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Appendix A  
DEMOGRAPHIC ANALYSIS

## Demographic Analysis: Population

The Blacksburg MSA is projected to add roughly 4,000 residents over the next five years. Given shifting demographics and preferences, downtown and close-in neighborhoods can be positioned to capture a greater share of regional growth than in recent decades.

Household data indicates an inclination in the market area toward multi-family housing. As the chart at bottom right shows, the number of persons per household in Downtown is low relative to regional figures. This is due to the relatively high percentages of singles and childless couples who are more likely to rent or live in multifamily housing than the general population; thus there is likely to be an amply deep market for housing in Downtown, provided a suitable environment is created and effectively marketed.

Five-year population projections indicate that all three market areas, as well as the MSA and state, will experience steady population growth. However, Downtown Blacksburg is estimated to capture only about 2.5 percent of the growth in Market Area One and less than one percent of the growth in the MSA. These numbers demonstrate that there is substantial opportunity for Downtown to increase its residential population with the right housing developments.

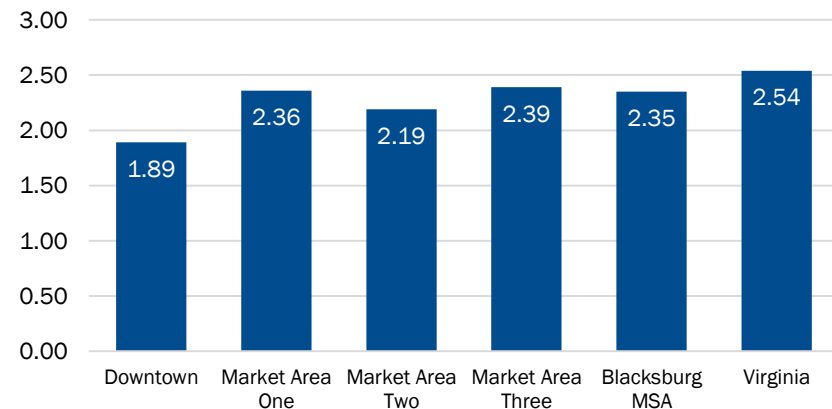
### Demographic Trends

Description	Downtown	Market	Market	Market	Blacksburg MSA	Virginia
		Area One	Area Two	Area Three		
<b>Population</b>						
2019 Projection	661	35,377	8,609	8,887	186,369	8,690,202
2014 Estimate	642	34,627	8,538	8,427	182,353	8,275,961
2010 Census	627	34,281	8,529	7,971	178,237	8,001,024
Annual Growth 2014-2019	0.6%	0.4%	0.2%	1.1%	0.4%	1.0%
Annual Growth 2010-2014	0.6%	0.3%	0.0%	1.4%	0.6%	0.8%

© ESRI, 2015

### Average Persons Per Household

Source: ESRI, 2015



## Demographic Analysis: Income

Relative to regional averages, Downtown Blacksburg has a low per capita income, which is explained by the large presence of students. The same is true of Market Areas One and Two, which cover most of the Town of Blacksburg, even though those areas contain the highest concentrations of wealth. Market Area Three, which has been identified as having less expensive and more desirable housing stock for professionals working in Blacksburg, has a high per capita and median household income as compared to the region.

### Median Household Income

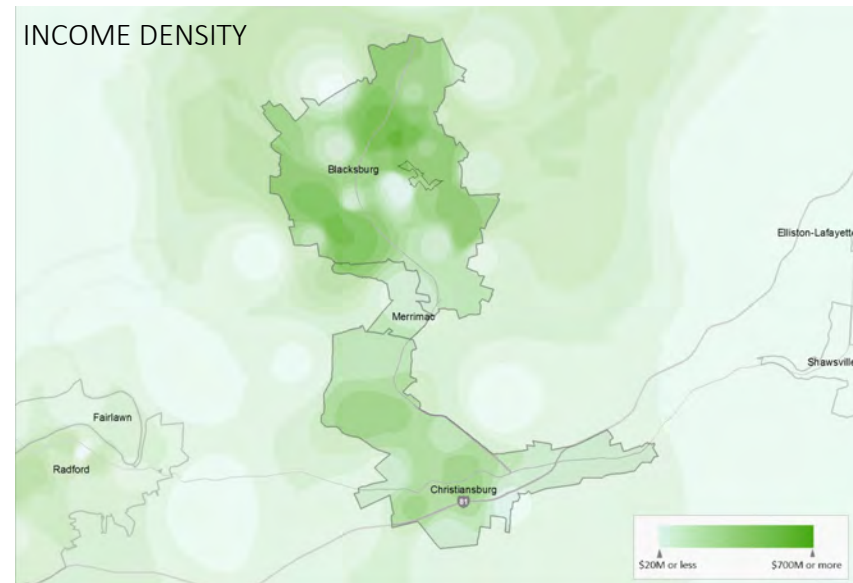
With a median income of \$25,908 and a per capita income of \$23,454, households in Downtown earn less than those in the region (\$42,100 and \$22,909, respectively). This is explained by the higher proportion of students living in Downtown housing. Incomes in Market Areas One and Two are also low compared to the region, which can also be attributed to the high percentage of student residents throughout the Town of Blacksburg. By contrast, Market Area Three has a high median income and per capita income as compared to the region (\$57,243 and \$27,400, respectively). Many professionals in Blacksburg have identified Market Area Three—located south of Blacksburg—as an area where they can find housing at their desired quality and price.

### Income Density

The map at above right shows income density, which measures aggregate income per square mile. As the map shows, the heaviest concentration of wealth in the Blacksburg area are within the town boundaries, to the north, southwest, and southeast of Downtown. Income density in Downtown itself is moderate as compared to other parts in the region. One opportunity for Downtown is to capture more residents similar to those in the more affluent neighborhoods, thus increasing income density and opportunities for neighborhood retail services.

Income By Geography

Source: ESRI, 2014



## Demographic Analysis: Age Cohorts

As would be expected in a university town, the market areas around Virginia Tech’s campus—Downtown and Market Area One—trend young. However, these areas also have a relatively low number of residents in their early workforce years, as well as empty nesters, which are favorable demographics for downtown housing. The current age distribution in the market areas demonstrates that there is an opportunity to attract more diverse age cohorts to Downtown and the surrounding area.

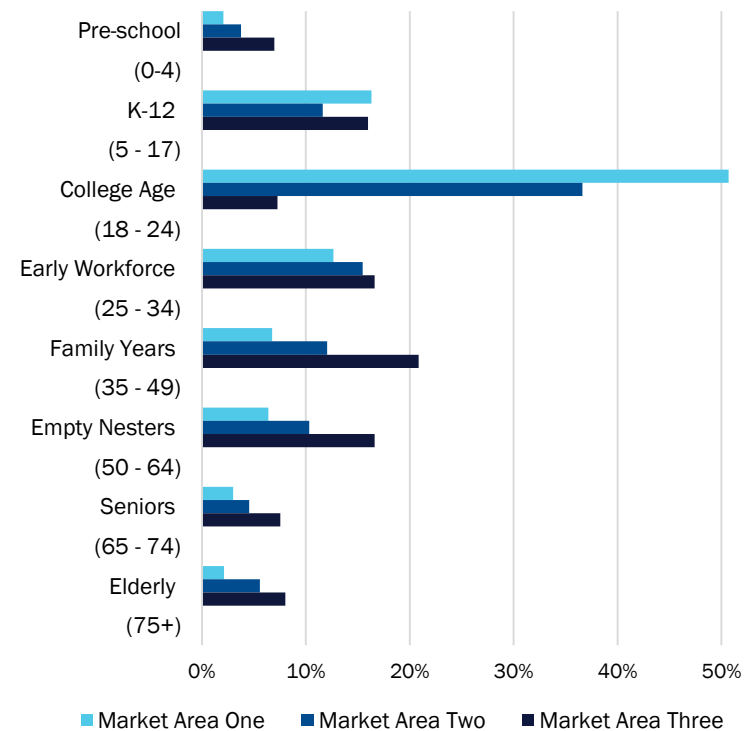
The average resident in Downtown is 23 years old, similar to the median age in Market Areas One and Two but significantly younger than residents in Market Area Three, where the median age is 37 years old. As the chart on top right indicates, Downtown and Market Area One have a very high proportion of College Age residents (ages 18-24), driven by the fact that most student housing is located in these areas.

At the same time, just 12 percent of Downtown residents and 13 percent of residents in Market Area One are in the Early Workforce cohort, while Market Areas Two and Three have higher proportions of this group. Demographic research for downtown areas indicates that, along with the College Age group, this demographic group is more inclined to live in a downtown than the general population. They are also more inclined to accept or desire multifamily housing, since people in this age bracket are more likely to be single and/or childless. If the right housing products were available, it is likely that the proportion of this group in Downtown and surrounding area would increase.

Empty nesters (50-64) are one of the smallest cohorts in Downtown and in Market Area One, while they make up 17 percent of residents in Market Area Three. This group also typically provides demand for downtown housing and there is potential to attract them from the more suburban surroundings of Market Area Three to live in Downtown.

Percentage of Population by Age Cohort

Source: ESRI, 2015



## Demographic Analysis: Housing

The high home values of for-sale housing Downtown points to two conclusions: A market for high-end housing does exist and too much emphasis on high price points has led to the exclusion of modestly priced units that would appeal to a broader market.

Occupancy of housing is somewhat lower in Downtown (85 percent) compared to the three market areas (94 percent). This is likely attributable to the obsolescence of some housing and the high cost of other properties, as opposed to a lack of desirability of location. Development Strategies’ survey of competitive downtown housing indicated occupancy rates above 90 percent.

Not surprisingly, the Downtown and surrounding Market Areas One and Two have very little single-family housing—an unlikely product type, given the high land costs which do not facilitate low density development. While Market Area Three more single-family housing than Downtown, it also has a lower proportion of single-family housing relative to the region, indicating a market that is more open to alternative housing formats.

High rates of homeownership are sometimes mistakenly associated with increased property values, yet analysis of median home values tells a different story. Downtown and Market Areas One and Two have a relatively low homeownership rate compared with the overall region, but have median home values that are significantly higher than Market Area Three and the MSA. Downtown, which has the lowest rate of owner-occupied housing, has the highest median home value, although this can be somewhat misleading, as most of the owner-occupied housing currently in Downtown is new and targeted to higher income groups. In fact, it is a conclusion of this study that past housing efforts that have exclusively targeted affluent residents have been limiting in attracting downtown residents, since a deeper pool exists for more modestly priced units.

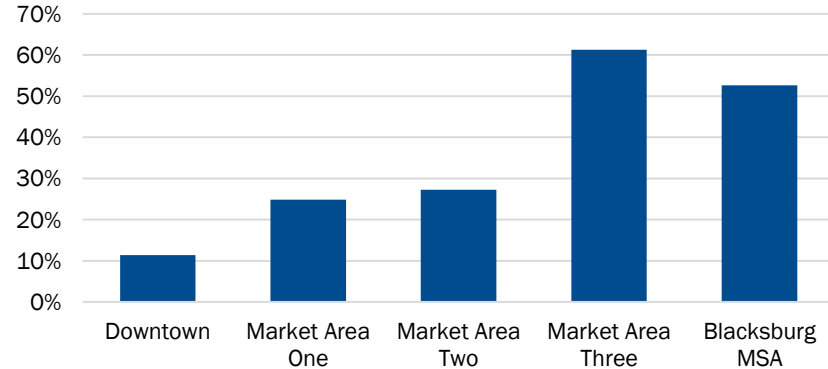
### Household Overview

Description	Downtown	Market Area One	Market Area Two	Market Area Three	Blacksburg MSA
Occupancy Rate	85%	94%	94%	94%	89%
% Detached SF Homes	21%	30%	23%	49%	59%
% Family Households	18%	31%	36%	63%	57%

© ESRI, 2015

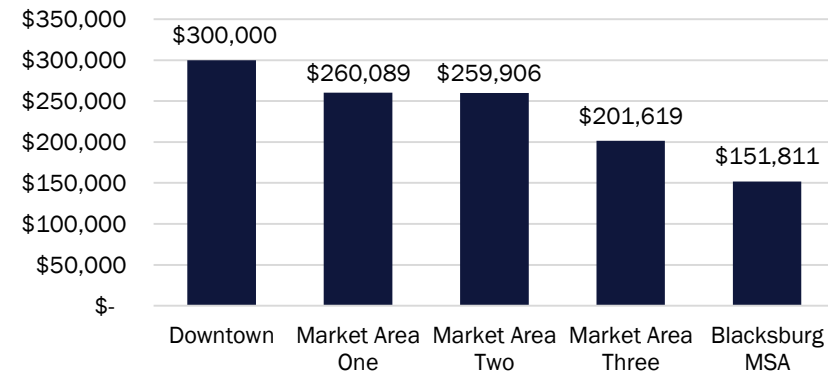
### Percent Homeownership

Source: ESRI, 2015



### Median Home Values

Source: ESRI, 2015

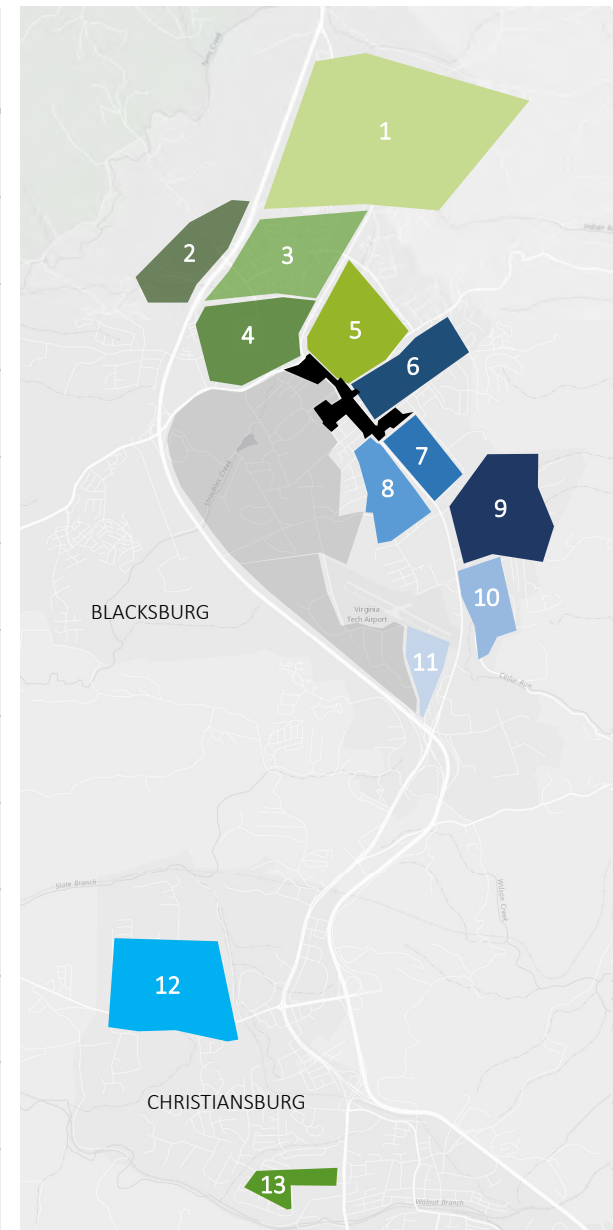




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Appendix B  
NEIGHBORHOOD PROFILES

