



January 20, 2021

Mr. Daniel Timberlake  
Director  
Department of Planning and Budget  
1111 East Broad Street, Room 5040  
Richmond, Virginia 23219

Dear Mr. Timberlake:

Enclosed please find the FY2020 Annual Report for the Virginia Innovation Partnership Authority and Center for Innovative Technology, which covers fiscal year 2020 prior to the establishment of the new Authority. The report fulfills the Code of Virginia § 2.2-2355 (17) and (20) and the 2020 Appropriations Act Item 135 E requirements.

Please feel free to call me at 703-689-3021 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Susan Aitcheson', is displayed within a light gray rectangular box.

Susan Aitcheson  
CFO  
Center for Innovative Technology

cc: The Honorable Governor Ralph Northam  
The Honorable George Barker, Chairman, Senate General Laws and Technology  
The Honorable Cliff Hayes, Chairman, House Communications, Technology and Innovation  
The Honorable Brian Ball, Secretary of Commerce and Trade  
Ms. Cassidy Rasnick, Deputy Secretary of Commerce and Trade  
The Honorable Janet D Howell, Chairman, Senate Finance & Appropriations Committee  
The Honorable Luke E. Torian, Chairman, House Appropriations Committee  
Ms. Anne E Oman, Staff Director, House Appropriations Committee  
Ms. April Kees, Staff Director, Senate Finance & Appropriations Committee  
Ms. Toni Walker, Associate Director, Department of Planning and Budget  
Ms. Samantha Martin, Budget and Policy Analyst, Department of Planning and Budget

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# Center for Innovative Technology 2020 Report

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## Investing in Commonwealth Growth

In accordance with 2020 Appropriation Act Item 135.E and Code of Virginia § 2.2-2355 (17) and (20), Virginia's Center for Innovative Technology is pleased to submit the following report describing key programs and economic performance for the Commonwealth of Virginia.



## Investing in Commonwealth Growth

The Center for Innovative Technology (CIT) is Virginia’s leading resource for innovation-based economic growth strategies and programs. CIT creates technology-based economic development strategies to accelerate innovation, imagination and the next generation of technology and technology companies at the earliest stages of the innovation continuum – commercialization and seed funding – as it helps entrepreneurs launch and grow high-growth technology companies that create high-paying jobs for the future.

To facilitate national innovation leadership and accelerate the rate of technology adoption, CIT creates partnerships between innovative technology start-up companies and advanced technology consumers. CIT builds public-private initiatives that bring government, industry and universities together to help entrepreneurs create new companies, government improve performance, and community leaders lay the foundations for their innovation economies. CIT has long been known as a source of ideas, programs, and capital for Virginia’s innovation ecosystem. To build on that foundation, CIT has become an integral part of economic development policy formation and execution with public and private stakeholders across the Commonwealth that include the Commonwealth government, Virginia universities and community colleges, businesses, and investors. Working closely with Virginia Economic Development Partnership (VEDP), GO Virginia, Virginia Biosciences Health Research Corporation/Virginia Catalyst (VBHRC), the Tobacco Commission, Virginia Research Investment Committee (VRIC), Department of Housing and Community Development (DHCD), the emerging Virginia Innovation Ecosystem and others, we share our expertise, craft strategies and design complementary programs to fulfill our mission of economic growth and diversity across Virginia and to make the best use of public and private funds entrusted to our organizations.

In FY2020, CIT, a not-for-profit corporation, carried out its mission through five service lines: CIT Entrepreneur, CIT R&D, CIT Strategic Initiatives, CIT Broadband, and CIT Regional and Policy Initiatives. Through these activities, CIT leverages public and private sector investments to drive innovation and entrepreneurship in the Commonwealth, creating new, high-growth companies and sustainable job growth.

### Program Changes Anticipated in FY2021

FY2021 represents the start of a profound transformative period for innovation, entrepreneurship, and technology commercialization in the Commonwealth of Virginia. In 2020 the General Assembly and Administration created the new Virginia Innovation Partnership Authority, or VIPA, on July 1, 2020. Established by Code of Virginia § 2.2-2351, VIPA brings consolidated and significant strategy, funding, and oversight for innovation commercialization and entrepreneur support under one entity. The Administration and General Assembly concluded “there exists in the Commonwealth a need to support the life cycle of innovation, from translational research; to entrepreneurship; to pre-seed and seed-stage

funding; as well as acceleration, growth, and commercialization, resulting in the creation of new jobs and company formation. A collaborative, consistent, and consolidated approach will assist the Commonwealth in identifying its entrepreneurial strengths, including the identification of talents and resources that make the Commonwealth a unique place to grow and attract technology-based businesses.”

The scope of the programs the Authority may undertake is broad. It provides a wide range of powers and programmatic development. Critical needs and opportunities of the Authority establish the Authority as Virginia’s hub to grow and diversify the economy through innovation, entrepreneurship, and technology commercialization.

- Promote the technology-based economic development of the Commonwealth by building, attracting, and retaining innovation and high-technology jobs and businesses in Virginia.
- Increase industry competitiveness by supporting the application of innovative technologies that improve productivity and efficiency.
- Attract and provide additional private and public funding in the Commonwealth to enhance and expand the scientific and technological research and commercialization at the state and federal research institutions and facilities, including by supporting and working with technology transfer offices to advance research from proof-of-concept to commercialization resulting in new business and job creation.
- Attract and provide additional private and public funding to support and enhance innovation-led entrepreneurship ecosystems and coordination of existing activities and programs throughout the Commonwealth to create new job opportunities and diversify the economy.
- Ensure promotion and marketing of Virginia’s statewide innovation economy and support and coordinate regional marketing efforts to align local and statewide objectives.
- Close the Commonwealth’s support gap through pre-seed and seed stage investments, coordination of private investor networks, and shared due diligence research.

In FY2021, CIT will organize in alignment with the VIPA in three divisions: a Commercialization Division, an Investment Division, and an Entrepreneurial Ecosystems Division; and, four executive function departments: Strategic Initiatives, Finance and Administration, Human Resources, and Policy, Communications and Government Engagement.

## **FY2020 Programs**

### **CIT Community Engagement: Outreach to Regions, Localities and Citizens**

Four years ago, CIT set out on a strategic initiative to dramatically increase its engagement with communities all across Virginia. Engagement in this context means CIT staff meeting with citizens and elected officials in communities across Virginia to communicate our programs, support for innovation and entrepreneurship and solicit participation in our programs. CIT staff outreach in all regions led to more applications for our CRCF program, a record number of clients, over 300, trained on SBIR/STTR proposal preparation, more investment opportunities for our Virginia Founders Fund (described below), and feedback from communities that CIT is notably more seen and engaged across the Commonwealth.

## **CIT Entrepreneur: Access to Capital**

To bridge the gap of critical early-stage capital for many emerging technology companies, CIT operates the CIT GAP Funds and the Virginia Founders Fund (VFF). The CIT GAP Funds makes seed-stage equity investments in Virginia-based technology, green technology and life science companies with high growth potential. The GAP Funds are overseen by CIT with the advice of private sector experts – the Investment Advisory Board – who conduct thorough due diligence on the companies before making investments. Funded by proceeds of the GAP Funds portfolio, the Virginia Founders Fund is designed to support regionally based innovation initiatives and provide investment opportunities for entrepreneurs underrepresented in venture capital. The Fund is dedicated to investments in minorities, women, veterans, and founders in regions outside of Northern Virginia. CIT promotes the VFF and other innovation opportunities, through partnership with regional innovation initiatives to showcase regional entrepreneurs and attract investors and entrepreneurs, and to support existing regional programs to stimulate economic growth in these communities.

