NEED AND DEMAND ANALYSIS

FOR THE SYCAMORE TOWERS APARTMENTS

IN

PETERSBURG, VIRGINIA

Prepared for
The Petersburg Housing and Redevelopment Authority
for submission to
Virginia Community Capital

January 17, 2019

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EXECUTIVE SUMMARY

The following provides a brief summary of each of the major sections in the market analysis.

The Sycamore Towers Apartments are located at 128 South Sycamore Street (US 301 A) in Petersburg. There are no apparent physical, environmental, or other constraints upon the rehabilitation and marketing of the proposed project at this location.

The proposed project will comprise the rehabilitation of 100 units of senior housing - 56 efficiency units, 36 one bedroom units, and eight two-bedroom units All units will be rent-assisted and thus targeted to older households with incomes up to 50 percent of the local area median income. Unassisted units would be targeted to households up to 60 percent of the median. These income targets qualify the apartments for low income housing tax credit status.

In 2008, a total of 13,246 persons were employed in the City. In 2017 the number was 12,414. This represents a net decrease of 883 jobs over that period - a 6.3 percent decrease.

For the City of Petersburg, the current unemployment rate is 7.3 percent, down from 7.9 percent the previous year. The rate was, however, above 10 percent between 2009 and 2014.

The market area for the proposed development is defined as the City of Petersburg.

The population of the market area is projected to decrease from 31,821 in 2018 to 31,673 in 2020. The number of households is projected to increase, from 13,634 in 2018 to 13,696 in 2020.

The elderly population (65 years and older) of the Petersburg market area is projected to increase from 5,349 in 2018 to 5,481 in 2020. The number of older households is projected to increase from 3,637 in 2018 to 3,726 in 2020.

Occupancy in existing apartment developments that are rent-assisted and are targeted to very low income seniors, is very good.

The total potential need for tax credit units such as is proposed in the Petersburg area by 2020 is calculated to be for 665 rent-assisted units. The net demand is for 665 units. Given the calculated need for rentassisted units, the proposed 100-unit development amounts to 15.3 percent of the net need, as calculated. This assumes that such a project would be a new introduction to the local market. Given that the subject development is the rehabilitation of an existing property, any units that may need to be filled with new tenants following the rehabilitation program would represent a small share of the market for such housing.

Consideration of the capture rate (15.3 percent), the (9.8 percent) affordability analysis capture, and the (40.8 percent) penetration rate suggests that the proposed rent-assisted development is marketable.

The proposed development is considered marketable and can be developed as proposed.

INTRODUCTION AND SCOPE OF WORK

This report is a professional market analysis of the need and demand for the proposed development.

The report is prepared for the Petersburg Redevelopment and Housing Authority for submission to the for submission to Virginia Community Capital.

The report is an update of report originally prepared for submission to the Virginia Housing and Development Authority (VHDA) as part of an application for Low Income Housing Tax Credits, and was designed to satisfy the underwriting criteria of the reviewing agency for which it was performed, and the conclusions, based on the results of our research, experience, and expertise reflect the predicted ability of the project, as presented to us, to meet or exceed that reviewing agency's guidelines. Thus, a positive conclusion does not necessarily imply that the project would be found to be feasible or successful under different underwriting standards, and this study does not necessarily incorporate generally accepted professional market study standards and elements pre-empted by the guidelines set out by the reviewing agency.

This report was completed using professional market techniques, based on the VHDA market study guidelines. The findings of this study are predicated upon the assumption that the proposed development, as presented to us, will be located at the site described in the report, that it will be funded through the program under which it was prepared, and within the stated projection period.

Further, the findings are based on the assumption that once funded, the complex will be well-designed, well-marketed, and professionally managed.

The site of the proposed apartments was visited (most recently, on February 3, 2018), by T. Ronald Brown.

T. Ronald Brown: Research & Analysis is a planning and economics consulting firm which provides real estate market analysis. The President of the firm is T. Ronald Brown. Mr. Brown has a Honours Master of Arts degree in Geographical Studies from the University of St. Andrews in St. Andrews, Scotland. He has 30 years experience in the provision of market studies for subsidized and unsubsidized apartment developments and for-sale housing. Over the last three decades or so, Mr. Brown has produced more than 3,000 studies in at least 20 states, predominantly in the Southeast. The firm was established in Cary, North carolina, and relocated to Asheville, North Carolina in 2018.

Mr. Brown is responsible for the analysis and write-up of this report – performing the role of both analyst and author.

To the best of our knowledge, this report is an accurate representation of market conditions. While due care and professional housing market study techniques were used, no guarantee is made of the findings.

It is stated that we do not have, nor will have in the future, any material interest in the proposed development, and that there is no identity of interest between us and the party for whom the project was prepared. Further, we state that the payment of the fee is not contingent upon a favorable conclusion, nor approval of the project by any agency before or after the fact. The payment of the fee does not include payment for testimony nor further consultation.

Submitted, and attested to, by:

T. Ronald Brown, President
T. Ronald Brown: Research & Analysis
P.O. Box 18534
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919, 233,0670 or 919,612,5328

Date: January 17, 2019

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PROJECT DESCRIPTION

The Sycamore Towers Apartments offer a total of 100 of units for the elderly - 56 efficiency units, 36 one-bedroom units, and eight two-bedroom units. The units will rent to households with incomes up to 50 percent of the median income, and thus the target income range will qualify the proposed units for tax credit status. Full rental assistance is available.

The property is a single eight-story brick structure, built in 1971. The property is to be rehabilitated.

It is understood that the rehabilitation program will commence in April 2019, and will be completed within 12 months, or so.

The project is to be configured as follows:

	No. of Units	Sq. Ft.	<u>Rent</u>	Targeting*
0 bedroom/ 1 bathroom	20	404	\$616	less than 60 percent**
0 bedroom/ 1 bathroom	36	402-407	\$616	less than 60 percent
1 bedroom/ 1 bathroom	36	537-538	\$647	less than 60 percent
2 bedroom/1 bathroom	8	729-757	\$748	less than 60 percent

^{*} based on local area median income

Existing on-site parking is available.

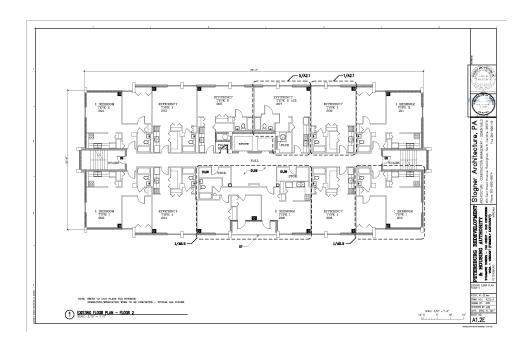
The site is reported to be effectively fully occupied, and remains so on an ongoing basis. Currently, there are units that are being held vacant in anticipation of the rehabilitation program.

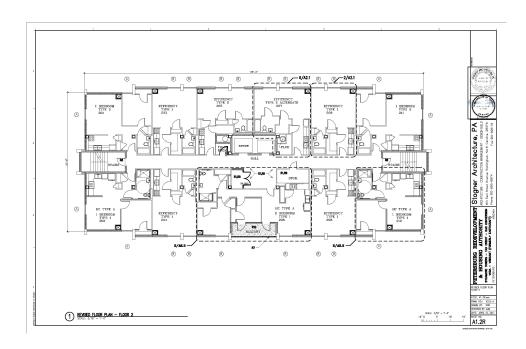
Utilities will be paid by the owner - utility allowances are: \$146 for the efficiency units, \$164 for the one-bedroom units and \$194 for the two-bedroom units.

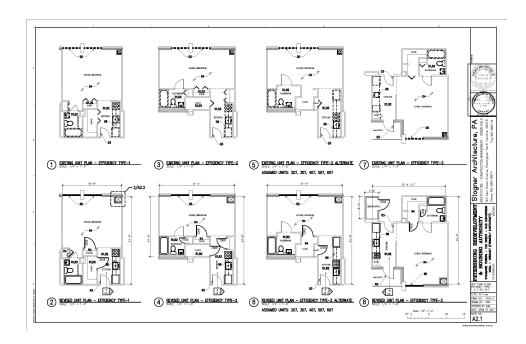
As noted, 100 units of project based vouchers are available, and these will be targeted to households with incomes up to 50 percent of the local area median.

Representative architectural drawings are set out on the following pages.

^{**} affordable at 50 percent of the median









LOCATION

The Sycamore Towers Apartments are located at 128 South Sycamore Street (US 301 A) in Petersburg. Adjacent properties include the Housing Authority offices, various historic properties across Sycamore Street, and the Lafayette House apartments for seniors.





View of property



View of property



Side view of property



Rear view of property



View across Sycamore St.



View south on Sycamore St., at property



View north on Sycamore St., at property

Access from the site to major thoroughfares, shopping, health and other services, is fair - reflecting the location near to the downtown in an area where most services are located somewhat peripherally.

The site is located on South Sycamore Street - US301 A - a major north south route that parallels Interstate 95. The site is within two blocks of the intersections of Sycamore Street and Wythe Street and Washington Street (US 1 and US 460) - the major east-west route, in downtown Petersburg - to the north. The site is within two miles or so of the intersection of Sycamore Street and South Crater Road (US 301), to the south. The site is within one half mile of interstates 85 and 95.

The Sycamore Towers property is within one fourth of one mile of an IGA grocery store on South Adams Street in the downtown area, and is with one half-mile of Kirkpatrick's Pharmacy (on South Sycamore Street). The site is within two miles or more of the various shops and services - such as Food Lion grocery store - located near the intersection of South Sycamore Street and South Crater Road, to the south. The site is within four miles or so of the South Crater Square shopping center and a Walmart Supercenter, to the south. The site is within two and one-half miles of the Southpark Mall, off Interstate 85/95 in Colonial Heights, to the north.

The site is within four miles, or so, of the Southside Regional Medical center and associated services.

The following table illustrates the various local amenities serving the site and the (driving) distance to the site.

