



# APPENDIX E: PRESENCE IN THE GREATER WASHINGTON, D.C., AREA AND ROANOKE

# THE GREATER WASHINGTON, D.C., AREA



## PRESENCE IN THE GREATER WASHINGTON, D.C., AREA

Virginia Tech has pursued land-grant inspired engagement in the greater Washington, D.C., area since the philanthropist Paul Mellon donated the 420-acre Middleburg farm to Virginia Tech in 1949 for equine treatment and research. The inaugural graduate program in Urban Affairs and Planning began admitting students in 1963, and a graduate studies center opened in 1969. Over the next five decades, multiple graduate degree and research programs were initiated independently in the greater Washington, D.C., area by departments, colleges, institutes, and centers, and the university consolidated programs in various ways, leading to the establishment of three primary urban locations inside the Beltway: in Alexandria, Arlington and Falls Church. Though currently managed independently, the connected sites across the footprint represent land-grant inspired engagement, education, and research with a broad range of partners.

The greater Washington, D.C., area is both a strategic resource and key location for advancing Virginia Tech as a thought leader and global land grant in the spirit of Beyond Boundaries. It is the capital of the United States, a global gateway, an expanding technology corridor, and one of the fastest growing megaregions in the country. Yet it is an area where economic opportunity and advancement is offset by a broad range of disparities. Conditions for wellness vary dramatically across the region, with tremendous contrasts in opportunity for education, access to transportation, healthy food, jobs, environmental conditions, secure housing, and more.

Virginia Tech is well placed to engage and address the challenges of regional disparities in the location, as well as to support innovation, growth and development that could foster a broader range of economic opportunities and lift the human condition through a focus on sectors critical to the region like technology, data science, business innovation, artificial intelligence, policy, education, and cybersecurity. As a strategic resource for Virginia Tech, these locations in the greater Washington, D.C., area support multiple experiential learning programs. Fifteen percent of the university's sponsored research is generated by greater Washington, D.C.-based faculty. A similar percentage of graduate students receive their degrees in the region, and university partnerships with local governments, organizations, and businesses thrive.

This arc of land-grant-inspired engagement, learning, and discovery in the area is now set to accelerate with the commonwealth and local governments' establishment of National Landing, a newly branded geographic location and innovation district, anchored by Amazon's HQ2 and Virginia Tech's Innovation Campus. The \$1B Innovation Campus will be a global center of technology excellence and talent production, nearly doubling Tech's regional graduate programming, sparking research and partnerships, and igniting the region's innovation economy. The Innovation Campus will build on the university's base to expand visibility, increase scale and resources, and propel Virginia Tech forward as a global land-grant university and thought leader.

Driven by its land-grant mission, Virginia Tech and Virginia Cooperative Extension maintains a presence in every Virginia County. This presence includes fourteen Agricultural Research & Extension Centers, several 4H Centers, and Graduate Centers; totaling approximately 130 locations across the commonwealth. However, only in Blacksburg and the greater Washington, D.C., area does Virginia Tech offer degree programs and research that span the full range of the university with locally based faculty and staff.

Virginia Tech's presence in the area dates from the late 1940's with the acquisition of the Middleburg farm. The first graduate program in the region, in Urban Affairs and Planning, began in 1963, and the university has operated a Graduate Center in the region since 1969.

Virginia Tech's greater Washington, D.C., area presence extends across three principal locations inside the Capital Beltway region to include the City of Alexandria, Arlington County, and the City of Falls Church. As of spring 2019, each location is a State Council of Higher Education for Virginia (SCHEV)-approved off-campus instructional site for Virginia Tech, and each has resident faculty, staff, and graduate students. These locations are separated by urban infrastructure challenges but each incorporate Metro access. In addition to the three principal locations, Virginia Tech also operates facilities in Middleburg, Leesburg, and Manassas.

Programming across these locations has significantly transformed since Virginia Tech's initial presence in the area. As a result of varied development and regional separation, programs vary by location. The Alexandria location is solely programs within Virginia Tech's College of Architecture and Urban Studies. Housed in the historic buildings of Old Town Alexandria, this location includes graduate programs in Architecture and Design as well as the School of Public and International Affairs, until later 2019 when the School of Public and International Affairs will relocate to the Arlington location.

