Johns Hopkins University - Carey Business School

# Development of Garden Apartments 

at Maiden Choice Lane, Catonsville, Maryland 21228

A Practicum Thesis submitted to Johns Hopkins University in conformity with the requirements for the degree of Master of Science in Real Estate.

By: Andrew W. Ingalls
Advisor: Mr. George Green
5/6/2010

## Contents

Executive Summary ..... 4
Site Analysis ..... 5
Site Description ..... 5
Current Ownership ..... 7
Surrounding Uses ..... 7
Topography ..... 8
Environmental ..... 8
Flood Plain ..... 9
Site Access ..... 9
Vicinity Access ..... 10
Basic Services ..... 10
Location Attributes ..... 11
Senior Living ..... 11
Medical Facilities ..... 11
University of Maryland, Baltimore County ..... 11
Nearby Amenities ..... 12
Zoning ..... 12
Dwelling Units ..... 13
Initial Impression. ..... 14
Market Analysis ..... 15
Urban Growth Model ..... 15
Market Area Delineation ..... 15
Demand ..... 17
Method of calculating demand ..... 17
UMBC - Forecasted Growth ..... 18
Supply Analysis ..... 19
UMBC Housing ..... 20
Proposed Projects ..... 21
Total Estimated Supply - 2014 ..... 21
Interaction of Supply \& Demand ..... 22
Demographics ..... 22
Absorption Rate ..... 22
Employment. ..... 22
Development Team ..... 23
Design Team. ..... 23
Business Team ..... 23
Building Team ..... 23
Development Program ..... 23
Unit Mix. ..... 23
Common Area Factor ..... 25
Project Schedule ..... 25
Construction. ..... 25
Parking ..... 27
Financial Analysis ..... 28
Inflation ..... 28
Expenses ..... 29
Capital Asset Pricing Model ..... 30
Risk Free Rate and Time Premium ..... 30
Beta ..... 30
Expected Return of the Market ..... 31
Discount Rate ..... 31
Adjustments to the Discount Rate ..... 31
Financing ..... 32
Valuation ..... 33
Recommendations ..... 33
References: ..... 34
Appendix A - Demographic DataAppendix B - Market DataAppendix C - Construction Data
Appendix D - Financial Data

## Executive Summary

While some of the areas surrounding the subject property have seen growth and redevelopment, the Catonsville area of Baltimore County, Maryland has seen little change over the past several decades. Although a few apartment communities have undergone renovations recently, no new communities have been developed for the market area in over 20 years. Several new for-sale residential developments have come on the market during this same period of time.

Perceiving an opportunity to capture some of the apartment rental market share by offering a new product in a possibly stagnant market, the subject property was analyzed for the purpose of developing market rate garden style rental apartment building. During the due diligence period, the following information regarding the subject property and market area was gathered.

## Summary of Findings

- Subject Property: Unnumbered property between 620 \& 716 Maiden Choice Lane
- Size:


### 7.603 acres; 1.687 buildable

- Zoning:
6.062 acres DR5.5; 1.541 acres OR-1
- Disposition: Currently owned by Maiden Choice Associates; offered for sale at beginning of due diligence period for $\$ 499,792$
- Market Area:

Primary 50,049 households, 11,694 rental units
Secondary
63,709 households, 19,517 rental units
Combined 113,758 households, 31,211 rental units

- 2014 Demand (est.) 1,068 units
- Project Description: 3-story, stick built walk up apartment building, 48 units
- Holding Period: 22 years (2 development, 20 operation)
- Project Cost:

| Land | \$ | 450,000 |
| :--- | ---: | ---: |
| Construction | $5,006,060$ |  |
| Total | $\$ 5,356,060$ |  |

- Stabilized NOI:
\$488,135
- Discount Rate:
11.03\%; 12.28\% terminal cap rate
- Unleveraged NPV:
$(\$ 1,572,589)$


## Development Recommendation:

Based on an analysis of current market, development of the subject property on Maiden Choice Lane as garden-style apartment is not recommended. Although a small, yet sufficient, amount of unmet demand is estimated for 2014, rental rates are not high enough to justify construction. A similar project may prove viable on a property with less complicated site improvements, however the proposed development will not work on the subject property.

## Site Analysis

## Site Description

The subject property is a 7.603 acre parcel of raw land located in the Catonsville neighborhood of Baltimore County, Maryland. A majority of the site is densely forested. The site has a varied topography; however, there are three substantially flat areas that would require minimal grading and are ideal for building. Other sections of the property have very steep grades; construction in these areas is likely costprohibitive.

This image shows the east side of the property, from the parking lot of the adjacent medical office buildings.


The site is located just inside the Baltimore Beltway on Maiden Choice Lane. Maiden Choice Lane forms the northern property boundary of the subject site.

Maiden Choice Lane is a two-lane road approximately 1.75 miles long. The major intersection along Maiden Choice Lane is Wilkens Avenue, approximately 0.4 miles south of the site. Heading north of the site 0.6 miles, Maiden Choice Lane continues on as South Paradise Avenue. Approximately 0.8 miles north of the site, S. Paradise Avenue intersects with Frederick Road. Both Frederick Road and Wilkens Avenue are exits off the Baltimore Beltway. This image shows the subject property from Maiden Choice Lane facing south.


There is an existing Storm Water Management pond located on the site. The pond was constructed to service the adjacent medical buildings. The pond currently has surplus capacity for approximately 90,000 square feet of additional paved or otherwise impervious surfaces.

Below are a satellite view of the subject property and an engineered drawing of the site.



## Current Ownership

The subject property is currently owned by Maiden Choice Associates, a Maryland general partnership. The property, along with the adjoining parcel of land to the east, was purchased in 1983 from the Dominican Sisters of the Perpetual Rosary. On the adjoining parcel is a building that was originally used by the Dominican Sisters as a convent. It is currently used as medical office space. Combined, the total area of the two parcels is approximately 14 acres.

At the onset of the due diligence period for this practicum, the subject property was offered for sale at a price of $\$ 499,792$. During the course of the investigation, the property was delisted. When consulted, the owner's agent stated that property was delisted only while modifications and improvements to the storm water management facility were completed. The owner still intends to the sell the property. It should also be noted that the subject property was originally offered for sale on June 10, 2009 at a price of $\$ 864,972$.

## Surrounding Uses

To the east of the site are three office buildings. The central building was originally used as a convent by the previous owners, the Dominican Sisters of the Perpetual Rosary. The convent was converted into medical office space.

There are also two newer structures on the site. Both of the new buildings are 3-story office condominium buildings; both buildings are also used primarily for medical office space.

To the west and northwest of the site is a small cluster of detached single family homes. To the south of the site are two residential communities. A townhouse community sits to the southeast of the site. A community of detached single family homes sits to the southwest of the site. These two developments to the south of the subject property, coupled with the mature tree growth on the site, serve as an excellent noise buffer from the Baltimore Beltway.

A portion of the site abuts McTavish Avenue to the northwest. McTavish Avenue is a very small county road used to access several residential homes. The road is a two lane undivided road with on-street parking. It originates at Maiden Choice Lane and runs approximately southwest 350' where it dead ends.

## Topography

The topography of the site plays considerably into its development potential. The reason this site has not been developed, while all of the surrounding land has, is likely due to the challenges created by the topography.

Within the site are three streams, two of which impede access to the bulk of the land. To access from the north or the west would require considerable grading, earth retention, and the construction of a bridge or culvert.

Steep slopes are also prevalent throughout the site. Areas in the southern and western quadrant of the site provide considerable impediments as a result.

Factoring in these constraints, two potential building sites have been identified. At the north end of the subject site, there is approximately 33,000 square feet of potentially buildable land. This area sits on Maiden Choice Lane and measures 220' x 150'. The demarcation line between the DR5.5 and OR-1 zones runs right through this area.

To the south of this site is a stream that divides this first site from the second, and more appealing of the two sites. Along the western edge of the subject site is an area $150^{\prime} \times 270^{\prime}$, about 40,500 square feet. This is the area that will be targeted for potential development.

This second building site will be the focus of the practicum.

## Environmental

An important consideration with the purchase of any property is the possibility of hazardous environmental conditions. An investigation into the presence of caustic building materials such as asbestos and lead paint is not necessary because the subject property is raw land.

An analysis of the Environmental Protection Agencies list of Superfund Sites revealed that there are none in the immediate vicinity, although there are two Superfund Sites within the market area.

Approximately 4.5 miles away, near the Patapsco River, is the site of Simkin Industries. Approximately 4 miles away, on the other side of Interstate 95 is the Capitol Assay Site. The following map provides the location of two Superfund sites.


Based on the distance between either of the Superfund site and the subject property, neither Superfund is of concern to the proposed development.

## Flood Plain

The subject property is not in or near any flood plain.

## Site Access

There are three potential means of access to the subject site: Maiden Choice Lane, McTavish Avenue, or through the adjacent medical office site to the east.

Accessing via Maiden Choice Lane would add considerable predevelopment and construction costs to the project. There is a streambed that runs along the site and feeds into the storm water management pond. In order to access the site via Maiden Choice Lane, a bridge or culvert would be required to span this streambed.

Similarly, accessing via McTavish Avenue would require substantial site development efforts. Another stream is located along the west side of the site and would need to be crossed in order to access from McTavish Avenue. Furthermore, this area of the site has areas of prohibitively steep slopes.

Alternatively, access to the site can be provided through the adjacent medical office park to the east of the site. Maiden Choice Associates granted an easement for vehicular access to the subject site by means of traveling across their adjacent site. Although the proposed development would not have a private entrance, the cost offset to the project would be sizable.

Although all of the specifics regarding the easement are not known, an assumption can be made based on previous concept plans submitted to Baltimore County for the subject property. Prior submissions have included development programs that require equal or greater amount of parking on the subject property with access being provided through the adjacent property. For the purposes of this practicum, it is assumed that the easement permits a sufficient increase of traffic for access to the proposed development. There is no risk of overburdening the easement, and therefore no risk of voiding the easement.

## Vicinity Access

The ease to which major traffic conduits can be accessed is a key strength of the site. 1 mile from the subject property is the on-ramp to the Baltimore Beltway, either via Wilkens Avenue to the south or Frederick Road to the north. Interstate 95 is only another mile from the site. Wilkens Avenue and Frederick Road also provide for direct access to downtown Baltimore. Commuters are only 5 miles for the Central Business District. From the property line, it is a short walk to an MTA commuter bus line. From there, commuters can easily connect with the Light Rail and MARC service.

## Basic Services

Basic municipal service levels are of paramount concern to any proposed development. In 1967, Baltimore County created the Urban Rural Demarcation Line (URDL). The purpose of the URDL is to establish an outside perimeter for the construction of public sewer and water infrastructure. The subject property is located within the perimeter of the (URDL), and is therefore eligible to connect to the public water and sewer infrastructure.

In addition to having access, it is essential that new development not place an extraordinary burden on the existing infrastructure, nor should a new development further compound the problems of areas that suffer from an already over-utilized infrastructure. Baltimore County can place building moratoria on areas where the level of services provided is deficient or of concern. According to the 2009 Baltimore County Basic Services Map set, the subject property is not located in any areas subject to development moratorium due to insufficient water or sewer capacity.

Similarly, Baltimore County can prevent development of projects that unnecessarily burden motor vehicle traffic. Northwest of the site are two intersections listed as failing on the 2009 County Basic Services Traffic Map.

The intersection of Frederick Road and Bloomsbury Road, approximately 1.6 miles from the subject site, received an ' $F$ '. The intersection of Frederick Road and South Rolling Road, 2.5 miles from the site,
received a ' $D$ '. The sphere of impact on traffic and congestion created by these two failing intersections does not permeate down to the subject property.

Eric Tombs of the Maryland State Highway Administration has been contacted to ascertain if any modifications or improvements to either of these intersections are currently planned. At this point, Mr. Tombs has not been able to identify any proposed work to these intersections.

Copies of the Basic Service Maps are available in Appendix C.

## Location Attributes

Within a 2 mile radius are three elements that are significant to the analysis of the subject property.

## Senior Living

Located on Maiden Choice Lane are three senior living communities.
Park View at Catonsville is a community managed by The Shelter Group. The community is located to the north of the site on Maiden Choice Lane. It offers apartment living with minimal services to middle income senior citizens.

St. Martin's Home is a community managed by The Little Sisters of the Poor. The community is located directly across Maiden Choice Lane from the subject site. It offers both apartment living and private rooms to 240 needy senior citizens.

Charlestown, an Erickson community, is by far the largest of the three senior living communities in the area. Charlestown, located 0.2 miles south of the site on the opposite side of Maiden Choice Lane, occupies approximately 110 acres. A wide variety of services and amenities are offered to Charlestown residents, including on-campus medical, dining, banking, and recreational facilities.

## Medical Facilities

The subject site is within close proximity to two major medical institutions. About 2 miles north on Wilkens Avenue is St. Agnes Hospital, a 300+ bed, full service teaching hospital. St. Agnes is in the midst of a $\$ 176$ million Campus Revitalization Project.

2 miles to the south of the subject site is the Spring Grove Hospital Center. Spring Grove is a 449-bed State owned facility that provides a variety of mental health services.

## University of Maryland, Baltimore County

Approximately 1.4 miles from the site is the University of Maryland, Baltimore County, or UMBC. UMBC is an accredited university and member of the University System of Maryland. Offering undergraduate, graduate, and doctoral studies, total enrollment for the fall 2009 semester was 12,870 . The university is situated on 530 suburban acres.

UMBC is an honors university offering programs for undergraduate, graduate, and doctoral students. The university offers 42 undergraduate majors, 41 minors, 33 master's degree programs, and 24 doctoral degree programs.

## Nearby Amenities

At the intersection of Maiden Choice Lane and Wilkens Avenue is the Wilkens Beltway Plaza, a community shopping center owned by Kimco Realty. The center, with a gross leasable area of about $80,000 \mathrm{SF}$, is anchored by a $55,000 \mathrm{SF}$ Giant grocery store. Other tenants include service, retail, and professional uses.

Below is a list of the other tenants in the Wilkens Beltway Plaza.

- Advanced Correction Chiropractic
- The Baltimore Endoscopy Association
- Betty Brite Cleansers
- Dr. Nalini Bhargava
- China Kitchen
- Digestive Disease Associates
- Erickson Retirement Community
- Dr. Moges Gebremariam
- Drs. Giardina \& Glubo
- H\&R Block
- Hair Cutter
- Ledo Pizza
- M\&T Bank
- Maryland Marketing
- Medstar Physicians Partners
- Nicholas Molinaro, D.D.S.
- Queen Nails
- Quest Diagnostics
- RadioShack
- Dr. Adrian Sanchez
- Subway
- Thomas W. Jones, M.D.
- Unlimited Solutions
- Wilkens Liquors

Kimco reported a total of 23,749 square feet of space across 11 suites currently available in the Wilkens Beltway Plaza.

## Zoning

The subject property is currently split zoned; 6.062 acres are zoned DR5.5, the remaining 1.541 acres of land zoned OR-1.

DR5.5 is a residential classification in the Baltimore County Zoning Regulation. By rights, the DR5.5 classification permits development up to 5.5 density units per acre. Design constraints stipulated by the DR5.5 classification include a floor-area ratio of 0.50 , maximum building height of 50 feet, and various building setback requirements.

The OR-1 classification is based on DR5.5, with two key differences. First, the design constraints for OR-1 are identical to DR5.5 except for a maximum building height of 60 feet. Second, in addition to the residential uses, Class $A$ and $B$ office space is permitted under OR-1.

The map below shows the Baltimore County Zoning Map. In black overlay is a rough outline of the subject property.


Baltimore County approaches zoning changes two different ways. Major changes in zoning are addressed once every four years. The next instance of this comprehensive rezoning process is in 2012. Requests for major changes are submitted in the beginning of the year. The entire process, from initial submission to final decision, typically takes 9 to 12 months.

The country also has a procedure that allows for minor zoning changes. This process is available to developers in the interim between comprehensive zoning years. Although it depends on the specifics of the requested change to zoning, the process for a minor change typically takes from 6 to 12 months to complete.

## Dwelling Units

Under the Baltimore County Zoning Regulation, the number of residential units available for development is a function of the proposed unit type. The following chart summarizes how Baltimore County allocates dwelling units.

| Residential Unit Type | Dwelling Units |
| :--- | :--- |
| Studio | 0.50 |
| 1 Bedroom | 0.75 |
| 2 Bedrooms | 1.00 |
| 3+ Bedrooms | 1.50 |

By rights, the 7.603 acre subject property is entitled to a total of 41.8 dwelling units. The potential unit mix for residential development ranges from (83) studios to (27) 3+ bedroom apartments.

## Initial Impression

When considering the subject property for potential development, a quick survey of the site, the surrounding land uses, and the existing entitlements resulted in three observations. First, the topography of the site is a constraining factor, and probably the primary reason the site has not yet been developed. Second, UMBC will play a considerable role in this, or any future development in the area. Third, the site is split zoned between DR5.5 and OR-1, with approximately $80 \%$ of the area currently zoned DR5.5.

Taking into account these observations, as well as the current economic climate and real estate market, a multifamily rental housing development is the proposed use for the subject property, and will be the focus of this practicum.

Although the OR-1 land use may be more valuable on a per square foot basis than DR5.5, the cost and risks associated with rezoning of the entire property were the deciding factors for moving ahead with the analysis for a residential land use.

## Market Analysis

## Urban Growth Model

The sector model is the most suited to describe the urban growth pattern that influences the market area for the subject property.

## Market Area Delineation

Baltimore City can be divided into 5 very recognizable sectors: north, northeast, northwest, southeast, and southwest. These sectors are carved out by the major transportation thoroughfares radiating from the center of the city. Socio-economic trends have also developed along these sectors.

The market area for the subject property is patterned based on the existence of these sectors, and their continued permeation out into the surrounding counties. Working from this idea, primary and secondary market areas are established.

Maps and demographic data were obtained through the Policy Map online geographic information system. The boundary lines for the primary and secondary market areas were established by census tracts that fell within the market areas.

The primary market area, shown below, is bound to the north by Interstate 70, to the west by the Patapsco River, to the south by I-895, and to the east by Gwynn's Falls Park. The Patapsco River also serves as the boundary line between Baltimore and Howard Counties.


The combined primary and secondary market areas are shown in the map below. The application of the sector model of urban growth is far more evident in the secondary market area than it is in the primary. Here the southwest sector is far better defined. The market area originates in Baltimore City and radiates out south and west. It continues out to the point where it can be said certainty that the market area borders on, or even encroaches on, another unique market.


For example, along the eastern border of the market area, there are two very identifiable factors that insist on the boundary. Within the city, there is an east / west dichotomy that exists. South of the city limits, in Baltimore and Anne Arundel Counties, the east side of those areas is situated on the Chesapeake Bay and Patapsco River.

Residents chose to live there due to the proximity to the water. Many of the residents are involved in recreational water sports activities or are professional watermen who make their living harvesting crabs, oysters, etc.

Similarly to the south and west or the market area, another psychographic factor comes into play. Along the Patapsco River there is a very minimal presence of people. For being so close to Baltimore city, it becomes very rural. The people who chose to live there do so for many reasons.

Finally, to the north, there is a strong division created by Interstate 70. While the neighborhoods to the north and south of I-70 are similar, as it was mentioned earlier, Baltimore has developed in sectors. To the north of I-70, particularly outside the Beltway, there are different demographic features and considerations that should be made for people living there.

Residents in Baltimore City and the surrounding counties identify with, and choose to reside in, a particular sector. The movements of residents to better housing options tend remain within the chosen sector.

## Demand

The following chart summarizes the data relevant for the calculation of demand in the primary and secondary market.

|  | Primary | Secondary | Combined |
| :--- | :--- | :--- | :--- |
| Population - '09 | 129,367 | 161,435 | 290,802 |
| Households - '09 | 50,049 | 63,709 | 113,758 |
| Home Ownership - '09 | 32,477 | 36,846 | 69,323 |
| Homeownership Rate - '09 | 0.649 | 0.578 | 0.609 |
| Rental Units - '09 | 11,694 | 19,517 | 31,211 |
| Average Household Size - '09 | 2.58 | 2.53 | 2.56 |
| Population - '14 (est.) | 128,880 | 167,959 | 296,839 |
| Households - '14 (est.) | 49,861 | 66,284 | 116,120 |

## Method of calculating demand

With the market area delineated, data regarding population size, household formation, and homeownership rate (housing tenure) were gathered from the U.S. Census and Claritas, Inc., by way of Policy Map.

By dividing the population in 2009 by the number of households in 2009, an average household size for each market area is calculated.

```
2009 Population ! 2009 Households = Average Household Size
    129,367\div50,049 = 2.58 (Primary)
    161,435\div63,709 = 2.53 (Secondary)
    290,802\div113,758=2.56 (Combined)
```

The forecasted 2014 population is divided by the average household size to determine the 2014 forecasted number of household for the market area.

```
2014 Population % Average Household Size = 2014 Households
    128,880\div2.58=49,953 (Primary)
    167,959\div2.53=66,387 (Secondary)
    296,839\div2.56=115,952 (Combined)
```

The 2009 homeownership rate is applied to the 2014 forecasted number of households to determine the 2014 forecasted number of households to own their own home.
2014 Households $\times 2009$ Homeownership Rate $=2014$ Homeowners

| $49,953 \times 0.649=32,419$ | (Primary) |
| :--- | :--- |
| $66,387 \times 0.578=38,371$ | (Secondary) |
| $115,952 \times 0.609=70,614$ | (Combined) |

Deducting the 2014 forecasted number of households to own their own home from the 2014 forecasted total number of households results in the 2014 forecasted number of households to rent their home.

```
2014 Households - 2014 Homeowners = 2014 Renters
    49,953-32,419 = 17,534 (Primary)
    66,387-38,371 = 28,016 (Secondary)
    115,952-70,614 = 45,338 (Combined)
```

The same operation is performed to determine the total number of household in 2009 that rent their homes.

```
2009 Households - 2009 Homeowners = 2009 Renters
    50,049-32,477 = 17,572 (Primary)
    \(63,709-36,846=26,863 \quad\) (Secondary)
    113,758-69,323 \(=44,435 \quad\) (Combined)
```

The difference between the forecasted number of households that will rent their homes and the current number of households that will rent their homes is the forecasted new demand for rental housing.

| 2014 Renters -2009 Renters $=2014$ | New Demand |  |
| ---: | :--- | ---: |
| $17,534-17,572$ | $=(38)$ | (Primary) |
| $28,016-26,863$ | $=1,153$ | (Secondary) |
| $45,338-44,435$ | $=903$ | (Combined) |

Using this analysis, the forecasted new demand to enter the market area between now and 2014 is between 903 and 1,115 . One problem that exists with this method of analysis is the apparent disconnect in results, depending on whether Primary and Secondary market information is combined before or after the calculations are preformed. For the purposes of this practicum 1,009, the average of the two figures, will be used for further analysis.

Despite this disconnect, forecasted demand was calculated using this method because it relies on only two assumptions, that the average household size and the rate of homeownership will both remain constant over the next five years.

## UMBC - Forecasted Growth

Conversations with members of the UMBC staff generated a substantial amount of information.

John Wichser, Associate Director of Facilities for Residential Life, was able to shed a great deal of light on the relationship between supply and demand for housing on campus. The following information was gleaned from conversation with Mr. Wichser.

- Demand for on-campus has remained at constant levels over the past several years, even during the recession.
- At the beginning of each semester, the waitlist for on-campus housing is typically 200-250 students deep.
- The university intends to increase total enrollment from 12,870 to 17,000 over the next several years.
- This summer the university is breaking ground on a new 200 bed addition to one of the residential facilities.
- $75 \%$ of the freshmen class is guaranteed on-campus housing.

Katie Boone, Director of Residential Life, confirmed a projected growth of $2 \%$. Based on current enrollment, this project has enrollment growing at approximately 250 students per year.

Assuming the university's projected growth rate is accurate, the waitlist for campus housing will increase by 5 students per year, to 275 by 2014.

## Supply Analysis

Data regarding the total number of competitive rental units in the market area was provided by Claritas, Inc., through Policy Map. According to the data, there are 11,694 units in small and large apartment buildings in the primary market area, and 19,517 units in the secondary market area, for a total of 31,211 units.

A survey of existing properties in the primary and secondary market areas was conducted. A total of nine properties in the immediate vicinity provided information that is useful for this practicum. The object of the survey was to collect information on unit size and mix, current rental rates, rent concessions, and amenities.

The following chart summarizes the information regarding unit size.

| Unit Size (SF) |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Eff. | 1 BR | 2 BR |
| Howard Crossing |  | 755 | 922 |
| Montrose Manor |  | 700 | 1,035 |
| Old Orchard | 760 | 925 |  |
| Caton House | 1,000 | 1,200 |  |
| Shade Tree Trace | 738 | 950 |  |
| Courts of Nunnery Lane |  |  | 650 |
| Westerlee |  | 950 | 1,014 |
| Cedar Run | 347 | 659 | 742 |
| Mount Ridge |  | 677 | 865 |
| Average | 347 | 780 | 923 |

This image shows the location of the comparable properties, relative to the subject property.


The entirety of the information gathered from the market survey in included in Appendix B - Market Data.

## UMBC Housing

UMBC offers three housing options for students; dormitories, suites and apartments. The following chart provides a breakdown of the university owned or affiliated housing facilities.

| Community | Housing Style | Year Built | Capacity |
| :--- | :--- | :--- | :--- |
| Chesapeake | Dorm | 1971 | 309 |
| Patapsco | Dorm | 1972 | 340 |
| Potomac | Dorm | 1992 | 350 |
| Susquehanna | Dorm | 1970 | 309 |
| Erickson | Suites | 2000 | 447 |
| Harbor | Suites | 2002 | 511 |
| Hillside | Apt. | 1987 | 328 |
| Terrace | Apt. | 1983 | 309 |
| West Hill | Apt. | 1980 | 284 |
| Walker Avenue | Apt. | 2003 | 582 |
|  |  |  | 3,769 |

One important note regarding the existing housing supply is that the Walker Avenue Apartments are not university owned but rather a public/private partnership. The property is owned by the Maryland Economic Development Corporation (MEDCO) and managed and operated by Capstone Management.

## Proposed Projects

An important consideration when testing the supply and demand for a project is proposed competitive projects. Dennis Wertz of the Baltimore County Office of Planning identified only two new multi-family projects in the area.

The first project, Gonzalez at St. Agnes, is a single apartment building consisting of 16 two-bedroom market rate rental units. It is located at 1301 St. Agnes Lane. This project is currently in the planning and approval phase.

The second project, Patapsco Overlook, is an age restricted planned unit development consisting of 80 condo units across 5 buildings. The project is limited to people 55 and older. The project is being built by J. Kirby Development. Construction of the project is currently underway. However, because the project is age restricted, it will not be factored into the supply analysis.

Conversations with representatives from the Howard County and Anne Arundel County Planning Departments revealed that no multi-family rental projects have been submitted recently, nor are any currently in the approval and review process.

The University of Maryland, Baltimore County is breaking ground the summer of 2010 on a 250 bed expansion to their Patapsco dormitory. UMBC is planning a second dorm expansion; however the university will not break ground on that project for another 5 years.

Total Estimated Supply - 2014

Combining the existing rental supply of 31,211 units in the primary and secondary market areas, 3,769 units currently available to UMBC students, 16 units expected to be completed at the 1301 St. Agnes Lane project, and 200 new units for UMBC students, the estimated supply of rental housing in the
primary and secondary market areas is expected to reach 35,196 units by 2014. Of that total, 31,227 will be market rate units and 3,969 will be reserved for UMBC students.

## Interaction of Supply \& Demand

For the purposes of this analysis, two assumptions will be made. First, the existing apartment rental market is in equilibrium. Second, any student waitlisted for university housing will seek rental housing in the primary or secondary market.

By 2014, demand for rental apartments in the market area is expected to increase by 1,009 units, while only 16 new units are expected to be available. Furthermore, growth at UMBC will add increase the waitlist for campus housing to 275 units while only adding 200.

By 2014, a total of demand for rental apartments will exceed supply by 1,068 units.

## Demographics

Appendix A contains the Policy Map reports which include demographic information for the primary and secondary market areas, as well as Baltimore City and the surrounding counties.

## Absorption Rate

The issue of unit absorption for the subject project is difficult to ascertain due to the fact that no new products have entered the market are in over 25 years. For the purposes of this analysis, it will be assumed that units will be leased at a rate of 6 per month. It will take the project 8 months to reach a stabilized level of occupancy.

## Employment

Within a few miles of the site are several major employment centers for the area.

A short distance west on Wilkens Avenue is the University of Maryland, Baltimore County. UMBC employs 739 faculty and 1,128 staff. With the proposed $2 \%$ annual growth for the university, these employment figures should increase accordingly.

A few miles east on Wilkens Avenue is St. Agnes Hospital. St. Agnes employs 800 physicians and 5,364 staff. The hospital is currently undergoing a facelift and expansion. A new patient tower is currently under construction. The expansion, however, is not expected to add a significant number of jobs; the hospital has not added any services or capacity, they have merely switch for 2 to 1 patient room.

## Development Team

## Design Team

The responsibilities of the design team include:

- Identify appropriate building program based on project requirements
- Develop appropriate building \& site design
- Prepare construction documents and drawings
- Coordinate permitting and approval process
- Assist with IFB distribution and bid review
- Monitor and inspect contractor's performance
- Review and Approve contractor payment requests
- Generate "Certificate of Substantial Completion"

The design team will be led by the project architect. Other members of the design team include civil, electrical, landscape, mechanical, and structural engineers.

## Business Team

The Members of the business team will include the project accountant, lenders, marketing and leasing agent, property management, and legal counsel. The business team will be tasked with the efficient operation of the subject property.

## Building Team

The building team will be led by the general contractor. The primary responsibility of the building team is the safe construction of the project as contractually agreed upon.

## Development Program

## Unit Mix

Several important lessons regarding unit mix and demand for different types of spaces was gleaned from the market analysis. During conversation with leasing agents for the various competitive properties, they disclosed that the unit types highest in demand, and most common, are 1-bedroom / 1bath and 2-bedrooms / 2-baths. Only one of the developments surveyed, the Courts of Nunnery Lane, did not offer 1-bedroom units.

Of the developments surveyed, none had any units with 3 bedrooms. Efficiency or studio apartments were only available at one of the developments surveyed, Cedar Run at the Timbers.

Regarding the rental rates for the various unit types, one trend exists. As expected, the cost for rental apartments, on a per square foot basis, increases as the amount of space leased in a transaction
decreases. Simply put, a smaller apartment leases for more, per square foot, than a larger apartment. The following table summarizes the observations of each of the nine properties surveyed.

|  | Unit Size (SF) |  |  | Monthly Rent (\$ / SF) |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Eff. | $\mathbf{1}$ BR | $\mathbf{2}$ BR | Eff. | $\mathbf{1}$ BR | $\mathbf{2 ~ B R ~}$ |
| Howard Crossing |  | 755 | 922 |  | 1.21 | 1.33 |
| Montrose Manor |  | 700 | 1,035 |  | 1.66 | 1.36 |
| Old Orchard | 760 | 925 |  | 1.45 | 1.22 |  |
| Caton House | 1,000 | 1,200 |  | 1.05 | 1.00 |  |
| Shade Tree Trace | 738 | 950 |  | 1.31 | 1.21 |  |
| Courts of Nunnery Lane |  |  | 650 |  |  | 1.11 |
| Westerlee |  | 950 | 1,014 |  | 1.14 | 1.18 |
| Cedar Run |  | 659 | 742 | 2.07 | 1.34 | 1.33 |
| Mount Ridge |  | 677 | 865 |  | 1.15 | 1.07 |
| Average | 347 | 780 | 923 | $\$ 2.07$ | $\$ 1.29$ | $\$ 1.20$ |

Based on the information gleaned from the survey, three apartment types will be offered: Studios, 1bedroom / 1-bathroom, and 2-bedroom / 2-bathroom. All of the products in the area were at least 26 years old, and as a result, are slightly out of date is it relates to consumer demand. For the subject development, each unit type will be sized about $10 \%$ larger to be more in line with current consumer demand.

Of the apartments surveyed, only 4 managers were willing to discuss the unit mix of their properties.
The challenge when coming up with the correct unit mix is balancing the tradeoffs between the various unit types. Ultimately, a decision must be made as far as what is more important, dollars per square foot or dollars per transaction. Dollar amount per transaction can also be thought of as dollars per lease signed. Unfortunately, the two metrics seem to be inversely correlated. Studio apartments bring in the highest dollar amount per square foot, but the lowest dollar amount per transaction.

The decided upon unit mix for the project is described in this following chart.

| Unit Type | Quantity | Size (SF) | Extension |
| :--- | :--- | :--- | :--- |
| Studio | 6 | 380 | 2,280 |
| 1 Bedroom / 1 Bathroom | 14 | 860 | 12,040 |
| 2 Bedroom / 2 Bathroom | 28 | 1,015 | 28,420 |
| Total | 48 Units |  | 42,740 SF |

## Common Area Factor

In any multitenant building, additional building area must be constructed for circulation, common areas, maintenance, and administrative uses. Based on observations and measurements taken of other similar buildings in the market area, a ratio of 0.18 SF of common area / 1 SF of rentable area is applicable for this analysis.

Applying the ratio of 0.18 SF of common area / 1 SF of rentable area to the above calculated total rentable apartment area of $42,740 \mathrm{SF}$, an additional $7,693 \mathrm{SF}$ of leasing office, maintenance, trash, storage, and circulation area will be included in the total building area. The gross building area for the subject project is $50,433 \mathrm{SF}$.

## Project Schedule

A vital part of forecasting is the accurate projection of a project schedule. The nature of this, or any, development of raw land involves a large number of variables. Fortunately for this project, no rezoning or variances will be necessary, as this is frequently a source for risk in a project. The following Gantt chart summarizes the major milestones in the development schedule for the proposed project.

$|$| ID | Name | Start | Finish |
| :--- | :--- | ---: | ---: |
|  |  |  |  |
| 10 | Due Diligence | $1 / 1 / 2010$ | $6 / 30 / 2010$ |
| 15 | Presentation | $5 / 6 / 2010$ | $5 / 6 / 2010$ |
| 20 | Fund Raising | $7 / 1 / 2010$ | $12 / 31 / 2010$ |
| 25 | Land Purchase | $1 / 1 / 2011$ | $1 / 1 / 2011$ |
| 30 | Design | $1 / 1 / 2011$ | $6 / 30 / 2011$ |
| 40 | Submission and Approval | $7 / 1 / 2011$ | $6 / 30 / 2012$ |
| 50 | Construction | $7 / 1 / 2012$ | $6 / 30 / 2013$ |
| 60 | Leasing | $3 / 15 / 2013$ | $10 / 15 / 2013$ |
| 70 | Project Stabilization | $10 / 15 / 2013$ | $10 / 15 / 2013$ |


| 2010 |  |  |  | 2011 |  |  |  | 2012 |  |  |  | 2013 |  |  |  | 2014 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan | Apr | Jul | Oct | Jan | Apr | Jul | Oct | Jan | Apr | Jul | Oct | Jan | Apr | Jul | Oct | Jan | Apr | Jul |

## Construction

As with any piece of raw land, development of the subject property will require certain site improvements prior to constructing of any building. For the purposes of this discussion on construction, unless stated otherwise, the term "site" refers only to the area on the east side of the property that will be built upon.

The first order of business is clearing and grubbing the site of vegetation. Because a majority of the entire property will not be developed, a majority of the mature vegetation will remain intact, preserving one of the site's few strengths. Following the necessary clearing \& grubbing, the site will be rough graded to approximate finished elevations.

Based on an initial examination of engineered drawings showing topography, a minimal amount of soil will have to be cut prior to the reaching approximate finished elevations. What soil is disturbed can remain on-site and may be used for backfill, although it may need to stock piled on the portion of the property accessed via Maiden Choice Lane. This will require minimal hauling fees, far less than if the soil had to be disposed of off-site.

Sewer, water, gas, electric, telephone, and internet connections will be made through the adjacent office park to the east and carried up above the finished foundation elevation. All pipe and conduit for exterior site fixtures will also be placed at this time. Following the completion of all underground utility work, the curb \& gutter and sidewalks will be formed and poured. All other site concrete work, such as light pole bases, will also be poured at this point.

Once the building envelope is contained by curb and gutter, topsoil and grass seed can be placed on any disturbed area. Engineered fill will be placed and compacted in the areas to the paved, followed by the base course of asphalt. The surface course of asphalt and line striping will not be placed until after the building is fully constructed; all of the truck and heavy equipment traffic would surely damage the surface course if it was put down any sooner.

Due to the topography of the subject property there are several issues that will need to be addressed in beyond standard site improvements. While the building site is substantially flat, immediately to the west and south are fairly steep slopes that are cause for concern. Engineered retaining walls will be needed to preserve the integrity of the building site.

The levels of finishes and amenities available in the market area, especially the primary market, are significantly below luxury. And although a few of the properties surveyed had been renovated during the past decade, many properties are close to 60 years old. The newest development found within the market area was built in 1986. Consideration of what comparable properties are offering to tenants certainly was factored into the design of the building. Moderate level finishes were selected to separate the subject property from the existing competitive properties, while being realistic what the potential tenant is looking for and can afford.

Utilizing Reed Construction Data's online database CostWorks, an estimate for the design and construction was prepared. Assuming the final product is a 3-story walk up, garden style apartment, stick built wrapped with simulated brick panels would have hard cost of $\$ 3,758,590$; additional charges for Architect and Engineer's Fees of $\$ 375,879$ and General Contractor Overhead and Profit of $\$ 871,591$ bring the total cost for construction to $\$ 5,006,060$. With a total building area of 50,433 square feet, the cost for the completed project is $\$ 99.26$ per square foot, a reasonable figure.

## Parking

Due to the minimal amount of buildable land on the site, parking will be a significant constraint for the project. Parking regulations are described in the Baltimore County Zoning Regulation.

| Unit Type | Quantity | Spot / Unit | Extension |
| :--- | :--- | :--- | :--- |
| Studio | 6 | 1.25 | 7.5 |
| 1 Bedroom / 1 Bathroom | 14 | 1.5 | 21 |
| 2 Bedroom / 2 Bathroom | 28 | 1.5 | 42 |
| Total | 48 Units |  | 70.5 |

The zoning code allows for the use of "small car" spaces when more than 50 parking spaces are provided and the "small car" spaces are clearly marked to indicate the intended use. The subject properties requirement of 71 parking spots allows for the use of "small car" parking spots.

When "small car" spots are utilized, a maximum of $40 \%$ of the parking spots can be designated as such. "Angled" parking, rather than "parallel", will be used for the development. The following chart quantifies the parking area requirements for the proposed development.

|  | Dimensions | Area / Space <br> (SF) | Quantity | Total Area (SF) |
| :--- | :--- | :--- | :--- | :--- |
| Standard Space | $81 / 2 \times 18$ | 153 | 43 | 6,579 |
| Small Space | $71 / 2 \times 16$ | 120 | 28 | 3,360 |
| Total |  |  | 71 | 9,939 |

## Financial Analysis

## Inflation

The Consumer Price Index for All Urban Consumers, generated by the Bureau of Labor Statistics, was used to determine the general inflation rate for this analysis. The most current publication of the Consumer Price Index, dated April 14, 2010, was used.

The CPI for March 2010 (217.631) and March 2002(178.8) were compared to establish an average annual rate of inflation over the past 8 years of $2.487 \%$. This will serve as the global inflation rate unless stated otherwise.

The NAA Survey of Operating Income \& Expenses in Rental Apartment Properties was analyzed from 2004 - 2009 in an effort to identify a realistic growth rate for rents. Over the 6 year period, rents increased by an average of $8.59 \%$ per year. This figure is considered to be inaccurate as it presents an unrealistically high expectation of the growth in the rental market. Consequently, rental rates will increase at the global inflation rate.

Individual inflation rates were also calculated for four specific expenses: utilities, management fees, repairs \& maintenance, and insurance. The individual inflation rates were calculated by averaging the year over year percentage changes in each of their respective categories from 2002 to 2009 as stated in the CPI.

In some cases, the Consumer Price Index does not have inflation rates for these specific expenses, in other cases it does. When there was not a matching line item in the CPI for an expense, another expenditure category with an expected to have a high correlation to the expense was used for this analysis. "Household energy" was used in lieu of utilities, "household operations" for management fees, "repair of household items" for repairs \& maintenance, and "tenant and household insurance" for insurance.

The remaining expenses, "salaries \& personnel", "taxes", and "administrative" will increase at the global inflation rate. The cost of construction will also increase at this same rate. The following chart provides a detailed look at the basis for the escalation rates for market rent and specific expenses. The blue lines represent the Index values, the white lines represent the year over year percentage change.

|  | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | Average |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Rent of Primary <br> Residence | 202.5 | 207.9 | 213.9 | 220.5 | 230 | 239.102 | 247.278 | 248.999 |  |
|  |  | $2.67 \%$ | $2.89 \%$ | $3.09 \%$ | $4.31 \%$ | $3.96 \%$ | $3.42 \%$ | $0.70 \%$ | $3.00 \%$ |
| Insurance | 112.3 | 114.3 | 118.7 | 116.1 | 117.1 | 117.003 | 120.019 | 123.812 |  |
|  |  | $1.78 \%$ | $3.85 \%$ | $-2.19 \%$ | $0.86 \%$ | $-0.08 \%$ | $2.58 \%$ | $3.16 \%$ | $1.42 \%$ |
| Utilities | 144.2 | 153.6 | 165.7 | 191.6 | 192.6 | 203.006 | 215.184 | 208.76 |  |
|  |  | $6.52 \%$ | $7.88 \%$ | $15.63 \%$ | $0.52 \%$ | $5.40 \%$ | $6.00 \%$ | $-2.99 \%$ | $5.57 \%$ |
| Management <br> Fees | 119.9 | 122.6 | 127 | 133.3 | 139.1 | 142.100 | 150.689 | 150.172 |  |
|  <br> Maintenance | 128.6 | 133 | 142.2 | 151.9 | 158.4 | 165.089 | 173.193 | 178.83 |  |

## Expenses

The National Apartment Association publishes an annual Survey of Operating Income \& Expenses in Rental Apartment Properties. In addition to a detailed narrative regarding the current trends and conditions in the marketplace, the Survey also provides numerous charts detailing the results of the nationwide survey. Surveys for the Baltimore / Towson MSA from 2004-2009 were used to establish an average annual cost per square foot for each of the expense items. The following chart summarizes the expense items used in this analysis.

| National Apartment Association |  |
| :--- | :--- |
|  | Average |
|  | $(\$ / \mathrm{FF} /$ Year $)$ |
| Operating Expenses | 1.23 |
| Salaries \& Personnel | 0.24 |
| Insurance | 0.99 |
| Taxes | 0.39 |
| Utilities | 0.43 |
| Management Fees | 0.27 |
| Administrative | 0.27 |
| Marketing | 0.19 |
| Contract Services | 0.43 |
| Repairs and Maintenance | 0.54 |
| Capital Expenditures | 1.65 |

## Capital Asset Pricing Model

After projected cash flows have been determined for an investment, they must be discounted back to determine their present value. The discount rate used to establish the present value of these cash flows is derived from current market conditions using the Capital Asset Pricing Model.

The Capital Asset Pricing Model equation is:

$$
\text { Expected Return }=R_{F R}+\mathrm{B}\left(R_{M}-R_{F R}\right)
$$

where $R_{F R}$ is equal to the sum of the risk free rate and the time premium, B is the beta of a publicly traded company used as proxy for the specific investment, and $R_{M}$ is the expected return of the market. The resulting discount rate is adjusted to reflect risk markers specific to the subject property (Groppelli, 99).

## Risk Free Rate and Time Premium

Two assumptions will be made regarding the risk free rate and the time premium for the purpose of this analysis. First, it is assumed that the risk free rate is equal to the yield on a 90 Day United States Treasury. Second, it is assumed for a given investment horizon, the time premium is equal to the yield of the long-term United States Treasury with the same maturity, less the risk free rate. As of April 23, 2010, the United State Treasury website stated the 20 year Treasury yield as $4.51 \%$. Note that the risk free rate has already been factored into the pricing of the 20 year Treasury.

$$
\text { Expected Return }=4.51+\mathrm{B}\left(R_{M}-4.51\right)
$$

## Beta

When valuing an individual asset, it is necessary to select a publicly traded company to serve as a proxy. The proxy provides information regarding the correlation of the expected return on the asset with the expected return of the market. During the selection of a company to serve as a proxy, it is imperative that the company selected provide the best possible representation of the characteristics of the asset. Similarities in size, scope, and geography are crucial when selecting a proxy; however, finding a publicly traded company that specializes in the product type and geography matching the subject property can prove to be challenging.

Home Properties, Inc. is a publicly traded REIT that owns, operates, develops, acquires, and rehabilitates apartment properties in Maryland, Virginia, Pennsylvania, Florida, Illinois, Massachusetts, Maine, New Jersey, New York, Ohio, and Washington, D.C. Of the 108 properties listed on the Home Properties website, 33 are located in Maryland.

Home Properties, Inc. was selected to serve as a proxy for the subject property because of its concentration on properties similar in profile to the subject property. Although it has geographical exposure outside of the market area, Home Properties, Inc. was selected for two main reasons.

First, of the publicly traded REITs surveyed, Home Properties has the highest percentage of properties in Maryland; other REITs with presence in Maryland had significantly less exposure, based on their percentage of properties located in Maryland.

Second, of the REITs surveyed, Home Properties, Inc. has the highest concentration of properties in the Mid-Atlantic and Northeast. 94\% of Home Properties' holdings are located within these two regions.

A Beta of 1.29 was reported for Home Properties, Inc. by Google Finance on April 26, 2010.

$$
\text { Expected Return }=4.51+1.29\left(R_{M}-4.51\right)
$$

## Expected Return of the Market

The expected return of the market is based on the internal rate of return of a broad-based stock market index, with dividends reinvested. For the purposes of this practicum, the Standard and Poor's 500 Index was used. An average annual return of $8.40 \%$ was calculated for the S\&P 500, based on the Monthly Adjusted Closing Prices between January 3, 1950 and April 1, 2010.

$$
\text { Expected Return }=4.51+1.29(8.40-4.51)
$$

## Discount Rate

After determining the risk free rate, time premium, expected return of the market, and appropriate beta, the discount rate for an investment can be calculated. Using the CAPM equation, the base discount rate for the subject property is $9.53 \%$.

## Adjustments to the Discount Rate

There are several issues that require adjustments be made to the discount rate in order to accurately account for the risk inherent to the subject property. These can be issues specific to the subject property, or dissimilarities between the subject property and the proxy.

Home Properties, Inc. is a portfolio of 108 assets across 10 states and the District of Columbia; its shares are traded openly on the New York Stock Exchange. The proposed investment is a single apartment building in Baltimore County. The discount rate for the subject property should be increased 50 basis points to reflect the illiquidity of the single asset, relative to shares of Home Properties.

As is the case with any project, the further it is from stabilization, the greater the risk associated with future cash flows. Home Properties' portfolio consists almost entirely of complete and stabilized properties, whereas the subject property is the development of raw land. The discount rate should be increased 50 basis points to account for the risk of a proposed verses stabilized project.

The climate in today's financial markets is a significant risk for this, or any new projects. While the attitude toward commercial lending has improved over the past 18 months, securing financing is and will continue to be a challenge for new projects. Accordingly, 25 basis points should be added to the discount rate.

Home Properties, Inc. has the benefit of diversification within their portfolio. Specifically, Home Properties has exposure to a variety of markets, not just Baltimore, and a variety of product sub-types, such as townhouses and high-rise apartment buildings. The discount rate for the subject property should be increased 25 basis points further to reflect the additional risk of the subject property, relative to the proxy.

Taking into account the stated adjustments, the resulting adjusted discount rate for the subject property is $11.03 \%$. A higher reversion rate of $12.28 \%$ will be used to account for the uncertainty of market conditions at the end of the investment hold period.

## Financing

The subject property is being evaluated on an all cash basis; an investment needs to be financially viable on its own merits, absent the positive benefits of leverage. However, for the purpose of this practicum, a discussion of financing is in order.

A survey of commercial lenders located in the Baltimore area was conducted to test the present climate for commercial lending on multifamily projects. Lenders for two strata of banks were surveyed: small local banks, and medium sized regional banks.

Several similarities exist among all the bankers surveyed. First, underwriting standards on loans have tightened significantly. Debt service coverage ratios have increased. Personal guarantees are expected for any new loan; non-recourse loans are almost nonexistent.

Second, most of the lenders surveyed are content, if not apprehensive, regarding their current level of exposure to commercial real estate. It is not uncommon for the value of commercial properties to have fallen below mortgage balances, completely wiping out any equity position in property. Many of the lenders expressed concerns that owners in this situation who are unable to infuse capitol into their projects may be unable to secure refinancing in the coming months. Lenders, especially at the local level, are very hesitant to offer financing for any new projects.

Opinions differed among the lenders on what the current lending environment was like. The local bankers, for example, did not know of anyone lending for the purchase of raw land, whereas the regional bankers were open to the idea, assuming the project was fundamentally sound. There were also differences regarding underwriting requirements, such as required debt service coverage and loan to value ratios.

Differences also existed regarding the terms of loans at the various stages of development. Interest rates are predominately tied to LIBOR; local bankers, however, are more open to the idea of lending against Prime.

Several commonalities and trends, regarding loan terms, exist among all the lenders surveyed. For the purposes of this practicum, the following loan terms will be assumed.
\(\left.\begin{array}{llll}\hline \& Raw Land \& Construction \& Permanent <br>
\hline Loan to Value \& 55 \% \& 65 \% \& 70 \% <br>
Term \& 2 years \& 2 Years, (2) 6 Month \& 10 Year Term w/ 30 <br>

\& \& Options \& Year Amortization\end{array}\right]\)| LIBOR +400 | LIBOR + 350 bps, 6\% | LIBOR + 300 bps, |
| :--- | :--- | :--- |
| Rate | bps | Floor |

## Valuation

Based on the projected cash flows, and the preceding analysis of risk, a net present value can be determined. Assuming a 22 year hold period, an $11.03 \%$ required rate of return, and a terminal cap rate of $12.28 \%$, the net present value of the investment is $-\$ 1,572,589$.

The supporting discounted cash flow spreadsheets are attached in Appendix D.

## Recommendations

Although development for residential apartment use is not recommended for the subject property, four proposed recommendations exist for the current property owners. First, the property can be analyzed for possible office use to see if that development program is financially viable. Second, the owner can hold the property and wait for rental rates to surpass construction costs. Third, the owner can land bank the subject property, and incorporate it into another development, allowing for greater density on a second site. Finally, the owner can grant a permanent forest easement for the land to Baltimore County or the State of Maryland. This would allow the owner to take a tax deduction equal to the value of the unused development rights for the subject property.

## References:

American Community Survey. http://www.census.gov/acs/www/
Fanning, Stephen F. (2005). Market Analysis for Real Estate. Appraisal Institute. Chicago.
Groppelli, A. A., \& Nikbakht, E. (2000). Finance, 94-99. Barron’s. New York.
Institute of Real Estate Management. 2009 Income/Expense Analysis: Conventional Apartments http://www.irem.org/. Institute of Real Estate Management.

National Apartment Association. 2004 Survey of Income and Expenses in Rental Apartment Communities. National Apartment Association.

National Apartment Association. 2005 Survey of Income and Expenses in Rental Apartment Communities. National Apartment Association.

National Apartment Association. 2006 Survey of Income and Expenses in Rental Apartment Communities: Executive Summary. National Apartment Association.

National Apartment Association. 2007 Survey of Income and Expenses in Rental Apartment Communities: Executive Summary. National Apartment Association.

National Apartment Association. 2008 Survey of Income and Expenses in Rental Apartment Communities: Executive Summary. National Apartment Association.

National Apartment Association. 2009 Survey of Income and Expenses in Rental Apartment Communities: Executive Summary. National Apartment Association.

National Association of Home Builders. http://www.nahb.org/
Reed Construction Data. http://www.reedconstructiondata.com/rsmeans/models/apartment/
St. Agnes Hospital. http://www.stagnes.org/
United States Census Bureau. http://www.census.gov/
University of Maryland, Baltimore County. http://www.umbc.edu/

## Appendix A - Demographic Data

- TRF Policy Map - Community Profile Report: Baltimore / Towson Metropolitan Statistical Area
- TRF Policy Map - Community Profile Report: Primary Market Area
- TRF Policy Map - Community Profile Report: Secondary Market Area
- TRF Policy Map - Community Profile Report: Primary \& Secondary Market Areas

Johns Hopkins University - Carey Business School
Development of Garden Apartments at Maiden Choice Lane, Catonsville, Maryland 21228
By: Andrew W. Ingalls
Advisor: Mr. George Green

## Current Report:

# Community Profile Report of Metro <br> Area: Baltimore-Towson, MD <br> Metropolitan Statistical Area 



Date: May 3, 2010
Proposed Location:
This location, Baltimore-Towson, MD Metropolitan Statistical Area (Metro Area), is located in Baltimore City County, in the state of Maryland.

It is located within or touches the following census tract(s): The number contained in the report area exceeds 100. When this happens, they are not shown in the report.

Similarly, it is located within or touches the following zip code(s): The number contained in the report area exceeds 100. When this happens, they are not shown in the report.

Data presented in this report summarize the Metro Areas that this area covers. See Endnotes for a full explanation of how the data are calculated.
(-) This Area is Served by (or touches):
School District(s): Frederick County Public Schools, Baltimore County Public Schools, Montgomery County Public Schools, Prince George'S County Public Schools, Harford County Public Schools, Carroll County Public Schools, Anne Arundel County Public Schools, Queen Annes County Public Schools, Cecil County Public Schools, Caroline County Public Schools, Talbot County Public Schools, Kent County Public Schools, Howard County Public Schools, Calvert County Public Schools, Baltimore City Public School System
Congressional District(s): Maryland District 1 (Frank M. Kratovil, Jr.), Maryland District 2 (Dutch Ruppersberger), Maryland District 3 (John P. Sarbanes), Maryland District 4 (Donna F. Edwards), Maryland District 5 (Steny H. Hoyer), Maryland District 6 (Roscoe Bartlett), Maryland District 7 (Elijah Cummings)
Senators: Benjamin L. Cardin (MD), Barbara A. Mikulski (MD)
State Senate District(s): Maryland State Senate District 004, Maryland State Senate District 005, Maryland State Senate District 006, Maryland State Senate District 007, Maryland State Senate District 008, Maryland State Senate District 009, Maryland State Senate District 010, Maryland State Senate District 011, Maryland State Senate District 012, Maryland State Senate District 013, Maryland State Senate District 014, Maryland State Senate District 021, Maryland State Senate District 023, Maryland State Senate District 027, Maryland State Senate District 030, Maryland State Senate District 031, Maryland State Senate District 032, Maryland State Senate District 033, Maryland State Senate District 034, Maryland State Senate District 035, Maryland State Senate District 036, Maryland State Senate District 037, Maryland State Senate District 040, Maryland State Senate District 041, Maryland State Senate District 042, Maryland State Senate District 043, Maryland State Senate District 044, Maryland State Senate District 045, Maryland State Senate District 046
State House District(s): Maryland State House District 006, Maryland State House District 007, Maryland State House District 008, Maryland State House District 010, Maryland State House District 011, Maryland State House District 013, Maryland State House District 014, Maryland State House District 021, Maryland State House District 030, Maryland State House District 031, Maryland State House District 032, Maryland State House District 036, Maryland State House District 040, Maryland State House District 041, Maryland State House District 042, Maryland State House District 043, Maryland State House District 044, Maryland State House District 045, Maryland State House District 046, Maryland State House District 04A, Maryland State House District 04B, Maryland State House District 05A, Maryland State House District 05B, Maryland State House District 09A, Maryland State House District 09B, Maryland State House District 12A, Maryland State House District 12B, Maryland State House District 23A, Maryland State House District 23B, Maryland State House District 27A, Maryland State House District 27B, Maryland State House District 33A, Maryland State House District 33B,

Maryland State House District 34A, Maryland State House District 34B, Maryland State House District 35A, Maryland State House District 35B, Maryland State House District 37B

## (-) Population Trends:

As of 2009, this area was home to an estimated $2,684,167$ people. Population is projected to be $2,757,661$ by 2014.

| Population | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Projected Change 2009 to 2014 (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | $\mathrm{N} / \mathrm{A}$ | $2,684,167$ | $2,757,661$ | $2.74 \%$ |
| Counties (Baltimore) | 754,292 | 793,827 | 815,904 | $2.78 \%$ |
| Counties (Anne Arundel) | 489,656 | 514,826 | 528,483 | $2.65 \%$ |
| Counties (Harford) | 218,590 | 242,946 | 255,711 | $5.25 \%$ |
| Counties (Queen Anne's) | 40,563 | 47,654 | 51,532 | $8.14 \%$ |
| Counties (Carroll) | 150,897 | 171,677 | 182,383 | $6.24 \%$ |
| Counties (Howard) | 247,842 | 277,926 | 294,264 | $5.88 \%$ |
| Counties (Baltimore City) | 651,154 | 635,311 | 629,384 | $-0.93 \%$ |
| State (Maryland) | $5,296,486$ | $5,662,381$ | $5,860,415$ | $3.5 \%$ |

## (-) Racial Characteristics:

Of the people living in this area in 2009, $\mathbf{6 3 . 8 5 \%}$ are White, $\mathbf{2 8 . 8 4 \%}$ are African American, $\mathbf{3 . 3} \%$ are Hispanic, 3.87\% are Asian, 0.05\% are either Native Hawaiian or Pacific Islander, 0.3\% are American Indian or Alaskan Native, $1.06 \%$ are of "some other race" and $2.03 \%$ are of two or more races. In the table below, the percentage of the population that each segment represents in the report area is compared to the percent it represents in the state.

Between 2009 and 2014, the White population is expected to change by $-0.55 \%$, the African American population by $5.92 \%$, and Asian population by $20.07 \%$. The number of Hispanics will change by $24.63 \%$.

| Race |  | 2000 | 2009 | 2014 | Percent of Total Population in 2009 |  | Percent of State Population in 2009 (Maryland) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White |  | N/A | 1,713,720 | 1,704,252 | 63.85\% |  | 60.41\% |
| African American |  | N/A | 774,139 | 819,997 | 28.84\% |  | 29.07\% |
| Asian |  | N/A | 103,758 | 124,580 | 3.87\% |  | 5.02\% |
| Native Hawaiian or Pacific Islander |  | N/A | 1,416 | 1,642 | 0.05\% |  | 0.06\% |
| American Indian or Alaskan Native |  | N/A | 8,085 | 8,732 | 0.3\% |  | 0.32\% |
| Some Other Race |  | N/A | 28,437 | 34,484 | 1.06\% |  | 2.65\% |
| Two or More Races |  | N/A | 54,612 | 63,974 | 2.03\% |  | 2.48\% |
| Ethnicity | 2000 | 2009 | 2014 | Percent of Total Population in 2009 |  | Percent of State Population in 2009 (Maryland) |  |
| Hispanic | N/A | 88,493 | 110,285 |  | 3.3\% |  | 6.6\% |

## (-) Age Distribution:

In the report area in 2009, 12.55\% of the population is over the age of $65.63 .59 \%$ are of working age (18-64). $23.86 \%$ are under 18 , and $6.49 \%$ are under 5 years old.

| Age | Number of People in Age <br> Group | Percent of People in Age <br> Group | Percent of People in Age Group <br> (Maryland) |
| :---: | :---: | :---: | :---: |
| Under 5 | 174,275 | $6.49 \%$ | $6.66 \%$ |
| Under 18 | 640,405 | $23.86 \%$ | $24.1 \%$ |
| Working Age <br> $(18-64)$ | $1,706,892$ | $63.59 \%$ | $63.69 \%$ |
| Aging (65+) | 336,870 | $12.55 \%$ | $12.21 \%$ |

## (-) Incomes:

The median household income for the study area was $\$ 64,510$, compared to a state median of $\$ 68,668$, as estimated for 2009 by Claritas.

The number of households divided by income categories is shown in the Annual Income Category table. In 2009, $38.75 \%$ of households in the study area had an annual income of less than $\$ 50,000$, compared to $35.53 \%$ of people in the state.

| 2009 Annual Income Category | Number of Households | Percent of Households |
| :---: | :---: | :---: |
| Metro Area (Baltimore-Towson, MD Metropolitan Statistical Area) |  |  |
| Less than \$25,000 | 178,639 | 17.35\% |
| Less than \$50,000 | 398,896 | 38.75\% |
| Less than \$75,000 | 594,030 | 57.71\% |
| Less than \$150,000 | 911,801 | 88.58\% |
| \$150,000 or more | 117,570 | 11.42\% |
| County (Baltimore) |  |  |
| Less than \$25,000 | 48,664 | 15.35\% |
| Less than \$50,000 | 124,560 | 39.28\% |
| Less than \$75,000 | 191,439 | 60.37\% |
| Less than \$150,000 | 287,886 | 90.79\% |
| \$150,000 or more | 29,199 | 9.21\% |
| County (Anne Arundel) |  |  |
| Less than \$25,000 | 17,938 | 9.34\% |
| Less than \$50,000 | 50,273 | 26.18\% |
| Less than \$75,000 | 86,844 | 45.23\% |
| Less than \$150,000 | 160,946 | 83.82\% |
| \$150,000 or more | 31,072 | 16.18\% |
| County (Harford) |  |  |
| Less than \$25,000 | 9,730 | 10.69\% |
| Less than \$50,000 | 27,451 | 30.16\% |
| Less than \$75,000 | 46,818 | 51.44\% |
| Less than \$150,000 | 81,459 | 89.5\% |
| \$150,000 or more | 9,556 | 10.5\% |
| County (Queen Anne's) |  |  |
| Less than \$25,000 | 2,401 | 13.12\% |
| Less than \$50,000 | 5,537 | 30.25\% |
| Less than \$75,000 | 8,890 | 48.57\% |
| Less than \$150,000 | 15,818 | 86.41\% |


| \$150,000 or more | 2,487 | 13.59\% |
| :---: | :---: | :---: |
| County (Carroll) |  |  |
| Less than \$25,000 | 6,015 | 9.93\% |
| Less than \$50,000 | 16,080 | 26.56\% |
| Less than \$75,000 | 27,603 | 45.59\% |
| Less than \$150,000 | 52,398 | 86.54\% |
| \$150,000 or more | 8,152 | 13.46\% |
| County (Howard) |  |  |
| Less than \$25,000 | 6,486 | 6.42\% |
| Less than \$50,000 | 18,957 | 18.76\% |
| Less than \$75,000 | 34,539 | 34.18\% |
| Less than \$150,000 | 74,465 | 73.68\% |
| \$150,000 or more | 26,598 | 26.32\% |
| County (Baltimore City) |  |  |
| Less than \$25,000 | 87,405 | 35.06\% |
| Less than \$50,000 | 156,038 | 62.58\% |
| Less than \$75,000 | 197,897 | 79.37\% |
| Less than \$150,000 | 238,829 | 95.79\% |
| \$150,000 or more | 10,506 | 4.21\% |
| State (Maryland) |  |  |
| Less than \$25,000 | 320,303 | 15.05\% |
| Less than \$50,000 | 756,162 | 35.53\% |
| Less than \$75,000 | 1,164,462 | 54.71\% |
| Less than \$150,000 | 1,852,270 | 87.02\% |
| \$150,000 or more | 276,260 | 12.98\% |

According to Claritas estimates, the median income for a family in 2009 was $\mathbf{\$ 7 9 , 2 3 3}$, compared to the state median family income of $\$ 82,923$.

## (-) Immigration:

Data from the U.S. Census Bureau in 2000 indicate that $\mathbf{1 4 6 , 1 2 8}$ people or $\mathbf{N} / \mathbf{A}$ of the population living in this area were "foreign born". Census defines foreign born as anyone who is not a U.S. citizen at birth. At this time, more recent estimates do not exist for the report area, but this area is located in Maryland, which, according to the Department of Homeland Security, was home to 27,062 people who were granted Legal Permanent Residence status in 2008. Those LPRs, or "green cards", represent $\mathbf{2 . 4 4 \%}$ of green cards issued in the nation that year.

## (-) Households and Families:

The composition of the $1,029,371$ households who reside in the study area is shown in the table below. Households refer to the person or group of people living in any one housing unit. Families, though, are groups of related people who live together. Generally, households that do not contain a family are made up of unrelated people living together (eg, roommates) or people living alone. While it is possible for two families to share a household, the difference between the number of households and the number of families in an area shows, approximately, the number of non-family households in a place.

| 2009 Household Composition | Number of Households | Percent of Households |
| :---: | :---: | :---: |
| Metro Area (Baltimore-Towson, MD Metropolitan Statistical Area) |  |  |
|  |  |  |


| Households | 1,029,371 | -- |
| :---: | :---: | :---: |
| Married with Children | 243,654 | 23.67\% |
| Single with Children | 130,078 | 12.64\% |
| Single Female with Children | 102,187 | 9.93\% |
| Other Households | 553,452 | 53.77\% |
| County (Baltimore) |  |  |
| Households | 317,085 | -- |
| Married with Children | 71,093 | 22.42\% |
| Single with Children | 34,605 | 10.91\% |
| Single Female with Children | 26,554 | 8.37\% |
| Other Households | 184,833 | 58.29\% |
| County (Anne Arundel) |  |  |
| Households | 192,018 | -- |
| Married with Children | 53,936 | 28.09\% |
| Single with Children | 19,891 | 10.36\% |
| Single Female with Children | 14,508 | 7.56\% |
| Other Households | 103,683 | 54\% |
| County (Harford) |  |  |
| Households | 91,015 | -- |
| Married with Children | 29,069 | 31.94\% |
| Single with Children | 8,692 | 9.55\% |
| Single Female with Children | 6,278 | 6.9\% |
| Other Households | 46,976 | 51.61\% |
| County (Queen Anne's) |  |  |
| Households | 18,305 | -- |
| Married with Children | 5,006 | 27.35\% |
| Single with Children | 1,726 | 9.43\% |
| Single Female with Children | 1,221 | 6.67\% |
| Other Households | 10,352 | 56.55\% |
| County (Carroll) |  |  |
| Households | 60,550 | -- |
| Married with Children | 20,892 | 34.5\% |
| Single with Children | 4,828 | 7.97\% |
| Single Female with Children | 3,306 | 5.46\% |
| Other Households | 31,524 | 52.06\% |
| County (Howard) |  |  |
| Households | 101,063 | -- |
| Married with Children | 34,104 | 33.75\% |
| Single with Children | 8,624 | 8.53\% |
| Single Female with Children | 6,509 | 6.44\% |
| Other Households | 51,826 | 51.28\% |
| County (Baltimore City) |  |  |
| Households | 249,335 | -- |


| Married with Children | 29,554 | $11.85 \%$ |
| :---: | ---: | ---: |
| Single with Children | 51,712 | $20.74 \%$ |
| Single Female with Children | 43,811 | $17.57 \%$ |
| Other Households | 124,258 | $49.84 \%$ |
| State (Maryland) |  |  |
| Households | $2,128,530$ | -- |
| Married with Children | 536,766 | $25.22 \%$ |
| Single with Children | 260,960 | $12.26 \%$ |
| Single Female with Children | 202,442 | $9.51 \%$ |
| Other Households | $1,128,362$ | $53.01 \%$ |

The average size of a household in this area was 2.54 in 2009, as compared to the average household size for the county and the state, 2.44 (Baltimore), 2.6 (Anne Arundel), 2.65 (Harford), 2.57 (Queen Anne's), 2.77 (Carroll), 2.71 (Howard), 2.44 (Baltimore City) and 2.59 (Maryland) respectively.

| 2009 Family Counts | Number of Families |
| :---: | :---: |
| Metro Area (Baltimore-Towson, MD Metropolitan Statistical Area) |  |
| Families | 695,098 |
| County (Baltimore) |  |
| Families | 210,002 |
| County (Anne Arundel) |  |
| Families | 138,845 |
| County (Harford) |  |
| Families | 69,007 |
| County (Queen Anne's) | 13,795 |
| Families |  |
| Families (Carroll) | 47,393 |
| County (Howard) |  |
| Families | 73,842 |
| County (Baltimore City) | 142,214 |
| Families | $1,466,953$ |
| State (Maryland) |  |
| Families |  |

## (-) Housing Type:

The type of housing available in this area, as estimated for 2009 by Claritas, is described in the table below. Single family homes include all one-unit structures, both attached and detached. Townhouses or duplexes include one-unit attached homes, as well as housing units with two units. Units in small apartment building are buildings with 3 to 49 units; large apartment buildings include buildings with 50 units or more. Other types of housing include vans, boats, recreational vehicles, or other units.

| 2009 Housing Stock | Number of Units | Percent of Units |
| :---: | ---: | ---: |
| Metro Area (Baltimore-Towson, MD Metropolitan Statistical Area) |  |  |
| Single family detached homes | 505,804 | $45.54 \%$ |
| Single family attached homes | 312,989 | $28.18 \%$ |
|  |  |  |


| 2-unit homes and duplexes | 30,558 | 2.75\% |
| :---: | :---: | :---: |
| Units in small apartment buildings | 201,535 | 18.14\% |
| Units in large apartment buildings | 44,691 | 4.02\% |
| Mobile homes or manufactured housing | 14,892 | 1.34\% |
| Other types | 297 | 0.03\% |
| County (Baltimore) |  |  |
| Single family detached homes | 156,303 | 47.24\% |
| Single family attached homes | 80,229 | 24.25\% |
| 2-unit homes and duplexes | 5,214 | 1.58\% |
| Units in small apartment buildings | 73,887 | 22.33\% |
| Units in large apartment buildings | 12,440 | 3.76\% |
| Mobile homes or manufactured housing | 2,727 | 0.82\% |
| Other types | 51 | 0.02\% |
| County (Anne Arundel) |  |  |
| Single family detached homes | 127,911 | 62.98\% |
| Single family attached homes | 36,804 | 18.12\% |
| 2-unit homes and duplexes | 2,417 | 1.19\% |
| Units in small apartment buildings | 28,663 | 14.11\% |
| Units in large apartment buildings | 2,767 | 1.36\% |
| Mobile homes or manufactured housing | 4,445 | 2.19\% |
| Other types | 100 | 0.05\% |
| County (Harford) |  |  |
| Single family detached homes | 59,271 | 61.33\% |
| Single family attached homes | 17,828 | 18.45\% |
| 2-unit homes and duplexes | 891 | 0.92\% |
| Units in small apartment buildings | 13,852 | 14.33\% |
| Units in large apartment buildings | 1,052 | 1.09\% |
| Mobile homes or manufactured housing | 3,721 | 3.85\% |
| Other types | 20 | 0.02\% |
| County (Queen Anne's) |  |  |
| Single family detached homes | 16,550 | 82.69\% |
| Single family attached homes | 1,153 | 5.76\% |
| 2-unit homes and duplexes | 279 | 1.39\% |
| Units in small apartment buildings | 1,027 | 5.13\% |
| Units in large apartment buildings | 21 | 0.1\% |
| Mobile homes or manufactured housing | 979 | 4.89\% |
| Other types | 5 | 0.02\% |
| County (Carroll) |  |  |
| Single family detached homes | 48,976 | 78.32\% |
| Single family attached homes | 5,445 | 8.71\% |
| 2-unit homes and duplexes | 1,881 | 3.01\% |
| Units in small apartment buildings | 4,842 | 7.74\% |
| Units in large apartment buildings | 572 | 0.91\% |


| Mobile homes or manufactured housing | 800 | 1.28\% |
| :---: | :---: | :---: |
| Other types | 16 | 0.03\% |
| County (Howard) |  |  |
| Single family detached homes | 57,634 | 54.73\% |
| Single family attached homes | 21,742 | 20.65\% |
| 2-unit homes and duplexes | 462 | 0.44\% |
| Units in small apartment buildings | 20,300 | 19.28\% |
| Units in large apartment buildings | 3,050 | 2.9\% |
| Mobile homes or manufactured housing | 2,069 | 1.96\% |
| Other types | 46 | 0.04\% |
| County (Baltimore City) |  |  |
| Single family detached homes | 39,159 | 13.4\% |
| Single family attached homes | 149,788 | 51.24\% |
| 2-unit homes and duplexes | 19,414 | 6.64\% |
| Units in small apartment buildings | 58,964 | 20.17\% |
| Units in large apartment buildings | 24,789 | 8.48\% |
| Mobile homes or manufactured housing | 151 | 0.05\% |
| Other types | 59 | 0.02\% |
| State (Maryland) |  |  |
| Single family detached homes | 1,214,946 | 52.21\% |
| Single family attached homes | 476,602 | 20.48\% |
| 2-unit homes and duplexes | 47,263 | 2.03\% |
| Units in small apartment buildings | 420,856 | 18.09\% |
| Units in large apartment buildings | 119,004 | 5.11\% |
| Mobile homes or manufactured housing | 47,428 | 2.04\% |
| Other types | 905 | 0.04\% |

## (-) Tenure:

Across the area, an estimated $\mathbf{6 7 . 8 \%}$ or $\mathbf{6 9 7 , 8 9 5}$ households owned their home in 2009. By 2014, 722,948 households are projected to own their homes. The average size of a household in this area was 2.54 in 2009, as compared to the average household size for the county and the state, 2.44 (Baltimore), 2.6 (Anne Arundel), 2.65 (Harford), 2.57 (Queen Anne's), 2.77 (Carroll), 2.71 (Howard), 2.44 (Baltimore City) and 2.59 (Maryland) respectively.

## (-) Vacancy:

There were $\mathbf{1 , 1 1 0 , 7 6 6}$ housing units found in the study area in 2009, according to Claritas projections. In 2000, the Census showed $\mathbf{N} / \mathbf{A}$ of housing units to be in the category "other vacant," compared to $1.76 \%$ in the state. This way of counting vacant properties excludes units that are vacant because they are for sale or for rent. Also excluded are seasonal use properties. This vacancy category is a typical indicator of neighborhood distress.
The US Postal Service tracks vacancy rates on a quarterly basis, showing vacancy trends over the short term. In the third quarter of 2009 , the vacancy rate in this area ranged from $0.45 \%$ to $7.54 \%$.

| USPS Vacancy Rates | 2008Q1 | 2008Q2 | 2008Q3 | 2008Q4 | 2009Q1 | 2009Q2 | 2009Q3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Metro Area <br> (Baltimore-Towson, MD <br> Metropolitan Statistical <br> Area) |  |  |  |  |  |  |  |


| Number Vacant | 37,735 | 36,806 | 36,538 | 37,616 | 38,524 | 39,811 | 39,129 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Percent Vacant | Ranged <br> From $0.45 \%$ <br> to $8.13 \%$ | Ranged <br> From $0.42 \%$ <br> to $7.71 \%$ | Ranged <br> From $0.4 \%$ <br> to $7.54 \%$ | Ranged <br> From $0.4 \%$ <br> to $7.67 \%$ | Ranged <br> From $0.37 \%$ <br> to $7.77 \%$ | Ranged <br> From $0.38 \%$ <br> to $7.86 \%$ | Ranged <br> From $0.45 \%$ <br> to $7.54 \%$ |

## (-) Employment:

The following table shows the number of people who were employed, unemployed, in the labor force, and the unemployment rate for the market in which the report area is located, according to the Bureau of Labor Statistics.

| 2000-2008 Employment | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| City (Baltimore) |  |  |  |  |  |  |  |  |  |
| Employed | 264,187 | 260,268 | 254,830 | 254,275 | 253,230 | 254,196 | 258,232 | 261,355 | 259,710 |
| Unemployed | 16,599 | 18,517 | 19,573 | 20,293 | 19,799 | 18,839 | 17,213 | 15,538 | 18,798 |
| In Labor Force | 280,786 | 278,785 | 274,403 | 274,568 | 273,029 | 273,035 | 275,445 | 276,893 | 278,508 |
| Unemployment Rate | 5.9 | 6.6 | 7.1 | 7.4 | 7.3 | 6.9 | 6.2 | 5.6 | 6.7 |
| City (Annapolis) |  |  |  |  |  |  |  |  |  |
| Employed | 19,898 | 19,926 | 19,978 | 19,845 | 19,936 | 19,921 | 20,441 | 20,600 | 20,470 |
| Unemployed | 733 | 845 | 966 | 938 | 913 | 723 | 690 | 638 | 791 |
| In Labor Force | 20,631 | 20,771 | 20,944 | 20,783 | 20,849 | 20,644 | 21,131 | 21,238 | 21,261 |
| Unemployment Rate | 3.6 | 4.1 | 4.6 | 4.5 | 4.4 | 3.5 | 3.3 | 3 | 3.7 |
| County (Baltimore) |  |  |  |  |  |  |  |  |  |
| Employed | 394,250 | 393,571 | 394,097 | 392,630 | 394,508 | 402,357 | 412,293 | 414,138 | 411,531 |
| Unemployed | 15,191 | 17,155 | 19,127 | 19,542 | 18,453 | 17,959 | 16,522 | 15,428 | 19,506 |
| In Labor Force | 409,441 | 410,726 | 413,224 | 412,172 | 412,961 | 420,316 | 428,815 | 429,566 | 431,037 |
| Unemployment Rate | 3.7 | 4.2 | 4.6 | 4.7 | 4.5 | 4.3 | 3.9 | 3.6 | 4.5 |
| County (Anne Arundel) |  |  |  |  |  |  |  |  |  |
| Employed | 260,150 | 260,513 | 261,203 | 259,463 | 260,652 | 265,477 | 270,756 | 272,932 | 271,214 |
| Unemployed | 8,118 | 9,355 | 10,694 | 10,386 | 10,109 | 9,678 | 9,121 | 8,586 | 10,889 |
| In Labor Force | 268,268 | 269,868 | 271,897 | 269,849 | 270,761 | 275,155 | 279,877 | 281,518 | 282,103 |
| Unemployment Rate | 3 | 3.5 | 3.9 | 3.8 | 3.7 | 3.5 | 3.3 | 3 | 3.9 |
| County (Harford) |  |  |  |  |  |  |  |  |  |
| Employed | 116,298 | 116,817 | 118,346 | 119,216 | 120,722 | 124,414 | 128,421 | 127,980 | 127,175 |
| Unemployed | 3,910 | 4,528 | 5,268 | 5,428 | 5,098 | 5,103 | 4,711 | 4,493 | 5,599 |
| In Labor Force | 120,208 | 121,345 | 123,614 | 124,644 | 125,820 | 129,517 | 133,132 | 132,473 | 132,774 |
| Unemployment Rate | 3.3 | 3.7 | 4.3 | 4.4 | 4.1 | 3.9 | 3.5 | 3.4 | 4.2 |
| County (Queen Anne's) |  |  |  |  |  |  |  |  |  |
| Employed | 22,065 | 22,217 | 22,781 | 23,202 | 23,560 | 24,222 | 25,122 | 25,363 | 25,203 |
| Unemployed | 698 | 793 | 860 | 923 | 879 | 878 | 854 | 825 | 1,097 |
| In Labor Force | 22,763 | 23,010 | 23,641 | 24,125 | 24,439 | 25,100 | 25,976 | 26,188 | 26,300 |
| Unemployment Rate | 3.1 | 3.4 | 3.6 | 3.8 | 3.6 | 3.5 | 3.3 | 3.2 | 4.2 |
| County (Carroll) |  |  |  |  |  |  |  |  |  |
| Employed | 81,665 | 82,517 | 84,353 | 85,408 | 86,830 | 89,085 | 92,067 | 91,726 | 91,149 |
| Unemployed | 2,505 | 2,757 | 3,160 | 3,238 | 3,144 | 3,048 | 2,939 | 2,815 | 3,556 |
| In Labor Force | 84,170 | 85,274 | 87,513 | 88,646 | 89,974 | 92,133 | 95,006 | 94,541 | 94,705 |
| Unemployment Rate | 3 | 3.2 | 3.6 | 3.7 | 3.5 | 3.3 | 3.1 | 3 | 3.8 |


| County (Howard) |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Employed | 141,360 | 143,217 | 144,629 | 145,021 | 146,193 | 149,792 | 154,946 | 156,016 | 155,034 |
| Unemployed | 3,648 | 4,494 | 5,211 | 5,061 | 4,929 | 4,770 | 4,446 | 4,115 | 5,021 |
| In Labor Force | 145,008 | 147,711 | 149,840 | 150,082 | 151,122 | 154,562 | 159,392 | 160,131 | 160,055 |
| Unemployment Rate | 2.5 | 3 | 3.5 | 3.4 | 3.3 | 3.1 | 2.8 | 2.6 | 3.1 |
| County (Baltimore City) |  |  |  |  |  |  |  |  |  |
| Employed | 264,187 | 260,268 | 254,830 | 254,275 | 253,230 | 254,196 | 258,232 | 261,355 | 259,710 |
| Unemployed | 16,599 | 18,517 | 19,573 | 20,293 | 19,799 | 18,839 | 17,213 | 15,538 | 18,798 |
| In Labor Force | 280,786 | 278,785 | 274,403 | 274,568 | 273,029 | 273,035 | 275,445 | 276,893 | 278,508 |
| Unemployment Rate | 5.9 | 6.6 | 7.1 | 7.4 | 7.3 | 6.9 | 6.2 | 5.6 | 6.7 |
| State (Maryland) |  |  |  |  |  |  |  |  |  |
| Employed | $2,711,382$ | $2,712,268$ | $2,733,103$ | $2,741,325$ | $2,761,583$ | $2,810,748$ | $2,871,176$ | $2,882,447$ | $2,867,178$ |
| Unemployed | 100,275 | 114,779 | 128,318 | 128,702 | 123,657 | 121,198 | 112,761 | 105,251 | 130,531 |
| In Labor Force | $2,811,657$ | $2,827,047$ | $2,861,421$ | $2,870,027$ | $2,885,240$ | $2,931,946$ | $2,983,937$ | $2,987,698$ | $2,997,709$ |
| Unemployment Rate | 3.6 | 4.1 | 4.5 | 4.5 | 4.3 | 4.1 | 3.8 | 3.5 | 4.4 |

The following Cities that are within or contain the report area have no data available: Eldersburg, Ellicott City, Columbia, Edgemere, Edgewood, Dundalk, Bel Air North, Bel Air South, Severna Park, Towson, Lake Shore, Fallston, Catonsville, Severn, Arnold, Glen Burnie, Pikesville, Odenton, Aberdeen Proving Ground, Essex, Parole, Cockeysville, North Laurel, Randallstown, Kingsville, Owings Mills, Woodlawn, Jarrettsville, Middle River, Burtonsville, Elkridge, Shady Side, Pasadena, Ashton-Sandy Spring, Lutherville-Timonium, Joppatowne, Rosedale, Carney, Perry Hall, Chester, Milford Mill, Aberdeen, Fort Meade, Arbutus, Westminster, South Gate, Bowleys Quarters, Stevensville, Havre de Grace, Hampton, Lochearn, Perryman, Crownsville, Rossville, White Marsh, Reisterstown, Grasonville, Crofton, Savage-Guilford, Selby-on-the-Bay, Mayo, Deale, Pleasant Hills, Parkville, Jessup, Linthicum, West Laurel, Lansdowne-Baltimore Highlands, Mount Airy, Ferndale, Laurel, Owings, Londontowne, Mays Chapel, Green Haven, Riviera Beach, Garrison, Overlea, Brooklyn Park, Taneytown, Bel Air, Riva, Hampstead, Pumphrey, Maryland City, Kent Narrows, Cape St. Claire, Kingstown, Riverside, Manchester, Herald Harbor, Centreville, Hillsmere Shores, Arden-on-the-Severn, Sykesville, Naval Academy, Union Bridge, New Windsor, Church Hill, Queenstown, Sudlersville, Barclay, Queen Anne, Templeville, Highland Beach

In this area in 2009, Claritas estimates that people were employed in the following industries:

| Employment by Industry | People <br> Employed | Percent <br> Employed <br> in this Industry | Percent Employed in this Industry in <br> Maryland |
| :---: | :---: | :---: | :---: |
| Accommodation and Food Services <br> Industry Employment | 68,316 | $5.1 \%$ | $5.13 \%$ |
| Administrative and Support and Waste <br> Management Services <br> Industries Employment | 44,976 | $3.36 \%$ | $3.36 \%$ |
| Agriculture, Forestry, Fishing and Hunting |  |  |  |
| Industry Employment | 5,234 | $0.39 \%$ | $0.63 \%$ |
| Arts, Entertainment, and Recreation | 20,619 | $1.54 \%$ | $1.58 \%$ |
| Educatries Employment |  |  |  |


| Manufacturing Industry Employment | 112,114 | $8.38 \%$ | $7.29 \%$ |
| :---: | :---: | :---: | :---: |
| Management of Companies and Enterprises <br> Industry Employment | 605 | $0.05 \%$ | $0.04 \%$ |
| Other Services Industry Employment | 67,677 | $5.06 \%$ | $5.54 \%$ |
| Professional, Scientific, and Technical Services <br> Industry Employment | 105,257 | $7.86 \%$ | $9.05 \%$ |
| Public Administration Employment | 125,313 | $9.36 \%$ | $10.59 \%$ |
| Retail Trade Industry Employment | 145,011 | $10.84 \%$ | $10.48 \%$ |
| Construction Industry Employment | 90,230 | $6.74 \%$ | $6.98 \%$ |
| Transportation and Warehousing, and Utilities | 66,870 | $5 \%$ | $4.86 \%$ |
| Industries <br> Employment | 46,001 | $3.44 \%$ | $2.79 \%$ |
| Wholesale Trade Industry Employment |  |  |  |

## (-) Crime:

The crime rates per 100,000 persons in the Census Place and county in which the study area is located, as reported by the FBI's Uniform Crime Reports, are as follows. Data was reported by the FBI for selected Census Places and counties, so data may be unavailable for your study area.

| Crime Rates per 100,000 persons | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: |
| City (Annapolis) |  |  |  |  |
| Aggravated Assault | 668.62 | 725.29 | 682.9 | 474.33 |
| Burglary | 4,115.86 | 4,876.51 | 4,366.19 | 3,941.88 |
| Motor Vehicle Thefts | 411.04 | 502.76 | 534.8 | 378.92 |
| Murder | 10.96 | 19.23 | 21.94 | 21.81 |
| Rape | 30.14 | 35.72 | 13.71 | 21.81 |
| Robbery | 509.69 | 634.63 | 510.12 | 354.39 |
| City (Aberdeen) |  |  |  |  |
| Aggravated Assault | N/A | 404.35 | 493.41 | 457.31 |
| Burglary | N/A | 5,089.24 | 4,687.39 | 4,194.36 |
| Motor Vehicle Thefts | N/A | 432.24 | 260.8 | 264.38 |
| Murder | N/A | 6.97 | N/A | N/A |
| Rape | N/A | 13.94 | 28.19 | 28.58 |
| Robbery | N/A | 285.83 | 289 | 221.51 |
| City (Westminster) |  |  |  |  |
| Aggravated Assault | 463.38 | 600.79 | 587.71 | 566.49 |
| Burglary | 4,209.99 | 3,964.07 | 3,886.67 | 3,668.18 |
| Motor Vehicle Thefts | 214.74 | 157.22 | 210.69 | 106.57 |
| Murder | 5.65 | 5.61 | N/A | N/A |
| Rape | N/A | N/A | N/A | N/A |
| Robbery | 96.07 | 140.37 | 66.53 | 44.87 |
| City (Havre de Grace) |  |  |  |  |
| Aggravated Assault | 521.68 | 478.31 | 397.33 | 337.04 |
| Burglary | 3,882.66 | 3,692.2 | 2,868.72 | 3,408.66 |
| Motor Vehicle Thefts | 162.49 | 184.61 | 158.93 | 99.58 |
| Murder | N/A | N/A | N/A | 15.32 |


| Rape | N/A | N/A | 7.95 | 22.98 |
| :---: | :---: | :---: | :---: | :---: |
| Robbery | 196.7 | 142.65 | 71.52 | 114.9 |
| City (Laurel) |  |  |  |  |
| Aggravated Assault | 414.94 | 292.98 | 362.22 | 378.3 |
| Burglary | 4,352.13 | 4,561.44 | 4,206.28 | 4,285.85 |
| Motor Vehicle Thefts | 1,301.4 | 964.57 | 1,000.63 | 991.88 |
| Murder | 9.43 | N/A | 4.53 | 9.23 |
| Rape | 42.44 | 4.51 | 22.64 | 27.68 |
| Robbery | 447.94 | 338.05 | 362.22 | 313.71 |
| City (Taneytown) |  |  |  |  |
| Aggravated Assault | 73.23 | 54.86 | 18.07 | 109.87 |
| Burglary | 1,885.76 | 2,450.62 | 2,132.66 | 2,160.78 |
| Motor Vehicle Thefts | 36.62 | 73.15 | 72.29 | 18.31 |
| Murder | N/A | N/A | N/A | N/A |
| Rape | N/A | N/A | 18.07 | N/A |
| Robbery | N/A | 18.29 | 18.07 | 18.31 |
| City (Bel Air) |  |  |  |  |
| Aggravated Assault | 542.33 | 537.8 | 684.93 | 434.69 |
| Burglary | 5,142.11 | 4,421.87 | 3,722.45 | 5,155.68 |
| Motor Vehicle Thefts | 230.99 | 298.78 | 208.46 | 232.51 |
| Murder | N/A | 9.96 | N/A | N/A |
| Rape | 10.04 | N/A | 39.71 | 20.22 |
| Robbery | 120.52 | 189.22 | 138.97 | 272.95 |
| City (Hampstead) |  |  |  |  |
| Aggravated Assault | 36.64 | 91.47 | 18.07 | 72.65 |
| Burglary | 1,612.31 | 1,408.71 | 2,402.89 | 2,252.09 |
| Motor Vehicle Thefts | 128.25 | 146.36 | 72.27 | 72.65 |
| Murder | N/A | N/A | N/A | N/A |
| Rape | N/A | N/A | N/A | 18.16 |
| Robbery | N/A | 18.29 | N/A | 36.32 |
| City (Manchester) |  |  |  |  |
| Aggravated Assault | 505.05 | 224.28 | N/A | 139.98 |
| Burglary | 1,571.27 | 1,233.53 | 1,413.13 | 1,063.83 |
| Motor Vehicle Thefts | 56.12 | 224.28 | 110.83 | 83.99 |
| Murder | N/A | N/A | N/A | N/A |
| Rape | N/A | 28.03 | N/A | N/A |
| Robbery | N/A | N/A | 27.71 | N/A |
| City (Centreville) |  |  |  |  |
| Aggravated Assault | 117.51 | 299.96 | 64.54 | 28.2 |
| Burglary | 4,700.35 | 3,149.61 | 2,000.65 | 1,466.44 |
| Motor Vehicle Thefts | 391.7 | 37.5 | 64.54 | N/A |
| Murder | N/A | N/A | N/A | N/A |
| Rape | 78.34 | N/A | N/A | N/A |


| Robbery | 78.34 | N/A | N/A | N/A |
| :---: | :---: | :---: | :---: | :---: |
| County (Baltimore) |  |  |  |  |
| Aggravated Assault | N/A | 437.04 | 433.7 | 383.21 |
| Burglary | N/A | 2,939.24 | 2,998.6 | 3,061.23 |
| Motor Vehicle Thefts | N/A | 439.32 | 429.24 | 373.31 |
| Murder | N/A | 4.44 | 4.58 | 3.94 |
| Rape | N/A | 18.14 | 19.22 | 19.3 |
| Robbery | N/A | 265.14 | 227.48 | 219.67 |
| County (Anne Arundel) |  |  |  |  |
| Aggravated Assault | 465.61 | 447.61 | 452.61 | 425.12 |
| Burglary | 3,007.15 | 3,052.45 | 3,287.72 | 3,466.92 |
| Motor Vehicle Thefts | 297.4 | 322.87 | 328.04 | 309.31 |
| Murder | 3.71 | 5.66 | 4.53 | 4.3 |
| Rape | 17.17 | 21.47 | 17.71 | 21.32 |
| Robbery | 168.8 | 184.08 | 179.08 | 158.47 |
| County (Harford) |  |  |  |  |
| Aggravated Assault | 261.18 | 241.34 | 273.04 | 233.23 |
| Burglary | 1,917.54 | 1,801.48 | 1,873.83 | 1,999.48 |
| Motor Vehicle Thefts | 151.23 | 182.15 | 192.33 | 167.25 |
| Murder | 0.84 | 3.75 | 3.29 | 2.49 |
| Rape | 12.64 | 15.01 | 20.59 | 27.39 |
| Robbery | 81.3 | 84.2 | 87.31 | 101.68 |
| County (Queen Anne's) |  |  |  |  |
| Aggravated Assault | 90.27 | 247.06 | 252.66 | 280.76 |
| Burglary | 1,941.83 | 2,059.6 | 1,918.51 | 1,903.61 |
| Motor Vehicle Thefts | 105.68 | 100.58 | 104.92 | 119.11 |
| Murder | 2.2 | N/A | N/A | 2.13 |
| Rape | 33.02 | 8.75 | 12.85 | 31.9 |
| Robbery | 33.02 | 24.05 | 38.54 | 27.65 |
| County (Carroll) |  |  |  |  |
| Aggravated Assault | 198.9 | 173.37 | 168.18 | 174.94 |
| Burglary | 1,557.12 | 1,525.42 | 1,523.48 | 1,625.51 |
| Motor Vehicle Thefts | 101.54 | 75.15 | 77.4 | 72.79 |
| Murder | 1.19 | 0.59 | 0.58 | 0.59 |
| Rape | 17.32 | 14.2 | 18.04 | 12.33 |
| Robbery | 21.5 | 33.14 | 22.11 | 23.48 |
| County (Howard) |  |  |  |  |
| Aggravated Assault | 113.85 | 110.29 | 110.36 | 147.7 |
| Burglary | 2,468.29 | 2,407.15 | 2,443.34 | 2,809.29 |
| Motor Vehicle Thefts | 202.4 | 242.79 | 201.36 | 194.27 |
| Murder | 1.49 | 1.85 | 1.83 | 1.46 |
| Rape | 15.63 | 15.54 | 13.16 | 13.1 |
| Robbery | 97.85 | 103.26 | 90.26 | 94.22 |
|  |  |  |  |  |


| County (Baltimore City) |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: |
| Aggravated Assault | N/A | N/A | N/A | 899.69 |
| Burglary | N/A | N/A | N/A | $4,102.28$ |
| Motor Vehicle Thefts | N/A | N/A | N/A | 874.79 |
| Murder | N/A | N/A | N/A | 37.03 |
| Rape | N/A | N/A | N/A | 21.59 |
| Robbery | N/A | N/A | N/A | 639.98 |

The following Cities that are within or contain the report area have no data available: Baltimore, Eldersburg, Ellicott City, Columbia, Edgemere, Edgewood, Dundalk, Bel Air North, Bel Air South, Severna Park, Towson, Lake Shore, Fallston, Catonsville, Severn, Arnold, Glen Burnie, Pikesville, Odenton, Aberdeen Proving Ground, Essex, Parole, Cockeysville, North Laurel, Randallstown, Kingsville, Owings Mills, Woodlawn, Jarrettsville, Middle River, Burtonsville, Elkridge, Shady Side, Pasadena, Ashton-Sandy Spring, Lutherville-Timonium, Joppatowne, Rosedale, Carney, Perry Hall, Chester, Milford Mill, Fort Meade, Arbutus, South Gate, Bowleys Quarters, Stevensville, Hampton, Lochearn, Perryman, Crownsville, Rossville, White Marsh, Reisterstown, Grasonville, Crofton, Savage-Guilford, Selby-on-the-Bay, Mayo, Deale, Pleasant Hills, Parkville, Jessup, Linthicum, West Laurel, Lansdowne-Baltimore Highlands, Mount Airy, Ferndale, Owings, Londontowne, Mays Chapel, Green Haven, Riviera Beach, Garrison, Overlea, Brooklyn Park, Riva, Pumphrey, Maryland City, Kent Narrows, Cape St. Claire, Kingstown, Riverside, Herald Harbor, Hillsmere Shores, Arden-on-the-Severn, Sykesville, Naval Academy, Union Bridge, New Windsor, Church Hill, Queenstown, Sudlersville, Barclay, Queen Anne, Templeville, Highland Beach

## (-) Endnotes:

Calculations presented here were performed by staff at The Reinvestment Fund and are based on public and proprietary data sources that have been licensed for use in PolicyMap.

Depending on the type of size of the area selected for this report, the above values capture data for the block groups, tracts, counties, etc, in which at least $50 \%$ of their areas are contained. If this report is run for a zip code, some data will be unavailable, as zip code values for some topics are not available through the Census.

The source of data on rental units, gross rent, cost burden, and vacancy are from the 2000 decennial U.S. Census, Summary File 3. For custom areas, such as radii, custom regions, school districts, and political districts, Census data was calculated by summing the following component Metro Areas: Baltimore-Towson, MD Metropolitan Statistical Area. Estimates and projections of tenure, incomes, household composition, and housing stock are provided by Claritas, Inc. for 2009 and 2014. For custom areas, such as radii, custom regions, school districts, and political districts, Claritas data was calculated by summing the following component Metro Areas:
Baltimore-Towson, MD Metropolitan Statistical Area. For more information on demographic data in PolicyMap, see the related entries for Census and Claritas in our Data Directory.

The source of data on population trends, racial characteristics, age distribution, incomes, foreign born population, households, housing type, tenure, and employment are from the 2000 decennial U.S. Census, Summary File 3. For custom areas, such as radii, custom regions, school districts, and political districts, Census data was calculated by summing the following component Metro Areas: Baltimore-Towson, MD Metropolitan Statistical Area. Estimates and projections of all of these topics, except foreign born population, are provided by Claritas, Inc. for 2009 and 2014. For custom areas, such as radii, custom regions, school districts, and political districts, Claritas data was calculated by summing the following component Metro Areas: Baltimore-Towson, MD Metropolitan Statistical Area. Data on legal permanent residents is from the Department of Homeland Security, and, for all areas, describes the state in which that area is located. For more information on demographic data in PolicyMap, see the related entries for Census, Claritas, and Department of Homeland Security Immigration Yearbook in our Data Directory.

The source of crime data in the tables presented here is Federal Bureau of Investigation's Uniform Crime Reporting
(UCR) Program, which compiles standardized incident reports from local law enforcement agencies in order to produce reliable, uniform, and national crime data. The UCR Program collects data on known offenses and persons arrested by law enforcement agencies. For details on this dataset, see the related entry for FBI Uniform Crime Reports in the Data Directory. Crime data in this report is not summed or aggregated, but rather listed for each of the complete areas within the study area for which crime is reported.

For the separate Employment and Crime Sections in this report, only locations for which data are available are included in the tables. If the section does not include information, no data was available for any of the locations or component parts of the area you requested for this report.

PolicyMap's Terms of Use apply to the creation and use of this report.

Toll-Free: 1-866-923-MAPS

# Current Report: <br> Community Profile Report of Custom <br> Region: Primary 



Date: April 24, 2010
Proposed Area:
This area is located in Anne Arundel ${ }^{*}$ County, Howard* County, Baltimore City* County, and Baltimore County, in the state of Maryland.

It is located within or touches the following census tract(s): 601101, 750600, 602100, 750500, 400400, 601201, 430400, 602700, 401503, 401501, 602800, 400500, 401504, 602600, 430600, 430300, 602900, 401102, 280301, 750300, 401101, 401400, 250103, 250206, 210200, 250205, 401505, 430700, 401602, 400100, 280403, 200600, 430200, 280401, 400800, 150900, 430101, 430900, 430800, 401000, 160802, 200701, 400701, 401301, 200800, 250303, 400900, 400600, 160700, 250101, 200200, 400200, 280404, 401601, 250102, 400702, 200500, 401302, 160600, 280402, 160801, 200400, 200702.

Similarly, it is located within or touches the following zip code(s): 21043, 21228, 21244, 21075, 21227, 21207, 21090, 21230, 21229, 21216, 21223, 21250.

Data presented in this report summarize the Zip Codes that this area covers. See Endnotes for a full explanation of how the data are calculated.

