Understanding MIT's Finances

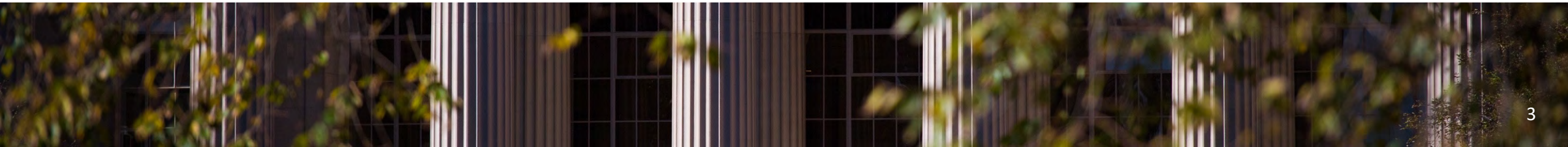
Glen Shor
Executive Vice President and Treasurer

Supporting MIT's mission

To advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century

Maintaining a balance

Allocate resources for immediate needs	⟷	Conserve resources to educate future generations of learners
Capitalize on strategic opportunities	⟷	Be prudent in reserving resources to sustain the Institute's operations
Encourage innovation	⟷	Maintain a strong core to keep MIT safe, compliant, and resilient



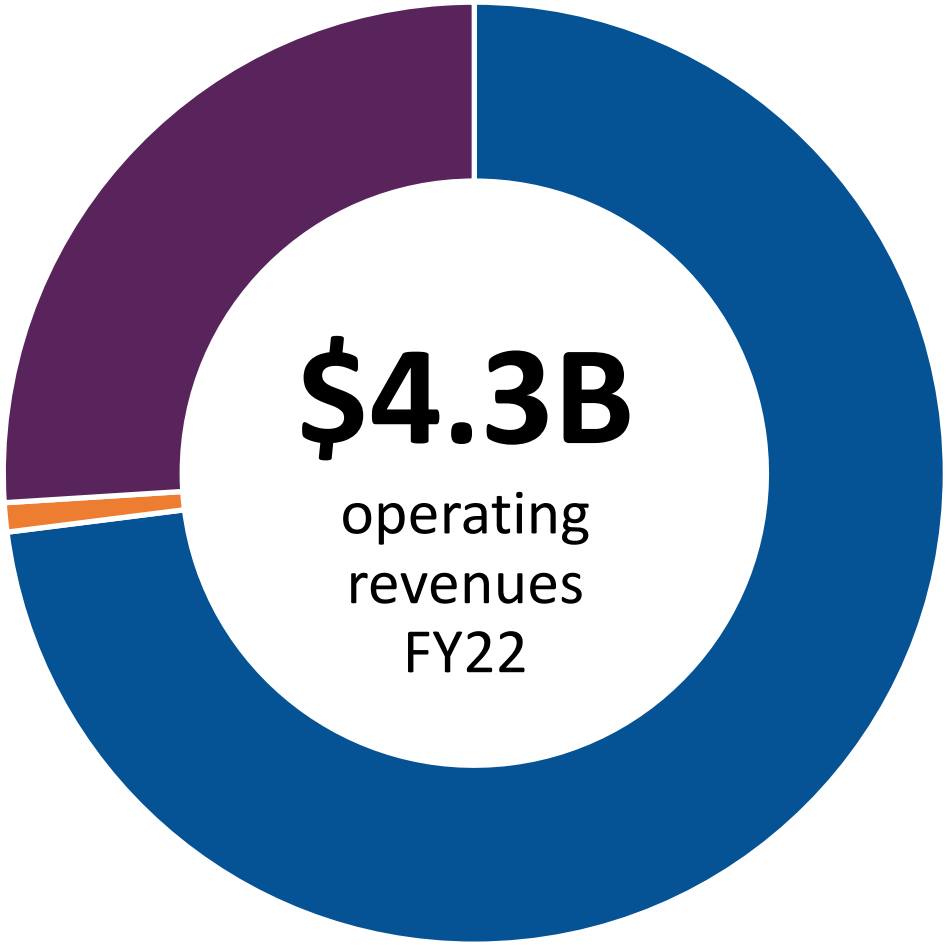
Where does MIT's money come from?

How do we use our resources?

How and when do these decisions get made?

Where does MIT's money come from?

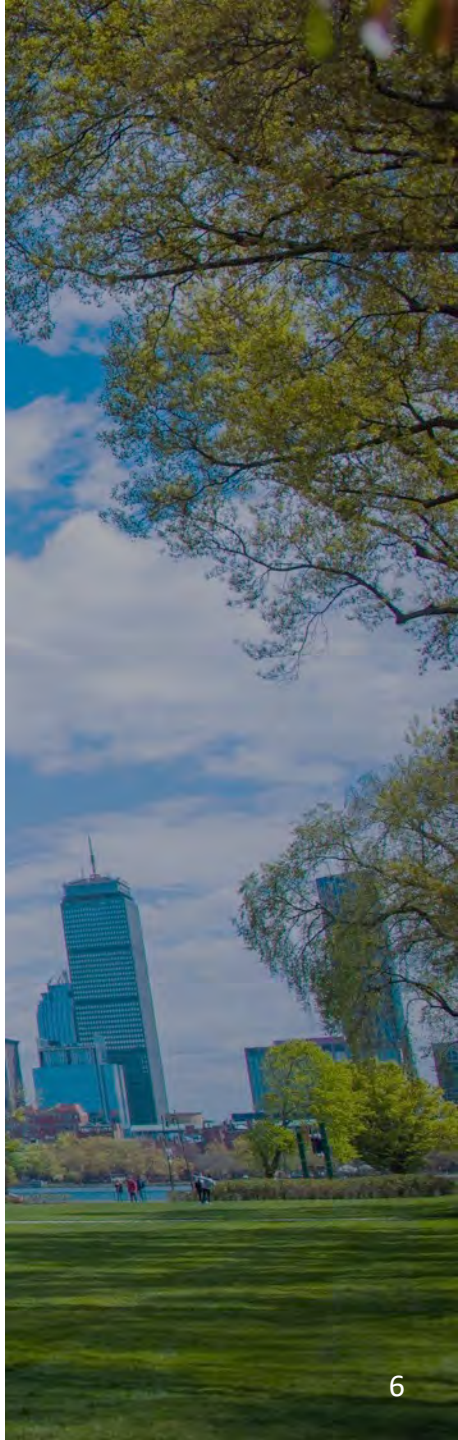
Annual operating revenues



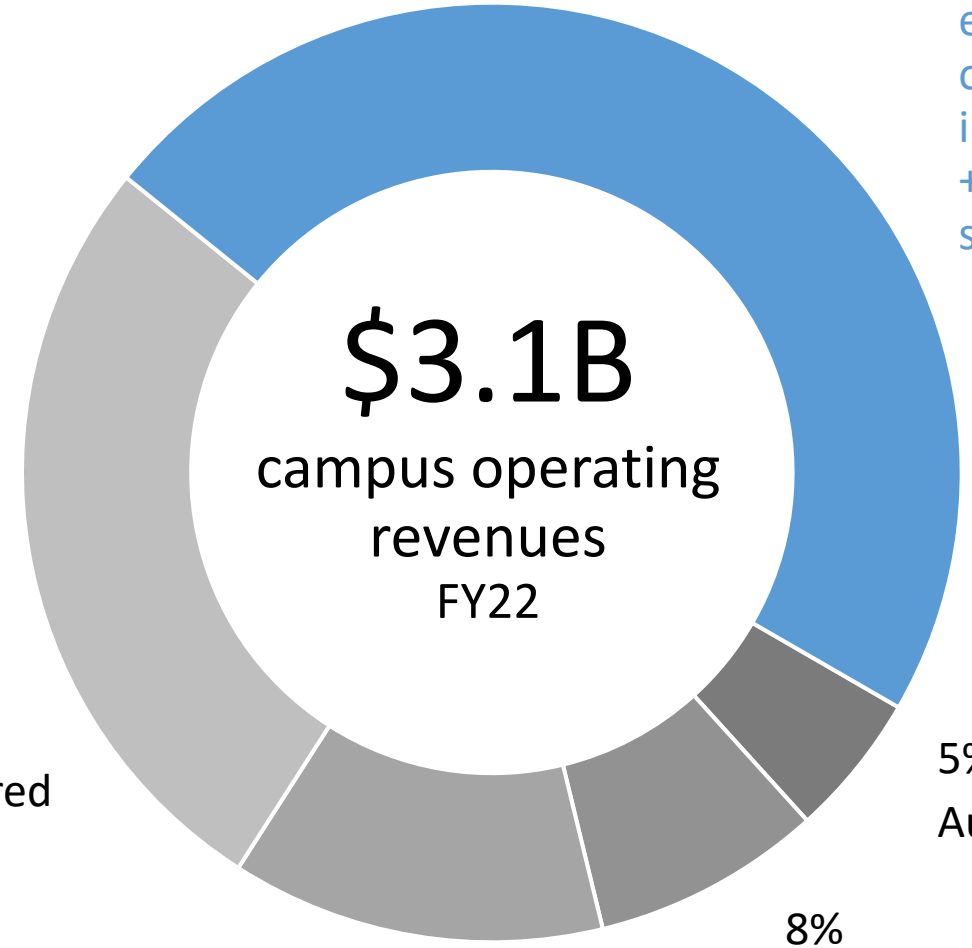
Campus
$3.1B / 73%

Lincoln Laboratory
(direct research)
$1.1B / 26%

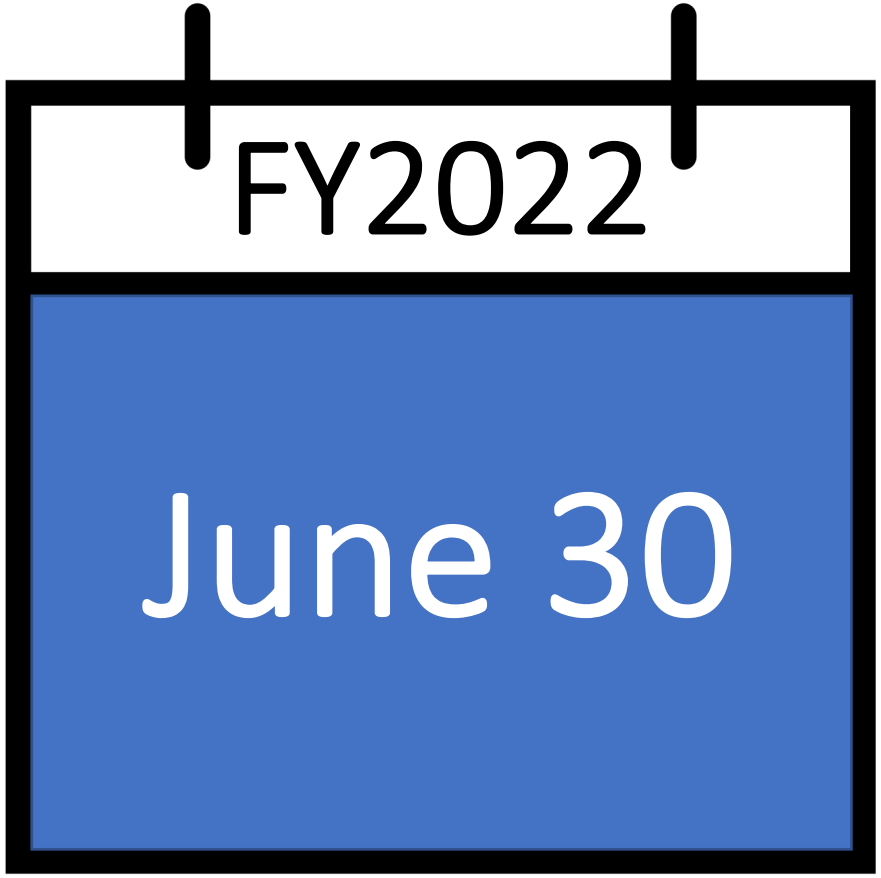
Singapore-MIT Alliance for Research and Technology (SMART)
(direct research)
$0.02B / 1%



Support from the endowment and other investments, plus current use gifts, comprise about half of MIT's campus annual operating revenues



