Interim report

October 13, 2017

of the Graduate Housing Working Group

Please remember: the findings shared in this interim report are preliminary

- The Working Group moved very quickly to develop these preliminary estimates and recommendations.
- We will be reviewing and refining them in the months ahead as we seek community input and do further work to finalize our findings.
- **To submit comments or questions, please visit http://chancellor.mit.edu/gradhousingworkgroup**
- We would welcome your comments before November 15, 2017.

Graduate Housing Working Group Members

The faculty and staff members of the working group were selected by the Chancellor, Provost, and Executive Vice President and Treasurer in August 2017. The Graduate Student Council nominated six graduate students to serve on the group.

- Ian Waitz, Vice Chancellor (Chair)
- Jon Alvarez, Director of Campus Planning, Office of the Executive Vice President and Treasurer
- Kelly Blynn G, Urban Studies and Planning
- Lauren Chai G, Mechanical Engineering
- Orpheus Chatzivasileiou G, Chemical Engineering; Secretary, Graduate Student Council
- David Friedrich, Senior Director, Housing Operations and Renewal Planning, Division of Student Life
- Stephen Graves, Chair, Faculty Committee on Campus Planning; Abraham Siegel Professor of Management, Sloan School of Management
- Will Kimball G, Sloan School of Management; Eastgate President
- Suzy Nelson, Vice President and Dean for Student Life
- Abigail Regitsky G, Materials Science and Engineering; Co-Chair, State and Local Affairs Committee
- Nicholas Triantafillou G, Mathematics; Co-Chair, Housing and Community Affairs Committee
- Krystyn Van Vliet, Associate Provost; Professor, Department of Materials Science and Engineering and Biological Engineering

Acknowledgements

The Graduate Housing Working Group wishes to thank the following individuals and groups:

- First and foremost we thank Jag Patel and Peter Cummings without whose exceptional help we would not have been able to carry out the work in this report.
- We thank Peter Gaskin and Patricia Yanes of Applied Marketing Science, Inc. for their excellent work with the focus groups, conjoint survey and analysis of the results.
- We also thank the Executive Committee of the Graduate Student Council, MIT Graduate Student Apartments Now, Sarah Gallop, Jen Hapgood-White, Amy Kaiser, David Bull, Chris Artis, Joe Higgins, Bill Colehower, MIT's Office of Institutional Research, and our colleagues at Harvard University, Boston University and Stanford University, for support, input, and conversations that helped shape this interim report.

From the working group charge

1. Assess how housing availability and graduate student housing needs, including those of international students and graduate student families, have changed in the three years since the completion of the Clay Report (a 2014 report assessing graduate student housing needs). **Based on this updated analysis, recommend options for matching graduate student housing demand with different housing types, locations, costs, and timelines for bringing the new beds online.** For each option, assess the demand and the expected costs and benefits to graduate students and to MIT. The options should consider the 250-net new graduate student beds currently under construction in Kendall Square and the Institute's commitment to provide at least an additional 250 beds in response to the Clay Report;

2. Present the **interim findings of the updated assessment** to the Chancellor, Provost, Executive Vice President and Treasurer, Dean of the School of Architecture and Planning, and other community members **before October 13, 2017**; and

3. Recommend a **process for periodic reviews and evaluations** of graduate student housing needs, along with opportunities for community engagement, for consideration by the Institute's senior administration.

Study plan to October 12

- **Document historical changes to Cambridge housing market**
- Understand **changes in different segments of our graduate student** population and how they have varied with research funding and other drivers
- Document **cost accounting** of current housing options, **normalized for comparison** across current MIT residence halls, upcoming Site 4 Tower, new commercial housing in Kendall, housing in suburbs with transportation benefits, and potential future options
- Conduct rigorous **conjoint analysis** to understand which combinations of features and pricing will be valued by different population segments
- **Match results of the conjoint with estimated cost to build, and policy recommendations to inform strategy and recommended number of new units**

Timeline

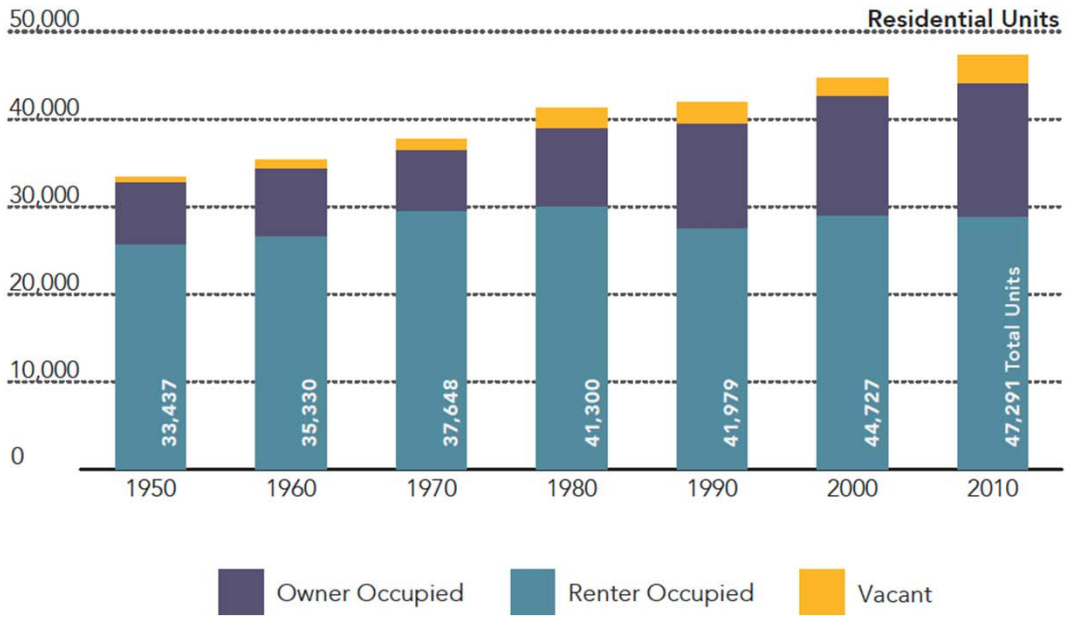
- Initiated work August 25th
- Survey opened Friday Sept 29th
- Survey closed Monday Oct 9th
- **Working Group to give interim report to senior administration and others in the community on Oct 13th**
- Meeting of senior administration with Working Group & GSC ExComm to share their response on Oct 16th
- Working Group continues to meet

Main messages

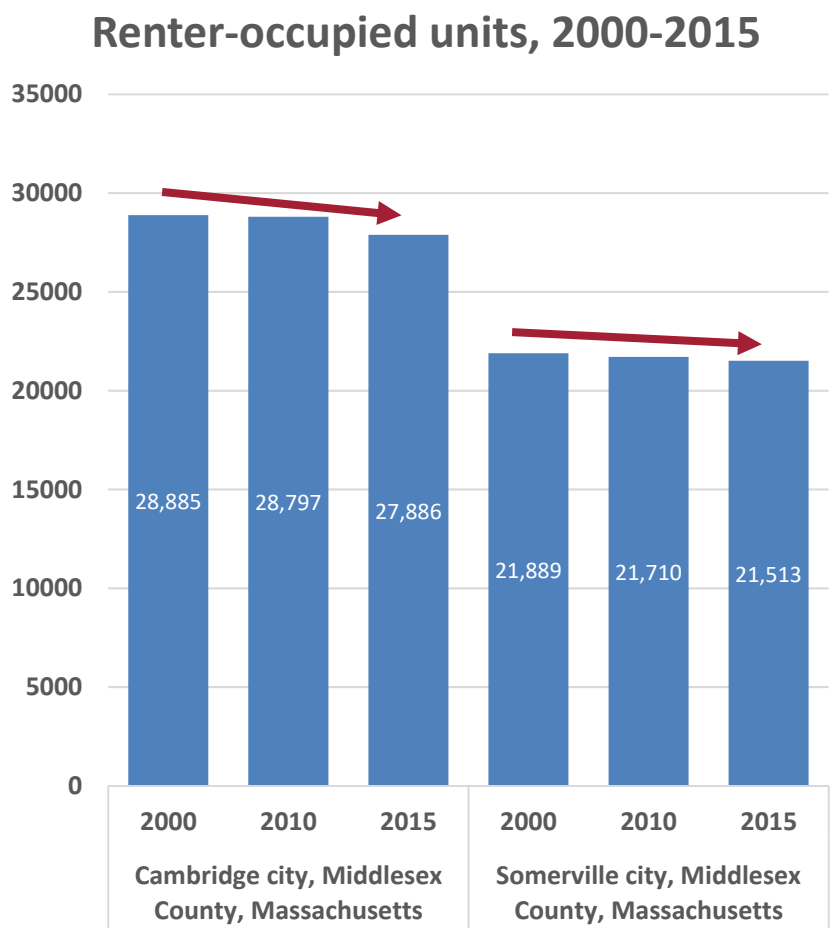
1. The Cambridge rental market has low vacancy rates and rapidly rising rents. We anticipate these conditions will continue.

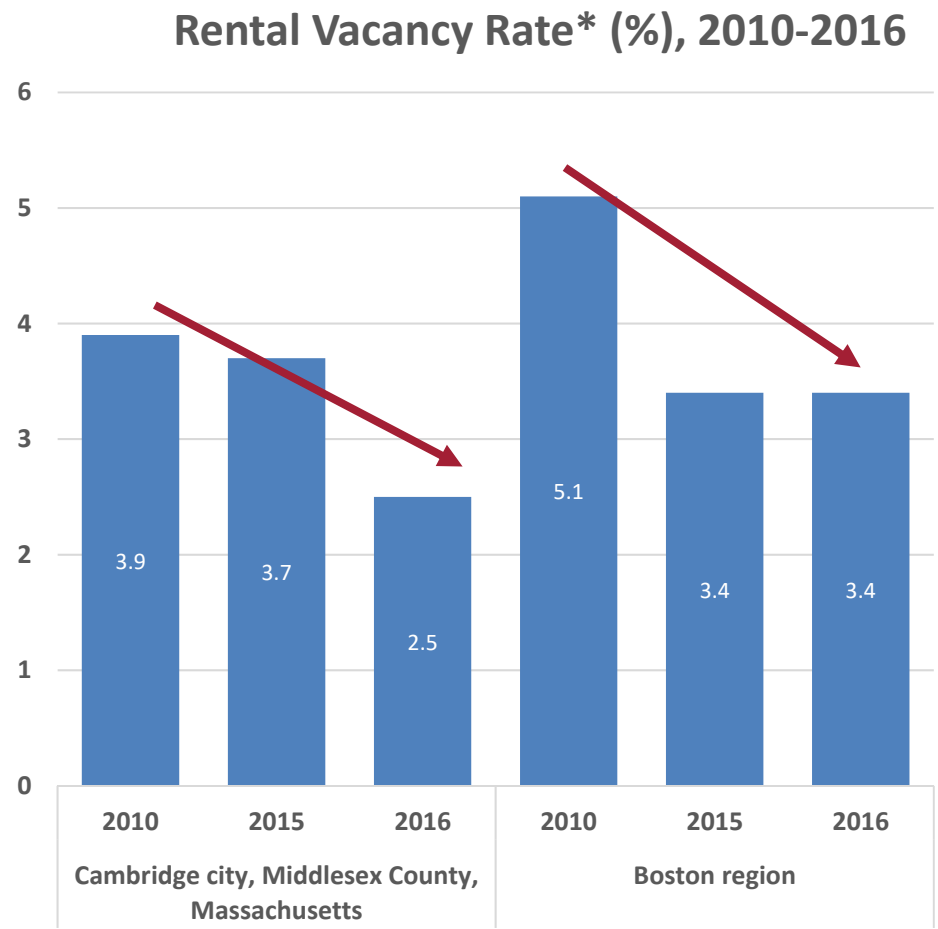
Cambridge housing market

- Supply of rental units flat over 50 years, **now declining** (due to conversions to condos)
- 6500 graduate students live off-campus in Cambridge (all universities)
- Grad students living off-campus in Cambridge, represent ~10% of the 65,000 renters in Cambridge
- **40% (2400) of graduate students living off-campus in Cambridge are MIT students and this number has roughly doubled over the last two decades. This represents 4% of the 65,000 renters in Cambridge.**