## (-) This Area is Served by (or touches):

School District(s): Baltimore County Public Schools, Anne Arundel County Public Schools, Howard County Public Schools, Baltimore City Public School System
Congressional District(s): Maryland District 2 (Dutch Ruppersberger), Maryland District 3 (John P. Sarbanes), Maryland District 7 (Elijah Cummings)
Senators: Benjamin L. Cardin (MD), Barbara A. Mikulski (MD)
State Senate District(s): Maryland State Senate District 009, Maryland State Senate District 010, Maryland State Senate District 012, Maryland State Senate District 032, Maryland State Senate District 040, Maryland State Senate District 041, Maryland State Senate District 044, Maryland State Senate District 046

State House District(s): Maryland State House District 010, Maryland State House District 032, Maryland State House District 040, Maryland State House District 041, Maryland State House District 044, Maryland State House District 046, Maryland State House District 09A, Maryland State House District 12A

## (-) Population Trends:

As of 2009, this area was home to an estimated 129,367 people. Population is projected to be 128,880 by 2014.

| Population | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Projected Change 2009 to 2014 (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | $\mathrm{N} / \mathrm{A}$ | 129,367 | 128,880 | $-0.38 \%$ |
| Counties (Baltimore) | 754,292 | 793,827 | 815,904 | $2.78 \%$ |
| Counties (Anne Arundel) | 489,656 | 514,826 | 528,483 | $2.65 \%$ |
| Counties (Howard) | 247,842 | 277,926 | 294,264 | $5.88 \%$ |
| Counties (Baltimore City) | 651,154 | 635,311 | 629,384 | $-0.93 \%$ |
| State (Maryland) | $5,296,486$ | $5,662,381$ | $5,860,415$ | $3.5 \%$ |

(-) Racial Characteristics:

Of the people living in this area in 2009, 51.21\% are White, $\mathbf{4 1 . 0 3 \%}$ are African American, $2.92 \%$ are Hispanic, $\mathbf{4 . 4} \%$ are Asian, $\mathbf{0 . 0 6 \%}$ are either Native Hawaiian or Pacific Islander, $\mathbf{0 . 2 7 \%}$ are American Indian or Alaskan Native, $\mathbf{1 . 0 1 \%}$ are of "some other race" and $\mathbf{2 . 0 3 \%}$ are of two or more races. In the table below, the percentage of the population that each segment represents in the report area is compared to the percent it represents in the state.

Between 2009 and 2014, the White population is expected to change by $-6.7 \%$, the African American population by $\mathbf{4 . 6} \%$, and Asian population by $\mathbf{1 4 . 0 3 \%}$. The number of Hispanics will change by $21.83 \%$.

| Race | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Percent of Total Population in <br> $\mathbf{2 0 0 9}$ | Percent of State Population in 2009 <br> (Maryland) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| White | $\mathrm{N} / \mathrm{A}$ | 66,246 | 61,809 | $51.21 \%$ | $60.41 \%$ |
| African American | $\mathrm{N} / \mathrm{A}$ | 53,082 | 55,523 | $41.03 \%$ | $29.07 \%$ |
| Asian | $\mathrm{N} / \mathrm{A}$ | 5,689 | 6,487 | $4.4 \%$ | $5.02 \%$ |
| Native Hawaiian or <br> Pacific Islander | $\mathrm{N} / \mathrm{A}$ | 79 | 95 | $0.06 \%$ | $0.06 \%$ |
| American Indian or <br> Alaskan Native | $\mathrm{N} / \mathrm{A}$ | 344 | 377 | $0.27 \%$ | $0.32 \%$ |
| Some Other Race | $\mathrm{N} / \mathrm{A}$ | 1,302 | 1,544 | $1.01 \%$ | $2.65 \%$ |
| Two or More <br> Races | $\mathrm{N} / \mathrm{A}$ | 2,625 | 3,045 | $2.03 \%$ | $2.48 \%$ |


| Ethnicity | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Percent of Total Population in $\mathbf{2 0 0 9}$ | Percent of State Population in $\mathbf{2 0 0 9}$ (Maryland) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hispanic | $\mathrm{N} / \mathrm{A}$ | 3,780 | 4,605 | $2.92 \%$ | $6.6 \%$ |

## (-) Age Distribution:

In the report area in 2009, 15.11\% of the population is over the age of $65.61 .63 \%$ are of working age (18-64). $\mathbf{2 3 . 2 6 \%}$ are under 18, and $\mathbf{6 . 6 6 \%}$ are under 5 years old.

| Age | Number of People in Age <br> Group | Percent of People in Age <br> Group | Percent of People in Age Group <br> (Maryland) |
| :---: | :---: | :---: | :---: |
| Under 5 | 8,614 | $6.66 \%$ | $6.66 \%$ |
| Under 18 | 30,092 | $23.26 \%$ | $24.1 \%$ |
| Working Age <br> $(18-64)$ | 79,733 | $61.63 \%$ | $63.69 \%$ |
| Aging (65+) | 19,542 | $15.11 \%$ | $12.21 \%$ |

## (-) Incomes:

The median household income for the study area $\mathbf{n} / \mathbf{a}$, compared to a state median of $\$ 68,668$, as estimated for 2009 by Claritas.

The number of households divided by income categories is shown in the Annual Income Category table. In 2009, $47.41 \%$ of households in the study area had an annual income of less than $\$ 50,000$, compared to $35.53 \%$ of people in the state.

| 2009 Annual Income Category | Number of Households | Percent of Households |
| :---: | ---: | ---: |
| Primary |  |  |
| Less than $\$ 25,000$ | 10,818 | $21.61 \%$ |
| Less than $\$ 50,000$ | 23,729 | $47.41 \%$ |
| Less than $\$ 75,000$ | 34,139 | $68.21 \%$ |
| Less than $\$ 150,000$ | 47,437 | $94.78 \%$ |
|  |  |  |


| \$150,000 or more | 2,612 | 5.22\% |
| :---: | :---: | :---: |
| County (Baltimore) |  |  |
| Less than \$25,000 | 48,664 | 15.35\% |
| Less than \$50,000 | 124,560 | 39.28\% |
| Less than \$75,000 | 191,439 | 60.37\% |
| Less than \$150,000 | 287,886 | 90.79\% |
| \$150,000 or more | 29,199 | 9.21\% |
| County (Anne Arundel) |  |  |
| Less than \$25,000 | 17,938 | 9.34\% |
| Less than \$50,000 | 50,273 | 26.18\% |
| Less than \$75,000 | 86,844 | 45.23\% |
| Less than \$150,000 | 160,946 | 83.82\% |
| \$150,000 or more | 31,072 | 16.18\% |
| County (Howard) |  |  |
| Less than \$25,000 | 6,486 | 6.42\% |
| Less than \$50,000 | 18,957 | 18.76\% |
| Less than \$75,000 | 34,539 | 34.18\% |
| Less than \$150,000 | 74,465 | 73.68\% |
| \$150,000 or more | 26,598 | 26.32\% |
| County (Baltimore City) |  |  |
| Less than \$25,000 | 87,405 | 35.06\% |
| Less than \$50,000 | 156,038 | 62.58\% |
| Less than \$75,000 | 197,897 | 79.37\% |
| Less than \$150,000 | 238,829 | 95.79\% |
| \$150,000 or more | 10,506 | 4.21\% |
| State (Maryland) |  |  |
| Less than \$25,000 | 320,303 | 15.05\% |
| Less than \$50,000 | 756,162 | 35.53\% |
| Less than \$75,000 | 1,164,462 | 54.71\% |
| Less than \$150,000 | 1,852,270 | 87.02\% |
| \$150,000 or more | 276,260 | 12.98\% |

According to Claritas estimates, the median income for a family in $2009 \mathrm{n} / \mathbf{a}$, compared to the state median family income of $\$ 82,923$.

## (-) Immigration:

Data from the U.S. Census Bureau in 2000 indicate that $\mathbf{N} / \mathbf{A}$ people or $\mathbf{N} / \mathbf{A}$ of the population living in this area were "foreign born". Census defines foreign born as anyone who is not a U.S. citizen at birth. At this time, more recent estimates do not exist for the report area, but this area is located in Maryland, which, according to the Department of Homeland Security, was home to 27,062 people who were granted Legal Permanent Residence status in 2008. Those LPRs, or "green cards", represent $\mathbf{2 . 4 4 \%}$ of green cards issued in the nation that year.

## (-) Households and Families:

The composition of the $\mathbf{5 0 , 0 4 9}$ households who reside in the study area is shown in the table below. Households refer to the person or group of people living in any one housing unit. Families, though, are groups of related people
who live together. Generally, households that do not contain a family are made up of unrelated people living together (eg, roommates) or people living alone. While it is possible for two families to share a household, the difference between the number of households and the number of families in an area shows, approximately, the number of non-family households in a place.

| 2009 Household Composition | Number of Households | Percent of Households |
| :---: | :---: | :---: |
| Primary |  |  |
| Households | 50,049 | -- |
| Married with Children | 9,511 | 19\% |
| Single with Children | 7,593 | 15.17\% |
| Single Female with Children | 6,173 | 12.33\% |
| Other Households | 26,772 | 53.49\% |
| County (Baltimore) |  |  |
| Households | 317,085 | -- |
| Married with Children | 71,093 | 22.42\% |
| Single with Children | 34,605 | 10.91\% |
| Single Female with Children | 26,554 | 8.37\% |
| Other Households | 184,833 | 58.29\% |
| County (Anne Arundel) |  |  |
| Households | 192,018 | -- |
| Married with Children | 53,936 | 28.09\% |
| Single with Children | 19,891 | 10.36\% |
| Single Female with Children | 14,508 | 7.56\% |
| Other Households | 103,683 | 54\% |
| County (Howard) |  |  |
| Households | 101,063 | -- |
| Married with Children | 34,104 | 33.75\% |
| Single with Children | 8,624 | 8.53\% |
| Single Female with Children | 6,509 | 6.44\% |
| Other Households | 51,826 | 51.28\% |
| County (Baltimore City) |  |  |
| Households | 249,335 | -- |
| Married with Children | 29,554 | 11.85\% |
| Single with Children | 51,712 | 20.74\% |
| Single Female with Children | 43,811 | 17.57\% |
| Other Households | 124,258 | 49.84\% |
| State (Maryland) |  |  |
| Households | 2,128,530 | -- |
| Married with Children | 536,766 | 25.22\% |
| Single with Children | 260,960 | 12.26\% |
| Single Female with Children | 202,442 | 9.51\% |
| Other Households | 1,128,362 | 53.01\% |

The average size of a household in this area $\mathbf{n} / \mathbf{a}$ in 2009, as compared to the average household size for the county and the state, 2.44 (Baltimore), 2.6 (Anne Arundel), 2.71 (Howard), 2.44 (Baltimore City) and 2.59
(Maryland) respectively.

| 2009 Family Counts | Number of Families |
| :---: | ---: |
| Primary |  |
| Families | 32,252 |
| County (Baltimore) | 210,002 |
| Families |  |
| County (Anne Arundel) | 138,845 |
| Families |  |
| County (Howard) | 73,842 |
| Families |  |
| County (Baltimore City) | 142,214 |
| Families |  |
| State (Maryland) | $1,466,953$ |
| Families |  |

## (-) Housing Type:

The type of housing available in this area, as estimated for 2009 by Claritas, is described in the table below. Single family homes include all one-unit structures, both attached and detached. Townhouses or duplexes include one-unit attached homes, as well as housing units with two units. Units in small apartment building are buildings with 3 to 49 units; large apartment buildings include buildings with 50 units or more. Other types of housing include vans, boats, recreational vehicles, or other units.

| 2009 Housing Stock | Number of Units | Percent of Units |
| :---: | :---: | :---: |
| Primary |  |  |
| Single family detached homes | 19,284 | 36.77\% |
| Single family attached homes | 19,228 | 36.67\% |
| 2-unit homes and duplexes | 2,127 | 4.06\% |
| Units in small apartment buildings | 9,029 | 17.22\% |
| Units in large apartment buildings | 2,665 | 5.08\% |
| Mobile homes or manufactured housing | 96 | 0.18\% |
| Other types | 10 | 0.02\% |
| County (Baltimore) |  |  |
| Single family detached homes | 156,303 | 47.24\% |
| Single family attached homes | 80,229 | 24.25\% |
| 2-unit homes and duplexes | 5,214 | 1.58\% |
| Units in small apartment buildings | 73,887 | 22.33\% |
| Units in large apartment buildings | 12,440 | 3.76\% |
| Mobile homes or manufactured housing | 2,727 | 0.82\% |
| Other types | 51 | 0.02\% |
| County (Anne Arundel) |  |  |
| Single family detached homes | 127,911 | 62.98\% |
| Single family attached homes | 36,804 | 18.12\% |
| 2-unit homes and duplexes | 2,417 | 1.19\% |
| Units in small apartment buildings | 28,663 | 14.11\% |
|  |  |  |


| Units in large apartment buildings | 2,767 | 1.36\% |
| :---: | :---: | :---: |
| Mobile homes or manufactured housing | 4,445 | 2.19\% |
| Other types | 100 | 0.05\% |
| County (Howard) |  |  |
| Single family detached homes | 57,634 | 54.73\% |
| Single family attached homes | 21,742 | 20.65\% |
| 2-unit homes and duplexes | 462 | 0.44\% |
| Units in small apartment buildings | 20,300 | 19.28\% |
| Units in large apartment buildings | 3,050 | 2.9\% |
| Mobile homes or manufactured housing | 2,069 | 1.96\% |
| Other types | 46 | 0.04\% |
| County (Baltimore City) |  |  |
| Single family detached homes | 39,159 | 13.4\% |
| Single family attached homes | 149,788 | 51.24\% |
| 2-unit homes and duplexes | 19,414 | 6.64\% |
| Units in small apartment buildings | 58,964 | 20.17\% |
| Units in large apartment buildings | 24,789 | 8.48\% |
| Mobile homes or manufactured housing | 151 | 0.05\% |
| Other types | 59 | 0.02\% |
| State (Maryland) |  |  |
| Single family detached homes | 1,214,946 | 52.21\% |
| Single family attached homes | 476,602 | 20.48\% |
| 2-unit homes and duplexes | 47,263 | 2.03\% |
| Units in small apartment buildings | 420,856 | 18.09\% |
| Units in large apartment buildings | 119,004 | 5.11\% |
| Mobile homes or manufactured housing | 47,428 | 2.04\% |
| Other types | 905 | 0.04\% |

## (-) Tenure:

Across the area, an estimated $64.89 \%$ or 32,477 households owned their home in 2009. By 2014, 32,423 households are projected to own their homes. The average size of a household in this area $\mathbf{n} / \mathbf{a}$ in 2009, as compared to the average household size for the county and the state, 2.44 (Baltimore), 2.6 (Anne Arundel), 2.71 (Howard), 2.44 (Baltimore City) and 2.59 (Maryland) respectively.

## (-) Vacancy:

There were $\mathbf{5 2 , 4 3 9}$ housing units found in the study area in 2009, according to Claritas projections. In 2000, the Census showed N/A of housing units to be in the category "other vacant," compared to $1.76 \%$ in the state. This way of counting vacant properties excludes units that are vacant because they are for sale or for rent. Also excluded are seasonal use properties. This vacancy category is a typical indicator of neighborhood distress.
The US Postal Service tracks vacancy rates on a quarterly basis, showing vacancy trends over the short term. In the third quarter of 2009, the vacancy rate in this area ranged from $0 \%$ to $9.33 \%$.

| USPS <br> Vacancy <br> Rates | 2008Q1 | 2008Q2 | 2008Q3 | 2008Q4 | 2009Q1 | 2009Q2 | 2009Q3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Primary |  |  |  |  |  |  |  |


| Number Vacant | 1,405 | 1,514 | 1,497 | 1,459 | 1,637 | 1,703 | 1,721 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent Vacant | Ranged From 0\% to $11.54 \%$ | Ranged From $0 \%$ to $10.14 \%$ | Ranged From 0\% to 9.68\% | Ranged From 0\% to 9\% | Ranged From 0\% to 9.64\% | Ranged From 0\% to 9.49\% | Ranged From 0\% to 9.33\% |
| County (Baltimore) |  |  |  |  |  |  |  |
| Number Vacant | 5,384 | 5,592 | 5,484 | 5,925 | 6,181 | 6,502 | 6,872 |
| Percent Vacant | 1.42\% | 1.47\% | 1.44\% | 1.55\% | 1.62\% | 1.7\% | 1.79\% |
| County (Anne Arundel) |  |  |  |  |  |  |  |
| Number Vacant | 2,640 | 2,764 | 2,900 | 2,993 | 3,008 | 3,459 | 3,387 |
| Percent Vacant | 1.13\% | 1.18\% | 1.23\% | 1.27\% | 1.27\% | 1.46\% | 1.42\% |
| County (Howard) |  |  |  |  |  |  |  |
| Number Vacant | 1,127 | 1,120 | 1,113 | 1,190 | 1,257 | 1,349 | 1,354 |
| Percent Vacant | 0.93\% | 0.92\% | 0.9\% | 0.97\% | 1.01\% | 1.09\% | 1.08\% |
| County (Baltimore City) |  |  |  |  |  |  |  |
| Number Vacant | 26,887 | 25,510 | 25,157 | 25,526 | 26,041 | 26,290 | 25,373 |
| Percent Vacant | 8.13\% | 7.71\% | 7.54\% | 7.67\% | 7.77\% | 7.86\% | 7.54\% |

## (-) Employment:

The following table shows the number of people who were employed, unemployed, in the labor force, and the unemployment rate for the market in which the report area is located, according to the Bureau of Labor Statistics.

| $\mathbf{2 0 0 0} \mathbf{- 2 0 0 8}$ Employment | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| City (Baltimore) |  |  |  |  |  |  |  |  |  |
| Employed | 264,187 | 260,268 | 254,830 | 254,275 | 253,230 | 254,196 | 258,232 | 261,355 | 259,710 |
| Unemployed | 16,599 | 18,517 | 19,573 | 20,293 | 19,799 | 18,839 | 17,213 | 15,538 | 18,798 |
| In Labor Force | 280,786 | 278,785 | 274,403 | 274,568 | 273,029 | 273,035 | 275,445 | 276,893 | 278,508 |
| Unemployment Rate | 5.9 | 6.6 | 7.1 | 7.4 | 7.3 | 6.9 | 6.2 | 5.6 | 6.7 |
| County (Baltimore) |  |  |  |  |  |  |  |  |  |
| Employed | 394,250 | 393,571 | 394,097 | 392,630 | 394,508 | 402,357 | 412,293 | 414,138 | 411,531 |
| Unemployed | 15,191 | 17,155 | 19,127 | 19,542 | 18,453 | 17,959 | 16,522 | 15,428 | 19,506 |
| In Labor Force | 409,441 | 410,726 | 413,224 | 412,172 | 412,961 | 420,316 | 428,815 | 429,566 | 431,037 |
| Unemployment Rate | 3.7 | 4.2 | 4.6 | 4.7 | 4.5 | 4.3 | 3.9 | 3.6 | 4.5 |
| County (Anne Arundel) |  |  |  |  |  |  |  |  |  |
| Employed | 260,150 | 260,513 | 261,203 | 259,463 | 260,652 | 265,477 | 270,756 | 272,932 | 271,214 |
| Unemployed | 8,118 | 9,355 | 10,694 | 10,386 | 10,109 | 9,678 | 9,121 | 8,586 | 10,889 |
|  |  |  |  |  |  |  |  |  |  |


| In Labor Force | 268,268 | 269,868 | 271,897 | 269,849 | 270,761 | 275,155 | 279,877 | 281,518 | 282,103 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Unemployment Rate | 3 | 3.5 | 3.9 | 3.8 | 3.7 | 3.5 | 3.3 | 3 | 3.9 |
| County (Howard) |  |  |  |  |  |  |  |  |  |
| Employed | 141,360 | 143,217 | 144,629 | 145,021 | 146,193 | 149,792 | 154,946 | 156,016 | 155,034 |
| Unemployed | 3,648 | 4,494 | 5,211 | 5,061 | 4,929 | 4,770 | 4,446 | 4,115 | 5,021 |
| In Labor Force | 145,008 | 147,711 | 149,840 | 150,082 | 151,122 | 154,562 | 159,392 | 160,131 | 160,055 |
| Unemployment Rate | 2.5 | 3 | 3.5 | 3.4 | 3.3 | 3.1 | 2.8 | 2.6 | 3.1 |
| County (Baltimore City) |  |  |  |  |  |  |  |  |  |
| Employed | 264,187 | 260,268 | 254,830 | 254,275 | 253,230 | 254,196 | 258,232 | 261,355 | 259,710 |
| Unemployed | 16,599 | 18,517 | 19,573 | 20,293 | 19,799 | 18,839 | 17,213 | 15,538 | 18,798 |
| In Labor Force | 280,786 | 278,785 | 274,403 | 274,568 | 273,029 | 273,035 | 275,445 | 276,893 | 278,508 |
| Unemployment Rate | 5.9 | 6.6 | 7.1 | 7.4 | 7.3 | 6.9 | 6.2 | 5.6 | 6.7 |
| State (Maryland) |  |  |  |  |  |  |  |  |  |
| Employed | $2,711,382$ | $2,712,268$ | $2,733,103$ | $2,741,325$ | $2,761,583$ | $2,810,748$ | $2,871,176$ | $2,882,447$ | $2,867,178$ |
| Unemployed | 100,275 | 114,779 | 128,318 | 128,702 | 123,657 | 121,198 | 112,761 | 105,251 | 130,531 |
| In Labor Force | $2,811,657$ | $2,827,047$ | $2,861,421$ | $2,870,027$ | $2,885,240$ | $2,931,946$ | $2,983,937$ | $2,987,698$ | $2,997,709$ |
| Unemployment Rate | 3.6 | 4.1 | 4.5 | 4.5 | 4.3 | 4.1 | 3.8 | 3.5 | 4.4 |

The following Cities that are within or contain the report area have no data available: Catonsville, Woodlawn, Arbutus, Lansdowne-Baltimore Highlands

In this area in 2009, Claritas estimates that people were employed in the following industries:

| Employment by Industry | People Employed | Percent Employed in this Industry | Percent Employed in this Industry in Maryland |
| :---: | :---: | :---: | :---: |
| Accommodation and Food Services Industry Employment | 3,291 | 5.41\% | 5.13\% |
| Administrative and Support and Waste Management Services Industries Employment | 2,188 | 3.6\% | 3.36\% |
| Agriculture, Forestry, Fishing and Hunting Industry Employment | 85 | 0.14\% | 0.63\% |
| Arts, Entertainment, and Recreation Industries Employment | 941 | 1.55\% | 1.58\% |
| Educational Service Industry Employment | 6,309 | 10.37\% | 9.03\% |
| Finance, Insurance, Real Estate and Rental and Leasing Industries Employment | 4,660 | 7.66\% | 7.17\% |
| Health Care and Social Assistance Industry Employment | 8,053 | 13.24\% | 11.51\% |
| Information Industry Employment | 1,981 | 3.26\% | 3.96\% |
| Manufacturing Industry Employment | 4,992 | 8.21\% | 7.29\% |
| Management of Companies and Enterprises Industry Employment | 37 | 0.06\% | 0.04\% |
| Other Services Industry Employment | 3,136 | 5.16\% | 5.54\% |
| Professional, Scientific, and Technical Services Industry Employment | 3,688 | 6.06\% | 9.05\% |
| Public Administration Employment | 5,831 | 9.59\% | 10.59\% |
| Retail Trade Industry Employment | 5,951 | 9.79\% | 10.48\% |


| Construction Industry Employment | 3,236 | $5.32 \%$ | $6.98 \%$ |
| :---: | :---: | :---: | :---: |
| Transportation and Warehousing, and Utilities <br> Industries <br> Employment | 3,999 | $6.58 \%$ | $4.86 \%$ |
| Wholesale Trade Industry Employment | 2,437 | $4.01 \%$ | $2.79 \%$ |

## (-) Crime:

The crime rates per 100,000 persons in the Census Place and county in which the study area is located, as reported by the FBI's Uniform Crime Reports, are as follows. Data was reported by the FBI for selected Census Places and counties, so data may be unavailable for your study area.

| Crime Rates per 100,000 persons | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: |
| County (Baltimore) |  |  |  |
| Aggravated Assault | N/A | 437.04 | 433.7 |
| Burglary | N/A | 2,939.24 | 2,998.6 |
| Motor Vehicle Thefts | N/A | 439.32 | 429.24 |
| Murder | N/A | 4.44 | 4.58 |
| Rape | N/A | 18.14 | 19.22 |
| Robbery | N/A | 265.14 | 227.48 |
| County (Anne Arundel) |  |  |  |
| Aggravated Assault | 465.61 | 447.61 | 452.61 |
| Burglary | 3,007.15 | 3,052.45 | 3,287.72 |
| Motor Vehicle Thefts | 297.4 | 322.87 | 328.04 |
| Murder | 3.71 | 5.66 | 4.53 |
| Rape | 17.17 | 21.47 | 17.71 |
| Robbery | 168.8 | 184.08 | 179.08 |
| County (Howard) |  |  |  |
| Aggravated Assault | 113.85 | 110.29 | 110.36 |
| Burglary | 2,468.29 | 2,407.15 | 2,443.34 |
| Motor Vehicle Thefts | 202.4 | 242.79 | 201.36 |
| Murder | 1.49 | 1.85 | 1.83 |
| Rape | 15.63 | 15.54 | 13.16 |
| Robbery | 97.85 | 103.26 | 90.26 |

The following Cities that are within or contain the report area have no data available: Baltimore, Catonsville, Woodlawn, Arbutus, Lansdowne-Baltimore Highlands

The following Counties that are within or contain the report area have no data available: Baltimore City

## (-) Endnotes:

Calculations presented here were performed by staff at The Reinvestment Fund and are based on public and proprietary data sources that have been licensed for use in PolicyMap.

Depending on the type of size of the area selected for this report, the above values capture data for the block groups, tracts, counties, etc, in which at least $50 \%$ of their areas are contained. If this report is run for a zip code, some data will be unavailable, as zip code values for some topics are not available through the Census.

The source of data on rental units, gross rent, cost burden, and vacancy are from the 2000 decennial U.S. Census,

Summary File 3. For custom areas, such as radii, custom regions, school districts, and political districts, Census data was calculated by summing the following component Zip Codes: 21228, 21227, 21229, 21250 . Estimates and projections of tenure, incomes, household composition, and housing stock are provided by Claritas, Inc. for 2009 and 2014. For custom areas, such as radii, custom regions, school districts, and political districts, Claritas data was calculated by summing the following component Zip Codes: 21228, 21227, 21229, 21250 . For more information on demographic data in PolicyMap, see the related entries for Census and Claritas in our Data Directory.

The source of data on population trends, racial characteristics, age distribution, incomes, foreign born population, households, housing type, tenure, and employment are from the 2000 decennial U.S. Census, Summary File 3. For custom areas, such as radii, custom regions, school districts, and political districts, Census data was calculated by summing the following component Zip Codes: 21228, 21227, 21229, 21250 . Estimates and projections of all of these topics, except foreign born population, are provided by Claritas, Inc. for 2009 and 2014. For custom areas, such as radii, custom regions, school districts, and political districts, Claritas data was calculated by summing the following component Zip Codes: 21228, 21227, 21229, 21250 . Data on legal permanent residents is from the Department of Homeland Security, and, for all areas, describes the state in which that area is located. For more information on demographic data in PolicyMap, see the related entries for Census, Claritas, and Department of Homeland Security Immigration Yearbook in our Data Directory.

The source of crime data in the tables presented here is Federal Bureau of Investigation's Uniform Crime Reporting (UCR) Program, which compiles standardized incident reports from local law enforcement agencies in order to produce reliable, uniform, and national crime data. The UCR Program collects data on known offenses and persons arrested by law enforcement agencies. For details on this dataset, see the related entry for FBI Uniform Crime Reports in the Data Directory. Crime data in this report is not summed or aggregated, but rather listed for each of the complete areas within the study area for which crime is reported.

For the separate Employment and Crime Sections in this report, only locations for which data are available are included in the tables. If the section does not include information, no data was available for any of the locations or component parts of the area you requested for this report.

PolicyMap's Terms of Use apply to the creation and use of this report.


Date: April 25, 2010
Proposed Area:
This area is located in Baltimore* County, Anne Arundel* County, Baltimore City* County, and Howard County, in the state of Maryland.

It is located within or touches the following census tract(s): 740102, 601101, 750700, 601202, 250600, 606901, 750600, 602100, 750500, 602200, 400400, 601201, 601102, 740202, 602302, 602700, 401503, 602800, 740103, 400500, 401504, 602306, 740201, 750801, 602600, 430600, 430300, 606605, 602900, 750201, 606601, 750300, 750400, 430102, 750804, 401400, 750900, 250206, 750202, 210200, 250205, 750803, 240400, 730401, 230300, 200600, 430200, 210100, 150900, 430101, 220100, 250301, 250207, 250203, 160802, 250401, 040100, 160500, 250303, 160700, 150600, 200200, 250204, 750102, 250302, 240200, 110200, 140100, 200500, 050100, 030200, 160600, 120500, 040200, 150200, 160400, 150300, 140200, 140300, 200400, 190100, 160100, 170200, 190300, 160200, 150100, 180100, 230100, 110100, 170300, 180300, 190200, 170100, 200100, 160300, 200300, 180200, 230200, 240300.

Similarly, it is located within or touches the following zip code(s): 21042, 21043, 21144, 21228, 21244, 21075, 21076, 21044, 21061, 21227, 20794, 21045, 21090, 21225, 21230, 21229, 21240, 21216, 21223, 21217, 21202, 21201, 21077.

Data presented in this report summarize the Zip Codes that this area covers. See Endnotes for a full explanation of how the data are calculated.

## (-) This Area is Served by (or touches):

School District(s): Baltimore County Public Schools, Anne Arundel County Public Schools, Howard County Public Schools, Baltimore City Public School System
Congressional District(s): Maryland District 2 (Dutch Ruppersberger), Maryland District 3 (John P. Sarbanes), Maryland District 7 (Elijah Cummings)
Senators: Benjamin L. Cardin (MD), Barbara A. Mikulski (MD)
State Senate District(s): Maryland State Senate District 009, Maryland State Senate District 010, Maryland State Senate District 012, Maryland State Senate District 013, Maryland State Senate District 031, Maryland State Senate District 032, Maryland State Senate District 040, Maryland State Senate District 041, Maryland State Senate District 044, Maryland State Senate District 046

State House District(s): Maryland State House District 010, Maryland State House District 013, Maryland State House District 031, Maryland State House District 032, Maryland State House District 040, Maryland State House District 041, Maryland State House District 044, Maryland State House District 046, Maryland State House District 09A, Maryland State House District 12A, Maryland State House District 12B

## (-) Population Trends:

As of 2009, this area was home to an estimated 161,435 people. Population is projected to be 167,959 by 2014.

| Population | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Projected Change 2009 to 2014 (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | N/A | 161,435 | 167,959 | $4.04 \%$ |
| Counties (Baltimore) | 754,292 | 793,827 | 815,904 | $2.78 \%$ |
| Counties (Anne Arundel) | 489,656 | 514,826 | 528,483 | $2.65 \%$ |


| Counties (Howard) | 247,842 | 277,926 | 294,264 | $5.88 \%$ |
| :---: | :---: | :---: | :---: | :---: |
| Counties (Baltimore City) | 651,154 | 635,311 | 629,384 | $-0.93 \%$ |
| State (Maryland) | $5,296,486$ | $5,662,381$ | $5,860,415$ | $3.5 \%$ |

## (-) Racial Characteristics:

Of the people living in this area in 2009, 57.35\% are White, 31.23\% are African American, 3.18\% are Hispanic, $\mathbf{7 . 8 5 \%}$ are Asian, $\mathbf{0 . 0 6 \%}$ are either Native Hawaiian or Pacific Islander, $\mathbf{0 . 2 8 \%}$ are American Indian or Alaskan Native, $\mathbf{0 . 9 8 \%}$ are of "some other race" and $2.25 \%$ are of two or more races. In the table below, the percentage of the population that each segment represents in the report area is compared to the percent it represents in the state.

Between 2009 and 2014, the White population is expected to change by $\mathbf{- 0 . 5 2 \%}$, the African American population by $\mathbf{4 . 6 7 \%}$, and Asian population by $27.83 \%$. The number of Hispanics will change by $\mathbf{2 9 . 1 3 \%}$.

| Race | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Percent of Total Population in <br> $\mathbf{2 0 0 9}$ | Percent of State Population in 2009 <br> (Maryland) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| White | $\mathrm{N} / \mathrm{A}$ | 92,577 | 92,099 | $57.35 \%$ | $60.41 \%$ |
| African American | $\mathrm{N} / \mathrm{A}$ | 50,422 | 52,777 | $31.23 \%$ | $29.07 \%$ |
| Asian | $\mathrm{N} / \mathrm{A}$ | 12,679 | 16,207 | $7.85 \%$ | $5.02 \%$ |
| Native Hawaiian or <br> Pacific Islander | $\mathrm{N} / \mathrm{A}$ | 96 | 109 | $0.06 \%$ | $0.06 \%$ |
| American Indian or <br> Alaskan Native | $\mathrm{N} / \mathrm{A}$ | 452 | 482 | $0.28 \%$ | $0.32 \%$ |
| Some Other Race | $\mathrm{N} / \mathrm{A}$ | 1,584 | 1,987 | $0.98 \%$ | $2.65 \%$ |
| Two or More <br> Races | $\mathrm{N} / \mathrm{A}$ | 3,625 | 4,298 | $2.25 \%$ | $2.48 \%$ |


| Ethnicity | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Percent of Total Population in $\mathbf{2 0 0 9}$ | Percent of State Population in $\mathbf{2 0 0 9}$ (Maryland) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hispanic | $\mathrm{N} / \mathrm{A}$ | 5,135 | 6,631 | $3.18 \%$ | $6.6 \%$ |

## (-) Age Distribution:

In the report area in 2009, 10.69\% of the population is over the age of $65.64 .53 \%$ are of working age (18-64). $\mathbf{2 4 . 7 8 \%}$ are under 18, and $\mathbf{7 . 0 1 \%}$ are under 5 years old.

| Age | Number of People in Age <br> Group | Percent of People in Age <br> Group | Percent of People in Age Group <br> (Maryland) |
| :---: | :---: | :---: | :---: |
| Under 5 | 11,316 | $7.01 \%$ | $6.66 \%$ |
| Under 18 | 40,008 | $24.78 \%$ | $24.1 \%$ |
| Working Age <br> $(18-64)$ | 104,175 | $64.53 \%$ | $63.69 \%$ |
| Aging (65+) | 17,252 | $10.69 \%$ | $12.21 \%$ |

## (-) Incomes:

The median household income for the study area $\mathbf{n} / \mathbf{a}$, compared to a state median of $\$ 68,668$, as estimated for 2009 by Claritas.

The number of households divided by income categories is shown in the Annual Income Category table. In 2009, $44.68 \%$ of households in the study area had an annual income of less than $\$ 50,000$, compared to $35.53 \%$ of people in the state.

| Secondary Market |  |  |
| :---: | :---: | :---: |
| Less than \$25,000 | 15,450 | 24.25\% |
| Less than \$50,000 | 28,464 | 44.68\% |
| Less than \$75,000 | 38,608 | 60.6\% |
| Less than \$150,000 | 56,105 | 88.06\% |
| \$150,000 or more | 7,604 | 11.94\% |
| County (Baltimore) |  |  |
| Less than \$25,000 | 48,664 | 15.35\% |
| Less than \$50,000 | 124,560 | 39.28\% |
| Less than \$75,000 | 191,439 | 60.37\% |
| Less than \$150,000 | 287,886 | 90.79\% |
| \$150,000 or more | 29,199 | 9.21\% |
| County (Anne Arundel) |  |  |
| Less than \$25,000 | 17,938 | 9.34\% |
| Less than \$50,000 | 50,273 | 26.18\% |
| Less than \$75,000 | 86,844 | 45.23\% |
| Less than \$150,000 | 160,946 | 83.82\% |
| \$150,000 or more | 31,072 | 16.18\% |
| County (Howard) |  |  |
| Less than \$25,000 | 6,486 | 6.42\% |
| Less than \$50,000 | 18,957 | 18.76\% |
| Less than \$75,000 | 34,539 | 34.18\% |
| Less than \$150,000 | 74,465 | 73.68\% |
| \$150,000 or more | 26,598 | 26.32\% |
| County (Baltimore City) |  |  |
| Less than \$25,000 | 87,405 | 35.06\% |
| Less than \$50,000 | 156,038 | 62.58\% |
| Less than \$75,000 | 197,897 | 79.37\% |
| Less than \$150,000 | 238,829 | 95.79\% |
| \$150,000 or more | 10,506 | 4.21\% |
| State (Maryland) |  |  |
| Less than \$25,000 | 320,303 | 15.05\% |
| Less than \$50,000 | 756,162 | 35.53\% |
| Less than \$75,000 | 1,164,462 | 54.71\% |
| Less than \$150,000 | 1,852,270 | 87.02\% |
| \$150,000 or more | 276,260 | 12.98\% |

According to Claritas estimates, the median income for a family in $2009 \mathrm{n} / \mathbf{a}$, compared to the state median family income of $\$ 82,923$.

## (-) Immigration:

Data from the U.S. Census Bureau in 2000 indicate that N/A people or N/A of the population living in this area were "foreign born". Census defines foreign born as anyone who is not a U.S. citizen at birth. At this time, more recent estimates do not exist for the report area, but this area is located in Maryland, which, according to the Department
of Homeland Security, was home to 27,062 people who were granted Legal Permanent Residence status in 2008. Those LPRs, or "green cards", represent $\mathbf{2 . 4 4 \%}$ of green cards issued in the nation that year.

## (-) Households and Families:

The composition of the 63,709 households who reside in the study area is shown in the table below. Households refer to the person or group of people living in any one housing unit. Families, though, are groups of related people who live together. Generally, households that do not contain a family are made up of unrelated people living together (eg, roommates) or people living alone. While it is possible for two families to share a household, the difference between the number of households and the number of families in an area shows, approximately, the number of non-family households in a place.

| 2009 Household Composition | Number of Households | Percent of Households |
| :---: | :---: | :---: |
| Secondary Market |  |  |
| Households | 63,709 | -- |
| Married with Children | 13,024 | 20.44\% |
| Single with Children | 9,010 | 14.14\% |
| Single Female with Children | 7,200 | 11.3\% |
| Other Households | 34,475 | 54.11\% |
| County (Baltimore) |  |  |
| Households | 317,085 | -- |
| Married with Children | 71,093 | 22.42\% |
| Single with Children | 34,605 | 10.91\% |
| Single Female with Children | 26,554 | 8.37\% |
| Other Households | 184,833 | 58.29\% |
| County (Anne Arundel) |  |  |
| Households | 192,018 | -- |
| Married with Children | 53,936 | 28.09\% |
| Single with Children | 19,891 | 10.36\% |
| Single Female with Children | 14,508 | 7.56\% |
| Other Households | 103,683 | 54\% |
| County (Howard) |  |  |
| Households | 101,063 | -- |
| Married with Children | 34,104 | 33.75\% |
| Single with Children | 8,624 | 8.53\% |
| Single Female with Children | 6,509 | 6.44\% |
| Other Households | 51,826 | 51.28\% |
| County (Baltimore City) |  |  |
| Households | 249,335 | -- |
| Married with Children | 29,554 | 11.85\% |
| Single with Children | 51,712 | 20.74\% |
| Single Female with Children | 43,811 | 17.57\% |
| Other Households | 124,258 | 49.84\% |
| State (Maryland) |  |  |
| Households | 2,128,530 | -- |
| Married with Children | 536,766 | 25.22\% |
|  |  |  |


| Single with Children | 260,960 | $12.26 \%$ |
| :---: | ---: | ---: |
| Single Female with Children | 202,442 | $9.51 \%$ |
| Other Households | $1,128,362$ | $53.01 \%$ |

The average size of a household in this area $\mathbf{n} / \mathbf{a}$ in 2009, as compared to the average household size for the county and the state, 2.44 (Baltimore), 2.6 (Anne Arundel), 2.71 (Howard), 2.44 (Baltimore City) and 2.59 (Maryland) respectively.

| 2009 Family Counts | Number of Families |
| :---: | ---: |
| Secondary Market |  |
| Families | 38,206 |
| County (Baltimore) | 210,002 |
| Families |  |
| County (Anne Arundel) |  |
| Families | 138,845 |
| County (Howard) |  |
| Families | 73,842 |
| County (Baltimore City) |  |
| Families | 142,214 |
| State (Maryland) |  |
| Families | $1,466,953$ |

## (-) Housing Type:

The type of housing available in this area, as estimated for 2009 by Claritas, is described in the table below. Single family homes include all one-unit structures, both attached and detached. Townhouses or duplexes include one-unit attached homes, as well as housing units with two units. Units in small apartment building are buildings with 3 to 49 units; large apartment buildings include buildings with 50 units or more. Other types of housing include vans, boats, recreational vehicles, or other units.

| 2009 Housing Stock | Number of Units | Percent of Units |
| :---: | ---: | ---: |
| Secondary Market |  |  |
| Single family detached homes | 19,517 | $26.99 \%$ |
| Single family attached homes | 28,789 | $39.82 \%$ |
| 2-unit homes and duplexes | 2,491 | $3.45 \%$ |
| Units in small apartment buildings | 13,184 | $18.23 \%$ |
| Units in large apartment buildings | 6,333 | $8.76 \%$ |
| Mobile homes or manufactured housing | 1,960 | $2.71 \%$ |
| Other types | 29 | $0.04 \%$ |
| County (Baltimore) |  |  |
| Single family detached homes | 156,303 | $47.24 \%$ |
| Single family attached homes | 80,229 | $24.25 \%$ |
| 2-unit homes and duplexes | 5,214 | $1.58 \%$ |
| Units in small apartment buildings | 73,887 | $22.33 \%$ |
| Units in large apartment buildings | 12,440 | $3.76 \%$ |
| Mobile homes or manufactured housing | 2,727 | $0.82 \%$ |
| Other types | 51 | $0.02 \%$ |


| County (Anne Arundel) |  |  |
| :---: | :---: | :---: |
| Single family detached homes | 127,911 | 62.98\% |
| Single family attached homes | 36,804 | 18.12\% |
| 2-unit homes and duplexes | 2,417 | 1.19\% |
| Units in small apartment buildings | 28,663 | 14.11\% |
| Units in large apartment buildings | 2,767 | 1.36\% |
| Mobile homes or manufactured housing | 4,445 | 2.19\% |
| Other types | 100 | 0.05\% |
| County (Howard) |  |  |
| Single family detached homes | 57,634 | 54.73\% |
| Single family attached homes | 21,742 | 20.65\% |
| 2-unit homes and duplexes | 462 | 0.44\% |
| Units in small apartment buildings | 20,300 | 19.28\% |
| Units in large apartment buildings | 3,050 | 2.9\% |
| Mobile homes or manufactured housing | 2,069 | 1.96\% |
| Other types | 46 | 0.04\% |
| County (Baltimore City) |  |  |
| Single family detached homes | 39,159 | 13.4\% |
| Single family attached homes | 149,788 | 51.24\% |
| 2-unit homes and duplexes | 19,414 | 6.64\% |
| Units in small apartment buildings | 58,964 | 20.17\% |
| Units in large apartment buildings | 24,789 | 8.48\% |
| Mobile homes or manufactured housing | 151 | 0.05\% |
| Other types | 59 | 0.02\% |
| State (Maryland) |  |  |
| Single family detached homes | 1,214,946 | 52.21\% |
| Single family attached homes | 476,602 | 20.48\% |
| 2-unit homes and duplexes | 47,263 | 2.03\% |
| Units in small apartment buildings | 420,856 | 18.09\% |
| Units in large apartment buildings | 119,004 | 5.11\% |
| Mobile homes or manufactured housing | 47,428 | 2.04\% |
| Other types | 905 | 0.04\% |

## (-) Tenure:

Across the area, an estimated $57.83 \%$ or $\mathbf{3 6 , 8 4 6}$ households owned their home in 2009. By 2014, 38,651 households are projected to own their homes. The average size of a household in this area $\mathbf{n} / \mathbf{a}$ in 2009, as compared to the average household size for the county and the state, 2.44 (Baltimore), 2.6 (Anne Arundel), 2.71 (Howard), 2.44 (Baltimore City) and 2.59 (Maryland) respectively.

## (-) Vacancy:

There were $\mathbf{7 2 , 3 0 3}$ housing units found in the study area in 2009, according to Claritas projections. In 2000, the Census showed $\mathrm{N} / \mathrm{A}$ of housing units to be in the category "other vacant," compared to $1.76 \%$ in the state. This way of counting vacant properties excludes units that are vacant because they are for sale or for rent. Also excluded are seasonal use properties. This vacancy category is a typical indicator of neighborhood distress.

The US Postal Service tracks vacancy rates on a quarterly basis, showing vacancy trends over the short term. In the third quarter of 2009, the vacancy rate in this area ranged from $0 \%$ to $22.68 \%$.

| USPS <br> Vacancy <br> Rates | 2008Q1 | 2008Q2 | 2008Q3 | 2008Q4 | 2009Q1 | 2009Q2 | 2009Q3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Secondary Market |  |  |  |  |  |  |  |
| Number Vacant | 6,327 | 5,795 | 5,772 | 6,067 | 6,030 | 6,139 | 6,203 |
| Percent Vacant | Ranged From 0\% to 44.82\% | Ranged From 0\% to 24.69\% | Ranged From 0\% to 24.04\% | Ranged From 0\% to 25.53\% | Ranged From 0\% to 23.46\% | Ranged From 0\% to 23.51\% | Ranged From 0\% to 22.68\% |
| County (Baltimore) |  |  |  |  |  |  |  |
| Number Vacant | 5,384 | 5,592 | 5,484 | 5,925 | 6,181 | 6,502 | 6,872 |
| Percent Vacant | 1.42\% | 1.47\% | 1.44\% | 1.55\% | 1.62\% | 1.7\% | 1.79\% |
| County (Anne Arundel) |  |  |  |  |  |  |  |
| Number Vacant | 2,640 | 2,764 | 2,900 | 2,993 | 3,008 | 3,459 | 3,387 |
| Percent Vacant | 1.13\% | 1.18\% | 1.23\% | 1.27\% | 1.27\% | 1.46\% | 1.42\% |
| County (Howard) |  |  |  |  |  |  |  |
| Number Vacant | 1,127 | 1,120 | 1,113 | 1,190 | 1,257 | 1,349 | 1,354 |
| Percent Vacant | 0.93\% | 0.92\% | 0.9\% | 0.97\% | 1.01\% | 1.09\% | 1.08\% |
| County (Baltimore City) |  |  |  |  |  |  |  |
| Number Vacant | 26,887 | 25,510 | 25,157 | 25,526 | 26,041 | 26,290 | 25,373 |
| Percent Vacant | 8.13\% | 7.71\% | 7.54\% | 7.67\% | 7.77\% | 7.86\% | 7.54\% |

## (-) Employment:

The following table shows the number of people who were employed, unemployed, in the labor force, and the unemployment rate for the market in which the report area is located, according to the Bureau of Labor Statistics.

| $\mathbf{2 0 0 0 - 2 0 0 8}$ Employment | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| City (Baltimore) |  |  |  |  |  |  |  |  |  |
| Employed | 264,187 | 260,268 | 254,830 | 254,275 | 253,230 | 254,196 | 258,232 | 261,355 | 259,710 |
| Unemployed | 16,599 | 18,517 | 19,573 | 20,293 | 19,799 | 18,839 | 17,213 | 15,538 | 18,798 |
| In Labor Force | 280,786 | 278,785 | 274,403 | 274,568 | 273,029 | 273,035 | 275,445 | 276,893 | 278,508 |
| Unemployment Rate | 5.9 | 6.6 | 7.1 | 7.4 | 7.3 | 6,9 | 6.2 | 5.6 | 6.7 |
| County (Baltimore) |  |  |  |  |  |  |  |  |  |
| Employed | 394,250 | 393,571 | 394,097 | 392,630 | 394,508 | 402,357 | 412,293 | 414,138 | 411,531 |
| Unemployed | 15,191 | 17,155 | 19,127 | 19,542 | 18,453 | 17,959 | 16,522 | 15,428 | 19,506 |


| In Labor Force | 409,441 | 410,726 | 413,224 | 412,172 | 412,961 | 420,316 | 428,815 | 429,566 | 431,037 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unemployment Rate | 3.7 | 4.2 | 4.6 | 4.7 | 4.5 | 4.3 | 3.9 | 3.6 | 4.5 |
| County (Anne Arundel) |  |  |  |  |  |  |  |  |  |
| Employed | 260,150 | 260,513 | 261,203 | 259,463 | 260,652 | 265,477 | 270,756 | 272,932 | 271,214 |
| Unemployed | 8,118 | 9,355 | 10,694 | 10,386 | 10,109 | 9,678 | 9,121 | 8,586 | 10,889 |
| In Labor Force | 268,268 | 269,868 | 271,897 | 269,849 | 270,761 | 275,155 | 279,877 | 281,518 | 282,103 |
| Unemployment Rate | 3 | 3.5 | 3.9 | 3.8 | 3.7 | 3.5 | 3.3 | 3 | 3.9 |
| County (Howard) |  |  |  |  |  |  |  |  |  |
| Employed | 141,360 | 143,217 | 144,629 | 145,021 | 146,193 | 149,792 | 154,946 | 156,016 | 155,034 |
| Unemployed | 3,648 | 4,494 | 5,211 | 5,061 | 4,929 | 4,770 | 4,446 | 4,115 | 5,021 |
| In Labor Force | 145,008 | 147,711 | 149,840 | 150,082 | 151,122 | 154,562 | 159,392 | 160,131 | 160,055 |
| Unemployment Rate | 2.5 | 3 | 3.5 | 3.4 | 3.3 | 3.1 | 2.8 | 2.6 | 3.1 |
| County (Baltimore City) |  |  |  |  |  |  |  |  |  |
| Employed | 264,187 | 260,268 | 254,830 | 254,275 | 253,230 | 254,196 | 258,232 | 261,355 | 259,710 |
| Unemployed | 16,599 | 18,517 | 19,573 | 20,293 | 19,799 | 18,839 | 17,213 | 15,538 | 18,798 |
| In Labor Force | 280,786 | 278,785 | 274,403 | 274,568 | 273,029 | 273,035 | 275,445 | 276,893 | 278,508 |
| Unemployment Rate | 5.9 | 6.6 | 7.1 | 7.4 | 7.3 | 6.9 | 6.2 | 5.6 | 6.7 |
| State (Maryland) |  |  |  |  |  |  |  |  |  |
| Employed | 2,711,382 | 2,712,268 | 2,733,103 | 2,741,325 | 2,761,583 | 2,810,748 | 2,871,176 | 2,882,447 | 2,867,178 |
| Unemployed | 100,275 | 114,779 | 128,318 | 128,702 | 123,657 | 121,198 | 112,761 | 105,251 | 130,531 |
| In Labor Force | 2,811,657 | 2,827,047 | 2,861,421 | 2,870,027 | 2,885,240 | 2,931,946 | 2,983,937 | 2,987,698 | 2,997,709 |
| Unemployment Rate | 3.6 | 4.1 | 4.5 | 4.5 | 4.3 | 4.1 | 3.8 | 3.5 | 4.4 |

The following Cities that are within or contain the report area have no data available: Ellicott City, Severn, Elkridge, Jessup, Linthicum, Lansdowne-Baltimore Highlands, Ferndale, Pumphrey

In this area in 2009, Claritas estimates that people were employed in the following industries:

| Employment by Industry | People Employed | Percent Employed in this Industry | Percent Employed in this Industry in Maryland |
| :---: | :---: | :---: | :---: |
| Accommodation and Food Services Industry Employment | 4,095 | 5.35\% | 5.13\% |
| Administrative and Support and Waste Management Services Industries Employment | 2,984 | 3.9\% | 3.36\% |
| Agriculture, Forestry, Fishing and Hunting Industry Employment | 138 | 0.18\% | 0.63\% |
| Arts, Entertainment, and Recreation Industries Employment | 1,321 | 1.73\% | 1.58\% |
| Educational Service Industry Employment | 6,685 | 8.74\% | 9.03\% |
| Finance, Insurance, Real Estate and Rental and Leasing Industries Employment | 5,764 | 7.54\% | 7.17\% |
| Health Care and Social Assistance Industry Employment | 8,786 | 11.49\% | 11.51\% |
| Information Industry Employment | 2,983 | 3.9\% | 3.96\% |
| Manufacturing Industry Employment | 6,559 | 8.57\% | 7.29\% |
| Management of Companies and Enterprises |  |  |  |


| Industry Employment | 34 | 0.04\% | 0.04\% |
| :---: | :---: | :---: | :---: |
| Other Services Industry Employment | 4,031 | 5.27\% | 5.54\% |
| Professional, Scientific, and Technical Services Industry Employment | 7,178 | 9.38\% | 9.05\% |
| Public Administration Employment | 6,609 | 8.64\% | 10.59\% |
| Retail Trade Industry Employment | 7,966 | 10.41\% | 10.48\% |
| Construction Industry Employment | 4,566 | 5.97\% | 6.98\% |
| Transportation and Warehousing, and Utilities Industries Employment | 3,830 | 5.01\% | 4.86\% |
| Wholesale Trade Industry Employment | 2,966 | 3.88\% | 2.79\% |

## (-) Crime:

The crime rates per 100,000 persons in the Census Place and county in which the study area is located, as reported by the FBI's Uniform Crime Reports, are as follows. Data was reported by the FBI for selected Census Places and counties, so data may be unavailable for your study area.

| Crime Rates per 100,000 persons | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: |
| County (Baltimore) |  |  |  |
| Aggravated Assault | N/A | 437.04 | 433.7 |
| Burglary | N/A | 2,939.24 | 2,998.6 |
| Motor Vehicle Thefts | N/A | 439.32 | 429.24 |
| Murder | N/A | 4.44 | 4.58 |
| Rape | N/A | 18.14 | 19.22 |
| Robbery | N/A | 265.14 | 227.48 |
| County (Anne Arundel) |  |  |  |
| Aggravated Assault | 465.61 | 447.61 | 452.61 |
| Burglary | 3,007.15 | 3,052.45 | 3,287.72 |
| Motor Vehicle Thefts | 297.4 | 322.87 | 328.04 |
| Murder | 3.71 | 5.66 | 4.53 |
| Rape | 17.17 | 21.47 | 17.71 |
| Robbery | 168.8 | 184.08 | 179.08 |
| County (Howard) |  |  |  |
| Aggravated Assault | 113.85 | 110.29 | 110.36 |
| Burglary | 2,468.29 | 2,407.15 | 2,443.34 |
| Motor Vehicle Thefts | 202.4 | 242.79 | 201.36 |
| Murder | 1.49 | 1.85 | 1.83 |
| Rape | 15.63 | 15.54 | 13.16 |
| Robbery | 97.85 | 103.26 | 90.26 |

The following Cities that are within or contain the report area have no data available: Baltimore, Ellicott City, Severn, Elkridge, Jessup, Linthicum, Lansdowne-Baltimore Highlands, Ferndale, Pumphrey

The following Counties that are within or contain the report area have no data available: Baltimore City

## (-) Endnotes:

Calculations presented here were performed by staff at The Reinvestment Fund and are based on public and proprietary data sources that have been licensed for use in PolicyMap.

Depending on the type of size of the area selected for this report, the above values capture data for the block groups, tracts, counties, etc, in which at least $50 \%$ of their areas are contained. If this report is run for a zip code, some data will be unavailable, as zip code values for some topics are not available through the Census.

The source of data on rental units, gross rent, cost burden, and vacancy are from the 2000 decennial U.S. Census, Summary File 3. For custom areas, such as radii, custom regions, school districts, and political districts, Census data was calculated by summing the following component Zip Codes: 21043, 21075, 21076, 21090, 21230, 21240, 21223, 21201. Estimates and projections of tenure, incomes, household composition, and housing stock are provided by Claritas, Inc. for 2009 and 2014. For custom areas, such as radii, custom regions, school districts, and political districts, Claritas data was calculated by summing the following component Zip Codes: 21043, 21075, 21076, 21090, 21230, 21240, 21223, 21201 . For more information on demographic data in PolicyMap, see the related entries for Census and Claritas in our Data Directory.

The source of data on population trends, racial characteristics, age distribution, incomes, foreign born population, households, housing type, tenure, and employment are from the 2000 decennial U.S. Census, Summary File 3. For custom areas, such as radii, custom regions, school districts, and political districts, Census data was calculated by summing the following component Zip Codes: 21043, 21075, 21076, 21090, 21230, 21240, 21223, 21201. Estimates and projections of all of these topics, except foreign born population, are provided by Claritas, Inc. for 2009 and 2014. For custom areas, such as radii, custom regions, school districts, and political districts, Claritas data was calculated by summing the following component Zip Codes: 21043, 21075, 21076, 21090, 21230, 21240, 21223, 21201. Data on legal permanent residents is from the Department of Homeland Security, and, for all areas, describes the state in which that area is located. For more information on demographic data in PolicyMap, see the related entries for Census, Claritas, and Department of Homeland Security Immigration Yearbook in our Data Directory.

The source of crime data in the tables presented here is Federal Bureau of Investigation's Uniform Crime Reporting (UCR) Program, which compiles standardized incident reports from local law enforcement agencies in order to produce reliable, uniform, and national crime data. The UCR Program collects data on known offenses and persons arrested by law enforcement agencies. For details on this dataset, see the related entry for FBI Uniform Crime Reports in the Data Directory. Crime data in this report is not summed or aggregated, but rather listed for each of the complete areas within the study area for which crime is reported.

For the separate Employment and Crime Sections in this report, only locations for which data are available are included in the tables. If the section does not include information, no data was available for any of the locations or component parts of the area you requested for this report.

PolicyMap's Terms of Use apply to the creation and use of this report.

Toll-Free: 1-866-923-MAPS

# Current Report: <br> Community Profile Report of Custom <br> Region: Primary \& Secondary 



Date: April 24, 2010
Proposed Area:
This area is located in Anne Arundel* County, Howard* County, Baltimore City* County, and Baltimore County, in the state of Maryland.

It is located within or touches the following census tract(s): The number contained in the report area exceeds 100. When this happens, they are not shown in the report.

Similarly, it is located within or touches the following zip code(s): 21042, 21043,
21144, 21228, 21244, 21075, 21076, 21044, 21061, 21227, 20794, 21207, 21045, 21090, 21225, 21230, 21229, 21240, 21216, 21223, 21217, 21202, 21201, 21250, 21077.

Data presented in this report summarize the Zip Codes that this area covers. See Endnotes for a full explanation of how the data are calculated.

## (-) This Area is Served by (or touches):

School District(s): Baltimore County Public Schools, Anne Arundel County Public Schools, Howard County Public Schools, Baltimore City Public School System
Congressional District(s): Maryland District 2 (Dutch Ruppersberger), Maryland District 3 (John P. Sarbanes), Maryland District 7 (Elijah Cummings)
Senators: Benjamin L. Cardin (MD), Barbara A. Mikulski (MD)
State Senate District(s): Maryland State Senate District 009, Maryland State Senate District 010, Maryland State Senate District 012, Maryland State Senate District 013, Maryland State Senate District 031, Maryland State Senate District 032, Maryland State Senate District 040, Maryland State Senate District 041, Maryland State Senate District 044, Maryland State Senate District 046

State House District(s): Maryland State House District 010, Maryland State House District 013, Maryland State House District 031, Maryland State House District 032, Maryland State House District 040, Maryland State House District 041, Maryland State House District 044, Maryland State House District 046, Maryland State House District 09A, Maryland State House District 12A, Maryland State House District 12B

## (-) Population Trends:

As of 2009, this area was home to an estimated 290,802 people. Population is projected to be 296,839 by 2014.

| Population | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Projected Change 2009 to 2014 (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | N/A | 290,802 | 296,839 | $2.08 \%$ |
| Counties (Baltimore) | 754,292 | 793,827 | 815,904 | $2.78 \%$ |
| Counties (Anne Arundel) | 489,656 | 514,826 | 528,483 | $2.65 \%$ |
| Counties (Howard) | 247,842 | 277,926 | 294,264 | $5.88 \%$ |
| Counties (Baltimore City) | 651,154 | 635,311 | 629,384 | $-0.93 \%$ |
| State (Maryland) | $5,296,486$ | $5,662,381$ | $5,860,415$ | $3.5 \%$ |

## (-) Racial Characteristics:

Of the people living in this area in 2009, 54.62\% are White, 35.59\% are African American, 3.07\% are Hispanic,
$\mathbf{6 . 3 2 \%}$ are Asian, $\mathbf{0 . 0 6 \%}$ are either Native Hawaiian or Pacific Islander, $\mathbf{0 . 2 7 \%}$ are American Indian or Alaskan Native, $\mathbf{0 . 9 9 \%}$ are of "some other race" and $\mathbf{2 . 1 5 \%}$ are of two or more races. In the table below, the percentage of the population that each segment represents in the report area is compared to the percent it represents in the state.

Between 2009 and 2014, the White population is expected to change by $-3.09 \%$, the African American population by $\mathbf{4 . 6 3 \%}$, and Asian population by $\mathbf{2 3 . 5 5 \%}$. The number of Hispanics will change by $\mathbf{2 6 . 0 3}$ \%.

| Race | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Percent of Total Population in <br> $\mathbf{2 0 0 9}$ | Percent of State Population in 2009 <br> (Maryland) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| White | $\mathrm{N} / \mathrm{A}$ | 158,823 | 153,908 | $54.62 \%$ | $60.41 \%$ |
| African American | $\mathrm{N} / \mathrm{A}$ | 103,504 | 108,300 | $35.59 \%$ | $29.07 \%$ |
| Asian | $\mathrm{N} / \mathrm{A}$ | 18,368 | 22,694 | $6.32 \%$ | $5.02 \%$ |
| Native Hawaiian <br> or <br> Pacific Islander | $\mathrm{N} / \mathrm{A}$ | 175 | 204 | $0.06 \%$ | $0.06 \%$ |
| American Indian <br> or <br> Alaskan Native | $\mathrm{N} / \mathrm{A}$ | 796 | 859 | $0.27 \%$ | $0.32 \%$ |
| Some Other Race | $\mathrm{N} / \mathrm{A}$ | 2,886 | 3,531 | $0.99 \%$ | $2.65 \%$ |
| Two or More <br> Races | $\mathrm{N} / \mathrm{A}$ | 6,250 | 7,343 | $2.15 \%$ | $2.48 \%$ |


| Ethnicity | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 4}$ | Percent of Total Population in $\mathbf{2 0 0 9}$ | Percent of State Population in 2009 (Maryland) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hispanic | N $/ \mathrm{A}$ | 8,915 | 11,236 | $3.07 \%$ | $6.6 \%$ |

## (-) Age Distribution:

In the report area in 2009, 12.65\% of the population is over the age of $65.63 .24 \%$ are of working age (18-64). $\mathbf{2 4 . 1 1 \%}$ are under 18, and $\mathbf{6 . 8 5 \%}$ are under 5 years old.

| Age | Number of People in Age <br> Group | Percent of People in Age <br> Group | Percent of People in Age Group <br> (Maryland) |
| :---: | :---: | :---: | :---: |
| Under 5 | 19,930 | $6.85 \%$ | $6.66 \%$ |
| Under 18 | 70,100 | $24.11 \%$ | $24.1 \%$ |
| Working Age <br> $(18-64)$ | 183,908 | $63.24 \%$ | $63.69 \%$ |
| Aging (65+) | 36,794 | $12.65 \%$ | $12.21 \%$ |

## (-) Incomes:

The median household income for the study area $\mathbf{n} / \mathbf{a}$, compared to a state median of $\mathbf{\$ 6 8 , 6 6 8}$, as estimated for 2009 by Claritas.

The number of households divided by income categories is shown in the Annual Income Category table. In 2009, $45.88 \%$ of households in the study area had an annual income of less than \$50,000, compared to $35.53 \%$ of people in the state.

| 2009 Annual Income Category | Number of Households | Percent of Households |
| :---: | ---: | ---: |
| Primary \& Secondary |  |  |
| Less than $\$ 25,000$ | 26,268 | $23.09 \%$ |
| Less than $\$ 50,000$ | 52,193 | $45.88 \%$ |
| Less than $\$ 75,000$ | 72,747 | $63.95 \%$ |
| Less than $\$ 150,000$ | 103,542 | $91.02 \%$ |


| \$150,000 or more | 10,216 | 8.98\% |
| :---: | :---: | :---: |
| County (Baltimore) |  |  |
| Less than \$25,000 | 48,664 | 15.35\% |
| Less than \$50,000 | 124,560 | 39.28\% |
| Less than \$75,000 | 191,439 | 60.37\% |
| Less than \$150,000 | 287,886 | 90.79\% |
| \$150,000 or more | 29,199 | 9.21\% |
| County (Anne Arundel) |  |  |
| Less than \$25,000 | 17,938 | 9.34\% |
| Less than \$50,000 | 50,273 | 26.18\% |
| Less than \$75,000 | 86,844 | 45.23\% |
| Less than \$150,000 | 160,946 | 83.82\% |
| \$150,000 or more | 31,072 | 16.18\% |
| County (Howard) |  |  |
| Less than \$25,000 | 6,486 | 6.42\% |
| Less than \$50,000 | 18,957 | 18.76\% |
| Less than \$75,000 | 34,539 | 34.18\% |
| Less than \$150,000 | 74,465 | 73.68\% |
| \$150,000 or more | 26,598 | 26.32\% |
| County (Baltimore City) |  |  |
| Less than \$25,000 | 87,405 | 35.06\% |
| Less than \$50,000 | 156,038 | 62.58\% |
| Less than \$75,000 | 197,897 | 79.37\% |
| Less than \$150,000 | 238,829 | 95.79\% |
| \$150,000 or more | 10,506 | 4.21\% |
| State (Maryland) |  |  |
| Less than \$25,000 | 320,303 | 15.05\% |
| Less than \$50,000 | 756,162 | 35.53\% |
| Less than \$75,000 | 1,164,462 | 54.71\% |
| Less than \$150,000 | 1,852,270 | 87.02\% |
| \$150,000 or more | 276,260 | 12.98\% |

According to Claritas estimates, the median income for a family in $2009 \mathrm{n} / \mathbf{a}$, compared to the state median family income of $\$ 82,923$.

## (-) Immigration:

Data from the U.S. Census Bureau in 2000 indicate that $\mathbf{N} / \mathbf{A}$ people or $\mathbf{N} / \mathbf{A}$ of the population living in this area were "foreign born". Census defines foreign born as anyone who is not a U.S. citizen at birth. At this time, more recent estimates do not exist for the report area, but this area is located in Maryland, which, according to the Department of Homeland Security, was home to 27,062 people who were granted Legal Permanent Residence status in 2008. Those LPRs, or "green cards", represent $\mathbf{2 . 4 4 \%}$ of green cards issued in the nation that year.

## (-) Households and Families:

The composition of the 113,758 households who reside in the study area is shown in the table below. Households refer to the person or group of people living in any one housing unit. Families, though, are groups of related people
who live together. Generally, households that do not contain a family are made up of unrelated people living together (eg, roommates) or people living alone. While it is possible for two families to share a household, the difference between the number of households and the number of families in an area shows, approximately, the number of non-family households in a place.

| 2009 Household Composition | Number of Households | Percent of Households |
| :---: | :---: | :---: |
| Primary \& Secondary |  |  |
| Households | 113,758 | -- |
| Married with Children | 22,535 | 19.81\% |
| Single with Children | 16,603 | 14.6\% |
| Single Female with Children | 13,373 | 11.76\% |
| Other Households | 61,247 | 53.84\% |
| County (Baltimore) |  |  |
| Households | 317,085 | -- |
| Married with Children | 71,093 | 22.42\% |
| Single with Children | 34,605 | 10.91\% |
| Single Female with Children | 26,554 | 8.37\% |
| Other Households | 184,833 | 58.29\% |
| County (Anne Arundel) |  |  |
| Households | 192,018 | -- |
| Married with Children | 53,936 | 28.09\% |
| Single with Children | 19,891 | 10.36\% |
| Single Female with Children | 14,508 | 7.56\% |
| Other Households | 103,683 | 54\% |
| County (Howard) |  |  |
| Households | 101,063 | -- |
| Married with Children | 34,104 | 33.75\% |
| Single with Children | 8,624 | 8.53\% |
| Single Female with Children | 6,509 | 6.44\% |
| Other Households | 51,826 | 51.28\% |
| County (Baltimore City) |  |  |
| Households | 249,335 | -- |
| Married with Children | 29,554 | 11.85\% |
| Single with Children | 51,712 | 20.74\% |
| Single Female with Children | 43,811 | 17.57\% |
| Other Households | 124,258 | 49.84\% |
| State (Maryland) |  |  |
| Households | 2,128,530 | -- |
| Married with Children | 536,766 | 25.22\% |
| Single with Children | 260,960 | 12.26\% |
| Single Female with Children | 202,442 | 9.51\% |
| Other Households | 1,128,362 | 53.01\% |

The average size of a household in this area $\mathbf{n} / \mathbf{a}$ in 2009, as compared to the average household size for the county and the state, 2.44 (Baltimore), 2.6 (Anne Arundel), 2.71 (Howard), 2.44 (Baltimore City) and 2.59
(Maryland) respectively.

| 2009 Family Counts | Number of Families |
| :---: | ---: |
| Primary \& Secondary |  |
| Families | 70,458 |
| County (Baltimore) | 210,002 |
| Families |  |
| County (Anne Arundel) | 138,845 |
| Families |  |
| County (Howard) | 73,842 |
| Families |  |
| County (Baltimore City) | 142,214 |
| Families |  |
| State (Maryland) | $1,466,953$ |
| Families |  |

## (-) Housing Type:

The type of housing available in this area, as estimated for 2009 by Claritas, is described in the table below. Single family homes include all one-unit structures, both attached and detached. Townhouses or duplexes include one-unit attached homes, as well as housing units with two units. Units in small apartment building are buildings with 3 to 49 units; large apartment buildings include buildings with 50 units or more. Other types of housing include vans, boats, recreational vehicles, or other units.

| 2009 Housing Stock | Number of Units | Percent of Units |
| :---: | :---: | :---: |
| Primary \& Secondary |  |  |
| Single family detached homes | 38,801 | 31.11\% |
| Single family attached homes | 48,017 | 38.49\% |
| 2-unit homes and duplexes | 4,618 | 3.7\% |
| Units in small apartment buildings | 22,213 | 17.81\% |
| Units in large apartment buildings | 8,998 | 7.21\% |
| Mobile homes or manufactured housing | 2,056 | 1.65\% |
| Other types | 39 | 0.03\% |
| County (Baltimore) |  |  |
| Single family detached homes | 156,303 | 47.24\% |
| Single family attached homes | 80,229 | 24.25\% |
| 2-unit homes and duplexes | 5,214 | 1.58\% |
| Units in small apartment buildings | 73,887 | 22.33\% |
| Units in large apartment buildings | 12,440 | 3.76\% |
| Mobile homes or manufactured housing | 2,727 | 0.82\% |
| Other types | 51 | 0.02\% |
| County (Anne Arundel) |  |  |
| Single family detached homes | 127,911 | 62.98\% |
| Single family attached homes | 36,804 | 18.12\% |
| 2-unit homes and duplexes | 2,417 | 1.19\% |
| Units in small apartment buildings | 28,663 | 14.11\% |
|  |  |  |


| Units in large apartment buildings | 2,767 | 1.36\% |
| :---: | :---: | :---: |
| Mobile homes or manufactured housing | 4,445 | 2.19\% |
| Other types | 100 | 0.05\% |
| County (Howard) |  |  |
| Single family detached homes | 57,634 | 54.73\% |
| Single family attached homes | 21,742 | 20.65\% |
| 2-unit homes and duplexes | 462 | 0.44\% |
| Units in small apartment buildings | 20,300 | 19.28\% |
| Units in large apartment buildings | 3,050 | 2.9\% |
| Mobile homes or manufactured housing | 2,069 | 1.96\% |
| Other types | 46 | 0.04\% |
| County (Baltimore City) |  |  |
| Single family detached homes | 39,159 | 13.4\% |
| Single family attached homes | 149,788 | 51.24\% |
| 2-unit homes and duplexes | 19,414 | 6.64\% |
| Units in small apartment buildings | 58,964 | 20.17\% |
| Units in large apartment buildings | 24,789 | 8.48\% |
| Mobile homes or manufactured housing | 151 | 0.05\% |
| Other types | 59 | 0.02\% |
| State (Maryland) |  |  |
| Single family detached homes | 1,214,946 | 52.21\% |
| Single family attached homes | 476,602 | 20.48\% |
| 2-unit homes and duplexes | 47,263 | 2.03\% |
| Units in small apartment buildings | 420,856 | 18.09\% |
| Units in large apartment buildings | 119,004 | 5.11\% |
| Mobile homes or manufactured housing | 47,428 | 2.04\% |
| Other types | 905 | 0.04\% |

## (-) Tenure:

Across the area, an estimated $\mathbf{6 0 . 9 4 \%}$ or 69,323 households owned their home in 2009. By 2014, 71,074 households are projected to own their homes. The average size of a household in this area $\mathbf{n} / \mathbf{a}$ in 2009, as compared to the average household size for the county and the state, 2.44 (Baltimore), 2.6 (Anne Arundel), 2.71 (Howard), 2.44 (Baltimore City) and 2.59 (Maryland) respectively.

## (-) Vacancy:

There were 124,742 housing units found in the study area in 2009, according to Claritas projections. In 2000, the Census showed N/A of housing units to be in the category "other vacant," compared to $1.76 \%$ in the state. This way of counting vacant properties excludes units that are vacant because they are for sale or for rent. Also excluded are seasonal use properties. This vacancy category is a typical indicator of neighborhood distress.
The US Postal Service tracks vacancy rates on a quarterly basis, showing vacancy trends over the short term. In the third quarter of 2009 , the vacancy rate in this area ranged from $0 \%$ to $22.68 \%$.

| USPS <br> Vacancy <br> Rates | 2008Q1 | 2008Q2 | 2008Q3 | 2008Q4 | 2009Q1 | 2009Q2 | 2009Q3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Primary \& |  |  |  |  |  |  |  |


| Secondary |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number Vacant | 7,758 | 7,330 | 7,287 | 7,546 | 7,688 | 7,860 | 7,940 |
| Percent Vacant | Ranged From 0\% to 44.82\% | Ranged From $0 \%$ to $24.69 \%$ | Ranged From 0\% to 24.04\% | Ranged From $0 \%$ to $25.53 \%$ | Ranged From 0\% to 23.46\% | Ranged From 0\% to 23.51\% | Ranged From 0\% to 22.68\% |
| County (Baltimore) |  |  |  |  |  |  |  |
| Number Vacant | 5,384 | 5,592 | 5,484 | 5,925 | 6,181 | 6,502 | 6,872 |
| Percent Vacant | 1.42\% | 1.47\% | 1.44\% | 1.55\% | 1.62\% | 1.7\% | 1.79\% |
| County (Anne Arundel) |  |  |  |  |  |  |  |
| Number Vacant | 2,640 | 2,764 | 2,900 | 2,993 | 3,008 | 3,459 | 3,387 |
| Percent Vacant | 1.13\% | 1.18\% | 1.23\% | 1.27\% | 1.27\% | 1.46\% | 1.42\% |
| County (Howard) |  |  |  |  |  |  |  |
| Number Vacant | 1,127 | 1,120 | 1,113 | 1,190 | 1,257 | 1,349 | 1,354 |
| Percent Vacant | 0.93\% | 0.92\% | 0.9\% | 0.97\% | 1.01\% | 1.09\% | 1.08\% |
| County (Baltimore City) |  |  |  |  |  |  |  |
| Number Vacant | 26,887 | 25,510 | 25,157 | 25,526 | 26,041 | 26,290 | 25,373 |
| Percent <br> Vacant | 8.13\% | 7.71\% | 7.54\% | 7.67\% | 7.77\% | 7.86\% | 7.54\% |

## (-) Employment:

The following table shows the number of people who were employed, unemployed, in the labor force, and the unemployment rate for the market in which the report area is located, according to the Bureau of Labor Statistics.

| $\mathbf{2 0 0 0} \mathbf{- 2 0 0 8}$ Employment | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| City (Baltimore) |  |  |  |  |  |  |  |  |  |
| Employed | 264,187 | 260,268 | 254,830 | 254,275 | 253,230 | 254,196 | 258,232 | 261,355 | 259,710 |
| Unemployed | 16,599 | 18,517 | 19,573 | 20,293 | 19,799 | 18,839 | 17,213 | 15,538 | 18,798 |
| In Labor Force | 280,786 | 278,785 | 274,403 | 274,568 | 273,029 | 273,035 | 275,445 | 276,893 | 278,508 |
| Unemployment Rate | 5.9 | 6.6 | 7.1 | 7.4 | 7.3 | 6.9 | 6.2 | 5.6 | 6.7 |
| County (Baltimore) |  |  |  |  |  |  |  |  |  |
| Employed | 394,250 | 393,571 | 394,097 | 392,630 | 394,508 | 402,357 | 412,293 | 414,138 | 411,531 |
| Unemployed | 15,191 | 17,155 | 19,127 | 19,542 | 18,453 | 17,959 | 16,522 | 15,428 | 19,506 |
| In Labor Force | 409,441 | 410,726 | 413,224 | 412,172 | 412,961 | 420,316 | 428,815 | 429,566 | 431,037 |
| Unemployment Rate | 3.7 | 4.2 | 4.6 | 4.7 | 4.5 | 4.3 | 3.9 | 3.6 | 4.5 |
| County (Anne Arundel) |  |  |  |  |  |  |  |  |  |
| Employed | 260,150 | 260,513 | 261,203 | 259,463 | 260,652 | 265,477 | 270,756 | 272,932 | 271,214 |
| Unemployed | 8,118 | 9,355 | 10,694 | 10,386 | 10,109 | 9,678 | 9,121 | 8,586 | 10,889 |


| In Labor Force | 268,268 | 269,868 | 271,897 | 269,849 | 270,761 | 275,155 | 279,877 | 281,518 | 282,103 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Unemployment Rate | 3 | 3.5 | 3.9 | 3.8 | 3.7 | 3.5 | 3.3 | 3 | 3.9 |
| County (Howard) |  |  |  |  |  |  |  |  |  |
| Employed | 141,360 | 143,217 | 144,629 | 145,021 | 146,193 | 149,792 | 154,946 | 156,016 | 155,034 |
| Unemployed | 3,648 | 4,494 | 5,211 | 5,061 | 4,929 | 4,770 | 4,446 | 4,115 | 5,021 |
| In Labor Force | 145,008 | 147,711 | 149,840 | 150,082 | 151,122 | 154,562 | 159,392 | 160,131 | 160,055 |
| Unemployment Rate | 2.5 | 3 | 3.5 | 3.4 | 3.3 | 3.1 | 2.8 | 2.6 | 3.1 |
| County (Baltimore City) |  |  |  |  |  |  |  |  |  |
| Employed | 264,187 | 260,268 | 254,830 | 254,275 | 253,230 | 254,196 | 258,232 | 261,355 | 259,710 |
| Unemployed | 16,599 | 18,517 | 19,573 | 20,293 | 19,799 | 18,839 | 17,213 | 15,538 | 18,798 |
| In Labor Force | 280,786 | 278,785 | 274,403 | 274,568 | 273,029 | 273,035 | 275,445 | 276,893 | 278,508 |
| Unemployment Rate | 5.9 | 6.6 | 7.1 | 7.4 | 7.3 | 6.9 | 6.2 | 5.6 | 6.7 |
| State (Maryland) |  |  |  |  |  |  |  |  |  |
| Employed | $2,711,382$ | $2,712,268$ | $2,733,103$ | $2,741,325$ | $2,761,583$ | $2,810,748$ | $2,871,176$ | $2,882,447$ | $2,867,178$ |
| Unemployed | 100,275 | 114,779 | 128,318 | 128,702 | 123,657 | 121,198 | 112,761 | 105,251 | 130,531 |
| In Labor Force | $2,811,657$ | $2,827,047$ | $2,861,421$ | $2,870,027$ | $2,885,240$ | $2,931,946$ | $2,983,937$ | $2,987,698$ | $2,997,709$ |
| Unemployment Rate | 3.6 | 4.1 | 4.5 | 4.5 | 4.3 | 4.1 | 3.8 | 3.5 | 4.4 |

The following Cities that are within or contain the report area have no data available: Ellicott City, Catonsville, Severn, Woodlawn, Elkridge, Arbutus, Jessup, Linthicum, Lansdowne-Baltimore Highlands, Ferndale, Pumphrey

In this area in 2009, Claritas estimates that people were employed in the following industries:

| Employment by Industry | People <br> Employed | Percent <br> Employed <br> in this Industry | Percent Employed in this Industry in <br> Maryland |
| :---: | :---: | :---: | :---: |
| Accommodation and Food Services <br> Industry Employment | 7,386 | $5.38 \%$ | $5.13 \%$ |
| Administrative and Support and Waste <br> Management Services <br> Industries Employment | 5,172 | $3.77 \%$ | $3.36 \%$ |
| Agriculture, Forestry, Fishing and HuntingIndustry Employment | 223 | $0.16 \%$ | $0.63 \%$ |
| Arts, Entertainment, and Recreation | 2,262 | $1.65 \%$ | $1.58 \%$ |
| Industries Employment |  |  |  |


| Retail Trade Industry Employment | 13,917 | $10.14 \%$ | $10.48 \%$ |
| :---: | :---: | :---: | :---: |
| Construction Industry Employment | 7,802 | $5.68 \%$ | $6.98 \%$ |
| Transportation and Warehousing, and Utilities <br> Industries <br> Employment | 7,829 | $5.7 \%$ | $4.86 \%$ |
| Wholesale Trade Industry Employment | 5,403 | $3.93 \%$ | $2.79 \%$ |

## (-) Crime:

The crime rates per 100,000 persons in the Census Place and county in which the study area is located, as reported by the FBI's Uniform Crime Reports, are as follows. Data was reported by the FBI for selected Census Places and counties, so data may be unavailable for your study area.

| Crime Rates per 100,000 persons | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: |
| County (Baltimore) |  |  |  |
| Aggravated Assault | N/A | 437.04 | 433.7 |
| Burglary | N/A | 2,939.24 | 2,998.6 |
| Motor Vehicle Thefts | N/A | 439.32 | 429.24 |
| Murder | N/A | 4.44 | 4.58 |
| Rape | N/A | 18.14 | 19.22 |
| Robbery | N/A | 265.14 | 227.48 |
| County (Anne Arundel) |  |  |  |
| Aggravated Assault | 465.61 | 447.61 | 452.61 |
| Burglary | 3,007.15 | 3,052.45 | 3,287.72 |
| Motor Vehicle Thefts | 297.4 | 322.87 | 328.04 |
| Murder | 3.71 | 5.66 | 4.53 |
| Rape | 17.17 | 21.47 | 17.71 |
| Robbery | 168.8 | 184.08 | 179.08 |
| County (Howard) |  |  |  |
| Aggravated Assault | 113.85 | 110.29 | 110.36 |
| Burglary | 2,468.29 | 2,407.15 | 2,443.34 |
| Motor Vehicle Thefts | 202.4 | 242.79 | 201.36 |
| Murder | 1.49 | 1.85 | 1.83 |
| Rape | 15.63 | 15.54 | 13.16 |
| Robbery | 97.85 | 103.26 | 90.26 |

The following Cities that are within or contain the report area have no data available: Baltimore, Ellicott City,
Catonsville, Severn, Woodlawn, Elkridge, Arbutus, Jessup, Linthicum, Lansdowne-Baltimore Highlands,
Ferndale, Pumphrey
The following Counties that are within or contain the report area have no data available: Baltimore City

## (-) Endnotes:

Calculations presented here were performed by staff at The Reinvestment Fund and are based on public and proprietary data sources that have been licensed for use in PolicyMap.

Depending on the type of size of the area selected for this report, the above values capture data for the block groups, tracts, counties, etc, in which at least $50 \%$ of their areas are contained. If this report is run for a zip code,
some data will be unavailable, as zip code values for some topics are not available through the Census.
The source of data on rental units, gross rent, cost burden, and vacancy are from the 2000 decennial U.S. Census, Summary File 3. For custom areas, such as radii, custom regions, school districts, and political districts, Census data was calculated by summing the following component Zip Codes: 21043, 21228, 21075, 21076, 21227, 21090, 21230, 21229, 21240, 21223, 21201, 21250 . Estimates and projections of tenure, incomes, household composition, and housing stock are provided by Claritas, Inc. for 2009 and 2014. For custom areas, such as radii, custom regions, school districts, and political districts, Claritas data was calculated by summing the following component Zip Codes: 21043, 21228, 21075, 21076, 21227, 21090, 21230, 21229, 21240, 21223, 21201, 21250 . For more information on demographic data in PolicyMap, see the related entries for Census and Claritas in our Data Directory.

The source of data on population trends, racial characteristics, age distribution, incomes, foreign born population, households, housing type, tenure, and employment are from the 2000 decennial U.S. Census, Summary File 3. For custom areas, such as radii, custom regions, school districts, and political districts, Census data was calculated by summing the following component Zip Codes: 21043, 21228, 21075, 21076, 21227, 21090, 21230, 21229, 21240, 21223, 21201, 21250 . Estimates and projections of all of these topics, except foreign born population, are provided by Claritas, Inc. for 2009 and 2014. For custom areas, such as radii, custom regions, school districts, and political districts, Claritas data was calculated by summing the following component Zip Codes: 21043, 21228, 21075, 21076, 21227, 21090, 21230, 21229, 21240, 21223, 21201, 21250 . Data on legal permanent residents is from the Department of Homeland Security, and, for all areas, describes the state in which that area is located. For more information on demographic data in PolicyMap, see the related entries for Census, Claritas, and Department of Homeland Security Immigration Yearbook in our Data Directory.

The source of crime data in the tables presented here is Federal Bureau of Investigation's Uniform Crime Reporting (UCR) Program, which compiles standardized incident reports from local law enforcement agencies in order to produce reliable, uniform, and national crime data. The UCR Program collects data on known offenses and persons arrested by law enforcement agencies. For details on this dataset, see the related entry for FBI Uniform Crime Reports in the Data Directory. Crime data in this report is not summed or aggregated, but rather listed for each of the complete areas within the study area for which crime is reported.

For the separate Employment and Crime Sections in this report, only locations for which data are available are included in the tables. If the section does not include information, no data was available for any of the locations or component parts of the area you requested for this report.

PolicyMap's Terms of Use apply to the creation and use of this report.

> Community Profile Report by Custom Region: Primary \& Secondary for area in Baltimore County, Maryland 04/24/2010
> Copyright © PolicyMap 2010

## Appendix B - Market Data

- National Apartment Association - Survey of Operating Income \& Expenses in Rental Apartment

Properties: Executive Summary; excerpts from 2009 - 2004 surveys.

- Comparable Property Survey Reports, Summary of Findings, and Rental Rate Adjustment Matrix

Johns Hopkins University - Carey Business School
Development of Garden Apartments at Maiden Choice Lane, Catonsville, Maryland 21228
By: Andrew W. Ingalls
Advisor: Mr. George Green


# 2009 Survey of Operating Income \& Expenses in Rental Apartment Properties 

EXECUTIVE SUMMARY

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

## EXECUTIVE SUMMARY TABLE OF CONTENTS

Market Rent Properties Summary ....................................................... 63
Metro Area Market Rent Summary...................................................... 67
Subsidized Properties Summary............................................................. 68
Glossary of Terms.................................................................................. 69
A full survey report and individual market data will be available at www.naahq.org/09ies by Oct. 1.

# Challenging Times Require Bottom-Line Focus 

In a transformational year of bailouts, stimulus programs, deficit spending and financial industry restructuring, in addition to a dramatic decline of home and stock ownership and values, rising unemployment and bankruptcies, the U.S. apartment industry continues to face many short-term challenges. In the face of a prolonged recession, rising cost of living, tax increases, declining rents and a significant decline in both transactional volume and asset values, the apartment industry is placing an even great emphasis on operational basics and performance metrics.

The turmoil created by economic uncertainty has raised the bar within the apartment industry for increased focus on operations. Asset and property management skills and experience are now more of a priority than ever before, as the apartment industry focuses on offensive and defensive actions to control the financial bottom line of property and portfolio operations.

These findings are just a few of the many conclusions drawn from the recently completed National Apartment Association's 2009 Survey of Operating Income \& Expenses. This NAA-sponsored survey of nearly 900,000 apartment units nationwide, conducted by Los Angeles-based CEL \& Associates Inc., concluded that the quality and dedication of leadership and onsite talent within the apartment industry does matter.

The 2009 survey results reveal that apartment operators are successfully balancing a commitment to providing high-quality living environments with the need to be financially diligent in
managing and controlling often unexpected increases in operating costs. Within the apartment industry, the experience, knowledge and dedication of onsite personnel is paying big dividends for residents and owners alike.

NAA has completed its Survey of Operating Income \& Expenses in Rental Apartment Properties for 2009, based on annual data for 2008.

Major findings in this survey of the professionally managed rental apartment industry reflect the uncertainties of the current economy, as demonstrated by net operating income in the "market rent" segment of the rental apartment market declining by 2.7 percentage points to 53.9 percent and a higher economic loss rate of 12.42 percent from 10.11 percent in 2007. Total operating expenses increased by 0.9 percentage points, or 2.3 percent. The economic state of subsidized properties in the survey also experienced variable results over 2007.

A total of 3,619 properties containing 898,523 units are represented in this year's report. Data was reported for 3,107 market rent properties containing 822,991 units and 512 subsidized properties containing 75,532 units. Forms 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, further segmented by individually metered and master-metered utilities. Survey data is presented in three forms: dollars per unit, dollars per square foot of rentable


MASTER METERED PROPERTIES

|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Properties | 437 |  |  | 326 |  |  | 111 |  |  |
| Number of Units | 110,351 |  |  | 82,595 |  |  | 27,756 |  |  |
| Avg. No. of Units/Property | 253 |  |  | 253 |  |  | 250 |  |  |
| Avg. No. of Square Feet/Unit | 905 |  |  | 939 |  |  | 803 |  |  |
| Turnover rate in \% | 46\% |  |  | 47\% |  |  | 45\% |  |  |
|  | $\begin{aligned} & \text { \$ Per } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 13,532 | 14.95 | 100.0\% | 12,375 | 13.18 | 100.0\% | 16,975 | 21.15 | 100.0\% |
| Rent Revenue Collected | 12,037 | 13.30 | 88.9\% | 10,957 | 11.67 | 88.5\% | 15,249 | 19.00 | 89.8\% |
| Losses to Vacancy | 1,011 | 1.12 | 7.5\% | 935 | 1.00 | 7.6\% | 1,234 | 1.54 | 7.3\% |
| Collection Losses | 116 | 0.13 | 0.9\% | 120 | 0.13 | 1.0\% | 106 | 0.13 | 0.6\% |
| Losses to Concessions | 368 | 0.41 | 2.7\% | 363 | 0.39 | 2.9\% | 386 | 0.48 | 2.3\% |
| Other Revenue | 1,011 | 1.12 | 7.5\% | 886 | 0.94 | 7.2\% | 1,383 | 1.72 | 8.1\% |
| Total Revenue | 13,048 | 14.41 | 96.4\% | 11,843 | 12.62 | 95.7\% | 16,632 | 20.72 | 98.0\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,336 | 1.48 | 9.9\% | 1,254 | 1.34 | 10.1\% | 1,578 | 1.97 | 9.3\% |
| Insurance | 308 | 0.34 | 2.3\% | 265 | 0.28 | 2.1\% | 437 | 0.54 | 2.6\% |
| Taxes | 1,128 | 1.25 | 8.3\% | 915 | 0.97 | 7.4\% | 1,761 | 2.19 | 10.4\% |
| Utilities | 1,299 | 1.44 | 9.6\% | 1,301 | 1.39 | 10.5\% | 1,292 | 1.61 | 7.6\% |
| Management Fees | 473 | 0.52 | 3.5\% | 418 | 0.45 | 3.4\% | 637 | 0.79 | 3.8\% |
| Administrative | 402 | 0.44 | 3.0\% | 362 | 0.39 | 2.9\% | 519 | 0.65 | 3.1\% |
| Marketing | 210 | 0.23 | 1.6\% | 192 | 0.20 | 1.6\% | 264 | 0.33 | 1.6\% |
| Contract Services | 516 | 0.57 | 3.8\% | 436 | 0.46 | 3.5\% | 755 | 0.94 | 4.4\% |
| Repair and Maintenance | 565 | 0.62 | 4.2\% | 546 | 0.58 | 4.4\% | 620 | 0.77 | 3.6\% |
| Total Operating Expenses | 6,237 | 6.89 | 46.1\% | 5,691 | 6.06 | 46.0\% | 7,862 | 9.80 | 46.3\% |
| Net Operating Income | 6,811 | 7.52 | 50.3\% | 6,153 | 6.55 | 49.7\% | 8,769 | 10.93 | 51.7\% |
| Capital Expenditures | 1,085 | 1.20 | 8.0\% | 1,024 | 1.09 | 8.3\% | 1,254 | 1.56 | 7.4\% |

Source: National Apartment Association 2009 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2009 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Internet.


floor area and as a percentage of gross potential rent (GPR).
Responses from garden properties with individually metered utilities represent 85.9 percent of the market rent properties and 70.5 percent of the subsidized properties. Therefore, the analysis is focused primarily on the garden properties with individually metered utilities.

The market rent segment generally has greater units per property and greater floor area per unit than the subsidized segment. The average size of individually metered market rent garden properties is 269 units ( 143 units in subsidized). Rentable floor area averaged 909 square feet for market rent apartments and 875 square feet for the subsidized units.

The complete report (available online Oct. 1 at www.naahq.org/09ies) contains detailed data summarized for six geographic regions and metropolitan areas. Seventy-seven metropolitan areas met the separate reporting requirements for market rent properties. Sufficient numbers of subsidized properties were submitted for 20 metropolitan areas.

This report also includes results for all "other" properties at the state level with a minimum of six properties located in metro areas that did not meet requirements for separate reporting. Nonmetro area reporting also is included at the state level. Tables for market rent properties are provided for 12 states and for subsidized properties in 16 states.

## Market Rent Properties

Economic Losses. A standard measure of the health of the rental housing market is economic losses, defined as the differ-
ence 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 individually metered garden properties increased to 12.42 percent in the data for 2008, the highest in the past four years of reporting, compared to 10.11 percent in 2007, 10.20 in 2006 and 11.87 percent in 2005 . Economic losses overall reported in the survey increased over levels not seen since prior to 2005.

Net Operating Income (NOI) 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 in the survey also reflected the current downward pressure on rental apartment market economics in 2008.

NOI measured as a percent of GPR for 2008 was 53.9 percent, declining 2.7 percentage points from 56.6 percent in 2007 (56.9 percent in 2006, 53.9 percent in 2005 and 52.2 percent in 2004). The NAA survey's historical peak was 58.9 percent in 1999. Regionally, NOIs in 2008 ranged from a high of 59.4 percent in the Northeast (Region I) and Pacific (Region VI) states to a low of 48.5 percent in the Southwest states (Region IV), which has usually experienced the lowest NOI percentage among the regions.

Average NOIs for the last three survey data years of individually metered garden properties are presented in the table on p. 65.

Gross Potential Rent (GPR). GPR in the survey data tables

|  | Economic Loss Rates By Region Individually Metered Garden Properties |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 |
| All | 12.42\% | 10.11\% | 10.20\% | 11.87\% | 13.99\% | 13.35\% | 11.39\% | 9.69\% |
| Region I | 9.49\% | 9.16\% | 9.46\% | 8.87\% | 10.02\% | 8.79\% | 8.21\% | 6.36\% |
| Region II | 14.07\% | 10.09\% | 10.84\% | 11.35\% | 12.89\% | 13.31\% | 12.10\% | 10.44\% |
| Region III | 10.93\% | 11.11\% | 12.02\% | 13.87\% | 15.54\% | 13.84\% | 10.85\% | 10.64\% |
| Region IV | 13.34\% | 12.55\% | 10.77\% | 15.39\% | 16.23\% | 13.98\% | 11.53\% | 9.90\% |
| Region V | 11.45\% | 11.22\% | 12.12\% | 15.14\% | 19.99\% | 16.33\% | 12.75\% | 9.16\% |
| Region VI | 10.82\% | 8.26\% | 8.09\% | 8.57\% | 12.15\% | 13.21\% | 11.54\% | 9.79\% |

## All Subsidized Properties <br> OPERATING INCOME \& EXPENSE DATA, INDIVIDUAL METERED PROPERTIES

INDIVIDUAL METERED PROPERTIES

|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Properties | 361 |  |  | 303 |  |  | 58 |  |  |
| Number of Units | 51,986 |  |  | 43,227 |  |  | 8,759 |  |  |
| Avg. No. of Units/Property | 144 |  |  | 143 |  |  | 151 |  |  |
| Avg. No. of Square Feet/Unit | 841 |  |  | 875 |  |  | 713 |  |  |
| Turnover rate in \% | 32\% |  |  | 34\% |  |  | 27\% |  |  |
|  | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\% \text { of }$ GPR | $\begin{aligned} & \text { \$ Per } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | $\begin{aligned} & \text { \$ Per } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 9,649 | 11.38 | 100.0\% | 9,432 | 10.78 | 100.0\% | 10,720 | 15.03 | 100.0\% |
| Rent Revenue Collected | 8,881 | 10.48 | 92.0\% | 8,606 | 9.83 | 91.2\% | 10,239 | 14.35 | 95.5\% |
| Losses to Vacancy | 481 | 0.57 | 5.0\% | 514 | 0.59 | 5.4\% | 317 | 0.44 | 3.0\% |
| Collection Losses | 110 | 0.13 | 1.1\% | 128 | 0.15 | 1.4\% | 24 | 0.03 | 0.2\% |
| Losses to Concessions | 177 | 0.21 | 1.8\% | 184 | 0.21 | 2.0\% | 140 | 0.20 | 1.3\% |
| Other Revenue | 319 | 0.38 | 3.3\% | 314 | 0.36 | 3.3\% | 345 | 0.48 | 3.2\% |
| Total Revenue | 9,200 | 10.85 | 95.3\% | 8,920 | 10.19 | 94.6\% | 10,584 | 14.84 | 98.7\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,230 | 1.45 | 12.7\% | 1,214 | 1.39 | 12.9\% | 1,311 | 1.84 | 12.2\% |
| Insurance | 280 | 0.33 | 2.9\% | 270 | 0.31 | 2.9\% | 328 | 0.46 | 3.1\% |
| Taxes | 642 | 0.76 | 6.7\% | 623 | 0.71 | 6.6\% | 740 | 1.04 | 6.9\% |
| Utilities | 537 | 0.63 | 5.6\% | 511 | 0.58 | 5.4\% | 665 | 0.93 | 6.2\% |
| Management Fees | 473 | 0.56 | 4.9\% | 456 | 0.52 | 4.8\% | 558 | 0.78 | 5.2\% |
| Administrative | 410 | 0.48 | 4.3\% | 405 | 0.46 | 4.3\% | 436 | 0.61 | 4.1\% |
| Marketing | 98 | 0.12 | 1.0\% | 98 | 0.11 | 1.0\% | 98 | 0.14 | 0.9\% |
| Contract Services | 468 | 0.55 | 4.8\% | 468 | 0.53 | 5.0\% | 465 | 0.65 | 4.3\% |
| Repair and Maintenance | 368 | 0.43 | 3.8\% | 396 | 0.45 | 4.2\% | 230 | 0.32 | 2.1\% |
| Total Operating Expenses | 4,506 | 5.32 | 46.7\% | 4,441 | 5.07 | 47.1\% | 4,830 | 6.77 | 45.1\% |
| Net Operating Income | 4,694 | 5.54 | 48.6\% | 4,479 | 5.12 | 47.5\% | 5,754 | 8.07 | 53.7\% |
| Capital Expenditures | 683 | 0.81 | 7.1\% | 710 | 0.81 | 7.5\% | 562 | 0.79 | 5.2\% |

MASTER METERED PROPERTIES

|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Properties | 151 |  |  | 73 |  |  | 78 |  |  |
| Number of Units | 23,546 |  |  | 9,959 |  |  | 13,587 |  |  |
| Avg. No. of Units/Property | 156 |  |  | 136 |  |  | 174 |  |  |
| Avg. No. of Square Feet/Unit | 723 |  |  | 818 |  |  | 661 |  |  |
| Turnover rate in \% | 21\% |  |  | 24\% |  |  | 18\% |  |  |
|  | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\% \text { of }$ GPR | $\begin{gathered} \text { \$Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | \% of GPR | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | \% of GPR |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 10,016 | 13.85 | 100.0\% | 9,142 | 11.18 | 100.0\% | 10,656 | 16.13 | 100.0\% |
| Rent Revenue Collected | 9,388 | 12.98 | 93.7\% | 8,204 | 10.03 | 89.7\% | 10,256 | 15.52 | 96.2\% |
| Losses to Vacancy | 421 | 0.58 | 4.2\% | 591 | 0.72 | 6.5\% | 297 | 0.45 | 2.8\% |
| Collection Losses | 114 | 0.16 | 1.1\% | 204 | 0.25 | 2.2\% | 49 | 0.07 | 0.5\% |
| Losses to Concessions | 93 | 0.13 | 0.9\% | 144 | 0.18 | 1.6\% | 55 | 0.08 | 0.5\% |
| Other Revenue | 307 | 0.42 | 3.1\% | 342 | 0.42 | 3.7\% | 281 | 0.43 | 2.6\% |
| Total Revenue | 9,695 | 13.40 | 96.8\% | 8,546 | 10.45 | 93.5\% | 10,537 | 15.95 | 98.9\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,329 | 1.84 | 13.3\% | 1,374 | 1.68 | 15.0\% | 1,297 | 1.96 | 12.2\% |
| Insurance | 360 | 0.50 | 3.6\% | 330 | 0.40 | 3.6\% | 382 | 0.58 | 3.6\% |
| Taxes | 653 | 0.90 | 6.5\% | 508 | 0.62 | 5.6\% | 759 | 1.15 | 7.1\% |
| Utilities | 1,369 | 1.89 | 13.7\% | 1,234 | 1.51 | 13.5\% | 1,467 | 2.22 | 13.8\% |
| Management Fees | 546 | 0.75 | 5.4\% | 480 | 0.59 | 5.2\% | 594 | 0.90 | 5.6\% |
| Administrative | 491 | 0.68 | 4.9\% | 506 | 0.62 | 5.5\% | 479 | 0.73 | 4.5\% |
| Marketing | 52 | 0.07 | 0.5\% | 75 | 0.09 | 0.8\% | 36 | 0.05 | 0.3\% |
| Contract Services | 635 | 0.88 | 6.3\% | 643 | 0.79 | 7.0\% | 629 | 0.95 | 5.9\% |
| Repair and Maintenance | 344 | 0.48 | 3.4\% | 443 | 0.54 | 4.8\% | 272 | 0.41 | 2.6\% |
| Total Operating Expenses | 5,780 | 7.99 | 57.7\% | 5,594 | 6.84 | 61.2\% | 5,916 | 8.95 | 55.5\% |
| Net Operating Income | 3,915 | 5.41 | 39.1\% | 2,952 | 3.61 | 32.3\% | 4,622 | 6.99 | 43.4\% |
| Capital Expenditures | 902 | 1.25 | 9.0\% | 812 | 0.99 | 8.9\% | 963 | 1.46 | 9.0\% |

[^0]| NOI By Region for Past Three Survey Data Years Individually Metered Garden Properties |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dollars per Unit |  |  | Dollars per Square Foot |  |  | \% of GPR |  |  |
|  | 2008 | 2007 | 2006 | 2008 | 2007 | 2006 | 2008 | 2007 | 2006 |
| All | \$5,585 | \$6,011 | \$5,644 | \$6.15 | \$6.60 | \$6.36 | 53.9\% | 56.6\% | 56.9\% |
| Region I | \$7,367 | \$7,542 | \$7,577 | \$8.22 | \$8.37 | \$8.46 | 59.4\% | 59.3\% | 61.4\% |
| Region II | \$5,119 | \$5,547 | \$5,111 | \$5.22 | \$5.66 | \$5.48 | 52.4\% | 55.8\% | 55.7\% |
| Region III | \$4,860 | \$4,535 | \$4,783 | \$5.13 | \$4.83 | \$5.55 | 49.9\% | 49.6\% | 53.0\% |
| Region IV | \$4,569 | \$4,570 | \$4,118 | \$5.41 | \$5.40 | \$4.91 | 48.5\% | 49.7\% | 50.0\% |
| Region V | \$5,406 | \$5,780 | \$5,113 | \$6.22 | \$6.54 | \$5.73 | 58.0\% | 59.1\% | 57.1\% |
| Region VI | \$7,552 | \$8,153 | \$7,993 | \$8.96 | \$9.37 | \$9.18 | 59.4\% | 62.7\% | 62.6\% |

is defined on a "look-back" fiscal year basis. It is the sum of total rents of all occupied units at 2008 lease rates and all vacant units at 2008 market rents.

