FY2022 Budget Hearing

April 8, 2021

Agenda

- FY 2021 in Review
  - Covid-19
  - Strategic Plan

- Our Students and Enrollment

- Online Master of Science Degree

- Strategic Plan and Related Investments
  - Champion Innovation
  - Lead by Example
  - Cultivate Well-Being
  - Amplify Impact

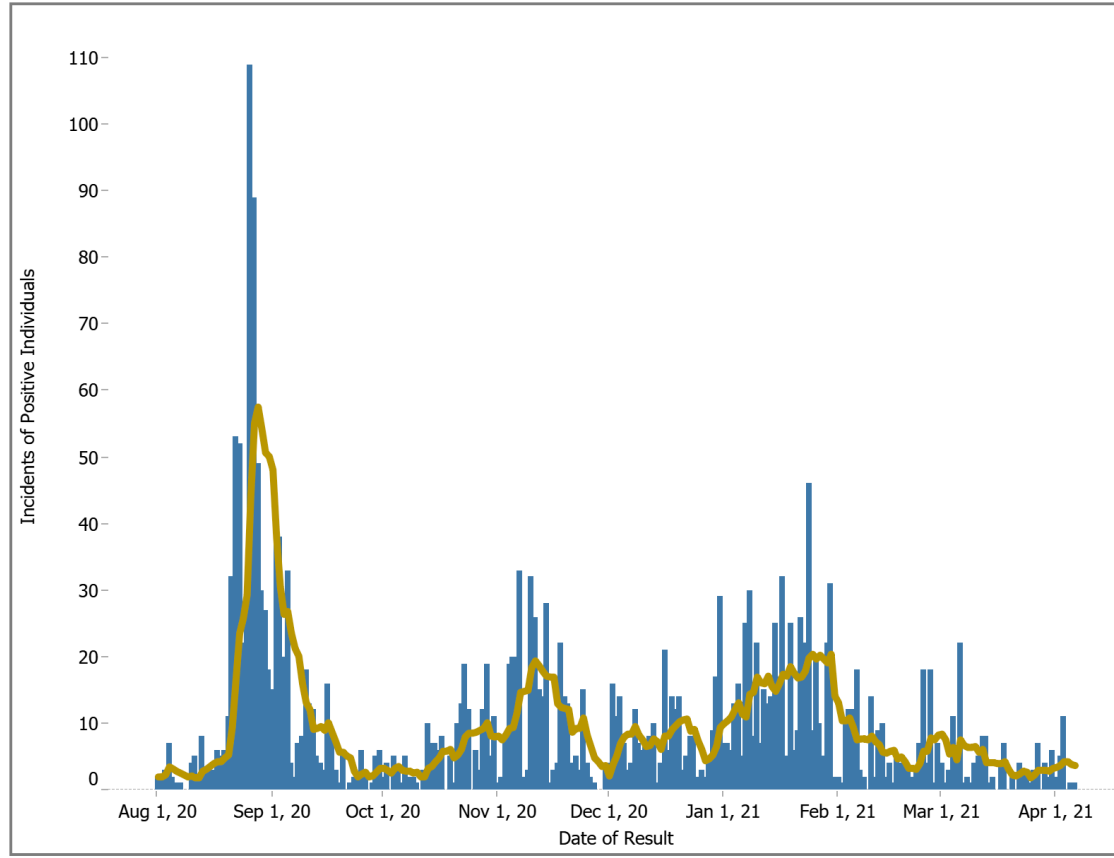# Covid-19 Mitigation: Jackets Protect Jackets

Georgia Institute of Technology Covid-19 Data

Count of Positive Cases since March 2020		Testing Count since August 2020		Isolation/Quarantine In Use Bed Count	Total Beds**
2,598		**296,203**			
Student Count of Positive Cases	Employee/Affiliate Count of Positive Cases	Student Test Count	Employee/Affiliate Test Count	**8**	**193**
2,123	**475**	**241,532 (82%)**	**54,505 (18%)**		

Past Seven Days Rolling Averages

2.86 (Positives)   698.29 (Tests)   0.17% (Surveillance Incident Rate)

**This number will update based on changes to GT contracts for isolation space

Moving Averages by Incidents of Positive Individuals

1. Population Selection
- ○ Total
- ○ Campus Location Type
- ○ GT Primary Affiliation
- ○ Testing Source
- ◉ Moving Averages

2. Population Filter
- ☑ (All)
- ☑

3. Measures
- ◉ Incidents of Positive Individuals
- ○ Cumulative Incidents of Positive Individuals
- ○ Number of Tests Per Day
- ○ Cumulative Number of Tests
- ○ Surveillance Incidence Positivity (0-100)

From Date of Result

8/1/2020

4/7/2021

*Notes days with < 450 total tests may not be indicative of surveillance trends.

Count
Moving Seven Day Average

Covid-19 Data Table

Surveillance Incident Positivity Table

Campus Covid-19 Vaccination Rollout

Started in January 2021 with support from the University System of Georgia.

Covid-19 vaccine dashboard updated daily.

Strong response from the Georgia Tech community.

Scaling up operations to 1,000 shots/day and working with the Georgia Department of Public Health to procure a larger supply.

Currently scheduling appointments for all individuals meeting the state of Georgia's eligibility criteria.

Covid-19 Vaccine Dashboard
Updated April 6, 2021

Total Doses of Vaccine

Administered by Georgia Tech

15,566

Received by Georgia Tech

22,527

Unique Individuals Vaccinated at Georgia Tech

12,711

Unique Individuals Completed Dose 1 and 2 Series at Georgia Tech

2,855

Data is updated at 8p.m. each day

Administered by Georgia Tech
Accounts for the administration of first and second doses and is based on actual doses extracted, which may sometimes exceed the average doses extracted per vial.

Received by Georgia Tech
An estimate based on the average number of doses extracted per vial.

Unique Individuals Vaccinated at Georgia Tech
The number of unique community members who we know with certainty have received at least a single dose — either the first and/or second dose — of vaccine at Georgia Tech. Note: Some individuals may have **received a dose elsewhere**.

Strategic Plan Focus Areas

GEORGIA TECH
STRATEGIC PLAN
PROGRESS AND SERVICE FOR ALL

Amplify Impact - Embrace our power as agents of change for the public good and generate talent, ideas, and solutions with unmatched impact and scale to help define and address the most critical problems of our time, locally and globally.

Champion Innovation - Champion our leadership position as an engine of innovation and entrepreneurship, and to collaborate with other public and private actors to create economic opportunity and mobility and position Atlanta and Georgia as examples of inclusive innovation.

Connect Globally - Strengthen our role as a convener of worldwide collaboration and build a global learning network to expand our reach and amplify our impact.

Expand Access- Empower people of all backgrounds and stages of life to learn and contribute to technological and human progress.

Cultivate Well-Being - Strengthen our culture of well-being and create an environment of holistic learning where all members of our community can grow and learn to lead healthy, purposeful, impactful lives.

Lead by Example - Lead and inspire by example by creating a culture of deliberate innovation in all our practices and be an example of efficiency, sustainability, ethics, equity, and inclusion.