Fewer rental units, vacancy rates declining



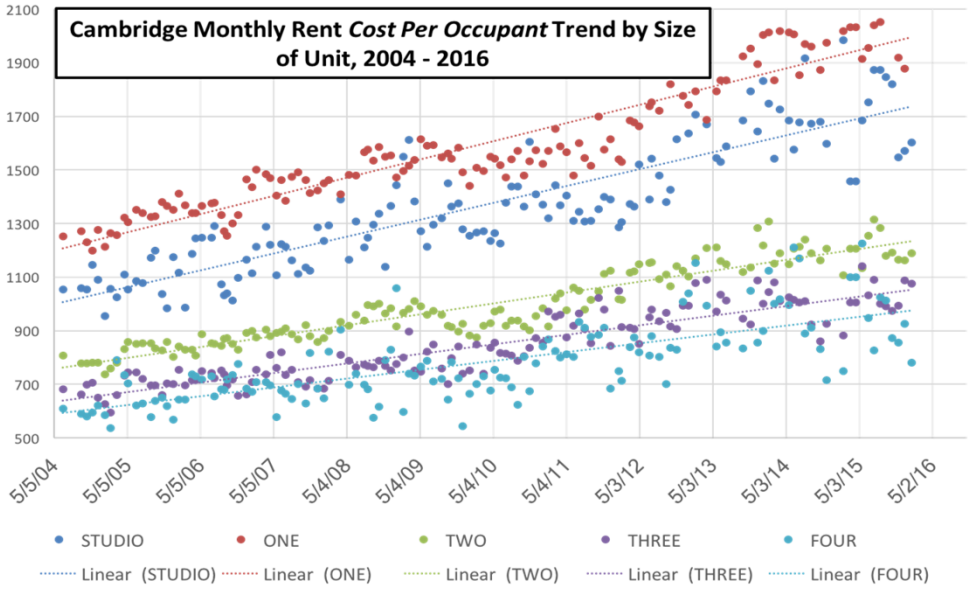


*Rents tend to stabilize at vacancy rates > 5.5%, and that below that the market tends to become extremely competitive for renters and landlords are able to raise rents more substantially. (Greater Boston Housing Report Card)

Prices increasing in Cambridge

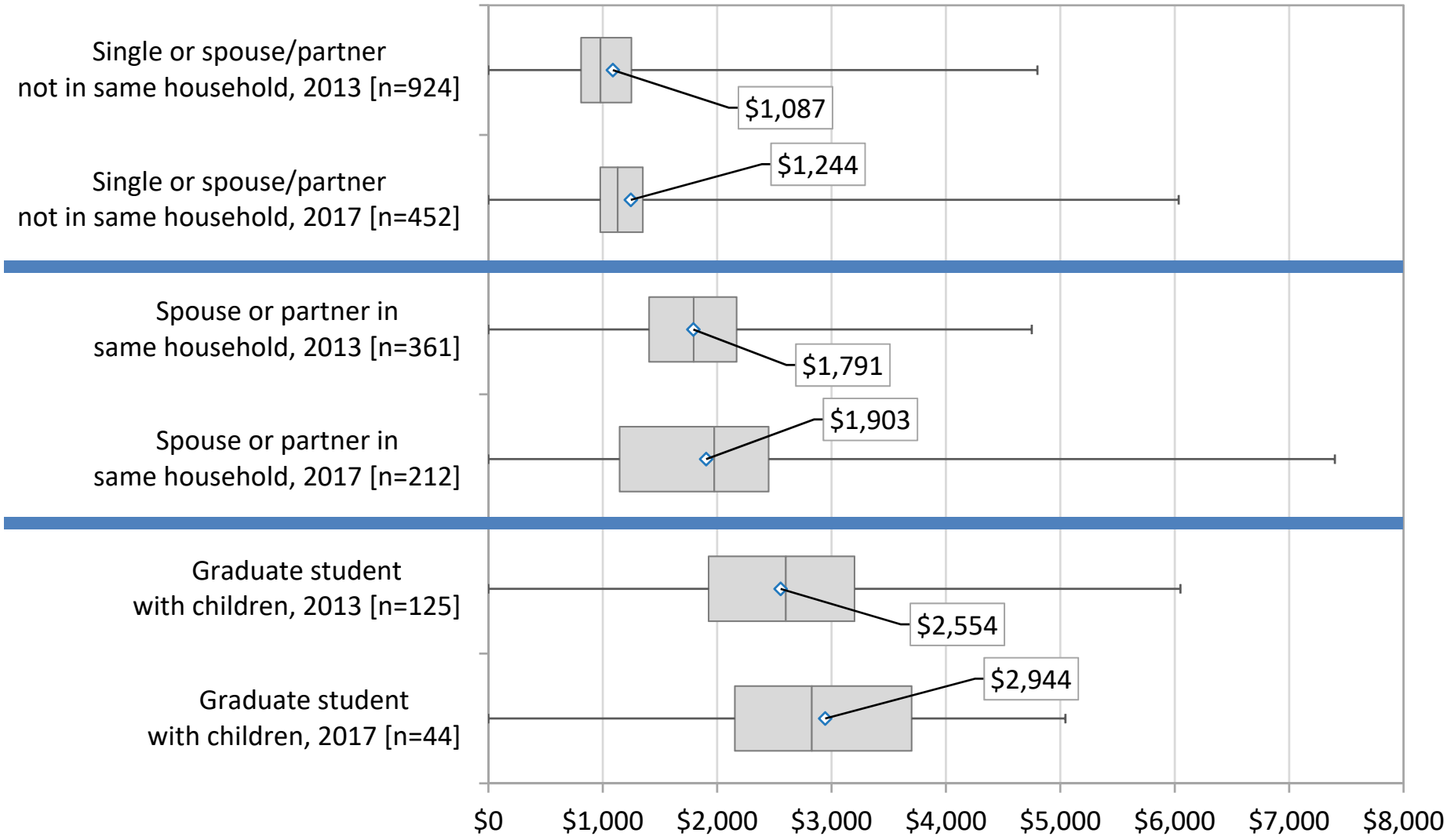
***Year-over-year** change (2006-2015):*

	Studio	1 BR	2 BR	3 BR	4 BR
10 year	4.7%	4.2%	4.1%	4.4%	4.4%
5 year	**6.1%**	**6.1%**	**4.0%**	2.5%	4.4%

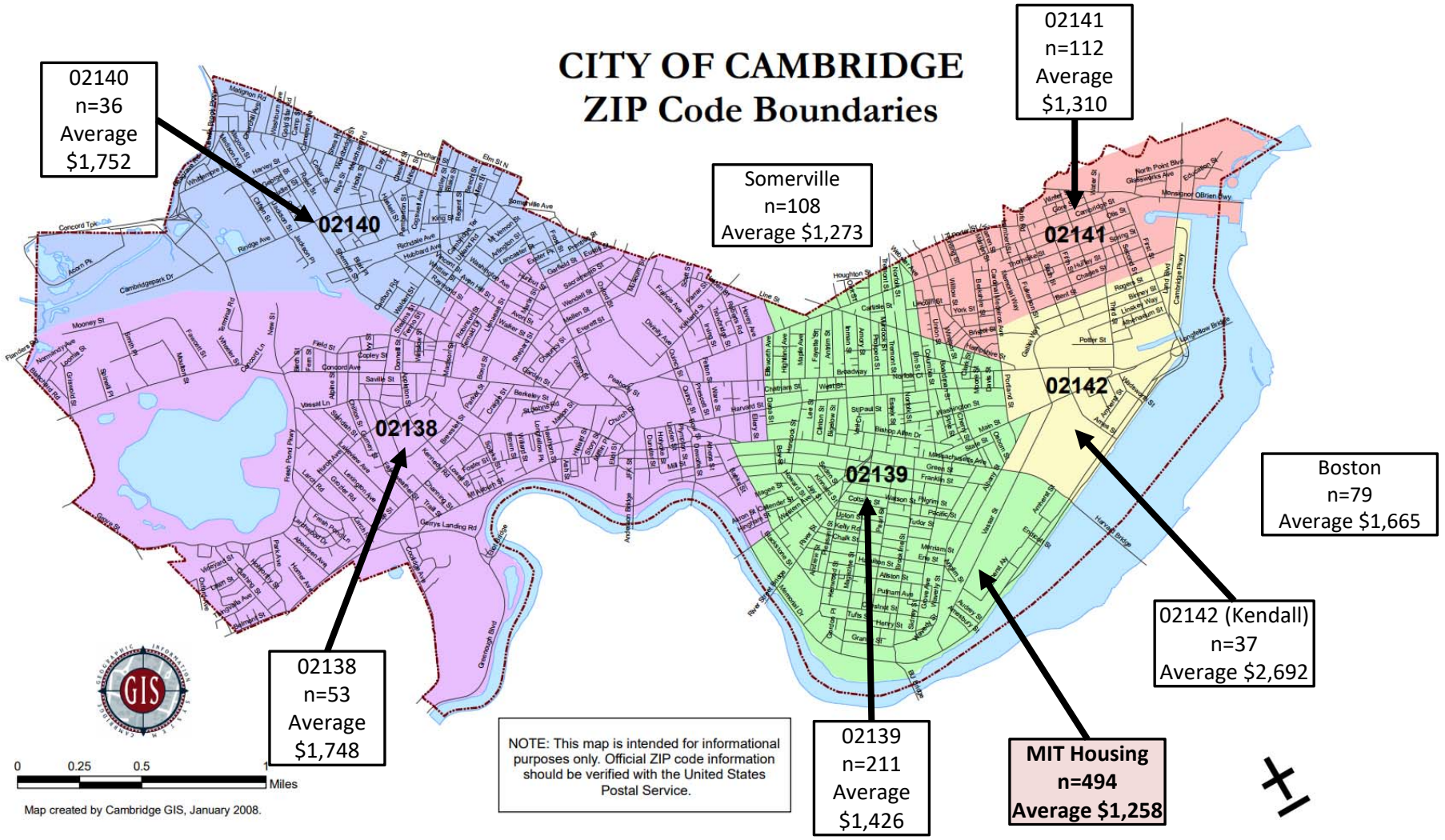


From listings posted by landlords on the MIT Off-Campus Housing Office website, so they are expected to be representative of off-campus rents targeted to students.

Off-campus monthly housing expenses have risen by ~15% for single students and students with children since 2013.