MIT's endowment is structured like a mutual fund



$24.6 billion
Market value of endowment

~4,450
Unique endowed funds

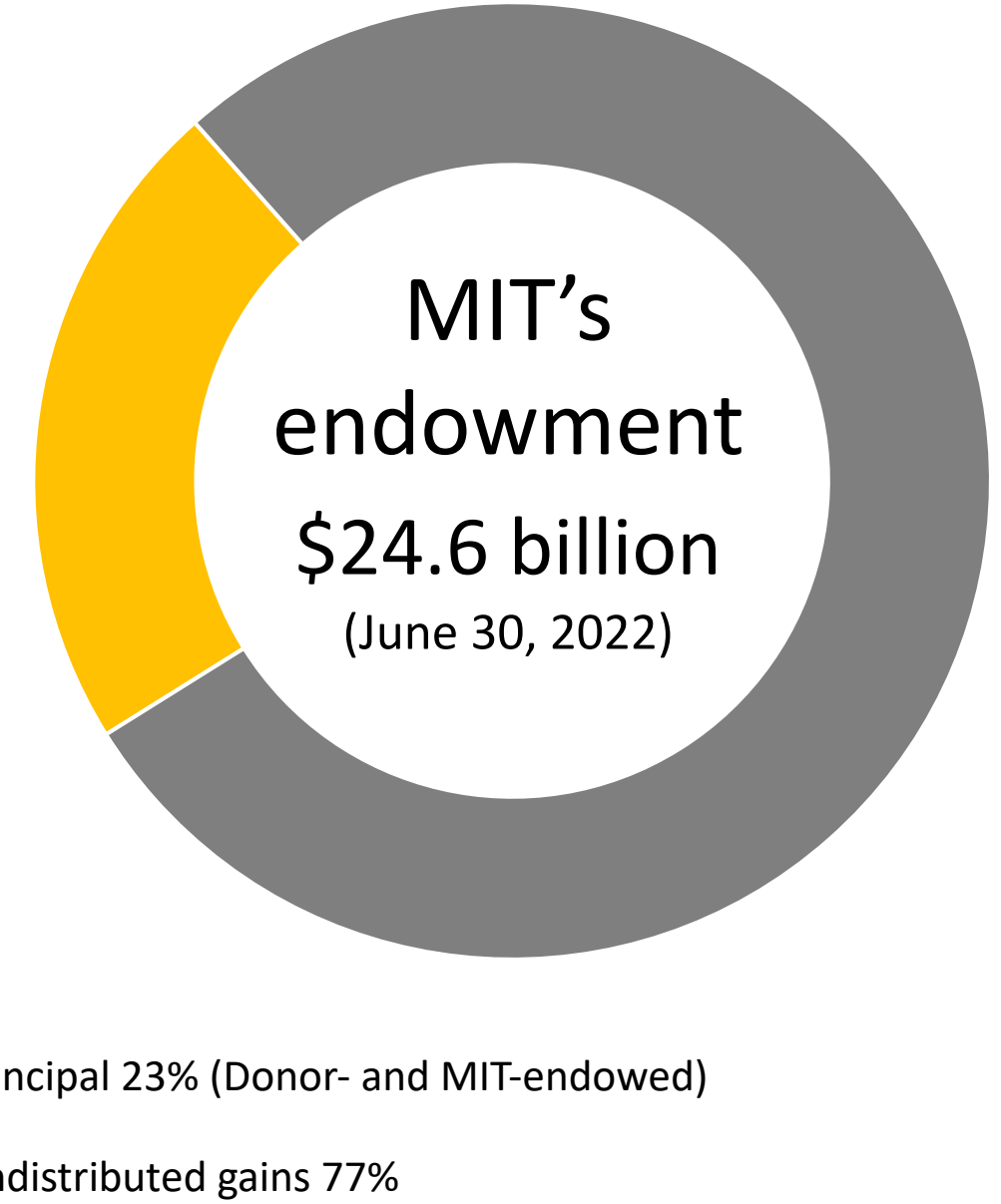
99%
of endowed funds invested in MIT's unitized investment pool (Pool A)

9.1 million
Units (shares) of Pool A owned by endowed funds

$2,688
Value of each unit at June 30, 2022

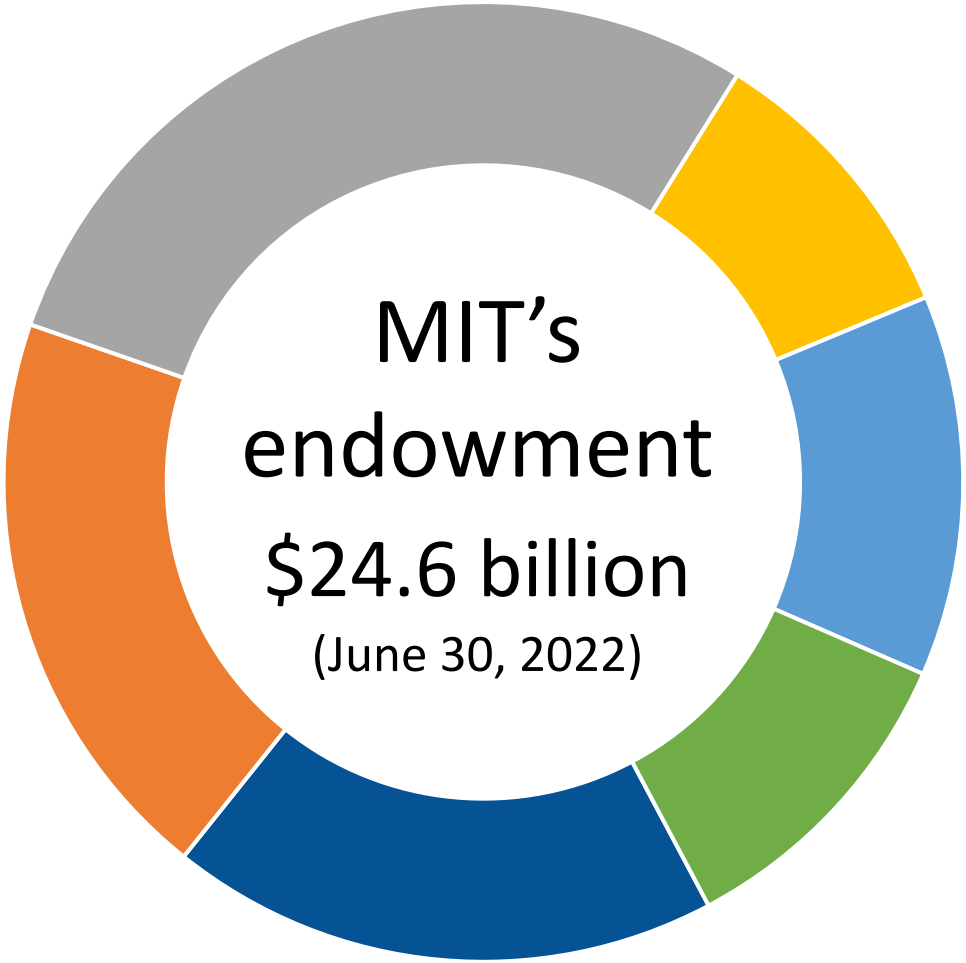
Constraint:

MIT cannot spend donor principal, and liquidating units endowed by MIT would reduce operating revenues



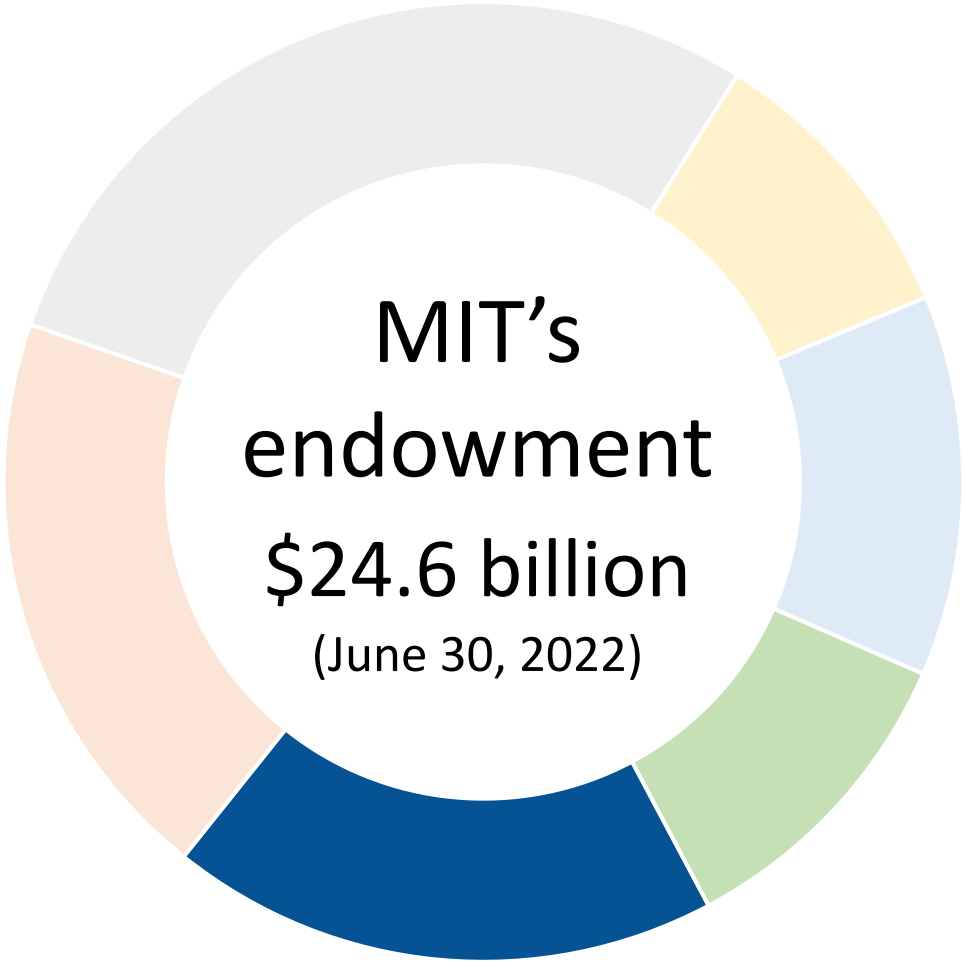
Constraint:

MIT must use endowment consistently with its established purpose



Constraint:

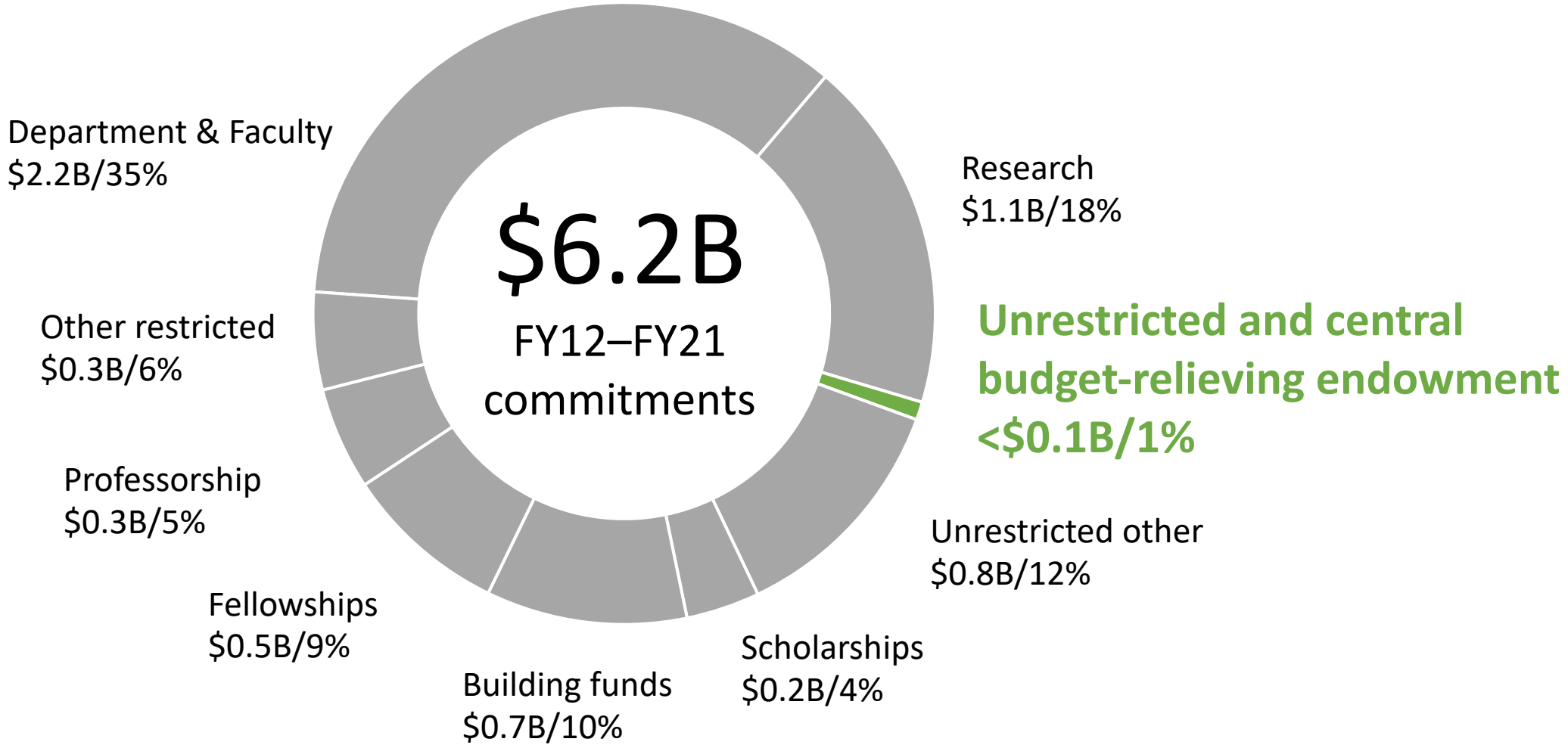
Just 19% of the endowment is for general purposes, meaning we can use it for any purpose consistent with our mission



