

Mesa City Council Presentation June 12, 2025

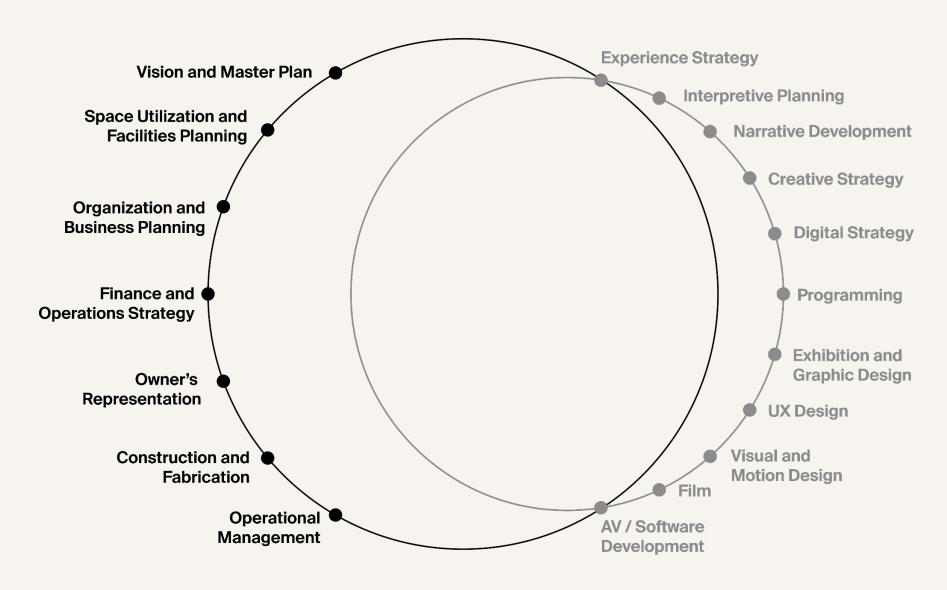
# **G&A Strategy & Design**

G&A synthesizes physical and digital spaces to produce immersive storytelling experiences that engage, entertain, and create measurable impact.

Our services encompass the full scope of a project, including Stakeholder Engagement to help us (and you!) to make the best decisions throughout each of these elements of the work.



# **Our Services**



G&A Proprietary and Confidential 2025



## Reach

We have completed:

750 Projects To-Date

# **Clients**

**30%** of our work comes from repeat clients

30 States + 24 Countries

# **Awards**

With more than:

**250** Awards

# **Design Excellence**

For more than:

**26** Years

Our projects have been recognized repeatedly for their ingenuity, creativity, and immersive storytelling.

















G&A, in partnership with Jones Studio, Karen Wise, Mimi Quintanilla, and in close collaboration with the AZMNH Museum Team, is pleased to present this Final Report of the AZMNH Master Plan. This Final Report includes:

 Executive Summary of the findings and recommendations from each area of research and planning

- 2. A detailed report of the the findings and recommendations from each area of research and planning:
  - \* Business Case & Plan
  - \* Architecture & Facility Feasibility
  - \* Audience & Community Engagement
  - \* Research & Collections
  - \* Interpretive Planning
  - \* Educational Programming
  - Experience Design

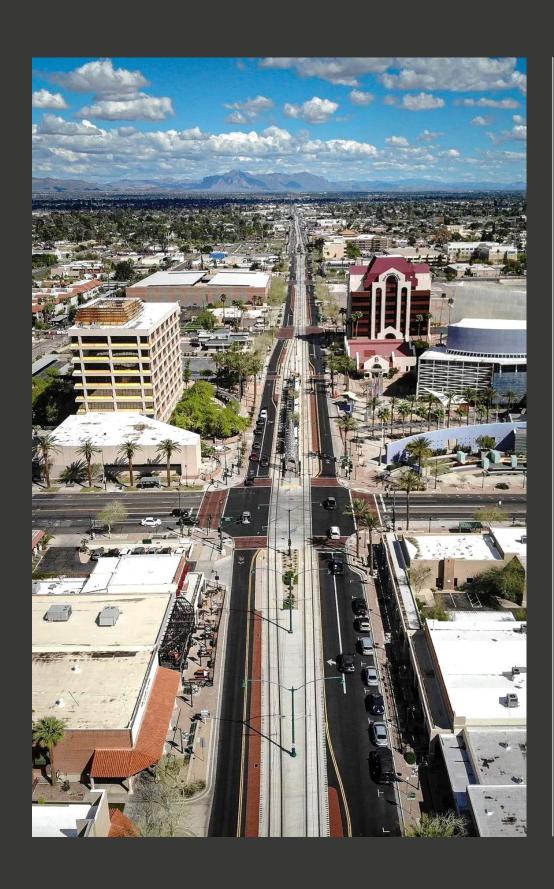
The museum is an important asset for the people and city of Mesa, but facility's limitations inhibit its opportunities for impact for residents, tourists, and nationally

## **Strengths**

- AZMNH is a museum that operates from the heart, with a dedicated and passionate staff who are committed to bringing a love of science and culture, through the lens of Arizona's history and prehistory, to the families and students of Mesa
- AZMNH is a museum with multiple unique and intangible assets at its disposal
  - A story unique to Arizona that can't be found or replicated anywhere else on the planet
  - The name recognition and brand power of being Arizona's **Natural History Museum**
  - An extremely strong resident population and tourism base to pull from in one of the largest and fastest growing markets in the nation — with more growth to come
  - A reputation and institution beloved by its core audience base

### Weaknesses

- However, the current museum experience and operational results do not fully reflect or leverage the museum's unique strengths and extraordinary location
- **AZMNH underperforms in terms of visitation, revenue** generation, and experience offering relative to its local Valley peers as well as national peers
- The current AZMNH facility is not fit for purpose—creating a cascade of challenges for a successful and sustainable future for the institution—and has undoubtedly impacted its ability to maximize its Return on Investment and Return on **Impact**



# Business Case & Plan

- 9 Market Analysis
- **Benchmarking**
- 21 Space Program & Capital Cost
- **30** Development Options

# Market Research for Audience Types

Analyzing AZMNH's diverse audience types and their unique preferences for experience, duration of visit, values, objectives, and educational outcomes, will shape the project's development and influence the Arizona Museum of Natural History's future operating model.



**Students** 



**Natural** History Scholars



Local & Regional **Families** 



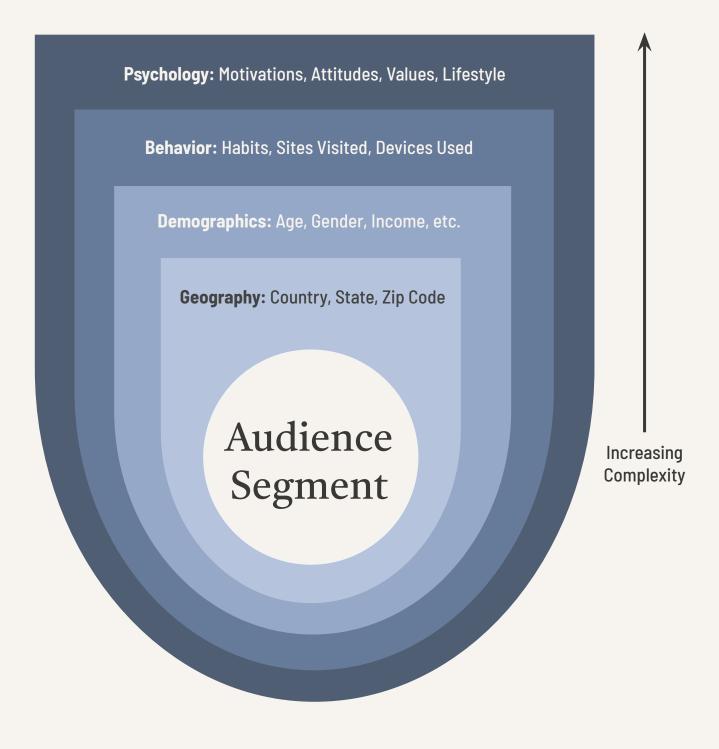
State & Regional School Groups



Regional **Tourists** 



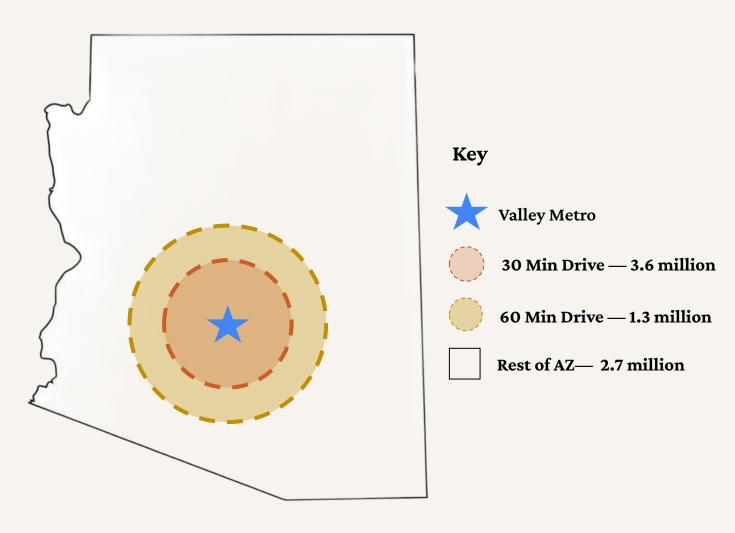
Local Organizations



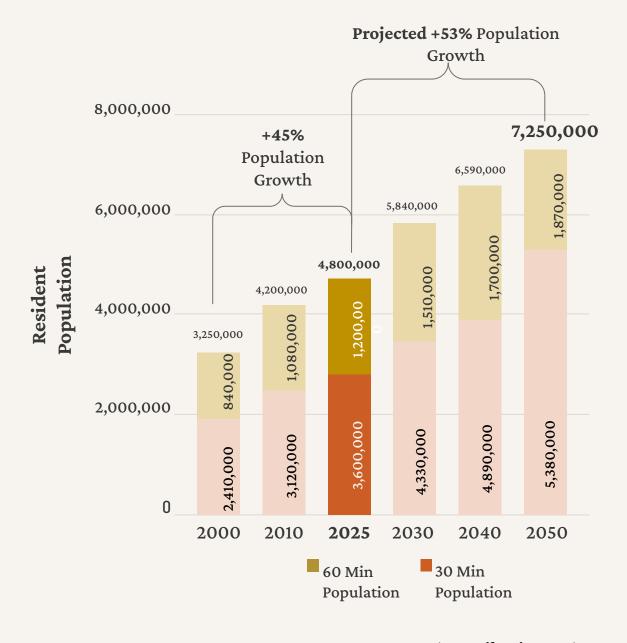
# Local Audiences

AZMNH has a robust local market of residents to draw from, not only in Mesa, but in the surrounding metro area containing most of the state's population and expected growth

