



NORTH CAROLINA Museum of Natural Sciences

ADVISORY COMMISSION

George House, J.D., Chair
Greensboro, NC
Martha Aldridge
Chapel Hill, NC
Leslie Alexandre, Dr. P.H.
Research Triangle Park, NC
Larry Bland, Ph.D.
Chapel Hill, NC
Jeanette Beckwith, Ph.D.
Raleigh, NC
Christopher Brown, Ph.D.
Chapel Hill, NC
Ruben Carbonell, Ph.D.
Raleigh, NC
Philip Carter, Ph.D.
Research Triangle Park, NC
William L. Chamides, Ph.D.
Chapel Hill, NC
Donald Cling
Greensboro, NC
Ann Cobb
Raleigh, NC
Frank Daniels, Jr.
Raleigh, NC
Tom Eamhardt
Raleigh, NC
Greg Fishel
Raleigh, NC
James Gibson
Research Triangle Park, NC
Harold Heatwole, Ph.D.
Raleigh, NC
Emlyn Koster, Ph.D.
Raleigh, NC
Rick Luetlich, Ph.D.
Morehead City, NC
Kim Lysrly, M.D.
Durham, NC
Mallory Martin
Raleigh, NC
Robert McMahon, Ph.D.
Cullowhee, NC
Nydia Morales, Ph.D.
Durham, NC
Jim Morton
Grandfather Mountain, NC
Mike Murphy
Raleigh, NC
Robert K. Peck, Ph.D.
Chapel Hill, NC
Brenda Pollard
Durham, NC
Harrell Reed, Ph.D.
Durham, NC
Judith Rizzo, Ed.D.
Chapel Hill, NC
Edward Samulski, Ph.D.
Chapel Hill, NC
James Schoof, Ph.D.
Durham, NC
David Senseney
Durham, NC
Andrew Shepard
Wilmington, NC
Veronica Singleton
Raleigh, NC
John E. Skvarla, III
Secretary, DENR
Dan Solomon, Ph.D.
Raleigh, NC
Kenneth Taylor, Ph.D.
Raleigh, NC
Paul Tine
Kitty Hawk, NC
Beverly Vance
Raleigh, NC
Barbara Volk
Hendersonville, NC
Steve Wainwright, Ph.D.
Durham, NC
Kent Yelverton
Raleigh, NC
Carlton Younger, J.D.
Carr, NC

MEMORANDUM

TO: Governor Pat McCrory
The Joint Legislative Commission on Governmental Operations
Senator Phil Berger, Co-Chair
Representative Thom Tillis, Co-Chair

FROM: NC Museum of Natural Sciences Advisory Commission
George House, Outgoing Chair
Philip Carter, PhD, Incoming Chair

SUBJECT: NC Museum of Natural Sciences Advisory Commission Report for 2013

DATE: October 1, 2013

In accordance with 143B-344.21 of the North Carolina General Statutes, the Advisory Commission for the NC Museum of Natural Sciences shall submit to the Governor and Joint Legislative Commission on Governmental Operations a report of its observations and recommendations by October 1st of each year.

We are pleased to hereby submit this Commission's report for 2013.

If you have any questions or need additional information, please contact either of us: gthouse@brookspierce.com, (336) 271-3114; philip.carter@ncsu.edu, (919) 602-1628.

One attachment

cc: Members, Museum Advisory Commission
Kristin Walker, Fiscal Research Division, NC General Assembly
Mariah Matheson, Fiscal Research Division, NC General Assembly
Lanier McRee, Fiscal Research Division, NC General Assembly
Hon. John Skvarla, Secretary, DENR
Brad Ives, Assistant Secretary, Natural Resources, DENR
Emlyn Koster, PhD, Director, NCMNS
Susan Valauri, President, Friends of the Museum
Mike Murphy, Past President, Friends of the Museum



NORTH CAROLINA Museum of Natural Sciences

ADVISORY COMMISSION

George House, J.D., Chair
Greensboro, NC
Martha Aldridge
Chapel Hill, NC
Leslie Alexandre, Dr. P.H.
Research Triangle Park, NC
Larry Band, Ph.D.
Chapel Hill, NC
Jeanette Beckwith, Ph.D.
Raleigh, NC
Christopher Brown, Ph.D.
Chapel Hill, NC
Ruben Carbonell, Ph.D.
Raleigh, NC
Philip Carter, Ph.D.
Research Triangle Park, NC
William L. Chamides, Ph.D.
Chapel Hill, NC
Donald Chino
Greensboro, NC
Ann Cobb
Raleigh, NC
Frank Daniels, Jr.
Raleigh, NC
Tom Eamhardt
Raleigh, NC
Greg Fishel
Raleigh, NC
James Gibson
Research Triangle Park, NC
Harold Heitwiler, Ph.D.
Raleigh, NC
Emlyn Koster, Ph.D.
Raleigh, NC
Rick Luetich, Ph.D.
Morehead City, NC
Kim Loyola, M.D.
Durham, NC
Malloy Martin
Raleigh, NC
Robert McAtahan, Ph.D.
Cullowhee, NC
Nydia Morales, Ph.D.
Durham, NC
Jim Morton
Grandfather Mountain, NC
Mike Murphy
Raleigh, NC
Robert K. Peet, Ph.D.
Chapel Hill, NC
Brenda Pollard
Durham, NC
Hazel Reed, Ph.D.
Durham, NC
Judith Rizzo, Ed.D.
Chapel Hill, NC
Edward Samulski, Ph.D.
Chapel Hill, NC
James Scheuler, Ph.D.
Durham, NC
David Senseney
Harrisville, NC
Andrew Shepard
Wilmington, NC
Veronica Shingleton
Raleigh, NC
John E. Skvarla, III
Searsville, DERN
Dan Solomon, Ph.D.
Raleigh, NC
Kenneth Taylor, Ph.D.
Raleigh, NC
Paul Tine
Kitty Hawk, NC
Kecally Vance
Raleigh, NC
Barbara Volk
Hendersonville, NC
Steve Wamsright, Ph.D.
Durham, NC
Ginger Williams
Raleigh, NC
Kent Yelverton
Raleigh, NC
Carlton Yeung, J.D.

October 1, 2013

Report to Governor Pat McCrory and the Joint Legislative Commission on Governmental Operations

Introduction

In accordance with 143B-344.21 of the North Carolina General Statutes, the Advisory Commission for the NC Museum of Natural Sciences (the "Museum") is pleased to submit this annual report of its observations and recommendations for 2013.

With its State-wide membership of ambassadorial expertise, this Advisory Commission has just transitioned from the dedicated chairmanship since 2000 of George House whose term reached its permitted maximum. The new Chair is Philip B. Carter from the university sector and the new Vice-Chair is Martha Aldridge from the corporate sector.

