ASTC

Association of Science and Technology Centers

Weekly Attendance and Operations Survey Aggregate Report: July-August 2020

INTRODUCTION

In March, nearly overnight, every one of the Association of Science and Technology Centers' (ASTC) almost 500-member science centers and museums closed their doors to the public. By October, just over 50% of ASTC's members across the globe had reopened to the public. Of those that have reopened, institutions are seeing an average of 26% of their weekly attendance reported for the same period in 2019.

Since closing to the public, every institution has made context-specific decisions about their reopened facility operations and programmatic offerings. Based on what is known about ASTC members' annual operating income, duration of closing, length of reopening, and the percentage of usual visitor attendance being received, it is conservatively estimated that across ASTC membership, since March, there has been a loss of more than $600 million in revenue compared to a typical prior year.

On June 29, 2020, in response to the continuing impact of the global COVID-19 pandemic on science centers and museums, ASTC launched the *Weekly Attendance and Operations Survey*, an ongoing survey project containing a data-benchmarking tool for members to collect and report on their visitor attendance and operational status.

This report provides a preliminary look at the data collected thus far in the ASTC Weekly Attendance and Operations Survey. As weekly data is being continuously collected, ASTC will release additional summaries and reports as they become available.

All ASTC members closed

$600 million lost revenue

Estimate of revenue loss for ASTC member institutions since March 2020, as compared to typical prior year

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METHODOLOGY

The following details the methodology behind the *Weekly Attendance and Operations Survey,* which is comprised of two data collection tools, the Baseline Survey and the Weekly Survey.

The Baseline Survey

To begin participating in the survey project, institutions fill out a baseline survey, reporting on their 2019 operations including daily or weekly visitor attendance, facilities, and typical programs offered by the institution. These data points provide a benchmark, enabling comparison to their 2020 weekly status data. Once an institution has submitted the baseline survey, they can begin participating in the Weekly Survey.

The Weekly Survey

In the weekly survey, institutions report their on-site attendance, facility statuses, and the programs offered during their previous operating week. Due to a variance in when institutions begin their operating week, the Weekly Survey contains a designated reporting time frame for each week; this time frame is determined by the institution's most recently completed operating week that includes the Wednesday indicated in the survey. Each weekly survey is labeled by the reporting week to which it belongs.

The Weekly Attendance and Operations Survey is open to all ASTC science center and museum members, regardless of their reopened status. The questions institutions receive on the weekly survey is dependent upon their reopened status; if a participating institution is not open to the public, they report on the programs offered for the week, as well as predicted daily hours and facility operations upon reopening.

TERMINOLOGY

This report refers to specific terminology, data collection, and analysis methods; these terms and processes are explained below.

Weekly Visitor Attendance
All visitor attendance data is presented as a percentage, showing the comparison between the provided 2019 attendance data and reported 2020 attendance counts.
Daily or weekly 2019 attendance files were submitted by institutions at the start of the survey project. Institutions also indicated on which day of the week their reporting week starts; this was then used to match up the correct 2019 dates to 2020 dates. If an institution did not provide their 2019 attendance data, or their data was not provided in a daily or weekly format, they are not included in the visitor attendance data presented in the report.

Facility Type
Ten facility types are presented in the weekly survey and resulting data. The facility data within this report represents the facility type as a whole and does not contain weighted data based on the amount of individual facilities an institutions may have within each type.
Institutions indicated the facilities they had on location in 2019 at the start of the survey project; these data are used to determine facility operating status throughout this project.

Facility Operation Status
In the weekly survey, institutions are asked to report the operating status of their facilities, selecting either *Fully Open*, *Partially Open*, or *Closed* for each facility type. A fully open operating status indicates that the facility type is open to the public and currently has minimal to no restrictions for visitors, outside what is normal for that facility. A partially open operating status indicates that while the facility type is open to the public, there are current restrictions in place for visitors; this could include limiting capacity, restricting areas of access, timed interactions, and more.

Program Type
Nine program types are presented in the weekly survey and resulting data. Similar to facility types, program data within this report represent the program type as a whole and do not contain weighted data based on the amount of individual programs within a program type offered by an institution.
Institutions indicated the typical program offerings they had during 2019 at the start of the survey project; these data are used to determine the percentage of program offerings throughout this project.

Annual Operating Income
An institution's annual operating income (AOI) includes all earned revenue including gross revenue from all museum operations, all private and public support, all restricted and unrestricted grants, and all interest and endowment income. The annual operating income used in this report is from institutions' most recently closed fiscal year in 2019.

