

With Great Data Come Great Responsibility: Using Visitor Data Wisely in Dynamic Environments

Association of Science and Technology Centers Annual Conference

Monday, October 1, 2018



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Great Lakes Science Center

What is one issue or problem at your institution that could be tackled with more data or better data?



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Collaboration for Ongoing
Visitor Experience Studies



COVES is designed to unite science centers in systematically collecting audience-level data, with a focus on institutional and field-wide improvement.



COVES provides common data to help with decision-making.

What do we need to know?

Who visits



Why they visit



What they see & do



How they feel



provides:

- a common instrument & shared measures
- institutional flexibility
- analytical assistance
- evaluation capacity building resources
- dynamic reporting
- systematic comparison

OMSI

SCIENCE WORLD at
TELUS WORLD
of SCIENCE



Science
Museum
of Minnesota



discovery
center
MUSEUM



imagination
STATION
pure science. pure fun.



GREAT LAKES
Science Center



science.nature.explore.connect.



COSI
Center of Science and Industry



Museum of Science.



ny sci
New York Hall of Science



THE
FRANKLIN
INSTITUTE



DISCOVERY PLACE



ORLANDO
SCIENCE
CENTER



MUSEUM
OF DISCOVERY
& SCIENCE
ALTERNATION IMAX THEATER



explOatorium

CITY OF
ROSEVILLE
CALIFORNIA



THE Discovery
Terry Lee Wells Nevada Discovery Museum



NATURAL HISTORY
MUSEUM OF UTAH
Rio Tinto Center | The University of Utah



BRADBURY
SCIENCE
museum



THE DO
SEUM



SCI
SCIENCE
CENTER
OF IOWA
& BLANK IMAX
DOME THEATER



SAINT LOUIS
science center

Aggregate Data Findings

July 1, 2017 - June 30, 2018



FY18: Nineteen Participants

Large



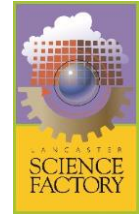
Science
Museum
of Minnesota®



Medium

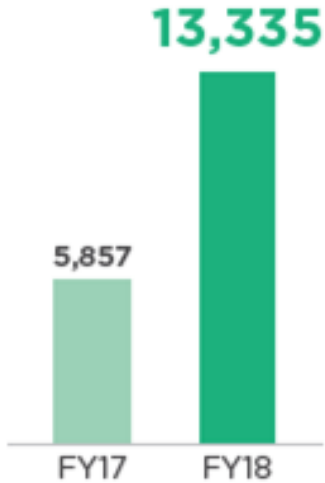


Small





Survey Stats



**NUMBER OF SURVEYS
COLLECTED**

61%
avg. rate

Ranging from
33% and 96%

**THE AVERAGE RESPONSE
RATE ACROSS SITES**



**THE AVERAGE
SURVEY DURATION**

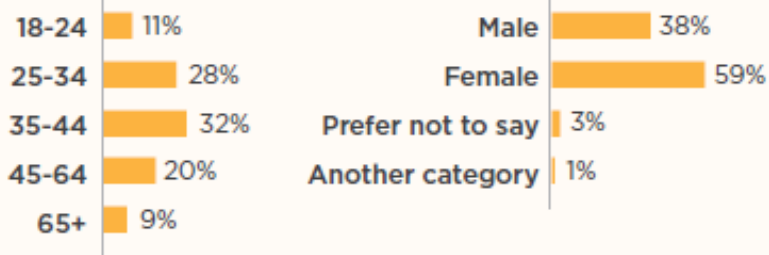


Basic Demographics



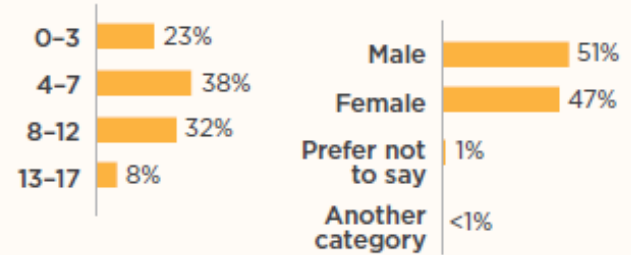
ADULT AGE AND GENDER BREAKDOWNS

n=11,786



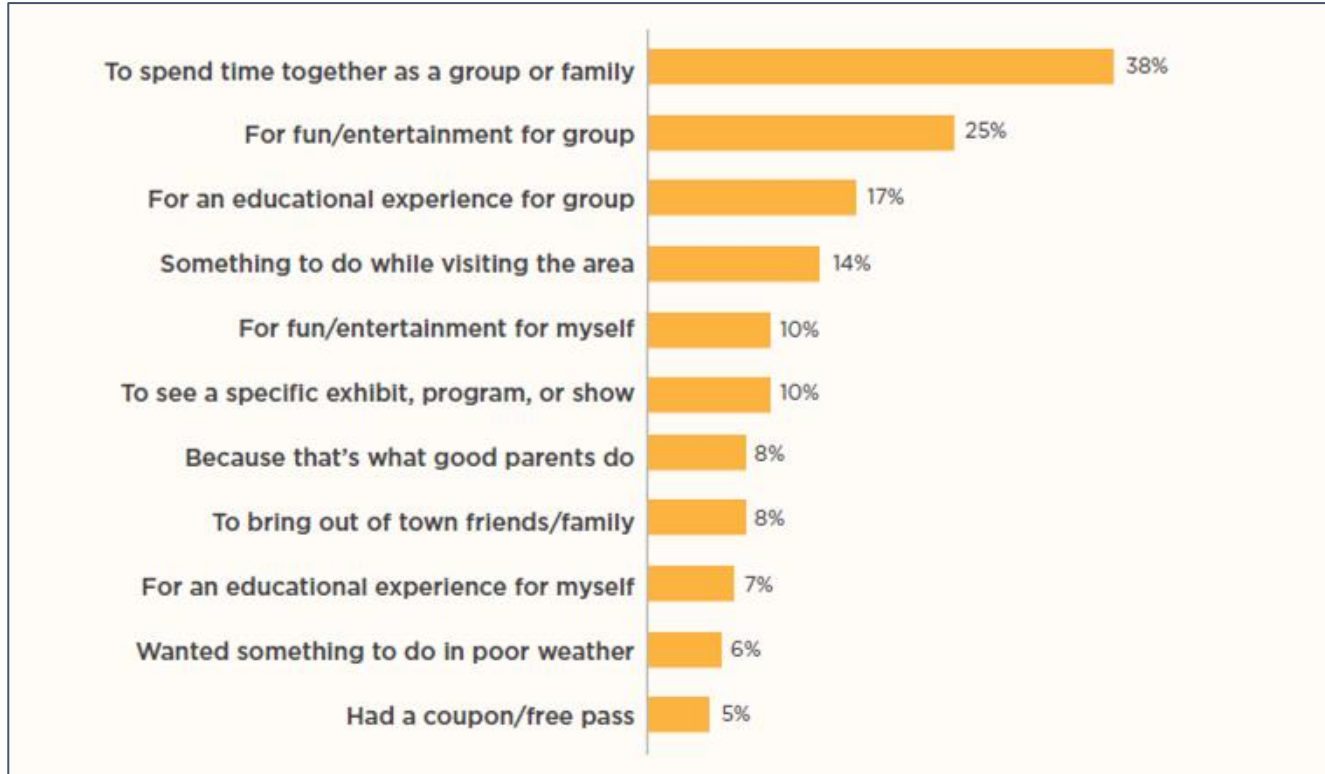
CHILD AGE AND GENDER BREAKDOWNS

n=11,786





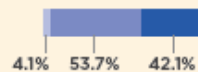
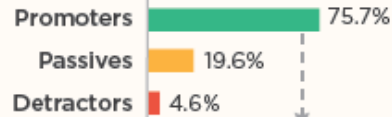
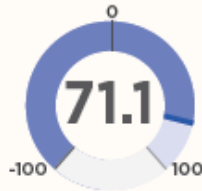
Motivations



Net Promoter Score/Overall Experience Rating

NET PROMOTER SCORE

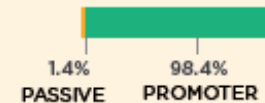
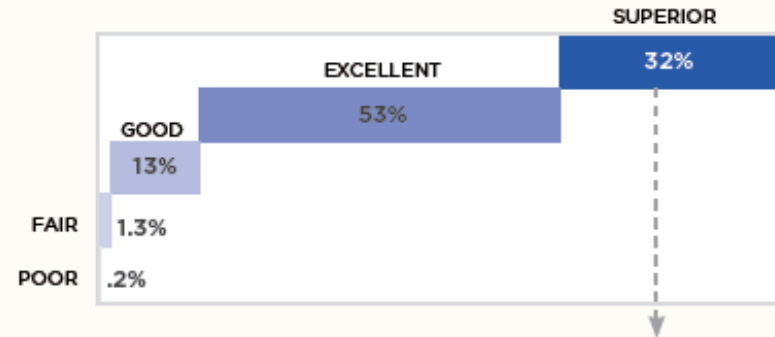
n=11,631



Of the promoters, this is the breakdown of their Overall Experience Rating (left to right: good, excellent, superior).