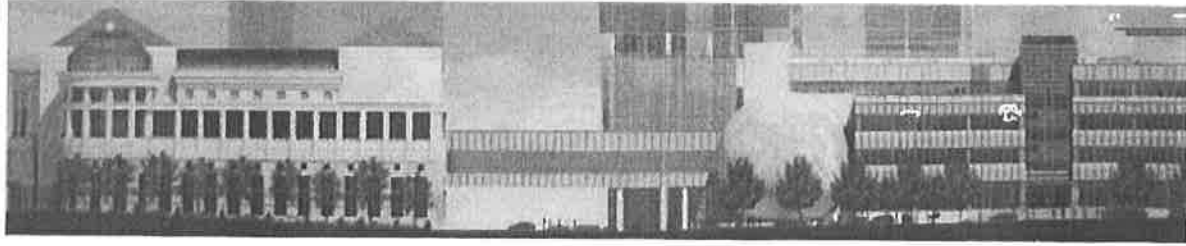
Your Commission has a close working liaison with the nonprofit Friends of the Museum. These two community-based bodies are as pleased about the achievements under Dr. Betsy Bennett (Museum Director from 1990-2012) as they are about the result of last fall's national search that attracted Dr. Emlyn Koster as her successor with his accomplishments in geology, natural history and science-technology museums, and institutional leadership. As an initial priority, he has engaged the Museum's staff, officials at DENR, the Friends of the Museum and this Advisory Commission in an inspiring reflection about the Museum's past, present and future with a return-on-investment focus. This situation analysis is available upon request.

Accomplishments and Challenges

*Dear Sir and your most courteous staff:
Just a note to thank you for a wonderful – actually fabulous – day. My first at the Museum.
Between the stunning architectural design and hands-on exhibits, the pleasure seeing little kids, big kids, lots of teenagers
and 'regular folks' like me enjoying it all so much, sheer pleasure knowing future generations will enjoy it as well.
A credit to you all and the State of North Carolina. Thank you.*

Margaret Mazurek, Wake Forest

The visionary NC Museum of Natural Sciences is the State's most visited attraction, most popular school field trip destination, the largest institution of its type in the southern United States, and is adjudicated by the federal government to be among the top twenty of the nation's 17,500 museums for outstanding community service. The new Nature Research Center wing, which opened last year, has increased the Museum's relevance and profile. Now fully integrated in a one-Museum paradigm, this institution is advancing its vital collection, research and education mandates, while also achieving exemplary efficiency as shown by a just-completed survey of the comparative cost, size, staffing, and attendance of mission-similar museums across the U.S. This survey's highlights are attached and please also note our remarks of concern at the end of this section.



Strengths of the NC Museum of Natural Sciences start with its distinguished place in the museum profession and as an engaging showcase of North Carolina's natural treasures. They also encompass being a major collaborative player in the State's quality of life, education and workforce, and science-driven economy. A small recent sample of how this Museum is a multifaceted force for good includes: support by SAS to increase the accessibility of those with any form of disability to STEM (science, technology, engineering and math) careers; support by TimeWarnerCable for the Museum's extended public schedule every Thursday evening to bring science to new targeted demographics; support by partners such as the National Science Foundation, NASA, Institute of Museum and Library Services, the US Department of Agriculture, and Audubon for innovative projects; joint research and teaching positions with State universities to push the frontiers of what we know in science and how to best communicate it to the public; biodiversity discoveries new to science, including a high-profile collaborative project with The Smithsonian to describe a previously unknown mammal; attraction of major international conferences with their economic benefits to Raleigh's convention center, hotels and restaurants; assistance to science museums and science centers State-wide; and a Museum research staff member honored as NC's Wildlife Conservation Biologist.

Your Advisory Commission joins the Museum's staff and private sector contributors in voicing appreciation for the State's unreduced appropriation for the Museum in 2013-2014. However, it is also our duty to draw your attention to an unsustainable overall trend in the Museum's funding. While the Museum's increased attendance from 970,000 in 2011 to 1,224,829 in 2012 is impressive news and has elevated the Museum to be the most visited attraction in North Carolina, it is worrisome that the State's \$12.4M portion of the Museum's annual support has dipped to 70%. Over the past five years, the fastest possible external/private rate of the Museum's revenue increase efforts has been outstripped by cumulative reductions of State Funding. Totalling \$891K, these decreases have resulted in five FTE position losses (\$245K), a 50% reduction in temporary wages (\$189K), and other operating support decreases (\$457K). As the demands on the Museum have risen sharply, State funding has gone in the opposite direction. In short, the Museum is operating on a budget roughly equal to what it was before adding the new Nature Research Center wing and its budgeted 49 new staff, and before the 22% attendance increase during the past two years. Exacerbating the budgetary pressure is the Museum's intense public operation averaging 3,000 visitors daily, special events such as BugFest which attracts 30,000 visitors on one day, seasonal variation in the demographics of the visiting public and therefore the Museum's need to nimbly respond, 200+ evening events annually, and other sudden demands such as the State-mandated care of confiscated venomous reptiles.

Please know that the Museum and its Friends organization are doing all they can to grow earned and contributed revenues. As well, it must be noted that the Museum's low staffing level for its core responsibilities is fast reaching the practical limits of assistance by volunteers (who already contribute 60,000+ hours annually) and by part-time staff (approximately 50).

The Museum has an additional perceptual challenge. It is that the attractive Daily Planet Café in the new Nature Research Center wing, which is part of the award-winning Green Square Complex, is frequented by State legislators and personnel. However, the Café gives no hints of the Museum's overall funding dilemma or of the cramped, and often worn-out, office areas in the adjacent building where scant renewal and deferred maintenance are mounting problems.

While making clear the Museum's strong ROI, the attached survey results also point to an unsustainable imbalance of the Museum's downward funding trend versus its upward performance trend.

Recommendations

1. That the State, through the Governor's State-of-the-State speech and other high-profile means, recognize and leverage the unique and major value of its Museum of Natural Sciences as a significant player in the State's quality of life, education and workforce, and economy.
2. That the State recognize the very favorable benefit/cost ratio of its investment in the Museum and commit to a multi-year plan that will allow the public and private funding portfolio to sustain the Museum's core research and education services, while also welcoming the growing array of external inquiries to partner with its expertise – regionally, nationally and internationally.
3. That the State provide more flexibility in policies and procedures for the attraction agencies at DENR, given the very different demands on their frontline service roles as compared to the regulatory agencies.
4. That the State recognize the Museum's need, as a major contributor to the education and lifelong learning of its citizenry, to improve services to students and teachers outside of the capital region through a dormitory and enhanced outdoor nature education projects at its Prairie Ridge EcoStation in NW Raleigh, together with a pressing expansion of its adjacent collections and research facilities.
5. That the State challenge the satellite Museum of Forestry in Whiteville to complete its core exhibition through private funding by December 2014.

