More Than a Building on Broad Street: A History of the Science Museum of Virginia, 1910-2017

©Virginia Academy of Science

By: Kasey Sease

Chapter 4: The Challenges of Running a State Science Museum

As construction of the planetarium steadily progressed, Museum staff and affiliates began to see the early 1980s as a moment of opportunity. While the state was not pouring funds into the Museum to raise its bottom line, legislators allowed phase I of the renovation process to continue without outright opposition, even allocating some of the financial resources necessary to further the project. If the General Assembly witnessed institutional growth and quantifiable results from the SMV's structural additions, the Board believed the state would continue to support the growth of the Museum.

The Museum saw many successes in the 1980s, but its accomplishments were never enough to solicit the financial backing the Board required to accomplish all its goals. The opening of The Universe planetarium and space theater brought record visitation to the Station and world-wide acclaim. However, the success of the project did little to convince the General Assembly to fully support new plans or the last two phases of renovation. The Museum continued offering educational programming to the public, but Virginians wanted to see its staff do more to set the facility apart from other science centers in the state. To top it off, the SMV encountered resistance from the Assembly when requesting funds to hire more staff, leaving the growing institution with far less people than it needed to efficiently execute day-to-day operations.

By 1988, the Museum faced what one newspaper reporter described as a "crossroads": "in the next several years it will either move away from the pack and claim the birthright of its name or it will become just one of the several science museums related to the commonwealth."¹ The SMV needed to revamp its educational programming, reorganize its financial assets, and raise enough money to bring state-of-the-art exhibits to the site; a job for more than one director. This chapter details the final years of Paul Knappenberger's tenure at the SMV; a crucial time for the Museum as its staff, Trustees, and Foundation Directors attempted to meet the challenges of running an innovative state science museum. Shortly after Knappenberger left his office on Broad Street, Walter Witschey, a familiar face in Richmond, returned to Virginia to assume the directorship. Under his watch, the Museum charted a new course forward, building upon the foundation that Knappenberger and his team built with persistence and compromise.

Financial Struggles and Stationary Streetcars

In January 1982, a historically significant addition to the Science Museum of Virginia made its way to America's shores.² Elisabeth S. Bocock, a Richmond philanthropist, purchased an early twentieth-century streetcar identical to the ones that ferried residents throughout the capital city in the 1910s and '20s. She, along with the local Hop-on-Trolley committee, sought to transport the restored car from its home in Portugal to Virginia in the hopes of "restoring a functioning streetcar line to Richmond's downtown area."³ The project was a timely one; the city's streetcar centennial, "commemorate[ing] the birth of the streetcar in Richmond," was only a few years away.⁴ The SMV saw the rousing local enthusiasm for the car's preservation as an opportunity to design a new exhibit and link the Museum to the streetcar's line.

Walter Witschey, then serving as a member of the Foundation's board, volunteered to conduct a feasibility study for the project. He "interviewed many individuals and civic, government, and business organizations" to compile his report, ultimately laying "the groundwork for achieving the support, donations, and agreements necessary to make [the] project a reality."⁵ He recorded a brief history of streetcars in Richmond and compiled a list of objectives as well as work, development and implementation plans. In his view, the functioning streetcar could supply the Museum with "a science and technology exhibit" while "accelerating the re-installation of trackage, railway cars, and public interest" during the last two phases of the Station's renovations.⁶ The car could also promote "the Museum in the community by involving many and varied civic and business organizations in the development of this project."⁷ Restoring the streetcar would bring more to the SMV than a transportation exhibit; it could stimulate interest in the Broad Street Station that resulted in more visitors and an increase in private financial support.

Throughout July and August 1982, the Board of Trustees, Foundation Directors, and museum staff agreed with Witschey's conclusions and greenlighted the plan.⁸ Since

construction of the planetarium was proceeding on schedule, there was no reason to slow the development of new or existing projects. Witschey began the process of bringing the streetcar to Broad Street by requesting "track, easements, and an exchange of property with the State" from the Richmond, Fredericksburg, and Potomac Railroad (RF&P).⁹ While representatives from the Railroad and the Museum engaged in negotiations, Witschey reached out to the City of Richmond to obtain a "permit [to allow] the streetcar to operate through intersections, to maintain the intersections, and to modify the traffic signals."¹⁰ Approval of the project by the state was contingent upon the attainment of "four other approvals": "Secretary of Education-Casteen; Secretary of Administration and Finance-Anderson; Director, Department of Planning and Budgets—Connock; [and the] Public Buildings Commission—[chaired by State Senator] Willev."11 Anderson offered to write "the State recommending variances be permitted" and Casteen approved of the project outright. However, as the Museum worked to prepare "a Capital Outlay Request...for Connock," Witschey awaited "an appointment with Senator Willey."12 After a meeting with the Virginia Electric and Power Company (VEPCO), Bill Proffitt, the senior vice president, "indicated that VEPCO would provide overhead electrification and the DC Substation for the streetcar" in addition to presenting the Museum's "request for a \$100,000 cash contribution to VEPCO's Gifts Committee."¹³ By November 1982, the Museum was setting up meetings with the VCU Department of Communication, Arts, and Design to review student proposals "to undertake the Exhibit design work."¹⁴ The Museum had built a network of community support around its new venture; the future of the streetcar appeared bright.

