

BOARD OF VISITORS INFORMATION SESSION MINUTES

November 13, 2022

An information session (open session) for the Board of Visitors was held on Tuesday, August 23, 2022, at 9:30 a.m. at the Virginia Tech Center at 700 Tech Center Parkway, Suite 305, Newport News, Virginia 23606. There was no public comment period, and the meeting was livestreamed on YouTube for the public.

Board Members Present

Letitia Long (Rector)
Ed Baine (Vice Rector)
Shelley Barlow
David Calhoun
Carrie Chenery
Sandra Davis
Greta Harris
Brad Hobbs
Anna James
Sharon Martin
Melissa Nelson
L. Chris Petersen
Jeff Veatch

Absent

C.T. Hill

Constituent Representatives Present:

Jamal Ross, Undergraduate Representative
Anna Buhle, Graduate/Professional Representative
Serena Young, Staff Representative
Holli Gardner Drewry, Administrative/Professional Faculty Representative
Robert Weiss, Faculty Representative

Also present at the meeting were: President Timothy Sands, Kim O'Rourke (Secretary to the Board), Lynsay Belshe, Eric Brooks, Bob Broyden, Brock Burroughs, Allen Campbell, Cyril Clarke, Lance Collins, Al Cooper, Corey Earles, Jeff Earley, Alisha Ebert, Juan Espinoza, Kari Evans, Ron Fricker, Luisa Havens Gerardo, Emily Gibson, April Goode, Debbie Greer, Suzanne Griffin, Rebecca Gunn, Rebecca Halsey, Kay Heidbreder, Tim Hodge, Matt Holt, Elizabeth Hooper, Chris Kiwus, Brett Malone, Erin McCann, Elizabeth McClanahan, Ken McCrery, Ross Meacham, Scott Midkiff, Jeff Mitchell, Justin Noble, Mark Owczarski, James Perkins, Charlie Phlegar, Ellen Plummer, Kevin Pitts, Lauren Pollard, Menah Pratt, Zohab Qazi, Robin Queen, Paul Richter, Julia Ross, Brandy Salmon, Ken Smith, Dan Sui, Aimee Surprenant, Don Taylor, Jon Clark Teglas, Rob Viers, Tracy Vosburgh, Lisa Wilkes, and Chris Yianilos.

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Rector Long convened the meeting and welcomed everyone to the Information Session. The agenda included:

- Freedom of Speech/Academic Freedom: Dr. Robin Queen, Vice President of the Faculty Senate, Professor in Biomedical Engineering and Mechanics, Director of the Kevin P. Granata Biomechanics Lab, and Professor in the Department of Orthopaedic Surgery at Virginia Tech Carilion School of Medicine provided an update on the Taskforce on Freedom of Expression and Inquiry. The Taskforce's charge is to draft a statement affirming Virginia Tech's commitments to academic freedom and the constitutional right of free speech. The statement should acknowledge existing statements and policies and bring them together in the context of the university's academic mission. If appropriate, the new statement could replace existing statements to establish a coherent and unified expression of the university's commitments. The Taskforce will also develop recommendations for exercising and demonstrating these commitments in a manner that exemplifies Virginia Tech's Principles of Community. The group reviewed 60 peer statements, 5 in detail, before drafting a preliminary statement which President Sands is currently reviewing. Included in the Taskforce membership are BOV members Anna James and Jeff Veatch.
- IT Transformation Initiative: Dr. Scott Midkiff, Vice President for Information Technology & Chief Information Officer and Mr. Zo Qazi, IT Transformation Program Director, shared project progress updates related to IT Governance, IT Finance, and Cybersecurity. Under IT Governance, the goals are to establish a university-wide IT governance model and IT Project Management Office. In IT Finance, the goal is to streamline the software procurement process. Cybersecurity goals include the implementation of CIS IG2 controls across all platforms, augmenting 24x7 monitoring with a Security Operations Center, enabling endpoint detection and data loss prevention, and setting minimum security standards. Key accomplishments and challenges were shared with the Board. Cybersecurity projects are speeding along and are already yielding tangible benefits. The software pilot has been hailed as beneficial with more improvements coming. There is a paradigm shift in IT Governance that will need consistent support and iteration to take hold. Overall progress is becoming steady. There are continuous updates on the IT Transformation website and dashboard.
- Economic Development: Dr. Lance Collins, Vice President and Executive Director for the Innovation Campus, Dr. Brandy Salmon, Associate Vice President for Innovation and Partnerships, and Mr. Jason El Koubi, President and CEO of Virginia Economic Development Partnership explored the economic impacts that Virginia Tech and its programs have on the Commonwealth. Mr. El Koubi presented the transformational goals for the Commonwealth. 1. Robust state growth will position Virginia to achieve a growth rate among that of the top 5-10 states in the U.S. 2. Every Region Wins ensures that every region participates in the growth of the Commonwealth. 3. Best State for Business will restore Virginia to its previous leadership position near the top of the national business climate rankings. 4. Top State EDO will

reestablish VEDP as one of America's most effective state economic development organizations. 5. Super Collaborator marks exhibit collaboration and coordination as hallmarks of VEDP (i.e., place a central focus on the "P" in VEDP). Availability of skilled labor is a top site selection factor for corporate executives and site selection consultants. Since Virginia is at the nexus of technology and manufacturing, colleges and universities play a critical role in economic development.

Dr. Lance Collins presented that Virginia Tech's Innovation Campus is driving tech startups in the Northern Virginia region with 150 teams annually participating in Project-Based Education, an Entrepreneurship Track with Professor Angelos Stavrou, high community support and select teams will receive early-stage funding and incubation space in Innovation Building. The Innovation Campus is constructing the southern anchor of National Landing with 844 workers employed to-date, 450 daily workers at peak, \$63M spent to-date on A/E and Construction Manager services, 25.8% of awards to SWAM* contractors. Also, Whiting-Turner has committed to achieving 34% SWAM subcontractors by building completion.

Dr. Brandy Salmon explained how Link.License.Launch builds strategic partnerships and delivers holistic approaches through Scholarships, Graduate assistantships, Branding and naming opportunities, Research collaborations, Co-capture opportunities, Faculty support, Program support and x-Labs. Link.License.Launch's FY2023 goals include 190 invention disclosures, 30 license agreements, and 9 start-up companies.

- Educational Mission - Future Development: Dr. Cyril Clarke, Executive Vice President and Provost, outlined the guiding principles of future development as evidence-based, student-centered, equity/excellence imperative experiential learning which is curricular/co-curricular and involves various modes of engagement. Virginia Tech has learned from online experience during the pandemic about student access and advising, wellness, mental health, academic progress, national trends, and the university's organizational structure and next steps. The goal is to optimize balance between course content/goals, instructional methodology, and expense.
- Enrollment Management: Dr. Luisa Havens Gerardo, Vice Provost for Enrollment & Degree Management, and Mr. Juan Espinoza, Associate Vice Provost for Enrollment Management and Director of Undergraduate Admissions, gave an overview of the breakdown of 2022 new undergraduate applicants and their financial aid profile. The undergraduate enrollment goals include 300 transfer students in Spring 2023, 7,085 FTIC and 1,025 new transfers with a total enrollment for Fall 2023 of 30,450 students. Current (as of 11/2/22) application numbers are as follows: Spring 2023 Transfer Applications – 748 which is up 5.8% from Spring 2022 (707); Fall 2023 Early Decision- 3,390 Applications which is up 21% from Fall 2022 (2,791); Fall 2023 Undergraduate Applications - 14,389 which is up 25% from Fall 2022 (11,527)

- Due to time constraints, the Annual Strategic Plan Review by Dr. Menah Pratt, Vice President for Diversity, Inclusion, and Strategic Affairs, will be given at Monday's full Board meeting.

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The meeting was adjourned at 5:00 p.m.

*(Copies of the presentations and reports are filed
with the permanent minutes and attached.)*

Virginia Tech Board of Visitors Meeting

Information Session

**Sunday, November 13, 2022
2:00 p.m.**

**The Inn – Latham Ballroom
Virginia Tech Campus**

Freedom of Speech/Academic Freedom

- Dr. Robin Queen, Vice President - Faculty Senate; Professor, Biomedical Engineering and Mechanics; Director, Kevin P. Granata Biomechanics Lab; Professor, Department of Orthopaedic Surgery, Virginia Tech Carilion School of Medicine

#+ IT Transformation Initiative

- Dr. Scott Midkiff, Vice President for Information Technology & Chief Information Officer
- Mr. Zo Qazi, IT Transformation Program Director

#+ Economic Development

- Dr. Lance Collins, Vice President and Executive Director for the Innovation Campus
- Dr. Brandy Salmon, Associate Vice President for Innovation and Partnerships
- Mr. Jason El Koubi, President and CEO of Virginia Economic Development Partnership

Educational Mission - Future Development

- Dr. Cyril Clarke, Executive Vice President and Provost

Enrollment Management

- Dr. Luisa Havens Gerardo, Vice Provost for Enrollment & Degree Management
- Mr. Juan Espinoza, Associate Vice Provost for Enrollment Management and Director of Undergraduate Admissions

+ Annual Strategic Plan Review

- Dr. Menah Pratt, Vice President for Diversity, Inclusion, and Strategic Affairs

Discusses Enterprise Risk Management topic(s)

+ Discusses Strategic Investment Priorities topic(s)

Freedom of Expression and Inquiry

Sponsors: Provost Cyril Clarke, PhD and Robert Weiss, PhD

Deadline: January 1, 2023

Charge:

- Draft a statement affirming Virginia Tech's commitments to academic freedom and the constitutional right of free speech. The statement should acknowledge existing statements and policies and bring them together in the context of the university's academic mission. If appropriate, the new statement could replace existing statements to establish a coherent and unified expression of the university's commitments.
- Develop recommendations for exercising and demonstrating these commitments in a manner that exemplifies Virginia Tech's Principles of Community.

Membership:

Chair

Robin Queen, PhD (Biomedical Engineering) VP of the Faculty Senate & Chair Commission on Faculty Affairs

Faculty

Jim Hawdon, PhD (Sociology)
Khadijah Queen, PhD (English)
Ali Mehrizi-Sani, PhD (Elec & Comp. Engineering)
Jerald Walz, PhD (Ag Leadership & Comm Dev)
Vivica Kraak, PhD, RDN (Human Nut., Food & Ex.)

Staff

Tasia Persson (Executive Assistant To the Dean)

A/P faculty

Janice Austin, PhD (Assistant Dean – Admissions)

Undergraduate students

Caroline Lohr (President USS)
Ainsley Cragin (VP for Policy and Issues USS)

Graduate students

Ben Beiter (President GPSS)
Chloe Robertson (VP GPSS)

BOV

Anna James
Jeff Veatch

Content experts

Kara Latopolski – Academic Freedom expert
Kay Heibreder – University Legal Counsel
Harrison Blythe – Director of Compliance and Conflict Resolution
Gabby McCollum - Past Chair of CEOD
Laura Belmonte, Ph.D. - Dean CLAHS
Chris Yianilos - VP for Government and Community Relations
Mark Owczarski - Associate VP for University Relations



IT TRANSFORMATION Program Update

November 2022

Scott Midkiff, Vice President for IT & CIO
Zohaib Qazi, IT Transformation Program Director

Program Office Development

- Program Office to hire our contract Project Managers on permanent basis
- Recognizing our campus collaborators
 - **Division of IT**
 - Karen Herrington
 - Angela Correa
 - Greg Kroll
 - Vicki Hall
 - **Organizational Excellence**
 - Kristina Givens
 - Mohammed Al Rezq (Graduate Assistant)
 - Ross Mecham
 - **Analytics and Institutional Effectiveness**
 - Thulasi Kumar

PROJECTS IN PROGRESS



IT Governance

Establish university-wide IT governance model

Establish a university-wide IT Project Management Office



IT Finance

Streamline software procurement process



Cybersecurity

Implement CIS IG2 controls across all platforms

Augment 24x7 monitoring with a Security Operations Center

Enable endpoint detection and data loss prevention

Minimum security standards

Access additional information at
<https://evpcoo.vt.edu/ittransformation>

Key Accomplishments



IT Governance – on schedule

- Sub-Committee charters completed
- Sub-Committee appointments completed



IT Project Management Office (PMO) Framework – on schedule

- Identified foundational metrics



Streamline Software Procurement – on schedule

- As of October 25th: 217 purchases have been approved and processed

Key Accomplishments



Enforce CIS IG2 Standards – on schedule

- 50% of senior management areas enrolled in the assessment process



24x7 Security Operations Center – on schedule

- Vendor of choice – OmniSOC
- Reviewing data in production and finalizing response protocols



Deploy Endpoint Detect and Response (EDR) and Data Loss Prevention Solutions – on schedule

- 3,500+ endpoint solutions deployed across various departments
- Detected ransomware on one endpoint



Minimum Security Standards – ahead of schedule

- 38 out of 38 procedure guides completed to augment current Minimum Security Standards

Challenges



Streamline Software Procurement

- Addressing the time consumed for legal review and other review and vendor interaction for Pilot 2



Identity & Access Management

- Attracting candidates for position since it is “restricted” due to current one-time funding

Key Takeaways

- Cybersecurity projects are speeding along and are already yielding tangible benefits
 - Ability to see filtered and un-filtered data via OmniSOC
 - Microsoft A5 license upgrade with improved security capabilities is now available for all faculty and staff
- Software pilot hailed as beneficial, more improvements are coming
- IT Governance – paradigm shift, will need consistent support and iteration to take hold
- Overall progress is becoming steady
- Continuous updates on IT Transformation website and dashboard

Access additional information at
<https://evpcoo.vt.edu/ittransformation>



Project Details



IT Governance 1.2 - University-wide IT Governance Model

Accomplishments

- First Executive Committee meeting held 9/6
- Sub-Committee Charters completed on 9/29
- Sub-Committee appointments completed

Executive IT
Committee

In Process

- Review and complete threshold document
- Send invitation letters to sub-committee members

Data Governance

Administrative
Technology

IT Risk
Management

Research
Technology

Teaching &
Learning

Access additional information at
<https://evpcoc.vt.edu/ittransformation>



IT Governance 1.3 - IT Project Management Office (PMO) Framework

Accomplishments

- Conducted 2 process workshops 09/07 and 09/22
- Completed foundational PMO framework
- Foundational template review completed – 9/14
- Metrics workshop, identified foundational metrics – 9/23

In Process

- Operationalizing foundational project process for Phase 1
- Documenting foundational project processes
- Training on Project Process
- Defining metrics

