



New York University

NYU Core Project

Student Housing and Faculty Housing

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- **University bond sale September 2013:**
 - True (i.e., average) Interest Cost: 4.4% for 30 year, tax exempt debt (University uses 6.0% for financial planning purposes)
 - Moody's and Standard & Poor's Credit Ratings affirmed NYU's AA-/Aa3 rating with stable outlook
- **Real Estate Market Analysis Update (under separate cover)**

The Need for Freshmen Housing at NYU's Core

- Guaranteeing housing for all four years to undergraduates was one of the major strategies credited with NYU's transition from a commuter school to an internationally recognized research university.
- The importance of living in residence halls:
 - National research consistently demonstrates that living on campus, compared to living off campus in the freshman year, produces higher GPA's, higher retention rates into the second year, higher graduation rates, promotes better social integration, more academic involvement with other students, better understanding and appreciation of diversity, more satisfaction with their social experience, and a stronger sense of belonging to the institution.
 - Our residential focus has coincided with improving student quality and improved student completion rates. As NYU's housing system has grown from about 3,700 students (including about 1,000 graduate students) in the mid 1980's, to 10,774 students (including 451 graduate students) this fall, NYU's 6-year graduation rate has improved from 69.2% for the class entering in 1991, to 85.3% for the class entering in 2006.

*Berger, J. B. (2001-2002). Understanding the organizational nature of student persistence: Empirically-based recommendations for practice. *Journal of College Student Retention*, 3, 3-21.

*M. L. Upcraft, J. N. Gardner, & B. O. Barefoot (2005), *Challenging and supporting the first-year student: A handbook for improving the first year of college*. San Francisco, CA: Jossey-Bass.

Student Housing

The Need for Freshmen Housing at NYU's Core

- In the past 10 years, more than 91% of all NYU freshmen electively chose to live in NYU freshmen residence halls. This year we are housing 4,523 freshmen in University residence halls.
- This constitutes one of the few "common core" experiences for our students attending one of the most school-centric universities in the country.
- In the past 10 years, NYU successfully transitioned to an all-freshmen residence hall model, trying to locate all freshmen residence halls as close to the Square as possible.
- It is generally accepted throughout higher education that when freshmen live at the core of the campus, they have greater ease in quickly acclimating, navigating, and finding their place within the campus setting. This is why almost all of our peer institutions (and almost all residential campuses in the US), house their first-year students at the core of their respective campus. Harvard and Yale, both of whom have "Freshman Yards", started this trend in the United States in the 1600's, and it continues to this day throughout the country and even in the village (i.e., Cooper Union, SVA, and the New School).
- NYU data in 2011 demonstrates that Freshmen who live in residence halls closest to the Square (Goddard, Hayden, Weinstein, Brittany, and Rubin, 2,672 -- 86%), reported feeling more connected to their residence community than Freshmen residing in dorms further away from the Square (3rd North and Founders, 1,629 -- 81%). This same finding was repeated in the 2012 BASE interviews, as well.
- Having the ability to build a state-of-the art traditional style freshman residence hall at the core of the campus will allow the University to provide the most supportive environment and community designed to facilitate student success.
- This issue takes on greater importance as NYU attracts an increasingly international undergraduate student population (this year 18% of freshmen were international students).

Drivers affecting the need for Student Housing in the Core

- Need to move freshmen closer to the core and in appropriately configured units
 - Relocate from 3rd North (976 beds)
 - Need to provide freshmen residence hall experience competitive with peer institutions
 - Need to provide appropriate environment for freshmen academic integration and socialization
- Continue to address capacity issues in student housing
 - Every fall there is lack of capacity – students placed in hotels and residence hall rooms reconfigured to maximize capacity
 - Increasing numbers of students outside the metropolitan area
 - Between 2002 and 2012, students from outside metropolitan area increased from 51% to 65%
 - Between 2002 and 2012, international students increased from 4% to 12%
 - Between 2002 and 2012, freshmen living in student residence halls increased from 88% to 92%
- NYU will use 3rd North for upperclassmen to address overcrowding and demand issues – and to shed leased residence halls as appropriate based on demand

Financing of Student Housing

- NYU finances student housing using tax exempt debt issued through the Dormitory Authority of the State of New York (DASNY)
- NYU debt is issued as thirty year, fixed rate debt with level debt service – no derivatives, swaps, or synthetic structures - seen as a credit positive.
 - Current rate: 4.4%
 - Financing Plan assumption: 6.0%
- NYU has not engaged in sale/leaseback or developer-driven structures to finance student housing – do periodically receive proposals and analyze
 - Have not proven financially advantageous
 - Rating agencies do not consider this “off-balance sheet”
 - Avoid counterparty risk
 - Avoid tax and structuring risk
 - Avoid business risk
 - Maintain operational and ownership control