Witschey's enthusiasm for the project materialized into a series of meetings that put the streetcar on the right track to Broad Street—all he needed was Senator Willey's approval to begin setting the plans in motion. Unfortunately for the Museum, Willey did not authorize the project. In a letter to "Trolley Friends and Enthusiasts," Witschey outlined the fallout between the state senator and streetcar project:

In December, at a meeting of the Public Buildings Commission, Senator Willey spoke in opposition to the proposed plan you have read. He raised several objections. Because of the other items before the General Assembly, the Science Museum waited until the close of the 1983 Session to approach Senator Willey about his objections. In two recent meetings held with Senator Willey, a revised plan designed to accommodate and deal with his objections was presented and reviewed. He still stood in opposition to the plan as revised.¹⁵

No matter how hard he tried, Walter Witschey could not formulate satisfying responses to the senator's objections. Willey balked at the streetcar opportunity for fear that it would congest his district with traffic and impede other local development initiatives.¹⁶ Ultimately, "Senator Willey's obvious antagonism toward" the project forced the Museum to "shelve" the exhibit and discontinue negotiations with all city, state, and private parties involved.¹⁷

Rae Carpenter wrote a letter to Witschey informing him of the Board's decision. He expressed "deep appreciation for his sustained hard work on [the] proposal."¹⁸ Carpenter had hoped to see the project realized "as a means of preserving additional lengths of train sheds," among other reasons.¹⁹ He assured Witschey that "this is not the first time we have had to bow to the express wish of a member of State government in spite of what we thought was in the long term [sic] interest of the Museum."²⁰ Indeed, the SMV would only face more challenges in the near future as it attempted to ascertain the requisite resources to operate Broad Street Station and its growing number of exhibits.

In a report "compiled...to secure more funds from the General Assembly and Governor," the staff described a dramatic uptick in visitation, attracting over 70,000 more guests in the summer of 1983 than in previous years.²¹ The influx of visitors "produced an increase in exhibit maintenance, building maintenance, custodial, security, exhibit floor operations, and a demand for longer hours of operation."²² And yet, the report continued, "there [had] been a decrease in funding for these services as the Museum's budget was reduced 5% on July 1 and 1-1/2% more on September 23."²³ The SMV was "desperate" for "additional funds and positions to properly operate and maintain the Museum" in the coming years, especially since the disparity reflected negatively in state audit reports.²⁴ The SMV lacked an "adequate segregation of duties" in several departments, most notably the Museum's shop and ticket sales desk.²⁵ Staff had no cash registers to tender payment nor the equipment necessary to accurately record receipts.²⁶ As the state reduced the Museum's budget to pay other expenses, the staff made do with what little they had and were often forced to sacrifice efficiency to complete basic tasks. In the meantime, the SMV continued to grow, though at a much slower pace than the leadership anticipated.

New Exhibits and Phase II of Renovations

Soon after receiving a lack-luster audit report from the state, the Museum debuted its "first computer lab" on October 18, 1983.²⁷ It was one of several new exhibit spaces opened between fall 1983 and winter 1984. The lab "served as a 'prototype' for developing computer education programs," bringing new technology into the Museum for staff and visitors to manipulate.²⁸ An "exhibit on visual perception opened" on July 22, 1984.²⁹ *Illusions, Science and Magic* challenged guests' interpretations of reality by tricking the eye with science. The Museum worked with VEPCO to deliver *Electriganza* to the public on October 9, 1984.³⁰ The exhibit reviewed "principles of electricity" and premiered in conjunction with a series of events paid for in part by the power company.³¹

The SMV rang in the new year with the opening of the Thalhimer Aerodrome exhibit.³² Its presentation of "the history of flight from the Wright Brothers to the Space Shuttle" was the first of several exhibit areas made possible by a large donation from William B. Thalhimer, Jr. and his wife, Barbara.³³ The couple contributed over \$2 million dollars to the SMV and both "served at different times on the board of trustees."³⁴ Thalhimer, Jr. had been President and CEO of the successful Thalhimer's department store chain before it merged with Carter, Hawley, Hale in 1978.³⁵ He remained involved in the business's management until 1990 when "Carter, Hawley, Hale sold Thalhimer's to The May Company."³⁶ Over the course of their time with the Museum, William and Barbara's gifts "increase[d] exhibit space by one-third."³⁷ 1985 was also the first year the SMV distributed four awards to Virginia's Outstanding Scientists and Industrialists.³⁸ In a ceremony attended by the Governor, the Museum recognized influential Virginians engaged in the research and application of science. Winners received medals displaying iconography that "blend[ed] past and present technologies, [with] modern and traditional symbols," such as "Earth, Air, Water, and [the] Cosmos."³⁹ The spirit of the award melded nicely with the Museum's new Creative Computing Center, a permanent version of the 1984 lab funded in part by Witschey and an anonymous donor.⁴⁰