Summary

Your Advisory Commission is immensely proud of the Museum's accomplishments as a unique, relevant and cost-effective State asset. At the same time, we are deeply concerned about the unsustainable downward trend in the State's investment given the increased demand for the Museum's services. The Museum has been successful in diversifying its funding base through entrepreneurial efforts and aggressive grant requests, but these cannot be offset by any further reductions in State appropriations.

The Museum is a neighbor to the Governor's Mansion, State Legislature and Department of Administration. Given the frequency and extent of the State's use of the Museum's facilities for conferences, meetings, broadcasts, and other special events, your Advisory Commission warmly invites you to a summit-level briefing and discussion with the Museum's and Commission's leadership this fall about the cumulative needs and greater potential of this remarkable treasure.

Sincerely,

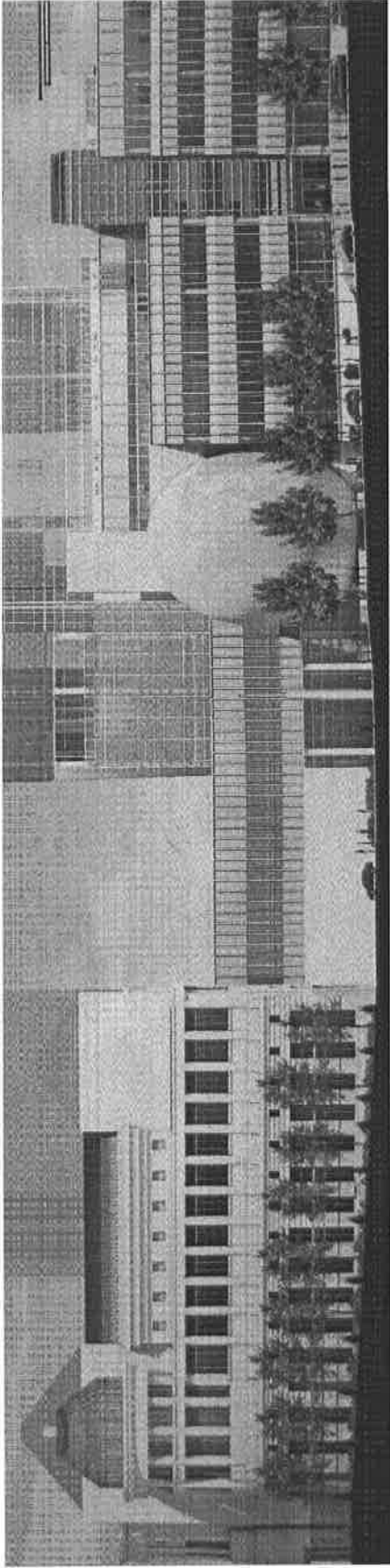


George House, Outgoing Chair



Philip B. Carter, PhD, Incoming Chair

Attachment: Comparative annual performance of 12 mission-similar museums



NORTH CAROLINA
Museum of Natural Sciences

Performance Survey of Comparable U.S. Museums

Emlyn Koster, PhD
Museum Director

September 24, 2013

Purpose

- In spring 2013 following its two-stage expansion along West Jones Street, the NC Museum of Natural Sciences undertook a survey to benchmark itself among mission-similar U.S. museums. CEOs/CFOs of eleven other institutions accepted our invitation to complete a FY 2011-12 profile.
- The data included total and interior building size; total operating budget and main revenue sources; onsite attendance; full-time and part-time personnel; and volunteerism. All participating institutions received the survey's summary spreadsheet and are interested to remain in touch.
- Encompassing the Museum's premises in downtown Raleigh, at the Prairie Ridge EcoStation and Research Lab in NW Raleigh, and the Museum of Forestry in Whiteville, we then undertook a detailed graphical analysis, the highlights and interpretation of which are presented here.
- Task force members were Alvin Braswell, Jason Cryan, Debra Gardner, Emlyn Koster, and Cassandra Williams (919-707-9804) who played a core role in institutional communications and the comparative analysis and from whom the survey's summary spreadsheet is available upon request.