Average annual GPR decreased by 2.4 percent in 2008 for garden properties with individually metered utilities. Average GPR was $\$ 10,367$ per unit ( $\$ 864$ monthly) in this year's survey versus $\$ 10,624$ per unit ( $\$ 885$ monthly) in the previous year's survey (2007). On a per square foot basis, GPR was $\$ 11.41$ ( $\$ 0.95$ per month) versus $\$ 11.67$ ( $\$ 0.97$ per month) in 2007.

Median annual GPR for individually metered garden properties in the survey is $\$ 9,700$ ( $\$ 808$ per month) versus $\$ 9,639$ ( $\$ 803$ per month) in 2007 and $\$ 8,751$ ( $\$ 729$ per month) in 2006.

Rent Revenue Collected. Annual rent revenue collected averaged $\$ 9,080$ per individually metered garden property unit, down 4.9 percent from $\$ 9,550$ in last year's survey. Measured on a per square-foot basis, rent revenue averaged $\$ 9.99$ per square foot versus $\$ 10.49$ in 2007 and $\$ 10.04$ in 2006.

Revenue Losses. Revenue losses averaged 12.42 percent of GPR in 2008 versus 10.11 percent in 2007, 10.20 percent in 2006 and 11.87 percent in 2005 . Revenue losses were reported in three categories: those from vacancies, collections and concessions. Vacancy losses for individually metered market rent garden properties averaged 7.6 percent of GPR in the current survey ( $\$ 785$ per unit, $\$ 0.86$ per square foot) versus 6.9 percent of GPR ( $\$ 732$ per unit, $\$ 0.80$ per square foot) in 2007. Collection losses averaged 0.9 percent of GPR ( $\$ 94$ per unit, $\$ 0.10$ per square foot) in comparison to 0.6 percent of GPR ( $\$ 64$ per unit, $\$ 0.07$ per square foot) from 2007. Losses from rent concessions increased, averaging 3.9 percent of GPR ( $\$ 407$ per unit in the property, $\$ 0.45$ per square foot) in 2008 versus 2.6 percent of GPR ( $\$ 278$ per unit in the property, $\$ 0.31$ per square foot) last year.

Other Revenue Collected. The trend of multifamily housing owners and service providers creating and offering additional revenue sources is reflected in a continued increase of 0.5 percent-




age points or 8.1 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 $\$ 691$ per unit ( $\$ 0.76$ per square foot) in 2008 versus $\$ 658$ per unit ( $\$ 0.72$ per square foot) in 2007 for individually metered garden properties reported in the survey. Median other operating revenues were $\$ 608$ per unit.

Total Operating Expenses. Total operating expenses, as a percent of GPR, increased by 0.9 percentage points or 2.3 percent in 2008, because of the decline in overall GPR. The total operating expenses represented 40.4 percent of GPR versus 39.5 percent in 2007. Total operating expenses for individually metered garden properties in the survey averaged $\$ 4,185$ per unit (\$4.61 per square foot) versus \$4,196 per unit ( $\$ 4.61$ per square foot) in 2007.

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), utilities (net of any reimbursements from residents), management fees, general and administration, marketing, contract services and maintenance. (Non-recurring capital expenses were 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 variations in accounting policy regarding expense classification that the survey cannot further delineate. Average
property-related insurance costs decreased 12.0 percent in 2008 to $\$ 234$ per unit ( $\$ 0.26$ per square foot) from $\$ 266$ per unit ( $\$ 0.29$ per square foot) in 2007. Administrative costs rose 1.3 percent to $\$ 238$ from $\$ 235$ per unit in 2007. Management fees decreased 15.0 percent to $\$ 289$ per unit (2.8 percent of GPR) from $\$ 340$ per unit (3.2 percent of GPR) a year earlier. Marketing costs increased 1.7 percent to $\$ 175$ per unit or 1.7 percent of GPR from $\$ 172$ per unit or 1.6 percent of GPR in 2007. Maintenance costs increased again at 3.4 percent to $\$ 428$ per unit from $\$ 414$ per unit in the 2007 survey. Contract services costs increased 7.2 percent to an average of \$284 per unit in 2008 from \$265 in 2007.

The overall turnover rate declined again from last year. As previous homeowners continued the migration back to apartment units, the overall turnover rate declined to 55 percent of total units among the individually metered garden apartment properties reported in the survey for 2008 from 59 percent in 2007 and 62 percent in 2006. This equals a new low turnover rate over the history of this survey, which has been in the range of 59 percent to 69 percent. The previous lows occurred in the data for 2007 and 1995 and the high during the recession year 1990.

All regional turnover rates declined last year: Northeast (Region I), 52 percent to 42 percent; Southeast (Region II), 59 percent
to 58 percent; North Midwest (Region III), 52 percent to 50 percent; Southwest (Region IV), 61 percent to 60 percent; Mountain/South Midwest States (Region V), 60 percent to 58 percent and in the Pacific (Region VI), 62 percent to 52 percent.

Age of Property. Operating expenses as a percentage of GPR and dollars per square foot basis expectedly rose in individually metered garden properties in the report as they age. Operating expenses are 38.9 percent of GPR ( $\$ 4.41$ per square foot) in properties less than 5 years old and rise to 42.5 percent of GPR ( $\$ 4.76$ per square foot) for properties 20 or more years old. As operating expenses decrease over the span of years, capital expenditures increase as the building ages. For example, operating expenses were $\$ 4,231$ per unit for those 5 to 9 years old and decreased to $\$ 4,071$ per unit for properties 20 or more years old, while capital expenditures ranged from $\$ 270$ to $\$ 1,006$, respectively, by age of property.

The highest average NOI as a percentage of GPR occurred in properties 10 to 19 years old at 56.5 percent. Measured in terms of dollars per unit, the low was $\$ 5,027$ per unit in properties that are 20 or more years old and the high was $\$ 6,801$ for properties 5 to 9 years old.

Economic losses continue to be the highest among the newest properties. Properties less than 5 years old reported the highest ratio of economic losses at 17 percent of GPR, while the lowest was in those that are 20 or more years old at 12 percent.

Age of property groupings again show distinct differences in the individual cost components of operating costs. The largest difference is in real estate and related property taxes and fees, varying from a high (average) of $\$ 1,334$ per unit ( $\$ 1.34$ per square foot) in those properties five to nine years old, to a low of \$820 (\$0.96 per square foot) for those aged 20 or more years.

Expectedly, capital expenditures were significantly lower for the newest properties. They averaged $\$ 270$ per unit ( $\$ 0.28$ per square foot) for properties less than five years old, compared to the highest average reported for properties 20 or more years old at $\$ 1,006$ per unit (\$1.18 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, dropping from 43.7 percent of GPR in properties of less than 100 units, to 40.3 percent in those containing 500 or more units. The survey results, however, did not show similar economies of scale on a per unit basis. Operating costs, across property sizes, ranged from $\$ 4,024$ to $\$ 4,261$ per unit.

Economic losses varied based on property size. Losses were highest with properties with 500 or more units at 13.1 percent of GPR and the lowest for properties with fewer than 100 units at 8.9 percent.

## Metro-Area Operating Income \& Expenses

Detailed tables in the full report are presented for the 77 metropolitan areas where a total of six or more garden communities of all types were reported in the survey. This is the only section of the report with metropolitan area data for garden, mid-rise and highrise building properties, and is further segmented into those with utilities that are individually 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 individually metered utilities unless otherwise noted.

- NOIs on a dollar-per-unit basis ranged from \$12,179 (\$13.19 per square foot) in the San Jose-Sunnyvale-Santa Clara metro area to a low of $\$ 2,013$ ( $\$ 2.43$ per square foot) in the AugustaRichmond County, Ga.-S.C. metro area. The New York-Northern New Jersey-Long Island metro area had the highest NOI measured as a percent of GPR at 68.6 percent and Augusta-Richmond County, Ga.-SC had the lowest at 39 percent.
- GPR averages were the highest in the San Jose-SunnyvaleSanta Clara, Calif., metro area at \$19,272 per unit (\$20.87 per square foot). A low of $\$ 5,156$ per unit ( $\$ 6.22$ per square foot) was tabulated for properties reported from Augusta-Richmond County, Ga.-S.C.
- Economic losses were lowest in the Des Moines, Iowa, metro area at 2.07 percent of GPR and Salt Lake City at 4.31 percent.

Both, however, have small numbers of reported individually metered garden properties. Metro areas with the highest economic losses were Birmingham, Ala., at 18.63 percent, and Wilmington, N.C., at 17.43 percent.

- Total operating costs' highs and lows vary among metro areas based on which measure is selected. Properties reporting from the Boston metro area had the highest operating costs based on a per unit basis at $\$ 7,048$ ( $\$ 7.35$ per square foot), followed by Ventura, Calif., at $\$ 6,528$ per unit ( $\$ 7.50$ per square foot). A low of $\$ 2,862$ per unit ( $\$ 2.93$ per square foot) was reported in the Jackson, Tenn., metro area.
- Real estate taxes remained high in many metro areas in 2008. The San Jose-Sunnyvale-Santa Clara, Calif., metro area had the highest real estate taxes per unit at $\$ 2,083$; Miami, Fla., was second at $\$ 2,073$ per unit followed by the New York-Northern New Jersey-Long Island metro area at $\$ 1,878$ per unit. The lowest average was for properties located in Colorado Springs, Colo., and

Wilmington, N.C., metro areas at \$245 and \$307, respectively.

- Insurance costs on a per unit basis were the highest among the following areas, including several hurricane prone metro areas: They were at $\$ 544$ per unit ( $\$ 0.52$ per square foot) in Fort Lauderdale, Fla.; $\$ 525$ ( $\$ 0.79$ per square foot) in the New YorkNorthern New Jersey-Long Island metro area; and \$492 (\$0.58 per square foot) in Deltona-Daytona Beach, Fla. They were lowest in the Tucson, Ariz., and Des Moines metro areas at $\$ 103$ per unit ( $\$ 0.13$ per square foot and $\$ 0.12$ per square foot, respectively).
- Salaries and personnel costs were the lowest in the Jackson, Miss., metro area at $\$ 680$ per unit ( $\$ 0.63$ per square foot) and Des Moines, at $\$ 661$ ( $\$ 0.78$ per square foot). Boston had the highest average at $\$ 2,322$ per unit ( $\$ 2.42$ per square foot) followed by $\$ 1,391$ in the Philadelphia-Camden metro area (\$1.52 per square foot).
- Dayton, Ohio, and Jackson, Miss., had the largest units among the metro areas reported separately in this report with an average of 1,089 and 1,088 square feet of floor area per unit, respectively. Properties reporting located in the Salt Lake City and New York metros had the lowest averaging at 675 and 663 square feet per unit, respectively.


## Subsidized Properties Income \& Expenses

 Operating Income \& Expenses Summary. Data was received for 512 subsidized properties containing 75,532 units. Garden properties with individually metered utilities represent the largest subgroup of properties reporting, and analysis herein will be limited to this sector. Data tables are presented for 20 metropolitan areas in the full report that met the minimum for separate reporting. Subsidized garden apartment properties with individually metered utilities in the survey tend to have fewer units and less floor area than market rent units. Responding properties contained an average of 143 units versus 269 units for market rent properties of the same type. These subsidized properties had an average of 875 square feet of floor area versus 909 square feet for the market rent properties.Revenues. GPR averaged $\$ 9,432$ per unit ( $\$ 10.78$ per square foot) annually in this year's survey versus $\$ 8,556$ per unit ( $\$ 9.77$ per square foot) in 2007 and $\$ 9,070$ per unit ( $\$ 10.62$ per square foot) in 2006. Rental revenues averaged $\$ 8,606$ ( $\$ 9.83$ per square foot) versus $\$ 7,867$ ( $\$ 8.98$ per square foot) in 2007 and $\$ 8,475$ per unit ( $\$ 9.92$ per square foot) in 2006 . Other operating revenues averaged $\$ 314$ per unit ( $\$ 0.36$ per square foot) in 2008 versus $\$ 320$ per unit ( $\$ 0.36$ per square foot) in 2007 and $\$ 341$ per unit ( $\$ 0.40$ per square foot) for 2006.

Operating Expenses. Operating expenses in subsidized properties were higher than those for market rent properties. Subsidized properties reported in the survey had total operating costs averaging $\$ 4,441$ ( $\$ 5.07$ per square foot) in 2008 versus the $\$ 4,339$ ( $\$ 4.95$ per square foot) in 2007 and $\$ 3,974$ per unit ( $\$ 4.65$ per square foot) reported for responding properties in 2006.

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 47.5 percent of GPR versus 53.9 percent for the market rent properties. Other comparisons of subsidized to market rent were $\$ 4,479$ versus $\$ 5,585$ on a dollars-per-unit basis, and $\$ 5.12$
versus $\$ 6.15$ on a per-square foot-of-floor-area basis, respectively.
Economic Losses. Economic losses tend to be lower in subsidized properties with their lower rents and relatively tight supply. An 8.8 percent average rate was calculated for the subsidized individually metered garden properties versus 12.42 percent for market rent units. The economic loss ratio in subsidized properties increased over last year's 8.1 percent and 6.56 percent in 2006 .

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 individually metered subsidized units was 34 percent versus 55 percent for market rent units.

## Metrics (Garden, Individually Metered 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 below, 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

Calendar year 2009, despite its challenges, provides an opportunity within the apartment industry to do more with less. It is clear that many apartment firms, leaders and onsite personnel have and continue to demonstrate the managerial and service qualities of which the apartment industry can be proud.

It also is clear that economic conditions in 2009 will not likely improve dramatically. The hidden value during these difficult times is the opportunity for industry professionals to fine-tune property and portfolio operating policy and procedures, which are capable of building an even stronger financial management platform as markets recover.

The NAA survey results in 2009 continue to demonstrate that many in the apartment industry know how to protect, add and create value, and are proving their skills in operations management.

Beyond financial results, the real "bottom line" for the multifamily housing industry is creating and maintaining a welcoming environment for approximately 35 million apartment residents-a deliverable requiring the range of diverse skills, creative talents and experience within the apartment industry.

## 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.

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, trash removal, exterminator and other services provided on a contract basis.

GPR Residential. Total rents of all occupied units at 2008 lease rates and all vacant units at 2008 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 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. Non-recurring capital expense not included.

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.

Apartment Operations Metrics Individually Metered Garden Properties
Payroll/
Net

## Thank You To Our Participating Companies

NAA sends a special note of appreciation to the 373 firms who donated their time to accumulate the data necessary to make this survey valuable. The following companies and their officers provided more than 20 properties for the 2009 Survey of Operating Income \& Expenses in Rental Apartment Properties.

AEW Capital Management
AIMCO
Alco Management Inc.
Alliance Communities
Alliance Residential/Westcorp
Ambling Management Company
AMCAL
AMLI Management Company
Archon Residential
Babcock \& Brown Residential
Bell Partners Inc.
Camden
Colonial Properties Trust
Dial Equities Inc.
Drucker \& Falk
Dunlap \& Magee Property Management
First Choice Management Group
Gables Residential
Greystar Real Estate Partners LLC

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. Does not include utility reimbursements (i.e., RUBS) in GPR or rental revenue. All utility reimbursements are subtracted from gross utility expense.

Payroll Costs. Gross salaries and wages paid to employees assigned to the property. Including payroll taxes, group health/life/disability insurance, $401(\mathrm{k})$, 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. If subsidized, the program was listed (i.e., Section 236, Section 8).

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.

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

Utilities. Total cost of all utilities and each listed type, net of any income reimbursements for or from residents (i.e., RUBS or similar systems). Does not include trash removal.

Utility Configuration. Whether electric, gas, oil and water/sewer utilities to individual units in subject property are: Master Metered, Owner Pays; Master Metered, Resident Pays (RUBS); Individual or Submetered, Resident Pays.

[^1]
## BALTIMORE-TOWSON, MD METROPOLITAN AREA MARKET RENT PROPERTIES OPERATING INCOME \& EXPENSE DATA

|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Properties | 63 |  |  | 31 |  |  | 32 |  |  |
| Number of Units | 12,803 |  |  | 8,601 |  |  | 4,202 |  |  |
| Avg. No. of Units/Property | 203 |  |  | 277 |  |  | 131 |  |  |
| Avg. No. of Square Feet/Unit | 916 |  |  | 986 |  |  | 780 |  |  |
| Turnover rate in \% | 30\% |  |  | 34\% |  |  | 24\% |  |  |
|  | \$ Per Unit | $\begin{array}{r} \text { \$ Per } \\ \text { Sq. Ft. } \end{array}$ | $\% \text { of }$ GPR | \$ Per Unit | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ | \$ Per Unit | $\begin{array}{r} \text { \$ Per } \\ \text { Sq. Ft. } \end{array}$ | $\% \text { of }$ GPR |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 13,694 | 14.95 | 100.0\% | 14,327 | 14.53 | 100.0\% | 12,400 | 15.91 | 100.0\% |
| Rent Revenue Collected | 12,537 | 13.68 | 91.6\% | 13,127 | 13.31 | 91.6\% | 11,331 | 14.54 | 91.4\% |
| Losses to Vacancy | 784 | 0.86 | 5.7\% | 756 | 0.77 | 5.3\% | 842 | 1.08 | 6.8\% |
| Collection Losses | 90 | 0.10 | 0.7\% | 103 | 0.10 | 0.7\% | 65 | 0.08 | 0.5\% |
| Losses to Concessions | 282 | 0.31 | 2.1\% | 341 | 0.35 | 2.4\% | 162 | 0.21 | 1.3\% |
| Other Revenue | 918 | 1.00 | 6.7\% | 1,121 | 1.14 | 7.8\% | 502 | 0.64 | 4.1\% |
| Total Revenue | 13,456 | 14.69 | 98.3\% | 14,248 | 14.45 | 99.5\% | 11,834 | 15.18 | 95.4\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,242 | 1.36 | 9.1\% | 1,192 | 1.21 | 8.3\% | 1,345 | 1.72 | 10.8\% |
| Insurance | 221 | 0.24 | 1.6\% | 230 | 0.23 | 1.6\% | 202 | 0.26 | 1.6\% |
| Taxes | 1,141 | 1.25 | 8.3\% | 1,273 | 1.29 | 8.9\% | 872 | 1.12 | 7.0\% |
| Utilities | 493 | 0.54 | 3.6\% | 426 | 0.43 | 3.0\% | 628 | 0.81 | 5.1\% |
| Management Fees | 479 | 0.52 | 3.5\% | 432 | 0.44 | 3.0\% | 575 | 0.74 | 4.6\% |
| Administrative | 311 | 0.34 | 2.3\% | 257 | 0.26 | 1.8\% | 420 | 0.54 | 3.4\% |
| Marketing | 179 | 0.20 | 1.3\% | 183 | 0.19 | 1.3\% | 171 | 0.22 | 1.4\% |
| Contract Services | 478 | 0.52 | 3.5\% | 491 | 0.50 | 3.4\% | 450 | 0.58 | 3.6\% |
| Repair and Maintenance | 581 | 0.63 | 4.2\% | 608 | 0.62 | 4.2\% | 525 | 0.67 | 4.2\% |
| Total Operating Expenses | 5,124 | 5.59 | 37.4\% | 5,092 | 5.16 | 35.5\% | 5,188 | 6.65 | 41.8\% |
| Net Operating Income | 8,332 | 9.09 | 60.8\% | 9,156 | 9.28 | 63.9\% | 6,646 | 8.53 | 53.6\% |
| Capital Expenditures | 1,034 | 1.13 | 7.6\% | 1,199 | 1.22 | 8.4\% | 673 | 0.86 | 5.4\% |
| MASTER METERED PROPERTIES |  |  |  |  |  |  |  |  |  |
|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| Number of Properties | 12 |  |  | 7 |  |  | 5 |  |  |
| Number of Units | 3,109 |  |  | 1,593 |  |  | 1,516 |  |  |
| Avg. No. of Units/Property | 259 |  |  | 228 |  |  | 303 |  |  |
| Avg. No. of Square Feet/Unit | 749 |  |  | 942 |  |  | 546 |  |  |
| Turnover rate in \% | 40\% |  |  | 39\% |  |  | 45\% |  |  |
|  | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \\ \hline \end{gathered}$ | $\begin{array}{r} \text { \$ Per } \\ \text { Sq. Ft. } \\ \hline \end{array}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{array}{r} \text { \$ Per } \\ \text { Sq. Ft. } \\ \hline \end{array}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ | \$ Per <br> Unit | $\begin{array}{r} \text { \$ Per } \\ \text { Sq. Ft. } \\ \hline \end{array}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 12,418 | 16.59 | 100.0\% | 13,253 | 14.07 | 100.0\% | 11,541 | 21.15 | 100.0\% |
| Rent Revenue Collected | 11,242 | 15.01 | 90.5\% | 12,126 | 12.87 | 91.5\% | 10,313 | 18.90 | 89.4\% |
| Losses to Vacancy | 746 | 1.00 | 6.0\% | 780 | 0.83 | 5.9\% | 710 | 1.30 | 6.2\% |
| Collection Losses | 265 | 0.35 | 2.1\% | 266 | 0.28 | 2.0\% | 263 | 0.48 | 2.3\% |
| Losses to Concessions | 165 | 0.22 | 1.3\% | 80 | 0.08 | 0.6\% | 255 | 0.47 | 2.2\% |
| Other Revenue | 876 | 1.17 | 7.1\% | 921 | 0.98 | 6.9\% | 829 | 1.52 | 7.2\% |
| Total Revenue | 12,118 | 16.18 | 97.6\% | 13,047 | 13.85 | 98.4\% | 11,142 | 20.42 | 96.5\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,237 | 1.65 | 10.0\% | 1,431 | 1.52 | 10.8\% | 1,032 | 1.89 | 8.9\% |
| Insurance | 221 | 0.30 | 1.8\% | 298 | 0.32 | 2.2\% | 141 | 0.26 | 1.2\% |
| Taxes | 1,012 | 1.35 | 8.2\% | 821 | 0.87 | 6.2\% | 1,214 | 2.22 | 10.5\% |
| Utilities | 1,572 | 2.10 | 12.7\% | 1,852 | 1.97 | 14.0\% | 1,278 | 2.34 | 11.1\% |
| Management Fees | 541 | 0.72 | 4.4\% | 582 | 0.62 | 4.4\% | 497 | 0.91 | 4.3\% |
| Administrative | 377 | 0.50 | 3.0\% | 373 | 0.40 | 2.8\% | 381 | 0.70 | 3.3\% |
| Marketing | 144 | 0.19 | 1.2\% | 151 | 0.16 | 1.1\% | 137 | 0.25 | 1.2\% |
| Contract Services | 571 | 0.76 | 4.6\% | 454 | 0.48 | 3.4\% | 694 | 1.27 | 6.0\% |
| Repair and Maintenance | 793 | 1.06 | 6.4\% | 918 | 0.97 | 6.9\% | 661 | 1.21 | 5.7\% |
| Total Operating Expenses | 6,467 | 8.64 | 52.1\% | 6,879 | 7.30 | 51.9\% | 6,034 | 11.06 | 52.3\% |
| Net Operating Income | 5,651 | 7.55 | 45.5\% | 6,168 | 6.55 | 46.5\% | 5,108 | 9.36 | 44.3\% |
| Capital Expenditures | 556 | 0.74 | 4.5\% | 761 | 0.81 | 5.7\% | 340 | 0.62 | 3.0\% |

[^2]

## REGIONS USED IN SURVEY

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

# 2008 Survey of Operating Income \& Expenses in Rental Apartment Properties 

## EXECUTIVE SUMMARY

BY CHRISTOPHER LEE

In a year of corporate repositioning, restructuring and re-engineering to successfully meet the economic, market and operating challenges in a recessionary-like environment, the U.S. apartment industry is, by most measures, performing at an exceptional level.

During a time of rental housing supply-demand imbalance in many markets, the turmoil created by the collapse of the subprime loan industry, anemic job growth and rising energy and day-to-day living expenses, the apartment industry has responded in a proactive and professional manner.

In a year where renters are moving away from availability to affordability, the apartment industry has responded with a return to the basics.

These findings are just a few of the many conclusions reached from the recently completed National Apartment Association's 2008 Survey of Operating Income \& Expenses. This NAA-sponsored survey, conducted by Los Angeles-based CEL \& Associates Inc., of more than 900,000 apartment units nationwide concluded that the quality and dedication of leadership and onsite talent within the apartment industry does matter:

The 2008 survey results reveal that apartment operators are successfully balancing a commitment to providing high-quality living environments with the need to be financially diligent in managing and controlling often unexpected increases in operat-
ing costs. Within the apartment industry, the experience, knowledge and dedication of onsite personnel is paying big dividends for residents and owners alike.

NAA has completed its Survey of Operating Income \& Expenses in Rental Apartment Properties for 2008, based on annual data for 2007.

Major findings in this survey of the professionally managed rental apartment industry reflect the uncertainties of the current economy, as demonstrated by net operating income in the "market rent" segment of the rental apartment market declining slightly by 0.3 percentage points to 56.6 percent and a lower economic loss rate of 10.11 from 10.20. Total operating expenses increased by 1.2 percentage points or 3.1 percent. The economic state of subsidized properties in the survey also experienced variable results over 2006.

A total of 3,691 properties containing 915,993 units are represented in this year's NAA report. Data was reported for 3,243 "market rent" properties containing 856,256 units and 448 "subsidized properties" containing 59,737 units. Forms with partial data or apparent problems that could not be resolved were not used.

The report presents data from four types of properties. Garden and mid-rise/high-rise properties are segmented by individually metered and master metered utilities. Survey data is presented in three forms: dollars per unit, dollars per square foot of rentable floor area, and as a percentage of gross potential rent (GPR).

## All Market Rent Properties <br> OPERATING INCOME \& EXPENSE DATA

INDIVIDUAL METERED PROPERTIES

|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Properties | 2,771 |  |  | 2,611 |  |  | 160 |  |  |
| Number of Units | 736,192 |  |  | 699,081 |  |  | 37,111 |  |  |
| Avg. No. of Units/Property | 266 |  |  | 268 |  |  | 232 |  |  |
| Avg. No. of Square Feet/Unit | 909 |  |  | 911 |  |  | 884 |  |  |
| Turnover rate in \% | 59\% |  |  | 59\% |  |  | 58\% |  |  |
|  | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{array}{r} \text { \$ Per } \\ \text { Sq. Ft. } \end{array}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 10,891 | 11.98 | 100.0\% | 10,624 | 11.67 | 100.0\% | 15,923 | 18.02 | 100.0\% |
| Rent Revenue Collected | 9,798 | 10.77 | 90.0\% | 9,550 | 10.49 | 89.9\% | 14,458 | 16.36 | 90.8\% |
| Losses to Vacancy | 748 | 0.82 | 6.9\% | 732 | 0.80 | 6.9\% | 1,055 | 1.19 | 6.6\% |
| Collection Losses | 64 | 0.07 | 0.6\% | 64 | 0.07 | 0.6\% | 54 | 0.06 | 0.3\% |
| Losses to Concessions | 282 | 0.31 | 2.6\% | 278 | 0.31 | 2.6\% | 355 | 0.40 | 2.2\% |
| Other Revenue | 676 | 0.74 | 6.2\% | 658 | 0.72 | 6.2\% | 1,031 | 1.17 | 6.5\% |
| Total Revenue | 10,474 | 11.52 | 96.2\% | 10,208 | 11.21 | 96.1\% | 15,490 | 17.53 | 97.3\% |
|  |  |  |  |  |  |  |  |  |  |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,082 | 1.19 | 9.9\% | 1,071 | 1.18 | 10.1\% | 1,274 | 1.44 | 8.0\% |
| Insurance | 268 | 0.29 | 2.5\% | 266 | 0.29 | 2.5\% | 294 | 0.33 | 1.8\% |
| Taxes | 1,046 | 1.15 | 9.6\% | 1,012 | 1.11 | 9.5\% | 1,681 | 1.90 | 10.6\% |
| Utilities | 425 | 0.47 | 3.9\% | 421 | 0.46 | 4.0\% | 505 | 0.57 | 3.2\% |
| Management Fees | 350 | 0.39 | 3.2\% | 340 | 0.37 | 3.2\% | 546 | 0.62 | 3.4\% |
| Administrative | 239 | 0.26 | 2.2\% | 235 | 0.26 | 2.2\% | 315 | 0.36 | 2.0\% |
| Marketing | 176 | 0.19 | 1.6\% | 172 | 0.19 | 1.6\% | 246 | 0.28 | 1.5\% |
| Contract Services | 270 | 0.30 | 2.5\% | 265 | 0.29 | 2.5\% | 354 | 0.40 | 2.2\% |
| Repair and Maintenance | 422 | 0.46 | 3.9\% | 414 | 0.45 | 3.9\% | 569 | 0.64 | 3.6\% |
| Total Operating Expenses | 4,276 | 4.70 | 39.3\% | 4,196 | 4.61 | 39.5\% | 5,785 | 6.55 | 36.3\% |
| Net Operating Income | 6,198 | 6.82 | 56.9\% | 6,011 | 6.60 | 56.6\% | 9,704 | 10.98 | 60.9\% |
| Capital Expenditures | 996 | 1.10 | 9.1\% | 993 | 1.09 | 9.3\% | 1,055 | 1.19 | 6.6\% |

## MASTER METERED PROPERTIES

|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Properties | 472 |  |  | 357 |  |  | 115 |  |  |
| Number of Units | 120,064 |  |  | 88,867 |  |  | 31,197 |  |  |
| Avg. No. of Units/Property | 254 |  |  | 249 |  |  | 271 |  |  |
| Avg. No. of Square Feet/Unit | 942 |  |  | 961 |  |  | 890 |  |  |
| Turnover rate in \% | 49\% |  |  | 51\% |  |  | 44\% |  |  |
|  | \$ Per Unit | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | $\begin{aligned} & \text { \$ Per } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | $\begin{aligned} & \text { \$ Per } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\% \text { of }$ GPR |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 14,252 | 15.13 | 100.0\% | 12,574 | 13.09 | 100.0\% | 19,031 | 21.39 | 100.0\% |
| Rent Revenue Collected | 12,750 | 13.53 | 89.5\% | 11,255 | 11.71 | 89.5\% | 17,008 | 19.12 | 89.4\% |
| Losses to Vacancy | 1,084 | 1.15 | 7.6\% | 939 | 0.98 | 7.5\% | 1,495 | 1.68 | 7.9\% |
| Collection Losses | 102 | 0.11 | 0.7\% | 100 | 0.10 | 0.8\% | 108 | 0.12 | 0.6\% |
| Losses to Concessions | 316 | 0.34 | 2.2\% | 279 | 0.29 | 2.2\% | 421 | 0.47 | 2.2\% |
| Other Revenue | 887 | 0.94 | 6.2\% | 793 | 0.83 | 6.3\% | 1,155 | 1.30 | 6.1\% |
| Total Revenue | 13,637 | 14.48 | 95.7\% | 12,048 | 12.54 | 95.8\% | 18,163 | 20.42 | 95.4\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,389 | 1.47 | 9.7\% | 1,292 | 1.35 | 10.3\% | 1,665 | 1.87 | 8.7\% |
| Insurance | 347 | 0.37 | 2.4\% | 315 | 0.33 | 2.5\% | 441 | 0.50 | 2.3\% |
| Taxes | 1,178 | 1.25 | 8.3\% | 967 | 1.01 | 7.7\% | 1,780 | 2.00 | 9.4\% |
| Utilities | 1,368 | 1.45 | 9.6\% | 1,311 | 1.36 | 10.4\% | 1,529 | 1.72 | 8.0\% |
| Management Fees | 527 | 0.56 | 3.7\% | 481 | 0.50 | 3.8\% | 659 | 0.74 | 3.5\% |
| Administrative | 410 | 0.43 | 2.9\% | 367 | 0.38 | 2.9\% | 530 | 0.60 | 2.8\% |
| Marketing | 241 | 0.26 | 1.7\% | 228 | 0.24 | 1.8\% | 279 | 0.31 | 1.5\% |
| Contract Services | 466 | 0.49 | 3.3\% | 422 | 0.44 | 3.4\% | 590 | 0.66 | 3.1\% |
| Repair and Maintenance | 609 | 0.65 | 4.3\% | 564 | 0.59 | 4.5\% | 736 | 0.83 | 3.9\% |
| Total Operating Expenses | 6,534 | 6.94 | 45.9\% | 5,947 | 6.19 | 47.3\% | 8,209 | 9.23 | 43.1\% |
| Net Operating Income | 7,103 | 7.54 | 49.8\% | 6,102 | 6.35 | 48.5\% | 9,954 | 11.19 | 52.3\% |
| Capital Expenditures | 1,598 | 1.70 | 11.2\% | 1,385 | 1.44 | 11.0\% | 2,156 | 2.42 | 11.3\% |

Source: National Apartment Association 2008 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2008 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Internet.

Responses from garden properties with individually metered utilities represent 80 percent of the market rent properties and 55 percent of the subsidized properties. Therefore, the analysis is focused primarily on the garden properties with individually metered utilities.

The market rent segment generally has greater units per property and greater floor area per unit. The average size of individually metered market rent garden properties is 268 units ( 129 units in subsidized). Rentable floor area averaged 911 square feet for market rent apartments and 876 square feet for the subsidized units.

The complete report (available online Oct. 1 at www.naahq.org /08ies) contains detailed data summarized for six geographic regions and for metropolitan areas. Sixty-nine metropolitan areas met the separate reporting requirements for market rent properties. Sufficient numbers of subsidized properties were submitted for seven metropolitan areas.

This report also includes results for all "other" properties at the state level with a minimum of six properties located in metro areas that did not meet requirements for separate reporting. Nonmetro area reporting is also included at the state level. Tables for market rent properties are provided for 16 states and for subsidized properties in 11 states.

## 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 individually metered garden properties declined slightly to 10.11 percent



square foot) last year.
Other Revenue Collected. The trend of multifamily owners and service providers creating and offering additional revenue sources is reflected in an increase of 0.8 percentage points or 14.6 percent 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 $\$ 658$ per unit ( $\$ 0.72$ per square foot) in 2007 versus $\$ 537$ per unit ( $\$ 0.61$ per square foot) in 2006 for individually metered garden properties reported in the survey. Other non-rent operating revenues ranged from none to $\$ 1,041$ per unit. Median other operating revenues were $\$ 647$ per unit.

Total Operating Expenses. Reflecting increased energy expenses and upward pressure on costs, an increase of 1.2 per-
month) the prior year, and ranged from a high of \$18,999 ( $\$ 1,583$ per month) to $\$ 5,816$ ( $\$ 485$ per month).

Rent Revenue Collected. Annual rent revenue collected averaged $\$ 9,550$ per individually metered garden property unit, up 7.2 percent from $\$ 8,909$ in last year's survey. Measured on a per-square-foot basis, rent revenue averaged $\$ 10.49$ per square foot versus \$10.04, in 2006.

Revenue Losses. Revenue losses averaged 10.11 percent of GPR in 2007 versus 10.20 percent in 2006, and 11.87 percent in 2005. Revenue losses were reported in three categories: those from vacancies, collections and concessions. Vacancy losses for individually metered market rent garden properties averaged 6.9 percent of GPR in the current survey ( $\$ 732$ per unit, $\$ 0.80$ per square foot) versus 6.6 percent of GPR ( $\$ 652$ per unit, $\$ 0.73$ per square foot) in 2006. Collection losses averaged 0.07 percent of GPR ( $\$ 64$ per unit, $\$ 0.07$ per square foot) in comparison to 0.7 percent of GPR ( $\$ 72$ per unit, $\$ 0.08$ per square foot) from 2006. Losses from rent concessions declined marginally, averaging 2.6 percent of GPR ( $\$ 278$ per unit in the property, $\$ 0.31$ per square foot) in 2007 versus 2.9 percent of GPR ( $\$ 288$ per unit in the property, $\$ 0.32$ per


centage points or 3.1 percent was recorded in total operating expenses last year. Total operating expenses for individually metered garden properties in the survey rose to an average of $\$ 4,196$ per unit ( $\$ 4.61$ per square foot) versus $\$ 3,802$ per unit ( $\$ 4.29$ per square foot) in 2006. The total represented 39.5 percent of GPR versus 38.3 percent in 2006, and down from 40 percent in 2005.

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), utilities (net of any reimbursements from residents), management fees, general and administration, marketing, contract services and maintenance. (Non-recurring capital expenses were excluded and reported separately.)
There continues to be variation in the trends among individual categories of operating costs. Average property-related insurance costs increased 13.9 percent in 2007 to $\$ 266$ per unit ( $\$ 0.29$ per square foot) from $\$ 220$ per unit ( $\$ 0.25$ per square foot) in 2006. Administrative costs rose 16.6 percent to $\$ 235$ from $\$ 189$ per unit in 2006. Management fees increased 3.3 percent to $\$ 340$ per unit ( 3.2 percent of GPR) from $\$ 309$ per unit ( 3.1 percent of GPR) a year earlier. Marketing costs increased to $\$ 172$ per unit from $\$ 160$ a year earlier, remaining at 1.6 percent of GPR. Maintenance costs increased 8.2 percent to $\$ 414$ per unit from $\$ 359$ per unit in the 2006 survey, effectively offsetting a portion of the decline of contract services costs of 19.4 percent to an average of $\$ 265$ per unit in 2007 from $\$ 303$ in 2006.

The overall turnover rate declined from last year. As previous homeowners migrate back to apartment units, the overall turnover rate declined to 59 percent of total units among the individually metered garden apartment properties reported in the survey for 2007 from 62 percent in 2006. This equals the lowest turnover rate over the history of this survey, which has been in the range of 59 percent to 69 percent. The previous low occurred in the data for 1995 and the high during the recession year 1990.

With the exception of the Pacific (Region VI), which remained

the same at 62 percent, the balance of the regional turnover rates declined last year: Northeast (Region I), 55 percent to 52 percent; Southeast (Region II), 64 percent to 59 percent; North Midwest (Region III), 56 percent to 52 percent; Southwest (Region IV), 63 percent to 61 percent; and in the Mountain/South Midwest States (Region V), 62 percent to 60 percent.

Age of Property. Operating expenses as a percentage of GPR and dollars per square foot basis expectedly rose in individually me-
tered garden properties in the report as they age. Operating expenses were 36.5 percent of GPR ( $\$ 4.15$ per square foot) in properties less than 5 years old and rise to 42.1 percent of GPR ( $\$ 4.82$ per square foot) for properties 20 or more years old. As operating expenses decrease over the span of years, capital expenditures increase as the building ages. For example, operating expenses were $\$ 4,457$ per unit for those 5 to 9 years old and decreased to $\$ 4,138$ per unit for properties 20 or more years old, while capital expenditures increased from $\$ 539$ to $\$ 1,076$, respectively.

Average NOI as a percentage of GPR continues to decline in those properties that are 20 or more years old, the lowest reported at 54.2 percent. The highest NOI as a percentage of GPR occurred in properties 10 to 19 years old at 59.8 percent. Measured in terms of dollars per unit, the low was $\$ 5,332$ per unit in properties that are 20 or more years old and the high was $\$ 7,314$ for properties 5 to 9 years old.

Economic losses continue to be the highest among the newest properties. Properties less than 5 years old reported the highest ratio of economic losses at 13.04 percent of GPR, while the lowest was in those that are 10 to 19 years old at 9.22 percent.

Age of property groupings again show distinct differences in the individual cost components of operating costs. The largest difference is in real estate and related property taxes and fees, varying from a high (average) of $\$ 1,354$ per unit ( $\$ 1.35$ per square foot) in those properties five to nine years old, to a low of \$843 (\$0.98 per square foot) for those aged 20 or more years.

Expectedly, capital expenditures were significantly lower for the newest properties. They averaged $\$ 243$ per unit ( $\$ 0.24$ per square foot) for those properties less than five years old, compared to the highest average reported for properties 20 or more years old at $\$ 1,076$ per unit ( $\$ 1.25$ 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, dropping from 42.6 percent of GPR in properties of less than 100 units, to a low of 39.7 percent in those containing 500 or more units. The survey results, however, did not show similar economies of scale on a per unit basis. The lowest operating costs were similar across a range of sizes (from $\$ 4,106$ to $\$ 4,192$ per unit), with the exception of properties with 100 to 249 units at $\$ 4,301$ per unit.

Economic losses varied based on property size. Losses were highest with properties with 500 or more units at 11.09 percent of GPR and the lowest for properties with fewer than 100 units at 8.85 percent.

## Metro Area Detailed Operating Income \& Expenses Data

Detailed tables in the report are presented for the 69 metropolitan areas where a total of six or more Garden communities of all types were reported in the survey. This is the only section of the report with metropolitan area data for garden, mid-rise and high-rise building properties, and is further segmented into those with utilities that are individually 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.

The following are some highlights of the metropolitan area data, focusing on garden properties with individually metered
utilities unless otherwise noted.

- NOIs on a dollar-per-unit basis ranged from \$12,500 (\$14.01 per square foot) in the Los Angeles-Long Beach-Glendale metro area to a low of $\$ 3,223$ ( $\$ 3.72$ per square foot) in the Indianapolis metro area. The Jackson, Miss., metro area had the highest NOI measured as a percent of GPR at 73.2 percent and Detroit had the lowest at 42 percent.
- GPR averages were the highest in the Los Angeles-Long BeachGlendale metro area at $\$ 18,899$ per unit ( $\$ 21.18$ per square foot). A low of $\$ 5,816$ per unit ( $\$ 6.71$ per square foot) was tabulated for properties reported from Augusta-Richmond County, Ga.-S.C..
- Economic losses were lowest in the Midland, Texas, metro area at 3.38 percent of GPR and Salt Lake City at 4.41 percent. Both, however, have small numbers of reported individually metered garden properties. Metro areas with the highest economic losses were Boston at 16.38 percent and Colorado Springs, Colo., at 18.32 percent.
- Total operating costs' highs and lows vary among metro areas based on which measure is selected. Properties reporting from the San Jose-Sunnyvale-Santa Clara, Calif., metro area had the highest operating costs based on a per unit basis and per square foot basis at $\$ 6,102$ ( $\$ 6.79$ per square foot), followed by Miami-Miami Beach-Kendall, Fla., at $\$ 5,954$ per unit ( $\$ 5.78$ per square foot). A low of $\$ 1,567$ per unit ( $\$ 1.81$ per square foot) was reported in the Augusta-Richmond County, Ga.-S.C. metro area.
- Real estate taxes remained high in many metro areas in 2007. The Miami-Miami Beach-Kendall, Fla., metro area had the highest real estate taxes per unit at $\$ 2,129$; San Jose-Sunnyvale-

|  | Operating Expenses by Age and Size of Property <br> INDIVIDUALLY METERED MARKET RENT GARDEN PROPERTIES |  |  |  |  |  |  |  | Repair \&Maint. | TotalOperatingExpenses | Capital Expend |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Salary \& Personnel Costs | Insurance | Taxes | Utilities | Mgmt. Fees | Admin. | Mrktg. | Contract Services |  |  |  |
| Age of Property |  |  |  |  |  |  |  |  |  |  |  |
| Dollars Per Unit |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years | \$1,032 | \$258 | \$1,149 | \$442 | \$352 | \$231 | \$205 | \$233 | \$252 | \$4,154 | \$243 |
| 5 to 9 years | \$1,087 | \$271 | \$1,354 | \$418 | \$331 | \$215 | \$192 | \$235 | \$355 | \$4,457 | \$539 |
| 10 to 19 years | \$1,072 | \$252 | \$1,150 | \$389 | \$322 | \$188 | \$162 | \$254 | \$386 | \$4,176 | \$896 |
| 20 or more years | \$1,071 | \$272 | \$843 | \$429 | \$352 | \$262 | \$170 | \$285 | \$455 | \$4,138 | \$1,076 |
| Dollars Per Square Feet |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years | \$1.03 | \$0.26 | \$1.15 | \$0.44 | \$0.35 | \$0.23 | \$0.20 | \$0.23 | \$0.25 | \$4.15 | \$0.24 |
| 5 to 9 years | \$1.09 | \$0.27 | \$1.35 | \$0.42 | \$0.33 | \$0.21 | \$0.19 | \$0.24 | \$0.35 | \$4.46 | \$0.54 |
| 10 to 19 years | \$1.12 | \$0.26 | \$1.20 | \$0.40 | \$0.34 | \$0.20 | \$0.17 | \$0.26 | \$0.40 | \$4.35 | \$0.93 |
| 20 or more years | \$1.25 | \$0.32 | \$0.98 | \$0.50 | \$0.41 | \$0.30 | \$0.20 | \$0.33 | \$0.53 | \$4.82 | \$1.25 |
| Percent of Gross Potential Rent |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years | 9.1\% | 2.3\% | 10.1\% | 3.9\% | 3.1\% | 2.0\% | 1.8\% | 2.0\% | 2.2\% | 36.5\% | 2.1\% |
| 5 to 9 years | 8.9\% | 2.2\% | 11.0\% | 3.4\% | 2.7\% | 1.7\% | 1.6\% | 1.9\% | 2.9\% | 36.3\% | 4.4\% |
| 10 to 19 years | 9.5\% | 2.2\% | 10.2\% | 3.4\% | 2.9\% | 1.7\% | 1.4\% | 2.2\% | 3.4\% | 36.9\% | 7.9\% |
| 20 or more years | 10.9\% | 2.8\% | 8.6\% | 4.4\% | 3.6\% | 2.7\% | 1.7\% | 2.9\% | 4.6\% | 42.1\% | 10.9\% |
| Percent of Total Operating Costs |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years | 24.9\% | 6.2\% | 27.7\% | 10.6\% | 8.5\% | 5.6\% | 4.9\% | 5.6\% | 6.1\% | 100.0\% |  |
| 5 to 9 years | 24.4\% | 6.1\% | 30.4\% | 9.4\% | 7.4\% | 4.8\% | 4.3\% | 5.3\% | 8.0\% | 100.0\% |  |
| 10 to 19 years | 25.7\% | 6.0\% | 27.5\% | 9.3\% | 7.7\% | 4.5\% | 3.9\% | 6.1\% | 9.3\% | 100.0\% |  |
| 20 or more years | 25.9\% | 6.6\% | 20.4\% | 10.4\% | 8.5\% | 6.3\% | 4.1\% | 6.9\% | 11.0\% | 100.0\% |  |
| Size of Property |  |  |  |  |  |  |  |  |  |  |  |
| Dollars Per Unit |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | \$982 | \$241 | \$693 | \$547 | \$451 | \$315 | \$152 | \$260 | \$550 | \$4,192 | \$773 |
| 100 to 249 units | \$1,120 | \$266 | \$926 | \$443 | \$356 | \$261 | \$186 | \$290 | \$453 | \$4,301 | \$979 |
| 250 to 499 units | \$1,058 | \$270 | \$1,070 | \$410 | \$325 | \$222 | \$170 | \$251 | \$388 | \$4,167 | \$965 |
| 500 or more units | \$1,039 | \$257 | \$1,015 | \$395 | \$345 | \$222 | \$154 | \$270 | \$409 | \$4,106 | \$1,151 |
| Dollars Per Square Feet |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | \$1.11 | \$0.27 | \$0.78 | \$0.62 | \$0.51 | \$0.35 | \$0.17 | \$0.29 | \$0.62 | \$4.72 | \$0.87 |
| 100 to 249 units | \$1.24 | \$0.29 | \$1.02 | \$0.49 | \$0.39 | \$0.29 | \$0.21 | \$0.32 | \$0.50 | \$4.74 | \$1.08 |
| 250 to 499 units | \$1.15 | \$0.29 | \$1.16 | \$0.45 | \$0.35 | \$0.24 | \$0.18 | \$0.27 | \$0.42 | \$4.52 | \$1.05 |
| 500 or more units | \$1.17 | \$0.29 | \$1.15 | \$0.45 | \$0.39 | \$0.25 | \$0.17 | \$0.31 | \$0.46 | \$4.64 | \$1.30 |
| Percent of Gross Potential Rent |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | 10.0\% | 2.5\% | 7.0\% | 5.6\% | 4.6\% | 3.2\% | 1.5\% | 2.6\% | 5.6\% | 42.6\% | 7.9\% |
| 100 to 249 units | 10.6\% | 2.5\% | 8.8\% | 4.2\% | 3.4\% | 2.5\% | 1.8\% | 2.7\% | 4.3\% | 40.8\% | 9.3\% |
| 250 to 499 units | 9.8\% | 2.5\% | 9.9\% | 3.8\% | 3.0\% | 2.1\% | 1.6\% | 2.3\% | 3.6\% | 38.6\% | 8.9\% |
| 500 or more units | 10.0\% | 2.5\% | 9.8\% | 3.8\% | 3.3\% | 2.1\% | 1.5\% | 2.6\% | 4.0\% | 39.7\% | 11.1\% |
| Percent of Total Operating Costs |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | 23.4\% | 5.8\% | 16.5\% | 13.1\% | 10.8\% | 7.5\% | 3.6\% | 6.2\% | 13.1\% | 100.0\% |  |
| 100 to 249 units | 26.0\% | 6.2\% | 21.5\% | 10.3\% | 8.3\% | 6.1\% | 4.3\% | 6.7\% | 10.5\% | 100.0\% |  |
| 250 to 499 units | 25.4\% | 6.5\% | 25.7\% | 9.8\% | 7.8\% | 5.3\% | 4.1\% | 6.0\% | 9.3\% | 100.0\% |  |
| 500 or more units | 25.3\% | 6.3\% | 24.7\% | 9.6\% | 8.4\% | 5.4\% | 3.8\% | 6.6\% | 10.0\% | 100.0\% |  |

## All Subsidized Properties

OPERATING INCOME \& EXPENSE DATA, INDIVIDUAL METERED PROPERTIES
INDIVIDUAL METERED PROPERTIES

|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Properties | 312 |  |  | 244 |  |  | 68 |  |  |
| Number of Units | 40,944 |  |  | 31,362 |  |  | 9,582 |  |  |
| Avg. No. of Units/Property | 131 |  |  | 129 |  |  | 141 |  |  |
| Avg. No. of Square Feet/Unit | 834 |  |  | 876 |  |  | 702 |  |  |
| Turnover rate in \% | 29\% |  |  | 33\% |  |  | 17\% |  |  |
|  | \$ Per | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ | \$ Per Unit | $\begin{array}{r} \text { \$ Per } \\ \text { Sq. Ft. } \end{array}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ | \$ Per Unit | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 8,396 | 10.06 | 100.0\% | 8,556 | 9.77 | 100.0\% | 7,871 | 11.21 | 100.0\% |
| Rent Revenue Collected | 7,809 | 9.36 | 93.0\% | 7,867 | 8.98 | 91.9\% | 7,619 | 10.85 | 96.8\% |
| Losses to Vacancy | 393 | 0.47 | 4.7\% | 460 | 0.52 | 5.4\% | 174 | 0.25 | 2.2\% |
| Collection Losses | 94 | 0.11 | 1.1\% | 104 | 0.12 | 1.2\% | 59 | 0.08 | 0.8\% |
| Losses to Concessions | 100 | 0.12 | 1.2\% | 125 | 0.14 | 1.5\% | 19 | 0.03 | 0.2\% |
| Other Revenue | 295 | 0.35 | 3.5\% | 320 | 0.36 | 3.7\% | 214 | 0.30 | 2.7\% |
| Total Revenue | 8,104 | 9.71 | 96.5\% | 8,187 | 9.34 | 95.7\% | 7,833 | 11.15 | 99.5\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,146 | 1.37 | 13.7\% | 1,175 | 1.34 | 13.7\% | 1,051 | 1.50 | 13.4\% |
| Insurance | 321 | 0.38 | 3.8\% | 299 | 0.34 | 3.5\% | 391 | 0.56 | 5.0\% |
| Taxes | 593 | 0.71 | 7.1\% | 583 | 0.67 | 6.8\% | 626 | 0.89 | 8.0\% |
| Utilities | 513 | 0.61 | 6.1\% | 481 | 0.55 | 5.6\% | 616 | 0.88 | 7.8\% |
| Management Fees | 491 | 0.59 | 5.8\% | 486 | 0.56 | 5.7\% | 506 | 0.72 | 6.4\% |
| Administrative | 438 | 0.53 | 5.2\% | 451 | 0.51 | 5.3\% | 397 | 0.57 | 5.0\% |
| Marketing | 64 | 0.08 | 0.8\% | 76 | 0.09 | 0.9\% | 23 | 0.03 | 0.3\% |
| Contract Services | 409 | 0.49 | 4.9\% | 429 | 0.49 | 5.0\% | 347 | 0.49 | 4.4\% |
| Repair and Maintenance | 327 | 0.39 | 3.9\% | 357 | 0.41 | 4.2\% | 229 | 0.33 | 2.9\% |
| Total Operating Expenses | 4,303 | 5.16 | 51.3\% | 4,339 | 4.95 | 50.7\% | 4,187 | 5.96 | 53.2\% |
| Net Operating Income | 3,801 | 4.56 | 45.3\% | 3,848 | 4.39 | 45.0\% | 3,646 | 5.19 | 46.3\% |
| Capital Expenditures | 764 | 0.92 | 9.1\% | 799 | 0.91 | 9.3\% | 652 | 0.93 | 8.3\% |

## MASTER METERED PROPERTIES

|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Properties | 136 |  |  | 68 |  |  | 68 |  |  |
| Number of Units | 18,793 |  |  | 7,762 |  |  | 11,031 |  |  |
| Avg. No. of Units/Property | 138 |  |  | 114 |  |  | 162 |  |  |
| Avg. No. of Square Feet/Unit | 773 |  |  | 862 |  |  | 706 |  |  |
| Turnover rate in \% | 17\% |  |  | 25\% |  |  | 12\% |  |  |
|  | \$ Per Unit | $\begin{gathered} \text { \$Per } \\ \text { Sq. Ft. } \end{gathered}$ | \% of GPR | \$ Per Unit | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | \% of GPR | \$ Per Unit | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 9,983 | 12.92 | 100.0\% | 8,555 | 9.92 | 100.0\% | 10,988 | 15.55 | 100.0\% |
| Rent Revenue Collected | 9,498 | 12.29 | 95.1\% | 7,903 | 9.17 | 92.4\% | 10,621 | 15.03 | 96.7\% |
| Losses to Vacancy | 329 | 0.43 | 3.3\% | 435 | 0.50 | 5.1\% | 254 | 0.36 | 2.3\% |
| Collection Losses | 115 | 0.15 | 1.2\% | 133 | 0.15 | 1.6\% | 102 | 0.14 | 0.9\% |
| Losses to Concessions | 41 | 0.05 | 0.4\% | 84 | 0.10 | 1.0\% | 11 | 0.02 | 0.1\% |
| Other Revenue | 289 | 0.37 | 2.9\% | 297 | 0.34 | 3.5\% | 283 | 0.40 | 2.6\% |
| Total Revenue | 9,787 | 12.67 | 98.0\% | 8,200 | 9.51 | 95.9\% | 10,904 | 15.44 | 99.2\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,396 | 1.81 | 14.0\% | 1,358 | 1.57 | 15.9\% | 1,423 | 2.01 | 12.9\% |
| Insurance | 350 | 0.45 | 3.5\% | 314 | 0.36 | 3.7\% | 376 | 0.53 | 3.4\% |
| Taxes | 743 | 0.96 | 7.4\% | 476 | 0.55 | 5.6\% | 930 | 1.32 | 8.5\% |
| Utilities | 1,509 | 1.95 | 15.1\% | 1,274 | 1.48 | 14.9\% | 1,675 | 2.37 | 15.2\% |
| Management Fees | 569 | 0.74 | 5.7\% | 506 | 0.59 | 5.9\% | 613 | 0.87 | 5.6\% |
| Administrative | 514 | 0.67 | 5.2\% | 459 | 0.53 | 5.4\% | 553 | 0.78 | 5.0\% |
| Marketing | 46 | 0.06 | 0.5\% | 58 | 0.07 | 0.7\% | 37 | 0.05 | 0.3\% |
| Contract Services | 612 | 0.79 | 6.1\% | 501 | 0.58 | 5.9\% | 690 | 0.98 | 6.3\% |
| Repair and Maintenance | 377 | 0.49 | 3.8\% | 424 | 0.49 | 5.0\% | 343 | 0.49 | 3.1\% |
| Total Operating Expenses | 6,116 | 7.91 | 61.3\% | 5,370 | 6.23 | 62.8\% | 6,640 | 9.40 | 60.4\% |
| Net Operating Income | 3,672 | 4.75 | 36.8\% | 2,831 | 3.28 | 33.1\% | 4,264 | 6.04 | 38.8\% |
| Capital Expenditures | 975 | 1.26 | 9.8\% | 758 | 0.88 | 8.9\% | 1,128 | 1.60 | 10.3\% |

[^3]Santa Clara, Calif., was second at $\$ 1,979$ per unit followed by New York at $\$ 1,869$ per unit. The lowest average was for properties located in Colorado Springs, Colo., and Salt Lake City metro areas at \$354 and \$346, respectively.

- Insurance costs on a per unit basis were the highest among several hurricaneprone metro areas. They were at $\$ 641$ per unit ( $\$ 0.20$ per square foot) in CharlestonNorth Charleston, S.C., \$558 (\$0.62 per square foot) in San Jose-Sunnyvale-Santa Clara, Calif., and \$486 (\$.52 per square foot) in Palm Bay-Melbourne-Titusville,

Fla. They were lowest in Augusta-Richmond County, Ga.-S.C., at $\$ 99$ per unit ( $\$ 0.11$ per square foot) and Hartford-West Hartford-East Hartford, Conn., at \$46 per unit ( $\$ 0.05$ per square foot).

- Salaries and personnel costs were the lowest in the Jackson, Miss., metro area at $\$ 732$ per unit (\$. 66 per square foot) and Dayton, Ohio, at \$771 (\$0.81 per square foot). Oakland-Freemont-Haywood, Calif., had the highest average at $\$ 1,380$ per unit ( $\$ 1.68$ per square foot) followed by the \$1,357 in San Jose-Sunnyvale-Santa Clara, Calif. ( $\$ 1.51$ per square foot).
- Columbus, Ohio, and West Palm Beach, Fla., had the largest units among the metro areas reported separately in this report with an average of 1,078 and 1,050 square feet of floor area per unit, respectively. Properties reporting located in the Salt Lake City and New York metros had the lowest averaging at 739 and 720 square feet per unit, respectively.


## Subsidized Properties Income \& Expenses Summary

 Operating Income \& ExpensesSummary. Data was received for 448 subsidized properties containing 59,737 units. Garden properties with individually metered utilities represent the largest subgroup of properties reporting, and analysis herein will be limited to this sector. Data tables are presented for seven metropolitan areas that met the minimum for separate reporting.

Subsidized garden apartment properties with individually metered utilities in the survey tend to have fewer units and less floor area than market rent units. Responding properties contained an average of 129 units versus 268 units for market rent properties of the same type. These subsidized properties had an average of 876 square feet of floor area versus 911 square feet for the market rent properties.

Revenues. GPR averaged $\$ 8,556$ per unit ( $\$ 9.77$ per square foot) annually in this year's survey versus $\$ 9,070$ per unit ( $\$ 10.62$ per square foot) in 2006. Rental revenues averaged $\$ 7,867$ ( $\$ 8.98$ per square foot) versus $\$ 8,475$ per unit ( $\$ 9.92$ per square foot). Other operating revenues averaged $\$ 320$ per unit ( $\$ 0.36$ per square foot) in 2007 versus $\$ 341$ per unit ( $\$ 0.40$ per square foot) for 2006.

Operating Expenses. Operating expenses in subsidized properties were higher than those for market rent properties. Subsidized properties reported in the survey had total operating costs averaging $\$ 3,848$ ( $\$ 4.39$ per square foot) in 2007 versus the $\$ 3,974$ per unit ( $\$ 4.65$ per square foot) reported for responding properties in 2006.

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
45.0 percent of GPR versus 56.6 percent for the market rent properties. The other comparisons were $\$ 3,848$ versus $\$ 6,011$ on a dollars-per-unit basis, and $\$ 4.39$ versus $\$ 6.60$ on a per-square-foot-of-floor-area basis.

Economic Losses. Economic losses tended to be lower in subsidized properties with their lower rents and relatively tight supply. An 8.1 percent average rate was calculated for the subsidized individually metered garden properties versus 10.11 percent for market rent units. The economic loss ratio in subsidized properties increased over last year's 6.56 percent.

Turnover Rates. Occupants of subsidized apartments have lower income and fewer housing choices in most local markets and are less likely to move. The turnover rate in individually metered subsidized units was 33 percent versus 59 percent for market rent units.

Summary. The current year, 2008, is indeed a year of challenge and opportunity. The NAA survey results indicate that by doing more with less, achieving or exceeding stakeholder expectations and by managing during difficult times, the apartment industry has a great deal of which to be proud.
Creating a welcoming living environment for approximately 35 million Americans who rent can be a daunting task. However, the NAA survey results are in and it appears that the apartment industry is up to the challenge and is setting operating performance benchmarks other industries would be proud to achieve.

## 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.

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, trash removal, exterminator and other services provided on a contract basis.

GPR Residential. Total rents of all occupied units at 2007 lease rates and all vacant units at 2007 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 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. Non-recurring capital expense not included.

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 Operating Income Individually Metered Market Rent Garden Properties


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. Does not include utility reimbursements (i.e., RUBS) in GPR or rental revenue. All utility reimbursements are subtracted from gross utility expense.

Payroll Costs. Gross salaries and wages paid to employees assigned to the property. Include payroll taxes, group health/life/ disability insurance, $401(\mathrm{k})$, 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. If subsidized, the program was listed (i.e., Section 236, Section 8).

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.

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

Utilities. Total cost of all utilities and each listed type, net of any income reimbursements for or from residents (i.e., RUBS or similar systems). Does not include trash removal.

Utility Configuration. Whether electric, gas, oil and water/sewer utilities to individual units in subject property are: Master Metered, Owner Pays; Master Metered, Resident Pays (RUBS); Individual or Submetered, Resident Pays.

## Thank You to Our Participating Companies

Aspecial note of appreciation goes to the 359 firms who donated their time to accumulate the data necessary to make this survey valuable. The following companies and their officers provided more than 20 properties for the 2008 Survey of Income and Expenses in Rental Apartment Properties:

- AIMCO
- Equity Residential
- Greystar Real Estate Partners LLC
- UDR
- Mid-America Apartment Communities
- Western National Property Management
- JPI Management Services
- Camden
- Drucker and Falk
- Village Green Companies
- Milestone Management
- Alliance Residential Management
- MV Residential Property Management Inc.
- AMLI
- William C. Smith \& Co.
- Alco Management Inc.
- Simpson Housing LLP
- 1st Choice Management Group
- JCM Partners
- Babcock \& Brown Residential
- AEW Capital Management
- Nevins Adams Lewbel Schell
- Gables Residential
- Dunlap \& Magee Property Management
- Education Realty Trust Inc.
- Alliance Communities
- PRG Real Estate Management Inc.
- Venterra Realty
- Post Apartment Homes L.P.
- The JBG Companies
- Konover Residential Corporation
- Lane Company
- The Dolben Companies
- MG Properties

| Apartment Operations Metrics (Individually Metered Garden Properties) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Properties | Units | Revenue / Payroll | Operating Income / Payroll | $\begin{array}{r} \text { \# Units / } \\ \text { Full-time } \\ \text { Employees } \end{array}$ | $\begin{array}{r} \text { \# Units / } \\ \text { Total } \\ \text { Employees } \end{array}$ | Payroll / Revenue | $\begin{gathered} \text { Payroll/ } \\ \text { Net } \\ \text { Operating } \\ \text { Income } \end{gathered}$ |
| Less Than 100 Units | 235 | 16,162 | \$9.64 | \$5.37 | 32.9 | 24.8 | 10.4\% | 18.6\% |
| 100 to 199 Units | 650 | 98,272 | \$9.10 | \$5.28 | 38.3 | 34.3 | 11.0\% | 18.9\% |
| 200 to 299 Units | 827 | 202,324 | \$9.39 | \$5.48 | 40.7 | 38.5 | 10.7\% | 18.2\% |
| 300 to 399 Units | 490 | 166,814 | \$9.66 | \$5.74 | 42.8 | 41.1 | 10.3\% | 17.4\% |
| 400 to 499 Units | 248 | 109,160 | \$10.01 | \$6.06 | 43.8 | 42.4 | 10.0\% | 16.5\% |
| 500 or More Units | 161 | 106,349 | \$9.52 | \$5.56 | 44.8 | 43.3 | 10.5\% | 18.0\% |
| Total | 2,611 | 699,081 | \$9.53 | \$5.61 | 41.7 | 39.1 | 10.5\% | 17.8\% |

## Metrics (Garden, Ind. Metered 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 above, 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 a point of reference and guidelines for readers of this survey report, and not necessarily a target or requirement to assure efficiency or operational policy.

Industry Designations By Position (All Respondents with one or more designations)
Apartment Manager - CAM


Apartment Manager - CPM

|  | PROPERTIES | UNITS | UNITS/PROPERTY | TOTAL | TOTALPROPERTY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Less Than 100 Units | 41 | 2,859 | 70 | 6 | 14.6\% |
| 100 to 199 Units | 72 | 10,353 | 144 | 7 | 9.7\% |
| 200 to 299 Units | 64 | 15,607 | 244 | 3 | 4.7\% |
| 300 to 399 Units | 36 | 12,498 | 347 | 5 | 13.9\% |
| 400 to 499 Units | 16 | 6,871 | 429 | 2 | 12.5\% |
| 500 or More Units | 8 | 5,776 | 722 | 1 | 12.5\% |
|  | 237 | 53964 | 228 | 24 | 10.1\% |

Assistant Manager - CAM



Leasing (Percent of Traffic Originated Online - All Respondents)

|  | Total <br> Properties | Total <br> Units | Units/ <br> Property <br> Average | \% Traffic <br> Average |
| :---: | ---: | :---: | ---: | :---: |
| Less Than 100 Units | 275 | 19,630 | 71 | $12 \%$ |
| 100 to 199 Units | 401 | 59,118 | 147 | $19 \%$ |
| 200 to 299 Units | 415 | 100,955 | 243 | $22 \%$ |
| 300 to 399 Units | 216 | 73,808 | 342 | $21 \%$ |
| 400 to 499 Units | 106 | 46,472 | 438 | $20 \%$ |
| 500 or More Units | 83 | 55,135 | 664 | $18 \%$ |

Rental Payments Permitted Online (All Respondents)

|  | Total <br> Properties | Total <br> Units | Units/ <br> Property <br> Average | \% Online <br> Permitted <br> Average |
| :---: | ---: | :---: | ---: | ---: |
| Less Than 100 Units | 351 | 24,121 | 69 | $10.3 \%$ |
| 100 to 199 Units | 521 | 76,913 | 148 | $22.1 \%$ |
| 200 to 299 Units | 540 | 131,281 | 243 | $38.0 \%$ |
| 300 to 399 Units | 293 | 100,094 | 342 | $43.0 \%$ |
| 400 to 499 Units | 141 | 62,057 | 440 | $51.1 \%$ |
| 500 or More Units | 98 | 64,282 | 656 | $50.0 \%$ |

## Additional Tables (All Respondents)

Following is summary information related to additional questions included on the survey that are related to apartment operations and leasing, and the extent of employees with industry designations/certifications. These tables include:

Certifications: Percentage of employees with specific designations in key positions-stratified by number of units per community.

The tabulation is for those respondents who reported one or more designation for the five positions. Results demonstrate that size of property has less to do with certification and designation for employees than the position (level) and the nature of the certification itself, showing strong levels of Certified Apartment Managers (CAM), ARM designations for Apartment Managers, Certified Apartment Maintenance Technicians (CAMT) and National Apartment Leasing Professional (NALP). These results likely are a result of job requirements at hiring or promotion.

Internet Based Traffic: Statistics by community size reflecting the extent to which leasing traffic was generated from internet Information. Traffic originated directly from the Internet primarily ranged from approximately 18 to 22 percent across community sizes, indicating that traditional methods of leasing traffic—print advertising, signage and referral—remain a staple to apartment marketing.

Online Rental Payment: Statistics by property type indicate a low percentage of renters who are paying their rent online, in part a function of availability. But, the percentage rises as the community size increases.

Method of Payment: Statistics presenting the average percentage of payments by cash, credit card, check and other. Payment by check continues to dominate as the preferred payment method.

Christopher Lee, President \& Chief Executive Officer of CEL \& Associates Inc., is NAA's Consulting Economist. Special thanks to Janet Gora, Director, CEL \& Associates Inc., as project manager and Chanal Thomas of NAA for helping with this survey, involving logistics and paper responses.

Method of Rent Payment (All Respondents)

|  | Total Properties | Total Units | $\begin{array}{r} \text { Units / } \\ \text { Properties } \\ \text { Average } \end{array}$ | Cash | Credit Card | Check | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less Than 100 Units | 291 | 20,637 | 71 | 2.4\% | 1.3\% | 74.7\% | 21.5\% |
| 100 to 199 Units | 439 | 65,116 | 148 | 0.9\% | 2.7\% | 78.1\% | 18.3\% |
| 200 to 299 Units | 458 | 111,381 | 243 | 0.4\% | 3.4\% | 84.0\% | 12.3\% |
| 300 to 399 Units | 244 | 83,675 | 343 | 1.2\% | 3.9\% | 86.5\% | 8.3\% |
| 400 to 499 Units | 123 | 53,972 | 439 | 0.1\% | 3.5\% | 85.3\% | 11.1\% |
| 500 or More Units | 81 | 53,620 | 662 | 0.4\% | 1.5\% | 82.4\% | 15.6\% |

## A full survey report and individual market data will be available at www.naahq.org/08ies by Oct. 1.

# Net Operating Income and Economic Vacancy Rates <br> BY REGION AND METROPOLITAN AREA 

MARKET RENT GARDEN PROPERTIES - INDIVIDUALLY METERED, DOLLARS PER SQUARE FOOT

|  | Total No. of Properties | Total No. of Units | Average Sq. Ft. Per Unit | Gross Potential Rent Revenue | Total <br> Rent <br> Revenue Collected | Vacancies ${ }^{\text {R }}$ | evenue Loss Collections | to Concessions | Total Other Revenue | Total <br> Revenue Collected | Total <br> Operating Expenses | $\begin{array}{r} \text { Net } \\ \text { Operating } \\ \text { Income } \\ \text { NOI } \end{array}$ | $\begin{array}{r} \text { Economic } \\ \text { Losses } \\ \text { as a \% } \\ \text { of GPR } \end{array}$ | Turnover Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL MARKET RENT | 2.611 | 699,081 | 911 | 11.67 | 10.49 | 0.80 | 0.07 | 0.31 | 0.72 | 11.21 | 4.61 | 6.60 | 10.11\% | 59\% |
| REGIONI | 271 | 72,747 | 901 | 14.11 | 12.82 | 0.92 | 0.08 | 0.29 | 0.71 | 13.53 | 5.16 | 8.37 | 9.16\% | 52\% |
| BALTIMORE-TOWSON, MD | 39 | 10,870 | 969 | 14.74 | 13.12 | 1.16 | 0.05 | 0.41 | 0.70 | 13.81 | 5.24 | 8.57 | 11.00\% | 55\% |
| BOSTON-CAMBRIDGE-QUINCY, MA-NH | 20 | 4,952 | 864 | 15.31 | 12.80 | 1.80 | 0.11 | 0.60 | 0.61 | 13.41 | 5.72 | 7.69 | 16.38\% | 53\% |
| HARTFORD-WEST HARTFORD-EAST HARTFORD, CT | 6 | 1,105 | 945 | 12.89 | 12.02 | 0.82 | 0.00 | 0.05 | 0.58 | 12.60 | 5.26 | 7.34 | 6.74\% | 59\% |
| NEW YORK, NY | 6 | 2,188 | 720 | 19.16 | 17.98 | 0.86 | 0.16 | 0.15 | 1.45 | 19.43 | 7.24 | 12.19 | 6.13\% | 48\% |
| PHILADELPHIA-CAMDEN-WILMINGTON, PA-NJ-DE-MD | 12 | 3,302 | 867 | 13.80 | 12.57 | 0.94 | 0.06 | 0.23 | 0.73 | 13.31 | 5.35 | 7.96 | 8.88\% | 47\% |
| RICHMOND, VA | 33 | 8,087 | 893 | 10.69 | 9.75 | 0.49 | 0.10 | 0.35 | 0.66 | 10.40 | 4.26 | 6.14 | 8.81\% | 52\% |
| VIRGINA BEACH-NORFOLK-NEWPORT NEWS, VA-NC | 36 | 10,425 | 900 | 11.53 | 10.47 | 0.81 | 0.11 | 0.14 | 0.69 | 11.16 | 4.41 | 6.75 | 9.15\% | 57\% |
| WASHINGTON-ARLINGTON-ALEXANDRIA , DC-MD-VA-WV | 76 | 23,641 | 880 | 16.10 | 14.82 | 0.94 | 0.07 | 0.27 | 0.70 | 15.52 | 5.47 | 10.05 | 7.92\% | 50\% |
| OTHER REGION I | 43 | 8,177 | 965 | 12.81 | 11.86 | 0.67 | 0.07 | 0.21 | 0.75 | 12.61 | 5.12 | 7.49 | 7.37\% | 52\% |
| REGION II | 789 | 223,871 | 979 | 10.15 | 9.12 | 0.72 | 0.07 | 0.23 | 0.66 | 9.79 | 4.12 | 5.66 | 10.09\% | 59\% |
| ATLANTA-SANDY SPRINGS-MARIETTA, GA | 152 | 50,216 | 1,016 | 9.49 | 8.38 | 0.72 | 0.08 | 0.31 | 0.61 | 8.99 | 3.88 | 5.11 | 11.67\% | 56\% |
| AUGUSTA-RICHMOND COUNTY, GA-SC | 6 | 1,236 | 867 | 6.71 | 6.31 | 0.31 | 0.02 | 0.08 | 0.33 | 6.64 | 1.81 | 4.84 | 5.94\% | 57\% |
| CHARLESTON-NORTH CHARLESTON, SC | 24 | 4,691 | 861 | 10.39 | 8.93 | 1.08 | 0.10 | 0.28 | 0.71 | 9.65 | 4.88 | 4.77 | 14.02\% | 72\% |
| CHARLOTTE-GASTONIA-CONCORD, NC-SC | 39 | 9,086 | 976 | 9.77 | 9.05 | 0.54 | 0.07 | 0.11 | 0.81 | 9.86 | 3.58 | 6.28 | 7.38\% | 59\% |
| DELTONA-DAYTONA BEACH-OSMOND BEACH, FL | 9 | 1,468 | 856 | 10.63 | 9.04 | 1.23 | 0.06 | 0.29 | 0.80 | 9.84 | 5.14 | 4.70 | 14.94\% | 57\% |
| FAYETTEVILLE, NC | 6 | 1,212 | 1,083 | 7.17 | 6.20 | 0.62 | 0.03 | 0.32 | 0.64 | 6.85 | 3.11 | 3.74 | 13.52\% | 41\% |
| FORT LAUDERDALE-POMPANO BEACH-DEERFIELD BEACH, FL | F. FL 13 | 4,881 | 980 | 13.83 | 12.70 | 0.87 | 0.08 | 0.18 | 0.80 | 13.51 | 5.33 | 8.18 | 8.17\% | 62\% |
| GREENSBORO-HIGH POINT, NC | 25 | 5,343 | 959 | 9.62 | 8.81 | 0.57 | 0.07 | 0.17 | 0.71 | 9.52 | 3.73 | 5.79 | 8.46\% | 47\% |
| GREENVILLE-SPARTANBURG-ANDERSON, SC | 14 | 3,127 | 983 | 7.57 | 6.97 | 0.36 | 0.10 | 0.13 | 0.53 | 7.50 | 3.16 | 4.34 | 7.86\% | 57\% |
| JACKSON, MS | 6 | 1,712 | 1,102 | 8.08 | 7.62 | 0.34 | 0.06 | 0.06 | 0.45 | 8.08 | 2.16 | 5.91 | 5.63\% | 60\% |
| JACKSONVILLE, FL | 38 | 13,342 | 936 | 10.36 | 9.28 | 0.85 | 0.07 | 0.16 | 0.66 | 9.94 | 4.51 | 5.43 | 10.42\% | 64\% |
| KNOXVILLE, TN | 14 | 2,802 | 1,034 | 7.38 | 7.00 | 0.33 | 0.01 | 0.04 | 0.35 | 7.35 | 4.06 | 3.29 | 5.14\% | 57\% |
| LEXINGTON-FAYETTE, KY | 9 | 2,723 | 972 | 8.82 | 8.20 | 0.45 | 0.04 | 0.12 | 0.72 | 8.92 | 3.87 | 5.05 | 7.03\% | 51\% |
| LOUISVILLE, KY-IN | 7 | 1,914 | 875 | 11.78 | 10.60 | 0.78 | 0.07 | 0.33 | 0.90 | 11.50 | 4.92 | 6.58 | 9.99\% | 71\% |
| MEMPHIS, TN-MS-AR | 21 | 6,243 | 969 | 8.17 | 7.25 | 0.47 | 0.20 | 0.26 | 0.44 | 7.69 | 3.76 | 3.94 | 11.26\% | 37\% |
| MIAMI-MIAMI BEACH-KENDALL, FL | 26 | 7,999 | 1,030 | 14.77 | 13.68 | 0.87 | 0.07 | 0.16 | 0.86 | 14.53 | 5.78 | 8.75 | 7.41\% | 60\% |
| NASHVILLE, TN | 35 | 10,349 | 951 | 9.39 | 8.50 | 0.68 | 0.05 | 0.15 | 0.58 | 9.08 | 4.00 | 5.08 | 9.44\% | 60\% |
| ORLANDO, FL | 72 | 22,307 | 997 | 11.09 | 9.86 | 0.92 | 0.06 | 0.24 | 0.69 | 10.55 | 4.24 | 6.31 | 11.03\% | 61\% |
| PALM BAY-MELBOURNE-TITUSVILLE, FL | 9 | 1,708 | 938 | 10.35 | 8.78 | 1.11 | 0.08 | 0.39 | 0.71 | 9.48 | 4.90 | 4.59 | 15.25\% | 69\% |
| RALEIGH-DURHAM, NC | 90 | 21,263 | 965 | 9.24 | 8.24 | 0.56 | 0.05 | 0.39 | 0.50 | 8.74 | 3.67 | 5.07 | 10.84\% | 53\% |
| TAMPA-ST. PETERSBURG-CLEARWATER, FL | 62 | 20,735 | 923 | 11.23 | 10.28 | 0.72 | 0.06 | 0.17 | 0.92 | 11.19 | 4.61 | 6.58 | 8.44\% | 66\% |
| WEST PALM BEACH, FL | 28 | 8,830 | 1,050 | 12.32 | 11.09 | 0.92 | 0.07 | 0.24 | 0.63 | 11.73 | 4.82 | 6.90 | 9.98\% | 63\% |
| OTHER REGION II | 84 | 20,684 | 976 | 9.37 | 8.46 | 0.64 | 0.09 | 0.17 | 0.68 | 9.13 | 3.81 | 5.32 | 9.72\% | 56\% |
| REGION III | 253 | 66,082 | 939 | 9.74 | 8.66 | 0.70 | 0.09 | 0.29 | 0.72 | 9.38 | 4.55 | 4.83 | 11.11\% | 52\% |
| CHICAGO-NAPERVILLE-JOLIET, IL-IN-WI | 38 | 12,136 | 945 | 12.21 | 11.08 | 0.73 | 0.08 | 0.32 | 0.77 | 11.85 | 4.99 | 6.86 | 9.23\% | 51\% |
| CINCINNATI-MIDDLETON, OH-KY-IN | 35 | 8.062 | 982 | 10.11 | 8.92 | 0.76 | 0.07 | 0.35 | 0.96 | 9.88 | 4.43 | 5.45 | 11.73\% | 54\% |
| COLUMBUS, OH | 18 | 3,914 | 1,078 | 8.89 | 7.76 | 0.63 | 0.19 | 0.31 | 0.46 | 8.23 | 4.08 | 4.15 | 12.72\% | 55\% |
| DAYTON, OH | 21 | 3,669 | 955 | 8.49 | 7.44 | 0.65 | 0.07 | 0.33 | 0.47 | 7.91 | 3.30 | 4.62 | 12.33\% | 46\% |
| DETROIT-WARREN-LIVIONIA, MI | 35 | 8,916 | 916 | 10.35 | 9.14 | 0.85 | 0.08 | 0.28 | 0.51 | 9.65 | 5.30 | 4.34 | 11.70\% | 48\% |
| INDIANAPOLIS, IN | 40 | 13,048 | 866 | 8.65 | 7.55 | 0.75 | 0.15 | 0.19 | 0.83 | 8.38 | 4.66 | 3.72 | 12.68\% | 54\% |
| LANSING-EAST LANSING, MI | 9 | 2,579 | 971 | 7.88 | 7.16 | 0.44 | 0.06 | 0.22 | 0.81 | 7.97 | 3.84 | 4.13 | 9.18\% | 54\% |
| MINNEAPOLIS-ST. PAUL-BLOOMINGTON, MN-WI | 10 | 3,357 | 993 | 12.09 | 10.37 | 0.79 | 0.04 | 0.89 | 0.95 | 11.32 | 5.33 | 5.99 | 14.21\% | 64\% |
| OTHER REGION III | 47 | 10,401 | 927 | 7.78 | 7.09 | 0.53 | 0.06 | 0.10 | 0.61 | 7.70 | 3.94 | 3.76 | 8.81\% | 54\% |
| REGIONIV | 519 | 144,449 | 846 | 10.87 | 9.51 | 0.80 | 0.07 | 0.50 | 0.80 | 10.31 | 4.91 | 5.40 | 12.55\% | 61\% |
| AUSTIN-ROUND ROCK, TX | 85 | 24,977 | 863 | 11.53 | 10.27 | 0.72 | 0.03 | 0.51 | 0.87 | 11.14 | 5.16 | 5.98 | 10.94\% | 62\% |
| DALLAS-PLANO-IRVING, TX | 127 | 37,904 | 857 | 10.91 | 9.56 | 0.76 | 0.08 | 0.51 | 0.72 | 10.29 | 4.79 | 5.50 | 12.32\% | 60\% |
| FORT WORTH-ARLINGTON, TX | 54 | 14,798 | 804 | 10.05 | 8.81 | 0.84 | 0.10 | 0.31 | 0.83 | 9.64 | 5.01 | 4.63 | 12.33\% | 66\% |
| HOUSTON-BAYTOWN-SUGARLAND, TX | 151 | 43,414 | 860 | 11.24 | 9.72 | 0.88 | 0.08 | 0.56 | 0.79 | 10.51 | 5.05 | 5.47 | 13.51\% | 60\% |
| MIDLAND, TX | 6 | 1,405 | 829 | 8.42 | 8.14 | 0.24 | -0.01 | 0.05 | 0.88 | 9.02 | 3.88 | 5.14 | 3.38\% | 48\% |
| SAN ANTONIO, TX | 51 | 12,402 | 794 | 10.63 | 8.98 | 0.93 | 0.06 | 0.66 | 1.05 | 10.03 | 5.00 | 5.03 | 15.54\% | 59\% |
| TULSA, OK | 10 | 2,188 | 865 | 10.01 | 9.13 | 0.67 | 0.01 | 0.20 | 0.39 | 9.52 | 3.79 | 5.72 | 8.78\% | 69\% |
| WACO, TX | 7 | 1,250 | 815 | 10.13 | 9.31 | 0.69 | 0.02 | 0.11 | 0.63 | 9.94 | 4.35 | 5.59 | 8.13\% | 89\% |
| OTHER REGION IV | 28 | 6,111 | 821 | 8.66 | 7.56 | 0.68 | 0.05 | 0.37 | 0.70 | 8.26 | 4.01 | 4.24 | 12.70\% | 69\% |
| REGIONV | 166 | 47,431 | 884 | 11.07 | 9.82 | 0.69 | 0.05 | 0.50 | 0.78 | 10.60 | 4.06 | 6.54 | 11.22\% | 60\% |
| ALBUQUERQUE, NM | 15 | 4,922 | 832 | 10.26 | 9.58 | 0.56 | 0.02 | 0.10 | 0.67 | 10.26 | 3.93 | 6.33 | 6.60\% | 61\% |
| COLORADO SPRINGS, CO | 11 | 2,316 | 907 | 9.46 | 7.73 | 0.84 | 0.06 | 0.83 | 0.71 | 8.44 | 3.94 | 4.50 | 18.32\% | 65\% |
| DENVER-AURORA-BOULDER, CO | 96 | 27,294 | 905 | 11.63 | 10.26 | 0.69 | 0.04 | 0.64 | 0.77 | 11.03 | 4.06 | 6.97 | 11.80\% | 64\% |
| KANSAS CITY, MO-KS | 8 | 2,628 | 945 | 10.40 | 9.22 | 0.81 | 0.02 | 0.36 | 0.87 | 10.09 | 3.93 | 6.16 | 11.36\% | 58\% |
| SALT LAKE CITY, UT | 8 | 3,277 | 739 | 10.37 | 9.91 | 0.35 | 0.04 | 0.06 | 1.16 | 11.08 | 4.54 | 6.54 | 4.41\% | 63\% |
| ST. LOUIS, MO-IL | 15 | 4,220 | 875 | 10.18 | 8.62 | 0.97 | 0.19 | 0.40 | 0.75 | 9.37 | 4.31 | 5.06 | 15.33\% | 47\% |
| OTHER REGION V | 13 | 2,774 | 881 | 10.71 | 9.92 | 0.59 | 0.05 | 0.15 | 0.65 | 10.57 | 3.71 | 6.87 | 7.31\% | 36\% |
| REGION VI | 613 | 144,501 | 870 | 14.95 | 13.71 | 0.98 | 0.06 | 0.20 | 0.74 | 14.45 | 5.08 | 9.37 | 8.26\% | 62\% |
| FLAGSTAFF, AZ | 6 | 1,331 | 664 | 13.43 | 10.82 | 1.68 | 0.53 | 0.40 | 1.31 | 12.13 | 5.32 | 6.81 | 19.43\% | 91\% |
| LAS VEGAS-PARADISE, NV | 26 | 8,502 | 816 | 12.90 | 11.27 | 1.26 | 0.09 | 0.27 | 0.98 | 12.25 | 4.58 | 7.67 | 12.58\% | 53\% |
| LOS ANGELES-LONG BEACH-GLENDALE, CA | 48 | 9,953 | 892 | 21.18 | 19.70 | 1.29 | 0.03 | 0.15 | 0.69 | 20.39 | 6.38 | 14.01 | 6.98\% | 61\% |
| OAKLAND-FREEMONT-HAYWOOD, CA | 19 | 4,251 | 823 | 18.57 | 17.50 | 0.91 | 0.04 | 0.12 | 0.62 | 18.11 | 6.24 | 11.88 | 5.77\% | 57\% |
| PHOENIX-MESA-SCOTTSDALE, AZ | 105 | 28,753 | 907 | 11.02 | 9.73 | 0.98 | 0.03 | 0.28 | 0.70 | 10.43 | 3.95 | 6.48 | 11.69\% | 66\% |
| PORTLAND-VANCOUVER-BEAVERTON, OR-WA | 26 | 7,365 | 981 | 10.24 | 9.59 | 0.57 | 0.03 | 0.06 | 0.63 | 10.21 | 3.79 | 6.42 | 6.42\% | 63\% |
| RIVERSIDE-SAN BERNARDINO-ONTARIO, CA | 18 | 4,734 | 847 | 15.86 | 13.95 | 1.47 | 0.10 | 0.34 | 0.76 | 14.71 | 5.40 | 9.31 | 12.01\% | 79\% |
| SACRAMENTO-ARDEN ARCADE-ROSEVILLE, CA | 25 | 6,047 | 801 | 11.75 | 10.49 | 0.77 | 0.15 | 0.34 | 0.46 | 10.95 | 4.82 | 6.13 | 10.70\% | 59\% |
| SALINAS, CA | 7 | 1,554 | 791 | 15.13 | 13.96 | 0.89 | 0.15 | 0.12 | 0.54 | 14.51 | 5.15 | 9.36 | 7.70\% | 52\% |
| SAN DIEGO-CARLSBAD-SAN MARCOS, CA | 32 | 9,179 | 886 | 18.08 | 16.64 | 1.15 | 0.06 | 0.23 | 0.76 | 17.39 | 5.75 | 11.64 | 7.96\% | 66\% |
| SAN FRANCISCO-SAN MATEO-REDWOOD CITY, CA | 19 | 3,863 | 833 | 19.28 | 18.31 | 0.83 | 0.04 | 0.10 | 0.57 | 18.88 | 6.14 | 12.74 | 5.02\% | 54\% |
| SAN JOSE-SUNNYVALE-SANTA CLARA, CA | 10 | 2,560 | 899 | 19.67 | 18.66 | 0.87 | 0.01 | 0.13 | 0.51 | 19.17 | 6.79 | 12.39 | 5.13\% | 60\% |
| SANTA ANA-ANAHEIM-IRVIINE, CA | 143 | 28,767 | 856 | 18.76 | 17.40 | 1.10 | 0.09 | 0.17 | 0.86 | 18.26 | 5.76 | 12.50 | 7.25\% | 56\% |
| SEATTLE-TACOMA-BELLEVUE, WA | 74 | 16,699 | 873 | 12.55 | 11.77 | 0.64 | 0.04 | 0.10 | 0.76 | 12.53 | 4.69 | 7.85 | 6.19\% | 62\% |
| STOCKTON, CA | 16 | 2,289 | 830 | 11.33 | 10.57 | 0.60 | 0.04 | 0.12 | 0.46 | 11.03 | 4.54 | 6.49 | 6.69\% | 60\% |
| TUCSON, AZ | 12 | 3,478 | 869 | 10.60 | 9.83 | 0.63 | 0.00 | 0.14 | 0.79 | 10.61 | 3.86 | 6.75 | 7.25\% | 65\% |
| VENTURA, CA | 9 | 2,144 | 830 | 18.97 | 17.13 | 1.42 | 0.06 | 0.36 | 0.85 | 17.98 | 6.66 | 11.32 | 9.70\% | 53\% |
| OTHER REGION VI | 18 | 3,032 | 848 | 14.64 | 13.72 | 0.73 | 0.06 | 0.13 | 0.63 | 14.35 | 6.72 | 7.64 | 6.31\% | 57\% |

# 2007 Survey of Operating Income \& Expenses in Rental Apartment Properties 

## EXECUTIVE SUMMARY



Association

# 2007 Survey of Operating Income \& Expenses in Rental Apartment Properties 

## SURVEY STAFF

Robert J. Sheehan II, CMC NAA Consulting Economist<br>Regis J. Sheehan \& Associates<br>Woodbridge, VA<br>Roland Freeman, CAPS, CRE, CPM Capital Consultants Realty Services Inc. Dallas, TX<br>Douglas S. Culkin, CAE<br>NAA President, Publisher<br>Mark Ingrao<br>NAA Vice President of Government Affairs<br>NAA Income \& Expense

# 2007 Survey of Operating Income \& Expenses in Rental Apartment Properties 

## ACKNOWLEDGEMENTS

The 2007 Survey of Operating Income \& Expenses in Rental Apartment Communities, the most successful survey in its 19 year history, further enhanced the National Apartment Association's (NAA) success in producing valuable information to its members and the apartment industry. The survey provides executives and professionals in the apartment and related industries with financial information needed to conduct their daily operations that can be used as a tool to support their strategic and business planning.

I thank Mark Ingrao, who acted as NAA's staff coordinator for the survey; Roland D. Freeman, a past NAA President, of Capital Consultants Realty Services, and Robert J. Sheehan II, NAA's Consulting Economist and President of Regis J Sheehan \& Associates, who jointly promoted responses, processed and analyzed the data, and wrote the report; Chanal Thomas, NAA's Government Affairs Coordinator, who developed the survey mailing list and received paper responses; Robert J. Sheehan III, of Regis J Sheehan \& Associates, for his work in developing the computer programming for tabulation of the results; Paul R. Bergeron III, Kerry A. Sullivan and Kate Pierce, who edited the report; Norman Grandstaff, of Ideas Communicated, who designed the report; and RE Data, the firm responsible for data input.

A special note of appreciation goes to all those firms who donated their time in accumulating the data necessary to make this survey a success. My sincere thanks is directed to those companies and their officers who contributed data for 20 or more of their properties for the 2007 survey (listed in order of number of property submissions).

- Equity Residential • AIMCO • UDR, Inc • Simpson Property Group LP • Alco Management, Inc • Alliance Residential • Mid-America Apartment Communities - Western National Property Management • Avalon Bay Communities •Milestone Management • Lincoln Property Company • AMLI Residential Properties Trust • Tarragon Corporation • Village Green Companies Gables Residential Services Inc. - Corcoran Management Co. Inc. • JCM Partners • Babcock and Brown Residential • Camden Property Trust - Greystar Management - The Dolben Companies • Baron Property Services • Konover • AEW Capital Management - Freeman Webb Company Realtors - Post Properties
- Capstone Management - HAI Management - Marquette Management - McDougal Companies • MG Properties

Dave Watkins, CAPS
2007 NAA's Chairman of the Board


## 2007 Survey of Operating Income \& Expenses in Rental Apartment Properties

EXECUTIVE SUMMARY

BY ROBERT J. SHEEHAN and ROLAND FREEMAN, CAPS, CRE, CPM

## REGIONS USED IN SURVEY

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

## EXECUTIVE SUMMARY TABLE OF CONTENTS

Market Rent Properties Summary 26
Metro Area Market Rent Detailed Income and Expenses Data 32
Subsidized Property Detailed Income and Expenses Data 40
Glossary of Terms

NAA has completed its Survey of Operating Income \& Expenses in Rental Apartment Properties for 2007, based on data supplied by NAA members for 2006. For a second consecutive year, major findings in this survey of the professionally managed rental apartment industry show a distinct improvement of the economics in the market rent segment of the rental apartment market with NOI rising and a lower economic losses rate. Adding to the improvement in apartment economics was the small 0.7 percent rise in total operating expenses. The economic state of subsidized properties in the survey also improved.

A total of 4,058 properties containing 937,568 units are represented in this report, marking the highest participation rate in the survey's 19-year history. Data was reported for 3,465 market rent properties containing 850,155 units and 593 subsidized properties containing 87,413 . Forms with partial data
or apparent problems that could not be resolved and therefore were not used totaled 268 properties with 64,588 units.

The report presents data from four types of properties. Garden and mid-rise/high-rise structures are segmented into individually metered and master metered utilities properties. Data is presented in three forms: dollars per unit, dollars per square feet of rentable floor area and as a percentage of gross potential rent (GPR).

Responses from garden properties with individually metered utilities dominate the survey, representing 80 percent of the market rent properties and 49 percent of the subsidized properties. The analysis is, therefore, centered on the garden properties with individually metered utilities.