The successful unveiling of new areas of the Museum coincided with the beginnings of the second phase of renovations. It was delayed by several years as the SMV had to raise upwards of \$800,000 to supplement inadequate funds from the state.⁴¹ Foundation chairman George L. Yowell told reporters in 1988 that "the foundation has done more than it's been asked to do" to underwrite the renovation costs.⁴² Phase II included improvements to the west wing, concourse, and lower level of the "main building" in addition to the installation of a "new

heating and air conditioning system" in the east wing.⁴³ The SMV also hoped to construct a "new freight elevator to serve five levels," an essential component for any museum hoping to transport large displays or objects between multiple floors.⁴⁴ Remaining funds from the Thalhimer donation were used to install "exhibits on aerospace, energy and electricity, and physics and chemistry" in the concourse, making up the Barbara and William B. Thalhimer J. Hall of Science Exploration.⁴⁵

On June 12, 1988, "a decade after opening," the SMV neared completion of phase II and scheduled the new exhibits to open in January of the next year.⁴⁶ Initiating phase III, which included restoration of the historic butterfly train sheds, would have to wait until the Museum could organize another fundraising campaign to supplement the state's budget. Yowell hoped that the Foundation would begin raising the money "by the end of 1989," but in the meantime the Museum had to focus on promoting its upcoming exhibits and developing new educational programming to accompany them.⁴⁷ According to a study conducted shortly before the renovations ended, the SMV needed to "take broad steps to increase its visibility outside the Richmond area."48 Thompson and Pendel Associates, the authors of the report, assembled a "detailed, 25-point plan of attack for museum officials," which included a new role for the Director.⁴⁹ As opposed to focusing on creating "exhibits and programs," the firm suggested that Knappenberger "give top priority to 'the building and maintaining of significant and diverse relationships for the Museum with Virginians."⁵⁰ Despite a recorded attendance of 302,578 for 1987, the SMV still "face[d] tight and shrinking budgets for day-to-day operations and maintenance of existing exhibits," including "the computer center...[which] remain[ed] open about 30 percent of the hours that the museum itself [was] open" because of a limited staff.⁵¹ The main way for the Museum to grow its budget in the short term was to increase ticket sales. The staff had to attract more Virginians to Broad Street Station with statewide outreach, effective advertising campaigns, and new programs.

The Science Museum of Virginia as a Community Institution

In January 1989, the Museum dedicated the William and Barbara Thalhimer Hall of Science Exploration before a crowd of Virginia statesmen.⁵² The annual General Assembly reception "marked the end of the second phase of renovation of Broad Street Station," and the beginning of a new direction for the SMV.⁵³ With "its new modern, fully-equipped fabrication and graphics shops in the Station's remodeled basement," the Museum could continue to offer the public exhibits built in-house.⁵⁴ Self-constructed exhibits could also be circulated to other centers around the country, providing the SMV with one way to advertise its name abroad. This practice contributed to the Museum's effort to rebrand Broad Street Station as a communitycentered institution open to all, inside or outside the state.

The SMV built three new exhibits in the Thalhimer Hall of Science: "Aerospace, ElectriWorks, and Science Sense."⁵⁵ ElectriWorks was a product of the relationship forged between the Museum and Virginia Power, consisting "of two major sections: Electricity and Science, and Electricity and Energy."⁵⁶ The first "present[ed] fundamental concepts key to the understanding of the modern electrical energy system and applied electronics," including "voltage, current, fields, and electromagnetism."⁵⁷ The second was a creative space that gave "visitors the opportunity to control a model electrical energy system."⁵⁸ Of the three exhibits, guests agreed that ElectriWorks was the most "dramatic."⁵⁹ However, they also provided the Museum with mixed feedback, identifying a number of shortcomings with the displays, such as "too much [content] to read" or too few "simple explanations in large letters."⁶⁰ Though ready for visitors to browse, the exhibits in the Hall of Science needed to be progressively tweaked to fully satisfy patrons.

The summer after the concourse's debut was full of popular events that brought thousands of Virginians to the Museum. The first was on June 29th when the SMV welcomed Jerry Mathers, from "the original 'Leave it to Beaver," as the guest of honor to "a '50s party complete with oldies music, food, dancing, contests and autograph signings."⁶¹ The retro shindig occurred in conjunction with other "opening festivities for *Beavers*, an IMAX film," and attracted almost 4,000 attendees.⁶² The Museum also displayed "a replica of the Batmobile" during the month of July.⁶³ The iconic vehicle from the hit TV show *Batman* (1966-1968) drew about 2,000 visitors to Broad Street Station.⁶⁴ In the same month, Apollo 11 astronaut Buzz Aldrin spoke at the SMV; an appearance that coincided with the *To The Moon* exhibit located just outside the entrance of The Universe planetarium and space theater.⁶⁵ In addition to hearing tales from the famous space explorer, guests could interact with "a simulated moon surface, the museum's Space Port for children and a model of John Glenn's Mercury capsule."⁶⁶ Summer programing ended with an eclipse viewing in August, "cohosted with the Richmond

