

AGENDA

CITY COUNCIL WORK SESSION

July 6, 2021

**4:00 PM, City Council Chambers
130 S Galena Street, Aspen**



CITY OF ASPEN

I. WEBEX

www.webex.com

Enter Meeting Number: 182 876 1198

Password: 81611

Click "Join Meeting"

OR

Join by phone

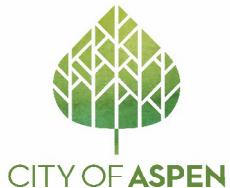
Call: 1-408-418-9388

Meeting number (access code): 182 876 1198

II. WORK SESSION

IA. Arts Impact Study

IB. Environmental Health and Sustainability Work Plan and Policy Discussion



MEMORANDUM

TO: Aspen City Council
FROM: Sara Ott, City Manager
MEMO DATE: July 1, 2021
MEETING DATE: July 6, 2021
RE: Aspen Snowmass Arts and Culture Impact Study

REQUEST OF COUNCIL: This agenda item is an informational presentation for City Council from leaders of the arts and cultural institutions, ACRA, and ACRA consultant RRC. The presentation will include an overview of the 2019 arts and culture economic impact study, as well as presentations about the arts in the community.

SUMMARY AND BACKGROUND: The City of Aspen provided a \$19,000 contribution in 2019 and 2020 to fund a portion of the economic impact study for arts and culture. Arts organizations – big and small – came together to define and fund the study. Further, they took a collective approach to examining the impact on the Aspen economy in employment, commerce, tourism, and more.

Sarah Roy, Red Brick Center for the Arts Executive Director, served as the city's liaison to the study. You can find attached her informational memo from December 2020 regarding the study, along with the full report and an infographic summary.

RECOMMENDATION: There is no staff recommendation at this time. No Council direction is requested.

Staff will work with the Mayor to schedule a review of all the Wheeler Real Estate Transfer Tax discussions either on July 20 at Council's retreat, or on August 2 during work session.

ATTACHMENTS:

An Information Only Memo and the Arts and Culture Impact Study that was provided to Council on December 3, 2020

Infographic



INFORMATIONAL MEMORANDUM

TO: Mayor and City Council

FROM: Sarah Roy, Director of Red Brick Center for the Arts

THROUGH: Sara Ott, City Manager
Austin Weiss, Parks and Recreation Director

MEMO DATE: December 3, 2020

MEETING DATE: December 8, 2020

RE: Aspen Snowmass Arts & Culture 2019 Economic Impact Study

BACKGROUND: The arts and culture nonprofit community approached Aspen Chamber Resort Association (ACRA) to facilitate a study of the Arts industry in the upper Roaring Fork valley, in order to provide census data and analysis of the local economic impacts. Previous impact studies had been completed in 1995 and 2003/04. A selection committee comprised of leaders from local arts organizations worked together with ACRA to review proposals, and selected RRC Associates and the University of Colorado Boulder Leeds School of Business to conduct the year-long study and analysis. These organizations should be commended for their collaboration to realize such an effort.

The study was sponsored by 12 prominent local arts, culture and environmental organizations, along with ACRA, the City of Aspen, and Snowmass Tourism. The City of Aspen contributed \$10,000 in 2019 and \$9,000 in 2020, which were allocated out of the Wheeler Opera House and Red Brick Center for the Arts budgets.

DISCUSSION: Aspen has many successful and thriving arts and culture organizations and businesses. A current economic impact study is crucial to gaining an understanding of the many ways the arts contribute to the local economy and community. The pandemic has significantly impacted the arts economy and Aspen's arts organizations have not been immune, experiencing canceled and/or reduced offerings, events and programming. Fortunately, this study was carried out from May 2019 through April 2020, allowing for data to be gathered uninfluenced by the pandemic. This study serves as a benchmark for quantifying the significance of the arts economic sector in pre-COVID, normal times. In addition, arts and culture have been integral components of Aspen's identity and its success as a world class resort destination. This study is a testament to, and a confirmation of the continued importance of the arts to our community, our economy and our identity.

ATTACHMENTS: Infographic Summary and Aspen Snowmass Arts & Culture 2019 Economic Impact Study

Aspen/Snowmass Arts & Culture

2019 Economic Impact Study

October 2020



RRC
ASSOCIATES

RRC ASSOCIATES
4770 Baseline Road, Suite 360
Boulder, CO 80303
rrcassociates.com



Leeds School of Business
UNIVERSITY OF COLORADO BOULDER

BUSINESS RESEARCH DIVISION
Leeds School of Business
University of Colorado Boulder
420 UCB
Boulder, CO 80309-0420
colorado.edu/business/brd

ASPEN/SNOWMASS ARTS & CULTURE

2019 Economic Impact Study

Conducted by:

RRC ASSOCIATES
4770 Baseline Road, Suite 360
Boulder, CO 80303
rrcassociates.com



BUSINESS RESEARCH DIVISION

Leeds School of Business
University of Colorado Boulder
420 UCB
Boulder, CO 80309-0420
colorado.edu/business/brd



October 2020

Table of Contents

Table of Contents.....	2
Introduction	1
Executive Summary.....	3
Total Economic Impacts of Arts & Culture in Pitkin County in 2019	3
Operations and Impacts of Participating Aspen/Snowmass Arts & Cultural Organizations	4
Other Establishments Involved with Arts and Cultural Production.....	5
Total Direct Jobs Attributable to Arts and Cultural Production	5
Arts & Culture Attendee Profile.....	8
Second Home Purchase Decisions Influenced by Arts and Culture.....	8
Comparisons to 2003/04 and 1995 Arts & Culture Studies.....	9
Other Economic and Community Benefits of Arts and Culture.....	10
Data Sources and Methodology.....	12
Arts Attendee Survey.....	12
Organization Survey.....	12
Additional Data Sources	12
IMPLAN Economic Modeling	12
Economic Definitions	13
Participating Organizations' Operations & Economic Impacts	14
Operations Data.....	14
Program Activities.....	17
Other Operations Details.....	23
Economic Impact of Organization Operations on Pitkin County	25
Arts & Culture Attendee Profile and Economic Impact	26
Visitor Type and Geographic Origin.....	26
Attendee Demographics.....	28
Overnight Trip Characteristics	30
Event Attendance Characteristics.....	32
Attendee Spending	34
Aggregate Attendee Spend and Economic Impact.....	37
Economic Impacts of Other Arts & Cultural Production	39
Economic Impacts of Arts-Driven Second Home Purchases.....	42
Total Economic Activity Attributable to Second Home Construction & Operations in Pitkin County ...	42
Proportion of Second Home Economic Activity Attributable to Arts & Culture	43
Appendix 1: Additional Data on Visitor Trip Motivations	46
Appendix 2: Second Homeowner Purchase Motivations and Other Opinions (2003 NWCCOG Survey) ..	49
Appendix 3: Jobs and Businesses in Creative Industries, 2017: Americans for the Arts Estimates	54
Appendix 4: Comparison of 2019, 2004 and 1995 Pitkin County Arts & Culture Studies.....	58

Introduction

This study summarizes the economic impacts of arts and culture in Pitkin County, Colorado in 2019, updating similar studies conducted in 2003/04 and 1995. The study is intended to provide a comprehensive overview of the many ways that arts and cultural offerings contribute to the local economy.

The study was sponsored by 12 prominent local arts, culture and environmental organizations, along with the Aspen Chamber Resort Association (ACRA), the City of Aspen, and Snowmass Tourism. ACRA also played an important role in coordinating and facilitating the study.

The study examines **four distinct categories of economic impact** which directly or indirectly result from local arts and cultural activities. These four categories are listed below.

1. **Operations of 12 Aspen/Snowmass arts and cultural organizations.** This category includes economic impacts associated with the operations of the following 12 Aspen/Snowmass organizations:

- a. Anderson Ranch Arts Center
- b. Aspen Art Museum
- c. Aspen Center for Environmental Studies
- d. Aspen Film
- e. Aspen Historical Society
- f. Aspen Music Festival and School
- g. Aspen Santa Fe Ballet
- h. Jazz Aspen Snowmass
- i. The Aspen Institute (*including the Aspen Ideas Festival, Aspen Institute Community Programs, and Aspen Words*)
- j. Red Brick Center for the Arts
- k. Theatre Aspen
- l. Wheeler Opera House

These 12 organizations were co-sponsors of the research, along with ACRA, the City of Aspen, and Snowmass Tourism. These organizations' impacts were primarily assessed via a survey of the organizations' operations and finances.

2. **Audience spend in conjunction with attendance at arts and cultural programming.** Pitkin County's arts and cultural organizations play an important role in drawing visitors to the area. This category estimates the incremental economic impact associated with visitor trips to experience arts and culture, inclusive of visitor spend on lodging, restaurants, shopping, recreation, transportation, etc. (To avoid double-counting impacts, visitor spend on arts and cultural activities is accounted for in categories 1 and 3 rather than here.)
3. **Other businesses and organizations involved with arts and cultural production.** This category includes economic activity generated by other organizations that are engaged in producing arts and culture, as generally defined by the US Bureau of Economic Analysis (BEA) and the National Endowment for the Arts (NEA).

By way of background, the BEA, in partnership with the NEA, prepares national- and state-level estimates of the economic impact of arts and cultural activities, as published in the Arts and Cultural Production Satellite Accounts (ACPSA). In this report, we have endeavored to replicate the methodology of the BEA/NEA at the Pitkin County level.

The ACPSA accounts include two broad categories of activities: (1) core arts and cultural production (e.g. performing arts, museums, design services, arts education, etc.), and (2) supporting arts and cultural production (e.g. support of the core category through publication, dissemination of the creative process, or other supportive functions, such as event promotion, printing, and broadcasting).

To avoid double-counting impacts, the economic impacts of the 12 organizations listed previously have been excluded from this category.

4. **Second home purchase decisions influenced by arts and culture.** Pitkin County's second homeowners are an important audience for local arts and cultural programming. By the same token, arts and culture programming is one of the factors that influences many second homeowners' decision to purchase their Pitkin County residence.

This category estimates economic activity stemming from second home purchase decisions that are influenced by local arts and cultural offerings. The category includes economic activity associated with the construction, purchase, operations and sales of second homes (and specifically that share of second home activity which is attributable to arts & culture's influence on owners' decision to buy their home).

Second homeowner spending during trips to Pitkin County – specifically in order to experience arts and cultural programming – is counted in the audience spend category above.

Combined, the four categories of economic impacts can be summed to approximate the aggregate impacts of arts and culture on the Pitkin County economy.

Executive Summary

Following are selected key findings regarding the economic impacts of arts and culture in Pitkin County, along with the profile of arts and culture attendees, the operations of sponsoring arts organizations, and selected other findings.

Total Economic Impacts of Arts & Culture in Pitkin County in 2019

In 2019, arts and cultural activities are estimated to have directly or indirectly supported 2,831 year-round equivalent jobs in Pitkin County, and generated approximately \$451 million in economic output, \$274 million in value added, and \$167 million in labor income (Table 1).

In proportionate terms, arts and culture is estimated to have directly or indirectly accounted for approximately 12% of the Pitkin County economy in 2019, including supporting approximately 11.6% of the county's jobs and 12.2–12.7% of the county's economic output, value added, and labor income.

Approximately 70% of the total economic impacts of arts and culture are attributable to direct effects, while roughly 30% are attributable to multiplier effects (i.e. indirect and induced economic activity).

TABLE 1: TOTAL ECONOMIC IMPACTS OF ARTS & CULTURE IN PITKIN COUNTY, 2019 – BY IMPACT TYPE

Impact Type	Employment	Labor Income (in Millions)	Value Added (in Millions)	Output (in Millions)
Direct	1,965	\$123	\$198	\$318
Indirect	624	\$33	\$53	\$96
Induced	242	\$11	\$23	\$37
Total	2,831	\$167	\$274	\$451
Pitkin County total economy 2019¹	24,419	\$1,313	\$2,244	\$3,642
Arts & culture share of total Pitkin economy	11.6%	12.7%	12.2%	12.4%

¹Source for Pitkin County total economy: IMPLAN. Job count includes wage and salary jobs as well as proprietor jobs.

Each of the four categories of economic activity analyzed made a substantial contribution to the total, with each accounting for approximately 20% to 30% of arts and culture-supported jobs (569 – 830 jobs; Table 2 to follow).¹

¹ To avoid double-counting, the indirect and induced impacts for each of the four sources of economic activity have been adjusted to exclude indirect and induced arts & culture production (since that production is already captured in entirety in the direct impacts of the 12 participating organizations and other arts and culture employers).

TABLE 2: TOTAL ECONOMIC IMPACTS OF ARTS & CULTURE IN PITKIN COUNTY, 2019 – BY SOURCE OF IMPACT

Impact Source	Employment	Labor Income (in Millions)	Value Added (in Millions)	Output (in Millions)
Operations of the 12 sponsoring organizations	569	\$32	\$54	\$91
Trip spend by arts & culture visitors	620	\$28	\$44	\$68
Other employers involved with arts and cultural production	812	\$64	\$85	\$124
Second home purchases influenced by arts & culture	830	\$43	\$91	\$168
Total	2,831	\$167	\$274	\$451
Pitkin County total economy 2019¹	24,419	\$1,313	\$2,244	\$3,642
Arts & culture share of total Pitkin economy	11.6%	12.7%	12.2%	12.4%

¹Source for Pitkin County total economy: IMPLAN. Total economy job count includes wage and salary jobs as well as proprietor jobs.

Operations and Impacts of Participating Aspen/Snowmass Arts & Cultural Organizations

The 12 participating arts and cultural organizations collectively make a large contribution to the economy and arts and cultural life of Pitkin County. Following are selected measures of the scope of their operations, programming, attendance, and marketing reach in 2019.

- 2,319 aggregate program offerings, including 709 artistic performances
- 618 unique professional artists and 1,136 unique student or volunteer artists in performances
- 453,000 attendance
- \$60 million total revenue: 56.8% from contributions, 37.4% from earned revenue, and 5.8% from investment income.
- \$61 million expenditures
- 596 direct employees (including seasonal employees), plus 387 contractors
- 492 volunteers
- 198 board members
- 13,135 person-hours spent by organizations in area schools
- 960,643 unique website visitors
- 320,000 social media followers
- 175,000 email recipients
- 700+ stories in local, regional, national and international media

Based on the survey results and economic modeling, the operations of the 12 participating organizations are estimated to have directly supported approximately 375 year-round equivalent jobs in Pitkin County in 2019, and generated \$60 million in economic output, \$38 million in value added, and \$22 million in labor income.

After factoring in multiplier effects (i.e. the additional local economic activity stimulated by the spending of the organizations), the organizations are estimated to have directly or indirectly supported 569 year-round equivalent jobs in Pitkin County in 2019, and generated \$91 million in economic output, \$54 million in value added, and \$32 million in labor income.

TABLE 3: ECONOMIC IMPACTS OF 12 PARTICIPATING ORGANIZATIONS ON PITKIN COUNTY, 2019

Impact Type	Employment	Labor Income (in Millions)	Value Added (in Millions)	Output (in Millions)
Direct Effect	375	\$22	\$38	\$60
Indirect Effect	144	\$7	\$12	\$22
Induced Effect	50	\$2	\$5	\$8
Total Effect	569	\$32	\$54	\$91

Other Establishments Involved with Arts and Cultural Production

Based generally on BEA/NEA definitions for the US Arts and Cultural Production Satellite Accounts, an additional 565 Pitkin County wage and salary employees were engaged in arts and cultural production in 2019 – above and beyond the employees of 12 participating organizations (Table 4 below).

TABLE 4: OTHER WAGE AND SALARY EMPLOYMENT ATTRIBUTABLE TO ARTS AND CULTURAL PRODUCTION & SUPPORT SERVICES, PITKIN COUNTY 2019

Industry	Jobs
Design services (<i>architecture, landscape architecture, interior design, photography, etc.</i>)	266
Information services (<i>publishing, broadcasting, motion pictures, etc.</i>)	70
Retail industries (<i>art galleries, florists, bookstores, music stores, etc.</i>)	57
Education and government (<i>music and arts education, Pitkin County Library, etc.</i>)	97
Other (<i>performing arts, custom woodwork and metalwork manufacturing, etc.</i>)	76
Total	565

Source: 2019 QCEW Pitkin County Employer Address File; 2018 US BEA ACPSA industry ratios.

The largest share of these other arts and cultural production jobs were in design services (266 jobs), particularly architecture (156 jobs), landscape architecture (51 jobs), and interior design (31). Significant numbers of jobs were also present in information services (70 jobs), retail industries (57 jobs), education and government (97 jobs), and other sectors (76 jobs).

Total Direct Jobs Attributable to Arts and Cultural Production

Altogether, direct wage and salary employment of the 12 participating organizations, plus wage and salary employment in other establishments engaged in arts and cultural production, totaled 904 jobs.² This is equivalent to 4.9% of the estimated 18,324 total wage and salary jobs in Pitkin County in 2019.³

By comparison, arts and cultural production directly accounted for 3.7% of the wage and salary jobs in Colorado, and 3.4% of wage and salary jobs in the nation as a whole in 2017, per BEA. As such, Pitkin County had a 33% higher concentration of jobs in arts and culture than Colorado, and a 47% higher concentration than the US as a whole, illustrating the

² The 904 jobs reflect a slight decrease from the 940 total jobs associated with the 12 participating organizations plus other ACPSA-producing establishments, to maximize consistency with BEA ACPSA definitions.

³ Wage and salary jobs are defined by BEA as “jobs for which wages and salaries are paid.” Wages and salaries are defined as “the remuneration receivable by employees (including corporate officers) from employers for the provision of labor services.” The wage and salary job counts exclude proprietor employment (i.e. sole proprietors and general partners in partnerships). <https://apps.bea.gov/regional/definitions/>

disproportionate importance of arts and cultural economic activity in Pitkin County – even before taking into account the additional tourism and second home impacts associated with arts and culture.

TABLE 5: WAGE AND SALARY EMPLOYMENT DIRECTLY ATTRIBUTABLE IN ARTS AND CULTURAL PRODUCTION & SUPPORT SERVICES: PITKIN COUNTY 2019, AS COMPARED TO COLORADO 2017 & US 2017

	Pitkin County 2019	Colorado 2017	US 2017
Total wage & salary employment	18,324	2,786,042	152,154,000
ACPSA direct wage & salary employment	904	103,401	5,108,000
ACPSA direct share of employment	4.9%	3.7%	3.4%

Source: US BEA ACPSA 2017; US BEA wage and salary employment; RRC Associates; CU BRD.

Note: 2019 Pitkin County wage and salary employment was not yet published by BEA at the time of this report. Instead, Pitkin County wage and salary employment has been extrapolated from QCEW employment, under the assumption that QCEW employment accounted for 95% of total wage & salary employment in 2019, its approximate share in 2018.

Note that establishments which have no employees are excluded, for consistency with BEA reporting standards.

The job counts summarized above reflect wage and salary jobs only. In addition, however, arts and culture also supports self-employed individuals and other businesses with no employment or payroll. Such nonemployer establishments are present across diverse industry sectors, including arts and culture sectors. This report does not attempt to document the full scope of arts and cultural activity attributable to nonemployers. However, as a partial indication of such activity, independent artists, writers and performers collectively had 163 nonemployer businesses in Pitkin County in 2018, with an average of \$32,497 in receipts each, as illustrated in Table 6 below. Independent artists, writers and performers accounted for 4.3% of nonemployer establishments in Pitkin County, 15% higher than the corresponding share in Colorado (3.7%), and 21% higher than the corresponding share in the US as a whole (3.6%).

**TABLE 6: SELECTED NONEMPLOYER STATISTICS:
TOTAL ACTIVITY, AND INDEPENDENT ARTISTS, WRITERS AND PERFORMERS
PITKIN COUNTY, COLORADO, AND US, 2018**

	Pitkin County	Colorado	United States
Nonemployer establishments			
Total	3,783	535,299	26,485,532
Independent Artists, Writers, and Performers	163	19,993	942,011
Share Independent Artists, Writers, and Performers	4.3%	3.7%	3.6%
Nonemployer receipts			
Total	\$261,423,000	\$26,587,439,000	\$1,292,866,710,000
Independent Artists, Writers, and Performers	\$5,297,000	\$366,772,000	\$22,243,927,000
Share Independent Artists, Writers, and Performers	2.0%	1.4%	1.7%
Average receipts per establishment			
Total	\$69,105	\$49,668	\$48,814
Independent Artists, Writers, and Performers	\$32,497	\$18,345	\$23,613

Source: US Census Nonemployer Statistics, 2018.

Finally, as a point of comparison, independent estimates of the size and scope of arts-centric “creative industries” have been developed by the nonprofit Americans for the Arts. Although based on a different data source and different methodologies, that analysis also indicates that

the arts have an outsized role in the Pitkin County economy. As shown in Table 7 to follow, the Americans for the Arts analysis indicates that creative industries accounted for 4.7% of jobs in Pitkin County in 2017, 34% higher than observed in Colorado (3.5%), and 132% higher than the national average (2.0%).⁴ Additionally, that analysis also indicates that Pitkin County has a higher concentration of jobs in creative industries (4.7%) than several other leading mountain resort counties and art destinations (such as Santa Fe County, NM – 3.4%, and Eagle County, CO – 2.8%), again underscoring the outsized importance of arts and culture to the Pitkin County economy.

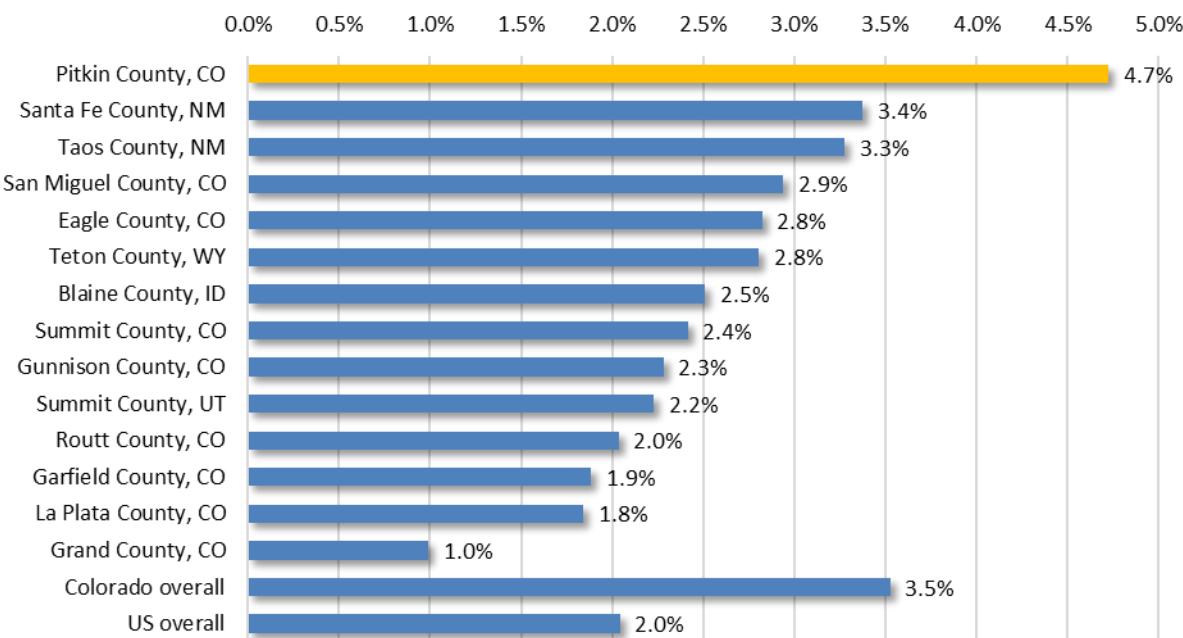
**TABLE 7: JOBS AND BUSINESSES IN CREATIVE INDUSTRIES (PER AMERICANS FOR THE ARTS):
PITKIN COUNTY, COLORADO, AND US, APRIL 2017**

	Pitkin County	Colorado	US Total
Total Number of Jobs	17,795	3,163,526	170,698,557
<u>Total Arts-Related Jobs</u>	<u>841</u>	<u>111,591</u>	<u>3,484,486</u>
Percentage of All Jobs that are Arts-Related	4.7%	3.5%	2.0%
Total Number of Businesses	2,645	386,088	16,803,700
<u>Total Arts-Related Businesses</u>	<u>242</u>	<u>18,880</u>	<u>673,656</u>
Percentage of All Businesses that are Arts-Related	9.1%	4.9%	4.0%

Source: "Creative Industries: Business & Employment in the Arts," Americans for the Arts. To define the Creative Industries, Americans for the Arts selected 644 8-digit Standard Industrial Classification codes that represent for-profit and nonprofit arts-centric businesses, ranging from museums, symphonies, and theaters to film, architecture, and advertising companies. The source of the data is the private company Dun & Bradstreet.

Note: The results understate arts-related jobs since not all businesses are registered with Dun & Bradstreet (particularly nonprofits arts organizations and individual artists).

**FIGURE 1: PERCENT OF TOTAL JOBS WHICH ARE IN CREATIVE INDUSTRIES, 2017:
PITKIN COUNTY VS. SELECTED AREAS**



Source: "Creative Industries: Business & Employment in the Arts," Americans for the Arts.

⁴ Additional detailed data from the Americans for the Arts Creative Industries analysis is contained in Appendix 3.

