

NEED AND DEMAND ANALYSIS

FOR THE

HANOVER APARTMENTS

IN

ASHLAND, VIRGINIA

**Prepared for
Hanover Apartments VA LLC
for submission to
the Virginia Housing Development Authority**

VHDA Application: 2019 - C - 36

As of February 21, 2019

T Ronald Brown: Research & Analysis

P.O. Box 18534

Asheville, NC 28814-0441

TABLE OF CONTENTS

A. EXECUTIVE SUMMARY	Page 1
B. INTRODUCTION AND SCOPE OF WORK	Page 2
C. PROJECT DESCRIPTION	Page 4
D. LOCATION	Page 9
E. MARKET AREA DEFINITION	Page 17
F. EMPLOYMENT AND ECONOMY	Page 19
G. DEMOGRAPHIC CHARACTERISTICS	Page 27
H. COMPETITIVE ENVIRONMENT	Page 35
I. AFFORDABILITY ANALYSIS, DEMAND ANALYSIS, CAPTURE RATES, AND PENETRATION RATES. .	Page 45
J. LOCAL PERSPECTIVES OF RENTAL HOUSING	Page 54
K. ANALYSIS/CONCLUSIONS	Page 55
L. OTHER REQUIREMENTS	Page 56
MARKET STUDY TERMINOLOGY	Page 61

LIST OF TABLES

Table 1 - Distance to Neighborhood and Community Amenities	Page 15
Table 2 - Total Employment	Page 19
Table 3 - Employment, by sector	Page 20
Table 4 - Unemployment trends	Page 21
Table 5 - Major Employers	Page 23
Table 6 - Wages by Industry Sector	Page 24
Table 7 - Commuting Data	Page 25
Table 8 - Commuting Patterns	Page 26
Table 9 - Population Trends	Page 27
Table 10 - Household Trends	Page 28
Table 11 - Age Distribution	Page 29
Table 12 - Household Size	Page 30
Table 13 - Tenure	Page 31
Table 14 - Household Income	Page 32
Table 15 - Household Income, Renter Households	Page 33
Table 16 - Residential Construction Since 2000	Page 34
Table 17 - Market Rate Properties	Page 36
Table 18 - Income Limits	Page 45
Table 19 - Rents and Income Targeting	Page 46
Table 20 - Qualifying Income Ranges	Page 47
Table 21 - Household Income, Renter Households	Page 48
Table 22 - Demand Calculations	Page 50
Table 23 - Capture Rates	Page 51

A. EXECUTIVE SUMMARY

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

The Hanover Apartments are located on the east side of North Cottage Green Drive, in east-central Ashland. There are no apparent physical, environmental, or other constraints upon the rehabilitation and marketing of the proposed project at this location.

The Hanover Apartments comprise 40 units - 20 one-bedroom units and 20 two-bedroom units. The project is the rehabilitation of a USDA/RD Section 515 Rural Rental Housing complex. Of the 40 unit total, there will be 20 units targeted to households with incomes up to 50 percent of the median and 20 units targeted at 60 percent of the median, and therefore qualify the apartments for low income housing tax credit status.

Employment in Hanover County fell from 53,918 in 2008 to 50,855 in 2010. Since then, employment has grown - to 56,179 in 2017.

For Hanover County, the current unemployment rate is 3.6 percent, up from 3.5 percent the previous year. The rate was 6.6 percent in 2010, having been as low as 3.4 percent in 2008.

The market area for the proposed apartments is central Hanover County, as defined by several census tracts.

The population of the market area is projected to increase from 33,458 in 2010 to 39,044 in 2019 to 40,987 in 2024. The number of households is projected to increase, from 11,999 in 2010 to 13,053 in 2019 to 13,812 in 2024. The number of renter households is projected to increase from 2,310 in 2010, to 2,726 in 2019, and to 3,018 in 2024.

There are several apartment complexes located in the Ashland area. These include conventional/market rate properties, a property financed with low income housing tax credits, and some subsidized housing for very low income households, including the subject property.

The total potential need for tax credit units such as is proposed in the Ashland area by 2024 is calculated to be for 1,062 units. Given the calculated need, the proposed 40-unit development amounts to 3.8 percent of the need, as calculated.

Consideration of the capture rate (3.8 percent), the (3.5 percent) affordability analysis capture and (17.9 percent) penetration rate, suggest that the proposed development is marketable, as proposed.

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.

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

B. 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 Hanover Apartments VA LLC, for submission to the Virginia Housing Development Authority. It is understood that the property was awarded tax credits in 2018 and this report is prepared for an application for a carryover allocation of 2019 credits.

The report is 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.

The report was completed using professional market techniques. 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 (on February 11, 2018, and on February 21, 2019)

The site was visited 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 35 0 years experience in the provision of market studies for subsidized and unsubsidized apartment developments and for-sale housing. Over the last three decades or more, Mr. Brown has produced more than 3,000 studies in at least 20 states, predominantly in the Southeast.

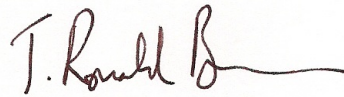
Mr. Brown is responsible for the analysis and write-up of this report – performing the role of both analyst and author.

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
Asheville, North Carolina 28814-0441
919. 233.0670 or 919.612.5328



Date: March 12, 2019

C. PROJECT DESCRIPTION

The Hanover Apartments comprise 40 units - 20 one-bedroom units and 20 two-bedroom units. The project is the rehabilitation of a USDA/RD Section 515 Rural Rental Housing complex.

The project is to be configured as follows:

	<u>Units</u>	<u>sq. ft</u>	<u>Rent</u>	<u>Targeting*</u>
1 bedroom/1 bath	4	556	\$376	less than 30 percent
1 bedroom/1 bath	16	556	\$450	less than 50 percent
2 bedroom/1 bath	2	706	\$490	less than 60 percent **
2 bedroom/1 bath	18	706	\$490	less than 60 percent
* percentage of area median income				
** affordable at 50% of area median				

Of the 40 unit total, there will be four units targeted at 40 percent of the median, 16 units targeted to households with incomes up to 50 percent of the median and 20 units targeted at 60 percent of the median, and therefore qualify the apartments for low income housing tax credit status.

Utilities (excluding trash collection) will be paid by the tenant - utility allowances are - \$92 for the one-bedroom units and \$115 for the two-bedroom units. Based on information supplied by the developer, the proposed apartments will meet energy-saving standards, both for construction and for appliances provided.

There are five two-story buildings. Construction is slab on grade with brick veneer, and siding. The property appears to have been quite well maintained, and appears to be in fair condition for a property of its age.

Rents at the property are based on income and the property is effectively fully occupied, and remains so on an ongoing basis.

Common area and site amenities include a laundry facility and playground.

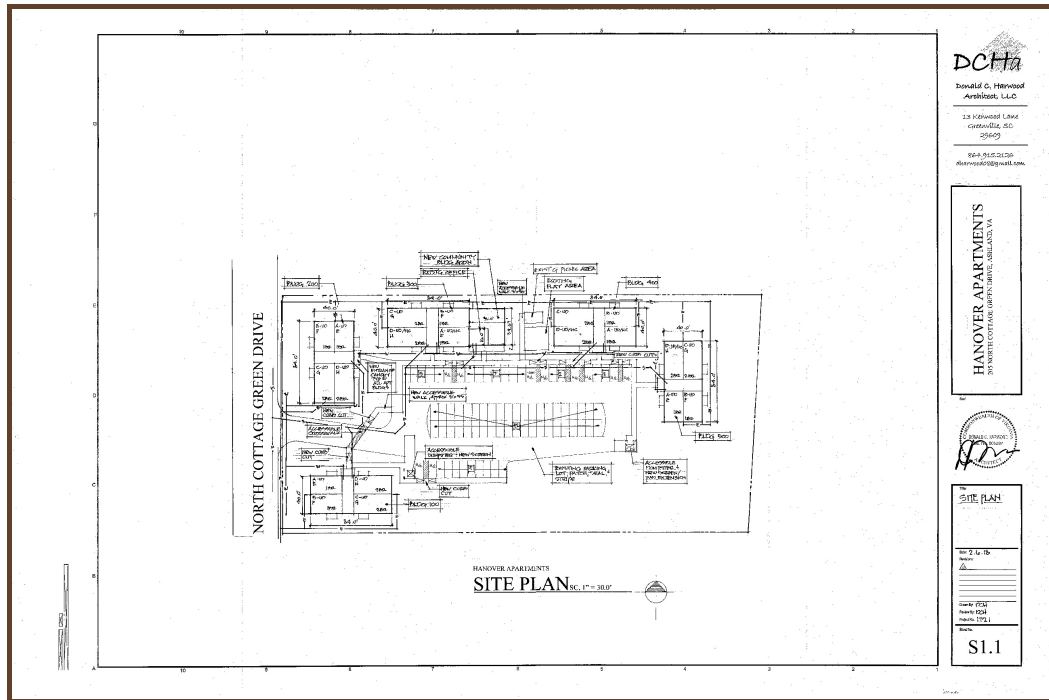
There are 77 parking spaces.

Representative architectural drawings are set out on the following pages.