## **CIT R&D: Strategic Investments in Research Commercialization**

CIT R&D facilitates the commercialization of research through public and private sector teams across the state that develop and deploy innovative, marketable solutions. The CIT R&D team manages the Commonwealth Research Commercialization Fund (CRCF), which invests in research and commercialization at Virginia colleges and universities, companies, federal labs and other research institutions in their efforts to advance technology and drive economic growth in the Commonwealth. In FY2020 the CRCF program was supported by a \$2.8 million General Fund appropriation which resulted in 30 awards totaling \$2.48 million and leveraging the Commonwealth's investment with more than \$13 million in matching funds. Since program inception in FY2012 and its sunset on June 30, 2020, nearly 380 projects around the Commonwealth totaling more than \$30 million in approved funding and leveraged with more than \$85 million in matching funds, including federal awards.

## **CIT Strategic Initiatives: Positioning the Commonwealth for Future Economic Growth**

CIT Strategic Initiatives focuses on identifying and advancing solutions and providing initial leadership for the Commonwealth around important emerging areas that impact future economic development. Key initiatives for FY2020 included Smart Communities, access to Broadband, and Autonomous Systems, with additional activities in conjunction with the Chief Data Officer (CDO), Chief Broadband Advisor (CBA), Department of Homeland Security and Public Safety (in conjunction with the Federal Department of Homeland Security), Virginia Department of Transportation (VDOT) and other Agencies.

In partnership with the US Department of Homeland Security Science and Technology Directorate, the Smart City IoT Innovation (SCITI Labs) program pioneered a new approach to R&D, Commercial First Innovation™ designed to speed delivery of innovative technologies to first responders. Commercial First encourages entrepreneurs already succeeding in related markets to innovate ideas that address the unique needs of the Homeland Security community. SCITI Labs is working in technology areas including: smart buildings, indoor UAVs for search and rescue, detection of wildfire ignition using ground-based IoT

sensors, vehicle inspection at speed, infrastructure protection against a range of threats, including cybersecurity and chemical release threats, and integrated information sharing (smart hub) technologies. SCITI Labs has strategically positioned the Commonwealth of Virginia to assume a national leadership role in the public safety domain as it evolves to face the new opportunities and challenges associated with Smart Communities.

Under the Smart Communities Initiative, smart communities are anticipated to drive approximately \$1.5 trillion of economic activity globally over the next 15 years. The CIT Smart Communities initiative has evolved from several related, synergistic activities including the DHS SCITI Labs program, the Smart City Works Actuator, and the Virginia Smart Community Working Group. The initiative moved from studies to implementation, leading the effort to have Virginia named as the first “Smart State” by the Smart Cities Council, and having Virginia selected by the National Governors Association for a Living Lab leading to the Virginia State Action Plan for Smart Communities. Smart Communities activities focus on “Community-Driven Innovation” pilot projects across the Commonwealth supporting early stages of initiatives that develop capabilities identified and desired by the communities involved. Project selection seeks to achieve geographic diversity across the Commonwealth, in addition to technology and vendor diversity, with preference for smaller, innovative Virginia companies. Implementation projects are under way throughout the Commonwealth including an IoT security and privacy testbed in Stafford County which offers a model from which other communities can follow.

Associated technologies supporting the initiative include the Unmanned Systems Center, and CIT Broadband as a critical component technology for Smart Communities in addition to its role described below. By integrating these efforts in a single conceptual framework CIT has the capability to address the needs of widely varying communities throughout the Commonwealth and provide a focal point for maturing both commercial and university-developed technologies that are relevant to these communities. A major key to success in this area is the continued evolution of partnerships at the state and national level, and with communities and local governments, universities and private entities throughout the Commonwealth.

In FY2021, in addition to these primary activities, Strategic Initiatives will explore three potential new areas including a Maritime Center of Excellence, Augmented Reality/Virtual Reality (AR/VR), and quantum computing. It will also continue its focus on integration with the Commonwealth Data Trust led by Chief Data Officer Carlos Rivera.

## **CIT | Broadband**

Within this framework, CIT Broadband is a state-sponsored program charged with “provid[ing] technical assistance to unserved and underserved regions and localities where wired broadband services are not currently available, support[ing] the expansion and continual improvement of broadband services in regions and localities throughout the Commonwealth as well as well as coordinat[ing] with and support[ing] the broadband assessment and planning activities of the Virginia Growth and Opportunity Board.”

By providing technical assistance to unserved localities throughout the Commonwealth to establish and expand broadband infrastructure, CIT Broadband supported the acceleration of socio-economic growth in Virginia. CIT strongly believes that the most efficient way (in cost and time) of expanding broadband is through public-private partnerships. CIT leverages its nationally recognized methodology called The Broadband Path to facilitate public-private partnerships that will address a locality's unique broadband needs. CIT serves as a repository of broadband information (ex. broadband funding, best practices, coverage maps and stats), a liaison between elected officials, providers, localities and citizens, and an enabler of locality-led broadband initiatives.

The CIT Broadband team worked in tandem with the Chief Broadband Advisor, the Broadband Advisory Council, the Administration, General Assembly, Internet Service Providers (ISPs), Federal and Virginia agencies, Virginia local governments, and an evolving set of Broadband stakeholders to shape strategy, policy, execution, and legislative guidance to develop strategic action plans to accelerate broadband deployment in the Commonwealth.

FY2020 was the final year of state sponsorship for the program. On July 1, 2020, CIT Broadband successfully handed off its broadband responsibilities to the Virginia Department of Housing and Community Development (DHCD). This included all broadband information and the Commonwealth Connect website.

### **CIT | Virginia's Unmanned Systems Center (VUS@CIT)**

The Unmanned Systems Center at CIT serves as Virginia's primary information resource, a proponent and point-of-contact on global UMS technology, policy, and trends. The Center is a catalyst for growth of unmanned and autonomous systems, vehicles, and technologies in Virginia. The Center has established itself as the nexus for collaboration between businesses, investors, universities, entrepreneurs and government organizations, which led to Virginia's recognition for the second year as the top state in the country for UAS by Business Facilities Magazine.

CIT and the Virginia Tech-led MAAP (Mid-Atlantic Aviation Partnership) FAA Unmanned Aviation Systems Integration Pilot Program (UAS IPP) is helping push the envelope for BVLOS (Beyond Visual Line of Sight) UAS operations, with valued industry partners like State Farm, Dominion Energy, Google's "Wing" and others.