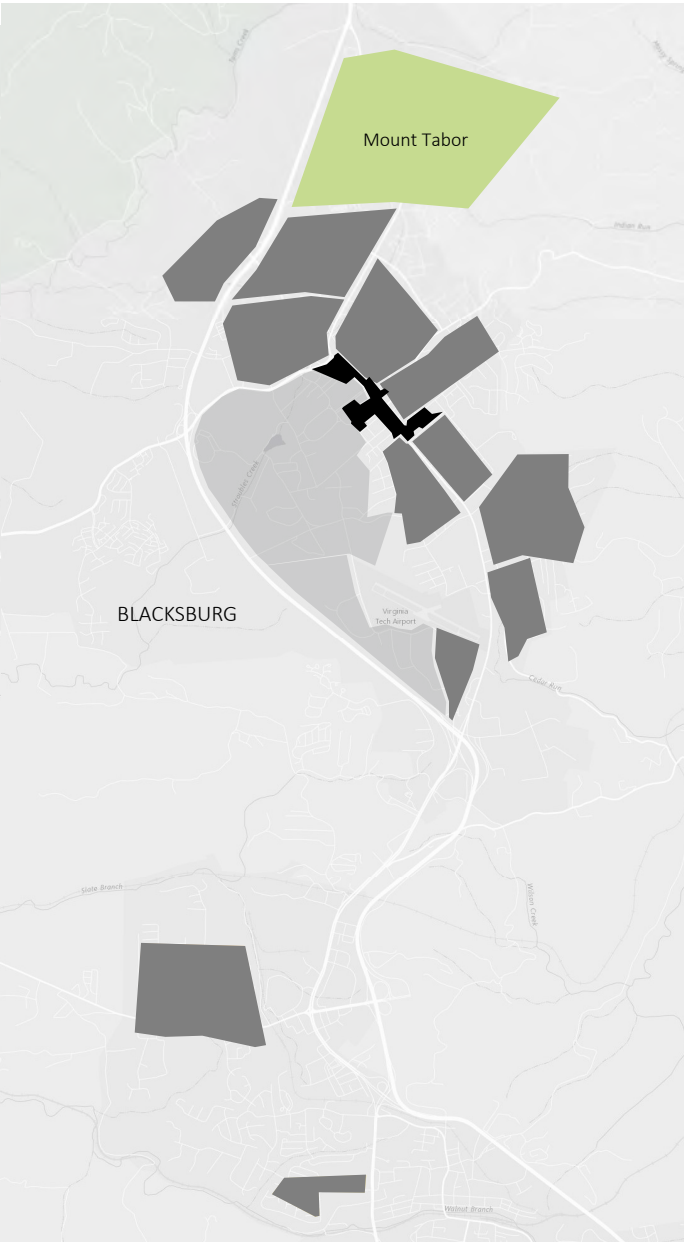
	Neighborhoods	Median House Price Range	Average Size (Sq Ft)	Median Year Built
1	Mount Tabor	\$231,000 - \$407,000	2600	2006
2	Village at Tom's Creek	\$295,000 - \$382,000	2451	2006
3	Patrick Henry	\$163,000 - \$295,000	1859	1995
4	McBryde	\$191,000 - \$291,000	2094	1963
5	Bennett Hill	\$135,000-\$271,000	1754	1960
6	Eastside	\$203,000-\$290,000	2010	1973
7	Mountain View	\$201,000 - \$245,000	2119	2001
8	Miller Southside	\$243,000 - \$527,000	2779	1957
9	Grissom/ Highland	\$219,000 - \$363,000	2528	1968
10	Ellett/ Jennelle	\$152,000 - \$197,000	1621	1985
11	Knollwood	\$182,000-\$245,000	1810	2000
12	New River Mall	\$173,000 - \$211,000	2000	2005
13	Oak Tree	\$138,000 - \$160,000	1629	2000





## Mount Tabor

Predominant Housing Type	Single-Family
Median House Price Range	\$231,000-\$407,000
Average Size (Square Feet)	2,600
Median Year Built	2006
Median Condo Price Range	\$171,000-\$175,000
Average Size (Square Feet)	1,800
Median Year Built	2009
Major Condo Communities	Mount Tabor Village
Average One-Bedroom Rent	N/A
Average Two-Bedroom Rent	N/A
Average Three-Bedroom Rent	N/A
Selected Rental Properties	N/A



## Village at Tom's Creek

Predominant Housing Type      Single-Family

Median House Price Range      \$295,000-\$382,000

Average Size (Square Feet)      2,451

Median Year Built      2006

Median Condo Price Range      N/A

Average Size (Square Feet)      N/A

Median Year Built      N/A

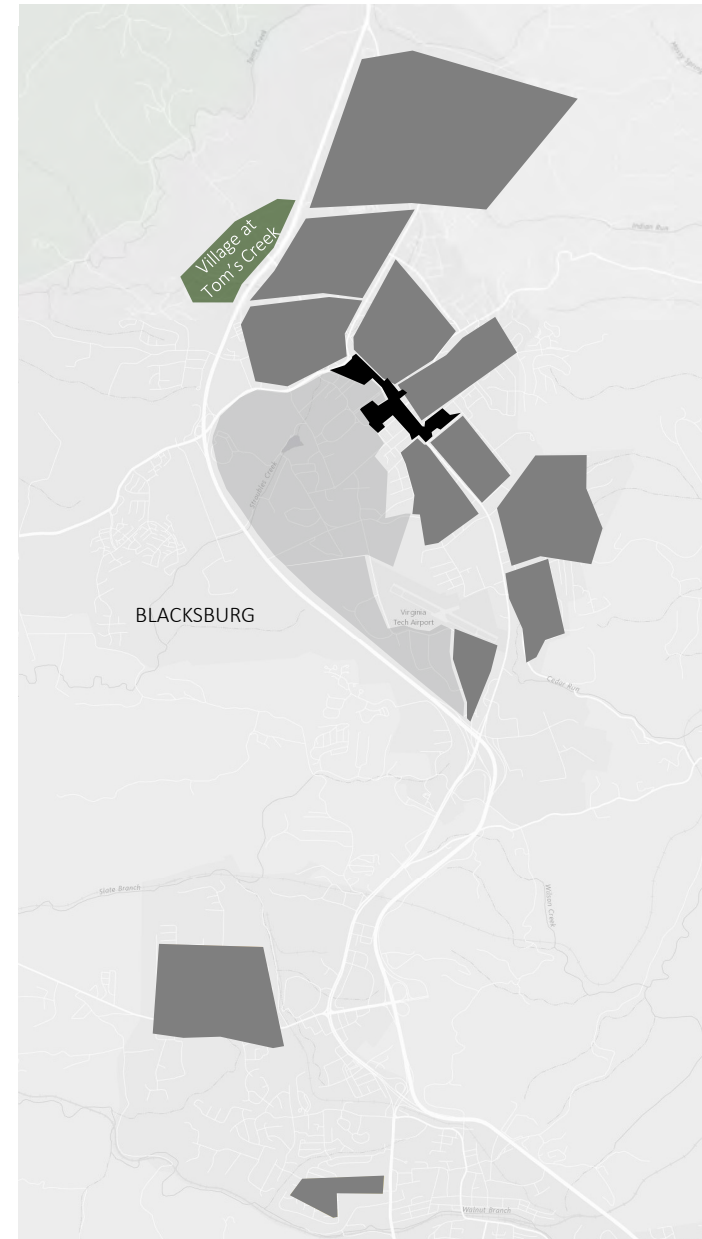
Major Condo Communities      N/A

Average One-Bedroom Rent      N/A

Average Two-Bedroom Rent      N/A

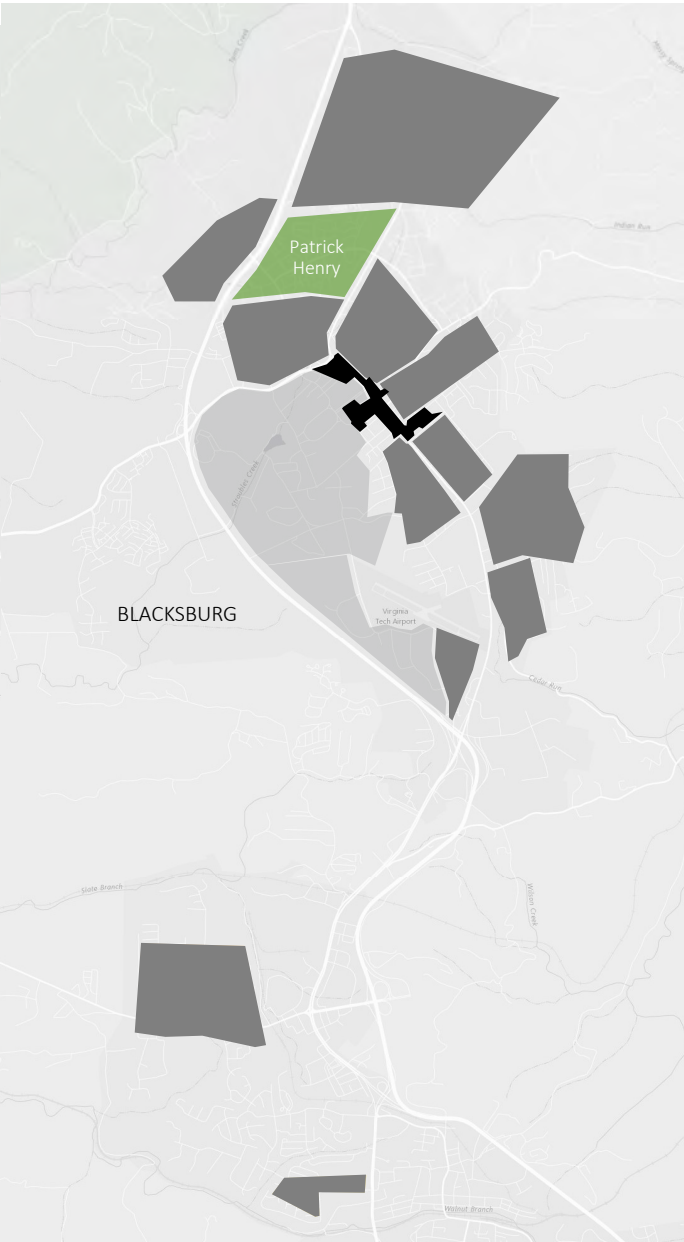
Average Three-Bedroom Rent      N/A

Selected Rental Properties      N/A



## Patrick Henry

Predominant Housing Type	Condos; Townhomes; Apartment Rentals
Median House Price Range	\$163,000-\$295,000
Average Size (Square Feet)	1,859
Median Year Built	1995
Median Condo Price Range	\$117,000-\$162,000
Average Size (Square Feet)	1,115
Median Year Built	1990
Major Condo Communities	University Terrace
Average One-Bedroom Rent	\$855
Average Two-Bedroom Rent	\$1,000
Average Three-Bedroom Rent	\$1,290
Average Four-Bedroom Rent	\$1,500-\$1,900
Selected Rental Properties	Hunters Ridge, Village at Blacksburg,