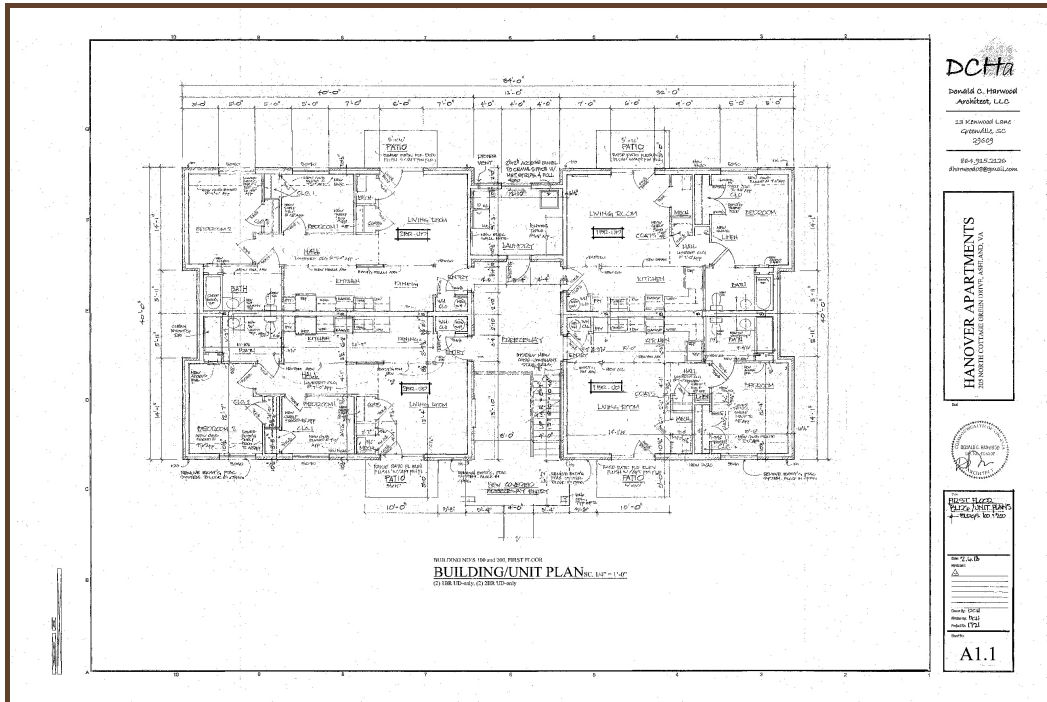
Based on information supplied by the developer, the proposed renovation includes, roofing, siding, landscaping, parking lot improvements, a new community building, as well as other major interior repairs and replacements. The project will feature various VHDA recommended enhancements.

It is understood that the rehabilitation program would commence in July 2020 and would be completed within 12 months, or earlier.

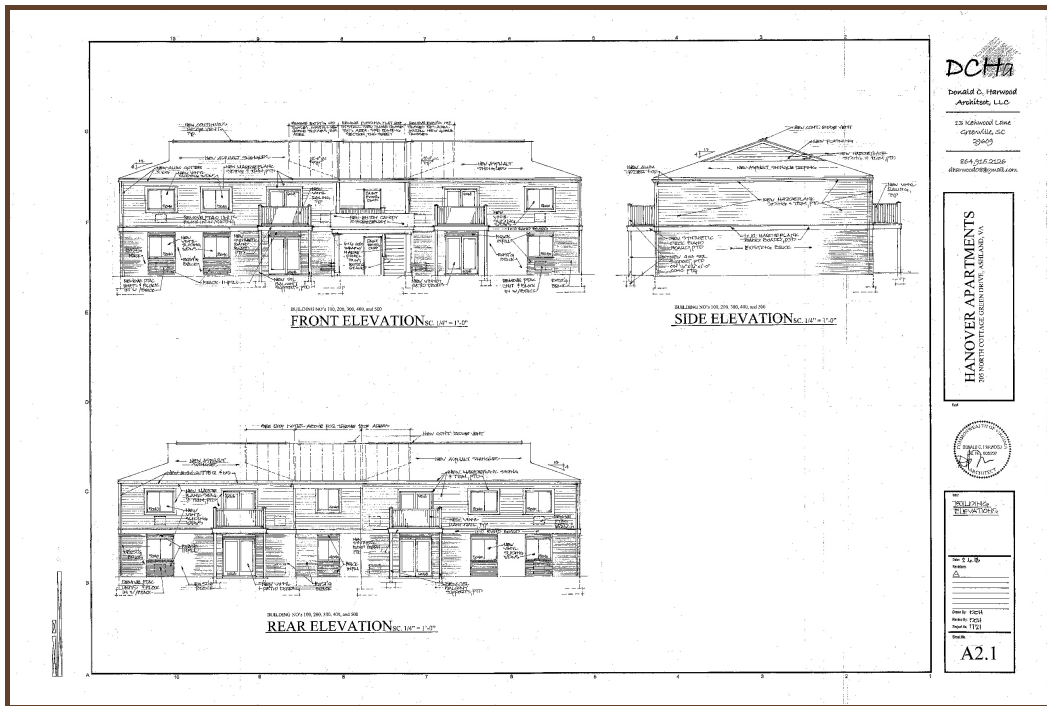
Site plan



Building/unit plan



Elevations



D. LOCATION

The Hanover Apartments are located on the east side of North Cottage Green Drive, in east-central Ashland. Adjacent properties are primarily attached multi-family units - both for sale and for rent. The Cottage Greene Townes are to the south of the property, and the Omni Park Senior apartments are to the west, across Cottage Green Drive. The Laurel Woods (USDA/RD) and Ashton Woods (tax credit) complexes are to the north.





Typical units



Typical units



Typical units



Typical units - rear view



View on property



View on property



Site office



Sitting area and playground



View of property entrance



View north on N.Cottage Green Dr., at entrance



View south on N. Cottage Green Dr., at entrance



View across N. Cottage Green Dr., at entrance

The site is located on North Cottage Green Drive, east of US Highway 1, and north of England Street, in east-central Ashland. Access to the site is very good.

Given the site location and its situation, the site is very visible.

Access from the site to major thoroughfares, sources of employment, shopping, and other local services is good.

The site is within one-half mile of the intersection of US Highway 1 - the area's major north-south thoroughfare, and England Street (VA Highway 54) - the area's major east-west route. The site is within three-fourths of one mile of the intersection of England Street and Interstate 95.

As noted, the site is well-located with respect to the area's major thoroughfares, and to Interstate 95. There is significant commercial development along these routes - including various interstate-oriented businesses (gas stations, hotels, and restaurants, for example).

The site is within one-fourth mile of the Ashland Hanover shopping center, which is anchored by a Food Lion grocery store and a Peebles store. Other stores in this area include a Rite Aid drugstore and a Family Dollar store. The site is within one mile of a Wal-mart supercenter.

The site is within one and one-half miles of both the JM Gandy and the Henry Clay Elementary Schools. The Patrick Henry High School and Liberty Middle School are located off VA 54, to the west of Ashland - within five miles of the site. Randolph Macon College is located within one mile of the site.

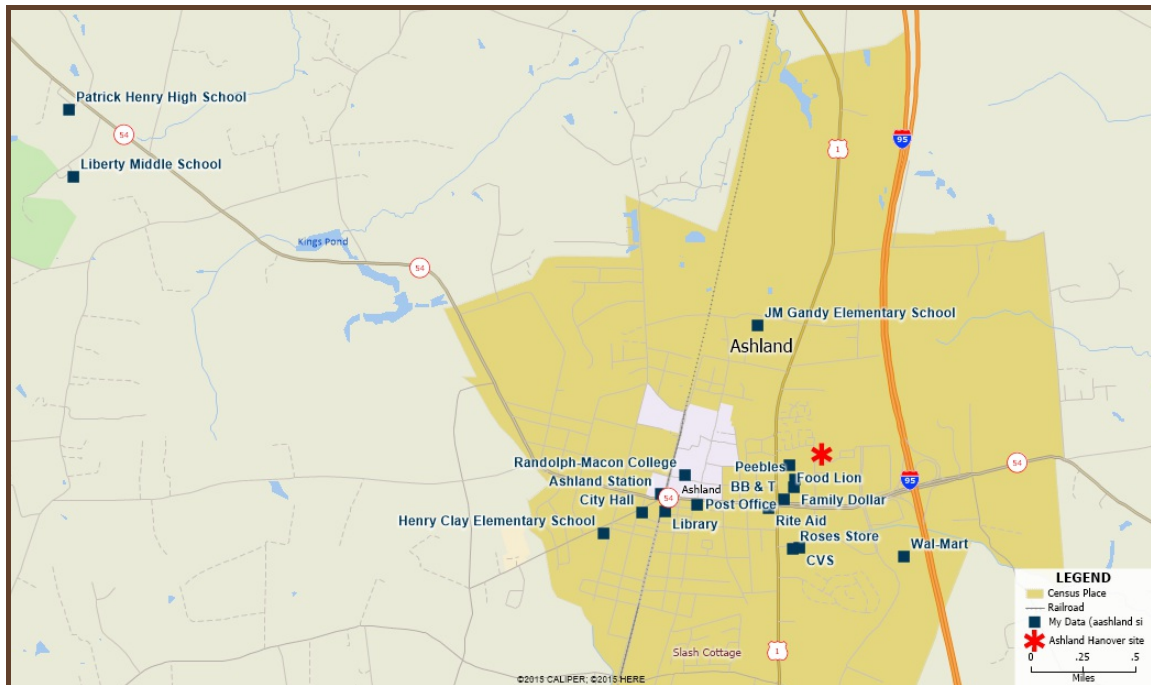
The site is within one and one-fourth miles of the Ashland Post Office, public library, and the city hall.

The following table illustrates the noteworthy community amenities serving the site and the (driving) distance to the site.

Table 1 - Distance to Neighborhood and Community Amenities

<u>Category</u>	<u>Neighborhood/Community Amenity</u>	<u>Distance (miles)</u>
Highways	US Highway 1	0.4
	Interstate 95	0.7
Public Transportation	Amtrak Station	1.1
Retail - Grocery	Food Lion	0.25
Retail - Other	Peebles	0.25
	Roses	0.6
	Wal-Mart	1.0
Pharmacies	Rite Aid	0.4
	CVS	0.6
Schools	Henry Clay Elementary School	1.4
	JM Gandy Elementary School	1.2
	Liberty Middle School	4.7
	Patrick Henry High School	4.7
Post Office	Ashland Post Office	0.8
Government	City Hall	1.0
Library	Ashland Branch Library	0.9

Source: T.Ronald Brown: Research & Analysis



Public transportation is available, by rail, at the Ashland Amtrak station, just over one mile from 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.

