# 2014-16 Executive Progress Report

# Commonwealth of Virginia Secretary of Education

# Virginia Museum of Natural History

#### At A Glance

The mission of the Virginia Museum of Natural History is to interpret Virginia's natural heritage within a global context in ways that are relevant to all citizens of the Commonwealth.

Staffing 36 Salaried Employees, 0 Contracted Employees, 48.5 Authorized, and 24 Wage Employees.

Financials Budget FY 2015, \$3.33 million, 84.38% from the General Fund.

♠ Visitors and Collaborations
♠ Programs delivered to citizens

↑ SOL Education programs Productivity → Cost of temporary exhibits

↑ Increase, ↑ Decrease, ↑ Steady Legend ↑ Improving, ↑ Worsening, ↑ Maintaining

For more information on administrative key, and productivity measures, go to www.vaperforms.virginia.gov

#### **Background and History**

# **Agency Background Statement**

Legend

The Virginia Museum of Natural History, located in Martinsville, hereinafter referred to as the "Museum," was created in 1985 and became a state agency in 1988. The Museum, located in Southside Virginia, is responsible for preserving and protecting Virginia's natural history.

With no institution serving as a centralized repository for the Commonwealth's natural history collections, the Museum was built to fill a gap in service to our culture and natural heritage. To date, the Museum remains the state's only collections-based science institution, and excels in collections-based research, inquiry based science education, science teacher professional development, and exhibit experiences rich with the actual specimens and artifacts documenting the natural and cultural heritage of Virginia.

To date, the museum has provided significant SOL-based experiences for children across the Commonwealth, and has provided professional development and educational training for numerous teachers. The Museum's scientists have assembled more than 10 million inventoried specimens and artifacts and contribute regularly to the published literature of biology, geology, paleontology, and archaeology. More than a dozen offsite exhibits are established throughout Virginia to reach audiences distant from Martinsville.

#### **Major Products and Services**

The Museum serves as the State's natural history museum and its duties include the following: 1) investigating, preserving and exhibiting the various elements of natural history found in Virginia and other parts of the United States and the world; 2) fostering an understanding and appreciation of how man and the earth have evolved; 3) encouraging and promoting research in the varied natural heritage of Virginia and other parts of the world; 4) encouraging individuals and scholars to study our natural history and to apply this understanding of the past to the challenge of the future; 5) establishing a state museum of natural history in Virginia where specimens of natural history, especially those of Virginia origin, can be properly housed, cared for, cataloged and studied, and to ensure a permanent repository of our natural heritage; and 6) coordinating an efficient network in Virginia where researchers and the public can readily use the natural history material of the Museum, its affiliates, Virginia's institutions of higher education and other museums.

There are three primary areas of museum work: Research and Collections, Education, and Exhibits.

RESEARCH AND COLLECTIONS: Museum curators and their support staff make significant contributions to the understanding of biology, geology, paleontology, and archaeology. All curators are Ph.D.-level researchers. During the course of their work, they grow the Museum's collections that act as a library of the natural heritage of Virginia. They support the work of researchers world-wide who benefit from the

accumulation and centralization of these collections.

EDUCATION: Supported by a Ph.D.-level education direction, the Department of Education and Public Programming is a source of SOL-based information for school groups, home school students, scouting organizations, and other groups. The Department provides significant professional development programs for teachers and offer graduate credit. Many teachers enter the workforce with little or no science background, but after engaging in the Museum's programs they come away with new materials, curriculum, and confidence.

EXHIBITS: The professional exhibits developed by museum staff take our science and puts it into a publically digestible form for all citizens. Exhibits link our science to the public. They provide an outlet for information that underscores childhood learning, and serves to make a more scientifically literate public. Science literacy is key to fields related to STEM topics (science, technology, engineering, and math), including STEM-based career paths. The Museum has its in-house exhibits for visitors, but also uses a variety of facilities across the Commonwealth to reach hundreds of thousands of citizens each year.

As a resource for all citizens of the Commonwealth, VMNH considers itself A MUSEUM WITHOUT WALLS. Staff works diligently to engage all areas of Virginia.

#### **Customers**

# **Customer Summary**

The key customers served by the Museum are students, teachers, children and families, scientists and researchers, tourists and eco-tourists, website visitors, and senior citizens. The Museum also serves the community by providing volunteer activity, including juniors and approximately 75 senior citizens. At present, the Museum has the capacity to serve a broad array of interested customers through programs, lectures, exhibits, the website, and special events. The programs, exhibits, events, publications, and website of the Museum are designed to appeal to a broad audience.