Table 1 - Distance to Neighborhood and Community Amenities

Category	Neighborhood/Community Amenity	Distance (mile
Highways	Interstate 85/95	1.0
	South Crater Road (US 301)	0.8
Public Transportation	PAT	adjacent
Retail - Grocery	IGA	0.2
	Food Lion	2.2
	Save-A-Lot	2.3
Retail - Other	Wal-mart	2.2
	Southpark Mall	2.8
Pharmacies	Kirkpatricks Pharmacy	0.4
City Hall	City of Petersburg	0.4
Senior Center	Senior Citizens Program (Tabernacle Life)	0.6
Entertainment, etc.	Central Park	0.2
Post Office	Petersburg Post Office	0.3
Library	Petersburg Public Library	0.4
Hospital	Southside Regional Medical Center	4.3

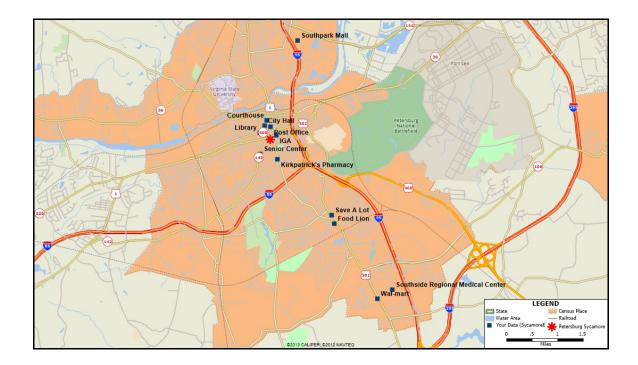
Source: T.Ronald Brown: Research & Analysis

Public bus service is available at the site.

Based on our observations during our site visit, there is no reason to expect that the risk of crime in this neighborhood would be greater or less than that for other parts of the market area.

Access and visibility, to and from the property, is good.

There are no apparent physical, environmental, or other constraints upon the rehabilitation and ongoing marketing of the proposed project at this location.



MARKET AREA DEFINITION

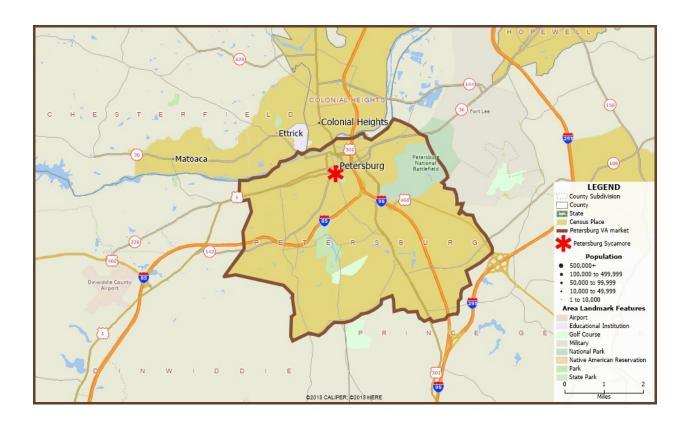
Market areas are defined on the basis of the consideration of many inter-related factors. These include consideration of the site location, consideration of socio-demographic characteristics of the area (tenure, income, rent-levels, etc.), local commuting patterns, physical (or other) boundaries, census geographies, and especially the location of comparable and/or potentially competing communities.

In communities such as county seats where that community is the county's largest community and is centrally located and can draw from the entire county, the county may be the market area. In circumstances where there are potentially competing communities in one county, the market area will be that part of the county (and, potentially, portions of adjacent counties) which the proposed development is most likely to draw from. Here, a combination of census county subdivisions (townships) may be used to define the market area. In urban or suburban markets, the market area will be areas adjacent to the site and will extend to all locations of relatively similar character, and with residents or potential residents likely to be interested in the project. Here combinations of census county subdivisions (townships) or combinations of census tracts, may be used to define the market area.

The City of Petersburg is located in south- central Virginia. The market area for the proposed development is defined as the City of Petersburg¹. This area is roughly focused on the site of the proposed development and extends to an approximately two and one-half -to-four mile hinterland, except to the north (where it extends to approximately one and one-half miles, to the Appomattox River). This area excludes neighboring and potentially competing communities such as Colonial Heights and Hopewell. The market area, as defined, therefore is that which constitutes the area adjacent to the site of the proposed development and extends to all locations of relatively similar character, and with residents or potential residents likely to be interested in the project.

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The City of Petersburg is an independent city. Normally, our reports provide data at the city, county, and market area levels. Here, the city is the equivalent of a county, and is the market area for the project. Hence, data are provided at the one geographic level.



EMPLOYMENT AND ECONOMY

The makeup and trends of the labor force and employment have a strong influence on the growth and stability of the local housing market in general.

Employment trends

Employment trends for the City of Petersburg are illustrated in the table, below. In 2008, a total of 13,246 persons were employed in the City. In 2017 the number was 12,414. This represents a net decrease of 832 jobs over that period - a 6.3 percent decrease.

Table 2 - Total Employment

		Change over	previous year
		number	percent
2008	13,246		
2009	12,533	-713	-5.4
2010	11,939	-594	-4.7
2011	11,950	11	0.1
2012	11,995	45	0.4
2013	12,169	174	1.5
2014	12,314	145	1.2
2015	12,262	-52	-0.4
2016	12,147	-115	-0.9
2017	12,414	267	2.2

Source: Virginia Labor Market Information

Employment trends, by sector

Employment by sector for the City of Petersburg is set out for 2017 and 2018 in Table 3. Here it is seen that the largest employment sector in the area - and significantly so - is healthcare - which accounted for 35.3 percent of jobs in the most recent period available. Retail trade is seen to be another significant source of employment.

Table 3 - Employment, by sector

	20:	-	t, by secto 201		
			number	_	pct change
Accommodation and Food services	1,098	8.6	1,069	8.2	-2.6
Administrative and Waste services	680	5.3	693	5.3	1.9
Agriculture, Forestry, etc	n/a	n/a	n/a	n/a	n/a
Arts, Entertainment, Recreation	107	0.8	108	0.8	0.9
Construction	477	3.7	594	4.6	24.5
Educational services	527	4.1	503	3.9	-4.6
Financial and Insurance	210	1.6	186	1.4	-11.4
Health Care and Social Assistance	4,572	35.9	4,603	35.3	0.7
Information	n/a	n/a	61	0.5	n/a
Management	23	0.2	12	0.1	-47.8
Manufacturing	857	6.7	858	6.6	0.1
Other Services	754	5.9	923	7.1	22.4
Professional and Technical services	174	1.4	189	1.4	8.6
Public Administration	626	4.9	670	5.1	7.0
Real estate	141	1.1	152	1.2	7.8
Retail trade	1,437	11.3	1,424	10.9	-0.9
Transp. and Warehousing	417	3.3	445	3.4	6.7
Unclassified	41	n/a	42	0.3	2.4
Utilities	n/a	n/a	n/a	n/a	n/a
Wholesale trade	369	2.9	337	2.6	-8.7
Total	12,728		13,042		2.5

Source: Virginia Labor Market Information

Unemployment trends

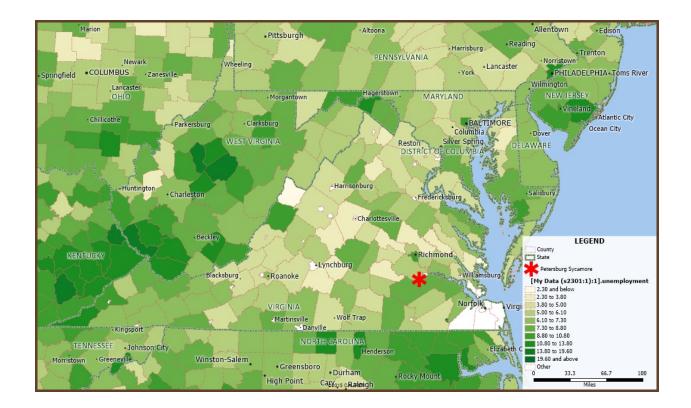
Unemployment trends for the City of Petersburg are illustrated in the table, below. Rates for Virginia and for the U.S as a whole are also shown, for reference. Here it is seen that the most recent annual unemployment rate is 7.3 percent, down from 7.9 percent the previous year. The rate was above 10 percent between 2009 and 2014.

Table 4 - Unemployment trends

	atan til tag a sama			
	Petersburg			
	City	Virginia	U.S.	
2008	7.3%	3.9%	5.8%	
2009	13.3%	6.7%	9.3%	
2010	14.0%	7.1%	9.6%	
2011	12.9%	6.6%	8.9%	
2012	12.0%	6.1%	8.1%	
2013	11.7%	5.7%	7.4%	
2014	10.7%	5.2%	6.2%	
2015	9.2%	4.5%	5.3%	
2016	7.9%	4.1%	4.9%	
2017	7.3%	3.8%	4.4%	

Source: Bureau of Labor Statistics

Current levels of unemployment throughout Virginia are illustrated, below.



Major Employers

The major employers in the Petersburg area are listed in Table 5, below. From this table it is seen that the area's largest single employer is the Southside Regional Medical Center - which accounts for the local concentration in healthcare jobs. Other significant employers include the Virginia State University and Brenco.

Table 5 - Major Employers

Employer Name	Product/	Service

Boar's Head Provisions Meat products

Brenco Ball and roller bearings

Custom T's T-shirts

Roper Brothers Lumber Lumber and building products

Southside Regional Medical Center Healthcare
Temple-Inland Container Containerboard
Virginia State University Higher education

Source: Virginia Economic Development Partnership

Information form the Virginia Economic Development Partnership shows that a total of no new jobs were reported to have been added, and that no jobs are reported to have been lost over the last two years.

The proposed development is not located in a market - such as a resort area - that would need housing for employees in such a specific market.

Earnings by occupation

Information on earnings by employment sector is provided by Virginia Labor Market Information. This information, for Petersburg is set out in Table 6, below. Here, average weekly wages exhibit quite a wide variation, with an overall increase of 1.8 percent over the last year - from \$736 to \$749.