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

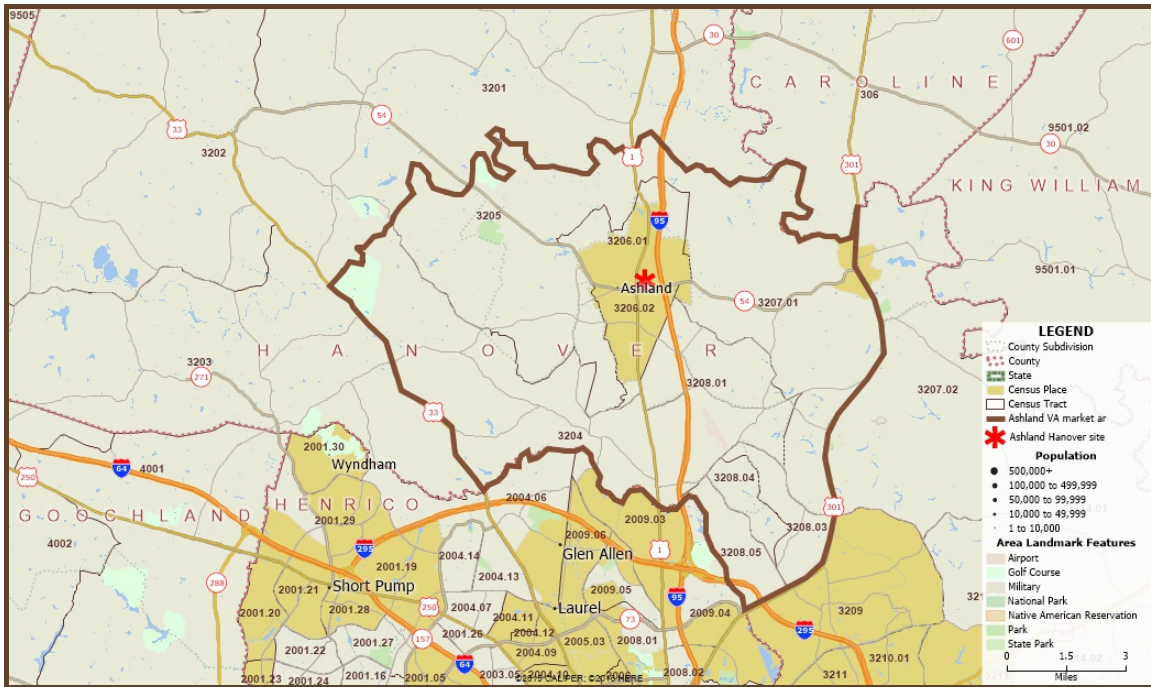
E. MARKET AREA DEFINITION

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.

Ashland is located in Hanover County, in central Virginia. The market area for the proposed apartments is central Hanover County, as defined by several census tracts. This area is focused on Ashland and extends to an approximately four- to seven-mile hinterland, focusing on the Interstate 95 corridor. This market area excludes larger and potentially competing neighboring communities such as Glen Allen and Mechanicsville. This area constitutes the geographic area immediately adjacent to the site and extends to all locations of relatively similar character, and with residents, or potential residents, likely to be interested in the project.

Market area map



F. 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 Hanover County are illustrated in the table, below. Employment fell from 53,918 in 2008 to 50,855 in 2010. Since then, employment has grown - to 56,179 in 2017.

Table 2 - Total Employment

		Change over previous year	
		<u>number</u>	<u>percent</u>
2008	53,918		
2009	51,015	-2,903	-5.4
2010	50,855	-160	-0.3
2011	51,675	820	1.6
2012	52,111	436	0.8
2013	52,602	491	0.9
2014	53,244	642	1.2
2015	54,052	808	1.5
2016	55,068	1,016	1.9
2017	56,179	1,111	2.0

Source: Virginia Labor Market Information

Employment trends, by sector

Information on employment, by industry for Hanover County in 2017 and 2018 (the most recent data) is set out in Table 2, below. From this it is seen that, with respect to employment, the largest subsectors were construction, health care, and retail trade which employed 10.5 percent, 12.2 percent, and 13.5 percent of the total, respectively in the most recent quarter.

Table 3 - Employment, by sector

	2017		2018*		pct change
	number	percent	number	percent	
Accommodation and Food services	4,099	7.8	4,063	7.6	-0.9
Administrative and Waste services	2,925	5.6	4,151	7.7	41.9
Agriculture, Forestry, etc	423	0.8	378	0.7	-10.6
Arts, Entertainment, Recreation	2,704	5.2	2,584	4.8	-4.4
Construction	5,573	10.6	5,656	10.5	1.5
Educational services	3,709	7.1	3,751	7.0	1.1
Financial and Insurance	649	1.2	652	1.2	0.5
Health Care and Social Assistance	6,460	12.3	6,524	12.2	1.0
Information	670	1.3	642	1.2	-4.2
Management	1,176	2.2	1,358	2.5	15.5
Manufacturing	3,676	7.0	3,505	6.5	-4.7
Mining	69	0.1	58	0.1	-15.9
Other Services	1,855	3.5	1,939	3.6	4.5
Professional and Technical services	2,329	4.4	2,237	4.2	-4.0
Public Administration	1,312	2.5	1,350	2.5	2.9
Real estate	546	1.0	566	1.1	3.7
Retail trade	7,248	13.8	7,216	13.5	-0.4
Transp. and Warehousing	1,410	2.7	1,744	3.3	23.7
Unclassified	131	0.3	202	0.4	54.2
Utilities	n/a	n/a	98	0.2	n/a
Wholesale trade	5,309	10.1	4,950	9.2	-6.8
Total	52,351		53,625		2.4

* most recent quarter (data for previous year is for the same quarter)

Source: Virginia Labor Market Information

Unemployment trends

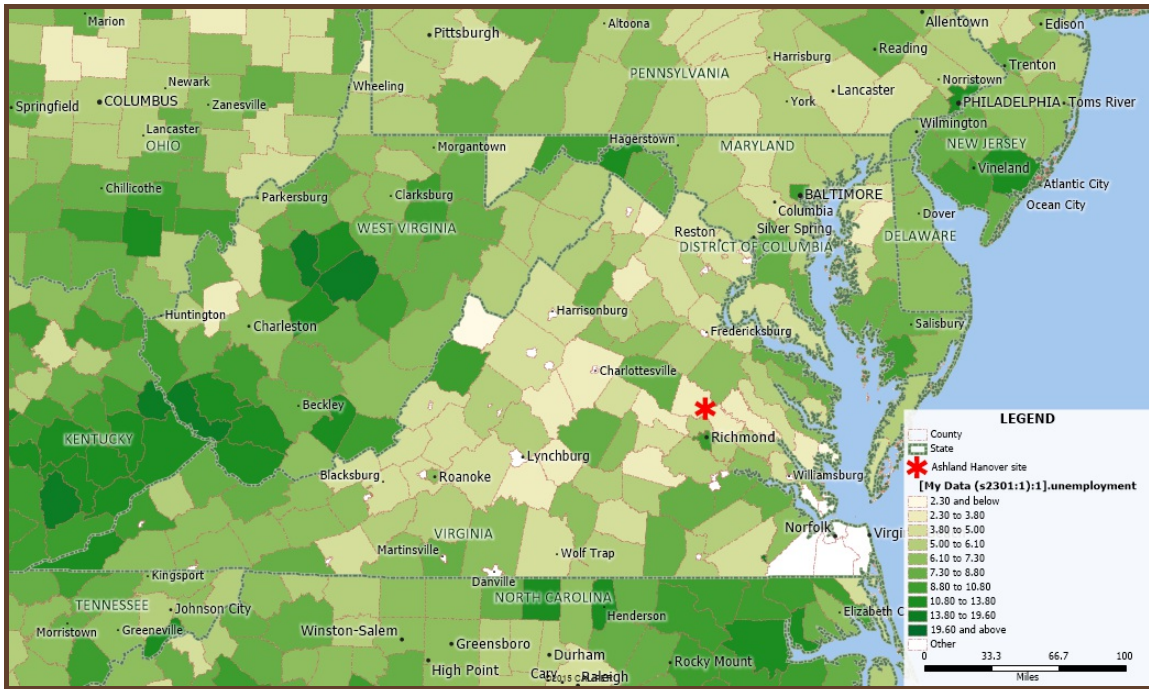
Unemployment trends for Hanover County are illustrated in the table, below. Rates for Virginia and for the U.S as a whole are also shown, for reference. Here it is seen that the current unemployment rate is 3.6 percent, up from 3.5 percent the previous year. The rate was 6.6 percent in 2010, having been as low as 3.4 percent in 2008.

Table 4 - Unemployment trends

	<u>Hanover</u> <u>County</u>	<u>Virginia</u>	<u>U.S.</u>
2008	3.4%	3.9%	5.8%
2009	6.5%	6.7%	9.3%
2010	6.6%	7.1%	9.6%
2011	6.0%	6.6%	8.9%
2012	5.5%	6.1%	8.1%
2013	5.1%	5.7%	7.4%
2014	4.6%	5.2%	6.2%
2015	3.9%	4.5%	5.3%
2016	3.5%	4.1%	4.9%
2017	3.6%	3.8%	4.4%

Source: Virginia Labor Market Information

Current levels of unemployment throughout Virginia are illustrated, below.



Major Employers

The major employers in the Hanover County area are listed in Table 5, overleaf. Here it is seen that the largest single employers include the local school system and the local hospital (Bon Secours), Kings Dominion, and the Hanover County government - each of which employs more than 1,000 persons.

Table 5 - Major Employers

<u>Employer</u>	<u>Product/Service</u>	<u>Employees</u>
Hanover County School Board	Educational Services	1000+
Bon Secours Richmond Health System	Hospitals	1000+
Kings Dominion	Amusement, etc Industries	1000+
County of Hanover	Local Government	1000+
RMC Events	Administrative and Support Services	500 to 999
Wal Mart	General Merchandise Stores	500 to 999
Owens & Minor Medical Inc	Management of Companies and Enterprises	500 to 999
Tyson Farms	Food Manufacturing	500 to 999
Kroger	Food and Beverage Stores	250 to 499
S2 HR Solutions 1C, LLC	Administrative and Support Services	250 to 499
Randolph-Macon College	Educational Services	250 to 499
Food Lion	Food and Beverage Stores	250 to 499
Supervalu Distribution Center	Merchant Wholesalers, Nondurable Goods	250 to 499
Liz Martin	Merchant Wholesalers, Nondurable Goods	250 to 499
Acosta Sales & Marketing	Wholesaler	250 to 499
Sales Mark	Professional, Scientific, Technical Services	250 to 499
Owens & Minor Distribution Inc	Merchant Wholesalers, Nondurable Goods	250 to 499
Vitamin Shoppe Distribution Center	Health and Personal Care Stores	250 to 499
Woodfin Oil Company	Nonstore Retailers	250 to 499
The Home Depot	Building Materials, etc	250 to 499
FedEX Ground	Couriers and Messengers	250 to 499
AMF Bowling Companies	Miscellaneous Manufacturing	250 to 499
Eastern Region Management Corp	Management of Companies and Enterprises	250 to 499
Richmond Home for Ladies	Nursing and Residential Care Facilities	250 to 499
BH Media Group	Publishing Industries (except Internet)	100 to 249
LogistiCare Solutions	Transit and Ground Passenger Transportation	100 to 249
Carter Machinery Company	Merchant Wholesalers, Durable Goods	100 to 249
AMF Bowling Center	Amusement, etc Industries	100 to 249
Bell Nursery USA, LLC	Crop Production	100 to 249
Cracker Barrel Old Country Store	Food Services and Drinking Places	100 to 249
Federal Express	Couriers and Messengers	100 to 249
Penn Line Corporation	Administrative and Support Services	100 to 249
Super Rite Foods Operations Company	Merchant Wholesalers, Nondurable Goods	100 to 249
Truckstops of America	Gasoline Stations	100 to 249
Autumn Corporation	Nursing and Residential Care Facilities	100 to 249
Sheltering Arms Hospital	Hospitals	100 to 249
New Caps LLC	Motion Picture and Recording Industries	100 to 249
Bass Pro Shops Outdoor World	Sporting Goods etc Stores	100 to 249
VSC Fire and Security Inc	Specialty Trade Contractors	100 to 249
YMCA	Religious, etc Organizations	100 to 249
The Supply Room Companies Inc	Miscellaneous Store Retailers	100 to 249
Freedomroads LLC	Motor Vehicle and Parts Dealers	100 to 249
Gretna Health Care Center	Nursing and Residential Care Facilities	100 to 249
Postal Service	Postal Service	100 to 249
Cox Transportation Service	Truck Transportation	100 to 249
Dianne's Fine Desserts Inc.	Food Manufacturing	100 to 249
Hanover Fabricators	Wood Product Manufacturing	100 to 249
Lowe's Home Centers, Inc.	Building Materials, etc	100 to 249
Town Of Ashland	Local Government	100 to 249
E.J. Wade Construction LLC	Specialty Trade Contractors	100 to 249