OVERALL EXPERIENCE RATING

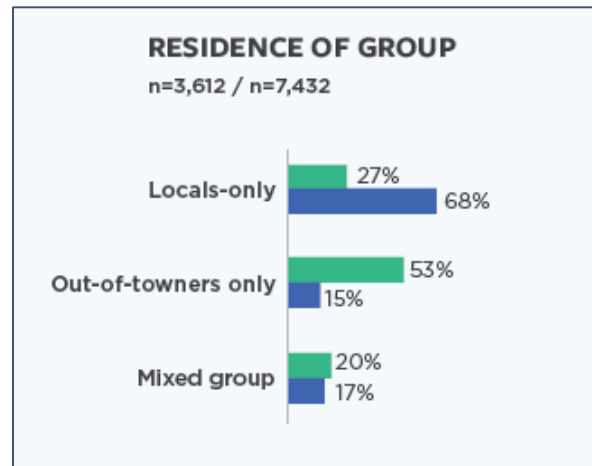
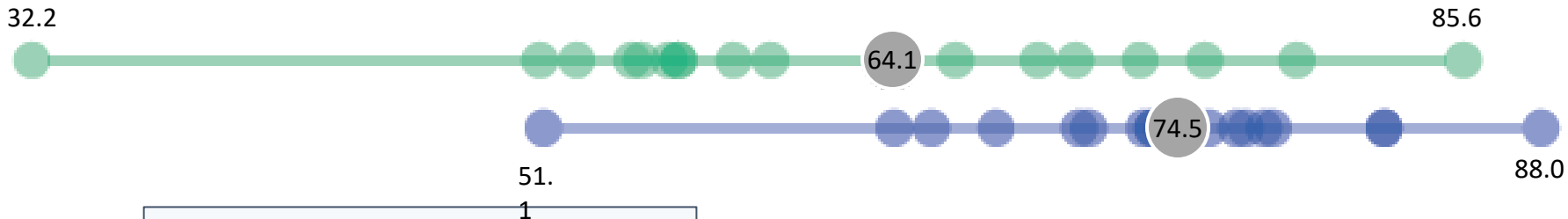
n=7,088



Of those who rated their experience "superior" here is the breakdown of their NPS.



First-Time Visitors vs. Repeat Visitors

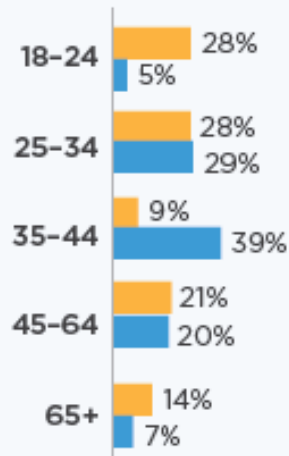




Adults-Only vs. Groups with Children

ADULT AGE

n=3,660 / n=12,242



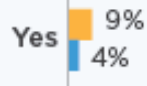
DATE OF LAST VISIT

n=2,480 / n=9,061



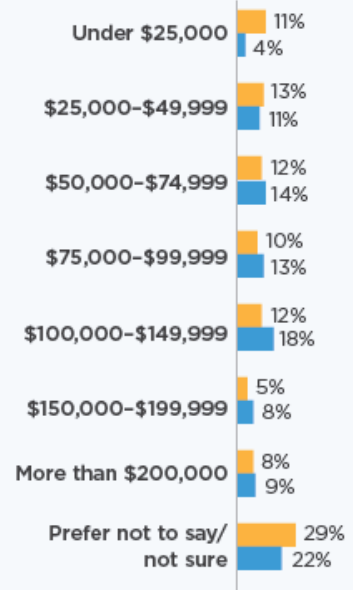
LGBT+

n=2,455 / n=9,015



INCOME

n=2,434 / n=8,997



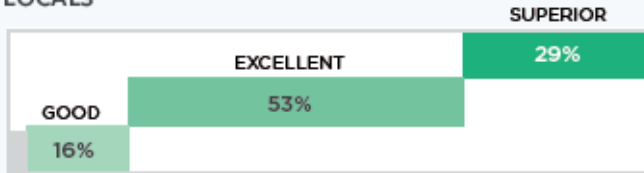


Locals vs. Out-of-Towners (Non-members)

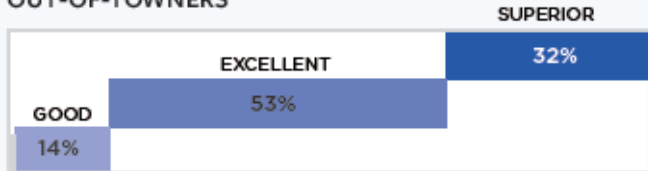
OVERALL EXPERIENCE RATING

n=2,055 / n=1,601

LOCALS

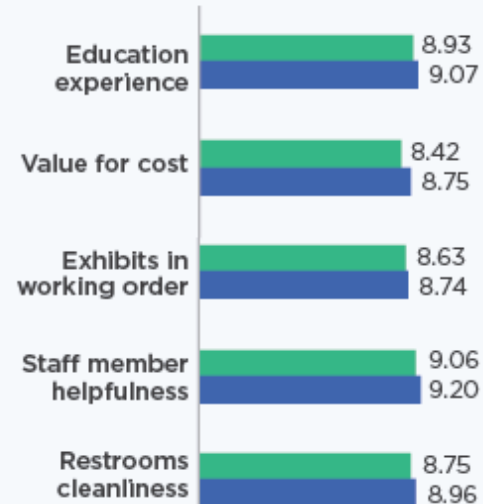


OUT-OF-TOWNERS



EXPERIENCE RATINGS

Average rating, scale from 0 to 10 where 10 is highest
n varies





Aggregate Data

- Provides broad, field-wide insight
- Helps contextualize institutional data
- How have some COVES institutions used data?