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Enrollment

Our Outstanding Students

Undergraduates: 62% of students (10,324) are in-state residents

STEM + Business majors dominate and account for 90% of undergraduates

- Record high 97% first-year retention rate for 5th consecutive year
- Record high graduation rates: 91% six-year, 89% five-year, and 55% four-year

Graduate enrollment: 23,210 in Fall 2020; significant growth since Fall 2013 due to Online Master of Science programs (Computer Science, Analytics, with Cybersecurity)

According to the latest data published by the American Society of Engineering Education, in the U.S. Georgia Tech is:

- 1st in engineering degrees awarded at the undergraduate and graduate levels.
- 1st in engineering degrees awarded to women
- 2nd in bachelor's engineering degrees awarded to Black or African Americans
- Only engineering program in the US with all programs ranked in top 5 by USNWR
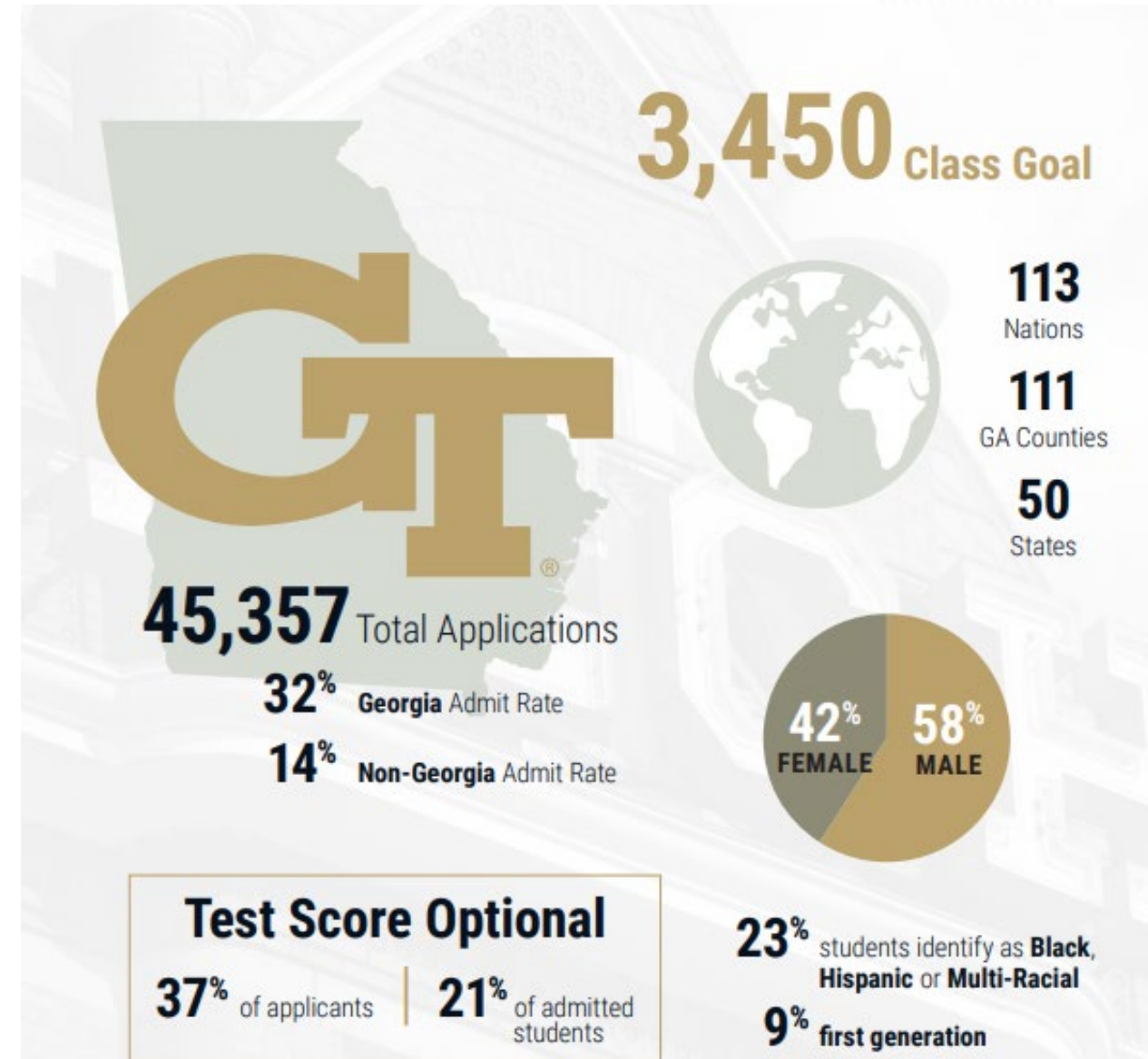
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Expand Access - 2021 First-Year Admitted Profile

45,350 students applied to become part of the 2021 first-year class:
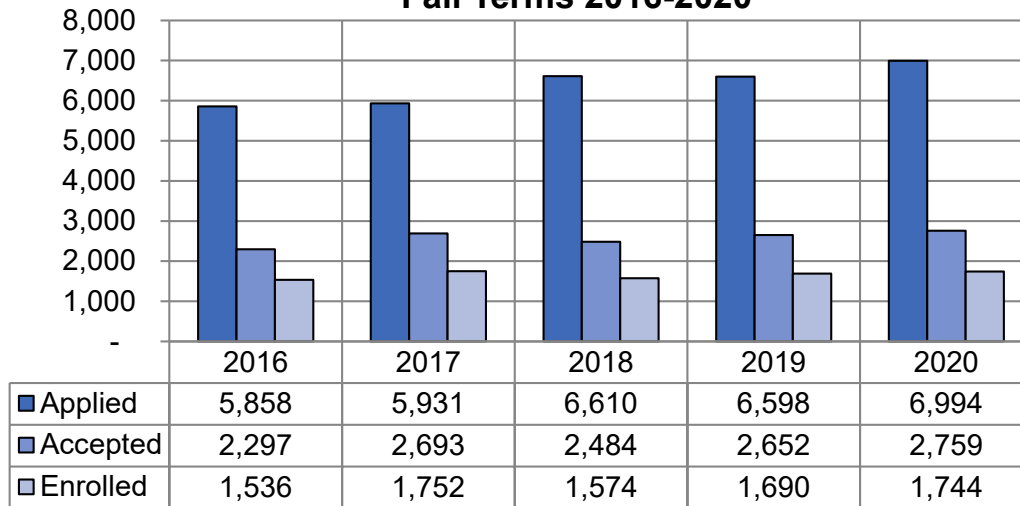- 18% were offered admission

Students are academically talented and more diverse than previous year:
- 28% more Black students
- 20% more first-generation students
- 12% more Hispanic students

3,450 Class Goal

113 Nations

111 GA Counties

50 States

45,357 Total Applications

32% Georgia Admit Rate

14% Non-Georgia Admit Rate

42% FEMALE **58%** MALE

Test Score Optional

37% of applicants | **21%** of admitted students

23% students identify as **Black, Hispanic** or **Multi-Racial**

9% first generation

Freshman Admissions by Residency

In-State Freshman Admissions
Fall Terms 2016-2020

	2016	2017	2018	2019	2020
Applied	5,858	5,931	6,610	6,598	6,994
Accepted	2,297	2,693	2,484	2,652	2,759
Enrolled	1,536	1,752	1,574	1,690	1,744

Out-of-State Freshman Admissions
Fall Terms 2016-2020

	2016	2017	2018	2019	2020
Applied	24,670	25,566	29,001	30,319	33,858
Accepted	5,571	4,676	5,553	4,916	5,960
Enrolled	1,341	1,108	1,562	1,390	1,530

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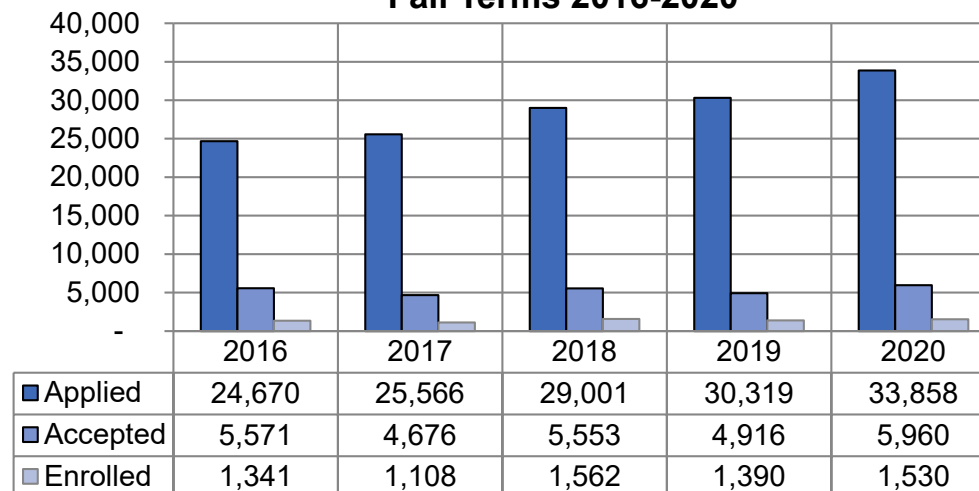
Full-Time Equivalent (FTE) Enrollment