Access additional information at
<https://evpcoo.vt.edu/ittransformation>



IT Finance 2.2 - Streamline Software Procurement

Consists of 2 Separate Pilot Projects

- Pilot 1: Implement expedited process for procurement of low risk, low-cost software and IT services
- Pilot 2: Implement concierge-guided process for the procurement of software and IT services

Accomplishments

- Pilot 1 was launched August 1st, will conclude on Dec 31, 2022
- Well-utilized process
- As of October 25th: 263 requests have been received and 217 purchases have been approved

In Process

- Pilot 2

Challenges

- Addressing the time consumed for legal review and other review and vendor interaction for Pilot 2

Access additional information at
<https://evpcoc.vt.edu/ittransformation>



Cybersecurity 6.1 - Enforce CIS IG2 Standards

Accomplishments

- 50% of senior management OU's (Organizational Units) are identified and enrolled in the assessment process

Project Phases (In Process)

- Continue enrolling OUs in the assessment process
- Phase 1: IT risk assessments; revise IT security standards to align with IG2 safeguards
- Phase 2: Based on assessments, develop IG2 plans of actions for high/moderate risk assets
- Phase 3: (Implementation) Complete the plans of action

Access additional information at
<https://evpcoc.vt.edu/ittransformation>



Cybersecurity 6.2 - 24 x 7 Security Operations Center (SOC)

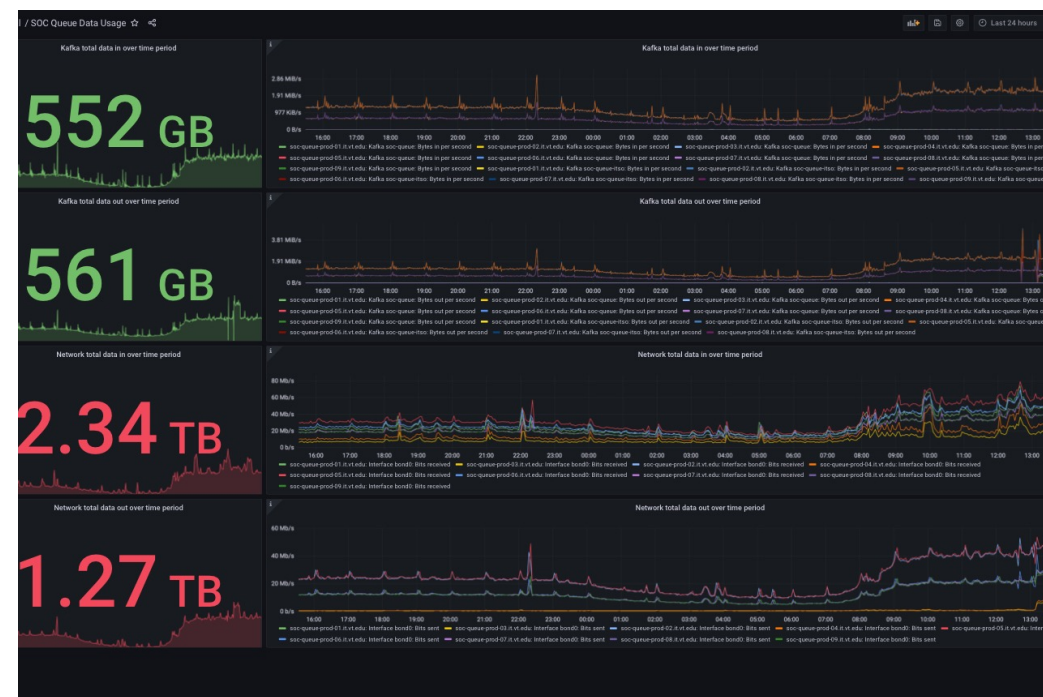
Vendor of Choice – OmniSOC

Accomplishments

- All production equipment including hardware has been installed at Indiana University's OmniSOC
- ServiceNow API will be used to send data related to incidents

In Process

- Continue to work on data formatting
- Implement Single Sign-On
- Implement EZ button tool
- Discuss communication related to SOC



Access additional information at
<https://evpcoo.vt.edu/ittransformation>



Cybersecurity 6.3 - Identity and Access Management

Accomplishments

- Project Kick off – 08/23/2022

In Process

- Project is divided in to 4 sub-projects
 - Service Data Access Mapping Administration Framework (Planning)
 - Enterprise Roles Administration Framework (Planning)
 - Implement Identity Governance & Administration Service (Planning)
 - IAM Governance Framework (Initiation)

Challenges

- Filling the restricted positions due to lack of base funding
- Funding to convert restricted position to base positions

Access additional information at
<https://evpcou.vt.edu/ittransformation>



Cybersecurity 6.4/6.5 – Deploy Endpoint Detect and Response (EDR) Solution

Accomplishments

- As of 10/17/2022, 3510 Endpoint solutions are deployed across 17 departments
- Microsoft A5 license upgrade negotiations completed and announced
- Ransomware was detected on one system

In Process

- Work on baseline configuration for MS Defender for Endpoints
- Identify data endpoints which can be exported to SOC
- Evaluating readiness for units to provide IT support

Alert details

Title	Ransomware-linked emerging threat activity group detected
Severity	■■■ High
Category	Ransomware
Source	EDR
Detection time	September 19, 2022 16:47 UTC

Access additional information at
<https://evpcoo.vt.edu/ittransformation>



Cybersecurity 6.6 - Minimum Security Standards

Accomplishments

- 38 out of 38 procedure guides completed to augment the current Minimum Security Standards

In Process

- Setting up procedure guides within an IT repository to be determined soon
- Providing access and support to promote adherence to minimum security standards
- Provide guidelines for additional controls in CIS IG2

Access additional information at
<https://evpcou.vt.edu/ittransformation>



PARTNERING TO POSITION VA AS A GROWTH LEADER

November 13, 2022

VIRGINIA ECONOMIC DEVELOPMENT PARTNERSHIP (VEDP)

ECONOMIC DEVELOPMENT: POLICIES AND PROGRAMS DESIGNED TO ENCOURAGE GROWTH IN JOBS, WAGES, AND INVESTMENT

VEDP accomplishes this through:



Marketing Virginia to raise awareness of the Commonwealth's advantages for business and cultivate new leads



Recruiting out-of-state firms to select Virginia for new job-creating projects



Encouraging and assisting the **retention and expansion** of existing Virginia firms



Assisting Virginia companies to establish and/or expand international sales (i.e., **trade development**)



Encouraging **coordination** of economic development efforts among local, regional, and state partners



Developing recommended **economic development policies and strategies** to position Virginia and its regions for growth



Conducting **research** to understand and effectively present Virginia's competitive advantages



Administering **performance-based incentives** that encourage job creation and capital investment



Providing **grants or custom workforce solutions** to address recruitment and training needs, and **analysis and insight** on education and labor market alignment



Collaborating with localities to develop **project-ready sites** for manufacturing and supply chain projects

TRANSFORMATIONAL GOALS FOR THE COMMONWEALTH

1

Robust State Growth

Position Virginia to achieve a growth rate among that of the top 5-10 states in the U.S.

2

Every Region Wins

Ensure that every region participates in the growth of the Commonwealth

3

Best State for Business

Restore Virginia to its previous leadership position near the top of the national business climate rankings

4

Top State EDO

Reestablish VEDP as one of America's most effective state economic development organizations

5

Super Collaborator

Exhibit collaboration and coordination as hallmarks of VEDP (i.e., place a central focus on the "P" in VEDP)

VEDP FOCUSES MOST OF ITS BUSINESS DEVELOPMENT EFFORTS ON A SET OF TARGET INDUSTRIES FOR WHICH VA IS COMPETITIVE



Automotive



Software



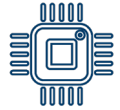
Headquarters



Aerospace



Cybersecurity



Semiconductors



Life Sciences



Unmanned Systems



Wood Products



Data Centers



Offshore Wind

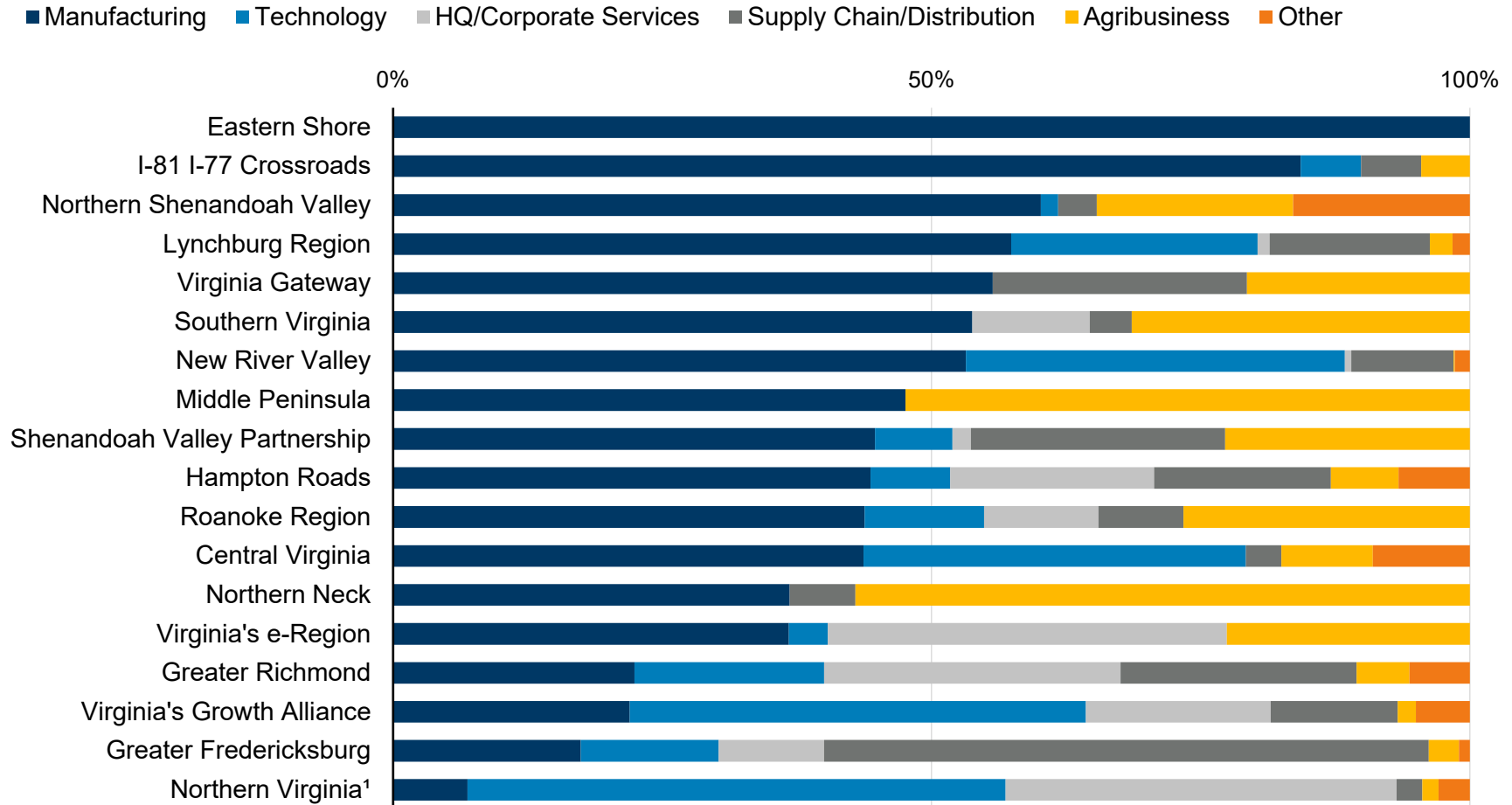
Business Process
ServicesSupply Chain
ManagementFood & Beverage
ProcessingAdvanced
MaterialsControlled
Environment
Agriculture

In addition, Virginia has dedicated state agencies to cultivate the tourism, agriculture, and forestry industries.



REGIONAL PROJECT ANNOUNCEMENTS REFLECT SIGNIFICANT DIFFERENCES IN REGIONAL ECONOMIC DIVERSITY

Total new regional employment, including expansions
VEDP Marketing Region, New jobs announced FY18 – FY22