ABOUT THE DATA

This report represents all the data collected so far in this survey project, since institutions can report data from previous weeks throughout the project; the current data include everything reported for the week of May 13, 2020 through the week of August 26, 2020.

Total Data
There are 77 reporting institutions represented in the total data, with 52 institutions that have reopened to the public and 25 institutions that remain closed. Among the 52 reopened institutions, 37 submitted 2019 attendance data to be compared to their 2020 attendance.

July 2020
For the month of July, there are 72 reporting institutions represented in the data, with 49 institutions that have reopened to the public and 23 institutions that were closed. Among the 49 reopened institutions, 37 submitted 2019 attendance data to be compared to their 2020 attendance.

August 2020
For the month of August, there are 57 reporting institutions represented in the data, with 43 institutions that have reopened to the public and 14 institutions that were closed. Among the 43 reopened institutions, 35 submitted 2019 attendance data to be compared to their 2020 attendance.

Annual Operating Income
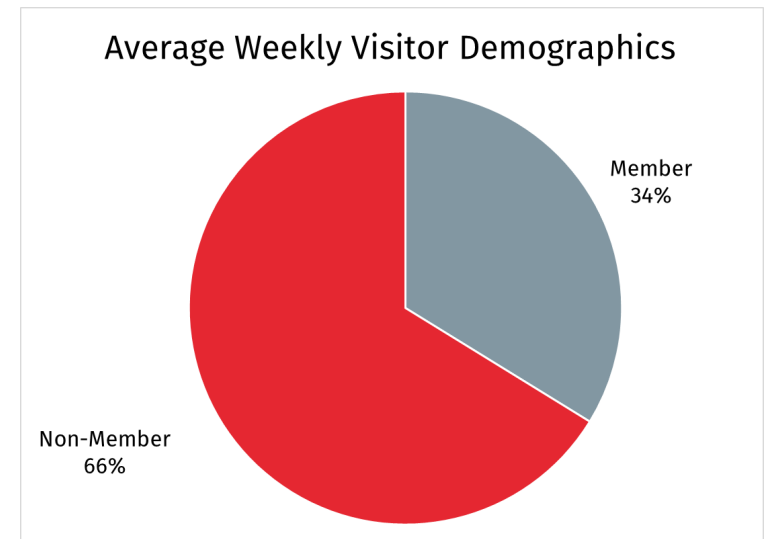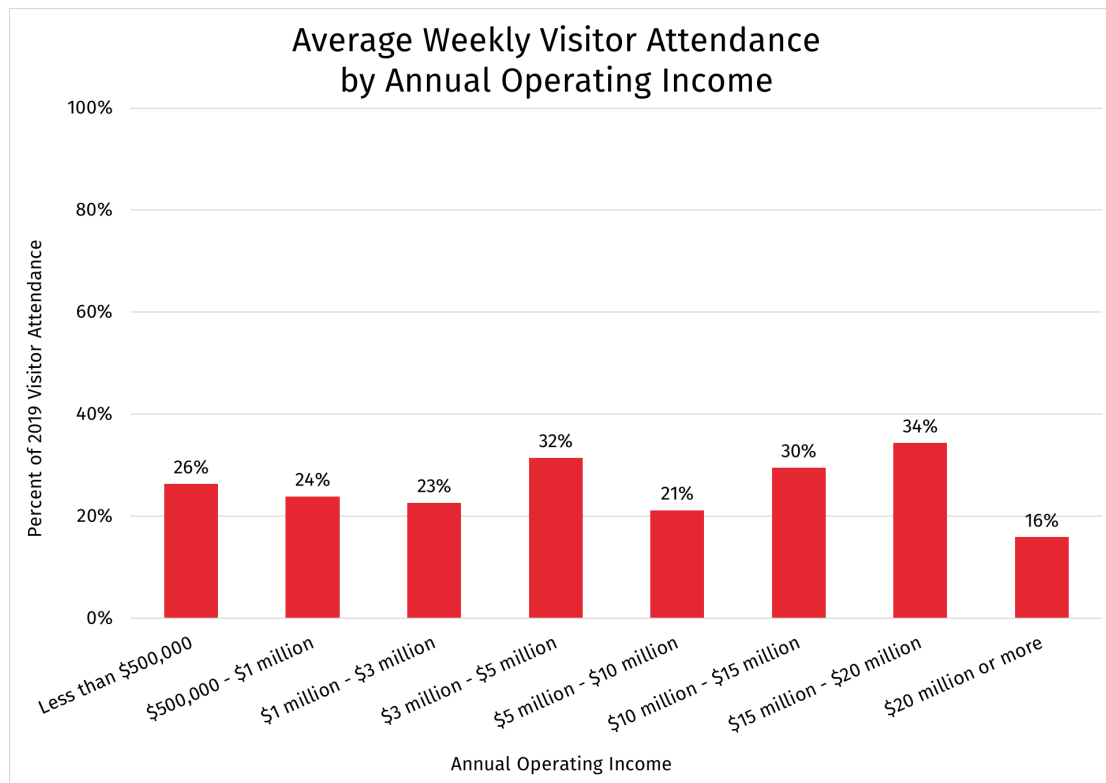Reopened institution annual operating income representation with 2019 attendance data, is shown below.