#### **Customer Table**

Predefined Group	User Defined Group	Number Served Annually	Potential Number of Annual Customers	Projected Customer Trend
Adult	Southeast Association of Vertebrate Paleontology	50	50	Stable
Adult	Virginia Academy of Sciences	30	30	Stable
Adult	Virginia Polytechnic Institute and State University	10	20	Increase
Adult	Visitors to website accessing an online collections database	825	1,600	Increase
Communication	Website visitors	225,378	500,000	Increase
Adult	Virginia Master Naturalists	50	50	Stable
Adult	K-12+ Teachers	150	150	Stable
Student	Youth volunteers and summer interns.	23	23	Stable
Student	K-12 students participating in in-house and outreach educational programs.	19,629	25,000	Stable
Families	Children over 18	8,709	25,000	Increase
Families	Museum Visitors	32,269	100,000	Increase
Higher Education Students	Interns and volunteers at a college or graduate school level	15	6	Stable
Natural Resources and Earth Science	Natural history enthusiasts including tourists and eco-tourists	36	50	Increase
Natural Resources and Earth Science	Scientists and researchers	47	60	Increase
Aged	Senior citizens 60 and over	1,399	5,000	Increase
Student	K-12 school groups who go on special tours of the collections	11	15	Stable
Higher Education Students	Hollins University	30	30	Stable
Student	Piedmont Regional Governor's School for Math, Science & Technology	30	30	Stable
Higher Education Students	Roanoke College	5	5	Stable

Student	Lynchburg College Residential Governor's School	160	160	Stable
Consumer	Visitors to Website (Research Blogs)	21,141	2,500	Stable
Adult	American Society of Mammalogists	300	300	Stable
Adult	Archaeological Society of Virginia	500	500	Stable
Adult	Council of Virginia Archaeologists	200	200	Stable
Adult	Department of Conservation and Recreation, Division of Natural Heritage	6	6	Stable
Adult	Geological Society of America	1,300	1,300	Stable
Adult	Mineralogical Society of America	40	40	Stable
Adult	Nature enthusiasts who go on special tours of the collections	90	75	Stable
Adult	Scientists and researchers from various universities, agencies, and organizations worldwide	57	100	Stable

# **Finance and Performance Management**

#### **Finance**

# **Financial Summary**

The Museum's programs are supported by a variety of funding sources, including general fund support, special funds from local support, grants, Foundation support, earned income, and federal grants. Approximately 85% of the Museum's budget comes from the state's general fund, 12% from special funds, and 3% from the federal government. The Museum also receives capital improvement funds from the Virginia Public Building Authority for building maintenance. Over the past few years, reductions in general fund support have increased the Museum's reliance on fund-raising and federal grants.

# **Fund Sources**

Fund Code	Fund Name	FY 2015	FY 2016
0100	General Fund	\$2,809,261	\$2,700,924
0200	Special	\$425,000	\$425,000
1000	Federal Trust	\$95,000	\$95,000

#### Revenue Summary

The Museum collects revenues from miscellaneous sources such as admissions and events, sale of Museum publications, memberships, education programs, room rentals, gift shop sales, and city, county, and federal grants. These revenues are used for agency operations, exhibit fabrication, educators' payroll, education programs, and to meet customer demand for services.

### **Performance**

#### **Performance Highlights**

One of the best measures of the Museum's performance is the number of customers reached by various programs. In FY2014, the Museum reached over 32,000 visitors in-house and nearly 200,000 visitors at off-site partnering organizations, state parks, schools, and visitor centers throughout the State. Educators reached over 20,000 people through 608 educational programs, all of which were correlated to standards of learning, served 18 school divisions, with 237 programs at the Museum, 20 distance learning programs, and 351 programs through outreach.

Museum scientists added nearly 2500 new specimens to the collections. Scientists participated in generating two new exhibits, continued strong collaborations state-wide, and have made the collections database accessible online. Each curator now has active blogs.

The Museum delivers valuable services to the Commonwealth via original collections-based research on our natural heritage, dynamic exhibits, in-house and at offsite areas that focus on enhancing the public's science literacy and children's comprehension of Virginia SOLs, and providing educational opportunities that benefit families, students, and teachers. The Museum is increasing multiple visits per person by maintaining up-to-date and interesting programming. Staff also continually improves operating revenue. Ultimately, the museum preserves and maintains the Commonwealth's natural history--the library of our natural heritage--for future generations.

#### **Selected Measures**

Measure ID	Measure	Alternative Name	Estimated Trend
94214507.002.002	Cost per visitor to provide temporary Museum exhibits	Cost of temporary exhibits	Maintaining
94214503.005.001	Number of outreach education programs and services delivered	Education programs delivered	Improving
94214508.002.001	Number of scientific publications produced by the Museum, and number of other scientific publications and technical presentations by Museum scientific staff and research associates	Programs delivered to citizens	Maintaining
94214508.001.001	Number of specimens added to Museum collections		Maintaining
94214507.002.001	Number of visitors to the Museum and remote Museum exhibit sites		Improving
94214503.002.002	Percentage of educational programs correlated to learning standards		Maintaining

# **Key Risk Factors**

Several factors will have a significant impact on the agency over the next four years.