The Arlington location operates approximately fifteen university programs across four colleges and four research institutes and maintains most of the regions sponsored research as well as administrative functions for the region. To manage the number of programs, the Arlington location is housed in a Virginia Tech branded 144,000 square foot research center. Research at the Arlington location focuses primarily on computationally intensive areas including cyber security, data analytics, computational social sciences, transportation technologies, energy, and health information technology.

The Northern Virginia Center in Falls Church is largely focused on graduate instruction but has added a significant research portfolio over the last two decades. It houses the College of Business's MBA programs and programs in the College of Liberal Arts and Human Sciences and the College of Engineering, as well as the ThinkABit lab, a STEM-focused K-12 outreach effort in partnership with QualComm.

In addition to three primary locations in Alexandria, Arlington, and Falls Church; Virginia Tech maintains several operations across the broader region. Civil & Environmental Engineering operates the Occoquan Watershed Research Lab in Manassas, focused on water quality and water reuse. Outreach and Engagement, particularly the Language & Culture Institute, has a significant presence currently in leased space in Merrifield but will move back to the Northern Virginia Center in 2019. Cooperative Extension has locations in each county in Northern Virginia, and the Ag Experiment Station operates the Middleburg Agricultural Research and Extension Center, focused on equine research. The College of Veterinary Medicine operates its Leesburg Center, also focused on equine systems.

University presence is bolstered by approximately 160 faculty including approximately 60 tenure-track faculty across seven colleges and five Research Institutes. These faculty account for approximately fifteen percent of Virginia Tech's sponsored research activity awards. Approximately fifteen percent of Virginia Tech's graduate students are physically based in the greater Washington, D.C., area or enrolled in online graduate programs

based in the region. As a result, Virginia Tech conducts graduation ceremonies each spring in this area are the only sanctioned ceremony outside of Blacksburg. These achievements and future efforts in the area are the primary focus of President Sands' executive advisory group, the National Capital Region Leadership Council.

## **STRATEGIC OPPORTUNITY AND BINARY STAR**

The greater Washington, D.C., area facilitates and amplifies Virginia Tech's strategic reach for excellence through the region's financial prosperity, workforce potential, and international collaboration. The region is ranked #5 in US regional GDP; hosts 15 Fortune 500 headquarters in addition to numerous federal agency headquarters such as the National Science Foundation, Defense Advanced Research Projects Agency, National Institutes of Health among others; and is ranked #4 nationally in venture capital. The financial resources generated by these opportunities can fund innovative research, retain inspired faculty, and promote improved university infrastructure across units. Positioning Virginia Tech across the greater Washington, D.C., area leverages exceptional prospective students and workforce. The surrounding area is home to nationally ranked public schools and approximately a quarter of local residents work in a STEM related field. In addition, there are an estimated 55,000 Virginia Tech alumni residing in the region. Each of these groups are strategic assets to the university. Finally, the proximity of surrounding 176 international embassies facilitates connections beyond the commonwealth to engage diverse communities and solve global problems.

Every urban-based innovation economy is built around a core of strong academic institutions actively partnering in its home. However, the greater Washington, D.C., area, particularly northern Virginia, lacks that university base. Regional studies (e.g., [Techonomy report](#)) have recognized that the region needs a greater university presence to attract talent and promote economic growth. Virginia Tech's strengths complement critical regional demand. Continued development of transdisciplinary communities through destination areas (in integrated security, critical intelligent infrastructure and human centered design; data and decisions; global systems science; and adaptive brain and behavior) and strategic growth areas (creativity and innovation; policy; equity and social disparity in the human condition; economic and sustainable materials) promote interdisciplinary, problem-focused research and curriculum, and align with many of the needs and priorities of the greater Washington, D.C., area, such as science and technology, business and innovation, data-driven decision making and policy, integrated security, and intelligent infrastructure.