Table 6 - Average Weekly Wages, by Sector

	Average	Wages, by sector	
	2017	2018*	pct change
Accommodation and Food services	\$291	\$299	2.7
Administrative and Waste services	\$457	\$468	2.4
Agriculture, Forestry, etc	n/a	n/a	n/a
Arts, Entertainment, Recreation	\$652	\$651	-0.2
Construction	\$757	\$912	20.5
Educational services	\$734	\$670	-8.7
Financial and Insurance	\$824	\$792	-3.9
Health Care and Social Assistance	\$798	\$791	-0.9
Information	n/a	n/a	n/a
Management	\$982	\$1,154	17.5
Manufacturing	\$1,097	\$1,135	3.5
Other Services	\$635	\$519	-18.3
Professional and Technical services	\$1,017	\$1,063	4.5
Public Administration	\$969	\$956	-1.3
Real estate	\$672	\$713	6.1
Retail trade	\$493	\$516	4.7
Transp. and Warehousing	\$904	\$982	8.6
Unclassified	\$458	\$616	34.5
Utilities	n/a	n/a	n/a
Wholesale trade	\$1,079	\$1,371	27.1
Total	\$736	\$749	1.8

Source: Virginia Labor Market Information

Commuting patterns

With respect to commuting, data from the American Community Survey, 36.0 percent of workers resident in Petersburg were employed there. The average driving time to work for residents of Petersburg was 22.5 minutes.

Table 7 - Commuting Data

	number	percent
Total Workers	13,503	100.0
Worked in Place of residence	3,472	36.0
Worked in County of residence	3,472	36.0
Worked outside Place of residence	8,642	64.0
Worked outside County of residence	8,642	64.0
Mean travel time to work (minutes)	22.5	

Census data for commuting patterns for persons who live and/or work in the Petersburg area are set out, below. This is the most recent Census data available.

Here it is seen that many persons who work in Petersburg commute into the City from adjacent counties in the Richmond metropolitan area. Likewise, many residents of Petersburg commute to work in adjacent areas - primarily Chesterfield County and Prince George County.

Table 8 - Commuting Patterns

Place of work	Place of Residence	Number of Workers
Petersburg	Petersburg	4,465
Petersburg	Chesterfield County	3,013
Petersburg	Dinwiddie County	1,956
Petersburg	Henrico County	477
Petersburg	Prince George County	1,797
Petersburg	Hopewell City	890
Petersburg	Richmond City	507
Chesterfield County	Petersburg	1,839
Colonial Heights City	Petersburg	727
Dinwiddie County	Petersburg	806
Henrico County	Petersburg	535
Prince George County	Petersburg	1,900
Richmond City	Petersburg	986

Source: US County to County Commuting Flows; T.Ronald Brown: Research & Analysis

Given that the proposed development will offer rental housing for seniors, the local economic conditions will not have a direct positive or negative impact on the subject property.

DEMOGRAPHIC CHARACTERISTICS

Population and Household Trends

In 2000, the population of the City of Petersburg was 33,740, and in 2010 the population was recorded as 32,420. Population projections for Petersburg are provided by the Virginia State Data Center. Based on these data, the population of that area is projected to be 31,821 by 2018, and to be around 31,673 by 2020. This projection period reflects the scheduling of the rehabilitation program at the subject development.

Information on population trends and changes between 2000 and 2020 are set out in Table 9, below.

Table 9- Population Trends

	City of Petersburg
2000	33,740
2010	32,420
2018	31,821
2020	31,673
absolute change	
2000-2010	-1,320
2010-2018	-599
2018-2020	-148
annual change	
2000-2010	-132
2010-2018	-75
2018-2020	-74

Source: 2000 and 2010 Census; Virginia State Data Center; T.Ronald Brown: Research & Analysis

Projections of the number of households for the City of Petersburg are set out in Table 10, below.

In 2000, there were 13,799 households in Petersburg and 13,634 in 2010. Based on the population projections set out, above, there will be around 13,684 households in 2018 and 13,696 in 2020.

Table 10 - Household Trends

	City of Petersburg
2000	13,799
2010	13,634
2018	13,684
2020	13,696
absolute change	•
2000-2010	-165
2010-2018	50
2018-2020	13
annual change	
2000-2010	-17
2010-2018	6
2018-2020	6

Source: 2000 and 2010 Census; Virginia State Data Center; T.Ronald Brown: Research & Analysis

Population and household characteristics

Age distribution

The distribution of the population, by age, for the City of Petersburg is set out in Table 11, below. These data are from the 2010 Census. Here it is seen that the median age of the population of Petersburg was 39.8 years.

Table 11 - Age Distribution

	City of Pe	tersburg
	number	percent
Under 5 years	2,109	6.5
5 to 9 years	1,735	5.4
10 to 14 years	1,726	5.3
15 to 19 years	2,020	6.2
20 to 24 years	2,888	8.9
25 to 29 years	2,433	7.5
30 to 34 years	1,749	5.4
35 to 39 years	1,607	5.0
40 to 44 years	2,146	6.6
45 to 49 years	2,511	7.7
50 to 54 years	2,486	7.7
55 to 59 years	2,302	7.1
60 to 64 years	1,854	5.7
65 to 69 years	1,483	4.6
70 to 74 years	1,089	3.4
75 to 79 years	870	2.7
80 to 84 years	677	2.1
85 years and over	735	2.3
#25% POS 52775		1007278
55 and older	9,010	27.8
65 and older	4,854	15.0
median	39.8	

Source: 2010 Census; T.Ronald Brown: Research & Analysis

Age projections

Official population projections by age at the County level are provided by the Virginia State Data Center. Here, the population of Petersburg aged 65 years and older is projected to increase from 4,854 in 2010 to 5,349 in 2018 and to 5,481 by 2020. The number of older renters is projected to increase from 1,390 to 1,476 between 2019 and 2020.

Table 12 - Population and Households, 65 years and older

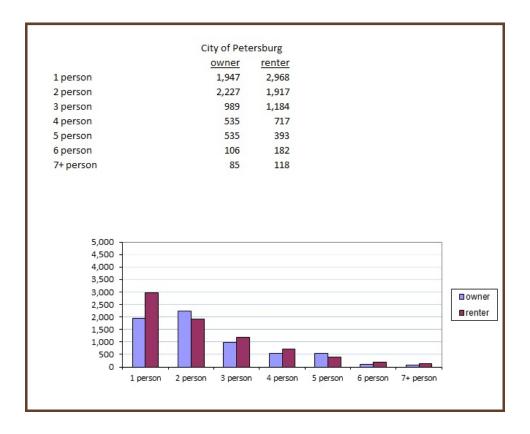
City of Petersburg			
	Population	<u>Households</u>	Renters
2000	5,247	3,415	944
2010	4,854	3,300	1,092
2018	5,349	3,637	1,390
2020	5,481	3,726	1,476

Source: 2000 and 2010 Census; Virginia State Data Center; T.Ronald Brown: Research & Analysis

Household size

Table 13 below, sets out household size, by tenure, for households in Petersburg.

Table 13 - Household Size



Source: 2010 Census; T.Ronald Brown: Research & Analysis

Tenure

Table 14, below, sets out the number and proportion of owner and renter households for the City of Petersburg. In the years beyond 2010, the tenure proportions are based on 2000 to 2010 tenure trends. In 2010, as many as 54.9 percent of households in Petersburg were renters.

Table 14 - Tenure

City of Pete	rsburg		persons per	Owner-or	ccupied	Renter-or	ccupied
po	pulation	households	household	number	percent	number	percent
2000	33,740	13,799	2.45	6,807	49.3	6,992	50.7
2010	32,420	13,634	2.38	6,155	45.1	7,479	54.9
2018	31,821	13,684	2.33	5,686	41.5	7,998	58.5
2020	31,673	13,696	2.31	5,563	40.6	8,134	59.4

Source: 2000 Census and 2010 Census; T.Ronald Brown: Research & Analysis

Tenure by age

Table 15, below, sets out the number of owner and renter households, by age of household head for older households in Petersburg. From this table it can be seen that, for example, 1,092 out of 3,300 households headed by a person 65 years or older in the market area are renters (33.1 percent).

Table 15 - Tenure of Elderly Households

City of Petersburg		Owner-occupied		Renter-occupied	
		number	percent	number	percent
55 to 64 years	2,581	1,566	60.7	1,015	39.3
65 to 74 years	1,788	1,147	64.1	641	35.9
75 to 84 years	1,064	741	69.6	323	30.4
85 years and older	448	320	71.4	128	28.6
total, 55 and older	5,881	3,774	64.2	2,107	35.8
total, 65 and older	3,300	2,208	66.9	1,092	33.1

Source: 2010 Census; T.Ronald Brown: Research & Analysis

Income Distribution

The distribution of household incomes for the City of Petersburg is set out in Table 16, below. These figures are taken from the 2013 to 2017 American Community Survey, and as such are subject to the limitations imposed by this source.

The median household income for Petersburg is around \$33,939.

Table 16 - Household Income

	City of Petersburg		
	number	percent	
less than \$10,000	1,967	14.8	
\$10,000 to \$14,999	1,033	7.8	
\$15,000 to \$19,999	1,034	7.8	
\$20,000 to \$24,999	898	6.8	
\$25,000 to \$29,999	969	7.3	
\$30,000 to \$34,999	915	6.9	
\$35,000 to \$39,999	798	6.0	
\$40,000 to \$44,999	699	5.3	
\$45,000 to \$49,999	509	3.8	
\$50,000 to \$59,999	860	6.5	
\$60,000 to \$74,999	891	6.7	
\$75,000 to \$99,999	1,291	9.7	
\$100,000 to \$124,999	764	5.8	
\$125,000 to \$149,999	217	1.6	
\$150,000 to \$199,999	261	2.0	
\$200,000 or more	156	1.2	
median income	\$33,939		

Income, by age

The distribution of household incomes for persons aged 65 years and older in Petersburg are set out in Table 17, below. Again, these figures are taken from the 2013 to 2017 American Community Survey, and as such are subject to the limitations imposed by this source. The median household income for older households in Petersburg is seen to be around \$29,510.