Arts & Culture Attendee Profile

Based on the aggregate results of a 2019/20 survey of attendees of the participating organizations, selected characteristics of the arts and culture attendee profile are as follows:

- **Attendee Mix.** A bit over half of attendees (56%) were visitors to the area, including visitors on an overnight trip (33%), second homeowners (20%), day visitors to the area (2%), and visiting Aspen Music School students or faculty (1+%)⁵. The remainder were primarily self-identified full-time residents of the Roaring Fork Valley, including resident of Aspen/Snowmass (29%) and downvalley residents thru Glenwood Springs (15%).
- **Gender.** The respondent profile tilted heavily female (65% female / 34% male). Women accounted for a significant majority of attendees across all visitor segments, underscoring their importance as a key audience group.
- **Age.** Attendees were predominantly aged 55+ (74%), with an average age of 63.1, underscoring the importance of arts programming to mature audiences especially, as well as potential opportunities to grow younger audiences.
- **Importance of organization's programming in decision to visit Aspen/Snowmass.** Attendees other than Aspen/Snowmass residents were asked to rate the importance of the organization's programming on their decision to visit using a 0-10 scale. The overall average rating was 5.4, indicating that the programming accounted for about half of the motivation to visit Aspen/Snowmass.
- **Rating of experience.** Most respondents had a positive experience with the programming they attended, giving it an average rating of 9.1 on a 10-point scale where 1=poor and 10=excellent.
- **Attendance at other arts & cultural venues / activities.** Most respondents planned to attend other arts and cultural programs during their trip (54%). When asked to list the other venues / activities they would attend, respondents listed an average of 1.7 other activities, commonly including the 12 organizations participating in the study. The significant level of multi-organization attendance speaks to the richness of the offerings in Aspen/Snowmass and the opportunities for arts and culture visitors.
- **Per capita spend per attendance occasion.** Altogether, respondents were estimated to have spent an average of \$383 in Aspen/Snowmass per attendance occasion (i.e. spend per performance, film screening, lecture, workshop, etc. attended with the subject organization). Top expenditure categories included lodging (\$125), restaurants/bars (\$80), shopping (\$51), and tickets/passes to the organization's events (\$48).

Second Home Purchase Decisions Influenced by Arts and Culture

According to US Census 2014-18 five-year estimates, Pitkin County had 5,034 housing units that were for seasonal, recreational or occasional use – a rough approximation of second homes. This amounted to 36.5% of Pitkin county's estimated 13,794 total housing units.

⁵ Aspen Music School students and faculty were not identified on every organization's audience survey, thus the 1% is likely an undercount.

The Colorado State Demography Office estimates that second home construction, upkeep and sales directly accounted for 2,040 jobs in Pitkin County in 2019, primarily in the real estate and construction sectors.

In order to estimate the proportion of second home jobs which are attributable to arts and culture, the study team examined the extent to which arts and culture is a driver of Pitkin County second homeowners' purchase decisions.

Specifically, second homeowners were asked to rate the importance of arts and culture on their decision to purchase their home in two tourism surveys conducted in 2019/20 – one in summer (among visitors to downtown Aspen) and one in winter (among visitors to the Aspen Skiing Company). Local second homeowners who were contacted via these two surveys were asked to rate the importance of arts & culture on their decision to purchase their unit on a 0-10 scale, where 0=no influence on purchase decision and 10=my only reason for purchasing.

Summer respondents gave an average rating of 5.4, and winter respondents gave an average rating of 4.4. The simple average across the two seasons was 4.9 – implying that second homeowners felt that arts and culture accounted for about 49% of their motivation for purchasing their home. However, for conservatism and to account for other independent survey results showing a variety of other buyer motivations (summarized in Appendix 2), we have halved the survey estimate of arts and culture's influence. This results in an estimate that arts and culture accounted for 25% of second homeowner purchase motivation. Accordingly, arts and culture are estimated to have driven approximately 25% of the 2,040 direct jobs associated with second home construction and operations, or 510 direct jobs.

Comparisons to 2003/04 and 1995 Arts & Culture Studies

The results of the 2019 Pitkin County Arts and Culture study can be compared to similar studies conducted in 2003/04 and 1995, albeit with caution and limitations due to differences in the participating organizations and study scope.⁶

Subject to these cautions, Table 8 below illustrates aggregate organization and audience spending in the three study years, in 2019 dollars. As shown, combined organization and audience spending doubled between 2003/04 (\$76.1 million) and 2019 (\$152.5 million) in real terms, among the studied organizations.

**TABLE 8: AGGREGATE ORGANIZATION AND AUDIENCE SPENDING IN 2019, 2004 AND 1995 STUDIES
(IN INFLATION-ADJUSTED 2019 DOLLARS)**

	2003/04 2019	(inflation-adjusted to 2019 dollars)	1995 (inflation-adjusted to 2019 dollars)	2003/04 - 2019 percent change
Organization expenditures	\$60,919,218	\$24,391,153	\$21,026,117	150%
Audience expenditures	\$91,589,637	\$51,700,313	\$46,228,451	77%
Total spending	\$152,508,854	\$76,091,467	\$67,254,568	100%

Note: 2003/04 and 1995 inflation adjustments are based on the Denver-Boulder-Greeley Consumer Price Index, per US Bureau of Labor Statistics.

⁶ 12 organizations were included in the 2019 study, as compared to 10 organizations in 2003/04 and 15 organizations/events in 1995. Seven organizations or events were included in all three years, while another four were included in two years, and 11 were represented in just one year.

Also of note, the audience survey results show a high degree of consistency over time with regards to gender mix (65% female in 2019/20 and 2003/04), inflation-adjusted household income (50-54% earning \$150,000+ in 2019 dollars in all three years), and the share attending other local arts and cultural events during their trip (54% in 2019 and 47% in 2003/04).

By contrast, the audience surveys exhibit greater differences regarding residence (with 40-66% Coloradans and 40-66% out of state/international across the years), age (with 2019/20 being significantly older than the other two years), the share staying overnight away from home (varying from 37% to 74%), and the average length of stay among lodgers (growing from 6.7 nights in 1995 to 23.5 nights in 2019/20). It is not immediately clear whether the variations are a result of differences in the participating organizations, other differences in the study methodologies, true shifts in the audience profile, or some combination of these.

Additional detailed comparisons of the three studies are contained in Appendix 4.

Other Economic and Community Benefits of Arts and Culture

The arts and culture literature identifies a wide variety of other economic and community benefits from arts and culture. It is beyond the scope of this report to identify all of these benefits and how they apply in Pitkin County. However, some of the types of benefits that have been cited include the following:

- Using the arts to attract workforce talent. 49% of people with a college degree—including Millennials (52%) and Gen X (54%)—say they would strongly consider whether a community is rich in the arts when deciding to relocate for a job. (*2015 Americans Speak Out About The Arts survey, Americans for the Arts*)
- Arts as image building and helping define the character of a community. 70% of Americans believe that the “arts improve the image and identity” of their community. (*2018 Americans Speak Out About The Arts survey, Americans for the Arts*)
- Creativity boosts job success. 55% of employed adults say their job requires them to be creative and come up with ideas that are new and unique. An even greater proportion (60%) say that the more creative and innovative they are at their job, the more successful they are in the workplace. (*2018 Americans Speak Out About The Arts survey, Americans for the Arts*)
- Arts spark creativity and innovation. Creativity is among the top 5 applied skills sought by business leaders, per the Conference Board’s Ready to Innovate report—with 72% saying creativity is of high importance when hiring. Research on creativity shows that Nobel laureates in the sciences are 17 times more likely to be actively engaged in the arts than other scientists. (*10 Reasons to Support the Arts, Americans for the Arts*)
- Arts improve individual well-being. 63% of the population believe the arts “lift me up beyond everyday experiences,” 64% feel the arts give them “pure pleasure to experience and participate in,” and 73% say the arts are a “positive experience in a troubled world.” (*10 Reasons to Support the Arts, Americans for the Arts*) Additionally, 90% believe cultural facilities improve quality of life. (*2018 Americans Speak Out About The Arts survey, Americans for the Arts*)
- Arts strengthen communities. 72% of Americans believe “the arts unify our communities regardless of age, race, and ethnicity” and 73% agree that the arts “helps me

understand other cultures better”—a perspective observed across all demographic and economic categories. (*2018 Americans Speak Out About The Arts survey, Americans for the Arts*)

- Arts improve academic performance. Students engaged in arts learning have higher GPAs, standardized test scores, and college-going rates as well as lower drop-out rates. These academic benefits are reaped by students regardless of socioeconomic status. (*10 Reasons to Support the Arts, Americans for the Arts*)

Relatedly, there have been several studies that illustrate the positive impact of early exposure to the arts, arts education and lifelong creative learning. For example, a report from the National Endowment for the Arts found that at-risk students who have access to the arts in and out of school also tend to see improved academic results, better job opportunities and increased civic engagement. (*The Arts and Achievement in At-Risk Youth: Findings from Four Longitudinal Studies* (NEA, 2012), as referenced in *2016 Economic Activity Study of Denver Metro Culture, Colorado Business Community for the Arts.*)

- Arts have social impact. University of Pennsylvania researchers have demonstrated that a high concentration of the arts in a city leads to higher civic engagement, more social cohesion, higher child welfare, and lower poverty rates. (*10 Reasons to Support the Arts, Americans for the Arts*)
- Arts improve healthcare. Nearly one-half of the nation's healthcare institutions provide arts programming for patients, families, and even staff. 78% deliver these programs because of their healing benefits to patients—shorter hospital stays, better pain management, and less medication. (*10 Reasons to Support the Arts, Americans for the Arts*)
- Arts for the health and well-being of the military. The arts heal the mental, physical, and moral injuries of war for military servicemembers and Veterans, who rank the creative arts therapies in the top 4 (out of 40) interventions and treatments. Across the military continuum, the arts promote resilience during pre-deployment, deployment, and the reintegration of military servicemembers, Veterans, their families, and caregivers into communities. (*10 Reasons to Support the Arts, Americans for the Arts*)
- City of Aspen residents place high importance on arts and culture. When asked, “In your opinion, how important do you feel arts and culture are to the Aspen community?”, most Aspen residents said “extremely important” (44%) or “very important” (34%). An additional 17% said “somewhat important,” 4% “not very important,” and 1% “not at all important.” Females were more likely to place importance on arts and culture. (*2019 City of Aspen Citizen Survey, n=433*)

Data Sources and Methodology

In order to obtain information pertinent to the economic impact study, the research team conducted two local surveys: an arts attendee survey and an organizational operations survey. Secondary data from other governmental and private sources was used as well. Following are details about these data sources.

Arts Attendee Survey

An arts attendee survey was fielded by the participating organizations to a sampling of their attendees. The survey collected attendee demographics, trip characteristics, trip spend, and related data for 10 of the 12 participating organizations (two of the organizations were unable to participate). The surveys were administered via a mix of methods, including post-event online surveys and on-site surveys (distributed by organization staff or left on audience seats). A total of 3,317 responses were collected in June 2019 through February 2020. The results were weighted so as to be proportionate to organization attendance. The results are used to profile arts visitors and calculate their trip spend.

Organization Survey

The 12 participating organizations were asked to complete a survey about their programming, attendance, employment, revenues, expenditures, and other operational data in their most recent fiscal or calendar year. Survey responses were collected between May 6 and July 7, 2020.

Additional Data Sources

A variety of additional data sources were referenced in order to cross-check the accuracy of the economic impact estimates and fill in data gaps. These sources included a variety of governmental statistical data and other visitor survey results, as documented more fully in the body of the report.

IMPLAN Economic Modeling

Visitor spend data and organizational economic data were broken out and applied to a 546-industry sector IMPLAN input-output model. This model quantified the economic impacts of Aspen/Snowmass arts and culture attendees and providers on the region.

Direct industry employment, wages, and expenditures were the basis for economic impact estimates and for subsequent multiplier analysis to illustrate ripple effects of industry spending within the Pitkin County economy.

Multipliers refer to the interindustry relationships within a study area in terms of input-output (I-O) economic impacts.⁷ Multipliers are useful for analyzing project decisions to understand the incremental impacts that such activities have on the local economy. IMPLAN multipliers are static and thus do not consider large-scale disruptive impacts on the economic fabric without

⁷Bureau of Economic Analysis, Regional Multipliers, <http://www.bea.gov/scb/pdf/regional/perinc/meth/rims2.pdf>, retrieved September 2, 2019.

calculating specific infrastructure changes. This study uses IMPLAN multipliers aggregated specifically for Pitkin County.

Economic Definitions

The economic impacts of arts and culture can be summarized via a variety of **economic measures**. These measures include the following.

- **Employment (or jobs).** The terms “employment” and “jobs” are used interchangeably in this report. Employment is calculated as an annual average of full-time and part-time jobs. For example, 1 job lasting 12 months counts as 1 job; so does 2 jobs lasting 6 months each. Additionally, full-time and part-time jobs are counted equally. The job count is not necessarily equal to the number of employed individuals, since a given worker can hold more than one job. Additionally, the job counts are greater than the number of full-time equivalents (FTEs), since full-time and part-time jobs are counted equally.
- **Output.** Output is equal to the total value of industry production in a one-year period. For service industries, output is equivalent to sales. For retail and wholesale trade, output is equal to sales minus the cost of goods sold (aka gross margin or marginal revenue). For manufacturers, output is equal to production in that year (also measured as sales plus inventory change).
- **Value Added (or Gross Domestic Product - GDP).** Value added is defined as output (total value of industry production) minus the cost of intermediate inputs. Intermediate inputs (e.g. energy, materials and services purchased from other industries) are goods and services that are used in the production process of other goods and services. Value Added is equivalent to an industry’s contribution to GDP.
- **Labor Income.** Labor income is the sum of employee compensation and proprietor income. Employee compensation is total payroll costs to an employer, and includes wages, salaries, benefits (e.g. health, retirement) and payroll taxes (both sides of social security, unemployment insurance taxes, etc.). Proprietor income is the production-related income of sole proprietorships, partnerships and tax-exempt cooperatives.

In addition, the economic impacts are also reported on different levels, as summarized below.

- **Direct effects** represent first-order economic impacts – for example, arts attendee purchases of restaurant meals, and the associated restaurant employment and restaurant employee wages stemming from those purchases.
- **Indirect effects** represent supply chain impacts triggered by the direct effects – for example, restaurant purchases of ingredients from food suppliers; food suppliers in turn needing to purchase vehicles to support their distribution networks; etc.
- **Induced effects** represent economic impacts stemming from the spending of employee wages – for example, restaurant workers purchasing clothes, groceries, medical care, etc., plus the extra rounds of economic activity triggered by that spending.
- Combined, indirect and induced effects are often referred to as **multiplier effects** or **secondary effects**.

Participating Organizations' Operations & Economic Impacts

Operations Data

Data from the 12 participating arts and culture organizations was collected via a survey on operations, attendance, and finances for the calendar year or fiscal year 2019.⁸

The majority of the participating organizations (83%) were nonprofits, while 17% were a government department, program, or facility.

The average age of the organizations was 40 years, with the oldest founded in 1952 and the youngest founded in 1999.

Total revenue for the 12 organizations was approximately \$60 million (Table 9). Contributions accounted for 56.8% of revenues, earned revenue accounted for 37.4%, and investment income accounted for the remaining 5.8%.

TABLE 9: REVENUES

Source	Total	Percent of Total
Trustee/Board Contributions	\$4,514,007	7.5%
Individual Contributions	\$18,349,306	30.3%
Corporate Contributions	\$297,442	0.5%
Foundation Contributions	\$2,251,612	3.7%
City Government Contributions	\$4,428,980	7.3%
County Government Contributions	\$8,861	0.0%
State Government Contributions	\$25,386	0.0%
Federal Government Contributions	\$30,000	0.0%
Other Cash Contributions	\$3,250,930	5.4%
Value of In-Kind Donations	\$1,177,149	1.9%
Investment Income	\$3,501,219	5.8%
Earned Program Revenue	\$19,133,618	31.6%
Other Earned Revenue	\$3,507,651	5.8%
Total Revenues	\$60,476,160	100.0%
Summary categories:		
Subtotal: Earned Revenues	\$22,641,269	37.4%
Subtotal: Government Contributions	\$4,493,227	7.4%
Subtotal: Other Contributions and Donations	\$29,840,445	49.3%
Subtotal: Investment Income	\$3,501,219	5.8%
Total Revenues	\$60,476,160	100.0%

Total expenses for the 12 organizations was approximately \$61 million in 2019, with 60% (\$34.6 million) of those expenditures on staff, contractors, or services providers **within the**

⁸ In some instances, gaps in individual survey responses were filled via reference to IRS Form 990 filings (Return of Organization Exempt from Income Tax) or other data sources.

Roaring Fork Valley (Table 10). The largest expenditures were on employee salaries and benefits (34.5%), independent contractors (10.3%), grants awarded (5.5%), and office and administration (5.5%).

TABLE 10: EXPENDITURES

Category	Total	Percent of Total
Employee Salaries	\$17,757,128	29.1%
Payroll Taxes and Fringe Benefits	\$3,232,419	5.3%
Independent Contractors	\$6,262,853	10.3%
Professional Fees	\$1,207,266	2.0%
Advertising and Promotion	\$2,054,067	3.4%
Conferences and Meetings	\$556,286	0.9%
Dues and Subscriptions	\$113,638	0.2%
Grants Awarded	\$3,339,765	5.5%
Insurance	\$913,107	1.5%
Occupancy Costs	\$2,217,468	3.6%
Office and Administration	\$3,321,682	5.5%
Printing, Postage, and Shipping	\$753,054	1.2%
Travel	\$820,285	1.3%
Capital Improvements	\$120,000	0.2%
Interest Expense	\$15,395	0.0%
Depreciation	\$1,675,520	2.8%
Other Expenses	\$16,559,284	27.2%
Total expenditures	\$60,919,218	100.0%

The 12 responding organizations had 574 **employees** in summer and 332 employees in winter, including both year-round and seasonal employees, and full-time and part-time employees (Table 11). In aggregate, 61% of total employees lived in Pitkin County. Collectively, 52% of the organizations' direct employees were year-round, 44% were summer seasonal, and 4% were winter seasonal.

The organizations also collectively employed 387 **contractors**, of whom 66% lived in Pitkin County, 32% lived elsewhere in the Roaring Fork Valley, and 2% lived elsewhere.

TABLE 11: EMPLOYMENT

Employee Type	No. Employees	% of Employees	% Living in Pitkin County
Permanent - Full Time	207	35%	59%
Permanent - Part Time	103	17%	63%
Summer Seasonal Full Time	207	35%	63%
Summer Seasonal Part Time	57	10%	65%
Winter Seasonal Full Time	10	2%	100%
Winter Seasonal Part Time	12	2%	25%
Total direct employees	596	100%	61%
Subtotal: permanent employees	310	52%	60%
Subtotal: summer seasonal employees	264	44%	63%
Subtotal: winter seasonal employees	22	4%	59%
Contractors	387	n/a	66%
Total direct employees + contractors	983	n/a	63%

In 2019, there were a collective 288 **artists delivering content** across permanent and seasonal full time and part time workers, contractors, and volunteers (Table 12). The majority of artists delivering content were contractors (75.7%), followed by permanent full-time employees (8.3%) and summer seasonal part-time employees (6.9%).

TABLE 12: ARTISTS DELIVERING CONTENT

Artist Type	Total Artists	Percent of Total
Permanent - Full Time	24	8.3%
Permanent - Part Time	16	5.6%
Summer Seasonal Full Time	0	0.0%
Summer Seasonal Part Time	20	6.9%
Winter Seasonal Full Time	0	0.0%
Winter Seasonal Part Time	5	1.7%
Contractors	218	75.7%
Volunteers - Part Time	5	1.7%
Total	288	100%

Volunteering is a major aspect of the organizations as well. Across 10 responding organizations, there were 492 volunteers (all part-time) who recorded 3,360 volunteer hours over the reported 12-month period (Table 13). Additionally, nine organizations reported a collective 198 board members who volunteered their time (5,121 hours). Volunteerism offers a meaningful way for people to engage with arts and cultural organizations and activities, in addition to lowering operating costs.

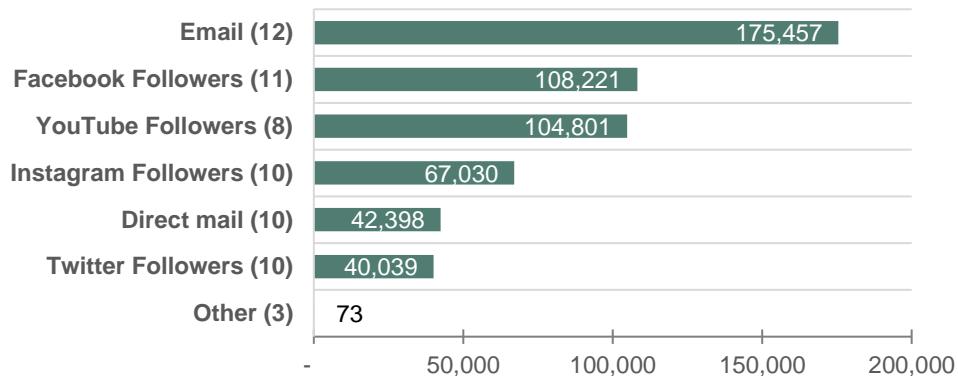
TABLE 13: VOLUNTEERS AND VOLUNTEER HOURS

	Total Volunteers	Total Volunteer Hour
Volunteers (all part-time)	492	3,360
Board Members	198	5,121

Marketing is crucial to the success of the organizations, and also helps to elevate the overall visibility and stature of Aspen/Snowmass as a destination. The most widespread method of marketing was email, with all 12 responding organizations utilizing this method, reaching a collective 175,457 recipients (Figure 2). Among social media channels, Facebook had the broadest reach (108,221 followers across 11 organizations), followed by YouTube (104,801 followers; 8 organizations), Instagram (67,030 followers; 10 organizations), and Twitter (40,039 followers; 10 organizations). Direct mail was used by 10 organizations, with 42,398 recipients. Across the nine organizations who reported website visits, a collective 960,643 unique visitors were recorded over the prior 12 months.

Many responding organizations also achieved substantial success in attracting **earned media**, including 700+ stories in local, regional, national and international publications and broadcast media.

FIGURE 2: AGGREGATE MARKETING CONTACTS



Note: Numbers in parentheses () indicate number of responding organizations.

Program Activities

The responding arts and culture organizations provide a number of **program activities**, including classes, workshops, lectures, professional development, film screenings, festivals, and community events, among others. As summarized in Table 14 to follow, approximately 2,319 total programs were offered to an aggregate of 453,068 attendees (excluding programs in local schools).

Approximately 74% of aggregate attendance occurred in summer (May-October), while 26% occurred in winter (November – April).

Additionally, approximately 62% of attendance was paid, while 38% was free.

TABLE 14: AGGREGATE PROGRAM OFFERINGS AND ATTENDEES

Type of Program	Total Offerings	Total Attendees	Summer Attendees	Winter Attendees	Paid Attendees	Free Attendees
Performances (7)	709	146,336	108,129	38,207	112,257	34,079
Other Audiences (2)	N/A	135,000	N/A	N/A	N/A	N/A
Museums and Exhibitions (3)	30	69,310	44,633	24,677	9,082	60,228
Fairs / Festivals (6)	14	45,271	40,891	4,380	38,137	7,134
Classes / Workshops / Lectures (8)	266	13,901	11,735	2,166	10,765	3,136
Film Festival Screenings (3)	62	13,889	9,473	4,416	N/A	N/A
Open Rehearsals/Master Classes (3)	58	7,933	7,895	38	7,852	81
Camps and Schools (8)	453	6,023	2,979	3,044	4,728	1,295
Field Trips (2)	103	5,504	1,295	4,209	0	5,504
Other Film Screenings (3)	55	4,278	3,192	1,086	2,254	2,024
Guided Tours (4)	568	3,100	2,044	1,056	2,310	790
Special Populations (3)	N/A	2,497	N/A	N/A	N/A	N/A
Conferences (1)	1	26	0	26	0	26
Total	2,319	453,068	232,266	83,305	187,385	114,297

Note: Numbers in parentheses () indicate the number of responding organizations. N/A=not available.

Not included are programs delivered in area schools (reported separately in Table 16) and 97,689 online archive visits.

All 12 of the responding organizations **collaborate with other organizations**. Collaborations span a broad spectrum and are often with each other, such as Spellbinders, Bauhaus 100: Aspen, and Roaring Fork Drawing Club, among many others. Collaborations involve putting on workshops, performances, educational classes, exhibitions, film screenings, and other programs.

Additional details about the respective program categories are outlined below.

Many of the organizations provide **children/young adult camps or schools**, including historical education programs, storytelling, music, theatre, and other activity/interest programs (Table 15). Across eight responding organizations, 53 unique types of camps/schools were offered. After factoring in programs offered multiple times, a collective total of 453 camp/school sessions were offered, including 144 single-day camp or school sessions and 309 multi-day camp or school sessions. A total of 6,023 campers/students registered for sessions over the course of the year. Organizations offer both paid and free sessions, collectively serving 4,728 paid attendees (78%) and 1,295 free attendees (22%). Most attendees were residents of the Roaring Fork Valley (72%), with 28% living outside the Valley. Attendance was about evenly split between the winter (51%) and summer (49%) seasons.

TABLE 15: CAMPS AND SCHOOLS

	Total
Unique Camps/Schools	53
Total Camps/School Sessions	453
Single Day Camp/School Sessions	144
Multi-Day Camp/School Sessions	309
Number of Paid Campers/Students	4,728
Number of Free Campers/Students	1,295
Number of Registrants - Summer (May-Oct)	2,979
Number of Registrants - Winter (Nov-Apr)	3,044
Number of Registrants - Primary Residence in Roaring Fork Valley	4,361
Number of Registrants - Primary Residence outside Roaring Fork Valley	1,658

* 8 responding organizations

Six responding organizations also offer several **in-school programs** to students both in and out of the Roaring Fork Valley (Table 16). An average of 13 schools in the valley and 8 outside the valley were served by the organizations, reaching an average of 8,158 students per organization. Collectively, 13,135 person-hours were spent in schools by staff or artists from the organizations.

TABLE 16: PROGRAMS IN SCHOOLS

	Average
Average number of schools served per organization: in RF Valley	13
Average number of schools served per organization: outside RF Valley	8
Average number of students served per organization	8,158
Average number of person-hours spent in schools by organization staff/artists	2,627

* 6 responding organizations

Multiple **classes, workshops, and lectures** were also provided by the surveyed organizations, including adult education classes and lectures, the Aspen Community Programs, Aspen Film's FilmEducates, Jazz workshops, apprentice programs, visual art classes, and art and naturalist classes, among others (Table 17). Across the eight responding organizations, 104 one-time and 162 multi-day classes, workshops, or lectures were provided over the year. Approximately 13,900 people registered for a class, workshop, or lecture with the eight responding organizations, with 77% being paid registrants. The majority of registrants (84%) were in the Summer (May-Oct), while 16% were in the Winter (November-April). Approximately, 54% of the 261 faculty, staff, or speakers employed for the classes, workshops, and lectures reside in the Roaring Fork Valley.