Source: Virginia Labor Market Information

Virginia Economic Development Partnership reports a total of 223 jobs lost at two locations in the County. With respect to expansions, the Virginia Economic Development Partnership reports 488 new jobs at five locations - including 300 additional jobs at Amazon.com.

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.

Wages by Industry Sector

Information on wages, by employment sector, for Hanover County is set out in Table 6, below. Here, average wages show some variation - both between sectors and also over time - with average wages increasing by 0.5 percent between 2017 and 2018.

Table 6 - Wages by Industry Sector

	<u>2017</u>	<u>2018*</u>	<u>pct change</u>
Accommodation and Food services	\$310	\$326	5.2
Administrative and Waste services	\$675	\$554	-17.9
Agriculture, Forestry, etc	\$619	\$623	0.6
Arts, Entertainment, Recreation	\$321	\$324	0.9
Construction	\$954	\$980	2.7
Educational services	\$710	\$729	2.7
Financial and Insurance	\$1,128	\$1,131	0.3
Health Care and Social Assistance	\$908	\$938	3.3
Information	\$587	\$601	2.4
Management	\$1,658	\$1,679	1.3
Manufacturing	\$899	\$938	4.3
Mining	\$1,088	\$1,122	n/a
Other Services	\$664	\$649	-2.3
Professional and Technical services	\$1,013	\$980	-3.3
Public Administration	\$1,003	\$995	-0.8
Real estate	\$894	\$920	2.9
Retail trade	\$599	\$617	3.0
Transp. and Warehousing	\$810	\$799	-1.4
Unclassified	\$917	\$800	-12.8
Utilities	n/a	\$1,332	n/a
Wholesale trade	\$1,112	\$1,127	1.3
Total	\$796	\$800	0.5

* most recent quarter (data for previous year is for the same quarter)

Source: Virginia Labor Market Information

Commuting patterns

With respect to commuting, data from the American Community Survey, only 39.5 percent of workers resident in Ashland were employed there, with 62.5 percent employed in Hanover County. The average driving time to work for residents of Ashland was 20.3 minutes.

Table 7 - Commuting Data

	<u>number</u>	<u>percent</u>
Total Workers	3,721	100.0
Worked in Place of residence	1,470	39.5
Worked in County of residence	2,326	62.5
Worked outside Place of residence	2,251	60.5
Worked outside County of residence	1,395	37.5
Mean travel time to work (minutes)	20.3	

Source: 2013 to 2017 American Community Survey; T.Ronald Brown: Research & Analysis

The most recent Census data for commuting patterns for persons who live and/or work in the wider Ashland area are illustrated, below.

Here it is seen that more than 14,000 persons who live in Hanover County commute into the County from Henrico County, with 2,253 and 9,216 from Chesterfield County and from the City of Richmond. Likewise, a very significant number of persons who work in Hanover County commute to work there from adjacent areas - notably Henrico County.

Table 8 - Commuting Patterns

<u>Place of work</u>	<u>Place of Residence</u>	<u>Number of Workers</u>
Hanover County	Hanover County	19,517
Chesterfield County	Hanover County	2,253
Henrico County	Hanover County	14,432
Richmond City	Hanover County	9,216
Hanover County	Caroline County	1,325
Hanover County	Chesterfield County	2,731
Hanover County	Henrico County	8,281
Hanover County	King William County	1,422
Hanover County	Louisa County	1,112
Hanover County	Richmond City	3,028

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

While the local economy grows, the local economic conditions will not have a direct negative impact on the subject property.

G. DEMOGRAPHIC CHARACTERISTICS

Population and Household Trends

In 2000, the population of Hanover County was 86,320, and in 2010 the population was recorded as 99,863. Population projections for Hanover County are provided by the Virginia State Data Center. Based on these data, the population of the area is projected to be 106,904 by 2019, and to be around 112,080 by 2024.

In 2000, the population of the market area was 28,826, and in 2010 the population was recorded as 33,458. Population projections for the market area are based on the average of several small area population projection techniques using census tract trends for 2000 to 2010 in Hanover County, corrected for the official State Data Center numbers. Based on these data, the population of the area is projected to be 39,044 by 2019, and to be around 40,983 by 2024.

Information on population trends and changes between 2000 and 2024 are set out in Table 9, below.

Table 9 - Population Trends

	Ashland	Market Area	Hanover County
2000	6,619	28,826	86,320
2010	7,225	33,458	99,863
2019	n/a	39,044	106,904
2024	n/a	40,983	112,080
absolute change			
2000-2010	606	4,632	13,543
2010-2019	n/a	5,586	7,041
2019-2024	n/a	1,939	5,176
annual change			
2000-2010	61	463	1,354
2010-2019	n/a	621	782
2019-2024	n/a	388	1,035

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

Projections of the number of households for Ashland, the market area, and for Hanover County are set out in Table 10, below.

In 2000, there were 31,121 households in Hanover County, and 36,589 in 2010. Based on the population projections set out, above, there will be around 39,620 households in 2019 and 41,809 in 2024.

There were 10,014 households in the market area in 2000 and 11,999 in 2010. Projections show around 13,053 and 13,812 households in 2019 and 2024, respectively.

Table 10 - Household Trends

	Ashland	Market Area	Hanover County
2000	2,282	10,014	31,121
2010	2,670	11,999	36,589
2019	n/a	13,053	39,620
2024	n/a	13,812	41,809
absolute change			
2000-2010	388	1,985	5,468
2010-2019	n/a	1,054	3,031
2019-2024	n/a	759	2,189
annual change			
2000-2010	39	199	547
2010-2019	n/a	117	337
2019-2024	n/a	152	438

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

Population and household characteristics

Age distribution

The distribution of the population, by age, for Ashland, the market area, and Hanover County 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 Ashland was 33.5 years, and that for Hanover County was recorded as 41.0 years. The relatively low average age for Ashland reflects the student population there.

Table 11 - Age Distribution

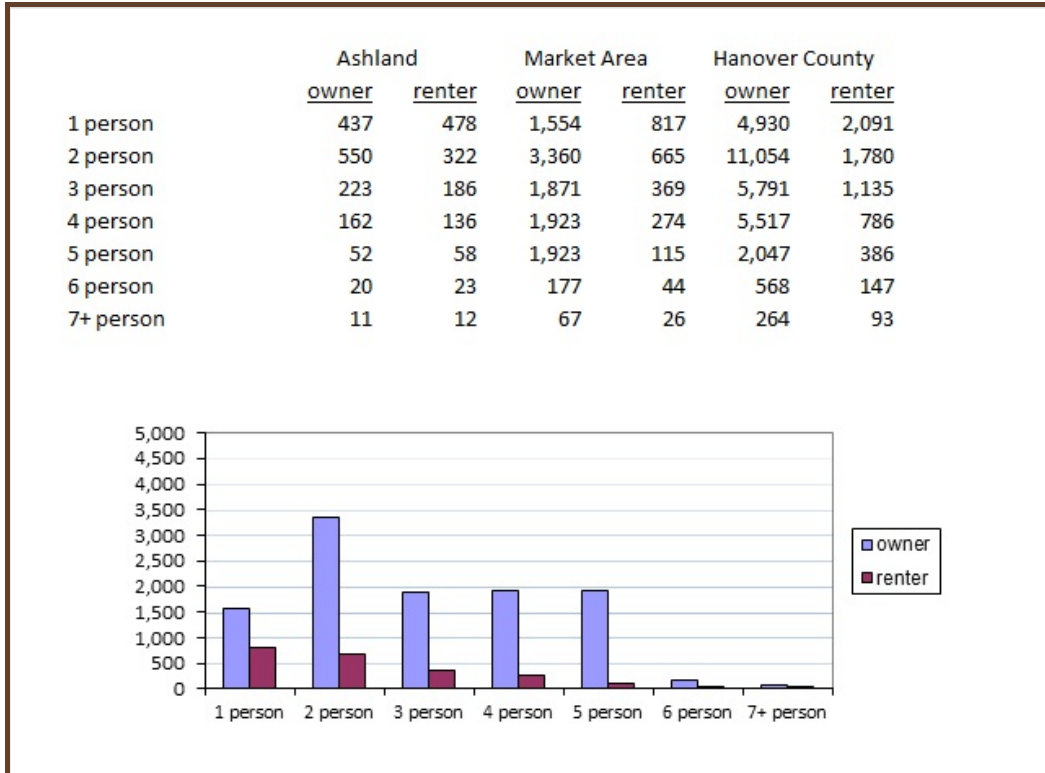
	Ashland		Market Area		Hanover County	
	<u>number</u>	<u>percent</u>	<u>number</u>	<u>percent</u>	<u>number</u>	<u>percent</u>
Under 5 years	406	5.6	1,836	5.5	5,473	5.5
5 to 9 years	346	4.8	2,298	6.9	6,896	6.9
10 to 14 years	342	4.7	2,674	8.0	7,698	7.7
15 to 19 years	787	10.9	2,855	8.5	7,680	7.7
20 to 24 years	1,043	14.4	2,087	6.2	5,086	5.1
25 to 29 years	392	5.4	1,290	3.9	4,210	4.2
30 to 34 years	404	5.6	1,480	4.4	4,715	4.7
35 to 39 years	339	4.7	2,061	6.2	6,524	6.5
40 to 44 years	364	5.0	2,602	7.8	7,759	7.8
45 to 49 years	473	6.5	3,208	9.6	9,115	9.1
50 to 54 years	480	6.6	2,907	8.7	8,466	8.5
55 to 59 years	396	5.5	2,307	6.9	7,106	7.1
60 to 64 years	379	5.2	1,921	5.7	6,031	6.0
65 to 69 years	257	3.6	1,307	3.9	4,408	4.4
70 to 74 years	218	3.0	907	2.7	2,976	3.0
75 to 79 years	183	2.5	658	2.0	2,324	2.3
80 to 84 years	187	2.6	537	1.6	1,765	1.8
85 years and over	229	3.2	523	1.6	1,631	1.6
55 and older	1,849	25.6	8,160	24.4	26,241	26.3
65 and older	1,074	14.9	3,932	11.8	13,104	13.1
median	33.5		n/a		41.0	

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

Household size

Table 12 below, sets out household size, by tenure, for households in Ashland, the market area, and Hanover County.