¹Excluding Amazon HQ2

EVERY REGION WINS: SINCE FY22, VEDP HAS HELPED SECURE 20,300+ JOBS AND \$35.7B+ IN CAPITAL INVESTMENT IN VIRGINIA

FY22 Results

17,203

DIRECT JOBS

\$34.02B

CAPEX

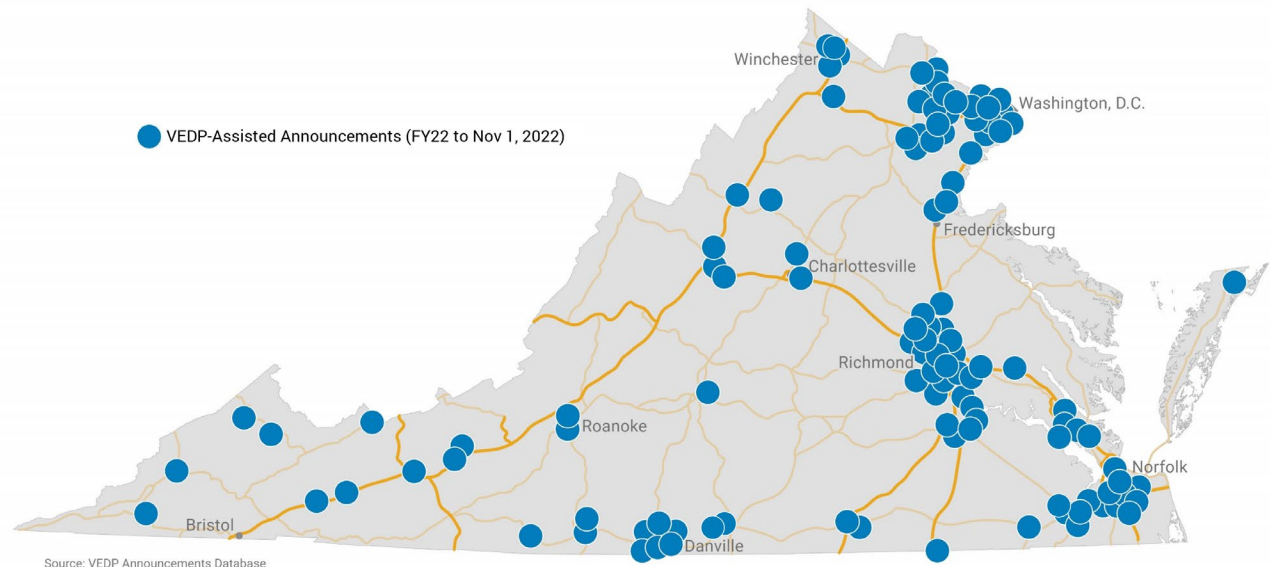
FY23 Goals

15,000

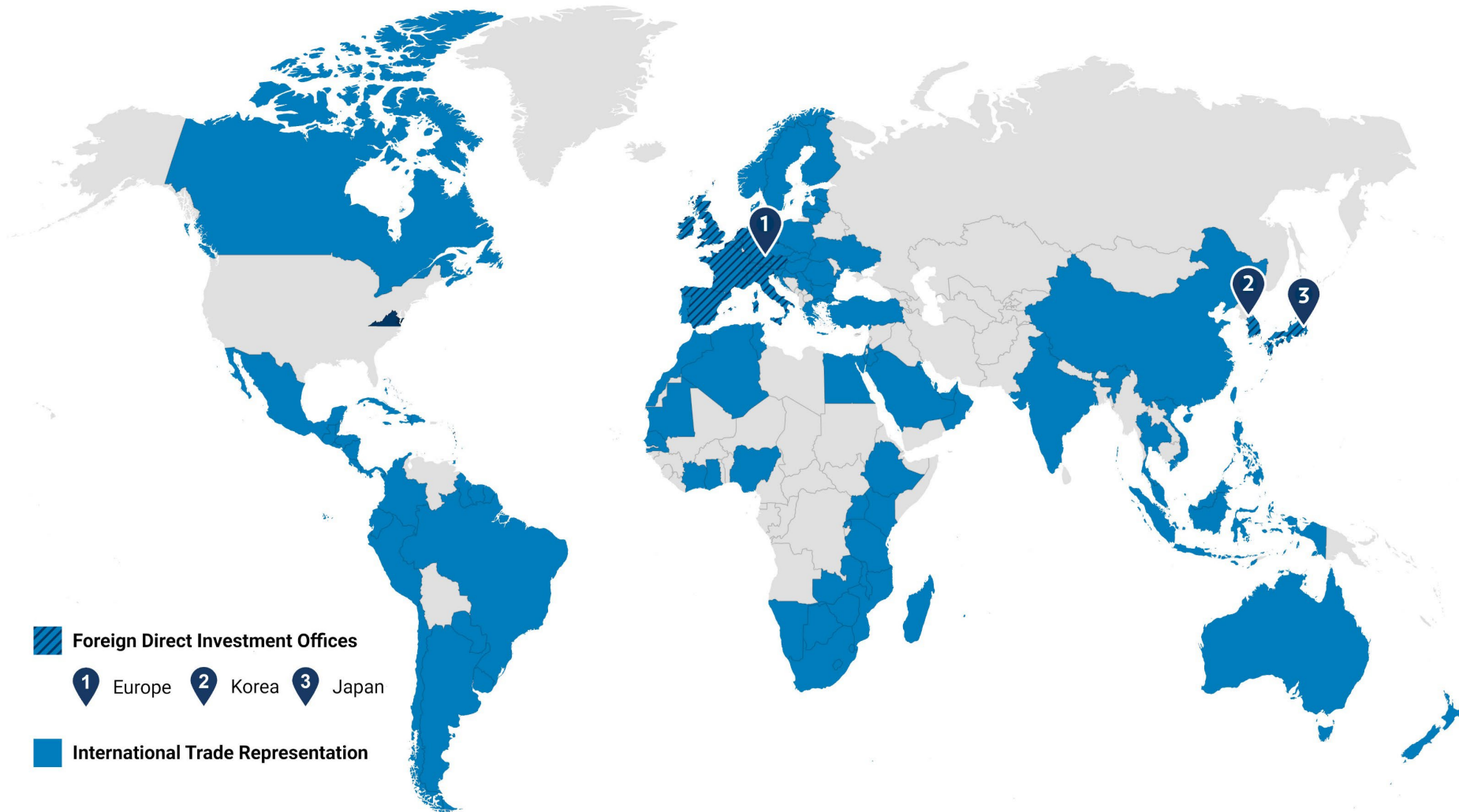
DIRECT JOBS

\$7.5B

CAPEX



VEDP'S GLOBAL NETWORK



TALENT-CENTRIC ECONOMIC DEVELOPMENT

Availability of skilled labor is a top site selection factor for corporate executives and site selection consultants

Most Important Site Selection Factors Area Development Surveys (2021)

Corporate Executive Survey

1. Labor costs
2. **Availability of skilled labor**
3. Energy availability and costs
4. Inbound/outbound shipping costs
5. Highway accessibility

Site Selection Consultant Survey

1. Proximity to major markets
2. **Availability of skilled labor**
3. Highway accessibility
4. State and local incentives (tie)
4. Proximity to suppliers (tie)
4. Available land (tie)



VEDP OFFERS INNOVATIVE TALENT SOLUTIONS TO SUPPORT THE NEEDS OF COMPANIES AND PARTNERS

Virginia Office of Education Economics (VOEE)

Analysis, resources, and expertise to help align education and labor market

Regional Talent Solutions & Business Outreach (RTSBO)

Facilitate talent-focused conversations with existing high-value firms

Virginia Talent Accelerator Program

Services customized to client recruitment and training needs

Strategic Talent Initiatives

Large-scale investments in talent that address the needs of many firms



HIGHER EDUCATION STRENGTHENS VIRGINIA'S VALUE PROPOSITION

Virginia Tech Innovation Campus
Rendering, Alexandria

COLLEGES AND UNIVERSITIES PLAY A CRITICAL ROLE IN ECONOMIC DEVELOPMENT



Talent



Innovation



Place



Industry

(From left): University of Virginia's College at Wise; Norfolk State University; James Madison University; Medicines for All Institute, Virginia Commonwealth University

AMERICA'S TOP STATE FOR TALENT

smartasset[®] 2022
#1 Best State for
Higher Education
on the East Coast



VIRGINIA TECH HAS A SIGNIFICANT IMPACT ON VA'S DEGREE PRODUCTION AND R&D

23%

Virginia Tech produces 23% of degrees (bachelor's and above) in the Commonwealth

38%

Virginia Tech produces the highest amount of VA's STEM PhDs, at 38%

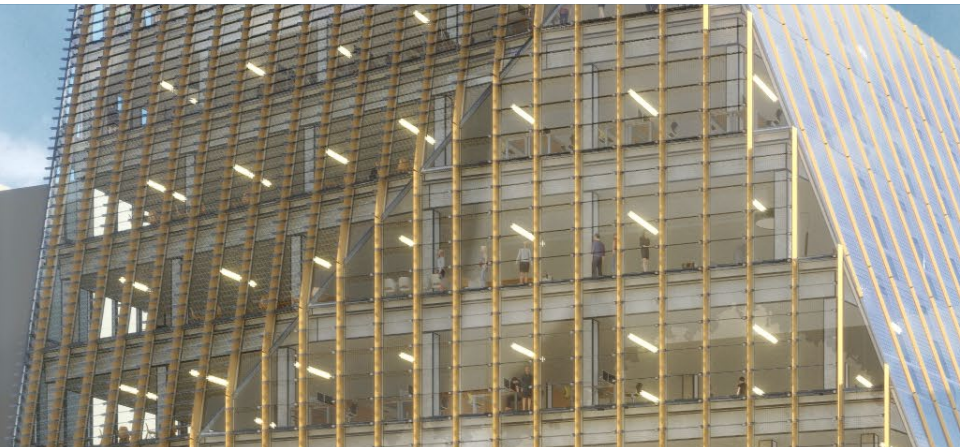
\$534.8M

On average, Virginia Tech spends \$534.8M on R&D per year (2016-2020)

Source: SCHEV, 2021-2022; National Science Foundation, Higher Education Research and Development Survey



Virginia Tech



Virginia Tech's innovative partnership helped secure the Amazon HQ2 decision



Virginia Tech Innovation Campus Rendering, Alexandria

UNIVERSITY COLLABORATIONS ARE NOW KEY TO VA'S APPROACH TO PROJECTS

VTTI is Building the Blueprint for the Modern Mobility Ecosystem

VIRginia International Raceway (VIR)

Located in Danville, VIR allows VTTI to conduct testing in both closed-course and open traffic conditions using both their road track and the adjacent on-site roadway network. The road course features a reconfigurable track to create courses between 1.1-4.2 miles long. Includes varied topography and complex curves, and enables testing at high speeds. The large heavily forested area ensures prototype vehicles remain out of the public eye. VTTI's affiliated company, the Global Center for Automotive Performance and Simulation (GCAPS) operates onsite at VIR where one of the world's most advanced test facilities is located. The facility is a state-of-the-art, multi-level, multi-use facility designed for advanced development for conducting advanced development.

Smart Roads, The Connected Vehicle Test VTTI to provide the backbone for delivering talent. In addition to those associated with computing, power electronic systems, AI/ML, VTTI is the largest producer of undergraduate engineering talent. VTTI is fusing interdisciplinary expertise with world-class pool of engineering talent ready to develop the next generation of mobility professionals.

The Southern Virginia Mobility Ecosystem



In consideration of Project's proposed major new investment in Southern Virginia, Virginia Tech will ignite the research and talent ecosystem through a robust platform for public and private sector innovation. By recruiting and retaining top-tier faculty and researchers, Virginia Tech will build a durable engine for training and teaching graduate and undergraduate talent. Together with Project, Virginia Tech will cement the Commonwealth as the global destination for advanced mobility industry and innovation.

Creating a Center for Mobility Innovation in Danville

Virginia Tech proposes a plan for mobilizing a critical mass of faculty/researchers in Danville to support a new Center dedicated to advanced mobility, with 3-4 thrust areas of priority to Project, which can be decided upon in collaboration. Example thrust areas may include advanced powertrain research (electric and/or hydrogen), automation, and future factory/advanced manufacturing. Principal goals will be to build a magnet for top-tier engineering talent, provide a robust mechanism for research collaborations, and produce a graduate talent pipeline proximal to the company. Researchers from Virginia Tech's main campus and VTTI will be actively engaged, creating close connections across the two sites and undergraduates will be drawn from Blacksburg to engage in experiential learning opportunities. The Company will be invited to collaborate and gain access to infrastructure, expertise, and assets in both Danville and Blacksburg. Virginia Tech offers a model for an investment of \$32M, with the following assumptions (which are approximate and directional only):

- The endowment support is an essential tool in recruiting faculty and will be deployed in the form of company-named endowments, e.g., "Project Professor of Powertrain Research"; this model assumes a director and 2-3 faculty with expertise in each thrust area of research.
- A program manager will be retained with current-use dollars to ensure coordination and be an active resource for the company.
- This model supports tuition and fees for approximately 12 graduate fellowships in perpetuity, such that each faculty member in the Center has funding support for at least three students, a key factor in recruitment and retention of faculty and a highly qualified talent pipeline for the company. These may be a combination of masters and doctoral students.

The above scenario assumes the Center will be housed in the proposed new Project Learning and Research Center on the Southern Virginia Megaplot or modified existing spaces in or around the City of Danville.

VTTI is Building the Blueprint for the Modern Mobility Ecosystem

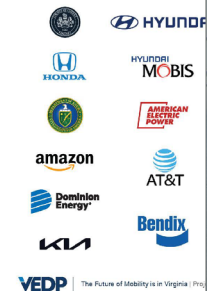
The Virginia Tech Transportation Institute (VTTI) Delivers Innovative Leadership in Advanced Mobility

With the largest group of safety researchers in the world, 70 million miles of data, and 4,000 instrumented vehicles, Virginia Tech is setting the standards for the next generation of vehicles. The VTTI team of 350+ strong is leading over 300 active projects and collaborations with more than 100 sponsors across the private and public sectors. From mobility to energy efficiency, sustainability, human factors, materials performance, business model design, and integrated systems research, VTTI is paving the way to the future of mobility.

VTTI deploys assets built over two decades to serve as the destination for transportation innovation. Among the first to oversee connected automation transportation projects, VTTI utilizes established facilities affiliated with the Institute: the Virginia Smart Roads, the Northern Virginia Connected-Vehicle Test Bed, multiple living laboratory smart cities testing environments, naturalistic data, these combined testing capabilities and facilities assess emerging vehicle technologies. With physics, computer science, statistics, behavior, and human factors, VTTI provides a full spectrum of services from concept to prototype development to testing.

For Partners, VTTI is The

Major automotive companies and suppliers of automation technologies and vehicles, business driver acceptance, and more. Selected partners include:



VTTI is Building the Blueprint for the Modern Mobility Ecosystem

Smart Roads

Unlike traditional durability tracks, our suite of state-of-the-art closed test bed research facilities are built to prevailing road standards – permitting high-fidelity research within a safe and controlled environment. The facilities support high-precision localization, and to end connectivity supporting an array of wireless technologies backhauled over a fiber-optic backbone to high-performance computing cluster that can readily interface with a variety of real and simulated data sources and novel traffic operations interfaces. The roadway has rain, snow, and fog weather-making capabilities and a variable lighting system, which provides the ability to precisely reproduce difficult driving conditions. With a footprint reaching over 700 acres, a combination of surface streets, highways, rural roads, and off-road trails enable advanced vehicle testing in a comprehensive cross section of environments. Virginia Smart Roads have multiple vehicle charging stations, signalized and unsignalized intersections, onramps, and specialized equipment to support robotic pedestrians, animals, and various other methods for choreographing complex driving scenarios to test the most advanced systems. FAA-approved testing facilities for unmanned aerial systems permits research at the nexus of air and surface.

Connected-Vehicle Test Bed

This Northern Virginia test bed is an open operational environment, encompassing sections of I-66, I-95, I-495, US-29, and US-50, and includes access to dedicated high-occupancy toll (HOT) lanes in one of the most traveled corridors in the U.S. These facilities allow researchers to migrate maturing transportation technologies from the laboratory and controlled test tracks onto the open roadway in carefully monitored field studies. Systems include a full-backend data computations and warehousing infrastructure that supports rapid prototyping and deployment of connected vehicle systems with a direct interface to VDOT's operational data backbone. To date, VTTI has deployed a myriad of infrastructure-based sensing systems as well as large test and validation deployments of vehicles with connected and automated vehicles.