Baltimore, Maryland

170,000 Square feet

FY17- Total reach including on-site
and outreach was 386,000

91,000 school group visitors



COVES as a Myth Buster

Demographics of visitors

- Age of adults and children
- Income brackets
- Locals vs. tourists

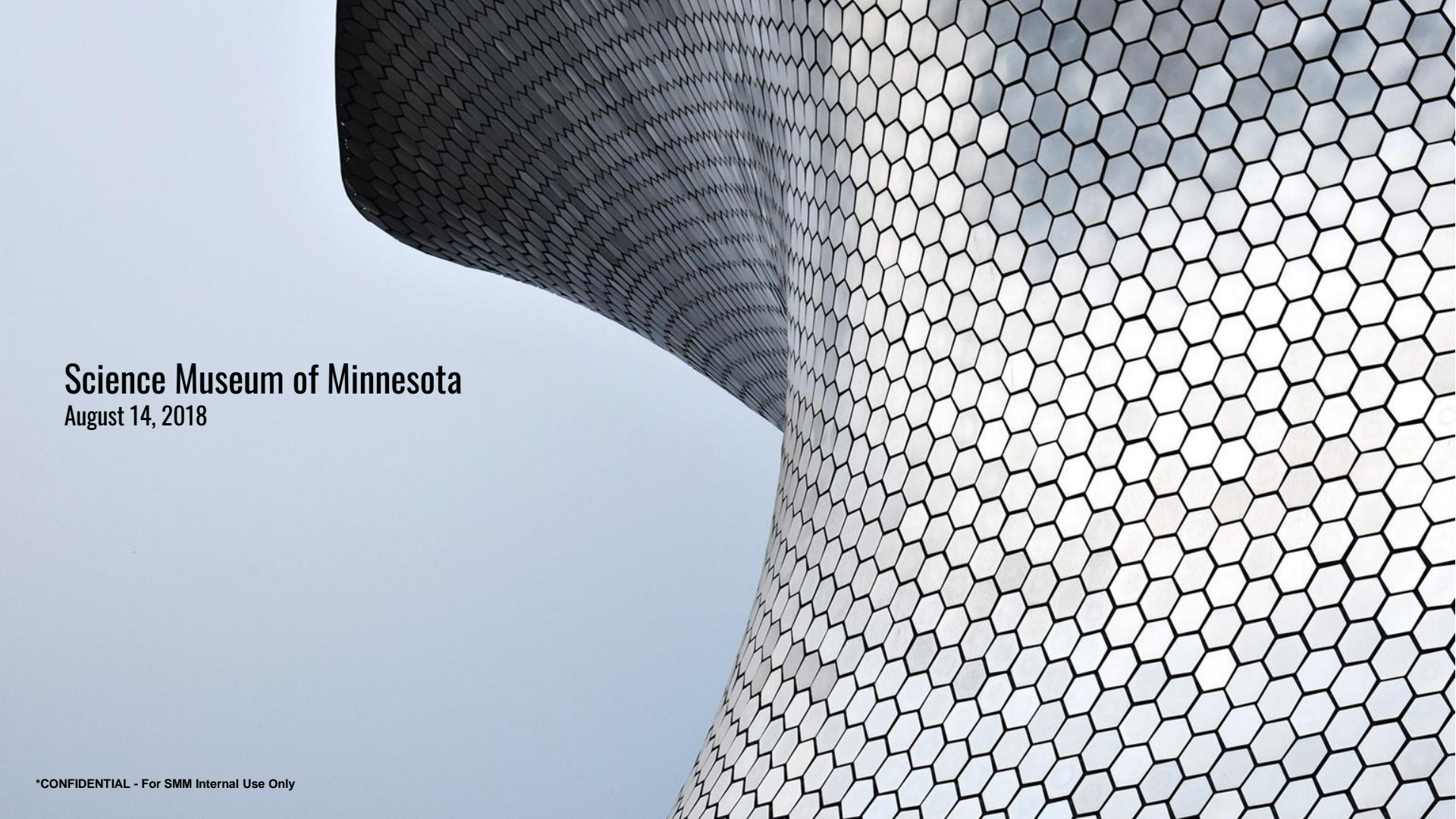
Visitation patterns

- Which exhibits visited
- Frequency of visitation
- Reason for visit



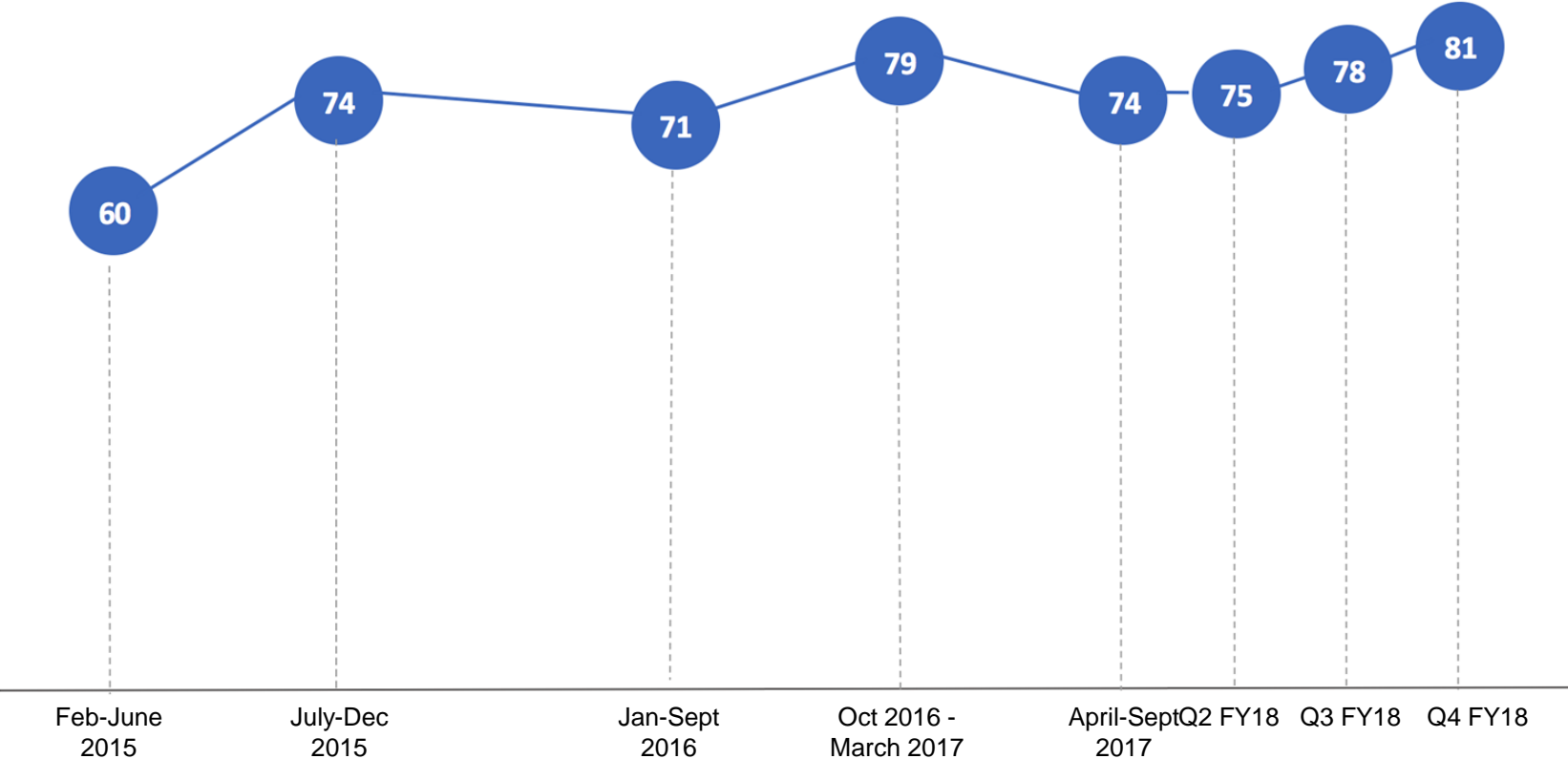
Impacts of COVES

- Better understanding of need to create programmatic diversity
- Shift in willingness of staff to offer mission/philanthropic messaging
- Contributed to conversation about exhibit seating
- Awareness of a need for better communication about exhibits
- Assessment of barriers to participation in specific exhibit spaces
- Informing program design by shifting the paradigm



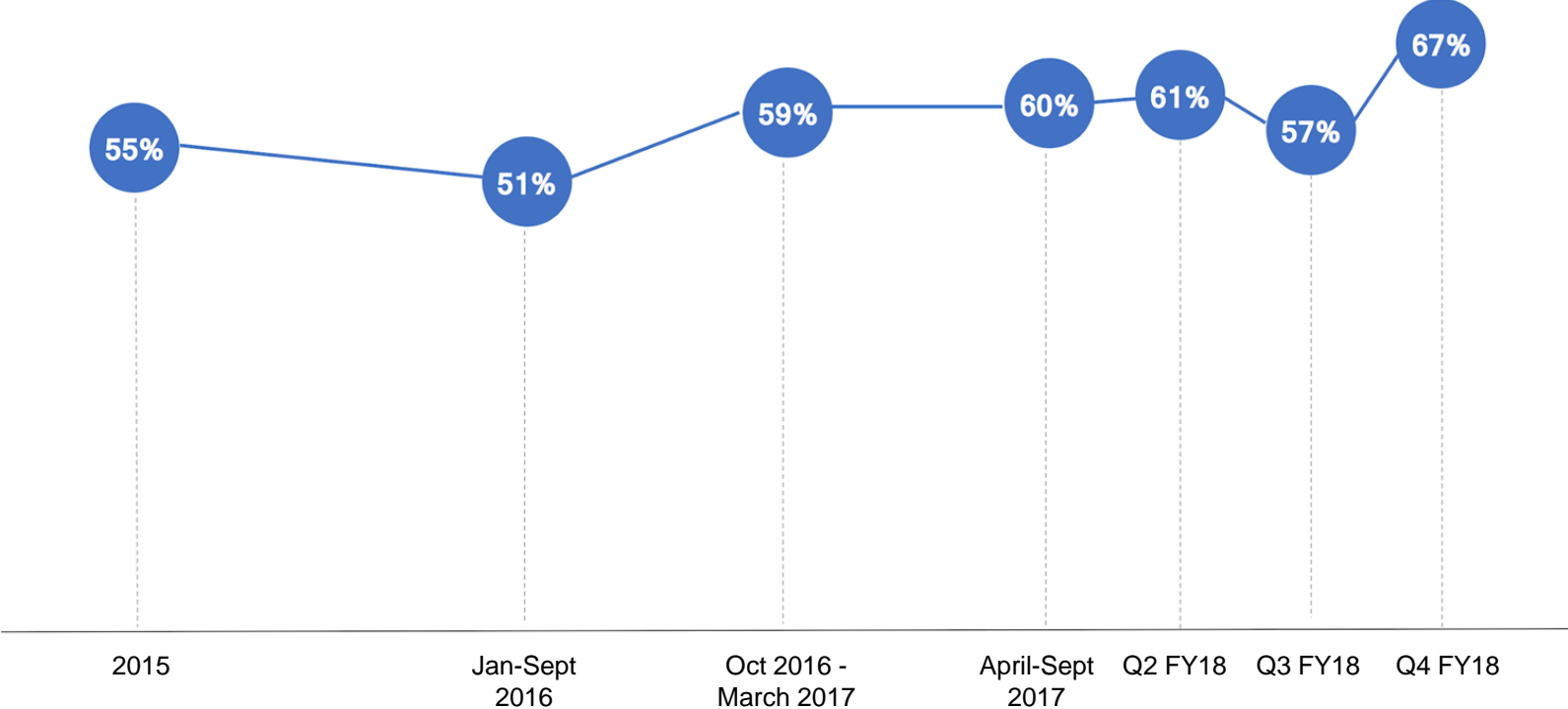
Science Museum of Minnesota
August 14, 2018

Net Promoter Score



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Adult and Children Groups as a % of visiting groups