Student Housing

Purchase versus Lease Analysis

- In 2007-2008, NYU analyzed the purchase of Gramercy Green and the 12th Street Dorm (now Founders Hall) compared to continuing lease of Water Street and Cliff Street residence halls
 - Gramercy Green (est. 1000 beds) + 12th Street (est. 710 beds) = 1,710 beds
 - Water Street (1208 beds) + Cliff Street (328 beds) = 1,536 beds
- Compared thirty year pro forma for each residence hall
- Projected NPV savings of \$170 million of purchase versus lease
- Explanation:
 - 2008 lease cost of \$30 million increasing 3% per year
 - Estimated debt service of \$28 million per year stays flat
- This analysis did not extend beyond life of bonds. But after thirty years, NYU owns dorms free and clear without debt service versus continued lease payments: generates positive cash flow of \$40 million per year (and growing) plus ownership of underlying asset versus leasing negative cash flow of \$21 million per (and growing).
- Addendum: @2013, Gramercy and Founders are performing approximately \$3 million per year better than 2008 projection

Student Housing

Purchase versus Lease Analysis: September 24, 2007

New York University								
Comparative Analysis: Gramercy Green & 12th Street v. Water and Cliff Street								
Fiscal Year	Gramercy Green	12th Street	Total	Water Street	Cliff Street	Total	Annual Net Income Savings/(Deficit)	NPV of Savings/(Deficit)
	Annual Net Income	Annual Net Income	Annual Net Income	Annual Net Income	Annual Net Income	Annual Net Income		
2009	(10,245,310)	(8,017,304)	(18,262,614)	(9,531,147)	(2,934,231)	(12,465,378)	(5,797,237)	(5,521,178)
2010	(9,933,277)	(1,687,114)	(11,620,390)	(9,715,587)	(2,999,632)	(12,715,219)	1,094,829	993,042
2011	(9,609,842)	(1,980,315)	(11,590,157)	(9,902,349)	(3,066,258)	(12,968,606)	1,378,450	1,190,757
2012	(9,274,596)	(1,751,485)	(11,026,080)	(10,091,392)	(3,134,122)	(13,225,514)	2,199,434	1,809,480
2013	(8,831,316)	(1,507,202)	(10,338,517)	(10,282,676)	(3,203,236)	(13,485,912)	3,147,394	2,466,066
2014	(8,321,163)	(1,262,376)	(9,583,539)	(10,476,150)	(3,273,612)	(13,749,762)	4,166,223	3,108,900
2015	(7,947,883)	(1,001,306)	(8,949,189)	(10,671,763)	(3,345,260)	(14,017,023)	5,067,834	3,601,615
2016	(7,561,007)	(738,880)	(8,299,886)	(10,869,455)	(3,418,191)	(14,287,647)	5,987,760	4,052,752
2017	(7,054,667)	(461,426)	(7,516,092)	(11,069,162)	(3,492,416)	(14,561,578)	7,045,485	4,541,583
2018	(6,639,120)	(172,709)	(6,811,828)	(11,270,811)	(3,567,943)	(14,838,754)	8,026,926	4,927,836
2019	(6,043,463)	120,166	(5,923,298)	(11,474,326)	(3,644,780)	(15,119,107)	9,195,809	5,376,599
2020	(5,481,240)	428,055	(5,053,185)	(11,679,623)	(3,722,936)	(15,402,559)	10,349,374	5,762,919
2021	(5,018,727)	746,331	(4,272,396)	(11,886,608)	(3,802,418)	(15,689,025)	11,416,629	6,054,482
2022	(4,539,426)	1,070,624	(3,468,802)	(12,095,182)	(3,883,231)	(15,978,413)	12,509,611	6,318,204
2023	(4,042,738)	1,411,833	(2,630,906)	(12,305,238)	(3,965,381)	(16,270,619)	13,639,713	6,560,935
2024	(3,219,034)	1,765,367	(1,453,667)	(12,516,659)	(4,048,872)	(16,565,531)	15,111,864	6,922,919
2025	(2,685,690)	2,131,900	(553,789)	(12,729,321)	(4,133,707)	(16,863,028)	16,309,239	7,115,667
2026	(2,133,031)	2,507,123	374,093	(12,943,089)	(4,219,887)	(17,162,977)	17,537,069	7,287,015
2027	(1,560,368)	2,896,990	1,336,622	(13,157,819)	(4,307,415)	(17,465,234)	18,801,856	7,440,533
2028	(826,728)	3,302,222	2,475,494	(13,373,355)	(4,396,288)	(17,769,644)	20,245,137	7,630,179
2029	(12,245)	3,723,556	3,711,310	(13,589,533)	(4,486,506)	(18,076,039)	21,787,350	7,820,403
2030	624,806	4,156,745	4,781,551	(13,806,176)	(4,578,065)	(18,384,240)	23,165,792	7,919,223
2031	1,284,867	4,607,813	5,892,679	(14,023,094)	(4,670,959)	(18,694,053)	24,586,732	8,004,734
2032	2,123,042	5,072,548	7,195,590	(14,240,086)	(4,765,182)	(19,005,269)	26,200,858	8,124,045
2033	2,831,606	5,557,009	8,388,616	(14,456,939)	(4,860,726)	(19,317,665)	27,706,281	8,181,741
2034	3,785,338	6,052,026	9,837,364	(14,673,423)	(4,957,581)	(19,631,004)	29,468,368	8,287,705
2035	4,545,917	6,568,945	11,114,862	(14,889,296)	(5,055,734)	(19,945,030)	31,059,892	8,319,340
2036	5,503,613	7,103,637	12,607,250	(15,104,300)	(5,155,171)	(20,259,471)	32,866,721	8,384,091
2037	6,319,968	7,657,242	13,977,210	(15,318,161)	(5,255,876)	(20,574,037)	34,551,247	8,394,098
2038	7,165,706	8,230,924	15,396,630	(15,530,589)	(5,357,830)	(20,888,419)	36,285,049	8,395,542
Totals	(86,796,006)	56,530,940	(30,265,066)	(373,673,310)	(121,703,445)	(495,376,754)	465,111,689	169,471,227