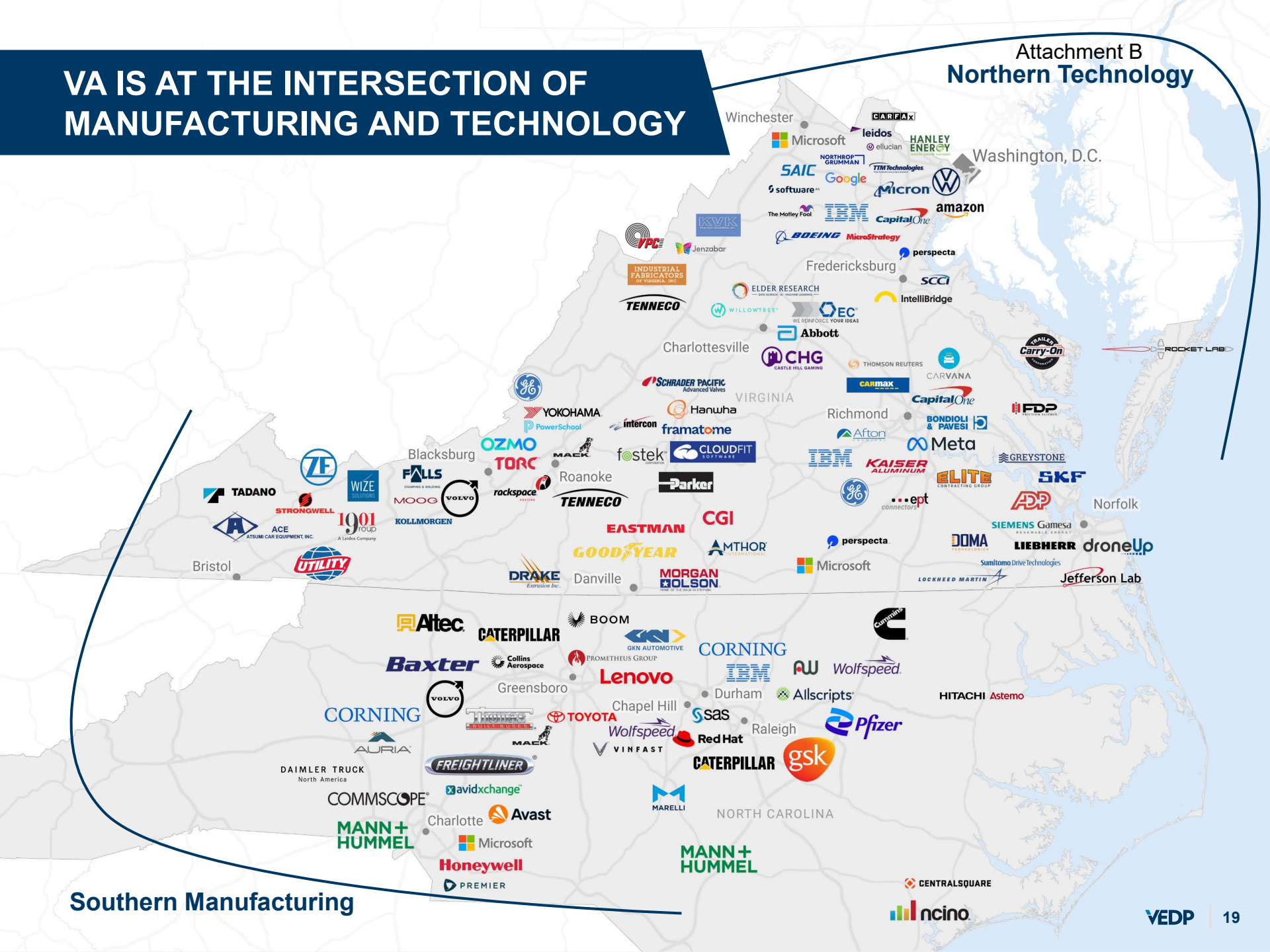
Rain on Smart Roads, Pulaski County

A woman with glasses and a man are sitting at a desk, looking at a large computer monitor. The man is pointing at the screen. On the desk, there are several electronic components, including circuit boards and a keyboard. The background is dark, and the scene is lit with blue light. A large blue diagonal shape is overlaid on the left side of the image.

GLIMPSES OF THE FUTURE: GROWING IMPORTANCE OF TECHNOLOGY IN MANUFACTURING

VA IS AT THE INTERSECTION OF MANUFACTURING AND TECHNOLOGY

Attachment B
Northern Technology



Southern Manufacturing

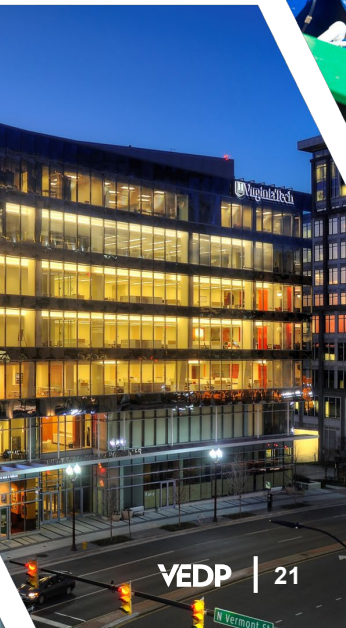
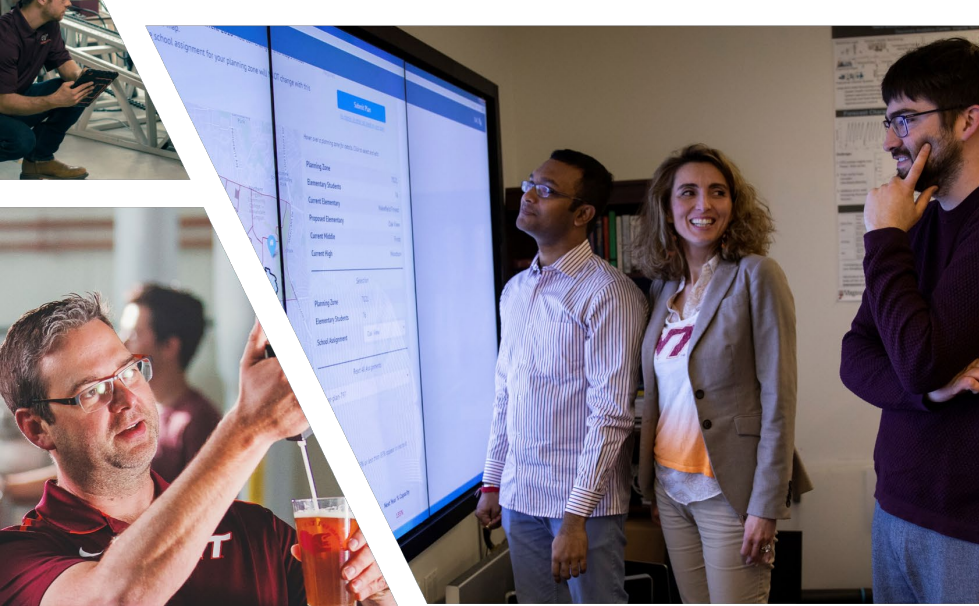
CENTRALSQUARE
ncino

MANUFACTURING MEETS TECHNOLOGY AT VIRGINIA TECH



Center for Packaging and Unit Load Design, Virginia Tech

Virginia Tech Transportation Institute



THANK YOU

Jason El Koubi
President and CEO

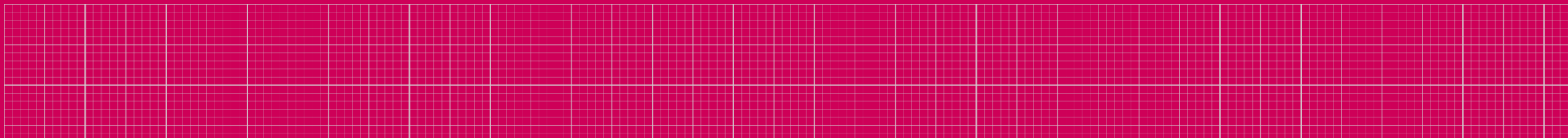




IMPACT OF THE VIRGINIA TECH INNOVATION CAMPUS ON THE ECONOMY OF THE GREATER WASHINGTON, D.C. REGION

LANCE COLLINS
VP AND EXECUTIVE DIRECTOR

NOVEMBER 14, 2022



INNOVATION CAMPUS SUPPLYING TALENT

	TOTAL ENROLLMENT	WOMEN	URM
2020	109	24	5
2021	192	52	18
2022	249	71	54
2030*	750	375 (50% of 750)	169 (30% of domestic enrollment)

**projected*

Economic impact growing exponentially...

HARNESSING DIVERSITY TO TACKLE TECH WORKFORCE CHALLENGES

- DC Metro – #2 for tech job postings – approximately 17,000 (source: CompTIA)
- 5 of the Top 10 employers for tech jobs are headquartered in Northern Virginia (source: CompTIA)
- Virginia a Top 10 state for % of Asian-American, Black, and foreign-born tech talent
- Arlington, VA – #1 U.S. City for women in tech
- DC Metro – #4 region for racial diversity in tech graduates
- More than 120 languages spoken across our regional K-12 systems
- Our Innovation Campus pathways, and scholarship opportunities, are helping non-traditional CS and CPE students see a future in tech
- Demand is greater than any one school can supply – creating a unique opportunity for collaboration



DRIVING TECH STARTUPS IN THE REGION

- Project-Based Education (150 teams annually)
- Entrepreneurship Track (Professor Angelos Stavrou)
- Community Support is High
- Select teams to receive early-stage funding and incubation space in Innovation Building





**WE ARE BUILT FOR PARTNERSHIPS
OF ALL TYPES**



CONSTRUCTING THE SOUTHERN ANCHOR OF NATIONAL LANDING

- 844 workers employed to-date
- 450 daily workers at peak
- \$63M spent to-date on A/E and Construction Manager services
- 25.8% of awards to SWAM* contractors
- Whiting-Turner has committed to achieving 34% SWAM subcontractors by building completion

*Small, Women-owned, and Minority-owned business

└ WHERE WE ARE HEADED

50

Top-tier tenure-line
and research faculty
hires, by 2030

750

Master's enrollment
candidates at scale

~250,000

Square feet of partner
space dedicated to
startups and corporate
facilities

~300,000

Square feet of
academic space and
cutting-edge R&D
facilities

**\$1
BILLION**

Anticipated
investment at buildout



THE INNOVATION CAMPUS

INNOVATION
CAMPUS

THE CATALYST FOR REGIONAL
GROWTH AT THE RIGHT TIME.

#10 Equitable Economic Development Opportunities | National Landing Attachment B

can reach its full potential as an **inclusive innovation ecosystem** through partnerships between its robust array public and private sector leaders.

Multitude of Public and Private Partners



Strategies to Bolster a Robust and Equitable Innovation Ecosystem

Ecosystem
building



Central innovation hub



Networking events and lectures



Incubators and accelerators



Support/mentorship for MWBE businesses

Equity
building



Workforce training and jobplacement



Internship programs for youth

CREATING THE FIRST 5G-ENABLED CITY: NATIONAL LANDING

Attachment B



- JBG Smith purchased spectrum for the National Landing area in 2020
- Providing unparalleled connectivity and unique digital placemaking
- Making National Landing an urban testbed for deployment

“Our investment in next-generation connectivity infrastructure will further cement National Landing as a premier global destination for entrepreneurs, universities and global technology companies to ideate, innovate and scale globally.”

-- Evan Regan-Levine, Executive VP of Strategic Innovation and Research, JBG Smith

PROXIMITY MATTERS: A GROWING ECOSYSTEM IN NATIONAL LANDING (AND SURROUNDING AREAS)



AT&T

**Bloomberg
Industry Group**

fw federated
wireless



IDA



Raytheon

ZE BOX
THE INNOVATIVE STARTUPS COMMUNITY.

TOGETHER WITH OUR STATE AND LOCAL PARTNERS, WE ARE CREATING A TECH ECOSYSTEM THAT ATTRACTS COMPANIES OF ALL SIZES AND PROMOTES A CULTURE OF RISK-TAKING



“**Boeing’s** recent announcement to move its headquarters to Virginia and reaffirm its commitment to building the next generation of tech talent is a timely development for the **Commonwealth**, and is made more exciting by their extensive partnership with Virginia Tech.”

Glenn Youngkin
Governor
Commonwealth of Virginia



“The **Virginia Tech Innovation Campus** is already attracting the attention of companies in emerging industries thanks to future-focused academic programs that will contribute to the growth of our tech talent pipeline while also providing world-class research and partnership opportunities. **AEDP** is excited to serve as the bridge that connects the academic and commercial sectors to drive economic growth in Alexandria and Northern Virginia.”