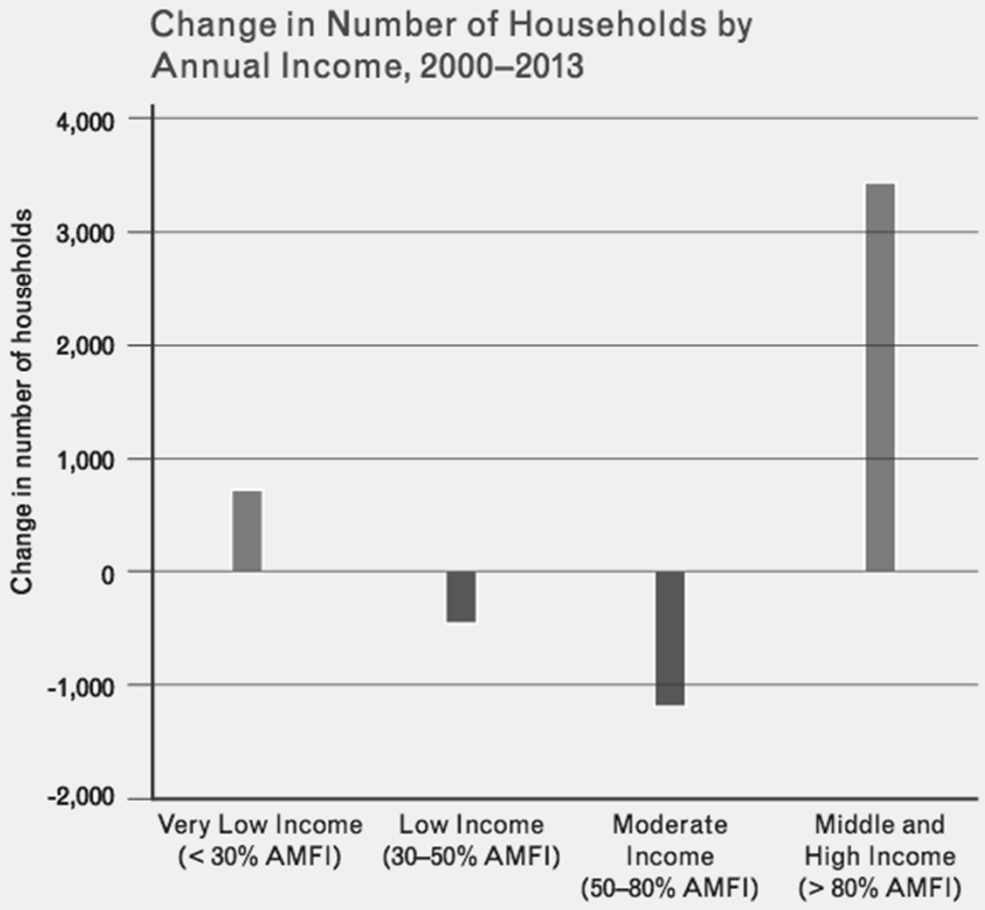
Average monthly housing expenses by location



(n = number of students who responded to the survey)

Source: Map, City of Cambridge; Rents from 2017 Graduate Housing Needs Survey

Change in number of households by income



Cambridge is losing its economic diversity as low- and moderate-income households leave the city.

Source: HUD, Comprehensive Housing Affordability Strategy data, 2000 and 2009–2013. Income brackets follow definitions used by the Federal Financial Institutions Examination Council.

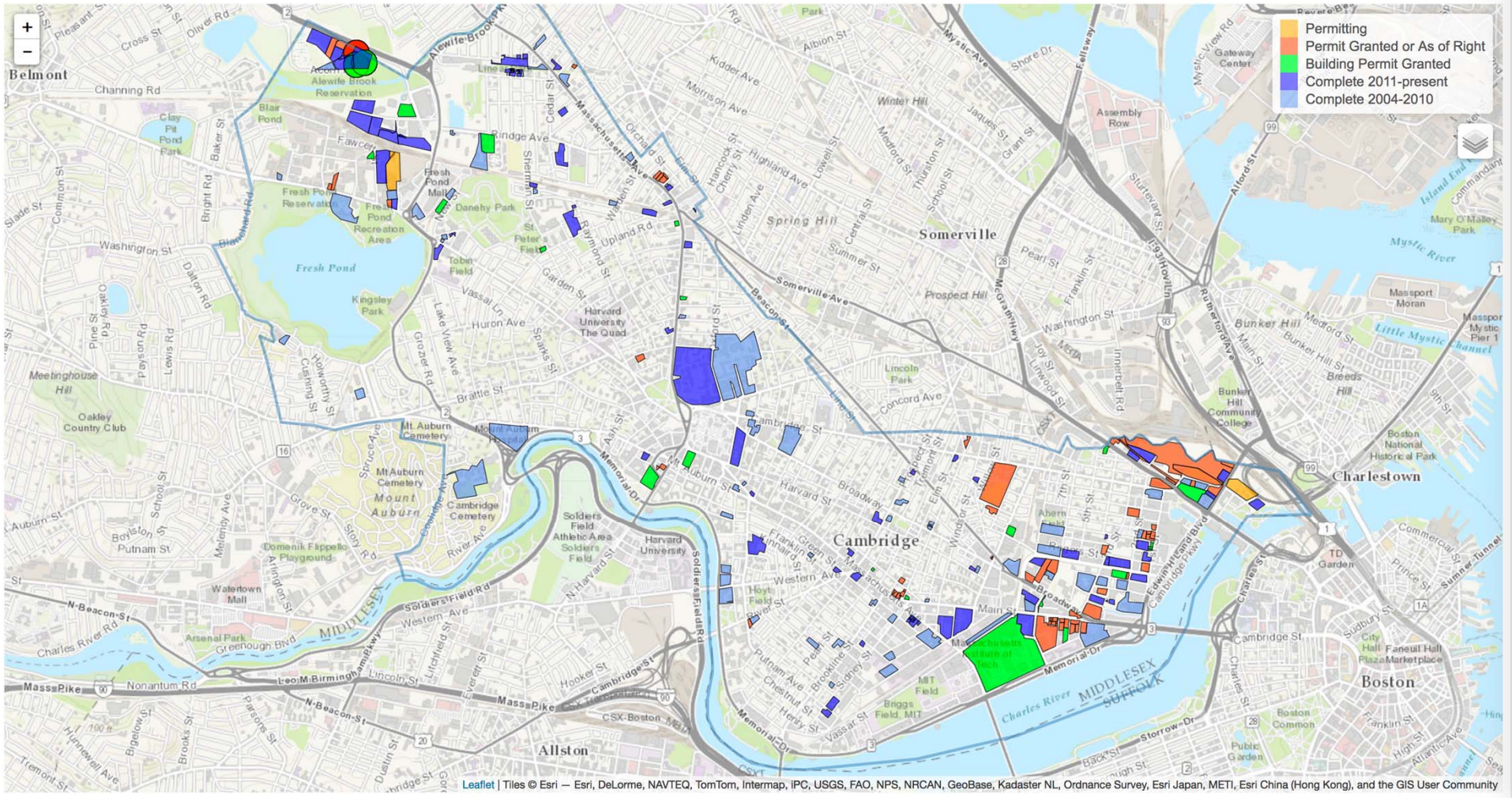
"Gentrification should mean we all get better, not have to move out."

— Mid-Cambridge resident

Source: Envision Cambridge report

Development projects in Cambridge, 2004-present

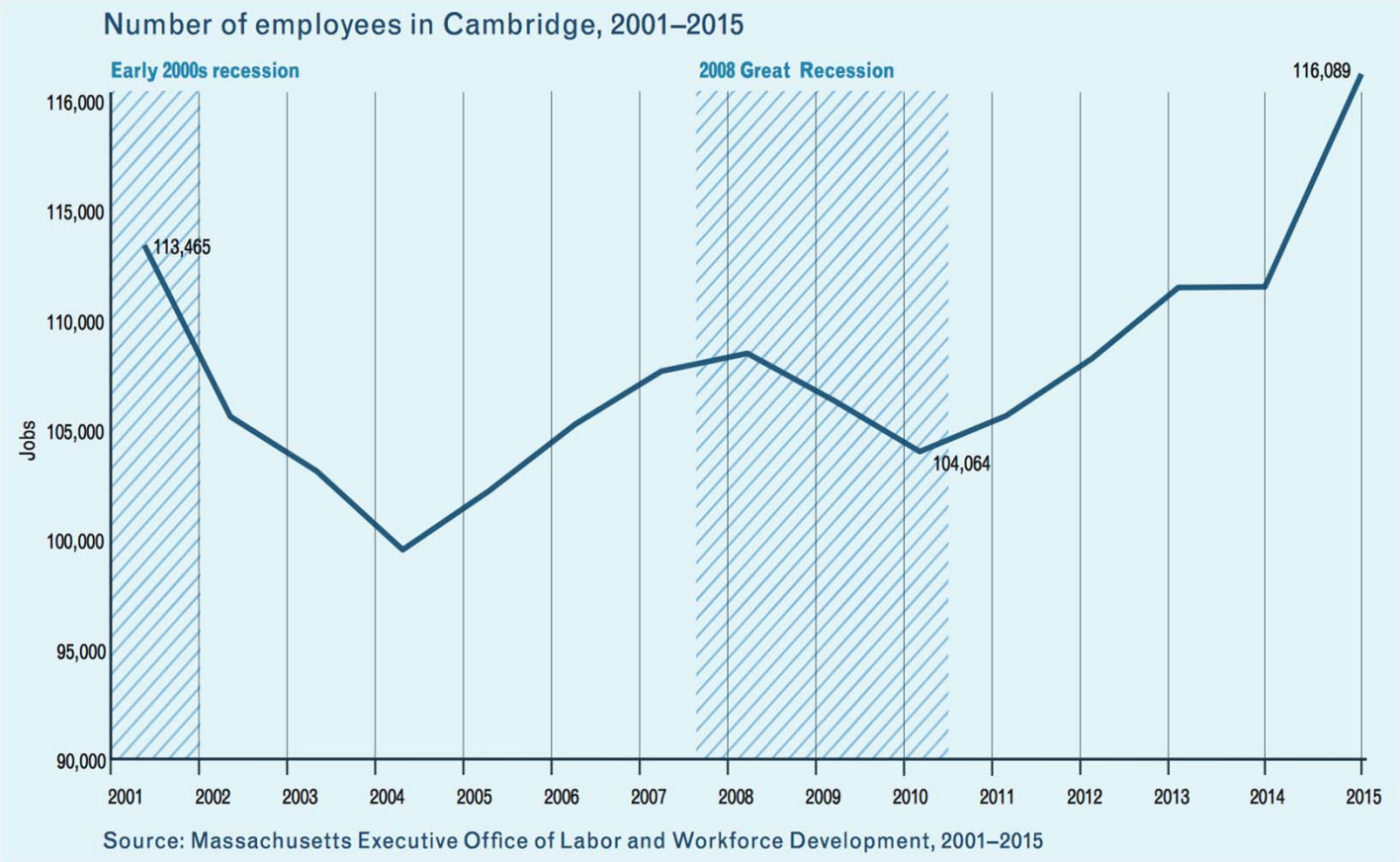
Current, historical and proposed development projects in Cambridge, 2004-present



Massachusetts Institute of Technology

Source: http://kentsj.com/FPRA/Cambridge_Development_Projects.html; Accessed Oct 2017