(1) Discount rate used to calculate NPV is 5%.

Student Housing

How Owned Residence Halls Become Performing Assets:

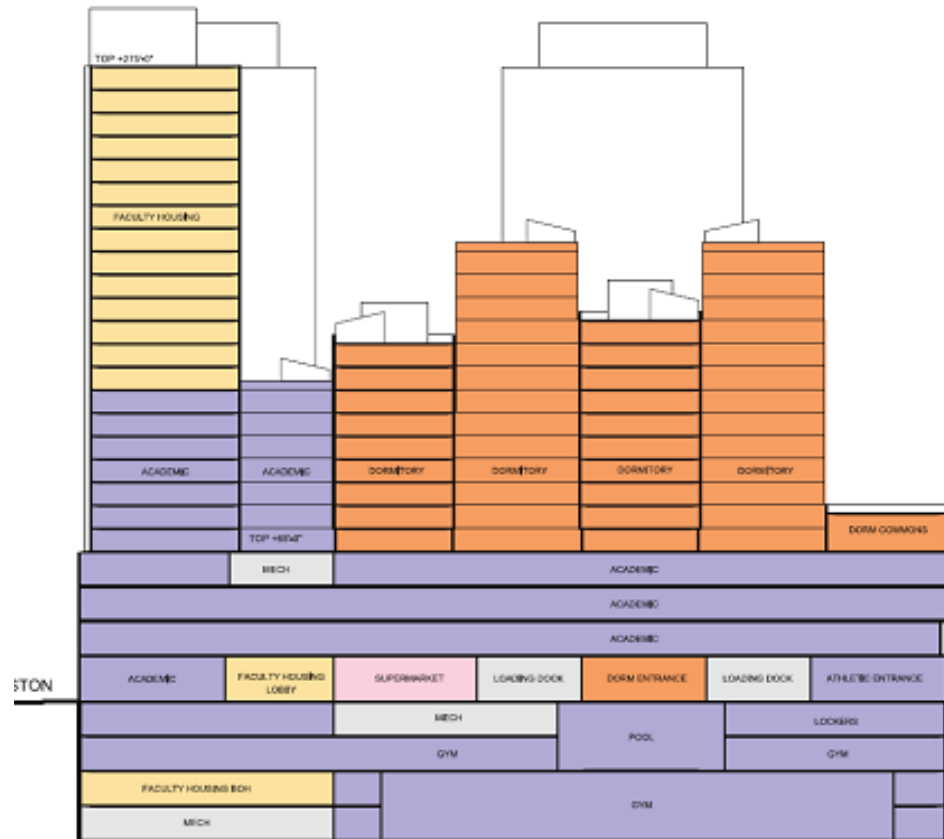
- All Revenue and only small percentage of expenses are variable
- Debt Service is fixed
- After borrowing is repaid, positive cash flow increases with no more debt service – and University owns the underlying asset
- Pro forma used in 2007 analysis:

12th Street											
	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
No of Revenue Bed Spaces	710	710	710	710	710	710	710	710	710	710	710
No of Non-Revenue Bed Spaces	25	25	25	25	25	25	25	25	25	25	25
No of Total Bed Spaces	735	735	735	735	735	735	735	735	735	735	735
Bed rate per academic year ¹	12,993	13,448	13,919	14,406	14,910	15,432	15,972	16,531	17,110	17,709	18,328
Bed rate per summer week ²	123	127	132	136	141	146	151	156	162	168	173
Revenue - Academic Year	9,225,235	9,548,118	9,882,302	10,228,183	10,586,169	10,956,685	11,340,169	11,737,075	12,147,872	12,573,048	13,013,105
Vacancy Discount (5%) ³	(461,262)	(477,406)	(494,115)	(511,409)	(529,308)	(547,834)	(567,008)	(586,854)	(607,394)	(628,652)	(650,655)
Revenue - Summer	872,771	903,318	934,934	967,657	1,001,525	1,036,578	1,072,859	1,110,409	1,149,273	1,189,498	1,231,130
Vacancy Discount (40%) ⁴	(349,109)	(361,327)	(373,974)	(387,063)	(400,610)	(414,631)	(429,143)	(444,164)	(459,709)	(475,799)	(492,452)
Dining Revenue ⁵	495,370	507,754	520,448	533,459	546,795	560,465	574,477	588,839	603,560	618,649	634,115
Total Revenue	9,783,005	10,120,457	10,469,595	10,830,827	11,204,571	11,591,263	11,991,353	12,405,305	12,833,602	13,276,743	13,735,242
Sq. Footage	174,440	174,440	174,440	174,440	174,440	174,440	174,440	174,440	174,440	174,440	174,440
Personnel ^{6,7}	1,171,296	1,212,291	1,254,722	1,298,637	1,344,089	1,391,132	1,439,822	1,490,216	1,542,373	1,596,356	1,652,229
Public Safety - Guard Service ^{6,7}	390,689	406,317	422,569	439,472	457,051	475,333	494,346	514,120	534,685	556,072	578,315
Utilities ^{6,7}	712,773	730,592	748,857	767,579	786,768	806,437	826,598	847,263	868,445	890,156	912,410
Telecomm Service Contracts ^{6,7}	216,444	220,340	224,306	228,344	232,454	236,638	240,897	245,233	249,648	254,141	258,716
All Other OTPS ^{6,7}	427,495	438,182	449,137	460,365	471,874	483,671	495,763	508,157	520,861	533,883	547,230
External Debt ⁹	8,371,510	8,375,110	8,371,310	8,375,310	8,373,760	8,370,760	8,373,760	8,372,260	8,371,260	8,375,510	8,374,510
Total Expenses	11,290,207	11,382,833	11,470,901	11,569,707	11,665,996	11,763,972	11,871,187	11,977,250	12,087,272	12,206,119	12,323,410
Net (Loss) / Income	(1,507,202)	(1,262,376)	(1,001,306)	(738,880)	(461,426)	(172,709)	120,166	428,055	746,331	1,070,624	1,411,833

Student Housing

NYU Leased Student Housing versus Construction on Coles Site

- The Coles Site provides 275,000 sf (Orange) and can yield 915 beds, without use of Tower.
- If Tower is included (Yellow, and Purple above 4th floor), can provide up to 185,000 sf additional, and about 585 additional beds; would increase the number of beds to 1500 beds
- If alternate uses are determined, floors could be converted to those other uses. The largest floor of dorm space (e.g., floor 6 -orange) yields 22,000 sf, the largest floors of tower space (e.g., floor 6 – purple) yields 13,600 sf.



Student Housing

NYU Leased Student Housing versus Construction on Coles Site

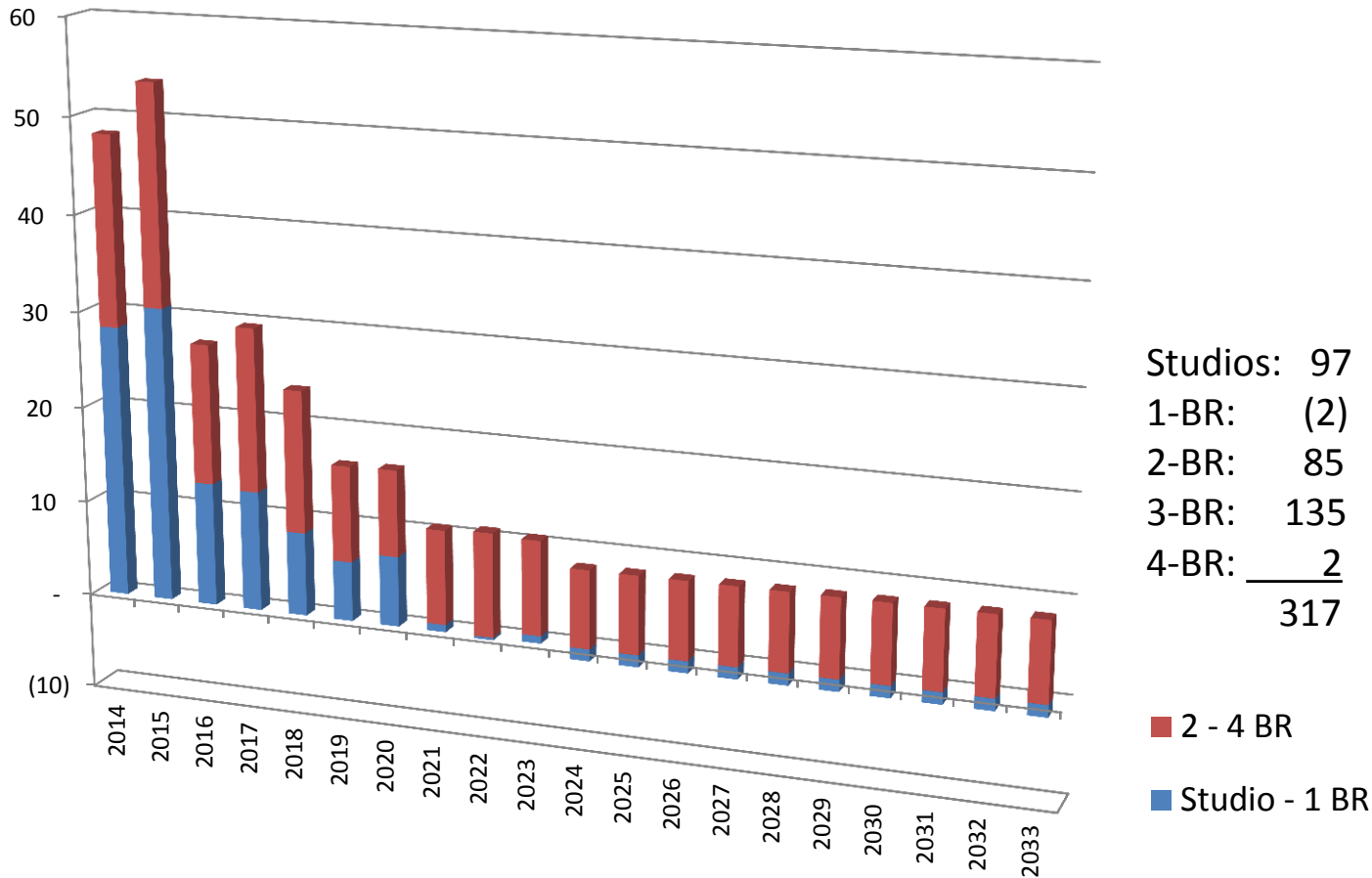
- Cost Comparison in 2020: Projected first full year of operation at Coles Site
- Leasing:
 - Total (rentable) beds in leased facilities: 2,564
 - Total annual lease payments:
 - 2014: \$38.8 million, \$15,130 per bed
 - 2020: \$47.1 million, \$18,360 per bed (3.3% inflation per year since 2014)
- Coles Site
 - Capital cost projected for 275,000 sf, 915 beds: \$225 million
 - Annual Debt Service @6%: \$16.4 million per year
 - Cost per bed:
 - 2020: \$17,880 per bed
- At opening, Coles is less expensive than leasing
- Over thirty years, assuming 915 beds constructed and financed instead of leased (assuming 3% per year inflation on leased property), net present value of borrowing vs. leasing is \$117 million
- After thirty years, NYU owns the residence hall, cash flow improves by \$16.4 million per year

