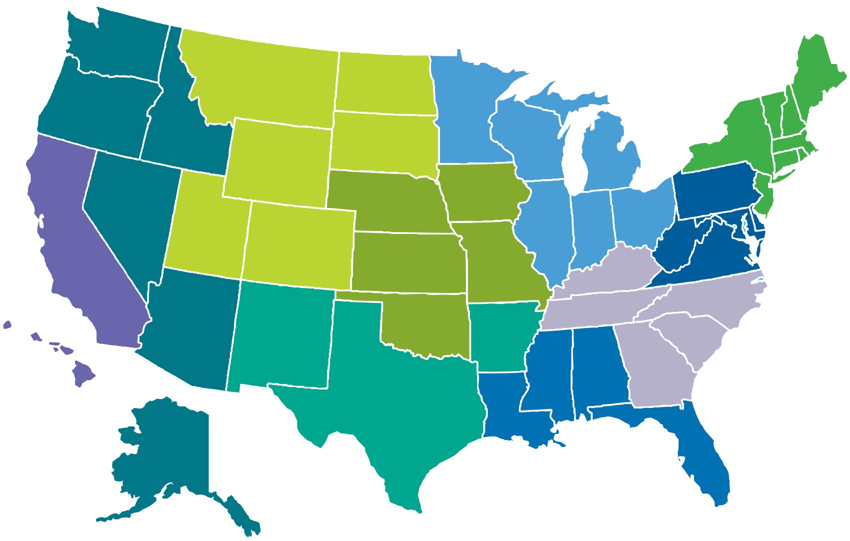
2016 NAA SURVEY OF OPERATING INCOME & EXPENSES IN RENTAL APARTMENT COMMUNITIES

Operations Take Center Stage In 2016

BY CHRISTOPHER LEE

Over the past 36 months, the multifamily housing industry has experienced unprecedented growth during a time of transformative change and accelerated effects of disruptive technologies. While demand for rental apartments has contributed to rapidly increasing rents, declining vacancies and significant asset value increases, the impact of Airbnb, Uber, Lyft, social media, online shopping and the Internet of Everything are reshaping location, design and operating strategies.

The continued shift to a renter-based society, an abundance of capital seeking yield and overall global uncertainty continues to place the multifamily housing industry in the bull's-eye for investors and operators alike. While the U.S. economy continues to muddle through, the labor market is creating increased numbers of lower- wage positions, part-time and self-employed workers and lower workforce participation rates that necessitate renting vs. an owning option for many. Renting is increasingly becoming a lifestyle choice for many as the quality of apartments, services and amenities have



NAA REGIONS

Region I	DC, DE, MD, PA, VA, WV
Region II	CT, MA, ME, NH, NJ, NY, RI, VT
Region III	IL, IN, MI, MN, OH, WI
Region IV	GA, KY, NC, SC, TN
Region V	IA, KS, MO, NE, OK
Region VI	AR, NM, TX
Region VII	AK, AZ, ID, NV, OR, WA
Region VIII	CO, MT, ND, SD, UT, WY
Region IX	AL, FL, LA, MS
Region X	CA, HI

improved dramatically. Residents are expecting and demanding more from their apartment owner and operator. During the next two years, finding the right balance between managed growth, maintaining product quality and service excellence, controlling operating costs and investing in the future will be recurring challenges for apartment leaders.

There are several ongoing and emerging trends that highlight this transformative time within the real estate industry amid the need for careful balance among all aspects and expectations of investors, operators and residents. For the first time in the modern era, more than 32 percent of young adults (18-34 years of age) are living at home. In 2014, according to Pew Research, for the first time in more than 130 years, adults 18-34 years of age were slightly more likely to be living in their parents' home than living with a spouse or partner in their own home. As a comparison, in 1960, 62 percent of the nation's 18-34-year-olds were living with a spouse or partner in their own household. The median age of first marriage continues to rise. According to Pew Research, as many as 25 percent of today's young adults may never marry. Cohabitation is rapidly increasing, and the impact of fewer jobs,

All Market-Rent Properties: Operating Income & Expense Data (Part I)

INDIVIDUAL METERED AND RECOVERY SYSTEM PROPERTIES*

	TOTAL			GARDEN			MID- & HIGH-RISE		
Number of Properties		2,970			2,575			395	
Number of Units		819,100			699,488			119,612	
Avg. No. of Units/Property		276			272			303	
Avg. No. of Square Feet/Unit		934			938			910	
Turnover rate in %		52%			53%			52%	
	$ Per Unit	$ Per Sq. Ft.	% of GPR	$ Per Unit	$ Per Sq. Ft.	% of GPR	$ Per Unit	$ Per Sq. Ft.	% of GPR
Revenues									
Gross Potential Rent	13,517	14.47	100.0%	12,561	13.39	100.0%	19,113	21.00	100.0%
Rent Revenue Collected	12,566	13.45	93.0%	11,690	12.46	93.1%	17,688	19.43	92.5%
Losses to Vacancy	726	0.78	5.4%	669	0.71	5.3%	1,058	1.16	5.5%
Collection Losses	82	0.09	0.6%	82	0.09	0.7%	81	0.09	0.4%
Losses to Concessions	143	0.15	1.1%	118	0.13	0.9%	286	0.31	1.5%
Other Revenue	787	0.84	5.8%	714	0.76	5.7%	1,211	1.33	6.3%
Total Revenue	**13,353**	**14.30**	**98.8%**	**12,405**	**13.22**	**98.8%**	**18,899**	**20.76**	**98.9%**
Operating Expenses									
Salaries and Personnel	1,284	1.37	9.5%	1,240	1.32	9.9%	1,540	1.69	8.1%
Insurance	259	0.28	1.9%	251	0.27	2.0%	302	0.33	1.6%
Taxes	1,575	1.69	11.6%	1,408	1.50	11.2%	2,550	2.80	13.3%
Utilities	330	0.35	2.4%	301	0.32	2.4%	502	0.55	2.6%
Management Fees	364	0.39	2.7%	344	0.37	2.7%	483	0.53	2.5%
Administrative	265	0.28	2.0%	248	0.26	2.0%	369	0.41	1.9%
Marketing	174	0.19	1.3%	157	0.17	1.2%	277	0.30	1.4%
Contract Services	355	0.38	2.6%	324	0.34	2.6%	541	0.59	2.8%
Repair and Maintenance	487	0.52	3.6%	476	0.51	3.8%	548	0.60	2.9%
Total Operating Expenses	**5,094**	**5.45**	**37.7%**	**4,748**	**5.06**	**37.8%**	**7,112**	**7.81**	**37.2%**
Net Operating Income	**8,259**	**8.84**	**61.1%**	**7,656**	**8.16**	**61.0%**	**11,787**	**12.95**	**61.7%**
Capital Expenditures	**1,181**	**1.26**	**8.7%**	**1,127**	**1.20**	**9.0%**	**1,490**	**1.64**	**7.8%**

*** Individual Meter and Recovery System (submeter, RUBS, flat fee) for primary utility.**

lower wages, student-debt obligations, credit card and other monthly debt payment requirements means more, not fewer, current and potential renters. Independent living for young adults (18-34 years of age) declined to 67 percent in 2015. Since 2007, the number of 18-34 year-olds has increased by nearly 3 million, however, the number of young adults heading their own household has not increased.

A recent study by the Institute for College Access & Success revealed that nearly 70 percent of students graduating from college have an average loan debt of $28,950 in 2014. Between 2004 and 2014, the average student debt rose 56 percent. In 2016, overall student loan debt rose to $1.3 trillion and the average graduate has $37,172 in student loan debt. In Q1 2016, the student loan delinquency rate had risen to 11.6 percent. For those who carry this type of debt, the average household credit card debt in 2015 was $15,762 and the average auto loan obligation per household was $27,141. The average starting salary for 2016 college graduates is now $50,556.

The median age for first marriage has increased to 27 for women and 29 for men, up from 23 for women and 26 for men in 1990, and 20 and 22, respectively, in 1960.