Fall 2016 through Fall 2020

	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020
■ Graduate	8,617	9,862	11,126	12,880	14,009
■ Undergraduate	14,466	14,837	15,240	15,425	15,636
Total	23,083	24,699	26,366	28,305	29,645

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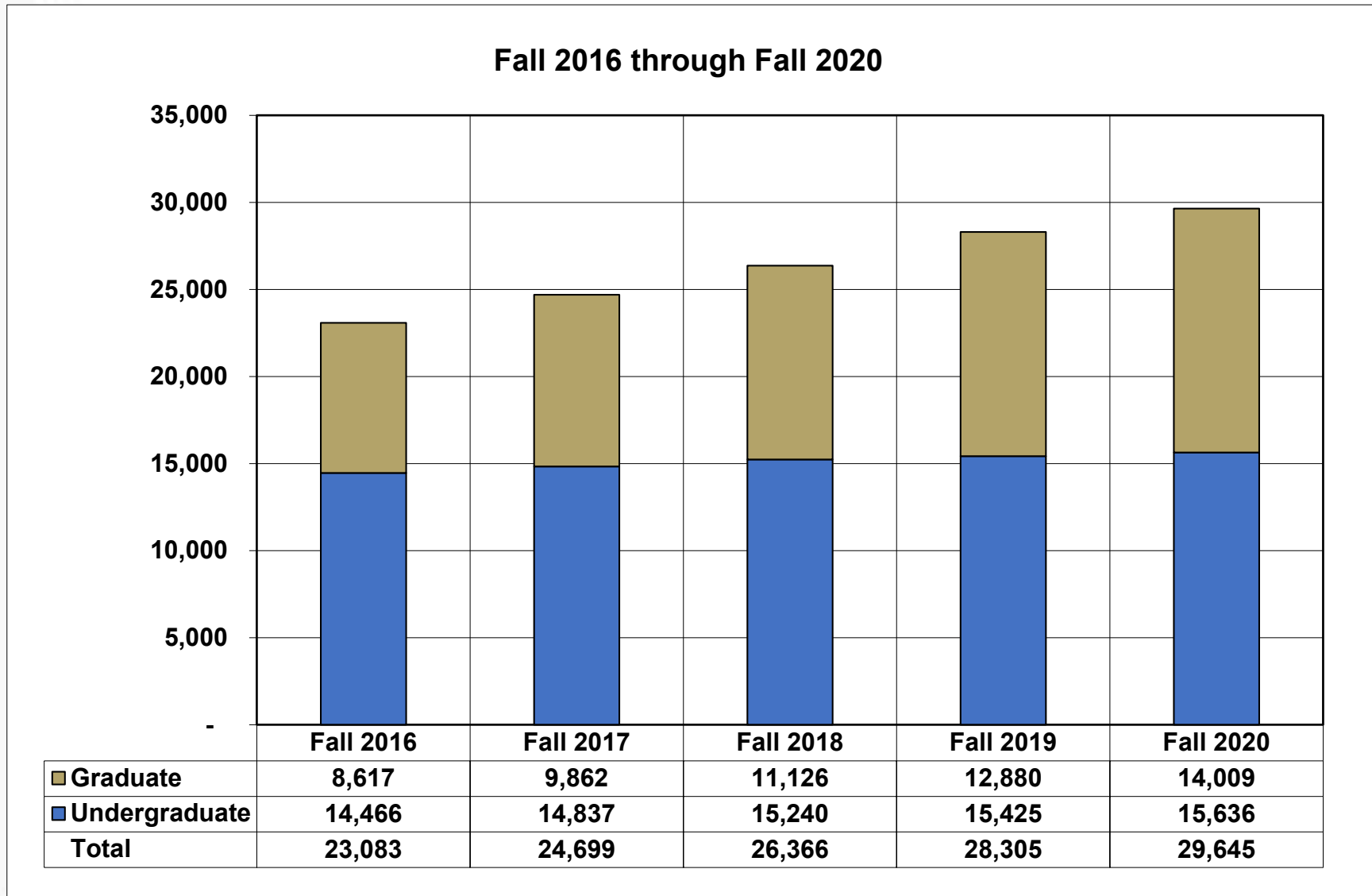
Retention Rates Continue at Record Highs

First Year Retention Rate
For Freshmen Entering Fall 2015 through Fall 2019

	2015	2016	2017	2018	2019
% Retained to Second Year	97%	97%	97%	97%	97%
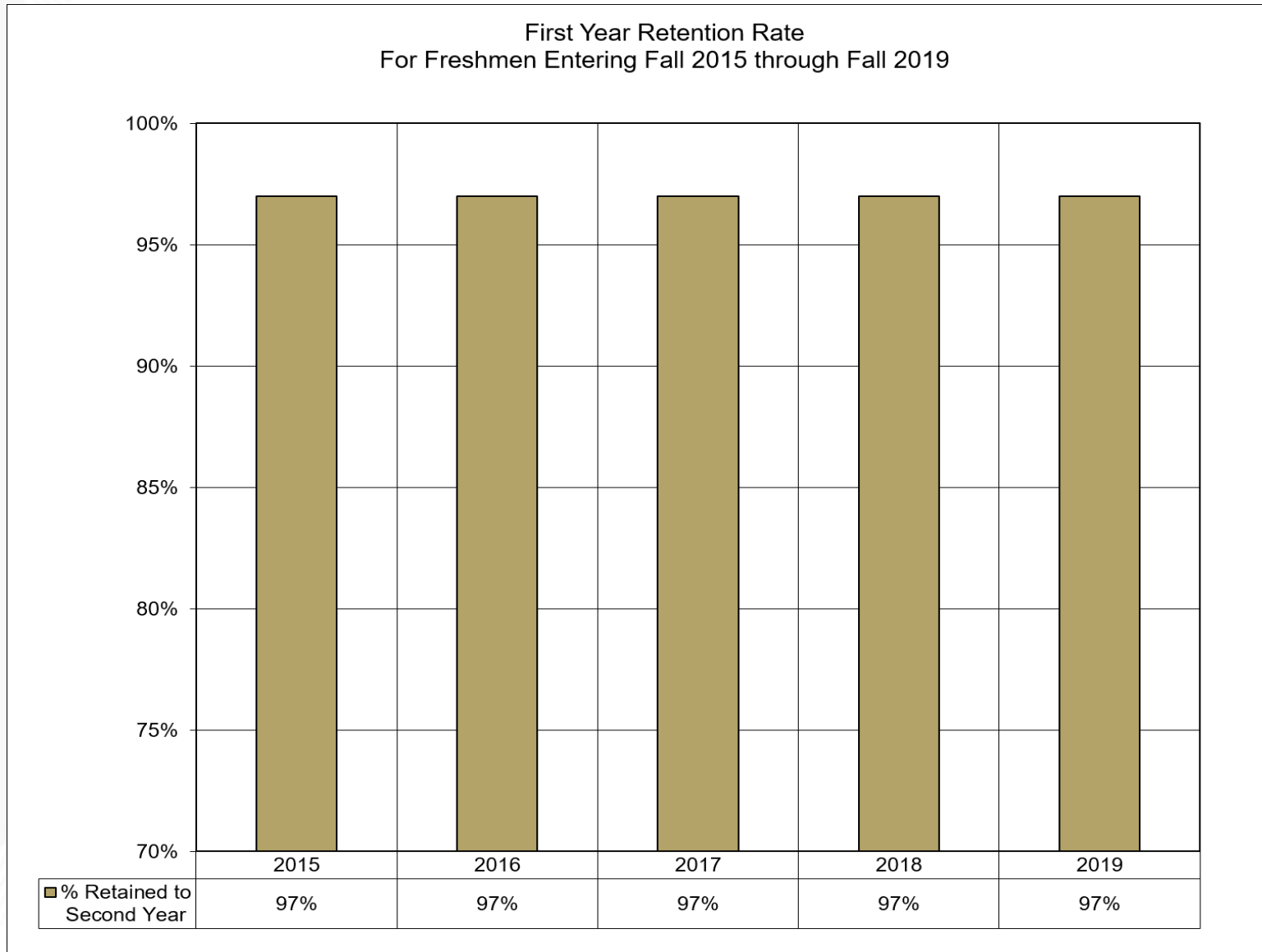
Leading to Higher Graduation Rates

