

# 2016-18 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** 32 Salaried Employees, 0 Contracted Employees, 48 Authorized, and 20 Wage Employees.

**Financials** Budget FY 2017, \$3.29 million, 86.83% from the General Fund.

**Trends**

- ↑ Extraordinary Exhibits
- ↑ Visitors and Collaborations
- ↑ Education Programs

**Key Perf Areas**

- ↑ Education programs delivered
- ➔ Programs delivered to citizens

**Productivity**

- ➔ Cost of temporary exhibits

**Legend** ↑ Increase, ↓ Decrease, ➔ Steady

**Legend** ↑ Improving, ↓ Worsening, ➔ Maintaining

For more information on administrative key, and productivity measures, go to [www.vaperforms.virginia.gov](http://www.vaperforms.virginia.gov)

**Background and History**

**Agency Background Statement**

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 Standards of Learning (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. Distance Learning Technology is employed to reach audiences across the Commonwealth.

## 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. These six points were declared areas of legislative determination in the Code of Virginia.

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. The Museum holds specimens found nowhere else on earth, including hundreds of holotype specimens. Fossils from areas just north of Richmond and near Danville, unavailable to researchers anywhere else, have recently been unearthed and are now available for study.

**EDUCATION:** The Department of Education 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. The Museum is in many instances the science curriculum for southern Virginia homeschoolers.

**EXHIBITS:** The professional exhibits developed by museum staff take our science and put 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                               | 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 | 89                     | 100                                  | Stable                   |
| Adult                               | Southeast Association of Vertebrate Paleontology  | 50                     | 50                                   | Stable                   |
| Adult                               | Virginia Academy of Sciences  | 60                     | 60                                   | Stable                   |
| Adult                               | Virginia Polytechnic Institute and State University   | 10                     | 20                                   | Increase                 |
| Adult                               | Visitors to website accessing an online collections database                                | 300                    | 1,600                                | Increase                 |
| Communication                       | Website visitors  | 225,378                | 500,000                              | Increase                 |
| Adult                               | Virginia Master Naturalists   | 54                     | 54                                   | Stable                   |
| Adult                               | K-12+ Teachers  | 797                    | 797                                  | Stable                   |
| Student                             | Youth volunteers and summer interns.  | 30                     | 30                                   | Stable                   |
| Student                             | K-12 students participating in in-house and outreach educational programs.                  | 26,232                 | 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  | 89                     | 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                          | 2                      | 5                                    | 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)  | 15,171                 | 3,000                                | Stable                   |
| Adult                               | Middle Atlantic Archaeology Conference  | 300                    | 300                                  | Stable                   |
| Higher Education Students           | Virginia Commonwealth University  | 30                     | 30                                   | Stable                   |
| Adult                               | Ohio Biological Survey  | 250                    | 250                                  | Stable                   |
| Adult                               | Entomological Society of America  | 800                    | 2,000                                | 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                   |

## 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 87 percent of the Museum's budget comes from the state's general fund, ten percent from special funds, and three percent 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 2017     | FY 2018     |
|-----------|---------------|-------------|-------------|
| 0100      | General Fund  | \$2,854,326 | \$2,660,680 |
| 0200      | Special       | \$338,075   | \$338,075   |
| 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, City and 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 FY2016, the Museum reached over 33,000 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 19,000 people through 736 educational programs, all of which were correlated to standards of learning, served 18 school divisions, with 295 programs at the Museum, 20 distance learning programs, and 421 programs through outreach.

Museum scientists added nearly 5,343 new specimens to the collections. Scientists participated in generating one new exhibit, 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, two vacant curator positions).

Economy- A high area unemployment rate continues to negatively impact visitation and revenues.

## Agency Statistics

### Statistics Summary

The Museum hosted one exhibit and 33,000 visitors in-house and nearly 200,000 visitors at over a dozen off-site locations and traveling exhibits in FY2016. The Museum held 37 special events in FY2016 and educators reached nearly 19,000 people through 736 educational programs, with 295 programs at the Museum, and 441 programs through outreach, serving 18 school divisions.

Museum scientists and collections staff have provided the following: published seven 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 one major exhibit; initiated new loans of about 270 individual specimens and 84 jars of specimens to nine other institutions and agencies; added 5,343 new records to the specimen catalogs and modified/updated 10,418 specimen records.

### Statistics Table

| Description   | Value   |
|---|---------|
| Annual Attendance   | 33,109  |
| Virtual Visitors  | 300,000 |
| Special Events  | 37      |
| In-house Exhibits   | 1       |
| Educational Programs  | 736     |
| Scientific Publications   | 7       |
| Scientific Programs   | 33      |
| Scientific Presentations  | 47      |
| Volunteers  | 300     |
| Members   | 500     |
| Scientific Collaborations   | 29      |
| Off-site Exhibits and Displays  | 18      |
| Off-site Visitation   | 181,659 |
| Law Enforcement Officers Trained in Crime Scene Methods and Evidence Analysis | 16      |

## Management Discussion

## 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 nearly 200,000 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 installed a state-of-the-art videoconferencing studio, called The Distance Learning Studio, at the Museum in FY2014. The Distance Learning Studio serves 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 Distance Learning Studio promotes opportunities for citizens to expand their science literacy regardless of where they live. It serves as a hub to connect scientists to students and the public, and gives 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, as budget allows. 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

The Museum is housed in a state-owned state-of-the-arts facility completed in 2007. It is located on a main highway in the cultural district of Martinsville and is very accessible to the public. Besides the day-to-day management of this building, the Museum operates two other buildings used as storage space. The Museum has several maintenance reserve projects planned, but no major physical plant projects planned.

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