	Total Count	July Count	August Count
Less than $500,000	2	2	2
$500,000 - $1 million	4	4	4
$1 million - $3 million	9	9	9
$3 million - $5 million	8	8	7
$5 million - $10 million	4	4	4
$10 million - $15 million	4	4	3
$15 million - $20 million	3	3	3
$20 million or more	3	3	3

VISITOR ATTENDANCE: ALL DATA

The graphs below present all reported attendance data from May 13, 2020, through the week of August 26, 2020; the data represent a total of 37 reopened institutions that provide accompanying 2019 attendance data.

On average, reopened science centers and museums are experiencing 26% of their reported 2019 visitor attendance. As shown in the graph on the left, the total average visitor attendance remains steady across annual operating income size, aside from a slightly lower attendance rate for the *$20 million or more* category. The lower attendance rate for very large institutions can most likely be attributed to the fact that the $20 million or more category only contains institutions with a mid-July to early August reopening date, while all other annual operating income categories contain a wider variety of reopening dates.

The graph on the right details the average visitor demographic for reopened institutions, showing that 66% of science center/museum visitors are not members of the institution they are visiting; over half of reopened institutions report that 61-100% of their total weekly visitorship are non-members.

Average Weekly Visitor Attendance by Annual Operating Income

Percent of 2019 Visitor Attendance

Annual Operating Income	Percent
Less than $500,000	26%
$500,000 – $1 million	24%
$1 million – $3 million	23%
$3 million – $5 million	32%
$5 million – $10 million	21%
$10 million – $15 million	30%
$15 million – $20 million	34%
$20 million or more	16%

Average Weekly Visitor Demographics

- Member 34%
- Non-Member 66%

VISITOR ATTENDANCE: JULY and AUGUST 2020

Presented below is all reported attendance data for the month of July 2020, representing 37 reopened institutions, and the month of August 2020, representing 35 reopened institutions.

The following charts display visitor rates for July and August. The graph on the left illustrates the percentage of institutions at each visitor attendance rate category—the percentage of reporting institutions that have reported their current visitorship compared to their 2019 visitorship at each level, 0-10%, 11-20%, 21-30%, and so on–for for the months of July and August. The graph on the right shows July and August attendance rates by AOI.