**Six-Year Graduation Rates
For Freshmen Entering Fall 2010-2014**

	2010	2011	2012	2013	2014
■ Graduation Rate	86%	85%	87%	90%	90%
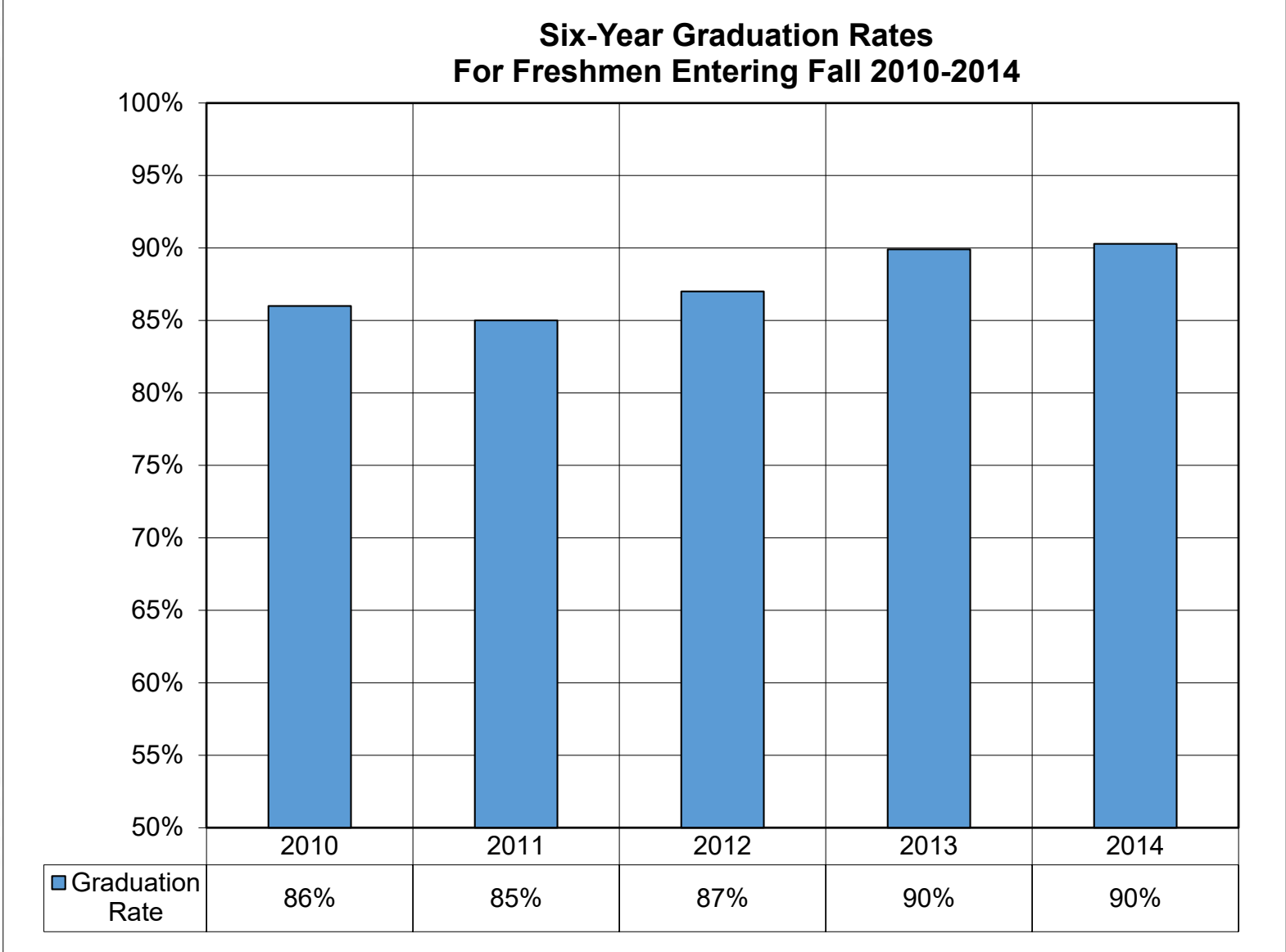
Feedback – Student Success and Satisfaction

Course Instructor Opinion Survey (CIOS)

- Analyzed fall course surveys to understand **teaching effectiveness**
- Overall **course and instructor effectiveness strong in each mode** and evidence of positive experiences in remote and hybrid modes
- Comparative data from Fall 2019 indicates that **effectiveness held at relatively similar** levels

Spring 2021 Classroom Experience Survey and Listening Sessions

- Survey with 6,000 responses and 21 focus groups conducted in February/March, surveying these areas:
  - **Clear Expectations:** On average, **90% agreed or strongly agreed** that instructors provided **clear expectations for attendance** in hybrid, residential, and remote courses (up from fall)
  - **In-Person Value: Significant uptick in-person learning experience in both hybrid and residential (15% and 20% respectively)**
  - **Flexibility: 90% of survey respondents agreed or strongly agreed their faculty were flexible** with them during Covid-19
  - **Satisfaction with Services:** Student survey respondents noted **high degrees of satisfaction** across student services
  - **Challenges:** Students and faculty continued to struggle with engagement and simultaneous instruction in dual modes. Feedback also showed indicators of burnout.

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Online Master of Science (OMS) Degree

OMS Degree: Background

MOOC (Massive Open Online Course)

- Emerged as a popular mode in 2012
- Courses are designed for online, typically asynchronous instruction with interactive and user forums
- Modeled as low-cost, at-scale education finally arrived

Georgia Tech leads the way: OMS Degree in May 2013

- Is a high-quality model with high student satisfaction, at-scale, and at a lower cost possible?

Eight years later: April 2021

- Is a high-quality model with high student satisfaction, at-scale, and at a lower cost possible… YES
- Taught us a great deal about demographics, platforms, instruction, students, and admissions
- Prepared us well for the last year

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OMS Degree Summary

|	OMS in Computer Science	OMS in Analytics	OMS in Cybersecurity
BoR Approved	May 2013	January 2017	July 2018
Launched	January 2014	August 2017	January 2019
Tuition Rate	$180/hr	$275/hr	$310/hr
Hours to Complete	30	36	32
Degree Issued	Computing	Business, Computing, Engineering	Computing, Engineering, Ivan Allen – three specialization tracks
Cost to Student	<$7,500	<$12,000	<$12,000
Donor/Amount	AT&T - $4M	AT&T - $1M Accenture - $1M	Accenture - $500k
Initial Cohort Size	380	250	237
Initial Platform	Udacity	edX	edX