Stephanie Landrum
President & CEO
Alexandria Economic Development Partnership (AEDP)



Updates for the Virginia Tech Board of Visitors

LINK + LICENSE + LAUNCH

November 2022



INNOVATION + PARTNERSHIPS

LINK + LICENSE + LAUNCH

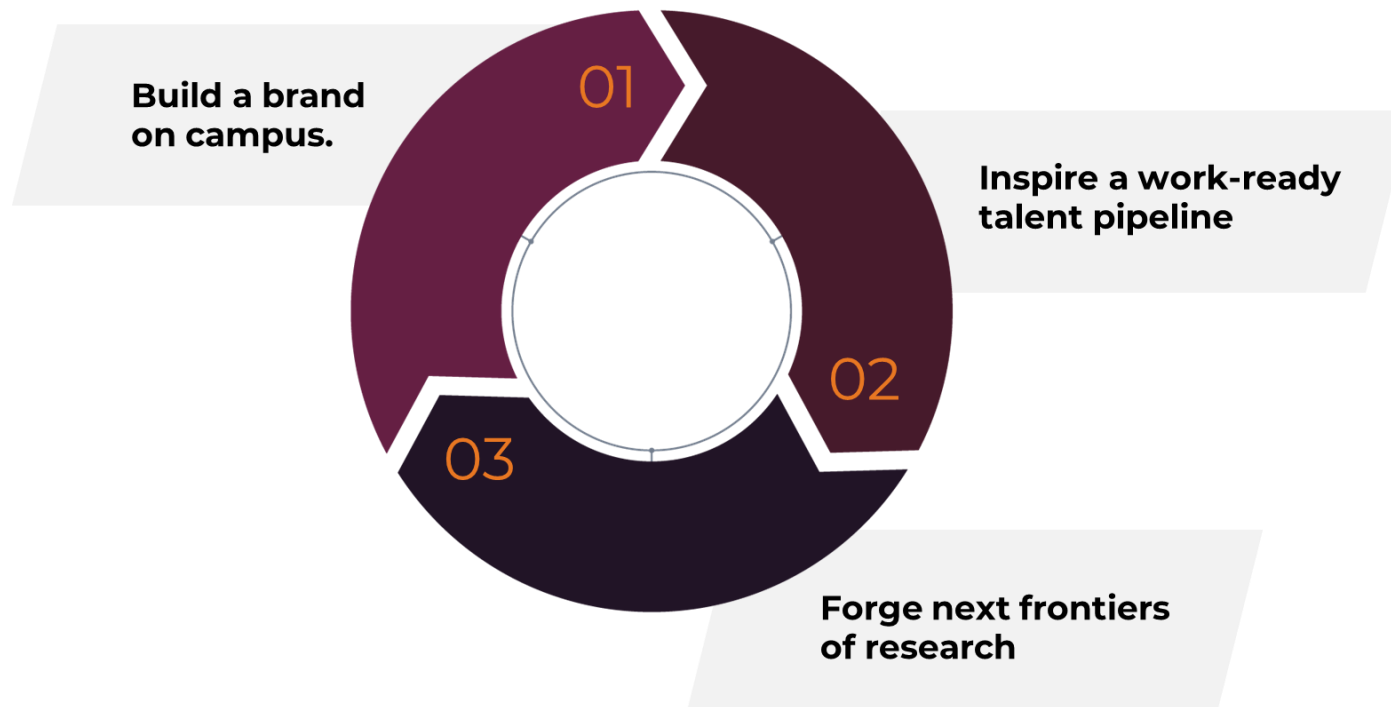
Advancing
partnerships

Commercializing
technologies

Starting new
ventures

Building strategic partnerships

Design goals



Delivering holistic approaches through:

- + Scholarships
- + Graduate assistantships
- + Branding and naming opportunities
- + Research collaborations
- + Co-capture opportunities
- + Faculty support
- + Program support
- + x-Labs

A busy Fall 2022

Selected examples

The logo for GILIC, featuring the word "GILIC" in a bold, blue, sans-serif font.The logo for BLUE ORIGIN, featuring the words "BLUE ORIGIN" in blue, with a feather icon above the word "ORIGIN".The logo for BOEING, featuring the word "BOEING" in blue, with a stylized blue wing icon above the word.The logo for amazon, featuring the word "amazon" in a lowercase, sans-serif font, with a curved orange arrow underneath.The logo for FINCANTIERI, featuring the word "FINCANTIERI" in a blue, sans-serif font.The logo for NORTHROP GRUMMAN, featuring the words "NORTHROP" and "GRUMMAN" in blue, with a stylized blue "N" and "G" icon.The logo for Deloitte, featuring the word "Deloitte" in a black, sans-serif font, with a small green dot at the end.The logo for HITT, featuring the word "HITT" in a blue, serif font.The logo for dancker, featuring the word "dancker" in a blue, sans-serif font.The logo for GENERAL DYNAMICS, featuring the words "GENERAL" and "DYNAMICS" in a blue, sans-serif font.

THE CITY OF ALBANY



Boeing Scholar

Meet: Tara Laughlin

INVITATION TO PARTNER | NSF ENGINES PROGRAM

A Coalition to Advance Supply Chain Resiliency, Efficiency, Sustainability, and Equity From **Dock-to-Door**

**Private-Public Partnerships****Advancing ecosystems**

The Appalachian Advanced Automation Engine, From Dock To Door

Catalyzing a regional strategy to align disparate technologies, a strategic location, unique infrastructure and robust partners, from ground to air to attain efficient, seamless, sustainable, secure, and resilient supply chains for the 21st century.

Inclusive Innovation Toward Future of Freight

Translate use-inspired research into innovations that drive economic growth and shared prosperity in a high-potential, but historically disadvantaged region.

National Blueprint for Advancing ACE

Through large-scale test and deployment environments and cutting-edge research, advance development, deployment, and consumer confidence in ACE vehicles for freight systems from first to last yard.

Enabling Policy Frameworks

Unify a coalition of industry, academia, and policymakers to evolve policy and business models to promote safety, reduce risk, encourage innovation, and lower barriers toward adoption of ACE transportation technologies.

Highly-Skilled Workforce

Build a robust and diverse workforce development platform for underserved members of our community, supercharging the regional ecosystem and ensuring participation in the future of work.

INNOVATION + PARTNERSHIPS

LINK + LICENSE + LAUNCH

Advancing
partnerships

Commercializing
technologies

Starting new
ventures

FY 2023 key goals

As measured in university strategic dashboard

Invention Disclosures

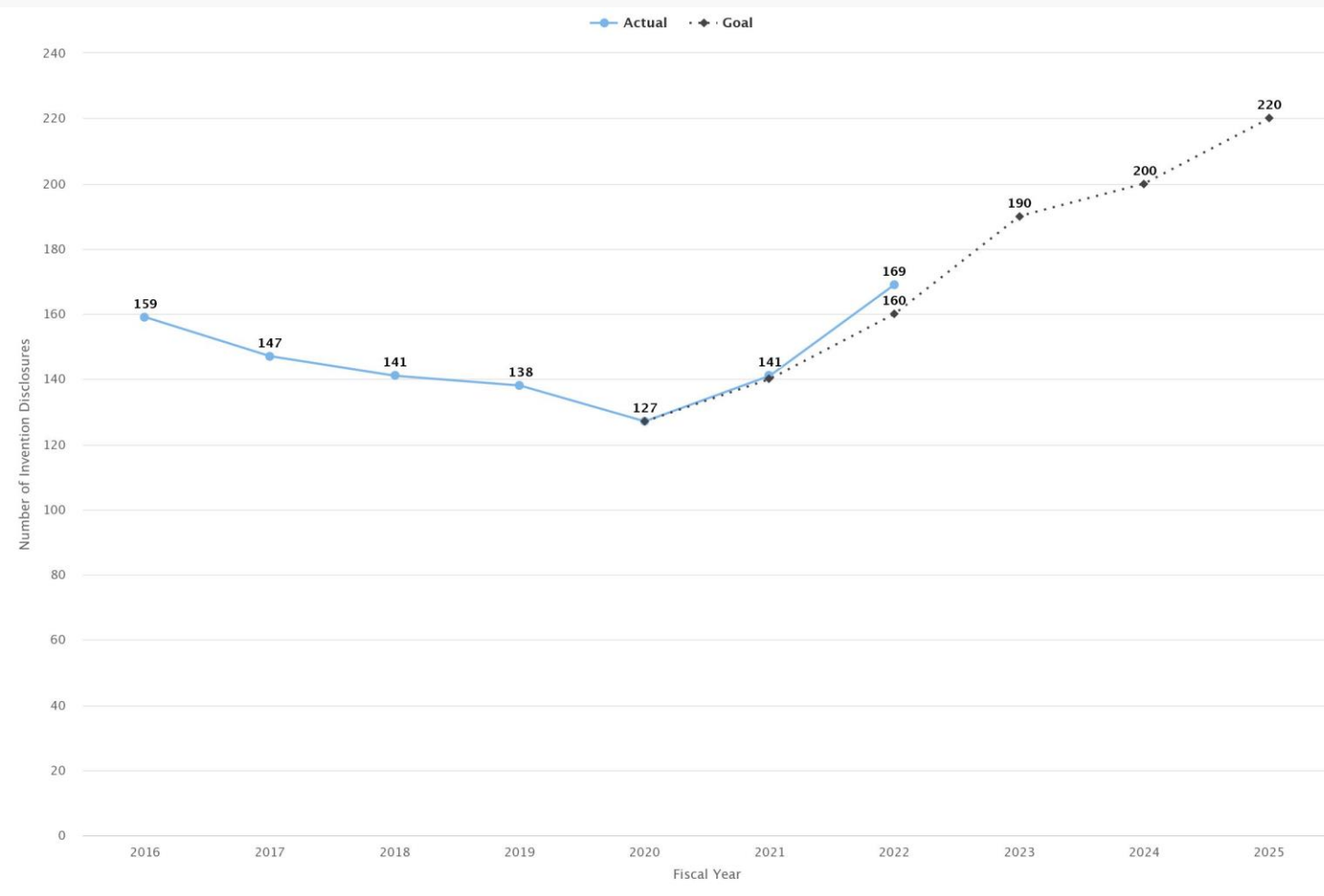
Reporting of
ideas/inventions
Goal: 190 total

License Agreements

Licensing of rights
to third party
Goal: 30

Start-up Companies

Launch of newco
based on IP
Goal: 9



FY22 University Strategic Metrics

INVENTION DISCLOSURES

- University goal: Increase the number of IP invention disclosures to 160 total by FY22
- A total of **169** invention disclosures in FY22

Source: Strategic planning metrics, Virginia Tech University Data Commons udc.vt.edu, accessed 9/20/2021

TECHNOLOGY HIGHLIGHT

Multiresonant Plasmonic Meshes for Bio-interfaced Sensing and Actuation

VTIP 22-042: “Flexible Microporous Multiresonant Plasmonics Meshes by Hierarchical Micro-nanoimprinting with Dissolvable Templates”

TECHNOLOGY HIGHLIGHT

LINK + LICENSE + LAUNCH

Multiresonant Plasmonic Meshes for Bio-interfaced Sensing and Actuation

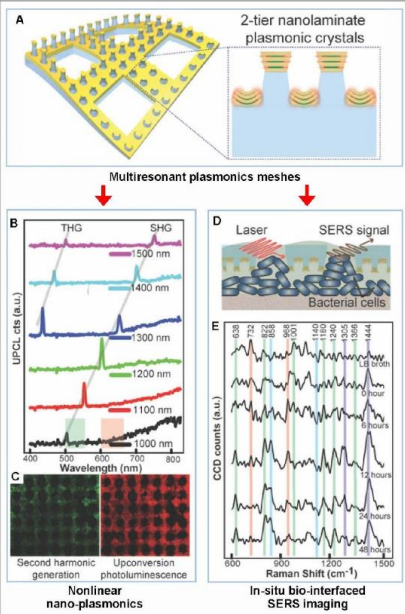
VTIP 22-042: “Flexible Microporous Multiresonant Plasmonics Meshes by Hierarchical Micro-nanoimprinting with Dissolvable Templates”

THE CHALLENGE

Mesh plasmonic devices have the potential to combine the biocompatibility of polymeric meshes with the capabilities of plasmonic nanostructures to enhance nanoscale light-matter interactions for bio-interfaced optical sensing and actuation. However, scalable integration of uniformly structured plasmonic hotspot arrays with polymeric meshes remains challenging due to the processing incompatibility of conventional nanofabrication methods with flexible microporous substrates.

OUR SOLUTION

This technology puts forth a strategy for the nanofabrication of wafer-scale multi-resonant plasmonic meshes (MPMs) via a cost-effective hierarchical micro-/nanoimprint lithography approach. MPMs can function as bio-interfaced broadband nonlinear nanoplasmonic devices and surface-enhanced Raman spectroscopy (SERS) mesh sensors that enable in-situ spatiotemporal molecular profiling of biological systems. Such devices can open exciting avenues for bio-interfaced optical sensing and actuation applications, such as inflammation-free epidermal sensors, combined tissue-engineering and biosensing scaffolds for in vitro 3D cell culture models, and minimally invasive implantable probes for long-term disease diagnostics and therapeutics.



(A) Schematic illustration of the multiresonant plasmonic mesh. (B) Spectra of nonlinear scattered light under fs-laser excitation in the near-infrared region from 1000 nm to 1500 nm. (C) Multiphoton microscopy 2D images under fs-laser excitation at 1000 nm with the emission detected at 500–550 nm (green) and 601–657 nm (red). (D) Schematic illustration of the experimental setup for in-situ spatiotemporal molecular profiling of bacterial biofilm formation and growth. (E) Average SERS spectra of Pseudomonas syringae biofilms measured between 0 and 48 hours (green bars = protein peaks, red bars = nucleic acid peaks, blue bars = carbohydrate peaks and purple bars = lipid peaks).



CONTACT:

David Irvin
davidir@vt.edu
540-231-7378



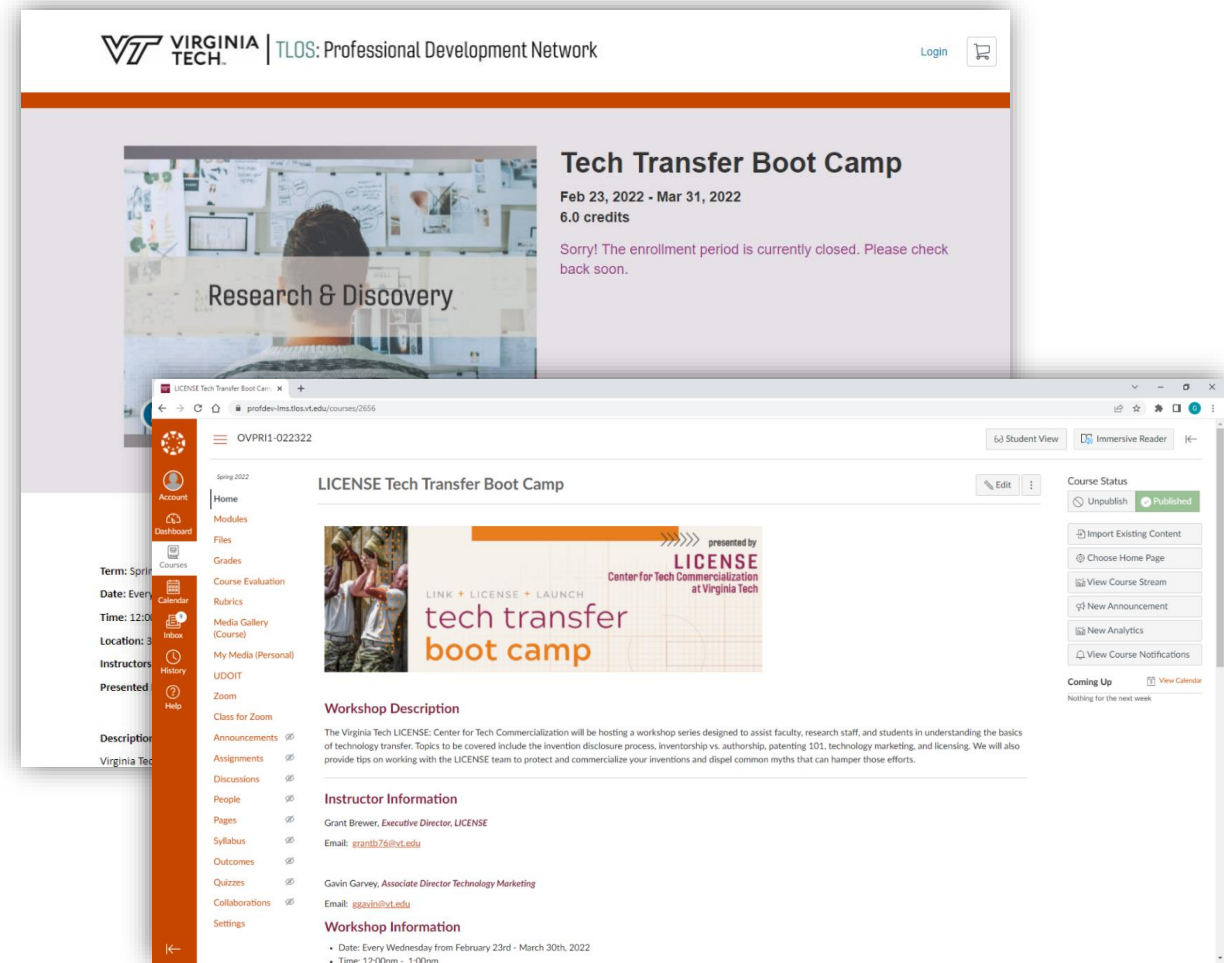
A photograph of three people in business attire sitting together and looking at a smartphone. The person on the left is a woman with long dark hair and glasses, wearing a dark blazer. The person in the middle is a man with a beard and glasses, wearing a grey blazer and a striped tie. The person on the right is a man with a beard and glasses, wearing a grey blazer and a blue shirt. They are all looking at a smartphone held by the man in the middle. The background is dark.