All Market-Rent Properties: Operating Income & Expense Data (Part II)

MASTER METERED PROPERTIES**

	TOTAL			GARDEN			MID- & HIGH-RISE		
Number of Properties		217			163			54	
Number of Units		50,377			39,138			11,239	
Avg. No. of Units/Property		232			240			208	
Avg. No. of Square Feet/Unit		851			868			792	
Turnover rate in %		45%			46%			41%	
	$ Per Unit	$ Per Sq. Ft.	% of GPR	$ Per Unit	$ Per Sq. Ft.	% of GPR	$ Per Unit	$ Per Sq. Ft.	% of GPR
Revenues									
Gross Potential Rent	14,807	17.40	100.0%	13,733	15.83	100.0%	18,548	23.42	100.0%
Rent Revenue Collected	13,956	16.40	94.2%	13,039	15.03	94.9%	17,148	21.65	92.5%
Losses to Vacancy	666	0.78	4.5%	580	0.67	4.2%	962	1.21	5.2%
Collection Losses	59	0.07	0.4%	46	0.05	0.3%	106	0.13	0.6%
Losses to Concessions	127	0.15	0.9%	68	0.08	0.5%	332	0.42	1.8%
Other Revenue	770	0.90	5.2%	742	0.85	5.4%	868	1.10	4.7%
Total Revenue	14,726	17.31	99.4%	13,781	15.88	100.3%	18,016	22.75	97.1%
Operating Expenses									
Salaries and Personnel	1,474	1.73	10.0%	1,354	1.56	9.9%	1,891	2.39	10.2%
Insurance	263	0.31	1.8%	255	0.29	1.9%	291	0.37	1.6%
Taxes	1,348	1.58	9.1%	1,292	1.49	9.4%	1,540	1.95	8.3%
Utilities	884	1.04	6.0%	738	0.85	5.4%	1,392	1.76	7.5%
Management Fees	504	0.59	3.4%	471	0.54	3.4%	617	0.78	3.3%
Administrative	321	0.38	2.2%	237	0.27	1.7%	613	0.77	3.3%
Marketing	149	0.18	1.0%	130	0.15	0.9%	215	0.27	1.2%
Contract Services	442	0.52	3.0%	379	0.44	2.8%	664	0.84	3.6%
Repair and Maintenance	685	0.81	4.6%	620	0.71	4.5%	913	1.15	4.9%
Total Operating Expenses	6,070	7.13	41.0%	5,477	6.31	39.9%	8,135	10.27	43.9%
Net Operating Income	8,656	10.17	58.5%	8,304	9.57	60.5%	9,880	12.48	53.3%
Capital Expenditures	1,562	1.84	10.6%	1,510	1.74	11.0%	1,746	2.20	9.4%

** Master Meter Owner Paid for primary utility.

The current divorce rate for first marriages ranges from 42 percent to 45 percent for those marrying today. This combination of high divorce rates, cohabitation and shifting household formations indicate a combined strong demand for rental living.

Approximately 57 percent of women and 69 percent of men participate in the workforce. The overall workforce participation rate is now 62.7 percent, among the lowest levels in 38 years. The U6 unemployment rate in June 2016 was 9.6 percent. The U6 rate measures all unemployed as well as persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percent of the labor force.

With more Americans not working or working part-time and stagnant median household income (which has not increased since the mid-1980s when adjusted for inflation), the population of potential life-long renters continues to increase. As a result, overall homeownership has dropped to 63.5 percent, and homeownership for first-time buyers is near its lowest level since the early 1980s (approximately 30 percent today versus 40 percent historically). According to Kiplinger, home prices are still 19 percent below their peak level. The demand for affordable housing is rising. Renting has

All Subsidized Properties: Operating Income & Expense Data (Part I)

INDIVIDUAL METERED AND RECOVERY SYSTEM PROPERTIES*

	TOTAL			GARDEN			MID- & HIGH-RISE		
Number of Properties	562			428			134		
Number of Units	93,138			65,383			27,755		
Avg. No. of Units/Property	166			153			207		
Avg. No. of Square Feet/Unit	869			894			811		
Turnover rate in %	35%			35%			36%		
	$ Per Unit	$ Per Sq. Ft.	% of GPR	$ Per Unit	$ Per Sq. Ft.	% of GPR	$ Per Unit	$ Per Sq. Ft.	% of GPR
Revenues									
Gross Potential Rent	12,631	14.53	100.0%	10,995	12.30	100.0%	16,485	20.32	100.0%
Rent Revenue Collected	11,881	13.67	94.1%	10,302	11.52	93.7%	15,601	19.23	94.6%
Losses to Vacancy	577	0.66	4.6%	528	0.59	4.8%	691	0.85	4.2%
Collection Losses	77	0.09	0.6%	73	0.08	0.7%	86	0.11	0.5%
Losses to Concessions	97	0.11	0.8%	93	0.10	0.8%	107	0.13	0.6%
Other Revenue	660	0.76	5.2%	464	0.52	4.2%	1,123	1.38	6.8%
Total Revenue	**12,541**	**14.43**	**99.3%**	**10,765**	**12.04**	**97.9%**	**16,724**	**20.62**	**101.5%**
Operating Expenses									
Salaries and Personnel	1,416	1.63	11.2%	1,387	1.55	12.6%	1,486	1.83	9.0%
Insurance	288	0.33	2.3%	291	0.33	2.6%	279	0.34	1.7%
Taxes	997	1.15	7.9%	748	0.84	6.8%	1,582	1.95	9.6%
Utilities	675	0.78	5.3%	698	0.78	6.3%	620	0.76	3.8%
Management Fees	457	0.53	3.6%	505	0.57	4.6%	344	0.42	2.1%
Administrative	430	0.49	3.4%	419	0.47	3.8%	457	0.56	2.8%
Marketing	123	0.14	1.0%	109	0.12	1.0%	157	0.19	1.0%
Contract Services	374	0.43	3.0%	333	0.37	3.0%	470	0.58	2.8%
Repair and Maintenance	528	0.61	4.2%	565	0.63	5.1%	440	0.54	2.7%
Total Operating Expenses	**5,288**	**6.08**	**41.9%**	**5,056**	**5.66**	**46.0%**	**5,835**	**7.19**	**35.4%**
Net Operating Income	**7,253**	**8.34**	**57.4%**	**5,710**	**6.39**	**51.9%**	**10,889**	**13.42**	**66.1%**
Capital Expenditures	**888**	**1.02**	**7.0%**	**837**	**0.94**	**7.6%**	**1,005**	**1.24**	**6.1%**

*** Individual Meter and Recovery System (submeter, RUBS, flat fee) for primary utility.**

Source : National Apartment Association 2016 Survey of Operating Income & Expenses in Rental Apartment Communities © 2016 by National Apartment Association.

become the first and, increasingly, the only residential option.

There are now over 46 million Americans ages 65 and older (over 12 times the number in 1900), with seniors now representing approximately 14.5 percent of the U.S. population. As Americans age and reach their late 70s and 80s, renting becomes a more viable option to taking care of their single-family home. Senior housing of all types will likely flourish over the next 15-20 years. Rental housing will likely capture an increasing share of this growing demographic.

In 2016, the seasonally adjusted number of multifamily permits (5+) will likely range from 358,000 to 390,000. Multifamily starts will remain around 318,000 to 330,000. Completions will likely hover around the 290,000 to320,000 range on a seasonally-adjusted basis with several markets in an oversupply of high-end product. Overall calendar year 2016 will likely see an overall slowdown in the number of permits, starts and completions compared to 2015 levels.