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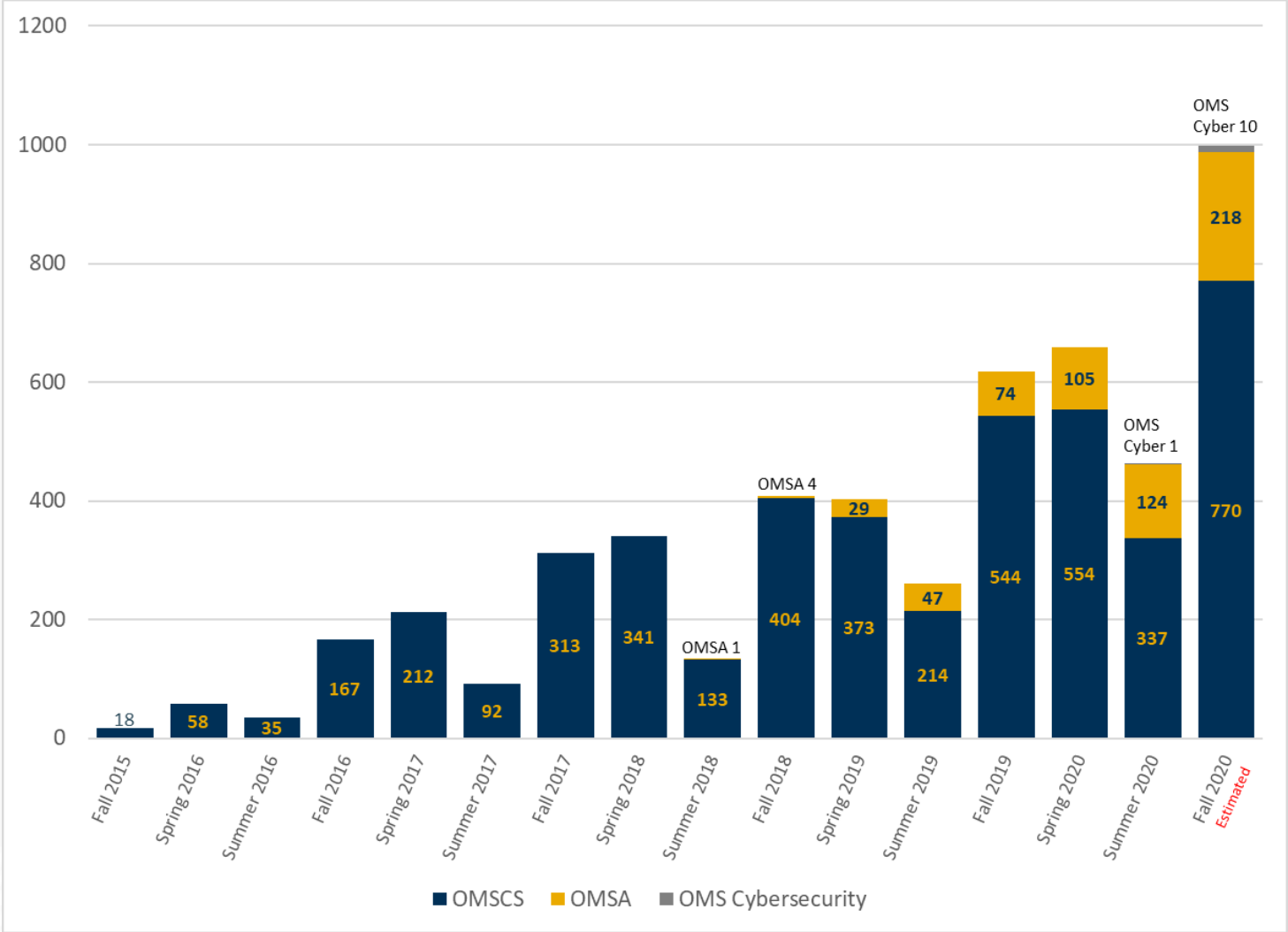CREATING THE NEXT