Table 12 - Household Size



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

Tenure

Table 13, below, sets out the number and proportion of owner and renter households for Ashland, the market area, and Hanover County. In the years beyond 2010, the tenure proportions are based on 2000 to 2010 tenure trends. In 2010, 45.5 percent of households in Ashland were renters, 19.3 percent of households in the market area were renters, and 17.5 percent in Hanover County were renters.

Table 13 - Tenure

Ashland	<u>population</u>	<u>households</u>	persons per <u>household</u>	Owner-occupied		Renter-occupied	
				<u>number</u>	<u>percent</u>	<u>number</u>	<u>percent</u>
2000	6,619	2,282	2.90	1,368	60	914	40.1
2010	7,225	2,670	2.71	1,455	54.5	1,215	45.5
2019	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2024	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Market Area							
Market Area	<u>population</u>	<u>households</u>	persons per <u>household</u>	Owner-occupied		Renter-occupied	
				<u>number</u>	<u>percent</u>	<u>number</u>	<u>percent</u>
2000	28,826	10,014	2.88	8,253	82.4	1,761	17.6
2010	33,458	11,999	2.79	9,689	80.7	2,310	19.3
2019	39,044	13,053	2.99	10,327	79.1	2,726	20.9
2024	40,983	13,812	2.97	10,794	78.1	3,018	21.9
Hanover County							
Hanover County	<u>population</u>	<u>households</u>	persons per <u>household</u>	Owner-occupied		Renter-occupied	
				<u>number</u>	<u>percent</u>	<u>number</u>	<u>percent</u>
2000	86,320	31,121	2.77	26,233	84.3	4,888	15.7
2010	99,863	36,589	2.73	30,171	82.5	6,418	17.5
2019	106,904	39,620	2.70	31,944	80.6	7,676	19.4
2024	112,080	41,809	2.68	33,249	79.5	8,560	20.5

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

Income Distribution

The distribution of household incomes for Ashland, the market area, and Hanover County are set out in Table 14, 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 Ashland is around \$48,903, and that for Hanover County as a whole is seen to be \$84,955.

Table 14 - Household Income

	Ashland		Market area		Hanover County	
	number	percent	number	percent	number	percent
less than \$10,000	203	7.4	347	2.7	990	2.6
\$10,000 to \$14,999	168	6.1	310	2.4	944	2.5
\$15,000 to \$19,999	135	4.9	327	2.6	996	2.6
\$20,000 to \$24,999	159	5.8	300	2.4	1,026	2.7
\$25,000 to \$29,999	154	5.6	401	3.2	1,026	2.7
\$30,000 to \$34,999	137	5.0	475	3.7	1,143	3.0
\$35,000 to \$39,999	250	9.1	520	4.1	1,381	3.6
\$40,000 to \$44,999	110	4.0	402	3.2	1,510	4.0
\$45,000 to \$49,999	85	3.1	346	2.7	1,219	3.2
\$50,000 to \$59,999	216	7.8	727	5.7	2,670	7.0
\$60,000 to \$74,999	284	10.3	1,167	9.2	3,756	9.8
\$75,000 to \$99,999	275	10.0	1,741	13.7	5,726	15.0
\$100,000 to \$124,999	178	6.5	1,629	12.8	5,128	13.4
\$125,000 to \$149,999	193	7.0	1,318	10.4	3,480	9.1
\$150,000 to \$199,999	101	3.7	1361	10.7	3,956	10.4
\$200,000 or more	111	4.0	1340	10.5	3,217	8.4
median income	\$48,903		n/a		\$84,955	

Source: 2013 to 2017 American Community Survey; T.Ronald Brown: Research & Analysis

Renter Income

The distribution of household incomes for renter households for Ashland, the market area, and Hanover County are set out in Table 15, below. These figures are also taken from the 2013 to 2017 American Community Survey.

Table 15 - Household Income, Renter Households

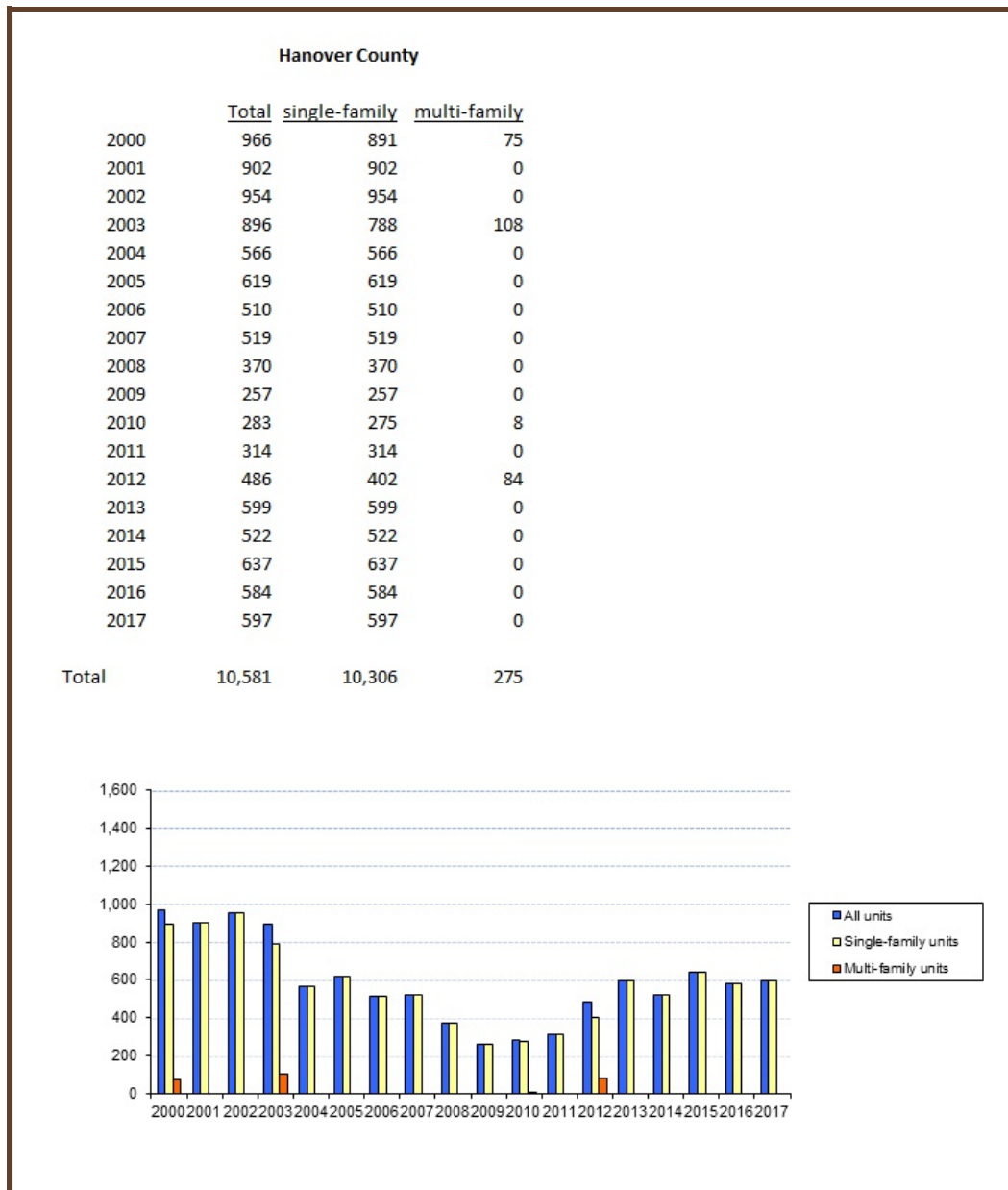
	Ashland		Market area		Hanover County	
	number	percent	number	percent	number	percent
less than \$10,000	141	12.5	188	7.4	616	8.6
\$10,000 to \$19,999	175	15.5	287	11.3	934	13.1
\$20,000 to \$34,999	211	18.7	423	16.6	947	13.3
\$35,000 to \$49,999	245	21.7	386	15.2	1,176	16.5
\$50,000 to \$74,999	221	19.6	484	19.0	1,297	18.2
\$75,000 to \$99,999	135	12.0	363	14.3	921	12.9
\$100,000 or more	0	0.0	413	16.2	1,247	17.5

Source: 2013 to 2017 American Community Survey; T.Ronald Brown: Research & Analysis

Building permit trends

Table 16 below gives details of residential construction in Hanover County since 2000. Where the data exist, it can be seen that a total of 10,581 units were added throughout Hanover County. No data exist for Ashland or for the market area.

Table 16 - Residential Construction Since 2000



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

H. COMPETITIVE ENVIRONMENT

There are several apartment complexes located in the Ashland area. These include conventional/market rate properties, a property financed with low income housing tax credits, and some subsidized housing for very low income households, including the subject property. These complexes were identified and surveyed, and where useful information was made available to us, this is presented, below.