> Approximately 65% of AZ residents are within a 60 min drive of the Arizona Museum of Natural History



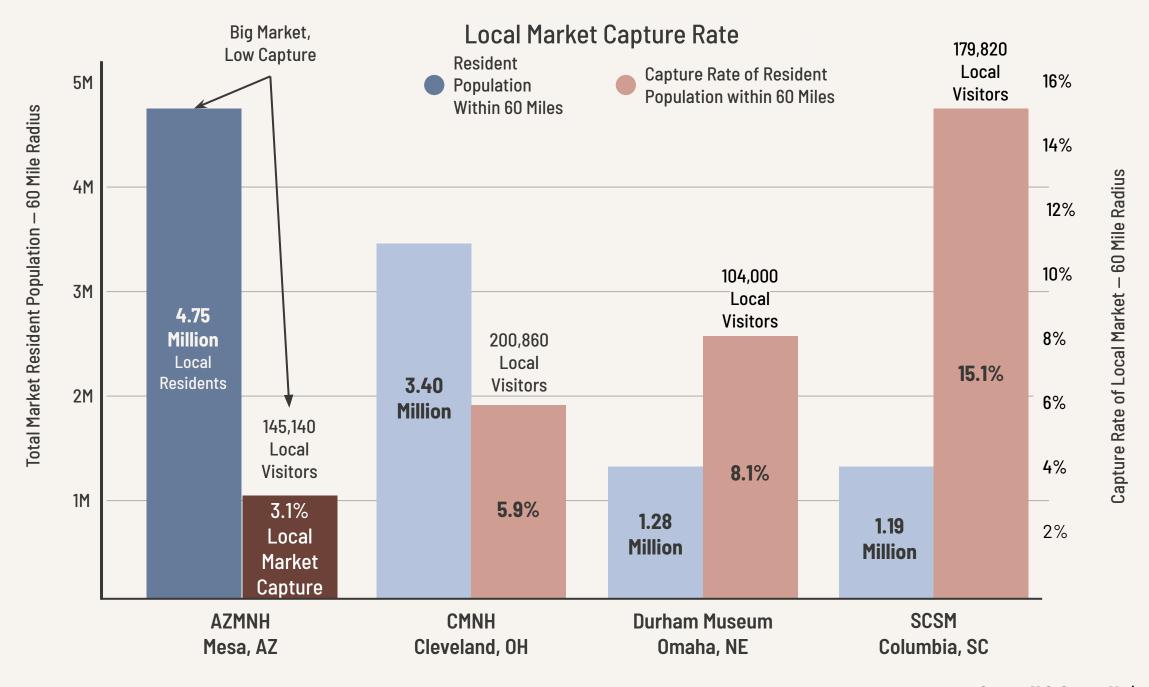
The Valley Metro of 2050 is projected to have as many residents as Houston, Dallas, the Bay Area, and Philadelphia do today



Sources: U.S. Census; Arizona Office of Economic Opportunity

# Local Visitation Performance

However, when you look at AZMNH's Local Resident Capture Rate — e.i. AZMNH's Total Visitation from Residents within 60 Miles divided by the Total Population within 60 Miles — it reveals that there is substantial opportunity to grow local visitation within its nearly 5 Million resident base



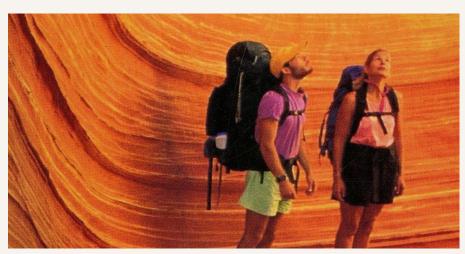
Sources: U.S. Census; Various Annual Reports; Various Interviews

# **Tourist Audiences**

The Valley brings in over 46 million tourists, engaged in outdoor activities, sporting events, and other recreational and entertainment activities during their visits, but only 13% report visiting museum's on their trip—far lower than other tourist activities in the region.







**Outdoor Activities / Recreation** 50% of tourist participation







**Sports Events / Activities** 31% tourist participation









Social/Nightlife/Resort/Casino Over 40% tourist participation

Sources: U.S. Census; Arizona Office of Economic Opportunity; Visit Phoenix

# Market Outlook



The Valley's resident market has a proven track record of growth over the last 25 years providing confidence that the market can accommodate the growing resident base.



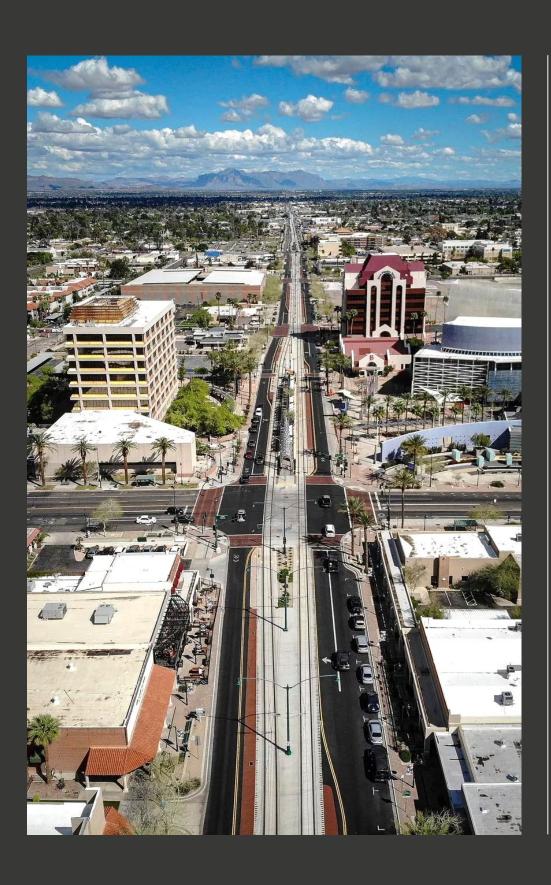
Tourism to The Valley is provides additional upside for future attendance but as a Natural History Museum, AZMNH must be able to provide an experience unique to Arizona that its tourists cannot get at their local museum back home



However, visitation has not reflected the opportunity AZMNH's resident market provides and they currently underperform their national peers in total visitation as well as visitation relative to market size



The rapid growth of the semiconductor industry and other STEM industries in the market provide additional support for market growth as well as opportunities for corporate partnerships and sponsorship not currently leveraged at the Museum



# Business Case & Plan

- **Market Analysis**
- Benchmarking
- **Space Program & Capital Cost**
- **Development Options**

# Benchmarking

## **Business Case**

Our benchmarking analysis looks at numerous facets of the comparable museum sample set, however, everything starts with market size...

#### **Competition/Status**

Relative position to cultural institutions operating in the market (e.g., Market Leaders)

#### Location

Proximity to population centers, schools, tourist attractions, etc.

#### Size

Amount of exhibit space or scope/scale of storytelling

#### **Theme/Content/Experience**

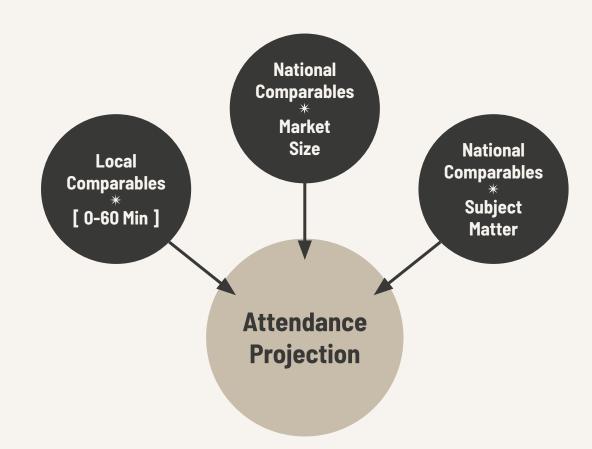
The partial and/or total similarity of a museum's subject matter to The AZMNH

#### **Total Potential Audience**

Total Potential Audience (TPA) is the combination of a market's total local resident population and total annual tourists

#### **Target Audience Segments**

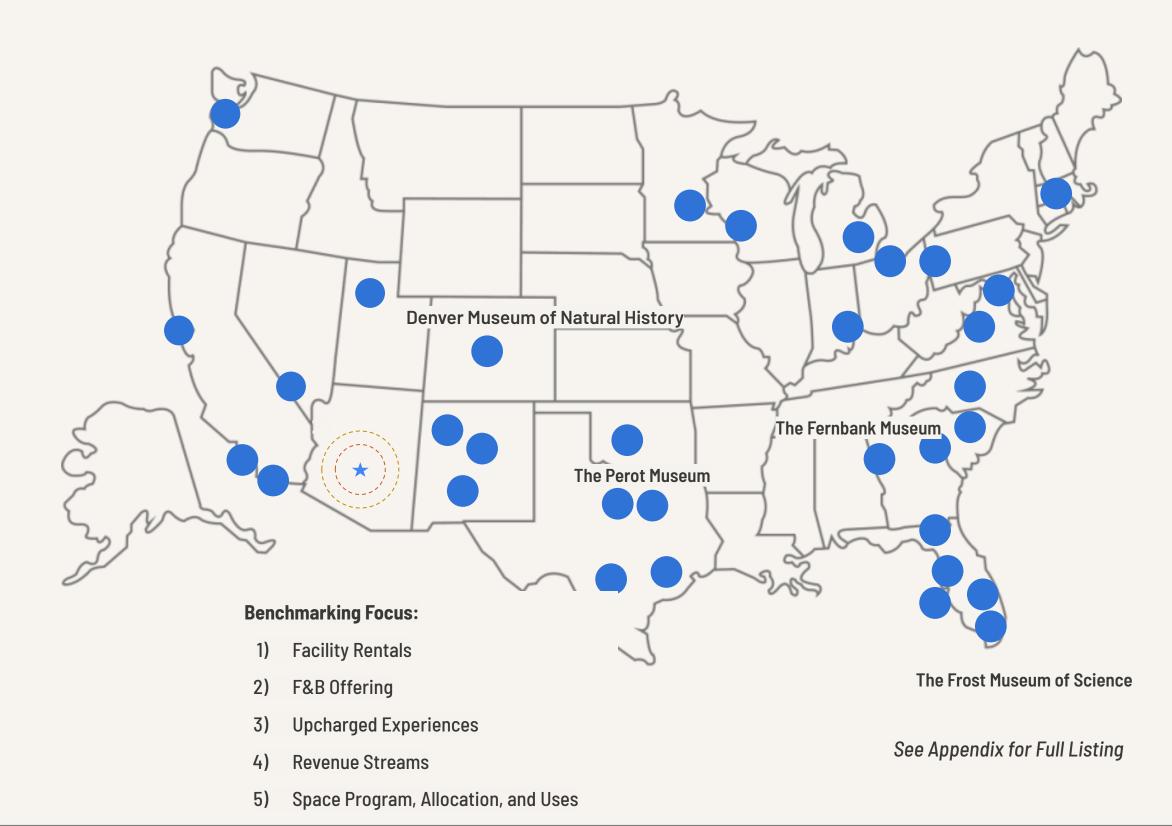
Similarity of positioning towards potential audience segments (e.g., residents, tourists, students, military)



# **National Benchmarks**

Our national benchmarking analysis looked at samples across a variety of market sizes in the U.S. and found:

- **AZMNH underperforms** as a science-based institution in a market of its size.
- The museum does not provide the visitor experience offerings and amenities that a best-in-class science-based museum typically offers.
- The museum is not maximizing revenue opportunities.