19%
General Purposes

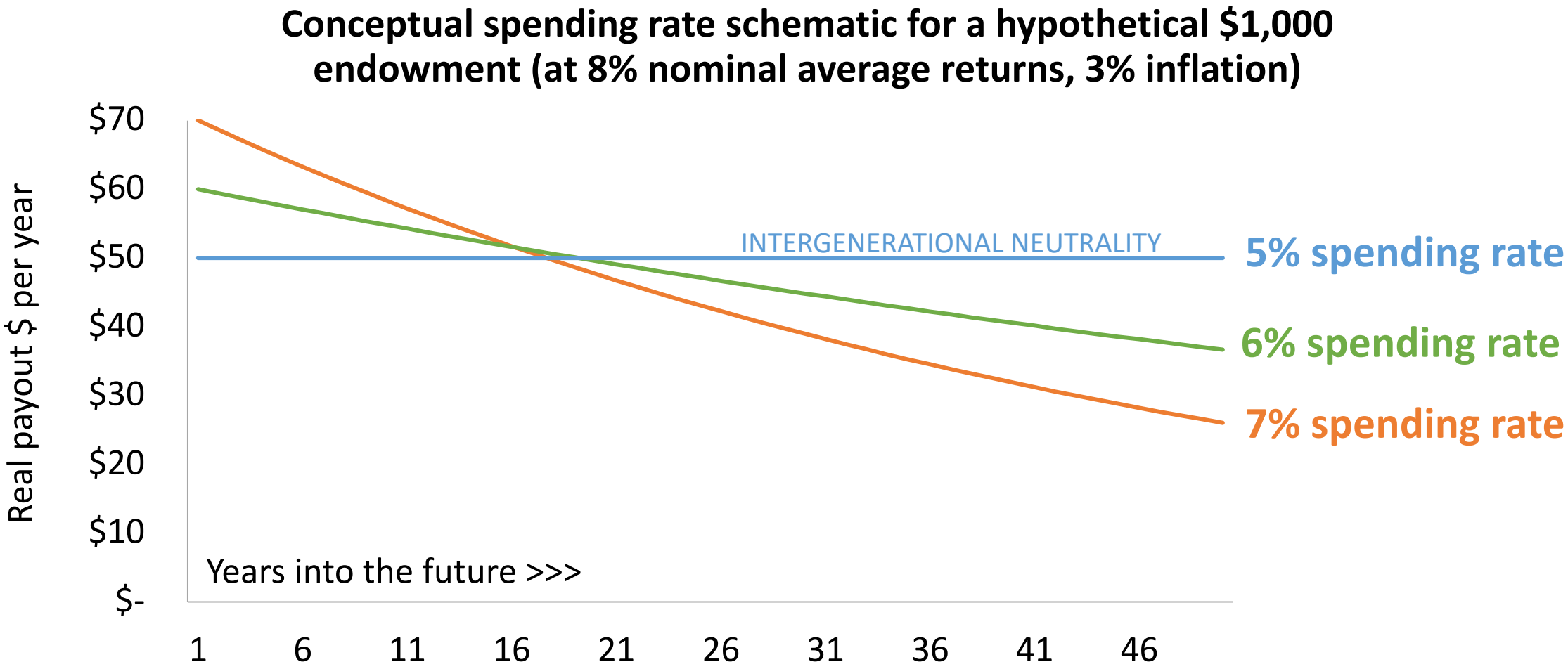
Constraint: Most philanthropy is restricted

Makeup of Campaign for Better World commitments



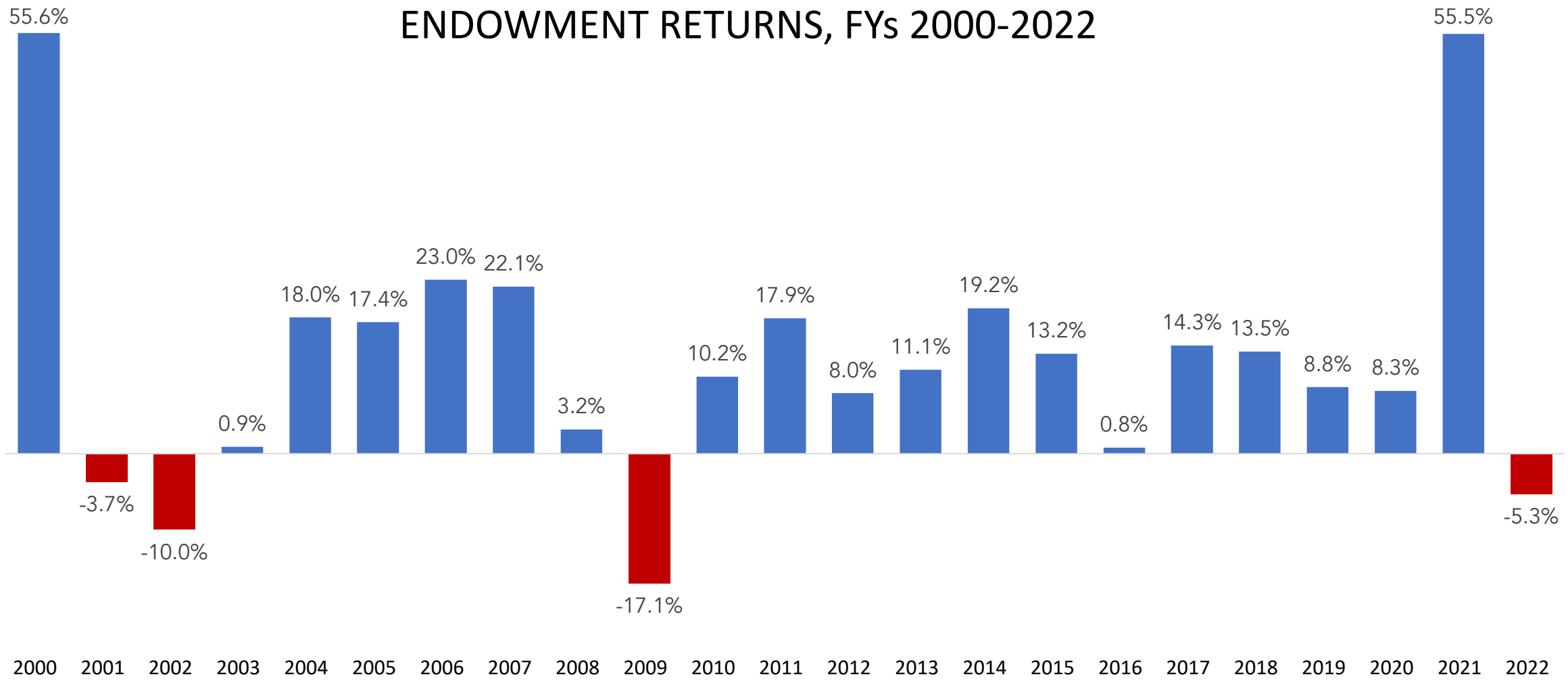
MIT’s spending policy is based on the concept of intergenerational neutrality – ensuring that we can offer the same support to today’s scholars and future generations

Constraint: We must maintain endowment's purchasing power



(1) Schematic is a conceptual depiction of spending rates, in general, and portrays payout per year on a $1,000 initial endowment (inflation-adjusted) while assuming investment results of 5% in real terms per year (which would translate into roughly 8% nominal if inflation was 3%).

Constraint: We must avoid "feast or famine" fluctuations in endowment support for current operations



Annual endowment payout balances stability and intergenerational equity

THE TOBIN RULE

80%
Prior year distribution per unit grown at long-term inflation factor

STABILITY

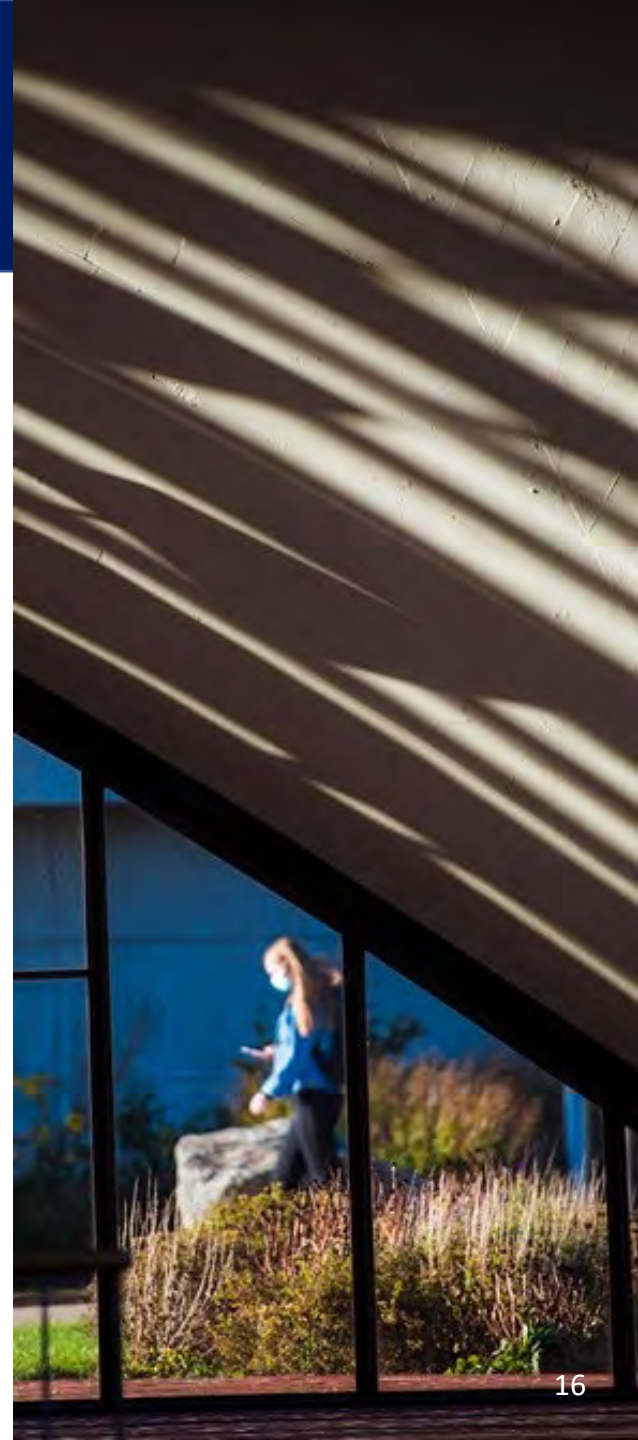
+

20%
Trailing 36-month average UMV spending rate of 5.25%

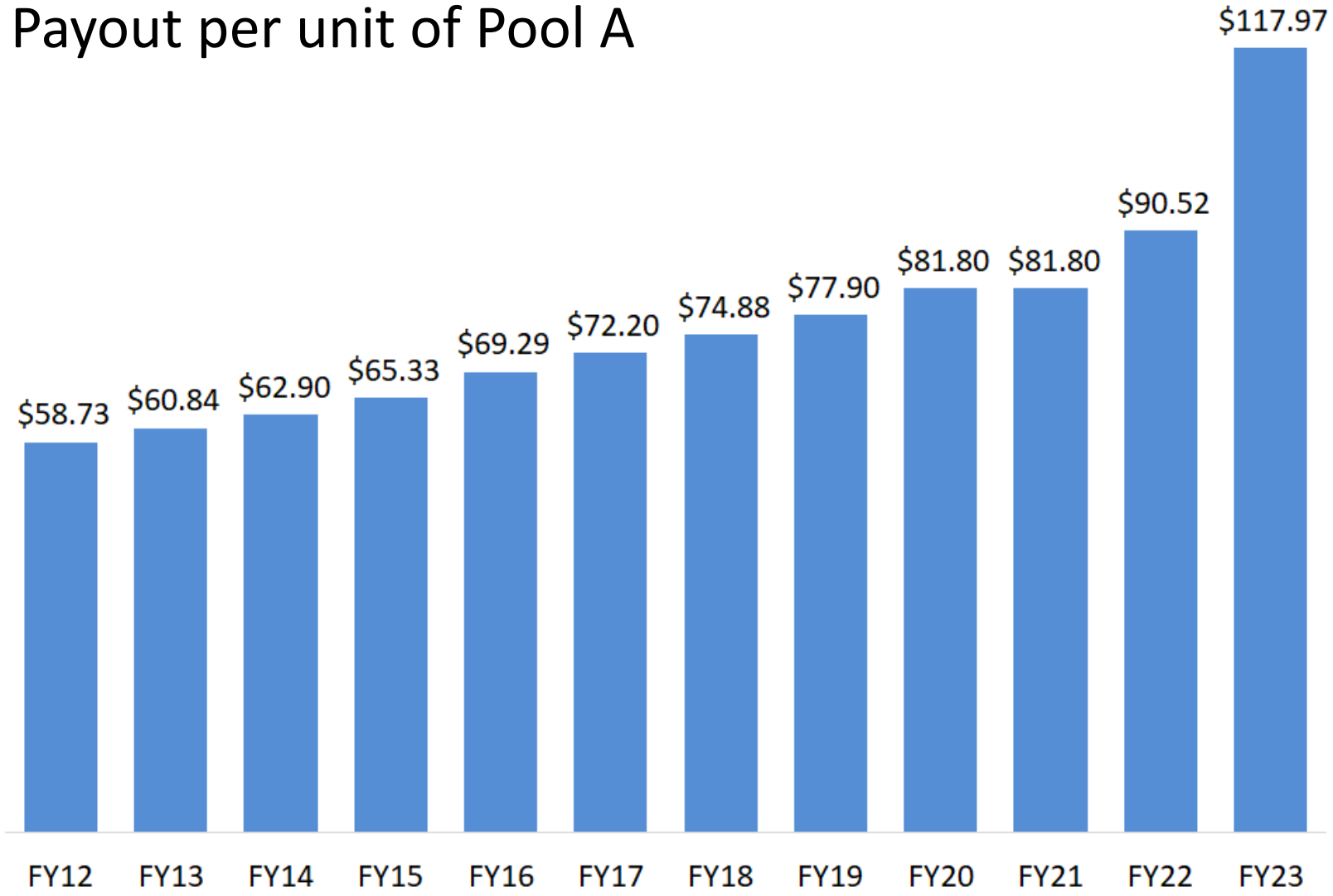
EQUITY

=

Payout rate in dollars per unit of endowment
$117.97 per unit in FY23



MIT’s payout rate per unit of endowment has increased 6.5%, on average, from FY12-FY23 (4.4% not including FY23’s 30.3% increase)