Niche opportunities remain in urban, urban-suburban, mixed use, senior, B product in secondary locations and student housing. However, rising land costs, labor and construction costs will begin to slow down the "amenities and features at any

All Subsidized Properties: Operating Income & Expense Data (Part II)

MASTER METERED PROPERTIES**

	TOTAL			GARDEN			MID- & HIGH-RISE		
Number of Properties		143			86			57	
Number of Units		24,727			14,847			9,880	
Avg. No. of Units/Property		173			173			173	
Avg. No. of Square Feet/Unit		759			783			723	
Turnover rate in %		20%			21%			19%	
	$ Per Unit	$ Per Sq. Ft.	% of GPR	$ Per Unit	$ Per Sq. Ft.	% of GPR	$ Per Unit	$ Per Sq. Ft.	% of GPR
Revenues									
Gross Potential Rent	13,245	17.45	100.0%	13.032	16.64	100.0%	13,565	18.75	100.0%
Rent Revenue Collected	12,730	16.77	96.1%	12,485	15.94	95.8%	13,097	18.11	96.6%
Losses to Vacancy	379	0.50	2.9%	390	0.50	3.0%	362	0.50	2.7%
Collection Losses	79	0.10	0.6%	84	0.11	0.6%	71	0.10	0.5%
Losses to Concessions	58	0.08	0.4%	73	0.09	06%	34	0.05	0.3%
Other Revenue	486	0.64	3.7%	395	0.50	3.0%	622	0.86	4.6%
Total Revenue	**13,215**	**17.41**	**99.8%**	**12,880**	**16.45**	**98.8%**	**13,719**	**18.97**	**101.1%**
Operating Expenses									
Salaries and Personnel	1,865	2.46	14.1%	1,830	2.34	14.0%	1,918	2.65	14.1%
Insurance	278	0.37	2.1%	259	0.33	2.0%	308	0.43	2.3%
Taxes	802	1.06	6.1%	754	0.96	5.8%	874	1.21	6.4%
Utilities	1,508	1.99	11.4%	1,445	1.85	11.1%	1,602	2.22	11.8%
Management Fees	547	0.72	4.1%	546	0.70	4.2%	549	0.76	4.0%
Administrative	524	0.69	4.0%	509	0.65	3.9%	546	0.75	4.0%
Marketing	67	0.09	0.5%	65	0.08	0.5%	69	0.10	0.5%
Contract Services	670	0.88	5.1%	630	0.80	4.8%	731	1.01	5.4%
Repair and Maintenance	651	086	4.9%	739	0.94	5.7%	518	0.72	3.8%
Total Operating Expenses	**6,912**	**9.10**	**52.2%**	**6,777**	**8.65**	**52.0%**	**7,114**	**9.84**	**52.4%**
Net Operating Income	**6,303**	**8.30**	**47.6%**	**6,103**	**7.79**	**46.8%**	**6,605**	**9.13**	**48.7%**
Capital Expenditures	**1,270**	**1.67**	**9.6%**	**1,271**	**1.62**	**9.8%**	**1,267**	**1.75**	**9.3%**

** Master Meter Owner Paid for primary utility.

Source : National Apartment Association 2016 Survey of Operating Income & Expenses in Rental Apartment Communities © 2016 by National Apartment Association.

2016 NOI by Region

INDIVIDUALLY METERED AND RECOVERY SYSTEM MARKET-RENT GARDEN PROPERTIES

	DOLLARS PER UNIT	DOLLARS PER SQ.FT.	PERCENT OF GPR
All	$7,656	$8.16	61.0%
Region I	$8,387	$8.93	59.7%
Region II	$10,093	$10.54	57.1%
Region III	$6,953	$7.25	58.5%
Region IV	$7,003	$6.93	62.2%
Region V	$5,959	$6.68	57.9%
Region VI	$6,822	$7.76	56.6%
Region VII	$7,521	$8.21	64.9%
Region VIII	$10,434	$11.49	71.3%
Region IX	$7,932	$7.86	62.3%
Region X	$12,484	$14.70	67.1%

cost" mentality of some developers. Expect a development slowdown in some urban areas.

Rent increases for professionally managed apartments in 2016 are expected to range from 3.9 percent to 4.8 percent, far higher than the rate of inflation, but are likely to taper off. The West, particularly San Francisco, Silicon Valley and Seattle, is expected to experience significant rent growth above national averages, but lower than experienced in 2015. Cap rates nationally will remain around 5.8 percent to 6.1 percent, with core assets in core locations still commanding a 4 percent or lower cap rate. Transactional volume will likely stay at or around 2015 levels; however, it would not be surprising to see transactional volumes increase by 12 percent to 20 percent because of the record levels of capital raised that "need to be deployed."

In a time of geographic mobility, Airbnb, market volatility, shifting employment centers, rising immigrant populations and a muddle-through economy, an increasing number of apartment residents are becoming renters for a longer period of time. Renters by choice and renters by necessity will ensure demand for rental apartments. The key question: At what point does the capacity to pay fall below the rent levels needed to perform up to investors' expectations? Affordability will be a major issue in 2016 and for years to come.

In 2016, to guarantee success, relevance and competitive advantage, apartment owners and operators will need to:

1. Lock in long-term debt.
2. Consider the disposition of non-core assets and re-evaluate holdings in non-core locations.
3. Maximize brand differentiation.
4. Take steps to protect information from cyberattacks.
5. Continue to enhance the quality and array of resident services.
6. Take steps to know more about your residents.
7. Continue to upgrade and train exceptional talent.
8. Assure business continuity.
9. Deploy a robust social media strategy.
10. Adopt a long-term focus on investments, development and operations.

These findings are just a few of the many conclusions drawn from CEL & Associates, Inc. research and the recently completed National Apartment Association's 2016 Survey of Operating Income & Expenses in Rental Apartment Communities. This NAA-sponsored survey of nearly 1 million apartments nationwide, conducted by Los Angeles-based CEL & Associates Inc., again indicated that improving conditions for the rental housing market continue to be reflected in improvements to operating fundamentals.

NAA has completed its Survey of Operating Income & Expenses in Rental Apartment Communities for 2016, based on data for fiscal year 2015.

Major findings in this survey of the professionally managed rental apartment industry reflect the fluctuations and continued uncertainty of the U.S. economy. Overall net operating income in the market-rent segment of the rental apartment market rose by 1.5 percentage points to 61.0 percent in 2015, versus 59.5 percent in 2014; with a lower economic loss rate of 6.93 percent compared to 7.50 percent in 2014, because of a continued decline in vacancy and concessions. Total operating expenses declined by 1.3 percentage points. The economic state of subsidized properties in the survey also experienced variable results during the prior year.

A total of 3,892 properties containing 987,342 units are represented in this year's report. Data was reported for 3,187 market-rent properties containing 869,477 units and 705 subsidized properties containing 117,865 units. (Surveys with partial data or apparent problems that could not be resolved were not included.)

The report presents data from stratifications of garden and mid-rise/high-rise properties; it is further segmented by individual meter and recovery systems (e.g., submeter, RUBS, flat fee), and master-metered utilities, for the property's primary utility. Survey data is presented in three forms: Dollars per unit, dollars per square foot of rentable area and as a percentage of gross potential rent (GPR).

Economic Loss Rates by Regions

INDIVIDUALLY METERED AND RECOVERY SYSTEM MARKET-RENT GARDEN PROPERTIES

	2016
All	6.93%
Region I	7.55%
Region II	4.92%
Region III	7.37%
Region IV	6.83%
Region V	8.48%
Region VI	7.54%
Region VII	6.42%
Region VIII	5.94%
Region IX	6.89%
Region X	5.15%

Responses from garden properties with individual meter/recovery utilities represent 80.8 percent of the market-rent properties and 60.7 percent of the subsidized properties. Therefore, the analysis is focused primarily on the garden properties with individual meter/recovery utilities.

The market-rent segment generally has more units per property and greater floor area per unit than the subsidized segment. The average size (# of units) of individual meter/recovery, market-rent garden properties is 272 units in 2015 (262 in 2014), and 153 units in subsidized properties in 2015 (161 in 2014). Rentable floor area averaged 938 square feet (932 in 2014) for market-rent apartments and 894 square feet (892 in 2014) for the subsidized units.

The full report (available mid-August at www.naahq.org/16ies) contains detailed data summarized for ten geographic regions, and 75 metropolitan areas met the separate reporting criteria for market-rent properties. Sufficient numbers of subsidized properties were submitted for 25 metropolitan areas. The reporting for geographic regions was adjusted and expanded this year to coincide with NAA's ten regions. (See page 31.)

This report also includes results for all "other" properties at the state level located in metro areas that did not meet criteria for separate reporting. Non-metro area reporting also is included at the state level. Tables for these "other" market-rent properties are provided for 20 states and for subsidized properties in 15 states.

