



Museum of Science



# 2023

# ANNUAL REPORT

## MISSION

To inspire a lifelong love of science in everyone.

## VISION

A world where science belongs to each of us for the good of all of us.

## VALUES

**Everyone:** We are everyone's Museum. We pursue equity and celebrate every person for who they are. We foster an inclusive environment in which we value and respect diversity.

**Service:** We serve our colleagues and community. We hold ourselves accountable to be a trustworthy public resource, and to support a sustainable, just, and evidence-based future.

**Learning:** We love learning. We are curious about the world and want to share our joy and wonder with others. We value open minds and recognize that everyone has more to explore, discover, and create.

**Connection:** We find strength in connections. We collaborate across communities, organizations, and disciplines to make science relevant and accessible to all.

**Boldness:** We dream big. We boldly push ourselves forward, pursuing new ideas and challenges. We experiment and learn from our failures as we seek to inspire purpose, spark imagination, and encourage hope.

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## 2023 LEADERSHIP

**TIM RITCHIE**

President

**ALEXIS RAPO**

Chief Digital Officer

**CHRISTINE CUNNINGHAM**

Senior Vice President, STEM Learning

**KRISTIN TOMMEY**

Interim Chief Advancement Officer

**MIRIAM KRONENBERG**

Chief Financial Officer

**SEVERINE IMBERT DE SMIRNOFF**

Chief of Staff and  
Chief of Strategic Initiatives

**TIM PORTER**

Interim Senior Vice President  
Learning and Research

**TODD SPERRY**

Chief Marketing Officer

**YUISA PÉREZ**

Chief People Officer

# LETTER FROM THE PRESIDENT



Fiscal year 2023 was a year we knew would be dedicated to nurturing the experiments we had launched the year before. We called fiscal year 2022 the year of “brave acting.” We went into fiscal year 2023 calling it the year of “brave growing.”

We grew our capacity to bring science to people at the pace of change by expanding the Centers for Public Science Learning from one center to three. We nurtured our digital program, exceeding our expectations by reaching more than 59 million people. Our onsite attendance rebounded, and we established a creative foundation for reaching underrepresented communities through our Heritage Months.

We started the year with the fledgling Center for Life Sciences, and discovered that it needed more support, more visibility, more integration. We accomplished this by adding the Center for the Environment and the Center for Space Sciences. This enabled us to position the Centers at the heart of the Museum.

One of the brightest spots of the year was the extraordinary success of our efforts to reach the world digitally. Our goal at the beginning of the year was to reach 7.75M people online. We reached over 59M. The Roblox game, *Mission: Mars*, was a remarkable success. Gaming is a wonderful way to bring immersive science learning to the world, and we will continue to pursue games to fulfill this part of our strategy.

We developed a practical theory for increasing Access and Belonging. We realized that simply lowering financial barriers was insufficient, so we began to focus on working with partners to issue authentic invitations, and to develop culturally responsive programming. We put our theory to work in multiple Heritage Celebration Weekends where we saw significant increases in attendance and developed meaningful partnerships within our local communities.

Going forward into fiscal year 2024, we will continue to grow these initiatives and set the groundwork for increasing our capacity to exercise public science leadership. We will do all we can to bring high quality science learning to everyone at the pace of change. What could be more important in a world where our future depends on our wise and creative use of science and technology? Thank you for your partnership along the way.

A handwritten signature in black ink that reads "Tim Ritchie". The signature is written in a cursive, flowing style.

Tim Ritchie  
President

# FAST FACTS

**1,052,330** IN-PERSON VISITORS



**135**

Corporate Members



**35,931**

Member Households



**4,228**

Community Outreach Attendance



**51**

SubSpace Virtual Programs and Events



**5,879**

SubSpace In-Person Views



**3,203**

SubSpace Digital Views



**\$63.6M**

Operating Budget



**\$207M**

Endowment



**\$29.7M**

New Gifts and Pledges



**194**

Volunteers



**7,950**

Volunteer Hours



**291**

Full-time Employees



**84**

Part-time Employees



**3.2M**

Students Reached Through EiE



**46,000**

Teachers Using EiE

## LIGHTNING ROUND

**153,697**

Mugar Omni Theater Viewers

**159,722**

Planetarium Visitors

**3,500**

Teachers Participating in Professional Development

**2,700**

Families Across All 50 States and DC Who Utilized EiE's Families Program

**104,845**

School Field Trip Participants

# IN MUSEUM

The Museum's Exhibit Halls are constantly teeming with life and activity, and fiscal year 2023 was no different. Whether you're visiting a special exhibit, seeing a film, or catching a SubSpace event, there is something for everyone at Science Park.