The relationship between the greater Washington, D.C., area and Virginia Tech's main Blacksburg campus challenges Virginia Tech to respond to dynamic social groups and regional variation that translates to global discovery. Significant population density differences, cultural and ethnic diversity, regional wealth disparity, technology ecosystems, and urban versus rural living labs position Virginia Tech to innovate across multifaceted environments.

Strategically responding to the unique challenges of the area positions Virginia Tech to connect deeper with broader communities in the commonwealth. The university Master Plan and on-going strategic plan recognizes Virginia Tech's coordinated campuses in Blacksburg, Roanoke, and the greater Washington, D.C., area. The university executes a strategy in each location by coordinating aspects of its physical presence, its programming, and its relationship to the local community.

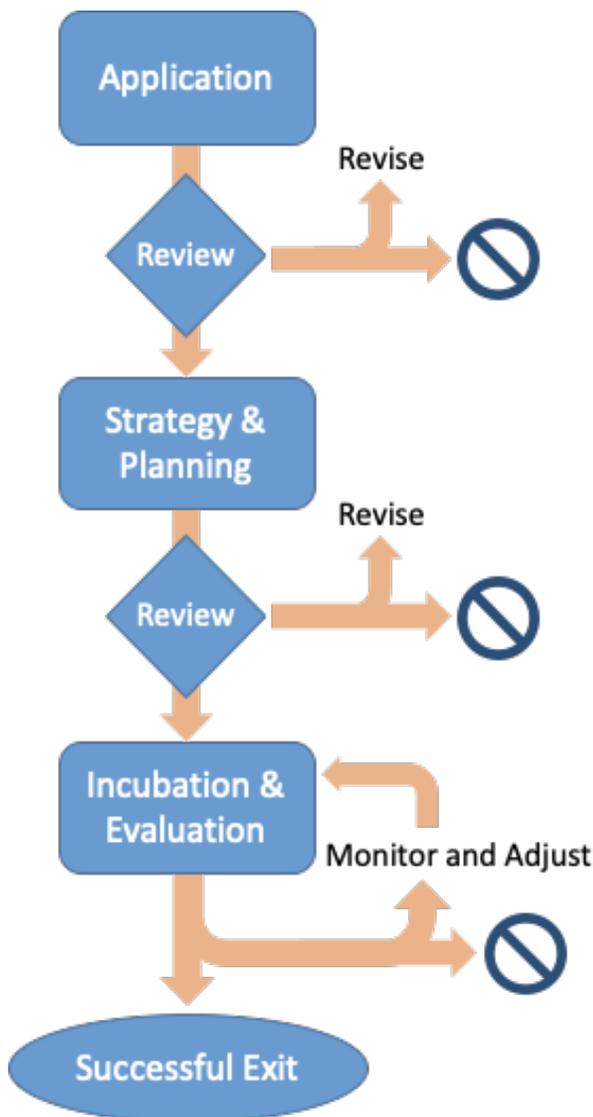
At the university level, the institution's strategy in the region is to grow; be it enrollments, research activity and funding, footprint and presence, as well as deliver differentiating, transdisciplinary programs, and to provide thought leadership toward the future of the region. At the Academic Unit level, the strategy is adaptive, reading signals of change, identifying opportunities quickly, effectively mobilizing and leveraging internal and external stakeholders to deliver competitive, well positioned programs. Regionally, the strategy is processing supportive resources that enable academic units to successfully compete in the region, while implementing the university's plans for growth and differentiation.

Virginia Tech's presence in the greater Washington, D.C., area is critical to achieving its land-grant mission to advancing the commonwealth and extending that mission to our global community. In response to this potential, Virginia Tech has ambitious goals to strengthen its existing programs in the area and activate new ways of thinking when it comes to academia, innovation, and creation.

Key points of this renewed commitment to Virginia Tech's presence in the greater Washington, D.C., area are the Academic Incubator/Accelerator and Innovation Campus.