Employees in Cambridge, 2001-2015



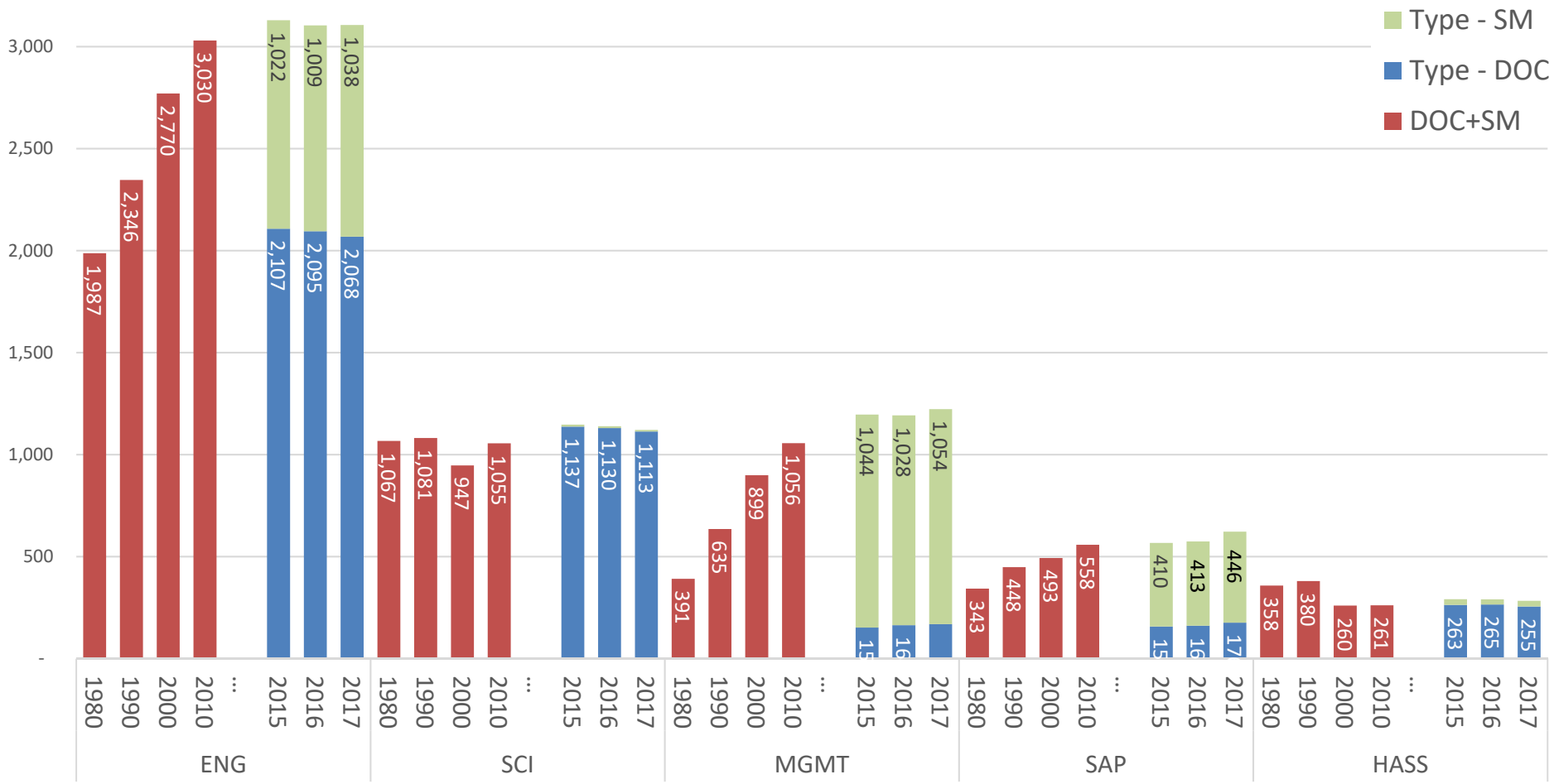
- "High-tech jobs have become an increasingly important component of Cambridge's employment growth, accounting for 42% of the city's total job growth since 2010."
- "From 2001 to 2014, employment in the life sciences in Cambridge grew 54%."

Main messages

2. MIT's graduate student population has grown in the last several decades due to changes in research volume and educational programs.

Grad growth driven by SOE & Sloan

Degree-seeking graduate students at MIT since 1980
Note: Doctoral includes regular resident only. Sloan SM does not include EMBA students.
Data source: IR, 8/19/2017, updated 10/11/2017 with Y-Report data from mit.edu/registrar/stats/yrpts/



Main messages

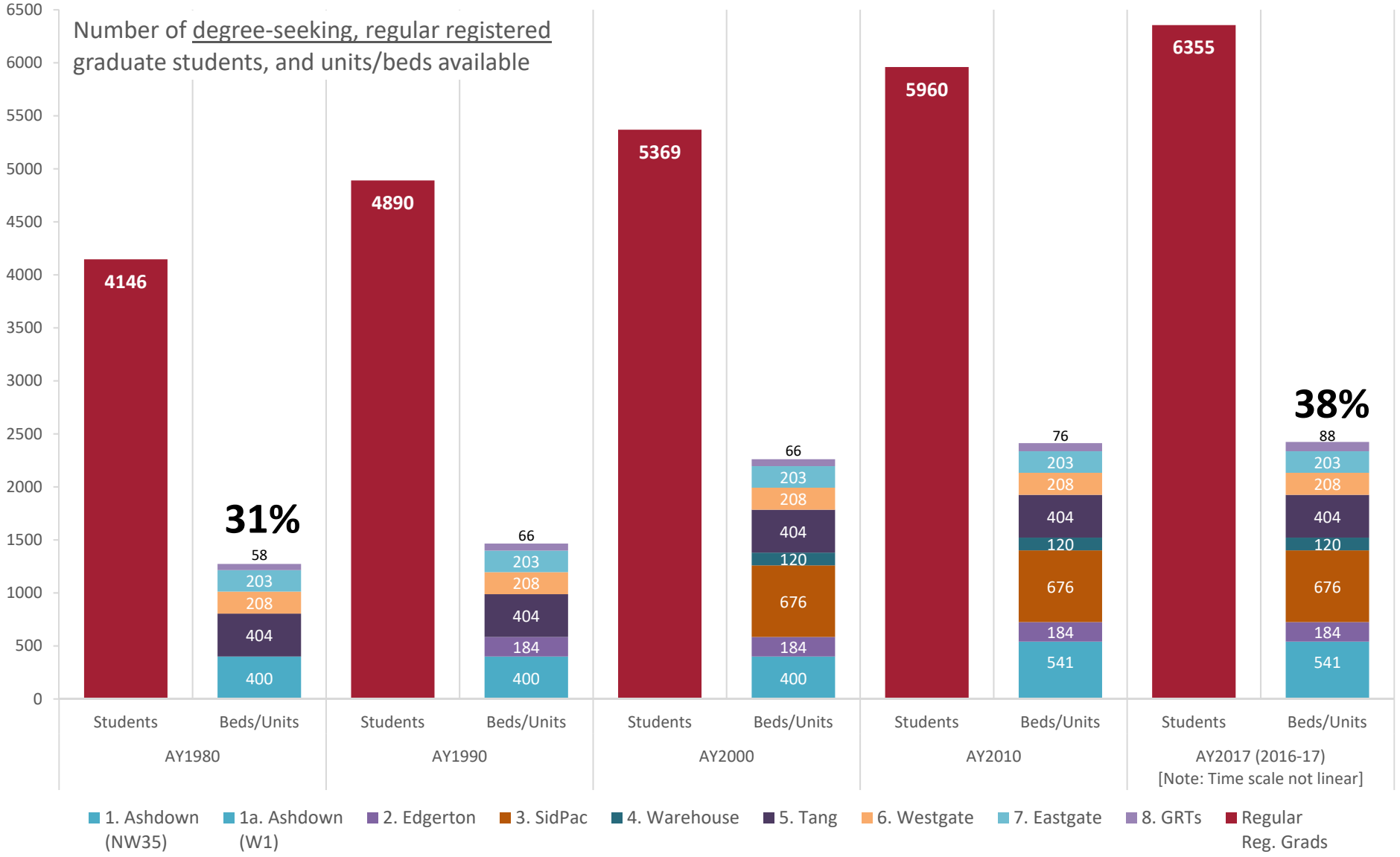
3. MIT has made commitments to addressing both graduate student housing needs and Cambridge housing needs.

MITs commitment to housing

- 1980s and 1990s, as part of the University Park development, **MIT was responsible for the creation of 674 units of housing, including 114 low- and 50 middle-income units of affordable housing.**
- Between 1997 and 2017, **MIT added 1470 units of graduate student housing**
- As part of its 2014 Kendall Square Initiative rezoning and development, MIT committed to 18% affordable housing in its residential building — one of the highest percentages committed through a development project at that time. **The One Broadway facility will create 300 new units of housing, including 50 low- and 5-10 middle-income affordable units.**
- In 2014, MIT committed to build **a new 450-unit graduate student residence hall**, which is now under construction in Kendall Square.
- MIT's current proposed **Volpe development is slated to include approximately 1,400 units of housing, of which 20% (280 units)** will be designated as permanently subsidized affordable housing.
- The Kendall Square Initiative rezoning and the Volpe rezoning (if approved), would **contribute $40M dollars to the Cambridge Affordable Housing Trust** as part of the City's commercial linkage ordinance that serves to increase the City's supply of affordable housing.
- MIT **on-campus graduate housing project costs total $702.5M (FY17$)** in last two decades