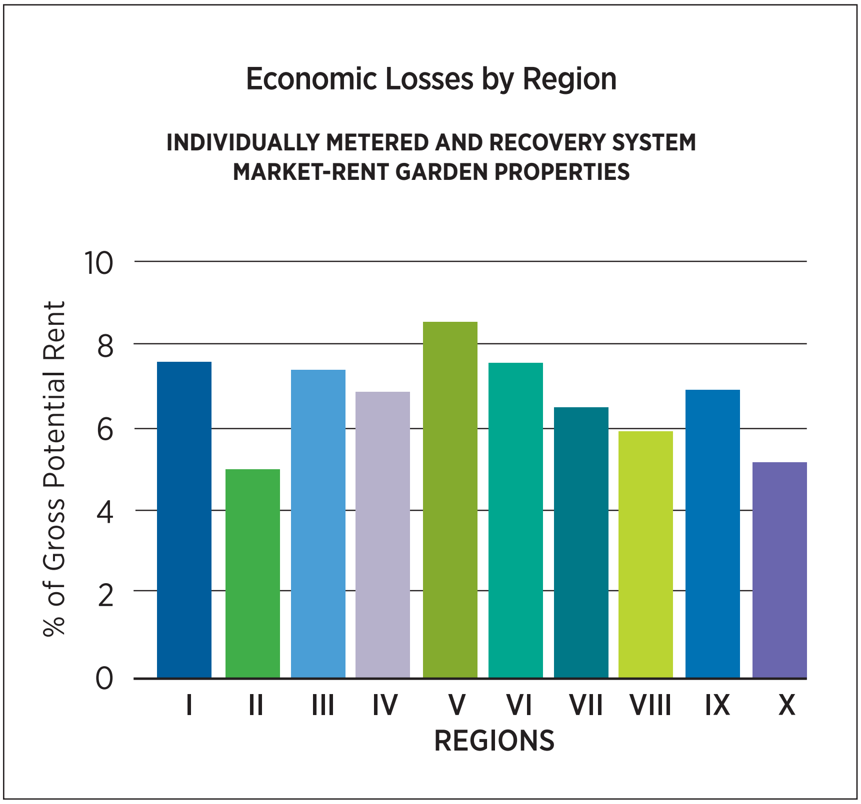
The NAA survey includes standard utilities and distinguishes expenses and recoveries by utility configuration to confirm that net utilities are reported. This level of standard utility expense more consistently represents utilities for comparison between properties. Not all properties are able to designate this detail. The additional utility reports represent those properties that offer utility detail for comparison.

Market-Rent Properties

Economic Losses. A standard measure of the health of the rental housing market is economic losses, defined as the difference between Gross Potential Rent (GPR) and rent revenue collected, expressed as a percentage of GPR. Included in the losses are revenues lost to physical vacancies, net uncollected rents and the value of rent concessions.

The economic loss rate in the survey for market-rent, individual meter/recovery garden properties continued its decline in this strong market to 6.93 percent in 2015 (compared to 7.50 percent in the data for 2014 and 8.29 percent in 2013). The highest economic losses overall were 13.99 percent, reported in the survey in 2004.

Net Operating Income and Revenues. NOI is a key measurement for evaluating the health of a property and the rental housing market. It is defined by the difference between total revenue collected and total operating expenses. NOI represents the gross cash available for debt service, capital expenditures and profits. NOI (as a percent of GPR) in the NAA survey improved



Apartment Operations Metrics

INDIVIDUALLY METERED AND RECOVERY SYSTEM MARKET-RENT GARDEN PROPERTIES

	PROPERTIES	UNITS	REVENUE/ PAYROLL	NET OPERATING INCOME/ PAYROLL	# UNITS/ FULL-TIME EMPLOYEES	# UNITS/ TOTAL EMPLOYEES	PAYROLL/ REVENUE	PAYROLL/ NET OPERATING INCOME
Less Than 100 Units	169	12,979	$9.09	$5.20	33.5	28.0	11.0%	19.2%
100 to 199 Units	623	94,154	$8.98	$5.26	39.1	35.0	11.1%	19.0%
200 to 299 Units	847	207,359	$9.72	$5.95	41.8	39.7	10.3%	16.8%
300 to 399 Units	548	185,561	$10.35	$6.48	45.6	43.9	9.7%	15.4%
400 to 499 Units	248	109,148	$10.43	$6.60	46.4	45.4	9.6%	15.2%
500 or More Units	140	90,287	$10.78	$6.80	49.2	48.1	9.3%	14.7%
Total	2,575	699,488	$10.00	$6.17	43.7	41.5	10.0%	16.2%

again in 2015, indicative of continued strong fundamentals in demand and pricing.

NOI measured as a percent of GPR for 2015 was 61.0 percent, improving by 1.5 percentage points (59.5 percent in 2014 and 59.2 percent in 2013). Regionally, NOIs in 2015 ranged from a high of 67.1 percent in the Region X (CA, HI) to a low of 56.6 percent in Region VI (AR, NM, TX).

Average NOIs for individual meter/recovery market-rent garden properties are presented on page 36.

Gross Potential Rent (GPR). GPR in the survey data tables is defined on a "look back" fiscal year basis. It is the sum of total rents of all occupied units at 2015 lease rates and all vacant units at 2015 market rents.

Average annual GPR in the survey increased by 5.9 percent in 2015 for garden properties with individual meter/recovery primary utilities. Average GPR was $12,561 per unit ($1,047 monthly) in this year's survey versus $11,857 per unit ($988 monthly) in 2014 and $11,280 per unit ($940 monthly) in 2013. On a per-square-foot basis, GPR was $13.39 ($1.12 per month) versus $12.72 ($1.06 per month) in 2014 and $12.19 ($1.02 per month) in 2013.

Median annual GPR for individual meter/recovery garden properties in the survey was $10,903 ($909 per month) versus $10,878 ($907 per month) in 2014 and $10,370 ($864 per month) in 2013.

Rent Revenue Collected. Annual rent revenue collected averaged $11,690 per individual meter/recovery garden property unit, up 6.59 percent from $10,967 in last year's survey and $10,345 in 2013. Measured on a per-square-foot basis (average size increased by 6 square feet), and average number of units (average increased by 10 units), rent revenue averaged $12.46 in 2015 versus $11.76 in 2014 and $11.18 in 2013.

Revenue Losses. Revenue losses averaged 6.93 percent of GPR in 2015 versus 7.50 percent of GPR in 2014 and 8.29 percent of GPR in 2013.

Vacancy losses for market-rent garden properties with individual meter/recovery utilities averaged 5.3 percent of GPR in the current survey ($669 per unit, $0.71 per square foot) versus 5.6 percent of GPR ($664 per unit, $0.71 per square foot) in 2014 and 5.9 percent of GPR ($663 per unit, $0.72 per square foot) in 2013.

Collection losses remained nearly the same, as percent of GPR, averaging 0.7 percent ($82 per unit, $0.09 per square foot) in comparison to 0.6 percent of GPR ($68 per unit, $0.07 per square foot) in 2014 and 0.6 percent of GPR ($73 per unit, $0.08 per square foot) in 2013.

Losses from rent concessions continued to decline by 0.4 percentage points to 0.9 percent of GPR ($118 per unit, $0.13 per square foot) in 2015 versus averaging 1.3 percent of GPR ($157 per unit, $0.17 per square foot) in 2014 and 1.8 percent of GPR ($199 per unit, $0.22 per square foot) in 2013.

Other Revenue Collected. Multifamily housing owners and service providers continue to create and offer additional revenue sources. There was a 0.4 percentage point decline to 5.7 percent as a percent of GPR this year. Other revenue collected from operating sources includes receipts from onsite laundries, cable, TV/Internet service, telephone systems, parking fees and other charges for services and amenities. These other operating revenues averaged $714 per unit ($0.76 per square foot) in 2015 versus $723 per unit ($0.78 per square foot) in 2014 and $718 per unit ($0.78 per square foot) in 2013 for individual meter/recovery garden properties reported in the survey.