This year, we opened two new Centers for Public Science Learning, the new outlets for bringing science to the public at the pace of change. Led by directors whose networks connect them to leading scientists in Boston and beyond, the Centers produce programming that hooks the public on the latest in science and technology.

Joining the existing Center for Life Sciences are the Center for the Environment and the Center for Space Sciences, which will influence the content found at the Museum in the upcoming year. But before we jump into 2024, please enjoy some of the highlights from our Halls over this past year.



# IN MUSEUM – EXHIBITS



## Mental Health: Mind Matters

This special exhibit featured unique, hands-on components that allowed visitors to better understand what it is like to live with depression, anxiety, post-traumatic stress disorder (PTSD), and other conditions. Created through a partnership between the Science Museum of Minnesota and Heureka Finnish Science Centre, the exhibit showed how mental health issues were treated in the past, bringing common misconceptions to light, and creating a safe environment for discussion.

## Mazes & Brain Games

This temporary exhibition, which ran during the summer of 2023, provided countless fun opportunities for all ages. *Mazes & Brain Games* featured a vibrant collection of mind-bending illusions, 3-D puzzles, and kinetic play. In addition to the adult-centered Maze of Illusions, there were several smaller mazes, including one for young visitors to find their way through a tangle of ropes. There was even a large display featuring a maze for the Museum's resident rats (key members of our live animal collection)!



# IN MUSEUM – EXHIBITS



## Exploring AI: Making the Invisible Visible

One of the first notable things visitors see when they enter the Museum from the parking garage (after the *T. rex*, of course) is Spot®, the Museum’s mobile robot dog. The Boston Dynamics creation is one of the focal points of the *Exploring AI* exhibit, which opened in September 2022. The exhibit also features a full-scale model of NASA’s Perseverance Mars rover and over three dozen components and interactive experiences that demystify how AI is already being used in our world.

## Immersive Room

The Museum opened its very own immersive room prototype at the end of fiscal year 2023. Framed by floor-to-ceiling screens, the *Immersive Room* offers interactive experiences for visitors of all ages. In the first Mars-focused prototype, visitors found themselves in a simulated landing on Mars, where they got to use hand-held scanning devices to look for signs of life. The second experience used the AI tool Dall-E, which turns text into images. Visitors chose inputs by standing on different circular prompts, which were analyzed to create wild images like “an elephant playing a piano in the style of an oil painting.”



# IN MUSEUM - FILMS



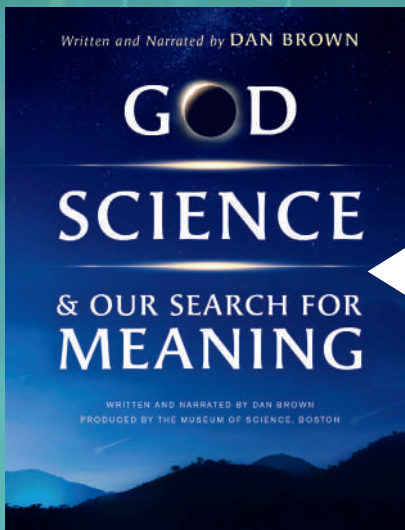
## Jane Goodall—Reasons for Hope

A new giant-screen film featuring renowned naturalist Dr. Jane Goodall opened in the Mugar Omni Theater in July 2023. This uplifting journey around the globe highlights good news stories that will inspire people to make a difference in the world around them. Throughout, the film reinforces Jane's four pillars of hope: the amazing human intellect, the resilience of nature, the power and dedication of young people, and the indomitable human spirit.



## Sea Lion 4-D

This fun film was added to the 4-D Theater's roster this year. In an environment as harsh as it is beautiful, this classic coming-of-age tale is centered on a sea lion pup named Otto. Viewers become part of her colony as she discovers that sometimes, immense sacrifice and bravery are required to navigate life in the seas.



## God, Science, and Our Search for Meaning

Dan Brown wrote and narrated this thought-provoking film, produced by the Museum's own Charles Hayden Planetarium team. Premiering in November 2022, it examines the interplay between science and religion as both explore humanity's oldest questions: Who are we and why are we here? Featuring stunning imagery on the Planetarium dome, the film shows how science and religion—often perceived to be at odds—can coexist.



# IN MUSEUM - SUBSPACE



## iA Bailar!

This event showcased the intersection of artistic movement and mental health in the Hispanic and Latinx communities. Some of New England's leading artmakers, dancers, and musicians amplified the importance of dance and movement in maintaining their own mental health and navigating their wellness journeys, as well as embracing the arts as a way to create community, identity, and belonging.