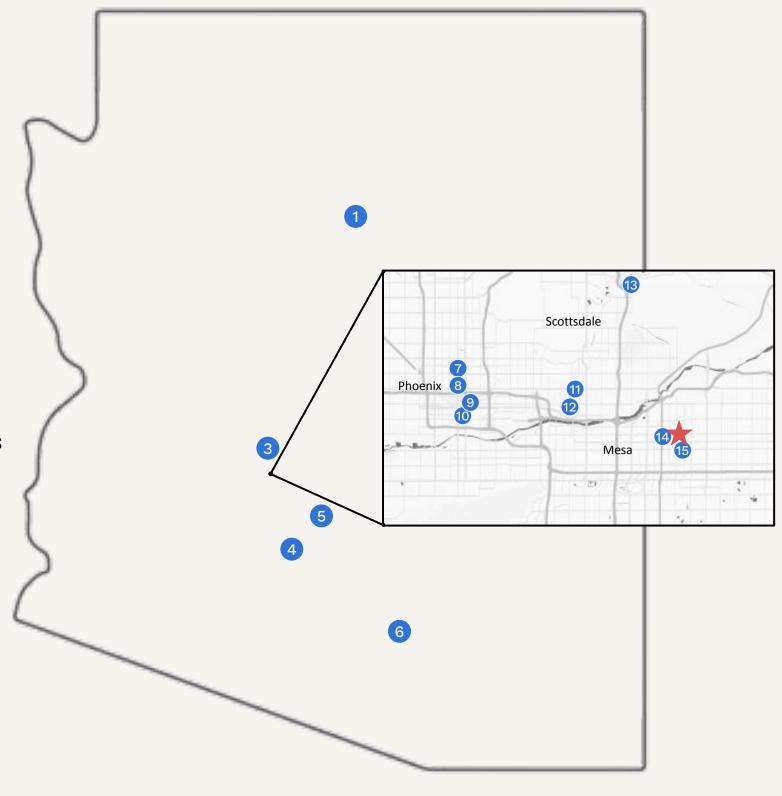
# Local Benchmarks

Our analysis of the local market for event space, food amenities, and upcharge experiences tells a similar story to our national analysis—AZMNH does not currently meet the expectations of the typical museum visitor

## **Select Comparables\***

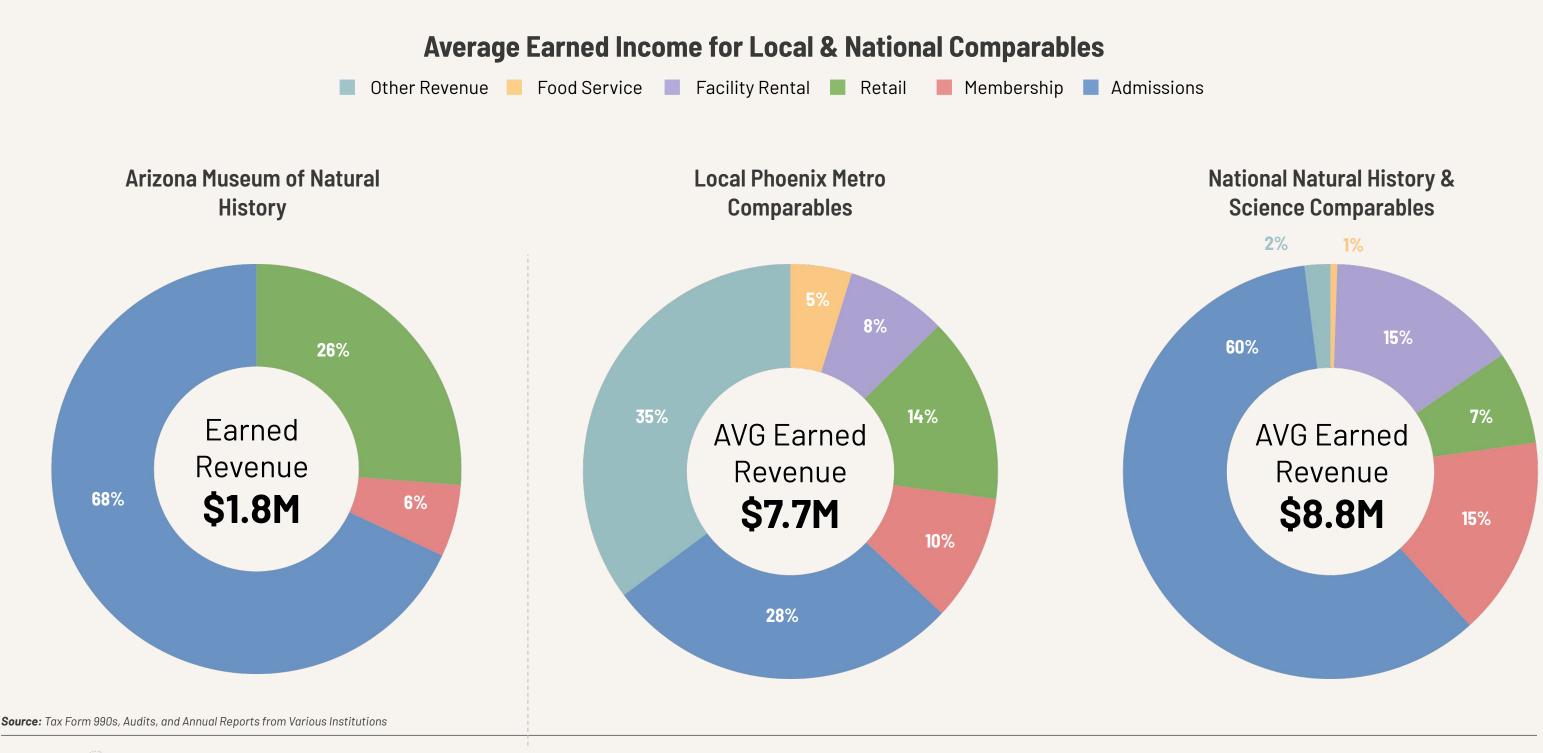
- **★** AZMNH
- Museum of Northern Arizona
- 2 Wildlife World Zoo & Aquarium
- Musical Instrument Museum
- 4 Casa Grande Ruins National Monument
- 5 Boyce Thompson Arboretum
- 6 Sonoran Desert Museum
- Heard Museum
- **Benchmarking Focus:** 
  - 1) Facility Rentals
- 2) F&B Offering
- 3) Upcharged Experiences
- 4) Revenue Streams
- 5) Space Program, Allocation, and Uses

- 8 Phoenix Art Museum
- Ohildren's Museum of Phoenix
- 10 Arizona Science Center
- Desert Botanical Garden
- 12 Phoenix Zoo
- 13 Pangaea Land of the Dinosaurs
- i.d.e.a. Museum
- 15 Mesa Arts Center



## Earned Revenue Streams

Most of AZMNH's comparables have more diverse offerings and are less dependent on one single earned revenue source.



# AZMNH lacks many of the amenities and earned revenue streams that its comparables offer



Does not offer facility rentals



Does not offer F&B or cafe amenities



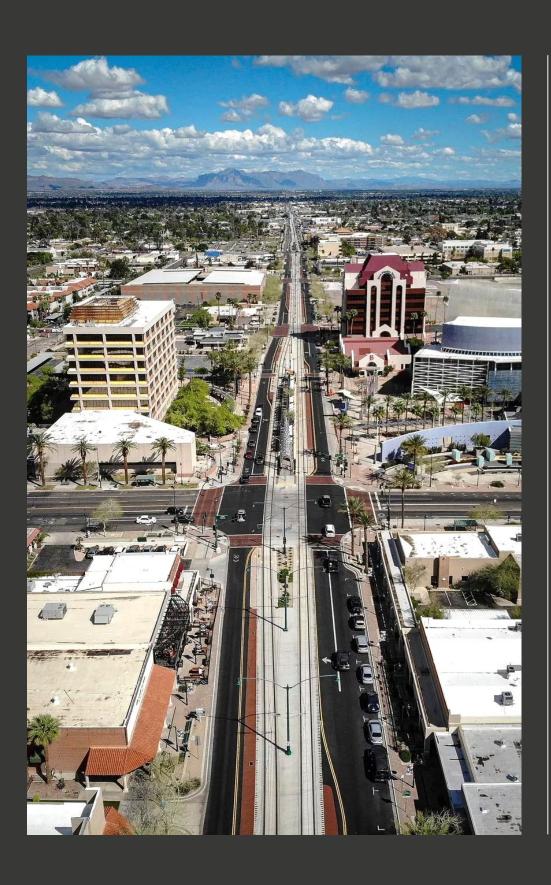
Does not offer upcharged experience



Too reliant on undiversified revenue model



Building limits ability to fully integrate research assets with educational programming and experience