Projected Net Demand for Faculty Housing through 2033: Base Case: Notes and Assumptions

- Schools and programs provided specific projections for net annual increases in faculty (and related post-doc) housing needs. School projections of faculty hiring and growth are consistent with University financial plans.
- Schools and programs that are not expecting major growth in their programs are assumed to increase housing demand at a rate of 0.3% per year (consistent with overall enrollment growth projections).
- Law and Dental currently meet faculty housing requirements from offsite rentals and/or units purchased directly by the school/foundation. This is assumed to continue in the base case.
- Demand for units for administrators is assumed steady because the demand for the larger units, for deans and senior administrators, is projected to continue.
- Demand for 290 Non-affiliate units is assumed flat.
- In the absence of any specific projections beyond 2023, the proxy for total annual faculty growth rate from 2024-2033 is 0.3% based on projected enrollment growth at that rate.
- Projections include continuing demand for upsizing: 5 faculty upgrades from 1-BR to 2-BR units and 5 from 2-BR to 3-BR units.
- The maximum number of units that can be provided in the Coles Site building: 24 2-BR apartments and 80 3-BR apartments, assuming an average 2-BR layout of 1100 sqft and 3-BR layout of 1400 sqft.

Faculty Housing

Projected Net Demand for Faculty Housing through 2033: Base Case: 317 Additional Apartments



47% of Adjusted Demand for Faculty Housing is Satisfied with Development of Coles Site Building

	2BR	3BR
Baseline Demand	85	135
Maximum Coles Site Allocation	24	80
Coles Site Space as % by Bedroom Size	28%	59%
Coles Site Space as % of Total	47%	