TABLE 17: CLASSES, WORKSHOPS, LECTURES

	Total
Number of one-time classes/workshops/lectures provided	104
Number of multi-day class series/courses provided	162
Number of class/workshop/lecture registrants - Paid	10,765
Number of class/workshop/lecture registrants - Free	3,136
Number of class/workshop/lecture registrants - Summer (May-Oct)	11,735
Number of class/workshop/lecture registrants - Winter (Nov-Apr)	2,166
Number of faculty/staff/speakers - Live in Roaring Fork Valley	142
Number of faculty/staff/speakers - Live outside Roaring Fork Valley	119

* 8 responding organizations

The surveyed organizations also put on a number of **performances**, including plays, music, and theatre performances (Table 18). Across the seven responding organizations, 709 performances (275 unique) were offered throughout the year, providing entertainment for over 146,000 attendees. The majority of attendance was paid (77%), while 23% was free. Approximately 74% of attendees attended a performance during the summer, with the rest attending in the winter. A total of 618 professional artists performed in these events, with 11% from the Roaring Fork Valley, while 1,136 student or volunteer artists performed, with 38% from the valley.

TABLE 18: PERFORMANCES

	Total
Unique Performances offered	275
Total Performances offered	709
Unique Professional Artists in Performances	
<i>Residence in Roaring Fork Valley</i>	69
<i>Residence outside Roaring Fork Valley</i>	549
Unique Student or Volunteer Artists in Performances	
<i>Residence in Roaring Fork Valley</i>	432
<i>Residence outside Roaring Fork Valley</i>	704
Paid Attendees	112,257
Free Attendees	34,079
Summer Attendees	108,129
Winter Attendees	38,207

* 7 responding organizations

Fairs and festivals are put on by a number of the surveyed organizations (Table 19). Of the five respondents, 14 fairs or festivals were offered over the year, with a collective 38,137 paid attendees and 7,134 free attendees. The majority of the fairs and festivals were in the summer, with 90% of attendees being in the summer.

TABLE 19: FAIRS/FESTIVALS

	Total
Number of fairs/festivals offered	14
Number of attendees - Paid	38,137
Number of attendees - Free	7,134
Number of attendees - Summer (May-Oct)	40,891
Number of attendees - Winter (Nov-Apr)	4,380

* 5 responding organizations

Three responding organizations put on **film festivals** throughout the year, with a collective 158 unique films shown and 62 total screenings (Table 20). Two organizations put on three film festivals throughout the year, while one put on one festival. Attendance at these film screenings totaled 13,889 over the year.

TABLE 20: FILM FESTIVALS

	Total
Number of film festivals	7
Unique films shown	158
Total screening sessions	62
Unique persons attending	3,427
Total attendance at screenings	13,889

* 3 responding organizations

Other film screenings were also provided by four of the respondents, with a collective 24 paid and 31 free screenings, with aggregate attendees of 2,254 and 2,024, respectively (Table 21).

TABLE 21: OTHER FILM SCREENINGS

	Total
Number of screenings provided - Paid	24
Number of screenings provided - Free	31
Number of screenings provided - Summer (May-Oct)	33
Number of screenings provided - Winter (Nov-Apr)	22
Aggregate attendees - Paid	2,254
Aggregate attendees - Free	2,024
Aggregate attendees - Summer (May-Oct)	3,192
Aggregate attendees - Winter (Nov-Apr)	1,086

* 3 responding organizations

Three organizations also provided a collective 58 **open rehearsals or master classes** to 7,852 paid attendees and 81 free attendees (Table 22). All or almost all programming occurred the summer.

TABLE 22: OPEN REHEARSALS AND MASTER CLASSES

	Total
Number of open rehearsals and master classes offered	58
Paid attendees	7,933
Free attendees	81

* 3 responding organizations

Guided tours are also a popular program activity for four of the responding organizations (Table 23). A total of 568 guided tours (21 unique tours) were put on by the four respondents, serving approximately 2,310 paid customers and 790 free customers. Most tour attendance occurred in summer (66%).

TABLE 23: GUIDED TOURS

	Total
Unique types of tours	21
Total tour sessions provided	568
Participants - Paid	2,310
Participants - Free	790
Participants - Summer (May-Oct)	2,044
Participants - Winter (Nov-Apr)	1,056

* 4 responding organizations

Additionally, three organizations served the community with **museums and exhibitions**, serving a collective 69,310 customers (13% paid admissions) with 30 exhibitions over the year (Table 24). The majority (64%) of exhibition admissions occurred in the summer.

TABLE 24: MUSEUMS AND EXHIBITIONS

	Total
Number of exhibitions shown	30
Admissions (number of people) - Paid	9,082
Admissions (number of people) - Free	60,228
Admissions (number of people) - Summer (May-Oct)	44,633
Admissions (number of people) - Winter (Nov-Apr)	24,677

* 3 responding organizations

Two surveyed organizations provided a collective 103 free **field trips** (across 10 unique types of trips) over the year, serving 5,504 attendees.

One responding organization offered a free winter **conference** with 26 attendees.

Some organizations also offer programs for **special populations**, including seniors, underserved communities, among others. Of the three responding organizations, 2,497 people were served from these groups.

Three organizations also **rent out their facilities to third parties for events** (e.g. weddings, fundraisers, meetings, etc.). Across the three organizations, their facilities were collectively rented 35 times in the summer and 3 times in the winter (Table 25). An estimated 6,998 people attended a third party event in the summer at the organization's facilities, with an estimated 42% of attendees from the Roaring Fork Valley. Approximately 200 people attended a third party event in the winter using the organization's facilities, with an estimated 22% from the Roaring Fork Valley.

TABLE 25: FACILITIES RENTALS TO THIRD PARTIES FOR EVENTS

Column1	Number
Times facilities were rented for third party events in summer	35
Times facilities were rented for third party events in winter	3
Aggregate number of attendees at third party events - Summer	6,998
Aggregate number of attendees at third party events - Winter	200
Attendees at third-party events who were RF Valley Residents - Summer	2,940
Attendees at third-party events who were RF Valley Residents - Winter	45
Attendees at third-party events who were not RF Valley Residents - Summer	3,959
Attendees at third-party events who were not RF Valley Residents - Winter	155

* 3 responding organizations

Three responding organizations also **rent out their space for meetings, classes, rehearsals, and office/studio use to artists and/or non-profits**, with short-term and/or long-term options offered.

Other Operations Details

Two of the responding organizations are currently in the middle of a **capital campaign**, three are considering a capital campaign in the next 5-10 years, and seven are not doing either.

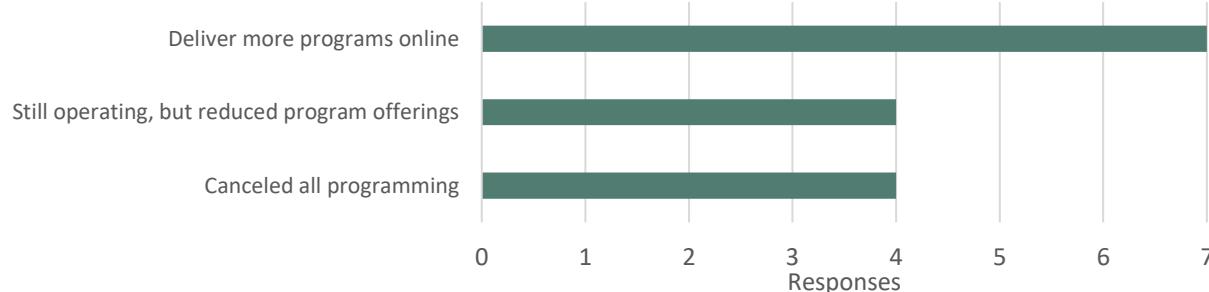
The survey also asked organizations how they have been impacted by the **COVID-19 pandemic**, as summarized below and illustrated in Figure 3 to follow.

- **Programming impacts of COVID-19:**
 - At the time of their response, four of the twelve organizations had canceled all of their **recent programming** (since mid-March, 2020), four were still operating but had reduced program offerings, and seven were delivering more programs online. (Multiple responses permitted.)
 - All 12 responding organizations had cancelled **summer 2020 programming** either partially or fully, or had moved programming online.
 - For **winter 2020/21 programming**, three organizations were planning for reduced programming, three were not planning until conditions become clearer, and five were planning for normal programming.
- **Employment impacts.** COVID-19 had caused three organizations to reduce hours or pay, and four to lay off some employees. Staff at three organizations haven't been affected.
- **Financial ability to deliver programming.** Two organizations reported COVID-19 shouldn't impact their financial ability programming, while five reported that finances may force them to offer slightly reduced programming, and three reported that their finances may force them to offer significantly reduced programming.
- **Employee and community support.** Organizations were taking steps to support their employees during the pandemic, with some offering work-from-home options, full pay, increased health benefits, and increased paid leave. Additionally, they were taking action

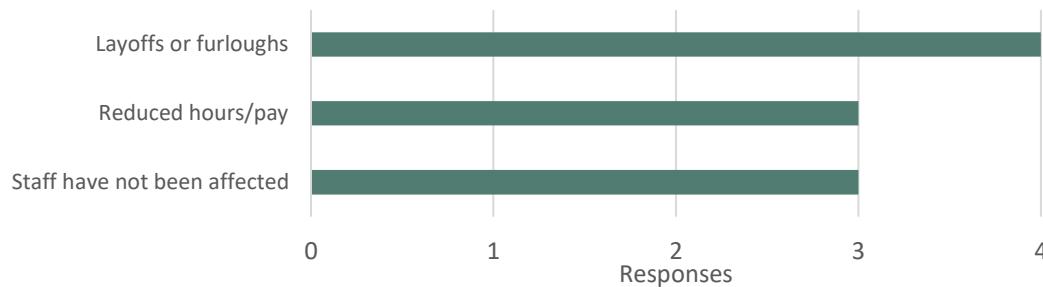
to support the local community through donating to local organizations and providing free online content, resources, classes, and programs.

FIGURE 3: IMPACT OF COVID-19

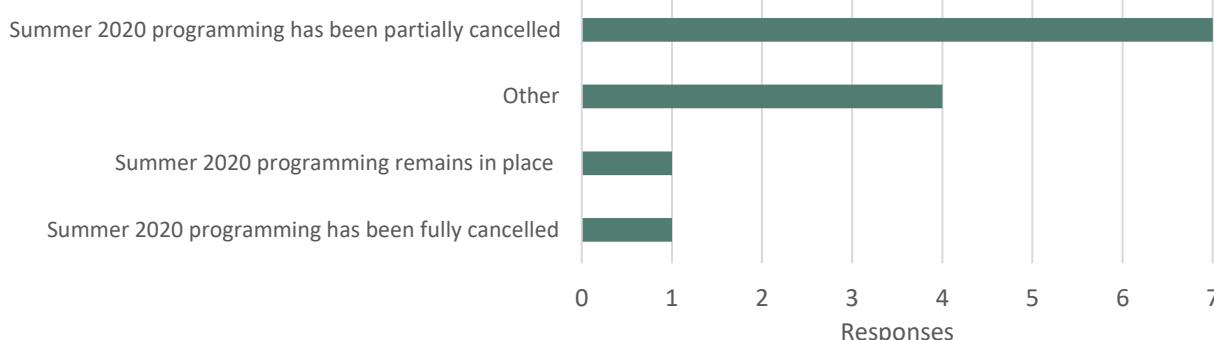
How has your recent (since mid-March) programming changed due to the COVID-19 pandemic?



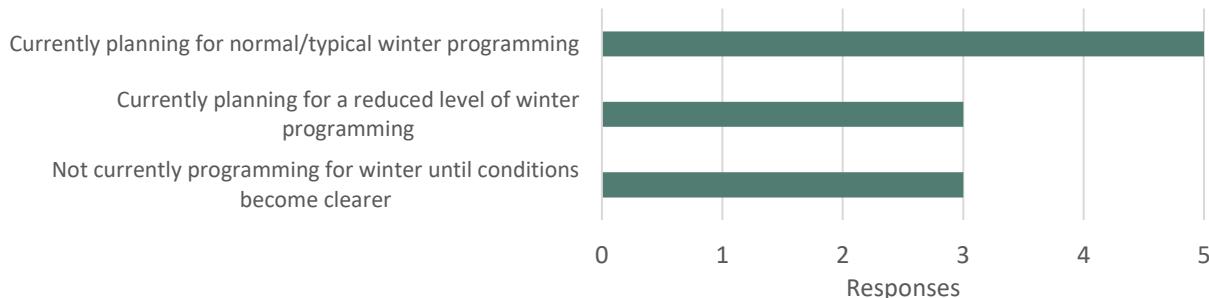
What has been your staffing response during the COVID-19 outbreak?



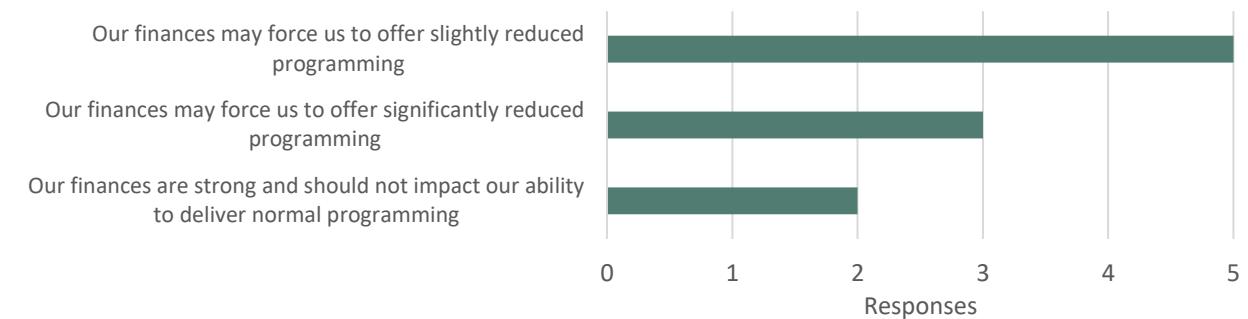
How would you characterize your planned programming for the summer 2020 season?



How would you characterize your program planning for the winter 2020/21 season?



To what extent do you anticipate the COVID-19 pandemic will impact your organization's financial capacity to deliver programming over the next year?



Economic Impact of Organization Operations on Pitkin County

Based on IMPLAN economic modeling, the operations of the 12 participating organizations are estimated to have directly or indirectly supported 569 year-round equivalent jobs in Pitkin County in 2019, and generated \$91 million in economic output, \$54 million in value added, \$32 million in labor income.

The organizations are estimated to have directly supported approximately 375 year-round equivalent jobs, \$60 million in economic output, \$38 million in value added, and \$22 million in labor income.

Multiplier effects (indirect and induced) are estimated to have generated an additional 194 jobs, \$30 million in output, \$17 million in value added, and \$9 million in labor income.

TABLE 26: ECONOMIC IMPACTS OF 12 PARTICIPATING ORGANIZATION ON PITKIN COUNTY, 2019

Impact Type	Employment	Labor Income (in Millions)	Value Added (in Millions)	Output (in Millions)
Direct Effect	375	\$22	\$38	\$60
Indirect Effect	144	\$7	\$12	\$22
Induced Effect	50	\$2	\$5	\$8
Total Effect	569	\$32	\$54	\$91

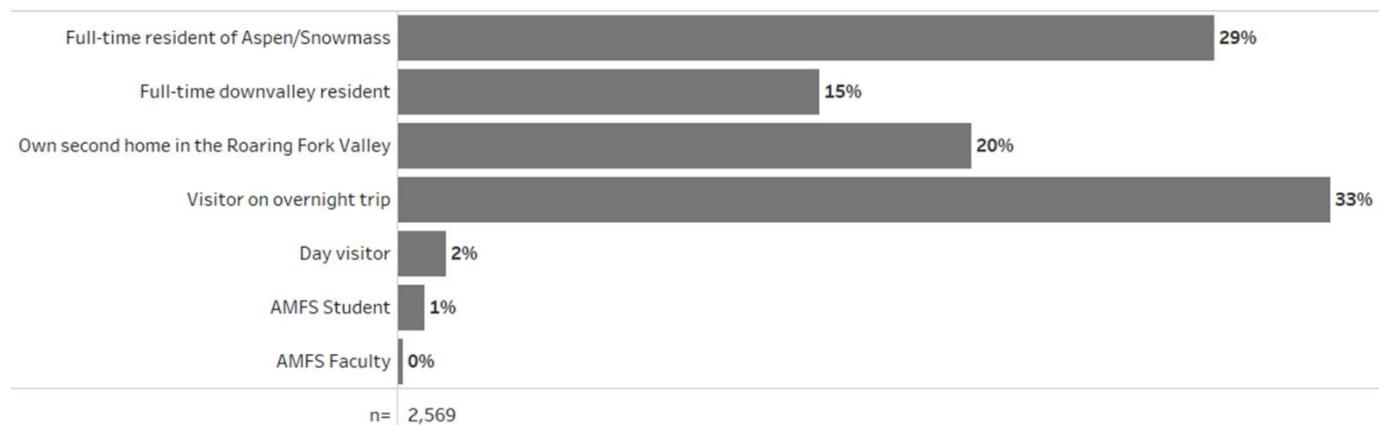
Arts & Culture Attendee Profile and Economic Impact

Following is a profile of program attendees, based on the aggregated results of the attendee survey conducted at 10 of the 12 participating arts and cultural organizations. The economic impacts of attendee spending are also summarized in this chapter.

Visitor Type and Geographic Origin

- **Visitor Type.** A bit over half of attendees (55%) were visitors from outside the Roaring Fork Valley, including visitors on an overnight trip (33%), second homeowners (20%), and day visitors to the area (2%). The remainder were primarily self-identified full-time residents of the Roaring Fork Valley, including resident of Aspen/Snowmass (29%) and downvalley residents thru Glenwood Springs (15%).⁹

FIGURE 4: WHICH BEST DESCRIBES YOU DURING YOUR VISIT TO US?



- **Geographic origin – Census Region.** Overall, 55% of attendees were from Colorado, including 42% with a Roaring Fork Valley zip code (Aspen to Glenwood), 10% from the Front Range, and 2% from the remainder of the state. Out-of-state visitors were widely dispersed, with 19% from the South, 10% from the West (excluding Colorado), 8% from the Midwest, 7% from the Northeast, and 1% international.
 - Second homeowners were especially likely to live out of state (87%), with a particular concentration from the South (43%).
 - Most overnight visitors were also from out of state (73%), with diverse origins.

⁹ A small number of respondents (approximately 1%) were students or faculty of the Aspen Music Festival and School – a response option provided on only some of the audience surveys.

FIGURE 5: U.S. CENSUS REGION

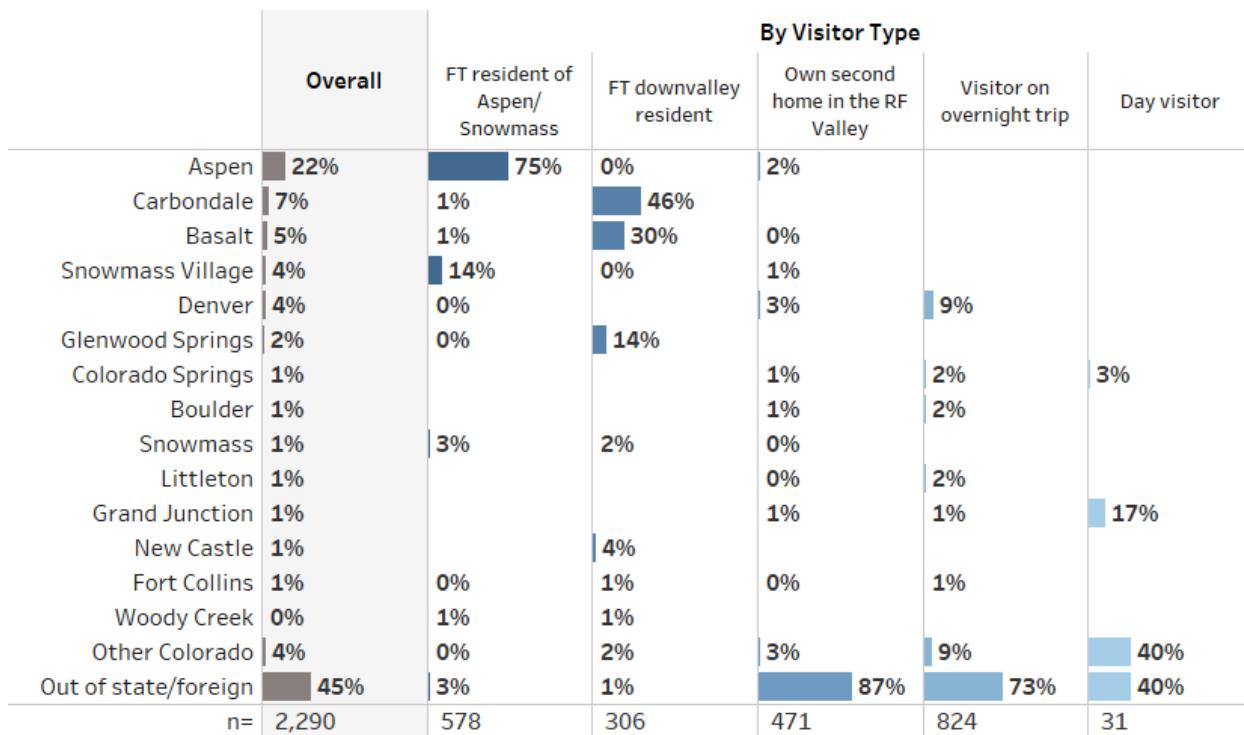
	Overall	By Visitor Type					Day visitor
		FT resident of Aspen/Snowmass	FT downvalley resident	Own second home in the RF Valley	Visitor on overnight trip		
Other Colorado	44%	97%	99%	5%	3%	48%	
South	19%	1%	1%	43%	27%	30%	
Colorado Front Range (12 county - Weld to Elbert to Pueblo)	10%	0%	1%	8%	24%	12%	
West (excluding Colorado)	10%	1%		14%	19%		
Midwest	8%	0%		17%	11%	9%	
Northeast	7%	0%		11%	14%	1%	
International & US territories	1%			1%	3%		
n=	2,321	578	306	477	848	31	

- **Geographic origin – States.** Again, most attendees were from Colorado (55%). Following were Florida (7%), California (6%) and Texas (6%). These three states accounted for 19% of total attendees, and a higher 41% share of second home attendees and 27% share of overnight visitor attendees.

FIGURE 6: TOP 10 STATES/COUNTRIES OF RESIDENCE

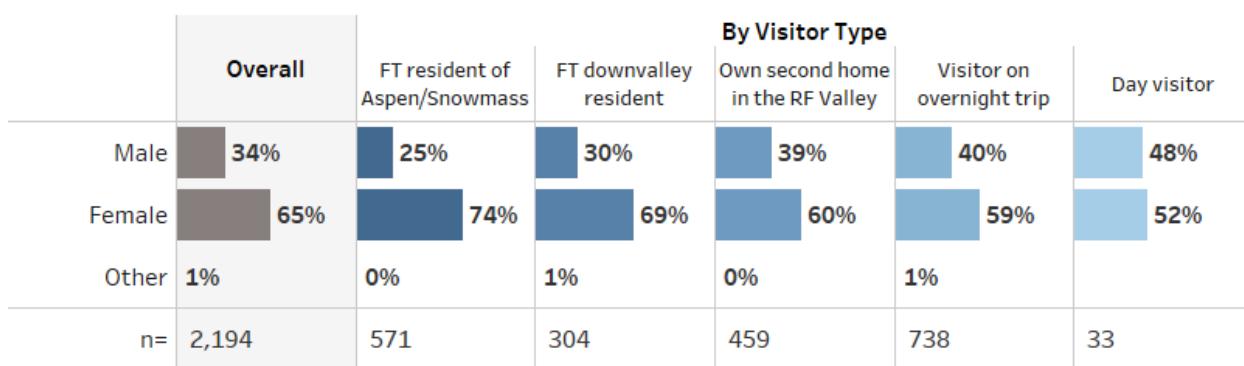
	Overall	By Visitor Type					Day visitor
		FT resident of Aspen/Snowmass	FT downvalley resident	Own second home in the RF Valley	Visitor on overnight trip		
Colorado	55%	97%	99%	13%	27%	60%	
Florida	7%	1%		19%	8%	6%	
California	6%	1%		9%	11%		
Texas	6%	0%		14%	8%	11%	
New York	3%	0%		4%	6%	1%	
Illinois	2%	0%		6%	2%		
Pennsylvania	2%			4%	2%		
Arizona	2%	0%		4%	2%		
North Carolina	1%	0%		3%	2%		
Minnesota	1%			1%	2%	3%	
Other	16%	1%	1%	25%	29%	14%	
n=	2,321	578	306	477	848	31	

- **Geographic origin – City.** Residents with Roaring Fork and Lower Colorado Valley zip codes (Aspen thru Rifle) accounted for 43% of respondents, led by Aspen (22%), Carbondale (7%), Basalt (5%), Snowmass Village (4%), and Glenwood Springs (2%), with 2% in other communities.

FIGURE 7: TOP CITIES

Attendee Demographics

- Gender.** The respondent profile tilted heavily female (65% female / 34% male). Women accounted for a significant majority of attendees across all visitor segments, underscoring their importance as a key audience group.

FIGURE 8: RESPONDENT GENDER

- Age.** Attendees were predominantly aged 55+ (74%), with an average age of 63.1. Second homeowner attendees tended to skew older (average age 70.7) than Aspen/Snowmass residents (61.1), downvalley residents (62.8), and overnight visitors (61.9). The findings speak to the importance of arts and culture as a key draw for older visitors and audiences.