The Center works with several Virginia state agencies to develop pilot projects that enable use of unmanned systems to accomplish agency missions faster, cheaper and safer. The Center promotes the use of UMS-based solutions to the COVID-19 emergency response. In partnership with Virginia's Department of Aviation and Department of Transportation, the Center is supporting the launch of VA FIX (Flight Information Exchange). The Center developed and maintains the Commonwealth's UMS website and Virginia's Unmanned Systems Directory to serve as the central source of information and assistance related to the unmanned systems landscape in Virginia. The Center's Director is assisted by a

24-member advisory board that brings together expertise and leadership from across the Commonwealth to guide strategies and priorities.

## **MACH37 Cyber Accelerator™: Privatization Complete**

MACH37 Cyber Accelerator™ is America's premier market-centric cybersecurity accelerator designed to facilitate the creation of the next generation of cybersecurity product companies. MACH37's unique program design places heavy emphasis on the validation of product ideas, building entrepreneurs' ability to grow viable companies and the development of relationships that produce an initial customer base and investment capital. In FY2019 CIT entered into a two-year joint venture to complete the privatization of MACH37 at fiscal year end 2020. MACH37 successfully completed its transition to 100% private control and funding. CIT continues exercise its right to invest in promising companies and their technologies in the accelerator.

## **CIT Regional and Policy Initiatives**

CIT Regional and Policy Initiatives support regionally based priorities and initiatives designed to expand opportunities and build on the strengths and resources that uniquely shape each region. Staff from all of CIT's services lines engage directly in organizations and initiatives as Board members, mentors, investors, trainers, advocates, and as partners in programs and proposals that seek additional funding sources. CIT supports the creation of a network of regional accelerators and funds – among the focus areas, best practices, resource sharing, and showcasing regional investment opportunities. To aid in achieving this goal, CIT created programs like the Virginia Founders Fund dedicated to providing investment opportunities for underrepresented entrepreneurs in Virginia. In addition, CIT serves on the innovation and proposal review committees for all GO Virginia Regional Councils and on the evaluation committee for the State Council where it advocates funding for innovation programs. CIT also collaborates directly with regions on grants developed to grow innovation and entrepreneurship. And, in partnership with regional stakeholders, CIT develops and advocates for legislative and budget proposals that advance innovation and entrepreneurship in Virginia. CIT works to establish policies and specific programs that maximize intellectual property commercialization, entrepreneurship, and new company formation.

Primary regional partners include:

- All regional technology councils
- All Go Virginia Councils
- Lighthouse Labs, Startup Virginia, Activation Capital – Richmond
- 757 Angels/Accelerate, ODU Entrepreneur Center – Hampton Roads
- Launch Place and Launch Place Seed Fund – Danville
- RAMP Accelerator – Roanoke
- Valley Innovation Council (VIC)
- iLab – Charlottesville
- Virginia is for Entrepreneurs (VA4E)
- MACH37/UVA-Wise Cyber Partnership

- Virginia Chamber – Blueprint Virginia

CIT's Federal Funding Assistance Program identifies and accelerates opportunities for Virginia's small technology businesses to obtain SBIR, STTR, and other government contracts. As the leader of SBIR initiatives in Virginia, CIT provides guidance, direction, training, and valuable resources to enhance the competitiveness of SBIR/STTR proposal strategies.

CIT Supports Virginia's Phase I and Phase II SBIR/STTR Applicants:

- SBIR strategy consultation and mentoring
- Low cost Phase I and Phase II proposal training and review courses
- Discounts with proposal consultants (proposal prep & proposal review)
- Discounts on proposal preparation software
- Referral to law firm for free IP and patent consultation
- Discounts on federal cost accounting solutions and CPA services
- Commercialization plan assistance
- Intro to 3rd party capital
- VC/Angel Capital "Readiness" review
- Funding assistance to qualified first time Phase I and/or Phase II applicants to help pay for proposal development resources

## **Economic Performance of Key Areas**

### **CIT Entrepreneur: Growth Accelerator Program (GAP)**

The GAP Fund was established to meet the early stage capital demands challenging the Commonwealth's most promising science and technology-based start-ups whose funding requirements could not be met by traditional financing means. GAP Fund investments are governed by the goal of developing the next generation of Virginia's science and technology economy and the entrepreneurial ecosystem required to support that economy. To this end, the GAP Fund places equity and convertible debt investments in tech, clean-tech and life science companies at the earliest stages of company formation, in a manner conducive to stimulating significant private investment or "leverage cash" as a result of CIT's deployment of public dollars.

Fundamental to CIT's ability to successfully deliver private capital is that, unlike grant programs, CIT holds an ownership position in the investee company and maintains that ownership for a multi-year holding period of indeterminate length while the company grows in scope of operations and value. CIT recovers GAP Program investments only upon a liquidity event such as a public offering or change of control for the company.

Underwritten by an annual appropriation from the Virginia General Assembly, the GAP

Fund Program functions as a double-bottom-line investment fund focused on creating significant economic outcomes for the Commonwealth, entrepreneurs and co-investors, with the goal of recovering investment capital for redeployment. Since inception, the GAP Fund Program has considered investing in over 6,300 companies and has invested \$31.4M in 240i seed and early stage technology, life science, and energy companies across the Commonwealth of Virginia.

Over the 16-year life of the program, CIT has found that the following metrics most closely align with program objectives:

- Venture and Angel Capital Attracted - Venture and angel capital dollars invested in the GAP Fund Program's portfolio companies as a result of CIT investing dollars appropriated to the Innovation and Entrepreneurship Investment Authority (IEIA) - prior to FY2021/Virginia Innovation Partnership Authority (VIPA) - starting in FY2021, and obtained from federal and private sources. CIT calculates its annual leverage factor by dividing the total of venture and angel capital by all GAP Fund Program portfolio companies in a given year by the dollars deployed in new investments in that year.
- GAP Fund Program Return - The ratio of capital returned and anticipated to return to CIT, as a result of portfolio companies being acquired, divided by total GAP Fund Program dollars deployed.

Venture and Angel Capital Attracted. For the period FY2020 and inception-to-date, the GAP Fund Program achieved the following leverage cash totals:

- FY2020 – During FY2020, CIT GAP Funds invested \$3.25M. In FY2020, CIT attracted \$158M in angel and venture dollars – inclusive of FY2020 new investments, FY2020 follow-on investments and pre-existing investments in which CIT did not invest in FY2020, for an annual leverage factor of 48.5.
- Inception-to-Date – Since inception, CIT GAP Funds has invested \$31.4M. CIT has attracted \$1.1B in angel and venture dollars, for an inception-to-date leverage factor of 35.4.

Important to note in these ratios is the impact of economic conditions with respect to the ability of GAP portfolio companies to attract leverage capital. Poor economic conditions may result in a lower capital attraction ratio due to investor withdraw from the early stage asset class which is not a direct reflection of changes or performance in the GAP program structure and operations.

GAP Fund Program Return. By the end of FY2020, CIT had secured and invested a total of \$31,372,228 program inception-to-date and had a projected capital return of \$49,296,905 on invested funds, resulting in a capital return factor of 1.6. This number indicates that CIT is managing Virginia's GAP Funds Program appropriation consistent with its goal to return funds to preserve the base of funds for future investment in Virginia's early stage companies.

Company Residency Requirements – CIT GAP Funds requires that all companies be headquartered and have substantial business operations in Virginia at the time of investment and for a minimum three-year period thereafter. MACH37 requires that all companies establish a significant presence in the Commonwealth within a 24-month period of graduation from the MACH37 Accelerator. Significant economic penalties – discussed below - apply to companies in breach of these requirements.