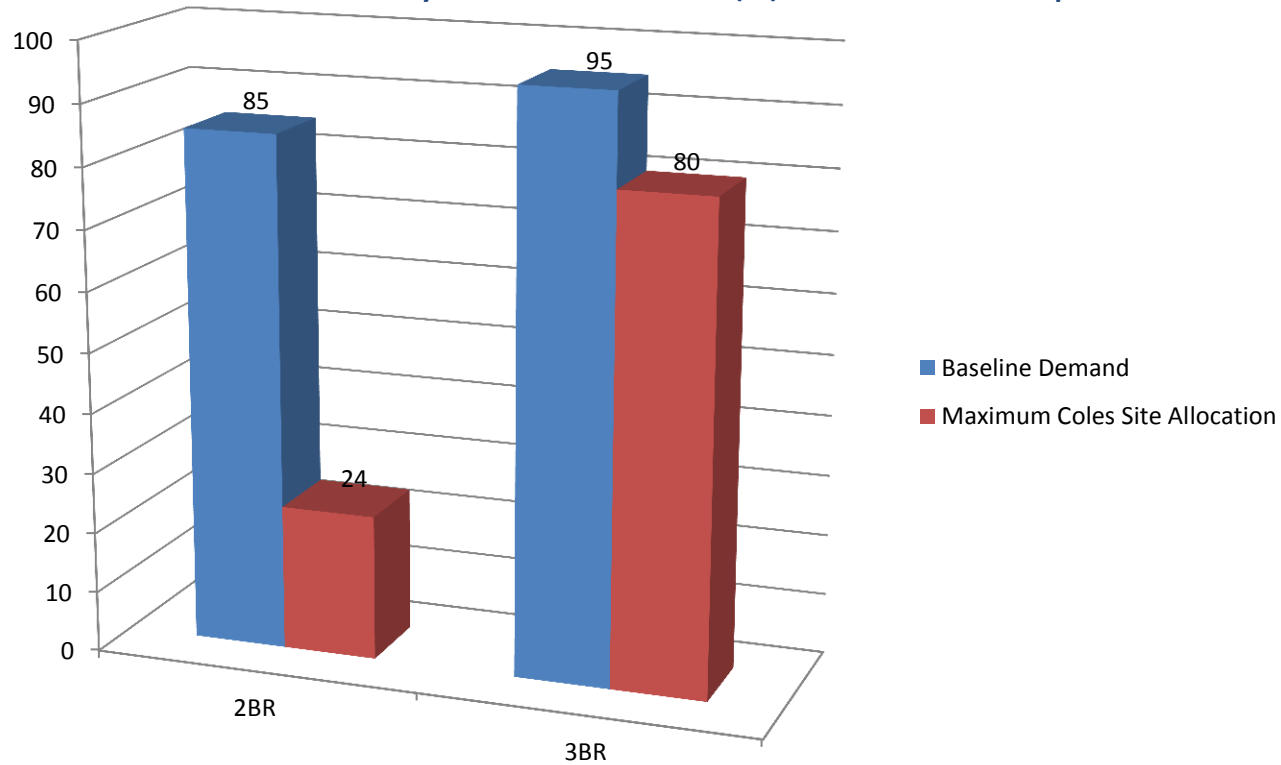
Projected Demand for Faculty Housing through 2033: Sensitivity Analysis

- Case 2: Increase the supply (reduce net demand) with conversion of studios, completing two additional 3-BR apartments each year through renovation.
- Case 3: Increase the supply, assuming that 2 2-BR apartments and 2 3-BR apartments are made available each year if a general housing loan program were in place.
- Case 4: Increase the supply with a general housing loan program per Case 3, while also assuming increased from School of Law and College of Dentistry will be met by University housing (not from offsite purchases and leases).

Faculty Housing

Demand for Faculty Housing

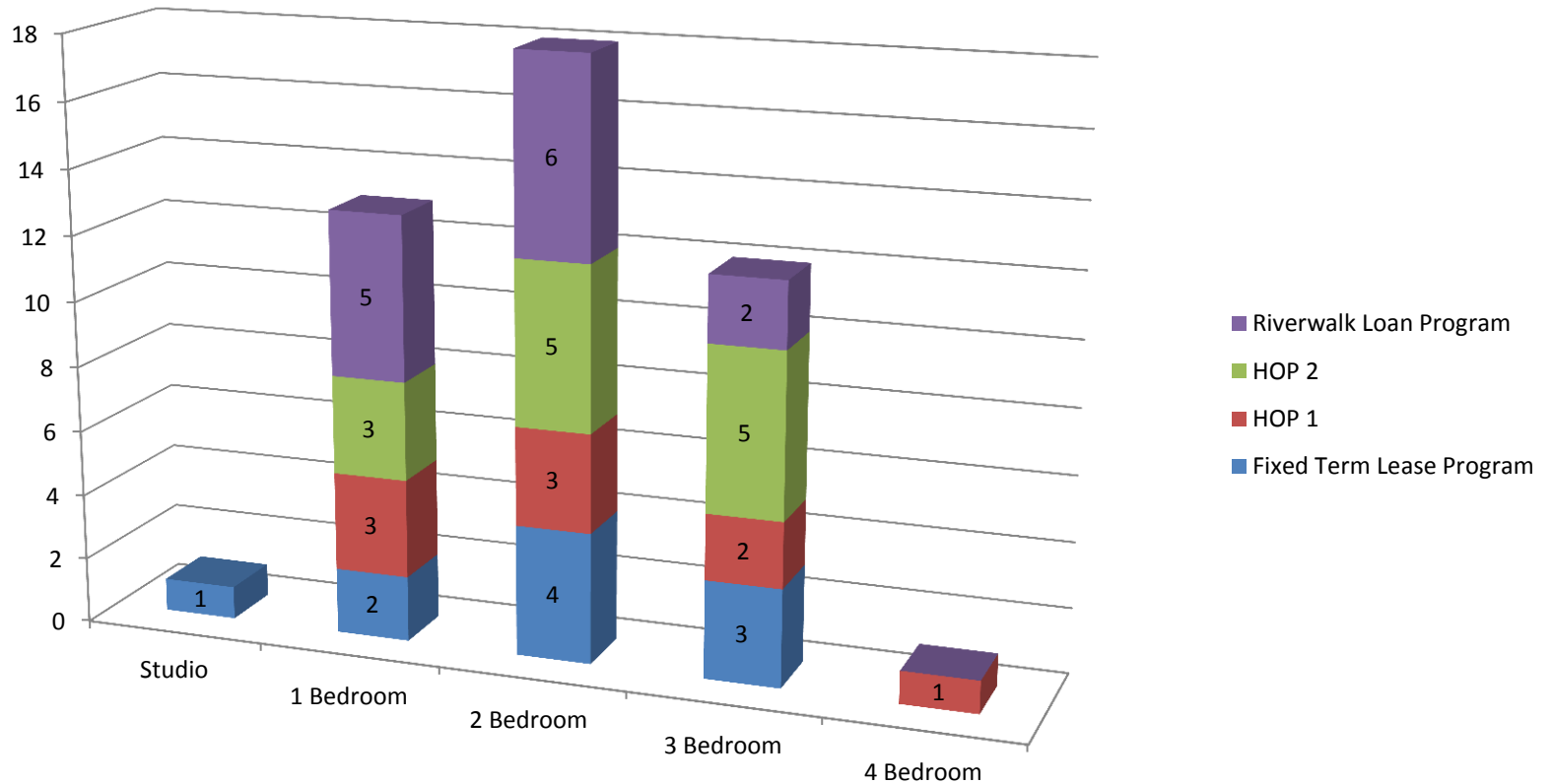
Case 2: Include Yearly Conversion of (2) 3-Bedroom Apartments