FIGURE 9: AGE OF RESPONDENT

	Overall	By Visitor Type				
		FT resident of Aspen/Snowmass	FT downvalley resident	Own second home in the RF Valley	Visitor on overnight trip	Day visitor
Under 18	1%	0%			1%	
18 - 24	3%	1%	2%		3%	
25 - 34	5%	6%	6%	0%	6%	13%
35 - 44	8%	10%	9%	2%	9%	19%
45 - 54	10%	13%	10%	4%	10%	25%
55 - 64	19%	21%	18%	19%	18%	11%
65 - 74	30%	26%	33%	39%	27%	15%
75 - 84	22%	19%	18%	31%	23%	17%
85 or older	3%	3%	5%	5%	2%	
Avg.	63.1	61.1	62.8	70.7	61.9	53.8
n=	1,434	393	205	309	468	19

- Household income.** While a broad range of incomes are represented, the audience profile is comparatively affluent. Overall, the interpolated median household income of all attendees was \$150,000. Aspen/Snowmass residents (median \$120,000) and downvalley residents (median \$110,000) tended to have more moderate incomes than overnight visitors (median \$179,000) and especially second homeowners (median \$385,000).

FIGURE 10: WHAT BEST DESCRIBES THE ANNUAL INCOME OF YOUR HOUSEHOLD BEFORE TAXES?

	Overall	By Visitor Type				
		FT resident of Aspen/Snowmass	FT downvalley resident	Own second home in the RF Valley	Visitor on overnight trip	Day visitor
\$0 - 24,999	5%	2%	9%	0%	5%	22%
\$25 - 49,999	8%	12%	13%	0%	7%	
\$50 - 74,999	9%	13%	11%	1%	6%	10%
\$75 - 99,999	10%	13%	12%	2%	10%	15%
\$100 - 149,999	19%	25%	26%	7%	14%	31%
\$150 - 199,999	10%	8%	10%	9%	12%	
\$200 - 299,999	14%	10%	10%	21%	17%	12%
\$300 - 499,999	11%	7%	5%	22%	13%	
\$500,000 and over	16%	11%	4%	37%	15%	10%
n=	1,155	339	169	212	384	16

- People in party with whom expenses are shared.** As defined by the people with whom expenses were shared, most attendees were in a party of one (26%) or two (52%), while 22% were in a party of three or more.

FIGURE 11: PEOPLE IN PARTY

	Overall	FT resident of Aspen/Snowmass	FT downvalley resident	Own second home in the RF Valley	Visitor on overnight trip	Day visitor
1	26%	33%	28%	13%	22%	23%
2	52%	51%	50%	63%	51%	59%
3	7%	5%	5%	4%	11%	10%
4	10%	7%	13%	11%	10%	8%
5	2%	1%	1%	4%	2%	
6	2%	1%	1%	3%	2%	
7	1%	0%		1%	1%	
8	0%	0%		0%	0%	
9	0%	1%		0%	0%	
10 - 15	1%	1%	1%	1%	0%	
15 or more	0%	0%				
Avg.	2.3	2.1	2.2	2.5	2.3	2.0
n=	2,056	398	240	263	503	25

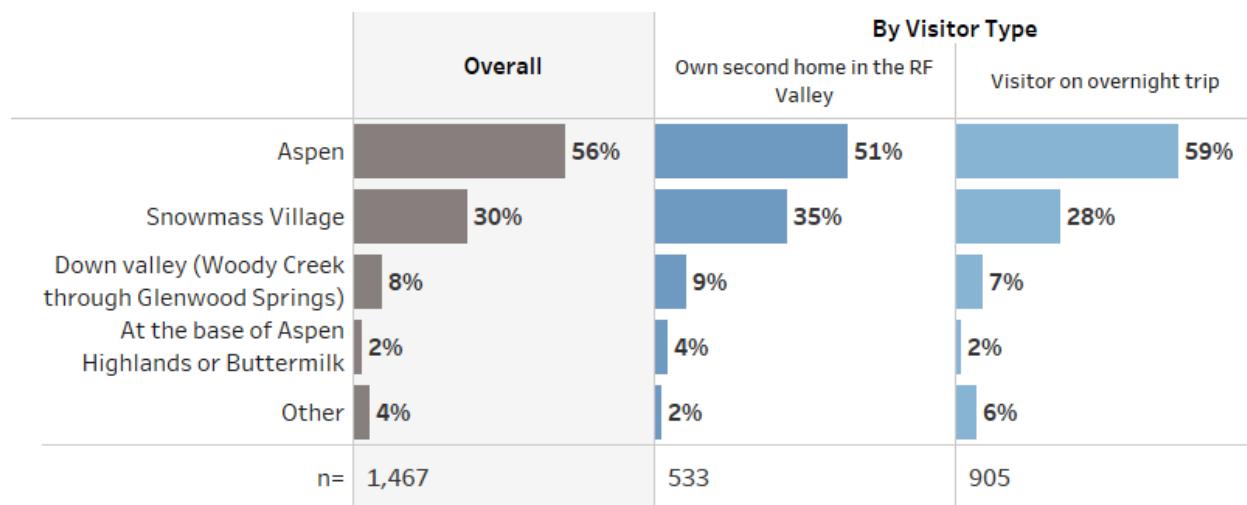
Overnight Trip Characteristics

- **Lodging type.** Most overnight visitors stayed in paid lodging (76%), with smaller shares staying in other lodging types. Conversely, almost all second homeowners stayed in a vacation home owned by them (84%) or relatives/friends (13%).

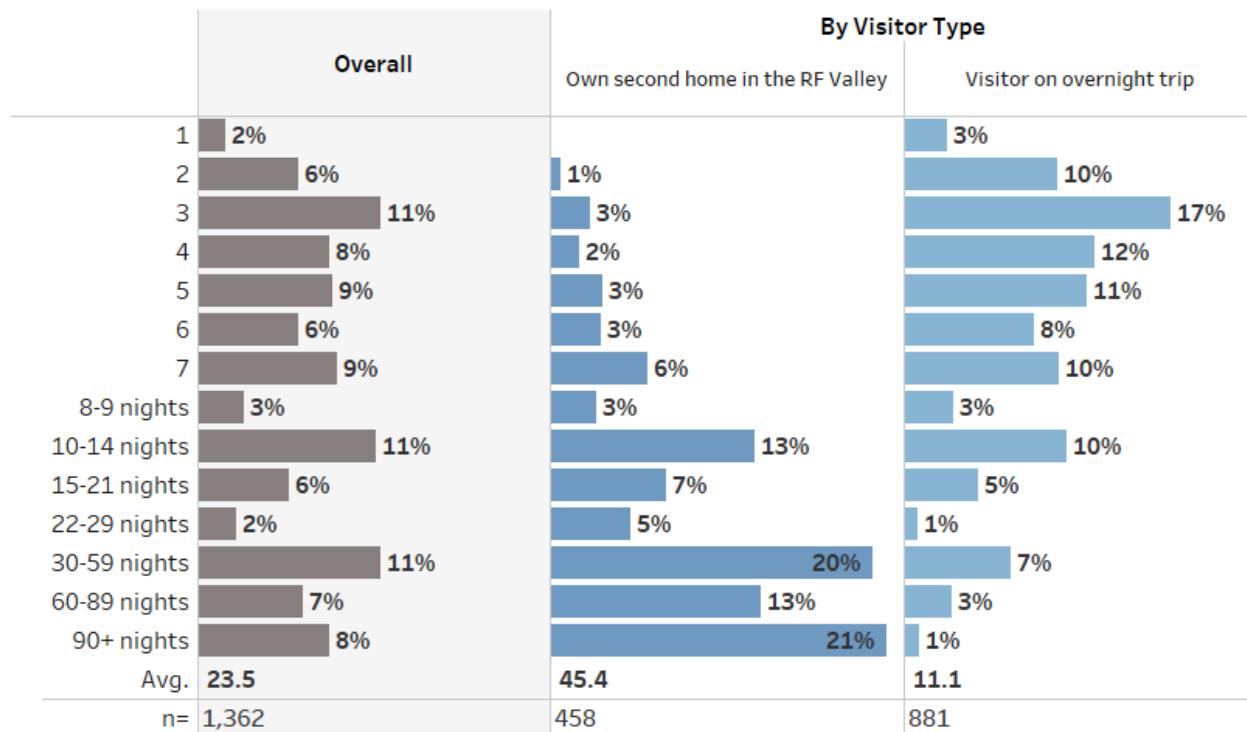
FIGURE 12: WHILE IN THE ASPEN TO GLENWOOD REGION, ARE YOU STAYING:

	Overall	By Visitor Type	
		Own second home in the RF Valley	Visitor on overnight trip
In paid lodging (hotel, condo rental, Airbnb, VRBO, etc.)	48%	2%	76%
In my vacation home or timeshare	33%	84%	4%
In a vacation home owned by my family or friends	10%	13%	9%
With friends/family who live in the area	6%	1%	9%
Tent camping, backpacking, RV/camper	1%	0%	2%
In housing for employees or students	1%		1%
Other	2%	2%	2%
n=	1,417	492	897

- **Lodging location.** Most overnight visitors and second homeowners stayed in Aspen (58%, including the base of Aspen Highlands and Buttermilk) or Snowmass Village (30%), while 12% stayed downvalley or elsewhere.

FIGURE 13: WHERE WAS YOUR LODGING LOCATED THIS TRIP?

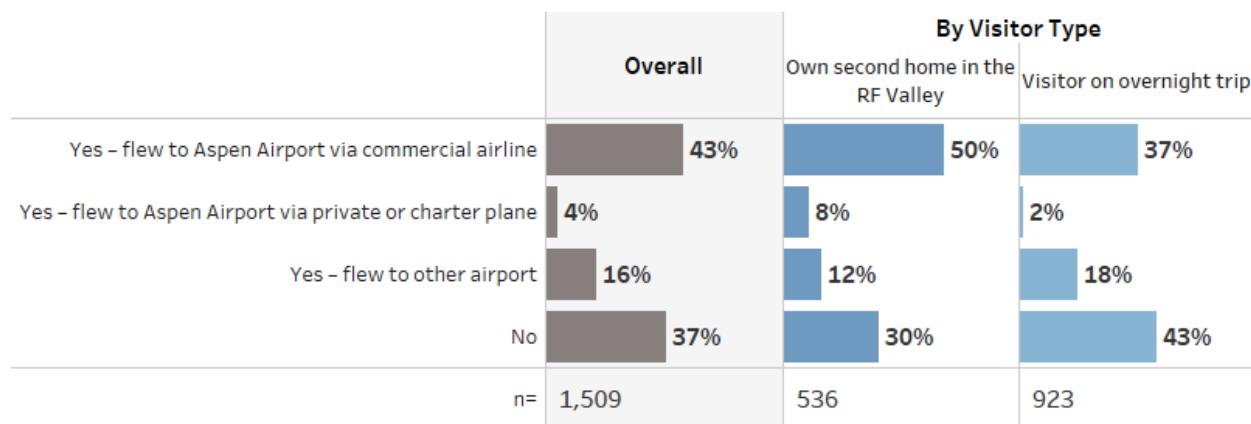
- **Nights stayed in region.** Altogether, visitors traveling away from home stayed an average of 23.5 nights in the area, and a much shorter median of 7 nights. Second homeowners tended to stay longer (average 45.4 nights, median 30 nights) than overnight visitors (average 11.1 nights, median 5 nights).

FIGURE 14: HOW MANY NIGHTS ARE YOU STAYING IN THE ASPEN TO GLENWOOD AREA THIS TRIP?

- **Mode of travel to region.** Just under half of travelers staying away from home flew to the Aspen Airport (47%), including 43% using commercial air and 4% using a private or charter flight. An additional 16% flew to a different airport, while 37% exclusively used

ground transportation. Second homeowners were more likely to fly to Aspen Airport (58%) than overnight visitors (39%).

FIGURE 15: DID YOU FLY AS A PART OF YOUR TRAVEL TO THE REGION?

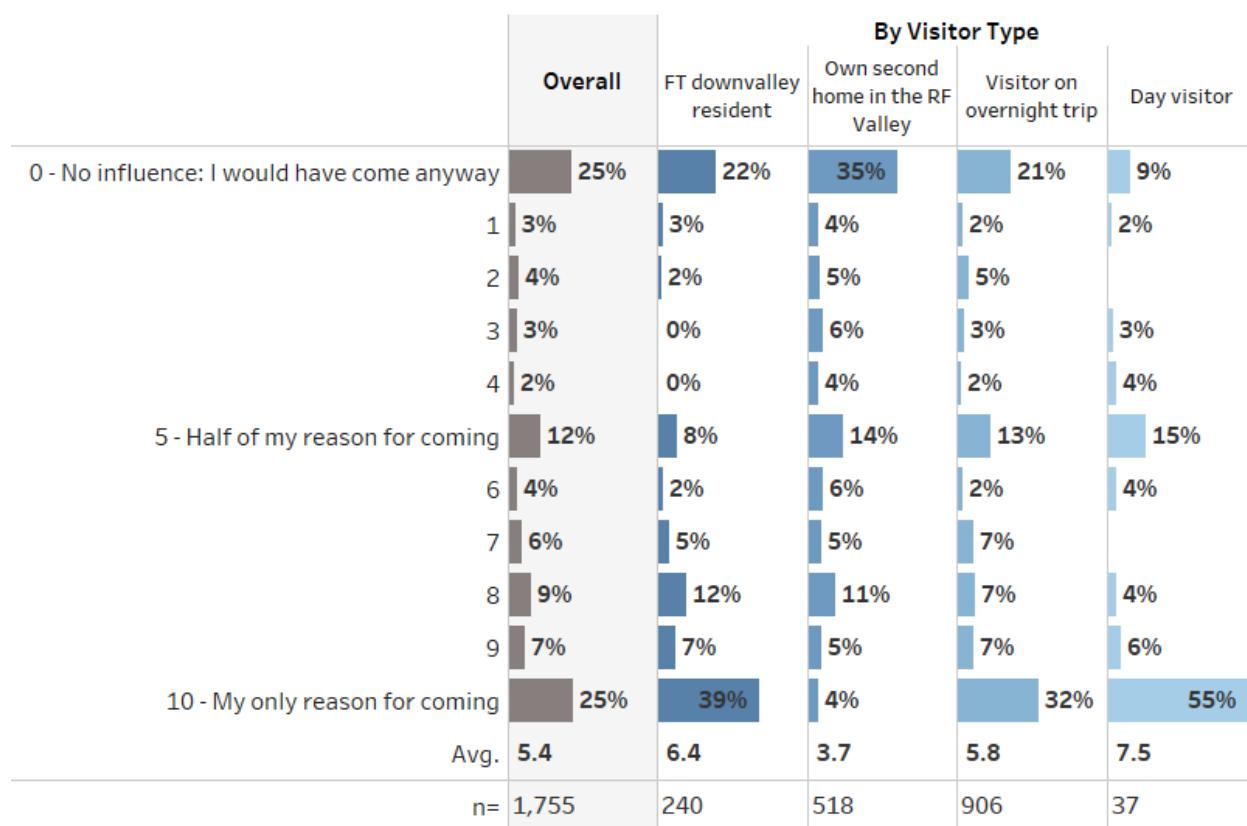


Event Attendance Characteristics

- Importance of organization's programming in decision to visit Aspen/Snowmass.** Attendees other than Aspen/Snowmass residents were asked to rate the importance of the organization's programming on their decision to visit using a 0-10 scale. Opinions were widely varied, with equal shares responding 0 (not at all important) and 10 (my only reason for coming), at 25% each, and the remaining 50% of respondents widely distributed in between. The overall average rating was 5.4, indicating that the programming accounted for 54% of attendees' motivation to visit.

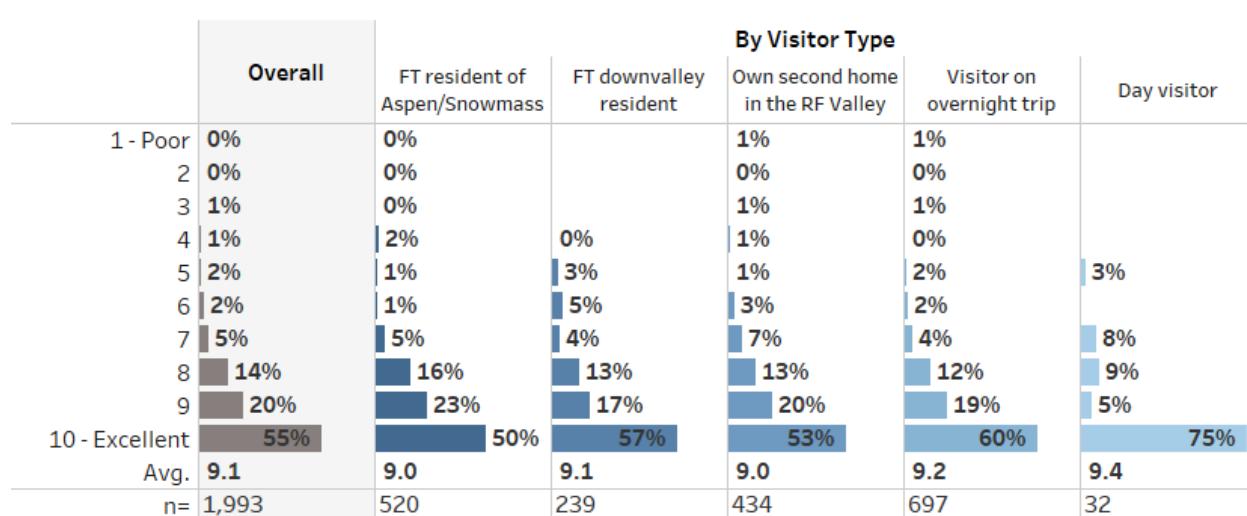
Second homeowners tended to place below-average importance on the individual organization's programming (average 3.7), although as noted later, they were also more likely than average to attend the programming of multiple different organizations during their stay.

FIGURE 16: HOW IMPORTANT WAS [THIS ORGANIZATION'S PROGRAMMING] IN YOUR DECISION TO VISIT ASPEN/SNOWMASS?



- **Rating of experience.** Most respondents had a positive experience with the programming they attended, giving it an average rating of 9.1 on a 1-10 scale.

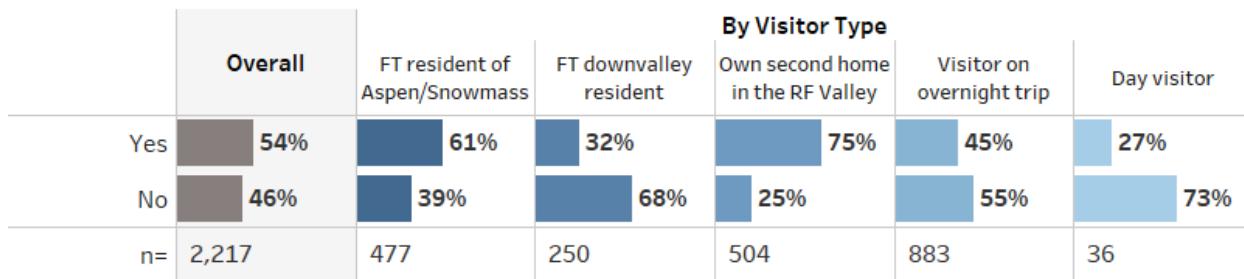
FIGURE 17: HOW WOULD YOU RATE YOUR OVERALL EXPERIENCE WITH THIS EVENT?



- **Attendance at other arts & cultural venues / activities.** Most respondents planned to attend other arts and cultural programs during their trip (54%), particularly second

homeowners (75%). When asked to list the other venues / activities they would attend, respondents listed an average of 1.7 other activities, commonly including 12 organizations participating in the study. The significant level of multi-organization attendance speaks to the richness of the offerings in Aspen/Snowmass.

FIGURE 18: ARE YOU ATTENDING ANY OTHER ARTS OR CULTURAL VENUES/ACTIVITIES IN ASPEN/SNOWMASS THIS TRIP?



Attendee Spending

- **Per capita trip spend per attendance occasion.** Altogether, respondents were estimated to have spent an average of \$383 in Aspen/Snowmass per attendance occasion.¹⁰ Top expenditure categories included lodging (\$125), restaurants/bars (\$80), shopping (\$51), and tickets/ passes to the organization's events (\$48).

As would likely be expected, visitors on overnight trips (\$685) and second homeowners (\$655) spent more per attendance occasion than other visitors.

¹⁰ In this analysis, the definition of attendance occasion depends on the nature of the programming, but generally corresponds to a discrete offering (e.g. a music or theatre performance, film screening, lecture, workshop, etc.) that is consistent with the attendance data collected via the organization survey. The attendee survey collected data on the number of "attendance occasions" that the respondent anticipated having with the organization during their trip.

FIGURE 19: AVERAGE PER CAPITA TRIP SPEND PER ATTENDANCE OCCASION

	Overall	By Visitor Type					Day visitor
		FT resident of Aspen/ Snowmass	FT downvalley resident	Own second home in the RF Valley	Visitor on overnight trip		
Total spending	\$383	\$119	\$122	\$655	\$685	\$172	
Lodging (room rental & tax, camping fees, etc.)	\$125	\$0	\$1	\$59	\$367	\$59	
Restaurants, bars and food concessions	\$80	\$33	\$38	\$198	\$95	\$46	
Tickets/passes/tuition for this program	\$55	\$43	\$64	\$59	\$59	\$37	
Shopping (groceries, clothing, gifts, etc.)	\$51	\$14	\$8	\$145	\$70	\$5	
Other entertainment (concert, play, etc.)	\$25	\$12	\$4	\$71	\$30	\$2	
Recreation (golf, rafting, bike rental, etc.)	\$19	\$9	\$2	\$55	\$23	\$5	
Other items, excluding airfare (spa, haircut, etc.)	\$12	\$2	\$1	\$41	\$16	\$8	
Local transportation (gas, parking, taxi, etc.)	\$10	\$4	\$3	\$20	\$17	\$4	
Sightseeing (museum, tour, gondola ride, etc.)	\$5	\$2	\$0	\$7	\$9	\$6	
n=	1,181	315	223	201	419	18	

- **Incremental per capita spending attributable to organization's programming.** In order to estimate the incremental economic activity stimulated in Aspen/Snowmass as result of the organizations' programming, the trip spend noted above was adjusted by the importance of the programming in the decision to visit.¹¹ Based on this adjustment, total incremental spend per attendance occasion is estimated at \$179.

¹¹ The importance of the organizational programming (asked on a 0-10 scale) was divided by 10 to create a 0-100% scale. Full-time local residents are excluded from the results since it is assumed they would spend their money on other offerings in the community if the subject programming was unavailable.

**FIGURE 20: INCREMENTAL PER CAPITA TRIP SPEND PER ATTENDANCE OCCASION
(I.E. SPENDING ADJUSTED BY THE IMPORTANCE OF THE PROGRAMMING IN THE DECISION TO VISIT)**

	Overall	By Visitor Type			
		FT downvalley resident	Own second home in the RF Valley	Visitor on overnight trip	Day visitor
Total spending	\$179	\$74	\$151	\$253	\$109
Lodging (room rental & tax, camping fees, etc.)	\$64	\$2	\$22	\$120	\$26
Restaurants, bars and food concessions	\$33	\$24	\$43	\$32	\$35
Tickets/passes to this event	\$28	\$37	\$18	\$29	\$30
Shopping (groceries, clothing, gifts, etc.)	\$22	\$4	\$34	\$27	\$3
Tuition and fees (school / workshop - AMFS, Anderson)	\$8	\$0	\$1	\$16	\$0
Other entertainment (concert, play, etc.)	\$7	\$2	\$13	\$8	\$1
Other items, excluding airfare (spa, haircut, etc.)	\$6	\$1	\$8	\$7	\$4
Local transportation (gas, parking, taxi, etc.)	\$5	\$1	\$4	\$8	\$3
Recreation (golf, rafting, bike rental, etc.)	\$4	\$1	\$8	\$5	\$2
Sightseeing (museum, tour, gondola ride, etc.)	\$2	\$0	\$2	\$2	\$3
Room and board (AMFS)	\$0	\$0	\$0	\$0	\$0
n=	795	165	196	412	17

	Overall	By Visitor Type			
		FT downvalley resident	Own second home in the RF Valley	Visitor on overnight trip	Day visitor
Total spending	\$179	\$74	\$151	\$253	\$109
Lodging (room rental & tax, camping fees, etc.)	\$64	\$2	\$22	\$120	\$26
Tickets/passes/tuition for this program	\$36	\$37	\$19	\$45	\$30
Restaurants, bars and food concessions	\$33	\$24	\$43	\$32	\$35
Shopping (groceries, clothing, gifts, etc.)	\$22	\$4	\$34	\$27	\$3
Other entertainment (concert, play, etc.)	\$7	\$2	\$13	\$8	\$1
Recreation (golf, rafting, bike rental, etc.)	\$4	\$1	\$8	\$5	\$2
Other items, excluding airfare (spa, haircut, etc.)	\$6	\$1	\$8	\$7	\$4
Local transportation (gas, parking, taxi, etc.)	\$5	\$1	\$4	\$8	\$3
Sightseeing (museum, tour, gondola ride, etc.)	\$2	\$0	\$2	\$2	\$3
n=	795	165	196	412	17

Aggregate Attendee Spend and Economic Impact

Aggregate **attendee spend** was calculated via the following steps.

- 1) Calculate spend per attendance occasion (at all organizational arts/cultural events).
This step involved dividing spend per attendee occasion (at the subject *individual* organization) by attendance at other organizations (as inferred from data about attendance at other organizations).
- 2) Multiply spend per attendance occasion by number of attendance occasions (as reported on the organization survey).
- 3) Avoid overlap with organization economic impact (calculated earlier, in the Organization Survey section) by excluding attendee spend with the subject organizations (primarily tickets/passes, and in some cases tuition, food & drink, organization-supplied lodging, etc.).

Aggregate attendee spend, as calculated above, reflects total trip spending by attendees in Aspen/Snowmass (except for arts & culture spending with the organizations). This measure is also commonly referred to as "**economic significance**," or the volume of attendee spend which occurs in conjunction with trips to attend the organizations' programming.

A second measure of interest is **arts-driven attendee spend** – i.e. incremental spend in Aspen/Snowmass which is specifically attributable to the draw of arts and culture programming (as distinct from other trip motivations, e.g. recreation or sightseeing). The calculation of arts-driven spend parallels that of total spend, with the exception that it factors in the importance of arts and cultural programming in the decision to visit. For conservatism, it is common to exclude local resident spend from this measure, under the assumption that residents would spend their money on other activities if the subject arts and cultural programming was unavailable.¹²

Based on the methodology described above, total attendee spend associated with trips that include attendance at the 12 organizations' programming was an estimated \$92 million in the 2019/20 study period. The portion of that spend which was specifically arts-driven was approximately \$54 million.