## ACADEMIC INCUBATOR/ACCELERATOR (AI/A)

The Academic Incubator/Accelerator provides the organizational structure and processes to help faculty modify existing programs or develop and launch new academic programs tailored to the greater Washington, D.C., area, enabling Virginia Tech to deliver competitive, transdisciplinary, market-driven, revenue-generating, partnership-driven research and instruction programs in the region. The AI/A incorporates three phases (see Figure 1) to link and address specific bottlenecks in existing processes and facilitate progress through university governance, integrating review, planning, investment, assessment, and evaluation to promote success and mitigate risk.



1. The Application phase uses a call for concept papers or proposals from individuals or faculty teams and uses a transparent review process with comment by professional staff. Proposals may be returned for revision, redirected to another process, rejected, or accepted into the second phase.

2. The Strategy and Planning phase is focused on internal and external analysis, development and evaluation of overall program options, including the development of an implementation plan with built-in evaluation benchmarks and decision points. This concludes with a comprehensive review to determine if the program proceeds to the third phase.

3. The Incubation and Evaluation phase, implements the plan designed in phase two, providing investment, as needed, to launch new programs or rebrand existing ones. Programs and initiatives that meet their benchmarks ultimately exit the AI/A to their university home (e.g., college, or department). Programs that cannot adapt to successfully meet agreed upon benchmarks are terminated.

Figure 1: Academic Incubator/Accelerator Phases

Fundamental Resources to the Academic Incubator/Accelerator are:

- Permanent professional staff with expertise in key areas like market analysis, curriculum development, and finance, to work with proposing faculty on developing concepts into well-structured plans and to assist in proposal and plan evaluation.
- A business model that provides seed funding and recovers funds through revenue sharing over time.
- Strong integration with administrative units and coordination across university processes.
- An adaptive process that monitors, evaluates, and adjusts program plans to respond to changes in the market or to other unanticipated events.
- Integrated review, monitoring, evaluation, and adjustment throughout by both a representative review committee and an oversight body representing senior university leadership.

The AI/A establishes an ongoing way to ensure that Virginia Tech's greater Washington, D.C., area-based academic programs are differentiating for the university, well positioned in and responsive to the regional competitive landscape, revenue-generating, and an overall asset for students, faculty, staff, and partners.

# VIRGINIA TECH INNOVATION CAMPUS



## VIRGINIA TECH INNOVATION CAMPUS

The Virginia Tech Innovation Campus is among the university's top strategic priorities and will expand the university's graduate and research programs for the digital age while also expanding the university's hub in the greater Washington, D.C., area. The campus will deliver on a bold vision to serve as a leading magnet for high-tech talent and innovation and increase regional and national competitiveness in the high-tech sector. Built from the ground up, the campus in Alexandria will extend from our foundation as the commonwealth's leading research land-grant university, our significant presence across Virginia, and our role as one of the largest and most highly-regarded producers of STEM degrees in the nation. Arising out of a historic higher education package that Virginia included in its Amazon HQ2 proposal, the Innovation Campus will complement significant expansion in Blacksburg to impart generational benefits, support a full range of partnerships with leading public and private entities, and deliver on our mission to transform the regional and state economic ecosystem.

### BACKGROUND

While the Amazon proposal was an important catalyst that helped to inspire the commonwealth's higher education package, the concept of the Innovation Campus is not new. The campus aligns with Virginia Tech's stated intentions and strategic investments to expand our presence in Northern Virginia, and the campus complements activities in Blacksburg and throughout the commonwealth.

When asked, Virginia Tech worked with Virginia officials for more than a year to craft a response to the Amazon HQ2 Request for Proposal, which ultimately included the vision for the \$1 billion Virginia Tech Innovation Campus, as well as expansion in Blacksburg—both of which are designed to support doubling the tech talent pipeline in the state and diversify the innovation economy.

The Innovation Campus will be a global center of technology excellence and talent production, support graduate education, attract top-tier faculty, spark research and partnerships, and ignite the region's innovation economy. With leading programs in computer science and computer engineering and specializations in domains such as technology and policy, human-machine interface, machine learning, and artificial intelligence, the Innovation Campus will deliver key programs for the digital age.