## McBryde

Predominant Housing Type      Single-Family

Median House Price Range      \$191,000-\$291,000

Average Size (Square Feet)      2,094

Median Year Built      1963

Median Condo Price Range      \$75,000-\$85,000

Average Size (Square Feet)      760

Median Year Built      1970

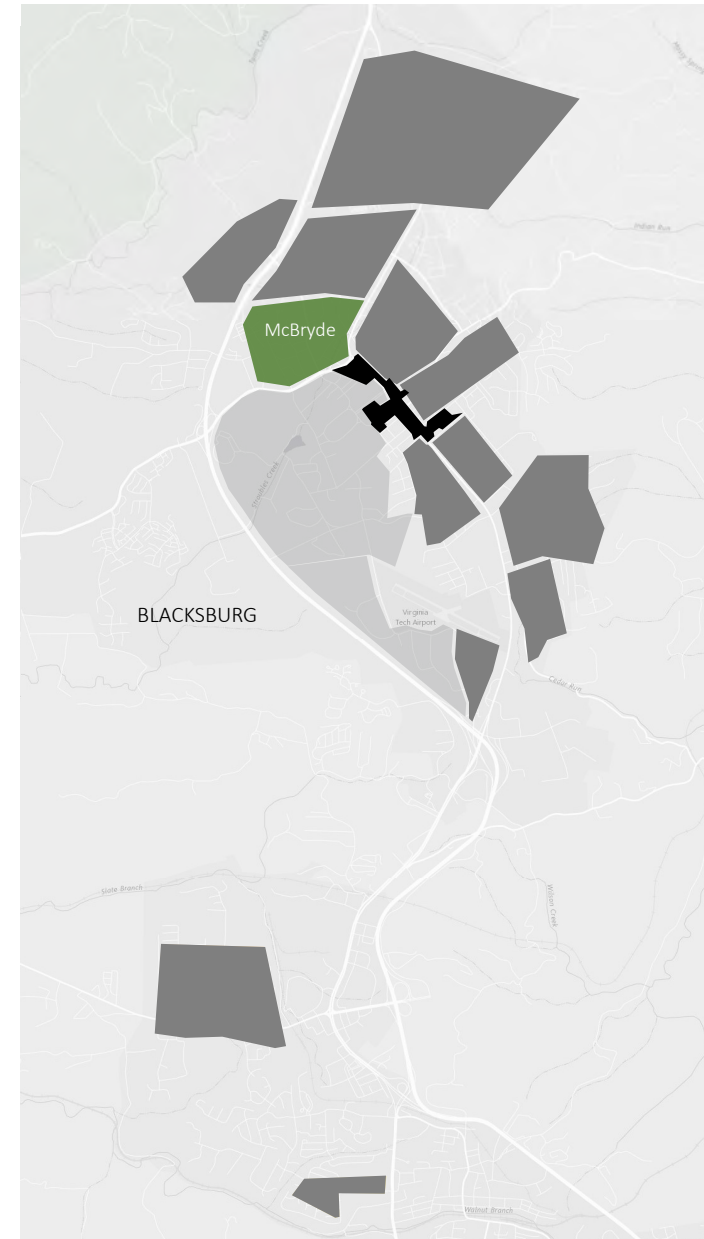
Major Condo Communities      Park Place

Average One-Bedroom Rent      N/A

Average Two-Bedroom Rent      N/A

Average Three-Bedroom Rent      N/A

Selected Rental Properties      N/A



## Bennett Hill

Predominant Housing Type                      Single-Family; Apartment Rentals

Median House Price Range                      \$135,000-\$271,000

Average Size (Square Feet)                      1,754

Median Year Built                                      1960

Median Condo Price Range                      \$217,000-\$230,000

Average Size (Square Feet)                      1,744

Median Year Built                                      2005

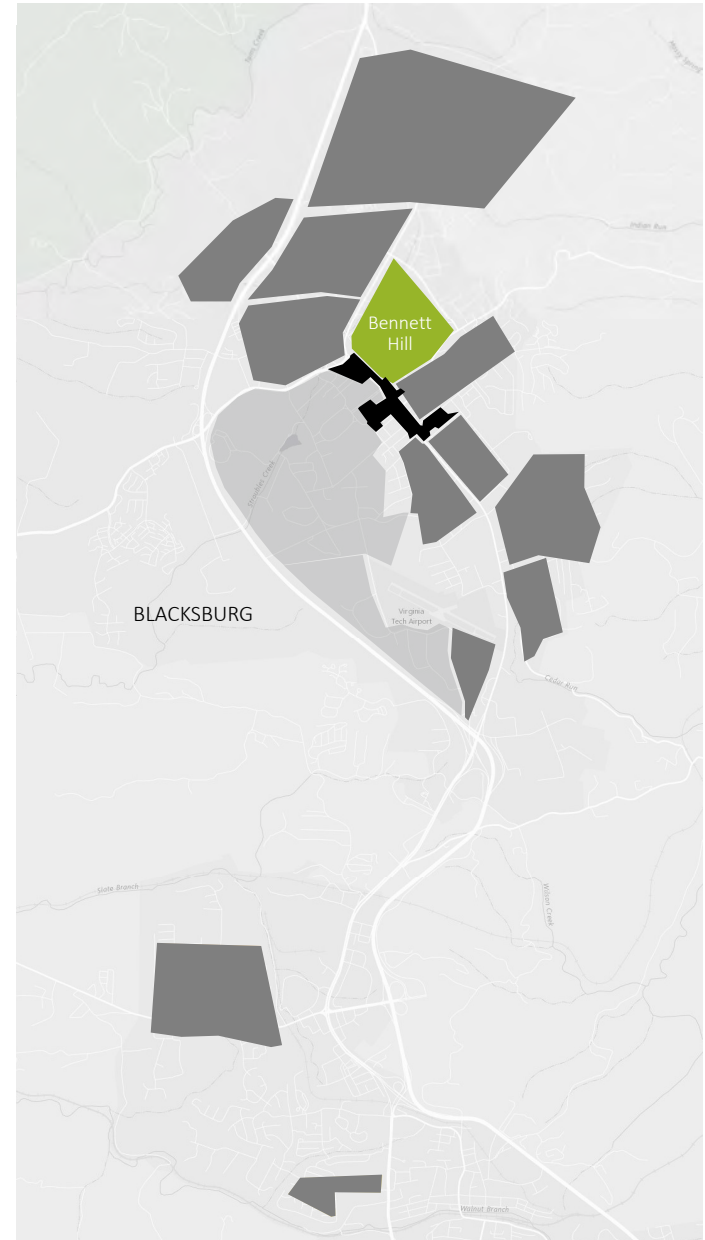
Major Condo Communities                      The Heights

Average One-Bedroom Rent                      \$575-\$600

Average Two-Bedroom Rent                      \$700

Average Three-Bedroom Rent                      \$750-\$800

Selected Rental Properties                      Hearthstone



## Eastside

Predominant Housing Type      Single-Family; Apartment Rentals

Median House Price Range      \$203,000-\$290,000

Average Size (Square Feet)      2,010

Median Year Built      1973

Median Condo Price Range      \$93,000-\$139,000

Average Size (Square Feet)      961

Median Year Built      1988

Major Condo Communities      Berryfield

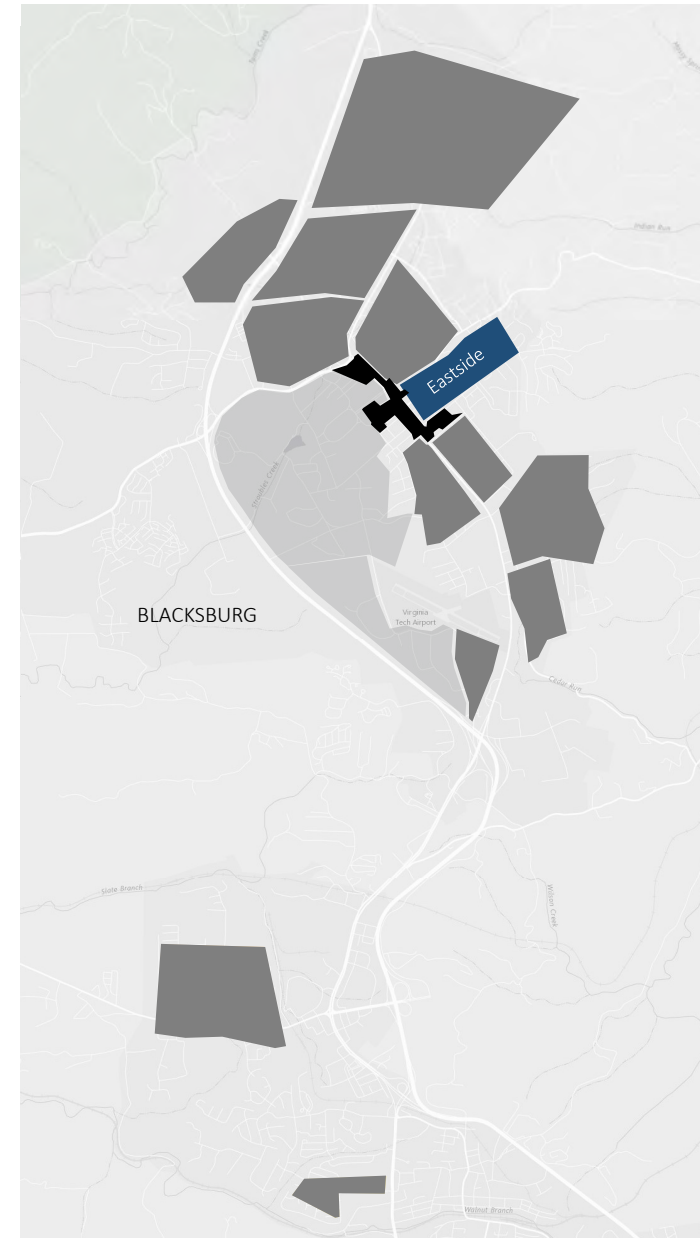
Average One-Bedroom Rent      \$573

Average Two-Bedroom Rent      \$698

Average Three-Bedroom Rent      \$760

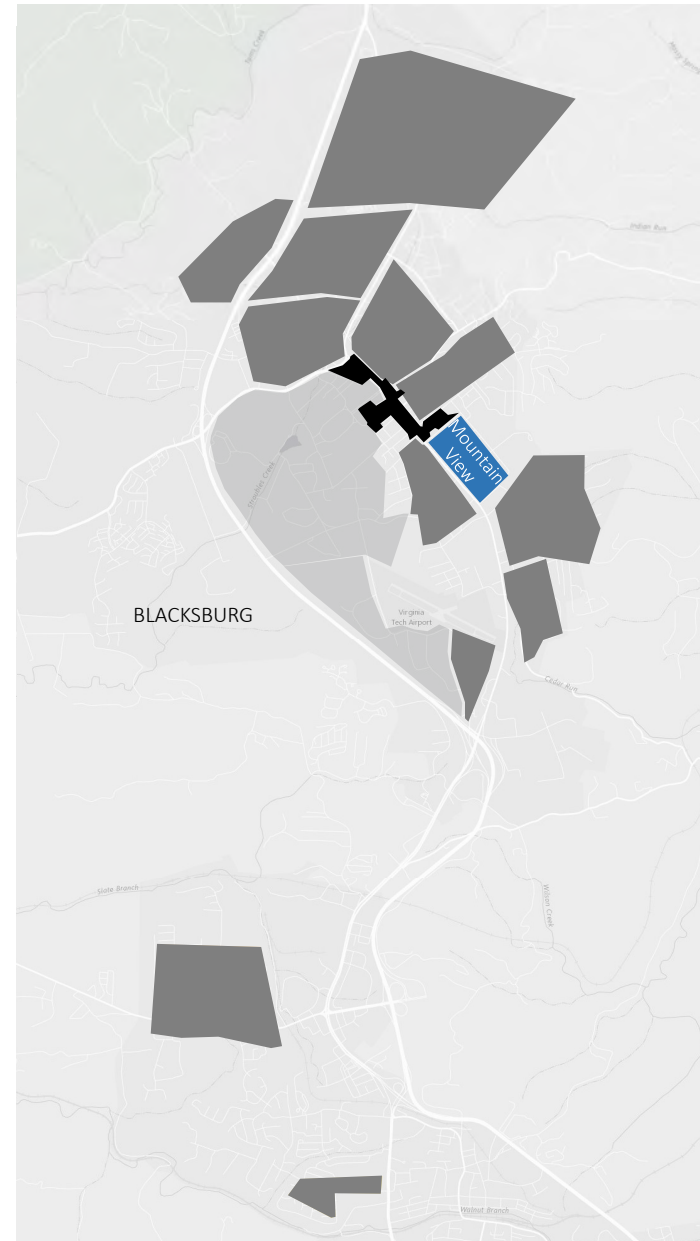
Average Four-Bedroom Rent      \$1,940

Selected Rental Properties      Jefferson Apartments; Chase Apartments



## Mountain View

Predominant Housing Type	Single-Family
Median House Price Range	\$201,000-\$245,000
Average Size (Square Feet)	2,119
Median Year Built	2001
Median Condo Price Range	N/A
Average Size (Square Feet)	N/A
Median Year Built	N/A
Major Condo Communities	N/A
Average One-Bedroom Rent	N/A
Average Two-Bedroom Rent	N/A
Average Three-Bedroom Rent	N/A
Selected Rental Properties	N/A