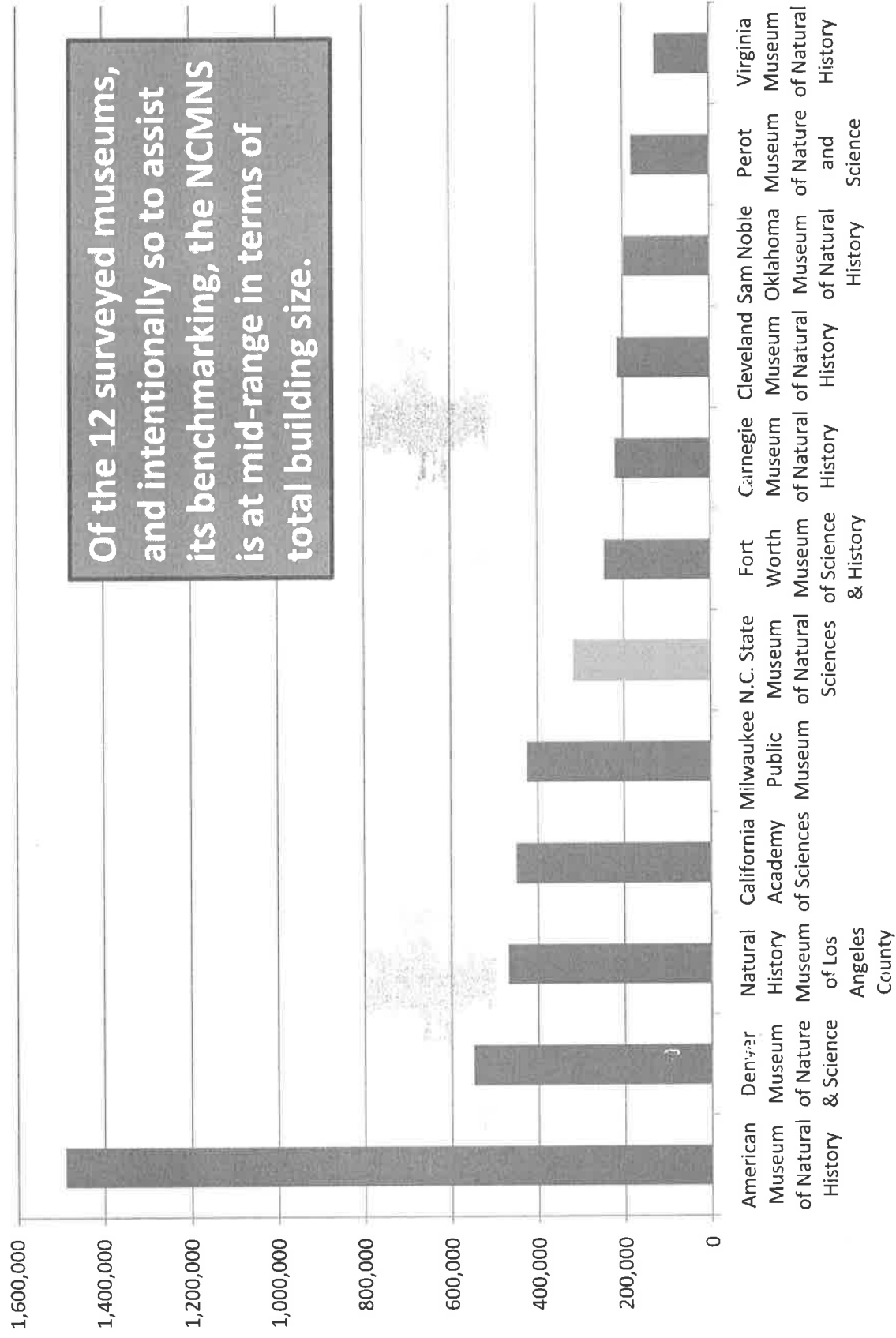
Participants

American Museum of Natural History, New York
California Academy of Sciences, San Francisco
Carnegie Museum of Natural History, Pittsburgh
Cleveland Museum of Natural History
Denver Museum of Nature and Science
Fort Worth Museum of Science and History
Milwaukee Public Museum
Natural History Museum of Los Angeles County
North Carolina Museum of Natural Sciences, Raleigh
Perot Museum of Nature and Science, Dallas
Sam Noble Oklahoma Museum of Natural History
Virginia Museum of Natural History, Martinsville