Based on information from VHDA, the following is the significant (non-elderly) property that has been financed with tax credits in the market area for the proposed development.

Ashland Woods (150 units)

Ashland Woods is located near the Hanover Apartments. It opened in 2000 and provides 126 two-bedroom (one and one-half bath) units, and 24 three-bedroom (two and one-half bath) units. The two-bedroom units rent for \$905 and the three-bedroom units rent for \$1,008. Currently, the property is reported to have no vacant units - with typical occupancy reported to be around 98 percent.

There are some market rate properties in the area. For example, Ashland Towne Square, which is located in Ashland, not far from the subject property, was built in 1974 and has a total of 218 units. One-bedroom units rent for \$825 to \$910, two-bedroom units rent for \$990, and three-bedroom units rent for \$1,090 and \$1,1150. No information is available regarding current occupancy. Typical occupancy is understood to be around 95 percent.

There are seen to be two other noteworthy market rate properties in the Ashland market area, as defined. These are Charter Creek and Lakeridge Square properties - both of which are located off Interstate 95, in the southernmost part of Hanover County.

Charter Creek has 150 units, and opened in 1998. There is a mix of one-, two-, and three-bedroom units at this location. The one-bedroom units rent from \$1,040 to \$1,050, the two-bedroom units rent for \$1,230 to \$1,240, and the three-bedroom units rent for \$1,435 to \$1,445. No units are vacant at present, and typical occupancy is reported to be around 97 percent, or more.

Lakeridge Square has 156 units - all two bedroom units of 970 or 1,074 square feet. Rents range from \$1,100 to \$1,170. There is reported to be one vacancy - with typical occupancy understood to be around 95 percent.

There are no new units in the area.

In addition to the above there are several properties that are subsidized and available to low and very low income households. The Laurel Woods Apartments is another USDA/RD-financed property - located adjacent to the subject property. All 40 units at this location are rent-assisted. The property is fully occupied at present, and is reported to remain so on an ongoing basis. There is a waiting list.

Based on our survey, there is a market-wide occupancy rate of 99.8 percent.

Occupancy at the unsubsidized tax credit property is 100.0 percent.

Occupancy at the various market rate properties in the market area (for which data are available) is seen to be 99.7 percent (and that for the subsidized properties is 100.0 percent).

In order to determine market rents, a sample of comparable market area properties were identified. The projects selected were chosen on the basis of age, location, and bedroom mix. In addition to the three market rate properties located in the market area (as set out above) , two additional properties were used (the Legends at Virginia Center and the Links at Virginia Center). These two properties, are located in the central part of northern Henrico County, just south of Hanover County. Information for one- and two-bedroom units at these various properties is summarized below.

Table 17 - Market Rate Properties

<u>Property</u>	<u>Year built</u>	<u>One-bedroom rents</u>	<u>Two-bedroom rents</u>
Asheland Town Square	1974	\$825-910	\$990
Charter Creek	1988	\$1,040-1,050	\$1,230-1,240
Lakeridge Square	1987		\$1,100-1,170
Legends at Virginia Center	1998	\$1,065-1,085	\$1,185-1,205
Links at Virginia Center	1998	\$960	\$1,055-1,130

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 \$846 for a one-bedroom unit, and \$961 for a two-bedroom unit.

These rents are seen to significantly above the proposed rents at the proposed development.



Legends at Virginia Center



Links at Virginia Center

The various market area complexes surveyed are summarized as follows:

Complex name	Financing	Year built	Total units	Vacant units	Occupancy (%)
Ashland Towne Square	market	1974	218	n/a	n/a
Ashland Woods	LIHTC	2000	150	0	100.0
Charter Creek	market	1998	150	0	100.0
Hanover	USDA/RD	1984	40	0	100.0
Lakeridge Square	market	1987	156	1	99.4
Laurel Woods	USDA/RD	1988	40	0	100.0

	0 br/1ba			1 br/1ba		
	number	size (sq. ft.)	rent	number	size (sq. ft.)	rent
Ashland Towne Square				54	744-769	\$825-910
Ashland Woods						
Charter Creek				42	752	\$1,040-1,050
Hanover				20	550	boi
Lakeridge Square						
Laurel Woods				8	421	boi
	2 br/1-1½ ba			2 br/2 ba		
	number	size (sq. ft.)	rent	number	size (sq. ft.)	rent
Ashland Towne Square	110	866	\$990			
Ashland Woods	126	896	\$905			
Charter Creek				90	992	\$1,230-1,240
Hanover	20	684	boi			
Lakeridge Square				156	970-1,074	\$1,100-1,135
Laurel Woods	32	743	boi			
	3 br/1-1½ ba			3 br/2+ ba		
	number	size (sq. ft.)	rent	number	size (sq. ft.)	rent
Ashland Towne Square	54	1,064-1,154	\$1,090-\$1,150			
Ashland Woods				24	1,140	\$1,008
Charter Creek				18	1,182	\$1,435-1,445
Hanover						
Lakeridge Square						
Laurel Woods						



Ashland Towne Square

Location: 204 Kings Arms Street, Ashland
 Year built: 1974

Total units: 218
 Typical occupancy: 95%

	<u>1 br/1 ba</u>	<u>1 br/1½ ba</u>	<u>2 br/1½ ba</u>	<u>3 br/1½ ba</u>	<u>3 br/1½ ba</u>
Units:	16	38	110	38	16
Unit size (sq. ft.):	744	769	866	1,064	1,154
Rent:	\$825	\$910	\$990	\$1,090	\$1,150
Rent/sq. ft.:	\$1.11	\$1.18	\$1.14	\$1.02	\$1.00
Vacant units:	n/a, overall				

Management: United Property Associates (Christy - 804.798.4733 [1/28])
 Telephone: on site / management site visit other

Utilities in rent: Water/Sewer Trash Heat Electricity

Amenities: Club House/Community Room Fitness center Pool Tennis Playground
 Business Center Controlled access/Security/gated Elevator Garages Storage Laundry

Unit features: Microwave Dishwasher 9'+ ceilings Washer/Dryer Washer/Dryer Hook-up
 Wood floor Fireplaces Patios/balconies



Ashland Woods

Location: 1100 Omni Terrace, West, Ashland
 Year built: 2000

Total units: 150
 Typical occupancy: 98%

	<u>2 br/1½ ba</u>	<u>3 br/2½ ba</u>
Units:	126	24
Unit size (sq. ft.):	896	1,140
Rent:	\$905*	\$1,008*
Rent/sq. ft.:	\$1.01*	\$0.88*
Vacant units: 0, overall		

Management: Ledic Management (Joan - 804.752.7120 [1/28])
 Telephone: on site / management site visit other

Utilities in rent: Water/Sewer Trash Heat Electricity

Amenities: Club House/Community Room Fitness center Pool Tennis Playground
 Business Center Controlled access/Security/gated Elevator Garages Storage Laundry

Unit features: Microwave Dishwasher 9'+ ceilings Washer/Dryer Washer/Dryer Hook-up
 Wood floor Fireplaces Patios/balconies

*Tax credit



Charter Creek

Location: 9440 Pleasant Point Way, Ashland
 Year built: 1998

Total units: 150
 Typical occupancy: 97%+

	<u>1 br/1 ba</u>	<u>2 br/2 ba</u>	<u>3 br/2 ba</u>
Units:	42	90	18
Unit size (sq. ft.):	752	992	1,182
Rent:	\$1,040-1,050	\$1,230-1,240	\$1,435-\$1,445
Rent/sq. ft.:	\$1.39	\$1.24	\$1.17
Vacant units: 0, overall			

Management: RC Evans Management (Amber - 804.550.5100 [1/29])
 Telephone: on site / management site visit other

Utilities in rent: Water/Sewer Trash Heat Electricity

Amenities: Club House/Community Room Fitness center Pool Tennis Playground
 Business Center Controlled access/Security/gated Elevator Garages Storage Laundry

Unit features: Microwave Dishwasher 9'+ ceilings Washer/Dryer Washer/Dryer Hook-up
 Wood floor Fireplaces Patios/balconies



Hanover

Location: 205 Cottage Green Drive, Ashland
 Financing: USDA/RD § 515
 Year built: 1985

Total units: 40
 Rental assistance: 20
 Typical occupancy: 100% (waiting list)

	<u>1 br/1 ba</u>	<u>2 br/1 ba</u>
Units:	20	20
Unit size (sq. ft.):	555	706
Basic rent:	\$423	\$483
Market rent:	\$643	\$683
Vacant units: 0, overall		

Management: GEM Management (Lory - 704.357.6000[2/4])
 Telephone: on site / management site visit other

Utilities in rent: Water/Sewer Trash Heat Electricity

Amenities: Club House/Community Room Fitness center Pool Tennis Playground
 Business Center Controlled access/Security/gated Elevator Garages Storage Laundry

Unit features: Microwave Dishwasher 9'+ ceilings Washer/Dryer Washer/Dryer Hook-up
 Wood floor Fireplaces Patios/balconies



Lakeridge Square

Location: 10267 Lakeridge Square Court, Ashland
 Year built: 1987

Total units: 156
 Typical occupancy: 95%

	<u>2 br/2 ba</u>	<u>2 br/2 ba</u>
Units:	78	78
Unit size (sq. ft.):	970	1,074
Rent:	\$1,110-1,135	\$1,150-1,170
Rent/sq. ft.:	\$1.15	\$1.08
Vacant units: 1, overall		

Management: Drucker & Falk (Ethan - 804.550.2676 [1/28])
 Telephone: on site / management site visit other

Utilities in rent: Water/Sewer Trash Heat Electricity

Amenities: Club House/Community Room Fitness center Pool Tennis Playground
 Business Center Controlled access/Security/gated Elevator Garages Storage Laundry

Unit features: Microwave Dishwasher 9'+ ceilings Washer/Dryer Washer/Dryer Hook-up
 Wood floor Fireplaces Patios/balconies



Laurel Woods

Location: 211 Cottage Green Drive, Ashland
 Financing: USDA/RD § 515
 Year built: 1988

Total units: 40
 Rental assistance: 40
 Typical occupancy: 100% (waiting list)

	<u>1 br/1 ba</u>	<u>2 br/1 ba</u>
Units:	8	32
Unit size (sq. ft.):	421	743
Basic rent:	\$572	\$660
Market rent:	\$624	\$780
Vacant units: 0, overall		