## Miller-Southside

Predominant Housing Type      Single-Family

Median House Price Range      \$243,000-\$527,000

Average Size (Square Feet)      2,779

Median Year Built      1957

Median Condo Price Range      N/A

Average Size (Square Feet)      N/A

Median Year Built      N/A

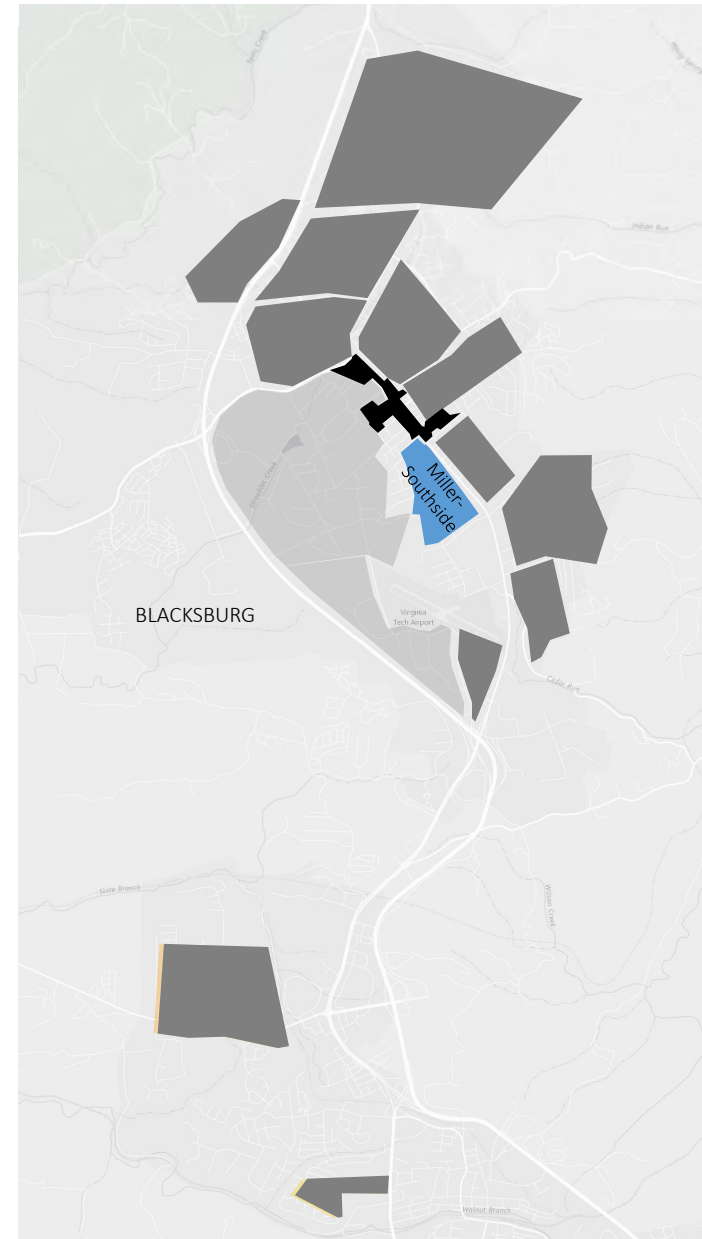
Major Condo Communities      N/A

Average One-Bedroom Rent      N/A

Average Two-Bedroom Rent      N/A

Average Three-Bedroom Rent      N/A

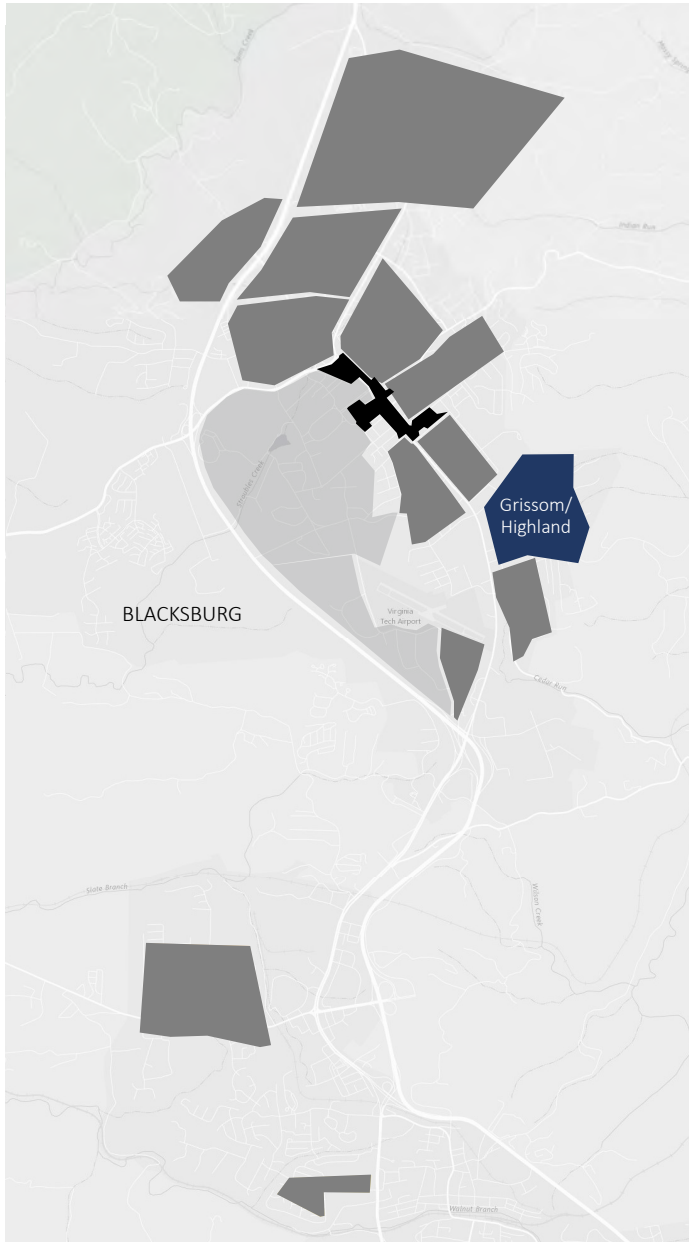
Selected Rental Properties      N/A





## Grissom/Highland

Predominant Housing Type	Single-Family
Median House Price Range	\$219,000-\$363,000
Average Size (Square Feet)	2,528
Median Year Built	1968
Median Condo Price Range	N/A
Average Size (Square Feet)	N/A
Median Year Built	N/A
Major Condo Communities	N/A
Average One-Bedroom Rent	N/A
Average Two-Bedroom Rent	N/A
Average Three-Bedroom Rent	N/A
Selected Rental Properties	N/A



## Ellett/Jenelle

Predominant Housing Type      Condos; Apartment Rentals

Median House Price Range      \$152,000-\$197,000

Average Size (Square Feet)      1,621

Median Year Built      1985

Median Condo Price Range      \$96,000-\$136,000

Average Size (Square Feet)      1,005

Median Year Built      1978

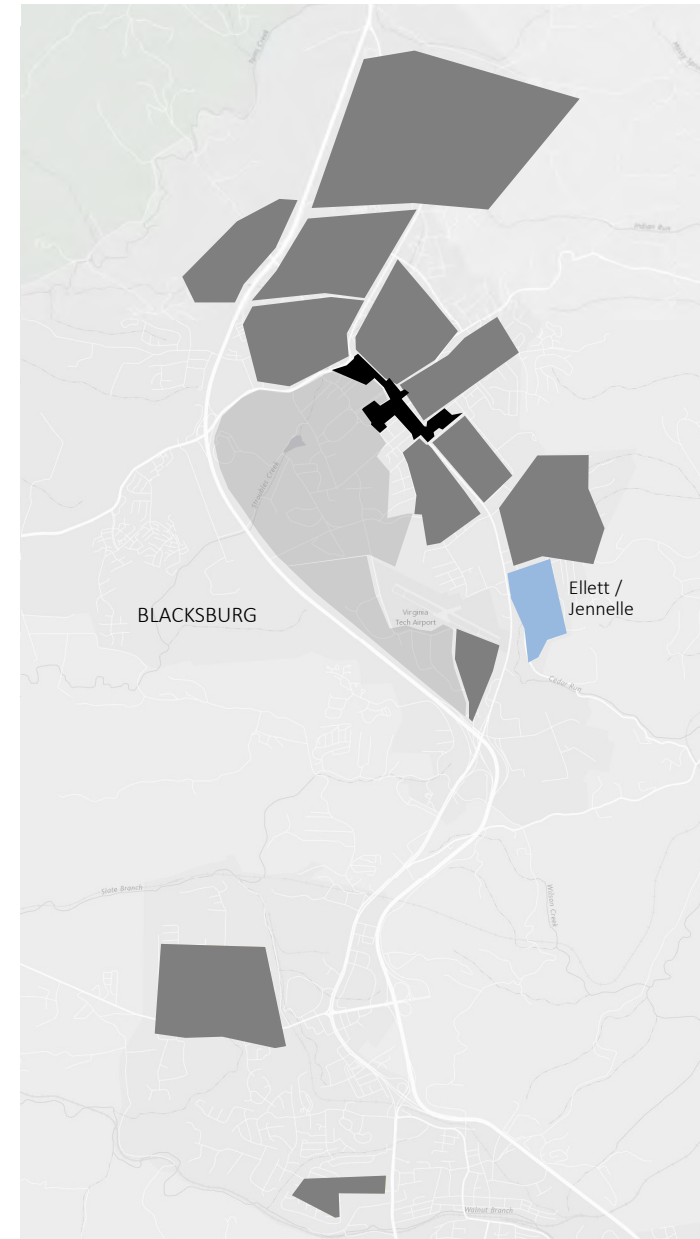
Major Condo Communities      Cascades

Average One-Bedroom Rent      \$700-\$750

Average Two-Bedroom Rent      \$775-\$825

Average Three-Bedroom Rent      \$1,000-\$1,050

Selected Rental Properties      Cedar Crest, Mill at Blacksburg



## Knollwood

**Predominant Housing Type**                      Condos; Townhome and Apartment Rentals

**Median House Price Range**                      \$182,000-\$245,000

**Average Size (Square Feet)**                      1,180

**Median Year Built**                                      2000

**Median Condo Price Range**                      \$142,000-\$182,000

**Average Size (Square Feet)**                      1,044

**Median Year Built**                                      1998

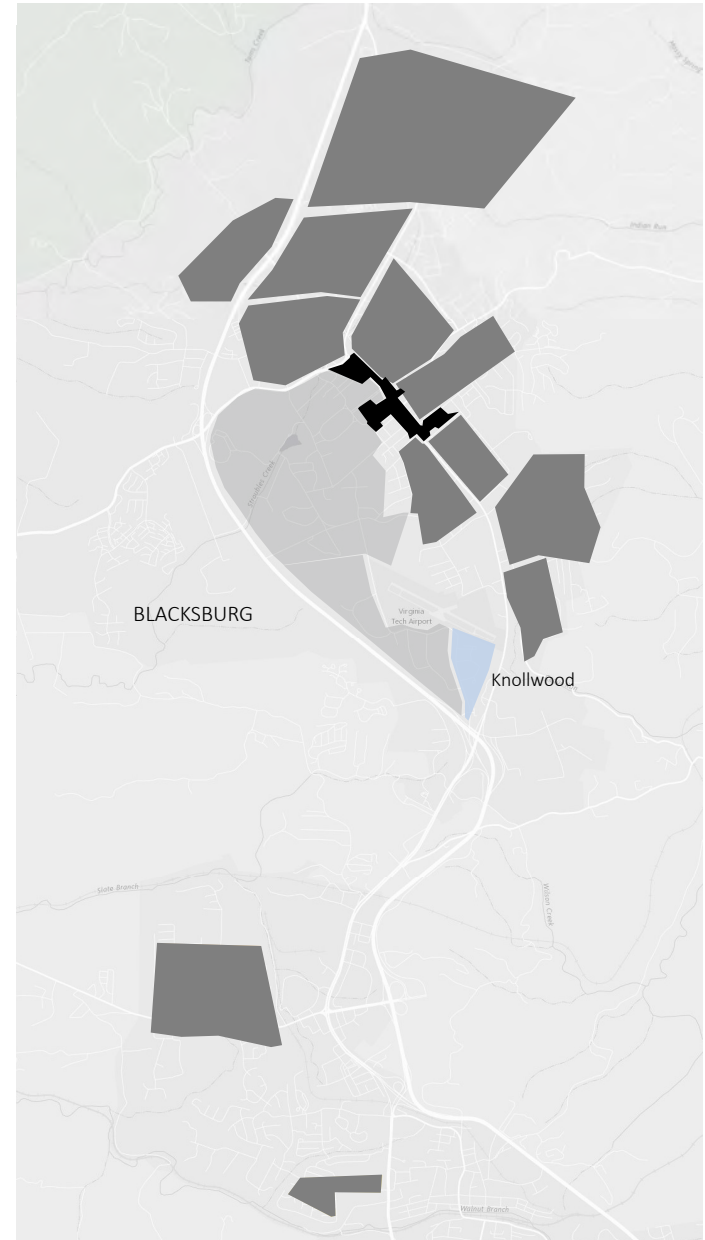
**Major Condo Communities**                      Knollwood

**Average One-Bedroom Rent**                      \$780-\$950

**Average Two-Bedroom Rent**                      \$975-\$1,250

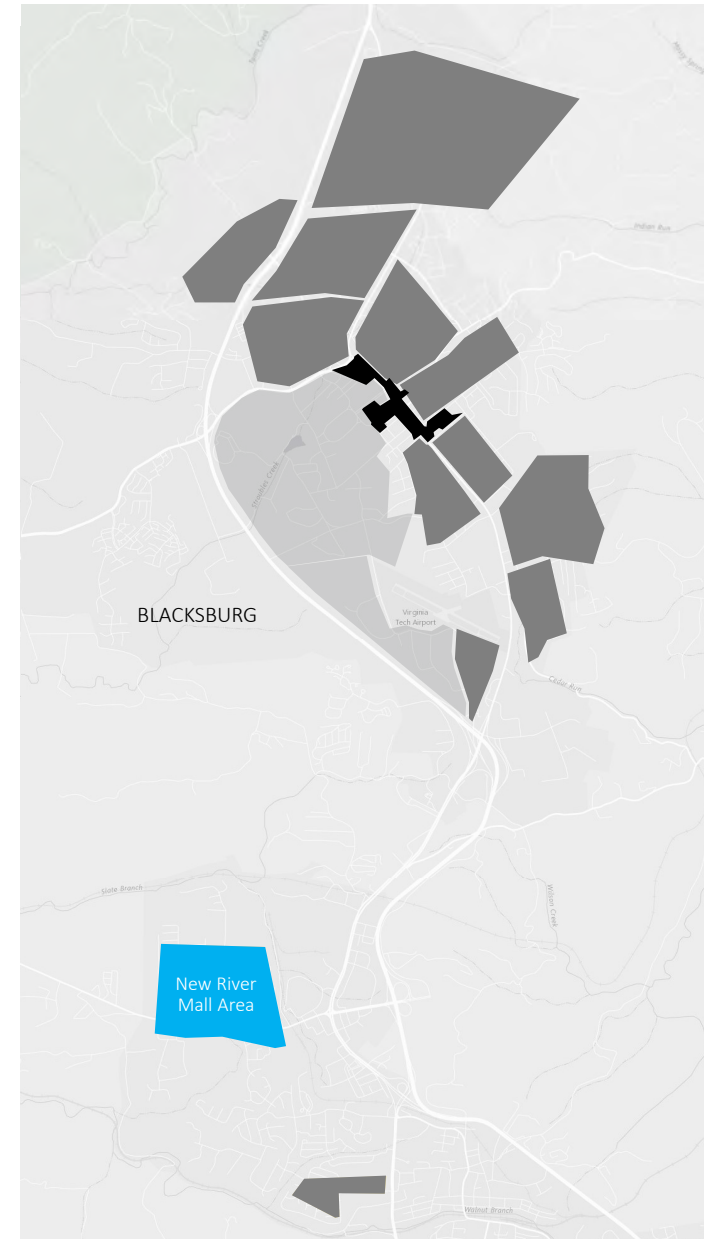
**Average Three-Bedroom Rent**                      \$1,275-\$1,450