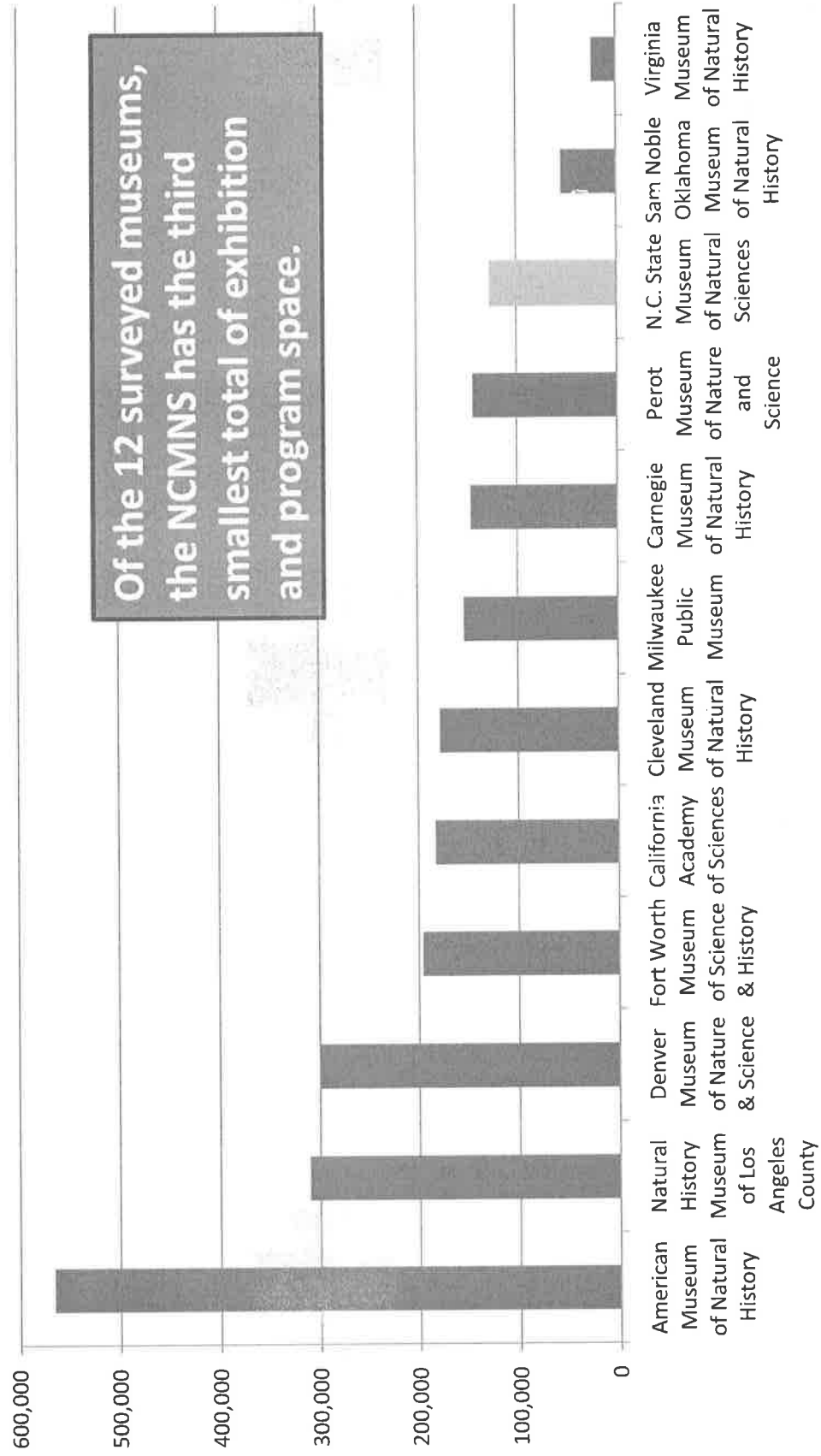
Mission statements

American Museum of Natural History	To discover, interpret, and disseminate--through scientific research and education -- knowledge about human cultures, the natural world, and the universe.
Denver Museum of Nature and Science	The Denver Museum of Nature and Science inspires curiosity and excites minds of all ages through scientific discovery and the presentation of preservations of the world's unique treasures.
Natural History Museum of Los Angeles County	The mission of the Natural History Museum of Los Angeles County is to inspire wonder, discovery and responsibility for our natural and cultural worlds.
California Academy of Sciences	The Academy's mission is to explore, explain and sustain life.
Milwaukee Public Museum	To be recognized by our members, visitors, donors and community as an institutional leader focusing on the interrelationship between people and the environment.
N.C. State Museum of Natural Sciences	To enhance the public's understanding and appreciation of the natural environment in ways that emphasize the natural diversity of North Carolina and the southeastern United States and relate the region to the natural world as a whole and engage the public in scientific research that affects our daily lives [<i>this statement is subject to refinement as part of the Museum's current planning project</i>].
Fort Worth Museum of Science and History	Dedicated to lifelong learning and anchored by our rich collections, the Fort Worth Museum of Science and History engages our diverse community through creative, vibrant programs and exhibits interpreting science and the stories of Texas and the Southwest.
Carnegie Museum of Natural History	Carnegie Museum of Natural History collects and cares for specimens and artifacts that document the history of life and human cultures.
Cleveland Museum of Natural History	The mission of the Cleveland Museum of Natural History is to inspire, through science and education, a passion for nature, the protection of natural diversity, the fostering of health and leadership to a sustainable future.
Sam Noble Oklahoma Museum of Natural History	Inspiring minds to understand the natural and cultural world through collection-based research, interpretation, and education.
Perot Museum of Nature and Science	To inspire minds through nature and science.
Virginia Museum of Natural History	To interpret Virginia's natural heritage within a global context in ways that are relevant to all citizens of the Commonwealth.

Total building size (sq. ft.)



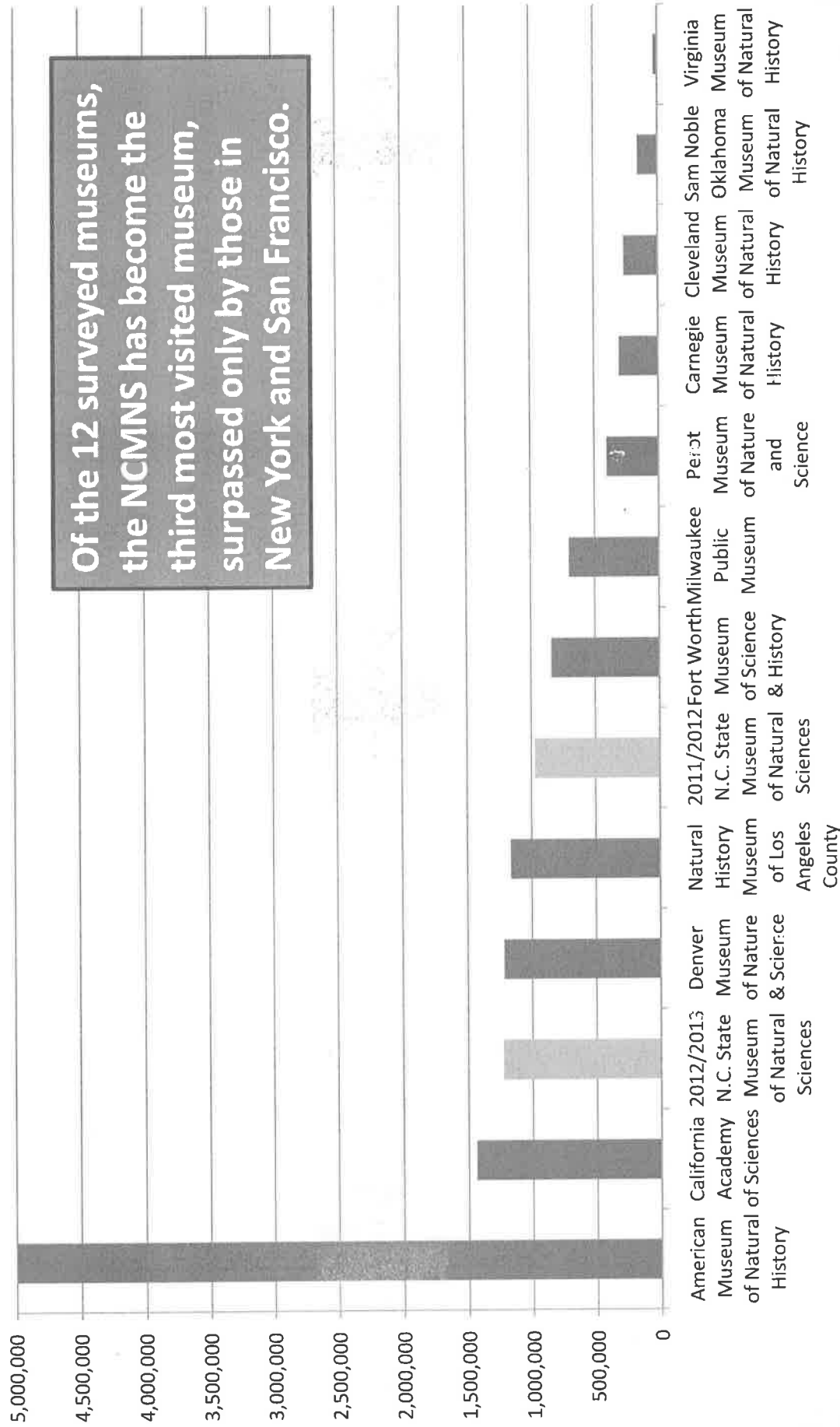
Interior public space (sq. ft.)