Our main goal

Cultivating a culture
of innovation

LICENSE Bootcamp

- Fully-customized training program
- Can be delivered in different formats, e.g. one-day workshops or 6X1 hours modules
- 33 enrolled in first offering
- Integrates with VT learning platform and one of the most popular courses on TLOS
- Requested to offer 3x per year





Gourdie Lab

Tiny Cargo

- + Technology based on exosomes harvested from milk as a drug delivery technology.
- + Founder has received over \$6M in federal funding for research at FBRI, including approximately \$600K in STTR funding to be used in conjunction with start-up.
- + Received nearly \$100K in local economic development funding from various programs including LAUNCH.
- + In process of \$1-2M seed round.
- + Currently finishing in-vivo (animal) studies for therapeutic applications that will improve outcomes following ischemic cardiac events.



Asbeck Lab

Maroon Assistive

- + Founded by researchers from the Assistive Robotics Lab at Virginia Tech with funding from Lowe's Home Improvement.
- + Patented carbon fiber spring that reduces the load on users backs, making lifting easier, safer, and more productive.
- + Users say it saves them energy and reduces back pain. Employers have found it reduces turnover and increases productivity.
- + 13 paid multi-month trials, sold 16 units.
- + Raising \$1.5M seed round.

Contact: Tim Pote
tim@maroonassistive.com

You're changing the world. So are we.
Let's do it together.



EDUCATIONAL MISSION – FUTURE DEVELOPMENT

PROVOST CYRIL CLARKE

NOVEMBER 13, 2022





GUIDING PRINCIPLES

1. Evidence-based, student-centered
2. Equity/excellence imperative¹
3. Experiential learning
4. Curricular – co-curricular
5. Modes of engagement

¹See [Boyer 2030 Commission Report](#)

1.



EVIDENCE- BASED, STUDENT- CENTERED

- Psychology of learning
- Start at the end (degree, certificate, etc.) and build back
- Personalized

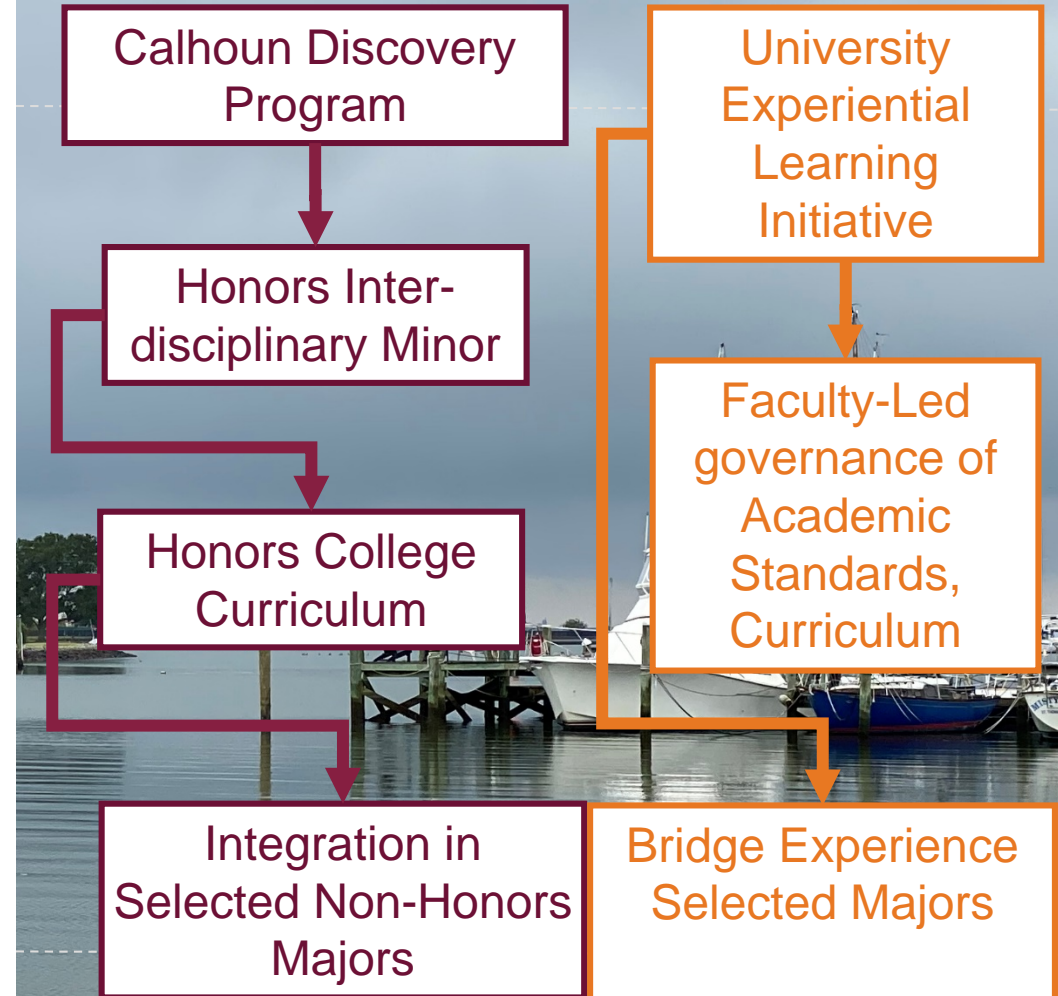
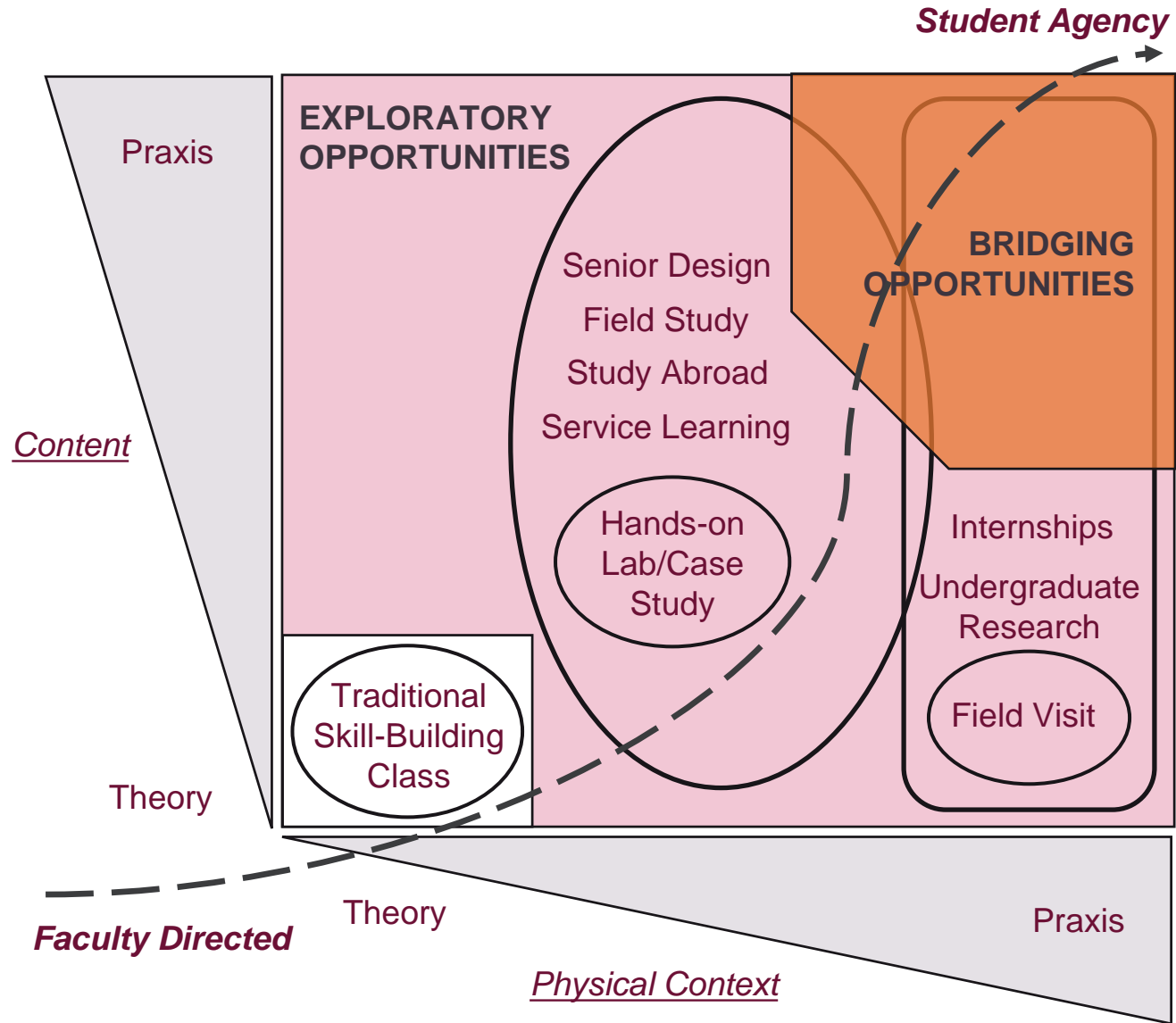


2.



EXPERIENTIAL LEARNING

- Hands-on, minds-on
- Transdisciplinary
- Access to learning environments



3.



CURRICULAR - CO-CURRICULAR

- Technical and non-technical competencies (SKA)
- ³Aspirations for Student Learning
- Living-Learning Communities

³See Division of Student Affairs [Aspirations for Student Learning](#).

4.



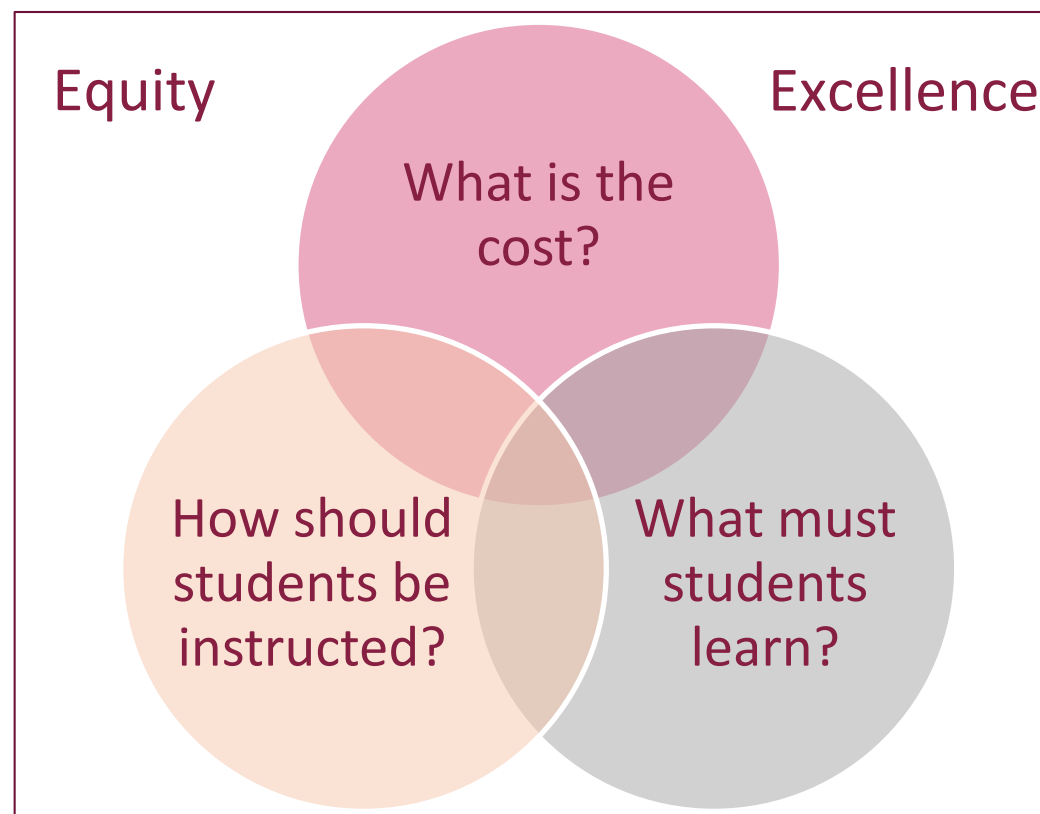
MODES OF ENGAGEMENT

- In-person is well-established and respected at Virginia Tech
- Hybrid to promote access and experiential learning
- Fully online
- Technology-enhanced

Learning from Online Experience during the Pandemic

- Student access and advising
- Wellness, mental health
- Academic progress
- National trends
- Virginia Tech's organizational structure and next steps

How does
it all fit
together?