During July, reopened science centers and museums saw on average 22% of their reported 2019 visitor attendance, increasing to 33% in August. During the month of July, the majority of reporting institutions received 0-30% of their 2019 attendance, with most institutions seeing an increase—to 21-50% of their 2019 attendance—in August.
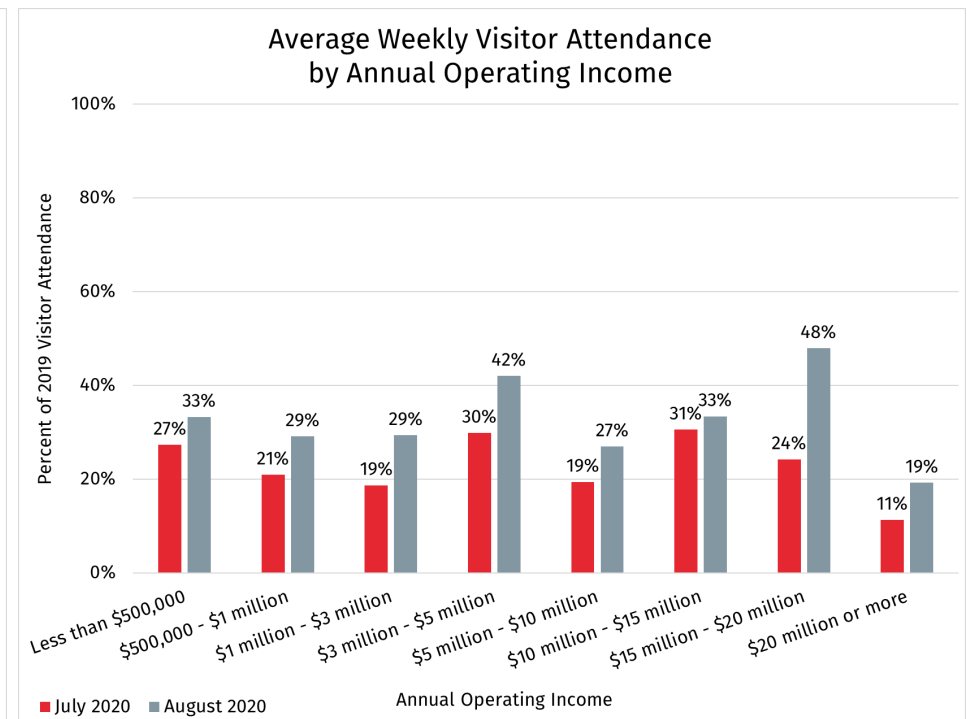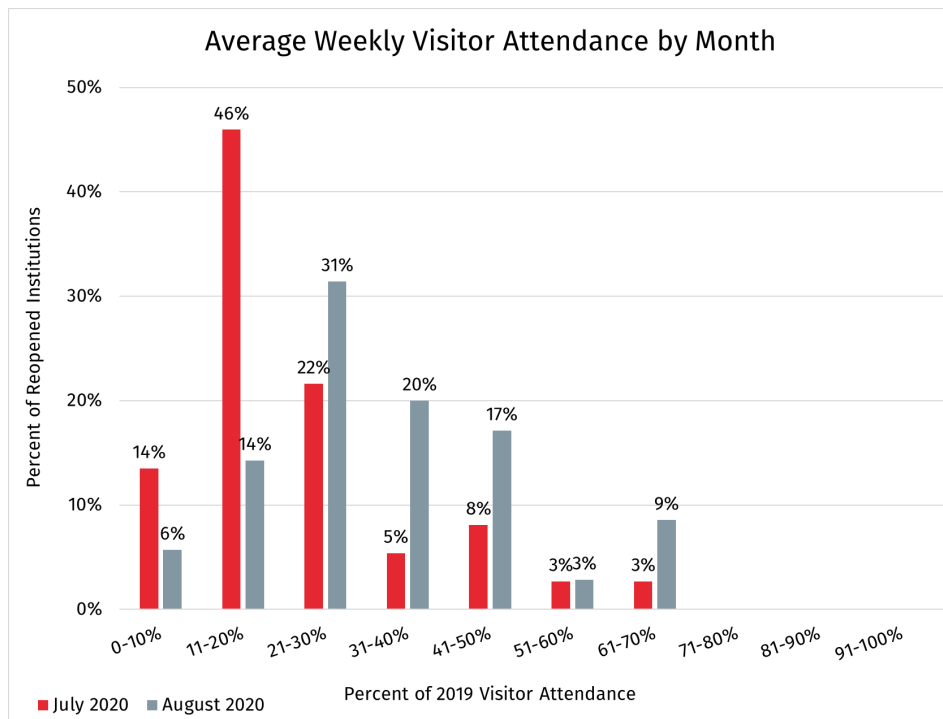
VISITOR ATTENDANCE: THE FIRST FIVE WEEKS OF REOPENING

All data presented below are reported attendance data for reopened institutions, with 33 institutions representing the first week of reopening, 30 institutions representing the second week of reopening, 32 institutions representing the third week of reopening, 32 institutions representing the fourth week of reopening, and 34 institutions representing the fifth week of reopening.

The following graphs illustrate the average visitor attendance pattern for the first five weeks after a science center or museum reopens to the public. The graph below shows the total average of visitor attendance, when compared to the corresponding week in 2019, for the first through fifth week of reopening.

Visitor attendance during the first five week of reopening, gradually increases in rate as the institution remains open.