58% of Adjusted Demand for Faculty Housing is Satisfied with Development of Coles Site Building

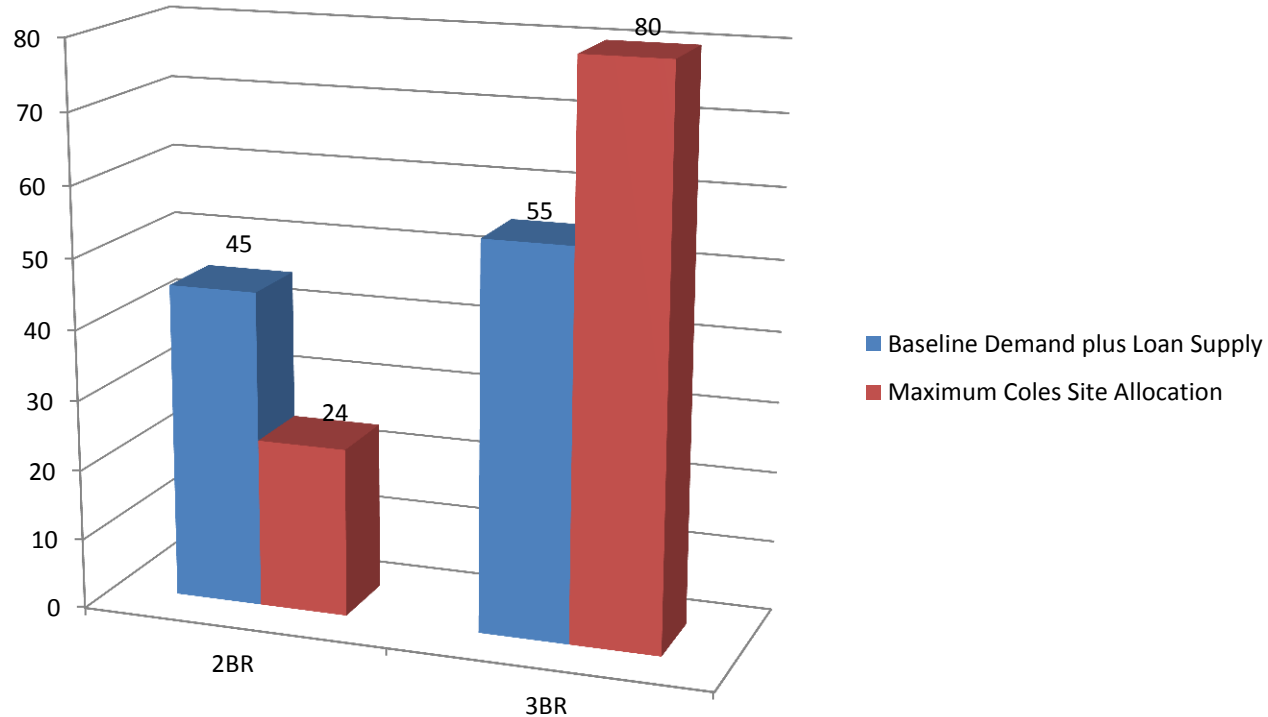
	2BR	3BR
Baseline Demand	85	95
Maximum Coles Site Allocation	24	80
Coles Site Space as % by Bedroom Size	28%	84%
Coles Site Space as % of Total	58%	

Case 3: Number of Units Relinquished Due to Loan Programs Over Life of Programs



- ▶ **HOP – 1** – Homeownership Program-1 was offered in 2006, eligible borrowers who participated executed zero interest lifetime loans with portability.
- ▶ **HOP – 2** – Homeownership Program-2 was offered from 2009 to 2011, eligible borrowers who participated executed lifetime shared appreciation loans at zero interest.
- ▶ **RAMP** – Riverwalk Loan Program launched in 2007 open to eligible residents in faculty housing who purchased a unit at Riverwalk Landing. Borrowers executed lifetime shared appreciation loans at zero interest.
- ▶ **Fixed Term Lease Program** – Launched in 2001 providing cash payments to tenured and tenure track faculty who sign non-renewable, time limited leases.