## Synth Fest

After a sold-out run in the summer, the New England Synth Fest returned to the Museum in February 2023 in the Charles Hayden Planetarium. The event featured synth musicians and visualizers "like never before" in the Planetarium's immersive full-dome environment, with a brand-new lineup of performers and exhibitors.



## A Beautiful Resistance: Live!

In her own words, *Boston Globe* culture columnist Jeneé Osterheldt created *A Beautiful Resistance* "to carry on the tradition of Black artists and Black journalists in reclaiming the truth of Black folk." During this year's live event, Jeneé spoke with special guests Rachael S. Rollins, US Attorney for the District of Massachusetts; Frank "The Butcher" Riviera, artist and philanthropist; and Real P., DJ, producer, and community partner.



## IN CLASSROOMS

The Museum of Science continues to provide high-quality educational resources to students and educators both locally and nationally. The Museum unveiled a major change to its education program at the end of fiscal year 2023, welcoming back Dr. Christine Cunningham, a globally recognized leader in STEM education. The Museum then launched a new PreK-12 education division that combines two curricula offerings founded by Christine, the existing EiE® portfolio and the new Youth Engineering Solutions (YES) curriculum, which focuses on equity-driven education resources.

The Museum also expanded into game-based learning on the Kahoot! platform. Tim Ritchie explains: “The Museum has many years of experience bringing engaging STEM learning into classrooms with our Engineering is Elementary curricula and virtual learning offerings, so working with Kahoot! allows us to expand our mission to make high-quality science learning accessible to everyone.”

# IN CLASSROOMS



## EiE Kahoots

In March 2023, the Museum announced a partnership with Kahoot!, the global game-based learning and engagement platform company, to expand its collection of virtual learning tools for educators and students. It allows the Museum to share fun, impactful learning modules about science and engineering for students in grades 1–8, either at home or in the classroom. Our collection of kahoots has expanded and now includes topics including climate, space, animals, and Mars.

## Youth Engineering Solutions (YES)

YES aims to educate the next generation of problem solvers and engineers by creating free, high-quality, standards-aligned curricula. YES curricula and the accompanying professional learning tools empower educators to create classrooms that engage students in authentic, hands-on engineering challenges connected to their lives and communities. EiE annually reaches 4.7 million people, and merging YES with EiE will help the Museum reach its goal of engaging 100 million people a year.



# ONLINE

One of the brightest accomplishments of fiscal year 2023 was the extraordinary success of the Museum's efforts to reach the world digitally. Our goal at the beginning of the year was to reach 11.5 million people. The Museum met and surpassed this ambitious goal by reaching over 59 million! This impressive number included over 50.4 million people reached on social media and 1.31 million game plays of the Museum's Roblox game, *Mission: Mars*.

Games like *Mission: Mars* are a great way to bring immersive science learning to the world, and the Museum will continue to pursue these experiences as a way to fulfill this part of our strategy. Tim Ritchie describes this goal, saying: "It's not enough for the Museum to be the most popular destination for families in New England and to share hands-on curricula with educators and millions of students around the world—we also want to leap into the metaverse to meet students where they are with top-quality STEM content."



# ONLINE



In December 2022, the Museum launched its first immersive educational experience, Mission: Mars on Roblox. The 3-D experience allows students of all ages to engage with the Engineering Design Process by developing and iterating vehicles that can navigate the Red Planet. Participants can work with a team to discover past evidence of water, collect samples of water ice, and rescue fellow explorers from certain doom.