Table 17 - Household Income, by Age

	City of Petersburg		
	number	percent	
less than \$10,000	359	10.9	
\$10,000 to \$14,999	428	13.0	
\$15,000 to \$19,999	290	8.8	
\$20,000 to \$24,999	302	9.1	
\$25,000 to \$29,999	308	9.3	
\$30,000 to \$34,999	157	4.8	
\$35,000 to \$39,999	160	4.8	
\$40,000 to \$44,999	93	2.8	
\$45,000 to \$49,999	117	3.5	
\$50,000 to \$59,999	251	7.6	
\$60,000 to \$74,999	192	5.8	
\$75,000 to \$99,999	290	8.8	
\$100,000 to \$124,999	126	3.8	
\$125,000 to \$149,999	51	1.5	
\$150,000 to \$199,999	94	2.8	
\$200,000 or more	87	3	
median income	\$29,510		

Renter Income

The distribution of household incomes for renter households for the City of Petersburg. are set out in Table 18, below. These figures are also taken from the 2013 to 2017 American Community Survey.

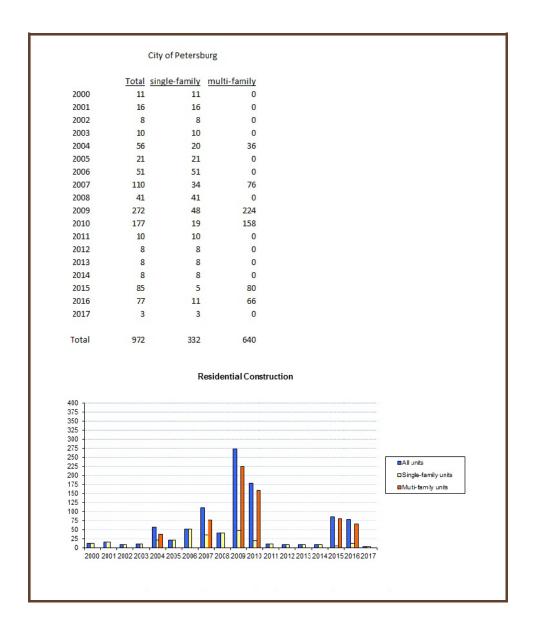
Table 18 - Household Income, Renter Households

	City of Petersburg		
	number	percent	
less than \$10,000	1,570	31.0	
\$10,000 to \$19,999	1,544	30.4	
\$20,000 to \$34,999	1,023	20.2	
\$35,000 to \$49,999	270	5.3	
\$50,000 to \$74,999	296	5.8	
\$75,000 to \$99,999	313	6.2	
\$100,000 or more	55	1.1	

Building permit trends

Table 19,below, gives details of residential construction in the City of Petersburg since 2000. Where the data exist, it can be seen that a total of 972 units were added in throughout the City. Here it is seen that there was significant construction of multi-family units in 2009 and 2010 - which accounted for more than 40 percent of new units added since 2000.

Table 19 - Residential Construction Since 2000



Source: Current Construction Reports, Bureau of the Census; T. Ronald Brown:Research & Analysis

COMPETITIVE ENVIRONMENT

There are several apartment complexes located in the Petersburg area which cater to older persons. These include properties financed with low income housing tax credits, and properties financed through HUD for the low and very low income elderly. These complexes were identified and surveyed, and where useful information was made available to us, this is presented, below.

There are no market rate complexes for seniors in the Petersburg area¹. Based on information from VHDA, the following are the significant properties that have been financed with tax credits and which are designated for the elderly, and are considered potentially comparable to the proposed development.

Bolling Park (47 units) Cavalier Senior (80) Carriage House (118 units) Claiborne Square (47 units)

Bolling Park is a 47-unit property that is the re-use of an historic school, not far from the subject property. Here there are 44 one-bedroom units that rent for \$580, and three two-bedroom units that rent for \$680. Currently, thi property is reported to have no vacant units, and stays effectively fully occupied on an ongoing basis, with a waiting list.

Cavalier Senior is an 80-unit development located off South Crater Road, north of Wagner Road in southern Petersburg. The property opened in late 2016 and has 30 one-bedroom units renting for (based on the most recent information [2018] made available to us) \$480 to \$590, per month. There are 50 two-bedroom units which rent for \$720 to \$810 (again, based on the most recent information). The units are tax credit financed and are targeted at 40, 50, and 60 percent of the local area median income. The property leasedup quickly in a slow season and is effectively fully occupied and maintains a three- to 12-month waiting list.

Carriage House is a fully assisted 118 unit property located in the downtown area. Currently, no units are reported to be vacant - with typical occupancy reported to be in the 95-to-100 percent range. There is a three-to-six month waiting list.

Claiborne Square is a 47 unit tax credit-financed project which opened in 2012. There are 34 one bedroom units and 13 two-bedroom units., which rent for \$680 and \$785, respectively. There are reported to be no vacant units at present, with typical occupancy reported at 95 percent, with a waiting list.

¹ Brighton Manor - which was located on North Union Street in the downtown area - originally attempted to transition from a subsidized to an "affordable" market rate property. This property is no longer designated for seniors and operates as Union Flats.

Gillhaven Manor and Lafayette House offer a total of 200 HUD subsidized units for low and very low income elderly persons, the handicapped, and disabled. Currently, Lafayette House has two vacant units and Gillhaven Manor reports one vacancy. Both properties are reported to stay effectively fully occupied, with waiting lists.

Based on our survey of 558 units that are designated for seniors (excluding Sycamore Towers, where units are being held vacant in anticipation of rehabilitation) there is a calculated market-wide occupancy rate of 99.4 percent. The occupancy level among the tax credit financed properties is 100.0 percent.

There are no potentially comparable market rate apartment developments that cater to the elderly in the Petersburg area. Thus, three market rate properties have been identified as potential comparable properties - they have been chosen on the basis of age, location, and bedroom mix. It should be noted that there are no comparable efficiency units in the area, and that the relatively new historic rehabilitation projects in the downtown area are not considered comparable for the purpose of this analysis. Information for the one- and two-bedroom units at these various properties are summarized below.

Table 20 - Market Rate Properties

Property	Year built	One-bedroom rents	Two-bedroom rents
Addison Crater Woods	1985	\$849-999	\$979-1,149
Crater Square	1974	\$699	\$749
Tanglewood	1971	\$690	\$780

Source: Apartment Managers; T. Ronald Brown: Research & Analysis

The location, rent levels, unit size, age, features, and amenities were analyzed in order to try to establish an estimate of market rent levels for the subject property. Following this approach we have determined that, all things being equal, these market properties suggest a rent of around \$616 for an efficiency unit (based on one-bedroom unit data), around \$644 for a one-bedroom unit, and around \$714 for a two-bedroom unit.



Addison Crater Woods



Crater Square



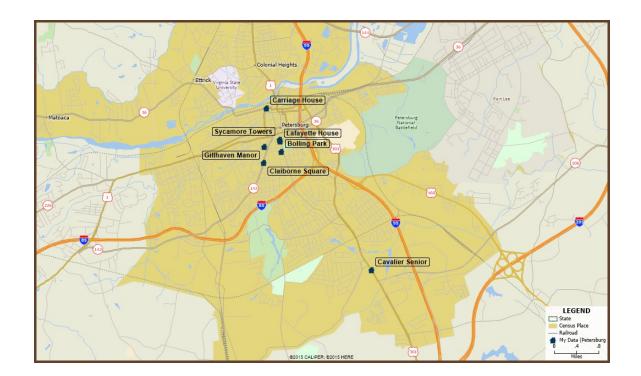
Tanglewood

The various complexes surveyed are summarized as follows:

Complex name	Financing	Year built	Total units	Vacant units	Occupancy (%)
Bolling Park	LIHTC	2000	47	0	100.0
Carriage House	HUD§8	2007	118	0	100.0
Cavalier Senior	LIHTC	2016	80	0	100.0
Claiborne Square	LIHTC	2012	47	0	100.0
Gillhaven Manor	HUD § 8/202	1982	100	1	99.0
Lafayette House	HUD § 8/202	1981	100	2	98.0
Sycamore Towers	Public Housing	1971	100	n/a	n/a

		0 br/1 ba		1	br/1- 1 ½ba	
	number s	size (sq. ft).	rent	number s	size (sq. ft).	rent
Bolling Park				44	770	\$580
Carriage House				112	varies	boi
Cavalier Senior				30	650	n/a
Claiborne Square				34	656-982	\$680
Gillhaven Manor				100	n/a	boi
Lafayette House				95	n/a	boi
Sycamore Towers	56	402-407	boi	36	538	boi
	2	br/1-1½ ba			2 br/2 ba	
	number s	ize (sq. ft).	rent	number s	size (sq. ft).	rent
Bolling Park	3	805	\$680			
Carriage House	6	varies	boi			
Cavalier Senior				50	950	n/a
Claiborne Square				13	929-1,045	\$785
Gillhaven Manor						
Lafayette House	5	n/a	boi			
Sycamore Towers	8	700-708	boi			

Location of existing senior housing





Bolling Park

Location: 35 West Fillmore Street, Petersburg, VA Total units: 47

Year built: 2000 Typical occupancy: 100% (waiting list)

	<u>1 br/1 ba</u>	2 br/1½ ba
Units:	44	3
Unit size (sq. ft.):	770	805
Rent:	\$580*	\$680*
Rent/sq. ft.:	\$0.75*	\$0.84*
Vacant units: 0, overall		

Management: Reliant Realty (Tawanda - 804.733.3300 [1/9])

Telephone: on site \mathbb{Z} / management \square site visit \square other \square

Utilities in rent: Water/Sewer Ø Trash Ø Heat □ Electricity □

Business Center □ Security gate Ø Parking (Garages) □ Laundry Ø

Unit features: Microwave □ Dishwasher □ Washer/Dryer (\$) □ Washer/Dryer Hook-up □