Total Operating Expense. Total operating expenses, as a percent of GPR, declined by 1.3 percentage points in 2015. The total operating expenses represented 37.8 percent of GPR in 2015 versus 39.1 percent of GPR in 2014 and 38.9 percent of GPR in 2013. Total operating expenses for individual meter/recovery garden properties in the survey averaged $4,748 per unit ($5.06 per square foot) versus $4,637 per unit ($4.97 per square foot) in 2014 and $4,387 per unit ($4.74 per square foot) in 2013.

Operating expenses in the survey are collected for nine major categories: Salary and personnel costs; insurance; taxes (real estate and other directly related property only); standard utilities (net of any reimbursements from residents); management fees; general and administrative; marketing; contract services; and maintenance. (Non-recurring capital expenses are excluded and reported separately.)

There continues to be variation in the trends among individual categories of operating costs, some of which may be derived from differences in accounting policy regarding expense classification that the survey cannot further delineate.

Average property-related insurance costs decreased to $251 per unit ($0.27 per square foot) in 2015 versus $260 per unit ($0.28 per square foot) in 2014 and $253 per unit ($0.27 per square foot) in 2013.

Administrative costs (G&A) remained approximately the same at $248 per unit in 2015 versus $246 per unit in 2014, with $245 per unit in 2013.

Management fees reported $344 per unit (2.7 percent of GPR) in 2015 versus $355 per unit (3.0 percent of GPR) in 2014 and versus $329 per unit (2.9 percent of GPR) in 2013.

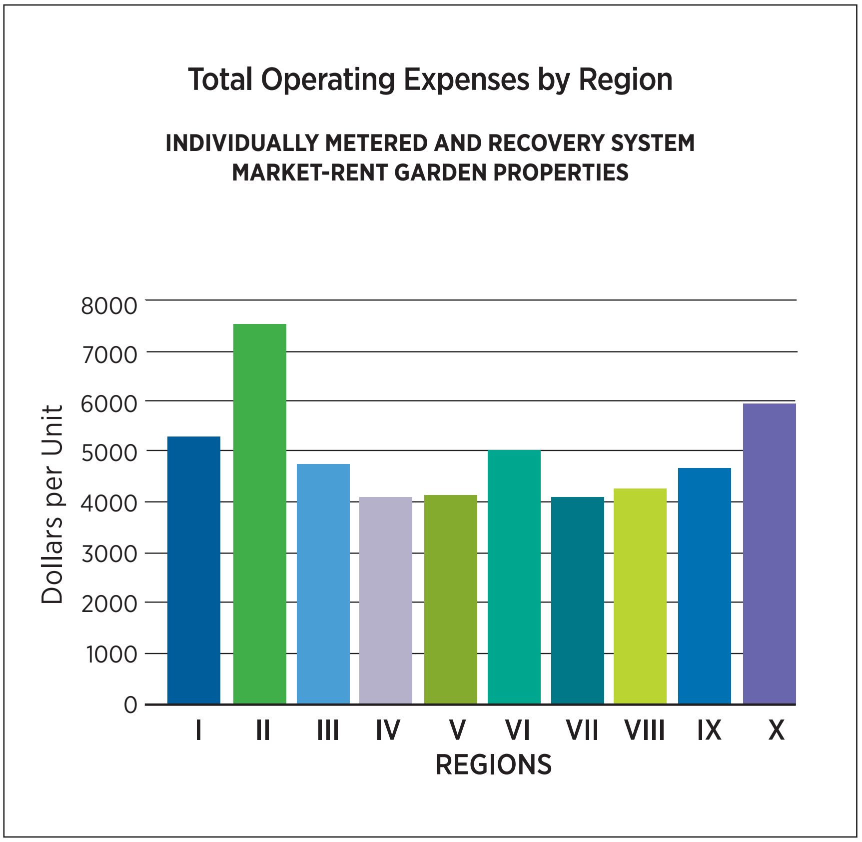
Marketing costs were $157 per unit or 1.2 percent of GPR in 2015 versus $160 per unit or 1.3 percent of GPR in 2014 and $152 per unit or 1.3 percent of GPR in 2013.

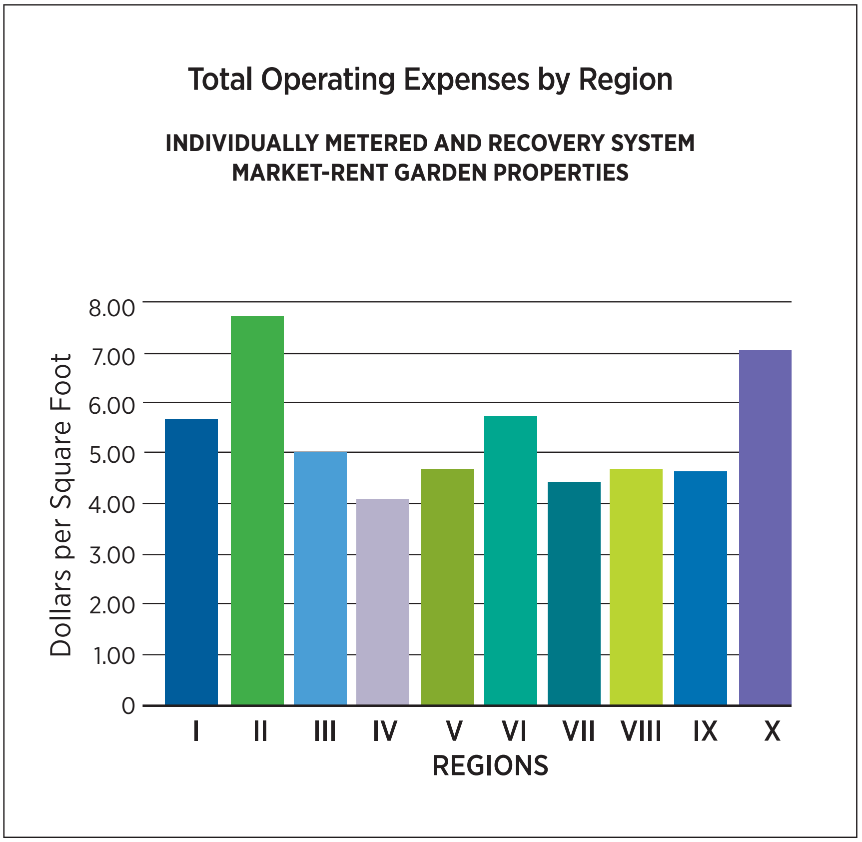
Maintenance costs were reported at $476 per unit in 2015 versus $419 per unit in 2014 and $434 per unit in 2013.

Contract services costs were reported at an average of $324 per unit in 2015 ($345 in 2014 and $296 in 2013).

Salaries were reported at $1,240 per unit in 2015 versus $1,236 per unit in 2014 and $1,178 per unit in 2013.

Turnover Rates. The overall turnover rate in the survey increased to 53 percent in 2015 (versus 51 percent in 2014). Turnover





had varied rates for all regions in 2015: ranging from 45 percent in Region II to 61 percent in Region V.

Age of Property. Operating expenses as a percentage of GPR ranged from 35.0 percent of GPR in properties less than five years old and rose to 39.3 percent of GPR for properties 20 or more years old. Generally, operating expenses decrease over the span of years per unit, while capital expenditures tend to increase as the building ages. In this year's survey, operating expenses were $5,482 per unit for those less than 5 years old and decreased to $4,543 per unit for properties 20 or more years old. Capital expenditures ranged from $319 to $1,372 per unit, generally increasing by age of property. Capital expenditures again increased overall in 2015 as deferred maintenance and market competition have required upgrades and repositioning to be competitive.

The highest average NOI as a percentage of GPR occurred in properties less than five years old at 63.8 percent. Measured in terms of dollars per unit, the low was $6,818 per unit in properties that are 20 or more years old and the high was $9,984 for properties less than 5 years old.

Economic losses tend to be the highest among the newest properties. However, this year, there was a tighter range from 6.32 percent to 7.32 percent.