**Selected Rental Properties**                      Crossing at Knollwood, Cedarfield, Reserve at Knollwood, Knollwood Townhomes



## New River Mall Area

Predominant Housing Type	Single-Family
Median House Price Range	\$173,000-\$211,000
Average Size (Square Feet)	2,000
Median Year Built	2005
Median Condo Price Range	\$220,000-\$255,000
Average Size (Square Feet)	1,676
Median Year Built	2007
Major Condo Communities	Villas at Peppers Ferry
Average One-Bedroom Rent	N/A
Average Two-Bedroom Rent	N/A
Average Three-Bedroom Rent	N/A
Selected Rental Properties	N/A



## Oak Tree

Predominant Housing Type      Townhomes

Median House Price Range      \$138,000-\$160,000

Average Size (Square Feet)      1,629

Median Year Built      2000

Median Condo Price Range      N/A

Average Size (Square Feet)      N/A

Median Year Built      N/A

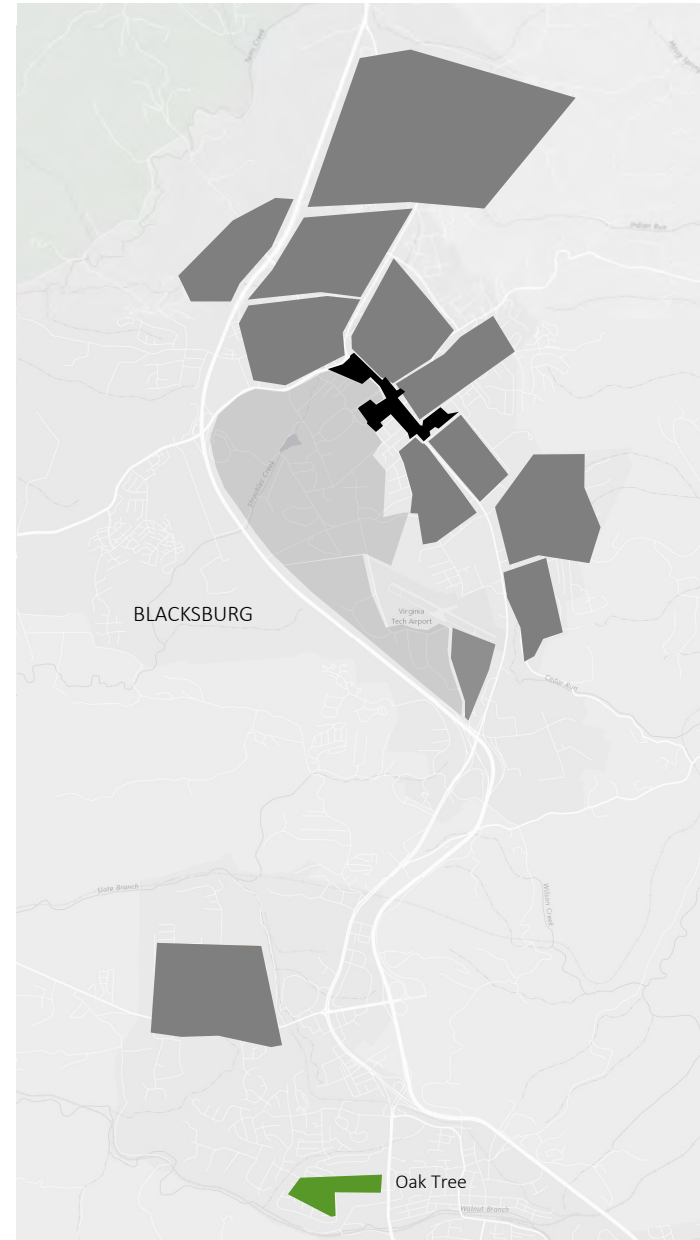
Major Condo Communities      N/A

Average One-Bedroom Rent      N/A

Average Two-Bedroom Rent      N/A

Average Three-Bedroom Rent      N/A

Selected Rental Properties      N/A





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Appendix C  
EXISTING RESIDENTIAL SUPPLY

## Existing Supply: Rental

Based on current Downtown properties, newly constructed medium and high-density products targeted at students will rent for up to \$1.80 per square foot, while newly rehabilitated properties for graduate students and professionals will rent for as much as \$2.00 per square foot.

Owners of rental properties in Blacksburg were surveyed to determine rents and occupancies in the market, as well as to gain an understanding of achievable rents relative to a property’s age, location, and level of finish. Following is an analysis of the most relevant properties:

**Undergraduate Student Apartments:** These property types are developed at medium to high densities and generally include some larger three- and four-bedroom units. None have been developed within the Downtown area. The most recently-built properties, The Edge and Smith’s Landing, achieve rents from \$1.20 per square foot for one-

bedroom units up to \$1.85 per square foot for four-bedroom units.

**Graduate Student and Young Professional Rentals:** There are a small number of rehabbed properties in Downtown Blacksburg, with around 20 rental units, that are targeted to graduate students and young professionals. In general they provide levels of finish and are of a quality that is superior to many older properties currently in the market. Newer apartments in the Knollwood community, southwest of Downtown, also attract this demographic. Rents at these properties range from \$1.15 to \$2.00 per square foot for one-bedroom and two-bedroom units.

**Midscale Apartments:** Blacksburg has a number of large older properties with dated unit interiors and/or inferior locations. These are primarily garden-style apartment properties that were built prior to 1990 and have received only modest renovations over the past few decades. Rents at these properties range from about \$1.00 per square foot for one-bedroom units to \$0.85 to \$0.90 per square foot for two- and three-bedroom units.



The Edge



Jackson Square Apartments



Reserve at Knollwood



Jefferson Apartments

### Town of Blacksburg Summary of Selected Apartment Rental Properties

Project	Year Built/ Rehabbed	# of Units	Two-Bedroom			Three-Bedroom			Four-Bedroom		
			Avg. Rent	Size (SF)	Rent PSF	Avg. Rent	Size (SF)	Rent PSF	Avg. Rent	Size (SF)	Rent PSF
<b>Undergraduate Student Rentals</b>											
The Edge	2013	252	\$1,430	923	\$1.55	\$2,037	1,207	\$1.69	\$3,000	1,592	\$1.88
Smith's Landing	2008	284	\$1,108	1,071	\$1.03	\$1,390	1,238	\$1.12	-	-	-
<b>Graduate/Young Professional Rentals</b>											
Reserve at Knollwood	2013	111	\$1,229	1,085	\$1.13	\$1,443	1,231	\$1.17	-	-	-
Lofts at the Lyric	2007	11	\$1,823	895	\$2.04	-	-	-	-	-	-
Lofts at 316	2010	3	-	-	-	-	-	-	-	-	-
Jackson Square Apartments	2003	8	-	-	-	-	-	-	-	-	-
<b>Midscale Apartments</b>											
Hearthstone Apartments	1962-1963	34	\$700	840	\$0.83	-	-	-	-	-	-
Jefferson Apartments	1970	250	\$698	790	\$0.88	\$760	915	\$0.83	-	-	-
Cedarfield	1993-2001	114	\$978	1,075	\$0.91	\$1,275	1,444	\$0.88	-	-	-

DEVELOPMENT STRATEGIES 2015



## Existing Supply: For Sale

A small number of condominium projects have occurred in Downtown Blacksburg in the past 15 years. While the market for upscale condominiums is modest, there is increasing demand from young professionals for midscale for-sale products in Downtown, a demand which is currently not being met.

Recent condominium projects were developed at the height of the housing boom with inflated prices, which had to come down considerably during the housing downturn in order to sell units. Nevertheless, the housing market is recovering and future demographic trends indicate that multifamily housing is likely to be in greater demand. Much of the demand will come from young professionals, for whom Downtown would be an appealing location for high-density, for-sale housing.

**Upscale Condos:** Upscale condo development in Blacksburg has occurred exclusively Downtown, and includes Kent Square, Clay Court, and the Brownstone. All three projects were built in the past 15 years and between them include 64 one-, two-, and three-bedroom units. Recent sales at Kent Square average \$260 per square foot, while the units at the

Brownstone sell for approximately \$325 per square foot. These are generally targeted at mid-career professionals, retirees, and “game day” buyers, and are outside the price range for young professionals.

**Midscale Condos:** Knollwood Condominiums and Cascade Pointe Condos are midscale condominium projects developed in the 1980s and 1990s. These projects have fewer amenities and lower levels of finish, with less desirable locations. These products are targeted towards graduate and professional students and young working professionals. Many of the units are currently being rented, but recent sales data indicate prices of around \$150 to \$170 per square foot.



Kent Square



The Brownstone



Knollwood Condominiums

### Town of Blacksburg

#### Summary of Selected For-Sale Properties

Project	Year Built/ Rehabbed	# of Units	One-Bedroom			Two-Bedroom			Three-Bedroom			Four-Bedroom		
			Avg. Sale Price	Size (SF)	Price PSF	Avg. Sale Price	Size (SF)	Price PSF	Avg. Sale Price	Size (SF)	Price PSF	Avg. Sale Price	Size (SF)	Price PSF
<b>Condos</b>														
The Brownstone*	2014	17	-	-	-	\$500,000	1,543	\$324	-	-	-	-	-	-
Clay Court	2006	32	\$230,000	980	\$235	\$350,000	1,260	\$278	-	-	-	-	-	-
Kent Square	2004	15	\$167,750	632	\$265	\$280,000	1,094	\$256	\$370,000	1,382	\$268	-	-	-
Knollwood Condominiums	1990s	90	\$132,100	770	\$172	\$184,900	1,068	\$173	\$180,000	1,184	\$152	-	-	-
Cascades Pointe Condos	1980s/2006	120	\$94,750	616	\$154	\$108,450	756	\$143	\$144,400	924	\$156	\$189,000	1,254	\$151

DEVELOPMENT STRATEGIES 2015 \*Development is not completed; prices represent information obtained from developer

## Existing Supply: Single Family and Townhome Developments

Blacksburg has a few examples of dense single family and townhome infill products around the peripheries of Downtown. They demonstrate that these products could be very marketable in the greater Downtown area, given feasible land costs.

While single family and townhome products in Downtown may not be the highest and best uses of land, they can be very marketable in greater downtown locations, and generally have a deeper pool of demand (i.e., more people want to live in single family homes than want to live in multifamily properties).

**Fiddlers Green:** Located just southeast of Downtown, Fiddlers Green includes single family, villa, and duplex units. About 60 lots, 40 villas and six duplexes have been sold since development began in 2007. The single family units range in size from 2,500 to 4,500 square feet and sell for an average of \$155 per square foot; the villas range from 1,500 to 2,500 square feet and sell for an average of \$150 per square foot; and the duplexes are 1,500 square feet in size on average and sell for an average of \$170 per

square feet. The development is located behind the Middle School site, very close to Downtown although it is not a walkable distance.

**Echols Village:** Echols Village was developed in two phases between 2006 and 2014 at the north end of Blacksburg in the Patrick Henry neighborhood. The three-bedroom single family units range in size from 1,450 to 1,675 square feet and sell for \$140 per square foot on average. The units were targeted towards young professional families, although many were ultimately bought by parents of university students or investors.

**Knollwood Townhomes:** Developed in 2006, the Knollwood Townhomes are located in the Knollwood community southwest of Downtown. The two- and three-bedroom units range in size from 1,400 to 2,200 square feet, with two-bedroom units selling for \$130 per square foot and three-bedroom units selling for \$170 per square foot.



Fiddlers Green



Echols Village



Knollwood Townhomes

### Town of Blacksburg Summary of Selected For-Sale Properties

Project	Year Built/ Rehabbed	# of Units	Two-Bedroom			Three-Bedroom			Four-Bedroom		
			Avg. Sale Price	Size (SF)	Price PSF	Avg. Sale Price	Avg. Size (SF)	Price PSF	Avg. Sale Price	Avg. Size (SF)	Price PSF
<b>Single Family and Townhomes</b>											
Echols Village	2006-2014	53	-	-	-	\$214,150	1,565	\$137	-	-	-
Fiddlers Green	2007-2014	61	-	-	-	\$388,400	2,395	\$162	\$449,400	3,052	\$147
Villas at Fiddlers Green	2007-2014	42	-	-	-	\$305,900	2,021	\$151	\$357,300	2,131	\$168
Duplexes at Fiddlers Green	2007-2014	6	-	-	-	\$257,875	1,508	\$171	-	-	-
Knollwood Townhomes	2006	42	\$210,000	1,616	\$130	\$295,000	1,763	\$167	-	-	-

DEVELOPMENT STRATEGIES 2015

## Affordable Housing: Rental

Rents at affordable properties in Blacksburg are slightly lower than the town’s older midscale apartment market and substantially lower than most other housing, but the supply of affordable units is extremely limited.

Affordable properties are generally those that target households earning 30 to 60 percent of area median income. Apartment development is facilitated with tax credits from the Low Income Housing Tax Credit (LIHTC) program, and limits are set on household earnings for qualifying tenants, as well rents that can be charged. For 2015, maximum monthly gross rents in Montgomery County are \$810 for one-bedroom units, \$972 for a two-bedroom unit, and \$1,123 for a three-bedroom unit. There is only one affordable project in Blacksburg—Cedar Crest—with 80 units. An additional 150 affordable units are offered in Christiansburg.