Fireplaces (\$) □ Patios/balconies □

*Tax credit



Carriage House

Location: 135 West Old Street, Petersburg, VA 28303 Total units: 118, elderly Financing: HUD § 8 Rental assistance

Year built: 2007 Typical occupancy: 95-100% (waiting list)

	<u>1 br/1 ba</u>	2 br/1 ba
		_
Units:	112	6
Unit size (sq. ft.):	varies	varies
Contract rent:	\$921	\$1,041
Vacant units: 0, overall		

Management: TRG Management (804.977.2492 [1/14])

Telephone: on site $\normalfont{\overline{\pi}}$ / management $\normalfont{\square}$ site visit $\normalfont{\square}$ other $\normalfont{\square}$

Utilities in rent: Water/Sewer Ø Trash Ø Heat □ Electricity Ø

Business Center □ Security gate □ Parking (Garages) □ Laundry Ø

Unit features: Microwave □ Dishwasher □ Washer/Dryer (\$) □ Washer/Dryer Hook-up □



Cavalier Senior

Location: 596 Halifax Street, Petersburg, VA 28303 Total units: 80

Year built: 2016 Typical occupancy: 100% (waiting list)

	<u>1 br/1 ba</u>	<u>2 br/2 ba</u>
Units:	30	50
Unit size (sq. ft.):	650	950
Rent:	\$500-610*	\$720-810*
Rent/ sq. ft.:	\$0.85*	\$0.81*
Vacant units: n/a		

Management: JDC Management (Danielle - 804.431.2145 [1/8/2018])

Telephone: on site **Z** / management □ site visit □ other □

Utilities in rent: Water/Sewer □ Trash Ø Heat □ Electricity □

Business Center

✓ Security gate/controlled access

✓ Parking

□ Laundry

✓

Unit features: Microwave Ø Dishwasher Ø Washer/Dryer (\$) □ Washer/Dryer Hook-up □

^{*} Tax credit - most recent (2018)data available



Claiborne Square

Location: 596 Halifax Street, Petersburg, VA 28303 Total units: 47

Year built: 2012 Typical occupancy:95% (waiting list)

	<u>1 br/1 ba</u>	<u> 2 Dr/ 2 Da</u>
Units:	34	13
Unit size (sq. ft.):	656-982	929-1,045
Rent:	\$680*	\$785*
Rent/ sq. ft.: Vacant units: 0, overall	\$0.83*	\$0.80*

Management: Better Housing Coalition (Virginia - 804.957.6712 [1/10])

Telephone: on site **Ø** / management □ site visit □ other □

Utilities in rent: Water/Sewer Ø Trash Ø Heat □ Electricity □

Amenities: Club House/Community Room

✓ Fitness center □ Pool □ Tennis □ Playground □

Business Center □ Security gate Ø Parking □ Laundry Ø

Unit features: Microwave □ Dishwasher Ø Washer/Dryer (\$) □ Washer/Dryer Hook-up □

^{*} Tax credit



Gillhaven Manor

Location: 500 Farmer Street South, Petersburg, VA 23802 Total units: 100 Financing: HUD § 8 and § 202 Rental assistance

Year built: 1982 Typical occupancy: 100% (waiting list)

1	br/1	ba

Units: 100
Unit size (sq. ft.): n/a
Contract rent: \$929
Vacant units: 1

Management: Petersburg Redevelopment and Housing Authority (Ronda - 804.733.2255 [1/9])

Telephone: on site \mathbb{Z} / management \square site visit \square other \square

Utilities in rent: Water/Sewer Ø Trash Ø Heat □ Electricity □

Business Center □ Security gate □ Parking (Garages) □ Laundry 💋

Unit features: Microwave □ Dishwasher □ Washer/Dryer (\$) □ Washer/Dryer Hook-up □



Lafayette House

Location: 214 South Sycamore Street, Petersburg, VA Total units: 100 Financing: HUD §8 and §202 Rental assistance

Year built: 1981 Typical occupancy: 98% (waiting list)

	<u> 1 br/1 ba</u>	2 br/1 ba
Units:	95	5
Unit size (sq. ft.):	n/a	n/a
Contract rent:	\$813	\$1,009
Vacant units: 2. overall		

Management: Whetstone Management (Ms. Jones - 804.862.1450 [1/9])

Telephone: on site $\normalfont{\overline{\pi}}$ / management $\normalfont{\square}$ site visit $\normalfont{\square}$ other $\normalfont{\square}$

Utilities in rent: Water/Sewer Ø Trash Ø Heat □ Electricity □

Business Center □ Security gate Ø Parking (Garages) □ Laundry Ø

Unit features: Microwave □ Dishwasher □ Washer/Dryer (\$) □ Washer/Dryer Hook-up □



Sycamore Towers

Location: 128 South Sycamore Street, Petersburg, VA Total units: 100 Financing: Low income conventional public housing Rental assistance

Year built: 1971 Typical occupancy: 98-100 % (waiting list)

	0 br/1 ba	<u>1br/1ba</u>	2 br/1 ba
Units:	56	36	8
Unit size (sq. ft.):	402-407	538	729-757
Vacant units: 37, overall*			

,

Management: Petersburg Redevelopment and Housing Authority

Telephone: on site $\slash\hspace{-0.4em}\not$ / management $\slash\hspace{-0.4em}\square$ site visit $\slash\hspace{-0.4em}\square$ other $\slash\hspace{-0.4em}\square$

Utilities in rent: Water/Sewer Ø Trash Ø Heat □ Electricity Ø

Business Center □ Security gate □ Parking (Garages) □ Laundry 🎜

Unit features: Microwave □ Dishwasher □ Washer/Dryer (\$) □ Washer/Dryer Hook-up □

^{*} units held vacant as part of rehabilitation program

AFFORDABILITY ANALYSIS, DEMAND ANALYSIS, CAPTURE RATES, AND PENETRATION RATES

Demand Analysis

The proposed development will rent to older adults - defined as those aged 62 years and older, based on the HUD definition. Following VHDA market study guidelines (and the format of Census data for the elderly), need and demand will be based on persons aged 65 years and older.

The market for the proposed apartments is derived from two principal sources: the population and household growth market, and from existing households currently living in the area who could move to the project were it to be made available. With respect to the latter, separate consideration is given to market area renter households and market area owner-occupied households.

Income is a key variable in the analysis of housing markets. Of the 100 units proposed, all will be targeted to households with incomes up to 60 percent of the median, and therefore qualify the apartments for low income housing tax credit status. Full rental assistance is available.

The maximum housing expenses for the proposed units are based on the above income limits and assume an average 1.5 persons per household and that renters will pay no more than 30 percent of their incomes on housing expenses (rent plus utilities).

Table 21 - Income Limits and Maximum Housing Costs

		2772
	50 percent	60 percent
1 person	\$29,150	\$34,980
2 person	\$33,300	\$39,960
3 person	\$37,450	\$44,940
	50 percent	60 percent
	50 percent	60 percent
0 bedroom	\$729	\$875
1 bedroom	\$781	\$937
2 bedroom	\$936	\$1,124

Source: HUD

Information as to rents and income targeting, and qualifying income ranges are set out in Table 22, below

Table 22 - Rents and Income Targeting

proposed unit	ts and income ta	rgeting	
	50 percent	60 percent	total
0 bedroom	0	56	56
1 bedroom	0	36	36
2 bedroom	0	8	8
total	0	100	100
propsed units	and rent targeti	ng	
	50 percent	60 percent	total
0 bedroom	10	46	56
1 bedroom	0	36	36
2 bedroom	0	8	8
total	10	90	100
proposed rent	ts		
	50 percent	60 percent	
0 bedroom	\$616	\$616	
1 bedroom		\$647	
2 bedroom		\$748	
proposed rent	ts as a proportio	n (%) of maximun	n
	50 percent	60 percent	
0 bedroom	104.8%	84.0%	
1 bedroom		83.1%	
2 bedroom		79.9%	

Source: Applicant; T Ronald Brown: Research & Analysis

It should be noted that ten efficiency units will have rents targeted to be affordable at the 50 percent rent level, and the remaining efficiency units are targeted to be affordable at the 60 percent level.

From this it can be seen that housing expenses at the proposed (rent-assisted) apartments fall between 80 and 105 percent of the maximum levels.

Qualifying income ranges are a function of the income needed to afford the proposed units and the mandated upper income limits. There is no official lower income limit for the proposed apartments. However, for the purposes of this report it is assumed that tenants will pay no more than 40 percent of their income on housing costs (rent and utilities). The upper income for the assisted units is the income needed to afford the rents at the proposed development, or the 50 percent income limit: whichever is lower. The upper limits are a function of household size - based on a standard of one and one-half persons per bedroom, capped at two persons for elderly complexes). Where rents are above the maximum allowable, the maximum is used.

Table 23 - Qualifying Income Ranges

		10110
	assi	sted
	lower	upper
0 bedroom	\$0	\$21,870
1 bedroom	\$0	\$24,150
2 bedroom	\$0	\$28,050
	50 pe	rcent
	lower	upper
0 bedroom	\$21,870	\$29,150
1 bedroom	\$24,150	\$31,225
2 bedroom	\$28,050	\$33,300
	60 pe	rcent
	lower	upper
0 bedroom	\$22,710	\$34,980
1 bedroom	\$24,150	\$37,470
2 bedroom	\$28,050	\$39,960

Source: Applicant; T Ronald Brown: Research & Analysis

The major variables to be examined are age, tenure, and income. These data are no longer available from the Decennial Census. Nonetheless, data can be extrapolated from the most recent American Community Survey - again, subject the limitations of those data. These data, for the market area for the proposed complex, are set out below.