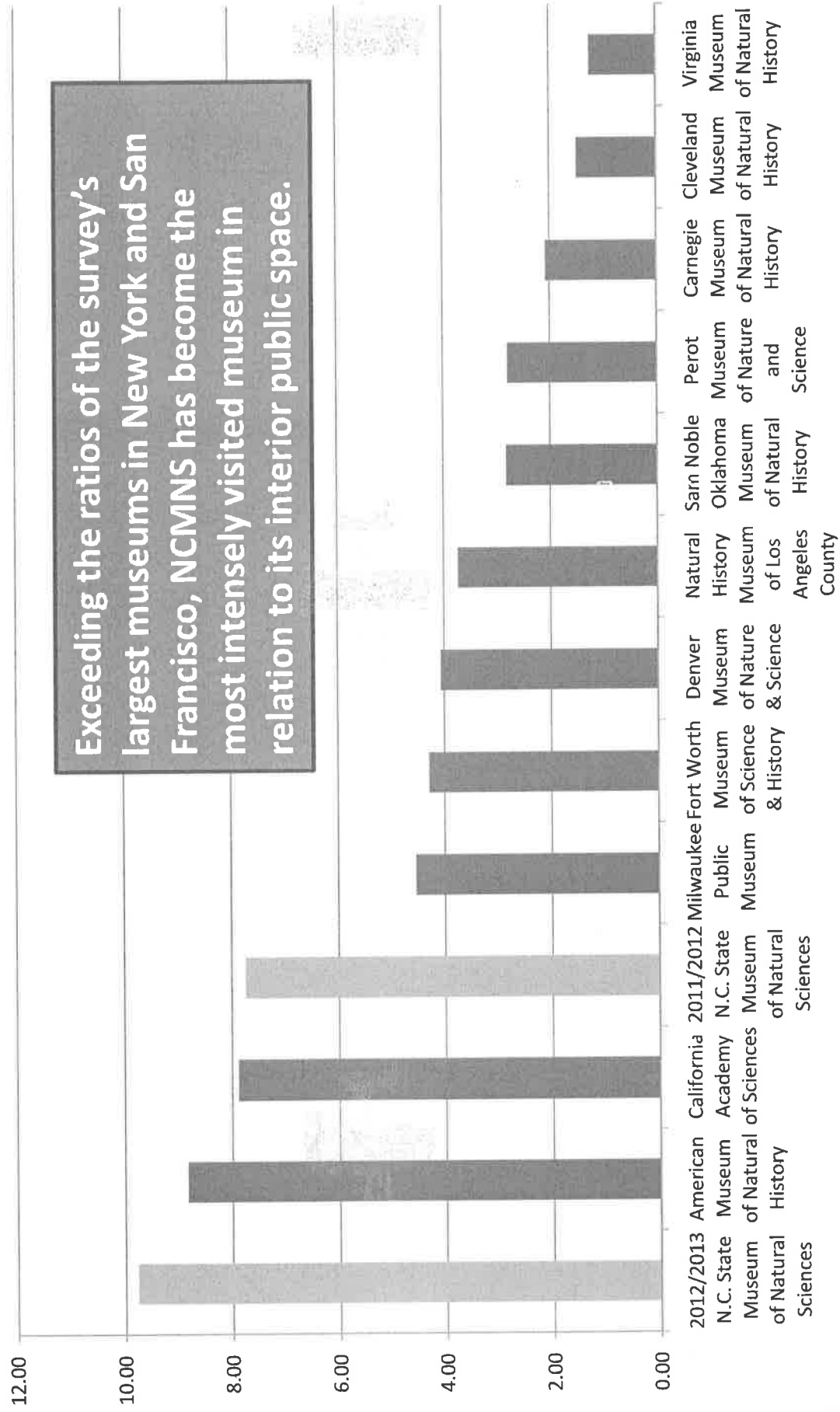
NC Museum of Natural Sciences

	2011-12	2012-13
Sources of operating support		
State appropriation	10,408,666	11,835,554
State reimbursement for		
university joint appointments	327,540	453,770
Friends of the Museum support	3,885,352 est.	4,640,505
Utilities and housekeeping costs		
paid by Dept. of Administration	est. 360,985	est. 579,138
FTE equivalent value of volunteerism	1,146,813	1,245,685
	\$16,129,356	\$18,754,652
Full-time staff / FTEs of part-time staff	152/51	164/40
Onsite attendance	970,654	1,224,829