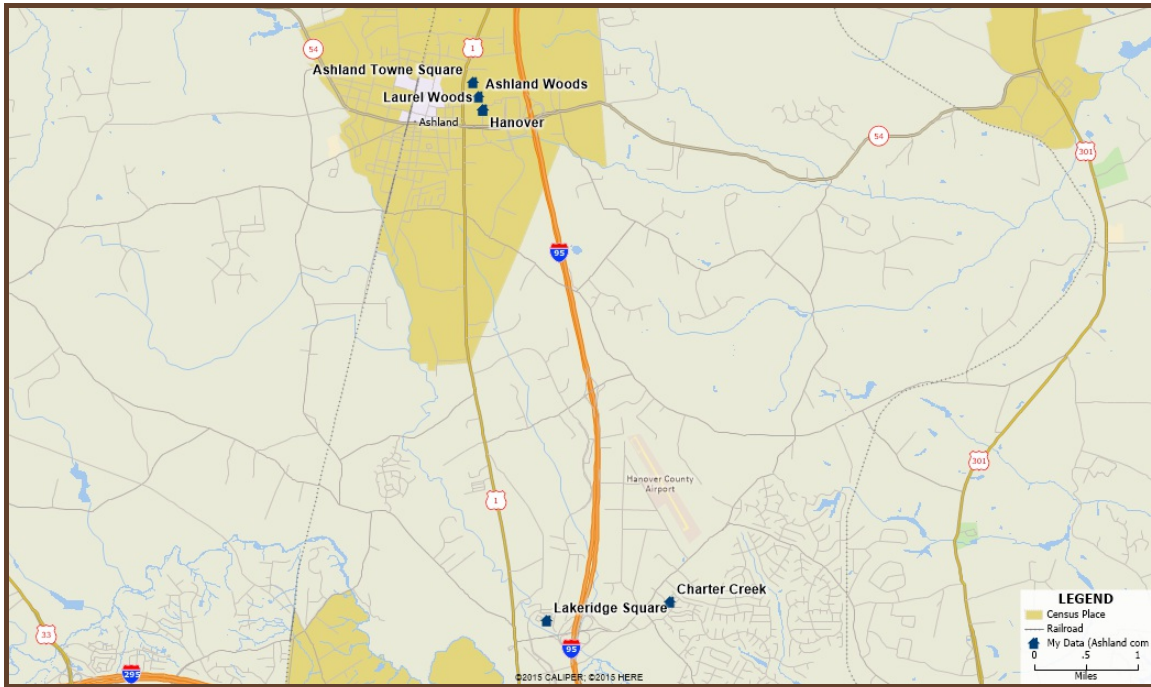
Management: TM Associates (Cheryl - 804.798.7368 [2/5])
 Telephone: on site / management site visit other

Utilities in rent: Water/Sewer Trash Heat Electricity

Amenities: Club House/Community Room Fitness center Pool Tennis Playground
 Business Center Controlled access/Security/gated Elevator Garages Storage Laundry

Unit features: Microwave Dishwasher 9'+(+) ceilings Washer/Dryer Washer/Dryer Hook-up
 Wood floor Fireplaces Patios/balconies

Location of existing apartments



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

Demand Analysis

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.

Income is a key variable in the analysis of housing markets. Of the 40 units proposed, four will be targeted to households at 30 percent of the median, 16 will be targeted to households with incomes up to 50 percent of the median, with 20 targeted at 60 percent of the median, and therefore qualify the apartments for low income housing tax credit status. The project is predominantly rent-assisted.

The HUD income limits for Hanover County (the Richmond MSA) are set out below. The median income for Hanover County in 2018 is \$83,200 - having been \$73,700 in 2017, and \$69,300 in 2008. This represents a 5.7 percent increase over the previous year, and a 20.1 percent increase over the last decade (or an average of 1.84 percent per year).

The maximum housing expenses for the proposed units are based on these 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 18 - Income Limits and Maximum Housing Costs

Income Limits			
	<u>30 percent</u>	<u>50 percent</u>	<u>60 percent</u>
1 person	\$17,490	\$29,150	\$34,980
2 person	\$19,980	\$33,300	\$39,960
3 person	\$22,470	\$37,450	\$44,940
4 person	\$24,960	\$41,600	\$49,920
5 person	\$26,970	\$44,950	\$53,940
6 person	\$28,980	\$48,300	\$57,960
Maximum Housing Costs			
	<u>30 percent</u>	<u>50 percent</u>	<u>60 percent</u>
1 bedroom	\$468	\$781	\$937
2 bedroom	\$562	\$936	\$1,124

Source: HUD

Information as to rents and income targeting, and qualifying income ranges are set out in Table 19, below

Table 19 - Rents and Income Targeting

proposed units and rent targeting				
	<u>30 percent</u>	<u>50 percent</u>	<u>60 percent</u>	<u>Total</u>
1 bedroom	4	16	0	20
2 bedroom	0	2	18	20
total	4	18	18	40
proposed units and income targeting				
	<u>30 percent</u>	<u>50 percent</u>	<u>60 percent</u>	<u>Total</u>
1 bedroom	4	16	0	20
2 bedroom	0	0	20	20
total	4	16	20	40
proposed rents				
	<u>30 percent</u>	<u>50 percent</u>	<u>60 percent</u>	
1 bedroom	\$376	\$450		
2 bedroom		\$490	\$490	
proposed rents as a proportion (%) of maximum				
	<u>30 percent</u>	<u>50 percent</u>	<u>60 percent</u>	
1 bedroom	99.9	65.3		
2 bedroom		59.7	48.6	

Source: Applicant; T Ronald Brown: Research & Analysis

As noted, four one-bedroom units will be targeted at the 30 percent rent level, with the remaining 16 one-bedroom units are targeted to be affordable at the 50 percent level. Likewise, two two-bedroom units will have rents set to be affordable at the 50 percent rent level, with the remaining 18 two-bedroom units are targeted to be affordable at the 60 percent level.

The utility allowances for the proposed development are \$92, and \$115 for one-, and two-bedroom units, respectively

From the table above, it can be seen that housing expenses at the proposed apartments fall effectively at the maximum allowable for the units targeted at 30 of the median, 60 to 65 percent of the maximum for units at 50 percent of the median, and around 49 percent of the maximum for the units targeted at 60 percent.

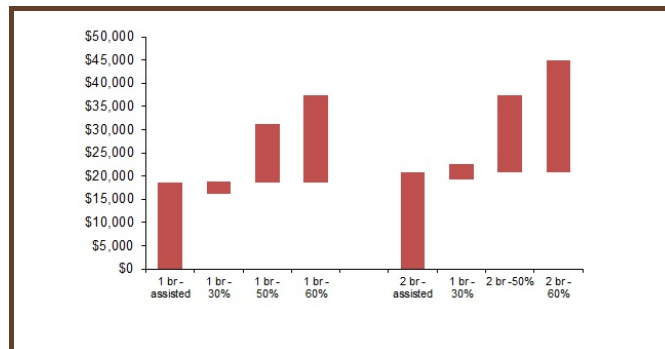
Qualifying income ranges are a function of the income needed to afford the proposed units and the mandated upper income limits. There is no official lower income limit for the proposed apartments. However, for the purposes of this report it is assumed that tenants will pay no more than 35 percent of their income on housing costs (rent and utilities). The upper limits are a function of household size - based on a standard of one and one-half persons per bedroom. The qualifying income limits for three-, and four-bedroom units are based on the proposed rents level relative to the maximum allowable. The qualifying income for the units at 50 and 60 percent of the median are based on the weighted average of the proposed rents, where necessary.

Table 20 - Qualifying Income Ranges

<u>assisted</u>		
	lower	upper
1 bedroom	\$0	\$18,583
2 bedroom	\$0	\$20,743
<u>30 percent</u>		
	lower	upper
1 bedroom	\$16,046	\$18,735
2 bedroom	\$19,234	\$22,470
<u>50 percent</u>		
	lower	upper
1 bedroom	\$18,583	\$31,225
2 bedroom	\$20,743	\$37,450
<u>60 percent</u>		
	lower	upper
1 bedroom	\$18,583	\$37,470
2 bedroom	\$20,743	\$44,940

Source: Applicant; T Ronald Brown: Research & Analysis

The previous table also shows that there is a certain amount of overlap between the target income ranges for the unassisted units. Consequently, demand calculations need to address this.



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 21 - Household Income, Renter Households

Income	All Renters		Overburdened Renters	
	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
Up to \$10,000	188	7.4	154	19.7
\$10,000 - \$19,999	287	11.3	226	28.9
\$20,000 - \$34,999	423	16.6	284	36.3
\$35,000 - \$50,000	386	15.2	114	14.6
\$50,000 - \$75,000	484	19.0	5	0.6
\$75,000 - \$100,000	363	14.3	0	0.0
\$100,000 and over	413	16.2	0	0.0
Total	2,544	100.0	783	30.8

Source: 2013 to 2017 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 2017 - and not for a specific year.

From this table it can be seen that 7.4 percent of the market area renter households have incomes less than \$10,000 and a further 11.3 percent have incomes between \$10,000 and \$20,000. Around 16.6 percent of renters are seen to be in the \$25,000 to \$35,000 income range. Around 31 percent of all renters are rent-overburdened.

Based on the income ranges set out in Table 20 and the income distribution set out in Table 21, it is found that around 21.0 percent of market area renter households qualify for assisted units, and the corresponding figures for the unassisted units at the 30, 50 and 60 percent levels are 3.9 percent, 18.9 percent and 26.0 percent, respectively.

Projections of need and demand are based upon a 2019 to 2024 projection period and the resulting calculations are corrected to account for any construction of comparable projects and/or planned comparable units.

Based on the projections set out in Table 13, a total of 292 new rental units are needed between 2019 and 2024. A total of 151 units will be for households eligible for the proposed project (64 of which will qualify for assisted units and 87 will be for unassisted units).

Again, the market for the proposed apartments comprises not only demand from population and household growth, but also from existing renter households 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-style.

Our calculations show that there will be a total of 1,563 renter households in the qualifying income ranges in the project market area - 662 qualifying for assisted units and 901 for unassisted units. 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, 50.0 percent of renters qualifying for assisted units are rent-overburdened. Likewise, 70.7, 39.2 percent, 39.2 percent, and 48.3 percent of those qualifying for unassisted units at the 50 and 60 percent 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 72 units, total.