¹² In practice, some Aspen/Snowmass resident spend would likely leak out to other communities if local arts and cultural programming was unavailable. By preventing such leakage, the programming likely retains some economic activity that would otherwise go elsewhere.

TABLE 27: TOTAL ATTENDEE SPEND AND INCREMENTAL ATTENDEE SPEND IN PITKIN COUNTY

	Total Attendee Spend ¹	Incremental Arts-Driven Attendee Spend ²
Entertainment (<i>other than tickets / fees with respective orgs.</i>) ³	\$6,208,633	\$2,069,544
Shopping (<i>groceries, clothing, gifts, etc.</i>)	\$11,565,079	\$7,428,830
Restaurants, bars and food concessions	\$19,592,720	\$11,937,915
Lodging (<i>room rental & tax, camping fees, etc.</i>)	\$32,074,148	\$21,758,230
Recreation (<i>golf, rafting, bike rental, ski lift tickets, etc.</i>)	\$5,047,812	\$1,760,270
Sightseeing (<i>museum, tour, gondola ride, etc.</i>)	\$1,420,538	\$658,158
Local transportation (<i>gas, parking, taxi, etc.</i>)	\$2,295,712	\$1,636,713
Other items, excluding airfare (<i>spa, haircut, etc.</i>)	\$2,589,959	\$1,742,163
Air transportation (<i>50% share</i>)	\$10,795,036	\$5,397,518
Total	\$91,589,637	\$54,389,342

¹Trip spend by all attendees. Also referred to as “economic significance.”

²Incremental visitor spend attributable to programming. Full-time residents of Aspen/Snowmass excluded.

³Purchases from the 12 participating organizations is excluded to avoid duplication (as that spending is factored into the organizations’ direct economic impact).

Based on IMPLAN modeling, arts-driven attendee spend is estimated to directly support 514 jobs and generate \$52 million in output, \$34 million in value added, and \$22 million in labor income in Pitkin County.

After factoring in multiplier effects, incremental attendee spend is estimated to support a total of 620 jobs and generate \$68 million in output, \$44 million in value added, and \$28 million in labor income.

TABLE 28: ECONOMIC IMPACT ASSOCIATED WITH ARTS-DRIVEN VISITOR SPEND, PITKIN COUNTY, 2019

Impact	Employment	Labor Income (in Millions)	Value Added (in Millions)	Output (in Millions)
Direct Effect	514	\$22	\$34	\$52
Indirect Effect	68	\$4	\$6	\$11
Induced Effect	38	\$2	\$4	\$6
Total Effect	620	\$28	\$44	\$68

Economic Impacts of Other Arts & Cultural Production

Based generally on BEA/NEA definitions for the US Arts and Cultural Production Satellite Accounts, an additional 565 Pitkin County wage and salary employees were engaged in arts and cultural production in 2019 – above and beyond the employees of 12 participating organizations.

The largest share of these other arts and cultural production jobs were in design services (266 jobs), led by architecture (156 jobs), landscape architecture (51 jobs), and interior design (31). Significant numbers of jobs were also present in information services (70 jobs), retail industries (57 jobs), education and government (97 jobs), and other sectors (76 jobs; Table 29 below).

TABLE 29: EMPLOYMENT IN OTHER ORGANIZATIONS ENGAGED IN ARTS AND CULTURAL PRODUCTION & SUPPORT SERVICES, PITKIN COUNTY 2019

Industry	Jobs
Design services (<i>architecture, landscape architecture, interior design, photography, etc.</i>)	266
Information services (<i>publishing, broadcasting, motion pictures, etc.</i>)	70
Retail industries (<i>art galleries, florists, bookstores, music stores, etc.</i>)	57
Education and government (<i>music and arts education, Pitkin County Library, etc.</i>)	97
Other (<i>performing arts, custom woodwork and metalwork manufacturing, etc.</i>)	76
Total	565

Source: 2019 QCEW Pitkin County Employer Address File; 2018 US BEA ACPSA industry ratios.
Data is shown at summary level due to protect employer confidentiality.

The approach for estimating this additional ACPSA-related employment in Pitkin County involved the following two steps.

1. Identify total employment in arts and culture producing industries. Arts and culture producing industries, and associated US employment in 2017 per the US BEA, are summarized in Table 30 to follow. The industries are grouped into two main categories: “core” and “supporting” industries. Per BEA definitions, “core” ACPSA industries are originators of ideas and content associated with the creation of arts and culture. “Supporting” industries produce and disseminate arts and cultural commodities.

The study team identified employers and associated employment in these same industry sectors in Pitkin County in 2019, based on Pitkin County Quarterly Census of Employment and Wages employer address files obtained from the Colorado Department of Labor and Employment.¹³

2. Multiply total employment in subject industries by the share of production composed of arts and cultural goods and services. Within applicable industry sectors for the US as a whole, BEA has estimated the share of total production which composed of arts and cultural goods and services. For example, 74.2% of industry production and employment in architecture services nationally is estimated to be arts and culture related. The study team applied these same US industry shares to Pitkin County.¹⁴

¹³ The study team used a BEA concordance file between ACPSA and NAICS industries to identify subject employers.

¹⁴ BEA developed US industry share measures at a much finer level of granularity than reported publicly. As such, Pitkin County ACPSA estimates should be viewed as approximating (rather than replicating) BEA’s methodology.

TABLE 30: US ACPSA DIRECT EMPLOYMENT BY INDUSTRY, 2017

Industry	Total wage and salary employment (thousands of employees)	% of industry's total production composed of arts and cultural goods & services	ACPSA employment (thousands of employees)	Example Establishments
Total	152,154		5,108	
Core Arts and Cultural Production	5,403		1,241	
Performing Arts	349		300	
Performing Arts Companies	126	96.9%	122	Theater companies; dance companies; symphony orchestras; opera companies; circuses.
Promoters of performing arts and similar events	144	77.8%	112	Live theater and art center operators; music festivals.
Agents/Managers For Artists	27	54.1%	15	Agents, theatrical talent; literary agents.
Independent Artists, Writers, And Performers	52	98.9%	51	Independent artists; independent authors; independent songwriters.
Museums	167	89.0%	149	Non-government museums; non-government botanical gardens and zoos; non-government nature parks.
Design services	1,876		567	
Advertising	442	39.6%	175	Advertising agencies.
Architectural Services	189	74.2%	140	Architectural services.
Landscape Architectural Services	33	96.4%	32	Landscape design services; garden-planning services.
Interior Design Services	44	95.1%	42	Interior design services; decorator consulting services.
Industrial Design Services	19	98.2%	19	Industrial design services; automobile design services; furniture design services.
Graphic Design Services	64	94.9%	61	Graphic design services; commercial art studios; commercial illustrators.
Computer Systems Design	1,003	2.4%	24	Computer integration systems design services supporting sound recording and motion picture production.
Photography and Photofinishing Services	67	98.0%	66	Photography studios, portrait; photography studios, commercial. Excludes one-hour photo-developing services.
All Other Design Services	15	61.5%	9	Jewelry design services; lighting design services; textile design services.
Fine Arts Education	315	40.1%	126	Dance studios; ceramics instruction; ballet schools; photography schools.
Education Services	2,696	3.7%	99	Private, K-12 and postsecondary art classes.
Supporting Arts and Cultural Production	44,981		3,704	
Art support services	15,648		1,250	
Rental and Leasing	84	22.5%	19	Theatrical costume rental; motion picture wardrobe rental.
Grant-Making And Giving Services	227	4.0%	9	Establishments engaged in raising funds for a wide range of social and welfare activities.
Unions	682	3.5%	24	Establishments engaged in promoting the interests of organized labor and union employees.
Government	14,434	8.3%	1,195	Federal, state, local: K-12, postsecondary art classes; public museums; public libraries; public nature parks.
Other Support Services	221	1.4%	3	Theatrical ticket agencies.
Information services	2,341		1,346	
Publishing	858	36.4%	312	Book publishers; newspaper publishers; art print publishers; arts-related software publishing.
Motion Pictures	427	96.0%	410	Motion picture production & distribution; TV show production; cartoon production & distribution; cinemas; film festivals.
Sound Recording	17	99.3%	17	Record producers; music publishers; sound recording studios.
Broadcasting	841	51.2%	431	Radio, television, and cable broadcasting--excluding sports.
Other Information Services	197	89.3%	175	Internet publishing and broadcasting; music archives; film archives; comic syndicates; news photo distribution svcs.
Manufacturing	971		173	
Jewelry and Silverware Manufacturing	25	92.7%	23	Manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry.
Printed Goods Manufacturing	441	16.6%	73	Book printing; lithographic printing; screen printing.
Musical Instruments Manufacturing	11	92.3%	10	Violins and parts manufacturing; keyboards, piano, and organ manufacturing.
Custom Architectural Woodwork and Metalwork Mfr	267	14.5%	39	Architectural woodwork and fixtures manufacturing; custom architectural millwork manufacturing.
Other Goods Manufacturing	228	12.1%	28	Pottery manufacturing; stained and blown-glass manufacturing; motion picture equipment.
Construction	584	22.0%	128	Construction of new arts and cultural structures, e.g., libraries, museums.
Wholesale and Transportation Industries	9,443	2.2%	207	Wholesale trade and trade margins of arts-related goods.
Retail Industries	15,994	3.8%	600	Art dealers/galleries; music/music instrument stores; art-supply stores; book stores, incl. internet retail; florist shops.
NonACPSA-related Production	101,771		163	Arts & cultural goods & svcs produced by non-arts industries - e.g., an engineering firm offering industrial design svcs.

Source: US BEA, Arts and Cultural Satellite Accounts, 2017; National Endowment for the Arts.

Based on the employment data and IMPLAN modeling, arts and cultural production (at establishments other than the 12 participating organizations) is estimated to have directly supported 565 jobs and generate \$89 million in output, \$64 million in value added, and \$52 million in labor income in Pitkin County in 2019.

After factoring in multiplier effects, arts and cultural production is estimated to have supported a total of 812 jobs and generate \$124 million in output, \$85 million in value added, and \$64 million in labor income.

**TABLE 31: ECONOMIC IMPACT OF OTHER ESTABLISHMENTS INVOLVED IN ARTS & CULTURAL PRODUCTION
PITKIN COUNTY, 2019**

Impact Type	Employment	Labor Income (in Millions)	Value Added (in Millions)	Output (in Millions)
Direct Effect	565	\$52	\$64	\$89
Indirect Effect	154	\$8	\$12	\$22
Induced Effect	93	\$4	\$9	\$14
Total Effect	812	\$64	\$85	\$124

As a cross-check and for additional perspective, Appendix 3 contains independent estimates of the size and scope of arts-centric “creative industries” in Pitkin County in 2017, as published by the nonprofit Americans for the Arts. Although that analysis utilizes somewhat different methodologies and data sources, the Pitkin County results from of that analysis largely parallel the findings discussed above, providing additional confidence in the results.

Economic Impacts of Arts-Driven Second Home Purchases

As noted previously, second homeowners are an important audience for local arts and cultural programming, accounting for approximately 20% of attendance (per the attendee survey).

Conversely, arts and culture programming is one of the factors that influences many second homeowners' decision to purchase their Pitkin County residence.

This chapter summarizes estimates of the total volume of economic activity associated with second home construction, operations and sales, as well as the portion of that activity which is attributable to arts and culture (as a reason for motivating the second home purchase).

Total Economic Activity Attributable to Second Home Construction & Operations in Pitkin County

According to US Census 2014-18 five-year estimates, Pitkin County had an estimated 5,034 housing units that were for seasonal, recreational or occasional use – a rough approximation of second homes. This amounted to 36.5% of Pitkin County's estimated 13,794 total housing units.

The Colorado State Demography Office (SDO) conducts an annual economic base analysis at the county level throughout the state, plus the Denver Metro region. The analysis identifies the foundations, or "base," of local economies, as described by the SDO:

The SDO Economic Base Analysis provides insights into the economic activities that bring outside dollars into a community and the additional jobs that result from the spending of those dollars on local resident services. Industries that sell goods or services outside the local area are considered the base of the economy; these "Basic Industries" are responsible for existence of the local economy as they bring in outside dollars to the community. Base industries also generate additional secondary jobs in the economy that are classified as either "Indirect Basic" or "Local Resident Services." (Colorado State Demography Office, "Base Analysis Summary.")

The SDO Base Analysis quantifies tourism as one of several "basic" sectors in local economies. It further quantifies second home construction, operations, maintenance and sales as a component of tourism.

In Pitkin County, the SDO estimates that tourism directly generated 10,740 jobs in 2019 (Table 32). Second home construction, upkeep and sales accounted for 2,040 of these jobs, primarily in the real estate and construction sectors.

In proportionate terms, tourism as a whole accounted for an estimated 59.3% of Pitkin County's basic jobs, with 11.3% of associated with second homes and 48.0% associated with other tourism services.

TABLE 32: PITKIN COUNTY BASE INDUSTRY ANALYSIS, 2019

	Jobs	% of Total Jobs	% of Direct Basic Jobs
DIRECT BASIC JOBS:			
Traditional Basic Industries - Total	732	3.4%	4.0%
Agribusiness	259	1.2%	1.4%
Mining	18	0.1%	0.1%
Manufacturing	63	0.3%	0.3%
Government (State & Federal)	393	1.8%	2.2%
Regional Center / National Services - Total	1,929	9.0%	10.6%
Communications	23	0.1%	0.1%
Construction	0	0.0%	0.0%
Finance, Insurance and Real Estate	59	0.3%	0.3%
Trade and Transportation	113	0.5%	0.6%
Professional and Business Services	512	2.4%	2.8%
Education and Health Services	1,220	5.7%	6.7%
Tourism - Total	10,740	49.9%	59.3%
Resorts (resorts, attractions, lodging)	7,473	34.7%	41.3%
Service (dining, shopping, entertainment)	997	4.6%	5.5%
Transportation (airfare, car rental, gas, etc.)	230	1.1%	1.3%
Second Homes (construction, upkeep, sales)	2,040	9.5%	11.3%
Households - Total	4,715	21.9%	26.0%
Commuters	(1,742)	-8.1%	-9.6%
HHs with Public Assistance Income	245	1.1%	1.4%
Retirees	2,577	12.0%	14.2%
HHs with Dividend / Interest / Rental Income	3,636	16.9%	20.1%
TOTAL DIRECT BASIC	18,116	84.2%	100.0%
OTHER JOBS:			
Indirect Basic	2,534	11.8%	n/a
Total Basic (Direct Basic + Indirect Basic)	20,650	96.0%	n/a
Worker/Local Resident Services (Non Basic)	866	4.0%	n/a
Total Local Resident Services (HHs + Non Basic)	5,581	25.9%	n/a
TOTAL - ALL INDUSTRIES	21,517	100.0%	n/a

Source: 2019 Base Industry Analysis, Colorado State Demography Office.

Proportion of Second Home Economic Activity Attributable to Arts & Culture

In order to estimate the proportion of second home jobs which are attributable to arts and culture, the study team has examined the extent to which arts and culture is a driver of Pitkin County second homeowners' purchase decisions.

Most directly, second homeowners were asked to rate the importance of arts and culture on their decision to purchase their home in two tourism surveys conducted in 2019/20. One was an intercept survey of summer 2019 visitors to Aspen that was sponsored by ACRA. The other was a post-trip online survey of skiers who had visited Aspen/Snowmass in winter 2019/20, conducted by the Aspen Skiing Company. Local second homeowners who happened to be contacted via these two surveys were asked to rate the importance of arts & culture on their

decision to purchase their unit on a 0-10 scale. The willingness of ACRA and the Aspen Skiing Company to add this question to their surveys is greatly appreciated.

As illustrated in Table 33 below, summer respondents gave an average rating of 5.4, and winter respondents gave an average rating of 4.4. The simple average across the two seasons was 4.9 – implying that second homeowners felt that arts and culture accounted for about 49% of their motivation for purchasing their home.

TABLE 33: IMPORTANCE OF ARTS AND CULTURE IN DECISION TO PURCHASE SECOND HOME, 2019/20

		Second Homeowners		
		Summer 2019 Survey	Winter 2019/20 Survey	Average
Summer: How important were Aspen and Snowmass's arts and cultural offerings in your decision to purchase your home here?	0 - No influence on purchase decision	8%	21%	14%
	1	2%	1%	2%
	2	5%	8%	6%
	3	14%	8%	11%
	4	5%	7%	6%
	5 - Half my reason for purchasing	26%	25%	25%
	6	2%	5%	4%
	7	8%	4%	6%
	8	9%	15%	12%
	9	9%	3%	6%
Winter: How important were arts and cultural offerings in the area in your decision to purchase your home in Aspen/Snowmass?	10 - My only reason for purchasing	11%	4%	7%
	TOTAL	100%	100%	100%
	Average	5.4	4.4	4.9
	n =	85	146	116

Sources: Summer 2019 Aspen Visitor Intercept Survey, sponsored by ACRA. Winter 2019/20 Aspen/Snowmass Visitor Post-Trip Survey, Aspen Skiing Company.

For conservatism, and to account for other independent survey results showing a variety of other buyer motivations¹⁵, we have halved the survey estimate of arts and culture's influence. This results in an estimate that arts and culture accounted for 25% of second homeowner motivation. Accordingly, arts and culture is estimated to drive approximately 25% of the 2,040 direct jobs associated with second home construction and operations, or 510 direct jobs.

Based on economic modeling, arts-driven second home construction and operations is estimated to directly support 510 jobs and generate \$117 million in output, \$62 million in value added, and \$26 million in labor income in Pitkin County.

After factoring in multiplier effects, arts-driven second home activity is estimated to support a total of 830 jobs and generate \$168 million in output, \$91 million in value added, and \$43 million in labor income (Table 34).

¹⁵ See Appendix 2, regarding the results of a 2003 NWCCOG survey regarding Pitkin County second homeowner purchase motivations, activity participation, and community priorities.

**TABLE 34: ECONOMIC IMPACTS OF SECOND HOME PURCHASE DECISIONS INFLUENCED BY ARTS AND CULTURE
PITKIN COUNTY, 2019**

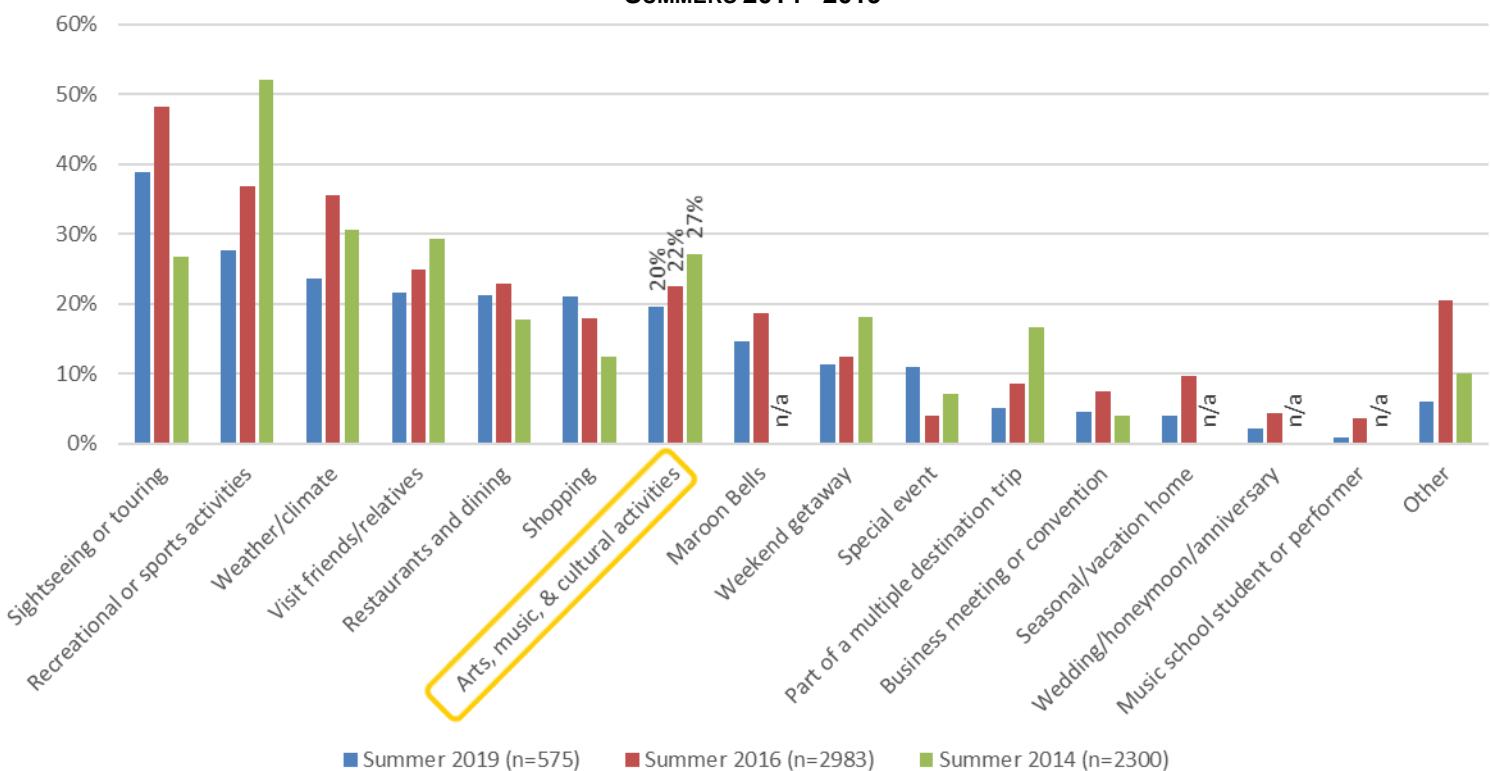
Impact	Employment	Labor Income (in Millions)	Value Added (in Millions)	Output (in Millions)
Direct Effect	510	\$26	\$62	\$117
Indirect Effect	258	\$14	\$23	\$41
Induced Effect	61	\$3	\$6	\$9
Total Effect	830	\$43	\$91	\$168

Appendix 1: Additional Data on Visitor Trip Motivations

In addition to the arts attendee surveys conducted as part of this study, a variety of other visitor surveys conducted in Pitkin County provide additional perspective on the role of arts and culture in driving tourism. Following are selected highlights from these surveys.

ACRA has sponsored ongoing summer visitor research in the Town of Aspen for several years. As illustrated in Figure 21, 20-27% of summer visitors in recent years have cited arts, music and cultural activities among their primary reasons for visiting Aspen. While results have varied somewhat by year, this places arts and culture somewhat behind other activities like sightseeing and touring and recreation/sports activities, but ahead of other activities such as special events and meetings/conventions.

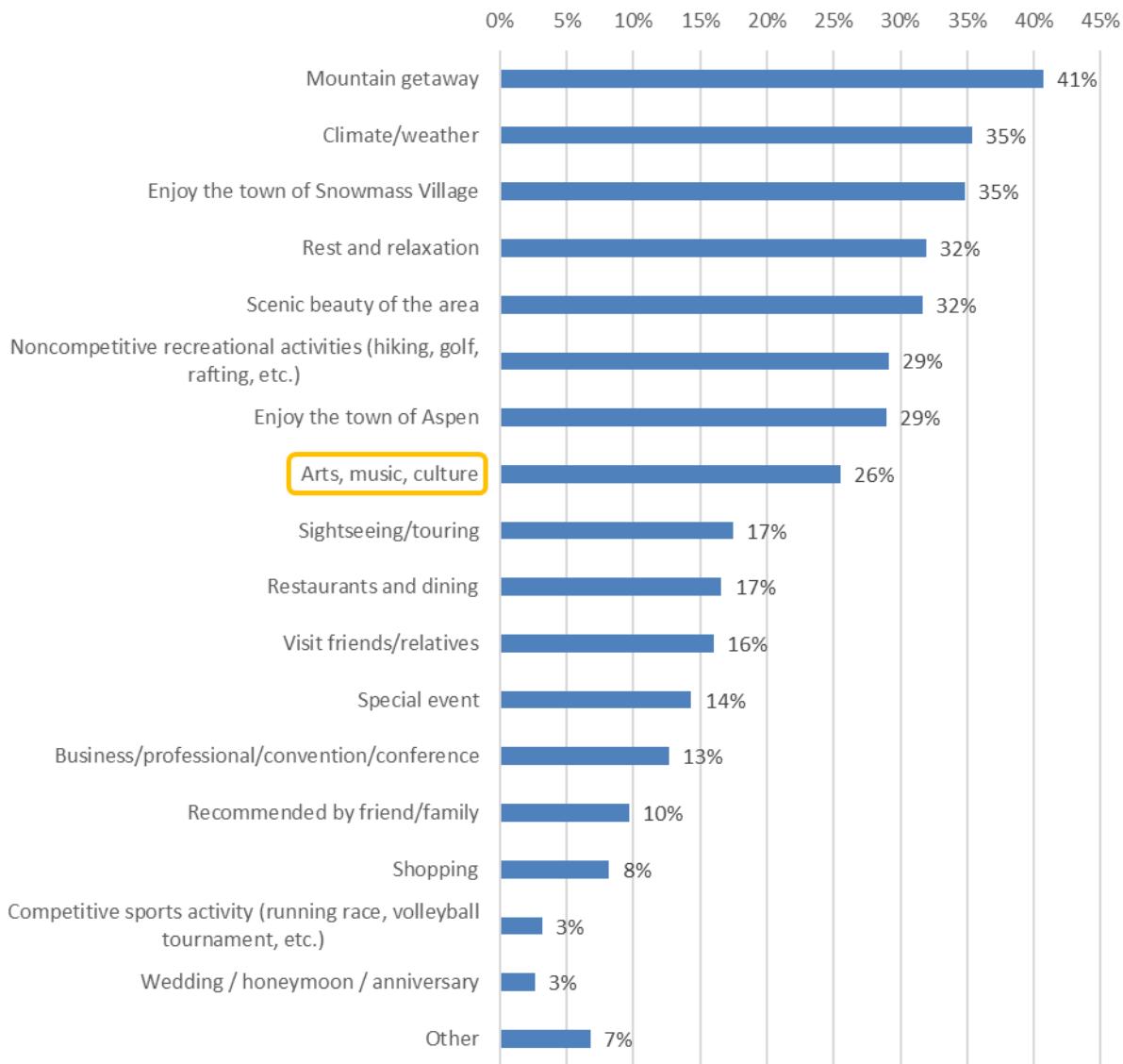
**FIGURE 21: "WHAT IS THE PRIMARY REASON(S) YOU CHOSE TO VISIT ASPEN?"
SUMMERS 2014 - 2019**



Source: ACRA summer visitor intercept surveys; RRC Associates.