Astronomical Society."⁶⁷ Roughly a thousand Richmonders trekked out to the Station to watch "as the moon darkened and turned to shades of red," a fitting end to an eventful season of events.⁶⁸

With the onset of fall, the Museum developed several new education programs to keep Virginians coming to West Broad Street in the slower months of the fiscal year. In September, the SMV began producing Live Sky, "an interactive, inside look at the night sky with commentary by staff astronomers."⁶⁹ The program was shown in The Universe and introduced guests to a new kind of educational experience at the planetarium.⁷⁰ The Museum also hosted its first-ever Educator's Open House, a content-based event that "attracted teachers from throughout Virginia" looking for new ways to teach science in their classrooms.⁷¹ The program was explicitly designed to court educators across the entire state, demonstrating the Museum's willingness to work with residents outside of Richmond. However, attention to such activities did not prevent the SMV from targeting city dwellers. In October, the staff coordinated Read Richmond Read, "the area's first literacy event" which "attracted 900 visitors, including Jeannie Baliles," the First Lady of Virginia and founder of the Virginia Literacy Foundation.⁷² The month of October also marked the beginning of the Museum's popular camp in program when "forty adults and children spent the night" in the historic train station.⁷³ Attendees participated in "hands-on workshops featuring exciting topics," in addition to viewing a planetarium demonstration and IMAX movie.⁷⁴ The evening was meant to "motivate and stimulate young" people to seek careers in science" as well as "improve participants' science knowledge and skills."⁷⁵ It was the first of what would become many camp ins organized by the SMV staff throughout the 1990s and 2000's.

While staff members coordinated the Museum's revamped schedule of events, Trustees negotiated a possible merger between the SMV and the Virginia Aviation Museum (VAM). VAM was founded in 1987 by the Virginia Aeronautical Historical Society (VAHS) upon receipt of a "collection of vintage aircraft and generous donations from many of the prominent Virginians who are flying buffs."⁷⁶ Housed in the Freedlander Wing of the Richmond International Airport, the Museum had "nearly three dozen aircraft on display—all in flying condition—and several more in storage" in 1989.⁷⁷ The driving force behind the "'marriage' of museums" was Neil November who had, at different points in his career, chaired the Board of Trustees for the SMV, the VAHS, and the Capital Regional Airport Commission, which leased

the Freedlander Wing to VAM "for \$1 a year."⁷⁸ November believed that VAM's collection of planes from the golden age of flight would complement the SMV's aeronautical exhibits in the Thalhimer Hall of Science.⁷⁹ VAM also had "no debt and a six-figure bank account," an appealing financial situation to the SMV that November frequently reminded members of VAHS would not last indefinitely.⁸⁰ Without a "massive infusion of charitable cash each year," VAM could face crippling deficits.⁸¹ "Now is the time to consolidate this merger," November argued, "and not wait until that inevitable time arrives when our financial reports begin to reflect solid red ink."⁸² Anthony F. Troy, the SMV's acting chairman of the Board of Trustees, believed that the merge was "a concept that's worth pursuing if it makes financial sense."⁸³ However, the Museum needed to review the "potential benefits and costs of the acquisition" before a decision could be made.⁸⁴

1989 was a crucial year for the Science Museum of Virginia. With the completion of phase II of renovations and the receipt of lack-luster financial reports, the Museum was forced to reevaluate its programming and reach out to more Virginians to raise ticket sales. Outside studies also revealed that the staff needed to target citizens throughout the state to set it apart from other science centers in the Commonwealth. Budget cuts from the General Assembly enticed the Museum to look inward when it needed to project outward; a trend that threatened to strip the SMV of its statewide mission and appeal. By hosting events with wide-ranging demand, like the Educator's Open House, museum staff put the SMV on course to serving more areas of the state.

In an almost symbolic coincidence, the Museum dedicated a plaque honoring Dr. Hughes, the "founder of the Science Museum of Virginia," in August 1989.⁸⁵ Roughly 100 guests attended the ceremony, including Hughes's widow, Elizabeth.⁸⁶ In an SMV press release, Knappenberger explained that the "plaque is our way of showing...appreciation."⁸⁷ In his view, Hughes had the "foresight and dedication" to make the Museum a reality, and his desire to offer all Virginians fun and informative science education continued to motivate the staff years after his death.⁸⁸ This observation was especially true in light of the SMV's new direction. Though the Museum still faced several financial and logistical challenges, the staff hoped to improve the SMV and develop it into an institution more in line with Hughes's original vision.

Knappenberger's Final Year as Director of the Science Museum of Virginia

With the onset of a new decade, Director Knappenberger sought to continue the Museum's crack at operational reform and begin fundraising efforts for phase III of renovations. While the staff made substantial progress toward rebranding the SMV as a state-conscious institution, there was still work to be done. The Board also had substantial hurdles to overcome to ensure a stable financial future at Broad Street. The General Assembly remained as skeptical as ever toward increasing the Museum's budget, forcing the staff to continue improving ticket sales. In the meantime, Knappenberger acclimated the Museum Board, Foundation, and staff to the idea of his departure; he planned to embark upon his next career as president of the Adler Planetarium in Chicago.⁸⁹ By 1991, the SMV was engaged in a search for its next director.