# Business Case & Plan

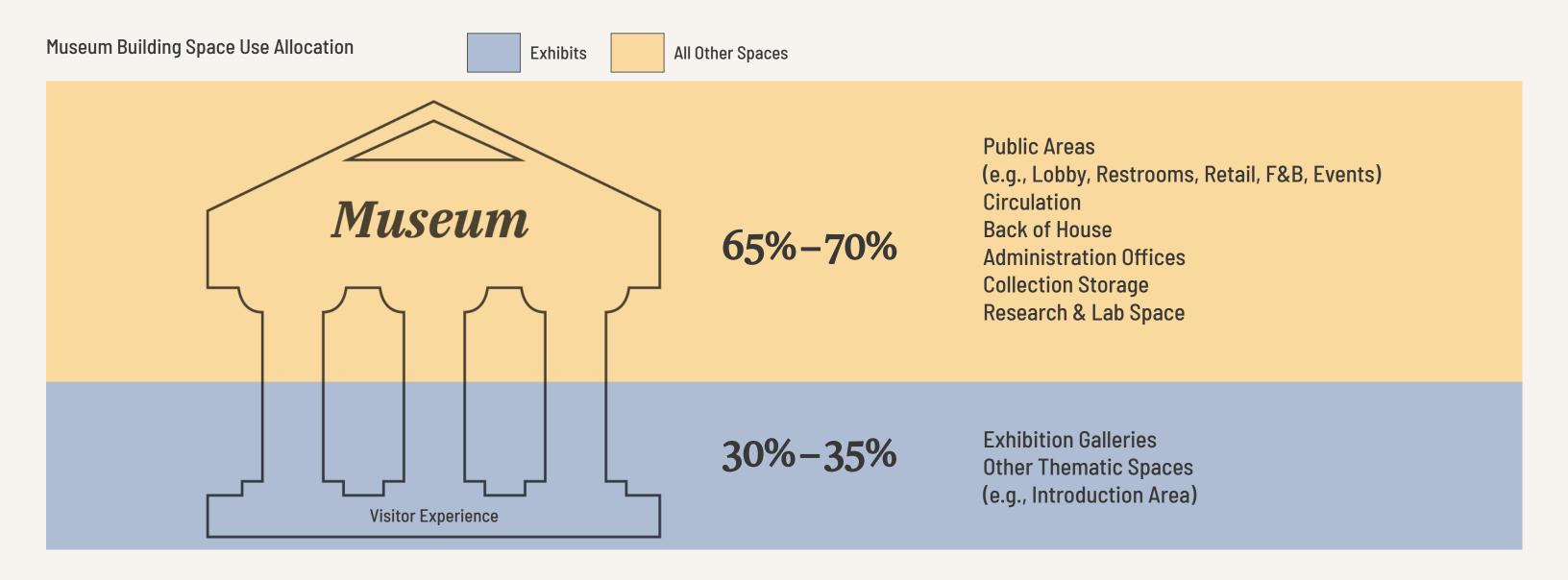
- Market Analysis
- 15 Benchmarking
- 21 Space Program & Capital Cost

**Development Options** 

It is critical to consider both development & operational investments when considering size.

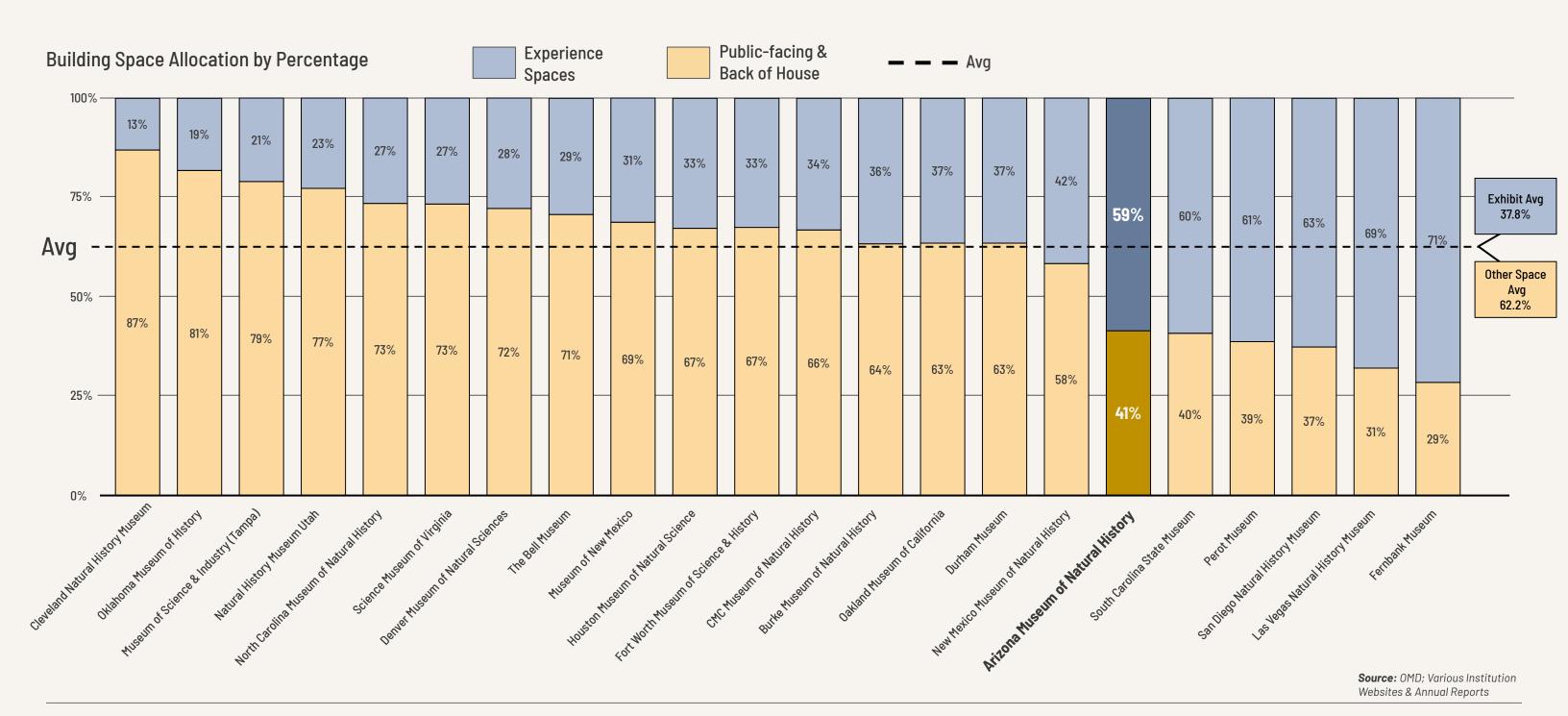
# Space Allocation

Museums typically balance their space allocation across three key areas: Experience, Public-facing Spaces, and Back of House Spaces, with each museum's situation influencing the mix based on individual need



# Space Allocation

In benchmarking AZMNH, the analysis found that AZMNH was overallocated in experience space, at the expense of space available for public-facing amenities and research and collection



# The International Spy Museum

**New Building (**Existing Museum**)** - 2015 — 2018

**History Museum** 

Physical Experience Design / Media Interactives

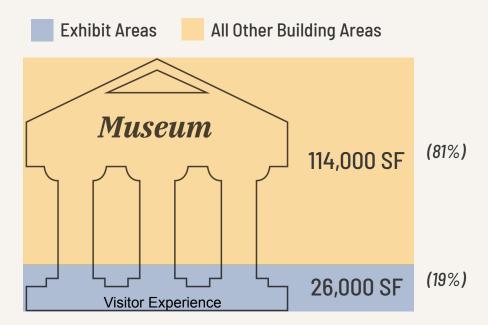
Washington, D.C.

#### **Total Project Budget:**

Time of Completion (2018) \$162,000,000

Adjusted to 2024 Dollars \$199,260,000

#### **Building Composition**



**Total Size = 140,000 SF** 













#### **Environment & Exhibits**

- Gamified interactive experience which builds a cohesive thread for individual visitors throughout their experience
- Extensive digital and analog interaction design
- Customized theatrical lighting









#### **Digital Media & Interactives**

- Four immersive signature pieces (6-8 min dwell time, groups of 2-10).
- Hunt for Bin Laden is the first multiplayer branching narrative experience.
   Distilled tremendous amount of CIA-led content into participatory & theatrical experience.
- Red Teaming includes significant custom projection mapping, voting & CG & filmic experience synchronization.
- 21st Century
   Eavesdropping is a gamified "signal hunt" w/ film cutscenes in an immersive environment.
- Infinity room film experience
- Open-ended user experience design