Budget constraints- Adaptation to necessary budget constraints placed added emphasis on drawing outside dollars to the museum's programs. Personnel have made greater use of competitive grant activities.

Research and Collections- Curators are the caretakers of the State's only centralized repository of collections representing extensive natural and cultural heritage. Staff vacancies have impacted the Museum's ability to conduct biological and paleontological programs (in particular, 2 vacant curator positions).

Economy- A high unemployment rate has negatively impacted visitation. As a consequence, the admission fees were reduced and visitation remained constant, but the museum has not had an increase in revenue.

#### **Agency Statistics**

## **Statistics Summary**

The Museum hosted 4 exhibits and 32,000 visitors in-house and nearly 200,000 visitors at over a dozen off-site locations and traveling exhibits in FY2014. The Museum held 7 special events in FY2014, educators reached over 20,000 people through 608 educational programs, with 237 programs at the Museum, 20 distance learning programs, and 351 programs through outreach, serving 18 school divisions.

Museum scientists and collections staff have provided the following: published 7 peer-reviewed papers; conducted 80 programs, lectures and tours for over 3000 individuals; responded to 37 requests for technical information and reviewed 54 technical documents; posted 74 new entries on the Museum's Paleontology Blog, which received more than 28,000 visits; posted 29 new entries on the Museum's Research & Collections Blog, which received more than 500 visits since its creation in February 2014; provided content and assisted in planning, design, and fabrication of 2 major exhibits; initiated new loans of about 270 individual specimens and 84 jars of specimens to 9 other institutions and agencies; added 5,343 new records to the specimen catalogs and modified/updated 10,418 specimen records; and responded to requests for information in the Museum library from 73 adult visitors and 23 children.

# Statistics Table Description

Description	Value
Annual Attendance	32,000
Virtual Visitors	200,000
Special Events	7
In-house Exhibits	4
Educational Programs	608
Scientific Publications	7
Scientific Programs	33
Scientific Presentations	47
Volunteers	275
Members	518
Scientific Collaborations	29
Off-site Exhibits and Displays	18
Off-site Visitation	198,000
Law Enforcement Officers Trained in Crime Scene Methods and Evidence Analysis	16

### **Management Discussion**

Value

#### **General Information About Ongoing Status of Agency**

As the Museum's extensive collections continue to grow and further benefit our education, exhibit, and research efforts, the Museum offers exciting opportunities for all Virginia citizens to be engaged in furthering their science literacy. This unique benefit generates tourism, with half of our onsite visitation coming from outside our area code, and over a quarter million people visiting our 18 offsite exhibits. Our modern facility in Martinsville, built in 2007, continues to protect and house the State's collections effectively. Highlights of collections growth include new specimens (including fossil species new to Virginia) from Carmel Church located in Caroline County, mammals from throughout the State, marine specimens from coastal habitats, and archaeological specimens from statewide locations will be the focus of current collections growth.

Research supports a Virginia science SOL-based curriculum of programs for school groups and homeschoolers. These programs are delivered by experts in early childhood education. In addition, surveys show that teachers who go through museum teacher professional development programs come out of these week-long immersive programs with a greater understanding of science instruction methods, and are more comfortable handling STEM-based topics. Due to the Museum's draw (approximately one half of all visitors are from areas outside of Martinsville/Henry County), it is an important focal point for area tourism efforts. Visitors spend time at the Museum then shop and/or eat in local establishments. Museum staff purchase much of their supplies and equipment, or contract specialized workers, from local Small, Women, and Minority (SWAM) businesses, thus providing hundreds of thousands of dollars flowing through the local economy. The Museum is one of the larger employers in the area, thus supplying steady jobs.

#### Information Technology

The agency intends to improve the elementary, secondary, and vocational education function that provides educational programming at the Museum and through outreach programs to local and regional K-12 schools. The agency will accomplish this through a non-major IT project called Adventure Classroom. The project is scheduled in FY2014 and will install a state-of-the-art videoconferencing science classroom at the Museum. The videoconferencing science classroom will serve as a distance-learning laboratory connected to the local and Virginia IT network where science education at-a-distance can be delivered, studied, and improved.

The Adventure Classroom will promote opportunities for citizens to expand their science literacy regardless of where they live. It will be a hub to connect scientists to students and the public, and give people the opportunity to observe science in action at remote field sites.

All paleontological and geological collections are now available on the collections database eGEMS, and the collections databases are available online publically.

# **Workforce Development**

The Museum's workforce will continue to face technological changes and frequent changes in systems and processes. One strategy the Museum will use to ensure a knowledgeable workforce is to provide professional development training to all of its employees. Continuous training will ensure that employees are able to adapt to operational changes and provide quality services. The Museum will also face challenges because of aging and retiring employees. Leadership training and cross-training programs will prepare future leaders and employees to succeed retiring employees.

# **Physical Plant**