In Snowmass Village, a generally similar 26% of visitors cited arts, music and culture among their primary reasons for visiting in summer 2016 (Figure 22). Again, arts, music and culture was among the middle-ranked reasons in terms of popularity.

**FIGURE 22: “WHAT ARE YOUR PRIMARY REASON(S) FOR VISITING SNOWMASS THIS TRIP?”
SUMMER 2016**



Source: Snowmass Visitor Intercept Survey Summer 2016 (n=847); RRC Associates.

In winter 2019/20, among Aspen/Snowmass skiers on overnight trips (second homeowners excluded), 28% participated in arts and cultural activities during their trip, led by art galleries (13%), concerts (7%) and museums (6%). Among those who attended arts and cultural activities, those activities accounted for an average of 35% of guests' motivation for visiting the area (average rating 3.5 on a 0-10 scale). Note that these results exclude nonskiers, although most visitors to Aspen/Snowmass in winter are likely to be downhill skiers/snowboarders.

**FIGURE 23: ARTS AND CULTURE PARTICIPATION AMONG WINTER OVERNIGHT SKIERS
ASPEN/SNOWMASS, WINTER 2019/20**

		Overnight Skiers Winter 2019/20
Did you participate in any arts and cultural activities in Aspen/Snowmass during your trip? (Please check all that apply)	Art gallery	13%
	Concert	7%
	Museum	6%
	Movie	3%
	Play/musical/dance performance	2%
	Comedy or variety show	2%
	Lecture/artist talk	1%
	Art/humanities class or seminar	0%
	Other	5%
	None of the above	72%
TOTAL		112%
	n =	2,511
(If participated in arts and cultural activities) How important were arts & cultural offerings in your decision to visit Aspen/Snowmass this trip?	0 - Not at all important	20%
	1	8%
	2	12%
	3	13%
	4	13%
	5 - Half of my reason for coming to Aspen/Snowmass	13%
	6	3%
	7	6%
	8	8%
	9	3%
	10 - My only reason for coming to Aspen/Snowmass this trip	2%
TOTAL		100%
Average		3.5
n =		699

Source: Aspen Skiing Company post-trip skier survey, winter 2019/20. Second homeowners excluded.

Appendix 2: Second Homeowner Purchase Motivations and Other Opinions (2003 NWCCOG Survey)

In 2003, NWCCOG sponsored a homeowner mailback survey in Pitkin County and Eagle, Grand and Summit counties, in part to understand second homeowner purchase motivations, interests and behaviors.

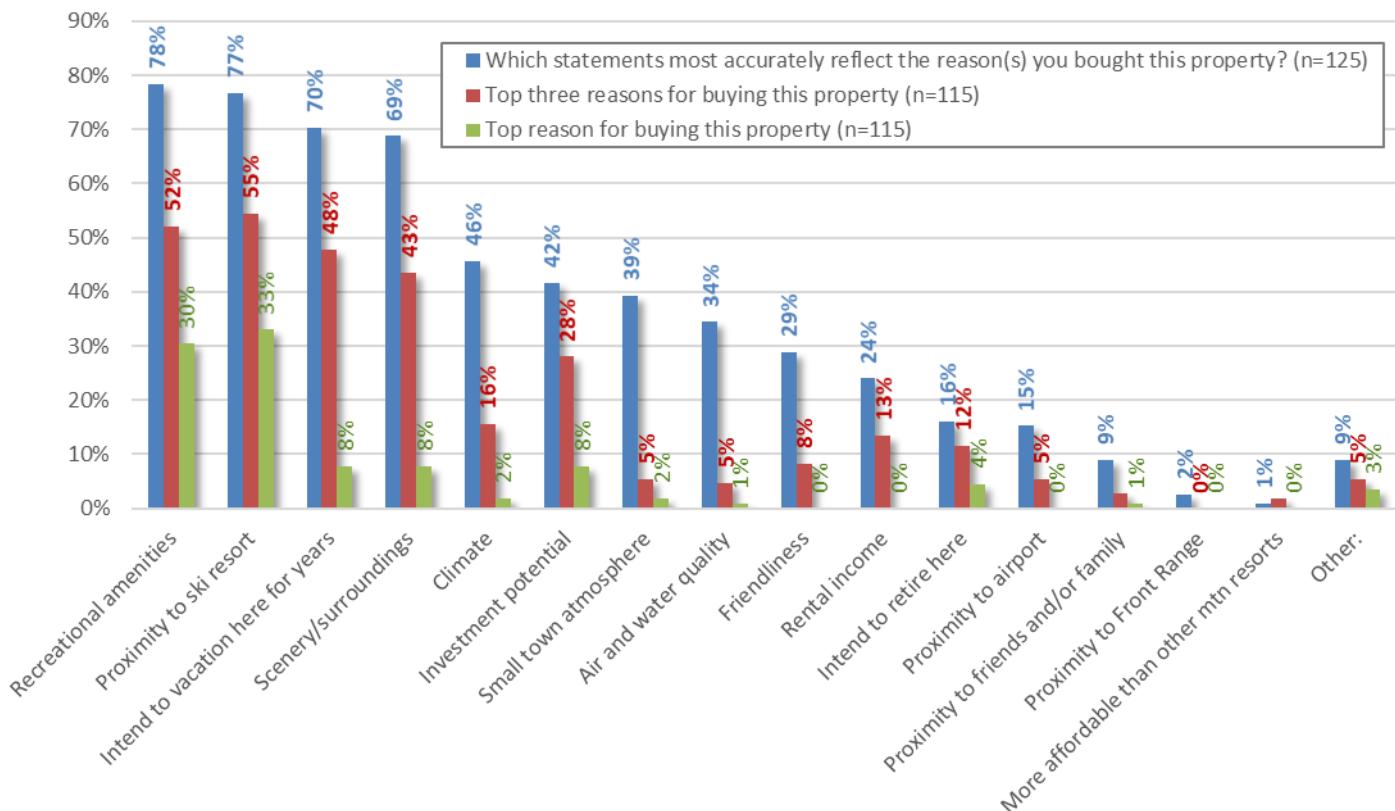
Although the results are dated and current patterns may differ, the results of that survey provide an additional perspective on values and priorities of second homeowners.

The survey garnered responses from 129 Pitkin County second homeowners. Following are selected findings from the survey which focus on purchase motivations, interests and activities.

Regarding motivations for purchasing their second home, respondents were presented with a series of reasons, and asked to select all the reasons as well as the first, second and third most important reasons.

As illustrated in Figure 24 below, the top two reasons were recreational amenities and proximity to ski resort, followed by “intend to vacation here for years” and scenery/surroundings. Arts and culture was not listed as a response option, although respondents did have the ability to check “other” (9% cited “other” reasons for their purchase). These results indicate that reasons other than arts and culture were important factors for many second homeowners in 2003.

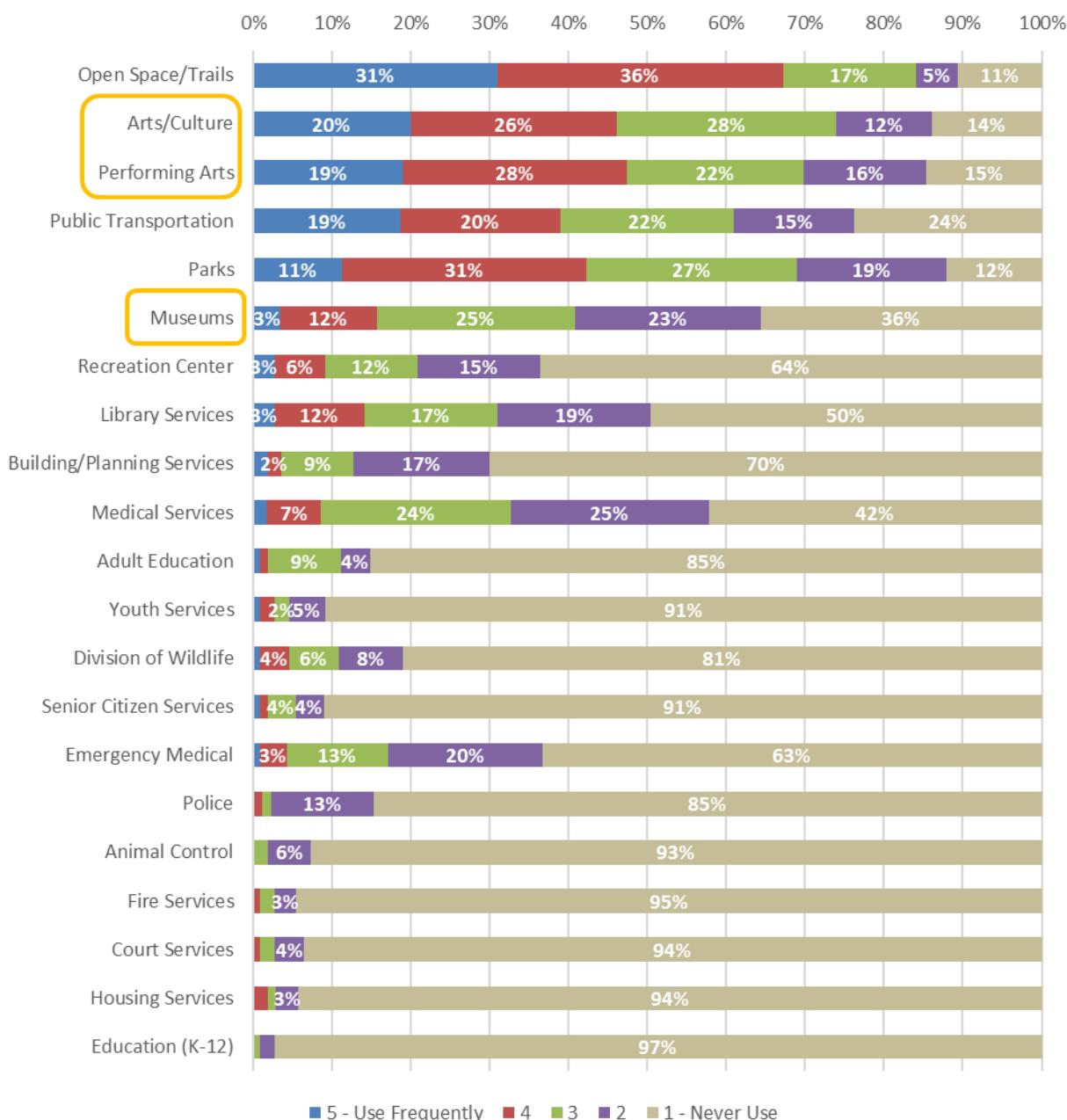
**FIGURE 24: “WHICH STATEMENTS MOST ACCURATELY REFLECT THE REASON(S) YOU BOUGHT THIS PROPERTY?”
“PLEASE RANK YOUR TOP THREE REASONS.” PITKIN COUNTY SECOND HOMEOWNERS 2003**



Additionally, the survey probed the activities of second homeowners. As illustrated in Figure 25 below, many second homeowners indicated frequent use of arts and cultural activities. On a 5-point frequency scale (where 1=never use and 5=use frequently), many second homeowners indicated relatively frequent use (response of 4 or 5) of performing arts (47%), arts/culture (46%), and museums (16%).

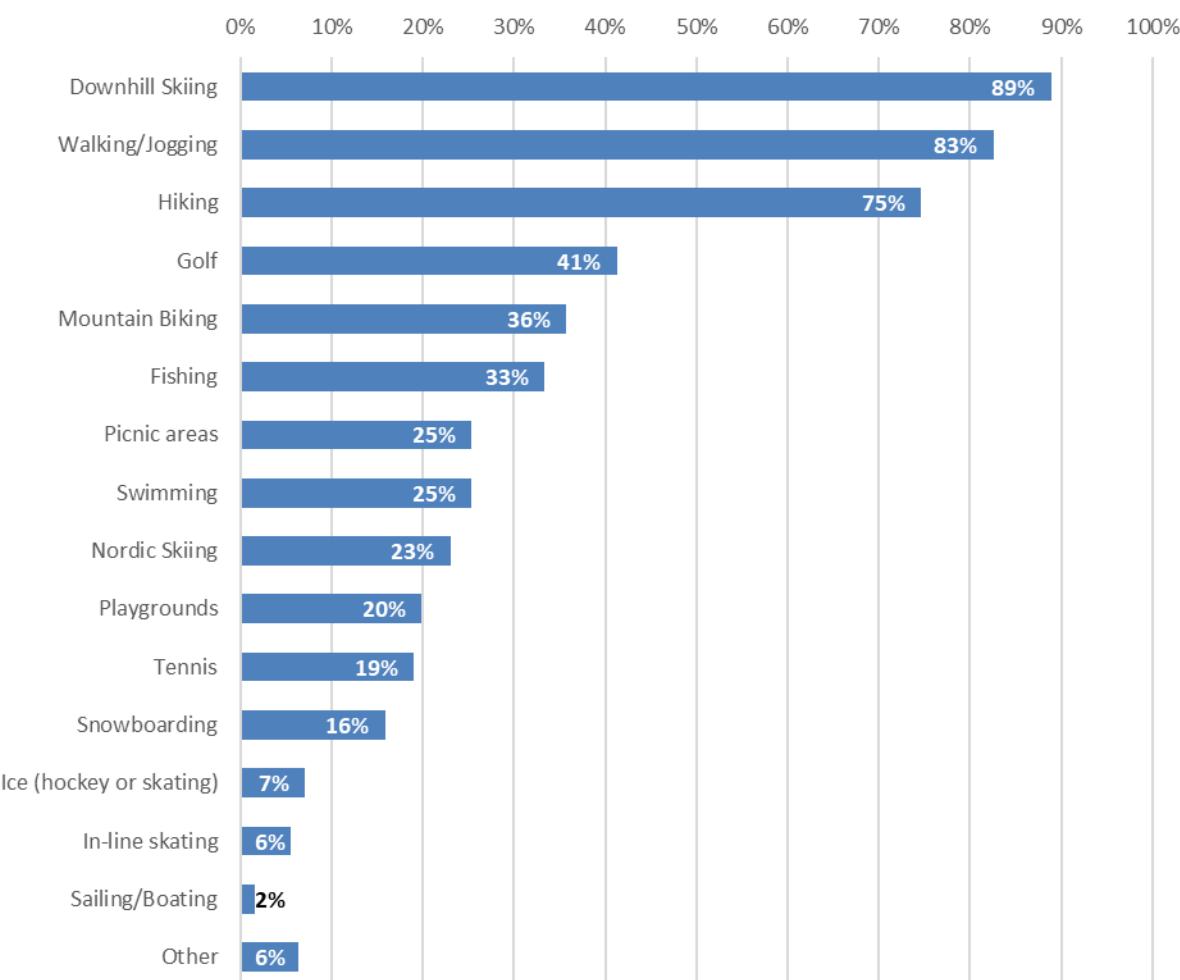
FIGURE 25: "DURING THE PAST 12 MONTHS PLEASE INDICATE THE FREQUENCY OF USE THAT YOU (AND PEOPLE VISITING AND/OR LIVING WITH YOU) HAVE UTILIZED FOR THE FOLLOWING COMMUNITY SERVICES."

PITKIN COUNTY SECOND HOMEOWNERS 2003



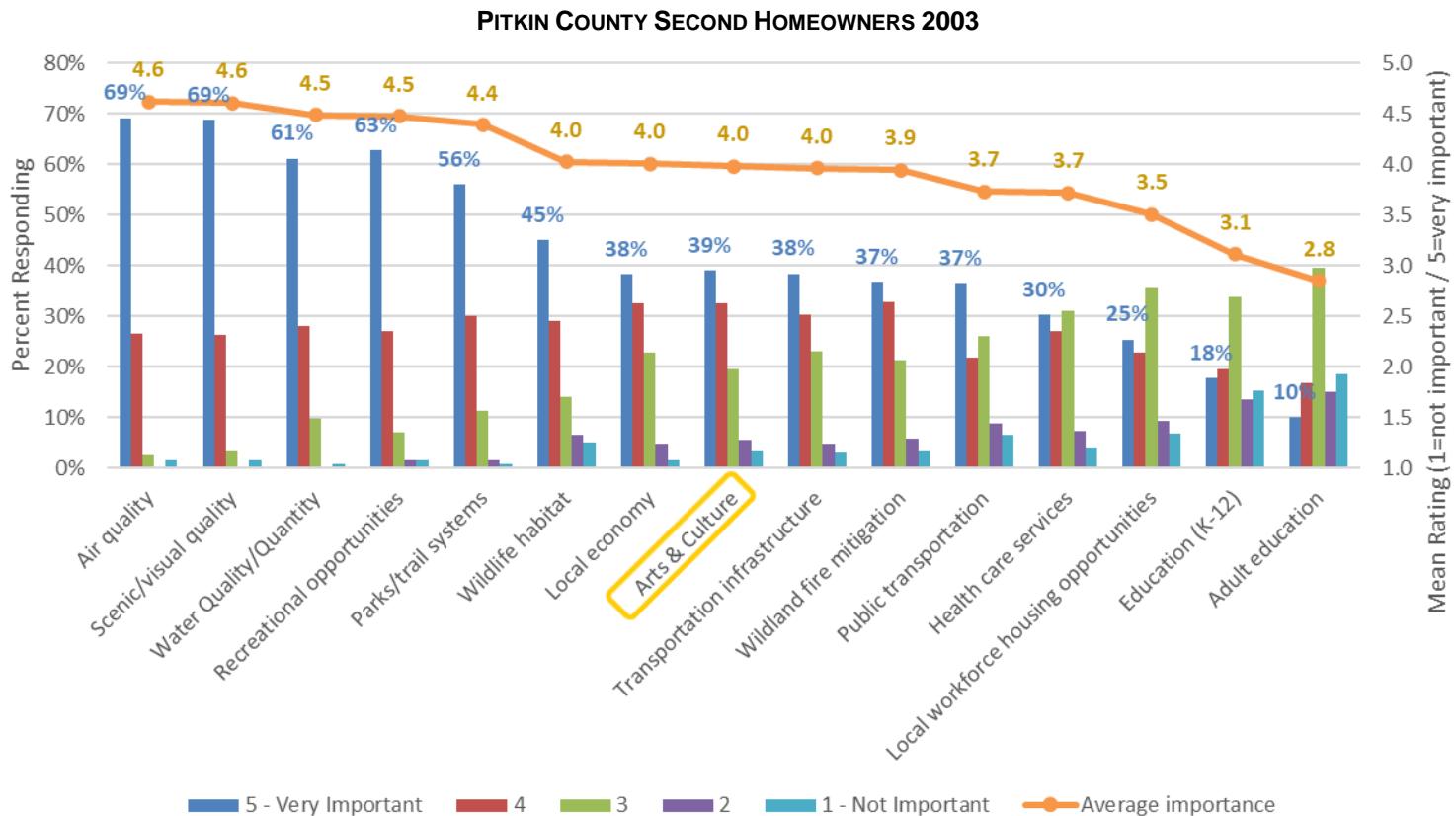
Separately, the survey also found that a second homeowners broadly participate in recreational activities when they are in the area, with 89% downhill skiing (16% snowboarding), 83% walking/jogging, and 75% hiking, among other activities (Figure 26).

**FIGURE 26: "WHAT RECREATIONAL ACTIVITIES DO YOU PARTICIPATE IN WHILE IN THE AREA?"
PITKIN COUNTY SECOND HOMEOWNERS 2003**



The survey also asked second homeowners to rate the importance of selected issues for purposes of informing local decisionmakers. As shown in Figure 27, respondents gave “arts and culture” an average rating of 4.0 on a 1-5 importance scale – behind a variety of environmental and recreational issues, and on a par with the local economy and transportation infrastructure.

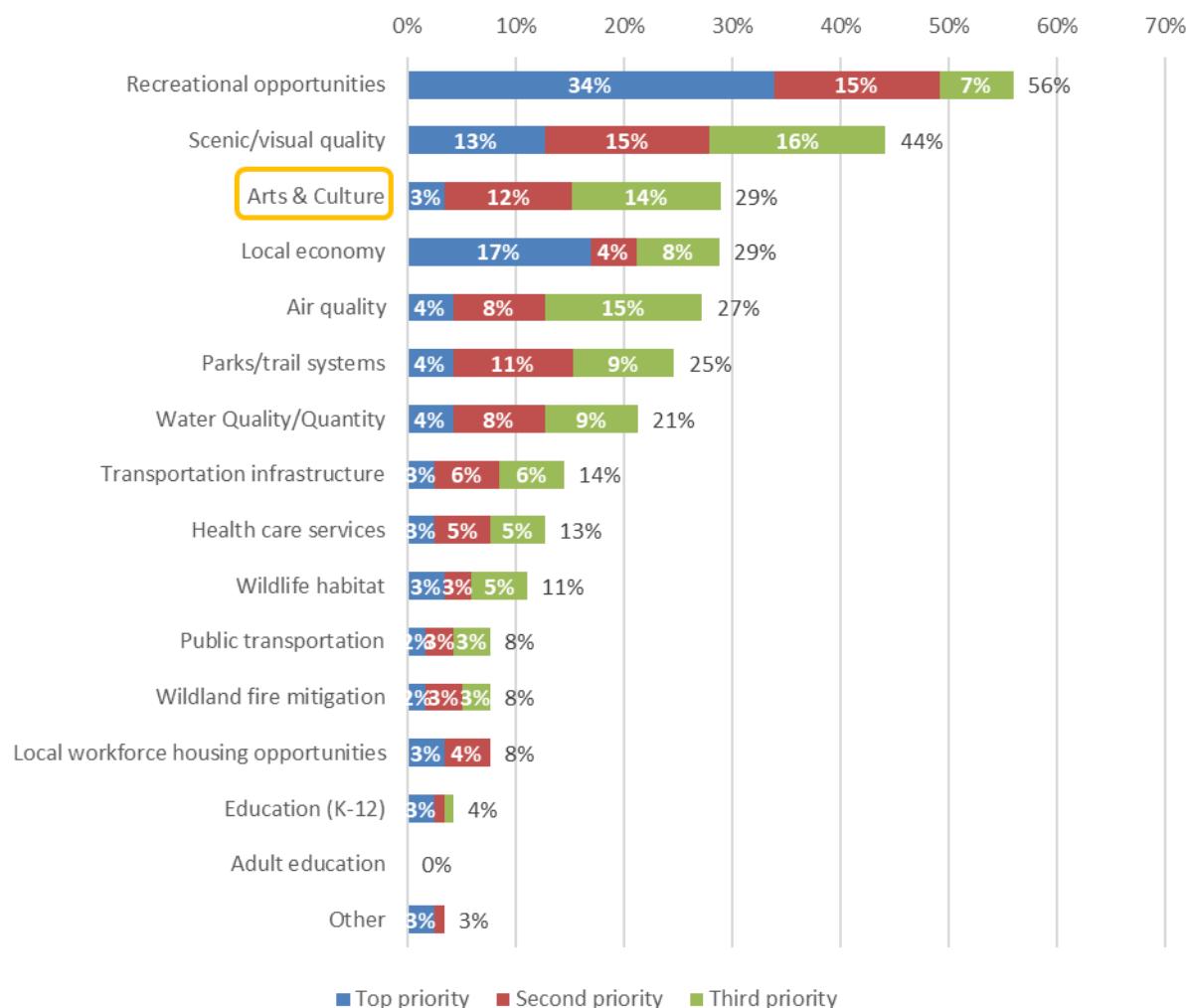
FIGURE 27: “PLEASE LET THE LOCAL GOVERNMENT OFFICIALS KNOW HOW IMPORTANT THE FOLLOWING ISSUES ARE TO YOU.”



In a follow-up question, respondents were asked to identify their top three issues for local government officials, using the same list. As shown in Figure 28 below, 29% of second homeowners selected “arts and culture” as one of their top three issues – behind recreation (56%) and scenic/visual quality (44%), and similar to the local economy (29%) and air quality (27%).

FIGURE 28: “PLEASE LET THE LOCAL GOVERNMENT OFFICIALS KNOW HOW IMPORTANT THE FOLLOWING ISSUES ARE TO YOU. PLEASE PRIORITIZE YOUR TOP THREE ITEMS.”

PITKIN COUNTY SECOND HOMEOWNERS 2003



Appendix 3: Jobs and Businesses in Creative Industries, 2017: Americans for the Arts Estimates

As noted in the Executive Summary, the nonprofit Americans for the Arts has developed estimates of employment and businesses in “creative industries,” inclusive of for-profit and nonprofit arts-centric businesses. The estimates have been reported at the national, state, and county levels, as well as for other geographies. The data allows for geographic and industry sector comparisons, enabling Pitkin County’s creative industries to be understood in a broader context. The results also provide a cross-check to other estimates of arts and culture jobs.

The source of the data is the private company Dun & Bradstreet. Because not all businesses are registered with Dun & Bradstreet, the results undercount arts employment and businesses (particularly nonprofits arts organizations and individual artists). Additionally, both the underlying data source and the definitions of arts and cultural economic activities differ from the BEA Arts and Cultural Production Satellite Accounts (ACPSA), so any comparisons of these two datasets should be made with caution.

As shown in Table 35 to follow, the Americans for the Arts data indicates that jobs in creative industries accounted for 4.7% of jobs in Pitkin County in 2017, 34% higher than observed in Colorado (3.5%), and 132% higher than the national average (2.0%). As such, creative industries are disproportionately important to the Pitkin County economy, even before accounting for audience spend and second home purchase decisions. The comparisons also show that Pitkin County has above-average concentrations of jobs in each major sector – arts schools and services, design and publishing, film/radio/TV, museums and collections, performing arts, and visual arts/photography - relative to the U.S. (and relative to Colorado, except for film/TV/radio).¹⁶

Table 36 to follow illustrates the number of jobs in creative industries in Pitkin County and a selection of other mountain resort and western U.S. counties in 2017. The table also shows the share of total jobs which are in creative industries. Again, Pitkin County stands out for an above-average share of jobs in creative industries (4.7%) – leading all of the compared counties, including Santa Fe County NM (3.4%), Taos County NM (3.3%), San Miguel County CO (2.9%), Eagle County CO (2.8%), and Teton County WY (2.8%), among others.