### Average Visitor Attendance by Reopening Week
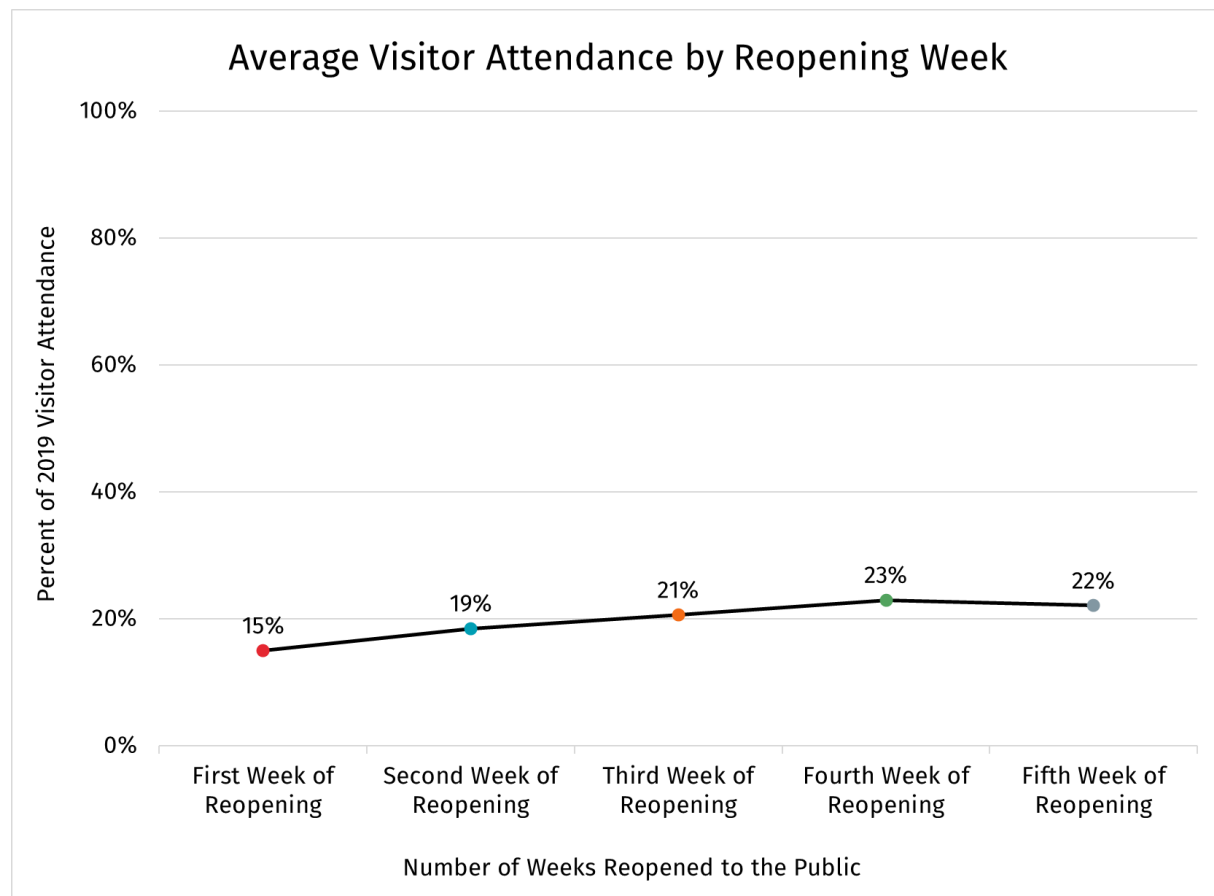
FACILITY OPERATING STATUS: INSTITUTIONS

The graph below presents an average of all reported weekly data from May 13, 2020, through August 26, 2020, representing a total of 52 reopened institutions.

The graph below displays the total average of reporting institutions that have each facility type open to the public, with both July and August status shown.

On average, outdoor spaces (100%), permanent exhibits (96%), and gift shops (96%) have the highest open operating status among all facility types, with event-rental spaces (50%) and demo theaters (49%) having the highest closed status. Cinemas, demo theaters, and classrooms had a decrease in open operations during the month of August, while both event-rental spaces and gift shops experienced an increase in open operations of over 10% .