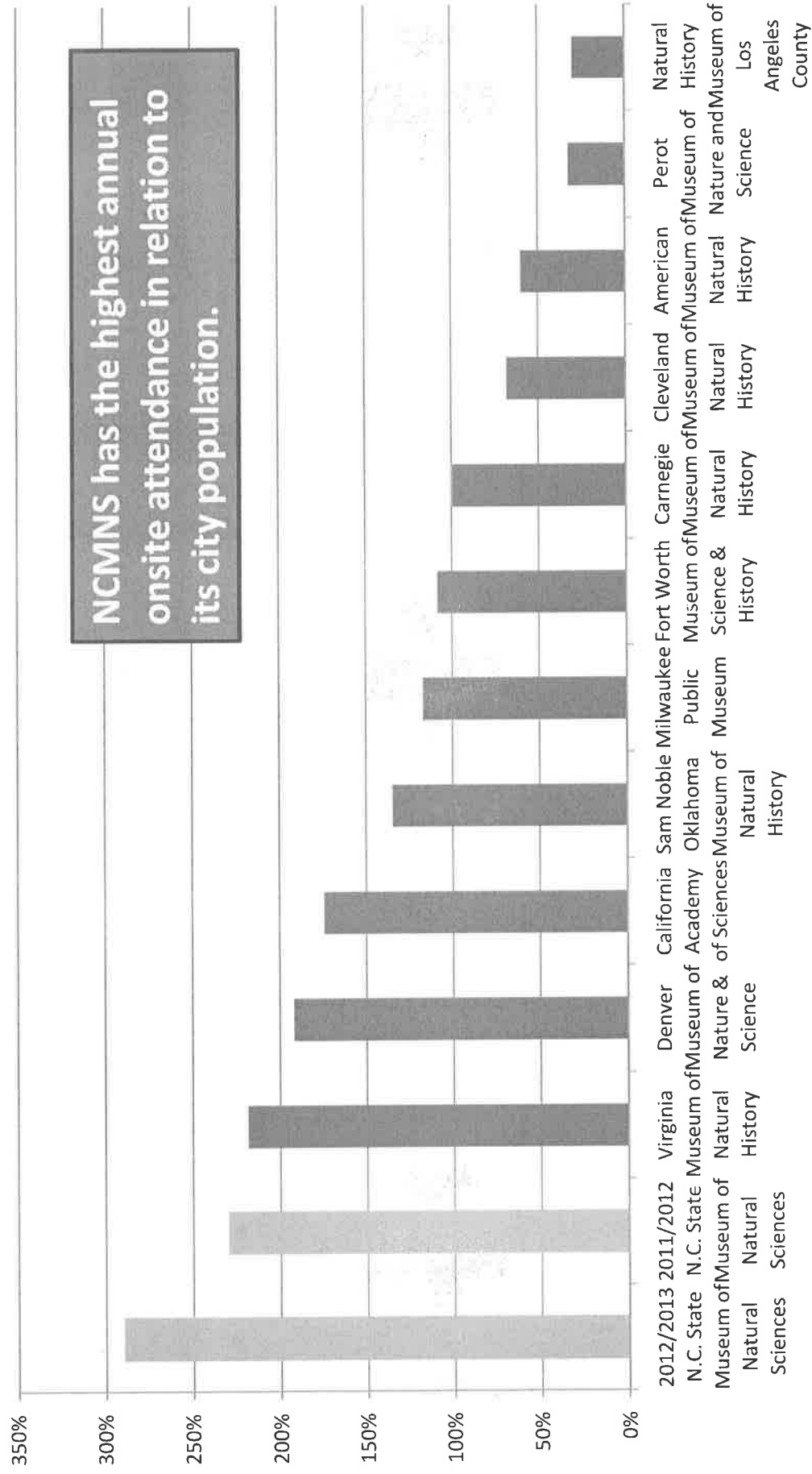
Annual onsite attendance



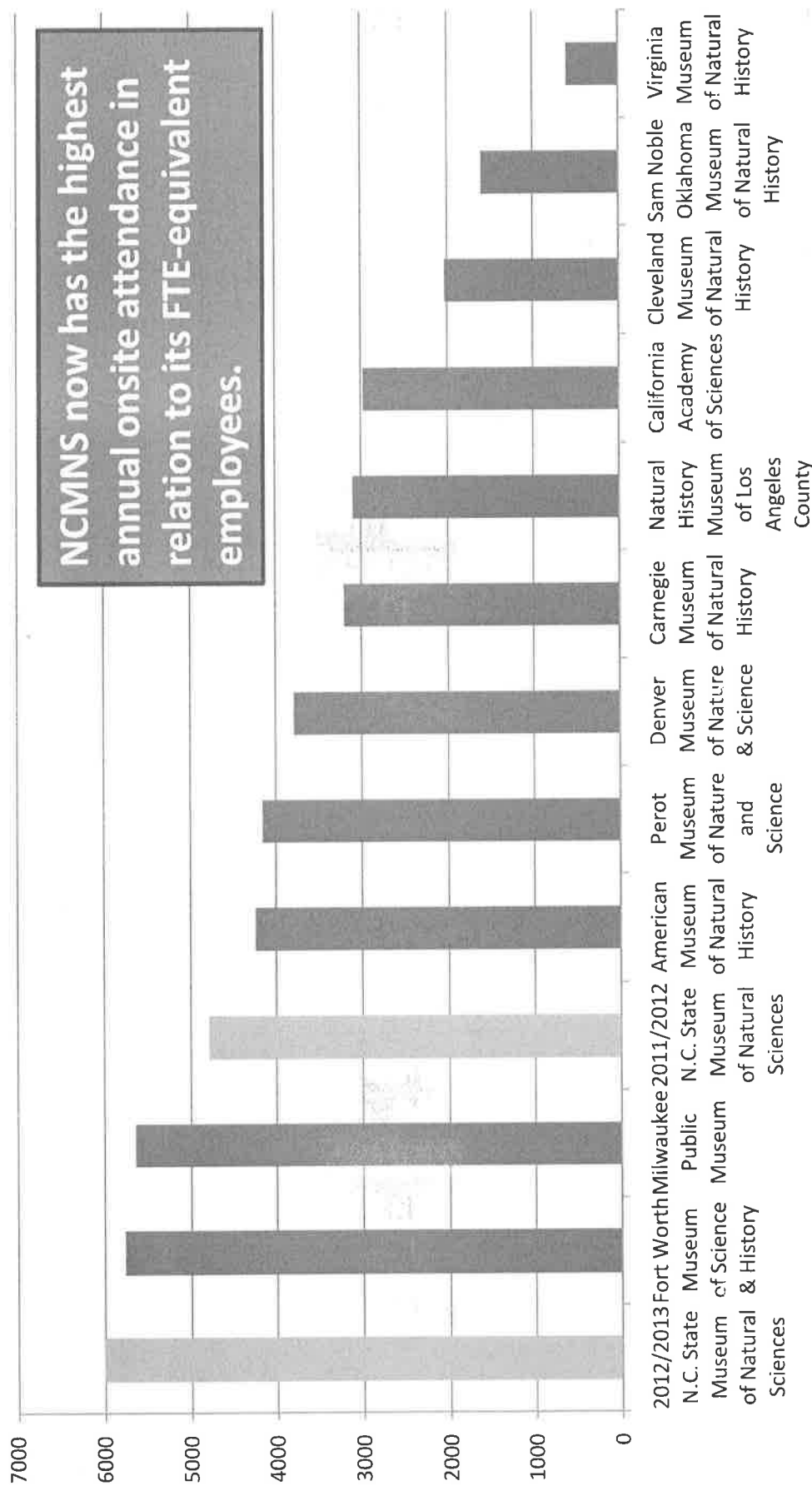
Annual onsite attendance / Interior public space



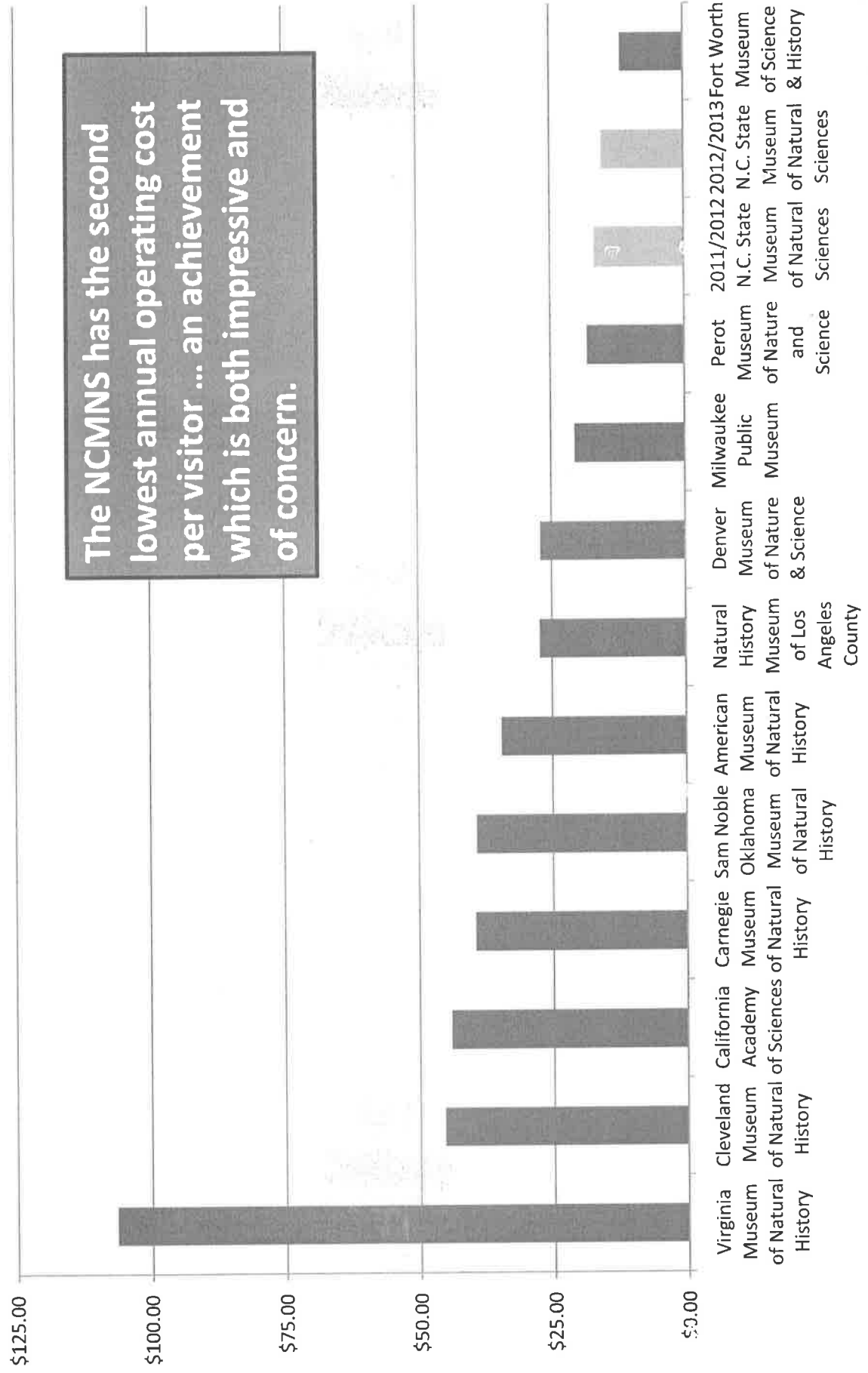
Annual onsite attendance / City population