In January 1990, the Museum dedicated one of its most iconic fixtures in the Station's rotunda: the Foucault Pendulum.⁹⁰ Renovations from phase II included the relocation of *Crystal World* to exhibit space outside The Universe, making room for the simple swinging mechanism to be hung from the ceiling.⁹¹ The installation illustrated the constant rotation of the Earth by gradually knocking over pegs affixed to the Museum's floor. Around the same time as the pendulum's debut, the SMV opened *About Faces*, a series of "spectacular exhibits demonstrating the range of information communicated by the human face."⁹² The displays "attracted more than 33,000 visitors in its eight-week run."⁹³ Guests visiting Broad Street Station in the month of January also witnessed the premier of *Eye in the Sky*, a planetarium show that "peered into the history of telescopes and the future with the Hubble Space Telescope."⁹⁴ The Museum greeted the 1990s with a variety of activities for visitors, continuing the staff's attempt to bring more Virginians to the Station.

In addition to exhibits, the Museum hosted several successful events that exposed attendees to the science behind their everyday lives and environment. For example, in March, the SMV celebrated Chesapeake Bay Days, welcoming "3,700 people to the museum for a sampling of the sights, sounds and flavors of the bay."⁹⁵ The event highlighted existing conservation efforts and reminded visitors of the precious biodiversity in the estuary. Also in March, the SMV brought together "local officials and area leaders" for Richmond: Year 2000, a meeting "in the rotunda to discuss [the future of] education, transportation, and more" in Virginia.⁹⁶ In April, the Museum continued to sponsor Virginia's Outstanding Scientist and Industrialist Awards.⁹⁷ At its sixth installment, Governor Douglas Wilder presented medals to

five individuals, two of which were executives at Ethyl Corporation; the company that donated \$500,000 to complete The Universe planetarium and space theater.⁹⁸ Leaders in science and industry were not the only ones to receive acknowledgement from the Museum. The SMV held its annual volunteer recognition dinner where the staff "honored its first group of 10-year volunteers."⁹⁹ Broad Street Station also served as the location for the state's geography bee in May 1990.¹⁰⁰ The winner, "Sophia Delano of Warsaw," competed against students from all over the Commonwealth, allowing the Museum to showcase its educational offerings to a diverse group of Virginia families.¹⁰¹

With the arrival of summer, the SMV initiated two significant structural changes that affected its educational outreach. First, the Board of Trustees "voted unanimously to accept the Aviation Museum at Richmond International Airport" in June 1990.¹⁰² After months of deliberation, the SMV agreed that the collection of planes could supplement the Museum's aerospace exhibit. In addition, Chairman Troy believed the acquisition of VAM "further demonstrates that we are more than an edifice on Broad Street—that we are the state Science Museum for the commonwealth."¹⁰³ The SMV hoped to reach a variety of Virginians travelling through the Richmond International Airport with new hands-on programs in the Freedlander Wing hanger.

Second, the Museum debuted Science-by-Van, a "travelling science program [that] present[ed] informal educational experiences" to audiences in "towns and cities throughout the commonwealth."¹⁰⁴ In the same spirit of Trans-Science 1 and 2, Science-by-Van allowed the SMV to visit "schools, fairs, festivals, libraries and special events" beyond Richmond for a fee of no more than \$500.¹⁰⁵ The staff divided the state into three regions and sent teams of two to deliver "one 20-minute all-school assembly performance; over 30 hands-on table top exhibits; 10 classroom workshops accommodating 36 students each; [and] make-it, take-it science toys for each workshop participant."¹⁰⁶ Local teachers could "choose from five different topics" when planning workshops, including Animal Tracks, Dinosaurs, Mirrors, and more.¹⁰⁷ Local newspapers in Chesterton and Lexington covered visits from the SMV's new program to area schools in 1990 and 1991.¹⁰⁸ One fourth grader from Chalkley Elementary School said the visit "was like we were going to the State Fair and riding on the rides."¹⁰⁹ Science-by-Van was made possible when local industries donated two vans to the Museum.¹¹⁰ The fun and interactive program experienced a "strong demand" from local schools and was "presented 50 times" in 1990 alone.¹¹¹

After getting Science-by-Van on the road and overseeing the SMV's acquisition of VAM, Director Knappenberger petitioned the General Assembly to allocate \$3,000,000 for phase III of renovations to Broad Street Station.¹¹² The top priority of the Museum was to "repair and stabilize the historic train sheds," several of which had "been deteriorating since before the state acquired the property in 1976."¹¹³ Knappenberger informed the state that the area was "now…a safety and health hazard."¹¹⁴ The SMV needed funds to facilitate "asbestos removal," the "replacement of broken windows," and other crucial repairs.¹¹⁵ "The minimum work required for the safety and stabilization of the deteriorating structures will not provide a usable, secure space," Knappenberger warned.¹¹⁶ The state needed to eradicate "the retention of moisture within the roof structure, rusting of the structural members and the deterioration of concrete" to effectively "eliminate any hazards to the public, employees, and to the structural integrity of the train sheds."¹¹⁷