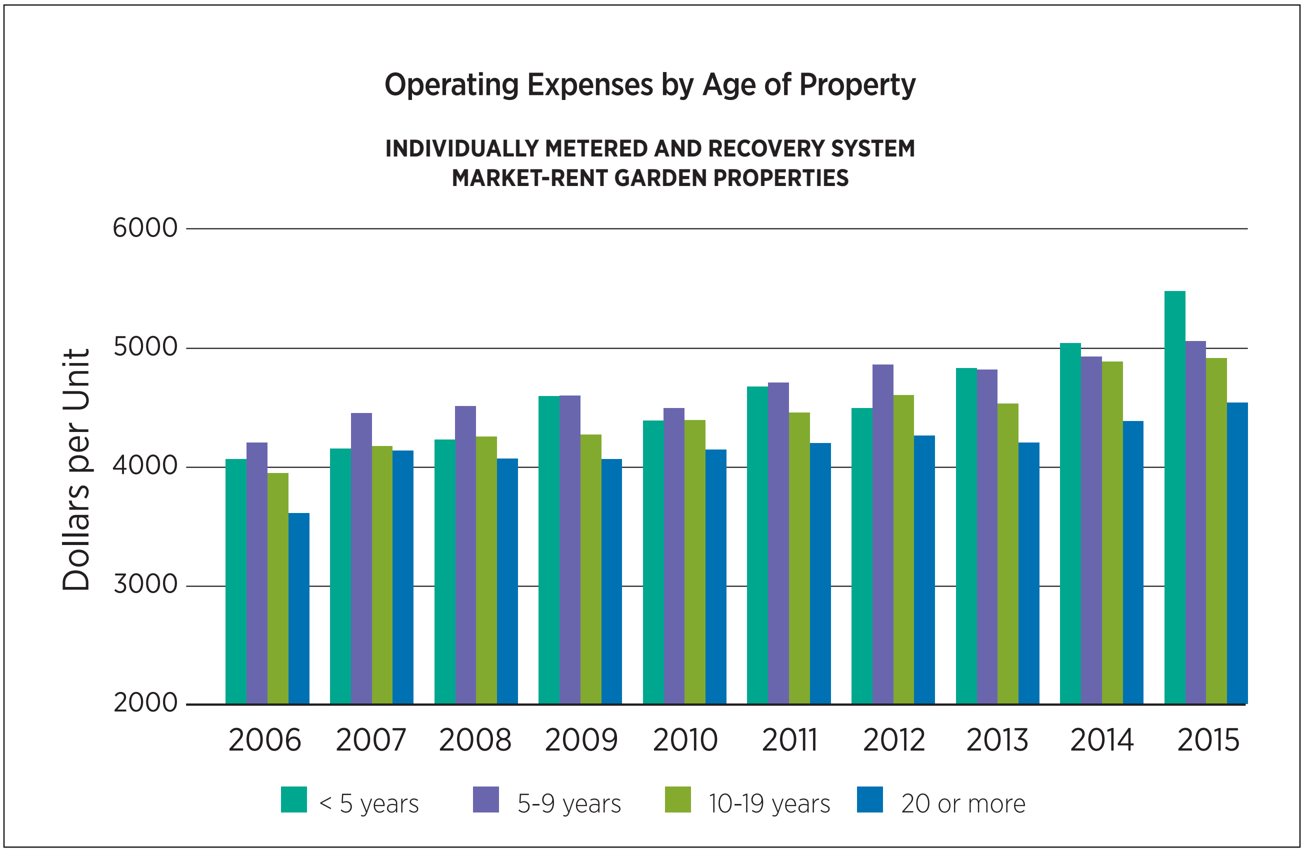
Age of property groupings again show distinct differences in the individual cost components of operating costs. The largest difference is in real estate-related property taxes and fees, varying from a high (average) of $2,134 per unit ($2.13 per square foot) in those properties that are less than 5 years old, to a low of $1,131 ($1.29 per square foot) for those aged 20 or more years.

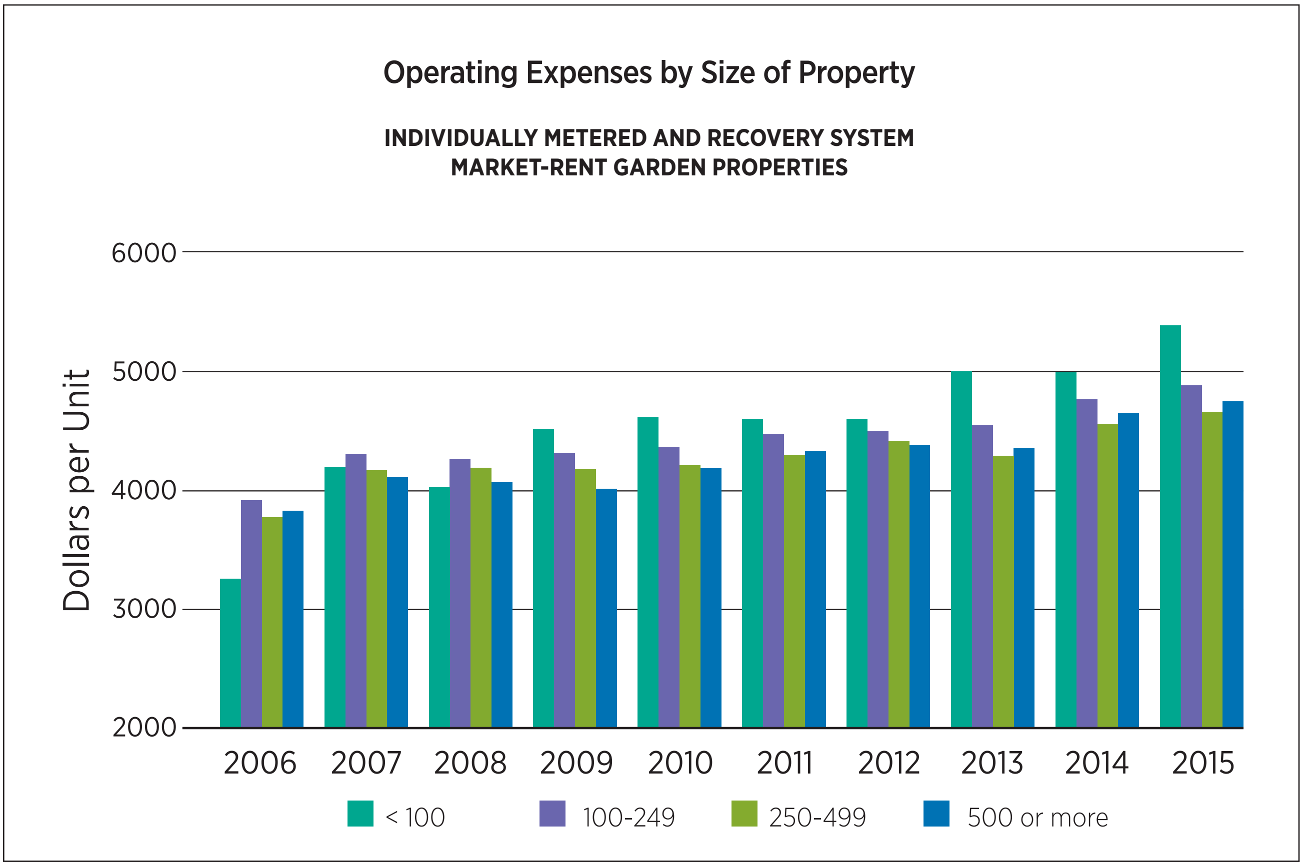
As expected, capital expenditures were significantly lower for the newest properties. They averaged $319 per unit ($0.32 per square foot) for properties less than 5 years old, compared to the average reported for properties 10 to 19 years old at $1,372 per unit ($1.36 per square foot) and for properties aged 20 or more years at $1,145 per unit ($1.30 per square foot).

Size of Property. Economies of scale in apartment property size are evident if operating costs decline as the size of properties increases.

Economies of scale did appear when total operating costs were measured on a percentage of gross potential rent basis, ranging from 42.3 percent of GPR in properties of less than 100 units to 36.4 percent in those containing 500 or more units. On a per-unit basis, operating costs across property sizes ranged from $5,387 (less than 100 units) to $4,661 per unit (250 to 499 units).