Top-tier programs and research foci will be designed to keep pace with market needs and the rapidly advancing high-tech sector. Globally-recognized faculty will collaborate with industry and public-sector partners to offer innovative programs that anticipate and meet the needs of the professions of the future, deliver research to advance the human condition, encourage startups, and create enduring foundations for economic and global impact at the frontier of public and private innovation.

The campus's design features, spaces, and location in Alexandria will position the campus to serve as a hub for tech talent. The Innovation Campus will fuse academics with integrated spaces for partners of all types—companies, startups, and public.

The plans for the Innovation Campus align with the university's long-standing roadmap for growing its presence in Northern Virginia, where Virginia Tech boasts seven sites and a 50-year history of educational

excellence. Nearly 60,000 alumni live in the region, and Virginia Tech maintains seven facilities and operates programs in Old Town Alexandria, Arlington, Fairfax, Falls Church, Leesburg, Manassas, and Middleburg. Moreover, the commonwealth’s higher education package allows for a significant expansion of undergraduate enrollment in computer science and software engineering on the Blacksburg campus.

## **BUILDING ON THE INNOVATION CAMPUS VALUE PROPOSITION**

The Innovation Campus will be a game-changer for the region, the high-tech sector, and Virginia Tech. The campus will become a reality during perhaps the most important time in human history as the fourth industrial revolution unfolds and the promise and peril of advanced digital technologies are realized. Not only will the world be undergoing significant technological disruption, but so too will the region and the commonwealth, as Amazon’s HQ2 and other entities grow and reach scale in proximity to the nation’s capital.

The Innovation Campus will take shape based on a number of value drivers, including:

- **A UNIQUE PLACE:** Our history in Northern Virginia and our location in proximity to Amazon’s HQ2 and the federal government in Washington, D.C., offer unprecedented opportunity
- **VIRGINIA TECH’S ENDURING FOUNDATIONS:** Our long-standing strengths as Virginia’s research land-grant institution—combined with excellence in STEM, a track record of collaboration, a presence in both urban and rural communities, and our ability to meet market needs—position us to transform the region
- **HUMAN-CENTERED APPROACH:** Designed to move beyond a focus on technology alone and the boundaries of traditional academics, the campus will allow us to deliver a transdisciplinary, human-centered approach to address challenges of the digital age at the human-computing frontier
- **FOCUS ON BROAD THEMES:** By coalescing around big ideas and broad themes to bring disparate competencies and ideas to the complex and interrelated opportunities and challenges of the digital age, we will solve problems that truly matter

## **FEATURES AND SPECIFICS**

The new campus will serve as a main feature of an Innovation District with a myriad of other organizations, corporate entities, amenities, arts, and more, which together will be part of a modern, urban, and vibrant ecosystem. At the Innovation Campus, we envision:

- A complete campus (versus a single building) that includes an academic building, innovation center, and residential accommodations
- Delivery of graduate-level education and research with 750 master’s degrees at scale
- Focus on computer science and computer engineering, as well as complementary programs at the interface of humans and computing
- Specializations offered in high-demand areas, including data sciences, analytics and collective decisions; security and the Internet of Things; and technology and policy
- Robust doctoral and undergraduate opportunities

At the Virginia Tech Innovation Campus, we will initially hire up to 50 tenure-line and research faculty. The top-tier faculty and industry and public-sector collaborators will lead the world in cutting-edge, technology-based research areas such as machine learning and artificial intelligence.

The campus' proximity to the nation's global center of power and influence will allow Virginia Tech to collaborate with leading businesses, K-12 schools, community colleges, academic peers, industry partners, and a vibrant alumni network to ensure a robust pipeline of technology talent for generations to come.

Moving forward, we will continue to engage with partners in the state, the Alexandria community, and others throughout the region, while forging new partnerships across public and private sectors.

While the Innovation Campus is a focal point for the university and the commonwealth's higher education package, the expansion in Blacksburg is critically important and complementary to our efforts in Northern Virginia.