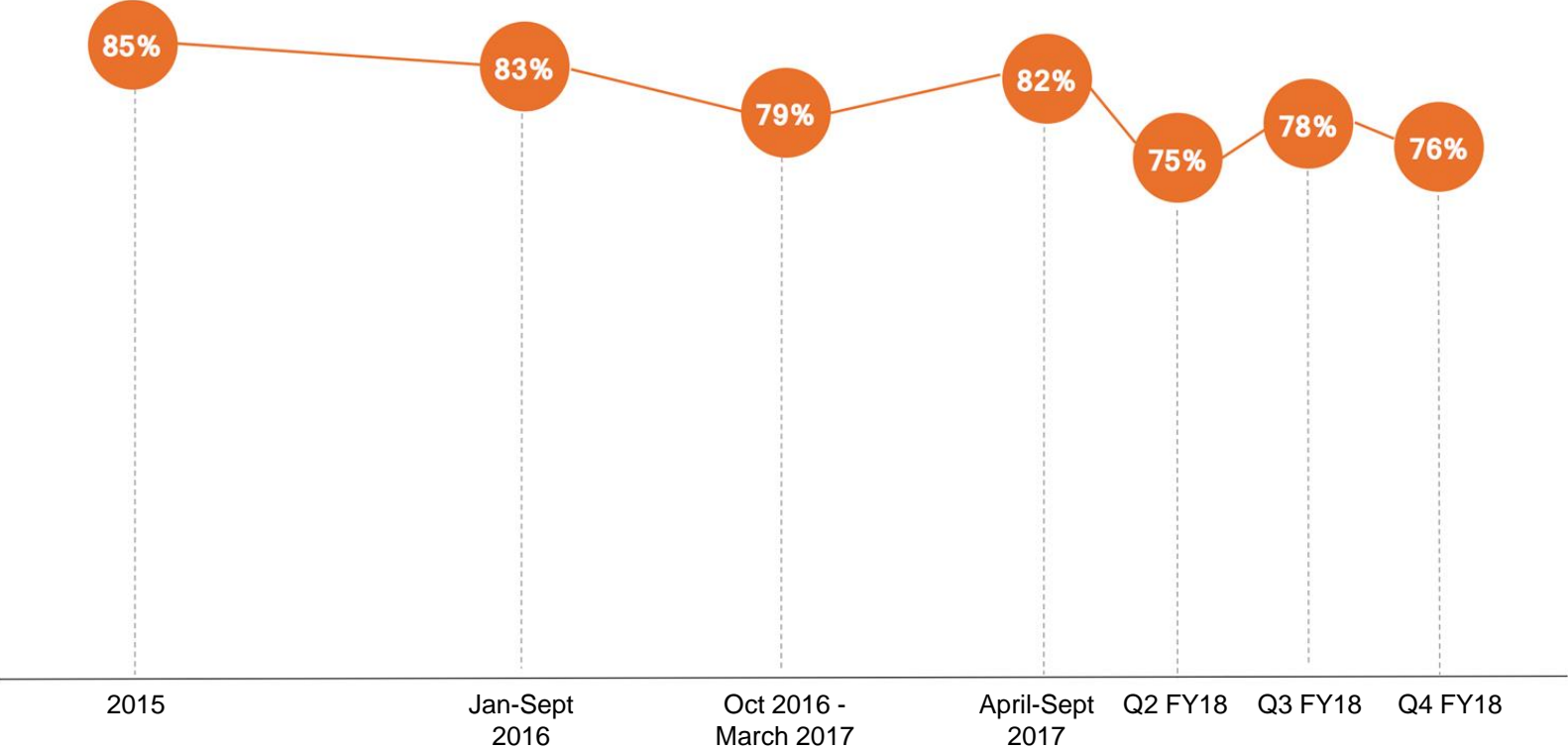
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Activity: Hold up your answer

Where does the SMM audience LEAST match Twin Cities metro area demographics?

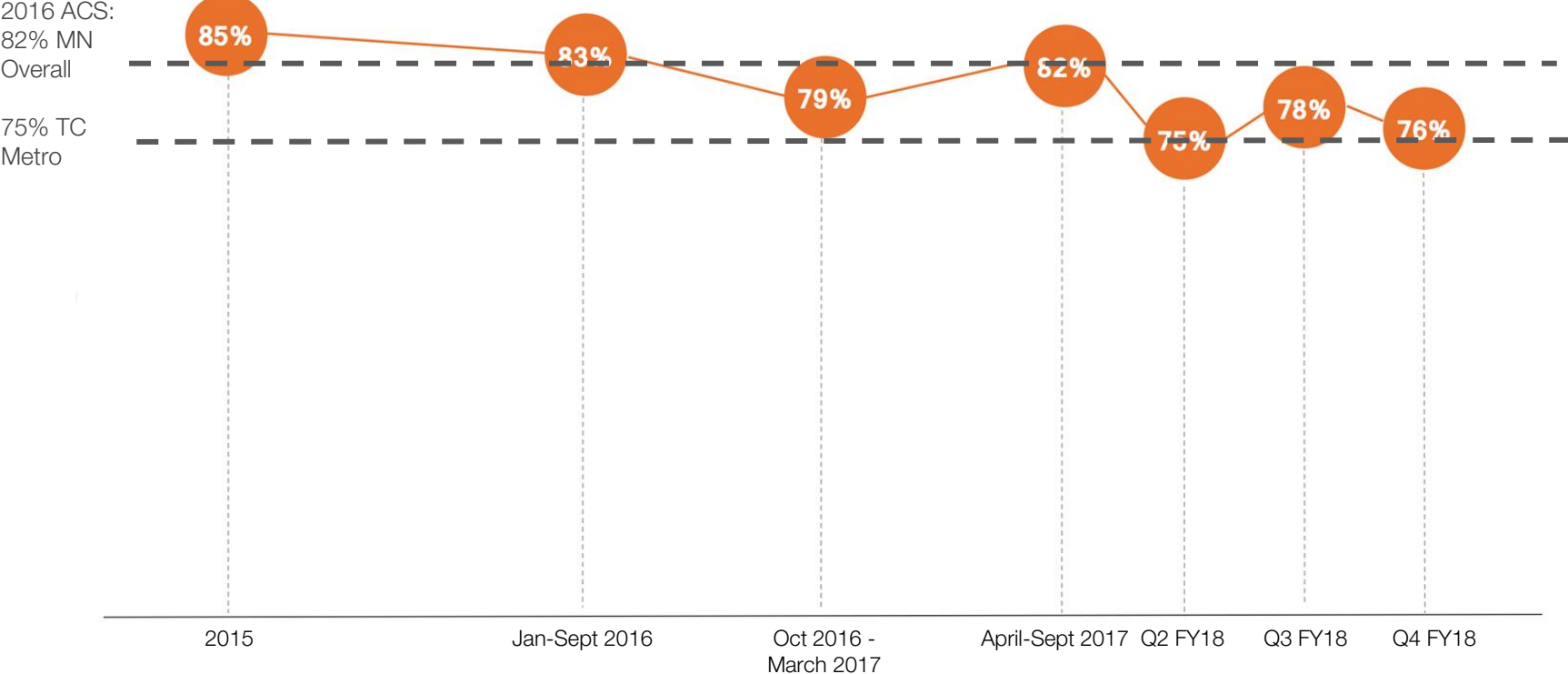
- A) Race and ethnicity
- B) Age
- C) Highest education attainment
- D) Income

White-Only Audience



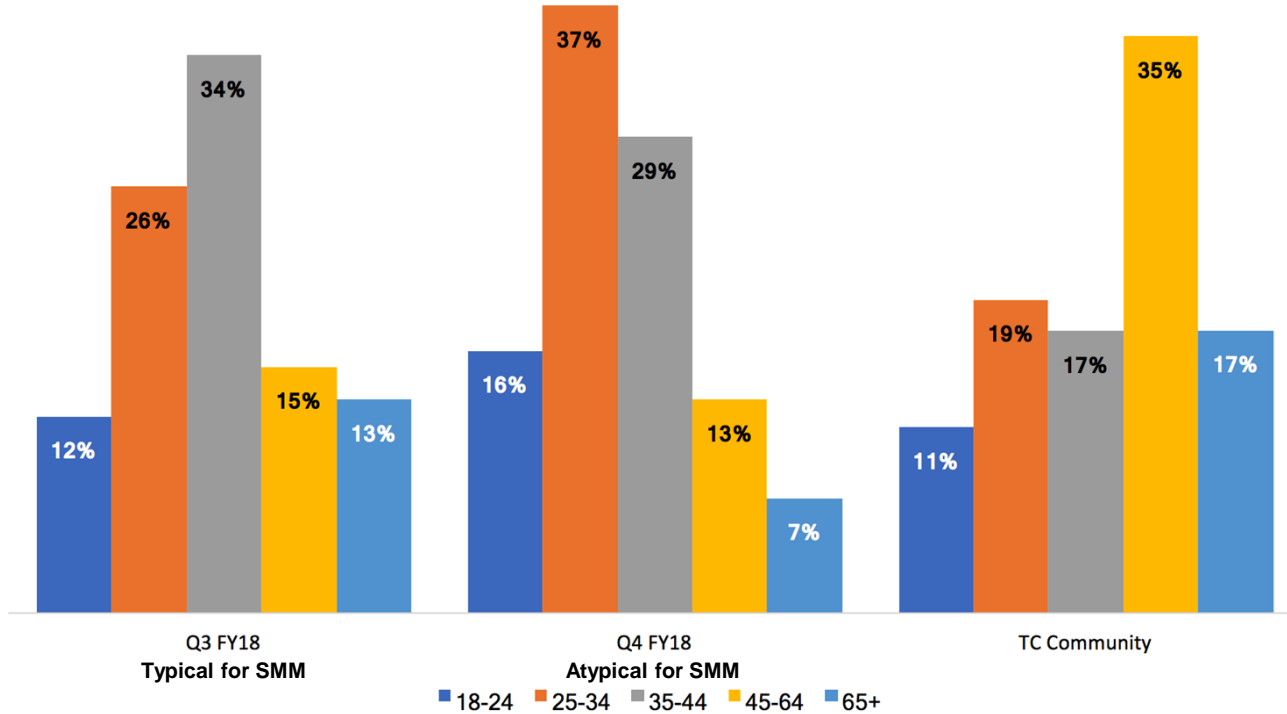
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White-Only Audience