Market rent properties tend to have more units and greater floor area per unit. Average sizes of the individually metered market rent garden properties are 247 units, and 142 units in

## All Market Rent Properties <br> OPERATING INCOME \& EXPENSE DATA

| INDIVIDUAL METERED PROPERTIES |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| Number of Properties | 2890 |  |  | 2764 |  |  | 126 |  |  |
| Number of Units | 714,549 |  |  | 683,723 |  |  | 30,826 |  |  |
| Avg. No. of Units/Property | 247 |  |  | 247 |  |  | 245 |  |  |
| Avg. No. of Square Feet/Unit | 887 |  |  | 887 |  |  | 885 |  |  |
| Turnover rate in \% | 62\% |  |  | 62\% |  |  | 60\% |  |  |
|  | \$ Per Unit | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$Per } \\ \text { Sq. } . \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | $\begin{aligned} & \text { \$ Per } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 10,141 | 11.43 | 100.0\% | 9,921 | 11.18 | 100.0\% | 15,032 | 16.98 | 100.0\% |
| Rent Revenue Collected | 9,119 | 10.28 | 89.9\% | 8,909 | 10.04 | 89.8\% | 13,769 | 15.55 | 91.6\% |
| Losses to Vacancy | 659 | 0.74 | 6.5\% | 652 | 0.73 | 6.6\% | 814 | 0.92 | 5.4\% |
| Collection Losses | 72 | 0.08 | 0.7\% | 72 | 0.08 | 0.7\% | 74 | 0.08 | 0.5\% |
| Losses to Concessions | 291 | 0.33 | 2.9\% | 288 | 0.32 | 2.9\% | 375 | 0.42 | 2.5\% |
| Other Revenue | 543 | 0.61 | 5.4\% | 537 | 0.61 | 5.4\% | 685 | 0.77 | 4.6\% |
| Total Revenue | 9,663 | 10.89 | 95.3\% | 9,447 | 10.65 | 95.2\% | 14,454 | 16.33 | 96.2\% |
|  |  |  |  |  |  |  |  |  |  |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,040 | 1.17 | 10.3\% | 1,025 | 1.16 | 10.3\% | 1,376 | 1.55 | 9.2\% |
| Insurance | 222 | 0.25 | 2.2\% | 220 | 0.25 | 2.2\% | 282 | 0.32 | 1.9\% |
| Taxes | 950 | 1.07 | 9.4\% | 925 | 1.04 | 9.3\% | 1,507 | 1.70 | 10.0\% |
| Utilities | 317 | 0.36 | 3.1\% | 313 | 0.35 | 3.2\% | 409 | 0.46 | 2.7\% |
| Management Fees | 315 | 0.36 | 3.1\% | 309 | 0.35 | 3.1\% | 451 | 0.51 | 3.0\% |
| Administrative | 192 | 0.22 | 1.9\% | 189 | 0.21 | 1.9\% | 265 | 0.30 | 1.8\% |
| Marketing | 164 | 0.18 | 1.6\% | 160 | 0.18 | 1.6\% | 261 | 0.30 | 1.7\% |
| Contract Services | 308 | 0.35 | 3.0\% | 303 | 0.34 | 3.1\% | 419 | 0.47 | 2.8\% |
| Repair and Maintenance | 362 | 0.41 | 3.6\% | 359 | 0.40 | 3.6\% | 420 | 0.47 | 2.8\% |
| Total Operating Expenses | 3,871 | 4.36 | 38.2\% | 3,802 | 4.29 | 38.3\% | 5,389 | 6.09 | 35.9\% |
| Net Operating Income | 5,792 | 6.53 | 57.1\% | 5,644 | 6.36 | 56.9\% | 9,065 | 10.24 | 60.3\% |
| Capital Expenditures | 1,101 | 1.24 | 10.9\% | 1,108 | 1.25 | 11.2\% | 948 | 1.07 | 6.3\% |

## MASTER METERED PROPERTIES

|  | Total |  |  | Garden |  |  | Mid \& Hi Rise |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Properties | 575 |  |  | 448 |  |  | 127 |  |  |
| Number of Units | 135606 |  |  | 106780 |  |  | 28826 |  |  |
| Avg. No. of Units/Property | 236 |  |  | 238 |  |  | 227 |  |  |
| Avg. No. of Square Feet/Unit | 891 |  |  | 889 |  |  | 898 |  |  |
| Turnover rate in \% | 57\% |  |  | 58\% |  |  | 51\% |  |  |
|  | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | \$ Per Unit | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Unit } \end{gathered}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 12,709 | 14.26 | 100.0\% | 11,101 | 12.48 | 100.0\% | 18,670 | 20.79 | 100.0\% |
| Rent Revenue Collected | 11,453 | 12.85 | 90.1\% | 9,874 | 11.10 | 89.0\% | 17,302 | 19.26 | 92.7\% |
| Losses to Vacancy | 804 | 0.90 | 6.3\% | 764 | 0.86 | 6.9\% | 952 | 1.06 | 5.1\% |
| Collection Losses | 108 | 0.12 | 0.8\% | 116 | 0.13 | 1.0\% | 77 | 0.09 | 0.4\% |
| Losses to Concessions | 345 | 0.39 | 2.7\% | 346 | 0.39 | 3.1\% | 339 | 0.38 | 1.8\% |
| Other Revenue | 777 | 0.87 | 6.1\% | 667 | 0.75 | 6.0\% | 1,185 | 1.32 | 6.3\% |
| Total Revenue | 12,230 | 13.72 | 96.2\% | 10,541 | 11.85 | 95.0\% | 18,487 | 20.58 | 99.0\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,290 | 1.45 | 10.2\% | 1,193 | 1.34 | 10.7\% | 1,652 | 1.84 | 8.8\% |
| Insurance | 326 | 0.37 | 2.6\% | 287 | 0.32 | 2.6\% | 468 | 0.52 | 2.5\% |
| Taxes | 1,082 | 1.21 | 8.5\% | 877 | 0.99 | 7.9\% | 1,839 | 2.05 | 9.8\% |
| Utilities | 1,204 | 1.35 | 9.5\% | 1,139 | 1.28 | 10.3\% | 1,444 | 1.61 | 7.7\% |
| Management Fees | 423 | 0.47 | 3.3\% | 384 | 0.43 | 3.5\% | 567 | 0.63 | 3.0\% |
| Administrative | 266 | 0.30 | 2.1\% | 234 | 0.26 | 2.1\% | 385 | 0.43 | 2.1\% |
| Marketing | 197 | 0.22 | 1.6\% | 184 | 0.21 | 1.7\% | 248 | 0.28 | 1.3\% |
| Contract Services | 452 | 0.51 | 3.6\% | 386 | 0.43 | 3.5\% | 694 | 0.77 | 3.7\% |
| Repair and Maintenance | 468 | 0.52 | 3.7\% | 452 | 0.51 | 4.1\% | 528 | 0.59 | 2.8\% |
| Total Operating Expenses | 5,708 | 6.40 | 44.9\% | 5,136 | 5.78 | 46.3\% | 7,824 | 8.71 | 41.9\% |
| Net Operating Income | 6,523 | 7.32 | 51.3\% | 5,405 | 6.08 | 48.7\% | 10,663 | 11.87 | 57.1\% |
| Capital Expenditures | 1,481 | 1.66 | 11.7\% | 1,419 | 1.60 | 12.8\% | 1,711 | 1.90 | 9.2\% |

[^4]© 2007 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Internet.
subsidized units. Rentable floor area averaged 887 square feet for market rent apartments and 854 square feet for the subsidized units.

The complete report contains detailed data summarized for six geographic regions and for metropolitan areas with at least 10 properties reported. Seventy-eight metropolitan areas met the separate reporting requirement for market rent properties.

Economic Losses Rates by Regions Individually Metered Garden Properties

|  | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All | 10.20\% | 11.87\% | 13.99\% | 13.35\% | 11.39\% | 9.69\% |
| Region I | 9.46\% | 8.87\% | 10.02\% | 8.79\% | 8.21\% | 6.36\% |
| Region II | 10.84\% | 11.35\% | 12.89\% | 13.31\% | 12.10\% | 10.44\% |
| Region III | 12.02\% | 13.87\% | 15.54\% | 13.84\% | 10.85\% | 10.64\% |
| Region IV | 10.77\% | 15.39\% | 16.23\% | 13.98\% | 11.53\% | 9.90\% |
| Region V | 12.12\% | 15.14\% | 19.99\% | 16.33\% | 12.75\% | 9.16\% |
| Region VI | 8.09\% | 8.57\% | 12.15\% | 13.21\% | 11.54\% | 9.79\% |

Sufficient numbers of subsidized properties were submitted for 16 metropolitan areas.

This report also includes tables for the "other" properties in states with at least eight properties located in metro areas that did not meet requirements for separate reporting and in nonmetro areas. Tables for market rent properties are given for 13 states and subsidized properties in 18 states.

## Market Rent Properties

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

The economic loss rate in the survey for market rent individually metered garden properties improved significantly with a drop to 10.20 percent in the data for 2006 from 11.87 percent in the data for 2005 and 13.99 percent for 2004. Economic losses in 2006 were at their lowest level since 2001.

Net Operating Income and Revenues (NOI). NOI is another important measurement for evaluating the health of a property and the rental housing market. It is simply the difference between total revenue collected and total operating expenses. NOI represents the gross cash available for debt service, capital expenditures and profits.

NOI in the survey also revealed the further strengthening of the rental apartment market last year. NOI measured in percent of GPR terms in the data for 2006 rose to 56.9 percent

from 53.9 percent in 2005 and 52.2 percent recorded in 2004. Last year's level is still well below the survey's historical peak of 58.9 percent in 1999. Regionally, NOIs in 2005 ranged from a high of 63.4 percent in the Pacific states (Region VI) to a low of 44.2 percent in the Southwest (Region IV). The Southwest states historically have had the lowest NOI among the regions.

Average NOIs for the last three survey data years of individ-

ually metered garden properties are listed in the table at the bottom of the page.

Gross Potential Rent (GPR). GPR in the survey data tables is defined here on a post-fiscal year basis. It is the sum of rent revenue collected and revenue losses, including those from vacancies, collections and concessions.

A 5 percent increase was recorded in average GPR for garden properties with individually metered utilities in the 2006 data from a year earlier. Average GPR was $\$ 9,921$ per unit ( $\$ 827$ monthly) in this year's survey versus $\$ 9,450$ per unit ( $\$ 788$ monthly) in the previous survey. Translated into per square foot of floor area, they were $\$ 11.18$ ( $\$ 0.93$ per month) versus $\$ 10.63$ ( $\$ 0.89$ per month).

Median GPR in the current survey is $\$ 8,751$ ( $\$ 729$ per

| NOI by Region for Last Three Survey Data Years - Individually Metered Garden Properties |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DOLLARS PER UNIT |  |  | DOLLARS PER SQUARE FEET |  |  | \% OF GPR |  |  |
|  | 2006 | 2005 | 2004 | 2006 | 2005 | 2004 | 2006 | 2005 | 2004 |
| All | \$5,644 | \$5,098 | \$4,647 | \$6.36 | \$5.73 | \$5.27 | 56.9\% | 53.9\% | 52.2\% |
| Region I | \$7,577 | \$7,317 | \$6,868 | \$8.46 | \$8.38 | \$7.72 | 61.4\% | 61.4\% | 60.2\% |
| Region II | \$5,111 | \$4,763 | \$4,420 | \$5.48 | \$5.07 | \$4.75 | 55.7\% | 53.7\% | 52.5\% |
| Region III | \$4,783 | \$4,038 | \$3,975 | \$5.55 | \$4.65 | \$4.48 | 53.0\% | 48.5\% | 48.7\% |
| Region IV | \$4,118 | \$3,643 | \$3,450 | \$4.91 | \$4.35 | \$4.21 | 50.0\% | 44.2\% | 44.4\% |
| Region V | \$5,113 | \$4,812 | \$4,708 | \$5.73 | \$5.47 | \$5.35 | 57.1\% | 53.4\% | 51.7\% |
| Region VI | \$7,993 | \$7,780 | \$6,355 | \$9.18 | \$8.78 | \$7.30 | 62.6\% | 63.4\% | 58.7\% |


month) versus $\$ 8,459$ ( $\$ 705$ per month a year ago). The range in 2006 went from a high of $\$ 35,942$ ( $\$ 2,995$ per month) to \$3,672 (\$306 per month) versus \$40,923 (\$3,410 per month) to $\$ 3,600$ ( $\$ 300$ per month) in the 2005 data.

Rent Revenue Collected. Rent revenue collected averaged $\$ 7,902$ per individually metered garden property unit annually in the survey, up 3.3 percent from the $\$ 7,652$ in last year's survey. Measured on a per-square-foot basis, rent revenue averaged $\$ 10.04$ per square foot versus $\$ 8.64$, in the 2005 data.

Revenue Losses. Revenue losses dropped to an average of 10.22 percent of GPR in 2006 versus 11.87 percent in 2005 and 13.99 percent of GPR for 2004 data. Data for revenue losses were reported in three categories: those caused by vacancies, collections and concessions. All three measures of revenue losses improved markedly. Vacancy losses for individually metered market rent garden properties averaged 6.8 percent of GPR in the current survey ( $\$ 652$ per unit, $\$ 0.76$ per square foot) versus 7.1 percent of GPR ( $\$ 674$ per unit, $\$ 0.76$ per square foot) a year ago. Collection losses averaged 0.7 percent of GPR ( $\$ 70$ per unit, $\$ 0.08$ per square foot) in comparison to 0.7 percent of GPR ( $\$ 70$ per unit, $\$ 0.08$ per square foot) for 2005 data. And losses from rent concessions averaged 2.9 percent of GPR ( $\$ 288$ per unit in the property, $\$ 0.32$ per square foot) versus 4 percent of GPR ( $\$ 377$ per unit in the property, $\$ 0.42$ per square foot).

Other Revenue Collected. Other revenue collected from operating sources includes receipts from onsite laundries, cable, telephone systems, parking fees and other charges for services and amenities. These other operating revenues averaged $\$ 537$ per unit ( $\$ 0.61$ per square foot) for individually metered garden properties reported in the survey, versus the $\$ 545$ per unit ( $\$ 0.61$ per square foot) a year earlier. Other non-rent operating revenues ranged from none to $\$ 6,850$ per unit. Median other operating revenues were $\$ 470$ per unit.

Total Operating Expenses. An increase of only 0.7 percent was recorded in total operating expenses last year. Total operating expenses for individually metered garden properties in the survey averaged $\$ 3,802$ per unit ( $\$ 4.29$ per square foot) versus $\$ 3,776$ per unit ( $\$ 4.25$ per square foot) in 2005 and $\$ 3,507$ per unit ( $\$ 3.98$ per square foot) in 2004. The total represented 38.3 percent of GPR versus 40 percent a year earlier.

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), utilities (net of
any reimbursements from residents), management fees, administration, marketing, contract services and repair and maintenance. (Non-recurring capital expenses were excluded and reported separately.)

Changes in individual categories of operating costs were mixed. Three categories had large increases. Average propertyrelated insurance costs jumped 15.2 percent in 2006 to $\$ 220$ per unit ( $\$ 0.21$ per square foot) from $\$ 191$ per unit ( $\$ 0.21$ per square foot). Administrative cost rose 12.5 percent to $\$ 189$ per unit from $\$ 168$ in 2005. Management fees increased 12.4 percent to $\$ 309$ per unit ( 3.1 percent of GPR) from $\$ 275$ per unit (2.9 percent of GPR) a year earlier. They were largely offset by declines in three other categories. Marketing costs declined 8 percent to $\$ 160$ per unit from $\$ 174$ a year earlier. Repair and maintenance costs declined 5.8 percent to $\$ 359$ per unit from $\$ 381$ per unit in the 2005 survey. And contract services costs declined 3.8 percent to an average of $\$ 303$ per unit last year from \$315 in 2005.

The overall turnover rate increased slightly last year. It increased to 62 percent of total units among the individually metered garden apartment properties reported in the survey for 2006 from 61 percent in 2005. Turnover rates have been in the range of 59 percent to 69 percent over the history of this survey. The low occurred in the data for 1995 and the high during the recession year 1990 .

Increases in the turnover rates last year occurred in the Northeast (Region I) 55 percent versus 53 percent, Southeast (Region II), 64 percent versus 60 percent and the Mountain/South Midwest States (Region V) 62 percent versus 61 percent. They declined in the North Midwest (Region III) to 56 percent versus 59 percent, the Southwest (Region IV) 63 percent versus 64 percent and the Pacific (Region VI) at 62 percent from 65 percent.

Age of Property. Operating expenses on a percentage of GPR and dollars per square foot basis tend to rise in individually metered garden properties in the report as they age. They were 34.8 percent of GPR ( $\$ 4.17$ per square foot) in properties less than five years old and rose to 40.2 percent of GPR ( $\$ 4.33$ per square foot) for properties 20 or more years old. Higher rents in newer properties produce a reverse pattern in operating expenses measured in dollars per unit. They increased from $\$ 3,611$ per unit for properties 20 or more years old to $\$ 4,206$ per unit for those five to nine years old.

Average NOI in terms of percentages of GPR was the lowest for the oldest properties reported at 55 percent for those that were 20 or more years old. The highest NOI in percentage of



GPR terms occurred in properties 10 to 19 years old at 59.5 percent. Measured in terms of dollars per unit, the low was $\$ 4,940$ per unit in properties that were 20 or more years old and the high was $\$ 6,664$ for properties five to nine years old.

Economic losses continue to be the highest among the newest properties. Properties less than five years old reported the highest ratio of economic losses at 14.31 percent of GPR and the lowest in those that are 10 to 19 years old at 9.34 percent.

Age of properties groupings show some distinct differences in the individual cost components of operating costs. The largest difference is in real estate and related property taxes and fees. They varied from a high average of $\$ 1,242$ per unit ( $\$ 1.24$ per square foot) in those properties five to nine years old to a low of $\$ 769$ ( $\$ 0.92$ per square foot) for those aged 20 or more years.

Capital expenditures were significantly lower for the newest properties. They averaged $\$ 282$ per unit ( $\$ 0.29$ per square foot) for those properties less than five years old. The highest average was reported for properties 20 or more years old at $\$ 1,191$ per unit (\$1.43 per square foot).

Size of Property. Presence of scale economies in apartment properties is evident if operating costs were to 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.

They drop from 42 percent of GPR in properties with less than 100 units to a low of 36 percent in those containing 500 or more units. The survey results, however, did not show scale economies on a cost per unit basis. The lowest operating costs, at $\$ 3,253$ per unit, were in the smallest properties-those with fewer than 100 units.

The highest operating costs occurred in properties with 100 to 249 units at $\$ 3,914$ per unit. Economic losses did not vary widely based on property size. They were highest with properties with 100 to 249 units at 10.34 percent of GPR and the lowest for properties with fewer than 100 units at 10.1 percent.

## Metro Area Detailed Operating Income and Expenses Data

Detailed tables in the report are presented for the 78 metropolitan areas for which a total of 10 properties of all types were reported in the survey. This is the only section of the report with metropolitan area data for garden, mid-rise and high-rise building properties and further segmented into those with utilities that were either individually 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 some highlights of the metropolitan area data. They are limited to garden properties with individually metered utilities in metropolitan areas with at least 10 properties of this type reported, unless otherwise noted.

- NOIs on a dollar-per-unit basis ranged from \$11,535 ( $\$ 12.07$ per square foot) in the New York metro area to a low of $\$ 2,884$ ( $\$ 4.11$ per square foot) in the Charleston, S.C., metro area. The San Francisco-San Mateo-Redwood City metro area, however, had the highest NOI on a per square foot basis at $\$ 13.09$. Northern New Jersey metro area had the high NOI measured in percentage of GPR terms at 64.7 percent and Lubbock, Texas, the low at 33.6 percent.
- GPR averages were the highest in the Los Angeles-Long Beach-Glendale metro area at $\$ 17,129$ per unit ( $\$ 19.29$ per square foot). A low of $\$ 6,039$ per unit ( $\$ 7.71$ per square foot) was tabulated for properties reported from Dayton, Ohio.
- Economic losses were lowest in the Sarasota-BradentonVenice, Fla.. metro area at 4.98 percent of GPR and Fort Laud-erdale-Pompano Beach-Deerfield Beach, Fla., at 5.12 percent. Both, however, have small numbers of individually metered garden properties reported. Metro areas with the highest economic losses were Lubbock, Texas, at 22.68 percent and Cleve-land-Elyria-Mentor, Ohio, at 17.49 percent.
- Total operating costs' highs and lows vary among metro areas based on which measure is selected. Properties reporting from the San Francisco-San Mateo-Redwood City metro area had the highest operating costs based on a per unit basis and for dollars per square foot of floor area at $\$ 7,422$ ( $\$ 7.76$ per square foot) followed by New Haven-Milford, Conn., at \$5,773 per unit ( $\$ 7.14$ per square foot). A low of $\$ 2,673$ per unit ( $\$ 3.27$ per square foot) was reported in the Salt Lake City metro areas. Properties reporting in the Greensboro-High Point, N.C., metro area also had a $\$ 3.27$ per square foot average operating expenses.
- Real estate taxes increased significantly in many metro areas last year and affected the rankings for this category of costs. The New York metro area had the highest real estate taxes per unit in dollar terms at 3,815 ; Boynton Beach, Fla., moved to near the top of the list at $\$ 1,755$ per unit followed by Chicago at $\$ 1,693$ per unit. The lowest averages were for properties located in the Louisville and Lexington, Ky., metro areas at $\$ 363$ and $\$ 406$, respectively.
- Insurance costs on a per unit basis were the highest in three hurricane-prone metro areas. They were at \$448 (\$0.46


# Operating Expenses by Age and Size of Property INDIVIDUALLY METERED MARKET RENT GARDEN PROPERTIES 



Age of Property

| Dollars Per Unit |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 5 years old | \$1,307 | \$318 | \$1,605 | \$1,022 | \$441 | \$326 | \$170 | \$548 | \$346 | \$6,081 | \$216 |
| 5 to 9 years old | \$1,050 | \$211 | \$1,242 | \$287 | \$338 | \$191 | \$188 | \$336 | \$363 | \$4,206 | \$932 |
| 10 to 19 years | \$1,044 | \$204 | \$1,087 | \$278 | \$314 | \$168 | \$163 | \$304 | \$388 | \$3,949 | \$1,117 |
| 20 or more years | \$1,003 | \$227 | \$769 | \$333 | \$300 | \$191 | \$147 | \$292 | \$349 | \$3,611 | \$1,191 |
| Dollars Per Square Foot |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years old | \$1.18 | \$0.29 | \$1.46 | \$0.93 | \$0.40 | \$0.30 | \$0.15 | \$0.50 | \$0.31 | \$5.51 | \$0.20 |
| 5 to 9 years old | \$1.04 | \$0.21 | \$1.24 | \$0.29 | \$0.34 | \$0.19 | \$0.19 | \$0.33 | \$0.36 | \$4.19 | \$0.93 |
| 10 to 19 years | \$1.11 | \$0.22 | \$1.15 | \$0.29 | \$0.33 | \$0.18 | \$0.17 | \$0.32 | \$0.41 | \$4.19 | \$1.19 |
| 20 or more years | \$1.20 | \$0.27 | \$0.92 | \$0.40 | \$0.36 | \$0.23 | \$0.18 | \$0.35 | \$0.42 | \$4.33 | \$1.43 |
| Percent of Gross Potential Rent |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years old | 8.1\% | 2.0\% | 10.0\% | 6.4\% | 2.7\% | 2.0\% | 1.1\% | 3.4\% | 2.2\% | 37.9\% | 1.3\% |
| 5 to 9 years old | 9.2\% | 1.8\% | 10.8\% | 2.5\% | 3.0\% | 1.7\% | 1.6\% | 2.9\% | 3.2\% | 36.8\% | 8.1\% |
| 10 to 19 years | 9.6\% | 1.9\% | 10.0\% | 2.6\% | 2.9\% | 1.5\% | 1.5\% | 2.8\% | 3.6\% | 36.4\% | 10.3\% |
| 20 or more years | 11.2\% | 2.5\% | 8.6\% | 3.7\% | 3.3\% | 2.1\% | 1.6\% | 3.3\% | 3.9\% | 40.2\% | 13.3\% |
| Percent of Total Operating Costs |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years old | 21.5\% | 5.2\% | 26.4\% | 16.8\% | 7.2\% | 5.4\% | 2.8\% | 9.0\% | 5.7\% | 100.0\% |  |
| 5 to 9 years old | 25.0\% | 5.0\% | 29.5\% | 6.8\% | 8.0\% | 4.5\% | 4.5\% | 8.0\% | 8.6\% | 100.0\% |  |
| 10 to 19 years | 26.4\% | 5.2\% | 27.5\% | 7.0\% | 8.0\% | 4.2\% | 4.1\% | 7.7\% | 9.8\% | 100.0\% |  |
| 20 or more years | 27.8\% | 6.3\% | 21.3\% | 9.2\% | 8.3\% | 5.3\% | 4.1\% | 8.1\% | 9.7\% | 100.0\% |  |

Size of Property

| Dollars Per Unit |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 100 units | \$967 | \$164 | \$608 | \$268 | \$310 | \$170 | \$122 | \$311 | \$332 | \$3,253 | \$1,097 |
| 100 to 249 units | \$1,091 | \$230 | \$864 | \$329 | \$314 | \$221 | \$174 | \$320 | \$371 | \$3,914 | \$1,262 |
| 250 to 499 units | \$996 | \$216 | \$964 | \$305 | \$304 | \$176 | \$163 | \$289 | \$358 | \$3,770 | \$1,081 |
| More than 500 units | \$997 | \$228 | \$978 | \$322 | \$319 | \$185 | \$141 | \$307 | \$352 | \$3,828 | \$965 |
| Dollars Per Square Foot |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | \$1.38 | \$0.23 | \$0.87 | \$0.38 | \$0.44 | \$0.24 | \$0.17 | \$0.45 | \$0.48 | \$4.65 | \$1.57 |
| 100 to 249 units | \$1.22 | \$0.26 | \$0.97 | \$0.37 | \$0.35 | \$0.25 | \$0.19 | \$0.36 | \$0.42 | \$4.39 | \$1.42 |
| 250 to 499 units | \$1.10 | \$0.24 | \$1.06 | \$0.34 | \$0.33 | \$0.19 | \$0.18 | \$0.32 | \$0.39 | \$4.15 | \$1.19 |
| More than 500 units | \$1.13 | \$0.26 | \$1.11 | \$0.37 | \$0.36 | \$0.21 | \$0.16 | \$0.35 | \$0.40 | \$4.35 | \$1.10 |
| Percent of Gross Potential Rent |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | 12.5\% | 2.1\% | 7.9\% | 3.5\% | 4.0\% | 2.2\% | 1.6\% | 4.0\% | 4.3\% | 42.0\% | 14.2\% |
| 100 to 249 units | 11.1\% | 2.3\% | 8.8\% | 3.4\% | 3.2\% | 2.3\% | 1.8\% | 3.3\% | 3.8\% | 40.0\% | 12.9\% |
| 250 to 499 units | 10.1\% | 2.2\% | 9.8\% | 3.1\% | 3.1\% | 1.8\% | 1.7\% | 2.9\% | 3.6\% | 38.2\% | 11.0\% |
| More than 500 units | 9.4\% | 2.1\% | 9.2\% | 3.0\% | 3.0\% | 1.7\% | 1.3\% | 2.9\% | 3.3\% | 36.0\% | 9.1\% |
| Percent of Total Operating Costs |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | 29.7\% | 5.0\% | 18.7\% | 8.2\% | 9.5\% | 5.2\% | 3.8\% | 9.6\% | 10.2\% | 100.0\% |  |
| 100 to 249 units | 27.9\% | 5.9\% | 22.1\% | 8.4\% | 8.0\% | 5.7\% | 4.4\% | 8.2\% | 9.5\% | 100.0\% |  |
| 250 to 499 units | 26.4\% | 5.7\% | 25.6\% | 8.1\% | 8.1\% | 4.7\% | 4.3\% | 7.7\% | 9.5\% | 100.0\% |  |
| More than 500 units | 26.0\% | 6.0\% | 25.6\% | 8.4\% | 8.3\% | 4.8\% | 3.7\% | 8.0\% | 9.2\% | 100.0\% |  |

Source: National Apartment Association 2007 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2007 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Internet.
per square foot) in Virginia Beach-Norfolk-Newport News, and \$371 (\$0.32 per square foot) in West Palm Beach-Boca RatonBoynton Beach, Fla., and \$363 (\$.39 per square foot) in Baton Rouge, La. They were lowest in Hartford-East Hartford, CT at
$\$ 100$ per unit ( $\$ 0.10$ per square foot) and Minneapolis-St. Paul at $\$ 114$ per unit ( $\$ 0.12$ per square foot).

- Salaries and personnel costs were the lowest in the Bloomington, Ind., metro area at $\$ 686$ per unit ( $\$ 1.00$ per square foot)


## Revenues and NOI by Age and Size of Property INDIVIDUALLY METERED MARKET RENT GARDEN PROPERTIES

| AGE OF PROPERTY | Dollars Per Unit |  |  |  |  | Dollars Per Square Foot |  |  |  | Percent of Gross Potential |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rent | $\begin{aligned} & \text { Less } \\ & \text { than } \\ & 5 \text { Years } \end{aligned}$ | $\begin{array}{r} 5 \\ \text { to } \\ 9 \text { years } \end{array}$ | $\begin{array}{r} 10 \\ \text { to } \\ 19 \text { years } \end{array}$ | 20 years more | $\begin{gathered} \text { Less } \\ \text { than } \\ 5 \text { Years } \end{gathered}$ | $\begin{array}{r} 5 \\ \text { to } \\ 9 \text { years } \end{array}$ | $\begin{array}{r} 10 \\ \text { to } \\ 19 \text { years } \end{array}$ | 20 years or more | $\begin{gathered} \text { Less } \\ \text { than } \\ 5 \text { Years } \end{gathered}$ | $\begin{array}{r} 5 \\ \text { to } \\ 9 \text { years } \end{array}$ | $\begin{array}{r} 10 \\ \text { to } \\ 19 \text { years } \end{array}$ | 20 years more |
| No. of Properties | 69 | 330 | 538 | 1748 | 69 | 330 | 538 | 1748 | 69 | 330 | 538 | 1748 |
| No. of Units | 17,524 | 99,819 | 155,426 | 393,686 | 17,524 | 99,819 | 155,426 | 393,686 | 17,524 | 99,819 | 155,426 | 393,686 |
| Avg. No. of Units/Property | 254 | 302 | 289 | 225 | 254 | 302 | 289 | 225 | 254 | 302 | 289 | 225 |
| Avg. No. of Square Feet/Unit | 976 | 1,005 | 941 | 834 | 976 | 1,005 | 941 | 834 | 976 | 1,005 | 941 | 834 |
| Turnover Rate in \% | 57\% | 64\% | 63\% | 61\% | 57\% | 64\% | 63\% | 61\% | 57\% | 64\% | 63\% | 61\% |
| Gross Potential Rent | \$11,683 | \$11,445 | \$10,845 | \$8,984 | \$11.97 | \$11.39 | \$11.52 | \$10.77 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Rent Revenue Collected | \$10,011 | \$10,281 | \$9,832 | \$8,037 | \$10.26 | \$10.23 | \$10.44 | \$9.63 | 85.7\% | 89.8\% | 90.7\% | 89.5\% |
| Losses to Vacancies | \$991 | \$736 | \$648 | \$620 | \$1.02 | \$0.73 | \$0.69 | \$0.74 | 8.5\% | 6.4\% | 6.0\% | 6.9\% |
| Losses to Collections | \$74 | \$56 | \$63 | \$79 | \$0.08 | \$0.06 | \$0.07 | \$0.09 | 0.6\% | 0.5\% | 0.6\% | 0.9\% |
| Losses to Concessions | \$607 | \$372 | \$302 | \$248 | \$0.62 | \$0.37 | \$0.32 | \$0.30 | 5.2\% | 3.2\% | 2.8\% | 2.8\% |
| Other Revenue Collected | \$530 | \$590 | \$573 | \$514 | \$0.54 | \$0.59 | \$0.61 | \$0.62 | 4.5\% | 5.2\% | 5.3\% | 5.7\% |
| Total Revenue Collected | \$10,541 | \$10,870 | \$10,404 | \$8,551 | \$10.80 | \$10.82 | \$11.05 | \$10.25 | 90.2\% | 95.0\% | 95.9\% | 95.2\% |
| Total Operating Expenses | \$4,069 | \$4,206 | \$3,949 | \$3,611 | \$4.17 | \$4.19 | \$4.19 | \$4.33 | 34.8\% | 36.8\% | 36.4\% | 40.2\% |
| Net Operating Income | \$6,472 | \$6,664 | \$6,455 | \$4,940 | \$6.63 | \$6.63 | \$6.86 | \$5.92 | 55.4\% | 58.2\% | 59.5\% | 55.0\% |
| Economic Vacancy Rates (\%) | 14.31\% | 10.17\% | 9.34\% | 10.54\% | 14.31\% | 10.17\% | 9.34\% | 10.54\% | 14.31\% | 10.17\% | 9.34\% | 10.54\% |


| SIZE OF PROPERTY | Dollars Per Unit |  |  |  | Dollars Per Square Foot |  |  |  |  | Percent of Gross Potential |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rent | Less than 100 units | 100 to 249 units | 250 to 499 units | more units $\begin{array}{r}500 \\ \text { or }\end{array}$ | Less than 100 units | 100 to 249 units | 250 to 499 units <br> 499 units | $\begin{array}{r} 500 \\ \text { or } \\ \text { more units } \end{array}$ | $\begin{array}{r} \text { Less } \\ \text { than } \\ 100 \text { units } \end{array}$ | 100 to 249 units | 250 to 499 units | more units $\begin{array}{r}500 \\ \text { or }\end{array}$ |
|  | 100 units | 249 units | 499 units | more units | 100 units | 249 units | 499 units | more units | 100 units | 249 units | 499 units | more units |


| No. of Properties | 505 | 1000 | 1026 | 154 | 505 | 1000 | 1026 | 154 | 505 | 1000 | 1026 | 154 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Units | 34,535 | 178,116 | 345,963 | 107,840 | 34,535 | 178,116 | 345,963 | 107,840 | 34,535 | 178,116 | 345,963 | 107,840 |
| Avg. No. of Units/Property | 68 | 178 | 337 | 700 | 68 | 178 | 337 | 700 | 68 | 178 | 337 | 700 |
| Avg. No. of Square Feet/Unit | 699 | 892 | 909 | 880 | 699 | 892 | 909 | 880 | 699 | 892 | 909 | 880 |
| Turnover Rate in \% | 62\% | 61\% | 63\% | 58\% | 62\% | 61\% | 63\% | 58\% | 62\% | 61\% | 63\% | 58\% |
| Gross Potential Rent | \$7,736 | \$9,793 | \$9,864 | \$10,621 | \$11.07 | \$10.98 | \$10.86 | \$12.07 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Rent Revenue Collected | \$6,955 | \$8,780 | \$8,850 | \$9,532 | \$9.95 | \$9.85 | \$9.74 | \$10.83 | 89.9\% | 89.7\% | 89.7\% | 89.7\% |
| Losses to Vacancies | \$539 | \$629 | \$653 | \$733 | \$0.77 | \$0.71 | \$0.72 | \$0.83 | 7.0\% | 6.4\% | 6.6\% | 6.9\% |
| Losses to Collections | \$73 | \$80 | \$68 | \$70 | \$0.10 | \$0.09 | \$0.07 | \$0.08 | 0.9\% | 0.8\% | 0.7\% | 0.7\% |
| Losses to Concessions | \$169 | \$303 | \$293 | \$287 | \$0.24 | \$0.34 | \$0.32 | \$0.33 | 2.2\% | 3.1\% | 3.0\% | 2.7\% |
| Other Revenue Collected | \$407 | \$540 | \$551 | \$547 | \$0.58 | \$0.61 | \$0.61 | \$0.62 | 5.3\% | 5.5\% | 5.6\% | 5.1\% |
| Total Revenue Collected | \$7,362 | \$9,319 | \$9,401 | \$10,079 | \$10.53 | \$10.45 | \$10.35 | \$11.46 | 95.2\% | 95.2\% | 95.3\% | 94.9\% |
| Total Operating Expenses | \$3,253 | \$3,914 | \$3,770 | \$3,828 | \$4.65 | \$4.39 | \$4.15 | \$4.35 | 42.0\% | 40.0\% | 38.2\% | 36.0\% |
| Net Operating Income | \$4,109 | \$5,405 | \$5,630 | \$6,250 | \$5.88 | \$6.06 | \$6.20 | \$7.10 | 53.1\% | 55.2\% | 57.1\% | 58.8\% |
| Economic Vacancy Rates (\%) | 10.10\% | 10.34\% | 10.28\% | 10.26\% | 10.10\% | 10.34\% | 10.28\% | 10.26\% | 10.10\% | 10.34\% | 10.28\% | 10.26\% |

Source: National Apartment Association 2007 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2007 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Internet.
and Chattanooga, Tenn., at \$814 (\$0.83 per square foot). New Haven Oakland-Freemont-Haywood, Calif., had the highest average at $\$ 1,444$ per unit ( $\$ 1.65$ per square foot) followed by the $\$ 1,430$ in San Francisco-San Mateo-Redwood City (\$1.59 per square foot).

- West Palm Beach-Boca Raton-Boynton Beach, Fla., had the largest units among the metro areas reported separately in this report with an average of 1,025 square feet of floor area per unit. Properties reporting located in the Toledo, Ohio, metro had the low average at 665 square feet per unit.
- Metropolitan areas with the most garden properties
reporting that were individually metered were Atlanta (170), Dallas (144) and Houston (139).


## Subsidized Properties Income \& Expense Summary

## Operating Income \& Expense Summary. Data were

 received for 593 subsidized properties containing 87,413 units. Garden properties with individually metered utilities represent the largest subgroup of properties reporting, and analysis here will be limited to them. Data tables are presented for 16 metropolitan areas that met the 10-property minimum for separate reporting.
# Economic Losses Rates - NOI - Turnover, Metropolitan Areas MARKET RENT GARDEN PROPERTIES - INDIVIDUALLY METERED 

|  | 2007 Survey |  |  |  |  |  | 2006 Survey |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Total } \\ \text { No. of } \\ \text { Units } \end{gathered}$ | $\begin{aligned} & \text { Average } \\ & \text { Sq. F. } \\ & \text { Per Unit } \end{aligned}$ | $\begin{gathered} \text { Turnover } \\ \text { Rate } \end{gathered}$ | Operating Income NOI (1) | Economic Losses as a of GPR | Economic Losses as a\% of GPR | Operating Income NOI (1) | $\begin{gathered} \text { Turnover } \\ \text { Rate } \end{gathered}$ | $\begin{array}{r} \text { Total } \\ \text { No. of } \\ \text { Properties } \end{array}$ | $\begin{aligned} & \text { Total } \\ & \text { No. of } \\ & \text { Units } \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & \text { Ser. Fnit } \\ & \text { Punit } \end{aligned}$ |
| TOTAL MARKET RENT | 2.764 | 683,723 | 887 | 62\% | 56.9\% | 10.20\% | 11.87\% | 53.9\% | 61\% | 2,609 | 667,951 | 889 |
| REGION I | 250 | 61,399 | 896 | 55\% | 61.4\% | 9.46\% | 8.87\% | 61.4\% | 53\% | 195 | 43,996 | 873 |
| BALTIMORE-TOWSON, MD | 40 | 9,331 | 904 | 54\% | 63.6\% | 7.76\% | 7.32\% | 59.5\% | 35\% | 40 | 8,242 | 787 |
| BOSTON-CAMBRIDGE-QUINCY, MA-NH | 18 | 4,841 | 892 | 47\% | 55.7\% | 17.31\% | 11.97\% | 57.7\% | 63\% | 12 | 2,869 | 918 |
| HARTFORD-WEST HARTFORD-EAST HARTFORD, CT | 7 | 1,728 | 973 | 61\% | 39.9\% | 16.08\% | 10.28\% | 52.4\% | 48\% | 3 | 825 | 1,027 |
| NEW HAVEN-MILFORD, CT | 14 | 1,720 | 808 | 72\% | 51.1\% | 10.73\% | 10.02\% | 53.2\% | 55\% | 16 | 2,294 | 781 |
| NEW YORK, NY | 6 | 1,192 | 956 | 54\% | 59.1\% | 5.69\% | 7.17\% | 58.7\% | 52\% | 6 | 1,829 | 849 |
| NORTHERN NEW JERSEY MSA'S | 9 | 3,051 | 837 | 46\% | 64.7\% | 6.84\% | 6.20\% | 65.3\% | 55\% | 3 | 1,250 | 947 |
| PHILADELPHIA-CAMDEN-WILMINGTON, PA-NJ-DE-MD | 6 | 1,260 | 855 | 50\% | 62.1\% | 8.63\% | 8.94\% | 55.9\% | 51\% | 4 | 776 | 781 |
| PITTSBURGH, PA | 13 | 1,557 | 815 | 55\% | 53.9\% | 11.65\% | 11.79\% | 57.1\% | 47\% | 11 | 1,258 | 810 |
| PROVIDENCE-FALL RIVER-WARWICK, RI | 5 | 984 | 903 | 56\% | 59.7\% | 12.13\% | N/A | N/A | N/A | N/A | N/A | N/A |
| RICHMOND, VA | 23 | 7,311 | 912 | 58\% | 56.8\% | 12.96\% | 11.78\% | 56.6\% | 56\% | 16 | 5,194 | 846 |
| VIRGIIIA BEACH-NORFOLK-NEWPORT NEWS, VA-NC | 14 | 4,580 | 980 | 59\% | 67.2\% | 7.41\% | 6.17\% | 67.9\% | 64\% | 10 | 2,703 | 954 |
| WASHINGTON-ARLINGTON-ALEXANDRIA, DC-MD-VA-WV | 62 | 17,556 | 870 | 55\% | 66.8\% | 7.37\% | 8.56\% | 65.0\% | 56\% | 45 | 12,549 | 895 |
| OTHER | 33 | 6288 | 926 | 57\% | 53.7\% | 8.88\% | 9.70\% | 63.9\% | 59\% | 29 | 4,207 | 972 |
| REGION II | 932 | 224,985 | 933 | 64\% | 55.7\% | 10.84\% | 11.35\% | 53.7\% | 60\% | 936 | 235,517 | 939 |
| ATLANTA-SANDY SPRINGS-MARIETTA, GA | 170 | 47,258 | 995 | 61\% | 53.2\% | 13.72\% | 14.87\% | 51.9\% | 61\% | 196 | 57,586 | 1,013 |
| AUGUSTA-RICHMOND COUNTY, GA-SC | 11 | 1,719 | 701 | 68\% | 45.5\% | 14.14\% | N/A | N/A | N/A | N/A | N/A | N/A |
| CHARLESTON-NORTH CHARLESTON SC | 13 | 2,745 | 860 | 74\% | 57.7\% | 8.93\% | N/A | N/A | N/A | N/A | N/A | N/A |
| CHARLOTTE-GASTONIA-CONCORD, NC-SC | 48 | 12,491 | 931 | 61\% | 58.3\% | 10.59\% | 10.79\% | 55.0\% | 60\% | 52 | 12,304 | 962 |
| CHATTANOOGA, TN-GA | 10 | 2,167 | 876 | 58\% | 50.3\% | 10.25\% | 13.37\% | 61.5\% | 46\% | 10 | 1,670 | 979 |
| COLUMBIA, SC | 20 | 5,217 | 887 | 66\% | 53.6\% | 11.75\% | 10.61\% | 49.9\% | 67\% | 17 | 4,981 | 806 |
| DELTONA-DAYTONA BEACH-OSMOND BEACH, FL | 12 | 1,195 | 743 | 68\% | 49.5\% | 16.68\% | 11.04\% | 50.7\% | 65\% | 12 | 1,196 | 743 |
| FT. LAUDERDALE-POMPANO BEACH-DEERFIELD BEACH, FL | FL 8 | 2,604 | 978 | 53\% | 62.8\% | 5.12\% | 10.97\% | 56.3\% | 59\% | 29 | 6,323 | 938 |
| GREENSBORO-HIGH POINT, NC | 21 | 4,518 | 914 | 64\% | 59.5\% | 10.45\% | 14.06\% | 47.3\% | 59\% | 16 | 3,496 | 949 |
| GREENVILLE, SC | 22 | 4,075 | 966 | 65\% | 51.1\% | 12.55\% | 9.99\% | 54.6\% | 58\% | 50 | 14,050 | 923 |
| JACKSONVILLE, FL MSA | 57 | 16,154 | 934 | 68\% | 57.9\% | 9.27\% | 7.34\% | 65.8\% | 57\% | 10 | 3,749 | 865 |
| KNOXVILLE, TN | 13 | 2,270 | 908 | 57\% | 52.2\% | 6.88\% | 10.20\% | 64.9\% | 59\% | 10 | 1,684 | 923 |
| LEXINGTON-FAYETTE, KY | 16 | 2,687 | 823 | 64\% | 54.5\% | 13.47\% | 13.33\% | 51.7\% | 55\% | 18 | 3,327 | 834 |
| LOUISVILLE, KY-IN | 19 | 2,940 | 839 | 68\% | 55.9\% | 9.38\% | 18.03\% | 50.5\% | 59\% | 17 | 2,620 | 801 |
| MACON, GA | 15 | 1,819 | 880 | 76\% | 50.6\% | 12.44\% | 10.48\% | 48.1\% | 57\% | 15 | 1,983 | 925 |
| MEMPHIS, TN-MS-AR | 20 | 7,329 | 929 | 61\% | 52.3\% | 16.06\% | 15.49\% | 40.1\% | 51\% | 48 | 14,020 | 933 |
| MIAMI-MIAMI BEACH-KENDALL, FL MD | 35 | 8,592 | 931 | 59\% | 59.1\% | 6.66\% | 6.02\% | 58.4\% | 60\% | 29 | 6,909 | 953 |
| NASHVILLE,TN | 47 | 14,043 | 904 | 63\% | 56.9\% | 10.44\% | 11.29\% | 54.4\% | 64\% | 37 | 11,228 | 861 |
| ORLANDO, FL | 61 | 15,538 | 942 | 67\% | 58.5\% | 8.49\% | 7.27\% | 58.6\% | 65\% | 69 | 18,539 | 954 |
| PALM BAY-MELBOURNE-TITUSVILLE, FL | 8 | 1,257 | 806 | 64\% | 55.8\% | 7.23\% | N/A | N/A | N/A | N/A | N/A | N/A |
| PENSACOLA-FERRY PASS-BRENT, FL | 15 | 1,941 | 829 | 73\% | 64.8\% | 5.76\% | N/A | N/A | N/A | N/A | N/A | N/A |
| RALEIGH-DURHAM, NC MSA's | 57 | 15,118 | 930 | 58\% | 53.7\% | 12.12\% | 13.57\% | 50.3\% | 58\% | 50 | 13,968 | 921 |
| SARASOTA-BRADENTON-VENICE, FL | 9 | 1,451 | 839 | 64\% | 63.1\% | 4.98\% | 7.14\% | 58.0\% | 63\% | 51 | 14,031 | 891 |
| SAVANNAH, GA | 14 | 2083 | 894 | 72\% | 53.4\% | 12.55\% | 11.72\% | 55.5\% | 74\% | 10 | 1,423 | 863 |
| TAMPA-ST. PETERSBURG-CLEARWATER,FL | 66 | 17,930 | 888 | 62\% | 55.8\% | 8.54\% | 8.02\% | 57.7\% | 70\% | 12 | 2,429 | 780 |
| WEST PALM BEACH-BOCA RATON-BOYNTON BEACH, FL | 40 | 8,996 | 1,025 | 71\% | 55.3\% | 9.71\% | 7.28\% | 59.1\% | 64\% | 31 | 7,171 | 1,038 |
| OTHER | 105 | 20,848 | 919 | 70\% | 56.4\% | 11.28\% | 9.89\% | 52.9\% | 59\% | 126 | 26,667 | 905 |
| REGION III | 373 | 76,123 | 861 | 56\% | 53.0\% | 12.02\% | 13.87\% | 48.5\% | 59\% | 307 | 54,898 | 869 |
| BLOOMINGTON, IN | 10 | 1,080 | 682 | 65\% | 45.2\% | 12.80\% | 13.00\% | 64.6\% | 70\% | 6 | 623 | 660 |
| CHICAGO-NAPERVILLE-JOLIET, IL-IN-WI | 56 | 19,588 | 921 | 51\% | 56.0\% | 10.82\% | 13.08\% | 53.0\% | 59\% | 33 | 11,423 | 976 |
| CINCINNAT-MIDDLETON, OH-KY-IN | 30 | 6,178 | 957 | 57\% | 53.6\% | 13.62\% | 13.54\% | 47.3\% | 51\% | 23 | 3,883 | 1,086 |
| CLEVELAND-ELYRIA-MENTOR, OH | 13 | 1,633 | 760 | 61\% | 47.6\% | 17.49\% | 14.03\% | 54.0\% | 61\% | 10 | 832 | 591 |
| COLUMBUS, OH | 63 | 10,330 | 772 | 59\% | 49.4\% | 13.35\% | 14.43\% | 47.2\% | 61\% | 52 | 6.410 | 750 |
| DAYTON, OH | 19 | 2,202 | 787 | 60\% | 47.4\% | 11.49\% | 12.81\% | 50.1\% | 67\% | 17 | 1,407 | 669 |
| DETROIT-WARREN-LIVONIA, MI | 32 | 5724 | 881 | 55\% | 57.3\% | 11.04\% | 14.05\% | 46.1\% | 50\% | 39 | 4,715 | 774 |
| INDIANAPOLIS, IN | 64 | 13,191 | 804 | 55\% | 50.8\% | 12.73\% | 12.81\% | 47.7\% | 62\% | 55 | 11,550 | 799 |
| LANSING-EAST LANSING, MI | 8 | 1,671 | 929 | 71\% | 55.0\% | 12.85\% | N/A | N/A | N/A | N/A | N/A | N/A |
| MINNEAPOLIS-ST. PAUL-BLOOMINGTON, MN-WI | 13 | 2,754 | 974 | 59\% | 49.5\% | 14.89\% | 14.60\% | 51.6\% | 59\% | 13 | 2,782 | 994 |
| TOLEDO, OH | 10 | 1,011 | 665 | 66\% | 53.0\% | 10.76\% | N/A | N/A | N/A | N/A | N/A | N/A |
| OTHER | 55 | 10,761 | 869 | 59\% | 50.9\% | 10.90\% | 15.97\% | 41.1\% | 59\% | 59 | 11,273 | 890 |
| REGION IV | 517 | 141,633 | 838 | 63\% | 50.0\% | 10.77\% | 15.39\% | 44.2\% | 64\% | 612 | 174,901 | 837 |
| AUSTIN-ROUND ROCK, TX | 62 | 17,549 | 847 | 66\% | 51.3\% | 9.36\% | 12.32\% | 44.8\% | 64\% | 84 | 23,214 | 842 |
| BATON ROUGE, LA | 13 | 2,211 | 930 | 51\% | 54.4\% | 10.03\% | N/A | N/A | N/A | N/A | N/A | N/A |
| DALLAS-PLANO-IRVING, TX | 144 | 45914 | 843 | 61\% | 50.6\% | 10.65\% | 17.46\% | 44.0\% | 62\% | 219 | 67,026 | 851 |
| FT. WORTH-ARLINGTON, TX | 53 | 15,122 | 845 | 70\% | 47.8\% | 10.25\% | 15.33\% | 44.4\% | 68\% | 76 | 21,770 | 828 |
| HOUSTON-BAYTOWN-SUGARLAND, TX | 139 | 38,583 | 837 | 62\% | 49.0\% | 11.51\% | 14.81\% | 43.5\% | 62\% | 119 | 36,595 | 830 |
| LITLE ROCK-NORTH LITTLE ROCK, AR | 11 | 2,199 | 852 | 50\% | 56.3\% | 9.74\% | 9.79\% | 49.1\% | 57\% | 18 | 3,899 | 877 |
| LUBBOCK, TX | 14 | 2,623 | 798 | 58\% | 33.8\% | 22.88\% | N/A | N/A | N/A | N/A | N/A | N/A |
| OKLAHOMA CITY, OK | 11 | 2,715 | 783 | 62\% | 53.9\% | 7.39\% | N/A | N/A | N/A | N/A | N/A | N/A |
| SAN ANTONIO, TX | 25 | 5,935 | 804 | 70\% | 52.5\% | 9.96\% | 14.45\% | 42.2\% | 71\% | 48 | 12,095 | 787 |
| TULSA, OK | 12 | 2,735 | 786 | 73\% | 55.4\% | 8.56\% | 11.53\% | 51.2\% | 73\% | 14 | 3,709 | 79 |
| OTHER | 33 | 6047 | 826 | 62\% | 49.3\% | 11.82\% | 13.50\% | 45.8\% | 65\% | 34 | 6,593 | 845 |
| REGIoN V | 184 | 48,203 | 893 | 62\% | 57.1\% | 12.12\% | 15.14\% | 53.4\% | 61\% | 145 | 44,284 | 880 |
| ALBUQUERQUE, NM | 11 | 2,726 | 920 | 56\% | 57.5\% | 7.66\% | 9.03\% | 56.0\% | 67\% | 11 | 2,364 | 862 |
| COLORADO SPRINGS, CO | 15 | 3,235 | 907 | 63\% | 53.4\% | 17.08\% | 21.91\% | 47.0\% | 73\% | 7 | 1,606 | 851 |
| DENVER-AURORA \& BOULDER, CO MSA's | 82 | 24,270 | 891 | 62\% | 57.7\% | 13.02\% | 16.03\% | 54.4\% | 64\% | 74 | 23,177 | 903 |
| KANSAS CITY, MO-KS | 16 | 4,211 | 920 | 57\% | 59.2\% | 9.47\% | 10.13\% | 58.0\% | 59\% | 13 | 4,488 | 914 |
| ST. LOUIS, MO-IL | 12 | 4,461 | 945 | 64\% | 53.5\% | 12.48\% | 9.34\% | 51.3\% | 48\% | 8 | 3,003 | 767 |
| SALT LAKE CITY, UT | 11 | 3,786 | 818 | 69\% | 63.5\% | 8.98\% | 17.36\% | 50.9\% | $61 \%$ | 16 | 6,263 | 869 |
| OTHER | 37 | 5,514 | 871 | 62\% | 53.9\% | 9.76\% | 14.41\% | 44.8\% | 47\% | 16 | 3,383 | 821 |
| REGION VI | 508 | 131,380 | 871 | 62\% | 62.6\% | 8.09\% | 8.57\% | 63.4\% | 65\% | 414 | 114,355 | 886 |
| LAS VEGAS-PARADISE, NV | 10 | 2,341 | 906 | 71\% | 46.2\% | 17.36\% | N/A | N/A | N/A | N/A | N/A | N/A |
| LOS ANGELES-LONG BEACH-GLENDALE, CA | 47 | 11,599 | 888 | 53\% | 66.5\% | 5.82\% | 6.74\% | 66.7\% | 60\% | 40 | 9,752 | 849 |
| OAKLAND-FREEMONT-HAYWOOD, CA MSA | 21 | 5,105 | 883 | 60\% | 63.3\% | 6.92\% | 6.37\% | 63.6\% | 60\% | 23 | 5,758 | 853 |
| PHOENIX-MESA-SCOTTSDALE, AZ | 77 | 21,876 | 900 | 68\% | 60.2\% | 9.16\% | 11.23\% | 59.1\% | 67\% | 79 | 24,112 | 909 |
| PORTLAND-VANCOUVER-BEAVERTON, OR-WA | 30 | 8,919 | 959 | 66\% | 58.9\% | 8.42\% | 9.19\% | 58.6\% | 69\% | 28 | 7,959 | 966 |
| RIVERSIDE-SAN BERNARDINO-ONTARIO, CA | 13 | 3,679 | 799 | 58\% | 61.0\% | 11.29\% | 9.83\% | 59.9\% | 65\% | 18 | 5,284 | 808 |
| SACRAMENTO-ARDEN ARCADE-ROSEVILLE, CA | 34 | 8,714 | 841 | 67\% | 63.9\% | 7.48\% | 8.69\% | 62.7\% | 66\% | 11 | 3,084 | 902 |
| SAN DIEGO-CARLSBAD-SAN MARCOS, CA | 15 | 3,842 | 824 | 61\% | 53.1\% | 11.16\% | 7.58\% | 66.8\% | 66\% | 38 | 10,816 | 869 |
| SAN FRANCISCO-SAN MATEO-REDWOOD CITY, CA | 28 | 9,640 | 789 | 53\% | 63.9\% | 8.18\% | 8.00\% | 64.3\% | 59\% | 19 | 4,992 | 885 |
| SAN JOSE-SUNNYVILLE-SANTA CLARA, CA | 15 | 3,483 | 869 | 56\% | 64.2\% | 6.53\% | 7.17\% | 63.7\% | 63\% | 8 | 1,964 | 887 |
| SANTA ANA-ANAHEIM-IRVINE, CA | 111 | 28,200 | 856 | 57\% | 64.5\% | 8.20\% | 8.45\% | 66.6\% | 61\% | 56 | 17,173 | 878 |
| SEATTLE-TACOMA-BELLEVUE, WA | 65 | 15.814 | 924 | 70\% | 60.7\% | 8.13\% | 8.70\% | 60.7\% | 69\% | 64 | 16.425 | 914 |
| STOCKTON, CA | 10 | 1,489 | 850 | 63\% | 55.5\% | 8.45\% | N/A | N/A | N/A | N/A | N/A | N/A |
| OTHER | 32 | 6,680 | 776 | 64\% | 60.4\% | 7.46\% | 9.41\% | 61.3\% | 64\% | 30 | 7,036 | 832 |

Source: National Apartment Association 2007 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2007 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Internet.

# Gross Potential Rent, by Region \& Metropolitan Area GARDEN INDIVIDUALLY METERED PROPERTIES 

| 2007 |  |  |  |  | 2006 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Total } \\ \text { No. of } \\ \text { Properties } \end{gathered}$ | $\begin{gathered} \text { Total } \\ \text { No. of } \\ \text { Units } \end{gathered}$ | Average Sq. Ft. Per Unit | $\frac{\text { Gross Potential }}{\frac{\text { S's per Unit }}{\text { Snthly }}}$ | Rent Revenue <br> \$'s Per Sq. Foot Annual I Monthly | $\begin{aligned} & \text { Cross Potential } \\ & \text { \$os per Unit } \\ & \hline \text { Monthly \| Annual } \end{aligned}$ | $\begin{aligned} & \text { Rent Revenue } \\ & \begin{array}{l} \text { \$s Per Sq. Foot } \\ \hline \text { Monthly \| Annual } \end{array} \end{aligned}$ | $\begin{array}{r} \text { Total } \\ \text { No. of } \\ \text { Properties } \end{array}$ | $\begin{aligned} & \text { Total } \\ & \text { No. of } \end{aligned}$ Units | Average Per Unit |


| TOTAL MARKET RENT | 2,764 | 683,723 | 887 | \$9,921 | \$827 | \$11.18 | \$0.93 | \$0.89 | \$10.63 | \$788 | \$9,450 | 2,609 | 667,951 | 889 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REGION I | 250 | 61,399 | 896 | \$12,349 | \$1,029 | \$13.78 | \$1.15 | \$1.14 | \$13.65 | \$993 | \$11,914 | 195 | 43,996 | 873 |
| BALTIMORE-TOWSON, MD | 40 | 9,331 | 904 | \$12,546 | \$1,045 | \$13.89 | \$1.16 | \$1.07 | \$12.90 | \$846 | \$10,153 | 40 | 8,242 | 787 |
| BOSTON-CAMBRIDGE-QUINCY, MA-NH | 18 | 4,841 | 892 | \$16,098 | \$1,342 | \$18.04 | \$1.50 | \$1.34 | \$16.10 | \$1,232 | \$14,783 | 12 | 2,869 | 918 |
| HARTFORD-WEST HARTFORD-EAST HARTFORD, CT | 7 | 1,728 | 973 | \$9,760 | \$813 | \$10.03 | \$0.84 | \$0.86 | \$10.28 | \$880 | \$10,564 | 3 | 825 | 1,027 |
| NEW HAVEN-MILFORD, CT | 14 | 1,720 | 808 | \$13,451 | \$1,121 | \$16.65 | \$1.39 | \$1.19 | \$14.29 | \$929 | \$11,153 | 16 | 2,294 | 781 |
| NEW YORK, NY | 6 | 1,192 | 956 | \$19,516 | \$1,626 | \$20.42 | \$1.70 | \$1.66 | \$19.97 | \$1,414 | \$16,964 | 6 | 1,829 | 849 |
| NORTHERN NEW JERSEY MSA'S | 9 | 3,051 | 837 | \$15,146 | \$1,262 | \$18.09 | \$1.51 | \$1.66 | \$19.87 | \$1,569 | \$18,824 | 3 | 1,250 | 947 |
| PHILADELPHIA-CAMDEN-WILMINGTON, PA-NJ-DE-MD | 6 | 1,260 | 855 | \$12,562 | \$1,047 | \$14.70 | \$1.22 | \$1.38 | \$16.60 | \$1,080 | \$12,960 | 4 | 776 | 781 |
| PITTSBURGH, PA | 13 | 1,557 | 815 | \$8,231 | \$686 | \$10.09 | \$0.84 | \$1.00 | \$12.01 | \$811 | \$9,730 | 11 | 1,258 | 810 |
| PROVIDENCE-FALL RIVER-WARWICK, RI | 5 | 984 | 903 | \$12,407 | \$1,034 | \$13.74 | \$1.14 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| RICHMOND, VA | 23 | 7,311 | 912 | \$9,237 | \$770 | \$10.13 | \$0.84 | \$0.82 | \$9.80 | \$691 | \$8,289 | 16 | 5,194 | 846 |
| VIRGINIA BEACH-NORFOLK-NEWPORT NEWS, VA-NC | 14 | 4,580 | 980 | \$10,854 | \$905 | \$11.07 | \$0.92 | \$0.97 | \$11.62 | \$924 | \$11,090 | 10 | 2,703 | 954 |
| WASHINGTON-ARLINGTON-ALEXANDRIA, DC-MD-VA-WV | 62 | 17,556 | 870 | \$13,337 | \$1,111 | \$15.33 | \$1.28 | \$1.22 | \$14.70 | \$1,096 | \$13,154 | 45 | 12,549 | 895 |
| OTHER | 33 | 6288 | 926 | \$9,783 | \$815 | \$10.57 | \$0.88 | \$1.00 | \$11.95 | \$967 | \$11,607 | 29 | 4,207 | 972 |
| REGION II | 932 | 224,985 | 933 | \$9,174 | \$764 | \$9.83 | \$0.82 | \$0.79 | \$9.44 | \$739 | \$8,864 | 936 | 235,517 | 939 |
| ATLANTA-SANDY SPRINGS-MARIETTA, GA | 170 | 47,258 | 995 | \$9,551 | \$796 | \$9.60 | \$0.80 | \$0.79 | \$9.48 | \$801 | \$9,607 | 196 | 57,586 | 1,013 |
| AUGUSTA-RICHMOND COUNTY, GA-SC | 11 | 1,719 | 701 | \$6,332 | \$528 | \$9.03 | \$0.75 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| CHARLESTON-NORTH CHARLESTON SC | 13 | 2,745 | 860 | \$9,076 | \$756 | \$10.55 | \$0.88 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| CHARLOTTE-GASTONIA-CONCORD, NC-SC | 48 | 12,491 | 931 | \$8,735 | \$728 | \$9.38 | \$0.78 | \$0.72 | \$8.67 | \$696 | \$8,346 | 52 | 12,304 | 962 |
| CHATTANOOGA, TN-GA | 10 | 2,167 | 876 | \$6,849 | \$571 | \$7.82 | \$0.65 | \$0.62 | \$7.38 | \$602 | \$7,225 | 10 | 1,670 | 979 |
| COLUMBIA, SC | 20 | 5,217 | 887 | \$7,767 | \$647 | \$8.75 | \$0.73 | \$0.71 | \$8.52 | \$572 | \$6,870 | 17 | 4,981 | 806 |
| DELTONA-DAYTONA BEACH-OSMOND BEACH, FL | 12 | 1,195 | 743 | \$8,082 | \$673 | \$10.87 | \$0.91 | \$0.89 | \$10.71 | \$663 | \$7,959 | 12 | 1,196 | 743 |
| FT. LAUDERDALE-POMPANO BEACH-DEERFIELD BEACH, FL | - 8 | 2,604 | 978 | \$11,267 | \$939 | \$11.53 | \$0.96 | \$0.68 | \$8.21 | \$642 | \$7,702 | 29 | 6,323 | 938 |
| GREENSBORO-HIGH POINT, NC | 21 | 4,518 | 914 | \$7,923 | \$660 | \$8.67 | \$0.72 | \$0.67 | \$8.01 | \$634 | \$7,605 | 16 | 3,496 | 949 |
| GREENVILLE, SC | 22 | 4,075 | 966 | \$7,568 | \$631 | \$7.83 | \$0.65 | \$0.81 | \$9.69 | \$746 | \$8,948 | 50 | 14,050 | 923 |
| JACKSONVILLE, FL MSA | 57 | 16,154 | 934 | \$9,438 | \$787 | \$10.11 | \$0.84 | \$1.10 | \$13.16 | \$948 | \$11,381 | 10 | 3,749 | 865 |
| KNOXVILLE, TN | 13 | 2,270 | 908 | \$6,736 | \$561 | \$7.42 | \$0.62 | \$0.67 | \$8.09 | \$623 | \$7,471 | 10 | 1,684 | 923 |
| LEXINGTON-FAYETTE, KY | 16 | 2,687 | 823 | \$7,797 | \$650 | \$9.48 | \$0.79 | \$0.77 | \$9.28 | \$645 | \$7,739 | 18 | 3,327 | 834 |
| LOUISVILLE, KY-IN | 19 | 2,940 | 839 | \$7,730 | \$644 | \$9.21 | \$0.77 | \$0.82 | \$9.88 | \$660 | \$7,915 | 17 | 2,620 | 801 |
| MACON, GA | 15 | 1,819 | 880 | \$7,139 | \$595 | \$8.11 | \$0.68 | \$0.66 | \$7.94 | \$612 | \$7,342 | 15 | 1,983 | 925 |
| MEMPHIS, TN-MS-AR | 20 | 7,329 | 929 | \$8,515 | \$710 | \$9.16 | \$0.76 | \$0.65 | \$7.86 | \$611 | \$7,329 | 48 | 14,020 | 933 |
| MIAMI-MIAMI BEACH-KENDALL, FL MD | 35 | 8,592 | 931 | \$12,057 | \$1,005 | \$12.94 | \$1.08 | \$1.04 | \$12.45 | \$989 | \$11,862 | 29 | 6,909 | 953 |
| NASHVILLE,TN | 47 | 14,043 | 904 | \$8,308 | \$692 | \$9.19 | \$0.77 | \$0.82 | \$9.79 | \$703 | \$8,434 | 37 | 11,228 | 861 |
| ORLANDO, FL | 61 | 15,538 | 942 | \$9,955 | \$830 | \$10.57 | \$0.88 | \$0.79 | \$9.48 | \$754 | \$9,042 | 69 | 18,539 | 954 |
| PALM BAY-MELBOURNE-TITUSVILLE, FL | 8 | 1,257 | 806 | \$8,407 | \$701 | \$10.43 | \$0.87 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PENSACOLA-FERRY PASS-BRENT, FL | 15 | 1,941 | 829 | \$8,242 | \$687 | \$9.94 | \$0.83 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| RALEIGH-DURHAM, NC MSA's | 57 | 15,118 | 930 | \$8,417 | \$701 | \$9.05 | \$0.75 | \$0.73 | \$8.77 | \$673 | \$8,081 | 50 | 13,968 | 921 |
| SARASOTA-BRADENTON-VENICE, FL | 9 | 1,451 | 839 | \$9,135 | \$761 | \$10.89 | \$0.91 | \$0.85 | \$10.24 | $\$ 760$ | \$9,115 | 51 | 14,031 | 891 |
| SAVANNAH, GA | 14 | 2083 | 894 | \$7,297 | \$608 | \$8.16 | \$0.68 | \$0.81 | \$9.76 | \$702 | \$8,426 | 10 | 1,423 | 863 |
| TAMPA-ST. PETERSBURG-CLEARWATER,FL | 66 | 17,930 | 888 | \$9,041 | \$753 | \$10.18 | \$0.85 | \$0.98 | \$11.72 | \$762 | \$9,143 | 12 | 2,429 | 780 |
| WEST PALM BEACH-BOCA RATON-BOYNTON BEACH, FL | 40 | 8,996 | 1,025 | \$13,981 | \$1,165 | \$13.64 | \$1.14 | \$1.00 | \$12.00 | \$1,038 | \$12,453 | 31 | 7,171 | 1,038 |
| OTHER | 105 | 20,848 | 919 | \$8,380 | \$698 | \$9.11 | \$0.76 | \$0.72 | \$8.61 | \$649 | \$7,786 | 126 | 26,667 | 905 |
| REGION III | 373 | 76,123 | 861 | \$9,020 | \$752 | \$10.47 | \$0.87 | \$0.80 | \$9.59 | \$694 | \$8,329 | 307 | 54,898 | 869 |
| BLOOMINGTON, IN | 10 | 1,080 | 682 | \$6,504 | \$542 | \$9.54 | \$0.79 | \$0.80 | \$9.59 | \$527 | \$6,325 | 6 | 623 | 660 |
| CHICAGO-NAPERVILLE-JOLIET, IL-IN-WI | 56 | 19,588 | 921 | \$11,399 | \$950 | \$12.37 | \$1.03 | \$1.01 | \$12.16 | \$989 | \$11,868 | 33 | 11,423 | 976 |
| CINCINNATI-MIDDLETON, OH-KY-IN | 30 | 6,178 | 957 | \$8,901 | \$742 | \$9.30 | \$0.78 | \$0.64 | \$7.62 | \$690 | \$8,279 | 23 | 3,883 | 1,086 |
| CLEVELAND-ELYRIA-MENTOR, OH | 13 | 1,633 | 760 | \$8,920 | \$743 | \$11.74 | \$0.98 | \$0.93 | \$11.15 | \$549 | \$6,586 | 10 | 832 | 591 |
| COLUMBUS, OH | 63 | 10,330 | 772 | \$7,551 | \$629 | \$9.78 | \$0.82 | \$0.76 | \$9.13 | \$571 | \$6,852 | 52 | 6,410 | 750 |
| DAYTON, OH | 19 | 2,202 | 787 | \$6,919 | \$577 | \$8.79 | \$0.73 | \$0.80 | \$9.60 | \$535 | \$6,417 | 17 | 1,407 | 669 |
| DETROIT-WARREN-LIVONIA, MI | 32 | 5724 | 881 | \$10,889 | \$907 | \$12.36 | \$1.03 | \$0.92 | \$11.07 | \$714 | \$8,567 | 39 | 4,715 | 774 |
| INDIANAPOLIS, IN | 64 | 13,191 | 804 | \$7,041 | \$587 | \$8.76 | \$0.73 | \$0.73 | \$8.73 | \$581 | \$6,970 | 55 | 11,550 | 799 |
| LANSING-EAST LANSING, MI | 8 | 1,671 | 929 | \$11,599 | \$967 | \$12.48 | \$1.04 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MINNEAPOLIS-ST. PAUL-BLOOMINGTON, MN-WI | 13 | 2,754 | 974 | \$10,552 | \$879 | \$10.83 | \$0.90 | \$0.91 | \$10.97 | \$909 | \$10,904 | 13 | 2,782 | 994 |
| TOLEDO, OH | 10 | 1,011 | 665 | \$6,615 | \$551 | \$9.95 | \$0.83 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| OTHER | 55 | 10,761 | 869 | \$7,728 | \$644 | \$8.89 | \$0.74 | \$0.63 | \$7.57 | \$561 | \$6,738 | 59 | 11,273 | 890 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| REGION IV | 517 | 141,633 | 838 | \$8,234 | \$686 | \$9.82 | \$0.82 | \$0.82 | \$9.84 | \$686 | \$8,236 | 612 | 174,901 | 837 |
| AUSTIN-ROUND ROCK, TX | 62 | 17,549 | 847 | \$9,384 | \$782 | \$11.08 | \$0.92 | \$0.85 | \$10.26 | \$720 | \$8,642 | 84 | 23,214 | 842 |
| BATON ROUGE, LA | 13 | 2,211 | 930 | \$8,811 | \$734 | \$9.47 | \$0.79 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| DALLAS-PLANO-IRVING, TX | 144 | 45914 | 843 | \$8,248 | \$687 | \$9.79 | \$0.82 | \$0.87 | \$10.44 | \$740 | \$8,880 | 219 | 67,026 | 851 |
| FT. WORTH-ARLINGTON, TX | 53 | 15,122 | 845 | \$8,016 | \$668 | \$9.48 | \$0.79 | \$0.79 | \$9.50 | \$656 | \$7,872 | 76 | 21,770 | 828 |
| HOUSTON-BAYTOWN-SUGARLAND, TX | 139 | 38,583 | 837 | \$8,272 | \$689 | \$9.88 | \$0.82 | \$0.78 | \$9.30 | \$643 | \$7,720 | 119 | 36,595 | 830 |
| LITTLE ROCK-NORTH LITTLE ROCK, AR | 11 | 2,199 | 852 | \$8,204 | \$684 | \$9.62 | \$0.80 | \$0.73 | \$8.75 | \$640 | \$7,676 | 18 | 3,899 | 877 |
| LUBBOCK, TX | 14 | 2,623 | 798 | \$7,071 | \$589 | \$8.86 | \$0.74 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| OKLAHOMA CITY, OK | 11 | 2,715 | 783 | \$6,039 | \$503 | \$7.71 | \$0.64 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SAN ANTONIO, TX | 25 | 5,935 | 804 | \$7,996 | \$666 | \$9.95 | \$0.83 | \$0.78 | \$9.38 | \$615 | \$7,381 | 48 | 12,095 | 787 |
| TULSA, OK | 12 | 2,735 | 786 | \$6,857 | \$571 | \$8.72 | \$0.73 | \$0.79 | \$9.49 | \$628 | \$7,538 | 14 | 3,709 | 794 |
| OTHER | 33 | 6047 | 826 | \$7,235 | \$603 | \$8.75 | \$0.73 | \$0.65 | \$7.81 | \$550 | \$6,605 | 34 | 6,593 | 845 |
| REGION V | 184 | 48,203 | 893 | \$8,952 | \$746 | \$10.02 | \$0.84 | \$0.85 | \$10.24 | \$751 | \$9,009 | 145 | 44,284 | 880 |
| ALBUQUERQUE, NM | 11 | 2,726 | 920 | \$8,433 | \$703 | \$9.17 | \$0.76 | \$0.78 | \$9.34 | \$671 | \$8,052 | 11 | 2,364 | 862 |
| COLORADO SPRINGS, CO | 15 | 3,235 | 907 | \$9,910 | \$826 | \$10.92 | \$0.91 | \$0.92 | \$11.06 | \$785 | \$9,417 | 7 | 1,606 | 851 |
| DENVER-AURORA \& BOULDER, CO MSA's | 82 | 24,270 | 891 | \$9,594 | \$799 | \$10.77 | \$0.90 | \$0.93 | \$11.16 | \$840 | \$10,086 | 74 | 23,177 | 903 |
| KANSAS CITY, MO-KS | 16 | 4,211 | 920 | \$8,294 | \$691 | \$9.02 | \$0.75 | \$0.73 | \$8.81 | \$672 | \$8,059 | 13 | 4,488 | 914 |
| ST. LOUIS, MO-IL | 12 | 4,461 | 945 | \$8,739 | \$728 | \$9.25 | \$0.77 | \$0.82 | \$9.84 | \$713 | \$8,554 | 16 | 6,263 | 869 |
| SALT LAKE CITY, UT | 11 | 3,786 | 818 | \$7,577 | \$631 | \$9.26 | \$0.77 | \$0.71 | \$8.58 | \$548 | \$6,579 | 8 | 3,003 | 767 |
| OTHER | 37 | 5,514 | 871 | \$7,439 | \$620 | \$8.54 | \$0.71 | \$0.65 | \$7.74 | \$530 | \$6,360 | 16 | 3,383 | 821 |
| REGION VI | 508 | 131,380 | 871 | \$12,762 | \$1,064 | \$14.66 | \$1.22 | \$1.15 | \$13.85 | \$1,023 | \$12,277 | 414 | 114,355 | 886 |
| LAS VEGAS-PARADISE, NV | 10 | 2,341 | 906 | \$8,543 | \$712 | \$9.43 | \$0.79 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| LOS ANGELES-LONG BEACH-GLENDALE, CA | 47 | 11,599 | 888 | \$17,129 | \$1,427 | \$19.29 | \$1.61 | \$1.61 | \$19.33 | \$1,368 | \$16,411 | 40 | 9,752 | 849 |
| OAKLAND-FREEMONT-HAYWOOD, CA MSA | 21 | 5,105 | 883 | \$14,412 | \$1,201 | \$16.32 | \$1.36 | \$1.46 | \$17.51 | \$1,245 | \$14,936 | 23 | 5,758 | 853 |
| PHOENIX-MESA-SCOTTSDALE, AZ | 77 | 21,876 | 900 | \$9,069 | \$756 | \$10.08 | \$0.84 | \$0.81 | \$9.70 | \$735 | \$8,825 | 79 | 24,112 | 909 |
| PORTLAND-VANCOUVER-BEAVERTON, OR-WA | 30 | 8,919 | 959 | \$8,387 | \$699 | \$8.75 | \$0.73 | \$0.77 | \$9.21 | \$742 | \$8,898 | 28 | 7,959 | 966 |
| RIVERSIDE-SAN BERNARDINO-ONTARIO, CA | 13 | 3,679 | 799 | \$11,750 | \$979 | \$14.70 | \$1.22 | \$1.18 | \$14.15 | \$953 | \$11,434 | 18 | 5,284 | 808 |
| SACRAMENTO-ARDEN ARCADE-ROSEVILLE, CA | 15 | 3,842 | 824 | \$9,838 | \$820 | \$11.94 | \$0.99 | \$1.02 | \$12.26 | \$922 | \$11,061 | 11 | 3,084 | 902 |
| SAN DIEGO-CARLSBAD-SAN MARCOS, CA | 34 | 8,714 | 841 | \$15,157 | \$1,263 | \$18.03 | \$1.50 | \$1.46 | \$17.57 | \$1,273 | \$15,274 | 38 | 10,816 | 869 |
| SAN FRANCISCO-SAN MATEO-REDWOOD CITY, CA | 28 | 9,640 | 789 | \$16,152 | \$1,346 | \$20.48 | \$1.71 | \$1.63 | \$19.56 | \$1,442 | \$17,307 | 19 | 4,992 | 885 |
| SAN JOSE-SUNNYVILLE-SANTA CLARA, CA | 15 | 3,483 | 869 | \$16,085 | \$1,340 | \$18.51 | \$1.54 | \$1.51 | \$18.17 | \$1,344 | \$16,125 | 8 | 1,964 | 887 |
| SANTA ANA-ANAHEIM-IRVINE, CA | 111 | 28,200 | 856 | \$15,502 | \$1,292 | \$18.12 | \$1.51 | \$1.46 | \$17.53 | \$1,282 | \$15,379 | 56 | 17,173 | 878 |
| SEATTLE-TACOMA-BELLEVUE, WA | 65 | 15,814 | 924 | \$10,726 | \$894 | \$11.61 | \$0.97 | \$0.92 | \$11.04 | \$841 | \$10,097 | 64 | 16,425 | 914 |
| STOCKTON, CA | 10 | 1,489 | 850 | \$8,764 | \$730 | \$10.32 | \$0.86 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| OTHER | 32 | 6,680 | 776 | \$9,969 | \$831 | \$12.85 | \$1.07 | \$0.95 | \$11.36 | \$788 | \$9,454 | 30 | 7,036 | 832 |

[^5]© 2007 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Internet.

Subsidized garden apartment properties with individually metered utilities in the survey tend to have fewer units and less floor area than market rent units. They contained an average of 142 units versus 247 units for market rent properties of the same type. These subsidized properties had an average of 854 square feet of floor area versus 887 square feet for the market rent properties.

Revenues. GPR averaged \$9,070 per unit (\$10.62 per square foot) annually in this year's survey versus $\$ 8,642$ per unit ( $\$ 10.27$ per square foot) a year earlier. Rental revenues averaged $\$ 8,475$ ( $\$ 9.92$ per square foot) versus $\$ 7,847$ per unit ( $\$ 9.33$ per square foot). Other operating revenues averaged $\$ 341$ per unit ( $\$ 0.40$ per square foot) in 2006 versus $\$ 323$ per unit ( $\$ 0.36$ per square foot) for 2005.

Operating Expenses. Operating expenses in subsidized properties were higher than those for market rent properties. Subsidized properties reported in the survey had total operating costs averaging $\$ 3,974$ ( $\$ 4.65$ per square foot) in 2006 versus the $\$ 4,230$ per unit ( $\$ 4.17$ per square foot) reported for responding properties in 2005.

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 53.4 percent of GPR versus 56.9 percent for the market rent properties. The other comparisons were $\$ 4,841$ versus $\$ 5,644$ on a dollars-per-unit basis, and $\$ 6.36$ versus $\$ 6.08$ on a per-square-foot-of-floor-area basis.

Economic Losses. Economic losses tended to be lower in subsidized properties with their lower rents and relatively tight supply. A 6.56 percent average rate was calculated for the subsidized individually metered garden properties versus 10.20 percent for market rent units. The economic loss ratio in subsidized properties was under the 9.17 percent recorded a year earlier.

Turnover Rates. Occupants of subsidized apartments have lower income and fewer housing choices in most local markets and are less likely to move. The turnover rate in individually metered subsidized units was 44 percent versus 62 percent for market rent units.

Note: Metropolitan rankings of income and expenses categories on a per-unit versus square-footage basis can appear to be divergent. This can occur due to small samples of properties reporting, especially in those with very large or very small average-sized properties.

## Glossary of Terms

Administrative. This includes the total office expenses (i.e., telephone, computers, forms, office rental and furniture).

Capital Expenditures. Non-recurring capital expenditures. Improvements not included as an expense item in operating expenses (i.e., renovations, appliance replacements, etc.). A zero on the line meant there were no capital expenditures.

Contract Services. Total landscape maintenance, exter-
minating, trash removal, security, snow removal and other service costs typically provided on contract basis.

GPR Residential. Total rents of all occupied units at 2006 lease rates and all vacant units at 2006 street/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 payroll insurance.

Marketing. Total media advertising, collateral materials, locator fees, model expense, promotions, etc.

Management Fees. Total fees paid to managing agent from owner.

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. Does not include utility reimbursements (i.e., RUBS) in GPR or rental revenue. All utility reimbursements are subtracted from gross utility expense.

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.
Repair and Maintenance. Total of all general maintenance and repairs, cleaning, decorating, painting, plumbing, electrical, HVAC, etc. Non-recurring capital expense not included.

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

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

Salary and Personnel Costs. Gross salaries and wages paid to onsite employees. Includes value of employee apartment allowances, payroll taxes, group health/life insurance, workers' compensation, bonuses and lease commissions, employer $401(\mathrm{k})$ and/or retirement contributions and other cash benefits.

Subsidized Property. A property has controlled rents through a government-subsidized program. If subsidized, the program was listed (i.e., Section 236, Section 8).

# Operating Expenses by Region and Metropolitan Area MARKET RENT GARDEN PROPERTIES - INDIVIDUALLY METERED DOLLARS PER UNIT 

|  |  | $\begin{aligned} & \text { Total } \begin{array}{c} \text { To. } \\ \text { No. of } \\ \text { Units } \end{array} \end{aligned}$ | $\begin{gathered} \text { Average } \\ \text { Sq. Ft. } \\ \text { Per Unit } \end{gathered}$ | $\begin{gathered} \text { Salary \& } \\ \text { Persisnnel } \\ \text { Cosis } \end{gathered}$ | Insurance | Taxes | Uillites | $\underset{\text { Fess }}{\substack{\text { Momt }}}$ | Admin. | Mrkg. | Contract Services |  | $\begin{aligned} & \text { Total } \\ & \text { Operating } \\ & \text { Expenses } \end{aligned}$ | $\underset{\substack{\text { Cxpital } \\ \text { Expend }}}{ }$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total market rent | 2.764 | 683,723 | 887 | \$1,025 | \$220 | s925 | \$313 | \$309 | \$189 | 160 | \$303 | \$359 | \$3,802 | 8 |
| regionit | 250 | 61,399 | 896 | \$1,043 | 5246 | \$1,011 | \$313 | $\$ 409$ | \$250 | \$144 | 9370 | \$373 | \$4,158 | \$1,782 |
| BALTMORE-TOWSON, MD | 40 | 9,331 | 904 | \$1.018 | \$229 | $\$ 906$ | \$267 | \$446 | \$277 | \$159 | \$420 | \$408 | \$4,130 |  |
| BOSTON-CAMBRIDGE-QUINCY, MA-NH | 18 | 4,841 | 892 | \$1,180 | \$205 | s970 | 5337 | \$491 | \$235 | \$205 | \$657 | \$471 | \$4,753 | \$1,135 |
| HARTFORD-WEST HARTFORD-EAST HARTFORD, СT | 7 | 1,728 | 973 | \$1,131 | $\$ 101$ | \$1,006 | \$216 | 5366 | 析 | \$188 | ${ }_{5329}$ | ${ }^{5349}$ |  | ${ }_{\text {84,835 }}$ |
| NEW HAVEN-MLIFORD, CT | 14 | 1,720 | 808 | \$1,586 | 5311 | \$1,185 | \$564 | \$548 | 5308 | \$288 | \$549 | \$434 | 85,773 | \$7,287 |
| NEW YORK, NY | 6 | 1,192 | 956 | \$1,284 | \$264 | \$3,815 | 5353 | $\$ 316$ | \$342 | \$75 | \$594 | \$379 | 87,422 | \$623 |
| NORTHERN NEW JERSEY MSAA | 9 | 3,051 | 837 | \$858 | \$353 | \$1.818 | 5381 | \$548 | \$207 | \$139 | \$505 | \$273 | \$5,081 | \$1,358 |
| PHILAEELPHIA-CAMDEN-WILMIMGTON, PA-NJ-DE-MD | ${ }^{6}$ | 1,260 | ${ }_{855}^{855}$ | \$1,157 | ${ }_{\text {S293 }}$ | \$1.037 | \$470 | ${ }_{\$ 402}$ | ${ }_{\text {\$254 }}$ | \$1188 | ${ }_{\$ 338} 98$ | ${ }_{5}^{5274}$ | ${ }_{\$ 4,347}$ | \$2,673 |
| PITTSSURGGM, PA | ${ }^{13}$ | 1.557 | ${ }^{815}$ | \$999 | \$283 | 5962 | \$220 | ${ }_{5286}$ | ${ }_{\text {s223 }}$ | \$103 | \$282 | \$247 | ${ }^{53,617}$ | \$1,114 |
| PRovidencerall River-warwick, RI | 5 | 984 | 903 | \$892 | \$132 | \$1,050 | \$326 | 5480 | \$131 | \$199 | \$45 |  | \$3,991 |  |
| RICHMOND, VA | ${ }^{23}$ | 7.311 | 912 | ¢987 | \$226 | \$594 | \$255 | 5281 | 5228 | \$138 | \$221 | \$350 | \$3,320 | \$1,622 |
| VIRGIINA BEACH-NORFOLK-NEWPORT NEWS, VA-NC | 14 | 4.580 | 980 | \$933 | \$448 | $\$ 787$ | 5334 | 5302 | ${ }^{2} 234$ | \$101 | \$243 | \$260 | \$3,640 |  |
| WASHIIGGTON-ARLLNGTON-ALEXANDRIA, DC.MD-VA-WV | 62 | 17,556 | 870 | \$1,027 | \$220 | \$1,033 | \$286 | \$451 | \$200 | \$118 | \$286 | \$373 | \$3.979 | \$1,525 |
| OTHER | ${ }^{33}$ | 6288 | 926 | \$1,052 | \$220 | 5814 | 5385 | \$342 | \$186 | \$148 | \$441 | \$451 | \$4,040 | \$1,795 |
| REGION II | 932 | 224,985 | ${ }^{933}$ | 5989 | \$230 | \$826 | \$302 | \$270 | \$180 | \$148 | 5307 | \$376 | 53,627 | \$1.253 |
| ATLANTA-SANDY SPRINGS-MARIETA, GA | 170 | 47,258 | 995 | \$1.076 | $\$ 187$ | \$815 | \$283 | $\$ 267$ | $\$ 169$ | $\$ 180$ | \$275 | $\$ 399$ | \$3.651 | \$927 |
| AUGUSTA. RICHMOND COUNTY, GA.SC | 11 | 1,719 | 701 | \$878 | \$193 | ${ }^{5416}$ | ${ }^{5344}$ | \$1828 | \$168 | \$139 | \$273 | ${ }_{5331}$ | \$2,925 | \$779 |
| CHARLESTON-NORTH CHARLESTON SC | 13 | 2,745 | 860 | \$1,074 | \$302 | \$666 | 5316 | \$278 | ${ }_{\$ 23}$ | \$198 | \$273 | ${ }^{5346}$ | \$3,6 |  |
| CHARLOTTE-GASTONA-CONCORD, NC.SC | 48 | ${ }^{12,491}$ | 931 | \$1.029 | \$171 | s671 | \$285 | \$220 | S163 | \$139 | \$275 | \$351 | ¢3,305 | 5915 |
| Chattanooga, tw-GA | 10 | 2.167 | 876 | ¢952 | \$217 | \$648 | 5383 | \$146 | $\$ 150$ | $\$ 117$ | \$287 | ${ }^{5306}$ | \$3,206 |  |
| COLUMBEA, SC | 20 | 5,217 |  | \$942 |  | \$635 | \$411 | \$221 |  |  | \$185 |  |  |  |
| DELTONA-DAYTONA BEACH-OSMOND BEACH, FL | 12 | 1,195 | 743 | \$829 | \$190 | \$737 | \$348 | \$194 | \$158 | \$106 | 9328 | \$302 | \$3,192 | \$1.955 |
| FT. LAUDERDALE-POMPANO BEACH-DEERFIELD BEACH, FL | fL | 2.604 | 978 | \$1,009 | 5337 | \$1,315 | 5367 | \$450 | \$140 | \$99 | 5390 | ${ }^{5292}$ | \$4,399 | 5986 |
| GREENSBORO-HIGH POINT, NC | 21 | 4,518 | 914 | $\$ 905$ | \$131 | \$493 | \$352 | \$83 | $\$ 169$ | \$144 | \$328 | 9387 | \$2,992 |  |
| GREENVILLE, SC | 22 | 4,075 | 966 | \$1,020 | \$203 | S613 | 5333 | \$158 | \$173 | \$135 | 5328 | \$327 | \$3,289 | 9620 |
| JACKSONVILE, FL MSA | 57 | 16.154 | 934 | 9943 | \$273 | 5824 | 5302 | \$278 | \$162 | \$157 | \$352 | \$390 | \$3,680 |  |
| knoxvile, TN | 13 | 2.270 | 908 | 9984 | \$192 | \$473 | 5329 | \$232 | ${ }^{283}$ | \$88 | $\$ 251$ | \$331 | \$3,162 | \$775 |
| LEXINGTON-APYEITE, KY | 16 | 887 | 823 | \$1,042 | $\$ 186$ | \$404 | \$255 | \$174 | \$134 | \$167 |  | ${ }_{533}$ | \$3,012 |  |
| LOUISVILE, KY-IN | 19 | 2,940 | 839 | \$1,078 | \$186 | \$394 | \$271 | \$189 | \$275 | s135 | \$296 |  | S3,314 | \$644 |
| MACON, GA | 15 | 1.819 | 880 | \$1.074 | S188 | 5464 | 5301 | \$172 | \$214 | \$121 | \$256 | 5375 | ${ }^{53,165}$ | ${ }_{5882}$ |
| MEMPHIS, TN-MS-AR | 20 | 7,329 | 929 | \$918 | ${ }_{5216}$ | \$847 | 5312 | \$123 | \$151 | \$140 | \$361 | 5349 | \$3,416 | ${ }^{8822}$ |
| MAM-MIAMI BEACH-KENDALL, FL MD | 35 | ${ }^{8.592}$ | ${ }^{931}$ | \$1,000 | ${ }^{9323}$ | \$1.500 | ${ }^{5326}$ | ${ }_{\text {S368 }}$ | ${ }^{\$ 323}$ | \$135 | \$355 | ${ }_{5462}$ | \$4793 | \$1.010 |
| ORLANDO, FL | 61 | ${ }^{15.538}$ | 942 | ${ }_{\text {¢9972 }}$ | ${ }_{8235}$ | ¢9914 | 5314 | ${ }_{5347}$ | \$193 | \$156 | \$352 | ${ }_{5368}$ | ${ }_{\text {¢3,852 }}$ | ${ }_{\text {81,850 }}$ |
| PaLL Bay-MELBOURNE-TIUSVILLE, FL | 8 | 1.257 | 806 | ¢931 | \$291 | \$734 | 5336 | \$249 | $\$ 178$ | \$139 | \$294 | \$451 | \$3.602 | \$1,256 |
| PENSACOLA-FERRY PASS-BRENT, FL | 15 | 1.941 | 829 | 9863 |  |  | \$344 | $\$ 163$ | \$139 | 585 | $\$ 314$ |  |  |  |
| RALEIGH-DUAHAM, NC MSA's | 57 | 15,118 | 930 | \$1,019 | \$160 | \$649 | \$256 | $\$ 244$ | $\$ 178$ | \$157 | \$227 | \$321 | \$3,250 | \$1,183 |
| SARASOTAABADENTON-VENCE, FL | 9 | 1,451 | 839 | 5849 | \$283 | 5818 | \$228 | 5322 | \$146 | $\$ 107$ | $\$ 393$ | 5347 | ¢3,494 | 8884 |
| SAVANNAH, GA | 14 | 2083 | 894 | \$819 | \$263 | \$556 | \$216 | 5208 | 5282 | \$116 | 5308 | \$197 | \$2.965 | \$944 |
| TAMPA-ST. PETERSEURGG-CLEARWATER,FL | 66 | 17,930 | 888 | \$870 | \$287 | 5993 | \$286 | ${ }^{4426}$ | \$169 | \$119 | ${ }^{5313}$ | \$312 | \$3,775 | \$1,349 |
| WEST PALM BEACH-BOCA RATON-BOYNTON BEACH, FL | 40 | ${ }^{8.996}$ | ${ }^{1.025}$ | \$1,225 | \$377 | \$1,834 | \$384 | \$460 | \$215 | \$215 | \$443 | ${ }_{5667}$ | \$5,712 |  |
| OTHER | 105 | 20.848 | 919 | \$922 | \$284 | \$613 | 5305 | \$186 | \$158 | \$118 | \$314 | \$404 | \$3,303 | \$1,465 |
| REGION III | 373 | 70,123 | ${ }^{861}$ | 9931 | \$207 | \$1,085 | \$273 | \$320 | \$160 | \$156 | \$290 | 289 | S3,710 | \$772 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CHICAGO-NAPERVILLE-JULET, IL-N-WI | 56 | ${ }^{19,588}$ | 921 | \$996 | \$215 | \$1,720 | \$256 | 5394 | \$145 | S173 | \$275 | ${ }^{\text {s } 448}$ | \$4,522 | \$679 |
| CINCIINATIMIDDLEETON, OH-KY-IN | ${ }^{30}$ | 6.178 | ${ }^{957}$ | \$888 | ${ }_{5233}$ | \$810 | \$275 | \$274 | \$195 | \$176 | ${ }_{\$ 324}$ | ${ }_{\text {¢ }}$ \$235 | \$3,410 |  |
| CLEVELAND-ELYPIAAMENTOR, OH | 13 | 1,633 | 7760 | \$1,047 | \$117 | 5966 | \$249 | \$309 | \$148 | \$146 | \$301 | \$273 | ${ }^{53,556}$ | \$1,096 |
| Columbus, oh | 63 | 10,330 | 772 | \$867 | \$202 | \$822 | \$243 | \$269 | \$157 | \$128 | \$215 | \$275 | \$3,179 | \$1,073 |
| DAATON. OH | 19 | 2,202 | ${ }^{787}$ | \$789 | \$131 | \$743 | \$222 | \$239 | \$139 | \$119 | \$278 | \$495 | 53,134 | \$612 |
| DEIROIT-WARREN-LIVONA, MI | 64 | 5724 | ${ }_{804}^{888}$ | ${ }_{\text {¢985 }}^{\text {\$858 }}$ | \$306\% | \$1,194 | ¢ | $\$ 389$ <br> $\$ 276$ | ${ }_{\text {¢ }}$ | \$180 | \$3822 | ${ }_{\text {¢ }}^{\text {\$295 }}$ | \$4,086 <br> $\$ 3,104$ | ${ }_{\substack{4 \\ \$ 5109}}^{\text {\$512 }}$ |
| LANSING-EAST LANSING, M1 | 8 | 1,671 | 929 | \$1,118 | \$222 | \$1,226 | \$404 | 9355 | $\$ 218$ | \$234 | \$424 | \$306 | \$4,507 |  |
| MINEEAPOLIS-ST. PAUL-BLOOMINGTON, MN-WI | 13 | 2.754 | 974 | \$1,095 | \$114 | \$1,094 | 5477 | 5382 | $\$ 141$ | \$219 | \$279 | \$480 | \$4,280 | \$830 |
| TOLEDO, OH | 10 | 1.011 | 665 | \$867 | \$124 | \$684 | \$233 | \$218 | 899 | \$151 | \$235 | $\$ 185$ | \$2,79 |  |
| OTHER | 55 | 10.761 | 869 | 5965 | \$196 | \$862 | 5318 | $\$ 293$ | $\$ 163$ | 5148 | 5303 | \$239 | S3,488 | \$821 |
| REGIoNiv | 517 | ${ }^{141,633}$ | 838 | 9948 | \$216 | \$1.043 | \$356 | \$246 | \$176 | \$166 | \$232 | 5336 | \$3.719 | \$959 |
| AUSTN-ROUND ROCK, TX | 62 | 17,549 | 847 | \$1,024 | \$202 | \$1.572 | $\$ 285$ | \$229 | $\$ 153$ | \$242 | \$224 | \$347 | \$4,297 |  |
| BATON ROUGE. LA | 13 | 2.211 | 930 | \$882 | \$363 | \$442 | \$418 | 5365 | \$198 | $\$ 107$ | 5335 | \$469 | \$3,579 | \$3,037 |
|  | 44 | 45914 | 843 | \$990 | \$186 | \$1,045 | 5394 | ${ }^{2246}$ | \$170 | \$147 | \$240 | ${ }_{5330}$ | \$3,697 | 5878 |
| Fr. Worth-arlingon, TX | 53 | 15,122 | 845 | ${ }^{9968}$ | S178 | \$1,106 | 5373 | \$227 | \$205 | S142 | \$222 | 5358 | 53,837 |  |
| Houston-battown-SUGARLAND, IX | 139 | ${ }^{38.583}$ | 837 | \$936 | 5265 | \$1,063 | 5370 | \$239 | \$187 | S176 | \$2211 | \$297 | ¢3,745 | 5998 |
| LITLE ROCK-NORTH LITLE ROCK, AR | 11 | 2,199 | 852 | \$1,028 | \$187 | ${ }^{5561}$ | \$357 | \$179 | \$160 | \$133 | \$244 | ${ }^{\$ 326}$ | ${ }^{53,176}$ | ${ }_{\text {81,586 }}$ |
| LUBBOCK, TX OKLAHOMA CIT, OK | 14 11 | 2,623 2.715 | ${ }_{783}^{798}$ | \$775 | ${ }_{\text {\$221 }}$ | ${ }_{\text {S737 }}$ | \$183 | ${ }_{\text {¢ }}{ }_{\text {\$235 }}$ | \$138 | \$117 | \$106 | ${ }_{\text {S }}^{\text {\$723 }}$ | 53,237 <br> $\substack{\text { S7276 }}$ |  |
| SAN ANTONO, TX | 25 | 5,935 | 804 | \$928 | \$198 | \$791 | \$304 | \$309 | \$212 | \$219 | \$244 | \$296 | \$3,501 | ${ }_{9823}$ |
| TULSA, OK | 12 | 2,735 | 786 | \$910 | \$150 | \$414 | \$266 | \$227 | 8119 | \$121 | \$214 | \$348 | \$2,819 | \$570 |
| OTHER | 33 | 6047 | 826 | $\$ 904$ | \$248 | 8570 | 5362 | \$261 | \$158 | \$117 | \$255 | $\$ 391$ | \$3,267 | \$398 |
| REGIONV | 184 | 48,203 | 893 | \$1.042 | \$187 | $\$ 563$ | \$278 | \$287 | \$204 | \$195 | $\$ 235$ | \$326 | \$3,317 |  |
| Albuauerrue, nM |  | 2.726 | 920 | \$1,074 |  | \$414 | \$437 | \$302 | \$139 | \$159 | $\$ 290$ | \$349 | \$3,330 | \$434 |
| Colorado springs co | 15 | 3,235 | 907 | \$1,143 | 5360 | \$420 | 5323 | $\$ 309$ | \$195 | $\$ 290$ | \$184 | \$296 | \$3,520 | \$544 |
| denver-aupora \& Boulder, Co MSA's | 82 | 24,270 | 891 | \$1,117 | ${ }_{\$ 163}$ | ${ }_{\text {S }} 5881$ | \$221 | ${ }^{9313}$ | \$196 | \$216 | \$228 | ${ }_{5312}$ | ${ }^{53,388}$ | \$739 |
| KANSAS CITY, MO-KS | 16 | 4,211 | 920 | \$934 | \$188 | \$723 | \$235 | \$256 | \$143 | \$167 | \$254 | ${ }_{5406}$ | \$3,307 | ${ }^{\text {S3348 }}$ |
| ST. LOUIS, MO-LL | 12 | 4,461 | 945 | \$1.015 | ${ }^{2222}$ | \$700 | \$316 | \$185 | \$388 | \$113 | \$208 | \$418 |  |  |
|  | 37 | ${ }_{5}^{3.514}$ | 871 | ${ }_{\$ 885}$ | \$191 | \$561 | \$273 | ${ }_{\$ 266}$ | \$193 | \$152 | ${ }_{\$ 274}$ | \$330 | \$3, 126 | ${ }_{8682}$ |
| REGION VI |  | ${ }^{131,380}$ |  | \$1,209 |  | 5967 |  | $\$ 401$ | \$201 | \$169 | \$374 |  |  |  |
| LAS VEGAS.PARADISE, NV | 10 | 2.341 | 906 | \$1,130 | \$198 | \$577 | \$452 | \$246 | \$204 | \$148 | \$224 | \$443 | \$3,622 | \$597 |
| LOS Angeles-LONG BEACH-GLENDALE, CA | 47 | ${ }^{11,599}$ | 888 | \$1,279 | \$281 | \$1,400 | 5316 | \$513 | 5378 | \$190 | $\$ 506$ | \$375 | \$5,237 | \$1,377 |
| OAKLAND-FREEMONT-HATWOOD, CA MSA | 21 | 5.105 | 883 | \$1,365 | \$260 | \$1,385 | \$258 | 5331 | \$164 | \$147 | ${ }^{5443}$ | \$293 | \$4,646 |  |
| PHOENX-MESA.SCOTTSDALE, AZ | 77 | 21,876 | 900 | \$1.075 | \$162 | \$556 | \$294 | 5335 | \$157 | $\$ 162$ | \$274 | \$372 | \$3,366 | s951 |
| PORTLAND-VANCOUVER-EEAVERTON, OR-WA | 30 | 8.919 | 959 | \$971 | \$132 | $\$ 795$ | \$256 | \$288 | 899 | \$172 | \$297 | \$251 | \$3,260 |  |
| RIVERSIDE-SAN BERNARDINO-ONTARIO, CA | 13 | 3,679 | 799 | \$1,021 | \$225 | \$889 | \$315 | \$377 | \$146 | \$152 | \$322 | \$385 | \$3,832 | \$1,410 |
| SACRAMENTO-ARDEN ARCADE-ROSEVVILE, CA | 15 | 3.842 | 824 | \$932 | \$201 | \$759 | \$437 | \$264 | \$357 | \$198 | \$269 | ${ }^{5486}$ | \$3,902 | \$1,144 |
| SAAN DEGO-CAALSBAD-SAANARCOS, CA | ${ }^{34}$ | 8,714 | 841 | \$1,318 | \$219 | \$1,209 | 5406 | 5422 | 5251 | s190 | S384 | 5501 | \$4,899 | \$1,108 |
| SAN Franclisco-san Mateo-reow | 28 | 9,640 | 789 | \$1,414 | 5338 | \$1,007 | 5356 | \$477 | \$183 | \$150 | \$526 | ${ }^{\$ 456}$ | \$4,918 |  |
| SAN JoSE-SUNTYVLLE-SANTA C LAAA, CA | 15 | 3,483 <br> 28.200 | 889 | \$1,313 | ${ }_{5319}$ | \$1.518 | \$406 | \$189 | ${ }_{\text {S }}$ \$242 | \$ ${ }_{\text {S }}$ | \$4449 | \$419 | \$4,971 | \$949 11145 |
| SEATLL-TACOMA-BELLEVUE, WA | 65 | 15,814 | 924 | \$1,183 | \$184 | \$906 | \$221 | 5330 | \$153 | \$211 | 5385 | \$353 | \$3.925 | \$684 |
| stockton, CA | 10 |  | 850 | 5960 | \$249 | \$578 | \$434 | \$208 | $\$ 166$ | \$95 | \$311 | 5487 | \$3,488 |  |
| OTHER | 32 | 6,880 | 776 | \$1,116 | \$218 | \$709 | 5360 | \$365 | \$195 | 5143 | \$330 | \$362 | \$3,798 | \$872 |

[^6]© 2007 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Internet.