## DIGITAL REACH FISCAL YEAR 2023

**59.1M**

Digital Audience Reach

**300+**

Science Stories/Videos Launched in FY23

## ROBLOX MISSION: MARS

**1.31M**

Total Plays

## SPACING OUT NEWSLETTER

**12,000**

Subscribers Since Launch

## SOCIAL MEDIA

**56M**

Audience Reach

**37M+**

Video Views

## KAHOOT!

**535k**

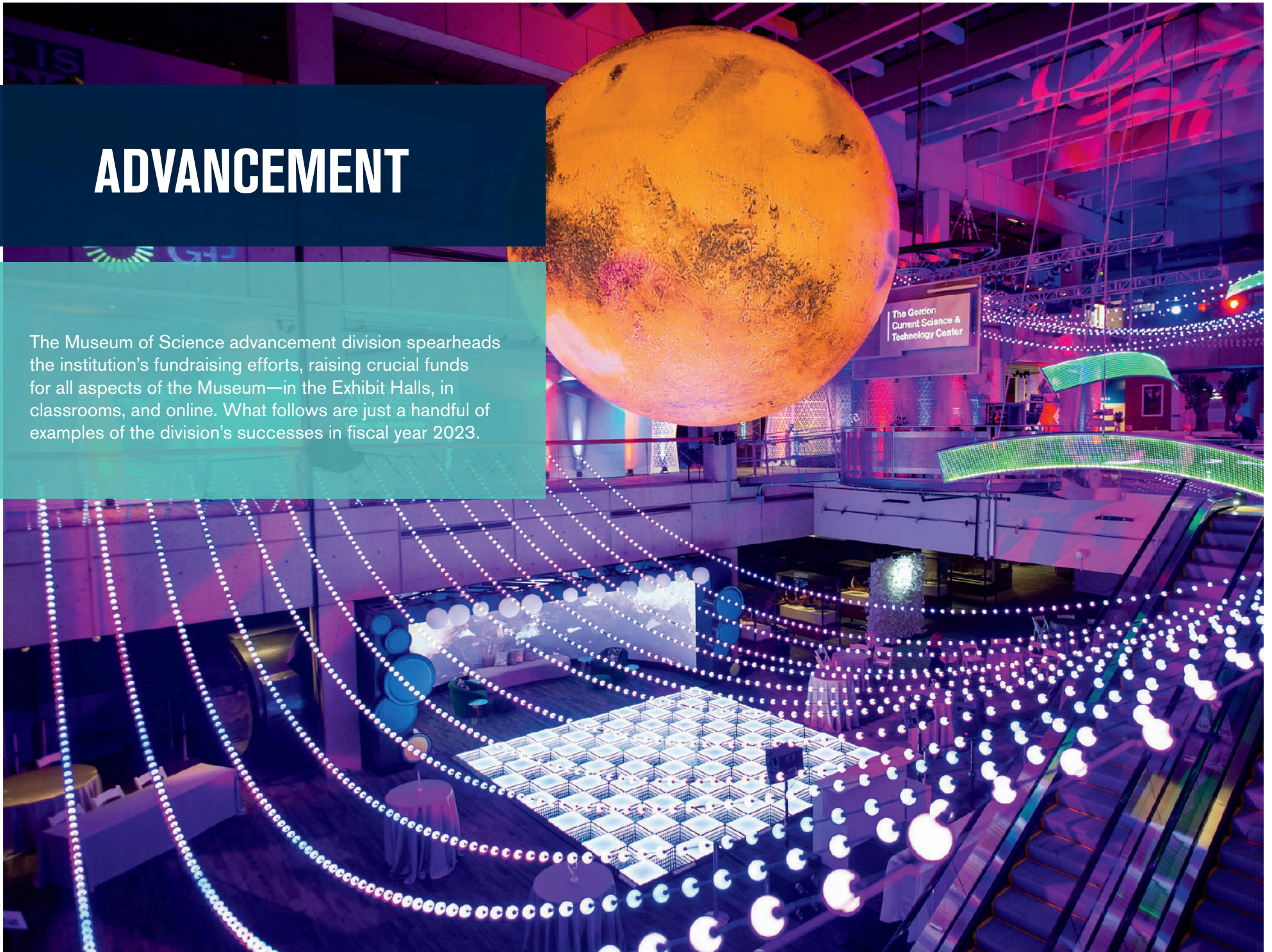
Players

**150**

Kahoots Produced to Date

# ADVANCEMENT

The Museum of Science advancement division spearheads the institution's fundraising efforts, raising crucial funds for all aspects of the Museum—in the Exhibit Halls, in classrooms, and online. What follows are just a handful of examples of the division's successes in fiscal year 2023.



# ADVANCEMENT



## Stars of STEM

The Museum's signature annual fundraising gala took place on May 5, 2023. Over 500 guests gathered in the Red Wing, which was transformed into a beautiful green oasis. The 2023 Star of STEM was ClimateWorks Foundation, an organization whose global programs and services fast-track climate solutions that benefit people and the planet. The event raised close to \$700,000 with an evening of multisensory stimulation, interactive experiences, a silent auction, and the always lively Sparks After Dark afterparty.

## Boston Marathon

The Museum of Science was represented by a team of 15 runners in the 127th Boston Marathon® in April 2023. The team raised a total of \$123,500 for the Museum's community engagement department, which works with community partners and organizations to provide equitable access to the Museum and its resources and programs. The School and Community Field Trip programs bring over 160,000 people each year to the Museum, and Community Outreach Programs bring fun and impactful STEM activities to youth and families through schools, libraries, camps, and community centers.