FY23 budget addressed important needs

Research

- Relieved pressure on grants by centrally funding NSF tuition shortfall (addressing stipend and insurance shortfall in FY24)
- Increased RA tuition subsidy to 55%
- Increased central funding for under-recovery
- Investments in RAS/OSATT
- Launched new, faculty-led Office of Research Computing and Data

Community

- Supplemented annual merit increases
- Graduate student stipend +8.7% over prior year
- Matched peers on tuition-free status for undergraduates
- 12-month funding for base budget-funded PhD programs for entire time to degree
- New childcare benefit
- Enhancements to faculty mortgage program
- New DEI programming and staffing

Infrastructure

- 2030 capital plan forecasted to spend $473M on building projects in FY23 (including on construction of new West Campus graduate residence)
- Provided capacity for critical cybersecurity enhancements
- Funded debt service for $500M bond issuance @ 3.06% to fund future capital plan investments in academic, student life, and research facilities and other needs

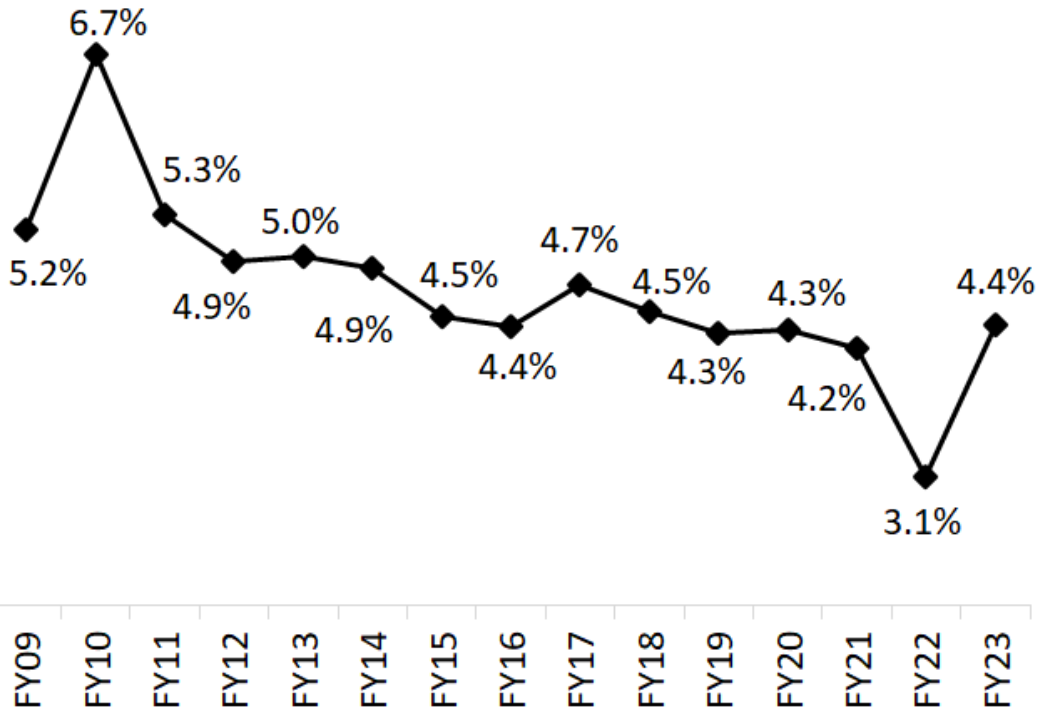
Innovation

- Supported launch of new MITx online platform to fulfill commitment from edX sale
- Provided one-time funding to enable initial Climate Grand Challenges awards as bridge to securing philanthropic commitments

MIT's distribution rate fluctuates with endowment performance

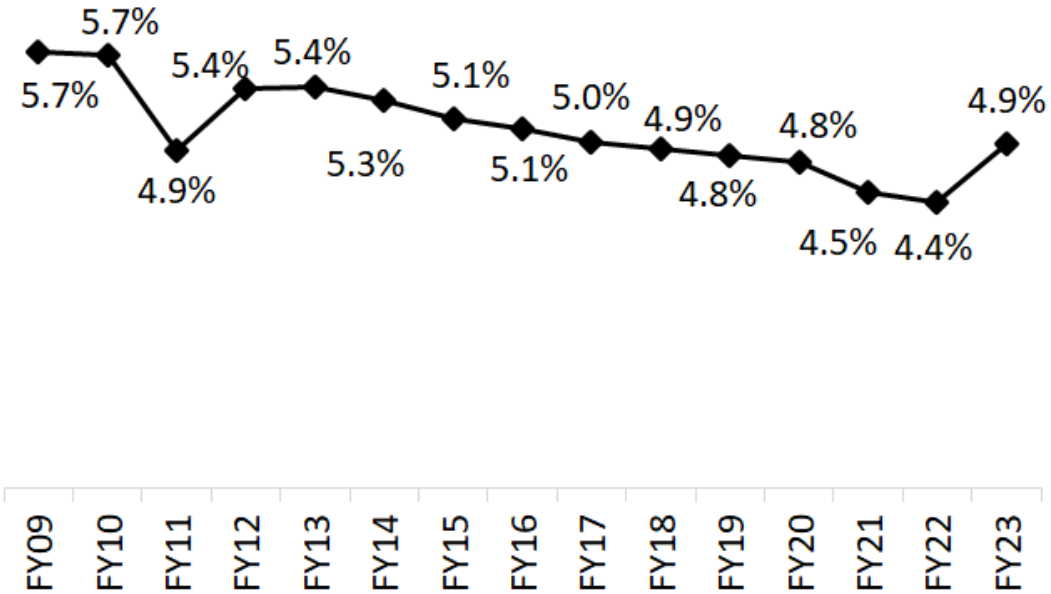
Spot distribution rate

Payout per unit of Pool A as a percentage of the market value of a unit of Pool A *at the end of the prior fiscal year*.



36-month average distribution rate

Payout per unit of Pool A as a percentage of the *trailing 36-month average market value* of a unit of Pool A

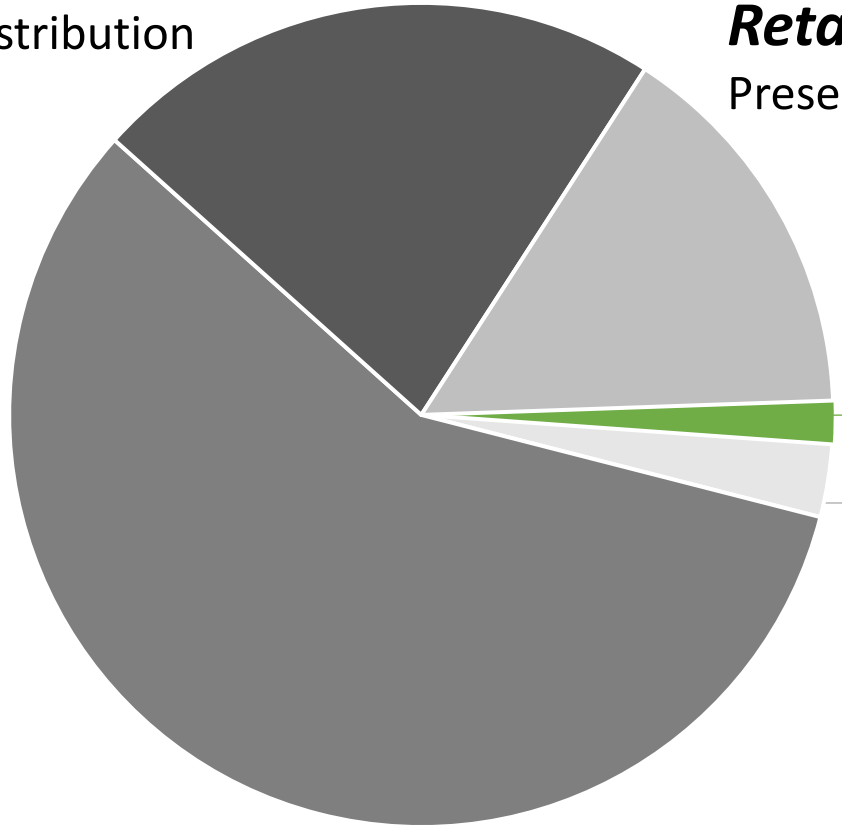


Distribution rate increasing in FY23 (and likely in FY24) due to 5.6% increase in endowment payout for FY24, continued stress on endowment performance

Putting it all together: Less than 2% of endowment is available to fund central budget

23% Principal
Not for distribution

15%
***Retained* general purpose gains**
Preserves intergenerational equity



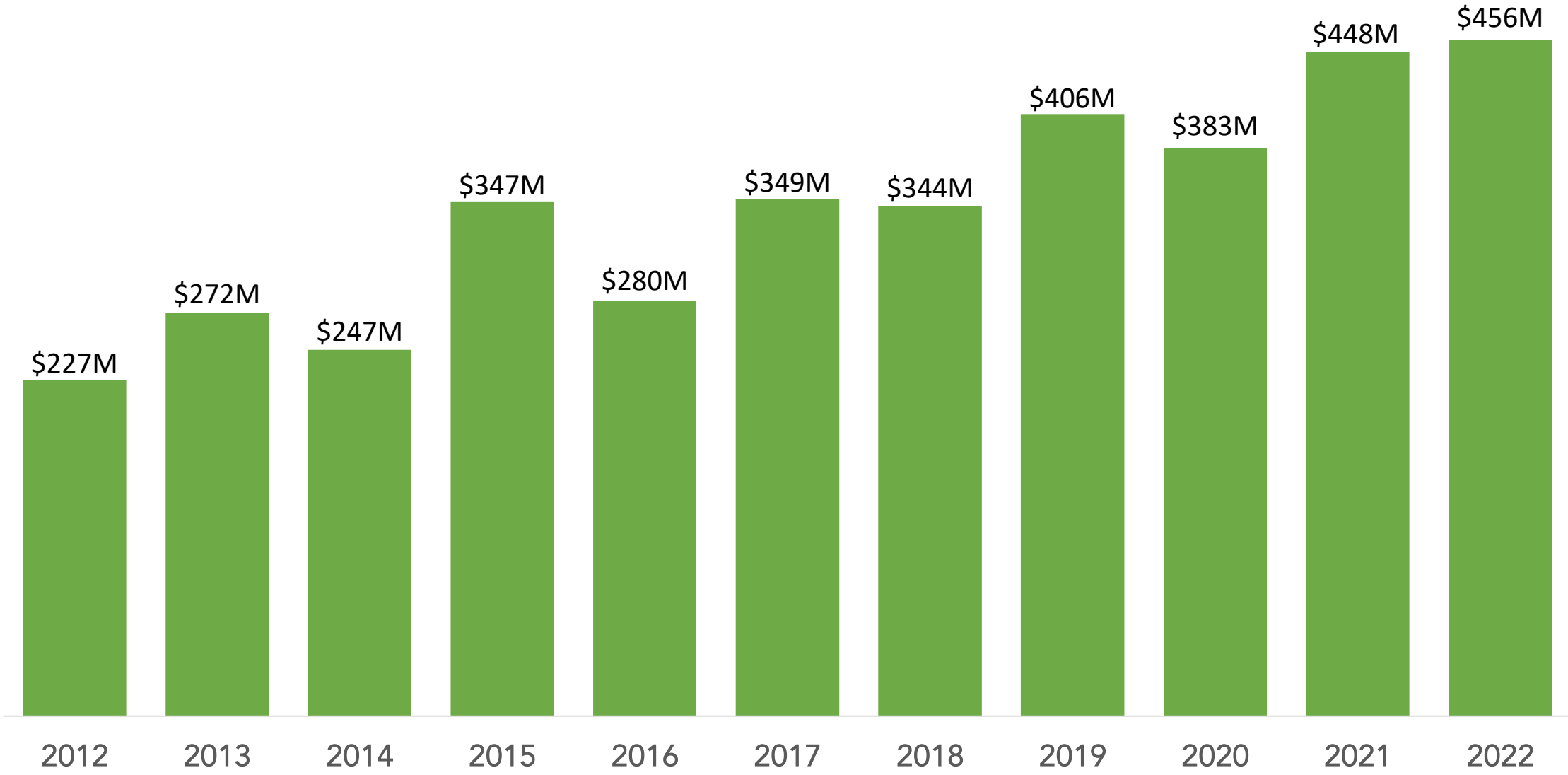
58% *Retained*
restricted gains
Preserves
intergenerational equity