Taxes. Total real estate and personal property taxes only. Payroll or rendering fees related to property taxes were not included.

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.

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

Utilities. Total cost of all utilities and each listed type, net of any income reimbursements for or from residents (i.e., RUBS or similar systems). Does not include trash removal.

Utility Configuration. Whether electric, gas, oil and
water/sewer utilities to individual units in subject property are: Master Metered, Owner Pays; Master Metered, Resident Pays (RUBS); Individual or Submetered, Resident Pays.

Robert J. Sheehan, Regis J. Sheehan \& Associates, McLean, Va., is NAA's Consulting Economist. Roland Freeman, CAPS, CRE, CPM, of Capital Consultants Realty Services, Inc., Dallas, was NAA Chairman of the Board in 1984. We would also like to thank Robert J. Sheehan III, Programmer and Data Editor and ReData, the Date Entry Firm involving paper responses for helping with this survey.

Robert J. Sheehan has compiled all but two of 19 IEE Surveys that NAA has published. This is his final survey, as he is retiring at the end of 2007, marking 25 years with NAA as Consulting Economist.

## Thank You to Our Participating Companies

Aspecial note of appreciation goes to the 511 firms who donated their time to accumulate the data necessary to make this survey valuable. The following companies and their officers provided more than 20 properties for the 2007 Survey of Income and Expenses in Rental Apartment Properties:

- Equity Residential
- AIMCO
- UDR Inc.
- Simpson Property Group LP
- Alco Management Inc.
- Alliance Residential Company
- Mid-America Apartment Communities Inc.
- Western National Property Management
- AvalonBay Communities
- Milestone Management
- Lincoln Property Company
- AMLI Residential Property Trust
- Tarragon Corporation
- Village Green Companies
- Gables Residential Services Inc.
- Corcoran Management Co. Inc.
- JCM Partners
- Babcock and Brown Residential
- Camden Property Trust
- Greystar Management
- The Dolben Company Inc.
- Baron Property Services
- Konover
- AEW Capital Management
- Freeman Webb Company Realtors
- Post Properties
- Capstone Management
- HAI Management
- Marquette Management
- McDougal Companies
- MG Properties


# Net Operating Income and Economic Vacancy Rates <br> BY REGION AND METROPOLITAN AREA 

MARKET RENT GARDEN PROPERTIES - INDIVIDUALLY METERED, DOLLARS PER SQUARE FOOT

|  | Total <br> No. of Properties | Total No. of Units | Average Sq. Ft. Per Unit | Gross Potential Rent Revenue | Total Rent Revenue Collected | Revenue Losses to |  |  |  | Total <br> Revenue Collected | Total <br> Operating <br> Expenses | Operating Income NOI | Economic Vacancy as a \% | Turnover Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL MARKET RENT | 2,764 | 683,723 | 887 | \$11.18 | \$10.04 | \$0.73 | \$0.08 | \$0.32 | \$0.61 | \$10.65 | \$4.29 | \$6.36 | 10.20\% | 62\% |
| REGIONI | 250 | 61,399 | 896 | \$13.78 | \$12.48 | \$0.84 | \$0.13 | \$0.34 | \$0.62 | \$13.10 | \$4.64 | \$8.46 | 9.46\% | 55\% |
| BALTIMORE-TOWSON, MD | 40 | 9,331 | 904 | \$13.89 | \$12.81 | \$0.72 | \$0.12 | \$0.23 | \$0.60 | \$13.41 | \$4.57 | \$8.84 | 7.76\% | 54\% |
| BOSTON-CAMBRIDGE-QUINCY, MA-NH | 18 | 4,841 | 892 | \$18.04 | \$14.92 | \$1.56 | \$0.34 | \$1.22 | \$0.46 | \$15.38 | \$5.33 | \$10.05 | 17.31\% | 47\% |
| HARTFORD-WEST HARTFORD-EAST HARTFORD, CT | 7 | 1,728 | 973 | \$10.03 | \$8.42 | \$1.21 | \$0.10 | \$0.30 | \$0.47 | \$8.89 | \$4.89 | \$4.00 | 16.08\% | 61\% |
| NEW HAVEN-MILFORD, CT | 14 | 1,720 | 808 | \$16.65 | \$14.86 | \$1.25 | \$0.12 | \$0.42 | \$0.79 | \$15.65 | \$7.14 | \$8.51 | 10.73\% | 72\% |
| NEW YORK, NY | 6 | 1,192 | 956 | \$20.42 | \$19.26 | \$0.63 | \$0.21 | \$0.32 | \$0.58 | \$19.83 | \$7.76 | \$12.07 | 5.69\% | 54\% |
| NORTHERN NEW JERSEY MSA'S | 9 | 3,051 | 837 | \$18.09 | \$16.85 | \$0.82 | \$0.09 | \$0.33 | \$0.91 | \$17.77 | \$6.07 | \$11.70 | 6.84\% | 46\% |
| PHILADELPHIA-CAMDEN-WILMINGTON, PA-NJ-DE-MD | 6 | 1,260 | 855 | \$14.70 | \$13.43 | \$0.83 | \$0.08 | \$0.36 | \$0.78 | \$14.21 | \$5.09 | \$9.12 | 8.63\% | 50\% |
| PITTSBURGH, PA | 13 | 1.557 | 815 | \$10.09 | \$8.92 | \$0.81 | \$0.02 | \$0.35 | \$0.96 | \$9.88 | \$4.44 | \$5.44 | 11.65\% | 55\% |
| PROVIDENCE-FALL RIVER-WARWICK, RI | 5 | 984 | 903 | \$13.74 | \$12.07 | \$0.95 | \$0.11 | \$0.61 | \$0.55 | \$12.62 | \$4.42 | \$8.21 | 12.13\% | 56\% |
| RICHMOND, VA | 23 | 7.311 | 912 | \$10.13 | \$8.81 | \$0.96 | \$0.14 | \$0.21 | \$0.58 | \$9.39 | \$3.64 | \$5.75 | 12.96\% | 58\% |
| VIRGINIA BEACH-NO | 14 | 4,580 | 980 | \$11.07 | \$10.25 | \$0.52 | \$0.08 | \$0.21 | \$0.90 | \$11.15 | \$3.71 | \$7.44 | 7.41\% | 59\% |
| WASHINGTON-ARLINGTON-ALEXANDRIA, DC-MD-VA-WV | 62 | 17,556 | 870 | \$15.33 | \$14.20 | \$0.75 | \$0.11 | \$0.27 | \$0.61 | \$14.81 | \$4.57 | \$10.23 | 7.37\% | 55\% |
| OTHER | 33 | 6288 | 926 | \$10.57 | \$9.63 | \$0.67 | \$0.08 | \$0.18 | \$0.41 | \$10.04 | \$4.37 | \$5.68 | 8.88\% | 57\% |
| REGION II | 932 | 224,985 | 933 | \$9.83 | \$8.77 | \$0.64 | \$0.08 | \$0.34 | \$0.60 | \$9.37 | \$3.89 | \$5.48 | 10.84\% | 64\% |
| ATLANTA-SANDY SPRINGS-MARIETTA, GA | 170 | 47,258 | 995 | \$9.60 | \$8.28 | \$0.70 | \$0.09 | \$0.53 | \$0.50 | \$8.78 | \$3.67 | \$5.11 | 13.72\% | 61\% |
| AUGUSTA-RICHMOND COUNTY, GA-SC | 11 | 1,719 | 701 | \$9.03 | \$7.76 | \$0.82 | \$0.05 | \$0.40 | \$0.53 | \$8.29 | \$4.17 | \$4.11 | 14.14\% | 68\% |
| CHARLESTON-NORTH CHARLESTON SC | 13 | 2,745 | 860 | \$10.55 | \$9.61 | \$0.68 | \$0.07 | \$0.20 | \$0.76 | \$10.37 | \$4.28 | \$6.09 | 8.93\% | 74\% |
| CHARLOTTE-GASTONIA-CONCORD, NC-SC | 48 | 12,491 | 931 | \$9.38 | \$8.39 | \$0.55 | \$0.08 | \$0.37 | \$0.63 | \$9.02 | \$3.55 | \$5.47 | 10.59\% | 61\% |
| CHATTANOOGA, TN-GA | 10 | 2,167 | 876 | \$7.82 | \$7.02 | \$0.42 | \$0.04 | \$0.34 | \$0.58 | \$7.59 | \$3.66 | \$3.93 | 10.25\% | 58\% |
| COLUMBIA, SC | 20 | 5,217 | 887 | \$8.75 | \$7.72 | \$0.62 | \$0.07 | \$0.34 | \$0.64 | \$8.36 | \$3.67 | \$4.69 | 11.75\% | 66\% |
| DELTONA-DAYTONA BEACH-OSMOND BEACH, FL | 12 | 1,195 | 743 | \$10.87 | \$9.06 | \$1.48 | \$0.07 | \$0.27 | \$0.62 | \$9.68 | \$4.29 | \$5.38 | 16.68\% | 68\% |
| FT. LAUDERDALE-POMPANO BEACH-DEERFIELD BEACH, FL | FL | 2,604 | 978 | \$11.53 | \$10.94 | \$0.41 | \$0.06 | \$0.11 | \$0.80 | \$11.74 | \$4.50 | \$7.24 | 5.12\% | 53\% |
| GREENSBORO-HIGH POINT, NC | 21 | 4,518 | 914 | \$8.67 | \$7.76 | \$0.54 | \$0.09 | \$0.28 | \$0.67 | \$8.43 | \$3.27 | \$5.16 | 10.45\% | 64\% |
| GREENVILLE, SC | 22 | 4,075 | 966 | \$7.83 | \$6.85 | \$0.51 | \$0.10 | \$0.37 | \$0.55 | \$7.40 | \$3.40 | \$4.00 | 12.55\% | 65\% |
| JACKSONVILE, FL MSA | 57 | 16,154 | 934 | \$10.11 | \$9.17 | \$0.56 | \$0.12 | \$0.25 | \$0.63 | \$9.80 | \$3.94 | \$5.85 | 9.27\% | 68\% |
| KNOXVILLE, TN | 13 | 2,270 | 908 | \$7.42 | \$6.91 | \$0.39 | \$0.03 | \$0.09 | \$0.45 | \$7.36 | \$3.48 | \$3.88 | 6.88\% | 57\% |
| LEXINGTON-FAYETTE, KY | 16 | 2,687 | 823 | \$9.48 | \$8.20 | \$0.82 | \$0.06 | \$0.40 | \$0.63 | \$8.83 | \$3.66 | \$5.17 | 13.47\% | 64\% |
| LOUISVILLE, KY-IN | 19 | 2,940 | 839 | \$9.21 | \$8.35 | \$0.61 | \$0.08 | \$0.17 | \$0.75 | \$9.10 | \$3.95 | \$5.15 | 9.38\% | 68\% |
| MACON, GA | 15 | 1,819 | 880 | \$8.11 | \$7.11 | \$0.59 | \$0.08 | \$0.34 | \$0.60 | \$7.70 | \$3.60 | \$4.11 | 12.44\% | 76\% |
| MEMPHIS, TN-MS-AR | 20 | 7,329 | 929 | \$9.16 | \$7.69 | \$0.69 | \$0.13 | \$0.65 | \$0.77 | \$8.46 | \$3.67 | \$4.79 | 16.06\% | 61\% |
| MIAMI-MIAMI BEACH-KENDALL, FL MD | 35 | 8,592 | 931 | \$12.94 | \$12.08 | \$0.52 | \$0.10 | \$0.25 | \$0.71 | \$12.79 | \$5.15 | \$7.65 | 6.66\% | 59\% |
| NASHVILLE,TN | 47 | 14,043 | 904 | \$9.19 | \$8.23 | \$0.53 | \$0.06 | \$0.37 | \$0.59 | \$8.83 | \$3.60 | \$5.23 | 10.44\% | 63\% |
| ORLANDO, FL | 61 | 15,538 | 942 | \$10.57 | \$9.67 | \$0.67 | \$0.07 | \$0.16 | \$0.60 | \$10.26 | \$4.09 | \$6.18 | 8.49\% | 67\% |
| PALM BAY-MELBOURNE-TITUSVILLE, FL | 8 | 1,257 | 806 | \$10.43 | \$9.68 | \$0.49 | \$0.06 | \$0.21 | \$0.61 | \$10.29 | \$4.47 | \$5.82 | 7.23\% | 64\% |
| PENSACOLA-FERRY PASS-BRENT, FL | 15 | 1,941 | 829 | \$9.94 | \$9.37 | \$0.31 | \$0.04 | \$0.23 | \$0.84 | \$10.21 | \$3.77 | \$6.45 | 5.76\% | 73\% |
| RALEIGH-DURHAM, NC MSA's | 57 | 15,118 | 930 | \$9.05 | \$7.95 | \$0.61 | \$0.07 | \$0.42 | \$0.41 | \$8.36 | \$3.50 | \$4.86 | 12.12\% | 58\% |
| SARASOTA-BRADENTON-VENICE, FL | 9 | 1,451 | 839 | \$10.89 | \$10.35 | \$0.39 | \$0.07 | \$0.09 | \$0.69 | \$11.04 | \$4.17 | \$6.87 | 4.98\% | 64\% |
| SAVANNAH, GA | 14 | 2083 | 894 | \$8.16 | \$7.14 | \$0.71 | \$0.08 | \$0.24 | \$0.53 | \$7.67 | \$3.32 | \$4.36 | 12.55\% | 72\% |
| TAMPA-ST. PETERSBURG-CLEARWATER,FL | 66 | 17,930 | 888 | \$10.18 | \$9.31 | \$0.66 | \$0.07 | \$0.13 | \$0.62 | \$9.93 | \$4.25 | \$5.68 | 8.54\% | 62\% |
| WEST PALM BEACH-BOCA RATON-BOYNTON BEACH, FL | 40 | 8.996 | 1,025 | \$13.64 | \$12.32 | \$0.99 | \$0.10 | \$0.23 | \$0.80 | \$13.12 | \$5.57 | \$7.55 | 9.71\% | 71\% |
| OTHER | 105 | 20,848 | 919 | \$9.11 | \$8.09 | \$0.63 | \$0.07 | \$0.33 | \$0.65 | \$8.74 | \$3.59 | \$5.14 | 11.28\% | 70\% |
| REGION III | 373 | 76,123 | 861 | \$10.47 | \$9.21 | \$0.77 | \$0.09 | \$0.40 | \$0.65 | \$9.86 | \$4.31 | \$5.55 | 12.02\% | 56\% |
| BLOOMINGTON, IN | 10 | 1,080 | 682 | \$9.54 | \$8.31 | \$0.72 | \$0.12 | \$0.39 | \$0.40 | \$8.71 | \$4.40 | \$4.31 | 12.80\% | 65\% |
| CHICAGO-NAPERVILLE-JOLIET, IL-IN-WI | 56 | 19,588 | 921 | \$12.37 | \$11.03 | \$0.74 | \$0.09 | \$0.51 | \$0.80 | \$11.83 | \$4.91 | \$6.93 | 10.82\% | 51\% |
| CINCINNATI-MIDDLETON, OH-KY-IN | 30 | 6,178 | 957 | \$9.30 | \$8.04 | \$0.87 | \$0.08 | \$0.32 | \$0.52 | \$8.55 | \$3.56 | \$4.99 | 13.62\% | 57\% |
| CLEVELAND-ELYRIA-MENTOR, OH | 13 | 1,633 | 760 | \$11.74 | \$9.68 | \$0.84 | \$0.09 | \$1.12 | \$0.57 | \$10.26 | \$4.68 | \$5.58 | 17.49\% | 61\% |
| COLUMBUS, OH | 63 | 10,330 | 772 | \$9.78 | \$8.48 | \$0.83 | \$0.08 | \$0.40 | \$0.47 | \$8.95 | \$4.12 | \$4.83 | 13.35\% | 59\% |
| DAYTON, OH | 19 | 2,202 | 787 | \$8.79 | \$7.78 | \$0.69 | \$0.09 | \$0.23 | \$0.37 | \$8.15 | \$3.98 | \$4.17 | 11.49\% | 60\% |
| DETROIT-WARREN-LIVONIA, MI | 32 | 5724 | 881 | \$12.36 | \$10.99 | \$0.88 | \$0.10 | \$0.39 | \$0.72 | \$11.71 | \$4.64 | \$7.08 | 11.04\% | 55\% |
| INDIANAPOLIS, IN | 64 | 13,191 | 804 | \$8.76 | \$7.65 | \$0.71 | \$0.14 | \$0.27 | \$0.67 | \$8.32 | \$3.86 | \$4.45 | 12.73\% | 55\% |
| LANSING-EAST LANSING, MI | 8 | 1,671 | 929 | \$12.48 | \$10.88 | \$1.03 | \$0.08 | \$0.49 | \$0.83 | \$11.71 | \$4.85 | \$6.86 | 12.85\% | 71\% |
| MINNEAPOLIS-ST. PAUL-BLOOMINGTON, MN-WI | 13 | 2,754 | 974 | \$10.83 | \$9.22 | \$0.93 | \$0.04 | \$0.65 | \$0.54 | \$9.76 | \$4.39 | \$5.36 | 14.89\% | 59\% |
| TOLEDO, OH | 10 | 1,011 | 665 | \$9.95 | \$8.88 | \$0.69 | \$0.07 | \$0.31 | \$0.59 | \$9.47 | \$4.20 | \$5.27 | 10.76\% | 66\% |
| OTHER | 55 | 10,761 | 869 | \$8.89 | \$7.92 | \$0.63 | \$0.06 | \$0.28 | \$0.61 | \$8.53 | \$4.01 | \$4.52 | 10.90\% | 59\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| REGION IV | 517 | 141,633 | 838 | \$9.82 | \$8.77 | \$0.73 | \$0.07 | \$0.26 | \$0.58 | \$9.35 | \$4.44 | \$4.91 | 10.77\% | 63\% |
| AUSTIN-ROUND ROCK, TX | 62 | 17,549 | 847 | \$11.08 | \$10.05 | \$0.68 | \$0.03 | \$0.33 | \$0.72 | \$10.77 | \$5.08 | \$5.69 | 9.36\% | 66\% |
| BATON ROUGE, LA | 13 | 2,211 | 930 | \$9.47 | \$8.52 | \$0.53 | \$0.15 | \$0.27 | \$0.48 | \$9.00 | \$3.85 | \$5.15 | 10.03\% | 51\% |
| DALLAS-PLANO-IRVING, TX | 144 | 45914 | 843 | \$9.79 | \$8.75 | \$0.71 | \$0.07 | \$0.26 | \$0.59 | \$9.34 | \$4.39 | \$4.95 | 10.65\% | 61\% |
| FT. WORTH-ARLINGTON, TX | 53 | 15,122 | 845 | \$9.48 | \$8.51 | \$0.68 | \$0.07 | \$0.22 | \$0.56 | \$9.08 | \$4.54 | \$4.54 | 10.25\% | 70\% |
| HOUSTON-BAYTOWN-SUGARLAND, TX | 139 | 38,583 | 837 | \$9.88 | \$8.74 | \$0.80 | \$0.08 | \$0.25 | \$0.57 | \$9.32 | \$4.47 | \$4.84 | 11.51\% | 62\% |
| LITTLE ROCK-NORTH LITTLE ROCK, AR | 11 | 2,199 | 852 | \$9.62 | \$8.69 | \$0.54 | \$0.05 | \$0.34 | \$0.45 | \$9.14 | \$3.73 | \$5.41 | 9.74\% | 50\% |
| LUBBOCK, TX | 14 | 2,623 | 798 | \$8.86 | \$6.84 | \$2.03 | \$0.00 | \$0.00 | \$0.21 | \$7.05 | \$4.06 | \$2.99 | 22.88\% | 58\% |
| OKLAHOMA CITY, OK | 11 | 2,715 | 783 | \$7.71 | \$7.15 | \$0.42 | \$0.04 | \$0.10 | \$0.52 | \$7.67 | \$3.51 | \$4.16 | 7.39\% | 62\% |
| SAN ANTONIO, TX | 25 | 5,935 | 804 | \$9.95 | \$8.96 | \$0.61 | \$0.08 | \$0.31 | \$0.62 | \$9.58 | \$4.36 | \$5.22 | 9.96\% | 70\% |
| TULSA, OK | 12 | 2,735 | 786 | \$8.72 | \$7.97 | \$0.57 | \$0.06 | \$0.12 | \$0.45 | \$8.42 | \$3.58 | \$4.83 | 8.56\% | 73\% |
| OTHER | 33 | 6047 | 826 | \$8.75 | \$7.72 | \$0.69 | \$0.05 | \$0.29 | \$0.55 | \$8.27 | \$3.95 | \$4.31 | 11.82\% | 62\% |
| REGION V | 184 | 48,203 | 893 | \$10.02 | \$8.81 | \$0.76 | \$0.06 | \$0.39 | \$0.63 | \$9.44 | \$3.71 | \$5.73 | 12.12\% | 62\% |
| ALBUQUERQUE, NM | 11 | 2,726 | 920 | \$9.17 | \$8.47 | \$0.60 | \$0.03 | \$0.07 | \$0.43 | \$8.90 | \$3.62 | \$5.27 | 7.66\% | 56\% |
| COLORADO SPRINGS, CO | 15 | 3,235 | 907 | \$10.92 | \$9.06 | \$1.04 | \$0.05 | \$0.78 | \$0.65 | \$9.71 | \$3.88 | \$5.83 | 17.08\% | 63\% |
| DENVER-AURORA \& BOULDER, CO MSA's | 82 | 24,270 | 891 | \$10.77 | \$9.37 | \$0.83 | \$0.06 | \$0.51 | \$0.65 | \$10.02 | \$3.80 | \$6.21 | 13.02\% | 62\% |
| KANSAS CITY, MO-KS | 16 | 4,211 | 920 | \$9.02 | \$8.16 | \$0.63 | \$0.06 | \$0.16 | \$0.77 | \$8.93 | \$3.59 | \$5.33 | 9.47\% | 57\% |
| ST. LOUIS, MO-IL | 12 | 4,461 | 945 | \$9.25 | \$8.09 | \$0.87 | \$0.07 | \$0.22 | \$0.62 | \$8.72 | \$3.77 | \$4.94 | 12.48\% | 64\% |
| SALT LAKE CITY, UT | 11 | 3,786 | 818 | \$9.26 | \$8.43 | \$0.54 | \$0.08 | \$0.21 | \$0.72 | \$9.16 | \$3.27 | \$5.88 | 8.98\% | 69\% |
| OTHER | 37 | 5,514 | 871 | \$8.54 | \$7.71 | \$0.51 | \$0.06 | \$0.26 | \$0.48 | \$8.19 | \$3.59 | \$4.60 | 9.76\% | 62\% |
| REGION VI | 508 | 131,380 | 871 | \$14.66 | \$13.47 | \$0.83 | \$0.07 | \$0.28 | \$0.60 | \$14.07 | \$4.89 | \$9.18 | 8.09\% | 62\% |
| LAS VEGAS-PARADISE, NV | 10 | 2,341 | 906 | \$9.43 | \$7.80 | \$0.93 | \$0.12 | \$0.59 | \$0.56 | \$8.36 | \$4.00 | \$4.36 | 17.36\% | 71\% |
| LOS ANGELES-LONG BEACH-GLENDALE, CA | 47 | 11,599 | 888 | \$19.29 | \$18.17 | \$0.81 | \$0.09 | \$0.23 | \$0.56 | \$18.73 | \$5.90 | \$12.83 | 5.82\% | 53\% |
| OAKLAND-FREEMONT-HAYWOOD, CA MSA | 21 | 5,105 | 883 | \$16.32 | \$15.19 | \$0.77 | \$0.07 | \$0.29 | \$0.40 | \$15.59 | \$5.26 | \$10.33 | 6.92\% | 60\% |
| PHOENIX-MESA-SCOTTSDALE, AZ | 77 | 21,876 | 900 | \$10.08 | \$9.16 | \$0.63 | \$0.04 | \$0.25 | \$0.65 | \$9.81 | \$3.74 | \$6.07 | 9.16\% | 68\% |
| PORTLAND-VANCOUVER-BEAVERTON, OR-WA | 30 | 8,919 | 959 | \$8.75 | \$8.01 | \$0.55 | \$0.05 | \$0.14 | \$0.55 | \$8.56 | \$3.40 | \$5.16 | 8.42\% | 66\% |
| RIVERSIDE-SAN BERNARDINO-ONTARIO, CA | 13 | 3,679 | 799 | \$14.70 | \$13.04 | \$1.09 | \$0.11 | \$0.46 | \$0.72 | \$13.76 | \$4.79 | \$8.96 | 11.29\% | 58\% |
| SACRAMENTO-ARDEN ARCADE-ROSEVILLE, CA | 15 | 3,842 | 824 | \$11.94 | \$10.61 | \$0.89 | \$0.08 | \$0.37 | \$0.46 | \$11.07 | \$4.73 | \$6.33 | 11.16\% | 61\% |
| SAN DIEGO-CARLSBAD-SAN MARCOS, CA | 34 | 8.714 | 841 | \$18.03 | \$16.68 | \$0.99 | \$0.07 | \$0.29 | \$0.67 | \$17.35 | \$5.83 | \$11.52 | 7.48\% | 67\% |
| SAN FRANCISCO-SAN MATEO-REDWOOD CITY, CA | 28 | 9,640 | 789 | \$20.48 | \$18.80 | \$1.27 | \$0.09 | \$0.31 | \$0.52 | \$19.33 | \$6.24 | \$13.09 | 8.18\% | 53\% |
| SAN JOSE-SUNNYVILLE-SANTA CLARA, CA | 15 | 3,483 | 869 | \$18.51 | \$17.30 | \$0.73 | \$0.10 | \$0.39 | \$0.31 | \$17.62 | \$5.72 | \$11.89 | 6.53\% | 56\% |
| SANTA ANA-ANAHEIM-IRVINE, CA | 111 | 28,200 | 856 | \$18.12 | \$16.63 | \$1.09 | \$0.09 | \$0.31 | \$0.63 | \$17.26 | \$5.58 | \$11.68 | 8.20\% | 57\% |
| SEATTLE-TACOMA-BELLEVUE, WA | 65 | 15,814 | 924 | \$11.61 | \$10.67 | \$0.61 | \$0.06 | \$0.28 | \$0.63 | \$11.29 | \$4.25 | \$7.04 | 8.13\% | 70\% |
| STOCKTON, CA | 10 | 1,489 | 850 | \$10.32 | \$9.44 | \$0.59 | \$0.12 | \$0.17 | \$0.39 | \$9.83 | \$4.11 | \$5.73 | 8.45\% | 63\% |
| OTHER | 32 | 6,680 | 776 | \$12.85 | \$11.89 | \$0.67 | \$0.08 | \$0.21 | \$0.77 | \$12.66 | \$4.90 | \$7.76 | 7.46\% | 64\% |

[^7]

# 2006 Survey of Operating Income and Expenses in Rental Apartment Communities 

## SURVEY STAFF

Robert J. Sheehan II, NAA Consulting Economist<br>Regis J. Sheehan \& Associates<br>Woodbridge, VA<br>Roland Freeman, CAPS, CRE, CPM<br>Capital Consultants Realty Services Inc.<br>Dallas, TX<br>\section*{Douglas S. Culkin, CAE}<br>NAA Executive Vice President, Publisher<br>Barbara A. Vassallo, Esq.<br>NAA Vice President of Government Affairs<br>NAA Income \& Expense

# 2006 Survey of Operating Income and Expenses in Rental Apartment Communities 

## ACKNOWLEDGEMENTS

The 2006 Survey of Operating Income and Expenses in Rental Apartment Communities further adds to National Apartment Association's (NAA) success in producing information valuable to its members and the apartment industry. The survey provides executives and professionals in the apartment and related industries with financial information needed to conduct their daily operations that can be used as a tool to support their strategic and business planning. NAA remains committed to improving the survey and presents more valuable revenue related data in this year's report.
I thank Barbara Vassallo, who acted as NAA's staff coordinator for the survey; Roland D. Freeman, a Past NAA President, of Capital Consultants Realty Services, and Robert J. Sheehan II, NAA's Consulting Economist, who jointly assisted in promoting responses, processing and analyzing the data, and wrote the report; Robert J. Sheehan III, of Regis J Sheehan \& Associates, for his work in developing the computer programming for tabulation of the results; Paul R. Bergeron III, Jeanine Gajewski and Kate Pierce, who edited the report; Norman Grandstaff of Ideas Communicated, who designed the report; and RE Data, the firm responsible for data input.
A special note of appreciation goes to those firms
who donated their time in accumulating the data necessary to make this survey a success. I am especially grateful to those companies and their officers who contributed data for 20 or more of their properties for the 2006 survey (listed in order of number of submissions).

- Equity Residential • AIMCO • United Dominion Realty Trust • Alliance Residential - Simpson Property Group LP • Mid-America Apartment Communities • Westdale Asset Management • AvalonBay • AMLI Residential Properties Trust • Lincoln Property Group • BRE Properties • Gables Residential Services Inc. • Milestone Management/ Walden Management Company • Forest City Management • Gables Residential Services • Tarragon Corporation • LEDIC Management Group • Post Properties • Camden Property Trust • Shelter Group/UBS • Village Green • ALCO Management • Sares-Regis Group • ZOM Management • HAI Management • Centrum Management \& Keystone Management Group • Sawyer Realty - Jupiter - BNP Residential Properties

Joe Sharp, CAPS
2006 NAA President


## 2006 Survey of Operating Income and Expenses in Rental Apartment Communities

## EXECUTIVE SUMMARY

BY ROBERT J. SHEEHAN and ROLAND FREEMAN, CAPS, CRE, CPM

## REGIONS USED IN SURVEY

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

## EXECUTIVE SUMMARY TABLE OF CONTENTS

Market Rent Properties Summary 4
Metro Area Market Rent Detailed Income and Expense Data 10
Subsidized Property Detailed Income and Expense Data 10
Glossary of Terms

To view a full survey report or individual market data visit www.naahq.org/06ies.

NAA has completed its Survey of Operating Income and Expenses in Rental Apartment Communities for 2006, based on data for 2005. Major findings in this survey of the professionally managed rental apartment industry show a distinct improvement of the economics in the market rent segment of the rental apartment market with NOI rising and the economic losses rate falling.

A total of 3,730 properties containing 933,550 units are represented in this report. Reporting of the data comprises 3,335 market rent properties containing 855,639 units and 405 subsidized properties containing 77,861 . Forms with partial data or apparent problems that could not be resolved and used were received for 221 more properties with 45,784 units.

The report presents data from four types of properties. Garden and mid-rise/high-rise structures are segmented into individually metered and master metered utilities properties.

Responses from garden properties with individually metered utilities dominate the survey, representing 78 percent of the market rent properties and 43 percent of the subsidized properties. The analysis is, therefore, centered on the garden properties with individually metered utilities.

Average sizes of the individually metered market rent garden properties are 256 units, and 216 units in subsidized units. Rentable floor area averaged 889 square feet for market rent
apartments and 887 square feet for the subsidized units.
The complete report (available online at www.naahq.org/06ies) contains detailed data summarized for six geographic regions and for metropolitan areas with at least 10 properties reported. Seventy metropolitan areas met the separate reporting requirement for market rent properties. Sufficient numbers of subsidized properties were submitted for 14 metropolitan areas.

This report also includes tables for the "other" properties in states with at least eight properties located in metro areas that did not meet requirements for separate reporting and in non-metro areas. Tables for market rent properties are given for 16 states. Data is presented in three forms: dollars per unit, dollars per square feet of rentable floor area and as a percentage of gross potential rent (GPR).

## Market Rent Properties

Economic Losses. A measure of the health of the rental housing market is economic losses. They are defined as the difference between rent revenue collected and GPR expressed as a percentage of GPR. Included in the losses are revenues lost to physical vacancies, net uncollected rents and the values of rent concessions. The economic loss rate in the survey for market rent individually metered garden properties improved significantly with a drop to 11.87 percent in the data for 2005 versus 13.99 percent for 2004 . The decline in the economic loss rate last year was the first since 2000.

## All Market Rent Properties <br> operating income \& expense data

| INDIVIDUAL METERED PROPERTIES |  |  | Total |
| :--- | ---: | ---: | ---: |
| Number of Properties | 2,768 | Garden | Mid \& Hirisise |
| Number of Units | 705,897 | 667,951 | 159 |
| Avg. No. of Units/Property | 255 | 256 | 37,946 |
| Avg. No. of Square Feet/Unit | 889 | 889 | 239 |
| Turnover rate in $\%$ | $61 \%$ | $61 \%$ | $58 \%$ |


|  | $\begin{aligned} & \text { \$ Per } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{gathered} \% \text { of } \\ \text { GPR } \end{gathered}$ | $\begin{aligned} & \text { SPer } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{gathered} \% \text { of } \\ \text { GPR } \end{gathered}$ | $\begin{aligned} & \text { \$Per } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | $\begin{gathered} \% \text { of } \\ \text { GPR } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 9,593 | 10.78 | 100.0\% | 9,450 | 10.63 | 100.0\% | 12,099 | 13.54 | 100.0\% |
| Rent Revenue Collected | 8,461 | 9.51 | 88.2\% | 8,329 | 9.37 | 88.1\% | 10,785 | 12.07 | 89.1\% |
| Losses to Vacancy | 681 | 0.77 | 7.1\% | 674 | 0.76 | 7.1\% | 792 | 0.89 | 6.5\% |
| Collection Losses | 70 | 0.08 | 0.7\% | 70 | 0.08 | 0.7\% | 70 | 0.08 | 0.6\% |
| Losses to Concessions | 381 | 0.43 | 4.0\% | 377 | 0.42 | 4.0\% | 452 | 0.51 | 3.7\% |
| Other Revenue | 549 | 0.62 | 5.7\% | 545 | 0.61 | 5.8\% | 607 | 0.68 | 5.0\% |
| Total Revenue | 9,009 | 10.13 | 93.9\% | 8,874 | 9.98 | 93.9\% | 11,392 | 12.75 | 94.2\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,006 | 1.13 | 10.5\% | 992 | 1.12 | 10.5\% | 1,244 | 1.39 | 10.3\% |
| Insurance | 191 | 0.21 | 2.0\% | 191 | 0.21 | 2.0\% | 193 | 0.22 | 1.6\% |
| Taxes | 933 | 1.05 | 9.7\% | 919 | 1.03 | 9.7\% | 1,168 | 1.31 | 9.7\% |
| Utilities | 362 | 0.41 | 3.8\% | 360 | 0.40 | 3.8\% | 404 | 0.45 | 3.3\% |
| Management Fees | 277 | 0.31 | 2.9\% | 275 | 0.31 | 2.9\% | 325 | 0.36 | 2.7\% |
| Administrative | 171 | 0.19 | 1.8\% | 168 | 0.19 | 1.8\% | 215 | 0.24 | 1.8\% |
| Marketing | 178 | 0.20 | 1.9\% | 174 | 0.20 | 1.8\% | 249 | 0.28 | 2.1\% |
| Contract Services | 315 | 0.35 | 3.3\% | 315 | 0.35 | 3.3\% | 310 | 0.35 | 2.6\% |
| Repair and Maintenance | 382 | 0.43 | 4.0\% | 381 | 0.43 | 4.0\% | 400 | 0.45 | 3.3\% |
| Total Operating Expenses | 3,815 | 4.29 | 39.8\% | 3.776 | 4.25 | 40.0\% | 4.509 | 5.05 | 37.3\% |
| Net Operating Income | 5,194 | 5.84 | 54.1\% | 5,098 | 5.73 | 53.9\% | 6,883 | 7.71 | 56.9\% |
| Capital Expenditures | 1,414 | 1.59 | 14.7\% | 1,440 | 1.62 | 15.2\% | 948 | 1.06 | 7.8\% |

## MASTER METERED PROPERTIES

|  | Total | Garden | Mid \& Hirise |
| :--- | ---: | ---: | ---: |
| Number of Properties | 587 | 482 | 125 |
| Number of Units | 149,742 | 125,488 | 24,254 |
| Avg. No. of Units/Property | 255 | 260 | 231 |
| Avg. No. of Square Feet/Unit | 904 | 900 | 921 |
| Turnover rate in $\%$ | $53 \%$ | $54 \%$ | $50 \%$ |


|  | \$ Per | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | \% of GPR | \$ Per Unit | $\begin{gathered} \text { \$Per } \\ \text { Sq. } \mathrm{Ft} . \end{gathered}$ | $\begin{gathered} \% \text { of } \\ \text { GPR } \end{gathered}$ | \$ Per Unit | $\begin{gathered} \text { \$ Per } \\ \text { Sq. Ft. } \end{gathered}$ | \% of GPR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 11,418 | 12.64 | 100.0\% | 10,202 | 11.33 | 100.0\% | 17,710 | 19.22 | 100.0\% |
| Rent Revenue Collected | 9,977 | 11.04 | 87.4\% | 8,841 | 9.82 | 86.7\% | 15,852 | 17.20 | 89.5\% |
| Losses to Vacancy | 853 | 0.94 | 7.5\% | 808 | 0.90 | 7.9\% | 1,085 | 1.18 | 6.1\% |
| Collection Losses | 99 | 0.11 | 0.9\% | 101 | 0.11 | 1.0\% | 89 | 0.10 | 0.5\% |
| Losses to Concessions | 489 | 0.54 | 4.3\% | 451 | 0.50 | 4.4\% | 683 | 0.74 | 3.9\% |
| Other Revenue | 608 | 0.67 | 5.3\% | 534 | 0.59 | 5.2\% | 993 | 1.08 | 5.6\% |
| Total Revenue | 10,585 | 11.72 | 92.7\% | 9,375 | 10.42 | 91.9\% | 16,846 | 18.28 | 95.1\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1,182 | 1.31 | 10.4\% | 1,094 | 1.22 | 10.7\% | 1,636 | 1.78 | 9.2\% |
| Insurance | 251 | 0.28 | 2.2\% | 240 | 0.27 | 2.4\% | 303 | 0.33 | 1.7\% |
| Taxes | 1,002 | 1.11 | 8.8\% | 879 | 0.98 | 8.6\% | 1,639 | 1.78 | 9.3\% |
| Utilities | 1,069 | 1.18 | 9.4\% | 1,018 | 1.13 | 10.0\% | 1,329 | 1.44 | 7.5\% |
| Management Fees | 367 | 0.41 | 3.2\% | 340 | 0.38 | 3.3\% | 508 | 0.55 | 2.9\% |
| Administrative | 230 | 0.25 | 2.0\% | 213 | 0.24 | 2.1\% | 317 | 0.34 | 1.8\% |
| Marketing | 201 | 0.22 | 1.8\% | 191 | 0.21 | 1.9\% | 250 | 0.27 | 1.4\% |
| Contract Services | 415 | 0.46 | 3.6\% | 393 | 0.44 | 3.9\% | 529 | 0.57 | 3.0\% |
| Repair and Maintenance | 529 | 0.59 | 4.6\% | 503 | 0.56 | 4.9\% | 661 | 0.72 | 3.7\% |
|  |  |  |  |  |  |  |  |  |  |
| Total Operating Expenses | 5,244 | 5.80 | 45.9\% | 4,871 | 5.41 | 47.8\% | 7,173 | 7.78 | 40.5\% |
| Net Operating Income | 5,341 | 5.91 | 46.8\% | 4,504 | 5.00 | 44.1\% | 9,673 | 10.50 | 54.6\% |
| Capital Expenditures | 3,467 | 3.84 | 30.4\% | 3,319 | 3.69 | 32.5\% | 4,233 | 4.59 | 23.9\% |

Source: National Apartment Association 2006 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2006 by National Apartment Association. This table may be used, copied, and/or distributed only in accordance with the License Agreement and may not be posted on the Internet.

Economic losses rates by region for individually metered garden properties were:

|  | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 1}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| All | $11.87 \%$ | $13.99 \%$ | $13.35 \%$ | $11.39 \%$ | $9.69 \%$ |
| Region I | $8.87 \%$ | $10.02 \%$ | $8.79 \%$ | $8.21 \%$ | $6.36 \%$ |
| Region II | $11.35 \%$ | $12.89 \%$ | $13.31 \%$ | $12.10 \%$ | $10.44 \%$ |
| Region III | $13.87 \%$ | $15.54 \%$ | $13.84 \%$ | $10.85 \%$ | $10.64 \%$ |
| Region IV | $15.39 \%$ | $16.23 \%$ | $13.98 \%$ | $11.53 \%$ | $9.90 \%$ |
| Region V | $15.14 \%$ | $19.99 \%$ | $16.33 \%$ | $12.75 \%$ | $9.16 \%$ |
| Region VI | $8.57 \%$ | $12.15 \%$ | $13.21 \%$ | $11.54 \%$ | $9.79 \%$ |

Net Operating Income and Revenues (NOI). NOI is another important measurement for evaluating the health of a property and the rental housing market. It is simply the difference between total revenue collected and total operating expenses. NOI represents the gross cash available for debt service, capital expenditures and profits. NOI in the survey also revealed the strengthening of the rental apartment market with an increase in NOI measured in percent of GPR terms in the data for 2005 to 53.9 percent from the 52.2 percent recorded in 2004 . And it was the first time in five years that NOI rose. Last year's level is still well below the survey's historical peak of 58.9 percent in 1999. Regionally, NOIs in 2005 ranged from a high of 63.4 percent in the Pacific states (Region VI) to a low of 44.2 percent in the Southwest (Region IV). The Southwest states historically have had the lowest NOI among the regions. Average NOIs for last three survey data years of individually metered garden properties were:

|  | Dollars per Unit |  |  | Dollars per Sq. Ft. |  |  | $\%$ of GPR |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2005 | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 3}$ |
| All | $\$ 5,098$ | $\$ 4,647$ | $\$ 4,627$ | $\$ 5.73$ | $\$ 5.27$ | $\$ 5.31$ | $53.9 \%$ | $52.2 \%$ | $53.1 \%$ |
| Region I | $\$ 7,317$ | $\$ 6,868$ | $\$ 6,607$ | $\$ 8.38$ | $\$ 7.72$ | $\$ 7.48$ | $61.4 \%$ | $60.2 \%$ | $60.9 \%$ |
| Region II | $\$ 4,763$ | $\$ 4,420$ | $\$ 4,401$ | $\$ 5.07$ | $\$ 4.75$ | $\$ 4.82$ | $53.7 \%$ | $52.5 \%$ | $52.7 \%$ |
| Region III | $\$ 4,038$ | $\$ 3,975$ | $\$ 4,193$ | $\$ 4.65$ | $\$ 4.48$ | $\$ 4.84$ | $48.5 \%$ | $48.7 \%$ | $50.0 \%$ |
| Region IV | $\$ 3,643$ | $\$ 3,450$ | $\$ 3,780$ | $\$ 4.35$ | $\$ 4.21$ | $\$ 4.61$ | $44.2 \%$ | $44.4 \%$ | $47.7 \%$ |
| Region V | $\$ 4,812$ | $\$ 4,708$ | $\$ 4,745$ | $\$ 5.47$ | $\$ 5.35$ | $\$ 5.43$ | $53.4 \%$ | $51.7 \%$ | $55.6 \%$ |
| Region VI | $\$ 7,780$ | $\$ 6,355$ | $\$ 6,073$ | $\$ 8.78$ | $\$ 7.30$ | $\$ 6.98$ | $63.4 \%$ | $58.7 \%$ | $58.7 \%$ |

Gross Potential Rent (GPR). GPR in the survey data tables is defined here on a post fiscal year basis. It is the sum of rent revenue collected and revenue losses, including those from vacancies, collections and concessions. A 6.2 percent increase was recorded in average GPR for garden properties with individually metered utilities in the 2005 data from a year earlier. Aver-



age GPR was $\$ 9,450$ per unit ( $\$ 788$ monthly) in this year's survey versus $\$ 8,896$ per unit ( $\$ 741$ monthly) in the previous survey. Translated into per square foot of floor area, they were \$10.63 (\$0.89 per month) versus \$10.09 (\$0.84 per month). Median GPR in the current survey is $\$ 8,459$ ( $\$ 705$ per month) versus $\$ 7,944$ ( $\$ 662$ per month a year ago). The range in 2005 went from a high of $\$ 40,923$ ( $\$ 3,410$ per month) to $\$ 3,600$ ( $\$ 300$ per month) versus \$39,952 (\$3,329 per month) to \$3,932 (\$328 per month) in the 2004 data.

Rent Revenue Collected. Rent revenue collected averaged \$7,652 per individually metered garden property unit annually in the survey, up 1.2 percent from the $\$ 7,555$ in last year's survey. Measured on a per-square-foot basis, rent revenue averaged $\$ 8.68$ per square foot, the same amount reported in the 2004 data.

Revenue Losses. Revenue losses dropped to 11.87 percent of GPR in 2005 data versus 13.99 percent of GPR for 2004 data. Data for revenue losses were reported in three categories: those caused by vacancies, collections and concessions. All three measures of revenue losses improved markedly. Vacancy losses for individually metered market rent garden properties averaged 7.1 percent of GPR in the current survey ( $\$ 674$ per unit, $\$ 0.76$ per square foot) versus 8.7 percent of GPR ( $\$ 776$ per unit, $\$ 0.88$ per square foot) a year ago. Collection losses averaged 0.7 percent of GPR ( $\$ 70$ per unit, $\$ 0.08$ per square foot) in comparison to 0.9




percent of GPR ( $\$ 76$ per unit, $\$ 0.09$ per square foot) for 2004 data. And losses from rent concessions averaged 4.0 percent of GPR ( $\$ 377$ per unit in the property, $\$ 0.42$ per square foot) versus 4.4 percent of GPR ( $\$ 339$ per unit in the property, $\$ 0.39$ per square foot).

Other Revenue Collected. Other revenue collected from operating sources includes receipts from onsite laundries, cable, telephone systems, parking fees and other charges for services and amenities. These other operating revenues averaged $\$ 545$ per unit ( $\$ 0.61$ per square foot) for individually metered garden properties reported in the survey, up from the $\$ 502$ per unit ( $\$ 0.57$ per square foot) a year earlier. Other non-rent operating revenues ranged from none to $\$ 9,374$ per unit. Median other operating revenues were $\$ 434$ per unit.

Total Operating Expenses. Total operating expenses last year rose at the highest rate in the history of the survey. Total operating expenses for individually metered garden properties in the survey averaged $\$ 3,776$ per unit ( $\$ 4.25$ per square foot) up 7.6 percent from the $\$ 3,507$ per unit ( $\$ 3.98$ per square foot) in 2004. The total represented 40 percent of GPR versus 39.4 percent a year earlier.

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), utilities (net of any reimbursements from residents), management fees, administration, marketing, contract services and repair and maintenance.
(Non-recurring capital expenses were excluded and reported separately.)

Almost all categories of operating costs increased markedly. The two largest increases were in repair and maintenance costs and real estate taxes. Repair and maintenance costs rose 23.3 percent to $\$ 381$ per unit in the 2005 survey from $\$ 309$ per unit in 2004 ( 4 percent of GPR versus 4.4 percent a year earlier). Real estate and related taxes increased 10.3 percent to $\$ 919$ from $\$ 883$ a year earlier. Property related insurance costs stabilized after falling a year ago. They dropped to $\$ 191$ per unit ( $\$ 0.21$ per square foot) from $\$ 192$ per unit ( $\$ 0.22$ per square foot). Management fees declined 1.1 percent to $\$ 275$ per unit from $\$ 278$.

Turnover Rates. Turnover rates declined slightly to 61 per-
cent of total units among the individually metered garden apartment properties reported in the survey for 2005 from 62 percent in 2004. The range in turnover rates has been from 59 percent to 69 percent over the history of this survey. The low occurred in the data for 1995 and the high during the recession year of 1990. Decreases in the turnover rates last year occurred in the Northeast (Region I) 53 percent versus 57 percent, Southeast (Region II), 60 percent versus 61 percent and the Mountain/South Midwest States (Region V) 61 percent versus 65 percent. They increased in the North Midwest (Region III) to 59 percent versus 56 percent. No changes were recorded in the Pacific (Region VI) at 65 percent and the Southwest (Region IV) at 64 percent.
Age of Property. Operating expenses on a percentage of GPR basis rise as properties age. They were 36.8 percent of GPR in properties less than five years old and rose to 43.0 percent for properties 20 or more years old. Significantly higher rents in newer properties produce a reverse pattern in operating expenses measured in dollars per unit and per square foot. They increased from $\$ 3,575$ per unit for properties 20 or more years old to $\$ 4,469$ per unit for those less than five years old. GPR per unit increased from a low of $\$ 8,321$ per unit ( $\$ 9.39$ per square foot) in the oldest property category to $\$ 11,773$ per unit ( $\$ 11.93$ per square foot) in the newest group.

Average NOI in terms of percentages of GPR was the lowest for the oldest properties reported at 50 percent for those that were 20 or more years old. The other three categories of age properties had NOIs of approximately 57 percent. Measured in terms of dollars per unit, NOIs rose with age. The low was $\$ 4,160$ per unit in properties that were 20 or more years old and the high was $\$ 6,913$ for properties less than five years old. Spreads in rent levels account for most of the pattern of dollar levels per unit in NOIs.

Economic losses continue to be the highest among the newest properties. Properties less than five years old reported the highest ratio of economic losses at 15.55 percent of GPR and the lowest in those that are 10 to 19 years old at 12.63 percent.
Age of properties groupings show some distinct differences in the individual cost components of operating costs. The largest difference is in real estate and related property taxes and fees. They varied from a high average of $\$ 1,482$ per unit ( $\$ 1.54$ per square foot) in those properties less than five years old to a low of $\$ 827$ ( $\$ 0.94$ per square foot) for those aged 20 or more years.

Capital expenditures were significantly lower for the newest properties. They averaged $\$ 469$ per unit ( $\$ 0.49$ per square foot) for those properties less than five years old. The highest average was reported for properties 20 or more years old at $\$ 3,835$ per unit (\$4.34 per square foot).


# Operating Expenses by Age and Size of Property individually metered market rent garden properties 

|  | Salary \& Personnel Costs | Insurance | Taxes | Utilities | Mgmt. Fees | Admin. | Mrktg. | Contract Services | $\begin{array}{r} \text { Repair } \\ \& \\ \text { Maint. } \end{array}$ | Total Operating Expenses | Capital <br> Expend. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age of Property |  |  |  |  |  |  |  |  |  |  |  |
| Dollars Per Unit |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years old | \$1,052 | \$225 | \$1,287 | \$358 | \$344 | \$220 | \$331 | \$322 | \$329 | \$4,469 | \$432 |
| 5 to 9 years old | \$1,055 | \$210 | \$1,281 | \$325 | \$286 | \$190 | \$198 | \$346 | \$342 | \$4,232 | \$503 |
| 10 to 19 years | \$1,012 | \$179 | \$973 | \$322 | \$278 | \$150 | \$165 | \$309 | \$388 | \$3,777 | \$1,143 |
| 20 or more years | \$959 | \$188 | \$738 | \$395 | \$266 | \$168 | \$161 | \$307 | \$393 | \$3,575 | \$1,975 |
| Dollars Per Square Foot |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years old | \$1.00 | \$0.21 | \$1.22 | \$0.34 | \$0.33 | \$0.21 | \$0.31 | \$0.31 | \$0.31 | \$4.24 | \$0.41 |
| 5 to 9 years old | \$1.06 | \$0.21 | \$1.28 | \$0.33 | \$0.29 | \$0.19 | \$0.20 | \$0.35 | \$0.34 | \$4.24 | \$0.50 |
| 10 to 19 years | \$1.11 | \$0.20 | \$1.07 | \$0.35 | \$0.31 | \$0.17 | \$0.18 | \$0.34 | \$0.43 | \$4.16 | \$1.26 |
| 20 or more years | \$1.15 | \$0.23 | \$0.89 | \$0.48 | \$0.32 | \$0.20 | \$0.19 | \$0.37 | \$0.47 | \$4.30 | \$2.38 |
| Percent of Gross Potential Rent |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years old | 8.7\% | 1.9\% | 10.6\% | 3.0\% | 2.8\% | 1.8\% | 2.7\% | 2.7\% | 2.7\% | 36.8\% | 0.0\% |
| 5 to 9 years old | 9.3\% | 1.8\% | 11.3\% | 2.9\% | 2.5\% | 1.7\% | 1.7\% | 3.0\% | 3.0\% | 37.2\% | 4.4\% |
| 10 to 19 years | 10.1\% | 1.8\% | 9.7\% | 3.2\% | 2.8\% | 1.5\% | 1.6\% | 3.1\% | 3.9\% | 37.6\% | 11.4\% |
| 20 or more years | 11.5\% | 2.3\% | 8.9\% | 4.7\% | 3.2\% | 2.0\% | 1.9\% | 3.7\% | 4.7\% | 43.0\% | 23.7\% |
| Percent of Total Operating Costs |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years old | 23.5\% | 5.0\% | 28.8\% | 8.0\% | 7.7\% | 4.9\% | 7.4\% | 7.2\% | 7.4\% | 100.0\% |  |
| 5 to 9 years old | 24.9\% | 5.0\% | 30.3\% | 7.7\% | 6.8\% | 4.5\% | 4.7\% | 8.2\% | 8.1\% | 100.0\% |  |
| 10 to 19 years | 26.8\% | 4.7\% | 25.8\% | 8.5\% | 7.4\% | 4.0\% | 4.4\% | 8.2\% | 10.3\% | 100.0\% |  |
| 20 or more years | 26.8\% | 5.3\% | 20.6\% | 11.0\% | 7.4\% | 4.7\% | 4.5\% | 8.6\% | 11.0\% | 100.0\% |  |


| Size of Property |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | \$919 | \$151 | \$580 | \$208 | \$277 | \$153 | \$121 | \$293 | \$318 | \$3,021 | \$951 |
| 100 to 249 units | \$1,056 | \$202 | \$871 | \$382 | \$284 | \$195 | \$186 | \$329 | \$411 | \$3,916 | \$1,546 |
| 250 to 499 units | \$984 | \$191 | \$951 | \$361 | \$275 | \$160 | \$178 | \$309 | \$375 | \$3,784 | \$1,384 |
| More than 500 units | \$944 | \$184 | \$975 | \$369 | \$261 | \$160 | \$157 | \$316 | \$368 | \$3,733 | \$1,550 |
| Dollars Per Square Foot |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | \$1.28 | \$0.21 | \$0.81 | \$0.29 | \$0.39 | \$0.21 | \$0.17 | \$0.41 | \$0.45 | \$4.22 | \$1.33 |
| 100 to 249 units | \$1.19 | \$0.23 | \$0.98 | \$0.43 | \$0.32 | \$0.22 | \$0.21 | \$0.37 | \$0.46 | \$4.40 | \$1.74 |
| 250 to 499 units | \$1.08 | \$0.21 | \$1.05 | \$0.40 | \$0.30 | \$0.18 | \$0.20 | \$0.34 | \$0.41 | \$4.16 | \$1.52 |
| More than 500 units | \$1.09 | \$0.21 | \$1.12 | \$0.43 | \$0.30 | \$0.18 | \$0.18 | \$0.36 | \$0.42 | \$4.30 | \$1.79 |
| Percent of Gross Potential Rent |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | 12.9\% | 2.1\% | 8.2\% | 2.9\% | 3.9\% | 2.2\% | 1.7\% | 4.1\% | 4.5\% | 42.5\% | 13.4\% |
| 100 to 249 units | 11.1\% | 2.1\% | 9.1\% | 4.0\% | 3.0\% | 2.0\% | 1.9\% | 3.4\% | 4.3\% | 41.0\% | 16.2\% |
| 250 to 499 units | 10.2\% | 2.0\% | 9.9\% | 3.8\% | 2.9\% | 1.7\% | 1.9\% | 3.2\% | 3.9\% | 39.3\% | 14.4\% |
| More than 500 units | 9.9\% | 1.9\% | 10.3\% | 3.9\% | 2.7\% | 1.7\% | 1.6\% | 3.3\% | 3.9\% | 39.3\% | 16.3\% |
| Percent of Total Operating Costs |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | 30.4\% | 5.0\% | 19.2\% | 6.9\% | 9.2\% | 5.1\% | 4.0\% | 9.7\% | 10.5\% | 100.0\% |  |
| 100 to 249 units | 27.0\% | 5.1\% | 22.3\% | 9.8\% | 7.3\% | 5.0\% | 4.7\% | 8.4\% | 10.5\% | 100.0\% |  |
| 250 to 499 units | 26.0\% | 5.0\% | 25.1\% | 9.5\% | 7.3\% | 4.2\% | 4.7\% | 8.2\% | 9.9\% | 100.0\% |  |
| More than 500 units | 25.3\% | 4.9\% | 26.1\% | 9.9\% | 7.0\% | 4.3\% | 4.2\% | 8.5\% | 9.9\% | 100.0\% |  |

Source: National Apartment Association 2006 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2006 by National Apartment Association. This table may be used, copied, and/or distributed only in accordance with the License Agreement and may not be posted on the Internet.

Size of Property. Presence of scale economies in apartment properties would be evident if operating costs were to 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. They drop from 42.5 percent of GPR in properties with less than 100 units to a low of 39.3 percent in those containing 500 or more units. The survey results, however, did not show scale economies on a cost per unit basis. The lowest
operating costs, at $\$ 3,021$ per unit, were in the smallest proper-ties-those with fewer than 100 units. The highest operating costs occurred in properties with 100 to 249 units at $\$ 3,916$ per unit.

Economic losses did not vary widely based on property size. They were highest with properties with 500 or more units at 12.51 percent of GPR and the lowest for properties with fewer than 100 units at 11.25 percent.

# Revenues and NOI by Age and Size of Property INDIVIDUALLY METERED MARKET RENT GARDEN PROPERTIES 

| AGE OF PROPERTY | Dollars Per Unit |  |  |  | Dollars Per Square Foot |  |  |  | Percent of Gross Potential Rent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Less } \\ & \text { Than } 5 \\ & \text { Years } \end{aligned}$ | $\begin{array}{r} 5 \\ \text { to } 9 \\ \text { Years } \end{array}$ | $\begin{array}{r} 10 \\ \text { to } 19 \\ \text { Years } \end{array}$ | $\begin{aligned} & 20 \text { or } \\ & \text { more } \\ & \text { Years } \end{aligned}$ | $\begin{aligned} & \text { Less } \\ & \text { Than } 5 \\ & \text { Years } \end{aligned}$ | $\begin{array}{r} 5 \\ \text { to } 9 \\ \text { Years } \end{array}$ | $\begin{array}{r} 10 \\ \text { to } 19 \\ \text { Years } \end{array}$ | $\begin{aligned} & 20 \text { or } \\ & \text { more } \\ & \text { Years } \end{aligned}$ | $\begin{aligned} & \text { Less } \\ & \text { Than } 5 \\ & \text { Years } \end{aligned}$ | $\begin{array}{r} 5 \\ \text { to } 9 \\ \text { years } \end{array}$ | $\begin{array}{r} 10 \\ \text { to } 19 \\ \text { Years } \end{array}$ | $\begin{aligned} & 20 \text { or } \\ & \text { more } \\ & \text { Years } \end{aligned}$ |
| No. of Properties | 85 | 367 | 700 | 1501 | 85 | 367 | 700 | 1501 | 85 | 367 | 700 | 1501 |
| No. of Units | 24,026 | 115,408 | 193,921 | 344,082 | 24,026 | 115,408 | 193,921 | 344,082 | 24,026 | 115,408 | 193,921 | 344,082 |
| Avg. No. of Units/Property | 283 | 314 | 277 | 229 | 283 | 314 | 277 | 229 | 283 | 314 | 277 | 229 |
| Avg. No. of Square Feet/Unit | 1,054 | 998 | 908 | 831 | 1,054 | 998 | 908 | 831 | 1,054 | 998 | 908 | 831 |
| Turnover Rate in \% | 60\% | 64\% | 62\% | 60\% | 60\% | 64\% | 62\% | 60\% | 60\% | 64\% | 62\% | 60\% |
| Gross Potential Rent | \$12,136 | \$11,370 | \$10,039 | \$8,321 | \$11.52 | \$11.39 | \$11.05 | \$10.02 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Rent Revenue Collected | \$10,249 | \$10,096 | \$8,972 | \$7,262 | \$9.73 | \$10.11 | \$9.88 | \$8.74 | 84.4\% | 88.8\% | 89.4\% | 87.3\% |
| Losses to Vacancies | \$957 | \$744 | \$656 | \$645 | \$0.91 | \$0.75 | \$0.72 | \$0.78 | 7.9\% | 6.5\% | 6.5\% | 7.8\% |
| Losses to Collections | \$87 | \$53 | \$65 | \$78 | \$0.08 | \$0.05 | \$0.07 | \$0.09 | 0.7\% | 0.5\% | 0.6\% | 0.9\% |
| Losses to Concessions | \$844 | \$478 | \$346 | \$336 | \$0.80 | \$0.48 | \$0.38 | \$0.40 | 7.0\% | 4.2\% | 3.4\% | 4.0\% |
| Other Revenue Collected | \$1,134 | \$640 | \$539 | \$473 | \$1.08 | \$0.64 | \$0.59 | \$0.57 | 9.3\% | 5.6\% | 5.4\% | 5.7\% |
| Total Revenue Collected | \$11,382 | \$10,735 | \$9,512 | \$7,735 | \$10.80 | \$10.75 | \$10.47 | \$9.31 | 93.8\% | 94.4\% | 94.7\% | 93.0\% |
| Total Operating Expenses | \$4,469 | \$4,232 | \$3,777 | \$3,575 | \$4.24 | \$4.24 | \$4.16 | \$4.30 | 36.8\% | 37.2\% | 37.6\% | 43.0\% |
| Net Operating Income | \$6,913 | \$6,503 | \$5,735 | \$4,160 | \$6.56 | \$6.51 | \$6.31 | \$5.01 | 57.0\% | 57.2\% | 57.1\% | 50.0\% |
| Economic Vacancy Rates (\%) | 15.55\% | 11.21\% | 10.63\% | 12.73\% | 15.55\% | 11.21\% | 10.63\% | 12.73\% | 15.55\% | 11.21\% | 10.63\% | 12.73\% |


| SIZE OF PROPERTY | Dollars Per Unit |  |  |  | Dollars Per Square Foot |  |  |  | Percent of Gross Potential Rent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { Less } \\ \text { than } 100 \\ \text { units } \end{array}$ | $\begin{array}{r} 100 \\ \text { to } 249 \\ \text { units } \end{array}$ | $\begin{array}{r} 250 \\ \text { to } 499 \\ \text { units } \end{array}$ | $\begin{array}{r} 500 \\ \text { or more } \\ \text { units } \end{array}$ | $\begin{array}{r} \text { Less } \\ \text { than } 100 \\ \text { units } \end{array}$ | $\begin{array}{r} 100 \\ \text { to } 249 \\ \text { units } \end{array}$ | $\begin{array}{r} 250 \\ \text { to } 499 \\ \text { units } \end{array}$ | $\begin{array}{r} 500 \\ \text { or more } \\ \text { units } \end{array}$ | $\begin{array}{r} \text { Less } \\ \text { than } 100 \\ \text { units } \end{array}$ | $\begin{array}{r} 100 \\ \text { to } 249 \\ \text { units } \end{array}$ | $\begin{array}{r} 250 \\ \text { to } 499 \\ \text { units } \end{array}$ | $\begin{array}{r} 500 \\ \text { or more } \\ \text { units } \end{array}$ |
| No. of Properties | 437 | 983 | 1081 | 152 | 437 | 1007 | 988 | 131 | 437 | 1007 | 988 | 131 |
| No. of Units | 30,604 | 176,622 | 369,125 | 101,086 | 30,300 | 179,419 | 329,686 | 89,113 | 30,300 | 179,419 | 329,686 | 89,113 |
| Avg. No. of Units/Property | 70 | 180 | 341 | 665 | 69 | 178 | 334 | 680 | 69 | 178 | 334 | 680 |
| Avg. No. of Square Feet/Unit | 715 | 889 | 910 | 867 | 682 | 891 | 897 | 873 | 682 | 891 | 897 | 873 |
| Turnover Rate in \% | 63\% | 62\% | 62\% | 60\% | 65\% | 62\% | 62\% | 58\% | 65\% | 62\% | 62\% | 58\% |
| Gross Potential Rent | \$7,108 | \$9,544 | \$9,617 | \$9,502 | \$9.94 | \$10.73 | \$10.95 | \$10.23 | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Rent Revenue Collected | \$6,309 | \$8,440 | \$8,468 | \$8,313 | \$8.82 | \$9.49 | \$9.58 | \$8.76 | 88.7\% | 88.4\% | 88.1\% | 87.5\% |
| Losses to Vacancies | \$527 | \$653 | \$676 | \$762 | \$0.74 | \$0.73 | \$0.88 | \$0.95 | 7.4\% | 6.8\% | 7.0\% | 8.0\% |
| Losses to Collections | \$79 | \$82 | \$68 | \$57 | \$0.11 | \$0.09 | \$0.07 | \$0.09 | 1.1\% | 0.9\% | 0.7\% | 0.6\% |
| Losses to Concessions | \$194 | \$369 | \$405 | \$370 | \$0.27 | \$0.42 | \$0.43 | \$0.44 | 2.7\% | 3.9\% | 4.2\% | 3.9\% |
| Other Revenue Collected | \$411 | \$533 | \$584 | \$455 | \$0.57 | \$0.60 | \$0.52 | \$0.54 | 5.8\% | 5.6\% | 6.1\% | 4.8\% |
| Total Revenue Collected | \$6,720 | \$8,973 | \$9,053 | \$8,768 | \$9.39 | \$10.09 | \$10.11 | \$9.30 | 94.5\% | 94.0\% | 94.1\% | 92.3\% |
| Total Operating Expenses | \$3,021 | \$3,916 | \$3,784 | \$3,733 | \$4.22 | \$4.40 | \$4.30 | \$3.94 | 42.5\% | 41.0\% | 39.3\% | 39.3\% |
| Net Operating Income | \$3,699 | \$5,057 | \$5,268 | \$5,035 | \$5.17 | \$5.69 | \$5.79 | \$5.80 | 52.0\% | 53.0\% | 54.8\% | 53.0\% |
| Economic Vacancy Rates (\%) | 11.25\% | 11.57\% | 11.94\% | 12.51\% | 11.25\% | 11.57\% | 12.51\% | 14.41\% | 11.25\% | 11.57\% | 11.94\% | 12.51\% |

Source: National Apartment Association 2006 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2006 by National Apartment Association. This table may be used, copied, and/or distributed only in accordance with the License Agreement and may not be posted on the Internet.

Individually Versus Master Metered Utilities. Comparisons of individually versus master metered utilities market rent garden properties for selected data was done for the first time in this year's survey. It provides another perspective of the data. Tabulations were done for all properties, regions and 18 metro areas

that had reporting of at least eight master metered garden properties.

Master metered properties overall and in most regions and metro areas fared less well economically than individually metered properties. Master metered garden properties had a 13.3 percent economic losses rate versus 11.9 percent for those that are individually metered. The comparison for NOI was 44.1 percent of GPR versus 53.9 percent. The relative dollars per unit and per square foot showed the same relative patterns. These results occurred despite the fact that the master metered properties had higher rents. Significantly higher operating costs in almost all categories were the reason that NOI was lower for master metered properties. The utility costs were the most pronounced among the individual categories with an $\$ 1,018$ aver-
age for master metered properties versus $\$ 360$ for individually metered properties.

Training Budgets. Training budget data was collected this year as the special survey topic. The question asked for training budget amounts for each property. Data were submitted for 994 properties by 166 firms. Another 101 firms reported that they did not have training budgets. One respondent reported that the firm budgeted $\$ 275$ per associate for training, but did not give the number of employees at each community.

Two series of tabulations were done with the data. One involved calculating ranges, medians and averages for all properties reporting and for individually metered garden properties. The second gives the same basic calculations for six groupings of numbers of units in the properties. There was not enough reporting of numbers of personnel working on properties to do calculations of budgets per employee.

Reporting properties showed a wide range of amounts of training budgets. The range was $\$ 7$ to $\$ 19,805$ per property, with a median of $\$ 1,276$ and an average of $\$ 2,221$. The average on a per unit basis was $\$ 8.89$, and the median was $\$ 5.46$. The training budgets averaged 0.09 percent and had a median of 0.06 percent. Training budgets tended to increase, as would be expected, on a per property basis as the size grouping rose, and the reverse occurred on a per unit basis.

## Metro Area Detailed Operating Income and Expense Data

Detailed tables in the report are presented for the 70 metropolitan areas for which a total of 10 properties of all types were reported in the survey. This is the only section of the report with metropolitan area data for garden, mid-rise and high-rise building properties and further segmented into those with utilities that were either individually 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 some highlights of the metropolitan area data. They are limited to garden properties with individually metered utilities in metropolitan areas with at least 10 properties of this type reported, unless otherwise noted.

- NOIs on a dollar-per-unit basis ranged from $\$ 11,131$ ( $\$ 12.58$ per square foot) in San Francisco-San Mateo-Redwood City metro area to a low of $\$ 2,941$ ( $\$ 3.15$ per square foot) in the Memphis metro area. The Los Angeles-Long Beach-Glendale metro area, however, had the highest NOI on a per square foot basis at $\$ 12.88$. Virginia Beach-Norfolk-Newport News had the high NOI when measured in percentage of GPR terms at 67.9 percent and Memphis, the low at 40.1 percent.
- GPR averages were the highest in the San Francisco-San Mateo-Redwood City metro area at $\$ 17,307$ per unit ( $\$ 19.56$ per square foot). A low of $\$ 6,417$ per unit ( $\$ 8.50$ per square foot) was tabulated for properties reported from Dayton, Ohio.
- Economic losses were lowest in Norfolk-Virginia BeachNewport News metro area at 5.46 percent and Savannah, Ga., at 6.76 percent. Both, however, have small numbers of individually metered garden properties reported. Metro areas with the highest economic losses were Colorado Springs at 25.26 percent and Denver-Boulder at 21.44 percent.
- Total operating costs highs and lows vary among metro areas based on which measure is selected. Properties reporting from San Francisco-San Mateo-Redwood City metro area had the highest operating costs based on a per unit basis at \$5,073 ( $\$ 5.73$ per square foot) followed by Boston-Cambridge-Quincy at $\$ 5,005$ per unit ( $\$ 5.45$ per square foot). The highs measured on a square foot basis were New Haven-Milford at $\$ 5.89$ and Los An-geles-Long Beach-Glendale at $\$ 5.83$. A low of $\$ 2,566$ per unit ( $\$ 4.34$ per square foot) in Cleveland-Elyria-Mentor and Dayton at $\$ 2,762$ per unit ( $\$ 4.13$ per square foot). Measured on a square foot basis, the lows were $\$ 3.22$ in Cincinnati-Middleton and Greensboro-Winston-Salem-High Point.
- Real estate taxes increased significantly in many metro areas last year and did have an impact on the rankings for this category of costs. West Palm Beach-Boca Raton-Boynton Beach moved to the top of the list at $\$ 1,755$ per unit followed by Chicago at \$1,693 per unit. (Chicago was also second in the data for 2004.) The lowest averages were for properties located in the Louisville and Lexington, Ky., metro areas at \$363 and \$406, respectively.
- Insurance costs on a per unit basis were the highest at \$369 ( $\$ 0.43$ per square foot) in Cape Coral-Fort Myers, Fla., and \$303 ( $\$ 0.29$ per square foot) in Sarasota-Bradenton-Venice, Fla. This is not surprising because these two metros are located in hurri-cane-prone areas. They were the lowest in Cleveland-Elyria-Mentor at $\$ 92$ per unit ( $\$ 0.16$ per square foot) and Minneapolis-St. Paul at $\$ 122$ per unit ( $\$ 0.12$ per square foot).
- Salaries and personnel costs were the lowest in the Sarasota-Bradenton-Venice metro area at $\$ 805$ per unit ( $\$ 1.03$ per square foot) and Chattanooga, Tenn., at $\$ 814$ ( $\$ 0.83$ per square foot) Oakland-Freemont-Haywood, Calif., had the highest average at $\$ 1,444$ per unit ( $\$ 1.65$ per square foot) followed by the $\$ 1,430$ in San Francisco-San Mateo-Redwood City ( $\$ 1.59$ per square foot).
- Cincinnati had the largest units among the metro areas reported separately in this report with an average of 1,086 square feet of floor area per unit. West Palm Beach-Boca Raton-Boynton Beach had the second-largest average size units at 1,038 square feet. Properties reporting from Cleveland had the low average at 591 square feet per unit.
- Metropolitan areas with the most garden properties reporting that were individually metered were Dallas (219), Atlanta (196) and Houston (119).


## Subsidized Properties Income and Expense Summary

Operating Income and Expense Summary. Data were received for 405 subsidized properties containing 77,861 units. Garden properties with individually metered utilities represent the largest subgroup of properties reporting, and analysis here will be limited to them. (Analysis of other subsidized properties can be found at www.naahq.org/06ies.) Data tables are presented for 23 metropolitan areas that met the 10-property minimum for separate reporting.

Subsidized garden apartment properties with individually metered utilities tend to have fewer units and less floor area than market rent units. They contained an average of 216 units versus 256 units for market rent properties of the same type. These subsidized properties had an average of 887 square feet of floor area

METROPOLITAN AREAS
INDIVIDUALLY METERED MARKET RENT GARDEN PROPERTIES

|  | 2006 Survey |  |  |  |  |  | 2005 Survey |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total No. of Properties | Total No. of Units | Average Sq. Ft. Per Unit | Turnover Rate | Operating Income NOI (1) | $\begin{gathered} \text { Economic } \\ \text { Losses } \\ \text { as a \% } \end{gathered}$ | $\begin{gathered} \text { Economic } \\ \text { Losses } \\ \text { as a \% } \end{gathered}$ | Operating Income NOI (1) | Turnover Rate | Total <br> No. of Properties | Total No. of Units | Average Sq. Ft. Per Unit |
| TOTAL MARKET RENT | 2,609 | 667,951 | 889 | 61\% | 53.9\% | 11.87\% | 13.99\% | 52.2\% | 62\% | 2,563 | 628,518 | 882 |
| REGION I | 195 | 43,996 | 873 | 53\% | 61.4\% | 8.87\% | 10.03\% | 60.2\% | 57\% | 198 | 48,788 | 890 |
| BALTIMORE-TOWSON, MD | 40 | 8,242 | 787 | 35\% | 59.5\% | 7.32\% | 9.55\% | 60.6\% | 57\% | 29 | 6,265 | 854 |
| BOSTON-CAMBRIDGE-QUINCY, MA-NH | 12 | 2,869 | 918 | 63\% | 57.7\% | 11.97\% | 12.83\% | 55.9\% | 55\% | 11 | 3,030 | 951 |
| HARTFORD-WEST HARTFORD-EAST HARTFORD, CT | 3 | 825 | 1,027 | 48\% | 52.4\% | 10.28\% | 10.55\% | 59.5\% | 54\% | 9 | 1,794 | 951 |
| NEW HAVEN-MILFORD, CT | 16 | 2,294 | 781 | 55\% | 53.2\% | 10.02\% | 8.46\% | 55.7\% | 50\% | 12 | 1,480 | 694 |
| NEW YORK, NY | 6 | 1,829 | 849 | 52\% | 58.7\% | 7.17\% | N/A | N/A | N/A | N/A | N/A | N/A |
| NORTHERN NEW JERSEY MSA'S | 3 | 1,250 | 947 | 55\% | 65.3\% | 6.20\% | 10.32\% | 62.5\% | 52\% | 8 | 3,168 | 725 |
| PHILADELPHIA-CAMDEN-WILMINGTON, PA-NJ-DE-MD | 4 | 776 | 781 | 51\% | 55.9\% | 8.94\% | 10.58\% | 62.5\% | 48\% |  | 748 | 831 |
| PITTSBURGH, PA | 11 | 1,258 | 810 | 47\% | 57.1\% | 11.79\% | 9.26\% | 57.0\% | 49\% | 9 | 833 | 754 |
| RICHMOND, VA | 16 | 5,194 | 846 | 56\% | 56.6\% | 11.78\% | 10.63\% | 53.5\% | 60\% | 22 | 7,012 | 902 |
| VIRGINIA BEACH-NORFOLK-NEWPORT NEWS, VA-NC | 10 | 2,703 | 954 | 64\% | 67.9\% | 6.17\% | 5.46\% | 66.0\% | 63\% | 13 | 4,446 | 980 |
| WASHINGTON-ARLINGTON-ALEXANDRIA, DC-MD-VA-WV | V 45 | 12,549 | 895 | 56\% | 65.0\% | 8.56\% | 10.11\% | 62.8\% | 57\% | 52 | 14,508 | 893 |
| OTHER | 29 | 4,207 | 972 | 59\% | 63.9\% | 9.70\% | 10.72\% | 57.9\% | 62\% | 21 | 3,596 | 975 |
| REGION II | 936 | 235,517 | 939 | 60\% | 53.7\% | 11.35\% | 12.99\% | 52.5\% | 61\% | 883 | 211,866 | 931 |
| ATLANTA-SANDY SPRINGS-MARIETTA, GA | 196 | 57,586 | 1,013 | 61\% | 51.9\% | 14.87\% | 16.79\% | 49.7\% | 61\% | 140 | 37,651 | 1,000 |
| CAPE CORAL-FORT MYERS, FL | 10 | 1,993 | 861 | 67\% | 55.9\% | 6.04\% | N/A | N/A | N/A | N/A | N/A | N/A |
| CHARLOTTE-GASTONIO-CONCORD, NC-SC | 52 | 12,304 | 962 | 60\% | 55.0\% | 10.79\% | 13.16\% | 50.5\% | 63\% | 47 | 12,724 | 947 |
| CHATTANOOGA, TN-GA | 10 | 1,670 | 979 | 46\% | 61.5\% | 13.37\% | N/A | N/A | N/A | N/A | N/A | N/A |
| COLUMBIA, SC | 17 | 4,981 | 806 | 67\% | 49.9\% | 10.61\% | 14.92\% | 47.6\% | 67\% | 21 | 5,636 | 940 |
| DAYTONA, FL | 12 | 1,196 | 743 | 65\% | 50.7\% | 11.04\% | 8.42\% | 56.1\% | 63\% | 12 | 1,196 | 743 |
| FT. LAUDERDALE-POMPA.BEACH-DEERFIELD BEACH, FL | 10 | 3,749 | 865 | 57\% | 65.8\% | 7.34\% | 9.97\% | 57.6\% | 59\% | 9 | 3,315 | 937 |
| GREENSBORO-WINSTON-SALEM-HIGH POINT, NC | 29 | 6,323 | 938 | 59\% | 56.3\% | 10.97\% | 12.88\% | 51.9\% | 57\% | 42 | 9,119 | 924 |
| GREENVILLE, SC | 16 | 3,496 | 949 | 59\% | 47.3\% | 14.06\% | 12.03\% | 50.2\% | 63\% | 24 | 5,579 | 907 |
| JACKSONVILLE, FL MSA | 50 | 14,050 | 923 | 58\% | 54.6\% | 9.99\% | 11.46\% | 55.8\% | 60\% | 58 | 15,446 | 917 |
| KNOXVILLE, TN | 10 | 1,684 | 923 | 59\% | 64.9\% | 10.20\% | 16.66\% | 40.0\% | 59\% | 11 | 2,049 | 919 |
| LEXINGTON-FAYETTE, KY | 18 | 3,327 | 834 | 55\% | 51.7\% | 13.33\% | 15.06\% | 51.7\% | 51\% | 16 | 2,313 | 816 |
| LOUISVILLE, KY-IN | 17 | 2,620 | 801 | 59\% | 50.5\% | 18.03\% | 18.18\% | 51.0\% | 59\% | 17 | 2,996 | 830 |
| MACON, GA | 15 | 1,983 | 925 | 57\% | 48.1\% | 10.48\% | 9.48\% | 51.5\% | 55\% | 14 | 1,850 | 918 |
| MEMPHIS, TN-AR | 48 | 14,020 | 933 | 51\% | 40.1\% | 15.49\% | 17.52\% | 39.9\% | 39\% | 22 | 8,669 | 877 |
| MIAMI-MIAMI BEACH-KENDALL, FL | 29 | 6,909 | 953 | 60\% | 58.4\% | 6.02\% | 9.16\% | 56.7\% | 58\% | 33 | 7,117 | 941 |
| NASHVILLE,TN | 37 | 11,228 | 861 | 64\% | 54.4\% | 11.29\% | 11.27\% | 57.0\% | 65\% | 33 | 10,303 | 914 |
| ORLANDO, FL | 69 | 18,539 | 954 | 65\% | 58.6\% | 7.27\% | 11.35\% | 55.2\% | 67\% | 67 | 17,373 | 950 |
| RALEIGH-DURHAM, NC MSA's | 50 | 13,968 | 921 | 58\% | 50.3\% | 13.57\% | 15.13\% | 49.7\% | 61\% | 51 | 13,560 | 924 |
| SARASOTA-BRADENTON-VENICE, FL | 12 | 2,429 | 780 | 70\% | 57.7\% | 8.02\% | 11.63\% | 54.5\% | 66\% | 10 | 1,924 | 932 |
| SAVANNAH, GA | 10 | 1,423 | 863 | 74\% | 55.5\% | 11.72\% | 6.76\% | 61.8\% | 75\% | 9 | 1,348 | 860 |
| TALLAHASSEE, FL | 11 | 2,170 | 841 | 68\% | 51.8\% | 14.56\% | N/A | N/A | N/A | N/A | N/A | N/A |
| TAMPA-ST. PETERSBURG-CLEARWATER, FL | 51 | 14,031 | 891 | 63\% | 58.0\% | 7.14\% | 10.36\% | 55.6\% | 64\% | 61 | 16,121 | 883 |
| WEST PALM BEACH-BOCA RATON-BOYNTON BEACH, FL | 31 | 7,171 | 1,038 | 64\% | 59.1\% | 7.28\% | 11.26\% | 57.5\% | 64\% | 26 | 5,472 | 957 |
| OTHER | 126 | 26,667 | 905 | 59\% | 52.9\% | 9.89\% | 11.80\% | 51.3\% | 55\% | 95 | 17,707 | 922 |
| REGION III | 307 | 54,898 | 869 | 59\% | 48.5\% | 13.87\% | 15.64\% | 48.7\% | 56\% | 364 | 65,461 | 886 |
| BLOOMINGTON, IN | 6 | 623 | 660 | 70\% | 64.6\% | 13.00\% | N/A | N/A | N/A | N/A | N/A | N/A |
| CHICAGO-NAPERVILLE-JOLIET, IL-IN-WI | 33 | 11,423 | 976 | 59\% | 53.0\% | 13.08\% | 13.65\% | 54.5\% | 54\% | 27 | 8,972 | 915 |
| CINCINNATI-MIDDLETON, OH-KY-IN | 23 | 3,883 | 1,086 | 51\% | 47.3\% | 13.54\% | 15.73\% | 47.8\% | 49\% | 39 | 6,897 | 1,087 |
| CLEVELAND-ELYRIA-MENTOR, OH | 10 | 832 | 591 | 61\% | 54.0\% | 14.03\% | 14.67\% | 53.6\% | 60\% | 12 | 802 | 591 |
| COLUMBUS, OH | 52 | 6,410 | 750 | 61\% | 47.2\% | 14.43\% | 14.78\% | 47.8\% | 59\% | 64 | 8,651 | 838 |
| DAYTON, OH | 17 | 1,407 | 669 | 67\% | 50.1\% | 12.81\% | 11.30\% | 54.1\% | 56\% | 24 | 2,766 | 765 |
| DETROIT-WARREN-LIVONIA, MI | 39 | 4,715 | 774 | 50\% | 46.1\% | 14.05\% | 15.65\% | 49.2\% | 54\% | 40 | 6,799 | 817 |
| INDIANAPOLIS, IN | 55 | 11,550 | 799 | 62\% | 47.7\% | 12.81\% | 17.07\% | 48.5\% | 56\% | 63 | 12,197 | 837 |
| MINNEAPOLIS-ST. PAUL-BLOOMINGTON, MN-WI | 13 | 2,782 | 994 | 59\% | 51.6\% | 14.60\% | 18.08\% | 45.5\% | 62\% | 17 | 3,819 | 1,047 |
| OTHER | 59 | 11,273 | 890 | 59\% | 41.1\% | 15.97\% | 16.62\% | 43.1\% | 58\% | 59 | 11,728 | 877 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| REGIONIV | 612 | 174,901 | 837 | 64\% | 44.2\% | 15.39\% | 16.23\% | 44.4\% | 64\% | 575 | 159,414 | 820 |
| AUSTIN-ROUND ROCK, TX | 84 | 23,214 | 842 | 64\% | 44.8\% | 12.32\% | 15.05\% | 46.8\% | 67\% | 66 | 17,977 | 835 |
| DALLAS-PLANO-IRVING, TX | 219 | 67,026 | 851 | 62\% | 44.0\% | 17.46\% | 16.68\% | 43.3\% | 62\% | 178 | 51,084 | 824 |
| FT. WORTH-ARLINGTON, TX | 76 | 21,770 | 828 | 68\% | 44.4\% | 15.33\% | 16.15\% | 42.5\% | 69\% | 80 | 21,985 | 805 |
| HOUSTON-BAYTOWN-SUGARLAND, TX | 119 | 36,595 | 830 | 62\% | 43.5\% | 14.81\% | 17.64\% | 43.9\% | 63\% | 145 | 42,685 | 821 |
| LITLE ROCK-NORTH LITTLE ROCK, AR | 18 | 3,899 | 877 | 57\% | 49.1\% | 9.79\% | 11.21\% | 53.0\% | 45\% | 9 | 2,048 | 897 |
| SAN ANTONIO, TX | 48 | 12,095 | 787 | 71\% | 42.2\% | 14.45\% | 13.54\% | 48.4\% | 66\% | 25 | 6,411 | 777 |
| TULSA, OK | 14 | 3,709 | 794 | 73\% | 51.2\% | 11.53\% | 12.02\% | 50.5\% | 73\% | 13 | 3,772 | 715 |
| OTHER | 34 | 6,593 | 845 | 65\% | 45.8\% | 13.50\% | 13.33\% | 44.7\% | 66\% | 36 | 7,814 | 844 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| REGION V | 145 | 44,284 | 880 | 61\% | 53.4\% | 15.14\% | 19.99\% | 51.7\% | 65\% | 167 | 42,281 | 880 |
| ALBUQUERQUE, NM | 11 | 2,364 | 862 | 67\% | 56.0\% | 9.03\% | N/A | N/A | N/A | N/A | N/A | N/A |
| COLORADO SPRINGS, CO | 7 | 1,606 | 851 | 73\% | 47.0\% | 21.91\% | 25.26\% | 46.1\% | 76\% | 16 | 3,276 | 853 |
| DENVER-AURORA-BOULDER, CO | 74 | 23,177 | 903 | 64\% | 54.4\% | 16.03\% | 21.44\% | 52.7\% | 65\% | 85 | 22,357 | 873 |
| KANSAS CITY, MO-KS | 13 | 4,488 | 914 | 59\% | 58.0\% | 10.13\% | 16.59\% | 55.5\% | 55\% | 10 | 2,866 | 953 |
| SALT LAKE CITY | 8 | 3,003 | 767 | 48\% | 51.3\% | 9.34\% | N/A | N/A | N/A | N/A | N/A | N/A |
| ST. LOUIS, MO-IL | 16 | 6,263 | 869 | 61\% | 50.9\% | 17.36\% | 16.27\% | 50.4\% | 66\% | 15 | 4,217 | 902 |
| OTHER | 16 | 3,383 | 821 | 47\% | 44.8\% | 14.41\% | 16.08\% | 50.3\% | 63\% | 41 | 9,565 | 876 |
| REGION VI | 414 | 114,355 | 886 | 65\% | 63.4\% | 8.57\% | 12.15\% | 58.7\% | 65\% | 376 | 100,708 | 870 |
| LOS ANGELES-LONG BEACH-GLENDALE, CA | 40 | 9,752 | 849 | 60\% | 66.7\% | 6.74\% | 8.20\% | 64.8\% | 63\% | 30 | 7,890 | 867 |
| OAKLAND-FREEMONT-HAYWOOD, CA MSA | 23 | 5,758 | 853 | 60\% | 63.6\% | 6.37\% | N/A | N/A | N/A | N/A | N/A | N/A |
| PHOENIX-MESA | 79 | 24,112 | 909 | 67\% | 59.1\% | 11.23\% | 17.34\% | 51.2\% | 71\% | 101 | 28,384 | 872 |
| PORTLAND-VANCOUVER-BEAVERTON, OR-WA | 28 | 7,959 | 966 | 69\% | 58.6\% | 9.19\% | 12.86\% | 53.3\% | 72\% | 20 | 5,991 | 962 |
| RIVERSIDE-SAN BERNARDINO-ONTARIO, CA | 18 | 5,284 | 808 | 65\% | 59.9\% | 9.83\% | 6.93\% | 65.1\% | 62\% | 12 | 3,404 | 785 |
| SACRAMENTO-ARDEN ARCADE-ROSEVILLE, CA | 11 | 3,084 | 902 | 66\% | 62.7\% | 8.69\% | N/A | N/A | N/A | N/A | N/A | N/A |
| SAN DIEGO-CARLSBAD-SAN MARCOS, CA | 38 | 10,816 | 869 | 66\% | 66.8\% | 7.58\% | 7.65\% | 66.1\% | 58\% | 25 | 6,456 | 894 |
| SAN FRANCISCO-SAN MATEO-REDWOOD CITY, CA | 19 | 4,992 | 885 | 59\% | 64.3\% | 8.00\% | 10.77\% | 61.3\% | 59\% | 37 | 9,247 | 844 |
| SAN JOSE-SUNNYVILLE-SANTA CLARA, CA | 8 | 1,964 | 887 | 63\% | 63.7\% | 7.17\% | N/A | N/A | N/A | N/A | N/A | N/A |
| SANTA ANA-ANAHEIM-IRVINE, CA | 56 | 17,173 | 878 | 61\% | 66.6\% | 8.45\% | 8.75\% | 64.8\% | 57\% | 48 | 14,499 | 890 |
| SEATTLE-TACOMA-BELLEVUE, WA | 64 | 16,425 | 914 | 69\% | 60.7\% | 8.70\% | 16.43\% | 53.1\% | 72\% | 51 | 11,774 | 878 |
| OTHER | 30 | 7,036 | 832 | 64\% | 61.3\% | 9.41\% | 10.05\% | 60.8\% | 70\% | 20 | 3,834 | 931 |

Source: National Apartment Association 2006 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2006 by National Apartment Association. This table may be used, copied, and/or distributed only in accordance with the License Agreement and may not be posted on the Internet.
versus 889 square feet for the market rent properties.
Revenues. GPR averaged $\$ 8,642$ per unit ( $\$ 10.27$ per square foot) annually in this year's survey versus $\$ 8,642$ per unit ( $\$ 10.27$ per square foot) a year earlier. Rental revenues averaged $\$ 10,140$ ( $\$ 11.43$ per square foot) versus $\$ 7,847$ per unit ( $\$ 9.33$ per square foot). Other operating revenues averaged $\$ 323$ per unit ( $\$ 0.36$ per square foot) in 2005 versus $\$ 489$ per unit ( $\$ 0.58$ per square foot) for 2004. Much of the difference can be attributed to a significant change in the properties reported in this year's survey from a year ago.

Operating Expenses. Operating expenses in subsidized properties were close to those for market rent properties. Subsidized properties reported in the survey had total operating costs averaging $\$ 4,230(\$ 4.17$ per square foot) in 2005 versus the $\$ 3,510$ per unit ( $\$ 4.17$ per square foot) reported for responding properties in 2004.

Net Operating Income. Subsidized properties reported in the survey had higher levels of NOI than the market rent properties in all three measures. NOI for subsidized properties in the survey averaged 56.4 percent of GPR versus 53.9 percent for the market rent properties. The other comparisons were $\$ 6,233$ versus $\$ 5,098$ on a dollars-per-unit basis, and $\$ 7.03$ versus $\$ 5.73$ on a per-square-foot-of-floor-area basis.

Economic Losses. Economic losses tended to be lower in subsidized properties with their lower rents and relatively tight supply. An 8.29 percent average rate was calculated for the subsidized individually metered garden properties versus 11.87 percent for market rent units. The economic loss ratio in subsidized properties was under the 9.17 percent recorded a year earlier. Again, note that differences in the sample of subsidized properties reporting this year probably account for most of the differences from last year.

Turnover Rates. Occupants of subsidized apartments have lower income and fewer housing choices in most local markets and are less likely to move. The turnover rate in individually metered subsidized units was 44 percent versus 61 percent for market rent units.

## Glossary of Terms

Administrative. This includes the total office expenses (i.e., telephone, computers, forms, office rental and furniture).

Capital Expenditures. Non-recurring capital expenditures. Improvements not included as an expense item in operating expenses (i.e., renovations, appliance replacements, etc.). A zero on the line meant there were no capital expenditures.

Contract Services. Total landscape maintenance, exterminating, trash removal, security, snow removal and other service costs typically provided on contract basis.

GPR Commercial. Total potential rents for all commercial space if area would have been 100 percent occupied.

GPR Residential. Total rents of all occupied units at 2005 lease rates and all vacant units at 2005 street/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 payroll insurance.

Marketing. Total media advertising, collateral materials, locator fees, model expense, promotions, etc.

Management Fees. Total fees paid to managing agent from owner.

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. Does not include utility reimbursements (i.e., RUBS) in GPR or rental revenue. All utility reimbursements are subtracted from gross utility expense.

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.

Repair and Maintenance. Total of all general maintenance and repairs, cleaning, decorating, painting, plumbing, electrical, HVAC, etc. Nonrecurring capital expense not included.

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

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

Salary and Personnel Costs. Gross salaries and wages paid to employees onsite. Includes value of employee apartment allowances, payroll taxes, group health/life insurance, workers' compensation, bonuses and lease commissions, employer $401(\mathrm{k})$ and/or retirement contributions and other cash benefits.

Subsidized Property. A property has controlled rents through a government-subsidized program If subsidized, the program was listed (i.e., Section 236, Section 8).

Taxes. Total real estate and personal property taxes only. Payroll or rendering fees related to property taxes were not included.

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.

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

Utilities. Total cost of all utilities and each listed type, net of any income reimbursements for or from residents (i.e., RUBS or similar systems). Does not include trash removal.

Utility Configuration. Whether electric, gas, oil and water/sewer utilities to individual units in subject property are: Master Metered, Owner Pays; Master Metered, Resident Pays (RUBS); Individual or Submetered, Resident Pays.