In January 1991, the Trustees supported Knappenberger's request by reaching out to state representatives and petitioning for its inclusion in the General Assembly's budget. For example, Carpenter wrote several letters to delegates and approached other statesmen, including the governor, in person about the dire state of the train sheds.¹¹⁸ He argued that "the operating budget of the museum has suffered more than the percentage applied to most agencies."¹¹⁹ While a majority of "cuts have thus far been absorbed by unfilled positions, partly by increased recruiting of volunteers and reduction of maintenance," the Trustees were beginning to consider "what time in the next 6-8 weeks staff would have to be furloughed to prevent a deficit on 30 June."¹²⁰ The Museum could not afford to repair the sheds by itself.

Unfortunately for the SMV, the General Assembly once again refused to appropriate the entirety of Knappenberger's request. The disappointing budget would be the last the director witnessed in his tenure at the Science Museum. Knappenberger completed his final year at Broad Street in 1991. The trustees began their search for the Museum's new director the same year, hoping to find another individual with the same level of enthusiasm and charisma that Knappenberger exuded throughout his 18 years in Richmond. In an advertisement for the position, the Trustees stressed that a successful candidate "must be capable of…dealing with State government, community and business groups"; the Museum's director "serve[d] as

representative of the institution at the state, national and international levels with political and legislative bodies, scientific and academic professionals, business and community leaders, and members of other sister institutions."¹²¹ The Trustees also hoped to hire an individual that could "train and motivate subordinates and measure the performance of his/her staff on a regular basis" while maintaining "sensitivity and commitment to advancing cultural, gender and racial diversity in programming and staffing at all levels of the institution."¹²² To top it off, this person needed to possess "a Ph. D. degree," ideally "in an area of science."¹²³ Knappenberger had set the bar high with his experience before coming to the Museum. The growth of the institution since necessitated an equally qualified candidate to sustain basic levels of operation. Thankfully for the SMV, the Trustees had already worked with one such individual: Walter Witschey.

Conclusion: Walter Witschey is Hired as Director of the Science Museum of Virginia

In a 1998 interview with the *Virginia Review*, Walter Witschey explained that he became director of the SMV "by one of those curious quirks of fate."¹²⁴ After working with Knappenberger to install the record-breaking analemmic sundial in the Museum's parking lot, Witschey told his new friend, "I think you have a wonderful job. If you ever give this job up, give me a phone call."¹²⁵ Witschey remained involved with the Museum through the Foundation until he moved his family to New Orleans to obtain a PhD in Maya Archaeology from Tulane University.¹²⁶ While in school, he became fascinated with "an ongoing program of archaeological field research in Muyil, an ancient Maya site on the Yucatan Peninsula in Mexico."¹²⁷ Once his studies were complete, Witschey submitted his dissertation for review and "got a phone call" from the SMV.¹²⁸ A staff member suggested that Witschey apply for the directorial position and he faxed his resume to Broad Street.¹²⁹ According to the article, "after a nine month wait, and a national search, in 1992 Walter Witschey got the job, and moved his family back" to Virginia.¹³⁰

Witschey returned to the Museum in a challenging economic climate. As Knappenberger quickly learned when requesting funds to restore the train sheds, "Governor Wilder's response to the budget crunch was to cut all unnecessary expenses, or 'niceties, not necessities' as he called them."¹³¹ Witschey would have to work with the Trustees and Foundation Directors to chart a viable financial course forward for the SMV, prioritizing phase III of renovations and the

incorporation of the Virginia Aviation Museum into the Museum's programming. While the state was an important resource for financial assistance, the SMV needed to build more relationships beyond the Virginia Capital. If Witschey hoped to continue Knappenberger's attempt to expand the Museum's outreach, he had to find the right people to run a significant fundraising campaign that fostered lasting partnerships with private donors. This need became all-the-more acute when Witschey revealed his plans to begin "one of [the Museum's] most aggressive outreach programs of its history."¹³²

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

¹⁴ Walter R.T. Witschey, *Letter from Walter R.T. Witschey to Streetcar Fans & Enthusiasts, October 11, 1982*, letter, in Science Museum of Virginia Archives, print (accessed Aug. 12, 2017).

¹⁵ Walter R.T. Witschey, *Letter from Walter R.T. Witschey to Trolley Friends and Enthusiasts, July 6, 1983*, letter, in Science Museum of Virginia Archives, print (accessed Aug. 12, 2017).

¹⁶ Witschey, Walter R. T., interview by Kasey Sease, personal interview, Farmville, August 17, 2016.