Finally, Table 37 to follow illustrates employment location quotients (LQs) in creative industries for the same counties, relative to the U.S. The results help to highlight particular sectors in which the comparative set communities have a relatively strong arts focus. For example, Pitkin County has especially high employment concentrations in arts schools and instruction (LQ 8.9, i.e. 8.9 times the US concentration) and architecture (LQ 6.9), with high LQs in several other sectors too. Santa Fe County is notably strong for opera (30.2), museums (6.8), and visual arts/photography (2.9), among others. Taos County stands out for museums (6.1), art schools and instruction (3.8), and visual arts/photography (3.4). Interestingly, all 14 of the listed counties exhibit LQ’s in excess of 1.0 for architecture except for Taos County, perhaps in part due to the significant second home and upscale home markets in each area. Additionally, 10 of the 14 counties have LQ’s in excess of 1.0 for creative industries as a whole.

¹⁶ These concentrations are apparent from Pitkin County’s employment location quotients, calculated as the share of Pitkin County employment in a given sector divided by the share of US or Colorado employment in the same sector. Pitkin County has an above-average share of employment in sectors with a location quotient above 1, and a below-average share of employment in sectors with a location quotient below 1.

**TABLE 35: JOBS AND BUSINESSES IN CREATIVE INDUSTRIES (PER AMERICANS FOR THE ARTS):
PITKIN COUNTY, COLORADO, AND US, APRIL 2017**

Category	Employees			Share of Employees			Employment Location Quotients			Businesses		
	Pitkin Co.	Colorado	U.S.	Pitkin Co.	Colorado	U.S.	Pitkin Co. vs. Colo.	Pitkin Co. vs. U.S.	Pitkin Co.	Colorado	U.S.	
Arts Schools and Services	93	3,019	120,315	0.52%	0.10%	0.07%		5.5		7.4		2
Agents	--	66	12,790	0.00%	0.00%	0.01%		--		--		--
Arts Councils	--	120	7,078	0.00%	0.00%	0.00%		--		--		--
Arts Schools and Instruction	93	2,833	100,447	0.52%	0.09%	0.06%		5.8		8.9		2
Design and Publishing	344	24,139	1,041,507	1.93%	0.76%	0.61%		2.5		3.2		115
Advertising	34	6,827	368,372	0.19%	0.22%	0.22%	0.9	0.9	0.9	0.9	9	836
Architecture	199	6,054	274,754	1.12%	0.19%	0.16%	5.8	6.9	52	1,248	38,955	
Design	106	10,783	357,826	0.60%	0.34%	0.21%	1.7	2.8	51	5,389	158,050	
Publishing	5	475	40,555	0.03%	0.02%	0.02%	1.9	1.2	3	61	2,823	
Film, Radio and TV	100	59,134	844,616	0.56%	1.87%	0.49%		0.3		1.1		30
Motion Pictures	86	27,949	473,996	0.48%	0.88%	0.28%	0.5	1.7	28	1,765	73,253	
Radio	4	1,494	32,810	0.02%	0.05%	0.02%	0.5	1.2	1	144	5,690	
Television	10	29,691	337,810	0.06%	0.94%	0.20%	0.1	0.3	1	149	6,676	
Museums and Collections	39	2,578	173,898	0.22%	0.08%	0.10%		2.7		2.2		5
Historical Society	--	168	17,391	0.00%	0.01%	0.01%	--	--	--	--	35	2,521
Museums	37	2,199	127,174	0.21%	0.07%	0.07%	3.0	2.8	4	325	13,850	
Planetarium	--	28	598	0.00%	0.00%	0.00%	--	--	--	--	1	57
Zoos and Botanical	2	183	28,735	0.01%	0.01%	0.02%	1.9	0.7	1	26	1,430	
Performing Arts	94	8,920	523,687	0.53%	0.28%	0.31%		1.9		1.7		18
Dance	--	40	3,612	0.00%	0.00%	0.00%	--	--	--	--	3	218
Music	4	3,784	228,571	0.02%	0.12%	0.13%	0.2	0.2	2	1,163	49,728	
Opera	--	25	4,802	0.00%	0.00%	0.00%	--	--	--	--	3	204
Performers (nec*)	7	2,029	118,406	0.04%	0.06%	0.07%	0.6	0.6	6	811	40,532	
Services & Facilities	83	2,715	143,640	0.47%	0.09%	0.08%	5.4	5.5	10	508	23,520	
Theater	--	327	24,656	0.00%	0.01%	0.01%	--	--	--	--	67	2,938
Visual Arts/Photography	171	13,801	780,463	0.96%	0.44%	0.46%		2.2		2.1		72
Crafts	9	1,348	104,534	0.05%	0.04%	0.06%	1.2	0.8	2	408	17,197	
Photography	77	7,754	338,426	0.43%	0.25%	0.20%	1.8	2.2	40	4,245	137,194	
Services	39	2,838	144,525	0.22%	0.09%	0.08%	2.4	2.6	8	564	21,307	
Visual Arts	46	1,861	192,978	0.26%	0.06%	0.11%	4.4	2.3	22	725	23,199	
Total - Creative Industries	841	111,591	3,484,486	4.73%	3.53%	2.04%		1.34		2.32		242
Total - All Businesses	17,795	3,163,526	170,698,557	100.00%	100.00%	100.00%		1.00		1.00		2,645
*nec=not elsewhere classified. Location quotient = Pitkin County industry concentration / (Colorado industry concentration, or US industry concentration).												

Source: "Creative Industries: Business & Employment in the Arts, 2017," Americans for the Arts.

**TABLE 36: JOBS IN CREATIVE INDUSTRIES (PER AMERICANS FOR THE ARTS), APRIL 2017:
PITKIN COUNTY AND SELECTED OTHER MOUNTAIN & WESTERN COUNTIES (COUNTIES SORTED BY % OF JOBS IN CREATIVE INDUSTRIES)**

Category	Pitkin County, CO	Santa Fe County, NM	Taos County, NM	Miguel County, CO	Eagle County, CO	Teton County, WY	Blaine County, ID	Summit County, CO	Gunnison County, CO	Summit County, UT	Routt County, CO	Garfield County, CO	La Plata County, CO	Grand County, CO
Arts Schools and Services	93	116	30	8	12	1	1	4	4	30	3	11	8	--
Agents	--	--	1	--	3	--	--	--	--	--	--	--	--	--
Arts Councils	--	9	--	2	4	1	--	--	--	--	3	2	--	--
Arts Schools and Instruction	93	107	29	6	5	--	1	4	4	30	--	9	8	--
Design and Publishing	344	646	56	84	553	190	127	264	92	241	120	238	213	28
Advertising	34	96	1	6	38	16	14	100	2	53	6	63	28	6
Architecture	199	297	15	31	210	97	69	97	57	56	54	72	60	16
Design	106	238	38	46	305	75	44	67	33	132	60	102	120	6
Publishing	5	15	2	1	--	2	--	--	--	--	--	1	5	--
Film, Radio and TV	100	219	45	40	92	105	27	39	28	241	54	70	67	16
Motion Pictures	86	212	33	40	84	105	27	37	14	222	43	63	61	8
Radio	4	2	10	--	5	--	--	2	12	7	11	3	1	--
Television	10	5	2	--	3	--	--	--	2	12	--	4	5	8
Museums and Collections	39	488	59	2	22	22	34	4	35	17	20	34	38	7
Historical Society	--	2	--	--	2	--	--	--	2	--	1	4	--	--
Museums	37	480	59	2	14	22	21	4	33	17	19	30	38	7
Planetarium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zoos and Botanical	2	6	--	--	6	--	13	--	--	--	--	--	--	--
Performing Arts	94	474	33	24	103	54	28	57	10	93	22	71	84	7
Dance	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Music	4	152	13	9	22	14	4	12	4	14	13	38	70	3
Opera	--	80	--	--	--	--	--	--	--	--	--	--	--	--
Performers (nec*)	7	42	7	4	5	4	19	16	2	58	6	5	3	--
Services & Facilities	83	170	13	11	76	21	5	29	4	21	3	28	11	4
Theater	--	30	--	--	15	--	--	--	--	--	--	--	--	--
Visual Arts/Photography	171	1,241	200	28	180	155	90	49	42	131	97	142	210	13
Crafts	9	132	12	4	37	2	1	6	3	9	4	7	26	2
Photography	77	238	45	10	41	84	47	31	18	62	39	56	110	8
Services	39	493	44	7	28	14	28	8	9	36	40	38	45	1
Visual Arts	46	378	99	7	74	55	14	4	12	24	14	41	29	2
Total - Creative Industries	841	3,184	423	186	962	527	307	417	211	753	316	566	620	71
Total - All Businesses	17,795	94,312	12,908	6,325	34,073	18,780	12,236	17,263	9,253	33,791	15,526	30,064	33,633	7,165
% Creative Industries	4.7%	3.4%	3.3%	2.9%	2.8%	2.8%	2.5%	2.4%	2.3%	2.2%	2.0%	1.9%	1.8%	1.0%

*nec=not elsewhere classified.

Source: "Creative Industries: Business & Employment in the Arts, 2017," Americans for the Arts.

**TABLE 37: EMPLOYMENT LOCATION QUOTIENTS IN CREATIVE INDUSTRIES:
PITKIN COUNTY AND SELECTED OTHER MOUNTAIN RESORT & WESTERN US COUNTIES, RELATIVE TO THE U.S. OVERALL: APRIL 2017**

Category	Pitkin County, CO	Santa Fe County, NM	Taos County, NM	Miguel County, CO	Eagle County, CO	Teton County, WY	Blaine County, ID	Summit County, CO	Gunnison County, CO	Summit County, UT	Routt County, CO	Garfield County, CO	La Plata County, CO	Grand County, CO
Arts Schools and Services	7.4	1.7	3.3	1.8	0.5	0.1	0.1	0.3	0.6	1.3	0.3	0.5	0.3	--
Agents	--	--	1.0	--	1.2	--	--	--	--	--	--	--	--	--
Arts Councils	--	2.3	--	7.6	2.8	1.3	--	--	--	--	4.7	1.6	--	--
Arts Schools and Instruction	8.9	1.9	3.8	1.6	0.2	--	0.1	0.4	0.7	1.5	--	0.5	0.4	--
Design and Publishing	3.2	1.1	0.7	2.2	2.7	1.7	1.7	2.5	1.6	1.2	1.3	1.3	1.0	0.6
Advertising	0.9	0.5	0.0	0.4	0.5	0.4	0.5	2.7	0.1	0.7	0.2	1.0	0.4	0.4
Architecture	6.9	2.0	0.7	3.0	3.8	3.2	3.5	3.5	3.8	1.0	2.2	1.5	1.1	1.4
Design	2.8	1.2	1.4	3.5	4.3	1.9	1.7	1.9	1.7	1.9	1.8	1.6	1.7	0.4
Publishing	1.2	0.7	0.7	0.7	--	0.4	--	--	--	--	0.1	0.6	--	--
Film, Radio and TV	1.1	0.5	0.7	1.3	0.5	1.1	0.4	0.5	0.6	1.4	0.7	0.5	0.4	0.5
Motion Pictures	1.7	0.8	0.9	2.3	0.9	2.0	0.8	0.8	0.5	2.4	1.0	0.8	0.7	0.4
Radio	1.2	0.1	4.0	--	0.8	--	--	0.6	6.7	1.1	3.7	0.5	0.2	--
Television	0.3	0.0	0.1	--	0.0	--	--	--	0.1	0.2	--	0.1	0.1	0.6
Museums and Collections	2.2	5.1	4.5	0.3	0.6	1.1	2.7	0.2	3.7	0.5	1.3	1.1	1.1	1.0
Historical Society	--	0.2	--	--	0.6	--	--	--	2.1	--	0.6	1.3	--	--
Museums	2.8	6.8	6.1	0.4	0.6	1.6	2.3	0.3	4.8	0.7	1.6	1.3	1.5	1.3
Planetarium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zoos and Botanical	0.7	0.4	--	--	1.0	--	6.3	--	--	--	--	--	--	--
Performing Arts	1.7	1.6	0.8	1.2	1.0	0.9	0.7	1.1	0.4	0.9	0.5	0.8	0.8	0.3
Dance	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Music	0.2	1.2	0.8	1.1	0.5	0.6	0.2	0.5	0.3	0.3	0.6	0.9	1.6	0.3
Opera	--	30.2	--	--	--	--	--	--	--	--	--	--	--	--
Performers (nec*)	0.6	0.6	0.8	0.9	0.2	0.3	2.2	1.3	0.3	2.5	0.6	0.2	0.1	--
Services & Facilities	5.5	2.1	1.2	2.1	2.7	1.3	0.5	2.0	0.5	0.7	0.2	1.1	0.4	0.7
Theater	--	2.2	--	--	--	5.5	--	--	--	--	--	--	--	--
Visual Arts/Photography	2.1	2.9	3.4	1.0	1.2	1.8	1.6	0.6	1.0	0.8	1.4	1.0	1.4	0.4
Crafts	0.8	2.3	1.5	1.0	1.8	0.2	0.1	0.6	0.5	0.4	0.4	0.4	1.3	0.5
Photography	2.2	1.3	1.8	0.8	0.6	2.3	1.9	0.9	1.0	0.9	1.3	0.9	1.6	0.6
Services	2.6	6.2	4.0	1.3	1.0	0.9	2.7	0.5	1.1	1.3	3.0	1.5	1.6	0.2
Visual Arts	2.3	3.5	6.8	1.0	1.9	2.6	1.0	0.2	1.1	0.6	0.8	1.2	0.8	0.2
Total - Creative Industries	2.3	1.7	1.6	1.4	1.4	1.4	1.2	1.2	1.1	1.1	1.0	0.9	0.9	0.5

*nec=not elsewhere classified. Green-shaded cells indicate location quotients greater than 1; red-shaded cells indicate location quotients less than 1.

Source: "Creative Industries: Business & Employment in the Arts, 2017," Americans for the Arts.

Appendix 4: Comparison of 2019, 2004 and 1995 Pitkin County Arts & Culture Studies

The results of the 2019 Pitkin County arts and culture study can be partially compared to similar studies conducted in 2003/04 and 1995. Both of the prior studies were conducted by the CU Business Research Division, which was again a study partner in 2019. However, there were some differences in the organizations studied, the scope of impacts evaluated, and selected methodological details, necessitating some caution in comparing the results.

The organizations which participated (and were a focus of analysis) in each study year are listed in Table 38 below. A total of 12 organizations were included in the 2019 study, as compared to 10 in 2003/04 and 15 organizations/events in 1995. Seven organizations or events were included in all three years, while another four were included in two years, and 11 were included in just one year. As a result of the differing organizational coverage, some differences would likely be expected in the study results.

TABLE 38: ORGANIZATIONS PARTICIPATING IN 2019, 2004 AND 1995 STUDIES

Participating Organizations	2019 Study	2003/04 Study	1995 Study
1 Anderson Ranch Arts Center	X	X	X
2 Aspen Art Museum	X	X	X
3 Aspen Film	X	X	X
4 Aspen Historical Society	X	X	X
5 Aspen Music Festival and School	X	X	X
6 Jazz Aspen Snowmass	X	X	X
7 Aspen Santa Fe Ballet	X	X	
8 Theatre Aspen (<i>Aspen Theatre in the Park in 2003/04</i>)	X	X	
9 The Aspen Institute	X		X
9a. Aspen Words (<i>Aspen Writers' Foundation 2003/04 & 1995</i>)	X	X	X
9b. Aspen Institute Community Programs	X		
9c. Aspen Ideas Festival	X		
10 Aspen Center for Environmental Studies	X		
11 The Red Brick Center for the Arts	X		
12 Wheeler Opera House	X		
13 Food & Wine Classic in Aspen		X	
14 Aspen Ballet Company and School			X
15 Aspen Community and Institute Committee			X
16 Aspen Community Theatre			X
17 Aspen/Snowmass Council for the Arts			X
18 DanceAspen			X
19 Grassroots TV Network			X
20 International Design Conference in Aspen			X
Total Participating Organizations	12	10	15

Table 39 summarizes the scope and survey methodologies of the respective studies. All three studies measured organization impacts and audience spend impacts, while 2019 was the only year to fully estimate other arts and cultural activity and estimate second home impacts. Additionally, audience and organization surveys were conducted in all three years, although audience surveys were conducted in summer only in 1995 (vs. both summer and winter in later years).

TABLE 39: STUDY SCOPE AND SURVEY METHODOLOGIES IN 2019, 2004 AND 1995 STUDIES

	2019 Study	2003/04 Study	1995 Study
Measured participating organization impacts?	Yes	Yes	Yes
Measured audience spend impacts?	Yes	Yes	Yes
Measured other arts & cultural activity?	Yes	Partial	No
Estimated second home impacts?	Yes	No	No
Types of surveys collected	Audience & organization	Audience & organization	Audience & organization
Season(s) that audience surveys were collected	Summer & winter	Summer & winter	Summer only
Aggregate audience surveys collected	3,317	777	2,099
Study contractor(s)	RRC Associates & CU BRD	CU BRD	CU BRD

Recognizing that comparability of results is limited (especially due to varying organizational coverage), Table 40 below illustrates aggregate organization and audience spending in the three study years, in 2019 dollars. As shown, combined organization and audience spending doubled between 2003/04 (\$76.1 million) and 2019 (\$152.5 million) in real terms, among the studied organizations.

**TABLE 40: AGGREGATE ORGANIZATION AND AUDIENCE SPENDING IN 2019, 2004 AND 1995 STUDIES
(IN INFLATION-ADJUSTED 2019 DOLLARS)**

	2019	2003/04 (inflation-adjusted to 2019 dollars)	1995 (inflation-adjusted to 2019 dollars)	2003/04 - 2019 percent change
Organization expenditures	\$60,919,218	\$24,391,153	\$21,026,117	150%
Audience expenditures	\$91,589,637	\$51,700,313	\$46,228,451	77%
Total spending	\$152,508,854	\$76,091,467	\$67,254,568	100%

Note: 2003/04 and 1995 inflation adjustments are based on the Denver-Boulder-Greeley Consumer Price Index, per US Bureau of Labor Statistics.

Finally, Table 41 to follow illustrates selected characteristics of the surveyed audiences in the three study years. The results show a high degree of consistency over time with regards to gender mix (65% female in 2019/20 and 2003/04), inflation-adjusted household income (50-54% earning \$150,000+ in 2019 dollars in all three years), and the share attending other local arts and cultural events during their trip (47-54% in 2019 and 2003/04).

By contrast, the studies exhibit greater differences regarding in-state (40-66%) vs. out-of-state (34-60%) residence, age (with 2019/20 being significantly older than the other two years, which were similar), the share staying overnight away from home (37-74%), and the average length of stay among lodgers (growing over time from 6.7 nights to 10.1 nights to 23.5 nights). It is not

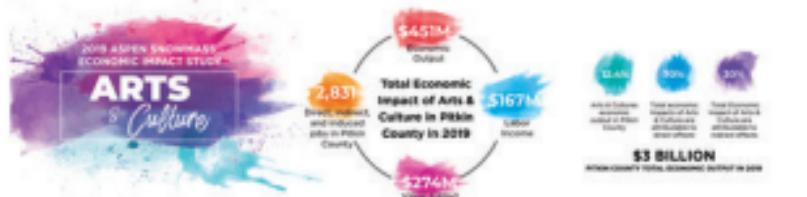
immediately clear whether the variations – including the shifts to an older, longer-stay guest – are a result of differences in the study scope and methodology, true shifts in the audience profile, or both. Independent summer intercept surveys of Aspen visitors over the 2006-2019 period (sponsored by ACRA) has shown much more stable results on age and length of stay over time, although those results apply to visitors generally rather than arts visitors specifically. More granular analysis over time of both the arts audience surveys and general summer visitor surveys may be needed to interpret the comparisons more fully.

TABLE 41: AUDIENCE PROFILE IN 2019, 2004 AND 1995 STUDIES

	2019/20	2003/04	1995
Place of Residence			
Aspen & Snowmass Village	26%	57%	20%
Other Roaring Fork Valley	16%		20%
Other Colorado	13%	9%	
<u>Out of state & International</u>	45%	34%	60%
Total	100%	100%	100%
Gender			
Female	65%	65%	n/a
Male	34%	35%	n/a
<u>Non-binary / Other</u>	1%	n/a	n/a
Total	100%	100%	n/a
Age			
17 and under	1%	2%	1%
18 to 29	4%	11%	10%
30 to 39	7%	13%	14%
40 to 49	8%	20%	22%
50 to 59	19%	26%	24%
<u>60 or older</u>	61%	28%	28%
Total	100%	100%	100%
Annual Household Income (2003/04 & 1995 results are inflation-adjusted to 2019 dollars)			
\$0 – 24,999	5%	4%	5%
\$25 – 49,999	8%	7%	6%
\$50 – 74,999	9%	10%	10%
\$75 – 99,999	10%	10%	10%
\$100 – 149,999	19%	19%	16%
\$150 – 199,999	10%	13%	13%
<u>\$200,000+</u>	40%	37%	41%
Total	100%	100%	100%
Selected Trip Characteristics			
Share attending other arts/cultural events in Aspen/Snowmass this trip	54%	47%	n/a
Share staying overnight away from home in Aspen/Snowmass area	54%	37%	74%
Mean nights per lodger	23.5	10.1	6.7

Note: 2003/04 and 1995 inflation adjustments to income are based on the Denver-Boulder-Greeley Consumer Price Index, per US Bureau of Labor Statistics.

Note: Interpolation was used to align age and income results across years.



OPERATIONS AND PROGRAMMING OF PARTICIPATING IMPACT STUDY ORGANIZATIONS



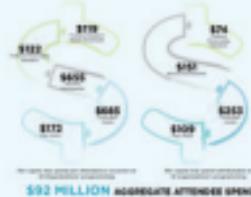
\$3 BILLION



492 members returning total volunteer hours	198 board members	568 members served from 100+ workshops	30 an estimated percentage of participants displayed	2,497 adults served through workshops for parents and caregivers of special needs children and adolescents
3,360	5,121			
13 adults served in housing Park Friday	8 adults serving Park Friday	13,135 adults served in workshops by staff and adults from supporting organizations	6,023 new students from diverse backgrounds from 100+ workshops	13,900 registrations for various volunteer opportunities
14 bars and clubs and individuals with attendance over 10 hours	158 adults from diverse	18,167 adults participating in Park Saturday	453,068 adults served from 100+ workshops	709 individuals participating through the workshop program
				
				CONTACT Individuals and families with disabilities and their caregivers
				2020 Annual Report and Financial Statement



AUDIENCE PROFILE



103 million Americans are obese

ECONOMIC IMPACT OF OTHER ARTS & CULTURAL PRODUCTION



ARTS DRIVEN SECOND HOME PURCHASES



7%

67



MEMORANDUM

TO: Mayor Torre and City Council

FROM: Ashley Perl, Climate Action Manager, Liz Chapman, Senior Waste and Environmental Health Specialist, Chris Menges, Sustainability and Climate Programs Administrator

THRU: CJ Oliver, Environmental Health and Sustainability Director
Phillip Supino, Community Development Director

MEMO DATE: July 2, 2021

MEETING DATE: July 6, 2021

RE: Environmental Health & Sustainability Workplan Update

REQUEST OF COUNCIL:

This memo and accompanying presentation will provide information for City Council's consideration in advance of Council's retreat and goal setting activities. No action is requested of Council and no direction to staff is needed at this time.

SUMMARY AND BACKGROUND:

Summary

In keeping with the Aspen City Council's mission "*to engage with positive civil dialogue, provide the highest quality innovative and efficient municipal services, steward the natural environment, and support a healthy and sustainable community for the benefit of future generations with respect for the work of our predecessors*", staff is sharing information about the current waste and climate crisis to inform Council's discussion at the 2021 goal setting retreat.

Local governments, across the world have taken bold environmental actions to benefit their communities and prevent the catastrophic consequences of climate change, and the City of Aspen is no exception. The City of Aspen and the Roaring Fork Valley have been committed to reducing the community's environmental footprint for decades, and local governments and partners have achieved significant successes. Thanks in large part to community members who engaged in various programs, the Aspen community has demonstrated that it can enact positive change.

However, local program data and nation-wide analysis conducted by [ICLEI](#) shows that the voluntary participation in climate and waste reduction programs to date is not sufficient to achieve the ambitious goals of the community and City Council. The intensifying costs and impacts of climate change and environmental degradation from excessive resource use remains a challenge, and cities across the world have the ability to make the necessary changes. More impactful and immediate action is needed to protect the health and quality of life for residents; extend the life of the landfill; and ensure the future of Aspen provides equitable access to the resources the community prioritizes.

The [scientific community](#) emphasizes that the next 8 years are the most critical to reducing greenhouse gas (GHG) emissions to levels that will hold global warming to the critical 1.5° Celsius threshold. And in the same timeframe, Aspen must reduce waste close to zero to prolong the life of the local landfill. These are exceptional challenges with significant, generational-scale consequences for the Roaring Fork Valley and beyond. Aspen remains uniquely well positioned to address them. As City Council prepares for their annual goal setting retreat, staff is providing information about how City Council can adopt science-based strategies capable of achieving ambitious, essential climate and waste reduction goals. These goals will need to be supported by new policies and regulations in order to be effective.