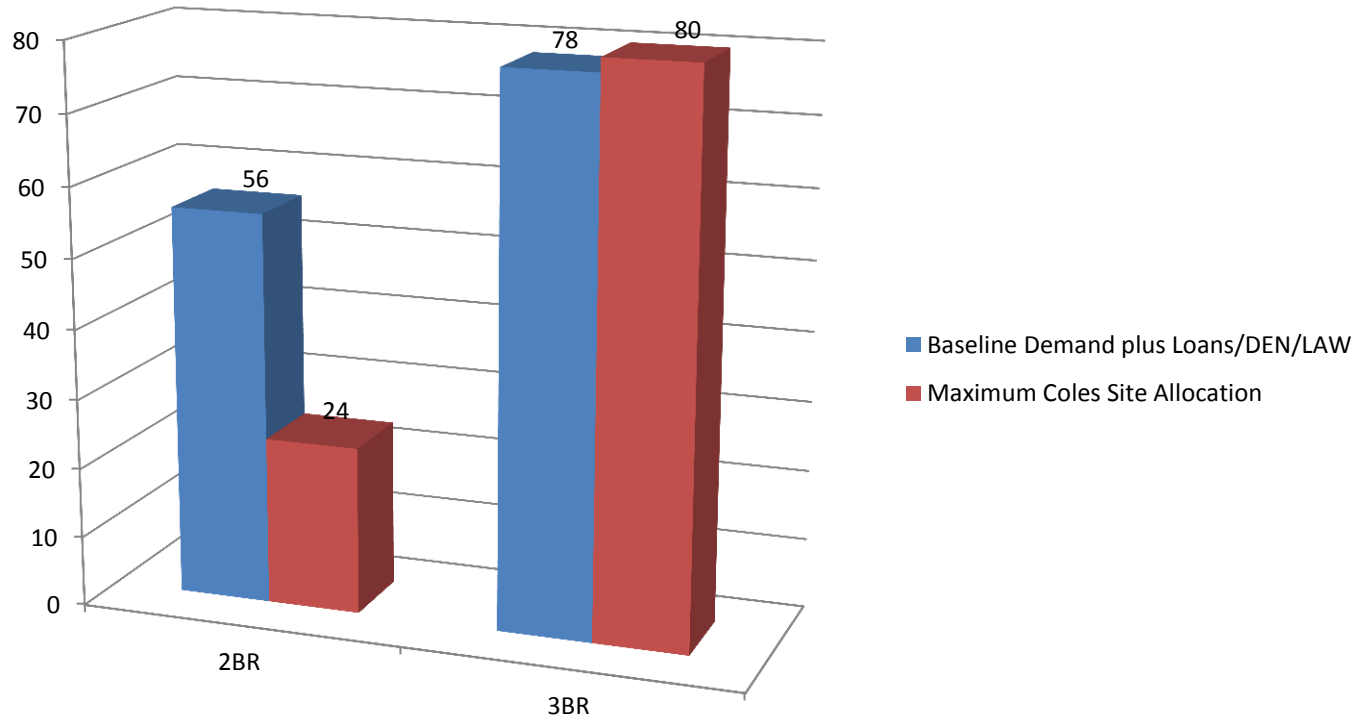
Demand for Faculty Housing Case 3: Potential Increase in Supply through Loan Programs



104% of Adjusted Demand for Faculty Housing is Satisfied with Development of Coles Site Building

	2BR	3BR
Baseline Demand plus Loan Supply	45	55
Maximum Coles Site Allocation	24	80
Coles Site Space as % by Bedroom Size	53%	145%
Coles Site Space as % of Total	104%	

Demand for Faculty Housing Case 4: Dental and Law housing demand Plus Increase in Supply with Loan Programs



78% of Adjusted Demand for Faculty Housing is Satisfied with Development of Coles Site Building

	2BR	3BR
Baseline Demand plus Loans/DEN/LAW	56	78
Maximum Coles Site Allocation	24	80
Coles Site Space as % by Bedroom Size	43%	103%
Coles Site Space as % of Total	78%	

Cost to Provide Housing in Coles Site Building versus Other Options

- Cost options for additional faculty housing were estimated based on maximum number of 2 and 3-BR unit allocation at the Coles Site building: 24 2-BR apartments and 80 3-BR apartments. An average 2-BR layout of 1100 sqft and 3-BR layout of 1400 sqft was used.
- Projected cost to develop purchased land is theoretical as there is no available parcel within the core. Depending on size of building, the cost for faculty housing construction could be between \$810-\$877/sf. Given the number of units, \$810 was used as estimate for costs. This includes C&S and fit-out, but no land costs. Appraisers have indicated \$500/sf +/- for purchase of residential development sites.
- To project costs for the purchase of individual units, data was used from The Corcoran Report, as of 6/30/2013. Please note this pricing is for current market, and does not account for market changes if purchases are completed in stages going forward.

Cost Options for Additional Faculty Housing to Meet Maximum Coles Site Building Space Allocation (104 units)