**Cedar Crest:** Blacksburg’s only affordable property development is located in the Ellett/Jennelle neighborhood, southwest of Downtown. It includes 80 two- and three-bedroom units in duplex homes. Rents average \$0.50 per square foot for households making 50 percent of area median income and \$0.60 to \$0.70 per square foot for households making 60 percent of area median income.

**Christiansburg Properties:** There are four affordable properties located in Christiansburg, three of which are managed by Community Housing Partners. The majority of the units are two- and three-bedroom townhome units similar to Cedar Crest. The units at Linden Grove and Hunting Hills are smaller than Cedar Crest and rents are about \$0.60 per square foot for 50 percent AMI tenants and \$0.70 per square for for 60 AMI tenants. Units at Huckleberry Court and Henly Place are significantly larger. Rents at Huckleberry Court are \$0.50 per square on average, while rents at Henly Place—which has the largest units—are approximately \$0.35 per square foot.

There are currently no one-bedroom affordable units available in the market. Therefore, a new affordable property in Downtown could probably achieve \$0.80 per square foot for a 600 to 700 square foot, one-bedroom unit. Two-bedroom units of 900 to 950 square feet could likely achieve rents of \$0.75 per square foot, and three-bedroom units of 1,200 square feet could achieve rents of \$0.70 per square foot. These rents are similar to rents of midscale apartments in Blacksburg, and greatly discounted compared to newly rehabilitated or renovated units. More importantly, affordable multi-family units in Downtown would offer walkable access to amenities that current properties lack. Current Downtown land costs will likely preclude such development.



### Town of Blacksburg

#### Summary of Selected Affordable Rental Properties

Project	Town	Year Built/ Rehabbed	Occ. Rate	# of Units	Two-Bedroom			Three-Bedroom			Four-Bedroom		
					Avg. Rent	Size (SF)	Rent PSF	Avg. Rent	Size (SF)	Rent PSF	Avg. Rent	Size (SF)	Rent PSF
<b>50% AMI Units</b>													
Cedar Crest	Blacksburg	2006-2014	94%	40	\$508	1,025	\$0.50	\$673	1,296	\$0.52	-	-	-
Hunting Hills	Christiansburg	2007-2014	99%	9	\$541	850	\$0.64	-	-	-	-	-	-
Linden Grove	Christiansburg	2007-2014	90%	29	\$520	850	\$0.61	-	-	-	-	-	-
Huckleberry Court	Christiansburg	2007-2014	95%	50	\$616	1,185	\$0.52	\$783	1,366	\$0.57	\$875	1,939	\$0.45
Henly Place	Christiansburg	2006	89%	41	\$620	1,656	\$0.37	\$830	2,253	\$0.37	\$945	2,582	\$0.37
<b>60% AMI Units</b>													
Cedar Crest	Blacksburg	2006-2014	94%	40	\$728	1,025	\$0.71	\$823	1,296	\$0.64	-	-	-
Hunting Hills	Christiansburg	2007-2014	99%	9	\$561	850	\$0.66	-	-	-	-	-	-
Linden Grove	Christiansburg	2007-2014	90%	29	\$627	850	\$0.74	-	-	-	-	-	-



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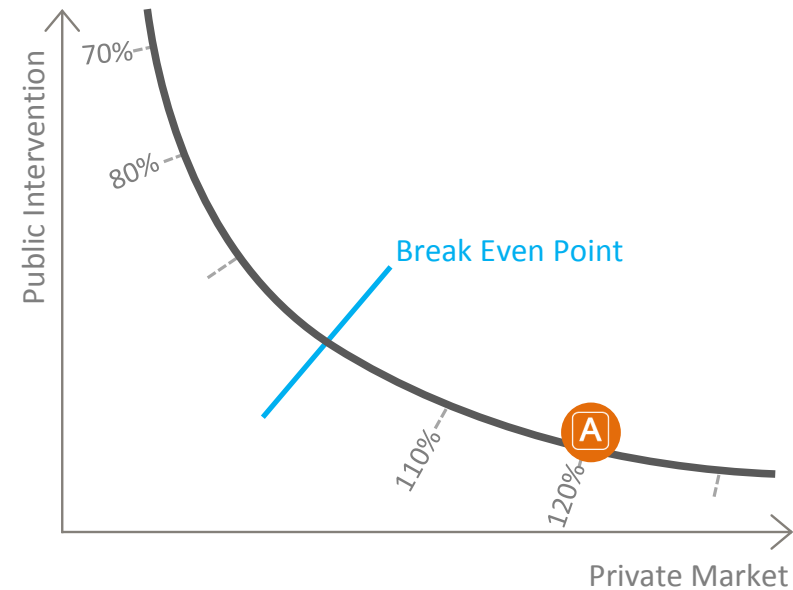
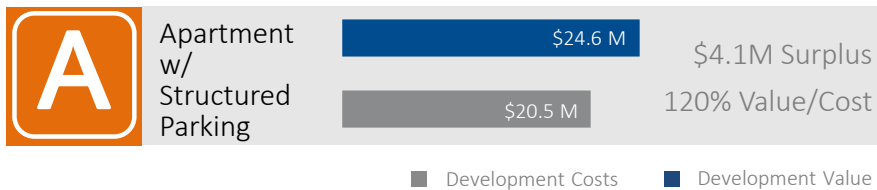
Appendix D  
FEASIBILITY ANALYSIS

## Special Opportunity Site: The Baptist Church Site

### Zone I: Upscale Undergraduate Housing

#### Proposed Development Details

Avg. Unit Size:	1,550 SF
Units/Acre:	35
Total Units:	65
Rent/Square Foot:	\$1.85
Development Costs/ SQ Ft:	\$150
Capitalization Rate:	6.0%

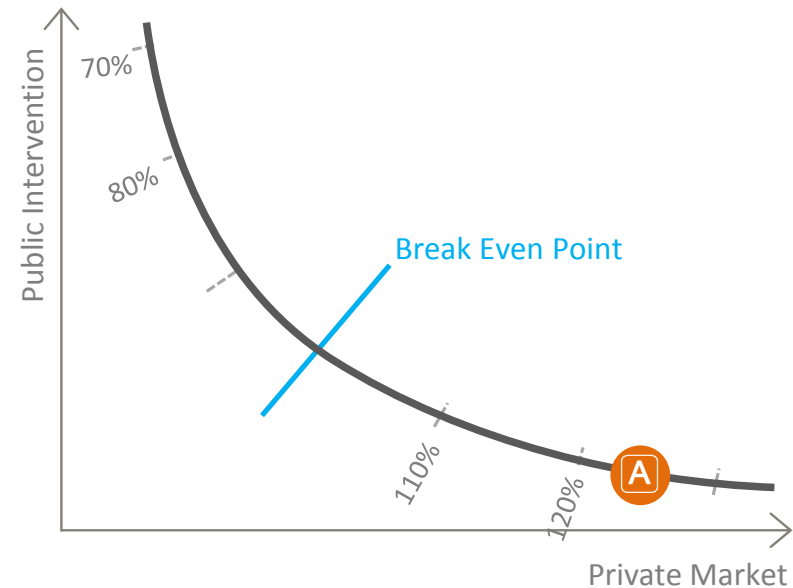
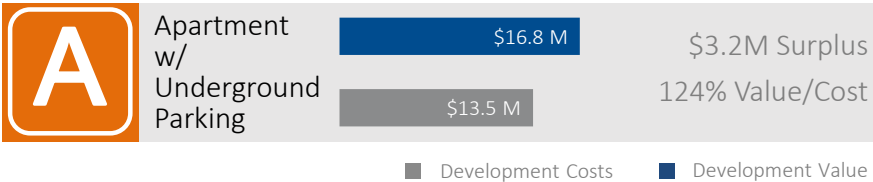


## Special Opportunity Site: The Baptist Church Site

### Zone I: Off-Campus University Housing

#### Proposed Development Details

Avg. Unit Size:	560 SF
Units/Acre:	40
Total Units:	75
Rent/Square Foot:	\$2.80
Development Costs/ SQ Ft:	\$220
Capitalization Rate:	5.5%

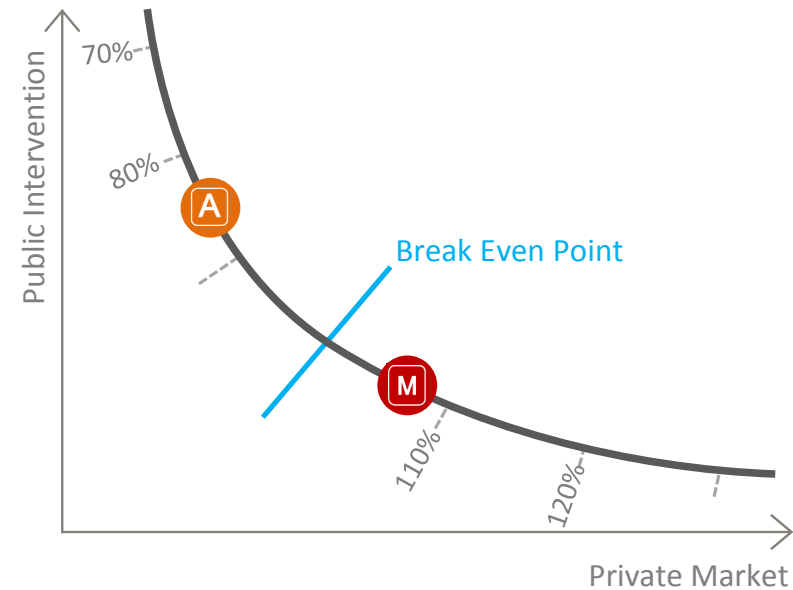
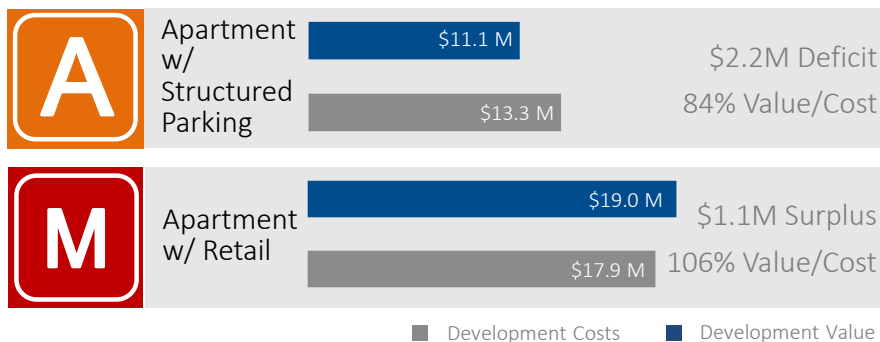


## Special Opportunity Site: The Baptist Church Site

Zone I: Graduate/Professional Housing

### Proposed Development Details

Avg. Unit Size:	600 SF
Units/Acre:	50
Total Units:	100
Rent/Square Foot:	\$1.50
Development Costs/ SQ Ft:	\$160
Capitalization Rate:	6.0%



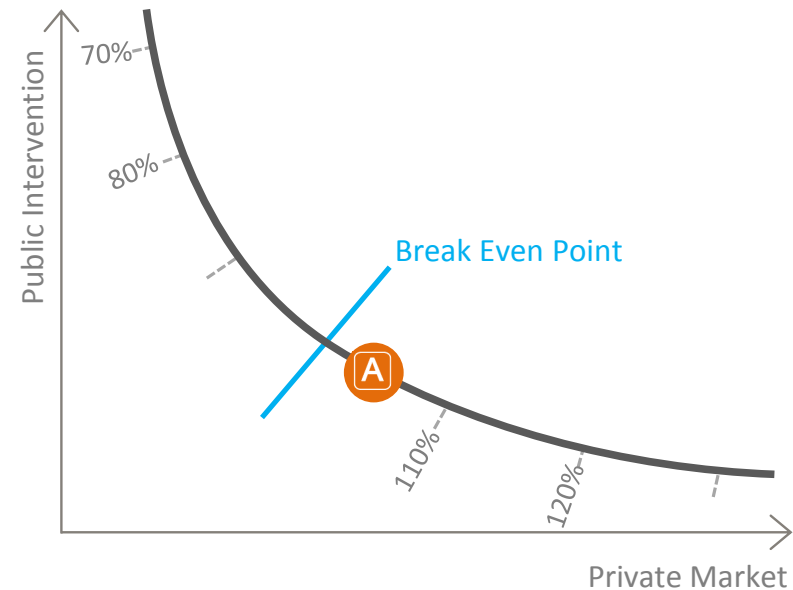
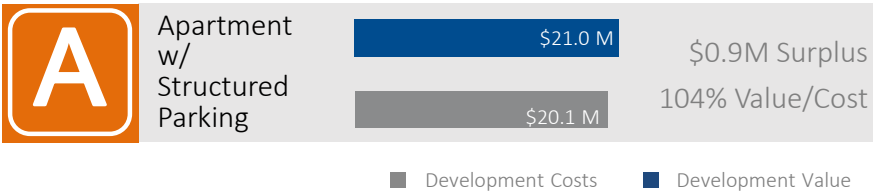


## Special Opportunity Site: The Baptist Church Site

### Zone I: Mid-Career Apartments

#### Proposed Development Details

Avg. Unit Size:	950 SF
Units/Acre:	50
Total Units:	95
Rent/Square Foot:	\$1.90
Development Costs/ SQ Ft:	\$180
Capitalization Rate:	6.25%