CIT Enforcement of GAP Portfolio Company Residency - Over the life of the GAP Program, CIT's policy and practice regarding remedies that invoked as a result of an investee company's departure from the state has evolved, matured and become more specific:

In FY2005, with the start of the GAP Fund program, CIT established its initial policy regarding company residency requirements. As at that time all CIT's investments were in the form of a convertible debenture, our loan covenants explicitly addressed this issue. Under that policy, if a portfolio company were to relocate to another state, CIT -- at its option -- could invoke one of two remedies: (1) CIT could demand the immediate payback of all principal and interest; or, (2) upon note conversion to equity, CIT could invoke a deeper discount percentage (50% v the 20% of the initial note).

In FY13, CIT revisited this policy and added redemption language to address all equity agreements. In FY14, CIT further refined this language. The current policy and practice, memorialized in CIT GAP Funds transaction covenants, is as follows:

- **Equity Investments:** If a company relocates its primary business from the Commonwealth within 36-months of CIT investment, CIT retains its equity position in the company and is repaid a penalty fee equal to two times CIT's investment. Also within 36-months of CIT's investment, if the Company accepts any direct or indirect funding from a publicly funded economic development or company attraction entity requiring temporary or permanent relocation of the Company's headquarters or any member of the Company's senior management outside of the Commonwealth of Virginia, Company shall be required to pay CIT a penalty equal to two times (2x) CIT's principal investment.
- **Convertible Debt Investments:** If a company relocates its primary business from the Commonwealth within 36-months of CIT investment, CIT can convert into common shares at a 50% discount or elect to be paid back principle plus interest. If the note has previously been converted, then CIT will be paid a penalty fee equal to CIT's principal investment. Also within 36-months of CIT's investment, if the Company accepts any direct or indirect funding from a publicly funded economic development or company attraction entity requiring temporary or permanent relocation of the Company's headquarters or any member of the Company's senior management outside of the Commonwealth of Virginia, Company shall be required to pay CIT a penalty equal to two times (2x) CIT's principal investment, regardless of whether CIT holds debt or equity in the Company.

All MACH37 Accelerator investments were transacted as \$50K common stock equity investments designed to attract or retain cyber startups in Virginia. Prior to FY2020, companies receiving investments from

MACH37 were located at CIT's offices in Herndon, VA for the three-month duration of their acceleration period and then had 24 months to establish a significant presence in Virginia. The accelerator is no longer located at CIT and as of July 2020, CIT will no longer have a role in managing the accelerator; however, CIT continues to make selective investments at its discretion. In FY2020, CIT sold off 11 companies to secondary investors; 10 companies made up the majority of the M37 Carried Interest portfolio. Current covenants call for a full redemption of CIT's investment in the event that companies fail to establish a significant presence in Virginia. Also within 36-months of CIT's investment, if the company accepts any direct or indirect funding from a publicly funded economic development or company attraction entity requiring temporary or permanent relocation of the company's headquarters or any member of the company's senior management outside of the Commonwealth of Virginia, the company shall be required to pay CIT a penalty equal to two times (2x) CIT's principal investment.

The FY2020 activity below is provided in response to Section 135.E.2A of the Appropriations Act. Since GAP investments are, by design, seed stage and intended to leverage private investment and stimulate the next generation of new technology companies, job creation and tax revenue impact are longer term objectives

- I. The number of companies receiving investment from the fund:
  - a. FY2020: 37 companies
  - b. Inception-to-date: 240 companies<sup>i</sup>
  
- II. The state investment and amount of privately leveraged investments per company:
  - a. FY2020: CIT invested \$3.3M and leveraged \$42.7M in angel and venture dollars on FY2020 investments. During FY2020, CIT's inception-to-date investments leveraged \$158M.
  - b. Inception-to-date: CIT has invested \$31.4M and has leveraged \$1.1B in angel and venture dollars, \$158M of which was leveraged during FY2020.
  
- III. The estimated number of jobs created or preserved during FY2020:
  - a. FY2020: 328 jobs in companies invested in by CIT in FY2020
  - b. Inception-to-date: In FY2020, companies reported that 2,358 jobs were created or preserved by companies invested in by CIT in FY2020 or before.
  
- IV. The estimated tax revenue generated during FY2020<sup>ii</sup>:
  - i. FY2020 investments: \$2,249,113
  - ii. Inception-to-date: \$13,011,886
  
- V. The number of companies who have received investments from the GAP fund still operating in Virginia
  - a. FY2020 investments: 35 out of 37
    - i. Two (2) MACH37 companies have returned to their place of origin and are working to establish a Virginia presence. CIT maintains a high level of visibility into those

companies, including frequent interactions with the CEO and team, Board of Director observation rights and receipt of a required quarterly status report.

- b. Inception-to-date: 114 out of 240<sup>i</sup>
  - i. Nine (9) CIT GAP Funds portfolio companies have moved from the Commonwealth:
    - 1. Four (4) moved from Virginia to other states after the 3 year requirement to be headquartered in Virginia timed out.
    - 2. One (1) moved from Virginia to Connecticut. This company had received a \$100K convertible note from CIT - \$50K from Commonwealth - appropriated funds and \$50K resulting from a grant to CIT by Johnson & Johnson. In June of 2009, CIT elected to be paid back the \$50,000 Commonwealth-appropriated funds plus interest and to convert Johnson & Johnson grant-sourced \$50,000 principal and interest at a 50% discount
    - 3. Four (4) were part of MACH37
      - a. Three (3) have returned to their place of origin and are working to establish a Virginia presence. CIT maintains a high level of visibility into those companies, including frequent interaction with the CEO and team, Board of Director observation rights and receipt of a required quarterly status report.
      - b. One (1) was acquired by a company not headquartered in the Commonwealth of Virginia and CIT's stock certificate has not yet been cancelled. We do not anticipate future distributions and planning to write off in the upcoming quarter.
  - ii. 50 have failed
  - iii. 65 have been acquired or paid back CIT
  - iv. Two (2) additional companies have been acquired by companies not located in the Commonwealth and CIT had not sold its shares as of 6/30/2020

VI. Return on investment

- a. FY2020 investments: \$0
- b. Inception-to-date: \$20,783,899

VII. The number of investments that failed:

- a. FY2020 investments: 0
- b. Inception-to-date: 51 failures, \$5,558,600 invested

VIII. Number of companies created or expanded and the number of patents filed during FY2020:

- a. FY2020:
  - i. Companies created or expanded: 37 companies
  - ii. Number of Patents filed: 70

- b. Inception-to-date:
    - i. Companies created or expanded: 240<sup>i</sup>
    - ii. Number of Patents filed during FY2020: 129
- IX. Geographic distribution of investments (based on GO Virginia regions)
- a. FY2020 investments: 35 of 37 in Virginia
    - i. Region 1: 0
    - ii. Region 2: 4
    - iii. Region 3: 1
    - iv. Region 4: 6
    - v. Region 5: 1
    - vi. Region 6: 1
    - vii. Region 7: 20
    - viii. Region 8: 0
    - ix. Region 9: 2
  
  - b. Inception to Date: 114 out of 123 active companies based in Virginia
    - i. Region 1: 2
    - ii. Region 2: 6
    - iii. Region 3: 3
    - iv. Region 4: 11
    - v. Region 5: 5
    - vi. Region 6: 1
    - vii. Region 7: 74
    - viii. Region 8: 1
    - ix. Region 9: 11

### **Program Changes Anticipated in FY2021**

The combination of the GAP Funds, MACH37 Seed Fund, Virginia Founders' Fund and Commonwealth Energy Fund will produce a projected 20 to 30 new investment transactions for Fiscal Year 2021. CIT will continue its work in examining how best to establish one or more private sector regionally-based or sector specific funds to augment financing obtained from the Commonwealth of Virginia for the purpose of investing in early stage companies. In FY2021, CIT will examine the investment ceilings on direct investments established 16 years earlier with the inception of the CIT GAP Funds. CIT will also examine new funding structures to increase private capital into Virginia companies.