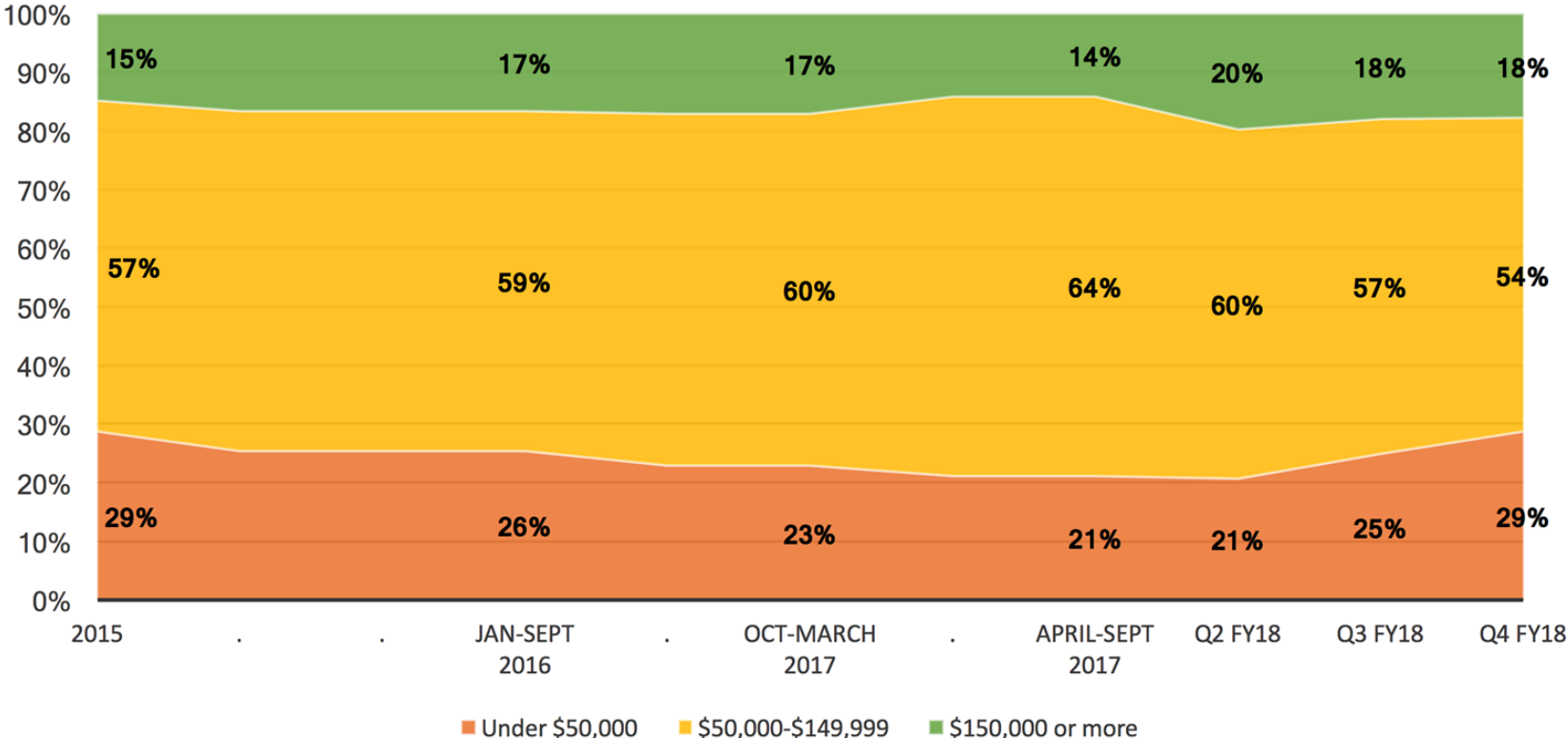


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Age

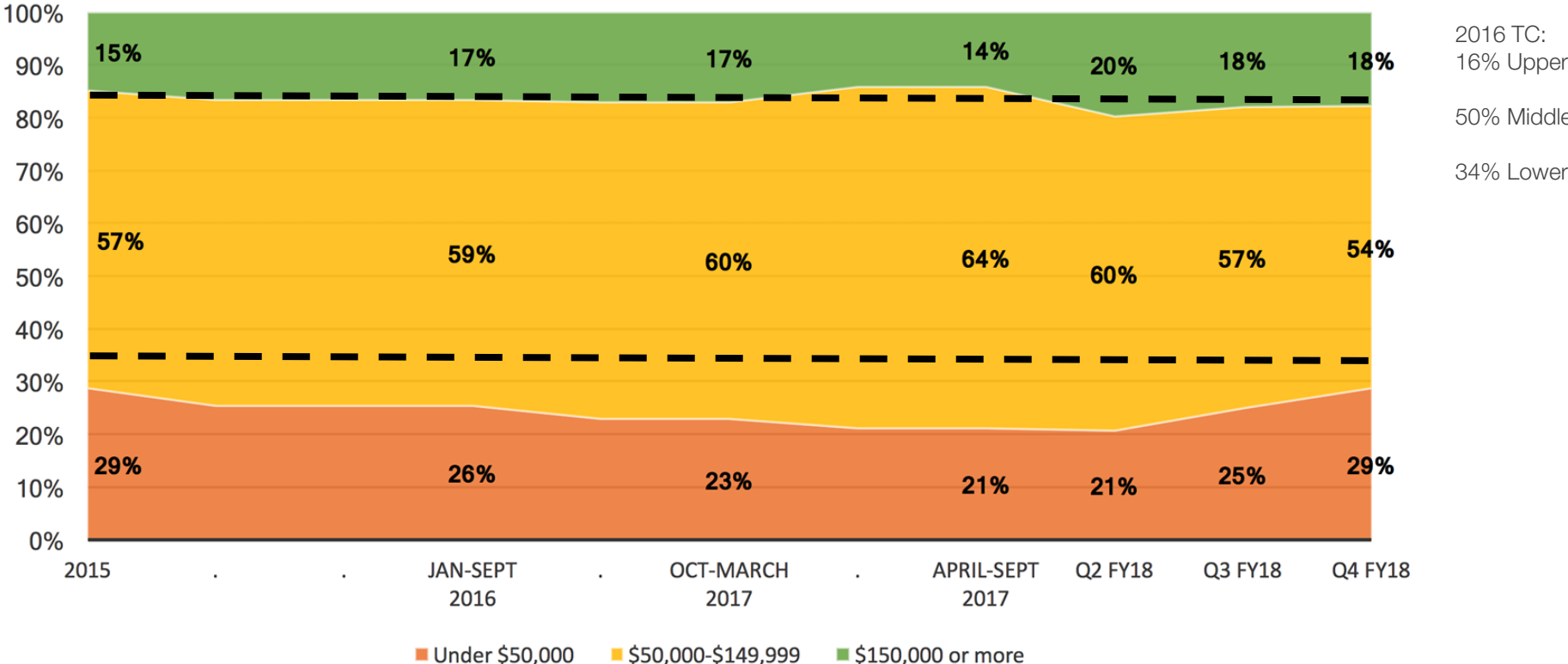


Household Income



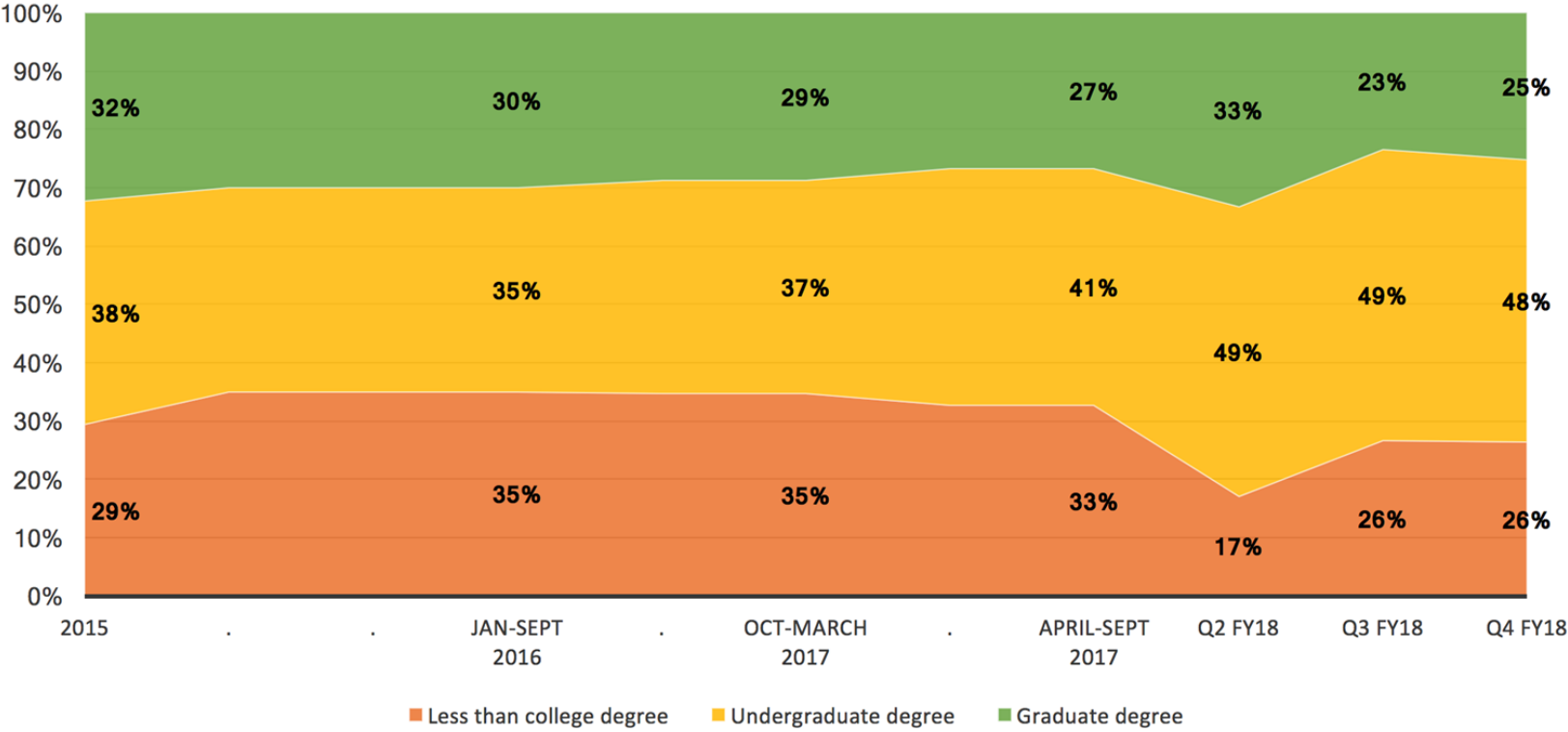
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Household Income