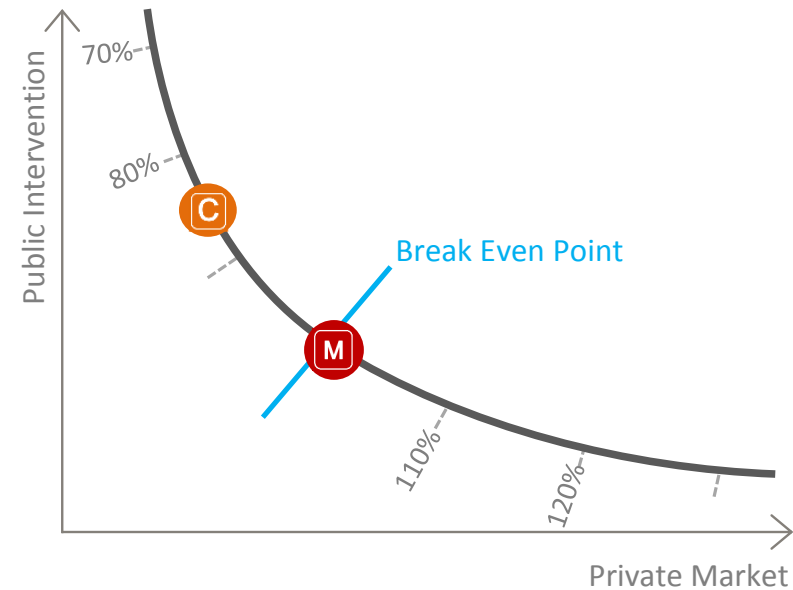
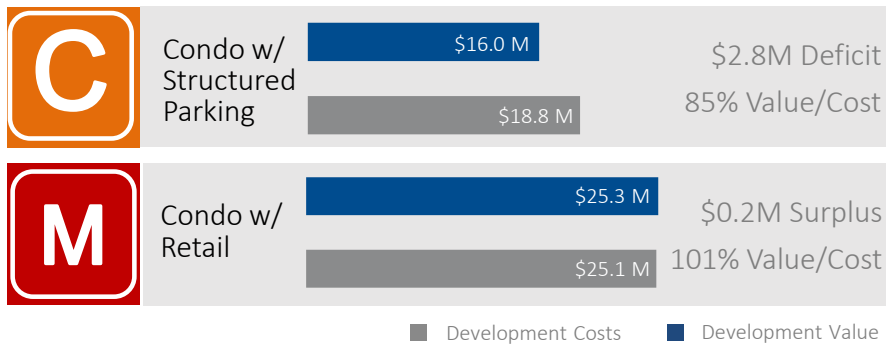


## Special Opportunity Site: The Baptist Church Site

### Zone I: Young Professional Condos

#### Proposed Development Details

Avg. Unit Size:	1,150 SF
Units/Acre:	40
Total Units:	75
Sale Price/Square Foot:	\$200
Development Costs/ SQ Ft:	\$160

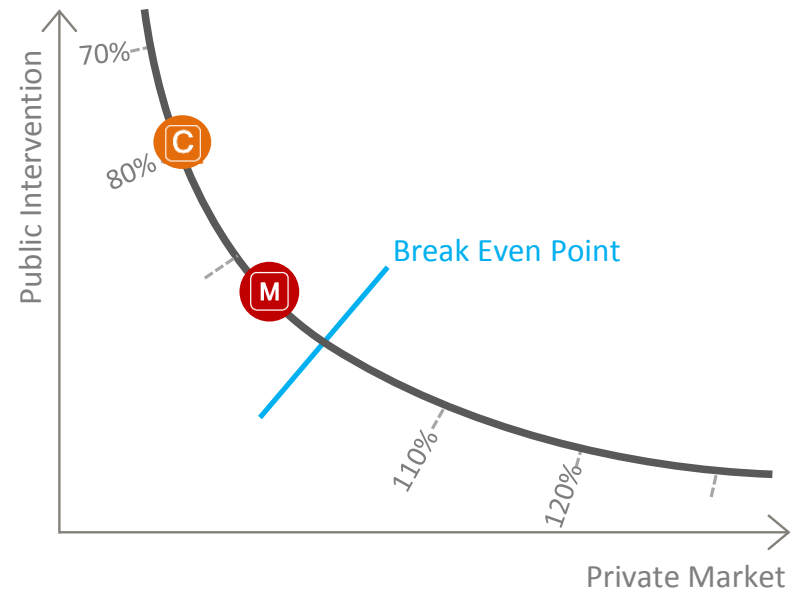
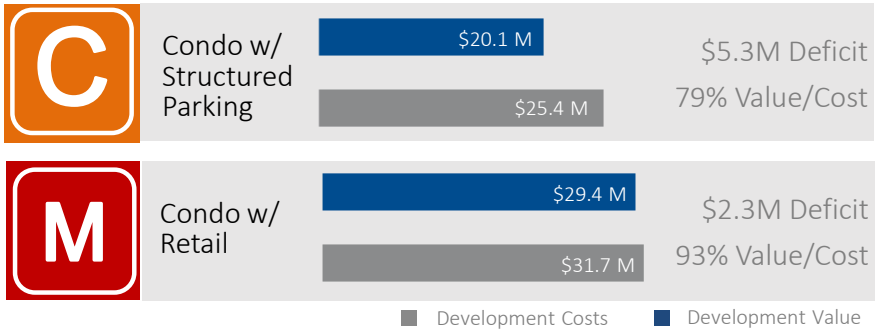


## Special Opportunity Site: The Baptist Church Site

### Zone I: Mid-Career Condos

#### Proposed Development Details

Avg. Unit Size:	1,650 SF
Units/Acre	35
Total Units:	65
Sale Price/Square Foot:	\$200
Development Costs/ SQ Ft:	\$180

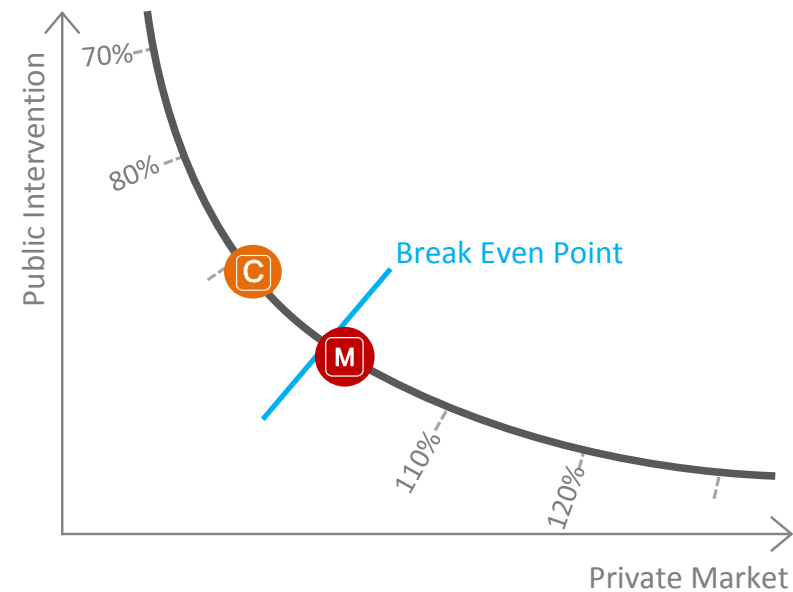
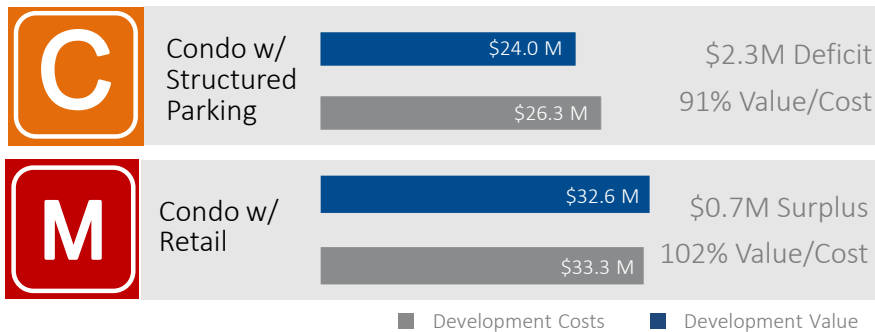


## Special Opportunity Site: The Baptist Church Site

### Zone I: Upscale/Game Day Condos

#### Proposed Development Details

Avg. Unit Size:	2,300 SF
Units/Acre:	30
Total Units:	55
Sale Price/Square Foot:	\$200
Development Costs/ SQ Ft:	\$180

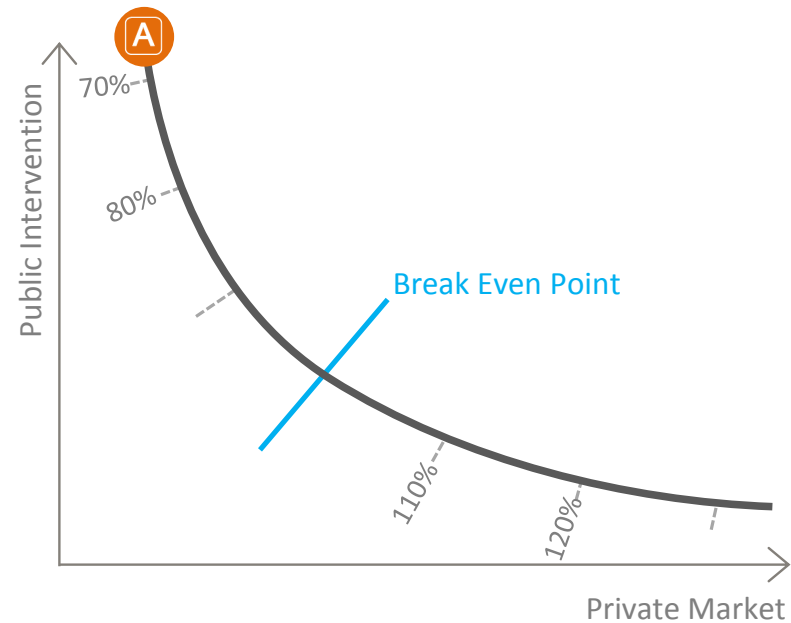
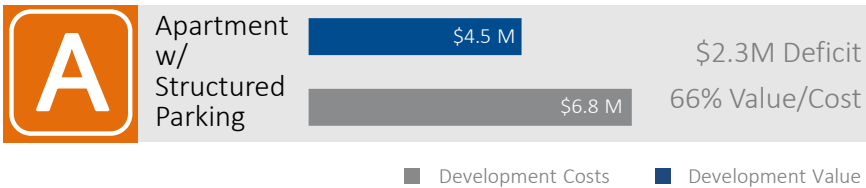


## Special Opportunity Site: The Baptist Church Site

### Zone 2: Graduate Student and Young Professional Apartments

#### Proposed Development Details

Avg. Unit Size:	600 SF
Units/Acre:	25
Total Units:	40
Rent/Square Foot:	\$1.50
Development Costs/ SQ Ft:	\$160
Capitalization Rate:	6.0%

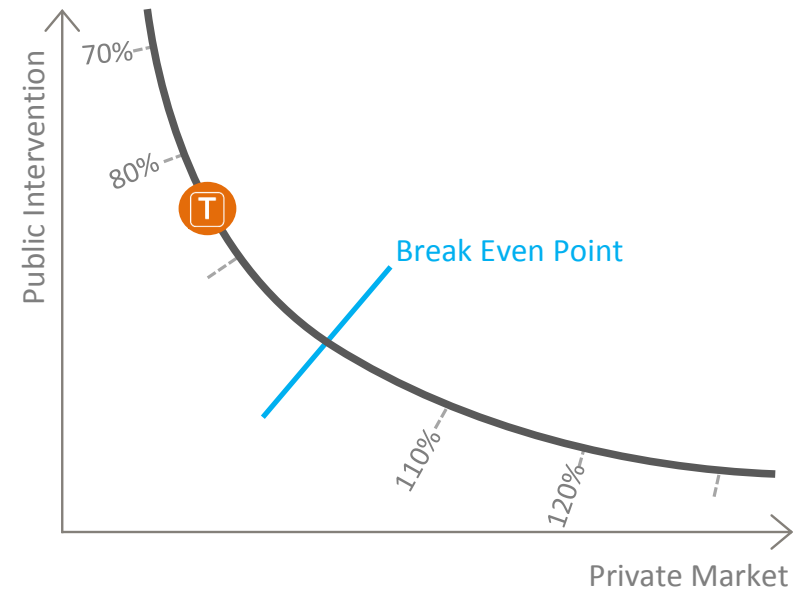
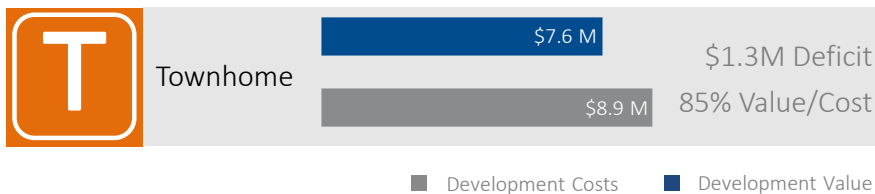


## Special Opportunity Site: The Baptist Church Site

### Zone 2: Empty Nester/Mid-Career Townhomes

#### Proposed Development Details

Avg. Unit Size:	1,800 SF
Units/Acre:	15
Total Units:	24
Sale Price/Square Foot:	\$190
Development Costs/ SQ Ft:	\$150