MACH37 will enter its eighth year of accelerator operations in Fiscal Year 2021. The program will continue to conduct two annual cohort sessions, one in the spring and one in the fall. Each cohort session will contain between 5 and 8 companies. As of FY2020, the accelerator is no longer located at CIT. As of FY2021, CIT will no longer be managing the accelerator but may continue to make selective investments. Going forward,

companies who go through the accelerator are no longer required to have a Virginia presence. CIT's investments from FY2021 and going forward will be treated as typical CIT GAP Funds' investments and include a side letter requiring Virginia presence at the time of investment.

### **Portfolio Companies**

Attached is a list of GAP portfolio companies, including MACH37 companies, for the prior year and program since inception. CIT's loan and equity covenants contain confidentiality provisions that strictly govern the disposition of company-sensitive information obtained thereunder. CIT obtains information on third-party, private investment from its portfolio companies under the constraints of this confidentiality language. Release of that private information by CIT, and subsequent availability to a third party under the Freedom of Information Act, could be construed as a breach of the confidentiality provisions, exposing CIT and the Commonwealth of Virginia to legal action by an investee company, its shareholders or other investors. This exclusion is also discussed in § 2.2-3705.6 (3) of Virginia's Freedom of Information Act.

### **MACH37 Cyber Accelerator™**

MACH37 is the premier accelerator for cybersecurity entrepreneurs and startups nationally. This unique program goes beyond the traditional model of typical business accelerators by providing innovators with focused mentoring and support from an extensive network of visionaries, practitioners, and successful entrepreneurs in cybersecurity. The Spring and Fall sessions of MACH37's 90-day program are designed to propel graduating companies into the marketplace with validated cyber security concepts and pipelines for accelerated growth.

The program emphasizes the validation of cohort company product concepts and the development of relationships to attract an initial customer base and investment capital. MACH37 employs a tailored approach to address the priority needs of each company, based on their individual strengths and weaknesses.

MACH37 was championed by the Commonwealth's technology community and launched on September 12, 2013 and started its first cohort that same month. Companies selected for the program typically constitute a team of 2 to 4 entrepreneurs and a technical co-founder working to build alpha or prototype cyber security solutions that address the drivers of a demand for innovations in cybersecurity, including:

- New mainstream demand for advanced capabilities;
- Porous network perimeters that are making traditional solutions less relevant;
- Opportunities created from software defined networking; and
- Challenges of a hyper-connected world with an Internet-of-everything.

At the close of the Spring 2020 cohort class, the list of successful graduates included 70 new cyber companies that have been attracted from around the country to grow these critical businesses in Virginia. MACH37 has also attracted applications from companies desiring to launch from the Northern Virginia based accelerator from 11 countries beyond the United States and Canada. As of FY2020, the accelerator is no longer located at CIT. As of FY2021, CIT will no longer be managing the accelerator but may continue to

make selective investments. Going forward, companies who go through the accelerator are no longer required to have a Virginia presence. CIT's investments from FY2021 and going forward will be treated as typical CIT GAP Funds' investments and include a side letter requiring Virginia presence at the time of investment.

The FY2020 activity below is provided in response to Section 135.E.2A of the Appropriation Act. As in the case of the GAP Fund, MACH37 companies are very early stage and the program is designed to leverage private investment and stimulate the growth of the cyber industry in Virginia. In FY2020, CIT sold 11 portfolio companies to secondary investors; ten of these companies represented the majority of the M37 Carried Interest portfolio.

- I. The number of companies assisted with the cyber accelerator program in:
  - a. FY2020: 6 companies
  - b. Inception-to-date: 70 (59 investments by CIT)
  
- II. The number of companies operating in Virginia as a result of the program in:
  - a. FY2020: 4 of the 6
    - i. Two (2) MACH37 companies have returned to their place of origin and are working to establish a Virginia presence.
  
  - b. Inception-to-date: 19 of the 59 are currently operating in Virginia
    1. Four (4) are not currently operating in Virginia:
      - a. Three (3) have returned to their place of origin and are working to establish a Virginia presence. CIT maintains a high level of visibility into those companies, including frequent interaction with the CEO and team, Board of Director observation rights and receipt of a required quarterly statute report.
      - b. One (1) was acquired by a company not headquartered in the Commonwealth of Virginia and CIT's stock certificate has not yet been cancelled. We do not anticipate future distributions and planning to write off in the upcoming quarter.
    2. Fifteen (15) of the companies have failed
    3. Eighteen (18) have been acquired or the investments paid back
    4. Three (3) are in the write-off process
  
- III. The estimated number of jobs created or preserved during FY2020:
  - a. FY2020: 5 jobs in companies invested in by MACH37 in FY2020
  - b. Inception-to-date: 334
  
- IV. The value of proceeds from the sale of equity in companies that received capital support from the program:
  - a. Two MACH37 graduate companies have been acquired since inception of this program.
  - b. Eleven MACH37 graduate companies were sold to secondary investors and thus have paid back the investment since inception of this program.

- V. The number of state investments that failed and the state investment associated with failed investments:
  - a. 15 MACH37 graduate companies have failed since inception of this program; \$1,087,500 state investment
  
- VI. Number of companies created or expanded and the number of patents filed:
  - a. FY2020:
    - i. Companies created or expanded: 6
    - ii. Number of Patents filed: 4
  - b. Inception-to-date:
    - i. Companies created or expanded: 59 invested by CIT
    - ii. Number of Patents filed by inception-to-date portfolio: 32

### **CIT R&D: Commonwealth Research and Commercialization Fund (CRCF)**

The CRCF accelerated innovation and drove economic development in the Commonwealth, while solving important state, national, and international problems through technology research, development, and commercialization. Since the inception of the CRCF program in FY2012 and its sunset on June 30, 2020, nearly 380 projects around the Commonwealth totaling more than \$30 million were approved for funding.

Economic outcomes reported in FY2020 by CRCF award recipients identified early returns on the Commonwealth's investment: approximately \$136 million in follow-on monies to support further technology advancement, nearly \$1.7 million in in-kind contributions, eight new companies formed, and approximately 49 products or services launched. In support of the Fund's goal to commercialize high-potential technologies, annual outcomes reported by awardees reflect the maturation and evolution of their organizations and technologies as they advance toward market entry. The FY2020 CRCF Annual Report can be found [here](#). Key outcomes are discussed below.