Economic losses varied based on property size. The highest was for properties with 500 or more units at 7.11 percent of GPR and the lowest for properties with fewer than 100 units at 6.00 percent.





Metro Area Operating Income & Expenses

Detailed tables in the full report are presented for 75 metropolitan areas reported in the survey. This is the only section of the report with metropolitan area data for garden and mid-rise/high-rise building properties, and is further segmented into those with utilities that are individual meter/recovery system or master metered. Care should be taken when reviewing the data for individual property types in metropolitan areas where the number of properties reported is small. Following are highlights of the metropolitan area data, focusing on garden properties with individual meter/recovery system primary utilities, and sorted based on dollars-per-unit, unless otherwise noted. (Additional per square foot data may be included for additional reference.)

■ NOI on a dollar-per-unit basis ranged from $15,038 ($18.21 per square foot) in the San Francisco-Oakland-Hayward, Calif., metro area to a low of $4,215 ($3.98 per square foot) in the Fayetteville, N.C., metro area. The Denver-Aurora-Lakewood, Colo., metro area had the highest NOI measured as a percent of GPR at 72.0 percent and Fayetteville, N.C., had the lowest at 45.3 percent.

■ GPR averages on a dollar-per-unit basis were the highest in the San Francisco-Oakland-Hayward, Calif., metro area at $23,354 ($28.28 per square foot), and the lowest at $8,318 per unit ($8.88 per square foot) was tabulated for properties reported from Winston-Salem, N.C. The San Francisco-Oakland-Hayward, Calif., metro area had the highest GPR measured on a dollar-per-square-foot basis at $28.28 and Huntsville, Ala., had the lowest at $8.56 per square foot.

■ Economic losses were lowest in the Santa Maria-Santa Barbara, Calif., and Reno, Nev., metro areas at 3.39 percent and 3.51 percent of GPR, respectively. Metro areas with the highest economic losses were Fayetteville, N.C., at 17.13 percent and Tulsa, Okla, at 13.94 percent.

■ Total operating costs' highs and lows can vary among metro areas based on which measure is selected. Properties reporting from the San Francisco-Oakland-Hayward, Calif., metro area had the highest operating costs based on a per-unit basis at $8,070 ($9.77 per square foot), followed by the Santa Maria-Santa Barbara, Calif., metro area at $7,519 per unit ($9.89 per square foot). A low of $3,151 per unit ($3.03 per square foot) was reported in the Huntsville, Ala., metro area, with $3,221 per unit ($3.69 per square foot) in the Albuquerque, N.M., metro area. The highest operating costs based on a per-square-foot basis, with a smaller average unit size, were Santa Maria-Santa Barbara, Calif., at $9.89 per square foot, and San Francisco-Oakland-Hayward, Calif., at $9.77 per square foot.

■ Real estate taxes remained high in many metro areas in 2015. The West Palm Beach-Boca Raton-Delray Beach, Fla., metro area had the highest real estate taxes per unit at $2,724; and the Fort Lauderdale-Pompano Beach-Deerfield Beach, Fla., metro area was second at $2,702 per unit. The lowest average was for properties located in Las Vegas-Henderson-Paradise, Nev., and Huntsville, Ala., metro areas at $506 and $540, respectively.

■ Insurance costs on a per-unit basis were the highest among the following areas, including several hurricane-prone metro areas. They were $848 per unit ($0.93 per square foot) in New Orleans-Metairie, La., and $501 ($0.46 per square foot) in the Fort Lauderdale-Pompano Beach-Deerfield Beach, Fla., metro area. They were lowest in the Tucson, Ariz., and Fayetteville, N.C., metro areas at $129 and $137 per unit ($0.14 and $0.13 per square foot), respectively.

■ Salaries and personnel costs were reported lowest in the Grand Rapids-Wyoming, Mich., metro area at $858 per unit ($0.93 per square foot) and the Santa Maria-Santa Barbara, Calif., metro area at $963 ($1.27 per square foot). The Philadelphia metro area had the highest average at $1,813 per unit ($2.03 per square foot) followed by $1,689 in the Anaheim-Santa Ana-Irvine, Calif., metro area ($1.96 per square foot).

■ West Palm Beach-Boca Raton-Delray Beach, Fla., and Fort Lauderdale-Pompano Beach-Deerfield Beach, Fla., had the largest units among the metro areas reported separately in this report with an average of 1,096 and 1,090 square feet of floor area per unit, respectively. Properties reporting located in the Santa Maria-Santa Barbara, Calif., and Stockton-Lodi, Calif., metros had the smallest, averaging 760 and 794 square feet per unit, respectively.

Subsidized Properties Income & Expenses

Operating Income & Expenses

Summary. Data was received for 705 low income subsidized properties containing 117,865 units. Garden properties with individual meter/recovery system standard utilities represent the largest subgroup of properties reporting, and analysis herein will be limited to this sector. Data tables are presented for 25 metropolitan areas in the full report that met the criteria for reporting. Subsidized garden apartment properties with individual meter/recovery utilities in the survey generally tend to have fewer units and less floor area than market-rent units. Responding properties contained an average of 153 units versus 272 units for market-rent properties of the same type. These subsidized properties had an average of 894 square feet of floor area versus 938 square feet reported for the market-rent properties in the 2015 survey.

Revenues. GPR averaged $10,995 per unit ($12.30 per square foot) annually in this year's survey versus $11,012 per unit ($12.35 per square foot) in 2014 and $9,824 per unit ($11.20 per square foot) in 2013. Rental revenues averaged $10,302 ($11.52 per square foot) versus $10,195 ($11.43 per square foot) in 2014 and $9,168 ($10.45 per square foot) in 2013. Other operating revenues averaged $464 per unit ($0.52 per square foot) in 2015 versus $450 per unit ($0.50 per square foot) in 2014, and $493 per unit ($0.56 per square foot) in 2013.

Operating Expenses. Subsidized properties reported in the survey had total operating costs averaging $5,056 per unit ($5.66 per square foot) in 2015 versus $5,357 per unit ($6.01 per square foot) in 2014 and $4,957 per unit ($5.65 per square foot) in 2013.

Net Operating Income. Subsidized properties reported in the survey had lower levels of NOI than the market-rent properties in all three measures. NOI for subsidized properties in the survey averaged 51.9 percent of GPR versus 61.0 percent for the market-rent properties. Other comparisons of subsidized NOI to market-rent were $5,710 versus $7,656 on a dollars-per-unit basis, and $6.39 versus $8.16 on a per-square-foot basis, respectively.

Economic Losses. Economic losses tend to be lower in subsidized properties with their lower rents and relatively tight supply; however, this year, with the continued improvements to market-rent economics, a 6.31 percent average rate was calculated for the subsidized individual meter/recovery garden properties and 6.93 percent for comparable market-rent units. The economic loss ratio in subsidized properties declined from last year's 7.42 percent.

Turnover Rates. Occupants of subsidized apartments have lower incomes and fewer housing choices in most local markets and are less likely to move. The turnover rate in individual meter/recovery subsidized units was 35 percent versus 53 percent for market-rent units.

Metrics. (Garden, Individually Metered/Recovery Properties)

To provide a better understanding of apartment operations, CEL has provided additional analysis in the form of ratios (metrics), which provide benchmarks of the relationship between key operating variables from survey participants. In the table on page 38, several operating metrics are presented, stratified by number of units per community. These include measures of the relationship between payroll (staffing) and revenue (top line) and income (NOI), shown as revenue (or income) dollars per dollar of payroll, or payroll as a percent of revenue or NOI, and the number of units supported by each full-time (and total) employee. These metrics should be used as a point of reference and guidelines for readers of this survey report, and not necessarily as a target or requirement to assure efficiency or operational policy.

Summary

As the U.S. continues to shift to a renter-based, sharing society (Airbnb, Uber, Zipcars, bicycle-sharing, Snapgoods, RelayRides, TaskRabbit, Zaarly and many others), the operating platforms and services of apartment owners and managers must adapt and be reflective of those changing societal norms.