Sources: MIT Office of Government and Community Relations

Growth in capacity to house graduate students



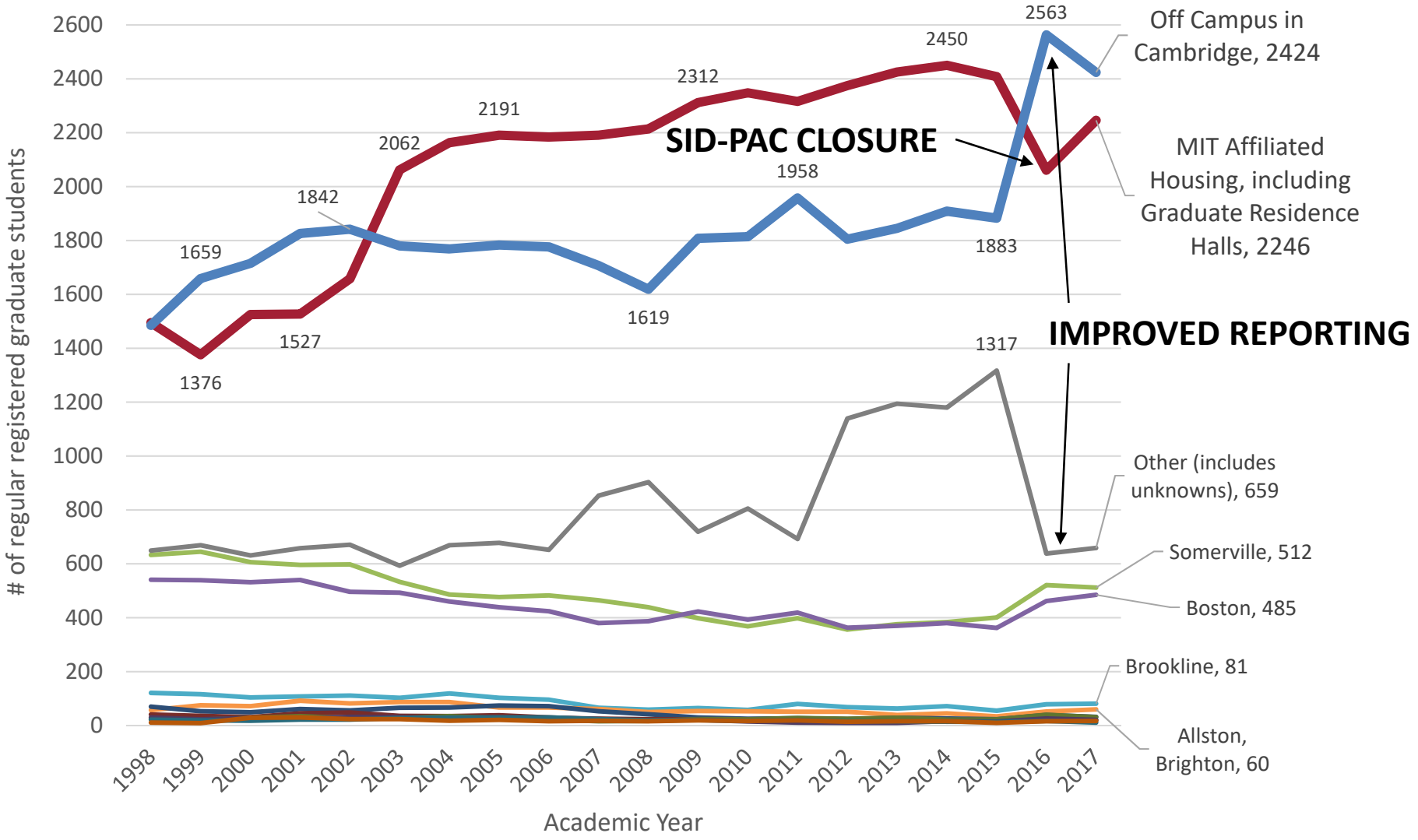
Main messages

4. These commitments have not kept pace with growing student preference for on-campus housing. We estimate additional preference for on-campus housing to be between 1000 and 1100 students relative to the number we have the capacity to house today (2557).

MIT graduate student housing dynamics

- Over the last two decades, the MIT graduate student population has grown by about 2000 students
- The on-campus population over this time has grown by about 1000
- The number of students housed off campus in Cambridge has grown by about 1000
- Students have moved from outlying areas into Cambridge

Where MIT graduate students live



The challenge of estimating demand for new beds

- **We do not yet have a good estimate of demand because that requires understanding student response to different housing types at different prices.**
- We will develop a better estimate of demand in the months ahead using simulations derived from the conjoint survey results.
- However, we did ask students,

"All things considered, which of the following best describes your feelings?" *(Same question as 2013)*

- I would prefer living off campus for my entire MIT program
- I would prefer to live on campus for my entire MIT program
- I would prefer to live on campus for my first year at MIT, and then move off campus for the remainder of my program
- Other - please describe

- Of the 713 survey respondents who live off-campus 163 would prefer to live on campus for their entire program, and an additional 59 would prefer to live on campus for their first year, but did not get a chance to.
- As was done in the Clay report, this number was scaled assuming that those who responded to the survey were representative of the entire graduate student population.

Scaled estimates of preference for on-campus housing in 2017.

	Total Residen-tial Grad Students	Doctoral	Sloan MBA, MFin, SM (EMBA excluded)	MEng	Other SM	INT/PR	US CIT	Single (51.1% of off campus)	Spouse or partner not in the same household (16.6% of off campus)	Has spouse or partner, NOT employed, in same hh (often another student; 6.2% of off campus)	Has spouse or partner, employed, in same household (21.6% of off campus)	Has children, spouse or partner employed (2.8% of off campus)	Has children, spouse or partner NOT employed (1.5% of off campus)
A. Living off campus this fall	4,278	2,573	725	256	724	1,572	2,706	2,187	712	266	926	121	66
B. Of those living off campus, % who would "prefer to live on campus for entire program"	23%	21%	31%	45%	23%	26%	22%	23%	14%	20%	22%	38%	46%
C. Estimate for demand to live on campus for entire program (A*B)	975	536	222	115	165	406	585	505	97	54	199	46	30
D. Total for group	975	1,039				991		932					
E. Living off campus this fall, in first year	1,113	251	391	192	279	360	753	569	185	69	241	31	17
F. Of those living off campus now, % who would "prefer to live on campus for 1st year" but lived off campus 1st year	8%	8%	9%	5%	9%	8%	8%	8%	6%	11%	9%	0%	0%
G. Estimate for demand to live on campus for 1st year but didn't get to (E*F)	89	19	36	10	24	28	61	48	11	8	21	0	0
H. Total for group	89	90				89		88					
Total for entire program + 1st year on campus but didn't get to (D+H)	**1,064**	**1,129**				**1,080**		**1,020**					
								Single= 661		**Couples or With Children= 359** *(some efficiencies)*			

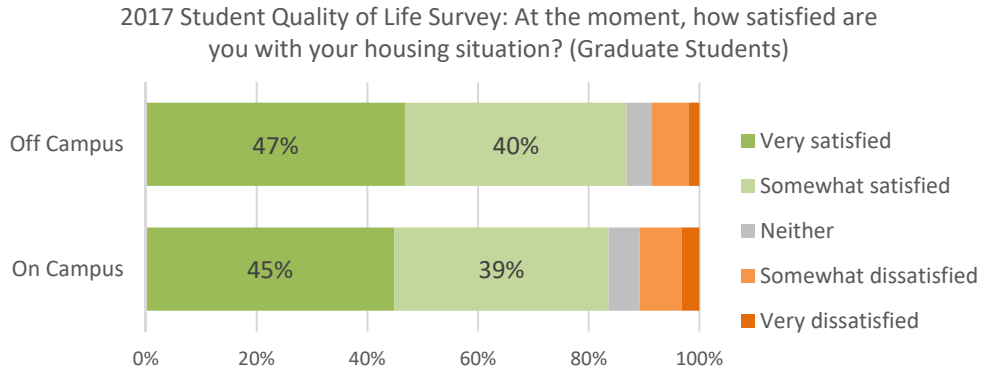
Our scaled estimate of preference

- **1000-1100 new beds** based on a scaled estimate of number of FY18 students who would prefer to live on campus
  - Unadjusted for Kendall Grad Tower opening (+454 units) in 2020 and Eastgate closing (-203 beds) sometime later in the 2020's
  - Represents doubling of % of off-campus students preferring to live on campus for entire program (11% in Clay Report survey in March 2013 → 23% in our October 2017 survey)
  - The price elasticity of demand derived from the conjoint survey suggests we would see an increased preference for on-campus housing of about 8% between the 2013 and 2017 surveys because of the growth in difference in on- and off-campus rents over the period, compared to the 12% change in preference we observed (11%—>23%).
- **Available FY18 stock:** 2557 beds (in 8 residences including 70 Amherst)

Understanding who responded to the survey*

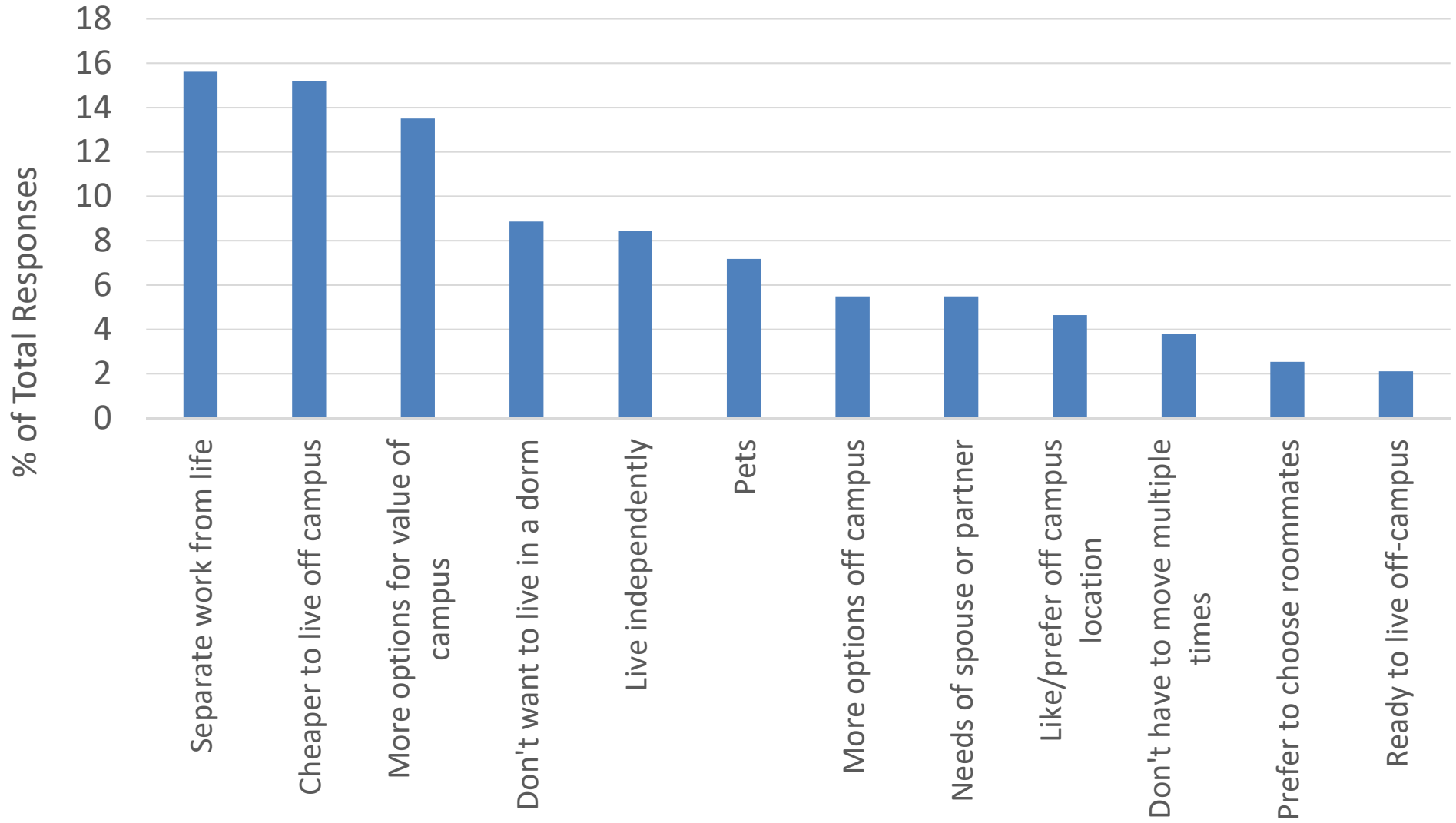
- In addition to looking at response rates by school, program, citizenship and housing location, we used previous survey data on satisfaction about housing availability, cost or situation to assess response bias.
- One of the source questions was on the 2017 Student Quality of Life survey, on which 87% of graduate respondents living off campus and 84% of graduate respondents living on campus indicated being "somewhat satisfied" or "very satisfied" with their housing situation.
- A roughly similar proportion of respondents who previously reported being dissatisfied (27%) or satisfied (33%) with housing responded to the recent survey.