Goal is to **optimize** balance between:

- Course content/goals
- Instructional methodology:
 - Student- vs. instructor-centered
 - Mode of delivery
- Expense

Underlying **matrix**:

- Equity/Excellence





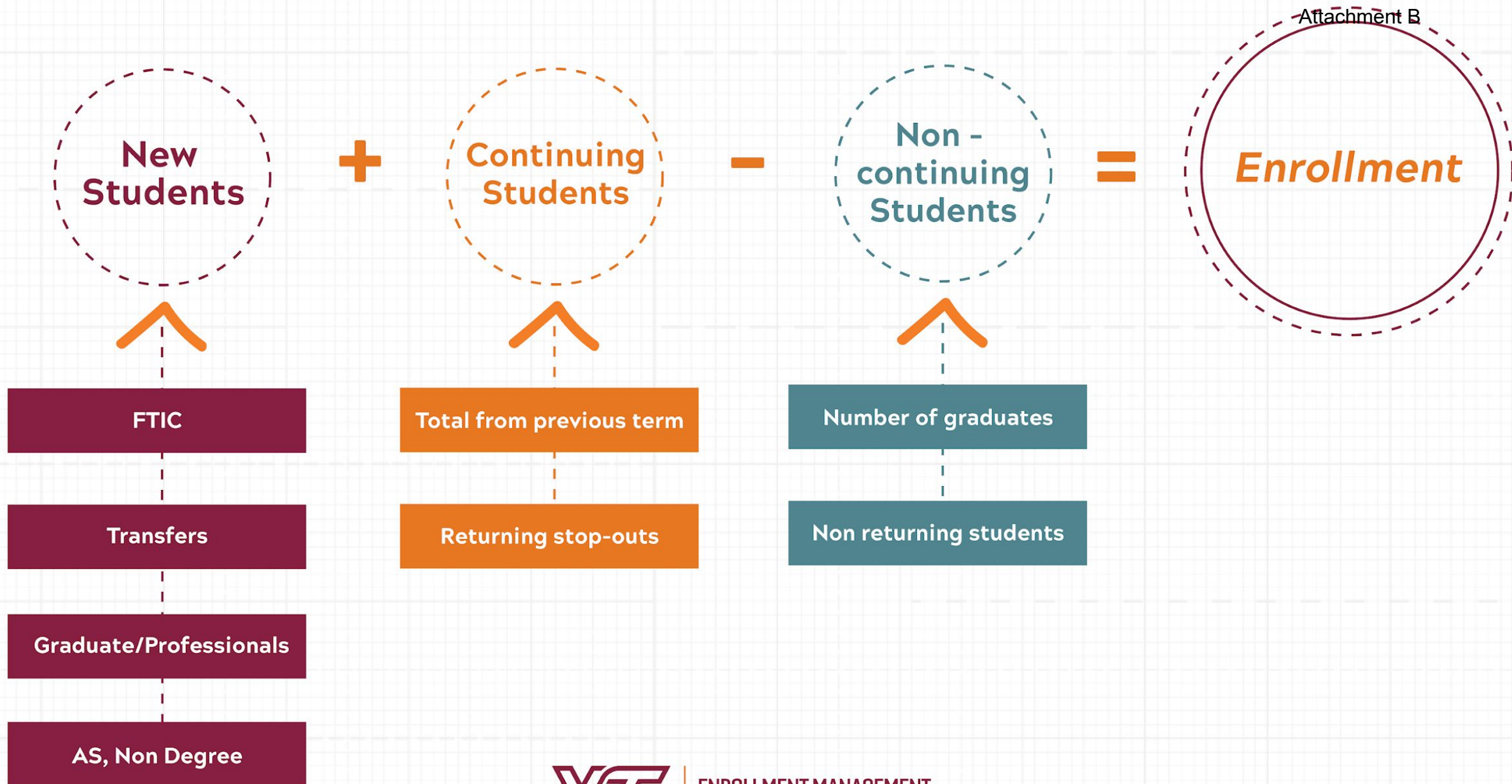
ENROLLMENT MANAGEMENT UPDATE



Luisa M. Havens Gerardo, Ph.D.
Vice Provost for
Enrollment Management



Juan P. Espinoza
AVP for Enrollment Management
and Director for Undergraduate
Admissions



2022 New Undergraduate Applicants

2021-2022 Admissions Cycle

First Time in College (FTIC)

Applicants	45,238*
Offered	25,752
Enrolled	7,101

* Record Number of Applicants

Transfers

Applicants	2,890
Offered	1,666
Enrolled	997

2022 Incoming Class
(FTIC + Transfers)

8,098

2022 New Undergraduate Applicants

FTIC Test Optional Status

With Test

Applicants	24,498
Offered	15,127
Enrolled	3,581

Without Test

Applicants	20,743
Offered	10,671
Enrolled	3,516

With test
offer rate:

61.75%

With test
yield rate:

23.67%

Without test
offer rate:

51.44%

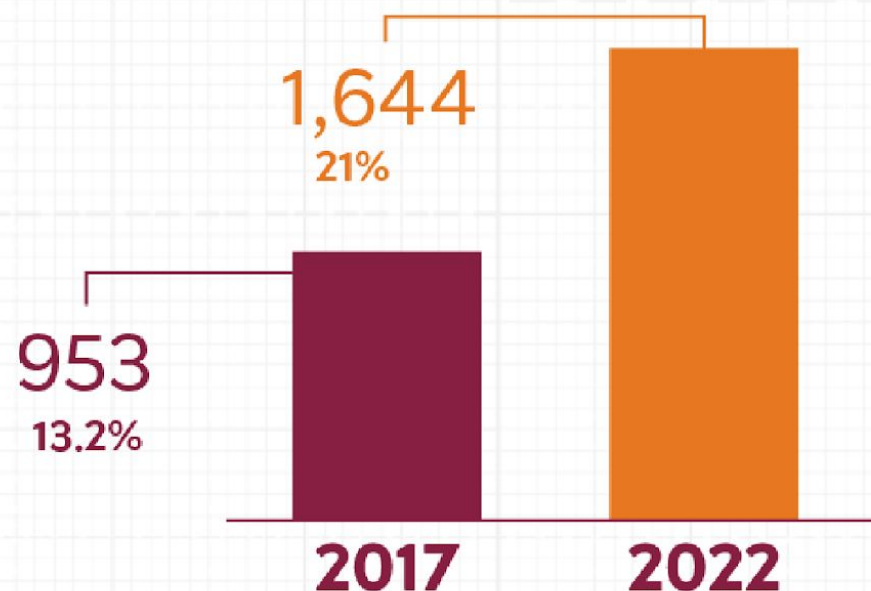
Without test
yield rate:

32.95%

2022 New Undergraduate Enrollment

Demographic Benchmark: Total Underrepresented Minority (FTIC + Transfers)

72.5%
Increase



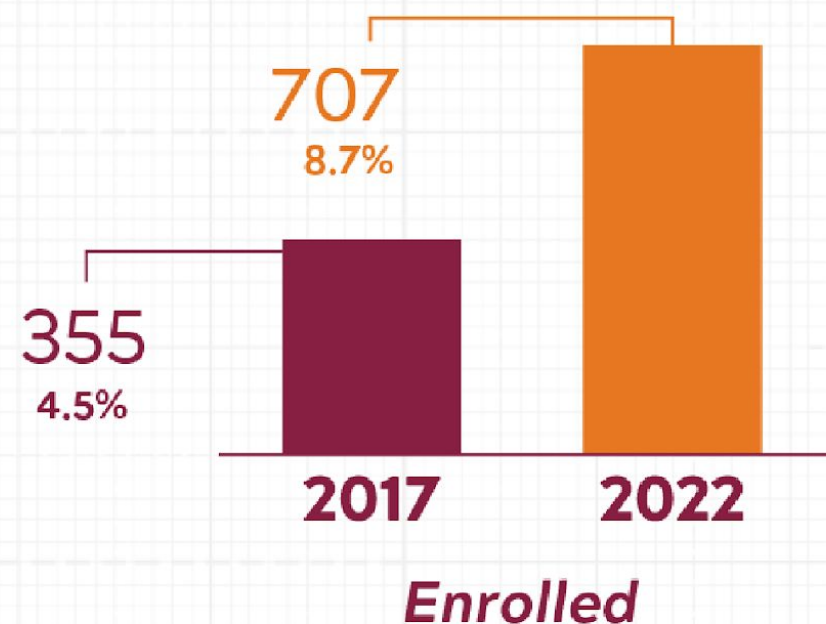
Goal: Achieve 25% representation of URM students in the entering class (FTIC and transfers) by 2022.

2022 New Undergraduate Enrollment

Demographic Benchmark:

Black Enrollment (FTIC)

*Black and 2 or more
races indicating Black*



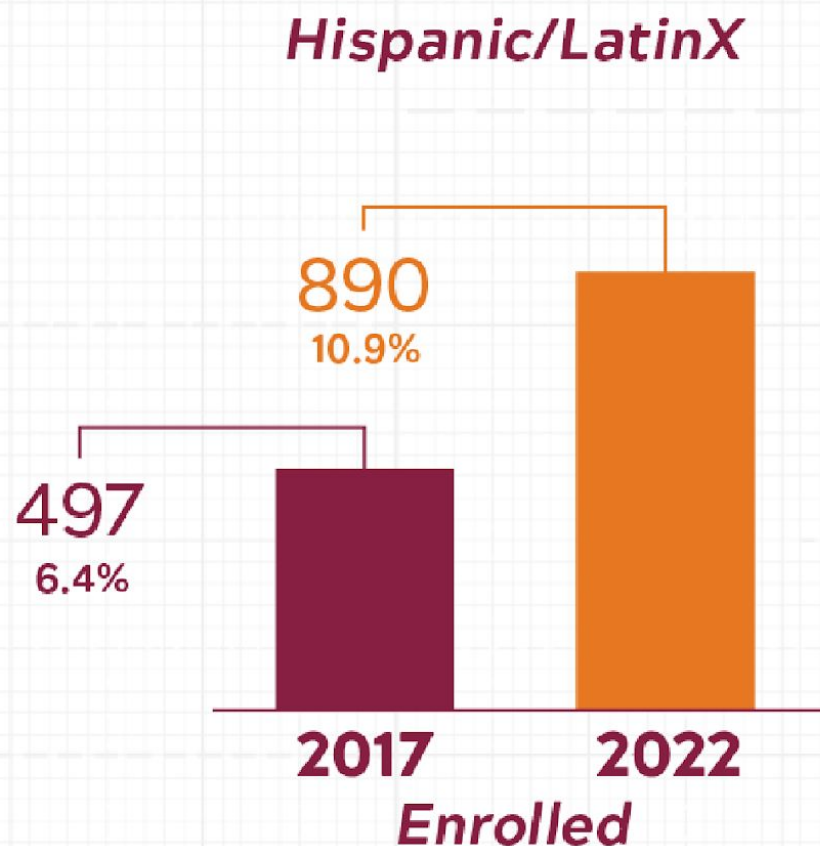
97.7%

Increase from
2017 - 2022

2022 New Undergraduate Enrollment

Demographic Benchmark:

Hispanic/LatinX Enrollment (FTIC)



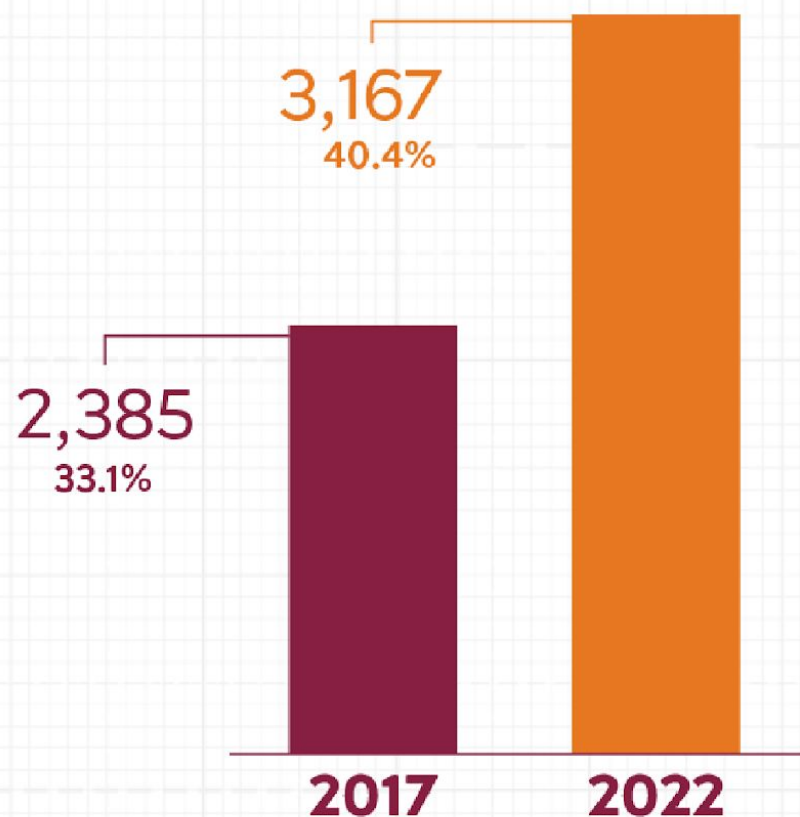
79%
Increase from
2017 - 2022

2022 New Undergraduate Enrollment

Demographic Benchmark:

URM/USS (FTIC + Transfers)

32.75%
Increase



Goal: Achieve 40%
representation of
underrepresented or
underserved (Pell-Eligible, first
generation, and veterans) in
the entering class (FTIC and
transfers) by 2022.