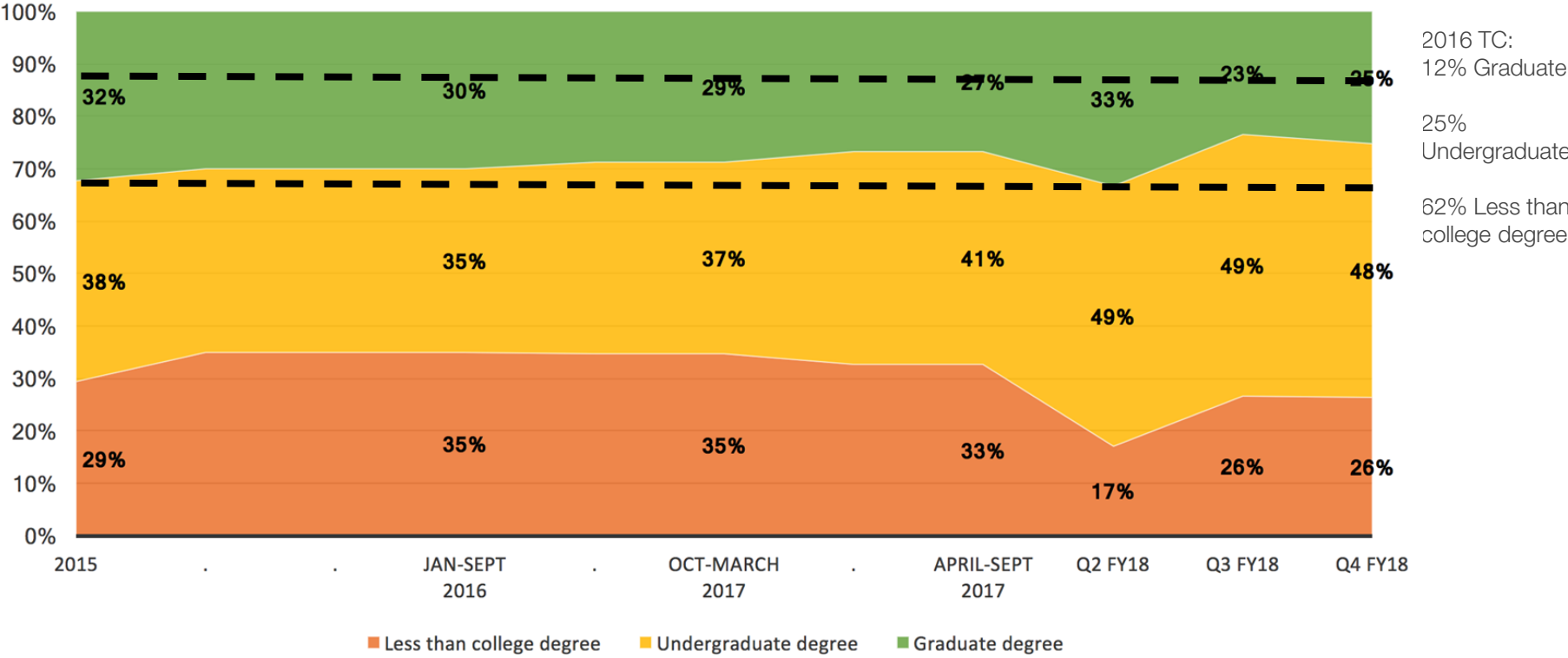
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Educational Attainment



2016 TC:
 12% Graduate
 25% Undergraduate
 62% Less than college degree

Educational Attainment



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Table Topics

Where do you need more Information?

Has this data changed your thinking about something? (Myths busted)

Do you see any big opportunities? (Influence business planning)

Do you see new connections? (Takeaways)

Will this change your work? (And if so what resources are needed)

THE DISCOVERY

- Science Center in Reno, NV
 - Medium-sized museum by ASTC standards
 - 67,000 ft² of hands-on exhibition halls
 - In 2017 we hosted 17,000 students in our fieldtrip programs
 - 200,000 visitors in 2017 and we aim to see more this year
-





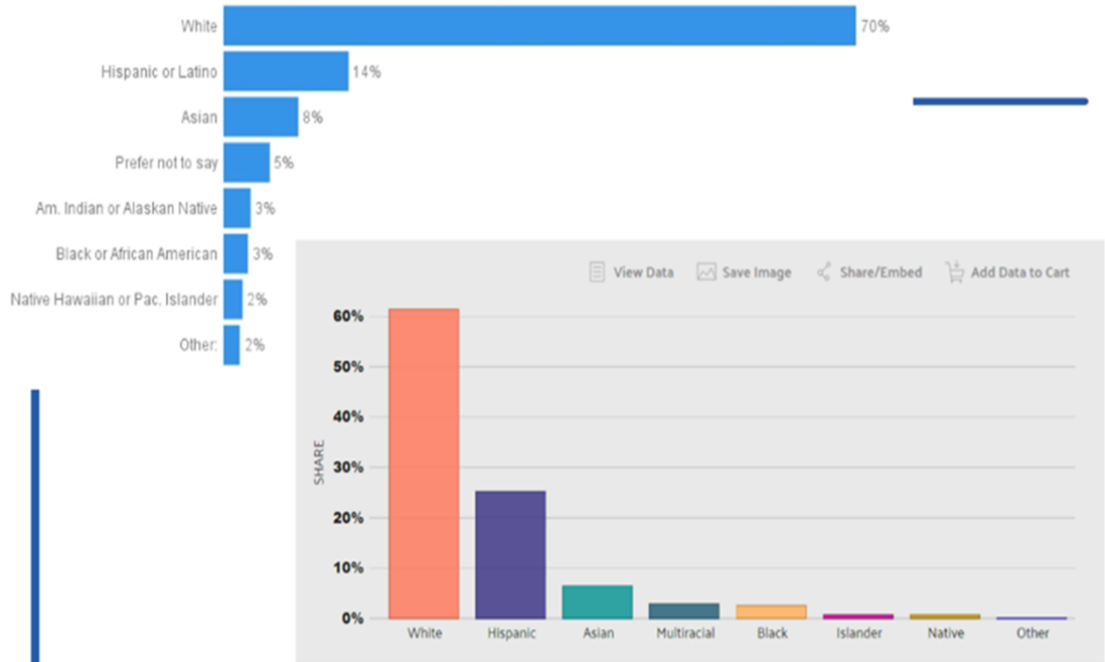
IMPACT OF COVES ON OUR MUSEUM

We have 4 examples that we'd like to share of how our involvement in COVES has changed The Discovery:

- 1) Adapted our survey methodology after seeing the response rate and comments from COVES—Social Science
 - 1) We incorporated COVES data into our Key Performance Indicators which senior staff reviews monthly
 - 1) We used the information on the COVES survey which showed a trend in complaints on our bathrooms cleanliness.
 - 1) We are using COVES data to help The Discovery establish base-line metrics of need for our diversity and equity efforts.
-

- Our Institution is beginning to work on strategic efforts to diversify our visitation, our staff and our board leadership. We used COVES to help us get a base-line understanding of where our initial metrics are.

Race/Ethnicity of Respondent 648 Responses



nvdm.org

Great Lakes Science Center



Why COVES is important?