School	Invited	Responding	% Responding
Architecture	642	111	17%
Engineering	3,119	624	20%
Humanities	287	59	21%
Sloan	1,253	159	13%
Science	1,161	275	24%
Program	Invited	Responding	% Responding
Doctoral	3,871	814	21%
Any Sloan Masters	1,069	122	11%
Other SM	1,522	292	19%
Citizenship	Invited	Responding	% Responding
US Citizen	3,464	733	21%
International/Perm. Resident	2,998	495	17%
Housing Location	Invited	Responding	% Responding
Lives On Campus	2,184	490	22%
Lives Off Campus	4,278	738	17%
Sentiment *(for who it is available)*	Invited	Responding	% Responding
Dissatisfied with housing	397	108	27%
Neither satisfied or dissatisfied	62	19	31%
Satisfied with housing	1,459	478	33%
First Year, no sentiment available	2,092	410	20%
No sentiment available	2,452	213	9%

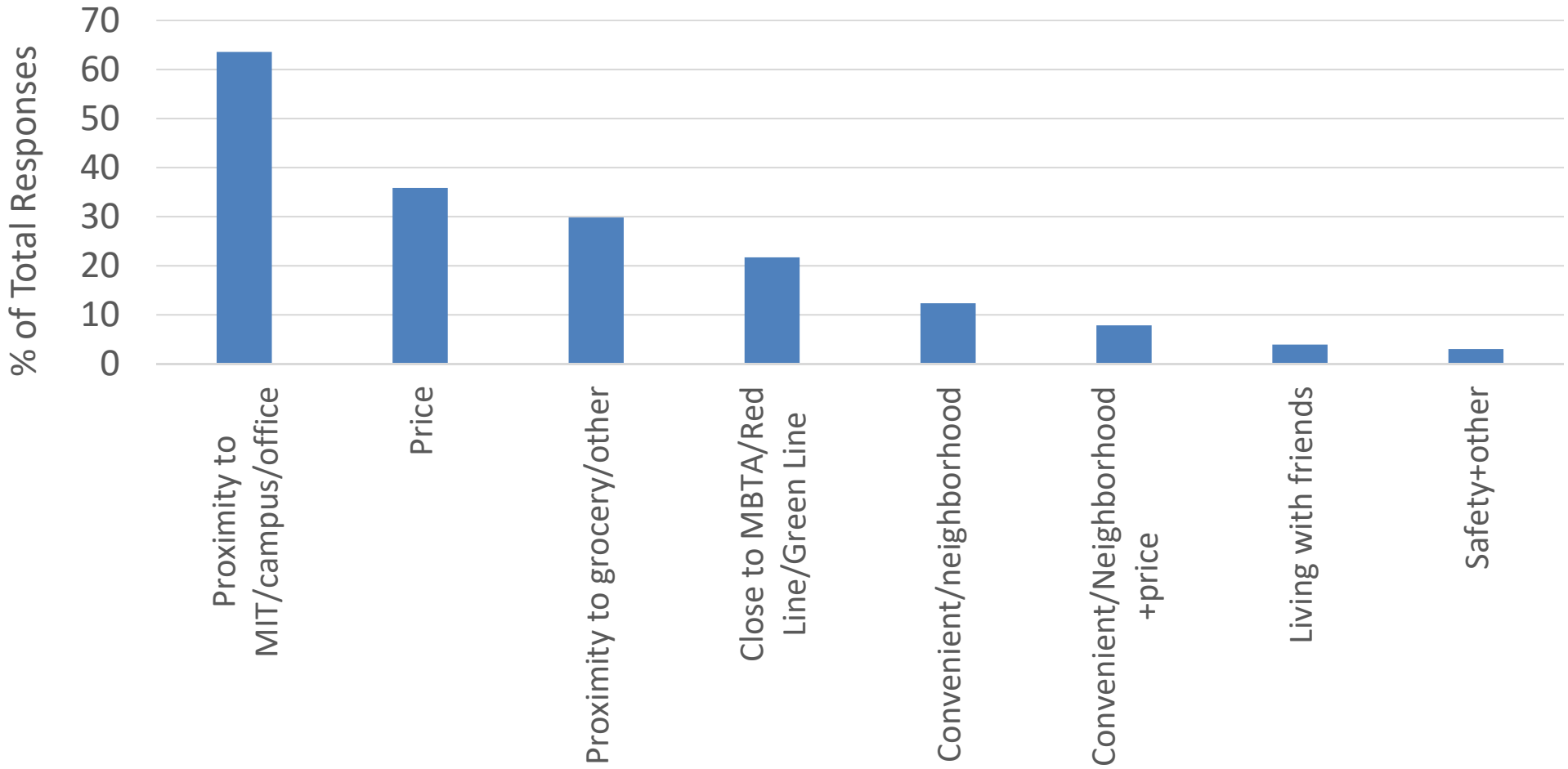


*From 1228 of 6462 students who completed our 2017 survey (19%)

Student responses: Why live off-campus?
(Total - 237)

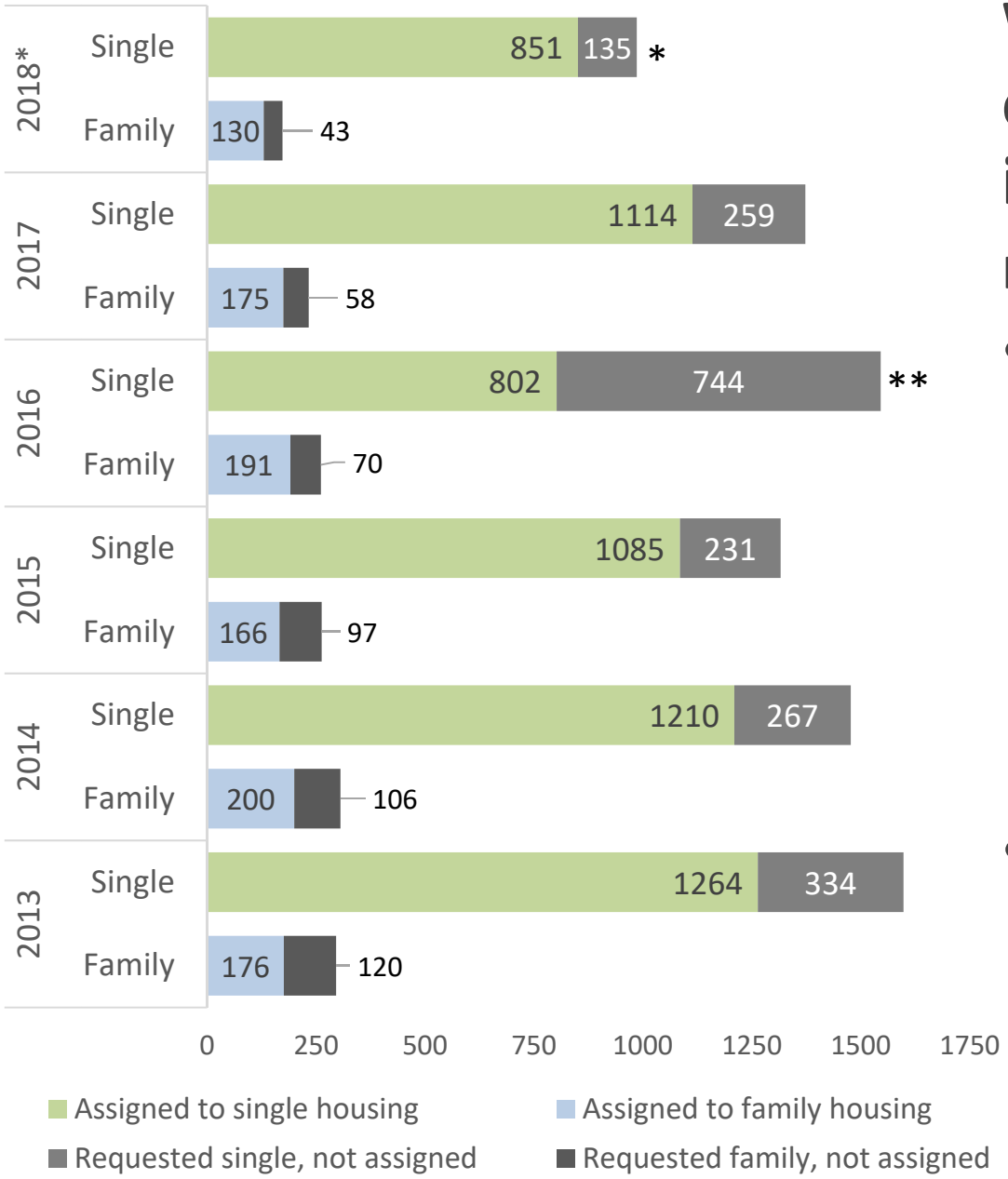


Student responses: Why did you choose to live where you do in Cambridge and not elsewhere? (Total – 332)



Other estimates of preference for on-campus housing

- Depends on options provided, external market dynamics, rental prices, and what/how the question is asked
- Clay Report (2014)
  - **500-600 new beds** based on number of students who would prefer to live on campus (about 11%)
- GSC Housing Survey (2017)
  - **1400-2450 new beds** based on number of students who would prefer to live on campus depending on what is offered (25%-50% of students currently living off-campus)
- Those in the on-campus housing lottery who do not get accommodated (2017)
  - **310 new beds**
- Those who stay on the waitlist for the housing lottery (2017)
  - **100 new beds**



Who applies for on campus housing and isn't getting it?

In recent years:

- Close to 95% of new graduate students and 60% of continuing graduate students who apply for single graduate housing, receive housing.

- About 75% of applicants for family housing receive an assignment, with priority given to new incoming students.

* Only one allocation; ** Sid-pac renovation

Findings from GSC Housing Survey

- **Preliminary analysis** indicates an unmet demand for graduate housing of around **1400 units (750 single, 650 family)** if we assume little to no change in the current housing system.
- Our analysis also attempts to gauge the level of demand for housing should larger changes (e.g. price, quality, allocation lottery) be made. To determine this, off-campus students (who were not included to estimate the demand of 1400 units) were asked, "At minimum, MIT-provided housing would need to meet the following requirements for you to prefer MIT-provided housing to off-campus housing (check all that apply)."
- We sampled a combination of the most popular choices to generate a moderate demand number. Adding the scaled number of respondents who answered only a combination of these choices leads to an **increased demand of 1750 units (1050 single, 700 family).** Adding more options into the combination leads to larger demand numbers, with a maximum demand of about **2450 units**.

2014 Clay report: key findings

- Graduate **families** and **international** students face special challenges in finding housing.
- # of grad students **not likely to increase or decrease** significantly in next decade.
- Relative to peers MIT is a **leader in supporting on-campus graduate housing**.
- Recommendation is to **build housing for 500-600** students to meet current unmet need
- **Consideration of a range of flexible, development options** for this new housing

Main messages

5. We operate some of our existing stock at a loss (for example, by deferring maintenance which eventually comes due when we renew a building). This creates an impediment to adding more housing stock. We recommend that the Institute identify ways to operate differently.