OMS Enrollment History
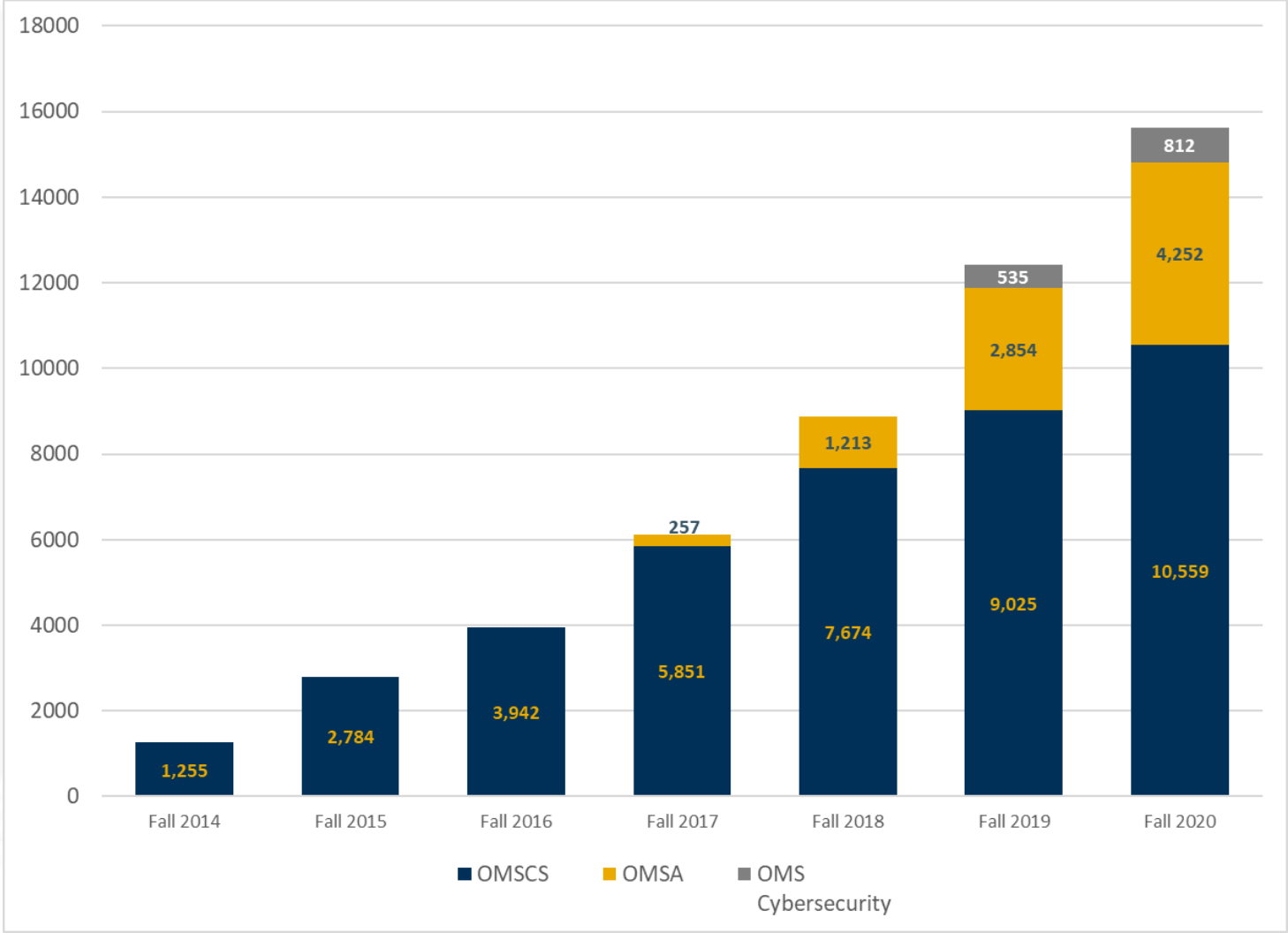
Georgia Tech 10-Year Enrollment Trends: Graduate Enrollment Growth Driven by OMS
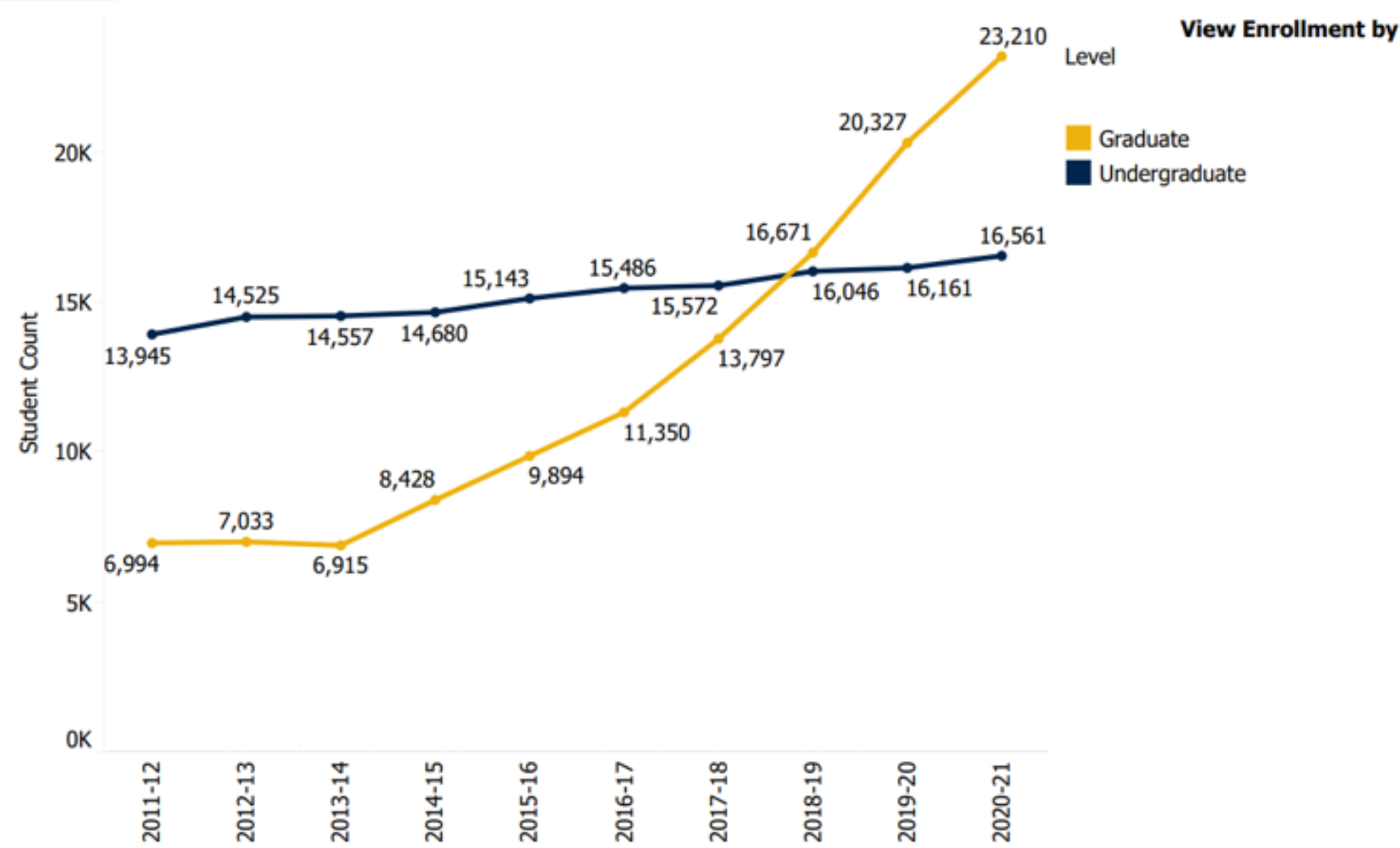
OMS Enrollment Estimate vs. Actual
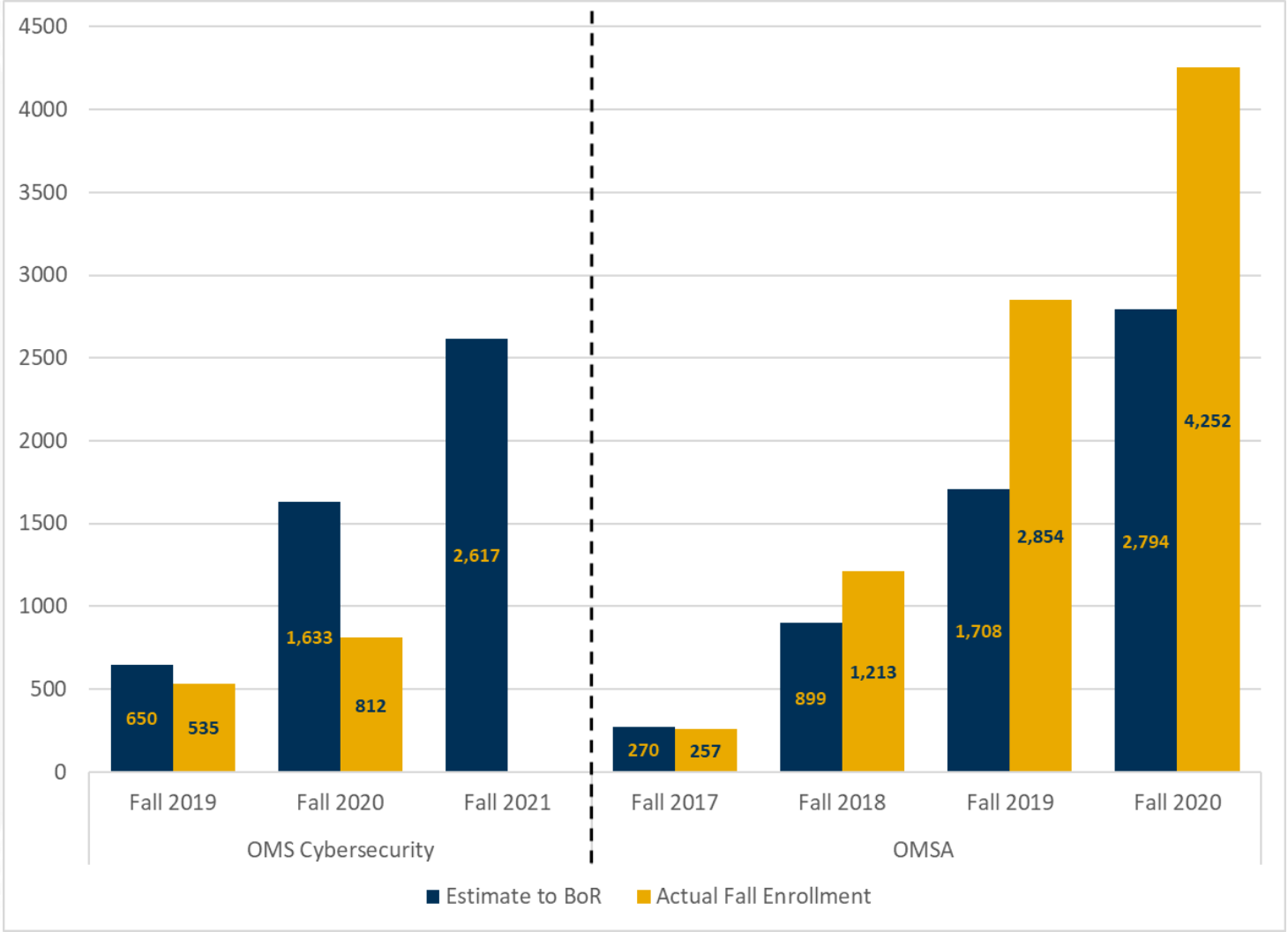
OMS Graduation History

What's Next?