In Blacksburg, we envision:

- Significant enrollment increase, with 2,000 additional undergraduates
- Computer science and software engineering focus
- 140-plus new faculty positions
- Capital project support

The Innovation Campus will serve as a platform for growth and opportunity in complementary domains. Additionally, Virginia Tech will ensure that every student takes classes in a number of fields, across different colleges. Hiring will reflect that growth across disciplines and departments. In particular, we expect the College of Liberal Arts and Human Sciences and the College of Science to add faculty to support teaching, research, and scholarship in English, chemistry, physics, and other core domains.

## LOCATION

Located in Alexandria near U.S. Route 1 in National Landing, the Innovation Campus is a first-of-its-kind effort for Virginia and the Washington, D.C., region. The 1 million-square-foot campus will offer a unique mix of academic and research space, co-located with business and industry partners where students and faculty live and work. The campus will be a collaborative magnet for leading tech talent, research, and education. It will include:

- ~300,000 square feet of academic space and cutting-edge R&D facilities
- ~250,000 square feet of partner space dedicated to startups and corporate facilities;
- ~350,000 square feet of housing space for students and faculty
- ~100,000 square feet of retail and support spaces

## TIMELINE

Planning and preparation is under way as we create programming, design curriculum, and begin recruiting. The first master's degree class of the Innovation Campus will enroll in the fall 2020 semester in start-up space in Alexandria. During 2019, we will honor our commitment to the state to immediately expand the tech talent pipeline and increase graduate enrollment in existing computer science programs at the university's Falls Church site. An Innovation Campus Fellows program will be offered in fall 2019 to engage a small number of selected students as ambassadors during an important time in the history of the campus.

President Tim Sands will retain an executive search firm in spring 2019 to assist in hiring of a world-class leader to shape the future of the Innovation Campus.

While we are moving with urgency, we recognize that the Innovation Campus and Blacksburg expansion will unfold over a number of years, framed as follows:

- Planning: 1 year
- Building: 2-5 years
- Scaling: 10 years
- Propelling: the next 100 years

## BLENDING RURAL AND URBAN STRENGTHS

The Innovation Campus is the next step in the evolution of Virginia Tech as a premier institution for learning and research for all students and faculty. The campus will inspire innovation, not only in terms of research and education, but also in the very approach to higher education—one purposefully designed to deliver specific workforce, societal, and economic benefits.

As the commonwealth's land-grant research university, Virginia Tech will be extending its strong roots in Blacksburg, where it has the space and facilities to conduct cutting-edge research in all areas—from dairy science to creative writing to nuclear engineering—to the state's urban center. And as programs in Northern Virginia grow, the university will boast a rural-and-urban balance that places us at the forefront of a sustainable higher-education model into the 21st century.

On the global stage and in the heart of the nation's capital, Virginia Tech will be positioned to advance diversity and inclusion goals, enrich the experience of students in all locations, and prepare graduates for today's global and diverse workplace.