On-campus housing financials

- **Currently operate so that revenues ($29M/year) almost match expenses (~$30M/year), leaving a $460/bed/year shortfall.**
- **However, expenses exclude deferred maintenance costs totaling to $5M/year**, relative to a **comprehensive stewardship model.***
- Current deferred maintenance for graduate housing stock is $130M (8% of $1.6B campus-wide deferred maintenance).
- If the grad housing stock included costs required to maintain buildings per industry standards of maintenance, changes in operations and/or rent would be required.
- **Current or future students should not be expected to absorb the past deferred maintenance costs through increases in rent.**

*As MIT invests in its campus through new construction and major renovations, there is an acknowledgement of the need to ***budget*** resources ***today*** for ***future*** care and renewal of our "newest" assets in a proactive manner. This ***forward looking*** approach ***which reserves funds for planned*** renewal and maintenance, known as Comprehensive Stewardship, ***assures*** the deferred maintenance is addressed and the useful life of our buildings is ***maximized***.

Operational change options

Option	Anticipated Effect(s)	Rationale
Increase rentable square feet in existing residences	Reduced $/bed at same $/GSF; increased parking spaces	Existing footprints can be modified (at cost) to convert common spaces to rentable units; new residences can maximize rentable units.
Reduce existing residence amenities and programming	Reduced $/GSF; increased use of community space on campus	Not all current amenities of high utility to renters
Increase # renters per room type	Increased # documented persons per room	Within allowable housing policy limits, decreases $/bed or $/renter
Increase monthly rental rates	Increased revenue, increased stipends to account for increased rent	Reflects total cost of ownership and market rates
Prioritize stock for certain student cohorts	Campus housing benefit varies by cohort	First-year or international or family-accompanied students (or other cohort definitions) least familiar with housing and commuting options
Subsidize transportation to offset increased commute distance	Reduced demand for housing within 20 min bike ride of MIT campus	Off-campus housing stock in adjacent, MBTA-accessible towns at lower rental rates; Not all students require campus proximity for entire degree program duration.
Other ways to control/incentivize lower costs?	TBD	TBD

Main messages

6. Some of our current housing stock has features and amenities that do not fully align with what some of our students value. These features and amenities cost us money to operate and also opportunity costs.

Conjoint analysis

- **Technique to determine how people value certain the features of a product or service, and the combination of those features at a certain price.**
- Process begins by describing the features and choices for the offering (rent, size, distance, rooms, amenities), and with a small group, testing the large matrix of combinations created by all these features and choices.
- This initial testing reduces the combination choices to survey questions: would you prefer A or B? A, B or C?
- From these inputs, the utility of each feature can be estimated, and market simulations based on current and future combinations can be calculated.

Conjoint levels

Attribute	Level 1	Level 2	Level 3	Level 4	Level 5
Unit Type	Studio (efficiency) w/ private bathroom and compact kitchen	1-bedroom apartment with private bathroom and full-size kitchen (w/ common space)	2-bedroom apartment with 1 shared bathroom and full-size kitchen (w/ common space)	3-bedroom apartment with 1 shared bathroom and full-size kitchen (w/ common space)	Single bedroom with shared bathroom and shared large kitchen on floor (no common space) (dorm style)
Family Status	Singles only Only singles are allowed and must be MIT students	Singles & couples Singles and couples are allowed, but no children. Non-MIT students must be authorized occupants	Couples and Families with children only No singles. Non-MIT students must be authorized occupants	Anyone is allowed All resident types (singles, couples, families) are allowed. Non-MIT students must be authorized occupants	
Access to Grocery Store, Bars, Cafés, Restaurants	Nothing in Neighborhood	Grocery Store nearby; No Bars/Cafés/ restaurants nearby	No Grocery Store nearby; Bars/Cafés/ restaurants nearby	Grocery Store nearby; Bars/Cafés/restaurants nearby	
Bedroom Size	Medium Bedroom 150 sq ft (14 sq m)	Large Bedroom 200 sq ft (18.6 sq m)	Extra Large Bedroom 250 sq ft (23 sq m)		
Air Conditioning	No A/C installed or allowed	Window units allowed	Central A/C in building	Central A/C in building, plus thermostat in the unit	Central A/C plus thermostat in each room
Building Amenities	None	Few (small lounge, outdoor area, front desk with security)	Some (medium lounge, music/rec rooms, outdoor area, bbq, same day maintenance, front desk with security)	Many (large lounge with HD TV, music/rec rooms, study lounges outdoor area, bbq, children's playground, on site HoH, same day maintenance, front desk with security)	
Fitness Center	None	Small	Large		
Parking	No parking	Paid uncovered parking for $1900	Paid covered parking for $2275		
Sense of Community	None-The residence hall offers no community programs	Few-There is a community program offered about every month	Many-There are several community programs offered every week		
Commute Time	10-min. walk; 3-min. bike (1/2 mile away)	20-min. walk; 10-min. bike (1 mile away)	25-min. bike; 20-min. drive/MBTA (3 miles away)	45-min. bike; 30-min. drive/MBTA (6 miles away)	
Monthly Rent/Bedroom	$800	$1000	$1500	$2000	$2500

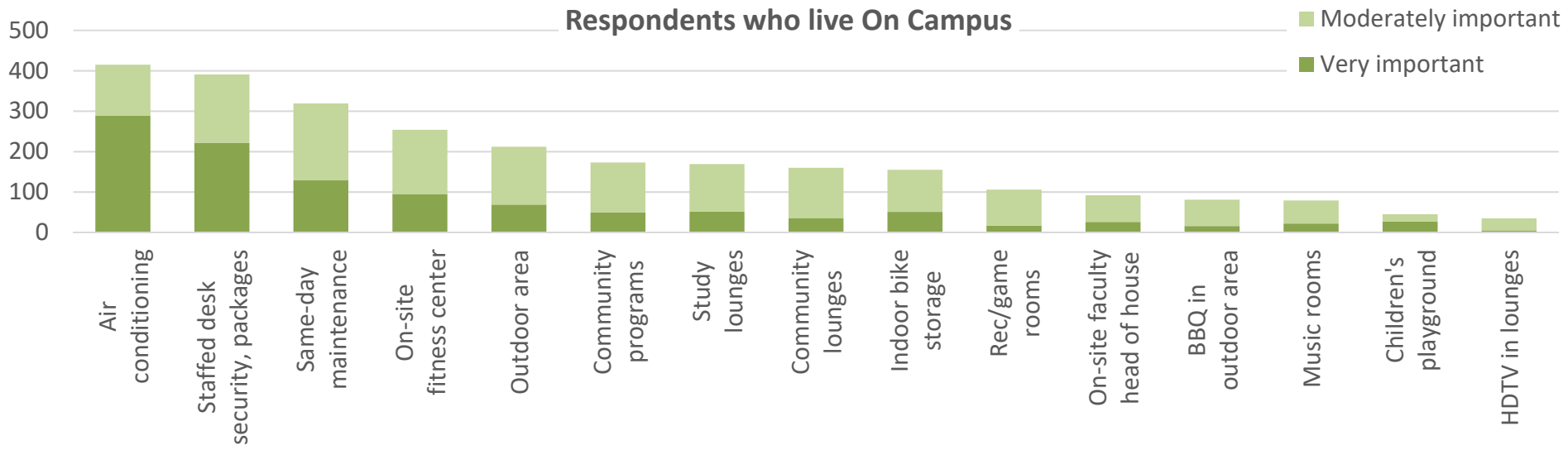
Student preferences

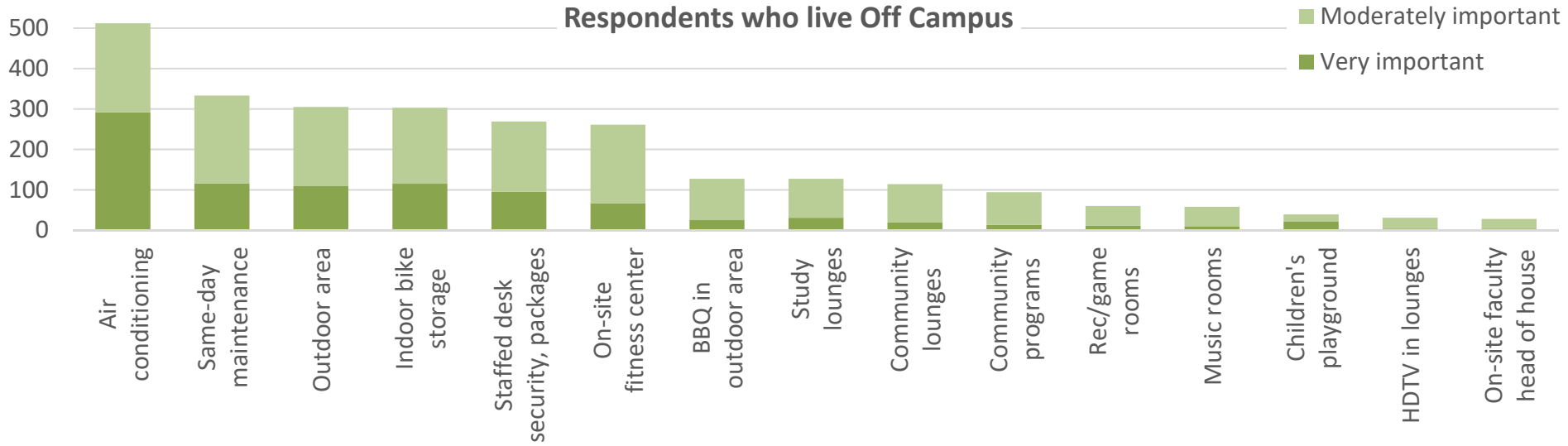
- 1228 students completed the conjoint analysis (of 6462 invited, a 19% response rate).
- Our **students value price, unit type, short commute time, air conditioning, and access to grocery/restaurants most highly.**
- Our students have a **lower willingness to pay for bedroom size, building amenities, sense of community, parking, fitness center.**
- Modest differences in preferences exist among different segments of our population, except for Sloan MBA students and students with families who have higher willingness to pay overall and for amenities.

Importance of features based on conjoint choices

Average Importance's based on conjoint choices	**Total**	**Families** (spouse living with)	**Has Children**	**In First Year**	**In Sloan**	**Lives in Cam-bridge**	**US Citizen**	**Inter-national**
Monthly Rent/Bedroom	27%	22%	17%	27%	21%	26%	26%	28%
Commute Time	15%	14%	12%	16%	16%	16%	15%	15%
Unit Type	14%	16%	18%	14%	16%	14%	14%	14%
Family Status	13%	14%	17%	12%	13%	13%	13%	12%
Air Conditioning	8%	9%	9%	8%	9%	8%	8%	8%
Access to Grocery and Bars/Cafes/Restaurants	7%	8%	7%	7%	7%	8%	7%	7%
Bedroom Size	5%	6%	6%	5%	5%	5%	5%	5%
Building Amenities	3%	4%	4%	3%	4%	3%	3%	3%
Sense of Community	3%	3%	3%	3%	3%	3%	3%	3%
Parking	3%	3%	4%	3%	3%	3%	3%	3%
Fitness Center	3%	3%	3%	3%	3%	3%	2%	3%

Amenities: “How important is it to have the following features available to you where you live?”





(From 1228 students who completed our 2017 survey.)

Amenity costs

- The total cost (operating and opportunity) of amenities for the current housing stock is ~$12M/year
- This includes utilities, internet and cable TV, fitness facilities, residential life programs, front desk and security, and opportunity costs of spaces to support the community.
- This is equivalent to ~$4700/bed/year on average
- We note that most of these amenities are valued by community members, and not all opportunity costs could/should be recovered.