The economic outlook for the U.S. in 2016 (GDP is expected to grow only 1.8 percent) and beyond is slow to modest at best. The perfect storm of a growing apartment rental population, stagnant household income, low workforce participation rate and the anemic full-time job creation will likely put pressure on rents. The shift to urban and urban-suburban locations, smaller unit sizes, more amenities and services and increasing demands for more technological features within apartment communities will pose recurring challenges to apartment companies nationwide. Rising resident expectations, the impact of disruptive technologies and an increasing level of challenging financing, construction pricing and protracted entitlement processes will require every apartment CEO and C-suite leaders to bring their "A Game."

Over the 2016–2017 period, owners and operators of apartment properties have much to be thankful for as well as a growing number of factors to be concerned about. While demand remains high, the ability to "afford" an apartment is becoming harder for many. While many apartment residents will generally select location over unit size, the growing number of renters who pay 40 percent to 50 percent or more of their income on rent could signal an emerging softness in the overall market. During the next 18 months, the average rent increase will be 100 bsp to 225 bsp below the increases enacted in late 2014 and 2015. However, the number of multifamily permits and starts on a seasonally adjusted basis will likely be below levels achieved in 2015.

Over the past 3 to 4 years, the apartment industry has been on a rocket-like trajectory, and there is a tendency to overlook the future. As Yogi Berra once said, "If you don't know where you are going you might wind up someplace else." Future challenges can be masked or avoided by financial success. Keeping an "internal score" and balancing rising resident expectations with rising operating costs and shifting rental patterns will be ongoing priorities for leaders. Apartment owners and operators need a vision and key strategies over the 2016-2017 period to achieve a strategic advantage. However, having and utilizing the proper benchmarks will be an ongoing key and measure of success. In 2016 and beyond, long-term success will require leadership, exceptional talent, aligned core values, a commitment to innovation, flexibility and access to capital. This NAA operating benchmark study is a valuable tool to enabling the realization of stakeholder expectations.

The apartment industry continues to be in great shape. In 2016 and beyond, the pace of consolidation combined with the emergence of new and very dynamic competitors and new technologies will continue to transform the apartment industry. Achieving success tomorrow requires one to stay focused, prioritize, grow initiatives and "get balanced." This NAA survey can be a cornerstone for shaping success today and preparing for the changes ahead.

Glossary of Terms

Administrative. Total monies spent on general and administrative items such as answering service, donations, mileage reimbursement, bank charges, legal/eviction charges, postage, telephone/fax/Internet charges, office supplies, resident functions, uniforms, credit reports, permits, membership dues, subscriptions, data processing, etc. Does not include any payroll-related expenses.

Capital Expenditures. Total monies spent on non-recurring capital expenditures such as asphalt/parking, concrete/masonry, water heaters, range/cook top/ovens, dishwashers, glass, blinds/draperies, sidewalks/curbing, vinyl, pool, new carpet, washers/dryers, club amenities, fitness equipment, etc. A zero on the line meant there were no capital expenditures.

Contract Services. Total monies spent on all contract services such as landscaping, security, snow removal, exterminator and other services provided on a contract basis.

GPR Residential. Total rents of all occupied units at 2015 lease rates and all vacant units at 2015 market rents (or fiscal year end).

Heating/Cooling Fuel. Type of fuel used in apartment units.

Insurance. Includes property hazard and liability and real property insurance and does not include health/payroll insurance.

Maintenance. Total monies spent on general maintenance, maintenance supplies and uniforms, minor painting/carpeting repairs, plumbing supplies and repairs, security gate repairs, keys/locks, minor roof/window repairs, HVAC repairs, cleaning supplies, etc. Does not include any payroll related expenses or non-recurring capital expenses. Contract services are reported separately.

Management Fees. Total fees paid to the management agent/company by the owner.

Marketing. Total monies spent on media advertising, including locator fees, apartment guides, signage, newsletter, Internet, marketing gifts/incentives (not rent concessions), model expense, promotions, etc.

Net Commercial Square Footage. Total rentable square feet of commercial floor space.

Net Rentable Residential Square Feet. Total rentable square feet of floor space in residential units only. Area reported includes only finished space inside four perimeter walls of each unit. Common areas are excluded.

Other Revenue. Total collections from laundry, vending, cable, deposit forfeitures, furniture, parking, amenity charges, etc. Does not include interest income or standard utility reimbursements (i.e., submeter, RUBS, flat fee). These standard utility reimbursements are reported separately and subtracted from gross utility expense.

Payroll Costs. Gross salaries and wages paid to employees assigned to the property in all departments. Includes payroll taxes, group health/life/disability insurance, 401(k), bonuses, leasing commissions, value of employee apartment allowance, workers' compensation, retirement contributions, overtime and other cash benefits.

Rent-Controlled Property. A property is subject to rent controls through local or state government regulations. This does not apply if rents are controlled through a government program that provides direct subsidies.

Rental Revenue Commercial. Total rent collections for commercial space after vacancy, administrative, bad debt and discount or concession losses.

Rental Revenue Residential. Total rent collections for residential units after vacancy, administrative, bad debt and discount or concession losses.

Revenue Losses to Collections. Amount of residential rents not received due to collection losses.

Revenue Losses to Concessions. Amounts of gross potential residential rents not received due to concessions.

Revenue Losses to Vacancies. Amount of rental income for residential units not collected because of vacancies and other use of units, such as models and offices.

Subsidized Property. A property has controlled rents through a government-subsidized program. (low-income housing).

Taxes. Total real estate and personal property taxes only. Does not include payroll or rendering fees related to property taxes or income taxes.

Tax-Exempt Bond or Housing-Credit Property. A property that has received tax-exempt bond financing and/or is a low-income tax credit property.

Total Operating Expenses. Sum of all operating costs. The sum of all expense categories must balance with this line, using total net utility expenses only. Does not include debt service or any one-time extraordinary costs.

Turnover. Number of apartment units in which residents moved out of the property during the 12-month reporting period.

Utilities. Total cost of all standard utilities and each listed type, net of any income reimbursements for or from residents (i.e., submeter, RUBS, flat fee or similar system).

Utility Configuration. Whether electric, gas, oil and water/sewer utilities to individual units in subject property are: Master Metered, Owner Paid; Master Metered with a Recovery System, Resident Paid (submeter, RUBS, flat fee); Individual Meter, Resident Paid. Report grouping is based on the configuration of the primary utility for the residents.

Christopher Lee, President & Chief Executive Officer of CEL & Associates Inc., is a Special Advisor to NAA. Special thanks to Janet Gora, Managing Director, CEL & Associates Inc., as project manager; and David Edwards, Joshua Dick and Julia Laffond of NAA for handling survey logistics.

Thank You To Our Participating Companies

NAA sends a special note of appreciation to the over 200 firms who donated their time to accumulate the data necessary to make this survey valuable. The following companies and their officers provided 20 properties or more for the 2016 Survey of Operating Income & Expenses in Rental Apartment Properties.

Adara Communities
Advanced Management Company
Aimco
ALCO Management
AMLI Residential
Beacon Communities LLC
Bell Partners Inc.
Berkshire Communities
Beztak Properties
BH Management Services
Blue Ridge Property Management
Buckingham Companies
Camden
Concierge Management Services
Cottonwood Residential
CWS Apartment Homes
DEI Communities
Drucker & Falk
ECI Management Corporation
Fogelman Management Group
Gables Residential
Ginkgo Residential LLC
Greystar
Holland Residential
Integral
JCM Partners
LCOR Incorporated
Legacy Partners Inc.
Lincoln Property Company
LumaCorp Inc.
MAA
Makowsky, Ringel Greenberg
MG Properties Group
Milestone Management
Monogram Residential Trust
MV Residential Property Management, Inc.
Nolan Real Estate Services
Olympus Property
Palms Associates
Pinnacle Property Management Services
Post Properties, Inc.
Prime Residential
Resource Real Estate
RMK Management Corporation
Scully Company
Shelter Properties LLC
Simpson Housing LLLP
Stout Management Company
The Dolben Company, Inc.
The JBG Companies
The Worthing Companies
Tribridge Residential
Van Metre Companies
Venterra Realty
Village Green Management Company
Waterton
WC Smith
Weinstein Properties
Western National Property Management