Annual onsite attendance / FTE-equivalent employees

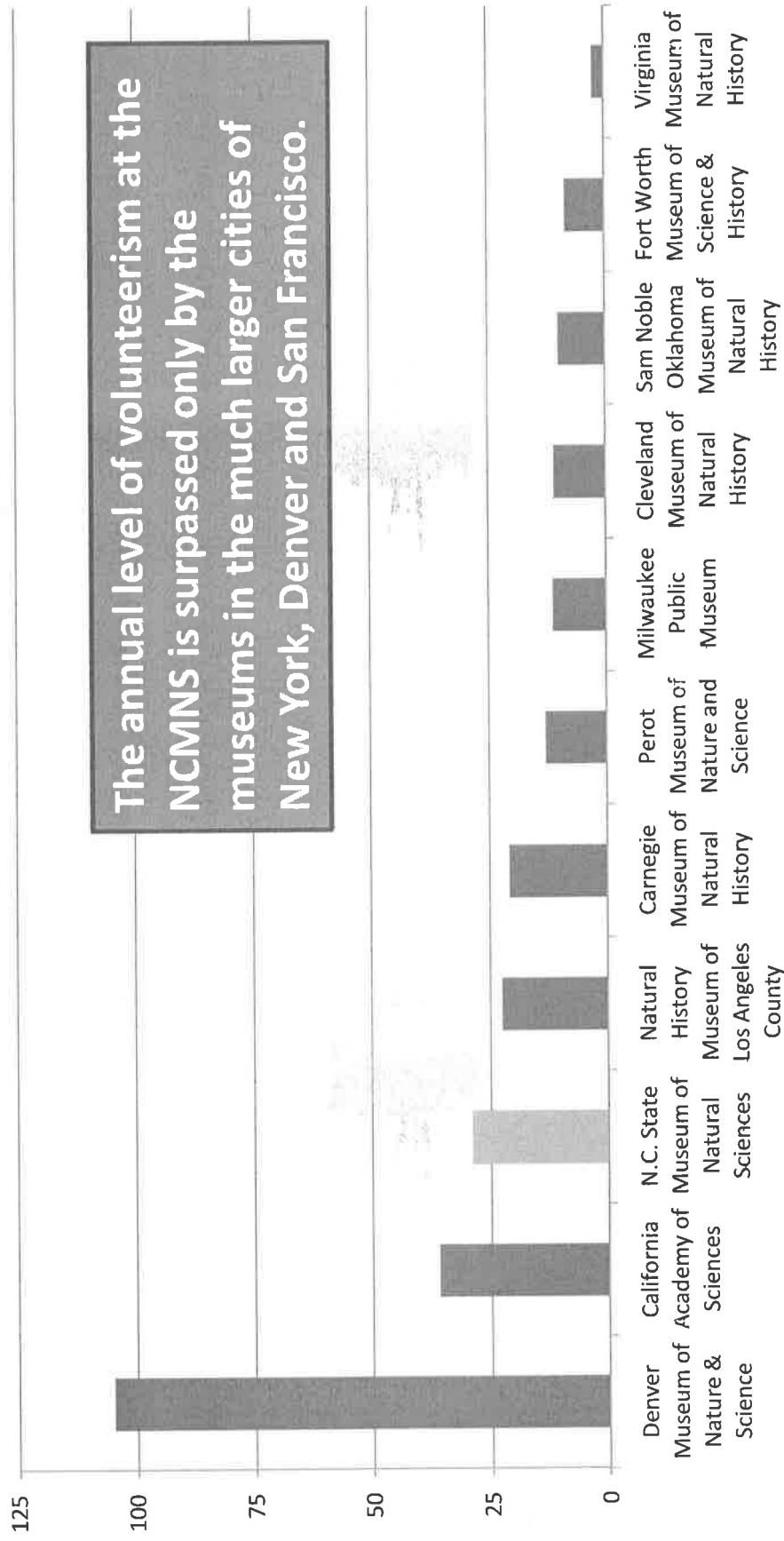


Operating cost / Onsite visitor



FTE-equivalent annual volunteerism

(not shown is the American Museum of Natural History with its 700+ total)



In summary, the NC Museum of Natural Sciences delivers strong returns on its investments, but ...

- Exceeding the ratios of the survey's largest museums in New York and San Francisco, NCMNS is the most intensely visited museum in relation to its interior public space
- NCMNS has the highest annual onsite attendance in relation to its city population
- NCMNS has the highest annual onsite attendance in relation to FTE-equivalent employees
- NCMNS has the second lowest annual operating cost per visitor
- The level of volunteerism at the NCMNS is exceeded only by the museums in New York, Denver and San Francisco
- But ... Rising annual performance is being inadequately served by an annual operating budget that has undergone a marked relative decline in State support

The NC Museum of Natural Sciences envisions its greater societal and environmental benefits

The 134-year old NC Museum of Natural Sciences is currently engaged in an analytical and planning project to optimize its mission advances. This includes reflective questions that are at the forefront of thought and practice in the field, such as increasing community and other stakeholder engagement with the Museum's research, collections, learning, and citizen science resources.

Today's progressive museums are embarking on strategic journeys to maximize the returns on their public and private sector investments in externally meaningful ways. With its top-20 rating among the nation's 17,500 museums in 2013 for outstanding community service, the NC Museum of Natural Sciences is already on a strong footing for its goals to be of even greater societal and environmental value.