Main messages

7. Other universities operate graduate student housing differently than we do.

Other universities*

	MIT	Harvard	Boston U	Stanford
Percentage of Grads Housed	38%	able to house 50%	6%	53% on campus with goal of 75% on campus (no more off-site at this point)
Housing Offered	410 family apartments; 2043 single student beds, assigned by lottery	Harvard University Housing (HUH)-3000 units; GSAS- 400 rooms; Law School-599 rooms; Medical School (1 building), assigned by lottery. *HUH housing (operated by RE office) open to students, faculty and staff.*	Medical School-208 beds in 2 bedroom units; Others-~800 apartments, assigned first come, first serve. *BU RE open to students, faculty and staff.*	4850 beds currently on campus. 1034 off-site; assigned by lottery. Provides subsidized off campus apartments as overflow housing until construction of new 2400 beds complete. Once new complex open, rental of off-site units will be discontinued. Not open to staff.
Housing Priorities	First Year	Families through HUH; First years guaranteed through GSAS if apply by April; Once a tenant is in HUH, can renew as long as eligible	No. Off campus apartments, can stay as long as students -> treat like commercial property	All 1st years have high priority. After 1st years: PhD, MD, JD have 'medium' priority for program length (all typically renewed). Masters have 'low' for 2nd.
Renting Agency	MIT Housing	Harvard University Housing/ Graduate and Professional Schools	BU Real Estate Office	Stanford Residential and Dining Enterprises
Pricing	Below market rate	Market (30% of portfolio professionally appraised each year. Results used to get projections on market, rates examined by faculty committee.)	Market with slight discount	Cost of running system rather than market rate. 30%+ below market rate. Off-site priced to match on-campus rates
Financial Aid	RA/TA stipend rates are set each year for schools of engineering/science. Other schools advised to establish stipends consistent with this range.	Financial aid and stipend (if any) determined by each graduate and professional school	None, with the exception of our Medical School Residence which offers a housing grant of approximately 21% of the market rate	No discounts. All financial aid handled departmentally. Central finaid office for loan options. Housing rates used in total cost of attendance calc to determine stipends & grants.
Capital Renewal and Capital Projects	Program of renewal across entire system, and Site 4 will add 454 mixed use single and family beds in 2020	Generally work in occupied buildings with riders to notify residents of scope of work in 24 month period from leasing period. Saving or spending 2% of replacement value annually for capital renewal.	Take one building (brownstone unit) off line for renovation every other year	Recently built 2 facilities, one with preference for business school, one for law school. New complex with 2400 beds will net 2000 bed spaces in 2020 to replace 1100 subsidized units off campus and increase capacity by 900 on campus. Complex will include large dining/retail/amazon/reading rooms.

*Note, some local universities do not offer on-campus housing for graduate students

Other universities

	MIT	Harvard	Boston U	Stanford
Traditional Dorm	Yes	In the schools, not through HUH (Chronkite only exception for HUH)	No	No longer providing for graduates. Previous dorms in traditional style were converted to undergraduate housing
Suite	No	Yes (Private bedroom/bath and shared kitchen). Rented by the bed (one unit with 2 separate leases).	*No*	No
Studio/ Efficiencies	Yes	Yes	Yes	1. Jr. studios - 360sq. ft. common area living/dining off kitchen with 1BR/BA and another 1BR/BA 2. Regular studios 350sq ft. 1 room for single students 3. Premium studios 450-475sq ft for single or couple 4. 2BR/1BA Efficiency with kitchen/dining nook and no living room
1-bed apartments	Yes	Yes	Yes	Yes (for couples)
2-bed apartment	Yes	Yes	Yes	Yes
3-bed apartment	Yes	Yes	Yes	Typically for families and some for single students
4-bed apartment	Yes			Some for families and several for single students
Off Campus Defined as the following: 1) Open to students, faculty and staff 2) Operated by university real estate office (and not the university student life division)	No	Yes (through Harvard University Housing)	Yes (through BU Real Estate)	No Stanford provides subsidized off campus apartments as overflow student housing until they complete construction of a new 2400 bed complex. Once the new complex is opened, Stanford plans to discontinue off-site units. Units are open only to students and are run by the Stanford R&DE like on campus units. On campus guest and pet policy apply. Units are priced to match on-campus prices, and Stanford covers the remaining cost of the full rental rate.
Assist with off campus search (non-university owned)	No	No	No	Yes - Off Campus Rental Housing office serving students faculty and staff

Main messages

8. We recommend increasing on-campus graduate housing capacity in a way that aligns with what students value/need. The Institute should also assess the feasibility of doing so in a way that breaks-even at 30 years with comprehensive stewardship.

Rationale for this recommendation

- Why comprehensive stewardship (see footnote on slide 35)?
  - Operating in this way extends the life the building
  - Leads to higher quality of life (better maintained spaces)
- Why 30-year break-even?
  - We don't think MIT should be making a profit from graduate housing
  - If MIT can break-even it should be easier to add capacity when it is needed (recognizing this is only one of many considerations), while still having below-market rents since we are not seeking a profit.
  - In the long run this should enable us to keep student costs-of-living lower.
  - This would also lead to greater equity relative to our current housing model where 38% of the students benefit from below-market on-campus housing, and the other students do not.

What do we mean by “aligned with student needs”?

- To the extent possible, we recommend aligning the services and amenities we offer in on-campus housing with what students value.
- However, we recognize there are a range of needs in the student population so we should provide a range of housing types.
- Importantly, we also recognize that MIT has institutional responsibilities (e.g. for supporting and keeping students safe on campus), and the importance of these to the Institute may not be appropriately represented in student responses to this survey.

We will be evaluating several options

- Using a simulator based on the results of the conjoint analysis the Graduate Student Housing Working Group will consider the following scenarios:
  - Adding Site 4 Kendall Grad Tower to our current inventory
  - Changing family status policies:
    - 70 Amherst, Eastgate, and Westgate keep the same policies for this scenario
    - Edgerton : All resident types (singles, couples, families) are allowed. All other buildings: singles & couples allowed. Note: This is to test the model in advance of due diligence by DSL and Campus Planning.)
  - An option the west end of campus with efficiency apartments
  - An off-campus option
  - 70 Amherst Street under different assumptions
  - Others as we learn more

Main messages

9. We recommend that the Institute develop a process for evaluating the benefits and detriments of changes to our housing policies.

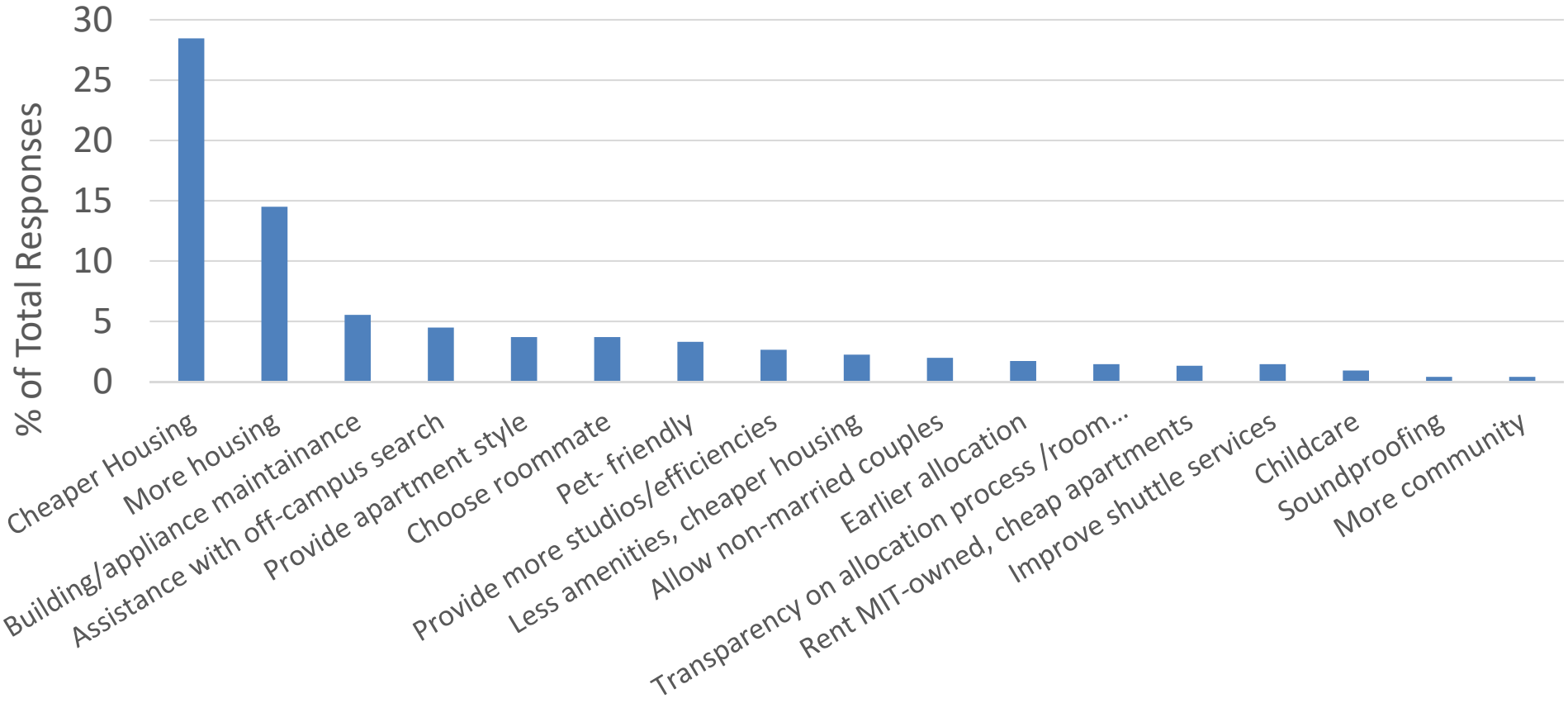
Changes to discuss: Ease of getting housing

- Review of on-campus housing allocation process
  - Increased transparency of housing prioritization e.g. first years, internationals, families with children
  - Increased transparency of room allocation, room conditions
  - Earlier allocation
  - Usability testing of housing website to make key pieces of information easier to find
  - Option to choose roommates prior to lottery and/or better roommate matching
- Assistance with off-campus housing search
  - Earlier notification to students to start preparing for living off campus
  - Develop a guide to off-campus housing searches including expected costs, timing, tenant rights, renter's insurance, landlords to work with or avoid

Changes to discuss: Improve quality of life in on-campus housing

- Quality of life audits of current stock
  - Work with dorm governments to audit buildings for necessary repairs and improve building quality
- Improve usability of process for reporting building problems
  - Ease process for reporting building problems
  - Provide clear timeline for repairs
- Reconsider existing housing policy
  - Review pet policy
  - Allow non-married couples to live together, including when one partner is not an MIT student
- Consider providing need-based housing support

Student responses: Suggestions for better support for graduate student needs (total - 759)



Main messages

10. We recommend that a detailed evaluation of graduate student housing be conducted by a similar working group every three years, with a report to Academic Council and the MIT Faculty.*

*Note: this should also include a short yearly update to assess progress relative to the last detailed evaluation.

Please remember: the findings shared in this interim report are preliminary

- The Working Group moved very quickly to develop these preliminary estimates and recommendations.
- We will be reviewing and refining them in the months ahead as we seek community input and do further work to finalize our findings.
- **To submit comments or questions, please visit http://chancellor.mit.edu/gradhousingworkgroup**
- We would welcome your comments before November 15, 2017.