Table 24 - Household Income, Older Renter Households

	All Olde	r Owners	All Old	er Renters	Overburde	ned Renters
Income	Number	Percentage	Number	Percentage	Number	Percentage
Up to \$10,000	154	6.8	197	14.2	118	16.9
\$10,000 - \$19,999	344	15.3	573	41.2	314	44.9
\$20,000 - \$34,999	543	24.1	286	20.6	200	28.5
\$35,000 - \$50,000	335	14.9	178	12.8	59	8.5
\$50,000 - \$75,000	326	14.5	61	4.4	8	1.2
\$75,000 - \$100,000	244	10.9	61	4.4	0	0.0
\$100,000 and over	303	13.5	33	2.4	0	0.0

Source: 2013 to 2107 American Community Survey; T.Ronald Brown: Research & Analysis

As noted, these data are necessarily from the American Community Survey and are based on the 5-year average for the period from 2013 to 2107 - and not for a specific year.

From this table it can be seen that 14.2 percent of the market area older renter households have incomes less than \$10,000 and a further 41.2 percent have incomes between \$10,000 and \$20,000. Around 20.6 percent of older renters are seen to be in the \$25,000 to \$35,000 income range. Around 50.4 percent of all older renters are rent-overburdened. This table also illustrates how rent-overburdened households are concentrated in the lower income groups.

Based on the income ranges set out in Table 23 and the income distribution set out in Table 24, it is found that around 63.8 percent of market area older renter households qualify for assisted units at 50 percent of the median. The corresponding figure for unassisted units at the 50 percent level is 10.0 percent, with that at the 60 percent level being 14.3 percent.

Projections of need and demand are based upon a 2018 to 2020 projection period and the resulting calculations are corrected to account for any construction of comparable projects and/or planned comparable units.

With respect to household growth of older households, the projections of the older population and households for the project market area show that the number of elderly persons (65 years and older) was projected to increase from 5,349 in 2018 to 5,481 in 2020. Likewise, the number of older households was projected to increase from 3,637 to 3,726.

The number of elderly renters is projected to increase by 86 between 2018 and 2020 (from 1,390 to 1,476 households). Based on the distribution of elderly renter household incomes there are 55 new elderly renter households which qualify for assisted units and twelve which will qualify for unassisted units.

Again, the market for the proposed apartments comprises not only demand from population and household growth, but also from existing older households-both homeowners and renters-who would move to the new apartments were they made available. The extent to which any new development is able to attract a certain share of this market is largely a factor of several interrelated factors. These include the location of the development, the amenities it offers, the quality of design and the effectiveness of the development's marketing and management. That is, the perceived value of the community in terms of price, convenience, and life-stye.

Our calculations show that there will be a total of 942 older renter households in the qualifying income range at the rent-assisted 50 percent level, and 210 households at unassisted level. These figures have to be adjusted to reflect the proportion that are likely to move to a new complex. With respect to existing households in the project market area it is found that, based on the most recent American Community Survey data, 57.9 percent of renters qualifying at the rent-assisted 50 percent and 69.7 percent and 63.4 percent of those at the unassisted levels are rent-overburdened. Here, these proportions are applied to the number of income eligible existing renter households to estimate how many of those households are likely to consider moving to the proposed apartments.

State Agency market study guidelines allow for the replacement of rental units due to demolition, abandonment, obsolescence and the like. This substandard housing component is based on an annual average rate of 0.9 percent of the rental housing stock. This rate is based on data from the HUD American Housing Survey publication "Components of Inventory Change: 2007-2009" published in May 2011. Based on the number of rental units in the project market area, this translates to a need for an additional 19 assisted units and four unassisted units.

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Our calculations show that there will be a total of 719 older owner-occupied households in the qualifying income range at the rent-assisted level, and 150 units at the unassisted level. With respect to the existing elderly homeowners it is realistically assumed that perhaps 5 percent would consider moving to the proposed apartments.

Total demand is therefore seen to amount to 655 rent-assisted units and 171 unassisted units. This demand has to be segmented to determine demand by number of bedrooms per unit. For the purposes of this report, it can be reasonably assumed that perhaps one-fourth of older households (65 years and older) would choose an efficiency unit, one-half would choose a one-bedroom unit, and one-fourth would choose a two-bedroom unit.

These figures are based on a 2018 to 2020 projection period and therefore have been corrected to account for the funding and/or construction of any directly comparable projects in the market area over that time-frame. No new comparable projects have been added in the project market area over the projection period, nor have any other comparable projects been funded, or are under construction. It should be noted that 80-units at the Cavalier Senior unassisted tax credit financed property opened in late 2016, prior to the projection period. The net need is therefore for 719 units.

The preceding calculations are summarized in the table on the following page.

Table 25 - Demand Calculations

		50 percent assisted	50 percent unassisted	60 percent unassisted	<u>Total*</u> unassisted
(i)	income eligible new renter households	55	9	12	12
(ii)	income eligible existing renter households	942	148	210	210
(iii)	existing renter households, likely to move	545	103	133	133
(iv)	renters in obsolete housing	19	3	4	4
(v)	income eligible existing owner households	719	115	150	420
(vi)	existing owner households, likely to move	36	13	21	21
	Total demand (i)+(iii)+(iv)+(vi)	655	128	171	171
	Supply	0	0	0	0
	Net demand	655	128	171	171
	* Excluding gap/overlap note: totals may not add due to rounding				

Source: T. Ronald Brown: Research & Analysis

Capture rates are illustrated in the table on the following page.

Table 26 - Capture Rates

		50 percent	50 percent	60 percent	Total*
		assisted	unassisted	unassisted	unassisted
Total den					
	0 bedroom	164	32	43	4
	1 bedroom	328	64	85	8
	2 bedroom	164	32	43	4
	Total	655	128	171	17
Supply					
	0 bedroom	0	0	0	
	1 bedroom	0	0	0	
	2 bedroom	0	0	0	
	Total	0	0	0	
Net dema	and				
	0 bedroom	164	32	43	4
	1 bedroom	328	64	85	8
	2 bedroom	164	32	43	4
	Total	655	128	171	17
Units pro	posed				
	0 bedroom	56	20	36	5
	1 bedroom	36	0	36	3
	2 bedroom	8	0	8	
	Total	100	20	80	10
Capture r	ates				
	0 bedroom	34.2%	62.5%	84.2%	131.0
	1 bedroom	11.0%	0.0%	42.1%	42.1
	2 bedroom	4.9%	0.0%	18.7%	18.79
	Total	15.3%	15.6%	46.8%	58.59
*= 1 1.	gap/overlap				

Source: T. Ronald Brown: Research & Analysis

Given the calculated need, the proposed 100-unit rent-assisted development amounts to 15.3 percent of the total net need for rent-assisted units, as proposed. This assumes that such a project would be a new introduction to the local market. Given that the subject development is the rehabilitation of an existing property, any units that may need to be filled with new tenants following the rehabilitation program would represent a small share of the market for such housing.

The capture rate, by bedroom, is determined to be 34.2 percent for the 56 rent-assisted efficiency units, 11.0 percent for the 36 one-bedroom units, and 4.9 percent for the eight two-bedroom units.

The capture rates presented above are considered reasonable for this property.

For reference, a 100-unit unassisted project would correspond to 58.5 percent of that market, all things considered.

Affordability Analysis

Here, an affordability analysis addresses the total number of income eligible renter households in the market are relative to the size of the proposed development.

The minimum income is that associated with the rent for the least expensive unit offered, and the upper limit is based on the 50 percent limit (the highest target income range) for the largest unit size, by number of bedrooms. Here, the lower income is seen to be \$0, as the proposed development is rent-assisted. The upper income is \$33,300 (the two-person income limit at 50 percent of the median). Based on the income data set out in Table 22, there will be 1,024 older renter households in that range. Thus, the proposed 100-unit development corresponds to a 9.8 percent affordability analysis capture rate.

Penetration rate.

A penetration rate is defined, for the purposes of this analysis, as the proportion of income-eligible households needed to fill the proposed development, plus those in existing competitive units, plus any in competitive units that are approved and funded for future development. Here, given that the proposed development will be a rent-assisted property targeting very low income households, the existing elderly, rent-assisted inventory is considered those units that are comparable to and competitive with, the subject property.

Again, the target income range is seen to be from \$0 to \$33,300. The comparable properties are seen to be Carriage House, Gillhaven Manor and Lafayette House- a total of 318 units. There are as, noted, 1,024 qualifying elderly renter households in the market area. It is seen that 100 units are proposed, with 318 comparable units, with none under construction or funded for future construction: a total of 418 units. Thus the penetration rate - as defined - amounts to 40.8 percent.

Summary

Consideration of the capture rate (15.3 percent), the (9.8 percent) affordability analysis capture, and the (40.8 percent) penetration rate suggests that the proposed development is marketable, as proposed.

LOCAL PERSPECTIVE OF RENTAL HOUSING MARKET

As part of the research for this market study, interviews were held with property managers, local government officials, and others with particular knowledge of the local housing market. The proposed development will offer and attractive, new, apartment complex - to be leased subject to the provisions of the Low Income Housing Tax Credit program. Property managers of existing complexes and/or other representatives of management companies were a potential source of information.

The proposed development is the rehabilitation of an existing public housing apartment complex. As such it does not represent a net addition to the local housing stock - thus this proposal represents a potential qualitative rather than a quantitative impact on the market. Representatives of the property management company confirmed that the current residents would benefit significantly from the improvement to their apartments.

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ANALYSIS/CONCLUSIONS

Based on the above, the project could expect to lease-up over a period dictated by the rehabilitation schedule, plus 60 days, or so.

As an existing, fully leased, property the proposed rehabilitation will not have an impact on existing housing in the area.

It is our recommendation that, based upon our analysis, the proposed apartments should be developed as proposed, and that the project should be awarded low income housing tax credits. This conclusion is based on our analysis of the economic and demographic criteria of the project market area as defined and on our project specific demand analysis and survey of the supply of rental housing in the market--as set out in the foregoing report and summarized in the Executive Summary.