<2%
<u>Distributed</u> to central budget
✓ **Sustainable unrestricted support**

<3%
Sustainable restricted support
Not for central budget

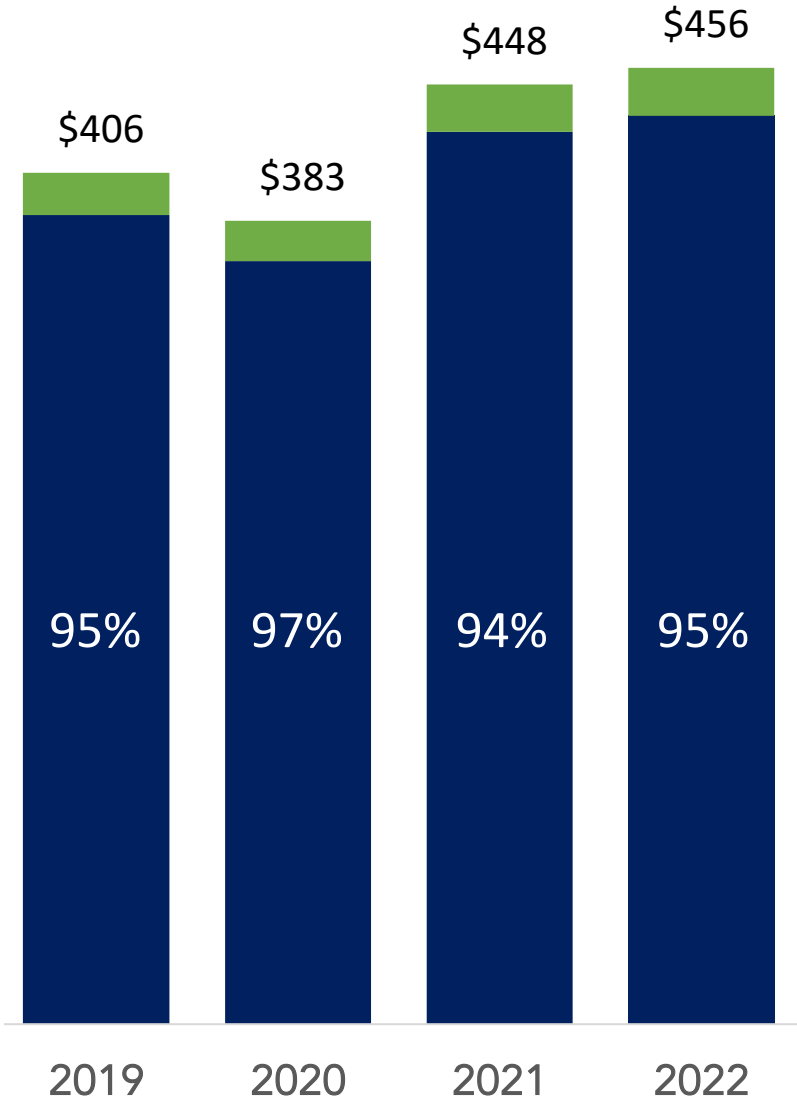
Notes: Endowment composition in this presentation is a conceptual view of FY23 projected size and use of endowment based on adjusting FY22 year-end endowment value (total and components) assuming 0% returns, no new endowed gifts, and payout to support operations, with payout based on FY23 approved payout per unit of endowment. Endowment for central budget is comprised of direct payout to endowed funds that support the central budget and recovery of service costs to the central budget from restricted endowed funds.

Current-use philanthropy (non-endowed) has grown significantly over 10 years



Current-use philanthropy (non-endowed) has grown significantly over 10 years

But is mostly restricted



Research volume includes direct activity and billed indirect costs

Campus research volume: $784M in FY22

Research Direct Costs
$592M in FY22

- Generated through **research grants**
- Awarded to PIs to support **direct costs of research activity**
- Examples: Salaries, **RA tuition and stipends**, equipment, subcontracts

Indirect Cost Recovery
$192M in FY22

- Charged to **subset of direct costs** at on/off campus rates negotiated with federal oversight agency
- Funds central costs **to support research** (e.g., buildings, general and departmental administration)

Notes: MIT additionally has other sponsored activity (non-research) that totaled $123 million in FY22

The federal research dollar on the MIT campus

30¢ OF EACH DOLLAR IS FOR INDIRECT COSTS

(two-thirds for space)

OPERATIONS & MAINTENANCE .... 8¢

EQUIPMENT .... 1¢

UTILITIES .... 3¢

BUILDINGS .... 6¢

LIBRARIES .... 2¢

GENERAL .... 4¢

DEPARTMENTAL .... 2¢

FACULTY .... 2¢

ADMINISTRATION .... 2¢

70¢ OF EACH DOLLAR IS FOR DIRECT COSTS

39¢ .... RESEARCH SALARIES & EMPLOYEE BENEFITS

9¢ ..... MATERIALS, SERVICES & TRAVEL

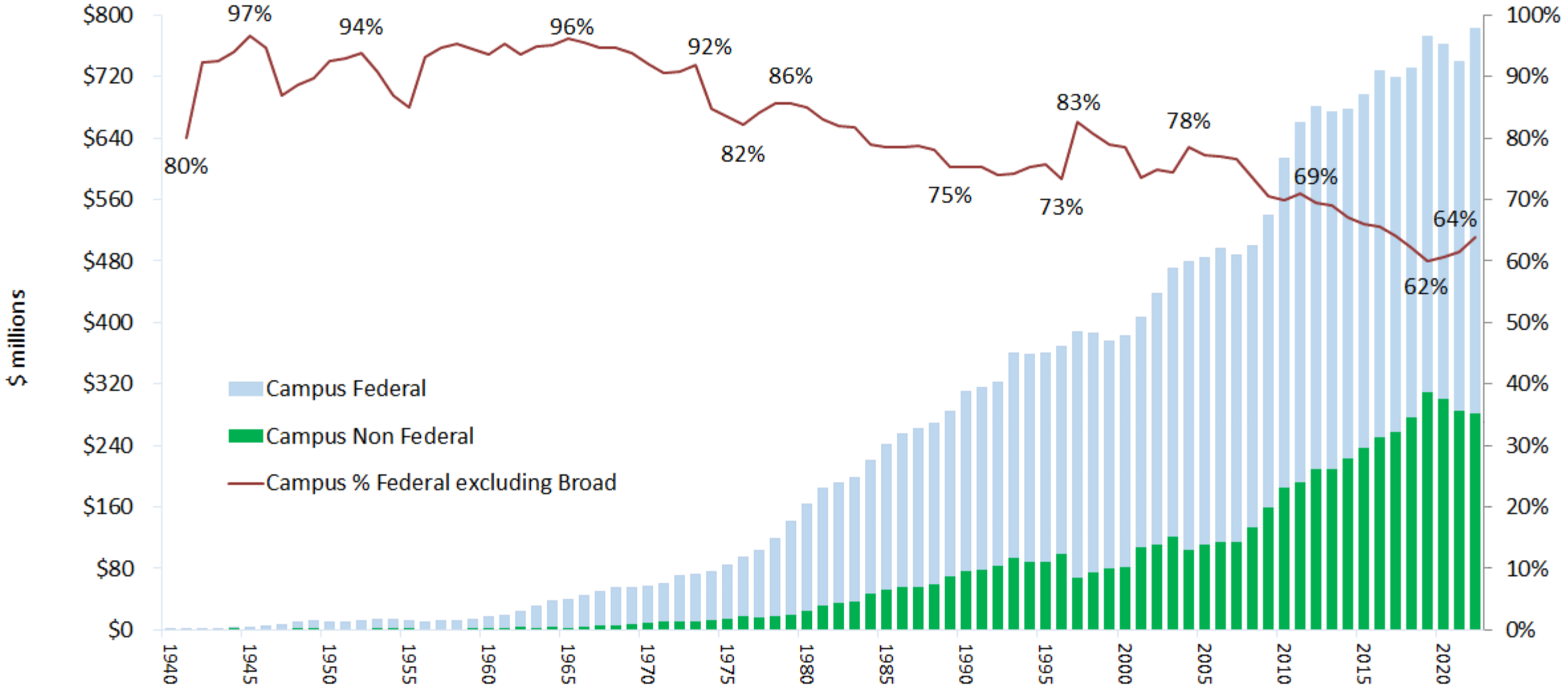
6¢ ..... EQUIPMENT

6¢ ..... GRADUATE STUDENT SUPPORT

10¢ .... ALL SUBCONTRACTS & OTHER DIRECT CHARGES

Image: MIT Assistant Professor Farnaz Niroui and her team have devised a way to arrange arrays of nanoparticles onto a surface without damaging the material's surface.
MIT Photo: M. Scott Brauer. Source: MIT Office of the Vice President for Research FY22. Chart: MIT, November 2022

Campus research volume trending toward non-federally sponsored



Source: MIT Institutional Research (IR)

Constraints on sponsored support:

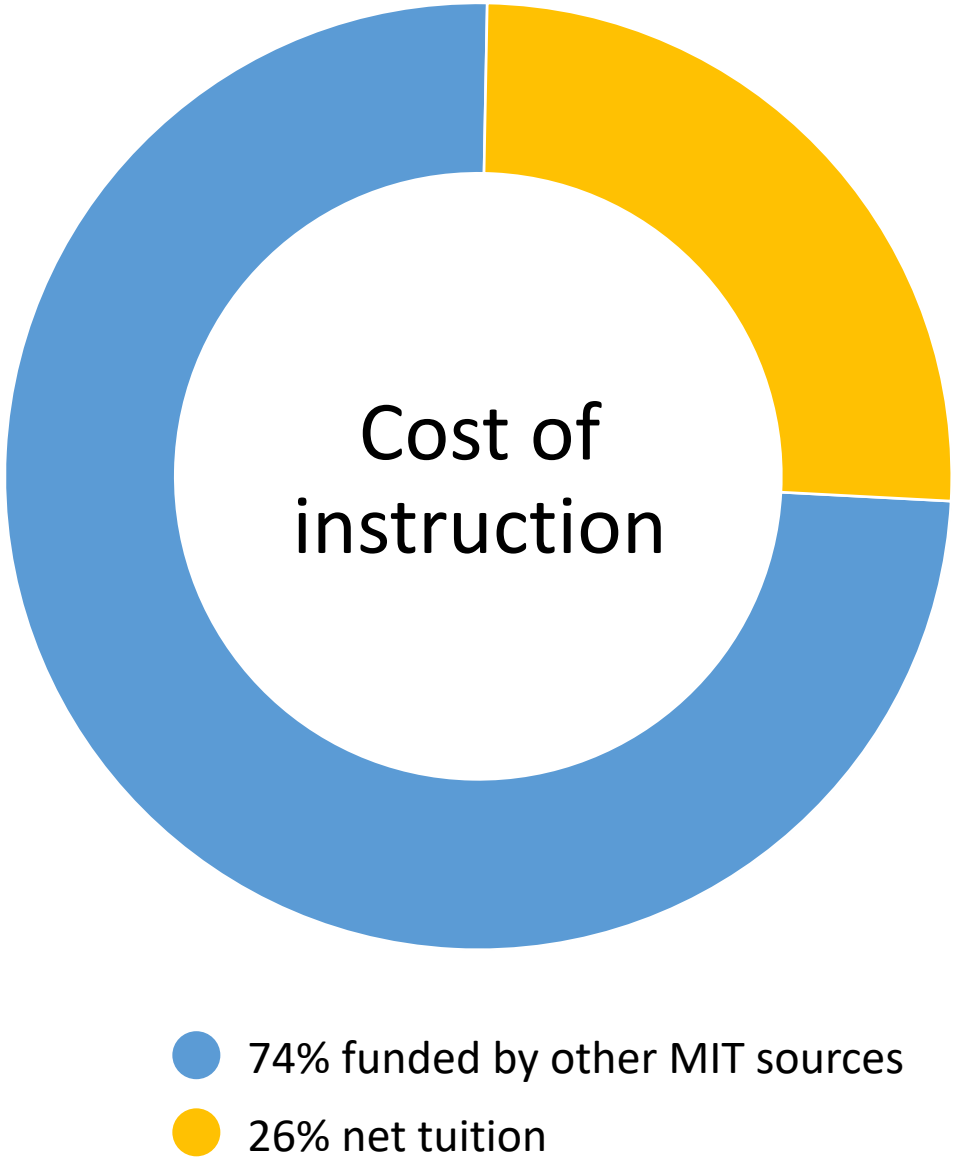
- Supports specific activity per terms set by source
- Size defined by source – does not/cannot necessarily flex with added cost
    - MIT's trying to add cost impacts competitiveness of proposals
- F&A revenue limited to costs allocated to overhead supporting sponsored activity
- Sponsors may not pay full overhead – has to be absorbed by central budget/units

Net tuition: Background

- Tuition rate generally the same for undergraduates and graduates
- Some graduate programs have a separate tuition rate (e.g., Sloan)
- Undergraduate financial aid funded by scholarships (largely endowed) and central funds, designed to make tuition and other charges/costs affordable
- Levels of support and sources for graduate financial aid vary program to program

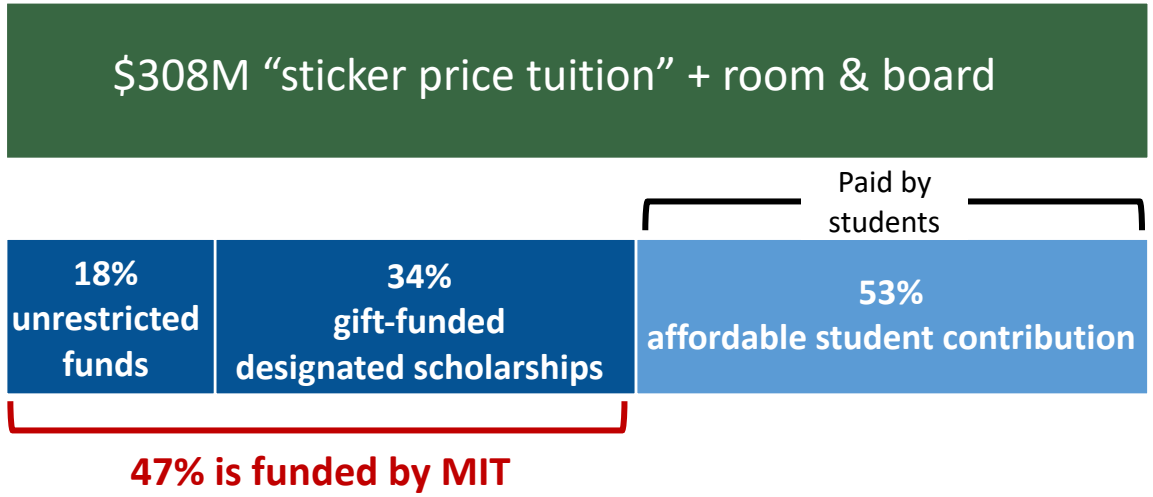
Just a quarter of the cost of instruction is funded by net tuition – the tuition charge net of financial aid