VHDA market study guidelines allow for the inclusion of existing qualifying tenants likely to remain after renovation. Here, based on information for the subject property's management company suggests that the project will retain at 80 percent of its tenants throughout the rehabilitation process. Thus, the project should retain at least 32 out of 40 of its current tenant base.

Total demand is therefore seen to amount to 1,062 units: 606 qualifying for assisted units, with 456 qualifying for unassisted units.

These figures are based on a 2019 to 2024 projection period and therefore have been corrected to account for the funding and/or construction of any directly comparable projects in the market area. No directly comparable projects have been added in the project market area over the projection period, nor have any been funded or are under construction. The net need is therefore for 1,062 units.

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

Table 22 - Demand Calculations

	assisted	unassisted			Total	Overall *
		30 percent	50 percent	60 percent		
(i) income eligible new renter households	64	11	55	76	87	151
(ii) income eligible existing renter households	662	116	567	784	901	1,563
(iii) existing households, likely to move	330	82	222	379	461	791
(iv) need from obsolete housing	30	5	26	36	41	72
(v) Existing qualifying tenants likely to remain	32	0	0	0	0	32
Total demand (i)+(iii)+(iv)	456	115	303	491	606	1,062
Supply	0	0	0	0	0	0
Net demand	456	115	303	491	606	1,062

** Excluding gap/overlap
note: totals may not add due to rounding*

Source: T. Ronald Brown: Research & Analysis

Demand has to be segmented to determine demand by number of bedrooms per unit. Based on the distribution of household size in the market area and given data from the American Housing Survey correlating typical household size and number of bedrooms, we have determined that one-bedroom units should account for 27 percent of the total, two-bedroom units should account for 44 percent of the total, and three-bedroom units should account for 25 percent of the total with four- or more bedroom units accounting for 4 percent.

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

Table 23 - Capture Rates

	assisted	unassisted			Total	Overall *
		30 percent	50 percent	60 percent		
Total demand						
1 bedroom	125	31	83	134	166	290
2 bedroom	198	50	132	213	264	462
3 bedroom	113	28	75	121	150	263
4 bedroom	20	5	13	22	27	47
Total	456	115	303	491	606	1,062
Supply						
1 bedroom	0	0	0	0	0	0
2 bedroom	0	0	0	0	0	0
3 bedroom	0	0	0	0	0	0
4 bedroom	0	0	0	0	0	0
Total	0	0	0	0	0	0
Net demand						
1 bedroom	125	31	83	134	166	290
2 bedroom	198	50	132	213	264	462
3 bedroom	113	28	75	121	150	263
4 bedroom	20	5	13	22	27	47
Total	456	115	303	491	606	1,062
Units proposed						
1 bedroom	20	4	0	0	20	20
2 bedroom	20	0	16	20	20	20
3 bedroom	0	0	0	0	0	0
4 bedroom	0	0	0	0	0	0
Total	40	4	16	20	40	40
Capture rates						
1 bedroom	16.0%	12.7%	0.0%	0.0%	12.1%	6.9%
2 bedroom	10.1%	0.0%	12.1%	9.4%	7.6%	4.3%
3 bedroom	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4 bedroom	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	8.8%	3.5%	5.3%	4.1%	6.6%	3.8%
<i>* Excluding gap/overlap</i>						

Source: T. Ronald Brown: Research & Analysis

Given the calculated need, the proposed 40-unit development amounts to 3.8 percent of the total net need.

The capture rate, by bedroom, is determined to be 6.9 percent for the 20 one-bedroom units, and 4.3 percent for the 20 two-bedroom units.

The need for 40 rent-assisted units is seen to be 3.8 percent of need (20 assisted units equating to 4.4 percent, and 20 unassisted units equating to 3.3 percent).

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

Affordability Analysis

The minimum income is that associated with the rent for the least expensive unit offered, and the upper limit is based on the 60 percent limit (the highest target income range) for the largest unit size, by number of bedrooms. Here, the lower income is seen to be that for the assisted one-bedroom units - that is \$0. The upper income is \$44,940. Based on the income data set out in Table 21, there are found to be 1,154 renter households in that range. Thus, the proposed 40-unit development corresponds to a 3.5 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.

The lower income limit for this analysis is the income needed to afford the least expensive competitive unit in the market (or the rent for the least-expensive proposed unit, if lower), and the upper income limit is the upper income limit for the competitive units (or the proposed units, if higher). Our survey of the existing, competitive inventory, shows that there are is one potentially comparable unassisted property in the market area that can be considered comparable to the proposed units. Thus, given the rents for the proposed development, the target income range for this market is that for the proposed development. That is, from \$0 to \$44,940. Thus, given that there are as, noted, 1,154 qualifying renter households in the market area. It is seen that 40 units are proposed, there are 126 potentially comparable units at the Ashland Woods tax credit property, and 40 comparable assisted units at Laurel Woods, with no others under construction or funded for future construction: a total of 206 units. Thus the penetration rate - as defined - amounts to 17.9 percent.

Summary

Consideration of the capture rates (3.8 percent), the (3.5 percent) affordability analysis capture and (17.9 percent) penetration rate, suggest that the proposed development is marketable, as proposed.

J. LOCAL PERSPECTIVES OF RENTAL HOUSING

The proposed development is the rehabilitation of an existing USDA/Rural Development 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.

K. 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.

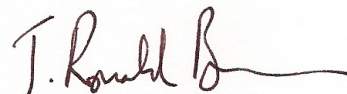
It is our recommendation that, based upon our analysis, the proposed apartments should be rehabilitated, as proposed, and that the project should be awarded low income housing tax credits. This conclusion is based on our analysis of the economic and demographic criteria of the project market area as 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.

L. 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. I understand that any misrepresentation in this statement may result in the denial of participation in the Low Income Housing Tax Credit Program in Virginia as administered by the Virginia Housing Development Authority.
4. Neither I nor anyone at my firm has any interest in the proposed development or relationship with the ownership entity.
5. Neither I nor anyone at my firm nor anyone acting on behalf of my firm is representing VHDA or in any way acting for, at the request of, or on behalf of VHDA
6. Compensation for my services is not contingent upon this development receiving a reservation or allocation of tax credits.



Market Analyst

Date March 12, 2019

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 35 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 3,000 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

The 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
Town of Ashland
Hanover County
U.S. Bureau of Labor Statistics
HUDUSER (e.g., SOCDs building permits database)

Market study checklist

	Page(s)
A. Executive Summary	
Executive Summary	1
B. Scope of Work	
Scope of Work	2
C. Project Description	
Unit mix inc. bedrooms, bathrooms, sq. footage, rents and Income targeting	4
Utilites (and utility sources) included in rent	4
Target market/population description	4
Project description inc. unit features and community amenities	4
Date of construction/preliminary completion	4
Scope of work, existing rents, and existing vacancies (rehabilitation)	4-5
D. Location	
Concise description of the site and adjacent parcels	9
Site photos/maps	9-13
Map of community services	16
Site evaluation/neighborhood inc. visibility, accessibility and crime	14-16
E. Market area	
Market area description	17
Market area map	18
F. Employment and Economy	
Employment trends	19
Employment by sector	20
Unemployment rates	21
Major employers/employment centers and proximity to site	23
Recent or planned employment expansions/reductions	24
G. Demographic Characteristics	
Population and household estimates and projections	27-28
Area building permits	34
Population and household characteristics inc. income, tenure, and size	29-33
For senior or special need projects, data specific to target market	n/a
H. Competitive Environment	
Comparable property profiles and photos	35-43
Map of comparable properties	44
Existing rental housing evaluation inc. vacancy and rents	36-37
Comparison of subject to comparable properties	35-37
Discussion of availability and cost of other affordable housing options	n/a
Rental communities under construction, approved, or proposed	49
Data specific to target market (senior/special needs)	n/a
I. Affordability, Demand, and Penetration Rate Analysis	
Estimate of demand	45-52
Affordability analysis, with capture rate	53
Penetration rate analysis with capture rate	53
J. Analysis/Conclusions	
Absorption rate and estimated stabilized occupancy for subject	55
Evaluation of proposed rent levels, inc estimate of market rent	55
Precise statement of key conclusions	55
Market strengths and weaknesses impacting project	55
Product recommendations and/or suggested modifications to subject	55
Discussion of subject property's impact on existing housng	55
Discussion of risks or other mitigating circumstances impacting subject	55
Interviews with area housing stakeholders	54
K. Other Requirements	
Certifications	56-57
Statement of quailifications	58
Sources of data not otherwise identified	59

MARKET STUDY TERMINOLOGY

The following presents the accepted definitions of various terms typically found in real estate market studies. These definitions are typically followed unless reviewing agency requirements differ.

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 unites 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.

Comprehensive market study - NCHMA (the National Council of Housing Market Analysts) 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 include 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.e. 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 typically⁷ 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. $(\text{market rent} - \text{proposed rent}) / \text{market rent} * 100$

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, economic - percentage of rent loss due to concessions, vacancies, and non-payment of rent on occupied units.

Market vacancy rate, physical - average number of apartment units in any market which are unoccupied 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 new 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 as contract rent or lease rent) - Gross rent less *tenant paid utilities*.

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 with 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 *rent burden* above the level determined by the lender, investor, or public program to be an acceptable rent-to-income.

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 *primary market area* 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 population 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 *contract rent* 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 period - 1. An estimate of the number of housing units in a market area as a percentage of total housing units in the market area that will likely change occupants in any one year. See also: vacancy period. $\text{Housing units with new occupants} / \text{housing units} * 100$ 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 vacancy rate - physical - maximum potential revenue less actual rent revenue divided by maximum potential rent revenue. The number of total habitable units that are vacant divided by the total number of units in the property.

Other Terms

The following terms are also to be found in professional market studies - here, this information is drawn from various sources including HUD, the Census Bureau, and the Urban Land Institute.

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 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.

Contract rent - 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.

Elder or senior housing - housing where (1) all units in the property are restricted for occupancy by persons 62 years of age or older or (2) at least 80% 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 the Area Median Income adjusted for household size.

Fair Market Rent (FMR) - the estimates established by HUD of the Gross rents (Contract rent plus Tenant Paid Utilities) needed to obtain modest rental units in acceptable condition in a specific county or metropolitan statistical area. HUD generally set 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 in the use of the housing of their choice. The voucher payment subsidizes the difference between the Gross Rent and 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 (FHA) - 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 501(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 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 have 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 the area median income or where the poverty rate is at least 25%. A project located in a QCT and receiving Low Income Housing Tax Credit 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. The 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.