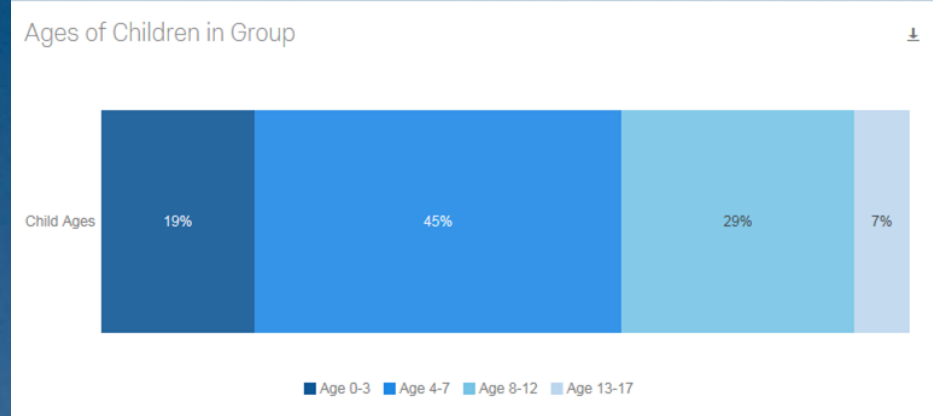
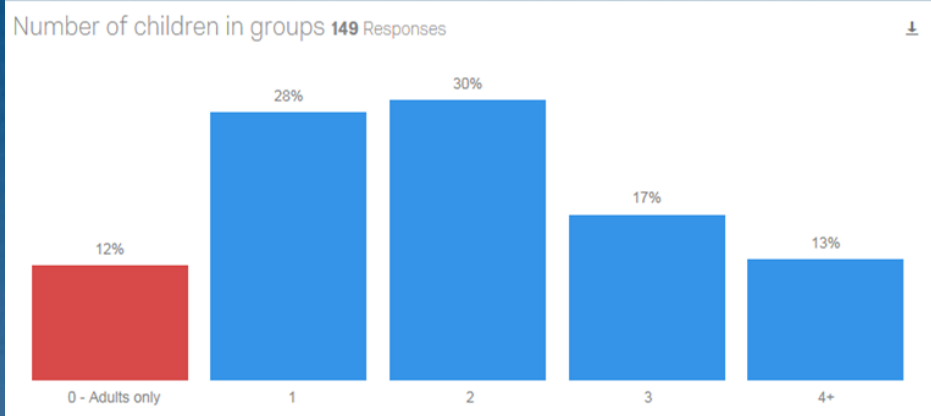
- Improve the guest experience
- Better informed future updates
- Focus on ROI



COVES at work

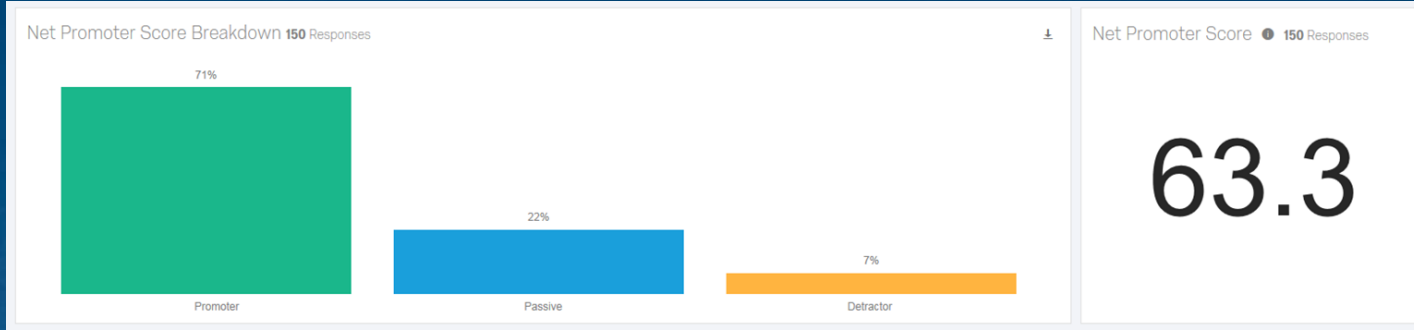
- Primary audience confirmation
 - Families with children ages 0-12

FY18 Q1 (Oct. 1, 2017 - Dec. 31, 2017)

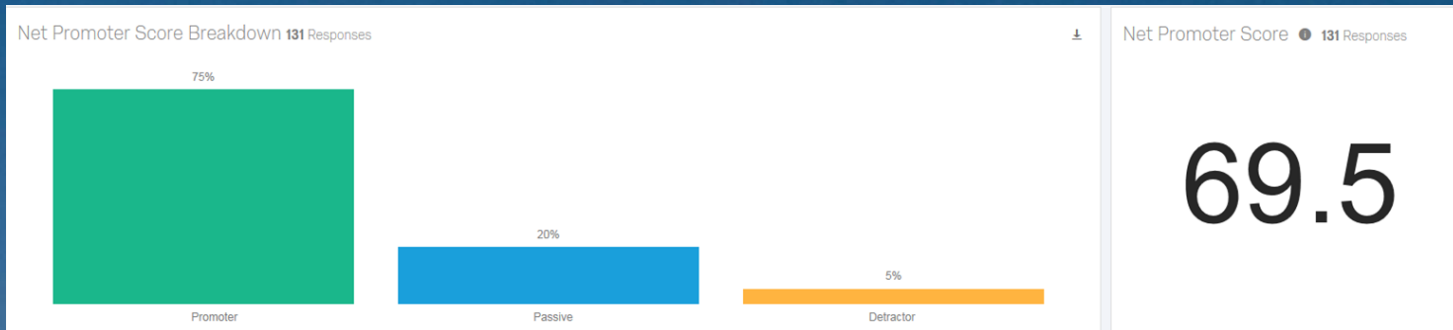


NPS Ratings: FY18 Q1

- Base Line



- Primary Audience (Guests with kids)

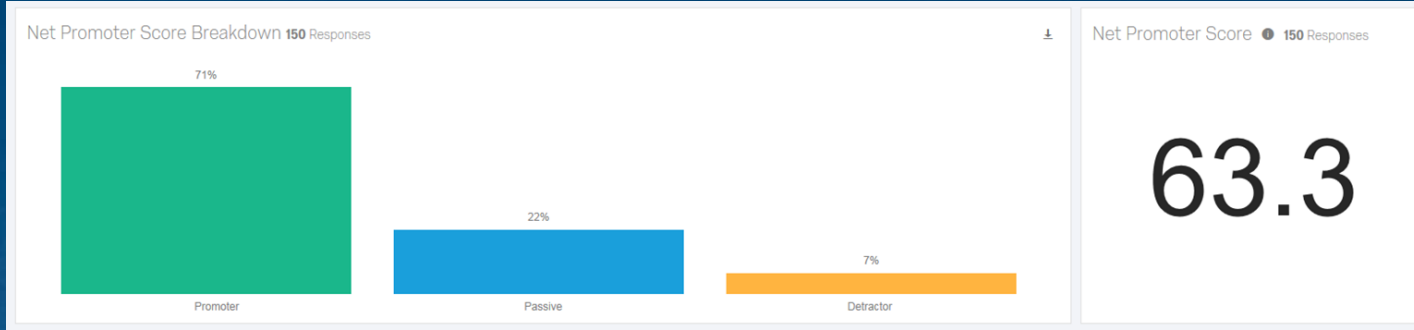


But what about adult programming?

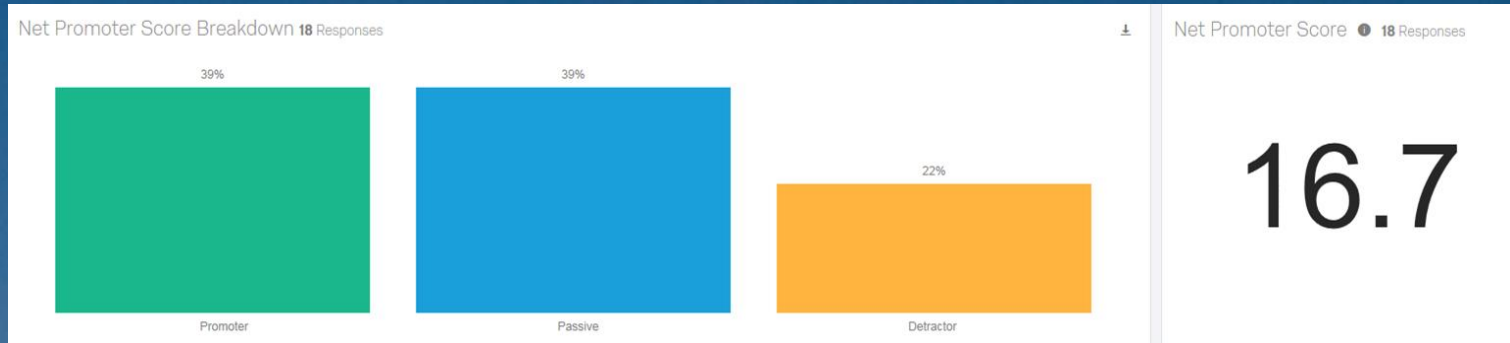


NPS Ratings: FY18 Q1

- Base Line



- Adults Only



COVES and decision making

- September Value Added Programming
 - Saturday video game programming for families or Wednesday evening programming for adults?



READY PLAYER FUN



What's next?