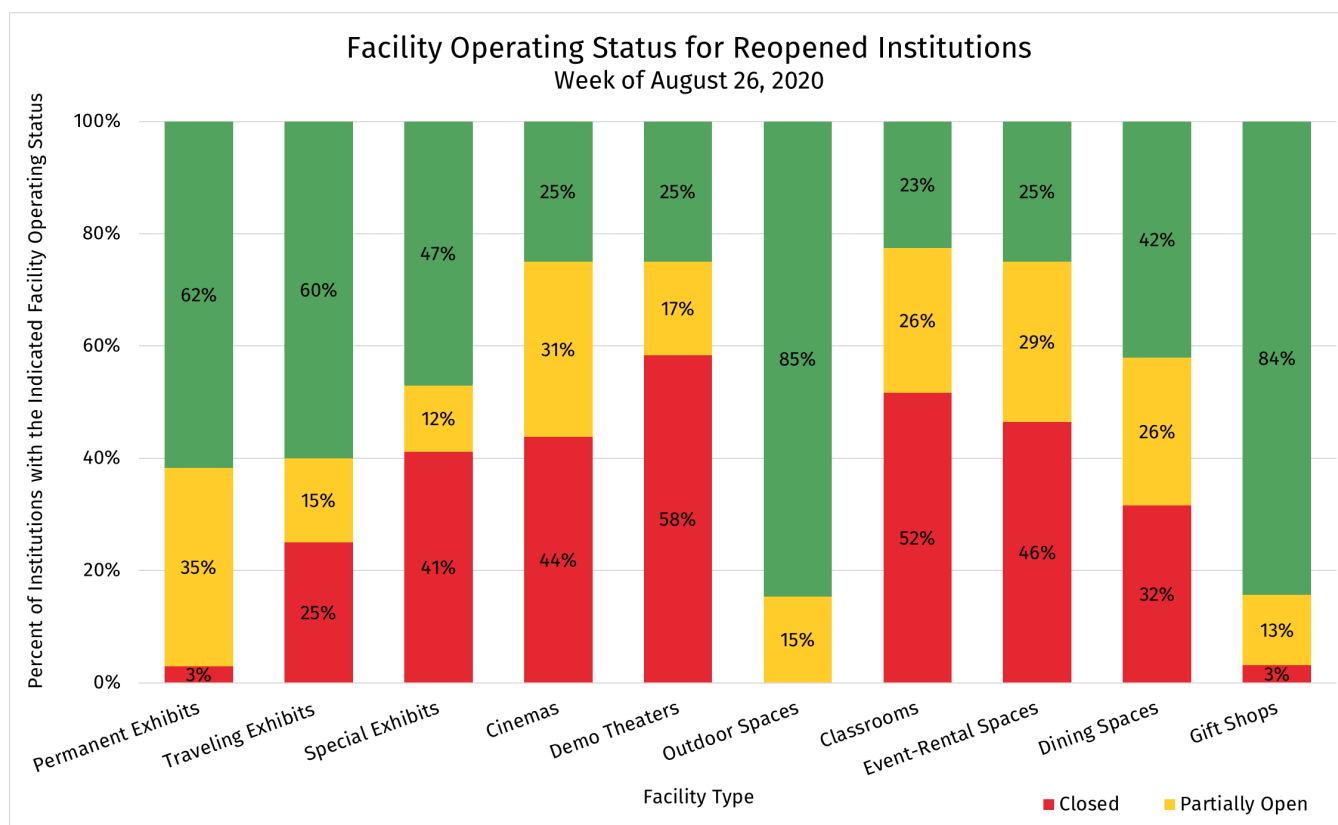Reopened Institution Operating Status by Facility Type
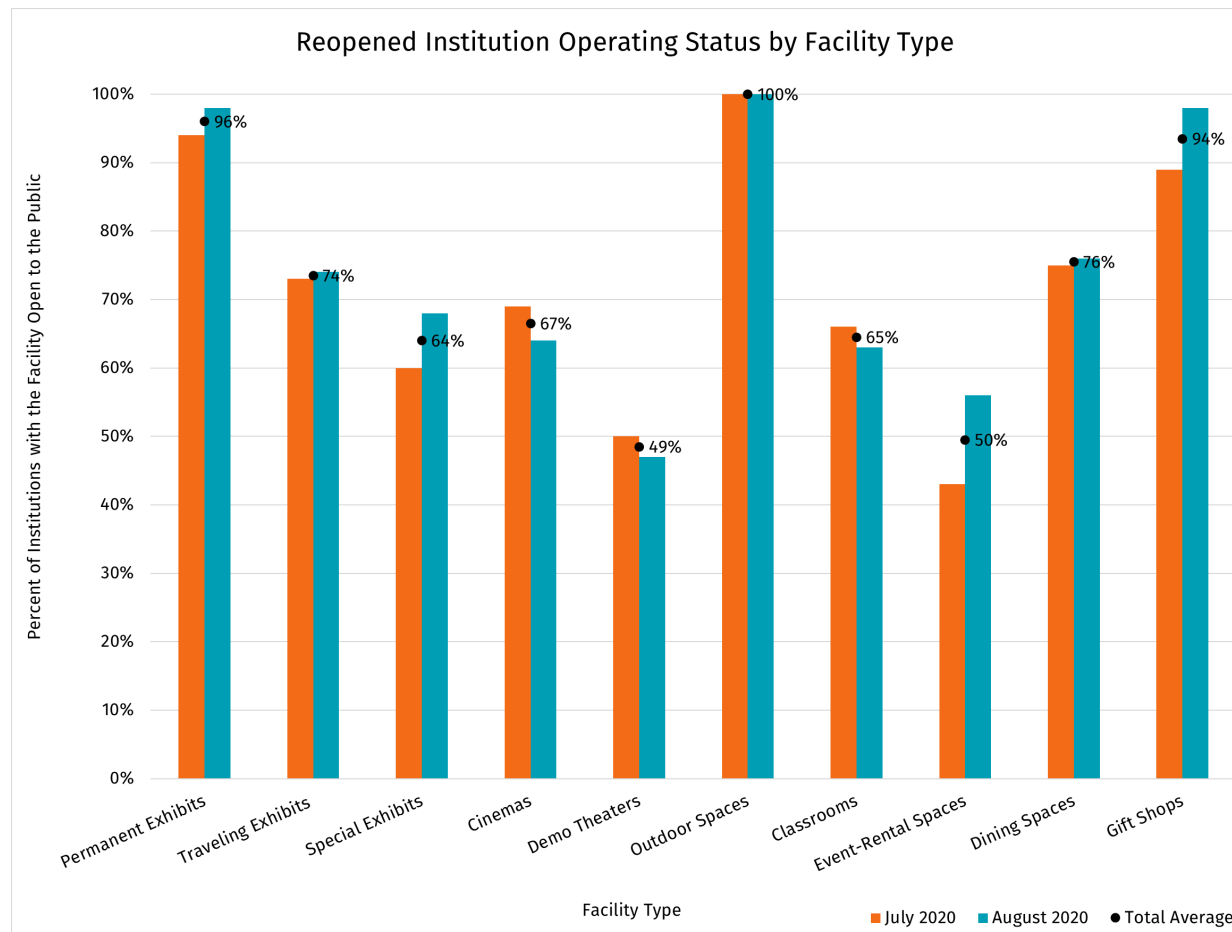
FACILITY OPERATING STATUS: CAPACITY