OTHER REQUIREMENTS

Statement and signature

I affirm the following:

- 1. That I have made a physical inspection of the site and market area.
- 2. The appropriate information has been used in the comprehensive evaluation of the need and demand for the proposed rental units.
- 3. To the best of my knowledge the market can support the demand shown in this study.
- 4. Neither I nor anyone at my firm has any interest in the proposed development or relationship with the ownership entity.
- 5. Compensation for my services is not contingent upon this development receiving any approval of funds which are being applied for.

Market Analyst

J. Rould B

As affirmed in the Scope of Work, there is no identity of interest between the analyst and the entity for which the report has been prepared.

Similarly, the recommendations and conclusions are based solely on the analyst's experience, opinion, and best efforts.

Analyst Qualifications

T. Ronald Brown: Research & Analysis is a planning and economics consulting firm which provides real estate market analysis.

The President of the firm is T. Ronald Brown. He has 30 years experience in the provision of market studies for subsidized and unsubsidized apartment developments and for-sale housing. Over the last two decades or so, Mr. Brown has produced around 2,500 studies in at least 20 states, predominantly in the Southeast.

Mr. Brown has a Honours Master of Arts degree in Geographical Studies from the University of St. Andrews in St. Andrews, Scotland.

The firm has primary experience in market analysis for residential projects including both single-family homes and multi-family units (for sale and for rent). A significant proportion of the firm's business focuses on apartment market studies—for family renters and for elderly persons. These reports include conventionally financed projects (including HUD 221 (d) (4) projects), affordable housing (including low income tax credit financed projects) and subsidized housing.

Clients include for-profit developers, non-profit developers and community development corporations, state housing finance agencies, syndicators, and municipalities.

List of sources

Te foregoing reports contains information from a variety of sources - those sources (such as contact numbers for property interviews) are cited at the appropriate place in the report itself. The major sources of data include:

The U.S. Census - 2000 and 2010, and the American Community Survey (2013-2017)

Virginia Housing Development Authority

U.S. Department of HUD

U.S. Department of Agriculture

Virginia State Data Center/Weldon Cooper Center for Public Service

Virginia Employment Commission

Virginia Economic Development Partnership

City of Petersburg

U.S. Bureau of Labor Statistics

HUDUSER (e.g., SOCDS building permits database)

MARKET STUDY TERMINOLOGY

Absorption period The period of time necessary for a newly constructed or renovated property to

achieve the *stabilized level of occupancy*. The absorption period begins when the first certificate of occupancy is issued and ends when the last unit to reach the *stabilized level of occupancy* has a signed lease. Assumes a typical premarketing period, prior to the issuance of the certificate of occupancy, of about three to six months. The month that leasing is assumed to begin should

accompany all absorption estimates.

Absorption rate The average number of units rented each month during the absorption period.

Acceptable rent burden The rent-to-income ratio used to qualify tenants for both income-restricted and

non-income restricted units. The acceptable rent burden varies depending on the requirements of funding sources, government funding sources, target

markets, and local conditions.

Achievable Rents See Market Rent, Achievable Restricted Rent.

Affordable housing Housing affordable to low or very low-income tenants.

Amenity Tangible or intangible benefits offered to a tenant. Typical amenities include

on-site recreational facilities, planned programs, services and activities.

Annual demand The total estimated demand present to the market in any one year for the type

of units proposed.

Assisted housing Housing where federal, state or other programs *subsidize* the monthly costs to

the tenants.

Bias A proclivity or preference, particularly one that inhibits or entirely prevents an

impartial judgment.

Capture rate The percentage of age, size, and income qualified renter households in the

primary market area that the property must capture to fill the units. Funding agencies may require restrictions to the qualified households used in the calculation including age, income, living in substandard housing, mover-ship and other comparable factors. The *Capture Rate* is calculated by dividing the total number of units at the property by the total number of age, size and income qualified renter households in the *primary market area*. See also:

penetration rate.

Comparable property

A property that is representative of the rental housing choices of the subject's primary market area and that is similar in construction, size, amenities, location, and/or age. Comparable and competitive properties are generally used to derive market rent and to evaluate the subject's position in the market.

Competitive property

A property that is comparable to the subject and that competes at nearly the same rent levels and tenant profile, such as age, family or income.

Study

Comprehensive Market NCHMA defines a comprehensive market study for the purposes of IRC Section 42 as a market study compliant with its Model Content Standards for Market Studies for Rental Housing. Additionally, use of the suggested wording in the NCHMA certification without limitations regarding the comprehensive nature of the study, shows compliance with the IRC Section 42 request for completion of a market study by a 'disinterested party.'

Concession

Discount given to a prospective tenant to induce the tenant to sign a lease. Concessions typically are in the form of reduced rent or free rent for a specific lease term, or for free amenities, which are normally charged separately (i.e. washer/dryer, parking).

Demand

The total number of households in a defined market area that would potentially move into the proposed new or renovated housing units. These households must be the appropriate age, income, tenure and size for a specific proposed development. Components of demand vary and can included household growth; turnover, those living in substandard conditions, rent over-burdened households, and demolished housing units. Demand is project specific.

Effective rents

Contract rent less concessions.

Household trends

Changes in the number of households for a particular area over a specific period of time, which is a function of new household formations (e.g. at marriage or separation), changes in average household size, and net *migration*.

Income band

The range of incomes of households that can afford to pay a specific rent but do not have below any applicable program-specific maximum income limits. The minimum household income typically is based on a defined acceptable rent burden percentage and the maximum typically is pre-defined by specific program requirements or by general market parameters.

Infrastructure

Services and facilities including roads, highways, water, sewerage, emergency services, parks and recreation, etc. Infrastructure includes both public and private facilities.

Market advantage The difference, expressed as a percentage, between the estimated market rent

for an apartment property without income restrictions and the lesser of (a) the owner's proposed rents or (b) the maximum rents permitted by the financing program for the same apartment property. (market rent - proposed rent) /

market rent * 100

Market analysis A study of real estate market conditions for a specific type of property.

Market area See *primary market area*.

Market demand The total number of households in a defined market area that would potentially

move into any new or renovated housing units. Market demand is not project specific and refers to the universe of tenure appropriate households, independent of income. The components of market demand are similar to

those used in determining project-specific demand.

A common example of market demand used by HUD's MAP program, which is based on three years of renter household growth, loss of existing units due to

demolition, and market conditions.

Market rent The rent that an apartment, without rent or income restrictions or rent

subsidies, would command in the *primary market area* considering its location, features and amenities. Market rent should be adjusted for *concessions* and

owner paid utilities included in the rent.

Market study A comprehensive study of a specific proposal including a review of the housing

market in a defined market area. Project specific market studies are often used by developers, syndicators, and government entities to determine the appropriateness of a proposed development, whereas market specific market studies are used to determine what housing needs, if any, exist within a specific

geography.

Marketability The manner in which the subject fits into the market; the relative desirability

of a property (for sale or lease) in comparison with similar or competing

properties in the area.

Market vacancy rate, Percentage of rent loss due to concessions, vacancies, and non-payment of rent

economic on occupied units.

Market vacancy rate, Average number of apartment units in any market which are unoccupied physical divided by the total number of apartment units in the same market, excluding

units in properties which are in the lease-up stage.

Migration The movement of households into or out of an area, especially a primary

market area.

Mixed income property An apartment property containing (1) both income restricted and

unrestricted units or (2) units restricted at two or more income limits (i.e. low

income tax credit property with income limits of 30%, 50% and 60%).

Mobility The ease with which people move from one location to another.

Move-up demand An estimate of how many consumers are able and willing to relocate to more

expensive or desirable units. Examples: tenants who move from class-C properties to class-B properties, or tenants who move from older tax credit

properties to newer tax credit properties.

Multi-family Structures that contain more than two housing units.

Neighborhood An area of a city or town with common demographic and economic features

that distinguish it from adjoining areas.

Net rent (also referred to Gross rent less tenant paid utilities.

as contract rent or

lease rent)

Penetration rate The percentage of age and income qualified renter households in the *primary*

market area that all existing and proposed properties, to be completed within six months of the subject, and which are competitively priced to the subject that must be captured to achieve the *stabilized level of occupancy*. Funding agencies may require restrictions to the qualified Households used in the calculation including age, income, living in substandard housing, mover ship and

other comparable factors.

Units in all proposals / households in market * 100

See also: capture rate.

Pent-up demand A market in which there is a scarcity of supply and vacancy rates are very low.

Population trends Changes in population levels for a particular area over a specific period of time

— which is a function of the level of births, deaths, and net *migration*.

Primary market area A geographic area from which a property is expected to draw the majority of

its residents.

Programmatic rents See restricted rents.

Project based rent assistance	Rental assistance from any source that is allocated to the property or a specific number of units in the property and is available to each income eligible tenant of the property or an assisted unit.
Redevelopment	The redesign or rehabilitation of existing properties.
Rent burden	gross rent divided by adjusted monthly household income.
Rent burdened households	Households with <i>rent burden</i> above the level determined by the lender, investor, or public program to be an acceptable rent-to-income ratio.
Restricted rent	The rent charged under the restrictions of a specific housing program or subsidy.
Restricted rent, Achievable	The rents that the project can attain taking into account both market conditions and rent in the <i>primary market area</i> and income restrictions.
Saturation	The point at which there is no longer demand to support additional unit. Saturation usually refers to a particular segment of a specific market.
Secondary market area	The portion of a market that supplies additional support to an apartment property beyond that provided by the primary market area.
Special needs population	Specific market niche that is typically not catered to in a conventional apartment property. Examples of special needs populations include: substance abusers, visually impaired person or persons with mobility limitations.
Stabilized level of occupancy	The underwritten or actual number of occupied units that a property is expected to maintain after the initial rent-up period, expressed as a percentage of the total units.
Subsidy	Monthly income received by a tenant or by an owner on behalf of a tenant to pay the difference between the apartment's <i>contract rent</i> and the amount paid by the tenant toward rent.
Substandard conditions	Housing conditions that are conventionally considered unacceptable which may be defined in terms of lacking plumbing facilities, one or more major systems not functioning properly, or overcrowded conditions.
Target income band	The income band from which the subject property will draw tenants.
Target population	The market segment or segments a development will appeal or cater to. State agencies often use target population to refer to various income set asides, elderly v. family, etc.