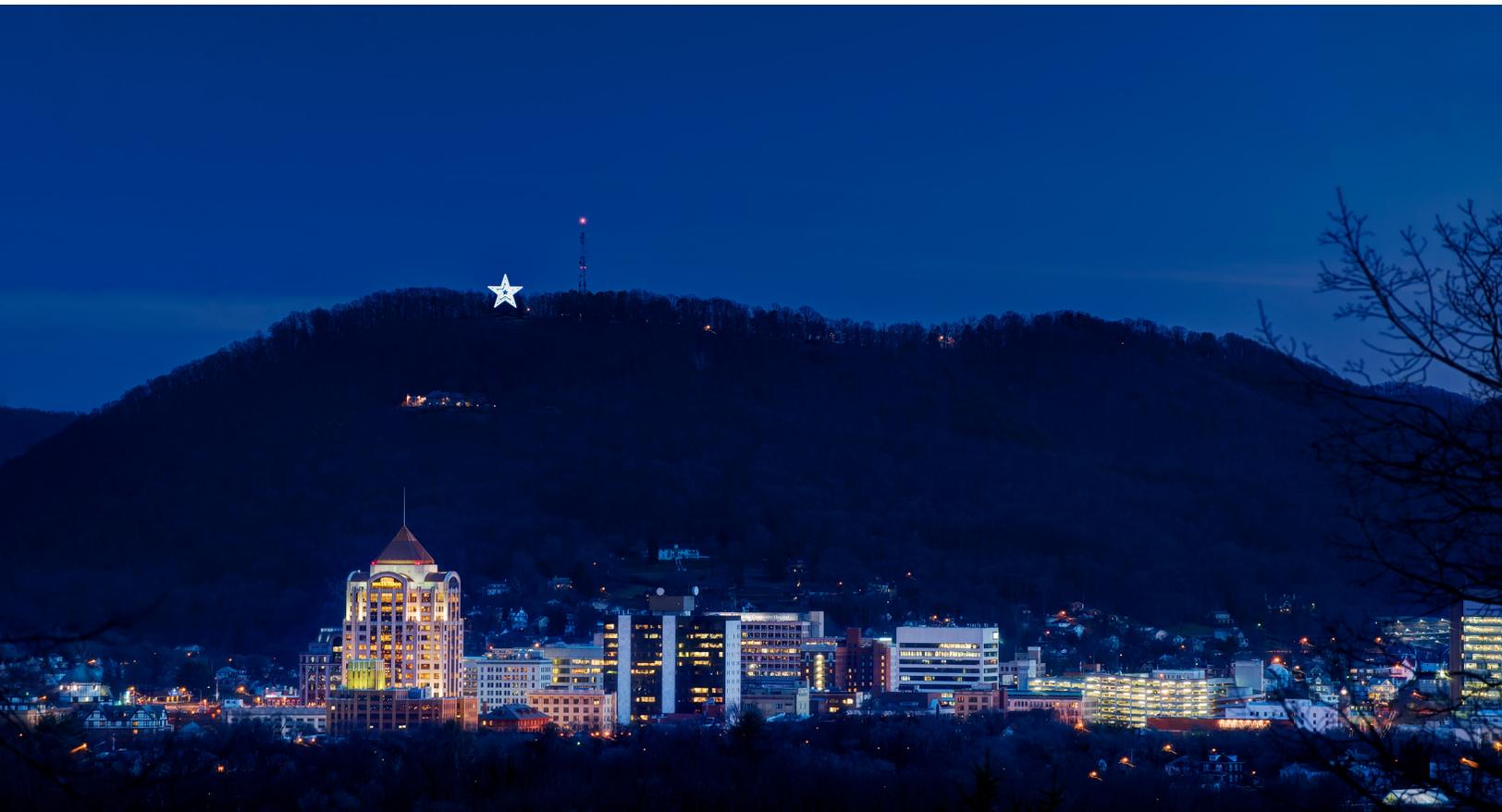
The added benefit of an increased urban presence to faculty in areas outside of computer science is unbounded. The property development on the campus will serve as a thriving hub for students, faculty, and staff to live, work, and play and catalyze creativity and innovation. Faculty from Blacksburg will be strongly encouraged to explore the benefits of the new campus. As we link Virginia Tech locations, faculty will be better equipped to pursue discovery and research in both urban environments and rural environments and to apply our findings in one environment to the other.

As a number of Virginia Tech research institutes have discovered, tremendous benefits arise in blending rural and urban mindsets when solving problems. The blend offers a broader perspective and a more comprehensive solution to any societal problem, from coastal mitigation to public health, from transportation to human-centered infrastructure. A stronger Virginia Tech presence in the D.C. area, with a more recognizable institutional brand around the globe, will improve our ability to attract world-class faculty, staff, and students to our sites in every corner of the commonwealth.

For nearly 150 years, Virginia Tech has led technological breakthroughs, created long-lasting industry partnerships, and planted deep roots throughout the commonwealth. We are uniquely committed to teaching and learning, research and discovery, and outreach, engagement, and service, all in the name of our motto, *Ut Prosim* (That I May Serve).

The Innovation Campus is a natural—and thrilling—outcome of all that we hold true about Virginia Tech.