In FY2020, CIT offered one CRCF solicitation, which resulted in 30 awards totaling \$2.48 million and leveraging the Commonwealth's investment with more than \$13 million in matching funds. These projects, along with those in the CRCF portfolio, are being performed by companies, universities, and research organizations across the state and align with Virginia's key strategic technology priorities as outlined in the Commonwealth Research and Technology Strategic Roadmap (hereafter referred to as "the Roadmap"). The Roadmap, most recently published by the State Council of Higher Education for Virginia (SCHEV) in October 2019, identifies research areas worthy of economic development and institutional focus because of their promise of driving economic growth in Virginia.

### **Program Impact**

FY2020 reports submitted by award recipients demonstrate exciting returns on investment for the Commonwealth, and aggregate figures are provided below.

Growth and Expansion				
Revenue	New Jobs	Jobs Retained	New Companies Formed	Enhancements and/or Expansions
\$ 16,643,667	168	162	8	29

Investments			
Follow-on Funding	In-Kind Contributions	Undisclosed Source	Additional Leverage
\$ 135,586,789	\$ 1,659,148	\$ 666,000	\$ 594,769

Products or Services		
Newly Commercialized	Anticipated for Release within 12 Months	Under Development
49	90	13

Intellectual Property	
Patents Granted	Patent Pending
57	157

Each year CIT assesses and refines CRCF reportable criteria to best reflect the types of economic outcomes being demonstrated in the Commonwealth. For example, CIT began tracking follow-on investment and jobs in FY2015; since that time, awardees have reported more than \$593 million in follow-on funding, more than \$20 million of in-kind support, more than \$105 million in sales and revenue, and more than 1,800 jobs created or retained.

## Program Overview

Since the inception of the CRCF program in FY2012, 1,062 applications were submitted from all nine GO Virginia regions and, from these submissions, 3,782 projects were offered funding. These awards total more than \$30 million and are leveraged with more than \$85 million in matching funds, including federal awards.

CRCF projects with the potential to positively impact Virginia’s technology future have covered the following technology sectors: advanced manufacturing, aerospace, communications, cybersecurity, energy, environment, information technology – including data analytics, life sciences, modeling and simulation, nuclear physics, transportation, and unmanned systems. Per legislative direction, CRCF projects advance technology sectors identified in the current Roadmap when a solicitation was announced.

CIT leveraged its programs to facilitate company creation and growth. In relation to other CIT programs, CRCF was part of a pipeline, working closely, for instance, with the Federal Funding Assistance Program (FFAP), the GAP family of funds, and the Virginia Unmanned Systems Center. CRCF also complemented other funding programs in the Commonwealth, such as the Virginia Research Investment Fund (VRIF), the Virginia Catalyst (formerly known as VBHRC, the Virginia Biosciences Health Research Corporation), the Commonwealth Health Research Board (CHRB), and the Tobacco Region Revitalization Commission.

## Program Changes Anticipated in FY2021

The 2020 Acts of Assembly sunset the CRCF program on June 30, 2020 and transitioned, along with the VRIF program, to the newly created Commonwealth Commercialization Fund (CCF) under the Division of Commercialization per Virginia Code § 2.2-2359. The Division shall (i) promote research and development excellence in the Commonwealth; (ii) provide guidance and coordination, as deemed necessary, to existing efforts to support research in the Commonwealth with commercial potential; (iii) review and advise on the Innovation Index; (iv) administer the Commonwealth Commercialization Fund; and (v) perform any other duties or responsibilities assigned by the Board.

## CIT Broadband: Planning and Assistance

CIT's Broadband program was charged with providing broadband technical assistance to underserved localities throughout the Commonwealth. Through FY2020, CIT served as Virginia's only resource for local level broadband technical assistance and a repository for broadband-related information and tools. CIT worked collaboratively with other state and federal entities including but not limited to: National Telecommunications and Information Administration (NTIA), Department of Housing and Community Development (DHCD), Virginia Tobacco Region Revitalization Commission (TRRC), Virginia Resources Authority (VRA), Virginia Department of Education (VDOE), Virginia Information Technologies Agency (VITA), Virginia Tech's Center for Geospatial Information Technology (CGIT), Virginia Municipal League (VML), Virginia Association of Counties (VACO), Virginia Planning District Commissions (VAPDC), Virginia Department of Transportation (VDOT), Go Virginia, Virginia Broadband Association (VCTA), Virginia Telecommunications Industry Association (VTIA), Virginia localities and others to help close the digital divide in the Commonwealth. CIT also staffed the Office of the Chief Broadband Advisor and the Broadband Advisory Council. CIT also leveraged its methodology, *The Broadband Path*, to assist Virginia localities in conducting broadband assessments and helped to facilitate public-private partnerships. The CIT Broadband Path has been nationally recognized and is distinctive because it produces tangible, local goal-driven, fiscally achievable broadband solutions at no cost to the locality.

The FY2020 activity summarized below, in response to Section 126.1.N.1 of the 2019 Appropriation Act, was state funded activity.

- I. Broadband technical assistance provided:
  - a. Provided assistance to 50 Virginia localities, state and federal agencies, associations and legislators.
  - b. CIT continued to staff the Office of the Chief Broadband Advisor, as key members of the Commonwealth Broadband Team.
  - c. CIT continued to staff the Broadband Advisory Council.
  - d. CIT responsibilities were expanded to support Go Virginia Broadband efforts and as a member of the Go Virginia Broadband Advisory Workgroup.

- e. CIT continued to maintain Virginia’s resources and tools used in assessing needs, planning broadband deployments, and raising awareness to increase adoption and utilization.
- f. CIT continued to maintain and analyze Virginia broadband data. This included new coverage mapping layers to help identify areas of need and to track progress in closing the digital divide.
- g. CIT continued to leverage its proven methodology – *The Broadband Path* – to assist localities by conducting a comprehensive assessment, identifying the locality’s unique needs, and facilitating public-private partnerships.
- h. CIT assisted the Chief Broadband Advisor in writing and editing the annual Commonwealth Connect Broadband Report.
- i. Composed the annual Broadband Advisory Council Report.
- j. Provided expertise on broadband-related bills during the Virginia General Assembly.

## II. Virginia broadband availability

Based on data compiled in the *Report on Commonwealth Connect 2.0: Governor Northam’s 2020 Plan to Connect Virginia*, here is where Virginia broadband coverage stands:

- a. 98% of urban areas have access to a 25/3Mbps connection (which is the Federal Communication Commission (FCC) definition of broadband).
- b. 68% of rural areas have access to a 25/3Mbps connection.
- c. 1.6% of Virginians have access to three or more ISPs.

## III. Takeaways

CIT Broadband accomplished its state mandate and successfully handed off assigned broadband responsibilities to DHCD on June 30, 2020. While much progress was made over the years, more can be done. While Virginia ranks well among all states in broadband statistics, much of the high-speed connectivity at true broadband speeds occurs in urban areas, especially along Virginia’s Urban Crescent. Population sparse rural areas do not have the same level of broadband coverage as the Urban Crescent. Additionally, competition remains very low among Virginia localities. The more provider choices Virginians have, the better off they will be in terms of price and service quality.