Tenant paid utilities The cost of utilities (not including cable, telephone, or internet) necessary for the habitation of a dwelling unit, which are paid by the tenant. Turnover 1. An estimate of the number of housing units in a market areas as a percentage period of total housing units in the market area that will likely change occupants in any one year. See also: vacancy period. Housing units with new occupants / housing units * 100 2. The percent of occupants in a given apartment complex that move in one year. Unmet housing need New units required in the market area to accommodate household growth, homeless people, and housing in substandard conditions. Unrestricted rents Rents that are not subject to restriction. Unrestricted units Units that are not subject to any income or rent restrictions. Vacancy period The amount of time that an apartment remains vacant and available for rent. Vacancy rate-economic Maximum potential revenue less actual rent revenue divided by maximum potential rent revenue. The number of total habitable units that are vacant vacancy rate - physical divided by the total number of units in the property.

Other Terms

Area Median Income (AMI)

100% of the gross median household income for a specific Metropolitan Statistical Area, county or non-metropolitan area established annually by HUD.

Attached housing

Two or more dwelling units connected with party walls (e.g. townhouses or flats).

Basic Rent

The maximum monthly rent that tenants who do not have rental assistance pay to lease units developed through the USDA-RD Section 515 Program, the HUD Section 236 Program and HUD Section 223(d)(3) Below Market Interest Rate Program. The Basic Rent is calculated as the amount of rent required to operate the property, maintain debt service on a subsidized mortgage with a below-market interest rate, and provide a return on equity to the developer in accordance with the regulatory documents governing the property.

Below Market Interest Rate Program (BMIR) Program targeted to renters with income not exceeding 80% or area median income by limiting rents based on HUD's BMIR Program requirements and through the provision of an interest reduction contract to subsidize the market interest rate to a below-market rate. Interest rates are typically subsidized to effective rates of one percent or three percent.

Census Tract

A small, relatively permanent statistical subdivision delineated by a local committee of census data users for the purpose of presenting data. Census tract boundaries normally follow visible features, but may follow governmental unit boundaries and other non-visible features; they always nest within counties. They are designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time of establishment. Census tracts average about 4,000 inhabitants.

Central Business District (CBD) The center of commercial activity within a town or city; usually the largest and oldest concentration of such activity.

Community
Development
Corporation (CDC)

Entrepreneurial institution combining public and private resources to aid in the development of socio-economically disadvantaged areas.

Condominium

A form of joint ownership and control of property in which specified volumes of space (for example, apartments) are owned individually while the common elements of the property (for example, outside walls) are owned jointly.

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1. The actual monthly rent payable by the tenant, including any rent subsidy paid on behalf of the tenant, to the owner, inclusive of all terms of the lease. (HUD & RD) 2. The monthly rent agreed to between a tenant and a landlord (Census).

Difficult Development Area (DDA)

An area designated by HUD as an area that has high construction, land, and utility costs relative to the Area Median Gross Income. A project located in a DDA and utilizing the Low Income Housing Tax Credit may qualify for up to 130% of eligible basis for the purpose of calculating the Tax Credit allocation.

Detached Housing

A freestanding dwelling unit, typically single-family, situated on its own lot.

Elderly or Senior Housing

Housing where (1) all the units in the property are restricted for occupancy by persons 62 years of age or older or (2) at least 805 of the units in each building are restricted for occupancy by Households where at least one Household member is 55 years of age or older and the housing is designed with amenities and facilities designed to meet the needs of senior citizens.

Extremely Low Income

Person or Household with income below 30% of Area Median Income adjusted for Household size.

Fair Market Rent (FMR)

The estimates established by HUD of the Gross rents (Contact rent plus Tenant Paid Utilities) needed to obtain modest rental units in acceptable condition in a specific county or metropolitan statistical area. HUD generally sets FMR so that 40% of the rental units have rents below FMR. In rental markets with a shortage of lower priced rental units HUD may approve the use of Fair Market Rents that are as high as the 50th percentile of rents.

Garden Apartments

Apartments in low-rise buildings (typically two or four stories) that feature low density, ample open-space around buildings, and on-site parking.

Gross Rent

the monthly housing cost to a tenant which equals the Contract rent provided for in the lease plus the estimated cost of all Tenant Paid Utilities.

High-rise

A residential building having more than ten stories.

Household

One or more people who occupy a housing unit as their usual place of residence.

Housing Unit

House, apartment, mobile home, or group of rooms used as a separate living quarters by a single household.

Housing Choice Voucher (Section 8 Program Federal rent subsidy program under Section 8 of the U.S. Housing Act, which issues rent vouchers to eligible Households to use in the housing of their choice. The voucher payment subsidizes the difference between the Gross Rent and the tenant's contribution of 30% of adjusted income, (or 10% of gross income, whichever is greater). In cases where 30% of the tenants' income is less than the utility allowance, the tenant will receive an assistance payment. In other cases, the tenant is responsible for paying his share of the rent each month.

Housing Finance Agency (HFA) State or local agencies responsible for financing housing and administering Assisted Housing programs.

HUD Section 8 Program

Federal program that provides project based rental assistance. Under the program HUD contracts directly with the owner for the payment of the difference between the Contract Rent and a specified percentage of tenants' adjusted income.

HUD Section 202 Program Federal Program, which provides direct capital assistance (i.e. grant) and operating or rental assistance to finance housing designed for occupancy by elderly households who have income not exceeding 50% of Area Median Income. The program is limited to housing owned by 501(c)(3) nonprofit organizations or by limited partnerships where the sole general partner is a 501(c)(3) nonprofit organization. Units receive HUD project based rental assistance that enables tenants to occupy units at rents based on 30% of tenant income.

HUD Section 811 Program Federal program, which provides direct capital assistance and operating of rental assistance to finance housing designed for occupancy by persons with disabilities who have income not exceeding 50% of Area Median Income. The program is limited to housing owned by 501(c)(3) nonprofit organizations or by limited partnerships where the sole general partner is a 510(c)(3) nonprofit organization.

HUD Section 236 Program Federal program which provides interest reduction payments for loans which finance housing targeted to Households with income not exceeding 80% of area median income who pay rent equal to the greater of Basic Rent or 30 percent of th their adjusted income. All rents are capped at a HUD approved market rent.

Income Limits

Maximum Household income by county or Metropolitan Statistical Area, adjusted for Household size and expressed as a percentage of the Area Median Income for the purpose of establishing an upper limit for eligibility for a specific housing program. Income Limits for federal, state and local rental housing programs typically are established at 30%, 50%, 60% or 80% of AMI. HUD publishes Income Limits each year for 30% median. Very Low Income (50%), and Low-Income (80%), for households with 1 through 8 people.

Low Income Person or Household with gross Household Income below 80% of Area Median

Income adjusted for Household size.

Low Income Housing

Tax Credit

A program to generate equity for investment in affordable rental housing authorized pursuant to Section 42 of the Internal Revenue Code, as amended. The program requires that a certain percentage of units built be restricted for occupancy to households earning 60% or less of Area Median Income, and that the rents on those units be restricted accordingly.

Low Rise Building A building with one to three stories.

Metropolitan Statistical Area (MSA)

A geographic entity defined by the federal Office of Management and Budget for use by federal statistical agencies, based on the concept of a core area with a large population nucleus, plus adjacent communities having a high degree of economic and social integration with that core. Qualification of an MSA requires the presence of a city with 50,000 or more inhabitants, or the presence of an Urbanized Area (UA) and a total population of at least 100,000 (75,000 in New England). The county or counties containing the largest city and surrounding densely settled territory are central counties of the MSA. Additional outlying counties qualify to be included in the MSA by meeting certain other criteria of metropolitan character, such as a specified minimum population density or percentage of the population that is urban.

Mid-rise A building with four to ten stories.

Moderate Income Person or Household with gross household income between 80 and 120

percent of area median income adjusted for Household size.

Public Housing or Low Income Conventional Public Housing HUD program administered by local (or regional) Housing Authorities which serves Low- and Very-Low Income Households with rent based on the same formula used for HUD Section 8 assistance.

Qualified Census Tract (QCT)

Any census tract (or equivalent geographic area defined by the Bureau of the Census) in which at least 50% of Households have an income less than 60% of area Median Income or where the poverty rate is at least 25%. A project located in a QCT and receiving Low Income Housing Tax Credits may qualify for up to 130% of the eligible basis for the purpose of calculating the Tax Credit allocation.

Rural Development (RD)
Market Rent

A monthly rent that can be charged for an apartment under a specific USDA-RD housing program, that reflects the agency's estimate of the rent required to operate the property, maintain debt service on an unsubsidized mortgage and provide an adequate return to the property owner. This rent is the maximum rent that a tenant can pay at an RD Property.

Rural Development (RD) Program (Formerly the Farmers Home Administration Section 515 Rural Rental Housing Program)	Federal program which provides the low interest loans to finance housing which serves low- and moderate-income persons in rural areas who pay 30 percent of their adjusted income on rent or the basic rent, which is the higher (but not exceeding the market rent). The Program may include property based rental assistance and interest reduction contracts to write down the interest on the loan to as low as one percent.
Single-Family Housing	A dwelling unit, either attached or detached, designed for use by one Household and with the direct access to a street. It does not share heating facilities or other essential building facilities with any other dwelling.
State Data Center (SDC)	A state agency or university facility identified by the governor of each state to participate in the Census bureau's cooperative network for the dissemination of the census data.
Tenant	One who rents real property from another.
Tenure	The distinction between owner-occupied and renter-occupied housing units.
Townhouse (or Row House)	Single-family attached residence separated from another by party walls, usually on a narrow lot offering small front and back-yards; also called row house.
Very Low Income	Person or Household whose gross household income does not exceed 50% of Area Median Income adjusted for Household size.
Zoning	Classification and regulation of land by local governments according to use categories (zones); often also includes density designations.