# PRESENCE IN ROANOKE



## PRESENCE IN ROANOKE

### VIRGINIA TECH CARILION ACADEMIC HEALTH CENTER

Virginia Tech's presence in Roanoke including the Virginia Tech Carilion School of Medicine and Fralin Biomedical Research Institute at Virginia Tech Carilion (previously known as the Virginia Tech Carilion Research Institute) combines the university's on-going excellence in academic health science and comprehensive biomedical research capacity to respond to complex problems of the commonwealth and the world. Virginia Tech Carilion (VTC) refers to the extensive partnership between Virginia Tech and private health care provider Carilion Clinic, as well as the collaborative relationship between the Virginia Tech Carilion School of Medicine and the newly renamed Fralin Biomedical Research Institute (formerly Virginia Tech Carilion Research Institute). The continued success of Virginia Tech and Carilion Clinic's partnership embodies the research to market mind-set necessary to not only foster innovative 21st century research but also apply that research to the community and actualize social biomedical impact.

The 2007 announcement and 2010 creation of the Virginia Tech Carilion School of Medicine and Research Institute was a complementary private and public long-term collaboration between the independent medical school and Virginia Tech Carilion Research Institute. This partnership was amplified in 2018 when the medical school became Virginia Tech's ninth college to facilitate the academic health center's existing emphasis between practice and research. Virginia Tech's pursuit of biomedical innovation and application will incorporate traditionally siloed disciplines of research and practice within living-learning educational environments and enable students to put their research into practice and streamline their capacity for bench to bedside healthcare.

The Roanoke campus is comprised of a variety of shared administrative, medical, and research space between Virginia Tech and Carilion Clinic. Continued collaboration between these partners and resulting growth in research projects and funding have necessitated exponential growth of the Roanoke campus. As a result, in 2016 Virginia Tech announced it would construct a more than 100,000 square-foot facility for medical and research functions through joint contributions of \$46.7 million in state funding and \$21 million in matched funds from the university and Carilion Clinic. This expansion and associated improvements will nearly double the previous campus footprint. As the social application of biomedical research, technology, and implementation continues to change, the Roanoke campus will continuously evaluate and respond to future infrastructure needs including connectivity improvement, shared data access, state-of-the-art technologies and equipment, and future capital projects.

#### *Virginia Tech Carilion School of Medicine*

The Virginia Tech Carilion School of Medicine set out to introduce physicians and clinicians in-training with transdisciplinary experiences grounded in foundational learning themes such as medical knowledge, patient care, and professionalism. Beyond this foundation, the Virginia Tech Carilion School of Medicine ensures students strengthen their education through a novel curriculum including bioethics, quality care and safety, use of clinical guidelines, and research implications. As a result, students are better prepared to apply their training to real-world situations and provide personal care.

### *Fralin Biomedical Research Institute at Virginia Tech Carilion*

Fralin Biomedical Research Institute at Virginia Tech Carilion (previously Virginia Tech Carilion Research Institute) houses the efforts of almost thirty research teams in biological, behavioral, computational, and engineering disciplines working towards health and disease challenges. Of note, the primarily biomedical research at the institute generates nearly \$100 million in extramural research grant funding, most often from the National Institutes of Health. Previously known as the Virginia Tech Carilion Research Institute, the institute was renamed in 2018 to honor the \$50 million commitment by Heywood Fralin, Cynthia Fralin, and the Horace G. Fralin Charitable Trust.

### **NEXT STEPS**

Virginia Tech's presence in Roanoke activates biomedical research and care across the region. It will continue to pursue commercialization from lab to application and ways to incentivize purpose-built partnerships. Higher-education partnerships and state-funding like the iTHRIV initiative will continue to amplify the university's reach across the commonwealth and foster translational research into practice for effective physicians and research teams. The academic health center will remain dedicated to its diversity and inclusion commitments across all programs as exemplified by the Virginia Tech Carilion's 2016 and 2018 INSIGHT Into Diversity's HEED awards. Faculty, staff, and students at the academic health center will utilize experiential learning opportunities to build on human-centered projects that foster deeper connections and promote retention. Finally, the academic health center will continue its success in philanthropic partnerships that result in improved facilities, connectivity, and ability to serve students capable of solving complex problems for the future.