# Net Operating Income and Economic Losses Rates <br> BY REGION AND METROPOLITAN AREA <br> INDIVIDUALLY METERED MARKET RENT GARDEN PROPERTIES <br> DOLLARS PER SQUARE FOOT 

|  | $\begin{array}{r} \text { Total } \\ \text { No. of } \\ \text { Properties } \end{array}$ | Total No. of Units | Average Sq. Ft. <br> Ser Unit | GrossPotential Potential Revenue Revenue | $\begin{array}{r} \text { Total } \\ \text { Rent } \\ \text { Revenue } \\ \text { Collected } \end{array}$ | REVENUE LOSSES TO |  |  | OtherRevenue | $\begin{gathered} \text { Total } \\ \text { Revenue } \\ \text { Collected } \end{gathered}$ | $\begin{array}{r} \text { Total } \\ \text { Operating } \\ \text { Expenses } \end{array}$ | $\begin{array}{r} \text { Net } \\ \text { Operating } \\ \text { Income } \\ \text { NOI } \end{array}$ | OperatingLosses as a \% | $\begin{gathered} \text { Economic } \\ \text { Turnover } \\ \text { Rate } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Vacanci | Collections | sions |  |  |  |  |  |  |
| TOTAL MARKET RENT | 2,609 | 667,951 | 889 | \$10.63 | 59.37 | \$0.76 | \$0.08 | 50.42 | \$0.61 | 59.98 | \$4.25 | 55.73 | 11.87\% | 61\% |
| REGION I | 195 | 43,996 | 873 | \$13.65 | \$12.44 | \$0.82 | 50.09 | \$0.30 | \$0.62 | \$13.06 | \$4.68 | 58.38 | 8.87\% | 53\% |
| BALTIMORE-TOWSON, MD | 40 | 8,242 | 787 | \$12.90 | \$11.95 | \$0.64 | \$0.09 | \$0.22 | \$0.52 | \$12.47 | \$4.79 | \$7.68 | 7.32\% | 35\% |
| BOSTON-CAMBRIDGE-QUINCY, MA-NH | 12 | 2,869 | 918 | \$16.10 | \$14.17 | \$1.25 | \$0.11 | \$0.57 | \$0.56 | \$14.74 | \$5.45 | \$9.29 | 11.97\% | 63\% |
| HARTFORD-WEST HARTFORD-EAST HARTFORD, CT | 3 | 825 | 1,027 | \$10.28 | \$9.23 | \$0.80 | \$0.05 | \$0.20 | \$0.61 | \$9.83 | \$4.45 | \$5.38 | 10.28\% | 48\% |
| NEW HAVEN-MILFORD, CT | 16 | 2,294 | 781 | \$14.29 | \$12.85 | \$1.00 | \$0.07 | \$0.36 | \$0.63 | \$13.48 | \$5.89 | \$7.60 | 10.02\% | 55\% |
| NEW YORK, NY | 6 | 1,829 | 849 | \$19.97 | \$18.54 | \$0.80 | \$0.16 | \$0.47 | \$0.74 | \$19.28 | \$7.55 | \$11.73 | 7.17\% | 52\% |
| NORTHERN NEW JERSEY MSA'S | 3 | 1,250 | 947 | \$19.87 | \$18.64 | \$0.98 | \$0.04 | \$0.21 | \$0.71 | \$19.35 | \$6.37 | \$12.98 | 6.20\% | 55\% |
| PHILADELPHIA-CAMDEN-WILMINGTON, PA-NJ-DE-MD | 4 | 776 | 781 | \$16.60 | \$15.11 | \$1.04 | \$0.04 | \$0.41 | \$0.55 | \$15.66 | \$6.39 | \$9.28 | 8.94\% | 51\% |
| PITTSBURGH, PA | 11 | 1,258 | 810 | \$12.01 | \$10.60 | \$0.92 | \$0.03 | \$0.47 | \$0.68 | \$11.28 | \$4.42 | \$6.86 | 11.79\% | 47\% |
| RICHMOND, VA | 16 | 5,194 | 846 | \$9.80 | \$8.65 | \$0.81 | \$0.11 | \$0.24 | \$0.66 | \$9.31 | \$3.76 | \$5.55 | 11.78\% | 56\% |
| VIRGIIIA BEACH-NORFOLK-NEWPORT NEWS, VA-NC | 10 | 2,703 | 954 | \$11.62 | \$10.91 | \$0.52 | \$0.11 | \$0.08 | \$0.82 | \$11.73 | \$3.84 | \$7.90 | 6.17\% | 64\% |
| WASHINGTON-ARLINGTON-ALEXANDRIA, DC-MD-VA-WV | V 45 | 12,549 | 895 | \$14.70 | \$13.44 | \$0.85 | \$0.10 | \$0.31 | \$0.51 | \$13.95 | \$4.39 | \$9.56 | 8.56\% | 56\% |
| OTHER | 29 | 4,207 | 972 | \$11.95 | \$10.79 | \$0.74 | \$0.07 | \$0.35 | \$0.89 | \$11.68 | \$4.04 | \$7.64 | 9.70\% | 59\% |
| REGION II | 936 | 235,517 | 939 | 59.44 | 58.37 | 50.62 | 50.08 | \$0.38 | 50.56 | 58.93 | \$3.86 | 55.07 | 11.35\% | 60\% |
| ATLANTA-SANDY SPRINGS-MARIETTA, GA | 196 | 57,586 | 1,013 | \$9.48 | \$8.07 | \$0.69 | \$0.08 | \$0.64 | \$0.48 | \$8.55 | \$3.63 | \$4.92 | 14.87\% | 61\% |
| CAPE CORAL-FORT MYERS, FL | 10 | 1,993 | 861 | \$11.14 | \$10.46 | \$0.38 | \$0.05 | \$0.25 | \$0.85 | \$11.31 | \$5.08 | \$6.23 | 6.04\% | 67\% |
| CHARLOTTE-GASTONIO-CONCORD, NC-SC | 52 | 12,304 | 962 | \$8.67 | \$7.74 | \$0.50 | \$0.08 | \$0.35 | \$0.52 | \$8.26 | \$3.48 | \$4.77 | 10.79\% | 60\% |
| CHATTANOOGA, TN-GA | 10 | 1,670 | 979 | \$7.38 | \$6.40 | \$0.59 | \$0.04 | \$0.36 | \$1.60 | \$7.99 | \$3.45 | \$4.54 | 13.37\% | 46\% |
| COLUMBIA, SC | 17 | 4,981 | 806 | \$8.52 | \$7.62 | \$0.59 | \$0.06 | \$0.26 | \$0.75 | \$8.36 | \$4.11 | \$4.25 | 10.61\% | 67\% |
| DAYTONA, FL | 12 | 1,196 | 743 | \$10.71 | \$9.53 | \$0.80 | \$0.05 | \$0.33 | \$0.63 | \$10.16 | \$4.72 | \$5.44 | 11.04\% | 65\% |
| FT. LAUDERDALE-POMPA.BEACH-DEERFIELD BEACH, FL | 10 | 3,749 | 865 | \$13.16 | \$12.19 | \$0.67 | \$0.07 | \$0.22 | \$2.03 | \$14.23 | \$5.56 | \$8.66 | 7.34\% | 57\% |
| GREENSBORO-WINSTON-SALEM-HIGH POINT, NC | 29 | 6,323 | 938 | \$8.21 | \$7.31 | \$0.62 | \$0.08 | \$0.20 | \$0.53 | \$7.84 | \$3.22 | \$4.62 | 10.97\% | 59\% |
| GREENVILLE, SC | 16 | 3,496 | 949 | \$8.01 | \$6.89 | \$0.68 | \$0.10 | \$0.35 | \$0.65 | \$7.53 | \$3.74 | \$3.79 | 14.06\% | 59\% |
| JACKSONVILE, FL MSA | 50 | 14,050 | 923 | \$9.69 | \$8.72 | \$0.64 | \$0.08 | \$0.24 | \$0.46 | \$9.19 | \$3.89 | \$5.29 | 9.99\% | 58\% |
| KNOXVILLE, TN | 10 | 1,684 | 923 | \$8.09 | \$7.27 | \$0.61 | \$0.04 | \$0.17 | \$1.49 | \$8.76 | \$3.51 | \$5.25 | 10.20\% | 59\% |
| LEXINGTON-FAYETTE, KY | 18 | 3,327 | 834 | \$9.28 | \$8.05 | \$0.77 | \$0.05 | \$0.42 | \$0.44 | \$8.49 | \$3.69 | \$4.80 | 13.33\% | 55\% |
| LOUISVILLE, KY-IN | 17 | 2,620 | 801 | \$9.88 | \$8.10 | \$1.44 | \$0.08 | \$0.27 | \$0.64 | \$8.74 | \$3.76 | \$4.98 | 18.03\% | 59\% |
| MACON, GA | 15 | 1,983 | 925 | \$7.94 | \$7.11 | \$0.50 | \$0.07 | \$0.26 | \$0.28 | \$7.39 | \$3.56 | \$3.82 | 10.48\% | 57\% |
| MEMPHIS, TN-AR | 48 | 14,020 | 933 | \$7.86 | \$6.64 | \$0.71 | \$0.20 | \$0.31 | \$0.49 | \$7.13 | \$3.97 | \$3.15 | 15.49\% | 51\% |
| MIAMI-MIAMI BEACH-KENDALL, FL | 29 | 6,909 | 953 | \$12.45 | \$11.70 | \$0.52 | \$0.07 | \$0.16 | \$0.66 | \$12.37 | \$5.09 | \$7.27 | 6.02\% | 60\% |
| NASHVILLE,TN | 37 | 11,228 | 861 | \$9.79 | \$8.68 | \$0.59 | \$0.07 | \$0.44 | \$0.48 | \$9.16 | \$3.83 | \$5.33 | 11.29\% | 64\% |
| ORLANDO, FL | 69 | 18,539 | 954 | \$9.48 | \$8.79 | \$0.43 | \$0.05 | \$0.21 | \$0.58 | \$9.37 | \$3.81 | \$5.55 | 7.27\% | 65\% |
| RALEIGH-DURHAM, NC MSA's | 50 | 13,968 | 921 | \$8.77 | \$7.58 | \$0.67 | \$0.08 | \$0.44 | \$0.43 | \$8.01 | \$3.60 | \$4.41 | 13.57\% | 58\% |
| SARASOTA-BRADENTON-VENICE, FL | 12 | 2,429 | 780 | \$11.72 | \$10.78 | \$0.52 | \$0.10 | \$0.32 | \$0.66 | \$11.44 | \$4.68 | \$6.76 | 8.02\% | 70\% |
| SAVANNAH, GA | 10 | 1,423 | 863 | \$9.76 | \$8.61 | \$0.87 | \$0.08 | \$0.20 | \$0.65 | \$9.27 | \$3.85 | \$5.42 | 11.72\% | 74\% |
| TALLAHASSEE, FL | 11 | 2,170 | 841 | \$11.22 | \$9.58 | \$0.91 | \$0.03 | \$0.68 | \$0.64 | \$10.22 | \$4.41 | \$5.81 | 14.56\% | 68\% |
| TAMPA-ST. PETERSBURG-CLEARWATER, FL | 51 | 14,031 | 891 | \$10.24 | \$9.50 | \$0.48 | \$0.05 | \$0.19 | \$0.74 | \$10.25 | \$4.32 | \$5.93 | 7.14\% | 63\% |
| WEST PALM BEACH-BOCA RATON-BOYNTON BEACH, FL | 31 | 7,171 | 1,038 | \$12.00 | \$11.12 | \$0.65 | \$0.07 | \$0.15 | \$0.69 | \$11.81 | \$4.72 | \$7.09 | 7.28\% | 64\% |
| OTHER | 126 | 26,667 | 905 | \$8.61 | \$7.75 | \$0.51 | \$0.07 | \$0.27 | \$0.43 | \$8.19 | \$3.64 | \$4.55 | 9.89\% | 59\% |
| REGION III | 307 | 54,898 | 869 | 59.59 | 58.26 | \$0.80 | 50.08 | 50.46 | 50.57 | 58.82 | \$4.18 | 54.65 | 13.87\% | 59\% |
| BLOOMINGTON, IN | 6 | 623 | 660 | \$9.59 | \$8.34 | \$0.79 | \$0.11 | \$0.34 | \$1.99 | \$10.33 | \$4.14 | \$6.19 | 13.00\% | 70\% |
| CHICAGO-NAPERVILLE-JOLIET, IL-IN-WI | 33 | 11,423 | 976 | \$12.16 | \$10.57 | \$0.82 | \$0.08 | \$0.69 | \$0.73 | \$11.30 | \$4.86 | \$6.44 | 13.08\% | 59\% |
| CINCINNAT-MIDDLETON, OH-KY-IN | 23 | 3,883 | 1,086 | \$7.62 | \$6.59 | \$0.50 | \$0.09 | \$0.44 | \$0.24 | \$6.83 | \$3.22 | \$3.61 | 13.54\% | 51\% |
| CLEVELAND-ELYRIA-MENTOR, OH | 10 | 832 | 591 | \$11.15 | \$9.59 | \$1.14 | \$0.11 | \$0.31 | \$0.78 | \$10.36 | \$4.34 | \$6.02 | 14.03\% | 61\% |
| COLUMBUS, OH | 52 | 6,410 | 750 | \$9.13 | \$7.81 | \$0.90 | \$0.08 | \$0.34 | \$0.52 | \$8.33 | \$4.02 | \$4.31 | 14.43\% | 61\% |
| DAYTON, OH | 17 | 1,407 | 669 | \$9.60 | \$8.37 | \$0.87 | \$0.06 | \$0.30 | \$0.57 | \$8.94 | \$4.13 | \$4.81 | 12.81\% | 67\% |
| DETROIT-WARREN-LIVONIA, MI | 39 | 4,715 | 774 | \$11.07 | \$9.51 | \$0.89 | \$0.10 | \$0.56 | \$0.59 | \$10.11 | \$5.00 | \$5.10 | 14.05\% | 50\% |
| INDIANAPOLIS, IN | 55 | 11,550 | 799 | \$8.73 | \$7.61 | \$0.81 | \$0.08 | \$0.23 | \$0.61 | \$8.21 | \$4.05 | \$4.16 | 12.81\% | 62\% |
| MINNEAPOLIS-ST. PAUL-BLOOMINGTON, MN-WI | 13 | 2,782 | 994 | \$10.97 | \$9.37 | \$0.84 | \$0.04 | \$0.72 | \$0.54 | \$9.91 | \$4.25 | \$5.65 | 14.60\% | 59\% |
| OTHER | 59 | 11,273 | 890 | \$7.57 | \$6.36 | \$0.75 | \$0.07 | \$0.39 | \$0.43 | \$6.79 | \$3.68 | \$3.11 | 15.97\% | 59\% |
| REGION IV | 612 | 174,901 | 837 | 59.84 | 58.32 | \$0.86 | 50.08 | 50.57 | \$0.61 | 58.93 | \$4.58 | \$4.35 | 15.39\% | 64\% |
| AUSTIN-ROUND ROCK, TX | 84 | 23,214 | 842 | \$10.26 | \$9.00 | \$0.69 | \$0.05 | \$0.52 | \$0.66 | \$9.66 | \$5.06 | \$4.60 | 12.32\% | 64\% |
| DALLAS-PLANO-IRVING, TX | 219 | 67,026 | 851 | \$10.44 | \$8.61 | \$0.96 | \$0.09 | \$0.77 | \$0.66 | \$9.28 | \$4.69 | \$4.59 | 17.46\% | 62\% |
| FT. WORTH-ARLINGTON, TX | 76 | 21,770 | 828 | \$9.50 | \$8.04 | \$0.84 | \$0.11 | \$0.51 | \$0.68 | \$8.73 | \$4.50 | \$4.22 | 15.33\% | 68\% |
| HOUSTON-BAYTOWN-SUGARLAND, TX | 119 | 36,595 | 830 | \$9.30 | \$7.93 | \$0.87 | \$0.09 | \$0.42 | \$0.48 | \$8.41 | \$4.36 | \$4.04 | 14.81\% | 62\% |
| LITLE ROCK-NORTH LITLE ROCK, AR | 18 | 3,899 | 877 | \$8.75 | \$7.90 | \$0.55 | \$0.13 | \$0.18 | \$0.33 | \$8.23 | \$3.93 | \$4.30 | 9.79\% | 57\% |
| SAN ANTONIO, TX | 48 | 12,095 | 787 | \$9.38 | \$8.02 | \$0.82 | \$0.08 | \$0.45 | \$0.70 | \$8.72 | \$4.76 | \$3.96 | 14.45\% | 71\% |
| TULSA, OK | 14 | 3,709 | 794 | \$9.49 | \$8.40 | \$0.84 | \$0.03 | \$0.23 | \$0.38 | \$8.78 | \$3.92 | \$4.86 | 11.53\% | 73\% |
| OTHER | 34 | 6,593 | 845 | \$7.81 | \$6.76 | \$0.70 | \$0.07 | \$0.28 | \$0.44 | \$7.19 | \$3.61 | \$3.58 | 13.50\% | 65\% |
| REGION V | 145 | 44,284 | 880 | \$10.24 | 58.69 | \$0.94 | 50.07 | \$0.54 | \$0.64 | 59.32 | \$3.86 | 55.47 | 15.14\% | 61\% |
| ALBUQUERQUE, NM | 11 | 2,364 | 862 | \$9.34 | \$8.50 | \$0.62 | \$0.03 | \$0.19 | \$0.52 | \$9.02 | \$3.79 | \$5.23 | 9.03\% | 67\% |
| COLORADO SPRINGS, CO | 7 | 1,606 | 851 | \$11.06 | \$8.64 | \$1.12 | \$0.08 | \$1.23 | \$0.86 | \$9.50 | \$4.30 | \$5.20 | 21.91\% | 73\% |
| DENVER-AURORA-BOULDER, CO | 74 | 23,177 | 903 | \$11.16 | \$9.37 | \$1.02 | \$0.07 | \$0.70 | \$0.67 | \$10.04 | \$3.96 | \$6.08 | 16.03\% | 64\% |
| KANSAS CITY, MO-KS | 13 | 4,488 | 914 | \$8.81 | \$7.92 | \$0.61 | \$0.07 | \$0.21 | \$0.69 | \$8.61 | \$3.49 | \$5.12 | 10.13\% | 59\% |
| SALT LAKE CITY | 8 | 3,003 | 767 | \$8.58 | \$7.78 | \$0.55 | \$0.05 | \$0.20 | \$0.62 | \$8.39 | \$3.99 | \$4.40 | 9.34\% | 48\% |
| ST. LOUIS, MO-IL | 16 | 6,263 | 869 | \$9.84 | \$8.13 | \$1.25 | \$0.09 | \$0.37 | \$0.65 | \$8.79 | \$3.78 | \$5.01 | 17.36\% | 61\% |
| OTHER | 16 | 3,383 | 821 | \$7.74 | \$6.63 | \$0.74 | \$0.04 | \$0.34 | \$0.32 | \$6.95 | \$3.48 | \$3.47 | 14.41\% | 47\% |
| REGION VI | 414 | 114,355 | 886 | \$13.85 | \$12.66 | \$0.81 | 50.07 | 50.31 | \$0.74 | \$13.41 | \$4.63 | 58.78 | 8.57\% | 65\% |
| LOS ANGELES-LONG BEACH-GLENDALE, CA | 40 | 9,752 | 849 | \$19.33 | \$18.03 | \$0.97 | \$0.11 | \$0.23 | \$0.69 | \$18.72 | \$5.83 | \$12.88 | 6.74\% | 60\% |
| OAKLAND-FREEMONT-HAYWOOD, CAMSA | 23 | 5,758 | 853 | \$17.51 | \$16.39 | \$0.79 | \$0.08 | \$0.25 | \$0.52 | \$16.91 | \$5.78 | \$11.14 | 6.37\% | 60\% |
| PHOENIX-MESA | 79 | 24,112 | 909 | \$9.70 | \$8.62 | \$0.62 | \$0.04 | \$0.42 | \$0.76 | \$9.37 | \$3.64 | \$5.73 | 11.23\% | 67\% |
| PORTLAND-VANCOUVER-BEAVERTON, OR-WA | 28 | 7,959 | 966 | \$9.21 | \$8.36 | \$0.56 | \$0.06 | \$0.23 | \$0.64 | \$9.00 | \$3.60 | \$5.40 | 9.19\% | 69\% |
| RIVERSIDE-SAN BERNARDINO-ONTARIO, CA | 18 | 5,284 | 808 | \$14.15 | \$12.76 | \$1.06 | \$0.07 | \$0.26 | \$0.61 | \$13.37 | \$4.90 | \$8.47 | 9.83\% | 65\% |
| SACRAMENTO-ARDEN ARCADE-ROSEVILLE, CA | 11 | 3,084 | 902 | \$12.26 | \$11.20 | \$0.76 | \$0.08 | \$0.23 | \$0.62 | \$11.81 | \$4.12 | \$7.69 | 8.69\% | 66\% |
| SAN DIEGO-CARLSBAD-SAN MARCOS, CA | 38 | 10,816 | 869 | \$17.57 | \$16.24 | \$0.99 | \$0.09 | \$0.25 | \$0.84 | \$17.08 | \$5.34 | \$11.74 | 7.58\% | 66\% |
| SAN FRANCISCO-SAN MATEO-REDWOOD CITY, CA | 19 | 4,992 | 885 | \$19.56 | \$17.99 | \$1.02 | \$0.06 | \$0.48 | \$0.32 | \$18.31 | \$5.73 | \$12.58 | 8.00\% | 59\% |
| SAN JOSE-SUNNYVILLE-SANTA CLARA, CA | 8 | 1,964 | 887 | \$18.17 | \$16.87 | \$0.76 | \$0.12 | \$0.43 | \$0.04 | \$16.91 | \$5.33 | \$11.58 | 7.17\% | 63\% |
| SANTA ANA-ANAHEIM-RVVINE, CA | 56 | 17,173 | 878 | \$17.53 | \$16.04 | \$1.12 | \$0.07 | \$0.30 | \$1.01 | \$17.06 | \$5.38 | \$11.68 | 8.45\% | 61\% |
| SEATLE-TACOMA-BELLEVUE, WA | 64 | 16,425 | 914 | \$11.04 | \$10.08 | \$0.66 | \$0.05 | \$0.25 | \$0.71 | \$10.80 | \$4.09 | \$6.70 | 8.70\% | 69\% |
| OTHER | 30 | 7,036 | 832 | \$11.36 | \$10.29 | \$0.72 | \$0.07 | \$0.28 | \$1.00 | \$11.29 | \$4.32 | \$6.97 | 9.41\% | 64\% |

Source: National Apartment Association 2006 Survey of Operating Income \& Expenses in Rental Apartment Communities
© 2006 by National Apartment Association. This table may be used, copied, and/or distributed only in accordance with the License Agreement and may not be posted on the Internet.


## Survey of

## Income

## and

## Expenses

## in Rental

Apartment
Gommunities


# 2005 Survey of Income and Expenses in Rental Apartment Gommunities 

## 2005

## NAA Income \& Expense <br> Survey Staff

## Robert J. Sheehan II, NAA Consulting Economist

Regis J. Sheehan \& Associates
Woodbridge, VA
Roland Freeman, CAPS, CRE, CPM
Capital Consultants Realty Services Inc.
Dallas, TX
Douglas S. Culkin, CAE
NAA Executive Vice President, Publisher

Barbara A. Vassallo, Esq.
NAA Vice President of Government Affairs

## ACKNOWLEDGEMENTS

The 2005 Survey of Operating Income and Expenses in Rental Apartment Communities further adds to National Apartment Association's (NAA) success in producing information valuable to its members and the apartment industry. The survey provides executives and professionals in the apartment and related industries with financial information needed to conduct their daily operations that can be used as a tool to support their strategic and business planning. NAA remains committed to improving the survey and presents more valuable revenue related data in this year's report.
I thank Barbara Vassallo, who acted as NAA's staff coordinator for the survey; Roland D. Freeman, a Past NAA President, of Capital Consultants Realty Services, and Robert J. Sheehan II, NAA's Consulting Economist, who jointly assisted in promoting responses, processing and analyzing the data, and wrote the report; Robert J. Sheehan III, of Regis J Sheehan \& Associates, for his work in developing the computer programming for tabulation of the results; Paul R. Bergeron III, Rachel F. Goldberg and Jeanine Gajewski, who edited the report; Norman Grandstaff of Ideas Communicated, who designed the report; and RE Data, the firm responsible for data input.

A special note of appreciation goes to those firms who donated their time in accumulating the data necessary to make this survey a success. I am especially grateful to those companies and their officers who contributed data for 20 or more of their properties for the 2005 survey (listed in order of number of submissions).

- AIMCO • Equity Residential • United Dominion Realty Trust • Alliance Residential • Mid-America Apartment Communities • Walden Management Company • Forest City Management • Tarragon Corporation • Sares-Regis Group • Keystone Management Group, Centrum \& AIMCO • Camden Property Trust •Corcoran Management Company • ALCO Management. • MG Properties • Towne Properties • Dial Equities • Hallmark Management • KSI Services • The Dolben Company • HMI Property Solutions • Konover Residential • Wells Asset Management • Westmark Management Company • Brown Investment Properties • First Worthing Company • Post Properties • Trammell Crow Residential

Tom Day, CAPS
2005 NAA President

# 2005 Survey of Income and Expenses in Rental Apartment Gommunities Executive Summary 

BY ROBERT J. SHEEHAN and ROLAND FREEMAN, CAPS, CRE, CPM

NAA has completed its Survey of Operating Income and Expenses in Rental Apartment Communities for 2005, based on data for 2004. Major findings in this survey of the professionally managed rental apartment industry show more softening in the market rent segment of the rental apartment market, although the market showed signs of improvement in the second half of 2004.

A total of 3,807 properties containing 873,532 units are represented in this report. Reporting of the data is composed of 3,093 market rent properties containing 767,337 units and 714 subsidized properties containing 106,195 units. Forms with partial data or apparent problems that could not be resolved and used were received for 265 more properties with 34,052 units.

The report presents data from four types of properties. Garden and mid-rise/high-rise structures are segmented into individually metered and master metered utilities properties.

Responses from garden properties with individually metered utilities dominate the survey, representing 83 percent of the market rent properties and 46 percent of the subsidized properties. The analysis is, therefore, centered on the garden properties with individually metered utilities.

Average sizes of the market rent garden individually metered properties are 245 units, and 158 units in subsidized units. Rentable floor


Market Rent Properties Summary . . . . . . . . . . . . . . . . . . . 43
Metro Area Detailed Income and Expense Data
Subsidized Properties Detailed Income and Expense Data 50
Glossary of Terms .
51
To view a full survey report or individual market data visit www.naahq.org/05ies.

## Regions Used in Survey

Region I CT, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT, WV
Region II AL, FL, GA, KY, MS, NC, SC, TN
Region III IL, IN, MI, MN, OH, WI
Region IV AR, LA, OK, TX
Region V CO, IA, KS, MO, MT, NE, ND, NM, SD, UT, WY
Region VI AZ, CA, ID, NV, OR, WA
area averaged 882 square feet for market rent apartments and 841 square feet for the subsidized units.

The complete report (available online at www.naahq.org/05ies) contains detailed data summarized for six geographic regions and for metropolitan areas with at least 10 properties reported. Seventy-two metropolitan areas met the separate reporting requirement for market rent properties. Sufficient numbers of subsidized properties were submitted for 24 metropolitan areas.

This report also includes tables for the "other" properties in states with at least eight properties located in metro areas that did not meet requirements for separate reporting and in non-metro areas. Tables for market rent properties are given for 13 states, and among subsidized properties there are tables for 15 states. Data is presented in three forms: dollars per unit, dollars per square feet of rentable floor area and as a percentage of gross potential rent (GPR).

## Market Rent Properties

Economic Losses. A sluggish labor market until recently produced weakness in the rental apartment since 2000. One measure of the weakness is economic losses. They are defined as the difference between rent revenue collected and GPR expressed as a percentage of GPR. Included in the losses are revenues lost to physical vacancies, net uncollect-

ed rents and the values of rent concessions. The economic loss rate in the survey averaged 13.99 percent, up from 13.35 percent in 2003, and 11.39 percent in 2002. The 2004 level is 5.25 percentage points higher than the 8.74 percent rate recorded in 2000.

Economic loss rates rose markedly in four of the six NAA regions. The lowest economic loss rate was recorded, as it has been in every one of the NAA surveys, in the Northeast (Region I) at 10.02 percent. A high of 19.99 percent was calculated for properties in the Mountain/South Midwest (Region V). Declines in economic losses occurred in the Southeast (Region II) and the Pacific states (Region VI).

Economic vacancy rates for all of the regions were:

|  | 2004 | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: | :---: |
| All | 13.99\% | 13.35\% | 11.39\% | 9.69\% |
| Region I | 10.02\% | 8.79\% | 8.21\% | 6.36\% |
| Region II | 12.89\% | 13.31\% | 12.10\% | 10.44\% |
| Region III | 15.54\% | 13.84\% | 10.85\% | 10.64\% |
| Region IV | 16.23\% | 13.98\% | 11.53\% | 9.90\% |
| Region V | 19.99\% | 16.33\% | 12.75\% | 9.16\% |
| Region VI | 12.15\% | 13.21\% | 11.54\% | 9.79\% |

Net Operating Income and Revenues (NOI). NOI is an important measurement to use for evaluating the health of a property. It is simply the difference between total revenue collected and total operating expenses. NOI represents the gross cash available for debt service, capital expenditures and profits. NOI in the survey also revealed the softer rental apartment market with its decline for the fifth straight year in the survey for 2004 data. NOI measured in percent of GPR terms fell to 52.2 percent from the survey historical peak of 58.9 percent in 1999. Regionally NOI's in 2004 ranged from a high of 60.2 percent in the Northeast states (Region I) to a low of 44.4 percent in the Southwest (Region IV). The Southwest states historically have had the lowest NOI among the regions. Average NOIs for all regions for the last two surveys are as follows:

|  | per unit |  | per sq. ft. |  |  | $\%$ of GPR |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | 2004 | 2003 | 2004 | 2003 | 2004 | 2003 |  |
| All | $\$ 4,647$ | $\$ 4,627$ | $\$ 5.27$ | $\$ 5.31$ | $52.2 \%$ | $53.1 \%$ |  |
| Region I | $\$ 6,868$ | $\$ 6,607$ | $\$ 7.72$ | $\$ 7.48$ | $60.2 \%$ | $60.9 \%$ |  |
| Region II | $\$ 4,420$ | $\$ 4,401$ | $\$ 4.75$ | $\$ 4.82$ | $52.5 \%$ | $52.7 \%$ |  |
| Region III | $\$ 3,975$ | $\$ 4,193$ | $\$ 4.48$ | $\$ 4.84$ | $48.7 \%$ | $50.0 \%$ |  |
| Region IV | $\$ 3,450$ | $\$ 3,780$ | $\$ 4.21$ | $\$ 4.61$ | $44.4 \%$ | $47.7 \%$ |  |
| Region V | $\$ 4,708$ | $\$ 4,745$ | $\$ 5.35$ | $\$ 5.43$ | $51.7 \%$ | $55.6 \%$ |  |
| Region VI | $\$ 6,355$ | $\$ 6,073$ | $\$ 7.30$ | $\$ 6.98$ | $58.7 \%$ | $58.7 \%$ |  |

Gross Potential Rent (GPR). GPR in the survey data tables is defined here on a post fiscal year basis. It is the sum of rent revenue collected and revenue losses, including those from vacancies, collections and concessions. A 2 percent increase was recorded in average GPR in the 2004 data over the 2003 data. Average GPR for individually metered garden apartments was $\$ 8,896$ per unit ( $\$ 741$ monthly) in this year's survey versus $\$ 8,719$ per unit ( $\$ 727$ monthly) in the previous survey. Translat-

ed into per square foot of floor area, they were $\$ 10.09$ ( $\$ 0.84$ per month) versus $\$ 10.02$ ( $\$ 0.84$ per month). Median GPR in the current survey is $\$ 7,947$ ( $\$ 662$ per month) versus $\$ 7,631$ ( $\$ 636$ per month) a year ago. The range in 2004 went from $\$ 39,952$ ( $\$ 3,329$ per month) to $\$ 3,932$ ( $\$ 328$ per month) versus $\$ 24,381$ ( $\$ 2,031$ per month) to $\$ 3,294$ ( $\$ 275$ per month) in the 2003 data.

Rent Revenue Collected. Rent revenue collected averaged $\$ 7,652$ per individually metered garden property unit annually in the survey up 1.2 percent from the $\$ 7,555$ in last year's survey. Measured on a per-square-foot basis, rent revenue averaged $\$ 8.68$ per square foot, the same amount reported in the 2003 data.

Revenue Losses. Revenue losses rose to 13.99 percent of GPR in 2004 data versus 3.35 percent of GPR for 2003 data. Data for revenue losses were reported in three categories: those due to vacancies, collections and concessions. All three measures of revenue losses increased markedly. Vacancy losses for individually metered market rent garden properties averaged 8.7 percent of GPR in the current survey ( $\$ 776$ per unit, $\$ 0.88$ per square foot) versus 8.3 percent of GPR ( $\$ 725$ per unit, $\$ 0.83$ per



square foot) a year ago. Collection losses averaged 0.9 percent of GPR ( $\$ 76$ per unit, $\$ 0.09$ per square foot) in comparison to 1.3 percent of GPR ( $\$ 114$ per unit, $\$ 0.13$ per square foot) for 2003 data. And losses from rent concessions averaged 4.4 percent of GPR ( $\$ 339$ per unit in the property, $\$ 0.39$ per square foot) versus 3 percent of GPR ( $\$ 339$ per unit in the property, $\$ 0.45$ per square foot).

Other Revenue Collected. Other revenue collected from operating sources includes receipts from onsite laundries, cable, telephone systems, parking fees and other charges for services and amenities. These other operating revenues averaged $\$ 5.02$ per unit ( $\$ 0.57$ per square foot) for individually metered garden properties reported in the survey down from the $\$ 540$ per unit ( $\$ 0.62$ per square foot) a year earlier. Other non-rent operating revenues ranged from none to $\$ 3,872$ per unit. Median other operating revenues were $\$ 451$ per unit.

Total Operating Expenses. Rental apartment managers were able to control operating expenses more effectively last year. Total operating expenses for individually metered garden properties in the survey averaged $\$ 3,507$ per unit ( $\$ 3.98$ per square foot) up about 1 percent from the $\$ 3,468$ per unit ( $\$ 3.98$ per square foot) in 2003. The totals represented 39.4 percent of GPR
versus 39.8 percent a year earlier.
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), utilities (net of any reimbursements from residents), management fees, administration, marketing, contract services, and repair and maintenance. (Non-recurring capital expenses were excluded and reported separately.)

The two largest increases were in salaries and personnel and marketing costs. Salaries and personnel costs rose 11 percent to $\$ 944$ per unit from $\$ 848$ per unit (10.6 percent of GPR versus 9.7 percent a year earlier). Marketing costs rose 7 percent to $\$ 163$ from $\$ 152$ a year earlier. Insurance costs moderated after two years of sharp increases. They dropped 5 percent to $\$ 192$ per unit ( $\$ 0.22$ per square foot) from $\$ 203$ per unit ( $\$ 0.23$ per square foot). Administration costs declined 3 percent.

Turnover Rates. Turnover rates were unchanged at 62 percent of total units among the individually metered garden apartment properties reported in the survey. The range in turnover rates has been from 59 percent to 69 percent over the history of this survey. The low occurred in the data for 1995 and the high during the recession year of 1990. Increases last year in the turnover rates occurred in the Northeast (Region I) and the Mountain/South Midwest States (Region V). They declined slightly in the other four regions. The only significant change was in the Northeast (Region I) where the turnover rate rose to 57 percent from 50 percent.

Age of Property. Operating expenses on a percentage of GPR basis rise as properties age. They were 34.5 percent of GPR in properties less than five years old and rose to 43.5 percent for properties 20 or more years old. Significantly higher rents in newer properties produce a reverse pattern in operating expenses measured in dollars per unit and per square foot. They increased from $\$ 3,345$ per unit for properties 20 or more years old to $\$ 4,060$ per unit for those less than five years old. GPR per unit increased from a low of $\$ 7,943$ per unit ( $\$ 9.39$ per square foot) in the oldest property category to $\$ 11,773$ per unit ( $\$ 11.93$ per square foot) in the newest group.

Average NOI in terms of percentages of GPR was the lowest for the oldest properties reported at 49.3 percent for those that were 20 or more years old. The highest occurred in properties 10 to 19 years old at 55.6 percent, followed by 54.1 percent for those five to nine years old and 53.2 percent for those less than five years old. NOI in dollars per unit terms increases from a low in the oldest properties to a high in the newest properties. Spreads in GPR account for most of the differences in the dollar terms of NOIs by age of property.

Economic losses were the highest among the newest properties. Properties less than five years reported the highest ratio of economic losses at 17.01 percent and those 10 to 19 years old have the lowest losses at 12.14 percent.

There are some distinct differences in the individual cost components of operating costs by age of properties. The largest difference is in real estate and related property taxes and fees.


They varied from a high average of $\$ 1,155$ per unit ( $\$ 1.15$ per square foot) in those properties less than five years old to a low of $\$ 703$ ( $\$ 0.83$ per square foot) for those aged 20 or more years.

Repair and maintenance costs were the lowest in the newest properties, as one would expect. A low average of $\$ 276$ per unit ( $\$ 0.28$ per square foot) was reported for properties less than five years old. A high of $\$ 325$ per unit ( $\$ 0.37$ per square foot) occurred for those 20 or more years old.

Capital expenditures were significantly lower for the newest properties. They averaged $\$ 222$ per unit ( $\$ 0.23$ per square foot) for those properties less than five years old. The highest average was reported for properties 20 or more years old at $\$ 668$ per unit ( $\$ 0.79$ per square foot).

Size of Property. Presence of scale economies in apart-

ment properties would be evident if operating costs were to decline as the size of properties increases. Economies of scale did

## REVENUES AND NOI BY AGE AND SIZE OF PROPERTY INDIVIDUALLY METERED MARKET RENT GARDEN PROPERTIES



| Gross Potential Rent | 11773 | 10697 | 9449 | 7943 |
| :--- | ---: | ---: | ---: | ---: |
| Rent Revenue Collected | 9770 | 9128 | 8302 | 6773 |
| Losses to Vacancies | 1049 | 877 | 717 | 766 |
| Losses to Collections | 80 | 75 | 75 | 76 |
| Losses to Concessions | 874 | 617 | 354 | 329 |
| Other Revenue Collected | 553 | 563 | 500 | 486 |
| Total Revenue Collected | 10322 | 9690 | 8803 | 7259 |
| Total Operating Expenses | 4060 | 3909 | 3556 | 3345 |
| Net Operating Income | 6262 | 5782 | 5247 | 3913 |
| Economic Losses Rates (\%) | $17.01 \%$ | $14.67 \%$ | $12.14 \%$ | $14.73 \%$ |


| SIZE OF PROPERTY | Dollars Per Unit |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Less <br> than <br> 100 units | 100 to 249 units | 250 <br> to <br> 499 units | 500 <br> or <br> more units |
| No. of Properties | 437 | 1007 | 988 | 131 |
| No. of Units | 30300 | 179419 | 329686 | 89113 |
| Avg. No. of Units/Property | 69 | 178 | 334 | 680 |
| Avg. No. of Square Feet/Unit | 682 | 891 | 897 | 873 |
| Turnover Rate in \% | 65\% | 62\% | 62\% | 58\% |


| Gross Potential Rent | 6830 | 8871 | 9088 | 8937 |
| :--- | ---: | ---: | ---: | ---: |
| Rent Revenue Collected | 5949 | 7627 | 7822 | 7650 |
| Losses to Vacancies | 594 | 759 | 787 | 829 |
| Losses to Collections | 71 | 79 | 75 | 75 |
| Losses to Concessions | 217 | 407 | 405 | 384 |
| Other Revenue Collected | 385 | 494 | 525 | 473 |
| Total Revenue Collected | 6334 | 8121 | 8347 | 8123 |
| Total Operating Expenses | 2955 | 3602 | 3523 | 3444 |
| Net Operating Income | 3379 | 4519 | 4825 | 4679 |
| Economic Losses Rates (\%) | $12.90 \%$ | $14.02 \%$ | $13.93 \%$ | $14.40 \%$ |


| Dollars Per Square Foot |  |  |  |
| ---: | ---: | ---: | ---: |
| Less <br> Than <br> 5 Years | 5 <br> to <br> 9 Years | 10 <br> to <br> 19 Years | or more <br> Years |
| 97 | 245 | 787 | 1221 |
| 26649 | 72701 | 196984 | 275938 |
| 275 | 297 | 250 | 226 |
| 987 | 1003 | 883 | 842 |
| $61 \%$ | $63 \%$ | $64 \%$ | $60 \%$ |


| 11.93 | 10.66 | 10.70 | 9.39 |
| ---: | ---: | ---: | ---: |
| 9.90 | 9.10 | 9.40 | 8.01 |
| 1.06 | 0.87 | 0.81 | 0.91 |
| 0.08 | 0.08 | 0.09 | 0.09 |
| 0.89 | 0.62 | 0.40 | 0.39 |
| 0.56 | 0.56 | 0.57 | 0.57 |
| 10.46 | 9.66 | 9.97 | 8.58 |
| 4.11 | 3.90 | 4.03 | 3.95 |
| 6.34 | 5.76 | 5.94 | 4.63 |
| $17.01 \%$ | $14.67 \%$ | $12.14 \%$ | $14.73 \%$ |


| Dollars Per Square Foot |  |  |  |
| ---: | ---: | ---: | ---: |
| Less <br> than <br> 100 units | 100 <br> to <br> 249 units | 250 <br> to <br> 499 units | 500 <br> or <br> more units |
| 437 | 1007 | 988 | 131 |
| 30300 | 179419 | 329686 | 89113 |
| 69 | 178 | 334 | 680 |
| 682 | 891 | 897 | 873 |
| $65 \%$ | $62 \%$ | $62 \%$ | $58 \%$ |


| 10.01 | 9.95 | 10.13 | 10.23 |
| ---: | ---: | ---: | ---: |
| 8.72 | 8.56 | 8.72 | 8.76 |
| 0.87 | 0.85 | 0.88 | 0.95 |
| 0.10 | 0.09 | 0.08 | 0.09 |
| 0.32 | 0.46 | 0.45 | 0.44 |
| 0.56 | 0.55 | 0.59 | 0.54 |
| 9.28 | 9.11 | 9.30 | 9.30 |
| 4.33 | 4.04 | 3.93 | 3.94 |
| 4.95 | 5.07 | 5.38 | 5.36 |
| $12.90 \%$ | $14.02 \%$ | $13.93 \%$ | $14.40 \%$ |


| Percent of Gross Potential Rent |  |  |  |
| ---: | ---: | ---: | ---: |
| Less <br> Than <br> 5 Years | 5 <br> to <br> 9 Years | 10 <br> to <br> 19 <br> Years | or more <br> Years |
| 97 | 245 | 787 | 1221 |
| 26649 | 72701 | 196984 | 275938 |
| 275 | 297 | 250 | 226 |
| 987 | 1003 | 883 | 842 |
| $61 \%$ | $63 \%$ | $64 \%$ | $60 \%$ |


| $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |
| ---: | ---: | ---: | ---: |
| $83.0 \%$ | $85.3 \%$ | $87.6 \%$ | $85.3 \%$ |
| $8.9 \%$ | $8.2 \%$ | $7.6 \%$ | $9.6 \%$ |
| $0.7 \%$ | $0.7 \%$ | $0.8 \%$ | $1.0 \%$ |
| $7.4 \%$ | $5.8 \%$ | $3.8 \%$ | $4.1 \%$ |
| $4.7 \%$ | $5.3 \%$ | $5.3 \%$ | $6.1 \%$ |
| $87.7 \%$ | $90.6 \%$ | $93.2 \%$ | $91.4 \%$ |
| $34.5 \%$ | $36.5 \%$ | $37.6 \%$ | $42.1 \%$ |
| $53.2 \%$ | $54.0 \%$ | $55.6 \%$ | $49.3 \%$ |
| $17.01 \%$ | $14.67 \%$ | $12.14 \%$ | $14.73 \%$ |


| Percent of Gross Potential Rent |  |  |  |
| ---: | ---: | ---: | ---: |
| Less <br> than <br> 100 units | 100 <br> to | 250 <br> to | 500 <br> or |
| 437 | 1007 | 988 | 131 |
| 30300 | 179419 | 329686 | 89113 |
| 69 | 178 | 334 | 680 |
| 682 | 891 | 897 | 873 |
| $65 \%$ | $62 \%$ | $62 \%$ | $58 \%$ |


| $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |
| ---: | ---: | ---: | ---: |
| $87.1 \%$ | $86.0 \%$ | $86.1 \%$ | $85.6 \%$ |
| $8.7 \%$ | $8.6 \%$ | $8.7 \%$ | $9.3 \%$ |
| $1.0 \%$ | $0.9 \%$ | $0.8 \%$ | $0.8 \%$ |
| $3.2 \%$ | $4.6 \%$ | $4.5 \%$ | $4.3 \%$ |
| $5.6 \%$ | $5.6 \%$ | $5.8 \%$ | $5.3 \%$ |
| $92.7 \%$ | $91.6 \%$ | $91.8 \%$ | $90.9 \%$ |
| $43.3 \%$ | $40.6 \%$ | $38.8 \%$ | $38.5 \%$ |
| $49.5 \%$ | $50.9 \%$ | $53.1 \%$ | $52.4 \%$ |
| $12.90 \%$ | $14.02 \%$ | $13.93 \%$ | $14.40 \%$ |

appear when total operating costs were measured on a percentage of gross potential rent basis. They drop from 43.3 percent of GPR in properties with less than 100 units to a low of 38.5 percent in those containing 500 or more units. The survey results, however, did not show scale economies on a cost per unit basis. The lowest operating costs, at $\$ 2,955$ dollars per unit, were in the smallest properties - those with less than 100 units. The highest operating costs occurred in properties with 100 to 249 units at $\$ 3,602$ per unit.

Economic losses did not vary widely based on property size. They were highest with properties with 250 to 499 units at 13.73 percent of GPR and the lowest for properties with less than 100 units. Properties with 100 to 249 units had a 13.14 percent economic loss ratio and those with 500 or more units reported a 12.87 percent average.

Detailed Marketing Expenditures. Magazine advertising dominates the specific designated categories of marketing expenditures in the responses to the special question in this year's survey. Respondents were asked to give breakdown of mar-
keting expenditures. The specific expenditures identified in the question were magazines, newspapers, Web, mail and radio/television. The "other" category includes additional forms of marketing and related expenditures. Detailed marketing data was submitted for about half of the market rent garden and midhigh rise properties respectively.

Advertising in magazines averaged $\$ 82$ per unit-29 percent of total marketing costs (TMC) —in market rent garden properties reporting the detail in the survey. Web advertising was second with a $\$ 17$ per unit average, followed by newspaper at $\$ 10$ and mail at $\$ 1$. Advertising through radio and television averaged less than $\$ 1$ per unit. "Other" marketing costs averaged $\$ 95$ per unit ( 53 percent of TMC). Several respondents noted that marketing through special events was a major component of the "other" category expenditures in their communities.

Total marketing coast were higher in the mid- high-rise properties responding to the special question at $\$ 248$ per unit (33 percent of TMC). Magazine advertising also accounted for the highest expenditures, but the $\$ 72$ per unit average represented a

| ECONOMIC VACANCY RATES - NOI - TURNOVERMEIROPOLITAN AREASMARKET RENT GARDEN PROPERTIES - INDIVIDUALLY METERED |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 Sunoy |  |  |  |  |  | 2004 sunver |  |  |  |  |  |
|  | $\begin{aligned} & \text { Total } \\ & \text { No. of } \\ & \text { Propenties } \end{aligned}$ | $\begin{aligned} & \text { Totat } \\ & \text { No of } \\ & \text { Unot } \end{aligned}$ | Average Sq Ft Per Und | Turnover Rate |  | Economic cosses asa\% | Economic Losses as a\% |  |  | $\begin{gathered} \text { Total } \\ \text { No. of } \\ \text { Properies } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Total } \\ & \text { No of } \\ & \text { Units } \end{aligned}$ | Average Sq. FL Per Unit |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Regioni | 198 | 48788 | 890 | 57\% | 60.2\% | 10.03\% | 679\% | 60.9\% | $50 \%$ | 175 | 40490 | 889 |
| eutmore upusa | 29 | 6265 | 854 | 57\% | 60.6\% | 9.55\% | 9.11\% | $58.0 \%$ | 50\% | 19 | 3625 | 868 |
| boston wesnimea | 11 | 3030 | 951 | 55\% | 55.996 | 12.83\% | 11.21\% | $60.1 \%$ | $52 \%$ | 10 | 2093 | 896 |
| Hertomb ctmsa | 9 | 1794 | 951 | 5496 | 59.5\% | 10.55\% | 6.63\% | 54.2\% | 51\% | 14 | 1737 | 979 |
| newhwer.ctusa | 12 | 1480 | 694 | $50 \%$ | 55.7\% | 8.46\% | 8.39\% | 61.4\% | 50\% | 8 | 1387 | 895 |
|  | 13 | 4446 | 980 | 63\% | 66.0\% | 5,46\% | 508\% | 635\% | 52\% | 12 | 3812 | 993 |
|  | 8 | 3168 | 725 | $52 \%$ | 62.59 | 10.32\% | N/A | N/A | N/A | NA | N/A | N/A |
| Premethat mamsa | 3 | 748 | 831 | 48\% | 62.5\% | 10.58\% | 9.43\% | 55.2\% | 39\% | 6 | 1572 | 842 |
| PITBSURGH PAMSA | 9 | 833 | 754 | 49\% | 57.0\% | 9.26\% | 9.19\% | 487\% | 54\% | 13 | 1914 | 782 |
| providence mimsa | 7 | 1716 | 918 | 54\% | 56.7\% | 11.76\% | $652 \%$ | 57.8\% | 47\% | 10 | 2140 | 109: |
| RCHUOND PETERSLURO. VMme | 22 | 7012 | 902 | 60\% | 53.5\% | 10.63\% | 11.11\% | 58.2 | 52\% | 17 | 4576 | 850 |
| spangritio muma | 2 | 192 | 989 | 5298 | 57.9\% | 8.72\% | NA | NA | N/A | N/A | N/A | N/A |
|  | 52 | 14508 | 893 | 57\% | 62.8\% | 10.11\% | 871\% | 653\% | 51\% | 33 | 11910 | 846 |
| mex | 21 | 3596 | 975 | 62\% | 57.9\% | 10,72\% | 9.56\% | 62.5\% | 51\% | 22 | 3774 | 815 |
| Reconil | 883 | 211866 | 931 | 619 | 52.5\% | 12.99\% | 1331\% | 52T\% | 62\% | 839 | 190708 | 914 |
| a cent camsa | 11 | 1152 | 824 | 66\% | 40.7\% | 16.21\% | N/A | N/A | N/A | N/A | N/A. | N/ |
| anmeragasa | 140 | 37651 | 1000 | 61\% | 49.7\% | 16.79\% | 1504\% | 518\% | 65\% | 183 | 48143 | 963 |
| AuOusta camsa | 12 | 2273 | 828 | 61\% | 49.196 | 12.74\% | 1835\% | 398\% | 78\% | 10 | 1591 | 789 |
| CHMEISSTOM. SCusa | 11 | 2570 | 949 | 63\% | 56.1\% | 11,70\% | 1232\% | 54.3\% | 54\% | 14 | 3152 | 909 |
| CHMPLOTTE MC. MSA | 47 | 12724 | 947 | 63\% | 50.5\% | 13,16\% | 15.95\% | 490\% | 60\% | 43 | 10654 | 910 |
| coummersma | 21 | 5636 | 940 | 67\% | 47.6\% | 14.92\% | 1375\% | 480\% | 59\% | 16 | 4358 | 927 |
| pertorer Rima | 12 | 1196 | 743 | 639\% | S6.19\% | 8.42\% | 11.74\% | 51.6\% | 72\% | 12 | 1289 | 759 |
|  | 9 | 3315 | 937 | 59\% | $57.6 \%$ | 9.97\% | 11.43\% | 50.5\% | 58\% | 15 | 4350 | 892 |
| geemsseora weston shi m hioh Pont Mc MSA | 42 | 9119 | 924 | 57\% | 51.9\% | 12.88\% | 14.62\% | 514\% | 50\% | 25 | 5320 | 875 |
| Catemmusshatwssinct wochson scmse | 24 | 5579 | 907 | 63\% | 50,2\% | 12.03\% | 1756\% | 42.6\% | 67\% | 22 | 3940 | 861 |
| jacksor ms usa | 9 | 2130 | 981 | 299 | 52.1\% | 7.74\% | NA | N/A | N/A | N/A | N/A | N/A |
| jacksonill zimsa | 58 | 15446 | 917 | 60\% | 55.8\% | 11.46\% | 888\% | 590\% | 64\% | 55 | 15294 | 942 |
| wnoxvic tmma | 11 | 2049 | 919 | $59 \%$ | 40.046 | 16.66\% | 921\% | 419\% | 58\% | 15 | 2969 | 946 |
| Exwcron cimen | 16 | 2313 | 816 | $51 \%$ | 51.7\% | 15.06\% | 1501\% | 49.4\% | 58\% | 15 | 1546 | 761 |
| Loubvile nainsa | 17 | 2996 | 830 | 59\% | $51.0 \%$ | 18.18\% | 1386\% | 51,7\% | 58\% | 16 | 2009 | 773 |
| micongemse | 14 | 1850 | 918 | 55\% | 51.5\% | 9,48\% | N/A | N/A | N/A | N/A | N/A | N/A |
| mempras. Tharusa | 22 | 8669 | 877 | 39\% | 39.9\% | 17.52\% | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 33 | 7117 | 941 | 58\% | 56.7\% | 9.16\% | 9.65\% | 562\% | 54\% | 37 | 8327 | 948 |
| nestmuetmma | 33 | 10303 | 914 | 65\% | 57.0\% | 11.27\% | 10.15\% | 57.3\% | 61\% | 26 | 9126 | 909 |
| orlwoo rima | 67 | 17373 | 950 | $67 \%$ | 55.2\% | 11.35\% | 13.05\% | 529\% | 64\% | 60 | 15343 | 956 |
| REMSACOLA . .EAMPASSBEENT ALIMSA | 14 | 1853 | 778 | 85\% | 60.2\% | 7.89\% | 5.39\% | 60.7\% | 88\% | 12 | 1048 | 600 |
| RUEGOL OUR | 51 | 13560 | 924 | 61\% | 49.7\% | 15.13\% | 1637\% | 499\% | 57\% | 51 | 12897 | 905 |
|  | 10 | 1924 | 932 | 66\% | 54.5\% | 11.63\% | 1294\% | 54.3\% | 61\% | 14 | 2835 | 917 |
| savnear camsa | 9 | 1348 | 860 | 75\% | 61.8\% | 6.76\% | 12.70\% | 50.4\% | 71\% | 14 | 1407 | 761 |
| TMEEST PETERSNURO-CEARWNERMSA | 61 | 16121 | 883 | 64\% | 55.6\% | 10.36\% | 1255\% | 54.2\% | 63\% | 69 | 17086 | 855 |
| WESTPAMSCACH HOCABATON BOOTON NEACH FLMO | 26 | 5472 | 957 | 64\% | 57.5\% | 11.26\% | 12.01\% | 62.4\% | 54\% | 30 | 5954 | 899 |
|  | 8 | 2420 | 942 | 7790 | 67.39 | 6.53\% | N/A | N/A | N/A | N/A | N/A | N/A |
| seme | 95 | 17707 | 922 | 55\% | 51.3\% | 11.80\% | 12.79\% | 48.2\% | 64\% | 77 | 10412 | 869 |
| Regionim | 364 | 65461 | 886 | 56\% | 48.7\% | 15.64\% | 13.84\% | 50.0\% | 57\% | 417 | 73024 | 867 |
| CHCHGOMPERVUE JOUET, LMSA | 27 | 8972 | 915 | 54\% | 54.5\% | 13.65\% | 1391\% | 52.6\% | 57\% | 33 | 11538 | 920 |
|  | 39 | 6897 | 1087 | 49\% | 47.8\% | 15.73\% | $12.15 \%$ | 475\% | 49\% | 39 | 6113 | 991 |
|  | 12 | 802 | 591 | 60\% | 53.6\% | 14.67\% | 953\% | 51.5\% | 56\% | 18 | 1620 | 707 |
| socumeve ormsa | 64 | 8651 | 838 | 59\% | 47.8\% | 14.78\% | 12.88\% | 50.7\% | 59\% | 71 | 7053 | 711 |
| pantok ohmss | 24 | 2766 | 765 | 56\% | 54.1\% | 11.30\% | 9.67\% | 530\% | 54\% | 30 | 3502 | 777 |
|  | 40 | 6799 | 817 | 54\% | 49.2\% | 15.65\% | 13.61\% | 50.6\% | 55\%\% | 39 | 7707 | 909 |
| nowneocus in mise | 63 | 12197 | 837 | 56\% | 48.5\% | 17.07\% | 16.95\% | 47.2\% | 61\% | 83 | 15881 | 835 |
| Unssmo memsa | 10 | 1871 | 945 | 55\% | 47.1\% | 18.70\% | 11.94\% | 47.3\% | 53\% | 13 | 2525 | 968 |
|  | 17 | 3819 | 1047 | 62\% | 45.5\% | 18.08\% | 13.78\% | 49.1\% | 59\% | 11 | 2959 | 1024 |
|  | 9 | 959 | 687 | 63\% | 50.6\% | 12.70\% | N/A | N/A | N/A | N/A | N/A | N/A |
| Tre | 59 | 11728 | 877 | 58\% | 43.1\% | 16.62\% | 1365\% | 483\% | 56\% | 80 | 14326 | 847 |
| neocniv | 575 | 159414 | 820 | $64 \%$ | 44.4\% | 16.23\% | 1398\% | 47.7\% | 65\% | 616 | 171732 | 825 |
| AUSTNACUMOROCK TXMSA | 66 | 17977 | 835 | 67\% | 46.8\% | 15.05\% | 1532\% | 478\% | 61\% | 70 | 20832 | 815 |
| delus puno-suna txmo | 178 | 51084 | 824 | $62 \%$ | 43.3\% | 16.68\% | 14.19\% | 47.3\% | 64\% | 171 | 51326 | 839 |
| -t Wormintumgon txmo | 80 | 21985 | 805 | 69\% | 42.5\% | 16.15\% | 13.21\% | 44.3\% | 73\% | 60 | 16533 | 795 |
| HCUSTOw eartown sucnewo .Txnse | 145 | 42685 | 821 | 63\% | 43.9\% | 17.64\% | 14.21\% | 48.1\% | 62\% | 167 | 49167 | 824 |
| UTHE ROCX NOPTM UTME POCK ARMSA | 9 | 2048 | 897 | 45\% | 53.0\% | 11.21\% | N/A | N/A | N/A | N/A | N/A | N/A |
| wiececx dx mat | 14 | 2511 | 792 | 65\% | 39.7\% | 16.90\% | 11.84\% | $480 \%$ | 79\% | 23 | 3612 | 762 |
| OLAHOMS CITY OKMSA | 9 | 3127 | 897 | 77\% | 48.7\% | 16.34\% | 88\% | 40.8\% | 63\% | 9 | 3070 | 763 |
| SUNNTONO TXMSA | 25 | 6411 | 777 | 66\% | 48.4\% | 13.54\% | 1340\% | 49.8\% | 64\% | 36 | 8956 | 775 |
| mistaruss | 13 | 3772 | 715 | 73\% | 50.5\% | 12.02\% | 1301\% | 53.4\% | 69\% | 29 | 7516 | 795 |
| mer | 36 | 7814 | 844 | 66\% | 44.7\% | 13.33\% | 12.14\% | 49.1\% | 63\% | 51 | 10720 | 852 |
| megionv | 167 | 42281 | 880 | 65\% | 51,7\% | 19.99\% | 16.33\% | 55.6\% | 63\% | 161 | 40119 | 874 |
| coioraoo sphencs comea | 16 | 3276 | 853 | 76\% | 46.1\% | 25.26\% | 19.70\% | 49.3\% | 66\% | 18 | 3288 | 848 |
| DEMER ARPORA EOULER COMSA, | 85 | 22357 | 873 | 65\% | 52,7\% | 21.44\% | 1961\% | 54.8\% | 70\% | 51 | 13877 | 852 |
| musus ctry moks mes | 10 | 2866 | 953 | 559 | $55.5 \%$ | 16.59\% | 1391\% | 61.5\% | 56\% | 27 | 8562 | 915 |
| stloue moth Msa | 15 | 4217 | 902 | 66\% | 50.4\% | 16.27\% | 1338\% | 508\% | 53\% | 11 | 3391 | 843 |
| -e* | 41 | 9565 | 876 | 63\% | 50.3\% | 16.08\% | 15.14\% | 52.3\% | 63\% | 39 | 7100 | 840 |
| Recom wi | 376 | 100708 | 870 | 65\% | 58.7\% | 12.15\% | 1321\% | 58.7\% | 66\% | 355 | 93498 | 876 |
|  | 18 | 5748 | 760 | 58\% | 52,7\% | 13.74\% | 15.00\% | 56,5\% | 62\% | 14 | 4308 | 781 |
| LesmCEES-LOMG BEACHOUNOME CANO | 30 | 7890 | 867 | $63 \%$ | 64.8\% | 8.20\% | $841 \%$ | $65.9 \%$ | 56\% | 22 | 7206 | 893 |
| PROENXMESASCOTTSDLE NTMSA | 101 | 28384 | 872 | 71\% | 51.2\% | 17.34\% | 1963\% | 50.5\% | 68\% | 124 | 34201 | 876 |
| PORTLUOVNCOUNER SEMERTON SMEM OR WM MEA | 20 | 5991 | 962 | $72 \%$ | 53.3\% | 12.86\% | 1606\% | 53.2\% | 81\% | 13 | 4176 | 931 |
| RMERSIDESSNAEANUNDNO CINEA | 12 | 3404 | 785 | 62\% | 65.1\% | 6.93\% | NA | N/A | N/A | N/A | NA | N/A |
| SAN DECOCARLSEASNMMRCOS CAMSA | 25 | 6456 | 894 | 58\% | 66.1\% | 7.65\% | 733\% | $688 \%$ | 68\% | 19 | 6007 | 916 |
| Sen hanctico onenosw joss caven. | 37 | 9247 | 844 | 599 | 61,396 | 10.77\% | 1052\% | 63.5\% | 62\% | 22 | 5232 | 865 |
| sartanaranuem hivae cand | 48 | 14499 | 890 | 57\% | 64.8\% | 8.75\% | 8.50\% | 56.4\% | 70\% | 10 | 1252 | 875 |
| seathe Tacoma neuwe wamsa | 51 | 11774 | 878 | 72\% | 53.19\% | 16,43\% | 1368\% | $56.1 \%$ | 719 | 56 | 13691 | 856 |
| tucsonazesa | 14 | 3481 | 813 | 68\% | 47.4\% | 18.04\% | 1373\% | 56.3\% | 65\% | 30 | 6579 | 797 |
| noc | 20 | 3834 | 931 | 70\% | 60.8\% | 10.05\% | 6.79\% | 66.7\% | 60\% | 23 | 4273 | 911 |

Source: Natonal Acartreent Associabon 2004 Survey of Operating income 8 Expenses in Rental Appartment Communbes

- 2004 by Nationai Apartrient Association. This trstie may only be used, copied, andior dissibuted in accordance with the License Agroement and may not be posied on the ifitemet.

smaller share of the total. Newspaper spending was second at $\$ 22$ per units followed by $\$ 21$ per unit for Web advertising.


## Metro Area Detailed Operating Income and Expense Data

Detailed tables in the report are presented for the 72 metropolitan areas for which a total of 10 properties of all types were reported in the survey. This is the only section of the report with metropolitan area data for garden, mid- and high-rise building properties and further segmented into those with utilities that were either individually 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.
Some highlights of the metropolitan area data follow. They are limited to garden properties with individually metered utilities in metropolitan areas with at least 10 properties of this type reported, unless otherwise noted.

- NOIs on a dollar-per-square-foot basis ranged from \$11,043 ( $\$ 12.73$ per square foot) in the Los Angeles-Long Beach-Glendale metro area to $\$ 2,682$ ( $\$ 4.75$ per square foot) in Albany, Ga. San Diego, Calif., had the high NOI when measured in percentage of GPR terms at 66.1 percent and Memphis, Tenn.-Arkansas had the low at 39.9 percent.
- GPR averages were the highest in the Los Angeles-Long Beach-Glendale metro area at $\$ 17,040$ per unit ( $\$ 19.65$ per square foot). A low of $\$ 5,848$ per unit ( $\$ 8.50$ per square foot) was tabulated for properties reported from Toledo, Ohio.
- Economic losses were lowest in Norfolk-Virginia BeachNewport News metro area at 5.46 percent and Savannah, Ga., at 6.76 percent. Both, however, have small numbers of individually
metered garden properties reported. Metro areas with the highest economic losses were Colorado Springs at 25.26 percent, and Denver-Boulder at 21.44 percent.
- Properties reporting from Providence, R.I., had the highest operating costs at $\$ 5,343$ per unit ( $\$ 5.82$ per square foot), followed by Los Angeles-Long Beach-Glendale at $\$ 5,195$ per unit ( $\$ 4.20$ per square foot). A low of $\$ 2,584$ per unit ( $\$ 2.74$ per square foot) was reported for those properties located in Wilmington, N.C.
- Real estate taxes tended to be the most significant factor in the rankings of metro areas based on total operating costs. Fort Lauderdale-Pompano Beach-Deerfield Beach, Fla., had the highest per unit real estate taxes at $\$ 1,641$ followed by Los Ange-les-Long Beach-Glendale at $\$ 1,601$ and Chicago (the previous leader for a long time) at $\$ 1,588$ per unit. The lowest average was for properties located in Lexington, Ky., at $\$ 351$ followed by Oklahoma City at $\$ 396$ per unit.
- Insurance costs on a per unit basis were the highest at $\$ 273$ in Norfolk-Virginia Beach-Newport News, Va.-N.C., followed by Fort Lauderdale, Fla., at $\$ 272$. They were the lowest in Springfield, Mass., at $\$ 95$ per unit.
- Salaries and personnel costs were the lowest in the Pensaco-la-Ferrypass-Brent, Fla., metro area at $\$ 692$ per unit. Springfield, Mass., had the highest average at $\$ 1,333$ per unit followed by the $\$ 1,136$ in Boston, and $\$ 1,130$ in New Haven, Conn.
- Cincinnati had the largest units among the metro areas reported separately in this report with an average of 1,087 square feet of floor area per unit. Minneapolis-St. Paul had the second largest average size units at 1,047 square feet. Properties reporting from Cleveland had the low average at 591 square feet per unit.
- Metropolitan areas with the most garden properties reporting that were individually metered were Atlanta (140), Dallas (178), Houston (145) and Phoenix (101).


## Subsidized Properties Income and Expense Summary

Operating Income and Expense Summary. Data was received for 714 subsidized properties containing 106,195 units. Garden properties with individually metered utilities represent the largest sub group of properties reporting and analysis here will be limited to them. (Analysis of other subsidized properties can be found at www.naahq.org/05ies.) Data tables are presented for 23 metropolitan areas that met the 10 -property minimum for separate reporting.

Subsidized garden apartment properties with individually metered utilities tend to have fewer units and less floor area than the market rent units. They contained an average of 156 units versus 245 units for market rent properties of the same type. These subsidized properties had an average of 841 square feet of floor area versus 882 square feet for the market rent properties.

Revenues. GPR averaged $\$ 8,642$ per unit ( $\$ 10.27$ per square foot) annually in this year's survey, up 5 percent from the $\$ 8,226$ ( $\$ 9.54$ per square foot) a year earlier. Rental revenues averaged $\$ 7,847$ ( $\$ 9.33$ per square foot) versus $\$ 7,385$ per unit ( $\$ 8.57$ per square foot). Other operating revenues in subsidized properties increased 10 percent last year. They averaged $\$ 489$ per unit
( $\$ 0.58$ per square foot) in 2004 up from $\$ 441$ per unit ( $\$ 0.51$ per square foot) for 2003.

Operating Expenses. Operating expenses in subsidized properties were close to those for market rent properties. Subsidized properties reported in the survey had total operating costs averaging $\$ 3,510$ ( $\$ 4.17$ per square foot) in 2004 up 4 percent from the $\$ 3,374$ per unit ( $\$ 3.92$ per square foot) of 2003 . The market rent property average in 2004 was $\$ 3,507$ ( $\$ 3.98$ per square foot).

Net Operating Income. Subsidized properties had a slightly lower average NOI in all three measures. NOI for subsidized properties in the survey averaged 55.8 percent of GPR versus 52.2 percent for the market rent properties. The other comparisons were $\$ 4,826$ versus $\$ 4,647$ on a dollars-per-unit basis, and $\$ 5.74$ versus $\$ 5.27$ on a per-square-foot-of-floor-area basis.

Economic Losses. Economic losses tend to be lower in subsidized properties with their lower rents and relatively tight supply. A 9.2 percent average rate was calculated for the subsidized individually metered garden properties versus 14 percent for market rent units. The economic loss ratio in subsidized properties improved significantly from the 11.39 percent recorded a year earlier.

Turnover Rates. Occupants of subsidized apartments have lower income and fewer housing choices in most local markets and are less likely to move. The turnover rate in individually metered subsidized units was 39 percent versus 62 percent for market rent units.

## Glossary of Terms

Administrative. This includes the total office expenses (i.e., telephone, computers, forms, office rental and furniture).

Capital Expenditures. Non-recurring capital expenditures. Improvements not included as an expense item in operating expenses (i.e., renovations, appliance replacements, etc.). A zero on the line meant there were no capital expenditures.

Contract Services. Total landscape maintenance, exterminating, trash removal, security, snow removal and other services costs typically provided on contract basis.

GPR Commercial. Total potential rents for all commercial space if area would have been 100 percent occupied.

GPR Residential. Total rents of all occupied units at 2004 lease rates and all vacant units at 2004 street/market rents (or fiscal year end).

Heating/Cooling Fuel. Type of fuel used in apartment units.
Insurance. This includes property hazard and liability and real property insurance, and does not include payroll insurance.

Marketing. Total media advertising, collateral materials, locator fees, model expense, promotions, etc.

Management Fees. Total fees paid to managing agent from owner.

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 should include only finished space inside four perimeter walls of
each unit. Common areas should be excluded.
Other Revenue. Total collections from laundry, vending, cable, deposit forfeitures, furniture, parking, amenity charges, etc. Does not include interest income. Does not include utility reimbursements (i.e., RUBS) in GPR or rental revenue. All utility reimbursements are subtracted from gross utility expense.

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.

Rent Controlled Property. Whether the 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.

Repair and Maintenance. Total of all general maintenance and repairs, cleaning, decorating, painting, plumbing, electrical, HVAC, etc. Nonrecurring capital expense not included.

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

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

Residential Units Revenue Losses to Vacancies. Annual amount of rental income for residential units not collected due to vacancies and other use of units, such as models and offices.

Salary and Personnel Costs. Gross salaries and wages paid to employee's onsite. Includes value of employee apartment allowances, payroll taxes, group health/life insurance, workers' compensation, bonuses and lease commissions, employer $401(\mathrm{k})$ and/or retirement contributions and other cash benefits.

Subsidized Property. Whether the property has controlled rents through a government subsidized program or not. If yes, the program was listed (i.e., Section 236, Section 8).

Taxes. Total real estate and personal property taxes only. Payroll or rendering fees related to property taxes were not included.

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

Total Operating Expenses. Sum of all operating costs. The sum must balance with this line, using total net utility expenses only.

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

Utilities. Total cost of all utilities and each listed type, net of any income reimbursements for or from residents (i.e., RUBS or similar systems). Does not include trash removal.

Utility Configuration. Whether electric, gas, oil and water/sewer utilities to individual units in subject property are: Master Metered-Owner Pays; Master Metered-Resident Pays (RUBS); Individual and Sub Metered-Resident Pays.

| MARKET RENT PROPERTIES WITH LESS THAN 100 UNITS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INDIVIDUAL METERED PROPERTIES |  |  |  |  |  |  |  |  |  |
| Number of Properties Number of Units Avg. No. of Units/Property Avg. No. of Square Feet/Unit Turnover rate in \% |  | Total |  |  | Garden |  |  | \& Hi Rise |  |
|  |  | 451 |  |  | 437 |  |  | 14 |  |
|  |  | 31467 |  |  | 30300 |  |  | 167 |  |
|  |  | 70 |  |  | 69 |  |  | 83 |  |
|  |  | 685 |  |  | 682 |  |  | 748 |  |
|  |  | 64\% |  |  | 65\% |  |  | 55\% |  |
|  | $\begin{aligned} & \text { \$Per } \\ & \text { Unit } \end{aligned}$ | $\begin{aligned} & \text { \$Per } \\ & \text { Sq. } \mathrm{Ft} \end{aligned}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ | $\begin{aligned} & \text { \$Per } \\ & \text { Unit } \end{aligned}$ | $\begin{aligned} & \text { SPer } \\ & \mathrm{Sq} . \mathrm{Ft} \end{aligned}$ | $\begin{aligned} & \% \text { of } \\ & \text { GPR } \end{aligned}$ | $\begin{aligned} & \text { \$ Per } \\ & \text { Unit } \end{aligned}$ | $\begin{aligned} & \text { \$Per } \\ & \text { Sq. Ft. } \end{aligned}$ | $\begin{aligned} & \begin{array}{l} \text { \% of } \\ \text { GPR } \end{array} \end{aligned}$ |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 7014 | 10.24 | 100.0\% | 6830 | 10.01 | 100.0\% | 11788 | 15.76 | 100.0\% |
| Rent Revenue Collected | 6102 | 8.91 | 87.0\% | 5949 | 8.72 | 87.1\% | 10090 | 13.49 | 85.6\% |
| Losses to Vacancy | 606 | 0.88 | 8.6\% | 594 | 0.87 | 8.7\% | 910 | 1.22 | 7.7\% |
| Collection Losses | 75 | 0.11 | 1.1\% | 71 | 0.10 | 1.0\% | 180 | 0.24 | 1.5\% |
| Losses to Concessions | 231 | 0.34 | 3.3\% | 217 | 0.32 | 3.2\% | 608 | 0.81 | 5.2\% |
| Other Revenue | 395 | 0.58 | 5.6\% | 385 | 0.56 | 5.6\% | 638 | 0.85 | 5.4\% |
| Total Revenue | 6497 | 9.49 | 92.6\% | 6334 | 9.28 | 92.7\% | 10728 | 14.34 | 91.0\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 881 | 1.29 | 12.6\% | 866 | 1.27 | 12.7\% | 1289 | 1.72 | 10.9\% |
| Insurance | 147 | 0.21 | 2.1\% | 141 | 0.21 | 2.1\% | 302 | 0.40 | 2.6\% |
| Taxes | 572 | 0.84 | 8.2\% | 555 | 0.81 | 8.1\% | 1023 | 1.37 | 8.7\% |
| Utilities | 255 | 0.37 | 3.6\% | 246 | 0.36 | 3.6\% | 485 | 0.65 | 4.1\% |
| Management Fees | 264 | 0.39 | 3.8\% | 258 | 0.38 | 3.8\% | 410 | 0.55 | 3.5\% |
| Administrative | 145 | 0.21 | 2.1\% | 137 | 0.20 | 2.0\% | 347 | 0.46 | 2.9\% |
| Marketing | 141 | 0.21 | 2.0\% | 140 | 0.20 | 2.0\% | 178 | 0.24 | 1.5\% |
| Contract Services | 292 | 0.43 | 4.2\% | 293 | 0.43 | 4.3\% | 277 | 0.37 | 2.4\% |
| Repair and Maintenance | 325 | 0.48 | 4.6\% | 320 | 0.47 | 4.7\% | 468 | 0.63 | 4.0\% |
| Total Operating Expenses | 3023 | 4.41 | 43.1\% | 2955 | 4.33 | 43.3\% | 4780 | 6.39 | 40.5\% |
| Net Operating Income | 3474 | 5.07 | 49.5\% | 3379 | 4.95 | 49.5\% | 5948 | 7.95 | 50.5\% |
| Capital Expenditures | 1038 | 1.52 | 14.8\% | 1052 | 1.54 | 15.4\% | 672 | 0.90 | 5.7\% |
| MASTER METERED PROPERTIES |  |  |  |  |  |  |  |  |  |
|  |  | Total |  |  | Garden |  |  | \& Hi Rise |  |
| Number of Properties |  | 54 |  |  | 42 |  |  | 12 |  |
| Number of Units |  | 4117 |  |  | 3142 |  |  | 975 |  |
| Avg. No. of Units/Property |  | 76 |  |  | 75 |  |  | 81 |  |
| Avg. No. of Square Feet/Unit |  | 866 |  |  | 855 |  |  | 901 |  |
| Turnover rate in \% |  | 46\% |  |  | 46\% |  |  | 44\% |  |
|  | $\begin{aligned} & \text { \$Per } \\ & \text { Unit } \end{aligned}$ | $\begin{aligned} & \text { \$Per } \\ & \text { Sq. } \mathrm{Ft} \end{aligned}$ | $\% \text { of }$ GPR | $\begin{aligned} & \text { \$Per } \\ & \text { Unit } \end{aligned}$ | $\begin{aligned} & \text { SPer } \\ & \mathrm{Sq} . \mathrm{Ft} \end{aligned}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ | $\begin{aligned} & \text { \$Per } \\ & \text { Unit } \end{aligned}$ | $\begin{aligned} & \text { SPer } \\ & \text { Sq. } \mathrm{Ft} \end{aligned}$ | \% of GPR |
| Revenues |  |  |  |  |  |  |  |  |  |
| Gross Potential Rent | 10519 | 12.15 | 100.0\% | 10225 | 11.97 | 100.0\% | 11467 | 12.73 | 100.0\% |
| Rent Revenue Collected | 9417 | 10.88 | 89.5\% | 9102 | 10.65 | 89.0\% | 10431 | 11.58 | 91.0\% |
| Losses to Vacancy | 764 | 0.88 | 7.3\% | 751 | 0.88 | 7.3\% | 805 | 0.89 | 7.0\% |
| Collection Losses | 68 | 0.08 | 0.6\% | 78 | 0.09 | 0.8\% | 36 | 0.04 | 0.3\% |
| Losses to Concessions | 270 | 0.31 | 2.6\% | 293 | 0.34 | 2.9\% | 194 | 0.22 | 1.7\% |
| Other Revenue | 371 | 0.43 | 3.5\% | 346 | 0.41 | 3.4\% | 449 | 0.50 | 3.9\% |
| Total Revenue | 9788 | 11.31 | 93.0\% | 9449 | 11.06 | 92.4\% | 10880 | 12.08 | 94.9\% |
| Operating Expenses |  |  |  |  |  |  |  |  |  |
| Salaries and Personnel | 1086 | 1.25 | 10.3\% | 1085 | 1.27 | 10.6\% | 1088 | 1.21 | 9.5\% |
| Insurance | 243 | 0.28 | 2.3\% | 227 | 0.27 | 2.2\% | 294 | 0.33 | 2.6\% |
| Taxes | 770 | 0.89 | 7.3\% | 718 | 0.84 | 7.0\% | 937 | 1.04 | 8.2\% |
| Utilities | 1035 | 1.20 | 9.8\% | 1043 | 1.22 | 10.2\% | 1011 | 1.12 | 8.8\% |
| Management Fees | 459 | 0.53 | 4.4\% | 437 | 0.51 | 4.3\% | 533 | 0.59 | 4.6\% |
| Administrative | 276 | 0.32 | 2.6\% | 258 | 0.30 | 2.5\% | 334 | 0.37 | 2.9\% |
| Marketing | 168 | 0.19 | 1.6\% | 172 | 0.20 | 1.7\% | 154 | 0.17 | 1.3\% |
| Contract Services | 390 | 0.45 | 3.7\% | 376 | 0.44 | 3.7\% | 437 | 0.48 | 3.8\% |
| Repair and Maintenance | 507 | 0.59 | 4.8\% | 477 | 0.56 | 4.7\% | 605 | 0.67 | 5.3\% |
| Total Operating Expenses | 4934 | 5.70 | 46.9\% | 4792 | 5.61 | 46.9\% | 5393 | 5.99 | 47.0\% |
| Net Operating Income | 4853 | 5.61 | 46.1\% | 4656 | 5.45 | 45.5\% | 5487 | 6.09 | 47.9\% |
| Capital Expenditures | 862 | 1.00 | 8.2\% | 856 | 1.00 | 8.4\% | 882 | 0.98 | 7.7\% |
| Source: National Apartment Association 2005 Survey of Operating income \& Expenses in Rental Apartment Communities |  |  |  |  |  |  |  |  |  |



## Survey

## of

## Income

and

## Expenses

## in Rental

Apartment
Gommunities


NATIONAL APARTMENT ASSOCIATION

# 2004 Survey of Income and Expenses in Rental Apartment Communities 

## 2004

## NAA Income \& Expense Survey Staff

Robert J. Sheehan II, NAA Consulting Economist
Regis J. Sheehan \& Associates
McLean, VA

Roland Freeman, CAPS, CRE, CPM
Capital Consultants Realty Services Inc.
Dallas, TX
Douglas S. Culkin, CAE
NAA Executive Vice President, Publisher

## Barbara A. Vassallo, Esq.

NAA Vice President of State $\mathcal{E}$ Local Policy

## ABOUT THE NATIONAL APARTMENT ASSOCIATION

The National Apartment Association (NAA) is a federation of more than 167 state and local associations throughout the United States and Canada. Together, we represent more than 30,000 members and 5.14 million apartment homes. NAA is the leading advocate for quality rental housing with members representing multifamily builders, owners, developers, managers, leasing consultants, service technicians and suppliers.
NAA strives to bring you a wealth of information through advocacy, research, technology, education, strategic partnerships and an ever-growing membership base. NAA ensures that your voice is heard and protects your interests by providing representation on legislative and regulatory issues across all levels of government through a joint legislative alliance with the National Multi Housing Council. The State and Local Policy Department monitors and reports state and local legislative activity, conducts research, and provides statistics and information from numerous resources.

NAA plays a key role in educating multifamily
housing professionals nationwide through our six nationally recognized certification programs for property supervisors (CAPS), apartment managers (CAM), leasing consultants (NALP), maintenance personnel (CAMT and CAMT II) and apartment suppliers (CAS).

NAA provides a forum for the exchange of ideas and information, strategic partnerships, and longlasting friendships at our three annual conferences. NAA's Capitol Conference, held each spring in Washington, D.C., is designed for members to receive legislative issue briefings and lobby their members of Congress. The biggest and most anticipated event of the year, the NAA Education Conference \& Exposition, is held each June. The Assembly of Delegates Meeting is held each fall to elect officers and transact association business.

Every member receives UNITS magazine, the authority on the multifamily housing industry. Plus, NAA members have access to special discounts on other resources not available anywhere else, such as this survey, the Washington Update Series, Hotsheets and the NAA Bookstore.


NATIONAL APARTMENT Association

## ACKNOWLEDGEMENTS

The 2004 Survey of Operating Income and Expenses in Rental Apartment Communities further adds to National Apartment Association's (NAA) success in producing information valuable to its members and the apartment industry. The survey provides executives and professionals in the apartment and related industries with financial information needed to conduct their daily operations that can be used as a tool to support their strategic and business planning. NAA remains committed to improving the survey and presents more valuable revenue related data in this year's report.

I thank Barbara Vassallo, who acted as NAA's staff coordinator for the survey; Roland D. Freeman, a Past NAA President, of Capital Consultants Realty Services, and Robert J. Sheehan II, NAA's Consulting Economist, who jointly assisted in promoting responses, processing and analyzing the data, and wrote the report; Robert J. Sheehan III, of Regis J Sheehan \& Associates, for his work in developing the computer programming for tabulation of the results; Paul R. Bergeron III and Rachel F. Goldberg, who edited the report; Norman Grandstaff of Ideas Communicated, who designed the report; and RE Data, the firm responsible for data input.

A special note of appreciation goes to those firms who donated their time in accumulating the data necessary to make this survey a success. I am especially grateful to those companies and their officers who contributed data for 20 or more of their properties for the 2004 survey (listed in order of number of submissions).

AIMCO Management Co. • Equity Residential Properties Trust • Alliance Residential • WMC Management Company LLC • Konover Residential • Dial Equities • Westmark Management Co. • Towne Properties • Lincoln Property Company • BNP Residential Properties Inc. • McCormack Baron Mangement Services • McSha Properties • Woodspear Properties • Julian LeCraw \& Co. Inc. $\bullet$ MC Realty Advisors LLC • McDougal Properties

Deane Dolben, CAPS
2004 NAA President

# 2004 Survey of Income and Expenses in Rental Apartment Communities Executive Summany 

NAA has completed its Survey of Operating Income and Expenses in Rental Apartment Communities for 2004, based on data for 2003. Major findings in this survey of the professionally managed rental apartment industry show some more softening in the market rent segment of the rental apartment market.
A total of 3,682 properties containing 832,471 units are represented in this report. Reporting of the data is composed of 3,064 market rent properties containing 734,737 units and 618 subsidized properties containing 97,734 units. Forms with partial data or apparent problems that could not be resolved and used were received for 57 more properties with 12,198 units.

The report presents data from four types of properties. Garden and mid-rise/high-rise structures are segmented into individually metered and master metered utilities properties.

Responses from garden properties with individually metered utilities dominate the survey, representing 84 percent of the market rent properties and 49 percent of the subsidized properties. The analysis is, therefore, centered on the garden properties with individually metered utilities.

Average sizes of the market rent garden individually metered properties are 238 units, and 175 units in subsidized units. Rentable floor area averaged 871 square feet for market rent apartments and 862 square feet for the subsidized units.

The complete report, which can be found at NAA's Web site, www.naahq.org, contains detailed


Market Rent Properties Summary . . . . . . . . . . . . . . . . . p. 4 Metropolitan Area Detailed Income and Expense Data . . p. 5 Subsidized Properties Summary . . . . . . . . . . . . . . . . . . . p. II Subsidized Properties Detailed Income and Expense Data .. p. 23
Glossary of Terms
p. 12

To view a full survey report or individual market data visit www.naahq.org.

## Regions Used in Survey

Region I CT, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT, WV
Region II AL, FL, GA, KY, MS, NC, SC, TN
Region III IL, IN, MI, MN, OH, WI
Region IV AR, LA, OK, TX
Region V CO, IA, KS, MO, MT, NE, ND, NM, SD, UT, WY
Region VI AZ, CA, ID, NV, OR, WA
data summarized for six geographic regions and for metropoli$\tan$ areas with at least 10 properties reported. Sixty-six metropoli$\tan$ areas met the separate reporting requirement for market rent properties. Sufficient numbers of subsidized properties were submitted for 20 metropolitan areas.

This report also includes tables for the "other" properties in states with at least seven properties located in metro areas that did not meet requirements for separate reporting and in non-metro areas. Tables for market rent properties are given for 16 states, and among subsidized properties there are tables for 16 states. Data is presented in three forms: dollars per unit, dollars per square feet of rentable floor area and as a percentage of gross potential rent (GPR).

## Market Rent Properties

Economic Losses (reported as Economic Vacancies in previous reports). Softness in the rental apartment market still existed through last year. One measure of the softness is economic losses. They are defined as the difference between rent revenue collected and GPR expressed as a percentage of GPR. Included in the losses are revenues lost to physical vacancies, net uncollected rents, and the values of rent concessions. The Economic loss rate in the survey averaged 13.35 percent in 2003, up from 11.39 percent recorded a year earlier.

Economic loss rates rose markedly in all regions. The lowest economic loss rate was recorded, as it has been in every one of the NAA surveys, in the Northeast (Region I) at 8.79 percent. A high

## ALL MARKET RENT PROPERTIES

OPERATING INCOME \& EXPENSE DATA

MASTER METERED PROPERTIES

| Number of Properties |
| :--- |
| Murmber of Unts |
| Total No of UntyProperty |
| Ava No of Square Feetlinit |
| Turnover ptein\% |



|  | $\begin{aligned} & \text { SPor } \\ & \text { Unit } \end{aligned}$ | $\begin{gathered} \text { \$Per } \\ \text { Sq. } \mathrm{R} \\ \hline \end{gathered}$ | $\begin{aligned} & \text { \% ot } \\ & \text { GPR } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Aeverues |  |  |  |
| Gross Potertal Rent | 10172 | 1120 | 10008 |
| Rent Revenue Collected | 8 Cr | 884 | 063* |
| Leoresto Vecancy | 091 | 100 | 88.8 |
| Coluctionlorses | 138 | 015 | 1.388 |
| Loseesto Conossuions | 369 | 041 | 3005 |
| Cheer Revenue. | 56 | 0.64 | 5081 |
| Total Rovenue | 838 | 1048 | 91.98 |


| $\begin{aligned} & \text { \$Per } \\ & \text { Unit } \end{aligned}$ | $\begin{aligned} & \text { \$Per } \\ & \text { Sq. } \mathrm{R} \end{aligned}$ | \% of GPR |
| :---: | :---: | :---: |
| Pam | 1038 | 10093 |
| 7080 | 884 | 8578\% |
| 831 | 0.98 | 9081 |
| 15. | 016 | 108 |
| 36 | 038 | 378 |
| 508 | 056 | 558 |
| EX94 | 941 | 9178 |


| $\begin{aligned} & \text { SPer } \\ & \text { Unt } \end{aligned}$ | $\begin{array}{r} \text { SPer } \\ \text { Sq } R \end{array}$ | $\begin{aligned} & \text { \% of } \\ & \text { GPR } \end{aligned}$ |
| :---: | :---: | :---: |
| 14836 | 1642 | 10005 |
| 12890 | 14.46 | 881\% |
| 11\% | 131 | 806 |
| m | 010 | 008 |
| 489 | 0.55 | 335 |
| 835 | 0.88 | 608 |
| 18.807 | 1544 | 9418 |


| Solures and Pemonnel | 96 | 111 | 978 | 900 | 104 | 1018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Insumace | 265 | 076 | 2331 | 22 | 025 | $24 \%$ |
| Taxes | 001 | 0.96 | 8.98 | 76. | 084 | $81 \%$ |
| Wilites | 相 | 0 OP | 8.588 | 1 mb | 0.08 | 2085 |
| Maragoment Fiees | 398 | 0.45 | 3988 | 30 | 0.40 | $39 \%$ |
| Adminotative. | 200 | 025 | 278 | 25 | 028 | 278 |
| Maduting | 151 | 017 | 1.58 | 13 | 015 | 158\% |
| Cortract Services | 37 | 042 | 3730 | 386 | 037 | 3588 |
| Repait and Mirtenance | 528 | 058 | 5.18 | 50 | 0.56 | 548 |
| Total (ooentina Ereennes | 4018 | 518 | 45038 | 4033 | 477 | 4623 |
| Net Operating income | 4731 | $530]$ | 4858 | 4141 | 464 | 45008 |
| Caphal Expendihys | 736 | 0.89 | 728 | 671 | 0 Cg | 678 |


| 1297 | 1.40 | 89\% |
| :---: | :---: | :---: |
| 200 | 033 | 205 |
| 139 | 156 | 998 |
| 10x8 | 1.18 | 72\% |
| 578 | 006 | 3984 |
| 2 m | 039 | 208 |
| 200 | 025 | $15 \%$ |
| 樶 | 068 | 41\% |
| EC5 | 070 | 437 |
| 6 cos | 700 | 4 $11 \%$ |
|  |  |  |
| 7481 | 837 | 51.04 |
| 17 E | 144 | 8808 |
| 1760 | 144 | 8808 |

Source: Mabional Apehtmert Ansociation 2004 Sarvey of hocme 5 Epenses in Rertal Apertnert Comenurbies

of 16.33 percent was calculated for properties in the Mountain/South Midwest (Region V).

Economic vacancy rates for all of the regions were:

|  | 2003 | 2002 | 2001 |
| :---: | :---: | :---: | :---: |
| Region I | 8.79\% | 8.21\% | 6.36 \% |
| Region II | 13.31\% | 12.10\% | 10.44 \% |
| Region III | 13.84\% | 10.85\% | 10.64 \% |
| Region IV | 13.98\% | 11.53\% | 9.90 \% |
| Region V | 16.33\% | 12.75\% | $9.16 \%$ |
| Region VI | 13.21\% | 11.54\% | 9.79 \% |

Net Operating Income and Revenues (NOI). NOI is an important measurement to use for evaluating the health of a property. It is simply the difference between total revenue collected and total operating expenses. NOI represents the gross cash available for debt service, capital expenditures and profits. NOI in the survey also revealed the softer rental apartment market with its decline for the fourth straight year in the survey for 2003 data. NOI measured in percent of GPR terms fell to 53.1 percent from the survey historical peak of 58.9 percent in 1999. Regionally NOI's in 2003 ranged from a high of 60.9 percent in the Northeast states (Region I) to a low of 47.7 percent in the Southwest (Region IV). The Southwest states historically have had the lowest NOI among the regions. Average NOIs for all regions for the last two surveys are as follows:

|  | per unit |  |  | per sq. ft. |  |  | $\%$ of GPR |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | 2003 | 2002 |  | 2003 | 2002 |  | 2003 |  |
|  | $\$ 4,627$ | $\$ 4,940$ | $\$ 5.31$ | $\$ 5.66$ | 53.1 | 56.7 |  |  |
| All | $\$ 6,607$ | $\$ 6,214$ | $\$ 7.48$ | $\$ 6.94$ | 60.9 | 62.5 |  |  |
| Region I | $\$ 6,02$ |  |  |  |  |  |  |  |
| Region II | $\$ 4,401$ | $\$ 4,608$ | $\$ 4.82$ | $\$ 5.10$ | 52.7 | 55.3 |  |  |
| Region III | $\$ 4,193$ | $\$ 4,561$ | $\$ 4.84$ | $\$ 5.26$ | 50.0 | 55.3 |  |  |
| Region IV | $\$ 3,780$ | $\$ 4,195$ | $\$ 4.61$ | $\$ 5.09$ | 47.7 | 52.2 |  |  |
| Region V | $\$ 4,745$ | $\$ 5,302$ | $\$ 5.43$ | $\$ 6.09$ | 55.6 | 60.3 |  |  |
| Region VI | $\$ 6,073$ | $\$ 6,164$ | $\$ 6.98$ | $\$ 7.07$ | 58.7 | 60.8 |  |  |

Gross Potential Rent (GPR). GPR in the survey data tables is defined here on a post fiscal year basis. It is the sum of rent revenue collected and revenue losses, including those from vacancies, collections and concessions. Average GPR for individually metered garden apartments was $\$ 8,719$ per unit ( $\$ 727$ monthly) in this year's survey vs. $\$ 8,707$ per unit ( $\$ 726$ monthly) in the previous survey. Translated into per square foot of floor area, they were $\$ 10.02$ ( $\$ .84$ per month) vs. $\$ 9.97$ ( $\$ .83$ per month). Median GPR in the current survey is $\$ 7,631$ ( $\$ 636$ per month). The range went from $\$ 24,381$ ( $\$ 2,031$ per month) to $\$ 3,294$ ( $\$ 275$ per month).

Rent Revenue Collected. Rent revenue collected averaged $\$ 7,555$ per individually metered garden property unit annually in the survey down from the $\$ 7,714$ in last year's survey. Measured on a per square foot basis, rent revenue averaged $\$ 8.68$.

Revenue Losses. Revenue losses rose to 13.35 percent of GPR for 2003 data from 11.4 percent in the survey for 2002 data and 9.5 percent in the 2001 data survey. Data for revenue losses was reported in three categories: those due to vacancies, collections and concessions. All three measures of revenue losses



increased markedly. Vacancy losses for individually metered market rent garden properties averaged 8.3 percent of GPR in the current survey ( $\$ 725$ per unit, $\$ .83$ per square foot) vs. 7.7 percent of GPR ( $\$ 668$ per unit, $\$ .77$ per square foot) a year ago. Collection losses averaged 1.3 percent of GPR ( $\$ 114$ per unit, $\$ 0.13$ per square foot) in comparison to 0.7 percent of GPR ( $\$ 63$ per unit, $\$ 0.07$ per square foot) for 2002 data. And losses from rent concessions averaged 3.9 percent of GPR ( $\$ 339$ per unit in the property, $\$ 0.39$ per square foot) vs. 3 percent of GPR ( $\$ 261$ per unit in the


Property Insurance Costs Individually Metered Market Rent Garden Properties


Insurance costs rose more than 13 percent to $\$ 203$ per unit ( $\$ .23$ per square foot) from $\$ 179$ per unit ( $\$ 0.21$ per square foot). And the 2002 level was up 79 percent from the $\$ 121$ per unit ( $\$ 0.14$ per square foot) reported in 2001 data.

Turnover Rates. Turnover rates were up slightly to 62 percent of total units among the individually metered garden apartment properties reported in the survey from 61 percent in the data for 2002. Turnover has ranged from 59 percent to 69 percent over the history of this survey. The low occurred in the data for 1995 and the high during the recession year of 1990. Increases in the turnover rates increased in three regions, dropped in two regions, and was unchanged in one.

Age of Property. Operating expenses on a percentage of GPR basis rise as properties age. They were 34.9 percent of GPR in properties less than 5 years old and rose to 43.5 percent for properties 20 or more years old. Significantly higher rents in newer properties produce a reverse pattern in operating expenses measured in dollars per unit and per square foot. They increased from \$3,307 per unit for properties 20 or more years old to $\$ 3,899$ per unit for those less than 5 years old. GPR per unit increased from a low of $\$ 7,602$ per unit ( $\$ 9.01$ per square foot) in the oldest property category to $\$ 11,192$ per unit ( $\$ 11.38$ per square foot) in the newest group.
NOI in terms of percentages of GPR was the lowest for the oldest properties reported. It was relatively the same for the three other age groups used in this analysis. Properties that were 20 or more years old reported an average NOI of 53.9 percent. The highest occurred in properties 5 to 9 years old at 58.3 percent, followed by 57.7 percent for those 10 to 19 years old and 57.4 percent for those less than 5 years old. Spreads in GPR account for most of the differences in the NOI's by age of property.

Economic losses were the highest among the newest and oldest properties at 14.93 and 14.01 percent respectively. Properties less than 5 years to 9 years reported economic losses at 13.21 percent and those 10 to 19 years old has the lowest losses at 12.48 percent.
There are some distinct differences in the individual cost components of operating costs by age of properties. The largest difference is in real estate and related property taxes and fees. They varied from a high average of $\$ 1,083$ per unit ( $\$ 1.09$ per square foot) in those properties less than 5 years old to a low of $\$ 652$ ( $\$ .77$ per square foot) for those aged 20 or more years.
Repair and maintenance costs were the lowest in the newest properties, as one would expect. A low average of $\$ 302$ per unit ( $\$ 0.31$ per square foot) was reported for properties less than 5 years old. A high of $\$ 401$ per unit ( $\$ 0.48$ per square foot) occurred for those 20 or more years old. Capital expenditures were significantly lower for the newest properties. They averaged \$224 per unit ( $\$ 0.23$ per square foot for those properties less than 5 years old. The highest average was reported for properties 10 to 19 years of age at $\$ 666$ per unit ( $\$ 0.78$ per square foot).