The time is right to think even bigger

The OMS model and the Strategic Plan allow us to provide:

- Quality at scale

- Innovation and platforms

- Models of success and inclusion

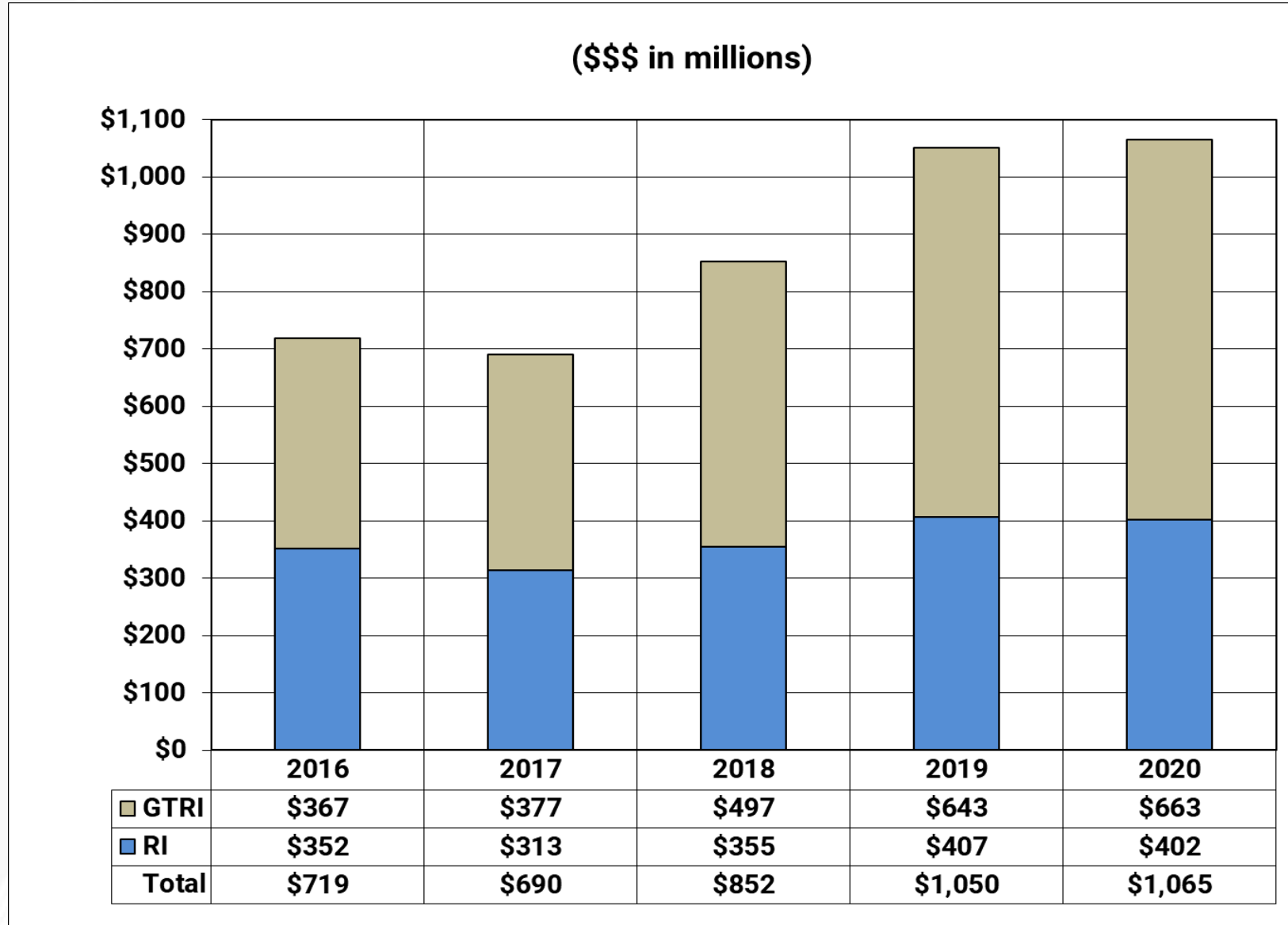## Become the best at supporting learners for their entire lives

- Keep our traditions of degree education for launching careers **and** add educational and other experiences along the individual's career path

- Think beyond courses: the benefits of our residential experience must span space and time

- Ecosystem for lifelong education

Georgia Tech Professional Education Next

- Quickly getting organized around
  - New programs and audiences
  - Research
  - Platforms and services

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Research Portfolio: Amplify Impact

Sponsored Awards Remain Strong

($$$ in millions)

	2016	2017	2018	2019	2020
GTRI	$367	$377	$497	$643	$663
RI	$352	$313	$355	$407	$402
Total	$719	$690	$852	$1,050	$1,065

Awards by Sponsor FY20

GTRC Awards	GTARC Awards	INSTITUTE Awards
Over $395.3 million for sponsored activities in academic and other Georgia Tech units	**Over $661.2 million** for sponsored activities in the Georgia Tech Research Institute (GTRI)	**$9.3 million** awarded directly to the the Georgia Institute of Technology

$262.3 million Army
$216.7 million Air Force
$99 million Industry
$93.3 million National Science Foundation
$54.3 million Navy
$52.8 million Universities
$45.2 million Department of HHS, including the NIH
$20.0 million Department of Energy
$17.1 million NASA

$1.04 BILLION in sponsored activity expenditures

3,700 submitted proposals

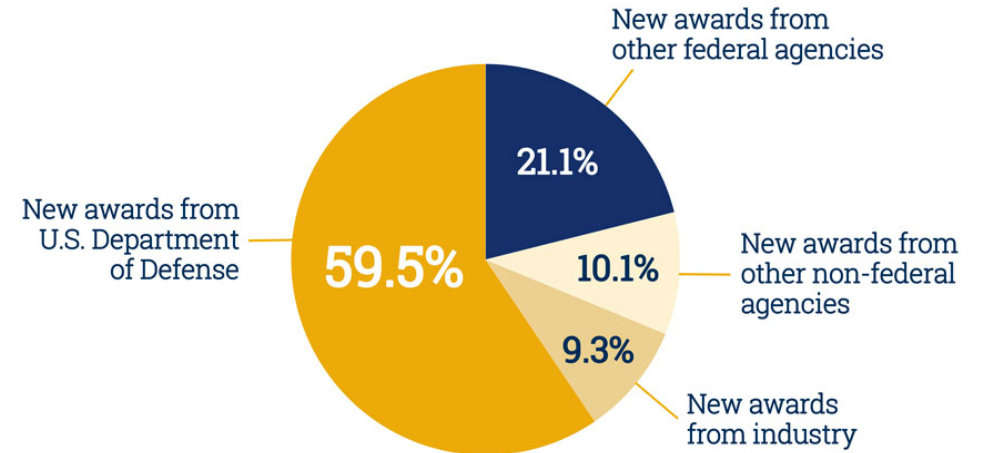representing over **$2.7 billion** in potential award funding

New Research Awards

$1.06 BILLION in total sponsored projects funding

to support research, discovery, and innovation

- New awards from other federal agencies — 21.1%
- New awards from U.S. Department of Defense — 59.5%
- New awards from other non-federal agencies — 10.1%
- New awards from industry — 9.3%

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CREATE-X: 2014-2020

Instilling entrepreneurial confidence

$90M+ highest revenue by one startup	**5K+** students involved	**43%** startups co-founded by women*
21% Black or Hispanic founders*	**150+** most jobs created by one startup	**38** different majors represented
$750M+ total valuation of all startups	**230** total startups created	**$100M+** venture capital raised

Startup Highlights:

STORD
The Cloud Supply Chain: End-to-End Logistics Services & Software

GIMME
Technology to help vending and market operators take control of warehouse inventory

Grubbly Farms
Grubbly Layer Feed is naturally balanced with nutrient-rich grubs and plant-based ingredients for happier, healthier chickens

FIXD
Meet the car repair sensor that's saving people $1000s

Gatherly
Spreading access to quality events by improving digital interactions through a delightful online platform

ETHOS
Introducing the Iris: Real-time instrument guidance system

Reframe
Use neuroscience to Reframe your relationship with alcohol & unlock the healthiest, happiest you

iSIMU VR
Atlanta's #1 virtual reality arcade

FireHUD *Protecting Our Protectors.*
FireHUD provides easy-to-use group monitoring to improve situational awareness and keep your team safe

SHOTCALL
The all-in-one community management platform that gets viewers off the sideline and in the game

ENGAGE

Engage is a **collaborative corporate innovation and startup go-to-market accelerator program** in partnership with Georgia Tech, 11 leading corporations, Invest Georgia, and Tech Square Ventures. Now in its 4th year, Engage's startup and innovation program is administered by Georgia Tech.