In sum, increasing broadband access to Virginians (particularly in rural localities) that lack access should be a short-term focal point, while providing more competition throughout the Commonwealth should also be an important long-term connectivity strategy moving forward.

## Investing in All Virginians

CIT programs stimulate economic growth for all Virginians by attracting private sector investment in Virginia companies and regions, commercializing early stage university and private sector research, working with regionally based initiatives to grow ecosystems that support innovation and new company growth, establishing footholds for new industry verticals such as Smart Communities, Unmanned Systems, and working with regional stakeholders to support, promote, and expand technology-based entrepreneurial ecosystems throughout the Commonwealth.

FY2021 will be a time of transformation for CIT and the Authority it serves that enhances its role as the Commonwealth's agent in the acceleration of innovation-based economic growth. FY2021 priorities include delivering vital services in strategic domain areas that existing Commonwealth organizations are not currently serving through of a continuum of services and investments for innovation-led development that will collectively scale to drive economic diversification, economic growth, and generate measurable benefits.

CIT will continue to apply four governing principals to guide the company and ensure all organizations under VIPA adhere to similar principles on behalf of the VIPA.

- Inclusion – prioritize outreach to groups in the Commonwealth traditionally underrepresented such as people of color, women, rural communities, students and youth while ensuring that all parts of the Commonwealth are touched by CIT.
- Transparency – openness on all issues among the Board, the Administration, and the General Assembly.
- Accountability – board approved operating plans and balanced scorecards; management accountability; rigorous reporting.
- Leadership – board and management policy engagement with the Commonwealth government, operational execution and measurable results.

We look forward to you joining us. Please visit us at [www.cit.org](http://www.cit.org) to learn more.

## Addendum: Company List GAP Funds

FY20 Investments	Invested Amount
Aquasys, LLC	\$ 50,000.00
Blue Triangle	\$ 22,289.00
Brazen Careerist	\$ 21,457.93
Buddy Technology	\$ 50,000.00
Card Isle Corporation	\$ 50,000.00
Cervais, Inc.	\$ 25,005.61
Coin Savage, LLC (dba RoundlyX)	\$ 50,000.00
Contraline	\$ 99,998.25
Curbside Kitchen	\$ 149,999.50
CySecure, Inc	\$ 24,995.85
CytoRecovery	\$ 250,000.00
Dark3	\$ 88,352.83
DeepSig	\$ 299,999.14
DHK Storage	\$ 50,000.00
EdConnective	\$ 100,000.00
Embody	\$ 95,000.00
Fend	\$ 50,000.00
Fenris	\$ 100,000.00
Fringe LLC	\$ 100,000.00
HyperQube (Cyber Academy, network security)	\$ 100,000.00
Jeeva Informatics Solutions	\$ 50,000.00
Kamana	\$ 50,000.00
Kinergycare	\$ 50,000.00
Kionemetrix	\$ 50,000.00
LiteIdeas LLC/Litesheet	\$ 200,000.00
MarginEdge	\$ 112,910.00
Mesh Intelligence AI, LLC	\$ 50,000.00
Metistream, Inc.	\$ 200,000.00
Ostendio	\$ 123,378.90
Panaceutics Nutrition, Inc.	\$ 250,000.00
Quirk	\$ 25,000.00
RunSafe	\$ 65,999.44
Scout, Inc (Eighth Continent Technologies)	\$ 50,000.00
Student Opportunity Center	\$ 50,000.00
Suvola Corporation	\$ 50,000.00
Syllab Systems Inc	\$ 50,000.00
Techulon, Inc	\$ 50,000.00

<b>Investments since Inception</b>	<b>Invested Amount</b>
26Labs (spinoff from Invincea)	\$ -
418 Intelligence	\$ 150,000
4FrontSecurity	\$ 50,000
4Stay	\$ 200,000
4Wave	\$ 100,000
ADI Engineering	\$ 200,000
Adlumin	\$ 49,000
ADR Software	\$ 100,000
Advanced Aircraft	\$ 50,000
Aida Health	\$ 50,000
Airak	\$ 100,000
Airside	\$ 100,000
Altruista Health	\$ 100,000
Anatrobe	\$ 50,000
AppTap	\$ 100,000
Aquanta (Sunnovations)	\$ 500,000
Aquasys, LLC	\$ 50,000
ArcheMedX	\$ 200,000
Ario Technologies LLC	\$ 50,000
Artglass	\$ 50,000
Atomic Corp	\$ 254,850
Atriceps	\$ 50,000
AutomatedDL	\$ 49,000
AxonAI, Inc. (Axon Ghost, ConvergentAI)	\$ 150,000
Babylon Micro-Farms Inc	\$ 50,000
BentSystems	\$ 100,000
BiJoTi	\$ 112,500
Biotherapeutis	\$ 125,000
Bloompop	\$ 200,000
Blue Triangle	\$ 222,289
Brazen Careerist	\$ 229,008
BrightContext (acq by WealthEngine)	\$ 133,758
Broadbridge	\$ 49,000
bThere	\$ 50,000
Buddy Technology	\$ 50,000
C3RS	\$ 200,000
Canvas	\$ 200,000
Card Isle Corporation	\$ 50,000
CardKill	\$ 50,000

CargoSense	\$ 200,000
Caveonics/Eunomic	\$ 150,000
Cavion	\$ 550,000
Cavitronix	\$ 200,000
Cervais, Inc.	\$ 25,006
ChurnZero	\$ 274,518
Cirrus Works	\$ 200,000
ClearEdge 3D	\$ 127,500
Coin Savage, LLC (dba RoundlyX)	\$ 50,000
Conatix	\$ 25,000
Cont3nt	\$ 50,000
Contraline	\$ 349,998
Corsha (Hashlit)	\$ 50,000
Curbside Kitchen	\$ 150,000
Cyber 20/20	\$ 50,000
Cyber Algorithms	\$ 50,000
Cynja Tech	\$ 50,000
Cyph	\$ 150,000
CySecure, Inc	\$ 24,996
CytoRecovery	\$ 300,000
Dark3	\$ 288,353
DataRPM	\$ 200,000
DeepSig	\$ 499,999
DHK Storage	\$ 50,000
Disrupt6	\$ 50,000
Distil	\$ 200,000
DivvyCloud	\$ 450,000
DroneUp (Dart)	\$ 200,000
EdConnective	\$ 150,000
Efficient Photon	\$ 75,000
eKare	\$ 50,000
Ekran Systems	\$ 49,000
Embody	\$ 345,000
Encore	\$ 100,000
Engineered Products of VA	\$ 200,000
EVS	\$ 50,000
Extinction	\$ 15,000
EyeQ	\$ 100,000
Farmraiser	\$ 100,000
Fast Orientation	\$ 50,000
Fend	\$ 50,000