# ADVANCEMENT



## Annual Giving

In fiscal year 2023, more than 3,600 donors raised over \$3.77M in unrestricted revenue. These gifts supported everything from exhibits and animal care to educational programs and access for historically underrepresented groups. Unrestricted support reaches every corner of the Museum and supplements our general operating budget, meaning we can respond quickly to emerging opportunities and challenges, ensuring we continue to fulfill our mission of inspiring a lifelong love of science in everyone.

In March 2023, we celebrated Pi Day, our annual day of giving, raising a total of \$171,000 from over 630 donors. We surpassed our goal of \$150,000 and with the generous match provided by the President's Catalyst Council, we raised over \$300,000 in unrestricted funds. Thank you to everyone who supported this campaign—we are raising a slice of Pi(e) to you!

## WISE Committee Luncheon

In June 2023, the Museum held its first Women in Science and Engineering (WISE) Luncheon since 2019. The program was centered around Artificial Intelligence (AI), with a panel of experts discussing everything from gender bias in AI to using AI in the classroom. The WISE committee was founded in 1997 by a group of women who are Museum Advisors, Trustees, and donors. The goal of the committee is to inspire a lifelong love of science by suggesting and supporting programs designed specifically for women and girls to learn about STEM at the Museum.





# FINANCIALS

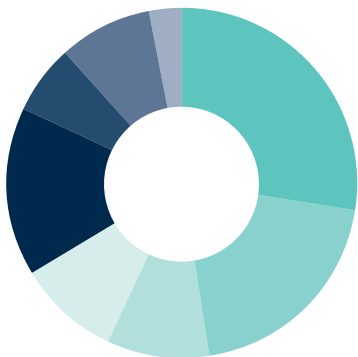
## FISCAL YEAR 2023 SOURCES OF OPERATING FUNDS (000's)

<b>Operating Budget</b> .....	<b>\$63,592,000</b>	
Admissions.....	\$12,660	19.9%
Memberships.....	\$6,004	9.4%
Program Fees.....	\$5,986	9.4%
Ancillary Services.....	\$9,953	15.7%
Endowment Income Used for Operations.....	\$4,020	6.3%
Designated Funds / Reserves.....	\$5,470	8.6%
Other Income.....	\$1,862	2.9%
Contributions and Grants.....	\$17,637	27.7%
<b>Total Sources of Operating Funds</b> .....	<b>\$63,592</b>	<b>100.0%</b>

## FISCAL YEAR 2023 USES OF OPERATING FUNDS (000's)

Program Services.....	\$29,649	48.1%
Facility Operations.....	\$6,165	10.0%
Fundraising.....	\$5,675	9.2%
Other Supporting Services.....	\$20,124	32.7%
<b>Total Uses of Operating Funds</b> .....	<b>\$61,613</b>	<b>100.0%</b>

	2021	2022	2023
<b>Endowment</b> .....	<b>\$214,327,000</b>	<b>\$200,756,000</b>	<b>\$206,882,000</b>
<b>Operating Income (000's)</b>			
Support.....	\$15,528	\$24,874	\$17,637
Revenue.....	\$28,904	\$41,502	\$45,955
<b>Total Operating Income</b> .....	<b>\$44,432</b>	<b>\$66,376</b>	<b>\$63,592</b>
<b>Operating Expenses (000's)</b>			
Program Services.....	\$19,394	\$26,449	\$29,649
Supporting Services.....	\$25,319	\$34,596	\$31,964
<b>Total Operating Expenses</b> .....	<b>\$44,713</b>	<b>\$61,045</b>	<b>\$61,613</b>
<b>Net Operating Income</b> .....	<b>(\$281)</b>	<b>\$5,331</b>	<b>\$1,979</b>



### FISCAL YEAR 2023 SOURCES OF OPERATING FUNDS

- Contributions and Grants..... 27.7%
- Admissions..... 19.9%
- Memberships..... 9.4%
- Program Fees..... 9.4%
- Ancillary Services..... 15.7%
- Endowment Income Used for Operations..... 6.3%
- Designated Funds / Reserves..... 8.6%
- Other Income..... 2.9%



### FISCAL YEAR 2023 USES OF OPERATING FUNDS

- Program Services..... 48.1%
- Facility Operations..... 10.0%
- Fundraising..... 9.2%
- Other Supporting Services..... 32.7%



**THANK YOU!**



Museum of Science