Instruction costs = ~4x net tuition

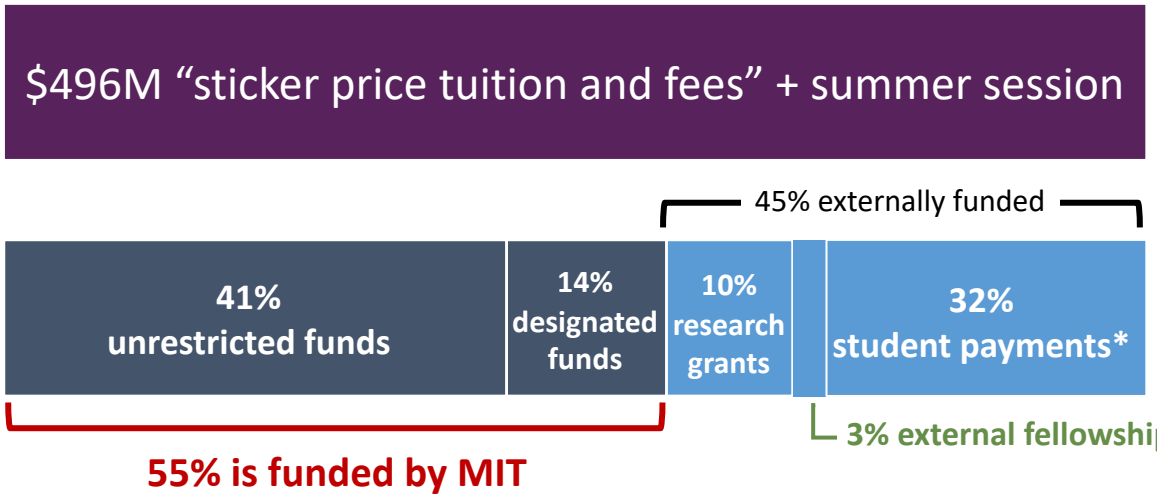


Different funding models for undergraduate vs. graduate students

+45% of undergraduate tuition, room & board charge is absorbed by MIT



+50% of graduate degree tuition charge is also absorbed by MIT

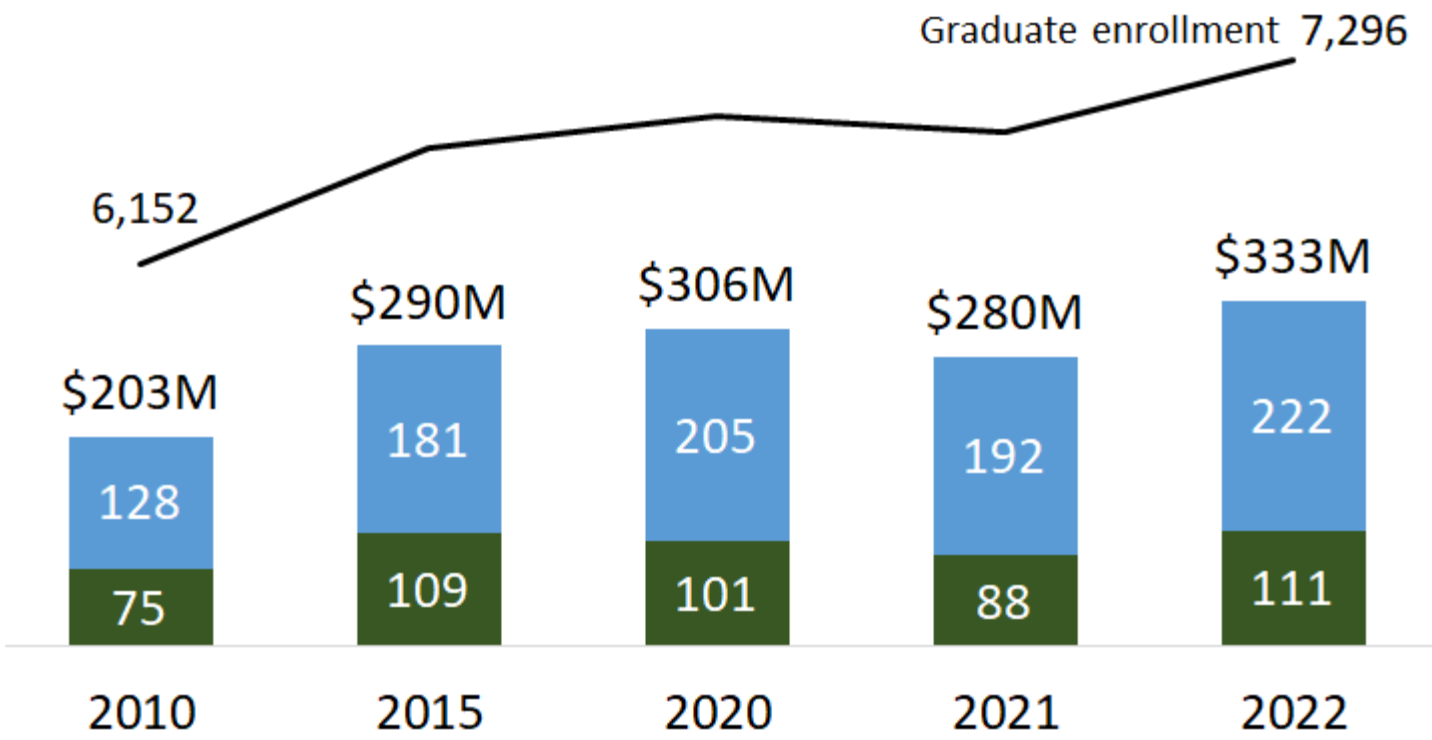


Based on FY22 actuals

*Student payments principally driven by graduate students without appointments

Increases in student enrollment are major factor in recent growth in net tuition...

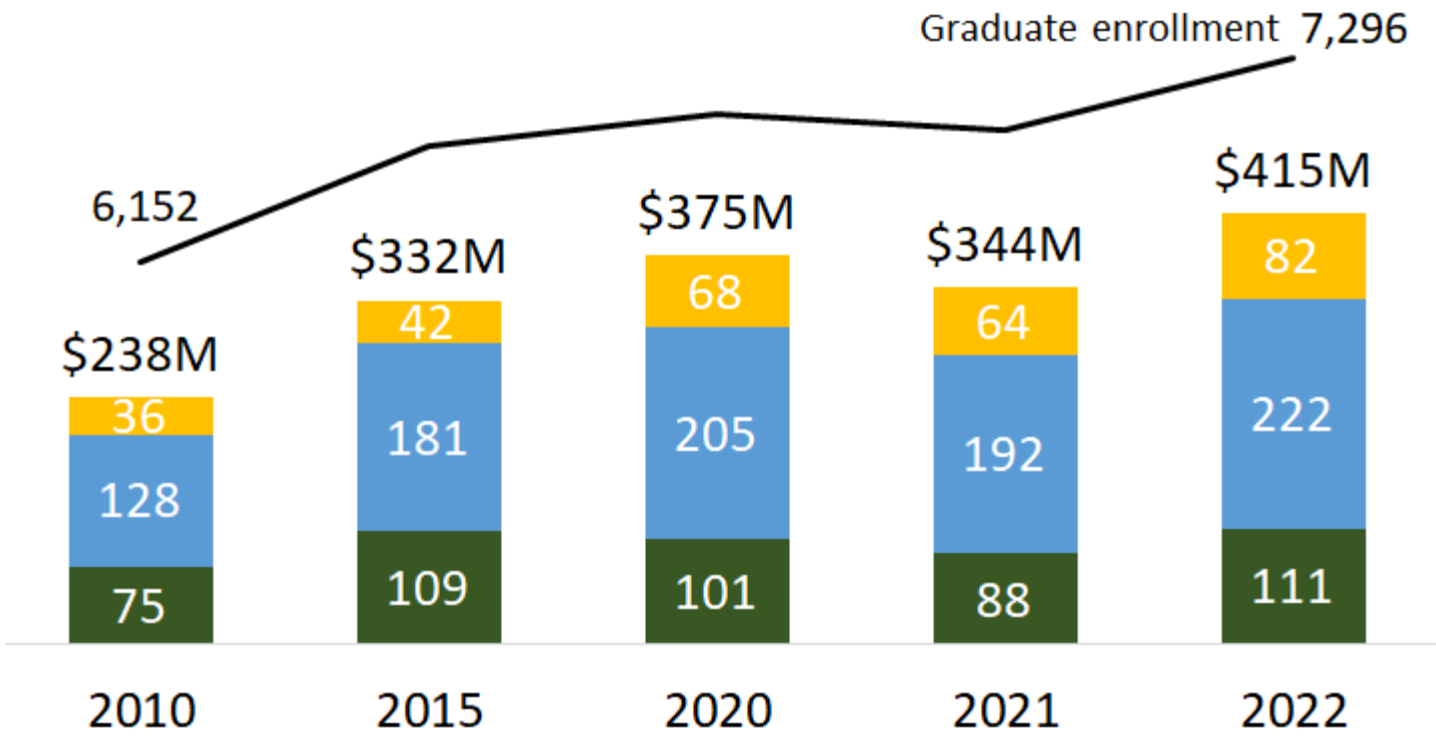
Tuition and financial aid dynamics over time



	Average annual growth rate:
Net undergraduate tuition	3.3%
Net graduate tuition	4.7%

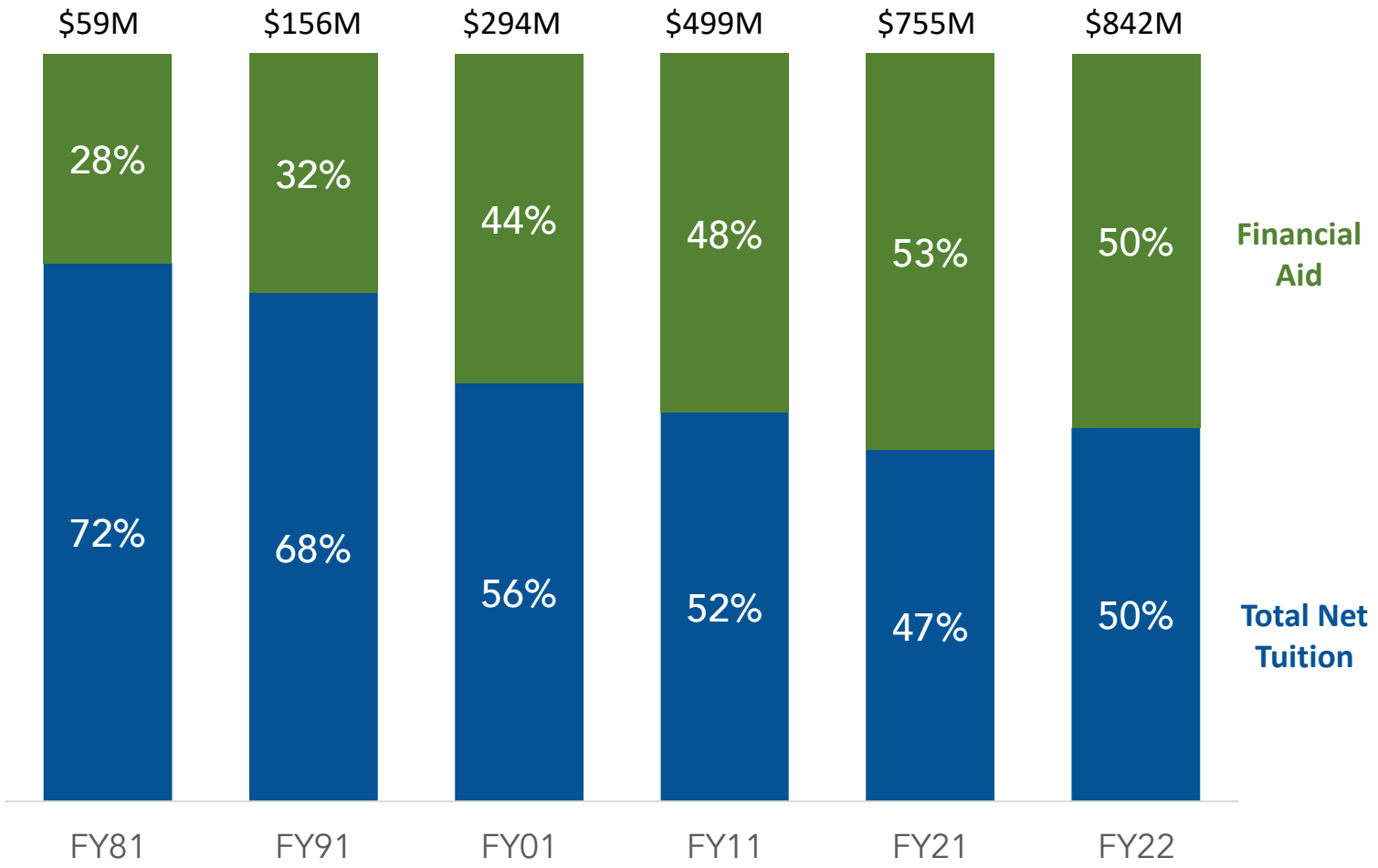
…in addition to more non-degree learners

Tuition and financial aid dynamics over time



	Average annual growth rate:
Net undergraduate tuition	3.3%
Net graduate tuition	4.7%
Non-degree programs	7.2%