Fenris	\$ 225,000
FITNET	\$ 224,912
Frnge LLC	\$ 150,000
GCPay	\$ 100,000
Global Cell Solutions	\$ 50,000
GovTribe	\$ 75,000
Gryphn/Uppidy (ArmorText)	\$ 50,000
Gyomo	\$ 50,000
Harbinger (ARCSys)	\$ 100,000
Heyo, Inc.	\$ 100,000
Hideez	\$ 50,000
Hill Top Security	\$ 130,000
Hosted Harbor LLC (spinoff of NexVortex)	\$ -
Hungry	\$ 100,000
Hunt (villagize)	\$ 150,000
Huntress Labs	\$ 50,000
HyperQube (Cyber Academy, network security)	\$ 200,000
iAspire	\$ 50,000
ID.Me	\$ 419,026
Identia	\$ 50,000
INF Robotics	\$ 45,000
Innovative Biologics	\$ 200,000
Intelligence Framework	\$ 49,000
IntroHive	\$ 50,000
Invincea (Two Six Labs)	\$ 312,695
iTi Health (ZielBio)	\$ 200,000
Jeeva Informatics Solutions	\$ 50,000
JeKuDo	\$ 50,000
Kamana	\$ 50,000
Kaprica	\$ 100,000
Key Cybersecurity	\$ 150,000
Kinergycare	\$ 50,000
Kionemetrix	\$ 50,000
KZO Innovations	\$ 50,000
Latista	\$ 175,000
LendPro	\$ 100,000
Lewis & Clark	\$ 200,000
Litelideas LLC/Litesheet	\$ 500,000
LiveSafe	\$ 117,618
Loci	\$ 15,000
Locurity	\$ 50,000

Loop88	\$ 125,000
LT Technologies	\$ 100,000
Lumin (Coloumb)	\$ 250,000
Manor Financial (UpSideDoor)	\$ 286,653
MarginEdge	\$ 312,910
Marz Industries	\$ 75,000
Maternity Neighborhood (Private Practice)	\$ 200,000
Mesh Intelligence AI, LLC	\$ 50,000
Metallum3D	\$ 25,000
Metistream, Inc.	\$ 200,000
Micronic Technologies, Inc.	\$ 50,000
MiserWare	\$ 316,100
Mobile System 7	\$ 100,000
MobilePhire / MobileSense	\$ 100,000
Moment Snap (Shift One)	\$ 100,000
MSB Associates	\$ 50,000
Naaya	\$ 100,000
Natural Insight/South49	\$ 150,000
NBE	\$ 50,000
Neoantigenics	\$ 249,999
NeoEyed	\$ 49,000
NexVortex	\$ 100,000
NormShield	\$ 50,000
NOVI	\$ 50,000
NS8	\$ 49,000
nVite/eventbrite	\$ 100,000
OhMyGov (Synoptos)	\$ 150,000
OnDialog	\$ 200,000
Oppleo Security	\$ 50,000
Ostendio	\$ 446,758
OTraces	\$ 100,000
Ovastasis	\$ 25,000
Panaceutics Nutrition, Inc.	\$ 250,000
Parabon NanoLabs	\$ 80,000
Paxfire	\$ 100,000
PCPursuit	\$ 50,000
PerformYard	\$ 200,001
PhosImmune	\$ 125,000
Phtsisis	\$ 50,000
Piedmont BioProducts	\$ 100,000
Pierce Global	\$ 150,000

Plutus Privacy Security	\$ 50,000
PocketShip	\$ 100,000
Power FingerPrinting (PFP Cybersecurity)	\$ 149,995
ProvenCyber	\$ 50,000
Public Relay	\$ 200,000
Pype	\$ 200,000
Qrvey	\$ 100,000
Quirk	\$ 50,000
RealPage/Senior Living	\$ 100,000
RecargaX	\$ 100,000
Riff Digital	\$ 5,000
Ringio	\$ 200,000
Riogin	\$ 200,000
Rivanna	\$ 50,000
RIZE (Gathering)	\$ 100,000
ROI2	\$ 150,000
RollStream	\$ 200,000
Router Solutions	\$ 100,000
RunSafe	\$ 315,999
Rybbon	\$ 100,000
SceneThink	\$ 50,000
Scout, Inc Eighth Continent Technologies)	\$ 50,000
Scryb	\$ 100,000
Secure Home (M37 CI - sold to secondary)	\$ 49,000
SecureDB	\$ 150,000
Senseware	\$ 300,000
Servhawk	\$ 200,000
Shevirah	\$ 150,000
Sitscape	\$ 50,000
Skyphos	\$ 25,000
SL8Z/Recruitmates	\$ 150,000
Societas (Anova Intelligence)	\$ 50,000
Soft Tissue Regeneration (Biorez)	\$ 100,000
Speek	\$ 200,000
Sphynx	\$ 150,000
SpydrSafe	\$ 150,000
SquareLoop	\$ 150,000
Status Identity	\$ 100,000
Steel Mountain (M37 CI - sold to secondary)	\$ 49,000
Stratus Digital Systems, Inc.	\$ 50,000
Student Opportunity Center	\$ 200,000

Suvola Corporation	\$ 50,000
SwipePay	\$ 100,000
Syllab Systems Inc	\$ 50,000
Syncurity	\$ 50,000
TearSolutions Inc	\$ 473,956
Techulon, Inc	\$ 50,000
Tenant Turner	\$ 100,000
Tensor Wrench	\$ 50,000
Territory Foods	\$ 200,000
ThreatLocker	\$ 50,000
ThreatQuotient Inc.	\$ 500,001
ThreatSwitch	\$ 49,000
Triblio	\$ 150,000
Trovolone	\$ 49,000
Tympanogen	\$ 50,000
Type Zero	\$ 354,198
Ubiquity Link (Lynk Global Inc)	\$ 50,000
Uknow.com	\$ 175,000
Unblinkr	\$ 50,000
Urgently	\$ 100,001
VanGogh Imaging	\$ 200,000
Veenome	\$ 200,000
Verical	\$ 239,633
Verication	\$ 100,000
VidRunner	\$ 100,000
Virgil	\$ 50,000
Visure	\$ 100,000
VividCortex	\$ 199,999
VoicePass	\$ 10,000
vThreat	\$ 150,000
WealthForge	\$ 50,000
WireTough	\$ 300,000
WorkProducts	\$ 100,000
YaSabe	\$ 200,000
Zoobean	\$ 150,000
ZoomData	\$ 200,000
Zoomph	\$ 200,000

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<sup>i</sup> CIT made 239 initial investments from inception through FY2020, of which 20 were made in FY2020. However, in FY 2020, one company, NexVortex, merged with a company that acquired all of its capital stock. NexVortex also created a new company, Hosted Harbor LLC that granted CIT 1.65% ownership due to being a shareholder in NexVortex. As a result, CIT's total portfolio company count is 240. In FY 2019, two of these companies Xydina and Tau Therapeutics merged forming Cavion, resulting in net total of 218 companies. In 2016 CIT exited Invincea. As a result of the exit, CIT received shares in 26Labs, a company spun-out of Invincea at the time of exit. This brought the net total back to 219 in FY19.

<sup>ii</sup> Corporate and personal income tax revenue estimated. Corporate tax revenue based on company's actual revenue in CY2019 Q3 and Q4 (assumes 50% of total reported CY2019 revenues) and CY2020 Q1 and Q2. Personal tax revenue assumes an average salary of \$125k per Virginia employee.