# The Bell Museum

**New Building** (Existing Museum): 2014 - 2018

**Natural History Museum** 

Physical Experience Design / Signage / Wayfinding

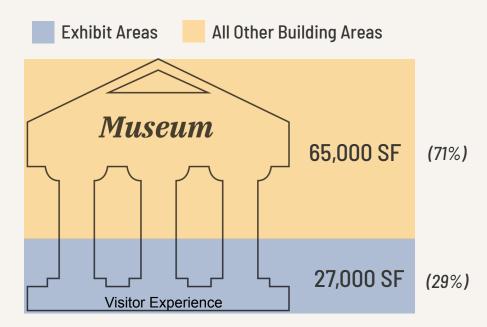
St Paul, MN

#### **Total Project Budget:**

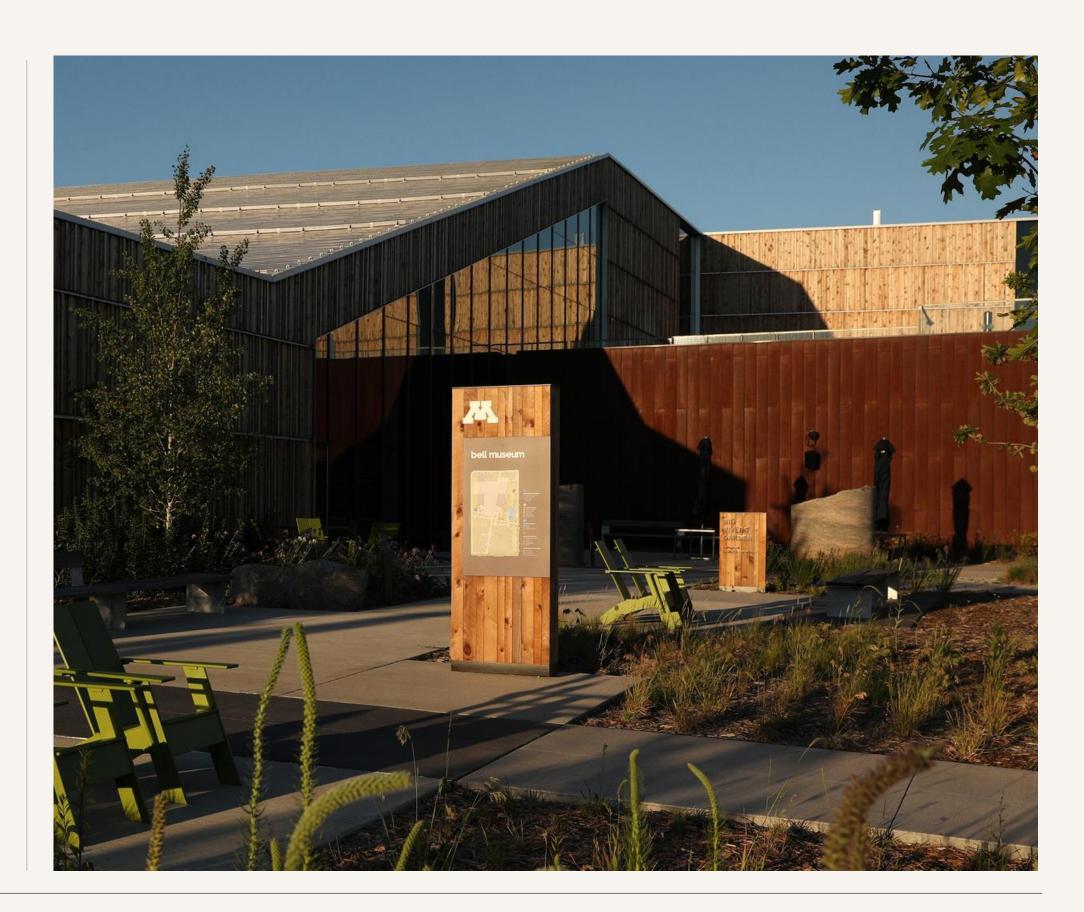
Time of Completion (2018) \$79,000,000

Adjusted to 2024 Dollars \$95,590,000

#### **Building Composition**



Total Size = 92,000 SF











#### **Environment & Exhibits**

- Graphics substrates were primarily switched to high pressure laminate graphics to meet budget.
- A signature exhibit item was "field notes" done by a local illustrator directly to the perimeter walls throughout the museum, we did not have to do any production work for these graphics.
- This was Design/Build which had an enormous impact on fabrication detailing. Huge modifications and VE were needed at the end of Design Development Phase.

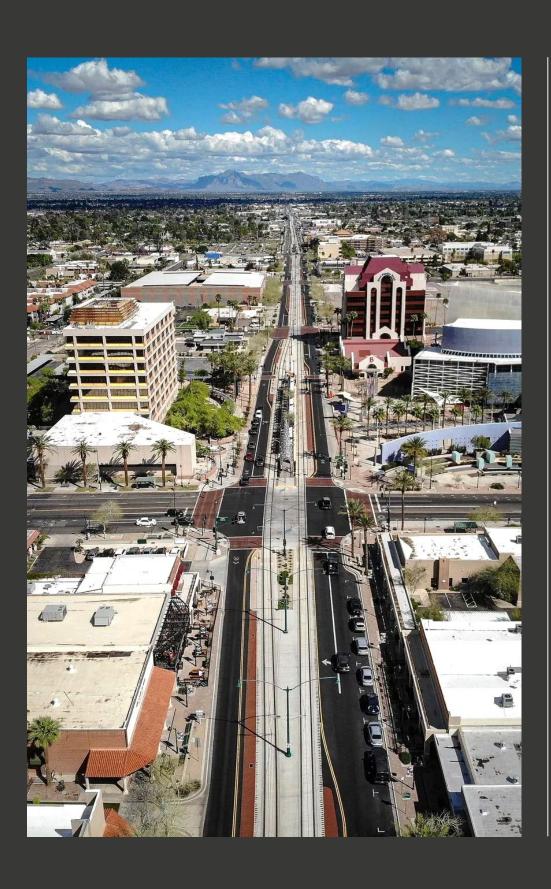






## Media & Digital Interactives

- AV development was by Cortina.
- All dioramas had similar touchscreen treatments.



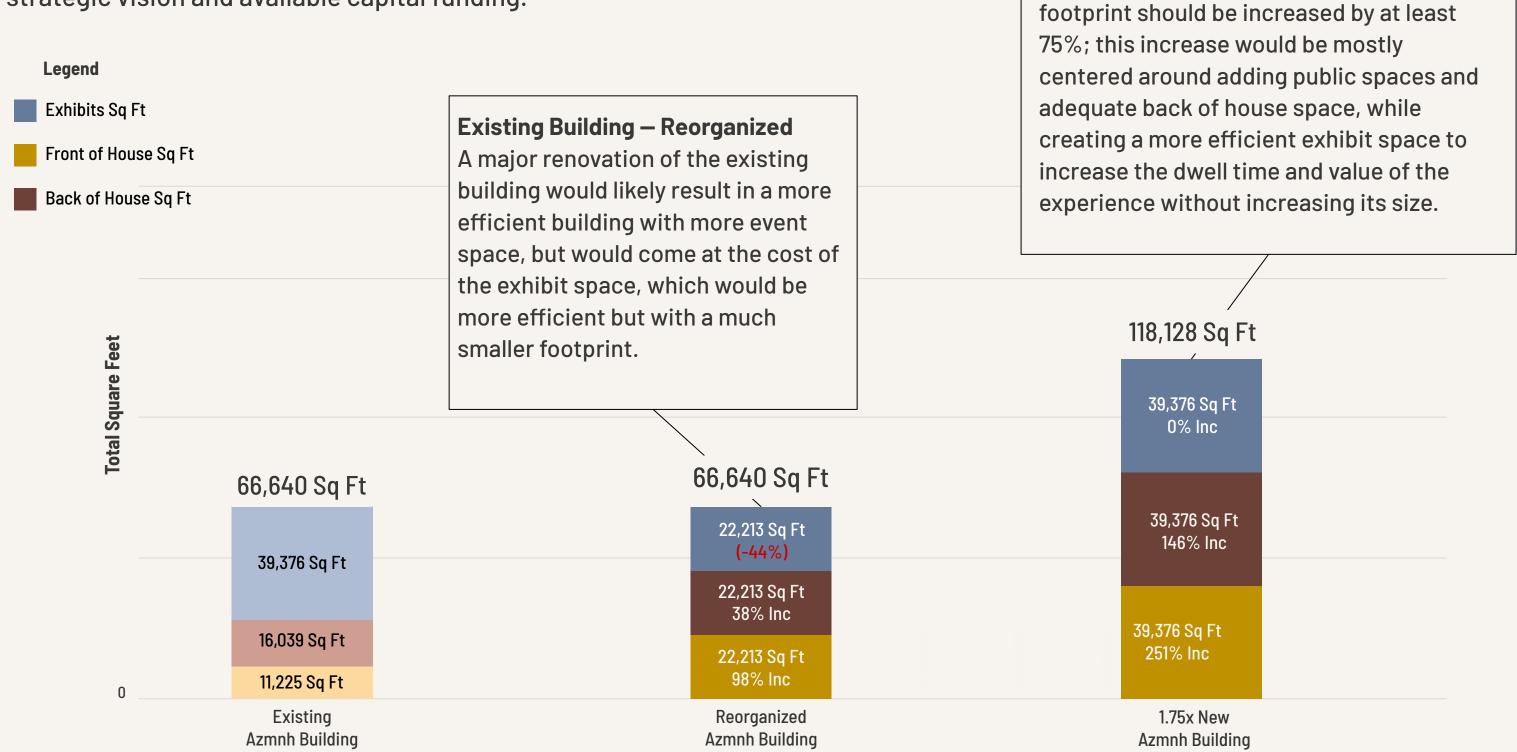
AZMNH MASTER PLAN / COUNCIL PRESENTATION / June 12, 2025

# Business Case & Plan

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# **Future Options**

The AZMNH future space allocation plan must align with AZMNH's strategic vision and available capital funding.



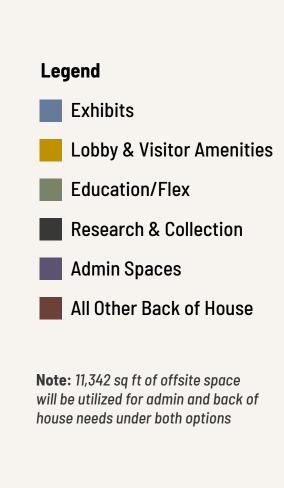
New Building — 1.75x Increase

If a new building is pursued, the total

# **Building Renovation**

A renovation of the existing building would provide AZMNH with an efficient space program capable of increasing visitation, revenue, and impact, but the building's small footprint will limit potential growth.





# **Renovation Option**

Total Capital Cost: \$83.9M

Total Sq Ft: **74,342 Sq Ft** 

Total Cost/Sq Ft: **\$1,130 per Sq Ft** 

Note: Project Costs as of 2024 Dollars

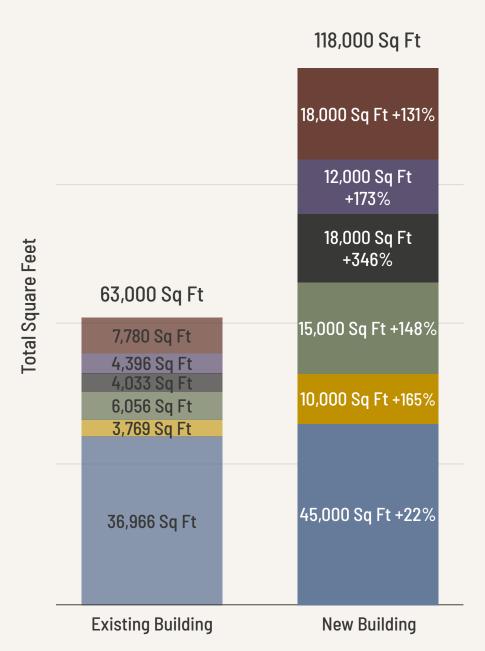
#### A renovation of the existing building provides AZMNH with:

- A small but high-quality, high-density experience; limited space for macro artifacts and signature experiences (skeletons, scale recreations, dinosaur mountain).
- Lobby capacity capable of hosting most private event group sizes.
- Education space with expanded capacity and integrated with R&C spaces.
- R&C space capable of integration into visitor experience and education space and support space capable of expanded but still limited scientific and mission oriented activities.
- Central admin with space for most of AZMNH staff needs; some staff will be located off-site and any future staff growth will likely require acquiring additional off-site office space.

# New Building Development

A new building would provide AZMNH with a right-sized space program and robust visitor experience with space for growth to pursue an ambitious mission and impact, research goals, and an expanded audience beyond Mesa.