Corporations

Research Universities
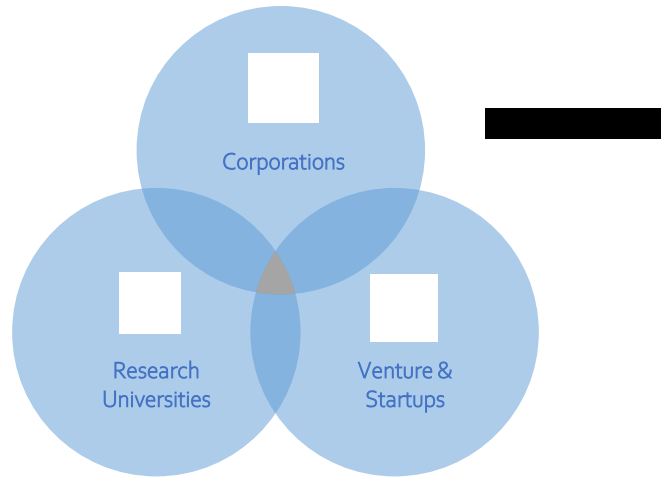
Venture & Startups

STARTUP SPOTLIGHT

STORD
end-to-end supply chain platform

2
GT FOUNDERS

$100M+
VENTURE FUNDING RAISED

100+
JOBS CREATED

METRICS WE MEASURE

3
GT ALUMNI FOUNDED STARTUPS

17
STARTUPS BASED IN GEORGIA

50
TOTAL STARTUP COMPANIES SUPPORTED

86
SIGNED CORPORATE CONTRACTS

32%
DIVERSE FOUNDERS (FEMALE + BLACK)

70%
SOUTHEAST BASED STARTUPS

250
JOBS CREATED IN ATLANTA BY STARTUP COMPANIES

$700M
CAPITAL RAISED BY STARTUPS SINCE JOINING ENGAGE

ENGAGE INTERNSHIP PROGRAM

The Engage Internship is a structured year-round practicum program designed to engage undergraduate and graduate students in multidisciplinary project teams. High-performing students are retained across multiple cohorts, with some students participating for up to two years. The program runs in the Spring, Summer, and Fall.

50+	3	8
Students (Undergrad + Grad)	Universities (GT, GSU, Emory)	# Unique Majors

STARTUP SPOTLIGHT

Founded at Georgia Tech in 2020, Canary is a startup democratizing the college internship process by providing a platform to share anonymized reviews on past internship/co-op experiences.

STUDENTS HAVE SECURED FULL TIME & INTERNSHIP ROLES AT:

Georgia Tech · Goldman Sachs · The Home Depot · facebook · accenture · CREATE-X · Heartbeat · Georgia-Pacific · TESLA · BAIN & COMPANY

COMMISSION ON RESEARCH NEXT/

Executive Sponsor:

Chaouki T. Abdallah
Executive Vice President for Research

Co-Chairs:

Tim Lieuwen, Regents' Professor, School of Aerospace Engineering, and Executive Director of the Strategic Energy Institute.

Wen Masters, Deputy Director for Research, Georgia Tech Research Institute.

Commission Members:
50+ across Georgia Tech community

The Charge:
Together, we want to discover the issues that will define the future of research, uncover new opportunities for engagement with peers, partners and others, and build the necessary infrastructure to make it all possible.

March 2020 - October 2020: Strategic Analysis and Phase I Report Development

October 2020 - February 2021: Develop Strategy to Support Institute Strategic Plan Goals

March 2021 and beyond — Implementation: Define Research Roadmap, Metrics, Structures, Resources

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Areas of Strategic Investment Aligned to the Strategic Plan

Budget by Funding Source – FY2017-21

FY2017-2021 Original Budget ($M)
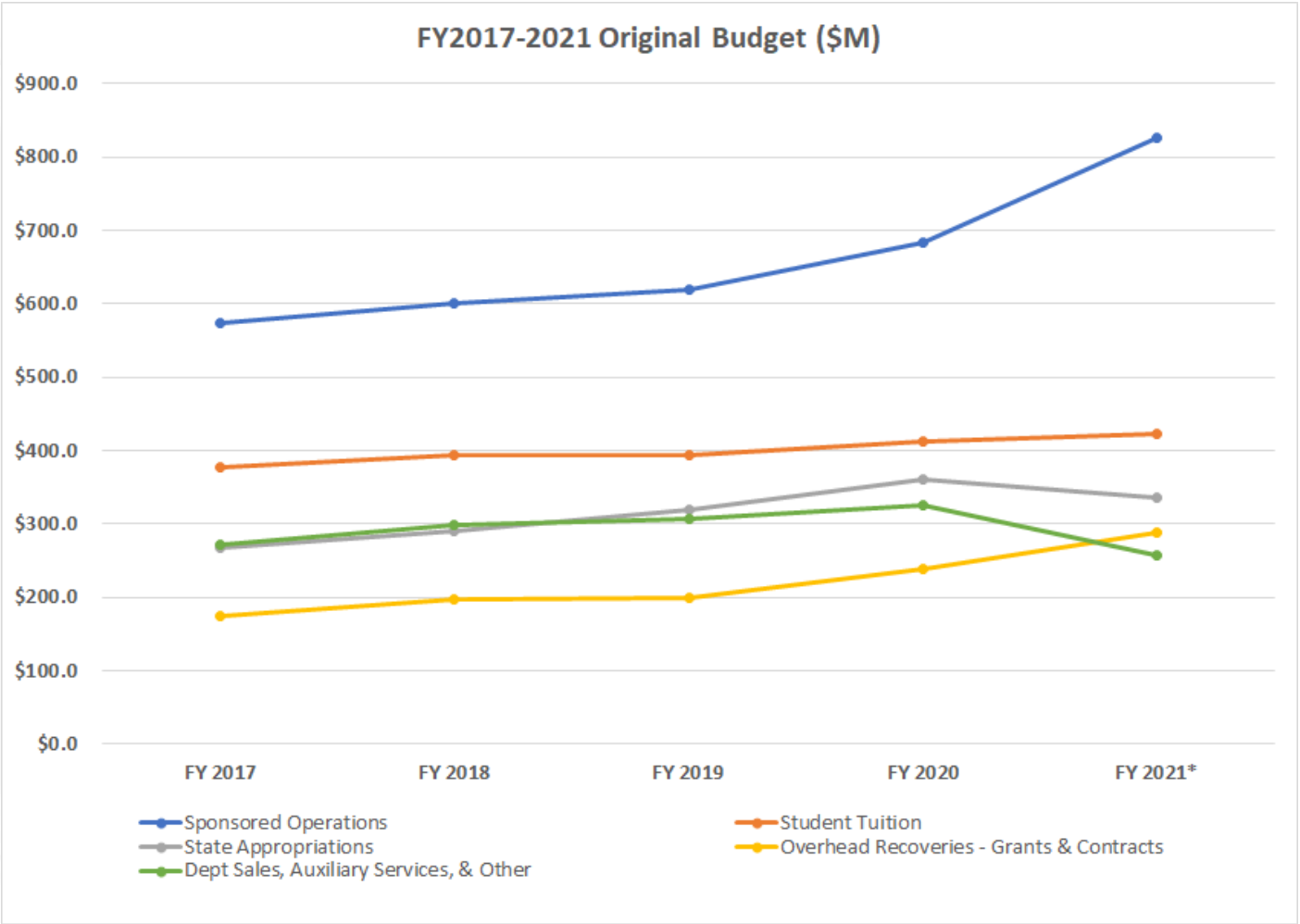
*FY2021 revenue has been updated to reflect the changes as submitted in the 3rd quarter budget amendment

Note: Includes revenue for Resident Instruction, GTRI, and EI2

Key Strategic Investments in our Strategic Plan

- ## Invest in faculty and staff
  - Equity pool to address internal and market equity issues
  - Provide new start-up and retention funds to support new faculty equipment start-up and lab renovations
  - Faculty hiring to focus on cybersecurity, machine learning, data science, quantum regenerative medicine/cell-based therapies, and neuroengineering
  - School chair positions for Industrial Design, City and Regional Planning, and Building Construction

- ## Enhance student experience
  - Increase subsidy for student health insurance
  - Additional academic, first year, and transition career advisors to support students in their academic success and career development
  - Increase annual graduate teaching assistant stipends to remain competitive with our peers
  - Additional teaching assistants to support enrollment growth
  - Funds to support instruction of GT1000/2000 courses

Thank you!