The data below represent all reported weekly data from May 13, 2020, through August 26, 2020, representing a total of 52 reopened institutions.

The chart below is from the week of August 26, 2020, which summarizes the status of each facility's capacity, whether at fully open, partially open, or closed.*

While stated previously that outdoor spaces, permanent exhibits, and gift shops have the highest open operating status among facility types, in the average overall data (not shown), fewer than half of institutions report that permanent exhibits operating at full capacity, while more than half of reopened institutions report that outdoor spaces and gift shops are fully operational. On the other hand, while event-rental spaces and demo theaters have the highest closed status among facility types, only 13% of institutions report that their classrooms are fully operational and only 11% of institutions have cinemas operating at full capacity.

Facility Operating Status for Reopened Institutions
Week of August 26, 2020

Facility Type	Closed	Partially Open	Fully Open
Permanent Exhibits	3%	35%	62%
Traveling Exhibits	25%	15%	60%
Special Exhibits	41%	12%	47%
Cinemas	44%	31%	25%
Demo Theaters	58%	17%	25%
Outdoor Spaces		15%	85%
Classrooms	52%	26%	23%
Event-Rental Spaces	46%	29%	25%
Dining Spaces	32%	26%	42%
Gift Shops	3%	13%	84%

Y-axis: Percent of Institutions with the Indicated Facility Operating Status. Legend: Closed (red), Partially Open (yellow)

* A fully open operating status indicates that the facility type is open to the public and currently has minimal to no restrictions for visitors; a partially open operating status indicates that the facility type is open to the public, but there are current restrictions in place for visitors.

PROGRAM OPERATING STATUS: OPEN INSTITUTIONS

The total average data below include all reported weekly data from May 13, 2020 through August 26, 2020, representing a total of 75 institutions.

When compared to the reported programs offered by institutions in 2019, all reporting science centers and museums are currently offering 22% of their typical public programming; with reopened institutions offering 32% of their typical public programs.