#### **Space Comparison**



#### Legend

**Exhibits** 

**Lobby & Visitor Amenities** 

Education/Flex

Research & Collection

Admin Spaces

All Other Back of House

**Note:** 11,342 sq ft of offsite space will be utilized for admin and back of house needs under both options

# **New Building Option**

Total Capital Cost: \$169.6M

Total Sq Ft: 129,342 Sq Ft

Total Cost/Sq Ft: \$1,310 per Sq Ft

Note: Project Costs as of 2024 Dollars

#### A new building development provides AZMNH with:

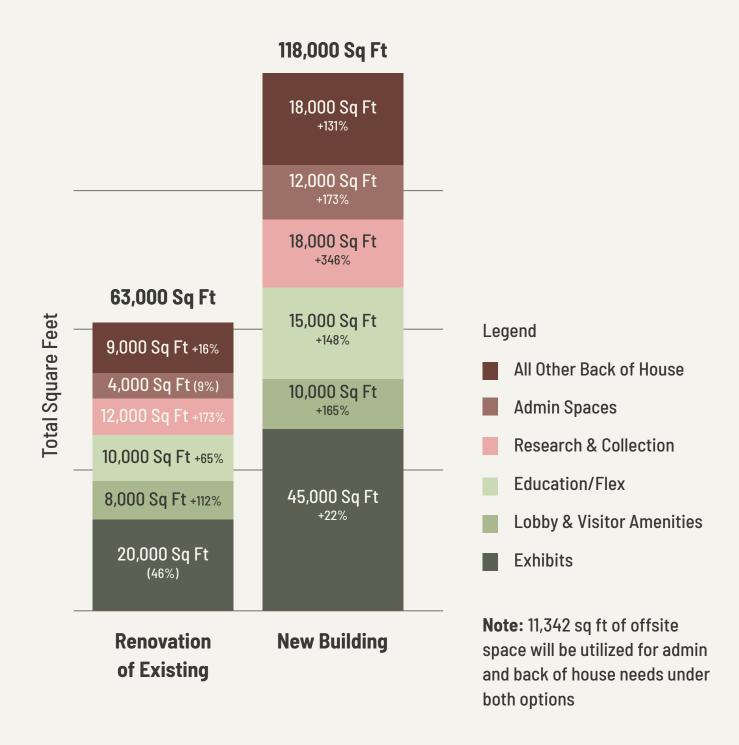
- Robust experience, space for macro artifacts, space for macro artifacts, and unconstrained visitor experience.
- Lobby with top tier-event space and ample public gathering space.
- Fully enabled education space integrated with R&C spaces and capacity fit for market and the future.
- R&C space capable of integration into visitor experience and education space and support space capable of next-level mission and scientific impact.
- Admin areas with sufficient space for growth and the ability to centralize all staff into a single building.

# **Option Comparison**

Option Comparison	Renovation Option	New Building Option	Option Difference
Total Building Sq Ft	74,342	129,342	55,000
Total Project Budget*	\$83,920,000	\$169,580,000	\$85,660,000
Cost Per Sq Ft	\$1,130	\$1,310	\$180

Renovation Option	Building Area	New Building Option
High quality but smallest footprint of the national comparable set; limited space for signature experience and limited space for macro artifacts	Exhibits & Experience	High quality and in line with visitor expectation for experience size; space macro artifacts and signature or upcharged experience
Lobby to host high-quality events, proper retail store & F&B space	Lobby & Visitor Amenities	Grand lobby capable of major events, lobby with other functional uses (programs, field trip staging, event programs)
Education space with capacity to serve market & flex space to expand programs	Education & Flex Space	Education space with capacity to serve market & future growth; enough space to add makerspace or learning labs; flex space capable of hosting large program and event groups
R&C Space capable of serving current needs and growth; R&C spaces integrated with experience and education to enhance visitor experience	Research & Collections	R&C Space capable of serving current needs & ambitious growth to put AZMNH on a state and national stage; space fully integrated with education & exhibits to enhance visitor experience
Efficient and co-located admin spaces for most of staff with some staff remaining off-site and little room for staff growth on-site; back of House space capable of supporting all building needs	Admin & Back of House	Efficient and co-located admin space with all staff in-building and space for future growth in building; back of house space capable of supporting all building needs

# **Space Comparison**



# In Summary, a renewed AZMNH achieves the following for the City of Mesa:

- 1) Economic Impact & Job Creation to the City
- 2) More efficient and income generating operating model
- 3) Transformative cultural asset for local residents
- 4) Distinct one-of-a-kind tourist attraction
- 5) Nationally significant Natural History Museum







Thank you

# APPENDIX

# National Benchmarks

AZMNH underperforms the average attendance and capture rate of the sample across all market sizes.

#### **AZMNH RANKED...**

- 27th out of 33 museums in attendance.
- 28th out of 33 in capture rate, which is the measurement of what percentage of their available resident base they convert to visitors.
- This is despite having the 11th largest resident base.

							Attendance		Capture Rate			
Tier	Museum / Attraction	City	Subject	Annual Visitors	30 Min Population	30-60 Min Population	60 Min Population	Capture Rate	Average	Median	Average	Median
	Perot Museum	Dallas, TX	Natural History	670,000	4,810,000	2,890,000	7,700,000	8.7%			9.0%	
	Fort Worth Museum of Science and History	Fort Worth, TX	Science	270,000	2,710,000	4,650,000	7,360,000	3.7%				
014	Oakland Museum of California	Oakland, CA	Natural History	135,000	3,380,000	3,900,000	7,280,000	1.9%				
6M+ Residents	Houston Museum of Natural Science	Houston, TX	Natural History	1,950,000	5,170,000	1,900,000	7,070,000	27.6%	624,286	408,000		6.6%
	Harvard Museum of Natural History	Boston, MA	Natural History	237,000	2,890,000	3,620,000	6,510,000	3.6%				
	Maryland Science Center	Baltimore, MD	Natural History	700,000	2,230,000	4,260,000	6,490,000	10.8%				
	Fernbank Museum	Atlanta, GA	Natural History	408,000	3,200,000	2,990,000	6,190,000	6.6%				
	Museum of Discovery and Science	Fort Lauderdale, FL	Science	456,000	2,770,000	2,970,000	5,740,000	7.9%				
	Frost Museum of Science	Miami, FL	Natural History	600,000	2,990,000	2,130,000	5,120,000	11.7%	]			
4M - 6M Residents	Detroit Historical Society	Detroit, MI	History Museum	200,000	2,950,000	1,950,000	4,900,000	4.1%	464,000	528,000	9.4%	9.8%
reordones	Arizona Museum of Natural History	Mesa, AZ	Natural History	175,000	2,790,000	1,940,000	4,730,000	3.7%				
	Museum of Science and Industry - Tampa	Tampa, FL	Natural History	600,000	2,150,000	2,130,000	4,280,000	14.0%				
	Burke Museum of Natural History & Culture	Seattle, WA	Natural History	96,000	2,370,000	1,550,000	3,920,000	2.4%				
	Denver Museum of Nature & Science	Denver, CO	Natural History	1,252,300	2,740,000	960,000	3,700,000	33.8%				
3M - 4M Residents	Bell Museum	St. Paul, MN	Natural History	246,000	2,660,000	1,020,000	3,680,000	6.7%	469,892	375,000	13.3%	11.5%
Redidents	San Diego Natural History Museum	San Diego, CA	Natural History	380,160	2,390,000	920,000	3,310,000	11.5%				
	Cleveland Natural History Museum	Cleveland, OH	Natural History	375,000	1,540,000	1,580,000	3,120,000	12.0%				
	Witte Museum	San Antonio, TX	Natural History	350,000	2,110,000	620,000	2,730,000	12.8%				
	Museum of Natural History & Science (CMC)	Cincinnati, OH	Natural History	332,393	1,530,000	1,240,000	2,770,000	12.0%				
2M - 3M	Natural History Museum of Utah	Salt Lake City, UT	Natural History	262,000	1,360,000	1,190,000	2,550,000	10.3%	/ 70 770	7/1 107	17.0%	10 / 0/
Residents	North Carolina Museum of Natural Sciences	Raleigh, NC	Natural History/Science	724,000	1,430,000	1,180,000	2,610,000	27.7%	439,732	341,197		12.4%
	Carnegie Museum of Natural History	Pittsburgh, PA	Natural History	900,000	1,370,000	1,110,000	2,480,000	36.3%				
	Las Vegas Natural History Museum	Las Vegas, NV	Natural History	70,000	2,180,000	30,000	2,210,000	3.2%				
	Museum of Science & History	Jacksonville, FL	Science/History	145,000	1,100,000	590,000	1,690,000	8.6%				
	Science Museum of Virginia	Richmond, VA	Science Center	300,000	1,030,000	600,000	1,630,000	18.4%				
1M - 2M Residents	Oklahoma Museum of History	Oklahoma City, OK	History	185,000	1,220,000	350,000	1,570,000	11.8%	203,400	185,000	14.0%	14.8%
Residents	Durham Museum	Omaha, NE	General/History	220,000	860,000	460,000	1,320,000	16.7%				
	South Carolina State Museum	Columbia, SC	Natural History	167,000	670,000	460,000	1,130,000	14.8%				
	New Mexico Museum of Natural History & Science	Albuquerque, NM	Natural History	211,322	800,000	190,000	990,000	21.3%				
	Santa Barbara Museum of Natural History	Santa Barbara, CA	Natural History	200,000	200,000	720,000	920,000	21.7%				
0 - 1M Residents	Las Cruces Museum of Nature and Science	Las Cruces, NM	Natural History/Science	169,126	170,000	740,000	910,000	18.6%	286,090	210,000	34.3%	21.7%
Nesidellis	Florida Museum of Natural History	Gainesville, FL	Natural History	210,000	290,000	610,000	900,000	23.3%				
	Museum of New Mexico	Santa Fe, NM	General/History	640,000	130,000	610,000	740,000	86.5%				
	Average of Sample		427,000	1,981,000	1,566,000	3,548,000	16.0%					
			Median of Sample	285,000	2,130,000	1,145,000	2,945,000	11.9%				

**Source:** U.S. Census Bureau; Online Museum Database; Various Institution Websites & Annual Reports

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# **Facility Rental**

AZMNH is 1 of 4 museums in the 33 museum sample set that do not offer rental spaces for private events.

- The 29 museums that offer rentals typically offer 7 rental space options.
- These rental spaces can serve a wide range of event types and can range from 25 to 6,000+ guests, with the average capacity ranging from 85 to 1,200.
- Most museums offering rentals were able to accommodate an event with 400+ guests which should be considered the optimal capacity for a major museum.
- These 29 museums are often also designed to maximize this revenue stream, offering as many spaces as possible and with buildings often built with private events in mind.