¹⁷ D. Rae Carpenter, Jr., *Letter from D. Rae Carpenter, Jr. to Walter R. T. Witschey, June 21, 1983*, letter, in Science Museum of Virginia Archives, print (accessed Aug. 12, 2017); D. Rae Carpenter, Jr., *Letter from D. Rae Carpenter, Jr. to Paul H. Knappenberger, Jr., June 21, 1983*, letter, in Science Museum of Virginia Archives, print (accessed Aug. 10, 2017).

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Carpenter, Jr., Letter from D. Rae Carpenter, Jr. to Paul H. Knappenberger, Jr., June 21, 1983.

²¹ Science Museum of Virginia: Operating, July 30, 1983, handout, in Science Museum of Virginia Archives, print (accessed Aug. 14, 2017).

²² Ibid.

²³ Ibid.

²⁴ Ibid.; *The Science Museum of Virginia, Richmond, Report on Audit for the Fiscal Year Ended June 30, 1983,* report, in Science Museum of Virginia Archives, print (accessed Aug. 15, 2017).

²⁵ Ibid.

²⁶ Ibid.

²⁷ Driscoll, A Brief History of Broad Street Station and the Science Museum of Virginia, 1992, pg. 7.

28 Ibid.

²⁹ Ibid.

³⁰ Ibid.

³¹ Mary Ellen Stumpf, *Memorandum from Mary Ellen Stumpf to Paul Knappenberger, May 31, 1984*, memorandum, in Science Museum of Virginia Archives, print (accessed Aug. 8, 2017).

³² Driscoll, A Brief History of Broad Street Station and the Science Museum of Virginia, 1992, pg. 8.

³³ Ibid.

³⁴ John D. Clarke, "Richmond Philanthropist Barbara Thalhimer Dies," *Richmond Times-Dispatch*, April 29, 2009, accessed August 30, 2017, http://www.richmond.com/entertainment/richmond-philanthropist-barbara-thalhimer-dies/article_b1d67673-69c4-593b-a69c-32aa1684a7c1.html.

³⁵ "A Guide to the William Blum Thalhimer, Jr. Corporate and Family Archives, 1862-1992," *vahistorical.org*, accessed Aug. 30, 2017, http://www.vahistorical.org/collections-and-resources/how-we-can-help-your-research/researcher-resources/finding-aids/thalhimer.

³⁶ Ibid.

³⁷ Clarke, "Richmond Philanthropist Barbara Thalhimer Dies."

¹ Charles Slack, "A More Visible Science Museum Needed, Study Says," newspaper clipping, in Science Museum of Virginia Archives, print (accessed Aug. 30, 2017).

² "Richmond Streetcar No. 192 Starts its Trip Here," newspaper clipping, in Science Museum of Virginia Archives, print (accessed Aug. 30, 2017).

³ Walter R.T. Witschey, *Streetcar Feasibility Study, June 19, 1982*, report, in Science Museum of Virginia Archives, print (accessed Aug. 12, 2017).

⁸ Make it Happen! Update, August 17, 1982, mailing, in Science Museum of Virginia Archives, print (accessed Aug. 12, 2017).

⁴¹ Charles Slack, "Crossroads: Science Museum Seeks a Vision for the Future," *Richmond Times-Dispatch* (Richmond, VA), June 12, 1988.

⁴² Ibid.

⁴³ Phase II, Science Museum of Virginia, Supporting Information, July 18, 1984, handout, in Science Museum of Virginia Archives, print (accessed Aug. 7, 2017).

44 Ibid.

⁴⁵ Slack, "Crossroads: Science Museum Seeks a Vision for the Future."

⁴⁶ Ibid.

⁴⁷ Ibid

⁴⁸ Charles Slack, "A More Visible Science Museum Needed, Study Says."

49 Ibid.

⁵⁰ Ibid.

⁵¹ Ibid.

- ⁵³ Ibid.
- ⁵⁴ Ibid.

55 Ibid.

⁵⁶ *ElectriWorks Project Report, July 20, 1989*, report, in Science Museum of Virginia Archives, print (accessed Aug. 20, 2017).

⁵⁷ Ibid.

58 Ibid.

59 Ibid.

60 Ibid.

⁶¹ Annual Report, 1989-1990, in Science Museum of Virginia Archives, print (accessed Aug. 30, 2017), pg. 13.

⁶² Note: the exact number of attendees to the *Beaver* event is recorded as 3,900 in the Annual Report for 1989-1990, Ibid.

⁶³ Ibid., pg. 5.

⁶⁴ Ibid.

⁶⁵ Ibid., pg. 9.

⁶⁶ Ibid.

⁶⁷ Ibid., pg. 6.

68 Ibid.

69 Ibid.

- 70 Ibid.
- ⁷¹ Ibid., pg. 9.

72 Ibid.

73 Ibid.

- ⁷⁴ *Educational Programs Descriptions*, word document, in Science Museum of Virginia Archives, print (accessed Aug. 18, 2017).
- ⁷⁵ Ibid.
- ⁷⁶ Andrew Petkofsky, "Talks May Lead to 'Marriage' of Museums," *Richmond News Leader* (Richmond, VA), June 20, 1989.