- Establish measurable goals
- Connect to Strategic Plan
 - Reporting to the board
- Get more departments involved



Background

- Founded in 1825 as the Worcester Lyceum of Natural History
- 55,000 ft² of hands on exhibits and 40 acres of property, including nature trails and wildlife habitats
- Operating Budget: \$3.9m, medium-sized museum by ASTC standards
- Over 175,000 visitors in 2017
- 41 COVES Data Collectors, all staff members



museum of science and nature



COVES Data: Review & Reflection across all Departments

- Strategic Planning
- Support grant applications
- Offer a baseline for measurement and action
- Provide an overview of our target audiences and inform decisions:
 - Messaging, partnerships and collaborations
 - Interpretative Plan
 - Proposed changes to operations

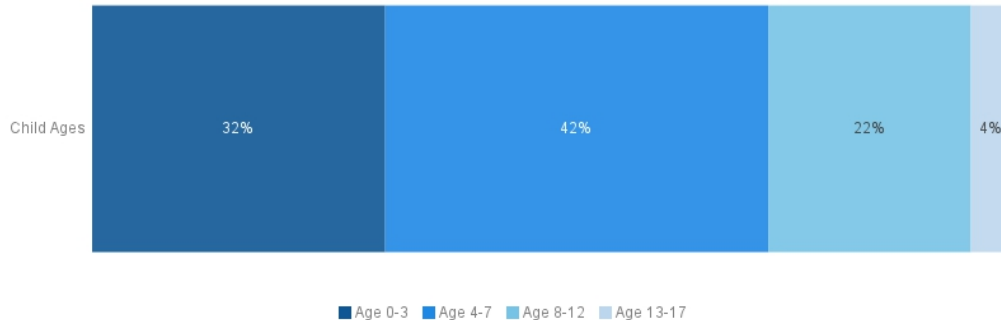


Q: "Please tell us about the children/adolescents in your group?"

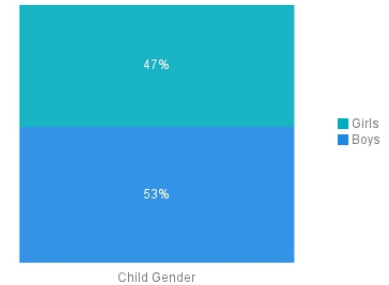
- Inform efforts across departments and look toward long term growth opportunities
- Provide data for grant applications that in the past might have used anecdotal information



Ages of Children in Group



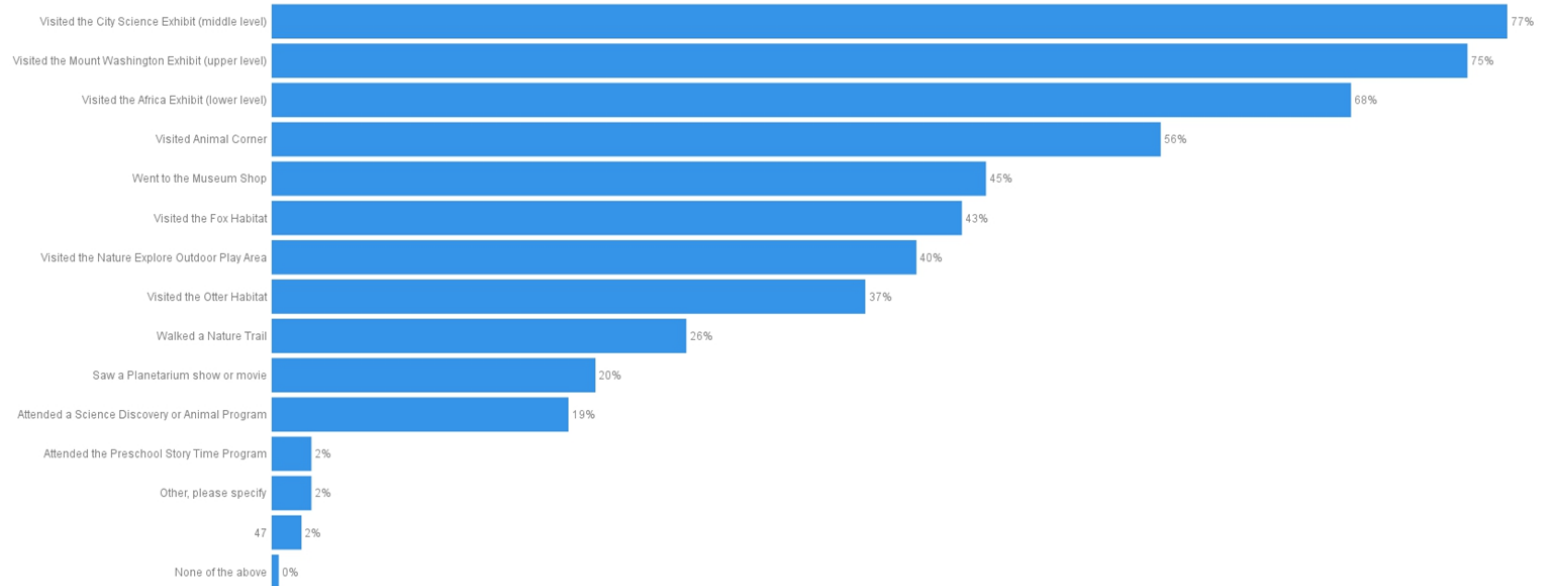
Gender of Children in Groups



Q: "Which of the following did you and/or your group do at the EcoTarium today?"

- Provide insight and baseline data regarding circulation around the campus

What do they do during their visit? 1124 Responses



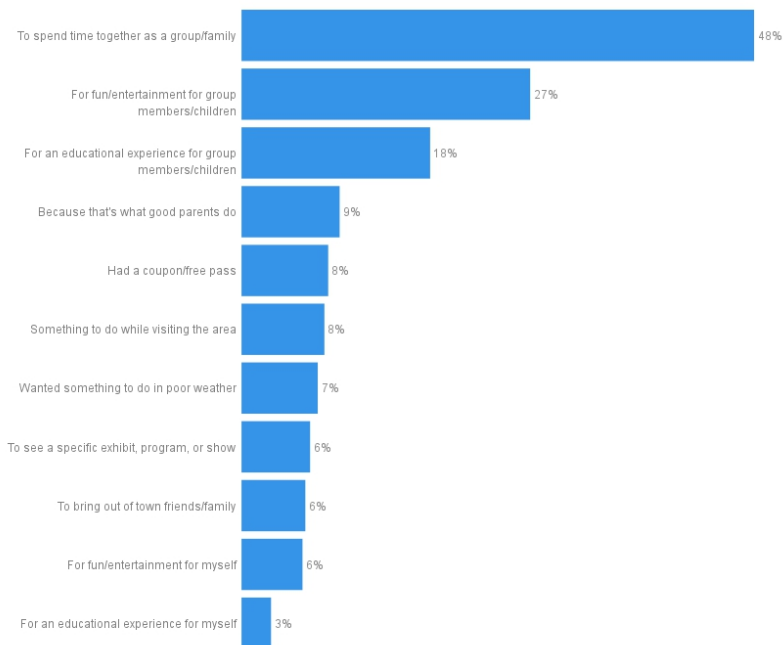
Q: Why did you decide to visit today?

- Understand motivations

Why do they visit? (Your Institution) Respondents could select up to two options 1126

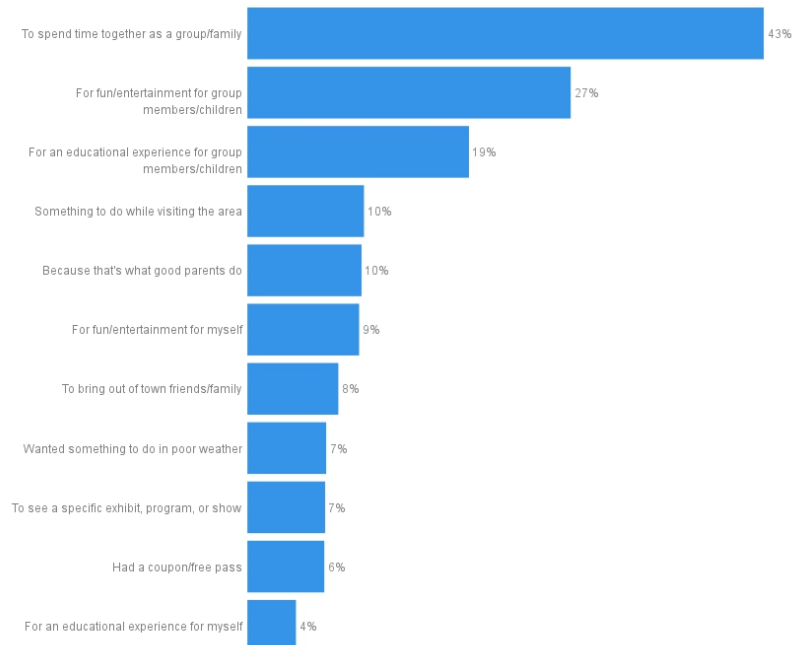
Responses

Download Filter



Why do they visit? (Aggregate) Respondents could select up to two options 4406 Responses

Download Filter



museum of science and nature

Reflect and discuss with your neighbors:

What is one issue or problem at your institution that could be tackled with more data or better data?

Did any of the presenters share a story that relates to the issue or problem you identified?



Audience Q&A



Thank you!

info@understandingvisitors.org