Tier	Museum / Attraction	City	Subject	Offers Rentals	Rentable Spaces	Capacity Range		
	Perot Museum	Dallas, TX	Natural History	YES	6	25 - 1500		
	Fort Worth Museum of Science and History	Fort Worth, TX	Science	YES	14	100 - 450		
6M+ Residents	Oakland Museum of California	Oakland, CA	Natural History	YES	5	50 - 900		
	Houston Museum of Natural Science	Houston, TX	Natural History	YES	18	20 - 900		
	Harvard Museum of Natural History	Boston, MA	Natural History	YES	10	30 - 300		
	Maryland Science Center	Baltimore, MD	Natural History	YES	5	100 - 1,500		
	Fernbank Museum	Atlanta, GA	Natural History	YES	10	100 - 600		
	Museum of Discovery and Science	Fort Lauderdale, FL	Science	YES	3	100 - 2,000		
	Frost Museum of Science	Miami, FL	Natural History	YES	7	80 - 3,000		
4M - 6M Residents	Detroit Historical Society	Detroit, MI	History Museum	YES	5	100 - 1,000		
Nesidents	Arizona Museum of Natural History	Mesa, AZ	Natural History	NO	NA	NA		
	Museum of Science and Industry - Tampa	Tampa, FL	Natural History	YES	14	100 - 2,500		
	Burke Museum of Natural History & Culture	Seattle, WA	Natural History	YES	3	80 - 250		
	Denver Museum of Nature & Science	Denver, CO	Natural History	YES	7	40 - 650		
3M - 4M Residents	Bell Museum	St. Paul, MN	Natural History	YES	5	60 - 600		
Nesidellis	San Diego Natural History Museum	San Diego, CA	Natural History	YES	7	60 - 1,800		
	Cleveland Natural History Museum	Cleveland, OH	Natural History	YES	9	85 - 440		
	Witte Museum	San Antonio, TX	Natural History	YES	5	75 - 1,000		
	Museum of Natural History & Science (CMC)	Cincinnati, OH	Natural History	YES	5	20 - 6,000		
2M - 3M	Natural History Museum of Utah	Salt Lake City, UT	Natural History	YES	3	80 - 1,500		
Residents	North Carolina Museum of Natural Sciences	Raleigh, NC	Natural History/Science	YES	9	120 - 1,500		
	Carnegie Museum of Natural History	Pittsburgh, PA	Natural History	YES	3	120 - 200		
	Las Vegas Natural History Museum	Las Vegas, NV	Natural History	NO	NA	NA		
	Museum of Science & History	Jacksonville, FL	Science/History	YES	10	90 - 250		
	Science Museum of Virginia	Richmond, VA	Science Center	YES	8	100 - 500		
1M - 2M Residents	Oklahoma Museum of History	Oklahoma City, OK	History	YES	2	300 - 500		
residents	Durham Museum	Omaha, NE	General/History	YES	7	150 - 600		
	South Carolina State Museum	Columbia, SC	Natural History	YES	6	40 - 1,000		
	New Mexico Museum of Natural History & Science	Albuquerque, NM	Natural History	YES	9	36 - 1,500		
	Santa Barbara Museum of Natural History	Santa Barbara, CA	Natural History	YES	3	50 - 300		
0 - 1M Residents	Las Cruces Museum of Nature and Science	Las Cruces, NM	Natural History/Science	NO	NA	NA		
Nesidellis	Florida Museum of Natural History	Gainesville, FL	Natural History	NO	NA	NA		
	Museum of New Mexico	Santa Fe, NM	General/History	YES	10	0 - 0		
	Average of Sample							
			Media	n of Sample	7	85 - 900		

# **Upcharged Experiences**

A7MNH is 1 of 13 museums in the 33 museum sample set that does not offer upcharged experiences or does not include an upcharged experience as part of a higher priced, all-inclusive ticket.

- These experiences are not only capable of generating revenue and provide an experience that draws attendance and can capture 20-30% of existing visitors, but they are also typically expected of any quality institution.
- An upcharge experience priced at the market average add-on ticket price of \$9 and capturing 25% of AZMNH's existing audience would lead to a 32% increase in AZMNH's total earned revenue.
- While Dinosaur Mountain is a unique and signature experience, it is too core to the existing experience to be considered an upcharge.

\*Upcharged caliber experience included in a higher priced, all-inclusive ticket

Burke Museum of Natural History & Culture	Tier	Museum / Attraction	Offers Upcharge	Annual Visitors	Adult Ticket Price	Upcharge Price Range	Options
Galland Museum of California   YES   135,000   \$19.00   \$36.00   \$special Exhibits   \$45,000   \$19.00   \$25.00   \$36.00   \$59.000   \$25.00   \$36.		Perot Museum	YES	670,000	\$25.00	\$8.00	T. Rex: The Ultimate Predator, 3D Film
Houston Museum of Natural History		Fort Worth Museum of Science and History	N0*	270,000	\$16.00	NA	Omni Theater
Nouston Museum of Natural History   No   237,000   Sib.00   NA	014	Oakland Museum of California	YES	135,000	\$19.00	\$6.00	Special Exhibits
Harvard Museum of Natural History   NO   237,000   S15,00   NA   Maryland Science Center   YES   700,000   S26,95   S5.00   IMAX		Houston Museum of Natural Science	YES	1,950,000	\$25.00	\$9-\$12	Butterfly center, planetarium, giant theater
Fernbank Museum	Nesidents	Harvard Museum of Natural History	NO	237,000	\$15.00	NA	
Museum of Discovery and Science		Maryland Science Center	YES	700,000	\$26.95	\$5.00	IMAX
Hard		Fernbank Museum	YES*	408,000	\$25.95	\$5.00	Big Screen Theater
AH - 6H   Residents   Arizona Museum of Natural History   N0   175,000   \$18.00   NA   NA   NA   NA   NA   NA   NA		Museum of Discovery and Science	YES	456,000	\$27.00	\$5.00	IMAX
Residents	/14 014	Frost Museum of Science	N0*	600,000	\$29.95	NA	Planetarium, Aquarium
Arizona Museum of Natural History   No   175,000   S16.00   NA		Detroit Historical Society	NO	200,000	\$10.00	NA	Tours
Burke Museum of Natural History & Culture	Residents	Arizona Museum of Natural History	NO	175,000	\$16.00	NA	
Denver Museum of Nature & Science   YES   1,252,300   \$24.95   \$7-\$10   Infinity theater, Planetarium		Museum of Science and Industry - Tampa	YES	600,000	\$14.00	\$5-\$8	Sky Trail Ropes Course, Mini Golf, VR, Planetarium
Bell Museum		Burke Museum of Natural History & Culture	NO	96,000	\$22.00	NA	
Residental   Sell Museum   YES   246,000   \$15.00   \$10.00   Planetarium   Planetarium   San Diego Natural History Museum   YES   380,160   \$24.00   \$5.00   MAX	714 (14	Denver Museum of Nature & Science	YES	1,252,300	\$24.95	\$7-\$10	Infinity theater, Planetarium
San Diego Natural History Museum   YES   380,160   \$24.00   \$5.00   IMAX		Bell Museum	YES	246,000	\$15.00	\$10.00	Planetarium
Witte Museum   YES   350,000   \$16.00   \$25.00   Rock art tours	Nesidents	San Diego Natural History Museum	YES	380,160	\$24.00	\$5.00	IMAX
Museum of Natural History & Science (CMC)   YES   332,393   \$22.50   \$10.00   \$0MNMAX		Cleveland Natural History Museum	YES	375,000	\$25.00	\$7.00	Birdly Simulator, Planetarium, 3D Theater
Natural History Museum of Utah   No   262,000   \$22.85   NA   North Carolina Museum of Natural Sciences   NO   724,000   \$0   NA   WRAL 3D Theater		Witte Museum	YES	350,000	\$16.00	\$25.00	Rock art tours
North Carolina Museum of Natural Sciences   NO   724,000   \$0   NA   WRAL 3D Theater		Museum of Natural History & Science (CMC)	YES	332,393	\$22.50	\$10.00	OMNIMAX
Carnegie Museum of Natural History	2M - 3M	Natural History Museum of Utah	NO	262,000	\$22.85	NA	
Las Vegas Natural History Museum	Residents	North Carolina Museum of Natural Sciences	NO	724,000	\$0	NA	WRAL 3D Theater
Museum of Science & History   YES   145,000   \$19.95   \$6.00   Daily programs		Carnegie Museum of Natural History	NO	900,000	\$25.00	NA	
No		Las Vegas Natural History Museum	NO	70,000	\$14.00	NA	
1M - 2M   Residents   Oklahoma Museum of History   NO   185,000   \$12.50   NA		Museum of Science & History	YES	145,000	\$19.95	\$6.00	Daily programs
Residents   Oklahoma Museum of History   NO   185,000   \$12.50   NA	1M 0M	Science Museum of Virginia	YES	300,000	\$17.50	\$5.00	Dome
Durham Museum		Oklahoma Museum of History	NO	185,000	\$12.50	NA	
New Mexico Museum of Natural History & Science YES 211,322 \$8.00 \$7.00 Dyna Theater  Santa Barbara Museum of Natural History YES 200,000 \$19.00 \$15.00 Sea Center  Las Cruces Museum of Natural History YES 210,000 \$0 NA  Florida Museum of Natural History YES 210,000 \$0 \$7-\$14 Insects Up Close, Butterfly Rainforest  Museum of New Mexico NO 640,000 \$12.00 NA  Average of Sample 427,000 \$19.25 \$9	residents	Durham Museum	NO	220,000	\$15.00	NA	
Santa Barbara Museum of Natural History  Residents  Santa Barbara Museum of Natural History  Las Cruces Museum of Nature and Science  NO  169,126  Florida Museum of Natural History  YES  200,000  \$19.00  \$0  NA  Florida Museum of Natural History  Museum of New Mexico  NO  640,000  \$12.00  NA  Average of Sample  427,000  \$19.25		South Carolina State Museum	YES	167,000	\$9.00	\$5-\$8	1 or 2 shows
Column   C		New Mexico Museum of Natural History & Science	YES	211,322	\$8.00	\$7.00	Dyna Theater
Cas Cruces Museum of Nature and Science   NO   169,126   \$0   NA	0 1M	Santa Barbara Museum of Natural History	YES	200,000	\$19.00	\$15.00	Sea Center
Florida Museum of Natural History  Museum of New Mexico  NO  S12.00  NA  Average of Sample 427,000  S12.00  NA  NO  S12.00  NA  NO  S12.00  NA		Las Cruces Museum of Nature and Science	NO	169,126	\$0	NA	
Average of Sample 427,000 \$19.25 \$9	T.OOIGOTICO	Florida Museum of Natural History	YES	210,000	\$0	\$7-\$14	Insects Up Close, Butterfly Rainforest
		Museum of New Mexico	NO	640,000	\$12.00	NA	
Median of Sample 285,000 \$19.00 \$7		Average	of Sample	427,000	\$19.25	\$9	
		Mediar	n of Sample	285,000	\$19.00	\$7	

# F&B Amenities

# Arizona Natural History Museum is 1 of 11 museums in the 33 museum sample set that do not offer any type of F&B.

- Most of the museums in the sample set offer some type of grab 'n go or cafe food service amenity.
- Food service is typically expected for a high performing, science-based museum.
- Can be outsourced to a 3rd party to reduce operational stress while still generating revenue.