Institute financial aid has been growing since the 1980s



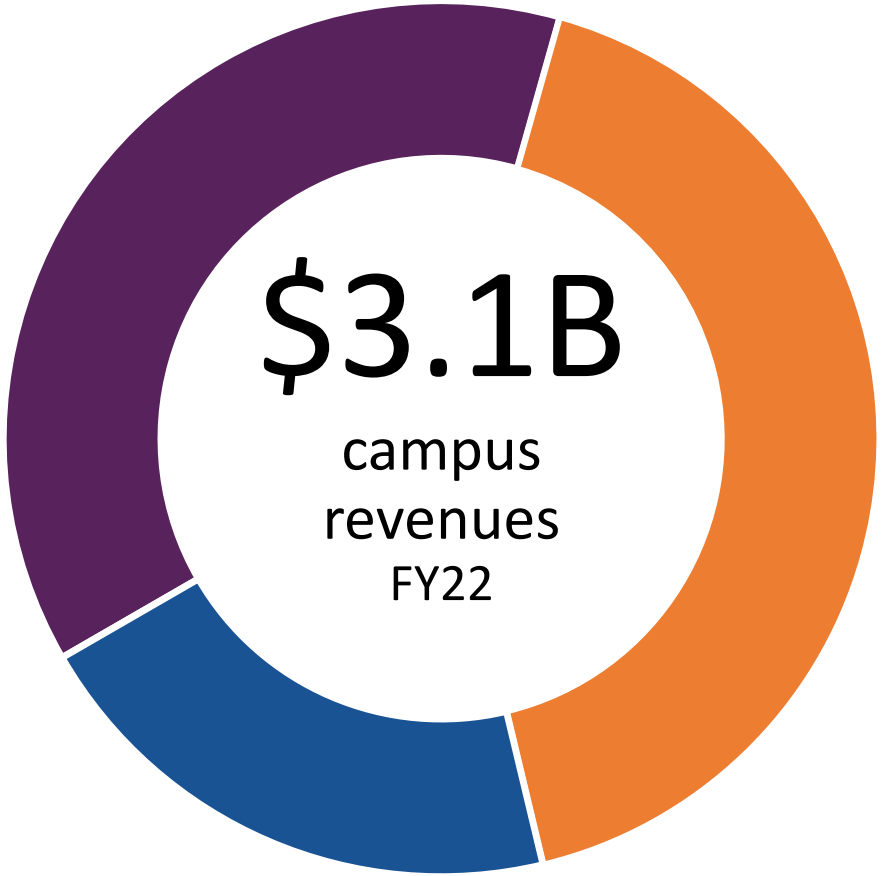
Note: Percentages before external tuition transfers

Constraints on raising tuition:

- Affordability to students
- Affordability to grants
- MIT’s competitiveness

How do we use our resources?

Colors of money: Use is restricted by the source



Unrestricted 42%

Allocated through central, or general Institute budget (GIB)

- Degree tuition
- Unrestricted endowed and expendable philanthropic support and other investment support
- Reimbursement of overhead costs that support research
- Central fees and services
- Internal transfers from restricted sources

Designated 38%

Allocated for specific purposes

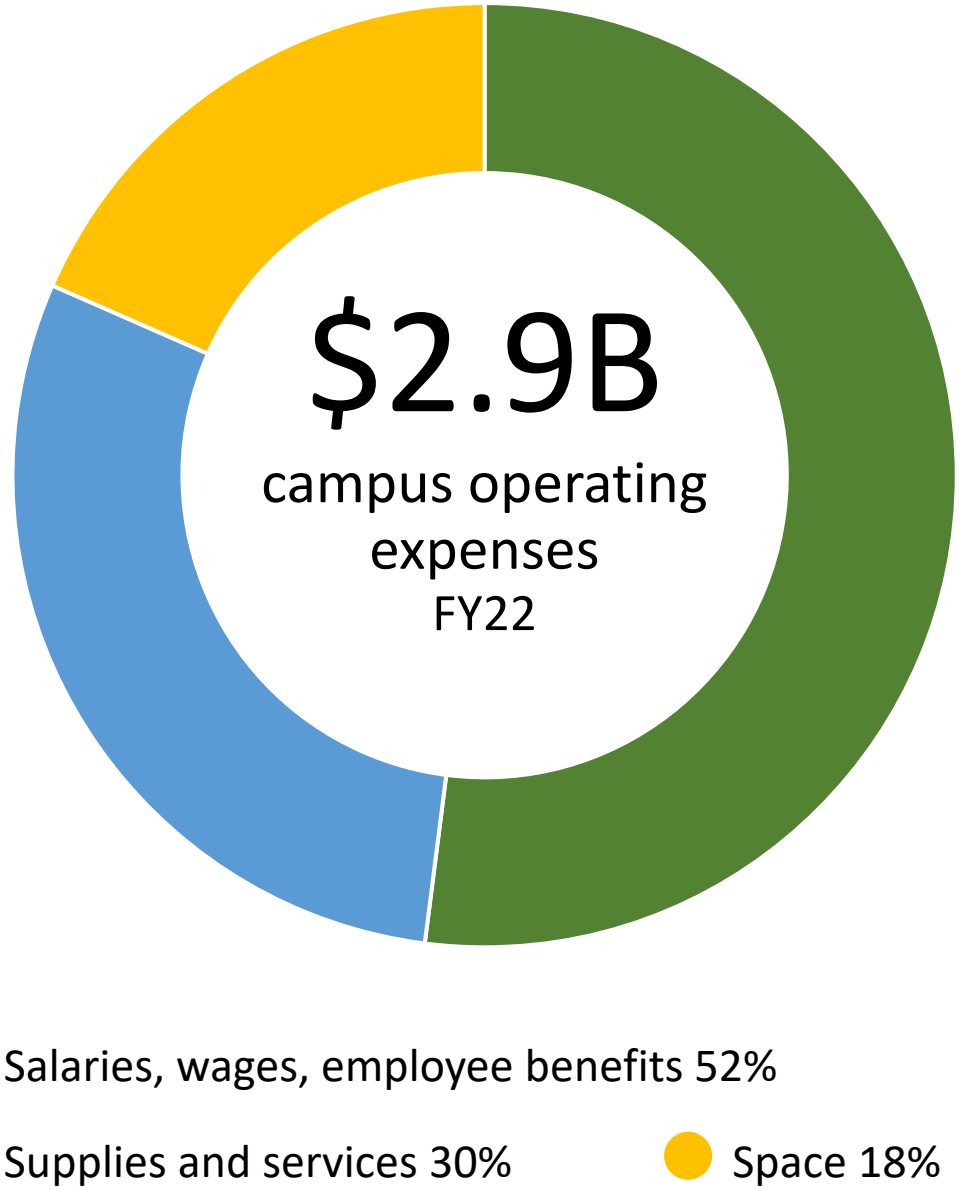
- Designated endowed and expendable philanthropic support
- Sloan degree tuition
- Non-degree program tuition
- Departmental fees and services
- Standalone auxiliary fees (primarily housing and dining)

Sponsored support 20%

External sponsor support of direct expenses

- Direct research revenue
- Other sponsored revenue

Over half of campus operating expenses supports “people costs,” and almost 20% supports the physical campus



Funding sources for graduate student tuition, stipends and SHIP paid through appointments

	Central Budget	Sponsored	Other
Stipends	21%	53%	26%
Tuition	60%	19%	21%
Health Insurance (SHIP)	82%	2%	16%

Notes: (1) Based on FY22 actual stipends, tuition, and SHIP costs (supported by appointments). (2) Sponsored includes research and other sponsored activity (e.g., external fellowships). (3) Other includes support from designated funds.

Central budget's share of campus spending

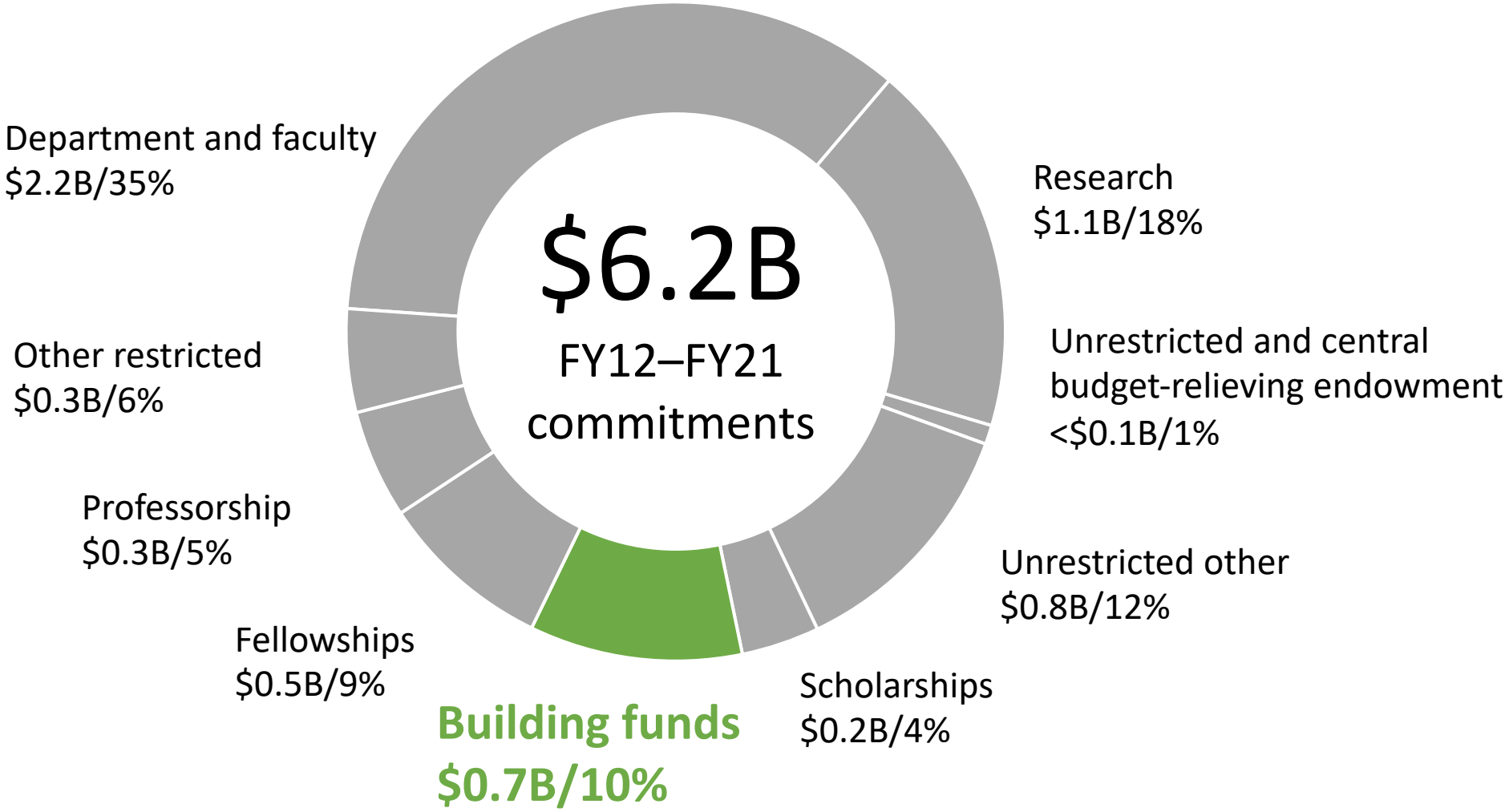
	Central Budget
Faculty and staff compensation	54%
Utilities, rent, and repair costs	84%
Other supplies and services	51%
Enterprise-level digital infrastructure cost	100%
2030 Facilities Capital Plan	77%

Overhead costs supporting sponsored activity recovered through F&A

Notes: (1) Distribution percentages based on FY22 actual expenditures with the exception of Capital Plan, which is based on cumulative spend on Capital Plan from FY13-FY22. (2) Other supplies and services represents Campus other operating expense excluding sub-recipient agreements (mostly sponsored) and any tuition-related or stipend-related support recorded as other operating expenses.

Only 10% of Campaign receipts supported building funds

Makeup of Campaign for Better World commitments



Central subsidies for research (sponsored and departmental)

Central budget:

- Pays majority of tuition for RA appointments
- Subsidizes operation of some shared research facilities
- Provide reliable funding source for some faculty salaries
- Absorbs more than half the costs of overhead under-recovery
- Funds central resource development

Pressures on the central budget

- Inflation has significantly increased costs (compensation, utilities, etc.)
- Economy is exerting drag on endowment performance and constraining financing for real-estate investments
  - -5.3% return for FY22
  - Continued stress in FY23
- Deficits in student life and other auxiliary units particularly vulnerable to revenue stresses (estimated at $14M in FY24)
- Need to invest and reserve more to continue renewing facilities (student housing, research buildings, etc.) and modernize our digital infrastructure and enterprise systems (research computing, SAP, MITSIS, KC, etc.)
- Demands to further subsidize research enterprise (under-recovery, etc.)