Average Program Offering for Reopened Institutions
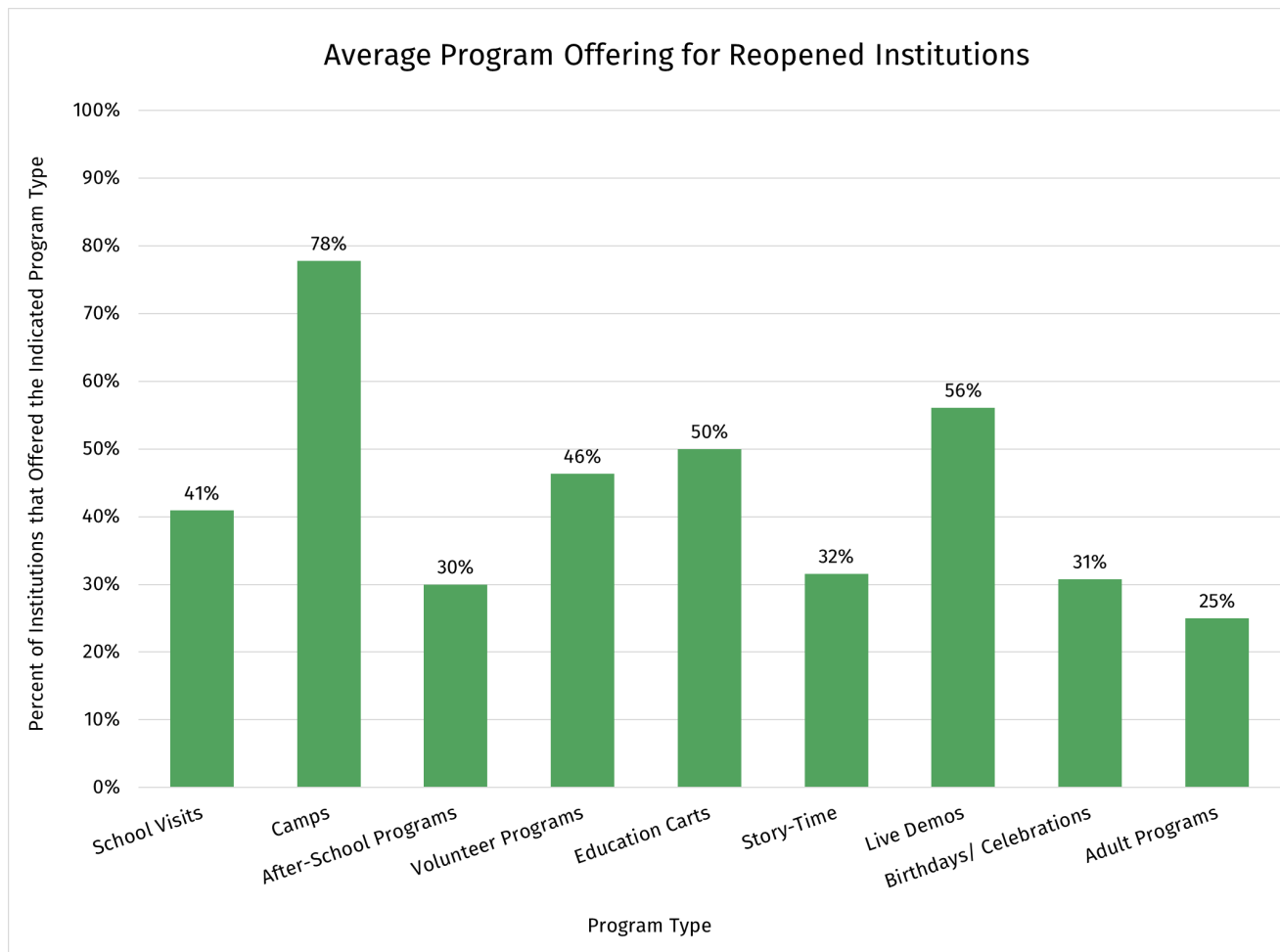
PROGRAM OPERATING STATUS: CLOSED INSTITUTIONS

The total average data below include all reported weekly data from May 13, 2020, through August 26, 2020, representing a total of 75 institutions.

When compared to the reported programs offered by institutions in 2019, open and closed science centers and museums are currently offering 22% of their typical public programming; with closed institutions only offering 11% of their typical public programs.

Closed institutions have successfully continued to provide public programming and have largely offered consistent camp programs, live demonstrations, and adult programming in a virtual setting.

Average Program Offering for Closed Institutions