Size of Property. Presence of scale economies in apartment properties would be evident if operating costs were to decline as the size of properties increases. Economies of scale did appear

## OPERATING EXPENSES BY AGE AND SIZE OF PROPERTY INDIVIDUALLY METERED MARKET RENT GARDEN PROPERTIES

| Salary 8 Personnel Costs | insurance | Taxes | Unides | Mgmt | Admin | Minco | Contract Services | $\begin{gathered} \text { Repair } \\ 8 \\ \text { Maint } \end{gathered}$ | $\begin{gathered} \text { Total } \\ \text { Operating } \\ \text { Expenses } \end{gathered}$ | Capital |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Age of Property

Dotars for Une

| Less than 5 years old | 915 | 233 | 1083 | 317 | 366 | 190 | 228 | 266 | 302 | 3899 | 224 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 to 9 years old | 945 | 200 | 1196 | 288 | 327 | 171 | 185 | 264 | 311 | 3887 | 446 |
| 10 to 19 years | 837 | 202 | 860 | 279 | 328 | 142 | 155 | 294 | 364 | 3461 | 666 |
| 20 or more years | 820 | 200 | 652 | 359 | 303 | 109 | 132 | 271 | 401 | 33077 | 567 |


| Dollars Por Square fod | 0.92 | 024 | 1.09 | 032 | 037 | 0.91 | 023 | 027 | 031 | 394 | 023 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 to 9 years old | 098 | 021 | 1.24 | 030 | 034 | 018 | 0.19 | 027 | 032 | 402 | 046 |
| 10 to 19 years | 098 | 024 | 101 | 033 | 038 | 017 | 0.18 | 034 | 0.42 | 405 | 078 |
| 20 or more years | 0.97 | 0.24 | 0.77 | 043 | 0.36 | 020 | 0.16 | 032 | 0481 | 393 | 0.67 |
| Percent of Gross Potential Rent |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years oid | 82\% | 219 | 97\% | 28* | 33* | 1.78 | $20 \%$ | 24\% | 27\% | 34.9\% | $20 \times 1$ |
| 5 5to 9 years old | 89\% | 1.9\% | 11.3\% | 27\% | 31\% | $1.6 \%$ | $17 \%$ | 25\% | 2.9\% | 3378. | 428 |
| 10 to 19 years | 92\% | 22\% | 95\% | 31\% | 36\% | 1.6x | 17\% | 32\% | 40\% | 381\% | 7.3\% |
| 2000 more years | 108\% | 26\% | 86\% | 47\%, | 40\% | 22\% | 17\% | 36\% | 53\%] | 435\% | 75\% |


| Less than 5 years old | 235\% | 60\% | 27.8\% | 818 | 94\% | 49\% | 5891 | 68 | \% | 000\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 to 9 years old | 243\% | 51\% | 3088 | 7.4\% | 84* | 4.4\% | 48\% | 68\% | $80 \%$ | 1000\% |
| 10 to 19 years | 24.2\% | 58\% | 24.8\% | 818 | 95\%. | 4.18 | 4.5\% | 85\% | 105\% | 1000\% |
| 20 or more years | 24.8\% | 6.0\% | 197\% | 10.9\% | 92\% | 5.1\% | 40\% | 82\% | 121\% | 1000\% |

Size of Property

| Less than 100 units | 778 | 151 | 519 | 243 | 264 | 156 | 111 | 293 | 299 | 2816 | 789 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 100 to 249 units | 876 | 211 | 745 | 344 | 339 | 191 | 161 | 281 | 390 | 3353 | 578 |
| 250 to 499 units | 849 | 205 | 863 | 313 | 318 | 147 | 156 | 273 | 359 | 3484 | 572 |
| More than 500 units | 814 | 199 | 944 | 308 | 312 | 145 | 135 | 283 | 396 | 3535 | 478 |
| Dollars Fer Square Foot |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | 1.15 | 022 | 077 | 036 | 039 | 023 | 0.16 | 0.43 | 0.44 | 4.17 | 1.17 |
| 100 to 249 units | 099 | 024 | 0.84 | 0.39 | 0.38 | 0.22 | 0.18 | 0.32 | 0.44 | 4.00 | 0.65 |
| 250 to 499 unts | 0.96 | 023 | 0.97 | 0.35 | 036 | 0.17 | 0.18 | 031 | 0.40 | 393 | 0.65 |
| More than 500 units | 094 | 023 | 1.09 | 035 | 036 | 0.17 | 0.16 | 0.33 | 0.45 | 4.07 | 0.55 |
| Percent of Gross Potantial Rient |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 unts | 11.7\% | 2.3\% | 78\% | 37\% | 40\% | 24\% | 1.7\% | 4.4\% | 4.5x | 42.4x | 1198 |
| 100 to 249 unts | 103\% | 25\% | $8.8 \times$ | 4.0\% | 39\% | 22\% | 1.9\% | 33\% | 46\% | 41.5\% | $68 \times$ |
| 250 to 499 unts | 95\% | 23\% | 9.6\% | 3.5\% | 35\% | 1.6\% | 1.7\% | 30\% | 40\% | 38.8\% | 64\% |
| More than 500 unts | 90\% | 2.2\% | 10.4\% | 3.4\% | 3.4\% | 1.6\% | 1.5\% | 31\% | 43\% | 38.9\% | 53\% |
| Percent of Total Operating Costs |  |  |  |  |  |  |  |  |  |  |  |
| Less than 100 units | 27.6\% | 5.4\% | 18.4\% | 8.6\% | 9.4\% | 55\% | 39\% | 10.4\% | 106x | 1000x |  |
| 100 to 249 units | 26.18 | 6.3\% | 22.2\% | 103\% | 99\% | 57\% | 4.8\% | 8.4\% | 11.6x. | 1000\% |  |
| 250 to 499 units | 24.4\% | 5.9\% | 24.8\% | 90\% | 9.15 | 4.2\% | 4.5\% | 7.8\% | 10.3\% | 1000\% |  |
| More than 500 unts | 230\% | 56\% | 26.7\% | 87\% | 88\% | 4.13. | 3.8\% | $8.0 \%$ | 11.2\% | 1000\% |  |

Source: Nabonal Apaitnent Association 2004 Sarvey of hcone 4 Eppenses in Rertal Apatment Conmunties

when total operating costs were measured on a percentage of gross potential rent basis. They drop from 42.4 percent of GPR in properties with less than 100 units to a low of 38.9 percent in those containing 500 or more units. The survey results, however, did not show scale economies on a cost per unit basis. The lowest operating costs, at $\$ 2,816$ dollars per unit, were in the smallest properties-those with less than 100 units. The highest operating costs occurred in properties with 500 units or more units at $\$ 3,535$ per unit, and nearly as high at $\$ 3,533$ in those with 100 to 249 units. Total operating costs in properties with 250 to 499 units were $\$ 3,461$ per unit.

Economic losses did not vary widely based on property size. They were highest with properties with 250 to 499 units at 13.73 percent of GPR and the lowest for properties with less than 100 units. Properties with 100 to 249 units had a 13.14 percent economic loss ratio and those with 500 or more units reported a 12.87 percent average.

## Metropolitan Area

## Detailed Operating Income and Expense Data

Detailed tables in the report are presented for the 66 metropolitan areas for which a total of 10 properties of all types were

## REVENUES AND NOI BY AGE AND SIZE OF PROPERTY INDIVIDUALLY METERED MARKET RENT GARDEN PROPERTIES

| AGE OF PROPERTY | Dollars Per Unit |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Lexs } \\ \text { Than } \\ \text { TYears } \end{gathered}$ | $\begin{gathered} 5 \\ \text { to } \\ \text { o Years } \end{gathered}$ | $\begin{gathered} 10 \\ 10 \\ 18 \text { years } \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ \alpha \text { mocer } \\ \text { Yeass } \end{gathered}$ |
| No of Properibes | 101 | 201 | 901 | 1221 |
| No. dunts | 28073 | 80111 | 224647 | 275838 |
| Avz No ol Unesproperty | 280 | 307 | 229 | 228 |
| Ang No. of Square foelune | mon | Pe6 | 855 | 842 |
| Turnover Rate in \% | 643 | 603 | 64\% | 60\% |


| Dollars Per Square Foot |  |  |  |
| :---: | :---: | :---: | :---: |
| Less <br> Than 5 Years | 5 to gYears | $\begin{aligned} & 10 \\ & \text { to } \\ & 19 \text { Years } \end{aligned}$ | 20 or more Years |
| 101 | 261 | 901 | 1221 |
| 28873 | 80111 | 224647 | 275938 |
| 288 | 307 | 229 | 278 |
| 890 | P68 | 855 | 842 |
| 64\% | 63\% | 64\% | 60\% |


| Percent of Gross Potential Rent |  |  |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Less } \\ & \text { Than } \\ & 5 \text { Years } \end{aligned}$ | 5 to 9 Years | $\begin{gathered} 10 \\ \text { to } \\ 19 \text { Years } \end{gathered}$ | 20 or more Years |
| 101 | 261 | 981 | 1221 |
| 28873 | 80111 | 224647 | 275998 |
| 286 | 307 | 228 | 276 |
| 990 | 966 | 055 | 842 |
| 64\% | 63\% | 64\% | 00\% |


| Grose Potential Rent | 11182 | 1083 | 9090 | 7602 |
| :---: | :---: | :---: | :---: | :---: |
| Rent Revenue Collected | 9621 | 9289 | 7956 | 6537 |
| Lopses to Vacancies | 965 | $8 \times 8$ | 702 | 678 |
| Lorres to Collections | 75 | 67. | 108 | 137 |
| Lonses to Concessions | 710 | 521 | 339 | 247 |
| Other Revenue Collected | 595 | 713 | 530 | 491 |
| Total Revenue Collected | 10116 | 9942 | 8487 | 7028 |
| Total Operating Expenses | 3899 | 3887 | 3461 | 3307 |
| Net Operating Income | 6217 | 6065 | 5026 | 3721 |
| Economic Vacancy Rates (\%) | 14.93\% | $13.21 \%$ | 12.48\% | $1401 \%$ |


| 11.38 | 11.06 | 10.64 | 901 |
| ---: | ---: | ---: | ---: |
| 9.61 | 0.58 | 9.30 | 7.76 |
| 0.97 | 0.90 | 0.82 | 0.80 |
| 0.08 | 0.07 | 0.12 | 0.16 |
| 0.72 | 0.54 | 0.40 | 0.29 |
| 0.60 | 0.74 | 0.62 | 0.58 |
| 10.21 | 10.29 | 9.92 | 8.34 |
| 3.94 | 4.02 | 4.05 | 3.93 |
| 6.28 | 6.26 | 5.87 | 3.93 |
| $14.99 \%$ | $13.21 \%$ | $12.48 \%$ | $14.01 \%$ |


| $100.0 \%$ | $1000 \%$ | $100.0 \%$ | $1000 \%$ |
| ---: | ---: | ---: | ---: |
| 85.15 | $86.8 \%$ | $875 \%$ | $880 \%$ |
| $8.6 \%$ | $8.2 \%$ | $77 \%$ | $8.9 \%$ |
| $0.7 \%$ | $0.6 \%$ | $12 \%$ | $1.8 \%$ |
| $6.3 \%$ | $4.9 \%$ | $37 \%$ | $3.3 \%$ |
| $5.3 \%$ | $6.7 \%$ | $5.8 \%$ | $6.5 \%$ |
| $00.4 \%$ | $83.5 \%$ | $93.4 \%$ | $925 \%$ |
| $348 \%$ | $36.6 \%$ | $38.1 \%$ | $435 \%$ |
| $55.6 \%$ | $56.9 \%$ | $55.3 \%$ | $48.9 \%$ |
| $14.93 \%$ | $1321 \%$ | $12.48 \%$ | $14.01 \%$ |


| SLEE OF PROPERTY | Dollars Per Unit |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Less <br> Han <br> 100 units | 100 to 249 units | 250 to 499 units | 500 of more unts |
| No. of Properties | 532 | 1006 | 891 | 135 |
| No. of Units | 35170 | 180000 | 290531 | P6099 |
| Avg No. of Unts/Property | 66. | 180 | 333 | 719 |
| Avg No of Square Feet/Int | 675 | 884 | 896 | 888 |
| Turnower Rate in \% | 65\% | $61 \%$ | 63\% | 60\% |



| Gross Potential Rent | 6645 | 8510 | 8970 | 9092 |
| :--- | ---: | ---: | ---: | ---: |
| Rent Revenue Collected | 5843 | 7382 | 7738 | 7922 |
| Losves to Vacancies | 558 | 697 | 755 | 748 |
| Losses to Colections | 106 | 130 | 111 | 93 |
| Losses to Concessions | 137 | 294 | 385 | 356 |
| Other Revenue Coilected | 376 | 529 | 543 | 607 |
| Total Revenue Coliected | 6219 | 7991 | 8281 | 8529 |
| Total Operating Expenses | 2816 | 3533 | 3481 | 3535 |
| Net Operating Income | 3403 | 4388 | 4800 | 4996 |
| Economic Vacancy Rates (\$) | $1207 \%$ | $1314 \%$ | $1373 \%$ | $1287 \%$ |



| $1000 \%$ | $1001 \%$ | $100.2 \%$ | $1002 \%$ |
| ---: | ---: | ---: | ---: |
| $879 \%$ | $86.9 \%$ | $86.3 \%$ | $87.1 \%$ |
| $8.4 \%$ | $8.2 \%$ | $8.4 \%$ | $8.2 \%$ |
| $1.6 \%$ | $1.5 \%$ | $1.2 \%$ | $1.0 \%$ |
| $21 \%$ | $3.5 \%$ | $4.3 \%$ | $3.9 \%$ |
| $5.7 \%$ | $6.2 \%$ | $6.1 \%$ | $6.7 \%$ |
| $93.6 \%$ | $83.1 \%$ | $923 \%$ | $93.8 \%$ |
| $424 \%$ | $41.5 \%$ | $38.9 \%$ | $38.9 \%$ |
| $51.2 \%$ | $51.6 \%$ | $53.5 \%$ | $54.9 \%$ |
| $1207 \%$ | $1314 \%$ | $1373 \%$ | $12.87 \%$ |

Souite Nabonal Apatment Ansociban 2004 Sarvey of heoms 1 Expences in Rental Apatment Conmmentien

reported in the survey. This is the only section of the report with metropolitan area data for garden and mid- and high-rise building properties and further segmented into those with utilities that were either individually 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.
Some highlights of the metropolitan area data follow. They are limited to garden properties with individually metered utilities in metropolitan areas with at least 10 properties of this type reported, unless otherwise noted.

- NOI's on a dollar-per-square-foot basis ranged from \$12,616 (\$15.09 per square foot) in the San FranciscoSan Jose metro area to $\$ 2,110$ ( $\$ 2.73$ per square foot) in Lubbock, Texas. Los Angeles-Long Beach, Calif., had the high NOI when measured in percentage of GPR terms at 69.9 percent and Knoxville, Tenn., the low at 40.9 percent.
- GPR averages were the highest in the San Francisco-San Jose area at $\$ 19,339$ per unit ( $\$ 23.13$ per square foot). A low of $\$ 5,121$ per unit ( $\$ 6.62$ per square foot) was tabulated for properties reported from Lubbock, Texas.
- Economic losses were lowest in Norfolk-Virginia

Beach-Newport News metro area at 5.08 percent and Pensacola, Fla., at 5.39 percent. Both, however, have small numbers of individually metered garden properties reported. Metro areas with the highest economic losses were Colorado Springs at 19.7 percent, Phoenix-Mesa at 19.63 percent and Denver-Boulder at 19.61 percent.

- Properties reporting from Providence, R.I., had the highest

To obtain market data from the Survey of Income and Expenses in Rental Apartment Communities for 2004 visit NAA's Web site, www.naahq.org.

To participate in the Survey of Income and Expenses in Rental Apartment Communities for 2005, please complete the survey on page 24.

|  | MARKE | CONON <br> RENT |  | CANCY <br> ETROP <br> EN PRO | RATES OLITAN PERTIES | NOI－TU AREAS <br> －INDIVID | NOVER <br> ALLY M | TERED |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2004 | Suny |  |  |  |  | 20008 | ney |  |  |
|  | $\begin{array}{\|c\|} \text { Todsil } \\ \text { No. of } \\ \text { Properties } \\ \hline \end{array}$ | Total No．of Unts | $\begin{gathered} \text { Avernge } \\ \text { Sq. Ft } \\ \text { Per Unt } \\ \hline \end{gathered}$ | Tumover Rate | Net Opernting Income NOR － | Esonomic Vacancy asa＊ | Economic Vecancy usa＊ | Net Operating income $\mathrm{NOH}=$ | Tumover Alste | $\begin{array}{\|c\|} \hline \text { Total } \\ \text { No of } \\ \text { Agperties } \\ \hline \end{array}$ | Totel <br> No of <br> Unls | Averige 54 Ft Per Unt |
| Survey Total | 2584 | 605669 | 871 | 627 | 53．1\％ | $13.35 \%$ | 11．39\％ | 56.75 | 61\％ | 2485 | 583151 | 873 |
| Region 1 | 175 | 40490 | 838 | 50 m | $609 \%$ | 8797 | $821 \%$ | 6258 | $51 \%$ | 216 | 49900 | 895 |
| BMLTIMORE MD PMSA | 19 | 3675 | 868 | $50 \%$ \％ | 58.00 | 911\％ | 9．24\％ | 57 4\％ | 56\％ | 45 | 10724 | 898 |
| BOSTON，MA－NH PMSA | 10 | 2093 | 896 | 52\％ | 60.15 | 1121\％ | $11.33 \%$ | 6183 | 25\％ | 13. | 4835 | 1039 |
| CHARLOTIESVILLE，VA MSA | 8 | 1432 | 1005 | 51\％ | 55．9\％ | $1075 \%$ | ค． | ra | ne | ก3 | na | กa， |
| HARTFORD，CT MSA | 14. | 1737 | 979 | $51 \%$ | 54．2\％ | $663 \%$ | $5.63 \%$ ， | 56.58 | 52\％ | 15 | 2012 | 951 |
| NEW HAVEN CT MSA | 8. | 1387 | 895 | 505 | $51.4 \%$ | $839 \%$ | 5037 | 68 85 | 505 | 9 | 1720 | 910 |
| NEW YORK，NY PUSA | 4. | 518 | 714 | 38.5 | $634 \%$ | $1233 \%$ | 9．52\％ | $64.3 \%$ | $50 \%$ | 8 | 2614 | 783 |
| NORFOUK－VA．BEACH－NEWPORT NEWS，VA－NC MSA | 12 | 3812 | 993 | 527 | $635 \%$ | $509 \%$ | 533\％ | 66005 | 56\％ | 13. | 4630 | 888 |
| PHILADELPHIA PA－N．J | 6 | 1572 | 842 | 3906 | 65，2\％ | 943\％ | $4.15 \%$ | 62.27 | $46 \%$ | 4. | 940 | 784 |
| PITSPURCH，PA MSA | 13 | 1914 | 782 | $54 \%$ | $487 \%$ | $9.19 \%$ | 6．97\％ | 61．5\％ | 50\％ | 10 | 681 | 869 |
| PROVIDENCE，RI MSA | 10. | 2140 | 1092 | 47\％ | 1 | $6.57 \%$ | 8.299 | 6505 | 43\％ | 6 | 1666 | 901 |
| RICHMOND－PETERSBURG VAMSA | 17 | 4576 | 850 | 57\％ | 58.28 | $11.11 \%$ | $8.39 \%$ | 60．5\％ | $62 \%$ | 22 | 4972 | 832 |
| WASHINGTON，DC－MD－VA－WW PMSA | 33. | 11910 | 846 | 51\％ | 65．3\％ | 8．71\％ | $8.45 \%$ | $66.9 \%$ | 53\％ | 32 | 9272 | 867 |
| other | 22 | 3774 | 815 | 51\％ | 625\％ | $956 \%$ | 6．18\％ | 62.31 | 45\％ | 25 | 38881 | 906 |
| Region il | 839 | 190708 | 914 | $6 \times 5$ | 6278 | 13.318 | 12.108 | 65．3\％ | $62 \%$ | 530 | 190197 | 904 |
| ATLANTA GA MSA | 183. | 45143 | 963 | $65 \%$ | 51．82 | 15.048 | 1475\％ | 557\％ | $64 \%$ | 155 | 39309 | 967 |
| AUGUSTA GA MSA | 10 | 1591 | 789 | 785 | 39.8 \％ | 18.352 | ra | กa | na | กa | na | ra |
| CHARLESTON，SC，MSA | 14. | 3152 | 903 | $54 \%$ | $54.3 \%$ | 1232\％ | na． | กa | na | Ta） | ra | 凧 |
| CHARLOTTE MC．USA | 43 | 10654 | 910 | $60 \%$ | 490\％ | $1595 \%$ | $14.08 \%$ ． | 513\％ | 64\％ | 43 | 11605 | 892 |
| COLUMELA SC．MSA | 16 | 4358 | 927 | 598 | 0 | 13758 | 13.176 | 51.95 | 558 | 11 | 2929 | 975 |
| DAYTONA BEACH， F M M $^{\text {M }}$ | 12 | 12 明 | 759 | 721 | 51．6\％ | $1174 \%$ | 1221\％ | $53.1 \%$ | 61\％ | 13. | 1229 | 722 |
| FT，LAUDERDALE，FL MSA | 15. | 4360 | 892 | $58 \%$ | 50．5\％ | $11.43 \%$ | 9．73\％ | 54.68 | $65 \%$ | 15. | 4093 | 879 |
| FT MYERS，FL MSA | 8 | 1638 | 878 | $63 \%$ | 5408 | 10．53\％ | $11.01 \%$ | $568 \%$ | $63 \%$ | 10 | 2276 | 888 |
| GRFENSBOROWNSTON SAL FM－HIGH POINT USA | 28 | 5370 | 879 | 50 y | $51.4 \%$ | $14.62 \%$ | $11.45 \%$ | $54.8 x$ | 65\％ | 13 | 2934 | 893 |
| GREENVILE－SPARTANSBURG－ANDERSON | 22 | 3940 | 061 | 67\％ | 42．6\％ | 1756\％ | 11．04\％ | $54.5 \%$ | $60 \%$ | 24 | 5038 | 927 |
| MCXSCNVILLE FL MSA | 55 | 15294 | 942 | 64\％ | 59．0x｜ | $8.88 \%$ | $8.45 \%$ ． | $607 \%$ | $64 \%$ | 43. | 12360 | 881 |
| KNOXVILLE，TNMSA | 15 | 2900 | 940 | 58.5 | $419 \%$ | 921\％ | 11.65 \％ | 40．9\％ | 605 | 13 | 2548 | 839 |
| LEXTMGTON，KY MSA | 15 | 1546 | 761 | 583\％ | $494 \%$ | $1501 \%$ | 10.16 K | 51．5\％ | 57\％ | 17 | 2009 | 734 |
| LOUISVILIE，KY－N MSA | 16 | 2009 | 773 | 56\％ | $517 \%$ | 13868 | $16.25 \%$ | $480 \%$ | 63\％ | 14. | 2054 | 794 |
| MLAM，R MSA | 37 | 8377 | 948 | $54 \%$ | 5673 | 965\％ | 795\％ | $584 \%$ | 56\％ | 41 | 9607 | 920 |
| NASHVRLLE，TNMSA | 26 | 9126 | 308 | 61\％ | 573\％ | 10.156 | 1081\％ | $56.8 \%$ | $65 \%$ | 29 | 9326 | 885 |
| ORLANDO，FL MSA | 69. | 15343 | 955 | 64\％ | 529\％ | $1305 \%$ | 12726． | 539\％ | 65\％ | 75 | 19966 | 936 |
| PENSACOA FL．MSA | 12. | 1048 | 608 | 88\％ | 60．7\％ | 5．398 | $5.37 \%$ | 64．1\％ | $72 \times$ | 11 | 1252 | 743 |
| RALEGGH－DURHAM－CHWPEL HILL，NC，MSA | 51 | 12897 | 905 | 57\％ | $49.9 \%$ | $16.37 \%$ | $12.63 \%$ | 54.58 | $57 \%$ | 40 | 10112 | 830 |
| SARASOTA－BRADENTON，RL MSA | 14 | 2835 | 917 | $61 \%$ | 54．3\％ | 1294\％ | 10.076 | 57．6\％ | $64 \%$ | 9 | 1447 | 813 |
| SAVANNAH，GA MSA | 14. | 1407 | 761 | 71\％ | $504 \%$ | 1270\％ | $9.97 \%$ | 423 x | 56\％ | 10 | 1756 | 877 |
| TAMPA－ST PETERSBURG－CLEARWATER FL MSA | 69 | 17085 | 358 | $63 \%$ | 54．2x | $12.58 \%$ | $11.59 \%$ ． | 65 1\％ | 678 | 73 | 19981 | 846 |
| WEST PAIM REACH，FL，MSA | 30 | 5054 | 㨋 | $54 \%$ | $62.4 \%$ | 1201\％ | $983 \%$ | 6085 | $60 \%$ | 22 | 4090 | 897 |
| other | 77 | 10412 | B6］ | $64 \%$ | $48.2 \%$ | 1279\％ | $1178 \%$ | $52.8 \%$ | $57 \%$ | 90 | 14440 | 836 |
| （1）pertentage of Orees Pitental Rent |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

operating costs at $\$ 5,074$ per unit（ $\$ 4.65$ per square foot）fol－ lowed by Minneapolis－St．Paul at $\$ 4,833$ per unit（ $\$ 4.71$ per square foot）and San Francisco－San Jose at \＄4，807（\＄5．58 per square foot）．Lows of $\$ 2,205$ per unit（ $\$ 2.12$ per square foot）and $\$ 2,463$ per unit（ $\$ 3.42$ per square foot）were reported for those properties located in Pensacola，Fla．Real estate taxes tended to be the most significant factor in the rankings of metro areas based on total operating costs．

－Chicago had the highest per unit real estate taxes at $\$ 1,709$ followed by New York at $\$ 1,565$ and Minneapolis－St．Paul at $\$ 1,509$ per unit．Both New York and Minneapolis－St．Paul had rel－ atively small numbers of properties reporting．The lowest average was for properties located in Oklahoma City，at $\$ 226$ per unit fol－ lowed by Augusta，Ga．，at $\$ 277$ ．
－Insurance costs on a per unit basis were the highest in Fort Lauderdale，Fla．，at \＄507，at \＄362 in Los Angeles and in Miami at $\$ 332$ ．They were the lowest in Tucson，Ariz．，at $\$ 113$ per unit．
－Salaries and personnel costs were the lowest in the
Daytona Beach，Fla．，area at $\$ 635$ per unit followed by $\$ 673$ in Lansing，Mich．，and \＄678 in Indianapolis．Norfolk－Virginia Beach－Newport News had the highest average at $\$ 1,361$ per unit followed by the $\$ 1,102$ in Providence，R．I．，and $\$ 1,101$ in Hartford，Conn．
－Providence，R．I．，had the largest units among the metro areas reported separately in this report with an average of 1,092 square feet of floor area per unit．Minneapolis－St．Paul had the second largest average size units at 1,026 square feet． Properties reporting from Pensacola had the low average at


608 square feet per unit.

- Metropolitan areas with the most garden properties reporting that were individually metered were Atlanta (183), Dallas (171), Houston (167) and Phoenix (124).


## Subsidized Properties Income and Expense Summary Operating Income and Expense Summary

Data was received for 618 subsidized properties containing 97,734 units. Garden properties with individually metered utilities represent the largest sub group of properties reporting and analysis here will be limited to them.

Subsidized garden apartment properties with individually metered utilities tend to have fewer units and less floor area. They contained an average of 175 units vs. 238 units for market rent properties of the same type. These subsidized properties had an average of 862 square feet of floor area vs. 871 square feet for the market rent properties.

Revenues. GPR averaged $\$ 8,226$ ( $\$ 9.54$ per square foot) annually. Rental revenues averaged $\$ 7,385$ per unit ( $\$ 8.57$ per square foot). Other operating revenues in subsidized properties are smaller than those for market rent properties. They averaged $\$ 441$ per unit ( $\$ 0.51$ per square foot) for the subsidized properties compared to $\$ 540$ per unit ( $\$ 0.62$ per square foot) for the market rent units.
Operating Expenses. Operating expenses in subsidized properties were close to those for market rent properties. Subsidized properties reported in the survey had total operating costs averaging $\$ 3,374$ per unit ( $\$ 3.92$ per square foot). The market rent property average was $\$ 3,468$ per unit ( $\$ 3.98$ per square foot).

Net Operating Income. Subsidized properties had a slightly lower average NOI in all three measures. NOI for subsidized properties in the survey averaged 53.1 percent of GPR vs. 54.1 percent for the market rent properties. The other comparisons

| GROSS POTENTIAL RENT <br> BY REGION \＆METROPOLITAN AREA <br> GARDEN INDIVIDUALLY METERED PROPERTIES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 |  |  |  |  |  |  | 2003 |  |  |  |  |  |  |
|  | Tctal <br> No of <br> Properties | Tetal Ne at Unts | $\begin{array}{\|c\|} \hline \text { Average } \\ S_{4}, R \\ \text { Per Unat } \\ \hline \end{array}$ | Groms Potental Rent Revenve |  |  |  | Grows Potertail Reet Revenup |  |  |  | TotalNa ofRropeties | Total No．of Unts | $\begin{aligned} & \text { Averape } \\ & \text { Sq } R \\ & \text { Perunat } \end{aligned}$ |
|  |  |  |  | 5s Per Una |  | $5 \times \mathrm{Prosy}$ Foet |  | 5s Forsy Foot |  | 5s Ferunt |  |  |  |  |
|  |  |  |  | Annual | Monity | Annual | Monety | Mority | Annual | Morthy | Anoual |  |  |  |
| Survey Total | 2564 | 609639 | 871 | 8719 | 727 | 10.02 | 0.84 | 0.83 | 997 | 726 | 8707 | 2485 | 583161 | 873 |
| Region 1 | 175 | 40490 | 88 | 10054 | 905 | 1229 | 1.08 | 0.83 | 11．10 | $8 \times 1$ | 9897 | 216］ | 49939 | 895 |
| BNLTMCRE，MD PMSA | 19. | 3625 | 868 | 10385 | 860 | 11.30 | 0.99 | 0.96 | 11.46 | 858 | 10890 | 45 | 10724 | 898 |
| BCSTOCN，MANHPMSA | 10. | 2093 | 890 | 11400 | 950. | 1273 | 1.06 | 0.80 | 714 | 618 | 7421 | 13 | 4835 | 1039 |
| CHARLOTTESVILE，VAMSA | B． | 1432 | 1005 | 8094 | 675 | 806 | 0.67 | na | na | na | ra | ra | na | $n 9$ |
| HARTFORD，CT MSA | 14. | 1737 | 979 | 11009 | 917 | 1126 | 0.98 | 089 | 1072 | 859 | 1019 | 15. | 2012 | 951 |
| NEWHAVEN，CTMSA | 8 | 1387 | 896 | 11012 | 918 | 12.31 | 1.03 | 1.00 | 1203 | 912. | 10947 | 9. | 1720 | 910 |
| MEW YORK NY PUSA | 4. | 518 | 714 | 12170 | 1014. | 1704 | 1.42 | 1.45 | 17.42 | 1137 | 13843 | 8 | 2614. | 783 |
| NCRFOK－VA BEACH－NEWPORT NEWS，VANCM | 12 | 3812 | 993 | 8991 | 749 | 905 | 075 | 0.77 | 922 | 682 | 8187 | 13. | 4630 | 888， |
| PHILIDPELPHIA PA－NI | 6 | 1572 | 542 | 11672 | 973 | 13.85 | 1.16 | 1.13 | 13.62 | 801 | 10511 | 4. | 940 | 794 |
| PITISEURGH，PA MSA | 13. | 1914 | 78. | 8596 | 716 | 10.99 | 092 | 0.99 | 1065 | 594 | 7128 | 10 | 651 | 609 |
| PROVIDENCE RIMSA | 10 | 2140 | 1092 | 12584 | 1069． | 11.5 y | 096 | 0.97 | 1164 | 874 | 10437 | 6. | 1686 | 901 |
| RICHMCNO－PETERSBURG VA MSA | 17 | 4576 | 250 | 7411 | 618 | $\underline{4} 72$ | 073 | 0.75 | 9.05 | 673 | 8071 | 72 | 4972 | 892 |
| WUSHINGITON，DC MO－VA WV PMSA | 33 | 11910 | 846 | 12588 | 1049 | 14.88 | 124 | 1.19 | 14.24 | 1029． | 12350 | 32 | 9272 | 887 |
| Other | 22. | 3774 | 515 | 12202 | 1017 | 14.8 | 1.25 | 0.83 | 9.92 | 769 | 8934 | 26 | 3858 | 806 |
| Region II | 839 | 190700 | 914 | 8347 | 696 | 9.13 | 076 | 077 | 922 | 695 | 8334 | 830 | 190197］ | 904 |
| ATIANTA GA MSA | 183 | 48143 | 963 | 9214 | 768. | 957 | 0.80 | 085 | 1027 | 833 | 9878 | 155 | 30909 | 967 |
| AUGUSTA GA MSA | 10 | 1591 | 789 | 5706 | 476 | 723 | 060 | ก． | \％${ }^{\text {a }}$ | ra | ra | ra | na | n |
| CHARLESTON，SCMSA | 14 | 3158 | 903 | 8188 | 632 | 206 | 076 | ne | r3 | n9 | rab | ra | na | no |
| CHARIOTTE，MC USA | 43 | 10654 | 910 | 7310 | 609 | 803 | 0.67 | 069 | 830 | 617 | 7408 | 43 | 11605 | 893 |
| COUMBUA SCMSA | 16. | 4383 | 97 | 7061 | Sas） | 7E2 | 064 | $0 \cdot 64$ | 771 | 62 | 7519 | 11 | 2929. | 973 |
| DAYTONA BEACH，FL MSA | 12 | 1289 | 759 | 6550 | 579 | 918 | 077 | 0.82 | 981 | 590 | 7064 | 13. | 1279 | 727 |
| FT．LAUDERDALE AL MSA | 15. | 4380. | 89 | 10658 | 888 | 11.85 | 1.00 | 091 | 10.91 | 709 | 9600 | 18 | 4093 | 879 |
| FT MYERS，AL MSA | 8. | 1630 | 873 | 8300 | 692 | 946 | 079 | 078 | 931 | $60^{\circ}$ | 8206 | 10. | 2276 | 888 |
| GREENSECROWNSTONSALEM－HIGHI PONT MSE | 25 | 5320 | 879 | 7632 | 686 | 863 | 072 | 067 | 803 | 598 | 7172 | 13 | 2904 | 893 |
| GREENVILE－SPARTANSBURG－ANDERSON | 22 | 3940 | 861 | 6401 | 533 | 744 | 062 | 0.63 | 769 | Ses | 7055 | 24 | 5038 | 927 |
| JACKSONVLEFL MSA | 55 | 15294 | 942 | 8266 | 689 | 879 | 073 | 074 | 8.92 | 656 | 7856 | 48 | 12340 | 881 |
| KNOXVILIE TNMSA | 15. | 29e9 | 940 | 6397 | 533 | 681 | 0.77 | 0.60 | 716 | 530 | 636］ | 13. | 2548 | 889 |
| LEOINGTON KY MSA | 15 | 1546 | 761 | 6635 | 5531 | 872 | 073 | 0.79 | 944 | 577 | 6026 | 17 | 2069 | 734 |
| LOUISVILE，KY－INMSA | 16. | 2009 | 773 | 6993 | 503. | 904 | 073 | 073 | 870 | 576 | 6090 | 14 | 2054 | 794 |
| MLAM，凡．MSA | 37 | 8327 | 948 | 10415 | 868 | 10.98 | 092 | 088 | 1060 | 813 | 9754 | 41 | 9607 | 920 |
| NASFVILIE TNMSA | 26 | 9126 | 908 | 7569 | 679 | 843 | 070 | 072 | 8.62 | 636 | 7626 | 29 | 2326 | 885 |
| ORLANDO，FL MSA | 60 | 15433 | 956 | ${ }^{3} 569$ | 714 | 888 | 075 | 073 | 881 | 687 | 8242 | 76 | 19906 | 993 |
| PENSACOAA，R MSA | 12 | 1045 | 608 | 5327 | 494 | 973 | 081 | 0.68 | 818 | 506 | 6076 | 11 | 1252 | 74.3 |
| RULEGH－DURHAMCHAPE，HILL，NC MSA | 51 | 12897 | ges | 83.58 | 日 7 | 925 | 077 | 073 | 903 | 662 | 7944 | 40. | 10112 | 850 |
| SARASOTA－BRADENTON，FL．MSA | 14 | 2835 | 917 | 8069 | 72 | 946 | 079 | 082 | 986 | 66］ | 8013 | 9 | 1447 | 813 |
| SAVANNAH，GAMSA | 14. | 1407 | 761 | 6685 | 557 | 879 | 073 | 069 | 829 | 606. | 7274 | 10. | 1236 | 877 |
| TAMPA ST PETERSEURG－CLEARWATER，F．MSA | 69 | 170e6 | 855 | 8301 | 69 | 971 | 0.31 | 088 | 10.11 | 713 | 85S4 | 73 | 19961 | 846 |
| WEST PALM BEACH，FL MSA | 30 | 5364 | 898 | 5098 | 758 | 1013 | 084 | 0.92 | 1102 | 824 | 9889 | 22 | 4000 | 897 |
| ather | 77 | 10412 | 868 | 6499 | 54. | 743 | 0.62 | 0 昭 | A28 | 612 | 7341 | 80 | 14440 | 888 |


were $\$ 4,452$ vs．$\$ 4,627$ on a dollars－per－unit basis，and $\$ 5.17$ vs． $\$ 5.31$ on a per－square－foot of floor area basis．
Economic Losses．Economic losses tend to be lower in sub－ sidized properties with their lower rents and relatively tight supply． An 11.39 percent average rate was calculated for the subsidized individually metered garden properties vs． 13.35 percent for mar－ ket rent units．The economic loss ratio in subsidized properties still reflected the softer rental apartment market with about a 4 percent rise from the last survey．
Turnover Rates．Occupants of subsidized apartments have lower income and fewer housing choices in most local markets and are less likely to move．The turnover rate in individually metered subsidized units was 49 percent vs． 62 percent for market rent units．

## Glossary of Terms

Administrative．This includes the total office expenses（i．e．， telephone，computers，forms，office rental and furniture）．

Capital Expenditures．Non－recurring capital expenditures．
Improvements not included as an expense item in operating expenses（i．e．，renovations，appliance replacements，etc．）．A zero
GROSS POTENTIAL RENT
BY REGION \& METROPOLITAN AREA
GARDEN INDIVIDUALLY METERED PROPERTIES

|  | 2004 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tital <br> No. of <br> Properties | Total <br> No. of <br> Unts | Average S4. R Per Unit | Gress Paterital Ment Rimenve |  |  |  |
|  |  |  |  | Sty Per Unit |  | Sy Persy Foet |  |
|  |  |  |  | Annual | Muntly | Aviual | Montly |
| Repion ili | 417 | 73024 | 867 | 8395 | 700 | 969 | 0.51 |
| CHICACO, IL-W PMSA | 33. | 11538 | 980 | 11599 | 967 | 12.60 | 1.05 |
| CINCINNATL OH-KY-NP PMSA | 3 | 6113 | 991 | 8591 | 716 | 8.67 | 072 |
| CLEVEIAND, OHPMSA | 18. | 1620 | 707 | 7472 | 619 | 10.50 | 088 |
| COLUMEUS, OHMSA | 71 | 7063 | 711 | 6656 | 586 | 9.36 | 078 |
| DAYTON SPPRINGFIELD, OH MSA | 30 | 3502 | 777 | 6889 | 574. | 8.87 | 074 |
| DETROIT, MIPMSA | 39. | 7707 | 903 | 9410 | 784 | 10.42 | 0.57 |
| INDANAPOUS, IN MSA | 83. | 15681 | 839 | 7293 | 608 | 8.69 | 0.72 |
| LANSENG, MIMSA | 13. | 2525 | (\%) | 6596 | 717 | 8.88 | 074 |
| MINNEAPCUS-ST PAUL, MN-WI MSA | 11 | 2969 | 1026 | 11638 | 970 | 11.34 | 0.96 |
| other | 80 | 14396 | 847 | 7019 | 585 | 829 | 0 0\% |


| 2003 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { Towe } \\ & \text { Noot } \\ & \text { Untes } \end{aligned}$ | $\begin{aligned} & \text { Aumpe } \\ & \text { Sq } \end{aligned}$ |
| Shasa | foot | Sife | une |  |  |  |
| Worthy | Anual | Matay | Anoum |  |  |  |
| 079 | 982 | 683 | E053 | 419 | 76 mz | ${ }^{867}$ |
| 1.02 | 1223 | 998 | 11978 | 33 | 10005 | 97 |
| 050 | 956 | 670 | 8039 | 231 | 633 | 3 |
| 0 解 | 1070 | 564 | 677 |  | 1120 | 63 |
| 076 | 904 | 636 | 7630 | 77 | 10758 | 84 |
| 0.70 | 843 | 53. | 6406 | 2. | 3762 | 760 |
| O, CA | 10.07 | 759 | 2056 | 50 | 930 | 189 |
| 0.72 | 8.61 | 603 | 7240 | 70 | 14013 | 01 |
| ra | $\square$ | ra | ra | ra | n |  |
| 0.55 | 1141 | 932 | 11903 | 9 | 2379 | 1043 |
| 063 | 811 | 583 | 6204 | 70 | 13129 | 81 |


| Reption IV | 616 | 171732 | 820 | 7921 | 680 | 966 | 0.81 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AUSTIN SAN MARCOS TX MSA | 70 | 20832 | 819. | 8296 | 741 | 1086 | 091 |
| PALLAS, TX PMSA | 171 | 51378 | 835 | 8320 | 为3 | 9.97 | 0.83 |
| FORT WORTH, TX PMEA | 60 | 16533 | 795 | 7263 | 606 | 9.14 | 076 |
| HOUSTON-GALVESTON-BRAZCRIA TX PMSA | 167 | 49167 | 826 | 8162 | 630 | 988 | 08 |
| LUBBCCKTX MSA | 23 | 3612 | 762 | 6603 | 550 | 8.67 | 0.72 |
| OKLAHOMA CITY, OK MSA | 9 | 3070 | 763 | 4976 | 415 | 6.58 | 0.54 |
| SANANTONIC TX MSA | 36 | P056 | 775 | 6887 | 574 | 8.89 | 074 |
| TULSA, CKMSA | 29 | 7515 | 796 | 7217 | 601 | 908 | 0.76 |
| cother | 51 | 10720 | AS2 | 6658 | 555 | 7.81 | 0 068 |


| 0.81 | 9.76 | 670 | 8040 | 488 | 130128 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.96 | 1146 | 778 | 9230 | 64 | 18185 | 814 |
| 0.87 | 1039 | 731 | 877 | 117 | 35291 | 34 |
| 0.81 | 968 | 54 | 7697 | 49 | 13031 | 795 |
| 0.81 | 909 | 679 | 8148 | 121 | 32352 | 41 |
| ra | ra | ${ }^{\circ}$ | ra | na | n |  |
| 0.55 | 6.2 | 427 | 5121 | 19 | 5701 | 773 |
| 072 | 86 | 572 |  | 42 | 589 | 796 |
| 074 | 887 | 559 | 8709 | 14 |  | $7 \times 8$ |
| 0.63 | 761 | 544 | 6586 | 3 | 544 | 657 |


| Replion Y | 151 | 40119 | 874 | E530 | 711 | 976 | 0.81 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALBUCUERCUE, NM MSA | 15 | 3901 | 974 | 8803 | 734 | 9.04 | 075 |
| COLORADO SPRINGS, COMSA | 18 | 3288 | 348 | 3138 | 678 | 959 | 0.80 |
| DENVER,COPMSA | 51 | 13877 | 052 | 9670 | 806 | 11.35 | 0.96 |
| KANSAS CITY, MO-KS MSA | 27. | a562 | 915 | 8140 | 678 | 889 | 0.74 |
| ST. LOUS, MOHL. MSA | 11 | 3391 | 843 | 8036 | 670 | 953 | 079 |
| other | 39 | 7100 | 840 | 7043 | 587 | 8.39 | 0.70 |


| 089 | 10.10 | 739 | 8794 | 187 | $4 \times 50$ | 871 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 076 | 307 | 705 | 8458 | 13 | 3200 | 203 |
| 089 | 10.59 | 668. | 8013 | 10 | 2206 | 757 |
| 0.99 | 1185 | 43 | 10112 | 6 | 16903 | 058 |
| 080 | 964 | 736 | skx3 | 26 | 8188 |  |
| 081 | 976 | 60 | 8300 | 23 | 6220 | 560 |
| 066 | 790 | 689 | 7072 | 23 | 45981 | 390 |


| Region V1 | 356 | 93498 | 870 | 10352 | 563 | 11.89 | 039 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LAS VEGAS NV-AZ MSA | 14 | 4308 | 781 | 8186 | 682 | 1048 | 087 |
| LOS ANGELES-LONG GEACH, CA PUSA | 22 | 7206 | 893. | 16033 | 1336 | 17.95 | 150 |
| OLYMPUA, WA MSA | 10 | 1252 | 875 | 8856 | 738. | 10.12 | 0.84 |
| ORANGE COUNTY, CA MSA | 22 | 6399 | 854 | 13352 | 1113 | 15.10 | 1.26 |
| PHOENEX-MESA AZMSA | 124 | 34201 | 878 | 8445 | 704 | 981 | 0.89 |
| PORTLAND-SALEM, OR-WA PUSA | 13 | 4176 | 931 | 8760 | 730 | 941 | 0.78 |
| SAN DIEGO CA MSA | 19 | 6007 | 910 | 14020 | 1168 | 15.41 | 1.28 |
| SAN FRANCISCO SAN JOSE CA PMSAS | 2 | 5232 | 865 | 15917 | 1326. | 18.41 | 1.53 |
| SEATTLETACCMA WA PUSA | 56 | 13601 | 850 | 9541 | 798 | 11.23 | 0.94 |
| TUCSON, AZMSA | 30 | 6579 | 797 | 7254 | 605 | 9.10 | 0.76 |
| other | 23 | 4273 | 911 | 10934 | 911 | 1200 | 100 |


| 0.97 | 11.63 | 845 | 10143 | 345 | 88164 | 872 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 083 | 10.01 | 687 | 8243 | 27 | 6369 | 824 |
| 138 | 16.56 | 1201 | 14412 | 23 | 7760 | 871 |
| 1.09 | 13.06 | 979 | 11750 | 11 | 2790 | 900 |
| 125 | 15.04 | 1083 | 12992 | 18 | S334 | 864 |
| 0.81 | 9.73 | 708 | 8501 | 118 | 31412 | 874 |
| 0.79 | 9.53 | 734 | 8804 | 13 | 4220 | 924 |
| 121 | 14.57 | 1133 | 13598 | 21 | 5752 | 933 |
| 198 | 23.13 | 1612 | 19309 | 10 | 1908 | 836 |
| 0.82 | 11.02 | 725 | 8644 | 40. | 9749 | 866 |
| 076 | 911 | 608 | 7296 | 34 | 8121 | 801 |
| 0.88 | 10.54 | 504 | 9647 | 20 | 3646 | 915 |



on the line meant there were no capital expenditures.
Contract Services. Total landscape maintenance, exterminating, trash removal, security, snow removal and other services costs typically provided on contract basis.

GPR Commercial. Total potential rents for all commercial space if area would have been 100 percent occupied.

GPR Residential. Total rents of all occupied units at 2003 lease rates and all vacant units at 2003 street/market rents (or fiscal year end).
Heating/Cooling Fuel. Type of fuel used in apartment units.

Insurance. This includes property hazard and liability and real property insurance, and does not include payroll insurance.

Marketing. Total media advertising, collateral materials locator fees, model expense, promotions, etc.

Management Fees. Total fees paid to managing agent from owner.

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 should include only finished space inside four perimeter walls of each unit. Common areas should be excluded.

Other Revenue. Total collections from laundry, vending, cable, deposit forfeitures, furniture, parking, amenity charges, etc. Does not include interest income. Note: Do not include utility reimbursements (i.e., RUBS) in GPR or rental revenue. All utility reimbursements are subtracted from gross utility expense.

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.

Rent Controlled Property. Whether the 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.

Repair and Maintenance. Total of all general maintenance and repairs, cleaning, decorating, painting, plumbing,
electrical, HVAC, etc. Nonrecurring capital expense not included.
Residential Units Revenue Losses to Collections.
Amount of residential rents not received due to collection losses.
Residential Units Revenue Losses to Concessions.
Amounts of gross potential residential rents not received due to concessions.

## Residential Units Revenue Losses to Vacancies.

Annual amount of rental income for residential units not collected due to vacancies and other use of units, such as models and offices.

Salary and Personnel Costs. Gross salaries and wages paid to employee's onsite. Includes value of employee apartment allowances, payroll taxes, group health/life insurance, workers' compensation, bonuses and lease commissions, employer 401k and/or retirement contributions and other cash benefits.
Subsidized Property. Whether the property has controlled rents through a government subsidized program or not. If yes, the program was listed (i.e., Section 236, Section 8 ).
Taxes. Total real estate and personal property taxes only. Payroll or rendering fees related to property taxes were not included.

## Tax Exempt Bond or Housing Credit Property.

Whether the property received tax exempt bond financing and/or is a low income tax credit property.

Total Operating Expenses. Sum of all operating costs. The sum must balance with this line, using total net utility expenses only.
Turnover. Number of apartments in which residents moved out of property during the 12-month reporting period.

Utilities. Total cost of all utilities and each listed type, net of any income reimbursements for or from residents (i.e., RUBS or similar systems). Does not include trash removal.

Utility Configuration. Whether electric, gas, oil and water/sewer utilities to individual units in subject property are: Master Metered-Owner Pays; Master Metered-Resident Pays (RUBS); Individual and Sub Metered-Resident Pays.

A special note of appreciation goes to those firms who donated their time in accumulating the data necessary to make this survey a success. The following companies and officers provided more than 20 properties for the 2004 survey.

AIMCO Management Co. - Equity Residential Properties Trust • Alliance Residential • WMC Management Company LLC • Konover Residential • Dial Equities • Westmark Management Co. • Towne Properties • Lincoln Property Company • BNP Residential Properties Inc. • McCormack Baron Mangement Services • McSha Properties • Woodspear Properties • Julian LeCraw \& Co. Inc. • MC Realty Advisors LLC • McDougal Properties

## YOU CAN HAVE IT ALL AT THE 2005 NAA EDUCATION CONFERENCE \& EXPOSITION

WHAT: The 2005 NAA Education Conference \& Exposition

WHEN: June 9-II, 2005
WHERE: The Gaylord Palms Resort \& Convention Center in Orlando, Florida


REGISTER ONLINE! www.naahq.org

Join NAA in Orlando, Florida for the best value in the multifamily housing industry.

The NAA Education
Conference \& Exposition is the largest national show in the multifamily housing industry with more than 30 Education Sessions with ideas and take-home tools on issues affecting you!

NATIONAL APARTMENT ASSOCIATION
201 N. UNION ST., SUITE 200
ALEXANDRIA, VA 22314
703/5 18-614 • WWW.NAAHQ.ORG

## OPERATING INCOME AND EXPENSES MARKET RENT PROPERTIES WITH LESS THAN 100 UNITS

InONIDUAL METERED PROPERTIES


## MASTER METERED PROPERTIES



|  | Garden |  |
| :---: | :---: | :---: |
|  | 56 |  |
|  | 3885 |  |
|  | 69 |  |
|  | 903 |  |
|  | 45\% |  |
| \$ Per | \$Por | \% of |
| Unit | Sq. P . | GPR |
| 9471 | 10.48 | 100.0\% |
| 8550 | 9.46 | 90.3\% |
| 664 | 0.74 | 7.0\% |
| 113 | 0.13 | 1.2\% |
| 142 | 0.16 | 1.5\% |
| 299 | 0.33 | 3.2\% |
| 8849 | 9.80 | 93.4\% |


| Md s mine Rine |
| :--- |
| 9 |
| 660 |
| 73 |
| 921 |
| $32 \%$ |

Operating Expenses

| Salaries and Personnel | 1042 | 1.15 | 10.8\% |
| :---: | :---: | :---: | :---: |
| insurance | 242 | 0.27 | 2.5\% |
| Taxes | 755 | 0.83 | 7.8\% |
| Ubilies | 885 | 0.98 | 9.1\% |
| Management Fees | 419 | 0.46 | 4.3\% |
| Acministrative | 243 | 0.27 | 2.5\% |
| Marketing | 118 | 0.13 | 1.2\% |
| Contract Services | 400 | 0.44 | 4.1\% |
| Repair and Maintenance | 475 | 0.52 | 4.9\% |
| Total Operating Expenses | 4579 | 5.05 | 47.3\% |
| Net Operating Income 4428 4.89 $45.7 \%$ |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Captal Expenditures | 686 | 0.76 | 7.1\% |


| 1034 1.15 $10.9 \%$ <br> 236 0.26 $2.5 \%$ <br> 709 0.78 $7.5 \%$ <br> 860 0.95 $9.1 \%$ <br> 405 0.45 $4.3 \%$ <br> 232 0.26 $2.5 \%$ <br> 115 0.13 $1.2 \%$ <br> 380 0.42 $4.0 \%$ <br> 438 0.55 $5.3 \%$ <br> 4469 4.95 $47.2 \%$ |
| :--- |
| 4379 4.85 $46.2 \%$ |
| $\|r\|$  <br> 669 0.74 |


| 1085 | 1.18 | $9.9 \%$ |  |
| ---: | ---: | ---: | :---: |
| 273 | 0.30 | $2.5 \%$ |  |
| 1026 | 1.11 | $9.4 \%$ |  |
| 1034 | 1.12 | $9.5 \%$ |  |
| 504 | 0.55 | $4.6 \%$ |  |
| 303 | 0.33 | $2.8 \%$ |  |
| 141 | 0.15 | $1.3 \%$ |  |
| 519 | 0.56 | $4.8 \%$ |  |
| 337 | 0.37 | $3.1 \%$ |  |
| 5222 | 5.67 | $47.9 \%$ |  |
|  |  |  |  |
| 4712 | 5.12 | $43.2 \%$ |  |


| 785 |  |  | 0.85 | $7.2 \%$ |
| ---: | ---: | :---: | :---: | :---: |

Soure: National Apartmert Aspodation 2004 Survey of income 84 Expenves in Rertal Apartment Conmunifies
02004 by Nutional Apartment A










|  | Unit Size (SF) |  |  | Monthly Rent (\$ / SF) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eff. | 1 BR | 2 BR | Eff. | 1 BR | 2 BR |
| Howard Crossing |  | 755 | 922 |  | 1.21 | 1.33 |
| Montrose Manor |  | 700 | 1,035 |  | 1.66 | 1.36 |
| Old Orchard |  | 760 | 925 |  | 1.45 | 1.22 |
| Caton House |  | 1,000 | 1,200 |  | 1.05 | 1.00 |
| Shade Tree Trace |  | 738 | 950 |  | 1.31 | 1.21 |
| Courts of Nunnery Lane |  |  | 650 |  |  | 1.11 |
| Westerlee |  | 950 | 1,014 |  | 1.14 | 1.18 |
| Cedar Run | 347 | 659 | 742 | 2.07 | 1.34 | 1.33 |
| Mount Ridge |  | 677 | 865 |  | 1.15 | 1.07 |
| Average | 347 | 780 | 923 | \$ 2.07 | \$ 1.29 | \$ 1.20 |
| Adjusted |  |  |  | \$ 2.24 | \$ 1.39 | \$ 1.30 |

## Comparable Property Rental Adjustment Matrix

|  | $\begin{aligned} & 3 \\ & 0 \\ & 0 \\ & \stackrel{7}{0} \\ & 0 \\ & 0 \\ & 20 \\ & 0 \\ & 0 \end{aligned}$ |  | $\begin{aligned} & \text { 음 } \\ & 0 \\ & \frac{1}{2} \\ & \stackrel{\rightharpoonup}{2} \\ & \frac{2}{2} \end{aligned}$ | $\begin{aligned} & \stackrel{\otimes}{0} \\ & \stackrel{\rightharpoonup}{1} \\ & \text { 무 } \\ & \stackrel{\tilde{C}}{ } \end{aligned}$ | $\begin{aligned} & \text { 几 } \\ & \stackrel{0}{0} \\ & 0 \\ & \stackrel{\rightharpoonup}{1} \\ & \stackrel{\rightharpoonup}{0} \\ & \vec{N} \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ |  | $\begin{aligned} & \sum_{0}^{\infty} \\ & \stackrel{\sim}{0} \\ & \frac{\rightharpoonup}{D} \\ & \underset{\sim}{D} \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unadjusted Rent / SF | 1.44 | 1.27 | 1.28 | 1.01 | 1.24 | 1.11 | 1.16 | 1.58 | 1.10 | 1.24 |
| Age of Property | 8\% | 8\% | 5\% | 5\% | 3\% | 8\% | 5\% | 3\% | 8\% |  |
| Location | -3\% | -3\% | 0\% | 2\% | 3\% | 5\% | 3\% | 3\% | 0\% |  |
| Occupancy | 0\% | 0\% | 0\% | 0\% | 0\% | 5\% | 3\% | 0\% | 1\% |  |
| Amenities | -1\% | -3\% | 3\% | 3\% | 3\% | 3\% | -3\% | 3\% | -2\% |  |
| Incentives | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% | -1\% | 0\% | 0\% |  |
| Total Adjustments | 3\% | 1\% | 8\% | 10\% | 9\% | 21\% | 7\% | 9\% | 7\% | 8\% |
| Adjusted Rent / SF | 1.48 | 1.28 | 1.38 | 1.11 | 1.35 | 1.34 | 1.24 | 1.72 | 1.18 | 1.34 |

## Appendix C - Construction Data

- CostWorks - Construction Cost Estimate
- Topographic Site Drawing
- Baltimore County Basic Service Map - Water; Baltimore County and Catonsville Area
- Baltimore County Basic Service Map - Sewer; Baltimore County and Catonsville Area
- Baltimore County Basic Service Map - Traffic; Baltimore County and Catonsville Area

Johns Hopkins University - Carey Business School
Development of Garden Apartments at Maiden Choice Lane, Catonsville, Maryland 21228
By: Andrew W. Ingalls
Advisor: Mr. George Green


| LineNumber |  | Description | Quantity | Unit | Total Incl. <br> O\&P | Ext. Total Incl. <br> O\&P |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |

## Division 01 General Requirements

| 011131100010 | ARCHITECTURAL FEES | 1.00 |  | \$0.00 | \$0.00 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 011131300010 | ENGINEERING FEES | 1.00 |  | \$0.00 | \$0.00 |
| 011131750050 | Color Renderings, matted, eye level, 1 building, 20" x 30", average | 1.00 | Ea. | \$3,059.63 | \$3,059.63 |
| 013113200200 | Field Personnel, project manager, average | 52.00 | Week | \$3,075.00 | \$159,900.00 |
| 013113200260 | Field Personnel, superintendent, average | 52.00 | Week | \$2,850.00 | \$148,200.00 |
| 015213200350 | Office Trailer, furnished, rent per month, 32' x 8', excl. hookups | 12.00 | Ea. | \$211.94 | \$2,543.28 |
| 015213201350 | Storage Boxes, rent per month, $40^{\prime} \mathrm{x} 8^{\prime}$ | 12.00 | Ea. | \$101.49 | \$1,217.88 |
| 015626500250 | Temporary Fencing, chain link, rented up to 12 months, 6 ' high, 11 ga, over $1000^{\prime}$ | 500.00 | L.F. | \$6.32 | \$3,160.00 |
| Division 01 Subtotal |  |  |  |  | \$318,080.79 |
| Division 02 Existing Conditions |  |  |  |  |  |
| 022113090020 | Topographical survey, conventional, minimum | 7.60 | Acre | \$400.52 | \$3,043.95 |
| 022113130320 | Boundary \& survey markers, lot location and lines, for average quantities | 7.60 | Acre | \$1,064.28 | \$8,088.53 |
| 023213100020 | Subsurface investigation, boring and exploratory drilling, initial field stake out \& determination of elevations, for borings | 1.00 | Day | \$814.67 | \$814.67 |
| 023213100100 | Subsurface investigation, boring and exploratory drilling, drawings showing boring details | 1.00 | Total | \$310.00 | \$310.00 |
| 023213100200 | Subsurface investigation, boring and exploratory drilling, report and recommendations from P.E. | 1.00 | Total | \$750.00 | \$750.00 |
| 023213100300 | Subsurface investigation, boring and exploratory drilling, mobilization and demobilization, minimum | 1.00 | Total | \$449.98 | \$449.98 |
| 024113175010 | Demolish, remove pavement \& curb, remove bituminous pavement, $3^{\prime \prime}$ thick, excludes hauling and disposal fees | 16.00 | S.Y. | \$2.35 | \$37.60 |
| 024113176000 | Demolish, remove pavement \& curb, remove concrete curbs, plain, excludes hauling and disposal fees | 35.00 | L.F. | \$4.01 | \$140.35 |
| Division 02 Subtotal |  |  |  |  | \$13,635.08 |
| Division 03 Concrete |  |  |  |  |  |
| 033053401320 | Structural concrete, in place, column (4000 psi), round, avg reinforcing, 20" diameter, includes forms(4 uses), reinforcing steel, concrete, placing and finishing | 36.00 | C.Y. | \$883.66 | \$31,811.76 |


| LineNumber | Description | Quantity | Unit | Total Incl. O\&P | Ext. Total Incl. O\&P |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 033053402550 | Structural concrete, in place, elevated slab ( 4000 psi ), one way joists, 125 psf superimposed load, 30" pans, 25' span, includes forms(4 uses), reinforcing steel, concrete, placing and finishing | 312.00 | C.Y. | \$627.24 | \$195,698.88 |
| Division 03 Subtotal |  |  |  |  | \$227,510.64 |
| Division 04 M |  |  |  |  |  |
| $047110100150$ | Simulated brick panels, vinyl siding | 1,860.00 | S.F. | \$4.51 | \$8,388.60 |
| Division 04 Subtotal |  |  |  |  | \$8,388.60 |
| Division 05 Metals |  |  |  |  |  |
| 055113500300 | Stair, shop fabricated, steel, $4^{\prime}-0{ }^{\prime \prime} \mathrm{W}$, incl picket railing, stringers, metal pan treads, excl concrete for pan treads, per riser | 144.00 | Riser | \$589.63 | \$84,906.72 |
| 055113501500 | Stair landing, shop fabricated, steel, conventional, incl framing, metal fan forms, excl concrete for pan forms | 24.00 | S.F. | \$73.87 | \$1,772.88 |
| Division 05 Subtotal |  |  |  |  | \$86,679.60 |
| Division 06 Wood, Plastics, And Composites |  |  |  |  |  |
| 061110280170 | Porch or deck framing, treated lumber, girder, double, 2" x $6 "$ | 1,680.00 | L.F. | \$2.50 | \$4,200.00 |
| 061110280360 | Porch or deck framing, treated lumber, railings and trim, 1 " x $4 "$ | 4,032.00 | L.F. | \$1.64 | \$6,612.48 |
| 061110280400 | Porch or deck framing, treated lumber, decking, 1" x 4" | 2,016.00 | S.F. | \$3.06 | \$6,168.96 |
| 061110302000 | Wood framing, roofs, fascia boards, $2^{\prime \prime} \mathrm{x}$ $8 "$ | 620.00 | L.F. | \$3.66 | \$2,269.20 |
| 061110305120 | Wood framing, roofs, rafters, ordinary, to 4 in 12 pitch, $2^{\prime \prime} \times 10 "$ | 8,400.00 | L.F. | \$1.93 | \$16,212.00 |
| 061110400100 | Wall framing, door buck, king studs, jack studs, header and accessories, 2 " x 4 " wall, $3^{\prime}$ wide, 8 ' high | 175.00 | Ea. | \$22.85 | \$3,998.75 |
| 061110400230 | Wall framing, door buck, king studs, jack studs, header and accessories, 2 " x $6 "$ wall, 12 ' wide, $8^{\prime}$ high | 50.00 | Ea. | \$83.05 | \$4,152.50 |
| 061110400240 | Wall framing, window buck, king studs, jack studs, rough sill, cripples, header and accessories, $2^{\prime \prime} \times 4^{\prime \prime}$ wall, $2^{\prime}$ wide, $8^{\prime}$ high | 150.00 | Ea. | \$27.09 | \$4,063.50 |
| 061110405045 | Wall framing, plates, untreated, $2^{\prime \prime} \times 6$ ", pneumatic nailed | 1,860.00 | L.F. | \$1.19 | \$2,213.40 |
| 061110405146 | Wall framing, studs, $2^{\prime \prime} \times 4^{\prime \prime}, 8^{\prime}$ high wall, pneumatic nailed | 5,070.00 | L.F. | \$0.80 | \$4,056.00 |
| 061110405166 | Wall framing, studs, $2^{\prime \prime} \times 6^{\prime \prime}, 8^{\prime}$ high wall, pneumatic nailed | 1,860.00 | L.F. | \$1.01 | \$1,878.60 |
| 061210100110 | Structural insulated panels, 7/16" OSB both faces, EPS insulation, 5-5/8" thick | 1,860.00 | S.F. | \$5.25 | \$9,765.00 |
| 061626100105 | Underlayment, plywood, underlayment grade, $1 / 2^{\prime \prime}$ thick, pneumatic nailed | 50,433.00 | SF Flr. | \$1.32 | \$66,571.56 |
| 061636100055 | Sheathing, plywood on roof, CDX, $3 / 8$ " thick, pneumatic nailed | 17,800.00 | S.F. | \$0.79 | \$14,062.00 |
| 061636100505 | Sheathing, plywood on walls, CDX, $3 / 8^{\prime \prime}$ thick, pneumatic nailed | 1,860.00 | S.F. | \$0.89 | \$1,655.40 |
| 062213150500 | Moldings, base, stock pine, 3-1/2" x 9/16" thick | 13,500.00 | L.F. | \$3.52 | \$47,520.00 |
| 062213352600 | Moldings, ceilings, crown, stock pine, 9/16" x 3-5/8" | 13,500.00 | L.F. | \$3.53 | \$47,655.00 |
| 062213502800 | Moldings, window \& door, for doors, stock, decorative, plain, 1-1/8" wide | 175.00 | Set | \$62.56 | \$10,948.00 |
| Division 06 Su |  |  |  |  | \$254,002.35 |


| LineNumber |  | Description | Quantity | Unit | Total Incl. <br> O\&P | Ext. Total Incl. <br> O\&P |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |

## Division 07 Thermal And Moisture Protection

071353100100

072116102210

072116200030

072216101932

072510100480

072510102100

074113100300

Division 07 Subtotal
Division 08 Openings
081313201360

081416090080

083213100450

085313300128

087120400100

087120400400

087120410100

087120452010

Division 08 Subtotal
Division 09 Finishes
092116331000

092910301050

096516108100

096810202010

096816100110 plain, 60 mils thick fasteners 23" wide
insulation, 4" thick, R20, 15 PSI compressive strength
Vapor Retarders, building paper, polypropylene, large roll decks ribbed, painted, $.0155^{\prime \prime}$ thick 3'-0" x 7'-0"
Doors, wood, architectural, flush, 3'-0" x 6'-8" x 1-3/8" thick
Doors, glass, sliding, aluminum, 6'-0" x 6'-8" jambs cylindrical, with sectional trim, non-keyed, privacy single cylinder function medium duty, outside key
Door hardware, peephole finished, standard, $1 / 2^{\prime \prime}$ thick backed, .080" thick, minimum 3/8" thick

Elastomeric sheet waterproofing, EPDM,

Blanket insulation for floors/ceilings,
fiberglass, paper or foil backing, 1 side, $9-1 / 2^{\prime \prime}$ thick, R30, incl. spring type wire

Blanket insulation, for walls or ceilings, kraft faced fiberglass, $3-1 / 2^{\prime \prime}$ thick, R11,

Roof Deck Insulation, install polystyrene
housewrap, exterior, spun bonded
Vapor retarders, building paper, asphalt felt roof deck vapor barrier, class 1 metal

Aluminum roof panels, corrugated or

Doors, residential, steel, prehung, insulated, exterior, flush face, full panel, interior, hollow core, 7 ply, luan face, economy, $5 / 8^{\prime \prime}$ tempered insul. glass,

Windows, vinyl double hung, grids, low E, J fin, exterior jambs, 25" x 37", including grill, J finish, low E, exterior

Door hardware, lockset, standard duty,

Door hardware, lockset, standard duty, cylindrical, with sectional trim, keyed,

Door hardware, deadlocks, mortise,
both sides, installed on \& incl. 25 ga , NLB metal studs, 3-5/8" wide, 16" O.C., $8^{\prime}$ to 12 ' high, $1 / 2^{\prime \prime}$ gypsum drywall Gypsum wallboard, on ceilings, taped \&

Resilient Flooring, vinyl sheet goods, Carpet padding, recycled waste carpet,

Carpet, natural fiber, sisal, reed, or hemp, 45 oz ., medium to heavy traffic
50.00 E
\$96.21
$\$ 127.64$
$\$ 185.06$
$\$ 28.23$
50.00 Ea.
.
\$144,719.25
\$2.89

| $1,860.00$ | S.F. | $\$ 2.45$ | $\$ 4,557.00$ |
| :---: | :---: | :---: | :---: |
| $50,433.00$ | S.F. | $\$ 1.43$ | $\$ 72,119.19$ |
| $50,433.00$ | S.F. | $\$ 0.51$ | $\$ 25,720.83$ |
| $17,800.00$ | S.F. | $\$ 2.00$ | $\$ 35,600.00$ |
|  |  |  |  |
| $1,860.00$ | S.F. | $\$ 0.22$ | $\$ 409.20$ |
|  |  | $\$ 31.21$ | $\$ 555,538.00$ |
| $17,800.00$ | Sq. |  |  |
|  |  | $\$ 2.48$ | $\$ 44,144.00$ |

$\$ 26,666.56$
\$172,690.87
\$1,552,414.27



| LineNumber | Description | Quantity | Unit | Total Incl. O\&P | Ext. Total Incl. O\&P |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 312513101000 | Synthetic erosion control, silt fence, polypropylene, ideal conditions, $3^{\prime}$ high | 800.00 | L.F. | \$0.79 | \$632.00 |
| 313219161550 | Geotextile soil stabilization, geotextile fabric, non-woven, 120 lb . tensile strength, includes scarifying and compaction | 600.00 | S.Y. | \$1.29 | \$774.00 |
| Division 31 Su |  |  |  |  | \$25,155.94 |
| Division 32 Exterior Improvements |  |  |  |  |  |
| 321123230101 | Base course drainage layers, aggregate base course for roadways and large paved areas, stone base, compacted, $3 / 4$ " stone base, to $6^{\prime \prime}$ deep | 37,620.00 | S.F. | \$0.96 | \$36,115.20 |
| 321126130500 | Asphalt Paving, plant mixed asphaltic base courses for roadways and large paved areas, bituminous concrete, 4 " thick | 630.00 | S.Y. | \$18.17 | \$11,447.10 |
| 321216130130 | Plant-mix asphalt paving, for highways and large paved areas, binder course, $2-1 / 2^{\prime \prime}$ thick, no hauling included | 400.00 | S.Y. | \$11.26 | \$4,504.00 |
| 321613130415 | Cast-in place concrete curbs \& gutters, concrete, machine formed, straight, $6 " \mathrm{x}$ 18 ", includes concrete | 400.00 | L.F. | \$8.66 | \$3,464.00 |
| 323213102200 | Cast-in place retaining walls, concrete gravity wall with vertical face, level embankment, no surcharge, $8^{\prime}$ high, includes excavation \& backfill, excludes reinforcing | 310.00 | L.F. | \$317.15 | \$98,316.50 |
| 329343100300 | Planting, trees, shrubs and ground cover, light soil, container, 1 gallon, includes planting only | 35.00 | Ea. | \$7.42 | \$259.70 |
| Division 32 Su |  |  |  |  | \$154,106.50 |
| Division 33 Utilities |  |  |  |  |  |
| 331113350200 | Water supply distribution piping, piping HDPE, butt fusion joints, 40 ' lengths, $6{ }^{\prime \prime}$ diameter, SDR 21 | 150.00 | L.F. | \$17.05 | \$2,557.50 |
| 334113601030 | Public Storm Utility Drainage Piping, non-reinforced concrete pipe,extra strength, B\&S or T\&G joints, 10" diameter, excludes excavation or backfill | 150.00 | L.F. | \$18.23 | \$2,734.50 |
| 337119151050 | Electrical Underground Ducts and Manholes, PVC, conduit with coupling, 2 " diameter, schedule 40, installed by direct burial in slab or duct bank | 150.00 | L.F. | \$4.78 | \$717.00 |
| Division 33 Subtotal |  |  |  |  | \$6,009.00 |



|  |  |  | Lir Of Deminct |
| :--- | :--- | :--- | :--- |

Devions
men chocz minocios


MAIDEN ChOICE ASSOCLATES MIDEN CHOICE LANE







## Appendix D - Financial Data

- United States Census Bureau - CPI Detailed Report: Data for March 2010; excerpt.
- United States Department of Labor, Bureau of Labor Statistics - Consumer Price Index: 04-14-2010.
- Argus Reports
- Cash Flow
- Sources and Uses
- Resale
- Detailed PV - Unleveraged
- Property Summary
- Presentation Rent Roll
- Market Leasing Assumptions - Year 6

Johns Hopkins University - Carey Business School
Development of Garden Apartments at Maiden Choice Lane, Catonsville, Maryland 21228
By: Andrew W. Ingalls
Advisor: Mr. George Green

# CPI Detailed Report <br> <br> Data for March 2010 

 <br> <br> Data for March 2010}

Editors<br>Malik Crawford<br>Sanjeev Katz<br>Andrew Mauro<br>Jonathan Church

Contents Page
Consumer Price Movements, March 2010 ..... 1
CPI-U 12-Month Changes ..... 3
Experimental Consumer Price Index for Americans 62 Years of Age and Older, 1998-2009 ..... 4
Technical Notes ..... 116

|  | $C P I-U$ | $C$ | $C$ CPI-W |
| :--- | :---: | :---: | :---: |
| Index tables | Table | Page | Table |


| U.S. city average: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Expenditure categories; commodity, service groups...................... | 1 | 9 | 6 | 29 |
| Seasonally adjusted expenditure categories; commodity, service groups $\qquad$ | 2 | 11 | 7 | 31 |
| Detailed expenditure categories .................... | 3 | 13 | 8 | 33 |
| Seasonally adjusted detailed expenditure categories ..................... | 4 | 20 | 9 | 39 |
| Special detailed categories... | 5 | 27 |  |  |
| Historical: |  |  |  |  |
| All items, 1913-present. | 24 | 73 | 27 | 91 |
| Commodity and service groups and detailed expenditures, indexes | 25 | 77 | 28 | 95 |
| Commodity and service groups and detailed expenditures, percent change from previous December $\qquad$ | 26 | 84 | 29 | 101 |
| Selected areas: |  |  |  |  |
| All items indexes ........................................................................... | 10 | 45 | 17 | 59 |
| Regions .............................................................................. | 11 | 46 | 18 | 60 |
| Population classes. | 12 | 48 | 19 | 62 |
| Regions and population classes cross-classified ............................. | 13 | 50 | 20 | 64 |
| Food at home expenditure categories.......................................... | 14 | 54 | 21 | 68 |
| Areas priced monthly: percent changes over the month ..................... | 15 | 55 | 22 | 69 |
| City indexes and percent changes ................................................. | 16 | 56 | 23 | 70 |

## Contents-Continued

CPI-U<br>Table Page

## Average price tables

| U.S. city average |  |  |
| :---: | :---: | :---: |
| Energy: |  |  |
| Residential prices | P1 | 107 |
| Residential units and consumption ranges | P2 | 108 |
| Gasoline. | P3 | 109 |
| Retail Food. | P4 | 110 |
| Chained CPI-U (C-CPI-U) tables |  |  |
| U.S. city average, expenditure categories, and commodity <br> and service groups |  |  |
| U.S. city average, all items index | 24 C | 113 |
| Historical U.S. city average, expenditure categories, and commodity and service groups, indexes | 25C | 114 |
| Historical U.S. city average, expenditure categories, and commodity and service groups, percent changes from previous December .... | 26C | 115 |

## Scheduled Release Dates

Consumer Price Index data are scheduled for initial release on the following dates:

| Index month | Release date | Index month | Release date |
| :--- | :--- | :--- | :--- |
| April | May 19 | May | June 17 |
| June | July 16 | July | August 13 |
| August | September 17 | September | October 15 |

## CONSUMER PRICE MOVEMENTS MARCH 2010

On a seasonally adjusted basis, the Consumer Price Index for All Urban Consumers (CPI-U) increased 0.1 percent in March, the U.S. Bureau of Labor Statistics reported today. Over the last 12 months, the index increased 2.3 percent before seasonal adjustment.

The seasonally adjusted increase in the all items index was mostly due to an increase in the fresh fruits and vegetables index, which rose 4.6 percent in March and accounted for over 60 percent of the all items increase. Other food at home indexes were mixed and the index for food away from home was unchanged.

The index for energy and for all items less food and energy were both unchanged in March. Within energy, an increase in the electricity index was offset by declines in the indexes for gasoline and natural gas. Within all items less food and energy, the indexes for medical care, new vehicles, and used cars and trucks posted increases, while the indexes for shelter, household furnishings and operations, and apparel declined.

Table A. Percent changes in CPI for All Urban Consumers (CPI-U): U.S. city average

|  | Seasonally adjusted changes from preceding month |  |  |  |  |  |  | Unadjusted 12-mos. ended <br> Mar. 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sep. } \\ & 2009 \end{aligned}$ | $\begin{aligned} & \text { Oct. } \\ & 2009 \end{aligned}$ | $\begin{aligned} & \text { Nov. } \\ & 2009 \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & 2009 \end{aligned}$ | $\begin{aligned} & \text { Jan. } \\ & 2010 \end{aligned}$ | $\begin{aligned} & \text { Feb. } \\ & 2010 \end{aligned}$ | $\begin{aligned} & \text { Mar. } \\ & 2010 \end{aligned}$ |  |
| All items | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 2.3 |
| Food | -. 1 | . 0 | . 1 | . 1 | . 2 | . 1 | . 2 | . 2 |
| Food at home | -. 3 | . 0 | . 0 | . 2 | . 4 | . 1 | . 5 | -. 7 |
| Food away from home 1 | . 1 | . 1 | . 2 | . 1 | . 1 | . 1 | . 0 | 1.2 |
| Energy | . 6 | . 6 | 2.2 | . 8 | 2.8 | -. 5 | . 0 | 18.3 |
| Energy commodities ........................ | 1.1 | . 4 | 3.0 | 1.6 | 4.9 | -1.3 | -1.0 | 39.6 |
| Gasoline (all types) ........................ | . 9 | . 3 | 2.7 | 2.3 | 4.4 | -1.4 | -. 8 | 41.4 |
| Fuel oil ${ }^{1}$ | -. 3 | 2.2 | 7.4 | . 0 | 6.1 | -2.4 | . 7 | 27.2 |
| Energy services ............................. | -. 1 | . 8 | 1.1 | -. 3 | . 0 | . 5 | 1.4 | -1.8 |
| Electricity ..................................... | . 3 | . 8 | 1.2 | -. 2 | -1.1 | -. 5 | 2.1 | -. 5 |
| Utility (piped) gas service ............... | -1.5 | . 7 | . 9 | -. 7 | 3.5 | 3.9 | -. 7 | -5.5 |
| All items less food and energy ........... | . 2 | . 2 | . 0 | . 1 | -. 1 | . 1 | . 0 | 1.1 |
| Commodities less food and energy commodities | . 3 | . 4 | . 2 | . 1 | . 1 | -. 1 | -. 1 | 1.9 |
| New vehicles ............................... | . 3 | 1.4 | . 5 | -. 2 | -. 5 | . 1 | . 1 | 3.0 |
| Used cars and trucks | 1.7 | 3.1 | 1.9 | 2.2 | 1.5 | . 7 | . 5 | 16.3 |
| Apparel ............ | . 2 | -. 3 | -. 3 | . 4 | -. 1 | -. 7 | -. 4 | -. 4 |
| Medical care commodities ${ }^{1}$........... | . 6 | . 2 | . 1 | -. 1 | . 7 | . 8 | . 4 | 3.7 |
| Services less energy services ........... | . 1 | . 1 | . 0 | . 1 | -. 2 | . 1 | . 1 | . 8 |
| Shelter ........................................ | . 0 | . 0 | -. 2 | . 0 | -. 5 | . 0 | -. 1 | -. 6 |
| Transportation services ................. | . 7 | . 5 | . 5 | . 3 | -. 3 | . 4 | . 4 | 3.8 |
| Medical care services .................... | . 3 | . 2 | . 3 | . 2 | . 5 | . 4 | . 3 | 3.8 |

1 Not seasonally adjusted.

## Consumer Price Index Data for March 2010

## Food

The food index rose 0.2 percent in March after rising 0.1 percent in February. The index for food away from home, which had increased every month since January 2003, was unchanged in March. In contrast, the index for food at home rose 0.5 percent, its largest increase since September 2008. The index for fruits and vegetables rose 3.4 percent due to the sharp rise in the fresh fruits and vegetables index. Other grocery store food groups registered only small changes in March. The meats, poultry, fish, and eggs index increased 0.2 percent, while the indexes for dairy and related products and for nonalcoholic beverages were unchanged and the indexes for cereals and bakery products and for other food at home declined slightly. The food index has risen 0.2 percent over the last 12 months, with the food at home index still down 0.7 percent over that period despite the March increase.

## Energy

The energy index, which fell 0.5 percent in February, was unchanged in March. The gasoline index declined for the second straight month, falling 0.8 percent. (Before seasonal adjustment, gasoline prices rose 4.5 percent in March and have increased 41.4 percent over the past 12 months.) The index for household energy rose in March, increasing 1.3 percent mostly because of a 2.1 percent rise in the electricity index. The fuel oil index rose 0.7 percent, but the index for natural gas declined 0.7 percent. Over the last 12 months the energy index has risen 18.3 percent.

## All items less food and energy

The index for all items less food and energy was unchanged in March after rising 0.1 percent in February. The shelter index declined in March, falling 0.1 percent due to a 0.1 percent decline in owners' equivalent rent. The index for household furnishings and operations fell 0.4 percent in March, its ninth decline in the past 10 months. The index for apparel fell 0.4 percent and the recreation index declined 0.1 percent. In contrast to these declines, the medical care index rose 0.3 percent in March with the index for hospital services increasing 1.1 percent. The index for used cars and trucks continued to rise, increasing 0.5 percent, and the new vehicles index rose 0.1 percent. Over the last 12 months the index for all items less food and energy has risen 1.1 percent, its smallest increase since January 2004. This is largely explained by the continued deceleration of the shelter index, which has now fallen 0.6 percent over the last 12 months.

## Not seasonally adjusted CPI measures

The Consumer Price Index for All Urban Consumers (CPI-U) increased 2.3 percent over the last 12 months to an index level of 217.631 (1982-84=100). For the month, the index rose 0.4 percent prior to seasonal adjustment.

The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) increased 3.0 percent over the last 12 months to an index level of $213.525(1982-84=100)$. For the month, the index rose 0.5 percent prior to seasonal adjustment.

The Chained Consumer Price Index for All Urban Consumers (C-CPI-U) increased 2.5 percent over the last 12 months. For the month, the index increased 0.4 percent on a not seasonally adjusted basis. Please note that the indexes for the post- 2008 period are subject to revision.

The Consumer Price Index for April 2010 is scheduled to be released on Wednesday, May 19, 2010, at 8:30 a.m. (EDT).


## Experimental Consumer Price Index for Americans 62 Years of Age and Older, 1998-2009

## Introduction

The Consumer Price Index (CPI) measures the average change over time in the prices paid by urban consumers for a representative market basket of consumer goods and services. The CPI for All Urban Consumers (CPI-U) represents the spending habits of about 87 percent of the population of the United States. The CPI for Urban Wage Earners and Clerical Workers (CPI-W), a subset of the CPIU population, represents about 32 percent of the U.S. population. ${ }^{1}$

The Bureau of Labor Statistics (BLS) also calculates an experimental price index for Americans 62 years of age or older (often called the CPI-E). This article reviews price changes seen in the experimental CPI-E from December 1997 through December 2009 and reiterates the methods, sources of data, and limitations of the experimental index described in earlier articles ${ }^{2}$. Over the 12-year period from December 1997 through December 2009, the experimental CPI-E rose 36.1 percent. This compares to increases of 33.9 and 33.8 percent for the CPI-U and CPI-W, respectively.

## Methodology, sources of data, and limitations

Although this study indicates a slightly higher overall inflation rate for older Americans compared to the official CPI population groups, any conclusions drawn from it should be used with caution because of the various limitations, summarized below, inherent in the methodology.

Expenditure weights. For purposes of index estimation, the CPI is divided into strata cross-classified by 38 areas and 211 item categories. For each CPI population group, these area/item strata are weighted according to their importance in the spending patterns of the respective population. The definition of the population of older Americans used for the experimental price index was all urban noninstitutionalized consumer units that met one of the following three conditions:

1) Unattached individuals who were at least 62 years of age;
2) Members of families whose reference person (as defined in
the Consumer Expenditure Survey) or spouse was at least
62 years of age; or
3) Members of groups of unrelated individuals living
together who pool their resources to meet their living expenses, whose reference person was at least 62 years of age.

In the 2007-2008 Consumer Expenditure Survey, which are used as the source of expenditure weights in the CPI for 2010-2011, 18 percent of the urban consumer units met the above definition for older Americans. Because the number of consumer units used for determining weights in the experimental index was relatively small, expenditure weights used in the construction of the experimental price index have a higher sampling error than those used for the larger populations.

For each population group, the base expenditure weight of any component represents the actual expenditure on that component in the base period. The "relative importance" of any component is its base expenditure weight updated for changes in relative prices expressed as a percent of the total updated expenditures for the population. The relative importance data for each of the three population groups for December 2009 are shown in Table 1.

Areas and outlets priced. The CPI-E is a weighted average of price changes for the same set of strata and collected from the same sample of urban areas used in calculating the CPI-U and CPI-W. Because the strata are defined by metropolitan area as well as item category, this means that the CPI-E reflects the general geographic distribution of the urban population.

Retail outlets are selected for pricing in the CPI based on data reported in a separate survey representing all urban households. The experimental index also uses the same retail outlet sample. The outlets thus selected may not be representative of the places of purchase (for example, the types of store or their locational distribution within metropolitan areas) of the elderly population.

[^8]Items priced. One major limitation of the experimental index is that the item samples priced within selected outlets are determined with probabilities proportionate to total urban (and not elderly) expenditures. As a result, the specific items selected for pricing in each outlet may not be representative of the experimental index population.

Prices collected. A final source of uncertainty about the appropriateness of using the CPI-U prices for the index of the older population concerns the availability of discount prices for older Americans. For example, senior-citizen discount rates are used in the CPI in proportion to their use by the urban population as a whole. To the extent that senior-citizen discounts take the form of a fixed percentage discount from the regular price, this may not be a problem. If, however, the discount is not expressed as a percentage of the price, or if that percentage is periodically adjusted, the scarcity of senior-citizen discount prices in the current CPI could lead to error in the experimental index.

Because of the above limitations, any conclusions drawn from these analyses should be treated as tentative.

## Relative behavior of price indexes

Table 2 shows the behavior of the CPI-E, CPI-U, and CPI-W for selected expenditure categories for the period December 1997 through December 2009. Over this 12-year period, the reweighted experimental price index for older Americans (CPI-E) rose 36.1 percent. This compares with increases of 33.9 percent for the CPI-U and 33.8 percent for the CPI-W.

The relative importance data for the CPI-E and the CPI-U and CPI-W populations show that older Americans devote a substantially larger share of their total budgets to medical care (see Table 1). In addition, for each population group, medical care prices rose more rapidly than the overall (all items) index during each of the eight years studied. For this reason, the medical care component accounts for a significant portion of the difference between the higher rate of increase measured for the CPI-E relative to the two official population groups during the 1998-2009 period.

Price change for each major expenditure group varied by population because the distribution of expenditures on the products and services within the major groups varied among the three index populations. For example, within the housing major group, the weight for owner-occupied shelter is higher for the elderly than the CPI-U and CPI-W populations, as a higher proportion of elderly own homes than the other population groups. The weight for rent, on the other hand, is smaller for the CPI-E population.

## The CPI and its relationship to Social Security benefits

Adjustments to Social Security benefits are currently based on the percent change in the CPI-W, measured from the average of the third quarter of one year to the third quarter of the succeeding year.

While the population covered for this study includes persons 62 years of age and older, it is important to note that it differs in many ways from the population receiving Social Security benefits.

First, many Social Security beneficiaries are younger than 62 years of age, and receive benefits because they are surviving spouses and/or minor children of covered workers or because of disability. The spending patterns of this younger group are excluded in the weights for the experimental index for older Americans. Second, a substantial number of persons 62 years of age and older do not receive Social Security benefits, especially those 62-64 years of age. Although these older consumers are included in the population covered by the experimental reweighted index, they would be excluded from an index specifically defined to reflect the experience of Social Security pensioners.

In short, an index designed specifically to measure price change for Social Security beneficiaries (i.e., one that excludes older people not receiving benefits, but includes younger persons receiving survival and disability benefits) might well show price movements that differ from those of the experimental index.

## Conclusions

This report summarizes the change in the prices of three population groups: the CPI-U, the CPI-W, and the CPI-E, the experimental population of Americans older than 62 years of age, for the period December 1997 through December 2009. During this time period, the CPI-E increased at a slightly higher rate than either of the two official populations.

The CPI-E, reweighted to incorporate the spending patterns of older consumers, behaved more like the CPI-U than the CPI-W. This was expected, because the CPI-U includes the expenditures of all urban consumers, including those 62 years of age and over. The CPI-W, however, is limited to the spending patterns of wage-earner and clerical families and, therefore, specifically excludes the experience of families whose primary source of income is from retirement pensions.

Finally, the medical care component of the CPI has a substantially larger relative weight in the experimental population compared to the CPI-U or CPI-W. As a result, the medical care component tends to have a larger effect on the elderly population than
it does on the other two indexes. Other differences also play an important role, however, such as the greater weight of homeownership in the CPI-E.

Finally, the experimental price index has limitations as an estimate of the inflation rate experienced by older Americans. Because of the various limitations inherent in the methodology, any conclusions drawn from these data should be made with caution.