77 Ibid.

⁷⁸ Thalhimer, Robert B., interview by Kasey Sease, personal interview, Richmond, September 16, 2016; Petkofsky, "Talks May Lead to 'Marriage' of Museums."

⁷⁹ Ibid.

- ⁸⁰ Ibid.; Neil November, "Merger Update," Virginia Eagles 12 (1989): 3.
- ⁸¹ Ibid.

⁸² Ibid.

83 Petkofsky, "Talks May Lead to 'Marriage' of Museums."

⁸⁴ Ibid.

³⁸ Virginia's Outstanding Scientist and Industrialist, April 23, 1990, pamphlet, in Science Museum of Virginia Archives, print (accessed Aug. 11, 2017).

³⁹ Ibid.

⁴⁰ Exhibit Committee Minutes, December 15, 1983, minutes, in Science Museum of Virginia Archives, print (accessed Aug. 7, 2017).

⁵² Driscoll, A Brief History of Broad Street Station and the Science Museum of Virginia, 1992, pg. 8-9.

⁸⁹ "Adler Planetarium President Dr. Paul H. Knappenberger, Jr. Announces Plans to Retire," *prnewswire.com*, March 7, 2012, accessed August 31, 2017, http://www.prnewswire.com/news-releases/adler-planetarium-president-dr-paul-h-knappenberger-jr-announces-plans-to-retire-141791683.html.

- ⁹⁰ Annual Report, 1989-90, pg. 13.
- ⁹¹ Ibid.
- 92 Ibid.
- 93 Ibid.
- ⁹⁴ Ibid.
- ⁹⁵ Ibid. pg. 15.
- ⁹⁶ Ibid. pg. 17.
- ⁹⁷ Ibid.

⁹⁸ Virginia's Outstanding Scientist and Industrialist, 1990, pamphlet, in Science Museum of Virginia Archives, print (accessed Aug. 18, 2017).

- ⁹⁹ Annual Report, 1989-90, pg. 17.
- ¹⁰⁰ Ibid., pg. 19.
- ¹⁰¹ Ibid.

¹⁰² Science Museum Approves Aviation Museum Acquisition, June 21, 1990, press release, in Science Museum of Virginia Archives, print (accessed Aug. 20, 2017).

¹⁰³ Ibid.

¹⁰⁴ Experience Science-By-Van, pamphlet, in Science Museum of Virginia Archives, print (accessed Aug. 20, 2017).
 ¹⁰⁵ Ibid.

106 Ibid.

107 Ibid.

¹⁰⁸ John C. Boyle, "Science Program Exciting for Kids," *Chesterfield Gazette* (Chesterfield, VA), October 4, 1990; "Experimenting," *News-Gazette* (Lexington, VA), January 30, 1991.

¹⁰⁹ Boyle, "Science Program Exciting for Kids."

¹¹⁰ D. Rae Carpenter, Jr., *Letter from D. Rae Carpenter, Jr. to Frank W. Nolan, January 31, 1991*, letter, in Science Museum of Virginia Archives, print (accessed Aug. 20, 2017).

¹¹¹ Boyle, "Science Program Exciting for Kids."

¹¹² Amendment Brief Submission for 1991: The Science Museum of Virginia, 1990, amendment request, in Science Museum of Virginia Archives, print (accessed Aug. 20, 2017).

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

117 Ibid.

¹¹⁸ D. Rae Carpenter, Jr., *Letter from D. Rae Carpenter, Jr. to Paul H. Knappenberger, Jr., January 28, 1991*, letter, in Science Museum of Virginia Archives, print (accessed Aug. 20, 2017).

¹¹⁹ D. Rae Carpenter, Jr., *Letter from D. Rae Carpenter, Jr. to Frank W. Nolan, January 31, 1991*, letter, in Science Museum of Virginia Archives, print (accessed Aug. 20, 2017).

¹²⁰ Ibid.

¹²¹ Science Museum of Virginia: Position Specification, Director, 1991, job advertisement, in Science Museum of Virginia Archives, print (accessed Aug. 20, 2017).

¹²² Ibid.

123 Ibid.

¹²⁴ Alyson Lindsey Taylor-White, "The Wonderful World of Walter Witschey: The Science Museum of Virginia— Where Fun is Serious Business," *Virginia Review* 76 (1998): pg. 14-15.

¹²⁵ Ibid.

126 Ibid.

¹²⁷ Ibid.

¹²⁸ Ibid.; Witschey, Walter R. T., interview by Kasey Sease, personal interview, Farmville, August 17, 2016.

⁸⁵ Annual Report, 1989-1990, pg. 5.

 ⁸⁶ Ann Holiday, "Science Museum Founder Honored," *Richmond News Leader* (Richmond, VA), August 12, 1989.
 ⁸⁷ Science Museum Founder is Honored, August 11, 1989, press release, in Science Museum of Virginia Archives, print (accessed Aug. 20, 2017).

⁸⁸ Ibid.

¹²⁹ Ibid.
¹³⁰ Taylor-White, "The Wonderful World of Walter Witschey," pg. 14-15.
¹³¹ Ibid., pg. 15.
¹³² Ibid.