Tier	Museum / Attraction	City	Subject	F&B Offering	# of Offerings	F&B Offerings
	Perot Museum	Dallas, TX	Natural History	YES	1	The Cafe (operated by Wolfgang Puck)
	Fort Worth Museum of Science and History	Fort Worth, TX	Science	YES	2	Cafe and Chick-fil-A Montgomery Plaza
6M+ Residents	Oakland Museum of California	Oakland, CA	Natural History	YES	1	Town Fare Cafe
	Houston Museum of Natural Science	Houston, TX	Natural History	YES	3	Periodic Table, Katz Coffee, Elements Grill
Nesidents	Harvard Museum of Natural History	Boston, MA	Natural History	NO	NA	
	Maryland Science Center	Baltimore, MD	Natural History	NO	NA	
	Fernbank Museum	Atlanta, GA	Natural History	YES	1	Fernbank Cafe
	Museum of Discovery and Science	Fort Lauderdale, FL	Science	YES	1	Elements Cafe
	Frost Museum of Science	Miami, FL	Natural History	YES	1	Food@Science
4M - 6M	Detroit Historical Society	Detroit, MI	History Museum	NO	NA	
Residents	Arizona Museum of Natural History	Mesa, AZ	Natural History	NO	NA	
	Museum of Science and Industry - Tampa	Tampa, FL	Natural History	YES	1	Zydeco Brew Werks
	Burke Museum of Natural History & Culture	Seattle, WA	Natural History	YES	1	Off the Rez Cafe
	Denver Museum of Nature & Science	Denver, CO	Natural History	YES	3	T-Rex Cafe, Grab & Go Deli, Coffee Lab
3M - 4M Residents	Bell Museum	St. Paul, MN	Natural History	NO	NA	
Kesidellis	San Diego Natural History Museum	San Diego, CA	Natural History	YES	1	The Flying Squirrel Cafe
	Cleveland Natural History Museum	Cleveland, OH	Natural History	YES	1	Origins Cafe
	Witte Museum	San Antonio, TX	Natural History	YES	1	Tremblay Family Cafe
	Museum of Natural History & Science (CMC)	Cincinnati, OH	Natural History	YES	1	Bean Sprouts Cafe (national chain)
2M - 3M	Natural History Museum of Utah	Salt Lake City, UT	Natural History	YES	1	The Canyon Cafe
Residents	North Carolina Museum of Natural Sciences	Raleigh, NC	Natural History/Science	YES	1	Daily Planet Cafe
	Carnegie Museum of Natural History	Pittsburgh, PA	Natural History	YES	2	Cafe Carnegie and Fossil Fuels
	Las Vegas Natural History Museum	Las Vegas, NV	Natural History	NO	NA	
	Museum of Science & History	Jacksonville, FL	Science/History	NO	NA	
	Science Museum of Virginia	Richmond, VA	Science Center	YES	2	The Periodic Table Cafe, Concession Stand
1M - 2M	Oklahoma Museum of History	Oklahoma City, OK	History	NO	NA	
Residents	Durham Museum	Omaha, NE	General/History	YES	2	Soda Fountain Restaurant, Candy Shop
	South Carolina State Museum	Columbia, SC	Natural History	YES	1	Crescent Cafe
	New Mexico Museum of Natural History & Science	Albuquerque, NM	Natural History	NO	NA	
	Santa Barbara Museum of Natural History	Santa Barbara, CA	Natural History	NO	NA	
0 - 1M Residents	Las Cruces Museum of Nature and Science	Las Cruces, NM	Natural History/Science	NO	NA	
	Florida Museum of Natural History	Gainesville, FL	Natural History	YES	1	Camellia Court Cafe
	Museum of New Mexico	Santa Fe, NM	General/History	YES	1	Museum Hill cafe
			Average o	f Sample	1	
		f Sample	1			

# **Facility Rental**

## **AZMNH** is the only museum and attraction among its local peers not offering a private event space.

- The Valley market museums and attractions offer more private event spaces on average than the national market.
- This means AZMNH is particularly disadvantaged in its market. Not only do private events offer revenue opportunities, but they also provide an opportunity to enhance the museum's visibility and convert private event guests to general admission guests in the future.

Museum / Attraction	City	Museum Type	Offers Event Space	Annual Visitors	Rentable Spaces	Capacity Range		
Phoenix Zoo	Phoenix, AZ	Zoo	YES	1,400,000	13.0	100-5,000		
Arizona Museum of Natural History	Mesa, AZ	Natural History	NO	175,000	-	-		
Arizona Science Center	Phoenix, AZ	Science	YES	300,000	10.0	50 - 5,000		
Mesa Arts Center	Mesa, AZ	Art Center	YES	430,000	6.0	35 - 1,570		
Children's Museum of Phoenix	Phoenix, AZ	Children's	YES	360,000	9.0	25 - 400		
Pioneer Living History Museum	Phoenix, AZ	Living History	YES	60,000	4.0	50 - 300		
Heard Museum	Phoenix, AZ	Art	YES	200,000	10.0	50 - 1,000		
Musical Instrument Museum	Phoenix, AZ	Specialty	YES	200,000	8.0	50 - 1,000		
Phoenix Art Museum	Phoenix, AZ	Art	YES	285,920	7.0	50 - 1,500		
ODYSEA Aquarium	Scottsdale, AZ	Aquarium	YES		12.0	25 - 1,500		
PANGEA	Scottsdale, AZ	Dinosaur Attraction	YES		1.0	10-50		
Butterfly Wonderland	Scottsdale, AZ	Butterfly Garden	YES		3.0	30 - 190		
Paradise Earth (Planned)	Scottsdale, AZ	Indoor Rainforest	YES		TBD	TBD		
	Average of Local Comp Set							
	293,000	8.0	40 - 1,000					

# **Upcharged Experiences**

# AZMNH is 1 of 5 museums out of it's 13 local peers that does not offer an upcharged experience.

- The Arizona Science Center AZMNH's biggest competitor being visited by 65% of AZMNH guests according to internal surveys — has 5 different upcharge experiences.
- AZMNH's second-largest competitor is the combination of the Arizona Boardwalk attractions — over 50% AZMNH visitors attended Pangaea and/or OdySea.\*
- Arizona Boardwalk attractions have upcharged experiences, and multiple combo ticket options, pairing 2 or more of the experiences.

Museum / Attraction	Offers Upcharge	Annual Visitors	Adult Ticket Price	Upcharge Options	Upcharge Price Range	Options
Phoenix Zoo	YES	1,400,000	\$37.95	5	\$2-\$139	Backstage Animal Tours, Discovery Tour, Premium Adventure, Guided Tour, Custom Guided Tour
Arizona Science Center	YES	300,000	\$29.95	5	\$5-\$45	Vertical Venture, SkyCycle, MakerSpace, Creative Challenge, Mid-Make
Heard Museum	YES	200,000	\$22.50	1	\$22.00	Private Tour
Musical Instrument Museum	YES	200,000	\$20.00	1	\$10.00	Traveling Exhibit
Phoenix Art Museum	YES	285,920	\$28.00	1	\$8.00	Films
ODYSEA Aquarium	YES		\$49.95	2	\$50-\$70	Audio Tour, Animal Encounters
PANGEA	YES		\$20.95	1	\$6.00	Fossil Panning
Paradise Earth (Planned)	YES		TBD	TBD	TBD	Live Animal Encounters, 3D Theater, Animatronics, Night Time Experience, Others TBD
Arizona Museum of Natural History	NO	175,000	\$16.00	-		
Mesa Arts Center	NO	430,000	-	-		
Children's Museum of Phoenix	NO	360,000	\$17.00	-		
Pioneer Living History Museum	NO	60,000	\$12.00	-		
Butterfly Wonderland	N0		\$29.95	-		3D Theater, Live Animal Encounters
Average of Local	Comp Set	448,000	\$23.50	2	\$50	
Median of Local	Comp Set	243,000	\$21.50	1	\$14	

**Source:** U.S. Census Bureau; Online Museum Database; Various Institution Websites & Annual Reports

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# F&B Amenities

# AZMNH is 1 of 3 out of its 13 local peers not offering any food service amenity.

- Food service amenities range from full-scale restaurants to cafes to vending machines.
- Most museums only offer 1F&B option, occasionally a 2nd option is available, however, it is usually a reduced offering amenity.

Museum / Attraction	F&B Offering	Annual Visitors	Adult Tlcket Price	# of Offering s	F&B Offerings
Phoenix Zoo	YES	1,400,000	\$37.95	8	Crossroads Cafe, Farm Cafe, Jungle Java, Keg Corner, Kettle Korner, Safari Snacks, Savanna Grill, Sunset Treats
Arizona Science Center	YES	300,000	\$29.95	2	Concessions Stand, Fresh Food Vending Machines
Children's Museum of Phoenix	YES	360,000	\$17.00	1	Museum Cafe
Heard Museum	YES	200,000	\$22.50	1	Courtyard Cafe
Musical Instrument Museum	YES	200,000	\$20.00	2	Cafe Allegro, Beats Coffee Bar
Phoenix Art Museum	YES	285,920	\$28.00	1	"Temporary Cafe"
ODYSEA Aquarium	YES		\$49.95	1	Starbucks
PANGEA	YES		\$20.95	1	Pangaea Cafe and Pub
Butterfly Wonderland	YES		\$29.95	1	Butterfly Wonderland Café
Paradise Earth (Planned)	YES			TBD	The Roost
Arizona Museum of Natural History	NO	175,000	\$16.00	-	
Mesa Arts Center	NO	430,000	-	_	
Pioneer Living History Museum	NO	60,000	\$12.00	_	
Average of Local (	Average of Local Comp Set		\$23.00	2	
Median of Local (	Comp Set	286,000	\$20.50	1	