Table 25. Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by commodity and service group and detailed expenditure categories
(1982-84=100, unless otherwise noted)

| Item and group | Unadjusted indexes |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December |  |  |  |  |  |  |  | $\begin{aligned} & \text { Mar. } \\ & 2010 \end{aligned}$ |
|  | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |  |
| Expenditure category |  |  |  |  |  |  |  |  |  |
| All items | 180.9 | 184.3 | 190.3 | 196.8 | 201.8 | 210.036 | 210.228 | 215.949 | 217.631 |
| All items (1967=100) | 541.9 | 552.1 | 570.1 | 589.4 | 604.5 | 629.174 | 629.751 | 646.887 | 651.925 |
| Food and beverages | 177.8 | 184.1 | 188.9 | 193.2 | 197.4 | 206.936 | 218.839 | 218.049 | 219.378 |
| Food ............. | 177.3 | 183.6 | 188.5 | 192.9 | 197.0 | 206.704 | 218.805 | 217.637 | 219.032 |
| Food at home | 176.1 | 184.1 | 188.5 | 191.7 | 194.3 | 205.208 | 218.683 | 213.359 | 215.623 |
| Cereals and bakery products | 197.3 | 202.9 | 206.4 | 208.4 | 214.8 | 226.461 | 253.063 | 251.019 | 250.930 |
| Cereals and cereal products | 180.1 | 183.9 | 185.7 | 185.1 | 189.0 | 196.793 | 222.639 | 219.487 | 218.420 |
| Flour and prepared flour mixes | 165.0 | 171.4 | 165.4 | 171.6 | 177.0 | 190.014 | 229.875 | 220.166 | 225.237 |
| Breakfast cereal | 202.2 | 203.2 | 205.7 | 201.3 | 202.3 | 207.828 | 217.930 | 218.174 | 215.500 |
| Rice, pasta, cornmeal | 154.6 | 161.1 | 165.0 | 167.1 | 174.9 | 183.958 | 233.018 | 226.189 | 225.797 |
| Rice 12 ................. | 98.2 | 103.4 | 108.3 | 110.1 | 117.3 | 122.254 | 170.418 | 155.502 | 157.232 |
| Bakery products | 206.0 | 212.6 | 217.1 | 220.7 | 228.5 | 242.268 | 269.187 | 267.776 | 268.259 |
| Bread 2 ........... | 116.2 | 118.6 | 123.3 | 126.9 | 133.4 | 147.354 | 165.774 | 160.007 | 159.507 |
| White bread ${ }^{1}$ | 213.7 | 218.9 | 227.2 | 232.5 | 244.6 | 272.159 | 304.713 | 294.248 | 290.424 |
| Bread other than white ${ }^{1}$ | 223.3 | 222.5 | 233.7 | 240.2 | 251.3 | 276.643 | 313.310 | 301.685 | 305.557 |
| Fresh biscuits, rolls, muffins ${ }^{2}$ | 115.5 | 119.9 | 123.1 | 126.1 | 134.0 | 139.977 | 158.809 | 154.706 | 152.105 |
| Cakes, cupcakes, and cookies | 199.9 | 205.1 | 209.4 | 213.9 | 216.1 | 228.738 | 248.707 | 255.349 | 251.823 |
| Cookies ${ }^{1}$ | 201.6 | 203.1 | 208.1 | 212.5 | 216.2 | 222.193 | 241.011 | 251.261 | 245.179 |
| Fresh cakes and cupcakes ${ }^{1}$ | 199.9 | 207.7 | 211.6 | 216.1 | 216.9 | 235.227 | 256.070 | 258.666 | 257.372 |
| Other bakery products | 197.3 | 206.5 | 206.9 | 205.9 | 212.4 | 217.459 | 240.851 | 242.453 | 249.544 |
| Fresh sweetrolls, coffeecakes, doughnuts ${ }^{1}$ | 198.0 | 205.5 | 209.8 | 216.8 | 225.3 | 233.009 | 250.349 | 251.485 | 253.092 |
| Crackers, bread, and cracker products ${ }^{1}$..... | 227.0 | 242.4 | 239.8 | 236.6 | 244.4 | 247.888 | 277.864 | 280.837 | 291.127 |
| Frozen and refrigerated bakery products, pies, tarts, turnovers ${ }^{1}$ $\qquad$ | 203.7 | 207.0 | 211.9 | 211.6 | 217.3 | 225.129 | 248.467 | 254.335 | 260.181 |
| Meats, poultry, fish, and eggs ......................... | 162.4 | 181.1 | 183.1 | 185.7 | 188.6 | 198.755 | 208.890 | 201.003 | 202.812 |
| Meats, poultry, and fish | 163.0 | 180.4 | 184.5 | 187.1 | 189.0 | 196.639 | 208.647 | 201.129 | 202.831 |
| Meats | 160.3 | 182.7 | 185.6 | 187.8 | 189.4 | 195.558 | 206.864 | 196.202 | 199.583 |
| Beef and veal | 161.1 | 198.9 | 197.1 | 201.5 | 202.6 | 212.808 | 226.019 | 215.426 | 217.346 |
| Uncooked ground beef | 139.0 | 166.1 | 170.9 | 176.8 | 177.7 | 186.936 | 207.712 | 195.073 | 197.833 |
| Uncooked beef roasts ${ }^{2}$ | 119.1 | 147.1 | 146.1 | 147.8 | 147.5 | 155.076 | 162.822 | 158.812 | 161.596 |
| Uncooked beef steaks ${ }^{2}$ | 116.1 | 148.0 | 143.1 | 145.0 | 145.1 | 152.557 | 154.867 | 147.026 | 146.765 |
| Uncooked other beef and veal ${ }^{2}$ | 112.8 | 137.3 | 128.8 | 132.7 | 138.1 | 143.603 | 152.620 | 151.342 | 153.016 |
| Pork ... | 159.2 | 167.5 | 175.4 | 175.2 | 176.4 | 178.818 | 187.918 | 173.178 | 181.502 |
| Bacon, breakfast sausage, and related products ${ }^{2}$ | 113.1 | 118.0 | 124.8 | 120.3 | 122.3 | 126.273 | 129.126 | 122.472 | 125.647 |
| Bacon and related products ${ }^{1}$................. | 187.8 | 205.1 | 212.4 | 207.7 | 211.1 | 219.140 | 219.838 | 211.750 | 215.105 |
| Breakfast sausage and related products <br> 12 | 110.7 | 115.1 | 123.6 | 117.7 | 119.3 | 122.097 | 127.313 | 120.341 | 126.333 |
| Ham | 155.3 | 162.4 | 169.2 | 172.9 | 173.6 | 175.954 | 185.401 | 169.673 | 182.420 |
| Ham, excluding canned ${ }^{1}$ | 169.8 | 178.9 | 188.5 | 193.3 | 195.9 | 198.301 | 208.760 | 190.435 | 205.666 |
| Pork chops ........................................... | 154.9 | 163.2 | 166.9 | 166.8 | 166.2 | 167.482 | 178.470 | 164.203 | 168.296 |
| Other pork including roasts and picnics ${ }^{2}$.. | 95.4 | 102.2 | 108.8 | 111.6 | 112.1 | 111.596 | 120.335 | 107.138 | 115.571 |
| Other meats | 164.8 | 173.8 | 178.9 | 180.4 | 184.0 | 187.239 | 198.096 | 193.250 | 191.883 |
| Frankfurters 1 | 172.0 | 177.0 | 172.8 | 175.6 | 177.6 | 186.345 | 193.675 | 183.973 | 186.155 |
| Lunchmeats 12 | 109.5 | 113.3 | 116.8 | 118.0 | 119.1 | 120.873 | 129.323 | 128.646 | 127.118 |
| Lamb and organ meats 1 | 189.8 | 202.7 | 207.5 | 214.2 | NA | 231.966 | 253.332 | 257.675 | 262.627 |
| Lamb and mutton ${ }^{12}$...... | NA | NA | 114.9 | 126.8 | NA | NA | 156.461 | 155.167 | 157.703 |
| Poultry | 166.6 | 174.4 | 183.3 | 183.8 | 182.5 | 193.998 | 205.222 | 202.158 | 201.654 |
| Chicken ${ }^{2}$ | 108.3 | 113.4 | 120.0 | 119.6 | 118.5 | 127.324 | 134.248 | 131.427 | 130.299 |
| Fresh whole chicken ${ }^{1}$ | 170.6 | 171.5 | 186.4 | 188.5 | 186.1 | 202.199 | 218.072 | 208.519 | 209.110 |
| Fresh and frozen chicken parts 1 | 167.5 | 176.9 | 186.3 | 183.2 | 181.2 | 194.487 | 202.195 | 201.295 | 197.237 |
| Other poultry including turkey ${ }^{2}$ | 104.0 | 108.5 | 111.2 | 114.3 | 114.7 | 116.282 | 124.859 | 126.405 | 129.190 |
| Fish and seafood ............. | 187.4 | 192.5 | 196.9 | 204.4 | 211.6 | 221.633 | 238.759 | 238.671 | 236.327 |
| Fresh fish and seafood ${ }^{2}$ | 106.3 | 111.3 | 114.4 | 120.9 | 125.9 | 132.385 | 140.429 | 138.441 | 139.565 |
| Processed fish and seafood ${ }^{2}$.................... | 105.3 | 105.3 | 106.9 | 108.2 | 110.9 | 115.420 | 126.573 | 128.506 | 124.775 |
| Canned fish and seafood ${ }^{1}$...................... | 130.5 | 130.2 | 133.7 | 136.5 | 144.0 | 148.631 | 170.862 | 176.701 | 171.535 |
| Frozen fish and seafood ${ }^{1}$. | 225.5 | 227.1 | 228.7 | 231.5 | 233.8 | 245.839 | 260.713 | 266.261 | 260.589 |
| Eggs | 146.5 | 190.6 | 152.6 | 154.7 | 176.5 | 234.018 | 212.819 | 198.747 | 202.397 |
| Dairy and related products | 167.3 | 173.0 | 180.1 | 183.2 | 181.0 | 205.299 | 210.838 | 194.792 | 198.814 |
| Milk ${ }^{2}$............................ | 109.9 | 117.5 | 124.4 | 128.7 | 125.5 | 149.692 | 144.817 | 129.538 | 132.631 |
| Fresh whole milk ${ }^{1}$ | 160.2 | 171.3 | 181.5 | 189.3 | 181.2 | 221.014 | 211.209 | 184.074 | 189.601 |
| Fresh milk other than whole 12 ................... | 111.8 | 119.1 | 125.1 | 128.0 | 128.0 | 149.603 | 145.893 | 133.648 | 136.597 |
| Cheese and related products.. | 168.3 | 172.2 | 181.4 | 182.3 | 178.9 | 202.189 | 219.187 | 198.738 | 203.872 |
| Ice cream and related products | 179.1 | 179.4 | 178.4 | 179.1 | 182.0 | 188.522 | 199.080 | 194.929 | 196.331 |
| Other dairy and related products ${ }^{2}$................. | 114.9 | 116.7 | 120.1 | 121.9 | 121.7 | 136.064 | 139.584 | 134.255 | 136.607 |
| Fruits and vegetables .................................... | 224.9 | 232.4 | 250.8 | 252.3 | 257.2 | 272.482 | 281.706 | 273.189 | 280.431 |

Table 25. Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by commodity and service group and detailed expenditure categories-Continued
(1982-84=100, unless otherwise noted)

| Item and group | Unadjusted indexes |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December |  |  |  |  |  |  |  | $\begin{aligned} & \text { Mar. } \\ & 2010 \end{aligned}$ |
|  | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |  |
| Expenditure category |  |  |  |  |  |  |  |  |  |
| Fresh fruits and vegetables | 264.3 | 276.3 | 302.7 | 301.1 | 306.4 | 326.064 | 327.943 | 315.247 | 325.425 |
| Fresh fruits | 283.3 | 287.3 | 308.2 | 312.3 | 325.7 | 344.733 | 338.252 | 325.602 | 331.425 |
| Apples | 231.2 | 238.5 | 241.0 | 251.1 | 276.3 | 292.707 | 304.060 | 273.996 | 291.731 |
| Bananas | 165.4 | 162.9 | 158.2 | 169.9 | 174.5 | 182.356 | 211.145 | 193.304 | 195.132 |
| Citrus fruits ${ }^{2}$ | 142.4 | 145.1 | 162.2 | 174.3 | 185.0 | 186.752 | 186.888 | 187.089 | 185.657 |
| Oranges, including tangerines ${ }^{1}$ | 278.8 | 294.3 | 313.7 | 331.5 | 370.7 | 348.722 | 362.266 | 377.682 | 360.901 |
| Other fresh fruits ${ }^{2}$ | 111.7 | 113.7 | 126.8 | 121.8 | 124.4 | 134.596 | 122.430 | 120.840 | 122.621 |
| Fresh vegetables | 245.2 | 263.8 | 295.1 | 288.3 | 286.1 | 306.142 | 315.835 | 303.191 | 317.397 |
| Potatoes .. | 222.2 | 214.5 | 230.5 | 251.7 | 266.8 | 274.694 | 335.346 | 278.568 | 293.686 |
| Lettuce | 218.5 | 301.8 | 276.9 | 260.0 | 281.9 | 295.313 | 300.040 | 329.458 | 279.289 |
| Tomatoes | 288.5 | 284.2 | 425.0 | 342.3 | 318.5 | 378.746 | 337.763 | 348.514 | 379.425 |
| Other fresh vegetables | 250.1 | 271.0 | 282.5 | 295.2 | 288.0 | 300.382 | 311.165 | 293.958 | 318.850 |
| Processed fruits and vegetables ${ }^{2}$ | 113.3 | 112.4 | 114.2 | 120.3 | 123.5 | 128.488 | 145.854 | 145.397 | 146.554 |
| Canned fruits and vegetables ${ }^{2}$ | 112.9 | 109.9 | 112.6 | 119.1 | 122.2 | 127.028 | 147.963 | 149.489 | 149.653 |
| Canned fruits ${ }^{12}$...... | 111.9 | 110.1 | 112.0 | 117.8 | 122.3 | 125.693 | 139.051 | 139.841 | 140.175 |
| Canned vegetables 12 | 116.1 | 112.2 | 116.5 | 124.4 | 125.9 | 131.871 | 157.030 | 159.591 | 160.869 |
| Frozen fruits and vegetables ${ }^{2}$ | 114.9 | 118.0 | 117.0 | 122.6 | 125.7 | 129.831 | 140.185 | 135.621 | 139.177 |
| Frozen vegetables ${ }^{1}$ | 168.6 | 173.2 | 171.4 | 177.5 | 178.7 | 179.760 | 195.634 | 188.807 | 196.475 |
| Other processed fruits and vegetables including dried ${ }^{2}$ | 110.3 | 109.5 | 113.0 | 118.5 | 122.5 | 129.286 | 148.092 | 148.847 | 148.468 |
| Dried beans, peas, and lentils 12 .............. | 110.1 | 108.9 | 113.8 | 116.6 | 123.6 | 139.039 | 176.320 | 176.524 | 175.355 |
| Nonalcoholic beverages and beverage materials $\qquad$ | 139.8 | 139.3 | 140.6 | 145.5 | 148.5 | 153.648 | 162.750 | 161.216 | 162.666 |
| Juices and nonalcoholic drinks ${ }^{2}$ | 108.0 | 107.4 | 108.3 | 111.5 | 113.6 | 117.609 | 126.154 | 124.645 | 125.476 |
| Carbonated drinks ................. | 124.9 | 124.8 | 127.5 | 133.1 | 133.6 | 138.194 | 151.095 | 151.851 | 156.747 |
| Frozen noncarbonated juices and drinks ${ }^{2}$ | 113.7 | 115.0 | 111.5 | 111.7 | 126.5 | 143.465 | 149.073 | 150.282 | 149.669 |
| Nonfrozen noncarbonated juices and drinks ${ }^{2}$ | 107.5 | 106.1 | 105.7 | 107.4 | 110.7 | 114.034 | 120.207 | 116.601 | 115.289 |
| Beverage materials including coffee and tea ${ }^{2}$ | 97.4 | 97.5 | 98.7 | 103.1 | 105.6 | 109.195 | 112.894 | 112.391 | 114.213 |
| Coffee | 142.2 | 143.2 | 145.5 | 162.3 | 165.8 | 175.083 | 185.929 | 180.802 | 184.410 |
| Roasted coffee ${ }^{1}$ | 142.0 | 144.6 | 146.4 | 167.1 | 166.3 | 180.752 | 189.098 | 185.174 | 190.140 |
| Instant and freeze dried coffee ${ }^{1}$ | 164.2 | 161.0 | 167.8 | 175.0 | 188.5 | 184.030 | 207.297 | 196.843 | 197.812 |
| Other beverage materials including tea ${ }^{2}$ | 114.7 | 114.3 | 115.4 | 115.9 | 118.9 | 121.631 | 123.849 | 124.960 | 126.559 |
| Other food at home ......... | 161.1 | 163.0 | 163.6 | 167.6 | 168.7 | 174.057 | 190.203 | 189.921 | 190.991 |
| Sugar and sweets | 159.1 | 161.0 | 161.3 | 167.8 | 172.4 | 178.631 | 193.312 | 198.712 | 199.917 |
| Sugar and artificial sweeteners | 140.1 | 143.0 | 142.7 | 154.3 | 163.3 | 162.521 | 173.015 | 179.643 | 187.954 |
| Candy and chewing gum ${ }^{2}$ | 107.0 | 107.3 | 107.5 | 111.4 | 113.1 | 118.555 | 128.689 | 132.313 | 130.874 |
| Other sweets ${ }^{2}$............ | 112.1 | 115.8 | 116.6 | 118.6 | 123.3 | 127.536 | 138.640 | 141.122 | 144.810 |
| Fats and oils | 152.8 | 157.7 | 167.4 | 165.2 | 166.7 | 176.068 | 206.710 | 197.391 | 198.567 |
| Butter and margarine ${ }^{2}$ | 114.6 | 119.2 | 135.6 | 131.2 | 129.5 | 137.454 | 163.439 | 150.847 | 152.655 |
| Butter ${ }^{1}$................ | 141.0 | 145.1 | 186.2 | 174.6 | 164.5 | 168.121 | 181.703 | 160.781 | 161.832 |
| Margarine ${ }^{1}$ | 161.4 | 171.1 | 173.0 | 174.1 | 177.0 | 193.811 | 246.153 | 234.357 | 237.091 |
| Salad dressing 2 | 107.3 | 109.7 | 110.3 | 105.6 | 109.2 | 113.085 | 124.935 | 125.704 | 125.627 |
| Other fats and oils including peanut butter 2 | 105.5 | 108.9 | 113.8 | 116.3 | 117.3 | 125.054 | 151.240 | 142.856 | 143.758 |
| Peanut butter 12 .................................. | 109.6 | 109.9 | 110.3 | 111.7 | 108.5 | 117.962 | 133.912 | 132.636 | 132.642 |
| Other foods | 178.2 | 179.6 | 178.3 | 183.3 | 183.5 | 188.325 | 203.902 | 203.832 | 204.952 |
| Soups | 205.3 | 207.1 | 207.4 | 211.4 | 211.3 | 211.165 | 229.675 | 224.677 | 226.146 |
| Frozen and freeze dried prepared foods ....... | 153.1 | 153.6 | 152.9 | 154.3 | 151.7 | 157.409 | 167.801 | 166.386 | 165.694 |
| Snacks ................................................... | 167.9 | 175.4 | 171.4 | 181.3 | 179.5 | 187.632 | 211.835 | 215.081 | 216.232 |
| Spices, seasonings, condiments, sauces . | 187.9 | 183.8 | 178.4 | 185.2 | 185.0 | 191.486 | 204.785 | 208.868 | 214.496 |
| Salt and other seasonings and spices ${ }^{12}$... | 108.2 | 107.0 | 106.7 | 113.2 | 109.0 | 115.302 | 117.672 | 121.482 | 122.329 |
| Olives, pickles, relishes ${ }^{12}$....................... | 111.7 | 105.0 | 109.7 | 110.2 | 112.6 | 117.241 | 132.534 | 130.724 | 134.454 |
| Sauces and gravies ${ }^{12}$............................ | 113.5 | 111.9 | 102.4 | 106.3 | 109.4 | 110.635 | 119.993 | 124.327 | 125.195 |
| Other condiments ${ }^{1}$.................................. | 195.4 | 202.8 | 195.5 | 198.9 | 199.3 | 211.775 | 222.149 | 217.733 | 245.501 |
| Baby food ${ }^{2}$ | 117.0 | 120.7 | 123.2 | 127.4 | 128.6 | 133.326 | 140.918 | 139.287 | 140.425 |
| Other miscellaneous foods ${ }^{2}$... | 110.2 | 109.8 | 110.8 | 112.4 | 115.1 | 115.267 | 123.791 | 122.422 | 122.318 |
| Prepared salads ${ }^{13}$ |  |  |  |  |  | 100.000 | 105.705 | 107.366 | 106.980 |
| Food away from home | 180.1 | 184.3 | 189.9 | 196.0 | 202.2 | 210.233 | 220.684 | 224.789 | 224.991 |
| Full service meals and snacks ${ }^{2}$ | 114.0 | 116.5 | 119.9 | 123.3 | 127.5 | 132.413 | 137.620 | 140.112 | 140.360 |
| Limited service meals and snacks ${ }^{2}$ | 113.7 | 116.3 | 120.0 | 124.0 | 127.7 | 132.959 | 140.918 | 143.407 | 143.130 |
| Food at employee sites and schools ${ }^{2}$............. | 111.3 | 114.1 | 117.4 | 120.6 | 125.0 | 128.545 | 135.998 | 139.858 | 140.392 |
| Food at elementary and secondary schools ${ }^{1}$ 4 | - | - | - | 100.0 | 104.3 | 107.685 | 114.392 | 117.561 | 117.786 |
| Food from vending machines and mobile vendors ${ }^{2}$ | 106.1 | 108.6 | 111.0 | 114.2 | 116.5 | 120.438 | 128.587 | 131.765 | 132.168 |

See footnotes at end of table.

Table 25. Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by commodity and service group and detailed expenditure categories-Continued
(1982-84=100, unless otherwise noted)

| Item and group | Unadjusted indexes |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December |  |  |  |  |  |  |  | $\begin{aligned} & \text { Mar. } \\ & 2010 \end{aligned}$ |
|  | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |  |
| Expenditure category |  |  |  |  |  |  |  |  |  |
| Other food away from home ${ }^{2}$ | 119.8 | 122.9 | 127.0 | 133.7 | 139.1 | 145.814 | 154.062 | 156.990 | 158.657 |
| Alcoholic beverages ................. | 184.9 | 188.7 | 193.9 | 196.4 | 201.1 | 208.704 | 217.975 | 222.082 | 222.521 |
| Alcoholic beverages at home | 164.6 | 167.4 | 170.9 | 171.5 | 174.0 | 179.709 | 187.666 | 190.510 | 190.782 |
| Beer, ale, and other malt beverages at home | 165.7 | 170.7 | 176.4 | 175.5 | 177.8 | 185.387 | 195.197 | 200.240 | 200.013 |
| Distilled spirits at home ............................... | 170.3 | 173.9 | 175.3 | 177.2 | 178.7 | 179.844 | 184.756 | 188.000 | 189.525 |
| Whiskey at home ${ }^{1}$... | 168.1 | 172.9 | 173.8 | 177.1 | 178.9 | 183.048 | 190.333 | 195.242 | 198.397 |
| Distilled spirits, excluding whiskey, at home ${ }^{1}$ | 171.3 | 173.6 | 175.7 | 176.8 | 177.2 | 177.552 | 179.735 | 183.543 | 185.922 |
| Wine at home ............................................ | 152.8 | 152.0 | 153.0 | 155.4 | 158.4 | 163.500 | 169.743 | 169.730 | 170.144 |
| Alcoholic beverages away from home | 225.9 | 232.0 | 240.9 | 248.0 | 258.4 | 270.329 | 282.390 | 289.055 | 289.853 |
| Beer, ale, and other malt beverages away from home 12 | 114.8 | 118.9 | 123.1 | 125.7 | 131.7 | 136.117 | 141.613 | 145.617 | 145.890 |
| Wine away from home ${ }^{12}$ | 123.5 | 125.4 | 131.4 | 135.8 | 140.1 | 148.241 | 155.850 | 159.749 | 159.156 |
| Distilled spirits away from home 12 | 117.9 | 122.4 | 126.3 | 131.6 | 136.2 | 144.053 | 149.577 | 152.055 | 152.506 |
| Housing | 181.1 | 185.1 | 190.7 | 198.3 | 204.8 | 210.933 | 216.073 | 215.523 | 216.023 |
| Shelter | 209.5 | 214.1 | 219.8 | 225.6 | 235.1 | 242.372 | 247.085 | 247.863 | 248.052 |
| Rent of primary residence ${ }^{5}$ | 202.5 | 207.9 | 213.9 | 220.5 | 230.0 | 239.102 | 247.278 | 248.999 | 249.089 |
| Lodging away from home 2 | 109.2 | 112.9 | 118.7 | 122.8 | 127.7 | 133.545 | 129.157 | 122.638 | 133.075 |
| Housing at school, excluding board 56 | 290.5 | 307.2 | 328.4 | 345.3 | 362.9 | 381.548 | 399.369 | 419.367 | 420.194 |
| Other lodging away from home including hotels and motels | 229.4 | 236.6 | 248.5 | 256.7 | 266.8 | 278.872 | 268.348 | 253.003 | 279.997 |
| Owners' equivalent rent of residences $5^{6} \ldots \ldots . \ldots \ldots$. | 217.9 | 222.2 | 227.2 | 232.8 | 242.8 | 249.532 | 254.875 | 256.727 | 256.272 |
| Owners' equivalent rent of primary residence ${ }^{5}$ 6 | 217.9 | 222.2 | 227.2 | 232.8 | 242.8 | 249.532 | 254.875 | 256.727 | 256.266 |
| Tenants' and household insurance ${ }^{2}$ | 112.3 | 114.3 | 118.7 | 116.1 | 117.1 | 117.003 | 120.019 | 123.812 | 124.416 |
| Fuels and utilities | 144.2 | 153.6 | 165.7 | 191.6 | 192.6 | 203.006 | 215.184 | 208.760 | 212.295 |
| Household energy | 127.5 | 136.5 | 148.0 | 174.7 | 174.2 | 183.516 | 194.335 | 184.886 | 187.864 |
| Fuel oil and other fuels | 125.6 | 137.0 | 183.7 | 227.8 | 233.2 | 299.296 | 256.209 | 262.649 | 276.027 |
| Fuel oil | 123.2 | 132.8 | 185.2 | 235.5 | 240.9 | 319.208 | 252.024 | 268.396 | 279.826 |
| Propane, kerosene, and firewood ${ }^{7}$ | 163.4 | 182.3 | 225.8 | 264.9 | 271.9 | 324.116 | 323.105 | 309.643 | 330.164 |
| Gas (piped) and electricity ${ }^{5}$............ | 134.1 | 143.3 | 153.0 | 180.0 | 179.0 | 185.155 | 199.487 | 188.724 | 191.280 |
| Electricity 5 | 132.1 | 135.6 | 138.5 | 153.3 | 164.8 | 173.357 | 188.342 | 187.388 | 189.061 |
| Utility (piped) gas service 5 ....................... | 145.1 | 170.3 | 198.2 | 258.0 | 221.3 | 220.496 | 232.548 | 190.497 | 195.832 |
| Water and sewer and trash collection services ${ }^{2}$ | 114.6 | 119.8 | 126.3 | 132.9 | 139.3 | 146.878 | 156.390 | 165.204 | 168.521 |
| Water and sewerage maintenance 5 | 246.2 | 257.8 | 273.7 | 288.8 | 302.5 | 319.460 | 341.965 | 365.664 | 374.109 |
| Garbage and trash collection ${ }^{8}$.......... | 285.4 | 297.4 | 307.4 | 320.6 | 337.2 | 353.439 | 371.093 | 379.248 | 383.362 |
| Household furnishings and operations .... | 127.0 | 124.7 | 125.5 | 126.4 | 127.0 | 126.066 | 128.535 | 127.119 | 126.750 |
| Window and floor coverings and other linens ${ }^{2}$... | 93.3 | 89.5 | 88.2 | 86.6 | 82.4 | 79.801 | 76.079 | 73.655 | 73.597 |
| Floor coverings ${ }^{2}$..... | 109.4 | 107.5 | 108.2 | 114.9 | 119.5 | 119.083 | 120.576 | 117.287 | 114.194 |
| Window coverings ${ }^{2}$ | 91.3 | 89.9 | 88.5 | 88.6 | 87.9 | 85.646 | 85.257 | 79.977 | 78.237 |
| Other linens ${ }^{2}$ | 88.3 | 82.9 | 81.3 | 77.9 | 71.3 | 68.305 | 62.517 | 61.602 | 62.651 |
| Furniture and bedding | 128.6 | 126.5 | 126.3 | 127.1 | 126.2 | 123.506 | 123.379 | 123.373 | 121.957 |
| Bedroom furniture ....... | 133.5 | 133.1 | 139.7 | 146.2 | 144.4 | 142.055 | 142.693 | 139.258 | 137.595 |
| Living room, kitchen, and dining room furniture | 98.5 | 96.2 | 94.4 | 93.0 | 92.3 | 90.510 | 89.411 | 91.131 | 89.780 |
| Other furniture ${ }^{2}$ $\qquad$ Infants' furniture 14 | 93.6 | 92.4 | 89.0 | 88.6 100.0 | 89.0 98.6 | 85.986 NA | 87.597 | 86.892 NA | 86.683 NA |
| Appliances ${ }^{2}$............ | 91.5 | 87.9 | 84.6 | 87.0 | 88.0 | 89.273 | 90.507 | 88.124 | 88.463 |
| Major appliances ${ }^{2}$.... | 95.6 | 92.1 | 89.3 | 94.5 | 97.2 | 99.903 | 101.990 | 99.009 | 99.256 |
| Laundry equipment ${ }^{1}$ | 111.5 | 109.5 | 105.3 | 110.7 | 112.4 | 115.994 | 116.576 | 112.673 | 112.724 |
| Other appliances ${ }^{2}$.... | 85.5 | 81.9 | 78.0 | 77.1 | 76.1 | 75.756 | 75.935 | 74.307 | 74.724 |
| Other household equipment and furnishings ${ }^{2}$.... | 91.5 | 86.9 | 87.3 | 83.2 | 78.7 | 74.948 | 74.767 | 72.130 | 71.809 |
| Clocks, lamps, and decorator items ...... | 101.0 | 91.8 | 91.7 | 84.6 | 77.6 | 70.179 | 68.602 | 65.126 | 64.012 |
| Indoor plants and flowers ${ }^{9}$. | 116.7 | 119.2 | 120.1 | 122.4 | 121.6 | 124.005 | 129.884 | 126.116 | 127.400 |
| Dishes and flatware ${ }^{2}$....... | 85.7 | 83.7 | 85.0 | 79.2 | 74.2 | 72.305 | 71.721 | 70.080 | 70.586 |
| Nonelectric cookware and tableware ${ }^{2}$ | 90.8 | 89.6 | 90.6 | 89.7 | 90.6 | 93.341 | 95.330 | 95.600 | 96.937 |
| Tools, hardware, outdoor equipment and supplies ${ }^{2}$ | 94.6 | 92.1 | 93.6 | 93.7 | 94.8 | 93.772 | 94.010 | 92.642 | 92.368 |
| Tools, hardware and supplies ${ }^{2}$...................................... | 94.2 | 92.6 | 95.7 | 98.2 | 100.1 | 99.028 | 99.541 | 97.073 | 97.195 |
| Outdoor equipment and supplies ${ }^{2}$ | 94.6 | 91.7 | 92.4 | 91.4 | 92.1 | 91.213 | 91.115 | 90.115 | 89.706 |
| Housekeeping supplies ............ | 158.1 | 156.7 | 158.1 | 161.8 | 168.3 | 170.743 | 182.569 | 183.109 | 183.463 |
| Household cleaning products ${ }^{2}$ | 109.0 | 107.3 | 106.5 | 109.9 | 112.9 | 112.712 | 120.558 | 122.280 | 121.736 |
| Household paper products ${ }^{2}$ | 119.1 | 116.9 | 125.0 | 125.6 | 133.9 | 138.930 | 154.754 | 155.772 | 155.989 |
| Miscellaneous household products ${ }^{2}$ | 105.2 | 106.0 | 104.7 | 107.3 | 111.4 | 113.655 | 117.609 | 115.953 | 117.118 |
| Household operations ${ }^{2}$.................... | 119.9 | 122.6 | 127.0 | 133.3 | 139.1 | 142.100 | 150.689 | 150.172 | 149.999 |
| Domestic services ${ }^{2}$ | 119.5 | 122.6 | 124.9 | 131.3 | 137.3 | 139.648 | 143.688 | 144.263 | 144.446 |
| Gardening and lawncare services ${ }^{2}$.................. | 118.4 | 119.9 | 125.5 | NA | NA | 141.672 | NA | 156.052 | 155.285 |

[^9]Table 25. Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by commodity and service group and detailed expenditure categories-Continued
(1982-84=100, unless otherwise noted)

| Item and group | Unadjusted indexes |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December |  |  |  |  |  |  |  | $\begin{aligned} & \text { Mar. } \\ & 2010 \end{aligned}$ |
|  | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |  |
| Expenditure category |  |  |  |  |  |  |  |  |  |
| Moving, storage, freight expense ${ }^{2}$ | 117.2 | 119.9 | 123.4 | 128.4 | 128.6 | 128.413 | 127.430 | 124.592 | 122.655 |
| Repair of household items ${ }^{2}$ | 128.6 | 133.0 | 142.2 | 151.9 | 158.4 | 165.089 | 173.193 | 178.830 | 182.583 |
| Apparel | 121.5 | 119.0 | 118.8 | 117.5 | 118.6 | 118.257 | 117.078 | 119.357 | 122.073 |
| Men's and boys' apparel | 119.3 | 118.0 | 116.3 | 114.1 | 113.2 | 112.026 | 110.767 | 110.633 | 113.104 |
| Men's apparel | 124.5 | 122.4 | 121.4 | 119.8 | 119.4 | 116.489 | 114.775 | 115.301 | 119.108 |
| Men's suits, sport coats, and outerwear | 127.2 | 128.1 | 126.0 | 125.3 | 120.2 | 121.449 | 116.071 | 113.718 | 116.164 |
| Men's furnishings ............................... | 133.2 | 136.1 | 134.8 | 133.4 | 131.7 | 126.721 | 134.123 | 136.207 | 144.506 |
| Men's shirts and sweaters ${ }^{2}$ | 91.3 | 88.5 | 86.0 | 85.4 | 87.8 | 81.560 | 78.307 | 79.733 | 77.960 |
| Men's pants and shorts | 113.7 | 106.8 | 110.3 | 106.4 | 106.8 | 108.284 | 104.650 | 104.203 | 113.197 |
| Boys' apparel ... | 100.6 | 101.7 | 97.5 | 93.8 | 91.4 | 95.216 | 95.395 | 93.228 | 91.301 |
| Women's and girls' apparel | 113.1 | 110.9 | 110.0 | 108.9 | 110.2 | 109.418 | 105.456 | 108.304 | 111.730 |
| Women's apparel | 112.9 | 111.1 | 109.6 | 109.7 | 111.6 | 110.570 | 106.734 | 109.851 | 113.704 |
| Women's outerwear | 113.8 | 112.6 | 106.8 | 102.4 | 101.7 | 96.725 | 95.894 | 100.512 | 93.242 |
| Women's dresses | 100.3 | 100.4 | 96.8 | 104.2 | 112.4 | 115.453 | 110.886 | 112.306 | 117.270 |
| Women's suits and separates ${ }^{2}$ | 88.7 | 86.3 | 86.0 | 85.6 | 87.6 | 87.306 | 82.653 | 83.985 | 87.615 |
| Women's underwear, nightwear, sportswear and accessories ${ }^{2}$ | 93.8 | 93.3 | 92.2 | 91.8 | 91.0 | 88.867 | 88.612 | 93.355 | 98.742 |
| Girls' apparel | 114.1 | 109.5 | 112.1 | 104.4 | 102.8 | 103.475 | 98.956 | 100.550 | 101.992 |
| Footwear | 120.7 | 118.5 | 120.3 | 121.4 | 123.0 | 122.258 | 124.093 | 128.492 | 128.525 |
| Men's footwear | 124.6 | 120.4 | 118.1 | 120.7 | 123.4 | 120.906 | 125.664 | 127.787 | 126.690 |
| Boys' and girls' footwear | 120.6 | 118.2 | 122.9 | 124.4 | 123.4 | 125.993 | 131.745 | 133.820 | 133.185 |
| Women's footwear | 117.3 | 116.5 | 119.7 | 119.7 | 121.7 | 120.615 | 118.767 | 125.675 | 126.780 |
| Infants' and toddlers' apparel | 125.3 | 119.2 | 118.6 | 115.0 | 114.1 | 113.779 | 112.568 | 112.695 | 115.920 |
| Jewelry and watches ${ }^{7}$ | 127.2 | 122.1 | 126.0 | 123.2 | 129.1 | 134.325 | 143.607 | 146.340 | 150.376 |
| Watches ${ }^{7}$ | 110.9 | 111.0 | 112.8 | 113.7 | 115.7 | 113.726 | 117.491 | 114.260 | 115.187 |
| Jewelry ${ }^{7}$ | 131.7 | 125.6 | 129.8 | 126.4 | 133.0 | 139.691 | 150.122 | 154.017 | 158.757 |
| Transportation | 154.2 | 154.7 | 164.8 | 172.7 | 175.4 | 189.984 | 164.628 | 188.318 | 192.130 |
| Private transportation | 150.4 | 150.8 | 161.3 | 168.9 | 171.8 | 186.134 | 159.411 | 183.766 | 187.796 |
| New and used motor vehicles ${ }^{2}$ | 98.7 | 94.4 | 95.4 | 95.8 | 94.8 | 94.754 | 91.408 | 96.421 | 97.032 |
| New vehicles | 140.6 | 138.0 | 138.8 | 138.3 | 137.1 | 136.664 | 132.308 | 138.857 | 138.600 |
| New cars and trucks ${ }^{12}$ | 97.6 | 95.7 | 96.3 | 95.9 | 95.0 | 94.727 | 91.677 | 96.214 | 96.050 |
| New cars ${ }^{1}$ | 137.7 | 134.8 | 135.5 | 136.6 | 136.9 | 136.371 | 134.930 | 139.728 | 138.712 |
| New trucks 18 | 148.6 | 146.4 | 147.2 | 144.4 | 141.5 | 141.191 | 133.657 | 142.520 | 143.228 |
| Used cars and trucks | 148.5 | 131.0 | 137.3 | 139.2 | 136.2 | 136.943 | 125.883 | 137.406 | 140.797 |
| Leased cars and trucks 10 | 98.0 | 95.7 | 91.7 | 93.0 | 92.9 | 93.464 | 99.045 | 99.045 | 98.952 |
| Car and truck rental ${ }^{2}$ | 104.2 | 107.5 | 103.2 | 112.1 | 115.4 | 113.982 | 118.241 | 125.705 | 122.009 |
| Motor fuel .. | 119.7 | 127.8 | 161.2 | 187.3 | 199.3 | 258.132 | 149.132 | 224.730 | 237.671 |
| Gasoline (all types) | 119.1 | 127.2 | 160.4 | 186.2 | 198.1 | 256.790 | 146.102 | 224.260 | 237.356 |
| Gasoline, unleaded regular ${ }^{1}$ | 117.1 | 125.7 | 159.2 | 185.8 | 197.9 | 256.775 | 143.918 | 223.353 | 236.697 |
| Gasoline, unleaded midgrade 111 | 123.9 | 131.4 | 165.2 | 190.8 | 202.1 | 261.983 | 152.838 | 230.558 | 243.484 |
| Gasoline, unleaded premium ${ }^{1}$ | 119.8 | 127.1 | 158.0 | 181.1 | 192.3 | 247.369 | 148.343 | 218.751 | 230.317 |
| Other motor fuels ${ }^{2}$ | 113.8 | 115.8 | 152.6 | 186.4 | 200.1 | 248.393 | 185.983 | 203.092 | 210.988 |
| Motor vehicle parts and equipment ................... | 107.0 | 107.7 | 109.9 | 114.0 | 119.5 | 123.928 | 133.077 | 134.781 | 135.523 |
| Tires ........................................ | 101.3 | 100.8 | 103.2 | 106.2 | 110.0 | 113.060 | 119.796 | 121.348 | 122.238 |
| Vehicle accessories other than tires ${ }^{2}$ | 108.7 | 111.1 | 112.7 | 118.4 | 126.2 | 132.574 | 145.311 | 147.139 | 147.446 |
| Vehicle parts and equipment other than tires ${ }^{1}$ | 113.9 | 115.5 | 116.0 | 119.9 | 125.6 | 131.420 | 139.882 | 142.377 | 142.490 |
| Motor oil, coolant, and fluids ${ }^{1}$....................... | 154.3 | 160.2 | 170.3 | 195.1 | 224.4 | 240.510 | 298.121 | 292.337 | 295.967 |
| Motor vehicle maintenance and repair ............... | 193.3 | 198.0 | 203.3 | 210.7 | 218.8 | 226.120 | 239.356 | 245.417 | 246.624 |
| Motor vehicle body work ................................ | 201.2 | 205.0 | 210.5 | 220.5 | 228.1 | 236.039 | 245.361 | 251.006 | 251.365 |
| Motor vehicle maintenance and servicing ......... | 177.9 | 180.9 | 186.2 | 192.2 | 198.3 | 204.331 | 219.020 | 224.018 | 224.784 |
| Motor vehicle repair ${ }^{2}$ | 117.9 | 121.4 | 124.4 | 129.2 | 134.9 | 139.602 | 146.705 | 150.735 | 151.715 |
| Motor vehicle insurance | 304.6 | 318.4 | 329.3 | 332.5 | 335.2 | 336.915 | 350.308 | 366.799 | 370.743 |
| Motor vehicle fees ${ }^{2}$...... | 114.0 | 121.8 | 132.3 | 136.2 | 139.4 | 142.248 | 147.741 | 163.829 | 165.108 |
| State motor vehicle registration and license $\text { fees } 25$ | 110.1 | 119.4 | 131.8 | 134.4 | 137.6 | 139.320 | 142.812 | 163.132 | 164.810 |
| Parking and other fees ${ }^{2}$.......................... | 122.9 | 126.5 | 133.0 | 139.5 | 142.3 | 147.630 | 156.704 | 165.205 | 165.786 |
| Parking fees and tolls 12 | 123.9 | 128.0 | 135.4 | 144.2 | 146.5 | 153.178 | 166.315 | 176.892 | 177.367 |
| Automobile service clubs 12 | 109.5 | 112.2 | 113.9 | 114.1 | 118.2 | 119.323 | 117.295 | 119.061 | 119.845 |
| Public transportation... | 203.0 | 205.6 | 205.4 | 217.6 | 217.8 | 233.408 | 237.638 | 245.203 | 244.766 |
| Airline fare | 223.4 | 223.1 | 219.7 | 233.8 | 231.4 | 255.873 | 259.566 | 270.667 | 269.377 |
| Other intercity transportation ........................... | 155.1 | 147.0 | 144.6 | 151.6 | 154.7 | 156.648 | 155.454 | 149.138 | 149.351 |

See footnotes at end of table.

Table 25. Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by commodity and service group and detailed expenditure categories-Continued
(1982-84=100, unless otherwise noted)

| Item and group | Unadjusted indexes |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December |  |  |  |  |  |  |  | $\begin{aligned} & \text { Mar. } \\ & 2010 \end{aligned}$ |
|  | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |  |
| Expenditure category |  |  |  |  |  |  |  |  |  |
| Intercity bus fare 13 | - | - | - | - | - | 100.000 | 108.182 | 108.660 | 107.450 |
| Intercity train fare 13 | - | - | - | - | - | 100.000 | 108.295 | 105.854 | 100.685 |
| Ship fare ${ }^{12}$ | 77.0 | 69.1 | 72.5 | 72.3 | 71.3 | 72.918 | 67.057 | 64.686 | 65.404 |
| Intracity transportation | 185.1 | 204.1 | 211.9 | 223.3 | 227.5 | 232.378 | 244.260 | 256.436 | 257.909 |
| Intracity mass transit 112 |  |  |  |  |  |  |  | 100.000 | 101.001 |
| Medical care | 291.3 | 302.1 | 314.9 | 328.4 | 340.1 | 357.661 | 367.133 | 379.516 | 387.142 |
| Medical care commodities | 259.5 | 265.0 | 270.8 | 280.8 | 285.9 | 293.610 | 298.361 | 308.221 | 314.023 |
| Medicinal drugs ${ }^{12}$ |  |  |  |  |  |  |  | 100.000 | 102.007 |
| Prescription drugs .......... | 321.2 | 329.1 | 340.7 | 355.7 | 362.3 | 374.389 | 379.943 | 396.526 | 405.763 |
| Nonprescription drugs ${ }^{12}$ |  |  |  |  |  |  |  | 100.000 | 100.726 |
| Medical equipment and supplies 12 |  | - | - | - | - | - |  | 100.000 | 99.522 |
| Medical care services | 299.4 | 311.9 | 327.3 | 342.0 | 356.0 | 376.940 | 388.267 | 401.452 | 409.687 |
| Professional services | 257.0 | 264.1 | 274.6 | 284.9 | 292.4 | 304.784 | 313.886 | 321.827 | 326.206 |
| Physicians' services ${ }^{5}$ | 264.1 | 270.1 | 280.8 | 289.5 | 294.3 | 306.304 | 315.233 | 323.124 | 329.087 |
| Dental services ${ }^{5}$ | 284.8 | 297.2 | 311.9 | 329.6 | 346.2 | 366.225 | 379.603 | 391.677 | 395.327 |
| Eyeglasses and eye care ${ }^{7}$ | 155.2 | 157.5 | 162.0 | 167.0 | 170.3 | 172.811 | 173.377 | 176.391 | 176.361 |
| Services by other medical professionals 57 | 175.1 | 179.2 | 183.7 | 188.3 | 194.2 | 200.312 | 207.850 | 211.524 | 214.109 |
| Hospital and related services ${ }^{5}$. | 382.4 | 407.0 | 428.0 | 449.7 | 477.2 | 515.677 | 543.585 | 581.968 | 603.850 |
| Hospital services 513 ............ | 140.3 | 149.3 | 157.1 | 165.2 | 175.4 | 189.908 | 201.053 | 216.570 | 225.822 |
| Inpatient hospital services 1513 | 136.0 | 143.7 | 151.8 | 159.8 | 170.6 | 183.595 | 194.073 | 209.075 | 219.733 |
| Outpatient hospital services 157 | 327.0 | 348.5 | 364.2 | 382.5 | 402.4 | 442.085 | 466.736 | 504.843 | 518.722 |
| Nursing homes and adult day services 513 ....... | 129.8 | 137.3 | 142.1 | 147.1 | 154.5 | 161.981 | 167.097 | 173.095 | 175.064 |
| Care of invalids and elderly at home ${ }^{4}$............. |  |  |  | 100.0 | 103.1 | 106.602 | 108.281 | 109.971 | 111.099 |
| Health insurance ${ }^{4}$......................... |  |  |  | 100.0 | 106.4 | 115.727 | 111.697 | 108.325 | 108.690 |
| Recreation ${ }^{2}$ | 106.5 | 107.7 | 108.5 | 109.7 | 110.8 | 111.705 | 113.674 | 113.212 | 113.339 |
| Video and audio ${ }^{2}$ | 103.2 | 103.3 | 103.9 | 103.9 | 102.8 | 102.691 | 101.629 | 99.873 | 99.915 |
| Televisions | 37.8 | 32.4 | 28.4 | 24.3 | 18.8 | 15.352 | 12.378 | 8.983 | 8.396 |
| Cable and satellite television and radio service ${ }^{8}$ | 301.3 | 312.6 | 325.2 | 336.0 | 344.7 | 353.432 | 359.854 | 368.083 | 371.882 |
| Other video equipment ${ }^{2}$. | 43.8 | 38.4 | 32.9 | 29.4 | 25.3 | 22.009 | 18.833 | 16.947 | 16.862 |
| Video discs and other media, including rental of video and audio ${ }^{2}$ | 78.0 | 78.0 | 77.1 | 76.5 | 77.4 | 77.808 | 79.629 | 77.022 | 78.088 |
| Video discs and other media 12 .............................................. | 80.7 | 79.0 | 77.1 | 70.7 | 68.4 | 64.303 | 61.029 | 55.958 | 56.471 |
| Rental of video or audio discs and other media 12 $\qquad$ | 86.5 | 86.3 | 85.5 | 89.1 | 92.2 | 95.867 | 101.515 | 100.789 | 102.210 |
| Audio equipment | 72.5 | 68.6 | 64.0 | 58.4 | 55.9 | 53.242 | 50.650 | 48.213 | 47.811 |
| Audio discs, tapes and other media 2 | 109.6 | 105.3 | 109.0 | 109.1 | 105.9 | 105.202 | 104.528 | 95.165 | 95.331 |
| Pets, pet products and services ${ }^{2}$........ | 113.9 | 117.0 | 122.0 | 125.4 | 129.8 | 136.947 | 150.242 | 152.943 | 153.904 |
| Pets and pet products | 149.3 | 151.5 | 155.8 | 157.6 | 162.6 | 170.641 | 191.503 | 193.281 | 194.052 |
| Pet food ${ }^{12}$ | 105.7 | 107.8 | 111.1 | 112.4 | 116.2 | 122.446 | 141.485 | 142.867 | 144.312 |
| Purchase of pets, pet supplies, accessories 12 | 104.3 | 103.9 | 105.8 | 107.7 | 110.9 | 114.293 | 117.639 | 118.375 | 117.580 |
| Pet services including veterinary ${ }^{2}$ | 130.7 | 137.3 | 145.9 | 153.0 | 159.3 | 169.281 | 179.657 | 185.234 | 187.161 |
| Pet services ${ }^{12}$. | 117.5 | 122.0 | 128.2 | 133.2 | 138.6 | 144.294 | 153.922 | 155.941 | 156.760 |
| Veterinarian services 12 | 132.2 | 139.3 | 148.6 | 156.3 | 163.0 | 174.382 | 185.269 | 192.436 | 195.049 |
| Sporting goods | 115.7 | 114.9 | 113.5 | 115.5 | 117.2 | 116.125 | 119.632 | 118.314 | 118.827 |
| Sports vehicles including bicycles | 130.7 | 127.8 | 129.6 | 134.7 | 138.8 | 138.424 | 139.862 | 139.648 | 140.268 |
| Sports equipment ................... | 101.6 | 102.2 | 98.2 | 97.8 | 96.8 | 95.030 | 100.316 | 98.056 | 98.444 |
| Photography ${ }^{2}$ | 96.8 | 94.7 | 91.8 | 89.0 | 84.7 | 81.737 | 80.236 | 80.606 | 79.858 |
|  | 114.7 | 108.2 | 100.5 | 95.6 | 84.9 | 79.082 | 74.245 | 72.637 | 71.761 |
| Film and photographic supplies 12 ................. | 91.7 | 88.8 | 87.5 | 88.0 | 84.5 | 86.304 | 86.915 | 89.475 | 90.744 |
| Photographic equipment ${ }^{12}$.......................... | 78.2 | 71.6 | 61.8 | 55.5 | 45.5 | 38.800 | 35.196 | 33.844 | 33.034 |
| Photographers and film processing 2 | 105.7 | 106.3 | 106.5 | 104.8 | 106.7 | 106.295 | 108.430 | 111.306 | 110.496 |
| Photographer fees 12 . | 114.3 | 118.1 | 115.4 | 113.4 | 114.6 | 117.023 | 117.795 | 120.763 | 120.121 |
| Film processing 12 .... | 100.5 | 100.6 | 100.4 | 98.8 | 100.5 | 99.692 | 102.004 | 105.993 | 105.046 |
| Other recreational goods ${ }^{2}$ | 77.0 | 74.5 | 71.3 | 68.5 | 66.4 | 62.868 | 60.213 | 58.316 | 58.980 |
| Toys ....................... | 88.9 | 85.2 | 80.0 | 76.4 | 72.7 | 68.585 | 63.944 | 59.985 | 60.559 |
| Toys, games, hobbies and playground equipment 12 | 78.1 | 75.7 | 73.6 | 71.8 | 70.0 | 67.586 | 64.308 | 62.449 | 63.016 |
| Sewing machines, fabric and supplies ${ }^{2}$..... | 94.1 | 94.6 | 94.9 | 91.7 | 92.6 | 86.794 | 88.423 | 92.515 | 95.262 |
| Music instruments and accessories ${ }^{2}$.... | 98.9 | 97.5 | 98.7 | 96.9 | 96.9 | 95.018 | 96.680 | 97.671 | 97.750 |
| Recreation services ${ }^{2}$ | 121.4 | 125.6 | 128.3 | 132.1 | 137.2 | 140.427 | 143.750 | 144.023 | 143.443 |
| Club dues and fees for participant sports and group exercises ${ }^{2}$ | 113.1 | 116.1 | 116.4 | 119.4 | 122.0 | 123.864 | 125.014 | 122.918 | 121.755 |
| Admissions ................................................... | 257.4 | 266.1 | 275.3 | 284.9 | 299.8 | 307.108 | 316.607 | 319.307 | 318.893 |

See footnotes at end of table.

Table 25. Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by commodity and service group and detailed expenditure categories-Continued
(1982-84=100, unless otherwise noted)

| Item and group | Unadjusted indexes |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December |  |  |  |  |  |  |  | $\begin{aligned} & \text { Mar. } \\ & 2010 \end{aligned}$ |
|  | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |  |
| Expenditure category |  |  |  |  |  |  |  |  |  |
| Admission to movies, theaters, and concerts 12 | 125.4 | 130.3 | 133.5 | 138.2 | 145.7 | 148.620 | 152.546 | 153.725 | 153.358 |
| Admission to sporting events ${ }^{12}$..................... | 131.4 | 132.3 | 141.4 | 150.4 | 156.0 | 163.370 | 172.671 | 174.389 | 175.289 |
| Fees for lessons or instructions ${ }^{7}$........... | 206.1 | 219.0 | 224.9 | 230.8 | 238.9 | 248.080 | 257.231 | 264.055 | 264.413 |
| Recreational reading materials | 196.9 | 198.6 | 202.9 | 204.0 | 205.7 | 208.036 | 215.325 | 221.333 | 221.468 |
| Newspapers and magazines ${ }^{2}$. | 111.7 | 113.6 | 117.8 | 119.8 | 121.0 | 122.709 | 128.653 | 134.986 | 135.600 |
| Recreational books ${ }^{2}$............... | 104.7 | 104.2 | 104.2 | 102.9 | 103.6 | 104.305 | 106.299 | 106.493 | 106.070 |
| Education and communication 2 | 109.2 | 110.9 | 112.6 | 115.3 | 118.0 | 121.506 | 125.921 | 128.883 | 129.236 |
| Education ${ }^{2}$ | 130.0 | 139.4 | 148.5 | 157.6 | 167.6 | 176.927 | 186.916 | 195.672 | 196.470 |
| Educational books and supplies | 323.3 | 342.8 | 355.9 | 374.3 | 399.5 | 434.352 | 464.544 | 496.580 | 502.273 |
| Tuition, other school fees, and childcare ............ | 374.0 | 401.7 | 428.9 | 455.3 | 484.0 | 510.016 | 538.309 | 562.610 | 564.613 |
| College tuition and fees ............................. | 387.4 | 425.5 | 462.2 | 492.8 | 527.2 | 559.190 | 591.804 | 627.061 | 626.817 |
| Elementary and high school tuition and fees ..... | 413.6 | 440.4 | 471.4 | 497.8 | 527.1 | 556.271 | 590.037 | 613.370 | 614.855 |
| Child care and nursery school ${ }^{9}$...................... | 176.4 | 183.6 | 190.0 | 200.5 | 211.2 | 219.405 | 230.326 | 235.532 | 238.296 |
| Technical and business school tuition and fees 2 $\qquad$ | 132.3 | 144.3 | 155.8 | 166.0 | 174.4 | 183.016 | 189.275 | 196.480 | 196.948 |
| Communication ${ }^{2}$ | 91.8 | 88.2 | 85.4 | 84.3 | 83.1 | 83.282 | 84.737 | 84.809 | 84.940 |
| Postage and delivery services ${ }^{2}$ | 119.2 | 119.4 | 120.0 | 120.5 | 126.5 | 132.091 | 136.357 | 143.156 | 145.888 |
| Postage ....... | 190.9 | 190.9 | 190.9 | 190.9 | 201.1 | 208.927 | 215.400 | 226.626 | 229.846 |
| Delivery services ${ }^{2}$ | 129.4 | 135.1 | 154.0 | 169.3 | 171.5 | 189.551 | 199.456 | 202.732 | 225.281 |
| Information and information processing 2 | 90.0 | 86.2 | 83.3 | 82.2 | 80.6 | 80.546 | 81.886 | 81.728 | 81.776 |
| Telephone services ${ }^{2}$ | 99.9 | 97.2 | 94.8 | 95.2 | 96.8 | 98.792 | 101.688 | 102.707 | 102.298 |
|  | 67.4 | 66.5 | 65.6 | 64.6 | 64.6 | 64.011 | 64.361 | 63.629 | $62.551$ |
| Land-line telephone services ${ }^{12}$ |  |  |  |  |  |  |  | 100.000 | $101.147$ |
| Information technology, hardware and services 14 $\qquad$ | 17.2 | 15.3 | 14.2 | 13.1 | 11.2 | 10.215 | 9.906 | 9.423 | 9.552 |
| Personal computers and peripheral equipment 3. <br> ................................................................. | 220.7 | 181.1 | 155.7 | 131.1 | 115.8 | 100.000 | 88.529 | 77.960 | 78.385 |
| Computer software and accessories ${ }^{2}$.............. | 71.0 | 64.1 | 61.1 | 58.5 | 54.2 | 50.722 | 50.180 | 48.930 | 48.636 |
| Internet services and electronic information providers ${ }^{2}$ | 99.6 | 97.6 | 97.2 | 94.5 | 77.2 | 73.176 | 75.899 | 75.642 | 77.673 |
| Telephone hardware, calculators, and other consumer information items ${ }^{2}$ | 59.0 | 52.3 | 48.4 | 44.2 | 40.3 | 36.945 | 36.230 | 34.994 | 33.933 |
| Other goods and services ................................... | 295.8 | 300.2 | 307.8 | 317.3 | 326.7 | 337.633 | 349.220 | 377.330 | 378.808 |
| Tobacco and smoking products .................... | 472.5 | 470.4 | 484.8 | 513.1 | 527.3 | 566.696 | 602.644 | 783.794 | 787.268 |
| Cigarettes ${ }^{2}$.......................... | 192.3 | 190.6 | 196.0 | 207.6 | 213.4 | 229.969 | 244.647 | 319.378 | 320.602 |
| Tobacco products other than cigarettes ${ }^{2}$........... | 130.9 | 138.6 | 147.1 | 154.6 | 157.7 | 163.226 | 172.664 | 210.845 | 213.438 |
| Personal care ....... | 175.4 | 179.0 | 183.3 | 187.6 | 193.3 | 197.643 | 202.774 | 205.823 | 206.594 |
| Personal care products | 153.4 | 153.4 | 153.4 | 155.4 | 159.0 | 158.236 | 161.397 | 162.275 | 162.367 |
| Hair, dental, shaving, and miscellaneous personal care products ${ }^{2}$ | 103.4 | 102.6 | 101.7 | 102.1 | 104.2 | 103.861 | 104.966 | 104.825 | 105.894 |
| Cosmetics, perfume, bath, nail preparations and implements | 165.9 | 167.3 | 169.2 | 173.1 | 177.5 | 176.418 | 181.661 | 183.917 | 182.212 |
| Personal care services | 189.9 | 194.3 | 201.2 | 206.6 | 212.5 | 219.656 | 226.281 | 228.343 | 228.429 |
| Haircuts and other personal care services ${ }^{2}$...... | 115.9 | 118.6 | 122.8 | 126.0 | 129.6 | 134.026 | 138.068 | 139.326 | 139.379 |
| Miscellaneous personal services ...................... | 276.9 | 287.1 | 297.7 | 306.6 | 318.7 | 329.908 | 339.698 | 348.697 | 352.028 |
| Legal services ${ }^{7}$...................... | 213.9 | 224.6 | 236.6 | 244.6 | 255.5 | 262.910 | 274.810 | 283.418 | 286.287 |
| Funeral expenses ${ }^{7}$...................... | 206.8 | 215.4 | 223.2 | 233.5 | 244.9 | 256.560 | 270.369 | 278.644 | 280.527 |
| Laundry and dry cleaning services ${ }^{2}$............... | 113.8 | 117.2 | 120.7 | 122.9 | 126.9 | 130.834 | 137.122 | 140.340 | 141.409 |
| Apparel services other than laundry and dry cleaning ${ }^{2}$ | 115.1 | 118.7 | 121.9 | 127.9 | 134.4 | 139.205 | 149.481 | 155.624 | 157.345 |
| Financial services ${ }^{7}$.................................. | 235.2 | 241.3 | 250.2 | 254.2 | 263.0 | 273.241 | 258.195 | 262.572 | 266.073 |
| Checking account and other bank services 12 | 117.9 | 120.1 | 123.4 | 123.9 | 126.7 | 129.839 | 122.325 | 124.260 | 126.002 |
| Tax return preparation and other accounting fees ${ }^{1} 2$ | 128.7 | 134.1 | 141.0 | 147.2 | 156.6 | 163.279 | 171.238 | 173.992 | 176.002 |
|  | 93.6 | 89.0 | 86.6 | 86.4 | 86.9 | 87.487 | 88.754 | 89.262 | 88.935 |
| Stationery, stationery supplies, gift wrap ${ }^{1}$ Infants' equipment 14 | 156.4 | 149.5 | 148.0 | 150.2 100.0 | 151.6 97.1 | 154.060 95.663 | 155.308 98.654 | 157.926 NA | 158.152 NA |
| Special aggregate indexes |  |  |  |  |  |  |  |  |  |
| Commodities | 149.7 | 150.4 | 155.8 | 160.0 | 162.1 | 170.511 | 163.582 | 172.572 | 174.798 |
| Commodities less food and beverages ................. | 133.6 | 131.7 | 137.2 | 141.3 | 142.5 | 150.162 | 135.720 | 148.441 | 150.953 |
| Nondurables less food and beverages ................. | 145.2 | 146.7 | 157.4 | 166.3 | 170.9 | 188.635 | 161.681 | 185.689 | 190.674 |
| Nondurables less food, beverages, and apparel | 163.9 | 167.7 | 185.2 | 200.4 | 207.3 | 236.735 | 192.948 | 231.169 | 237.683 |

See footnotes at end of table.

Table 25. Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by commodity and service group and detailed expenditure categories-Continued
(1982-84=100, unless otherwise noted)

| Item and group | Unadjusted indexes |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December |  |  |  |  |  |  |  | $\begin{aligned} & \text { Mar. } \\ & 2010 \end{aligned}$ |
|  | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |  |
| Special aggregate indexes |  |  |  |  |  |  |  |  |  |
| Durables | 120.2 | 115.0 | 115.5 | 114.9 | 113.3 | 112.093 | 108.811 | 111.477 | 111.694 |
| Services | 211.9 | 217.9 | 224.6 | 233.2 | 241.2 | 249.225 | 256.731 | 259.055 | 260.196 |
| Rent of shelter ${ }^{6}$ | 218.1 | 222.9 | 228.9 | 235.0 | 245.0 | 252.669 | 257.567 | 258.303 | 258.489 |
| Transportation services | 212.0 | 217.7 | 221.8 | 227.8 | 230.8 | 236.504 | 246.287 | 256.014 | 257.337 |
| Other services | 250.2 | 257.4 | 264.3 | 272.3 | 280.9 | 289.945 | 300.067 | 306.436 | 307.451 |
| All items less food | 181.6 | 184.4 | 190.6 | 197.4 | 202.6 | 210.610 | 208.855 | 215.703 | 217.430 |
| All items less shelter | 171.7 | 174.7 | 180.9 | 187.7 | 191.1 | 199.734 | 198.127 | 205.888 | 208.181 |
| All items less medical care | 175.1 | 178.2 | 183.9 | 190.0 | 194.8 | 202.600 | 202.442 | 207.860 | 209.301 |
| Commodities less food | 135.6 | 133.8 | 139.3 | 143.3 | 144.7 | 152.344 | 138.536 | 151.052 | 153.516 |
| Nondurables less food | 147.6 | 149.2 | 159.5 | 168.1 | 172.7 | 189.844 | 165.032 | 187.864 | 192.601 |
| Nondurables less food and apparel | 165.0 | 168.8 | 185.1 | 199.2 | 205.8 | 233.014 | 194.403 | 229.250 | 235.198 |
| Nondurables | 161.6 | 165.4 | 173.3 | 180.1 | 184.5 | 198.422 | 189.557 | 202.064 | 205.409 |
| Apparel less footwear | 117.2 | 114.8 | 114.1 | 112.3 | 113.3 | 112.990 | 111.235 | 112.993 | 116.181 |
| Services less rent of shelter ${ }^{6}$ | 220.5 | 228.4 | 236.5 | 248.8 | 254.9 | 263.966 | 275.370 | 279.896 | 282.297 |
| Services less medical care services | 204.3 | 209.9 | 216.0 | 224.2 | 231.7 | 238.894 | 246.090 | 247.793 | 248.531 |
| Energy | 123.3 | 131.8 | 153.7 | 180.0 | 185.2 | 217.506 | 171.158 | 202.301 | 209.999 |
| All items less energy | 188.6 | 191.5 | 195.8 | 200.1 | 205.1 | 210.890 | 215.930 | 219.048 | 220.133 |
| All items less food and energy ............................. | 191.4 | 193.6 | 197.8 | 202.1 | 207.3 | 212.356 | 216.100 | 220.025 | 221.059 |
| Commodities less food and energy commodities .. | 142.5 | 139.0 | 139.8 | 140.1 | 139.9 | 140.014 | 139.228 | 143.383 | 144.399 |
| Energy commodities ...................................... | 120.7 | 129.0 | 163.4 | 190.7 | 202.4 | 261.976 | 155.745 | 228.186 | 241.239 |
| Services less energy services ............................ | 219.8 | 225.5 | 231.9 | 238.7 | 247.5 | 255.785 | 262.636 | 266.237 | 267.248 |
| Domestically produced farm food ........................... | 179.8 | 189.5 | 194.4 | 196.9 | 199.2 | 211.109 | 224.865 | 218.813 | 221.389 |
| Utilities and public transportation ........................... | 158.4 | 163.2 | 168.3 | 183.5 | 185.2 | 191.955 | 201.511 | 199.834 | 201.354 |

[^10]9 Indexes on a December 1990=100 base
10 Indexes on a December 2001=100 base
11 Indexes on a December 1993=100 base
12 Indexes on a December 2009=100 base
13 Indexes on a December 1996=100 base.
14 Indexes on a December 1988=100 base.
NA Data not adequate for publication.
Data not available.
NOTE: Index applies to a month as a whole, not to any specific date.

# U.S. Department Of Labor <br> Bureau of Labor Statistics <br> Washington, D.C. 20212 <br> Consumer Price Index 

All Urban Consumers - (CPI-U)
U.S. city average

All items
1982-84=100

| Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Annual Avg. | $\begin{aligned} & \text { Dec- } \\ & \text { Dec } \end{aligned}$ | $\begin{gathered} \text { Avg- } \\ \text { Avg } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1913 | 9.8 | 9.8 | 9.8 | 9.8 | 9.7 | 9.8 | 9.9 | 9.9 | 10.0 | 10.0 | 10.1 | 10.0 | 9.9 |  |  |
| 1914 | 10.0 | 9.9 | 9.9 | 9.8 | 9.9 | 9.9 | 10.0 | 10.2 | 10.2 | 10.1 | 10.2 | 10.1 | 10.0 | 1.0 | 1.0 |
| 1915 | 10.1 | 10.0 | 9.9 | 10.0 | 10.1 | 10.1 | 10.1 | 10.1 | 10.1 | 10.2 | 10.3 | 10.3 | 10.1 | 2.0 | 1.0 |
| 1916 | 10.4 | 10.4 | 10.5 | 10.6 | 10.7 | 10.8 | 10.8 | 10.9 | 11.1 | 11.3 | 11.5 | 11.6 | 10.9 | 12.6 | 7.9 |
| 1917 | 11.7 | 12.0 | 12.0 | 12.6 | 12.8 | 13.0 | 12.8 | 13.0 | 13.3 | 13.5 | 13.5 | 13.7 | 12.8 | 18.1 | 17.4 |
| 1918 | 14.0 | 14.1 | 14.0 | 14.2 | 14.5 | 14.7 | 15.1 | 15.4 | 15.7 | 16.0 | 16.3 | 16.5 | 15.1 | 20.4 | 18.0 |
| 1919 | 16.5 | 16.2 | 16.4 | 16.7 | 16.9 | 16.9 | 17.4 | 17.7 | 17.8 | 18.1 | 18.5 | 18.9 | 17.3 | 14.5 | 14.6 |
| 1920 | 19.3 | 19.5 | 19.7 | 20.3 | 20.6 | 20.9 | 20.8 | 20.3 | 20.0 | 19.9 | 19.8 | 19.4 | 20.0 | 2.6 | 15.6 |
| 1921 | 19.0 | 18.4 | 18.3 | 18.1 | 17.7 | 17.6 | 17.7 | 17.7 | 17.5 | 17.5 | 17.4 | 17.3 | 17.9 | -10.8 | -10.5 |
| 1922 | 16.9 | 16.9 | 16.7 | 16.7 | 16.7 | 16.7 | 16.8 | 16.6 | 16.6 | 16.7 | 16.8 | 16.9 | 16.8 | -2.3 | -6.1 |
| 1923 | 16.8 | 16.8 | 16.8 | 16.9 | 16.9 | 17.0 | 17.2 | 17.1 | 17.2 | 17.3 | 17.3 | 17.3 | 17.1 | 2.4 | 1.8 |
| 1924 | 17.3 | 17.2 | 17.1 | 17.0 | 17.0 | 17.0 | 17.1 | 17.0 | 17.1 | 17.2 | 17.2 | 17.3 | 17.1 | 0.0 | 0.0 |
| 1925 | 17.3 | 17.2 | 17.3 | 17.2 | 17.3 | 17.5 | 17.7 | 17.7 | 17.7 | 17.7 | 18.0 | 17.9 | 17.5 | 3.5 | 2.3 |
| 1926 | 17.9 | 17.9 | 17.8 | 17.9 | 17.8 | 17.7 | 17.5 | 17.4 | 17.5 | 17.6 | 17.7 | 17.7 | 17.7 | -1.1 | 1.1 |
| 1927 | 17.5 | 17.4 | 17.3 | 17.3 | 17.4 | 17.6 | 17.3 | 17.2 | 17.3 | 17.4 | 17.3 | 17.3 | 17.4 | -2.3 | -1.7 |
| 1928 | 17.3 | 17.1 | 17.1 | 17.1 | 17.2 | 17.1 | 17.1 | 17.1 | 17.3 | 17.2 | 17.2 | 17.1 | 17.1 | -1.2 | -1.7 |
| 1929 | 17.1 | 17.1 | 17.0 | 16.9 | 17.0 | 17.1 | 17.3 | 17.3 | 17.3 | 17.3 | 17.3 | 17.2 | 17.1 | 0.6 | 0.0 |
| 1930 | 17.1 | 17.0 | 16.9 | 17.0 | 16.9 | 16.8 | 16.6 | 16.5 | 16.6 | 16.5 | 16.4 | 16.1 | 16.7 | -6.4 | -2.3 |
| 1931 | 15.9 | 15.7 | 15.6 | 15.5 | 15.3 | 15.1 | 15.1 | 15.1 | 15.0 | 14.9 | 14.7 | 14.6 | 15.2 | -9.3 | -9.0 |
| 1932 | 14.3 | 14.1 | 14.0 | 13.9 | 13.7 | 13.6 | 13.6 | 13.5 | 13.4 | 13.3 | 13.2 | 13.1 | 13.7 | -10.3 | -9.9 |
| 1933 | 12.9 | 12.7 | 12.6 | 12.6 | 12.6 | 12.7 | 13.1 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.0 | 0.8 | -5.1 |
| 1934 | 13.2 | 13.3 | 13.3 | 13.3 | 13.3 | 13.4 | 13.4 | 13.4 | 13.6 | 13.5 | 13.5 | 13.4 | 13.4 | 1.5 | 3.1 |
| 1935 | 13.6 | 13.7 | 13.7 | 13.8 | 13.8 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 13.8 | 13.8 | 13.7 | 3.0 | 2.2 |
| 1936 | 13.8 | 13.8 | 13.7 | 13.7 | 13.7 | 13.8 | 13.9 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 13.9 | 1.4 | 1.5 |
| 1937 | 14.1 | 14.1 | 14.2 | 14.3 | 14.4 | 14.4 | 14.5 | 14.5 | 14.6 | 14.6 | 14.5 | 14.4 | 14.4 | 2.9 | 3.6 |
| 1938 | 14.2 | 14.1 | 14.1 | 14.2 | 14.1 | 14.1 | 14.1 | 14.1 | 14.1 | 14.0 | 14.0 | 14.0 | 14.1 | -2.8 | -2.1 |


| 1939 | 14.0 | 13.9 | 13.9 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 14.1 | 14.0 | 14.0 | 14.0 | 13.9 | 0.0 | -1.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1940 | 13.9 | 14.0 | 14.0 | 14.0 | 14.0 | 14.1 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.1 | 14.0 | 0.7 | 0.7 |
| 1941 | 14.1 | 14.1 | 14.2 | 14.3 | 14.4 | 14.7 | 14.7 | 14.9 | 15.1 | 15.3 | 15.4 | 15.5 | 14.7 | 9.9 | 5.0 |
| 1942 | 15.7 | 15.8 | 16.0 | 16.1 | 16.3 | 16.3 | 16.4 | 16.5 | 16.5 | 16.7 | 16.8 | 16.9 | 16.3 | 9.0 | 10.9 |
| 1943 | 16.9 | 16.9 | 17.2 | 17.4 | 17.5 | 17.5 | 17.4 | 17.3 | 17.4 | 17.4 | 17.4 | 17.4 | 17.3 | 3.0 | 6.1 |
| 1944 | 17.4 | 17.4 | 17.4 | 17.5 | 17.5 | 17.6 | 17.7 | 17.7 | 17.7 | 17.7 | 17.7 | 17.8 | 17.6 | 2.3 | 1.7 |
| 1945 | 17.8 | 17.8 | 17.8 | 17.8 | 17.9 | 18.1 | 18.1 | 18.1 | 18.1 | 18.1 | 18.1 | 18.2 | 18.0 | 2.2 | 2.3 |
| 1946 | 18.2 | 18.1 | 18.3 | 18.4 | 18.5 | 18.7 | 19.8 | 20.2 | 20.4 | 20.8 | 21.3 | 21.5 | 19.5 | 18.1 | 8.3 |
| 1947 | 21.5 | 21.5 | 21.9 | 21.9 | 21.9 | 22.0 | 22.2 | 22.5 | 23.0 | 23.0 | 23.1 | 23.4 | 22.3 | 8.8 | 14.4 |
| 1948 | 23.7 | 23.5 | 23.4 | 23.8 | 23.9 | 24.1 | 24.4 | 24.5 | 24.5 | 24.4 | 24.2 | 24.1 | 24.1 | 3.0 | 8.1 |
| 1949 | 24.0 | 23.8 | 23.8 | 23.9 | 23.8 | 23.9 | 23.7 | 23.8 | 23.9 | 23.7 | 23.8 | 23.6 | 23.8 | -2.1 | -1.2 |
| 1950 | 23.5 | 23.5 | 23.6 | 23.6 | 23.7 | 23.8 | 24.1 | 24.3 | 24.4 | 24.6 | 24.7 | 25.0 | 24.1 | 5.9 | 1.3 |
| 1951 | 25.4 | 25.7 | 25.8 | 25.8 | 25.9 | 25.9 | 25.9 | 25.9 | 26.1 | 26.2 | 26.4 | 26.5 | 26.0 | 6.0 | 7.9 |
| 1952 | 26.5 | 26.3 | 26.3 | 26.4 | 26.4 | 26.5 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.5 | 0.8 | 1.9 |
| 1953 | 26.6 | 26.5 | 26.6 | 26.6 | 26.7 | 26.8 | 26.8 | 26.9 | 26.9 | 27.0 | 26.9 | 26.9 | 26.7 | 0.7 | 0.8 |
| 1954 | 26.9 | 26.9 | 26.9 | 26.8 | 26.9 | 26.9 | 26.9 | 26.9 | 26.8 | 26.8 | 26.8 | 26.7 | 26.9 | -0.7 | 0.7 |
| 1955 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.8 | 26.8 | 26.9 | 26.9 | 26.9 | 26.8 | 26.8 | 0.4 | -0.4 |
| 1956 | 26.8 | 26.8 | 26.8 | 26.9 | 27.0 | 27.2 | 27.4 | 27.3 | 27.4 | 27.5 | 27.5 | 27.6 | 27.2 | 3.0 | 1.5 |
| 1957 | 27.6 | 27.7 | 27.8 | 27.9 | 28.0 | 28.1 | 28.3 | 28.3 | 28.3 | 28.3 | 28.4 | 28.4 | 28.1 | 2.9 | 3.3 |
| 1958 | 28.6 | 28.6 | 28.8 | 28.9 | 28.9 | 28.9 | 29.0 | 28.9 | 28.9 | 28.9 | 29.0 | 28.9 | 28.9 | 1.8 | 2.8 |
| 1959 | 29.0 | 28.9 | 28.9 | 29.0 | 29.0 | 29.1 | 29.2 | 29.2 | 29.3 | 29.4 | 29.4 | 29.4 | 29.1 | 1.7 | 0.7 |
| 1960 | 29.3 | 29.4 | 29.4 | 29.5 | 29.5 | 29.6 | 29.6 | 29.6 | 29.6 | 29.8 | 29.8 | 29.8 | 29.6 | 1.4 | 1.7 |
| 1961 | 29.8 | 29.8 | 29.8 | 29.8 | 29.8 | 29.8 | 30.0 | 29.9 | 30.0 | 30.0 | 30.0 | 30.0 | 29.9 | 0.7 | 1.0 |
| 1962 | 30.0 | 30.1 | 30.1 | 30.2 | 30.2 | 30.2 | 30.3 | 30.3 | 30.4 | 30.4 | 30.4 | 30.4 | 30.2 | 1.3 | 1.0 |
| 1963 | 30.4 | 30.4 | 30.5 | 30.5 | 30.5 | 30.6 | 30.7 | 30.7 | 30.7 | 30.8 | 30.8 | 30.9 | 30.6 | 1.6 | 1.3 |
| 1964 | 30.9 | 30.9 | 30.9 | 30.9 | 30.9 | 31.0 | 31.1 | 31.0 | 31.1 | 31.1 | 31.2 | 31.2 | 31.0 | 1.0 | 1.3 |
| 1965 | 31.2 | 31.2 | 31.3 | 31.4 | 31.4 | 31.6 | 31.6 | 31.6 | 31.6 | 31.7 | 31.7 | 31.8 | 31.5 | 1.9 | 1.6 |
| 1966 | 31.8 | 32.0 | 32.1 | 32.3 | 32.3 | 32.4 | 32.5 | 32.7 | 32.7 | 32.9 | 32.9 | 32.9 | 32.4 | 3.5 | 2.9 |
| 1967 | 32.9 | 32.9 | 33.0 | 33.1 | 33.2 | 33.3 | 33.4 | 33.5 | 33.6 | 33.7 | 33.8 | 33.9 | 33.4 | 3.0 | 3.1 |
| 1968 | 34.1 | 34.2 | 34.3 | 34.4 | 34.5 | 34.7 | 34.9 | 35.0 | 35.1 | 35.3 | 35.4 | 35.5 | 34.8 | 4.7 | 4.2 |
| 1969 | 35.6 | 35.8 | 36.1 | 36.3 | 36.4 | 36.6 | 36.8 | 37.0 | 37.1 | 37.3 | 37.5 | 37.7 | 36.7 | 6.2 | 5.5 |
| 1970 | 37.8 | 38.0 | 38.2 | 38.5 | 38.6 | 38.8 | 39.0 | 39.0 | 39.2 | 39.4 | 39.6 | 39.8 | 38.8 | 5.6 | 5.7 |
| 1971 | 39.8 | 39.9 | 40.0 | 40.1 | 40.3 | 40.6 | 40.7 | 40.8 | 40.8 | 40.9 | 40.9 | 41.1 | 40.5 | 3.3 | 4.4 |
| 1972 | 41.1 | 41.3 | 41.4 | 41.5 | 41.6 | 41.7 | 41.9 | 42.0 | 42.1 | 42.3 | 42.4 | 42.5 | 41.8 | 3.4 | 3.2 |
| 1973 | 42.6 | 42.9 | 43.3 | 43.6 | 43.9 | 44.2 | 44.3 | 45.1 | 45.2 | 45.6 | 45.9 | 46.2 | 44.4 | 8.7 | 6.2 |
| 1974 | 46.6 | 47.2 | 47.8 | 48.0 | 48.6 | 49.0 | 49.4 | 50.0 | 50.6 | 51.1 | 51.5 | 51.9 | 49.3 | 12.3 | 11.0 |
| 1975 | 52.1 | 52.5 | 52.7 | 52.9 | 53.2 | 53.6 | 54.2 | 54.3 | 54.6 | 54.9 | 55.3 | 55.5 | 53.8 | 6.9 | 9.1 |
| 1976 | 55.6 | 55.8 | 55.9 | 56.1 | 56.5 | 56.8 | 57.1 | 57.4 | 57.6 | 57.9 | 58.0 | 58.2 | 56.9 | 4.9 | 5.8 |
| 1977 | 58.5 | 59.1 | 59.5 | 60.0 | 60.3 | 60.7 | 61.0 | 61.2 | 61.4 | 61.6 | 61.9 | 62.1 | 60.6 | 6.7 | 6.5 |
| 1978 | 62.5 | 62.9 | 63.4 | 63.9 | 64.5 | 65.2 | 65.7 | 66.0 | 66.5 | 67.1 | 67.4 | 67.7 | 65.2 | 9.0 | 7.6 |
| 1979 | 68.3 | 69.1 | 69.8 | 70.6 | 71.5 | 72.3 | 73.1 | 73.8 | 74.6 | 75.2 | 75.9 | 76.7 | 72.6 | 13.3 | 11.3 |


| 1980 | 77.8 | 78.9 | 80.1 | 81.0 | 81.8 | 82.7 | 82.7 | 83.3 | 84.0 | 84.8 | 85.5 | 86.3 | 82.4 | 12.5 | 13.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1981 | 87.0 | 87.9 | 88.5 | 89.1 | 89.8 | 90.6 | 91.6 | 92.3 | 93.2 | 93.4 | 93.7 | 94.0 | 90.9 | 8.9 | 10.3 |
| 1982 | 94.3 | 94.6 | 94.5 | 94.9 | 95.8 | 97.0 | 97.5 | 97.7 | 97.9 | 98.2 | 98.0 | 97.6 | 96.5 | 3.8 | 6.2 |
| 1983 | 97.8 | 97.9 | 97.9 | 98.6 | 99.2 | 99.5 | 99.9 | 100.2 | 100.7 | 101.0 | 101.2 | 101.3 | 99.6 | 3.8 | 3.2 |
| 1984 | 101.9 | 102.4 | 102.6 | 103.1 | 103.4 | 103.7 | 104.1 | 104.5 | 105.0 | 105.3 | 105.3 | 105.3 | 103.9 | 3.9 | 4.3 |
| 1985 | 105.5 | 106.0 | 106.4 | 106.9 | 107.3 | 107.6 | 107.8 | 108.0 | 108.3 | 108.7 | 109.0 | 109.3 | 107.6 | 3.8 | 3.6 |
| 1986 | 109.6 | 109.3 | 108.8 | 108.6 | 108.9 | 109.5 | 109.5 | 109.7 | 110.2 | 110.3 | 110.4 | 110.5 | 109.6 | 1.1 | 1.9 |
| 1987 | 111.2 | 111.6 | 112.1 | 112.7 | 113.1 | 113.5 | 113.8 | 114.4 | 115.0 | 115.3 | 115.4 | 115.4 | 113.6 | 4.4 | 3.6 |
| 1988 | 115.7 | 116.0 | 116.5 | 117.1 | 117.5 | 118.0 | 118.5 | 119.0 | 119.8 | 120.2 | 120.3 | 120.5 | 118.3 | 4.4 | 4.1 |
| 1989 | 121.1 | 121.6 | 122.3 | 123.1 | 123.8 | 124.1 | 124.4 | 124.6 | 125.0 | 125.6 | 125.9 | 126.1 | 124.0 | 4.6 | 4.8 |
| 1990 | 127.4 | 128.0 | 128.7 | 128.9 | 129.2 | 129.9 | 130.4 | 131.6 | 132.7 | 133.5 | 133.8 | 133.8 | 130.7 | 6.1 | 5.4 |
| 1991 | 134.6 | 134.8 | 135.0 | 135.2 | 135.6 | 136.0 | 136.2 | 136.6 | 137.2 | 137.4 | 137.8 | 137.9 | 136.2 | 3.1 | 4.2 |
| 1992 | 138.1 | 138.6 | 139.3 | 139.5 | 139.7 | 140.2 | 140.5 | 140.9 | 141.3 | 141.8 | 142.0 | 141.9 | 140.3 | 2.9 | 3.0 |
| 1993 | 142.6 | 143.1 | 143.6 | 144.0 | 144.2 | 144.4 | 144.4 | 144.8 | 145.1 | 145.7 | 145.8 | 145.8 | 144.5 | 2.7 | 3.0 |
| 1994 | 146.2 | 146.7 | 147.2 | 147.4 | 147.5 | 148.0 | 148.4 | 149.0 | 149.4 | 149.5 | 149.7 | 149.7 | 148.2 | 2.7 | 2.6 |
| 1995 | 150.3 | 150.9 | 151.4 | 151.9 | 152.2 | 152.5 | 152.5 | 152.9 | 153.2 | 153.7 | 153.6 | 153.5 | 152.4 | 2.5 | 2.8 |
| 1996 | 154.4 | 154.9 | 155.7 | 156.3 | 156.6 | 156.7 | 157.0 | 157.3 | 157.8 | 158.3 | 158.6 | 158.6 | 156.9 | 3.3 | 3.0 |
| 1997 | 159.1 | 159.6 | 160.0 | 160.2 | 160.1 | 160.3 | 160.5 | 160.8 | 161.2 | 161.6 | 161.5 | 161.3 | 160.5 | 1.7 | 2.3 |
| 1998 | 161.6 | 161.9 | 162.2 | 162.5 | 162.8 | 163.0 | 163.2 | 163.4 | 163.6 | 164.0 | 164.0 | 163.9 | 163.0 | 1.6 | 1.6 |
| 1999 | 164.3 | 164.5 | 165.0 | 166.2 | 166.2 | 166.2 | 166.7 | 167.1 | 167.9 | 168.2 | 168.3 | 168.3 | 166.6 | 2.7 | 2.2 |
| 2000 | 168.8 | 169.8 | 171.2 | 171.3 | 171.5 | 172.4 | 172.8 | 172.8 | 173.7 | 174.0 | 174.1 | 174.0 | 172.2 | 3.4 | 3.4 |
| 2001 | 175.1 | 175.8 | 176.2 | 176.9 | 177.7 | 178.0 | 177.5 | 177.5 | 178.3 | 177.7 | 177.4 | 176.7 | 177.1 | 1.6 | 2.8 |
| 2002 | 177.1 | 177.8 | 178.8 | 179.8 | 179.8 | 179.9 | 180.1 | 180.7 | 181.0 | 181.3 | 181.3 | 180.9 | 179.9 | 2.4 | 1.6 |
| 2003 | 181.7 | 183.1 | 184.2 | 183.8 | 183.5 | 183.7 | 183.9 | 184.6 | 185.2 | 185.0 | 184.5 | 184.3 | 184.0 | 1.9 | 2.3 |
| 2004 | 185.2 | 186.2 | 187.4 | 188.0 | 189.1 | 189.7 | 189.4 | 189.5 | 189.9 | 190.9 | 191.0 | 190.3 | 188.9 | 3.3 | 2.7 |
| 2005 | 190.7 | 191.8 | 193.3 | 194.6 | 194.4 | 194.5 | 195.4 | 196.4 | 198.8 | 199.2 | 197.6 | 196.8 | 195.3 | 3.4 | 3.4 |
| 2006 | 198.3 | 198.7 | 199.8 | 201.5 | 202.5 | 202.9 | 203.5 | 203.9 | 202.9 | 201.8 | 201.5 | 201.8 | 201.6 | 2.5 | 3.2 |
| 2007 | 202.416 | 203.499 | 205.352 | 206.686 | 207.949 | 208.352 | 208.299 | 207.917 | 208.490 | 208.936 | 210.177 | 210.036 | 207.342 | 4.1 | 2.8 |
| 2008 | 211.080 | 211.693 | 213.528 | 214.823 | 216.632 | 218.815 | 219.964 | 219.086 | 218.783 | 216.573 | 212.425 | 210.228 | 215.303 | 0.1 | 3.8 |
| 2009 | 211.143 | 212.193 | 212.709 | 213.240 | 213.856 | 215.693 | 215.351 | 215.834 | 215.969 | 216.177 | 216.330 | 215.949 | 214.537 | 2.7 | -0.4 |
| 2010 | 216.687 | 216.741 | 217.631 |  |  |  |  |  |  |  |  |  |  |  |  |


| For the Years Ending | $\begin{array}{r} \text { Year } 1 \\ \text { Mar-2011 } \end{array}$ | $\begin{array}{r} \text { Year } 2 \\ \text { Mar-2012 } \end{array}$ | $\begin{array}{r} \text { Year } 3 \\ \text { Mar-2013 } \end{array}$ | $\begin{array}{r} \text { Year } 4 \\ \text { Mar-2014 } \end{array}$ | $\begin{array}{r} \text { Year } 5 \\ \text { Mar-2015 } \end{array}$ | $\begin{array}{r} \text { Year } 6 \\ \text { Mar-2016 } \end{array}$ | $\begin{array}{r} \text { Year } 7 \\ \text { Mar-2017 } \end{array}$ | $\begin{array}{r} \text { Year } 8 \\ \text { Mar-2018 } \end{array}$ | $\begin{array}{r} \text { Year } 9 \\ \text { Mar-2019 } \end{array}$ | In Infla <br> Year 10 <br> Mar-2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating Ratios |  |  |  |  |  |  |  |  |  |  |
| Total Number of Units | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 |
| Average Occupancy |  |  |  | 75.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| Avg Monthly Rent per Occ Area |  |  |  | 1.34 | 1.36 | 1.40 | 1.45 | 1.49 | 1.53 | 1.58 |
| Avg Monthly Rent per Occ Unit |  |  |  | 1,189.66 | 1,214.06 | 1,250.48 | 1,288.00 | 1,326.64 | 1,366.44 | 1,407.43 |
| Expense Ratio to Operating Inc |  |  |  | 38.18\% | 28.87\% | 32.45\% | 33.71\% | 33.78\% | 33.85\% | 33.92\% |
| Expenses per Unit Area |  |  | 3.32 | 4.56 | 4.69 | 5.43 | 5.81 | 6.00 | 6.19 | 6.39 |
| Expenses per Unit |  |  | 2,959.19 | 4,058.90 | 4,175.90 | 4,835.44 | 5,174.46 | 5,339.81 | 5,511.13 | 5,688.75 |
| Potential Gross Revenue |  |  |  |  |  |  |  |  |  |  |
| Potential Market Rent | \$705,480 | \$726,644 | \$748,444 | \$770,897 | \$794,024 | \$817,845 | \$842,380 | \$867,651 | \$893,681 | \$920,491 |
| Loss to Lease | $(705,480)$ | $(726,644)$ | $(748,444)$ | $(192,724)$ | $(21,199)$ | $(21,836)$ | $(22,491)$ | $(23,165)$ | $(23,859)$ | $(24,576)$ |
| Potential Rental Revenue |  |  |  | 578,173 | 772,825 | 796,009 | 819,889 | 844,486 | 869,822 | 895,915 |
| Base Rent Abatements |  |  |  | $(64,241)$ | $(73,526)$ | $(75,731)$ | $(78,003)$ | $(80,343)$ | (82,754) | $(85,236)$ |
| Scheduled Base Rental Revenue |  |  |  | 513,932 | 699,299 | 720,278 | 741,886 | 764,143 | 787,068 | 810,679 |
| Total Potential Gross Revenue |  |  |  | 513,932 | 699,299 | 720,278 | 741,886 | 764,143 | 787,068 | 810,679 |
| Effective Gross Revenue |  |  |  |  |  |  |  |  |  |  |
| Operating Expenses |  |  |  |  |  |  |  |  |  |  |
| Salaries \& Personnel |  |  | 48,867 | 66,777 | 68,438 | 70,140 | 71,884 | 73,672 | 75,504 | 77,382 |
| Insurance |  |  | 9,338 | 12,627 | 12,806 | 12,988 | 13,172 | 13,360 | 13,549 | 13,742 |
| Taxes |  |  | 39,332 | 53,747 | 55,084 | 56,454 | 57,858 | 59,297 | 60,772 | 62,283 |
| Utilities |  |  | 16,441 | 23,142 | 24,431 | 25,792 | 27,228 | 28,745 | 30,346 | 32,036 |
| Management Fees |  |  | 17,336 | 23,876 | 24,661 | 25,472 | 26,310 | 27,176 | 28,070 | 28,994 |
| Administrative |  |  | 10,727 | 14,658 | 15,023 | 15,397 | 15,779 | 16,172 | 16,574 | 16,986 |
| Repairs \& Maintenance |  |  |  |  |  | 25,858 | 36,143 | 37,889 | 39,719 | 41,637 |
| Total Operating Expenses |  |  | 142,041 | 194,827 | 200,443 | 232,101 | 248,374 | 256,311 | 264,534 | 273,060 |
| Net Operating Income |  |  | $(142,041)$ | 315,507 | 493,961 | 483,135 | 488,319 | 502,483 | 517,025 | 531,944 |
| Leasing \& Capital Costs |  |  |  |  |  |  |  |  |  |  |
| Preparation Costs |  |  |  | 22,545 | 23,106 | 23,680 | 24,269 | 24,873 | 25,491 | 26,125 |
| Leasing Costs |  |  |  | 8,742 | 8,959 | 9,183 | 9,410 | 9,644 | 9,883 | 10,130 |
| Annual Cap Ex |  |  |  | 67,184 | 91,807 | 94,090 | 96,430 | 98,828 | 101,286 | 103,805 |
| Total Leasing \& Capital Costs |  |  |  | 98,471 | 123,872 | 126,953 | 130,109 | 133,345 | 136,660 | 140,060 |
| Development Costs |  |  |  |  |  |  |  |  |  |  |
| Land/Acquisition Costs |  |  |  |  |  |  |  |  |  |  |
| Land Purchase | 450,000 |  |  |  |  |  |  |  |  |  |
| Total Land/Acquisition Costs | 450,000 |  |  |  |  |  |  |  |  |  |
| Hard/Construction Costs |  |  |  |  |  |  |  |  |  |  |
| Construction |  |  | 3,943,621 | 1,347,233 |  |  |  |  |  |  |
| Total Hard/Construction Costs |  |  | 3,943,621 | 1,347,233 |  |  |  |  |  |  |
| Total Development Costs | 450,000 |  | 3,943,621 | 1,347,233 |  |  |  |  |  |  |
| Cash Flow Before Debt Service | (\$450,000) |  | (\$4,085,662) | (\$1,130,197) | \$370,089 | \$356,182 | \$358,210 | \$369,138 | \$380,365 | \$391,884 |
| \& Taxes |  | ======= | ========= | (1,13019) |  |  |  |  |  |  |



## For the Years Ending

Sources Of Capital
Net Operating Gains
Imputed Equity Level

Imputed Equity Level
Defined Sources Of Capital
Required Equity Contributions
Total Sources Of Capital


## Maiden Choice Apartments <br> Catonsville, Maryland 21228

Schedule Of Sources \& Uses Of Capital
Equity is Based on Property Value, Leverage and Operating Requirements

| $\begin{array}{r} \text { Year } 7 \\ \text { Mar-2017 } \end{array}$ | Year 8 <br> Mar-2018 | $\begin{array}{r} \text { Year } 9 \\ \text { Mar-2019 } \end{array}$ | $\begin{array}{r} \text { Year } 10 \\ \text { Mar-2020 } \end{array}$ | Year 11 <br> Mar-2021 | Year 12 <br> Mar-2022 | $\begin{array}{r} \text { Year } 13 \\ \text { Mar-2023 } \end{array}$ | Year 14 Mar-2024 | $\begin{array}{r} \text { Year } 15 \\ \text { Mar-2025 } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$488,319 | \$502,483 | \$517,025 | \$531,944 | \$547,254 | \$562,961 | \$579,074 | \$595,596 | \$612,543 |
| 488,319 | 502,483 | 517,025 | 531,944 | 547,254 | 562,961 | 579,074 | 595,596 | 612,543 |
| \$488,319 | \$502,483 | \$517,025 | \$531,944 | \$547,254 | \$562,961 | \$579,074 | \$595,596 | \$612,543 |
| 24,269 | 24,873 | 25,491 | 26,125 | 26,774 | 27,440 | 28,122 | 28,822 | 29,539 |
| 9,410 | 9,644 | 9,883 | 10,130 | 10,382 | 10,640 | 10,905 | 11,175 | 11,454 |
| 96,430 | 98,828 | 101,286 | 103,805 | 106,387 | 109,032 | 111,744 | 114,523 | 117,371 |
| 130,109 | 133,345 | 136,660 | 140,060 | 143,543 | 147,112 | 150,771 | 154,520 | 158,364 |
| 358,210 | 369,138 | 380,365 | 391,884 | 403,711 | 415,849 | 428,303 | 441,076 | 454,179 |
| \$488,319 | \$502,483 | \$517,025 | \$531,944 | \$547,254 | \$562,961 | \$579,074 | \$595,596 | \$612,543 |
| -22.78\% | -23.47\% | -24.19\% | -24.92\% | -25.67\% | -26.44\% | -27.24\% | -28.05\% | -28.88\% |
| 10.51\% | 10.51\% | 10.51\% | 10.52\% | 10.52\% | 10.53\% | 10.53\% | 10.53\% | 10.54\% |
| 8.59\% | 8.86\% | 9.13\% | 9.40\% | 9.69\% | 9.98\% | 10.28\% | 10.58\% | 10.90\% |


| Year 16 <br> Mar-2026 | $\begin{array}{r} \text { Year } 17 \\ \text { Mar-2027 } \end{array}$ | $\begin{array}{r} \text { Year } 18 \\ \text { Mar-2028 } \end{array}$ | Year 19 <br> Mar-2029 | $\begin{array}{r} \text { Year } 20 \\ \text { Mar-2030 } \end{array}$ | Year 21 <br> Mar-2031 | $\text { Year } 22$ Mar-2032 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$629,916 | \$647,730 | \$665,985 | \$684,698 | \$703,869 | \$723,509 | \$743,625 |
|  |  |  |  |  |  | 6,223,347 |
| 629,916 | 647,730 | 665,985 | 684,698 | 703,869 | 723,509 | 6,966,972 |
| \$629,916 | \$647,730 | \$665,985 | \$684,698 | \$703,869 | \$723,509 | \$6,966,972 |


| 30,273 | 31,026 | 31,798 | 32,588 | 33,400 | 34,230 | 35,081 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11,739 | 12,031 | 12,330 | 12,637 | 12,951 | 13,273 | 13,603 |
| 120,290 | 123,282 | 126,348 | 129,490 | 132,711 | 136,011 | 139,394 |
| 162,302 | 166,339 | 170,476 | 174,715 | 179,062 | 183,514 | 188,078 |
| 467,614 | 481,391 | 495,509 | 509,983 | 524,807 | 539,995 | 6,778,894 |
| \$629,916 | \$647,730 | \$665,985 | \$684,698 | \$703,869 | \$723,509 | \$6,966,972 |
| -29.74\% | -30.61\% | -31.51\% | -32.43\% | -33.37\% | -34.34\% | -35.33\% |
| 10.54\% | 10.55\% | 10.55\% | 10.56\% | 10.56\% | 10.56\% | 10.57\% |
| 11.22\% | 11.55\% | 11.89\% | 12.23\% | 12.59\% | 12.95\% | 13.33\% |

For the Years Ending
Resale Amount
Gross Proceeds from Sale
Net Proceeds From Sale

$\square$
$==========$

Year 2
Mar-2012
(\$1,156,686)
(1,156,686)
===========

Year 3
Mar-2013
$\begin{array}{r}\$ 2,569,275 \\ \hline 2,569,275\end{array}$
$2,569,275$
$==========$

Year 5 Mar-2015 Mar-2014
\$4,022,484
4,022,484
===========

Year 6 Mar-2016
\$3,976,539
3,976,539

Maiden Choice Apartments
Catonsville, Maryland 21228

| Year 7 <br> Mar-2017 | Year 8 Mar-2018 | Year 9 Mar-2019 | Year 10 <br> Mar-2020 | Year 11 <br> Mar-2021 | Year 12 <br> Mar-2022 | Year 13 <br> Mar-2023 | Year 14 Mar-2024 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$4,091,881 | \$4,210,301 | \$4,331,792 | \$4,456,466 | \$4,584,373 | \$4,715,586 | \$4,850,130 | \$4,988,135 |
| 4,091,881 | 4,210,301 | 4,331,792 | 4,456,466 | 4,584,373 | 4,715,586 | 4,850,130 | 4,988,135 |
| ======== | ======== | ======== | ========== | ======== | ========= | ========= | ======== |

Software: ARGUS Ver. 14.0.2
File: Maiden Choice
Property Type: Apartment
Portfolio:

| Year 15 <br> Mar-2025 | $\begin{array}{r} \text { Year } 16 \\ \text { Mar-2026 } \end{array}$ | $\text { Year } 17$ | $\begin{array}{r} \text { Year } 18 \\ \text { Mar-2028 } \end{array}$ | Year 19 Mar-2029 | $\begin{array}{r} \text { Year } 20 \\ \text { Mar-2030 } \end{array}$ | $\begin{array}{r} \text { Year } 21 \\ \text { Mar-2031 } \end{array}$ | $\text { Year } 22$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$5,129,609 | \$5,274,674 | \$5,423,331 | \$5,575,717 | \$5,731,832 | \$5,891,767 | \$6,055,578 | \$6,223,347 |
| 5,129,609 | 5,274,674 | 5,423,331 | 5,575,717 | 5,731,832 | 5,891,767 | 6,055,578 | 6,223,347 |

# AROFTWARE Maiden Choice Apartme: ARGUS Ver. 14.0.2 Catonsville, Maryland 21 File: Maiden Choice Property Type: Apartment <br> Portfolio: Date: 5/5/10 Time: 3:45 am Ref\#: AHG <br> Prospective Present Value 

Cash Flow Before Debt Service plus Property Resale Cash Flow Before Debt Service plus Property Resale
Discounted Annually (Endpoint on Cash Flow \& Resale) over a 22 -Year Period

|  For the <br> Year <br> Enalysis <br> Ending  | Annual Cash Flow | P.V. of Cash Flow @ 11.03\% |
| :---: | :---: | :---: |
| Year 1 Mar-2011 | $(\$ 450,000)$ | (\$405,296) |
| Year 2 Mar-2012 |  |  |
| Year 3 Mar-2013 | $(4,085,662)$ | $(2,984,980)$ |
| Year 4 Mar-2014 | $(1,130,197)$ | $(743,691)$ |
| Year 5 Mar-2015 | 370,089 | 219,333 |
| Year 6 Mar-2016 | 356,182 | 190,121 |
| Year 7 Mar-2017 | 358,210 | 172,209 |
| Year 8 Mar-2018 | 369,138 | 159,833 |
| Year 9 Mar-2019 | 380,365 | 148,332 |
| Year 10 Mar-2020 | 391,884 | 137,643 |
| Year 11 Mar-2021 | 403,711 | 127,711 |
| Year 12 Mar-2022 | 415,849 | 118,482 |
| Year 13 Mar-2023 | 428,303 | 109,907 |
| Year 14 Mar-2024 | 441,076 | 101,941 |
| Year 15 Mar-2025 | 454,179 | 94,541 |
| Year 16 Mar-2026 | 467,614 | 87,669 |
| Year 17 Mar-2027 | 481,391 | 81,285 |
| Year 18 Mar-2028 | 495,509 | 75,357 |
| Year 19 Mar-2029 | 509,983 | 69,854 |
| Year 20 Mar-2030 | 524,807 | 64,743 |
| Year 21 Mar-2031 | 539,995 | 59,999 |
| Year 22 Mar-2032 | 555,547 | 55,595 |
| Total Cash Flow | 2,277,973 | (2,059,412) |
| Property Resale @ 12.28\% Cap | 6,223,347 | 486,823 |
| Total Property Present Value |  | (\$1,572,589) |
| Rounded to Thousands |  | (\$1,573,000) |
| Per Unit |  | $(32,762)$ |
| Percentage Value Distribution |  |  |
| Prospective Income |  | 130.96\% |
| Prospective Property Resale |  | -30.96\% |
|  |  | 100.00\% |

Resale discounting is 1.25 percentage point(s) higher than cash flow rates.

## Maiden Choice Apartments Catonsville, Maryland 21228

Property Summary Report

Software: ARGUS Ver. 14.0.2 File: Maiden Choice Property Type: Apartment

Portfolio:
Date: $5 / 5 / 10$
Time: 3:45 am Ref\#: AHG Page: 5

Timing \& Inflation
Reporting Period: Inflation Month: General Inflation Rate:

Property Size \& Occupancy Property Size:
Alternate Size
Number of unit types:
Total Occupied Area:
Credit \& Collection Loss Method
Rate:
Property Purchase \& Resale Purchase Price:
Resale Method:
Cap Rate:
Cap Year:
Commission/Closing Cost: Net Cash Flow from Sale:

Present Value Discounting Discount Method:
Unleveraged Discount Rate
Unleveraged Present Value:

April 1, 2010 to March 31, 2032; 22 years
Analysis Start
2.48\%

8 Units
0,433 Square Feet
3
individual units, $0.00 \%$, during first month of analysis

Percent of Potential Gross Revenue
0.70\%

Capitalize Net Operating Income
2.28\%
\$0
6,223,347
nnually (Endpoint on Cash Flow \& Resale)
11.03\%
$(\$ 1,572,589)$ at $11.03 \%$

Total Occupied Units ..... 48

| AROFTWARE | Maiden Choice Apartments Catonsville, Maryland 21228 |  | Software: <br> Prope <br> /01/10 | US Ver. 14.0.2 Maiden Choice ype: Apartment Portfolio Date: 5/5/10 Time: 3:45 am Ref\#: AHG Page: 7 |
| :---: | :---: | :---: | :---: | :---: |
| MLA Categories |  | Studio | 1BR | 2BR |
| Renewal Probability |  | 50.00\% | 50.00\% | 50.00\% |
| Market Rent |  | \$/Unit/Mo | \$/Unit/Mo | \$/Unit/Mo |
|  | New: | 985.38 | 1,385.33 | 1,530.24 |
|  | Renewal: | 985.38 | 1,385.33 | 1,530.24 |
|  | Result: | 985.38 | 1,385.33 | 1,530.24 |
| Months Vacant | New: | 0.64 | 0.64 | 0.64 |
|  | Renewal: | 0 | 0 | 0 |
|  | Rounded: | 0 | 0 | 0 |
| Preparation Costs |  | \$/SqFt | \$/SqFt | \$/SqFt |
|  | New: | 0.73 | 0.73 | 0.73 |
|  | Renewal: | 0.37 | 0.37 | 0.37 |
|  | Result: | 0.55 | 0.55 | 0.55 |
| Leasing Costs |  | \$ Amount | \$ Amount | \$ Amount |
|  | New: | 0.32 | 0.32 | 0.32 |
|  | Renewal: | 0.11 | 0.11 | 0.11 |
|  | Result: | 0.21 | 0.21 | 0.21 |
| Rent Abatements | New: | 2.00 | 1.50 | 1.00 |
|  | Renewal: | 1.00 | 1.00 | 1.00 |
|  | Result: | 1.50 | 1.25 | 1.00 |
| Non-Weighted Items |  |  |  |  |
| Term Lengths |  | 12 | 12 | 12 |
|  |  | Months | Months | Months |
| Term Overrides |  | No | No | No |


[^0]:    Source: National Apartment Association 2009 Survey of Operating Income \& Expenses in Rental Apartment Communities
    © 2009 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Internet.

[^1]:    Christopher Lee, President \& Chief Executive Officer of CEL \& Associates Inc., is a Special Advisor to NAA. Special thanks to Janet Gora, Director, CEL \& Associates Inc., as project manager; and Chanal Thomas of NAA for handling survey logistics and paper responses.

[^2]:    Source : National Apartment Association 2009 Survey of Operating Income \& Expenses in Rental Apartment Communities © 2009 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License
    Agreement and may not be posted on the Internet.

[^3]:    National Apartment Association 2008 Survey of Operating income \& Expenses in Rental Apartment Communities
    © 2008 by National Apartment Association. This table may only be used, copied, and/or distributed in accordance with the License Agreement and may not be posted on the Interne.

[^4]:    Source: National Apartment Association 2007 Survey of Operating Income \& Expenses in Rental Apartment Communities

[^5]:    Source: National Apartment Association 2007 Survey of Operating Income \& Expenses in Rental Apartment Communities

[^6]:    Source: Naitnal Apartment Association 2007 Survey of Operaing income \& Expenses in Rentai Aparment Communites

[^7]:    2007 by Nation Aparime

[^8]:    ${ }^{1}$ The Chained CPI for All Urban Consumers (C-CPI-U), which BLS began publishing in August 2002 with data back to January 2000 , also represents the urban population. The prices used in the C-CPI-U are the same as those used to produce the CPI-U and CPIW , but the C-CPI-U uses a different formula and different weights to combine basic indexes.
    ${ }^{2}$ For example, the April 2008 Monthly Labor Review article by Kenneth J. Stewart, "The experimental consumer price index for elderly Americans (CPI-E), 1982-2007" provided estimates of the series for all items and major CPI expenditure components from December 1982 through December 2007.

[^9]:    See footnotes at end of table

[^10]:    1 Special index based on a substantially smaller sample.
    2 Indexes on a December 1997=100 base.
    3 Indexes on a December 2007=100 base.
    4 Indexes on a December 2005=100 base.
    5 This index series was calculated using a Laspeyres estimator. All other item stratum index series were calculated using a geometric means estimator.

    6 Indexes on a December 1982=100 base.
    7 Indexes on a December 1986=100 base.
    8 Indexes on a December 1983=100 base.