Typical central budget revenue growth covers typical base increases…

3.5% average annual revenue growth…

…equals ~$60M of current adjusted central budget revenue

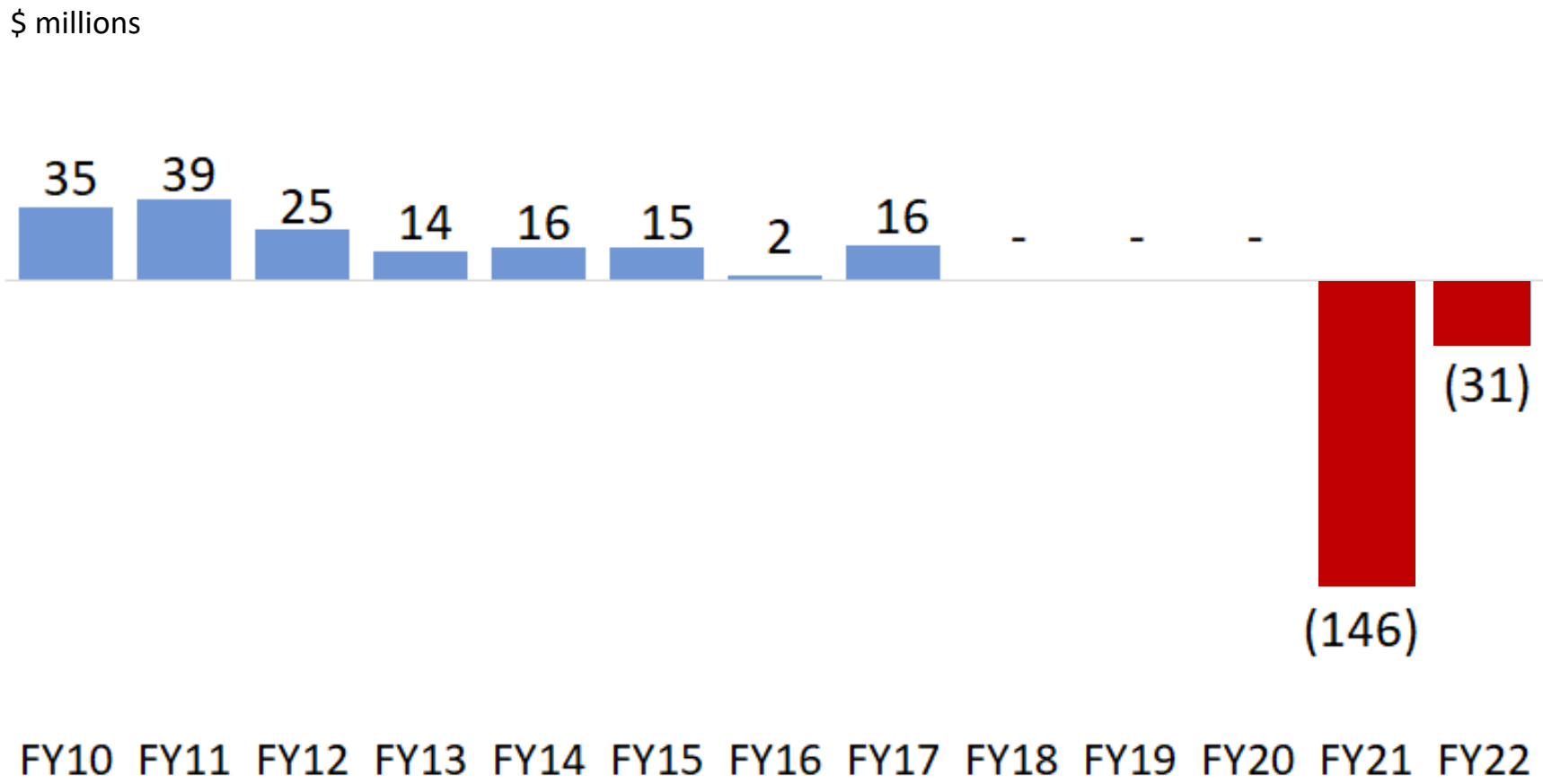
Central budget revenues have on average grown 3.5% annually over the past decade (FY13-FY22)

Roughly equals impact of standard annual salary increases, tuition rate increase on financial aid, and other inflation

Notes: (1) Total central budget revenue is adjusted to remove undergraduate and graduate financial aid. (While typically included within revenue, financial aid is a “contra expense” and has therefore been adjusted out of revenue for this portrayal.) Additionally, department support of operations (restricted funds transferred to support central budget costs incurred by departments) has been removed for the calculation of central budget revenue growth in this view in order to focus on core revenue drivers for the central budget.

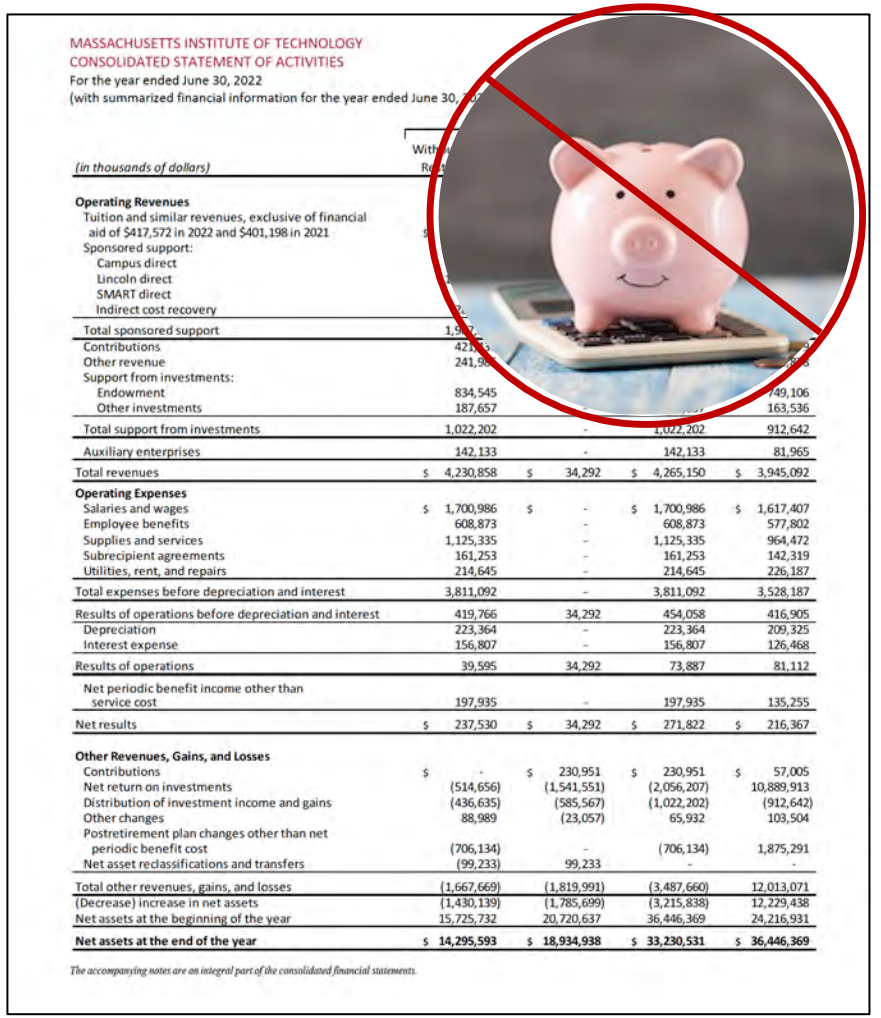
Central budget fully allocates unrestricted revenue to departments or central functions

Central budget margin went from surpluses to break-even over prior decade; deficits in last two years driven by COVID.



Consolidated (total) Institute GAAP operating margin isn't a piggybank

- Driven by timing differences:
  - timing differences between inflows and outflows for restricted gifts given for specific projects (especially in case of capital needs)
  - amounts being reserved for specific future obligations
  - amounts being reserved to maintain stability for future stresses (central, local)



MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CONSOLIDATED STATEMENT OF ACTIVITIES
For the year ended June 30, 2022
(with summarized financial information for the year ended June 30, 2021)

(in thousands of dollars)	With Restrictions	Without Restrictions	Total	2021
Operating Revenues				
Tuition and similar revenues, exclusive of financial aid of $417,572 in 2022 and $401,198 in 2021				
Sponsored support:				
Campus direct				
Lincoln direct				
SMART direct				
Indirect cost recovery				
Total sponsored support	1,9			
Contributions	421			
Other revenue	241,9			
Support from investments:				
Endowment	834,545			749,106
Other investments	187,657			163,536
Total support from investments	1,022,202	-	1,022,202	912,642
Auxiliary enterprises	142,133	-	142,133	81,965
Total revenues	$ 4,230,858	$ 34,292	$ 4,265,150	$ 3,945,092
Operating Expenses				
Salaries and wages	$ 1,700,986	$ -	$ 1,700,986	$ 1,617,407
Employee benefits	608,873	-	608,873	577,802
Supplies and services	1,125,335	-	1,125,335	964,472
Subrecipient agreements	161,253	-	161,253	142,319
Utilities, rent, and repairs	214,645	-	214,645	226,187
Total expenses before depreciation and interest	3,811,092	-	3,811,092	3,528,187
Results of operations before depreciation and interest	419,766	34,292	454,058	416,905
Depreciation	223,364	-	223,364	209,325
Interest expense	156,807	-	156,807	126,468
Results of operations	39,595	34,292	73,887	81,112
Net periodic benefit income other than service cost	197,935	-	197,935	135,255
Net results	$ 237,530	$ 34,292	$ 271,822	$ 216,367
Other Revenues, Gains, and Losses				
Contributions	$ -	$ 230,951	$ 230,951	$ 57,005
Net return on investments	(514,656)	(1,541,551)	(2,056,207)	10,889,913
Distribution of investment income and gains	(436,635)	(585,567)	(1,022,202)	(912,642)
Other changes	88,989	(23,057)	65,932	103,504
Postretirement plan changes other than net periodic benefit cost	(706,134)	-	(706,134)	1,875,291
Net asset reclassifications and transfers	(99,233)	99,233	-	-
Total other revenues, gains, and losses	(1,667,669)	(1,819,991)	(3,487,660)	12,013,071
(Decrease) increase in net assets	(1,430,139)	(1,785,699)	(3,215,838)	12,229,438
Net assets at the beginning of the year	15,725,732	20,720,637	36,446,369	24,216,931
Net assets at the end of the year	**$ 14,295,593**	**$ 18,934,938**	**$ 33,230,531**	**$ 36,446,369**

The accompanying notes are an integral part of the consolidated financial statements.

How and when do these decisions get made?

Roles and responsibilities for financial stewardship

Corporation

Votes to accept annual financials post-publication

Receives periodic financial updates

Executive Committee

Approves operating budget

Includes separate votes on endowment distribution, tuition, salary pools

Approves major capital projects/namings, debt issuance, quasi-endowment, retirement plan amendments

Risk & Audit Committee

Reviews financial results each quarter

Reviews annual financials pre-publication

Salary Sub-Committee

Approves compensation for MIT officers/executives and MITIMCo employees

Advises on salary pools for merit adjustments

Provost

Chief budget officer

Articulates budget parameters with EVPT; executes academic allocation

EVPT

Officer responsible for stewardship of Institute's financial resources

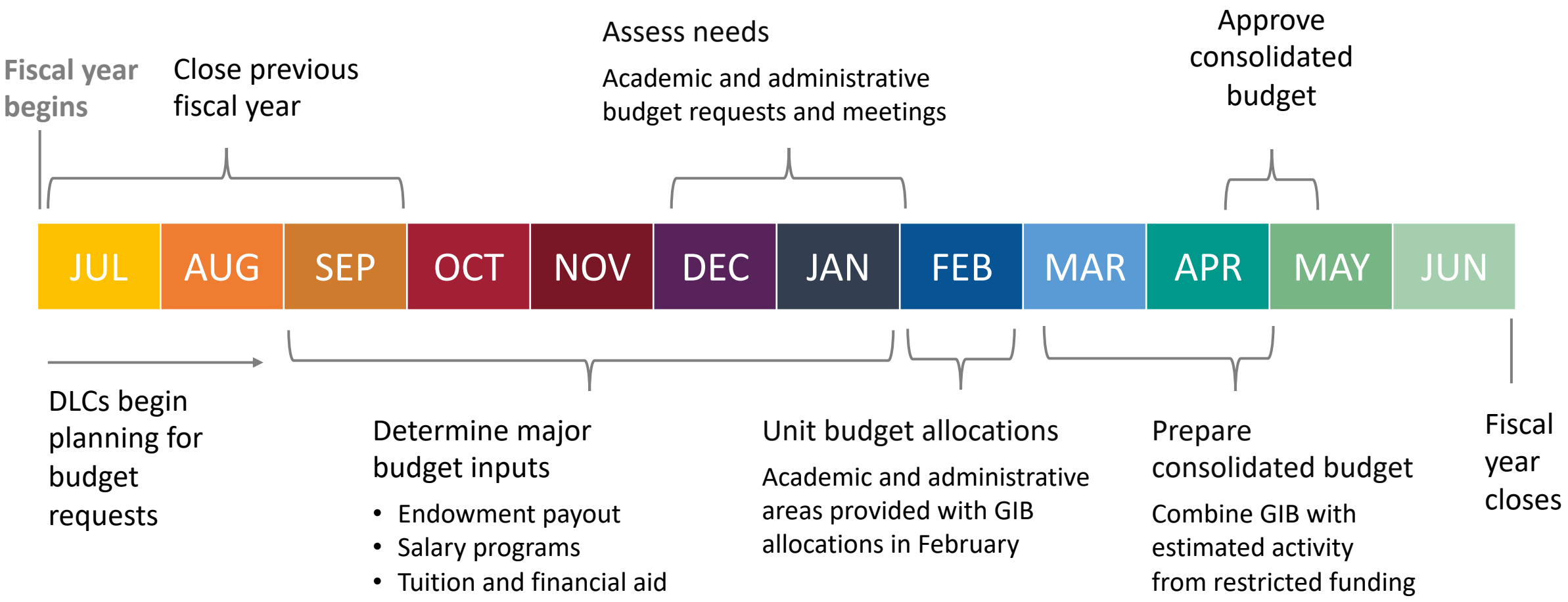
Articulates budget parameters with Provost; executes administrative allocation

MITIMCo

Oversees investment of the Institute's assets (endowment, working capital, pension)

Has a separate Board

The budget cycle: Navigating three fiscal years within span of one



Thank you