Previous Council Action

Aspen's City Council has taken previous actions to reduce GHG emissions and resource use, including:

- Adopting the 2012 [Aspen Area Community Plan](#) (AACP), which emphasizes the importance of tackling climate change and reducing waste.
- Adopting the [2018 – 2020 Climate Action Plan](#) (CAP), which lays out a pathway and actions to reduce community GHG emissions in alignment with the City's climate action target of reducing GHG emissions 80% by 2050 from 2004 levels. The CAP includes actions in five key sectors: Waste Reduction, Commercial Buildings, Residential Buildings, Vehicles, and Airport.
- Adopting the [Aspen Community Electric Vehicles Readiness Plan](#) in 2017, which outlines strategies for the City to support EV adoption in the Aspen area.
- Supporting sustainability efforts in the [City of Aspen 2021 Regional, State, and Federal Policy Agenda](#).
- Completing a comprehensive [Waste Study](#) from 2015-2017 which produced recommendations to reduce waste, extend the life of the landfill and reduce GHG emissions.
- In 2019, City Council adopted 2-year goals in the areas of waste reduction and climate action. Actions taken by staff in support of these goals include hiring a temporary staff member; launching a recycling educational campaign in partnership with Pitkin County; managing the Rio Grande Recycle Center to meet community needs; meeting with downtown businesses to improve waste practices; improving waste diversion at the Marolt Ranch Housing facility; and beginning to develop a long-term zero waste plan for Aspen. Additional actions were taken in the energy sector including launching a benchmarking help desk for businesses and expanding the income qualified energy assistance program.

These previous Council actions were strategic in their time and allowed the City to test and learn what is possible through voluntary programming. To date, voluntary programs have delivered direct benefits to program participants, yet they yield insufficient progress in achieving Council's goals.

Given the urgency of the climate crisis, the shortening lifespan of the local landfill, and the accelerated pace of [resource use](#), the current best practice for local governments worldwide and the recommendation for Aspen is to pursue waste reduction and climate action policies and programs on a faster timeline and with a more aggressive, mandated approach. The staff recommendation that follows suggests a shift towards more policies and regulations that build upon the existing programming that has earned Aspen recognition as a global environmental leader.

Background

Aspen's Changing Climate Aspen has experienced the effects of a changing climate for nearly four decades, and continues to see impacts to human health, infrastructure, ecosystems and the economy from the warming climate. In Aspen the measurement of *frost-free days* is used to gauge the extent of local warming. *Frost free days* is a measure of the total days per year when temperatures in Aspen do not dip below freezing for a 24-hour period. In the 2010-2019 period, 120 frost free days annually were measured in Aspen compared to 89 days in 1980. This change represents over a month of lost winter. Warmer temperatures come with real costs including poor air quality, more frequent and intense fires, damage to infrastructure, decreased visitors, and damaged ecosystems, according to the [National Climate Assessment](#). Aspen will see more of these impacts at worsening and accelerated levels unless the world (including Aspen) can decarbonize significantly within the next 8 years and reach net zero carbon by 2050.

Aspen's GHG Emissions As of its last published measurement in 2017, the Aspen community had reduced its greenhouse gas emissions by 20% since 2004 (Attachment B). This level of decrease is slightly less than the average decrease from other leading cities, according to data compiled by [ICLEI](#). The majority of these GHG reductions resulted from a more renewable electricity grid. Between 2004 and 2017, Aspen Electric became 100% renewable and Holy Cross Energy became about 40% renewable (with a commitment to get to 100% by 2030). A small portion of achieved reductions can be attributed to energy efficient building codes, transit service, and overall increases in vehicle fuel economy. Locally provided voluntary programs have helped keep resource consumption relatively stable but have not yielded major reductions.

Aspen's GHG forecast shows that the community will fall significantly short of its 2050 GHG reduction targets even if its electricity supply becomes entirely renewable, as planned. Not only is Aspen's current GHG reduction goal less ambitious than is scientifically necessary, but the forecast does not account for the unknown impacts of post-pandemic lifestyle changes.

Emissions from Waste The emissions associated with disposal and transportation of Aspen's waste are responsible for 9% of Aspen's total GHG emissions (Attachment B). To reduce those emissions, food waste must be removed from the landfill through a more robust organics collection and composting program.

Shrinking Landfill Life In addition to contributing to climate change, Aspen's trash also continues to fill the Pitkin County Landfill. At current rates, the landfill will be full and unusable by the year 2030. This will necessitate transporting waste to a non-local landfill which will increase the carbon footprint of Aspen's waste and the cost of waste disposal. To extend the useful life of the landfill, construction and demolition waste must be diverted away from burial.

DISCUSSION:

The key take-away from the data and the science is that Aspen's climate action and waste reduction programs and goals must be accomplished on a much shorter timeline than originally planned for. Within the next 8 years the landfill will run out of space at current rates of waste disposal, which means Aspen has 8 years to achieve community wide composting and significantly decrease construction and demolition waste. Similarly, the window of opportunity to hold global average temperature increase to 1.5° C above preindustrial levels is rapidly closing and requires reducing GHG emissions at least 63% by 2030 and to net zero by 2050 (as calculated by [ICLEI](#)). Like the nation and world, Aspen has 8 years to reduce emissions at these levels, which requires electrifying buildings and vehicles on a renewable electricity grid. Achievements of this magnitude will require participation from all members of and organizations in the community, following the lead of a bold and innovative City of Aspen.

Aspen, along cities across the world, needs to deliver the most substantive reductions by 2030 and continue moving towards zero by the year 2050. Aspen is not alone in the environmental stewardship journey. Numerous other communities offer recycling and composting programs, free public transit, and energy efficiency incentives. The experience locally and from other cities shows that Aspen has likely seen most early adopters in the community participate in City-offered programs like composting and energy efficiency. Local data from the SCRAPS composting program shows that approximately 5% of residents and 20% of the restaurants choose to divert compost and take advantage of the city-provided incentives. This aligns with the experiences in Fort Collins, Boulder, San Francisco, and Portland which did not see their diversion rates rise above the national average until they enacted mandates which required diversion as part of the waste management system.

Below are staff recommendations for how to transition Aspen's long-standing voluntary programs into high-impact solutions that will lead to achieving the community and City Council's goals. If Council decides to pursue these new policies and regulations, staff will present Council with a deeper analysis of each action, as well as the financial implications.

Waste Reduction

Although the overall GHG emissions associated with waste disposal are smaller than those associated with reducing energy usage in the built environment, Aspen will struggle to achieve its GHG reduction goals without increased organics diversion and reducing material landfilled from development activities.

Waste reduction programs and mandates provide the additional value of increasing the life expectancy of the local landfill and avoiding the negative impacts of transporting waste outside of the region. The embodied energy and carbon emissions of manufacturing products from virgin resources are reduced when materials are recycled and reused. Recycling results in greenhouse gas reduction, even when transportation emissions are considered. Increasing local compost production not only reduces greenhouse gas emissions from the landfill, but also provides a soil amendment to improve local soils.

High Impact Priorities – Waste Reduction

- **Construction and demolition waste diversion** In 2020, over 58% of the material buried in the Pitkin County landfill came from construction and demolition activities. Since staff estimates that 79% of the construction and demolition waste received at the Pitkin County landfill is generated by construction within the City limits, the City of Aspen has the potential to dramatically impact this waste stream in the following ways:
 1. Enact waste diversion requirements for new construction,
 2. Require deconstruction for demolition sites,
 3. Require recycled or repurposed materials to be used in new construction.
- **Organics diversion** Analysis of the waste coming from Aspen residents and businesses in 2015 indicated almost 40% could be diverted to the compost operations at the Pitkin County Solid Waste Center. Organic material buried in the landfill is the largest contributing factor to landfill methane emissions. Further, diverting food waste from trash dumpsters reduces the attraction of wildlife to trash dumpsters.
 1. Require food waste diversion in the commercial sector
 2. Require compost collection for residents

Climate Action

The largest contributors to Aspen's GHG emissions are existing buildings and vehicles. Modeling scenarios indicate that fully electrifying buildings and transportation with the community's planned 100% renewable grid would make it possible to reduce the community's GHG emissions to the necessary -63% by 2030 and net zero by 2050 (as calculated by [ICLEI](#)). Based on this modeling, the following priorities are recommended as the highest impact approaches to achieving Aspen's climate goals.

High Impact Priorities – Climate Action

- **Electrification of the built environment** New buildings are built according to Aspen's strict building codes and are relatively energy efficient compared to older buildings. Existing buildings are the largest potential for reducing Aspen's footprint. Overtime all of Aspen's commercial and residential buildings must take the following steps towards electrification:
 1. Measure and track energy use (Energy Benchmarking/ Building IQ)
 2. Increase the efficiency of the building envelope (Energy Efficiency Improvements/Building IQ)
 3. Switch appliances and systems away from natural gas onto electricity (Electrification)

This process will be incremental, and it will take decades for all of Aspen to become fully electrified. Community preparations and early, meaningful action toward this goal are essential to meeting our climate action mandates. To kickstart Aspen's path towards electrification, staff recommends a mandatory Building IQ program be enacted. This policy would require owners of existing buildings, of a certain size, to track energy and water use and then take steps to reduce that use. This program is now in place in close to 100 cities across the country and is a best practice for building owners to increase livability of these buildings while reducing utility costs.

- **Fleet Electrification** Replacing gas and diesel fueled vehicles with all electric vehicles is another key action to reducing Aspen's GHG emissions. The City of Aspen currently supports this transition by providing public charging stations for individuals. However, the City of Aspen fleet is predominantly made up of gasoline and diesel vehicles. Electrification of the City's fleet should be focused on passenger vehicles, of which there are many, prior to focusing on medium to heavy duty vehicles. By setting a goal to rapidly increase the percentage of electric vehicles in the City of Aspen fleet, the City can lead the way towards the clean vehicle transition for the community.

Climate Action + Waste Reduction = Race to Zero

Climate Action and Waste Reduction may seem like parallel program areas. However, it is a best practice for cities to integrate waste and climate action policies and regulations to optimize program effectiveness and achieve meaningful results. The Race to Zero campaign is one way to strategically integrate and accelerate the achievement of waste and climate goals. The Race to Zero (Attachment C) is a commitment to act at the scale and speed that science demonstrates is needed to address the environmental challenges of the time. All of the high-impact priorities listed above are part of the Race to Zero commitment. If City Council chooses to sign on as a Race to Zero city, the City will receive resources and assistance to help implement these programs and policies.

Should City Council desire to set an overarching, high-impact goal that encompasses both waste reduction and climate action, Council could commit to joining the Race to Zero and completing the customized action plan that would be created for Aspen as part of the membership benefits.

FINANCIAL IMPACTS:

Different programs and policies in climate action and waste reduction require specific budgets and resources to implement. Existing budget is in use to deliver the wide array of programming that is currently offered by the City of Aspen to help the community reduce their footprint. To expand or mandate these programs, additional resources are required. If the City of Aspen chooses to join the Race to Zero, the city will be eligible for financial benefits and additional support to implement the chosen actions.

ENVIRONMENTAL IMPACTS: Improving air quality, conserving resources, protecting the local watershed and extending the life of the landfill are immediate impacts of adopting more aggressive environmental goals. Reducing the frequency and intensity of fires, minimizing damage to infrastructure and ecosystems, and ensuring a viable community and environment for future generations are some of the long-term benefits of reducing GHG emissions.

NEXT STEPS: Should City Council desire to set meaningful goals in the areas of waste reduction and climate action, staff recommends goals that a shift towards more policies, codes and regulations as the most impactful way to achieve measurable results in the next 8 years.

- Council could adopt a goal to reduce landfill waste through mandatory diversion of food, organics, construction, and demolition waste from the landfill.
- Council could adopt a goal to mandate the increased efficiency and incremental electrification of the built environment, starting with a Building IQ ordinance that requires existing buildings to track and improve energy efficiency.
- Council could choose to adopt an integrated goal committing to the Race to Zero mission to ensure both waste reduction and climate action programs are prioritized in Council's goal structure and staff priorities.

A City Council goal in any of these areas would direct staff to focus more time and resources towards aggressive environmental stewardship mandates that can bring the community closer to achieving its stewardship goals. If City Council chooses to adopt such a goal(s), staff will provide the specific information Council will need to evaluate various actions to achieve the new goals. Staff will return to City Council with an implementation plan and analysis that includes both the advantages and disadvantages of policy changes, as well as financial implications of individual programs.

ATTACHMENTS:

Attachment A: High Impact Priorities – At A Glance

Attachment B: Aspen's Greenhouse Gas Emissions – Highlights from 2017 Inventory

Attachment C: Race to Zero



HIGH IMPACT ACTIONS

- ✓ WASTE
- ✓ GHG EMISSIONS

SECTOR

HIGH IMPACT ACTIONS

GHG REDUCTIONS

COMMUNITY BENEFITS



Organics Diversion

- ✓ Require food waste diversion through ordinance
- ✓ Provide financial incentives or support for compost collection



Construction & Demolition Waste Diversion

- ✓ Require diversion at new construction sites
- ✓ Require deconstruction at demolition sites
- ✓ Require recycled content for new construction



Building Electrification & Energy Efficiency

- ✓ New buildings: Adopt energy code requiring electrification
- ✓ Existing buildings: Approve 'Building IQ' policy



Electric Vehicles, Fleets & Transportation

- ✓ Resolution to electrify City of Aspen vehicle fleet
- ✓ EV requirements and incentives for fleet operators
- ✓ Consumer EV incentives
- ✓ EV requirements and incentives for transit and school busses
- ✓ Improve EV charging infrastructure



KEY



Diversion Potential



Economic Benefits



Community Resiliency



Environmental Benefits



Equity Impact

GHG Reduction Potential



Large



Largest

Attachment B

Highlights from Aspen's most recent* Community-wide GHG Inventory.

Full Report contains:

- Reduction results
- Sector trends
- GHG Forecast
- Takeaways

*** An Updated 'GHG Inventory will be available in late summer/fall 2021.**

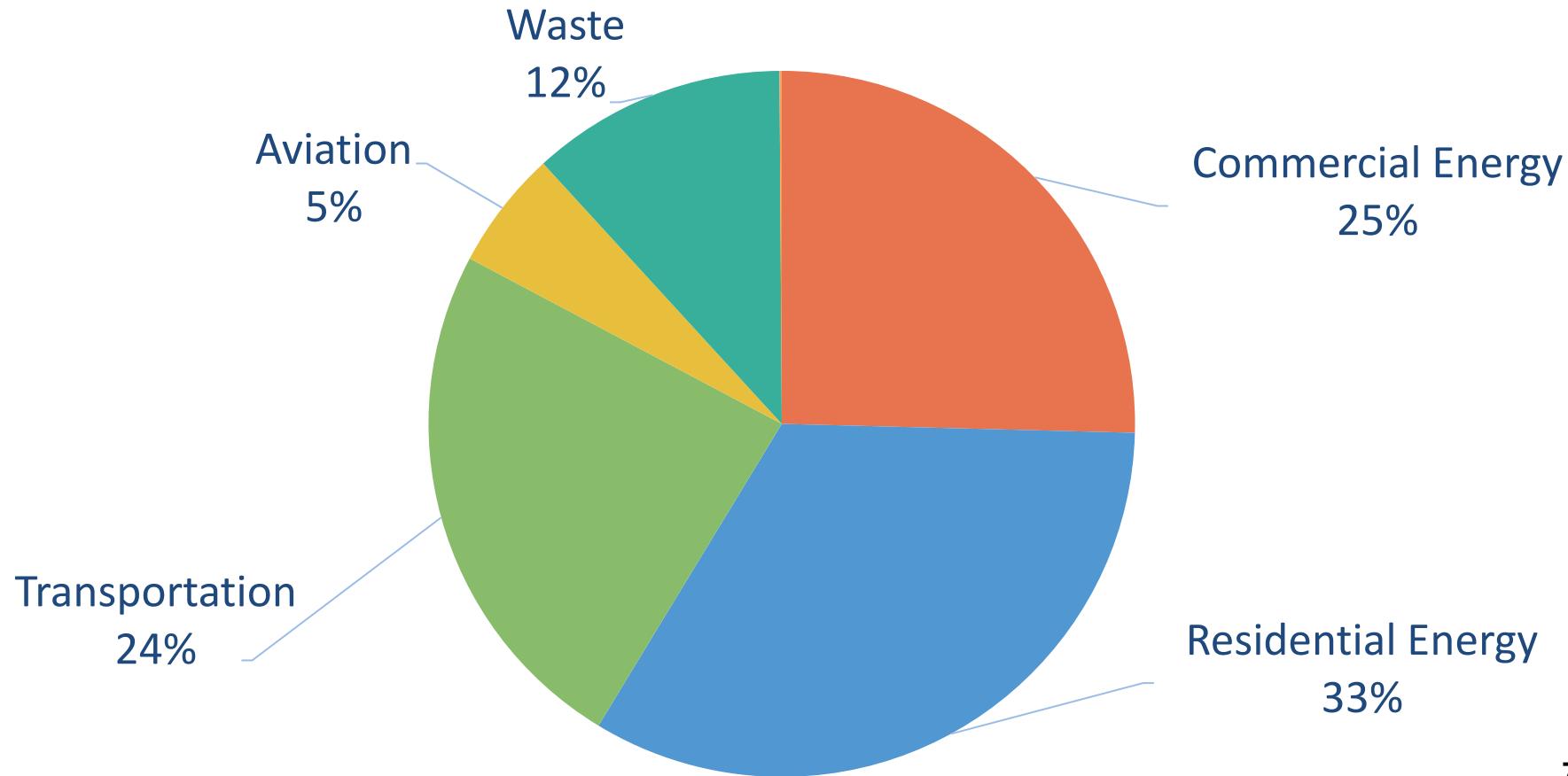


CITY OF ASPEN'S COMMUNITY-WIDE GREENHOUSE GAS EMISSIONS INVENTORY REPORT

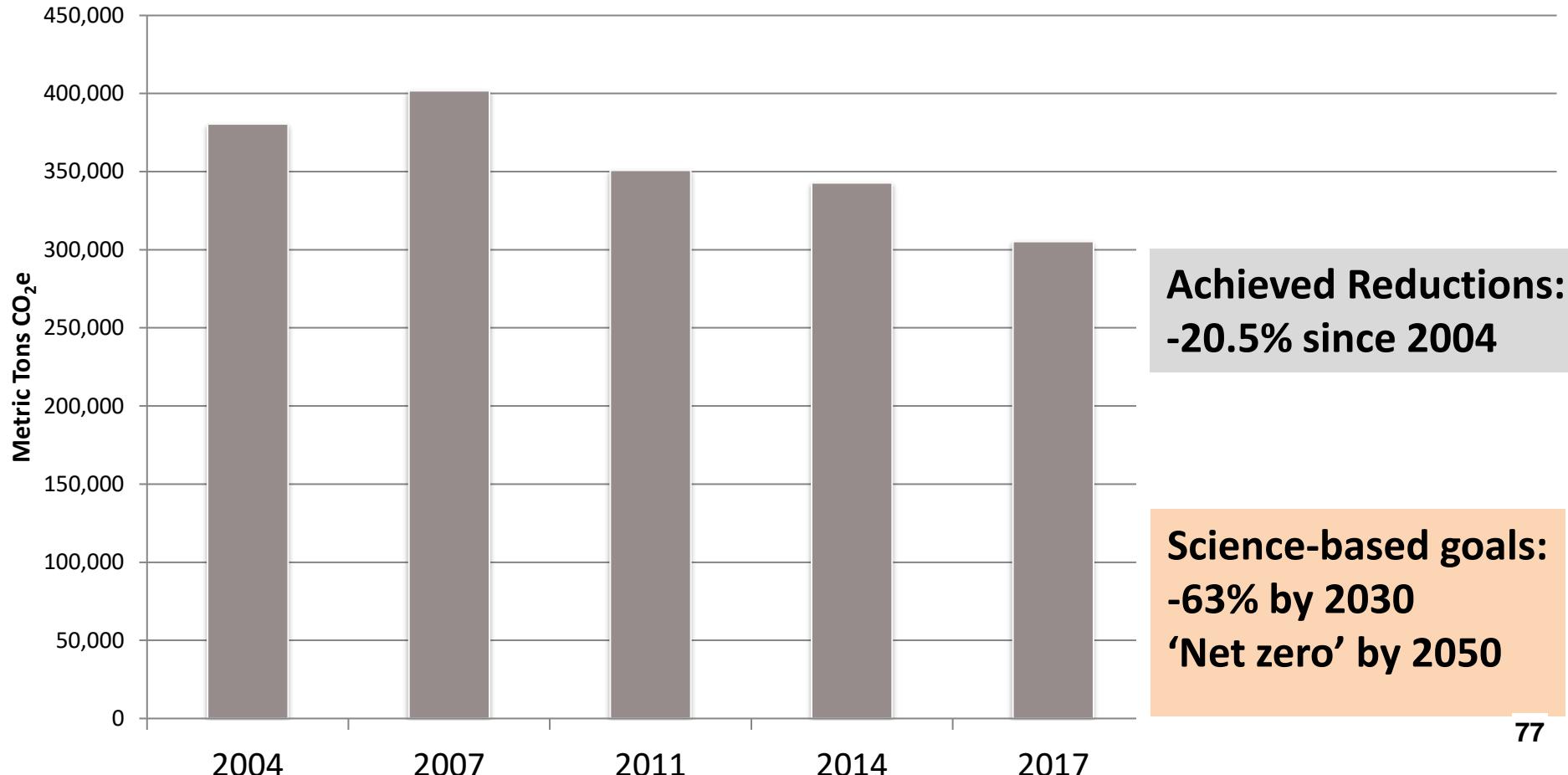
For Calendar Year 2017
Published February 2019



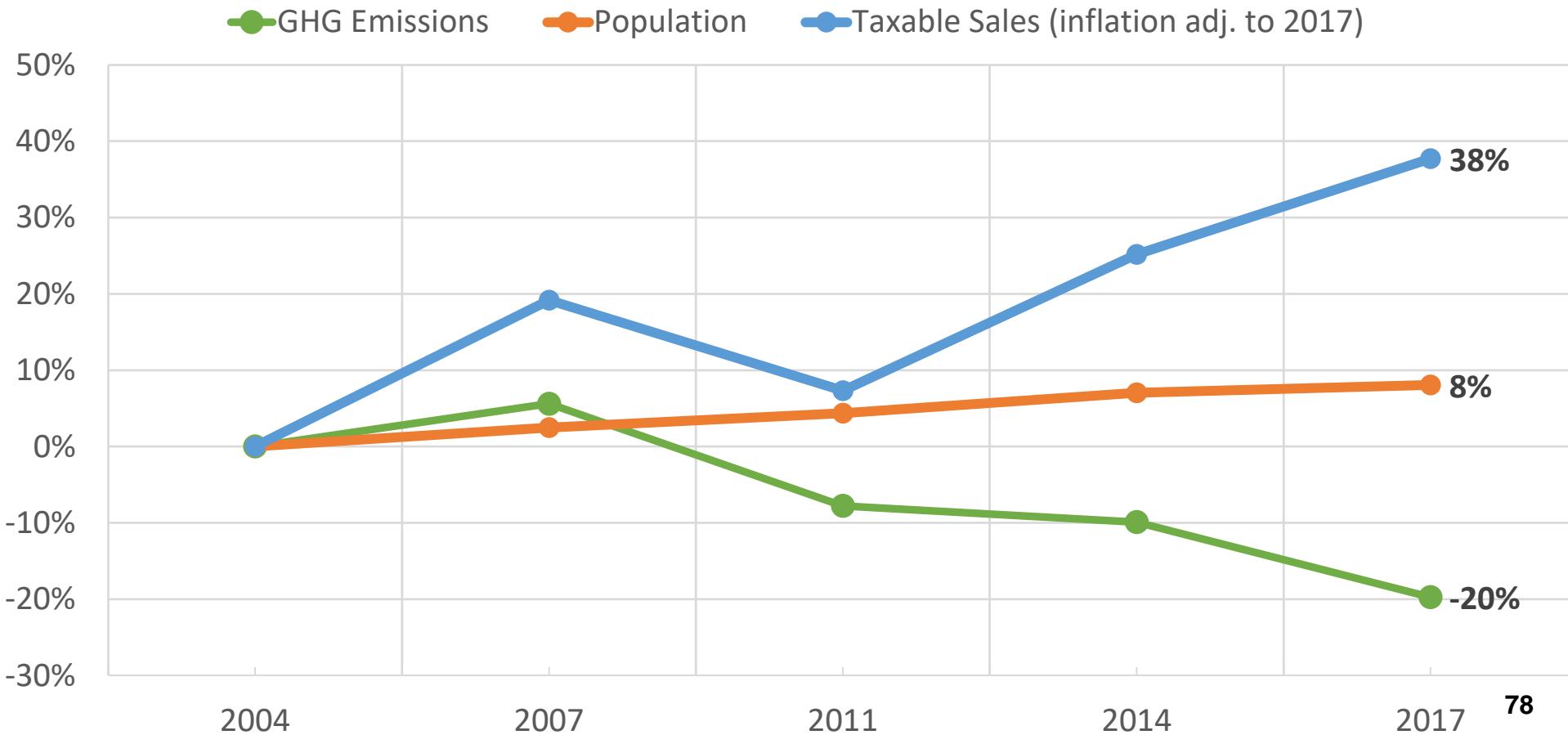
Sources of Aspen's GHGs (2017)



GHG Reductions: 2004 to 2017



GHGs, Population, Economy '04 – '17



The Race to Zero

Race To Zero is a global campaign (established by the UN Climate in June 2020) to rally leadership and support from businesses, cities, regions, investors for a healthy, resilient, zero-carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth. The Cities Race to Zero is the local government engagement opportunity within the UN's initiative and is coordinated by city network partners:





An Invitation to Go Further Faster

Milestones on the Race to Zero



Pledge

to reduce GHG emissions to zero by 2050 and set a interim 2030 target.



Plan

the actions to achieve both the 2030 and 2050 targets within 12 months of joining



Proceed

with high-impact action to achieve the targets during 2021



Publish

and report Race to Zero targets, actions, and progress

Science-Based Targets are an Important Step in:



Setting climate goals for 2030 or sooner that put your community on a path to climate neutrality

Reaching the scale of reductions necessary to limit global warming to 1.5°C

Maintaining steady progress

Prioritizing action now

High Impact Action Pathways

Accelerating



Renewable Energy



Building Electrification (and Efficiency): New and Existing



EV Transition (and VMT Reduction)



It can't be done alone.

The High Impact Action Pathways include avenues for advocacy and collaboration for systemic change

Supporting



Waste and Methane



Nature-Based Solutions



Sustainable Food Systems



Circular Economy



Community Resilience, Health, and Equity (Just and Equitable Transition)



Take the first steps on the Race to Zero

ICLEI150 will support your ambition