2022 New Undergraduate Students

Demographic Benchmarks:

Underserved (FTIC + Transfers)

Pell Eligible

Applicants*	6,176
Offered	3,839
Enrolled	1,308

*Historic High

First-Generation

Applicants*	8,762
Offered	5,259
Enrolled	1,685

*Historic High

Veterans

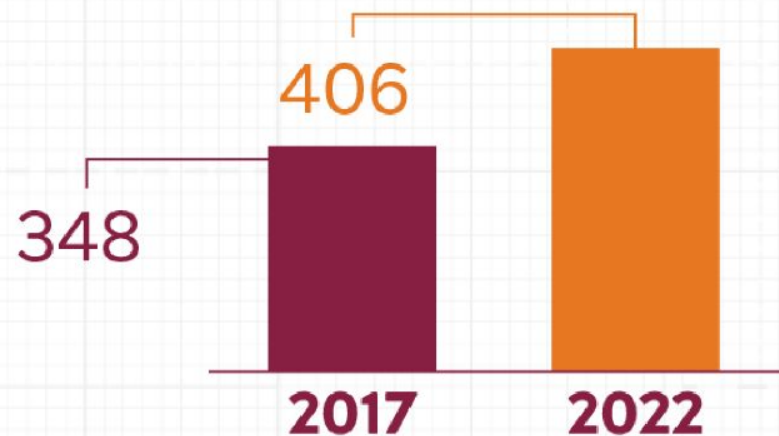
Applicants	116
Offered	50
Enrolled	22

2022 New Undergraduate Enrollment

Corps of Cadets (FTIC + Transfer)

2022 Total Corps
Enrollment:

1,164

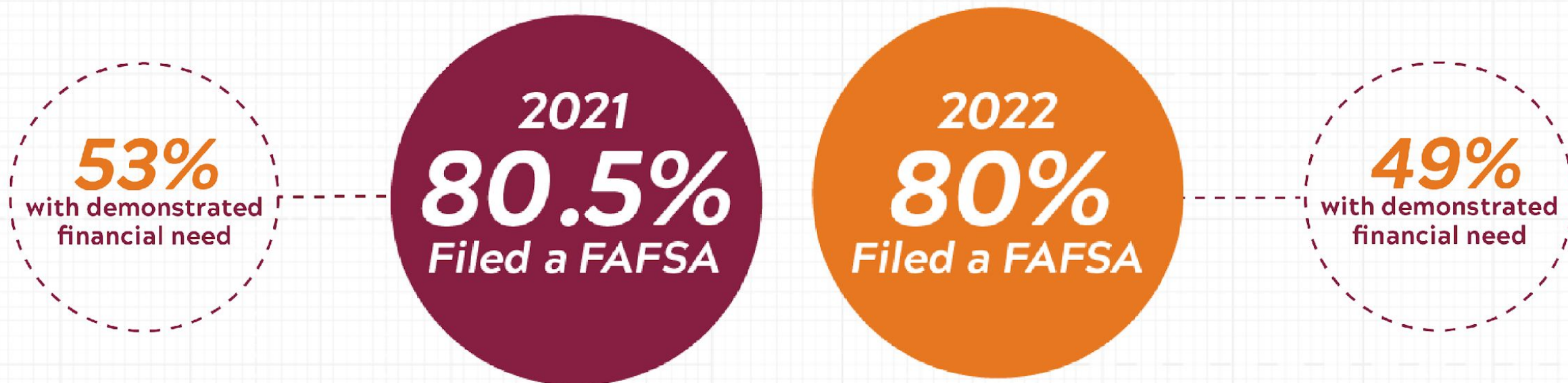


**Goal: Increase the total enrollment in
the Corps of Cadets to 1,400 by 2023.**

Financial Aid Profile

All New Undergraduates

FAFSA Filers



Financial Aid Profile

All New Undergraduates

Average Parent Income

2021

All	\$211,672 (n=6,231)
Most Need	\$40,191 (n=1,105)
No Need	\$364,126 (n=904)

2022

All	\$224,697 (n=7,271)
Most Need	\$43,731 (n=943)
No Need	\$334,828 (n=2,443)

Financial Aid Profile

All New Undergraduates

Average Expected Family Contribution

2021

All	\$58,362
Most Need	\$1,502
No Need	\$122,873

2022

All	\$66,902
Most Need	\$1,710
No Need	\$179,005



Financial Aid Profile

All New Undergraduates

Average Institutional Gift

Percentage
of need met:

All

29.6%

Most need

38%

2021

All

\$2,223

Most Need

\$3,513

No Need

\$3,173

2022

All

\$3,524

Most Need

\$6,076

No Need

\$1,976

Percentage
of need met:

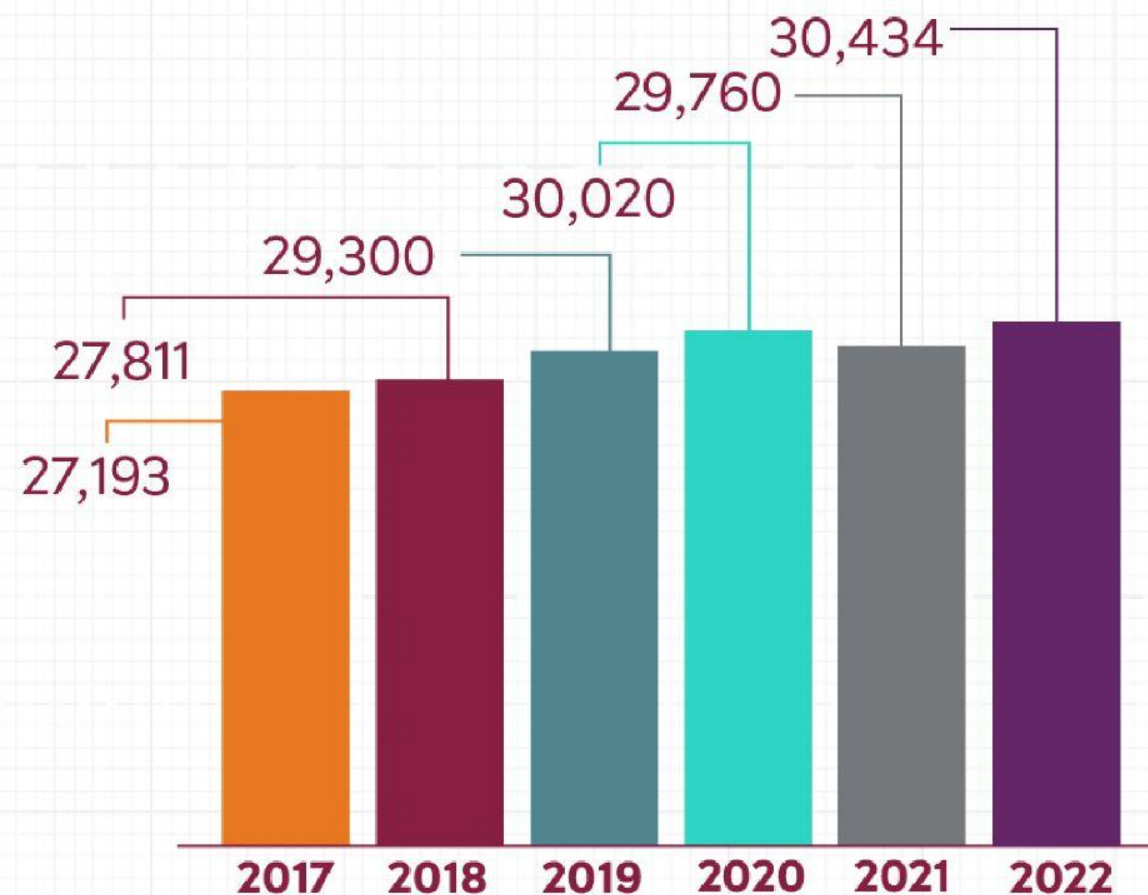
All

33%

Most need

42.2%

2022 Overall Undergraduate Enrollment



2022 Continuing Student Enrollment Retention - FTIC

- > Continued to 2nd year in college **91%** (2021 Cohort)
- > Continued to 3rd year in college **88.4%** (2020 Cohort)
- > Continued to 4th year in college **83.3%** (2019 Cohort)
- > Continued to 5th year in college **18.5%** (2018 Cohort)
- > Continued to 6th year in college **3.4%** (2017 Cohort)
- > Continued to 7th year in college **1.1%** (2016 Cohort)

Avg.
97.5%
continue to
1st Spring.

2022 Continuing Student Enrollment

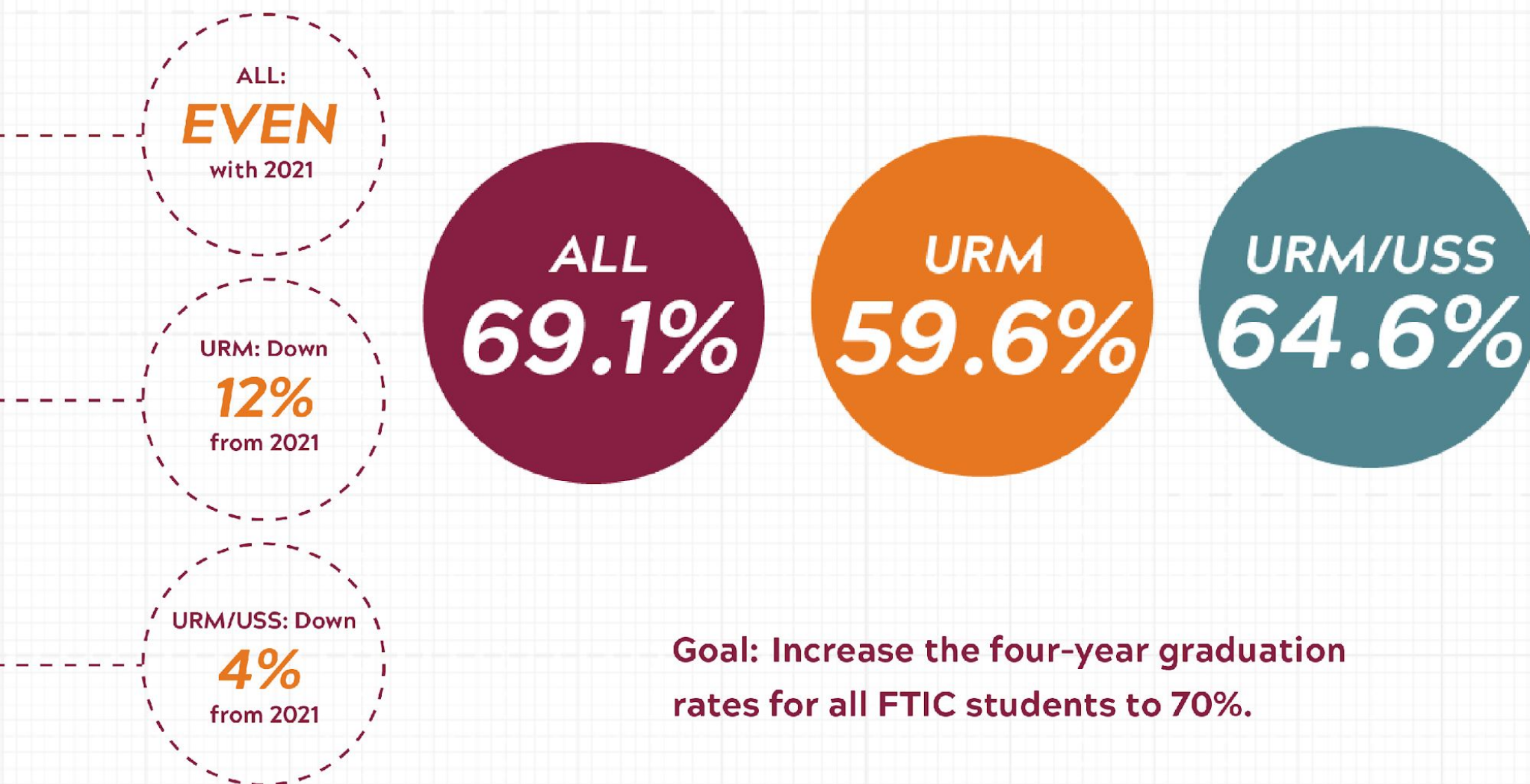
Retention - Transfers

- > Continued to 2nd year in college **89.6%** (2021 Cohort)
- > Continued to 3rd year in college **67.3%** (2020 Cohort)
- > Continued to 4th year in college **18.4%** (2019 Cohort)
- > Continued to 5th year in college **3.4%** (2018 Cohort)
- > Continued to 6th year in college **1.0%** (2017 Cohort)
- > Continued to 7th year in college **0.9%** (2016 Cohort)

Avg.
96%
continue to
1st Spring.

Graduating Students

4-Year Graduation Rates: 2022 FTIC



Graduating Students

3-Year Graduation Rates: 2022 Transfers

ALL: Down
2.9%
from 2021

URM: Down
1.3%
from 2021

URM/USS: Down
2.7%
from 2021

ALL
69.4%

URM
66.9%

URM/USS
68.9%

**Goal: Increase the three-year graduation rate
for all undergraduate transfer students to 75%.**

Graduating Students

Time to Degree

2020 - 2021

FTIC	3.94 years
Transfer	2.64 years

2021 - 2022

FTIC	3.93 years
Transfer	2.68 years

Graduating Students

Students Awarded Bachelor's Degrees



2022 New Graduate Applications - Masters

2021 - 2022 Admissions Cycle

2021
Offer rate:
71.5%

2021
Yield rate:
46.8%

2021

Applied	4,552
Offered	3,523
Enrolled	1,524

2022

Applied	5,263
Offered	2,912
Enrolled	1,360

2022
Offer rate:
55.3%

2022
Yield rate:
46.7%

2022 New Graduate Applications - PhD

2021 - 2022 Admissions Cycle

2021
Offer rate:
40.6%

2021
Yield rate:
40%

2021

Applied **2,896**

Offered **1,177**

Enrolled **471**

2022

Applied **3,235**

Offered **1,168**

Enrolled **469**

2022
Offer rate:
36.1%

2022
Yield rate:
40.2%

2022 Graduate Students

Overall Enrollment

2021 - 2022

Master's	3,738
Doctorate	3,108
Total	6,846

2022 - 2023

Master's	3,912
Doctorate	3,151
Total	7,063

Goal: Reach 7,900 graduate students by
2024 (4,550 masters and 3,350 PhDs).

2022 Graduate Students

Demographic Benchmarks:

Total URM Graduate and Professional

2020 - 2021

Graduate 17.9% (828)

Professional 19.5% (95)

2021 - 2022

Graduate 18.2% (833)

Professional 19.3% (94)

Goal: Achieve 20% representation of underrepresented minority graduate and minority professional students by 2024.

2022 Graduate Students

Time to Degree

2020 - 2021

Master's 2.38 years

Doctorate 5.32 years

2021 - 2022

Master's 2.24 years

Doctorate 5.26 years

2022 Graduate Students

Graduate Degrees Awarded

2020 - 2021

Master's	1,429
Doctorate	489

2021 - 2022

Master's	1,460
Doctorate	497



Looking Ahead

Undergraduate Enrollment Goals

- 300 Transfer students in Spring 2023
- 7,085 FTIC and 1,025 New Transfers
- Total enrollment for Fall 2023; 30,450

Current (as of 11/2/22) Application Numbers

- Spring 2023 Transfer Applications - 748
Up 5.8% from Spring 2022 (707)
- Fall 2023 Early Decision- 3,390 Applications
Up 21% from Fall 2022 (2,791)
- Fall 2023 Undergraduate Applications - 14,389
Up 25% from Fall 2022 (11,527)



ENROLLMENT MANAGEMENT UPDATE



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