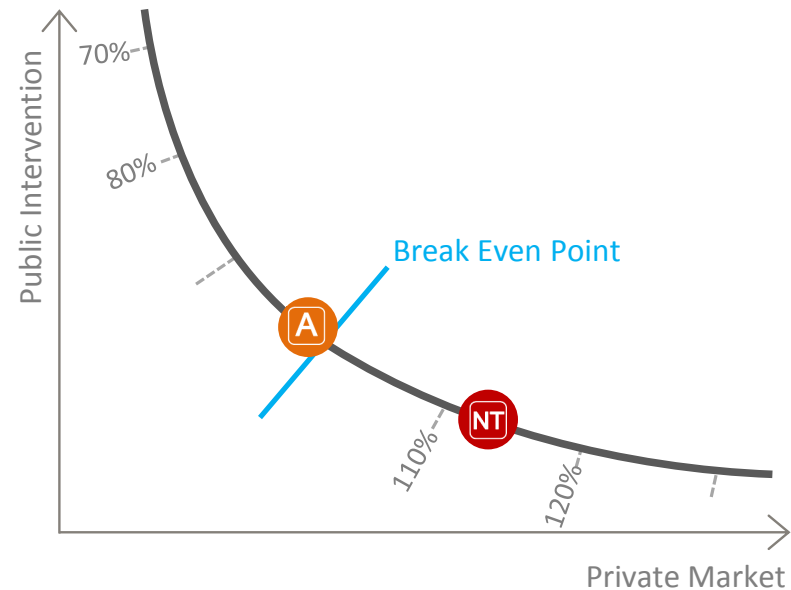
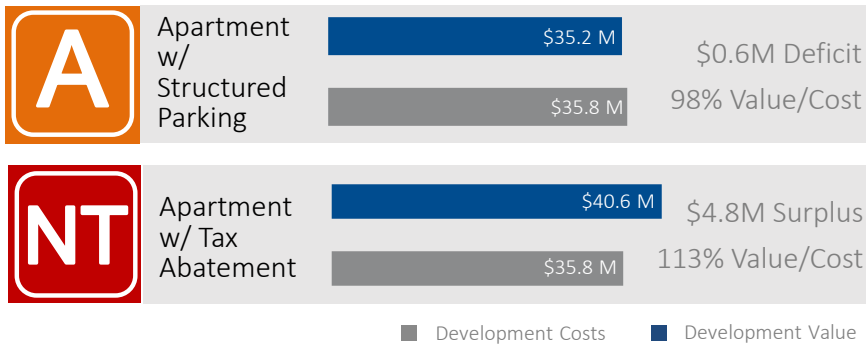


## Uptown: The Middle School Site

### Zone I: Graduate Student and Young Professional Apartments

#### Proposed Development Details

Avg. Unit Size:	600 SF
Units/Acre:	50
Total Units:	300
Rent/Square Foot:	\$1.50
Development Costs/ SQ Ft:	\$160
Capitalization Rate:	6.0%

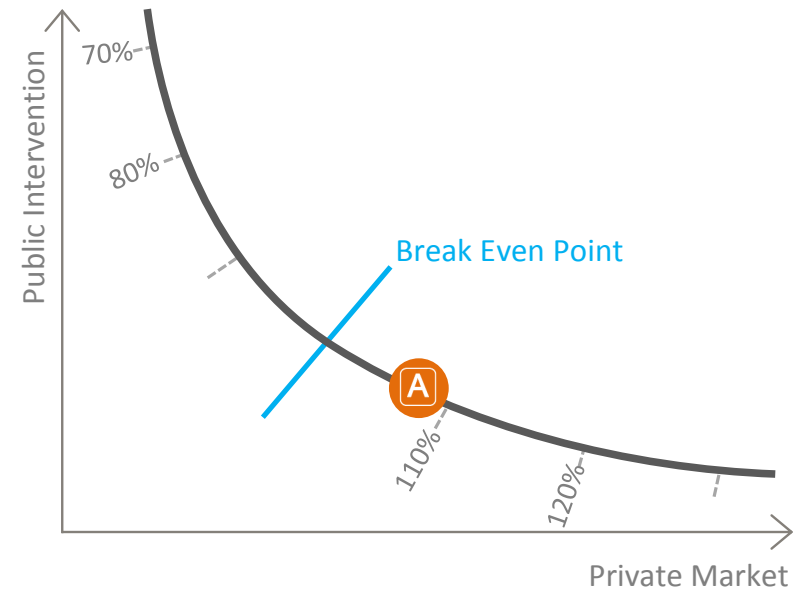
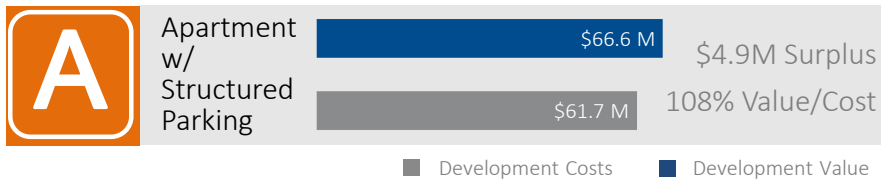


## Uptown: The Middle School Site

### Zone I: Mid-Career Apartments

#### Proposed Development Details

Avg. Unit Size:	950 SF
Units/Acre:	50
Total Units:	300
Rent/Square Foot:	\$1.90
Development Costs/ SQ Ft:	\$180
Capitalization Rate:	6.25%



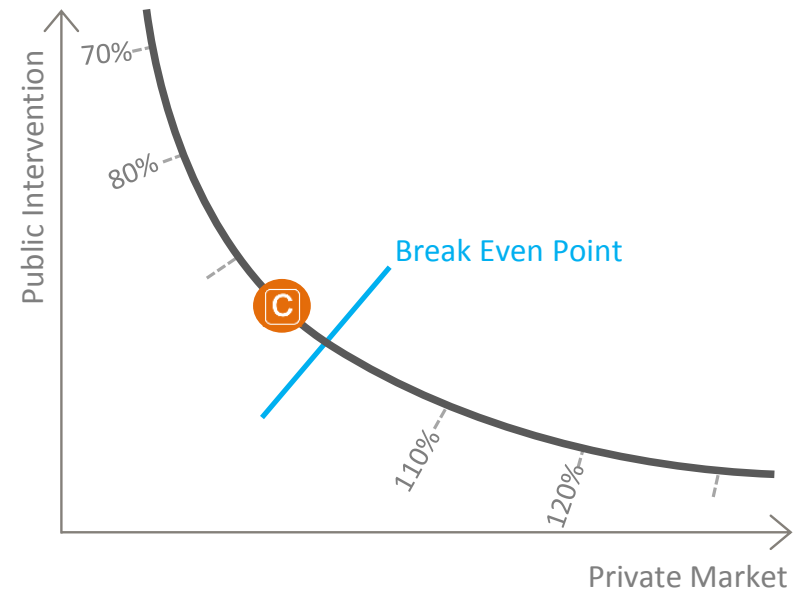
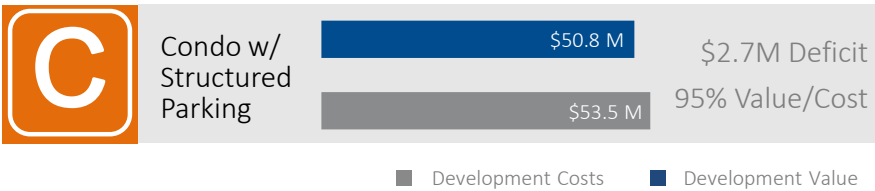


## Uptown: The Middle School Site

### Zone I: Young Professional Condos

#### Proposed Development Details

Avg. Unit Size:	1,150 SF
Units/Acre:	40
Total Units:	240
Sale Price/Square Foot:	\$200
Development Costs/ SQ Ft:	\$160

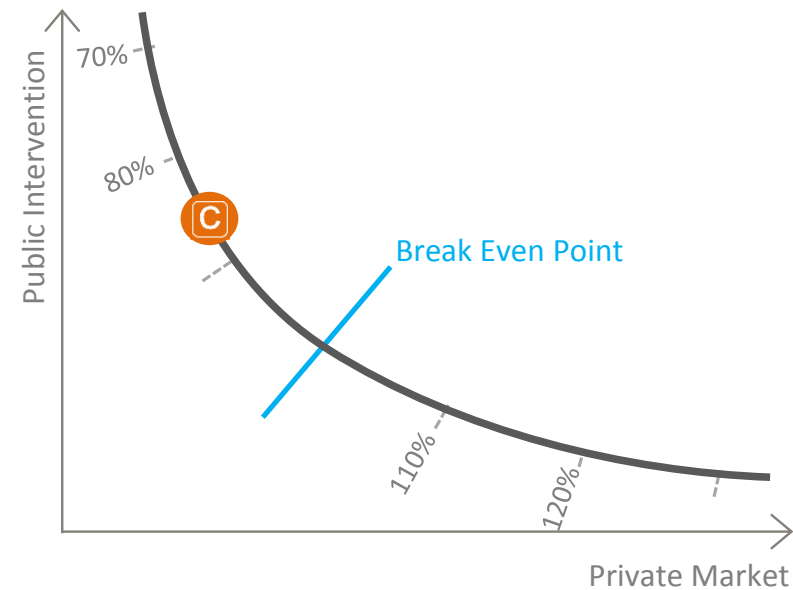


## Uptown: The Middle School Site

Zone I: Mid-Career Condos

### Proposed Development Details

Avg. Unit Size:	1,650 SF
Units/Acre	35
Total Units:	210
Sale Price/Square Foot:	\$200
Development Costs/ SQ Ft:	\$180

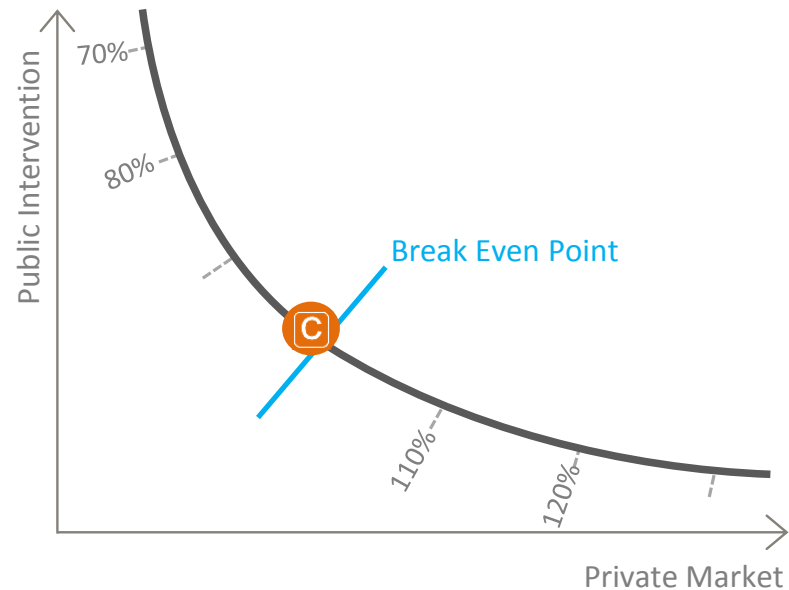
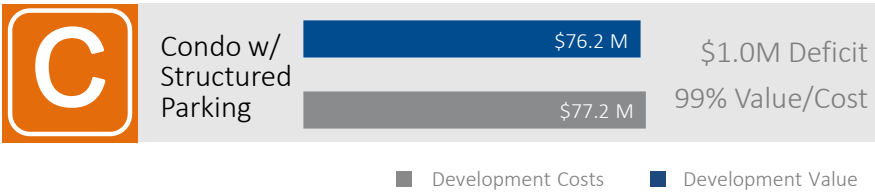


## Uptown: The Middle School Site

### Zone I: Upscale/Game Day Condos

#### Proposed Development Details

Avg. Unit Size:	2,300 SF
Units/Acre:	30
Total Units:	55
Sale Price/Square Foot:	\$200
Development Costs/ SQ Ft:	\$180

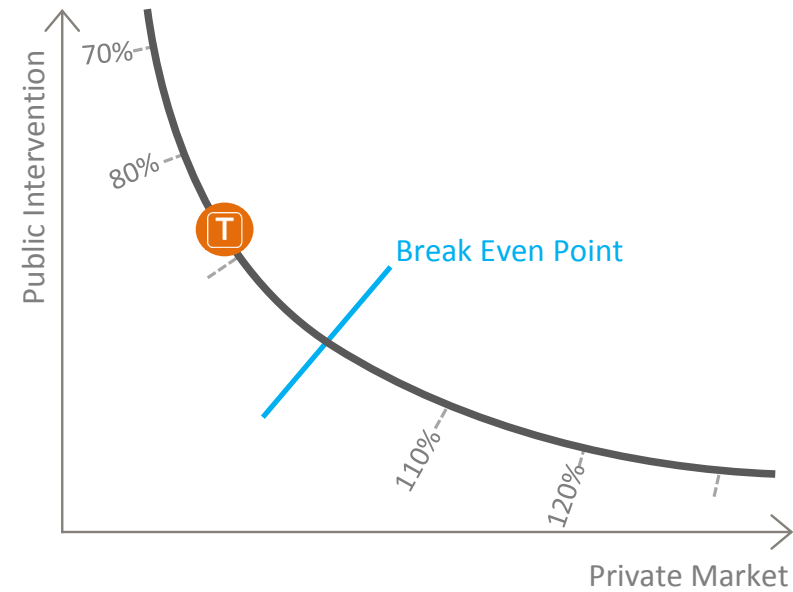
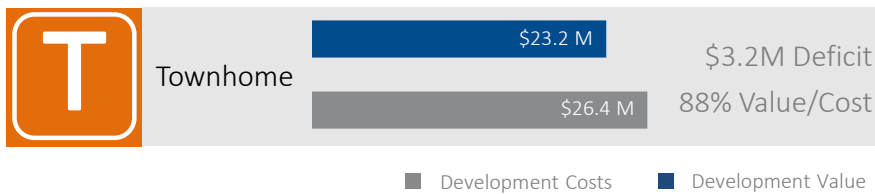


## Uptown: The Middle School Site

### Zone 2: First Time Townhomes

#### Proposed Development Details

Avg. Unit Size:	1,500 SF
Units/Acre:	12
Total Units:	120
Sale Price/Square Foot:	\$140
Development Costs/ SQ Ft:	\$130

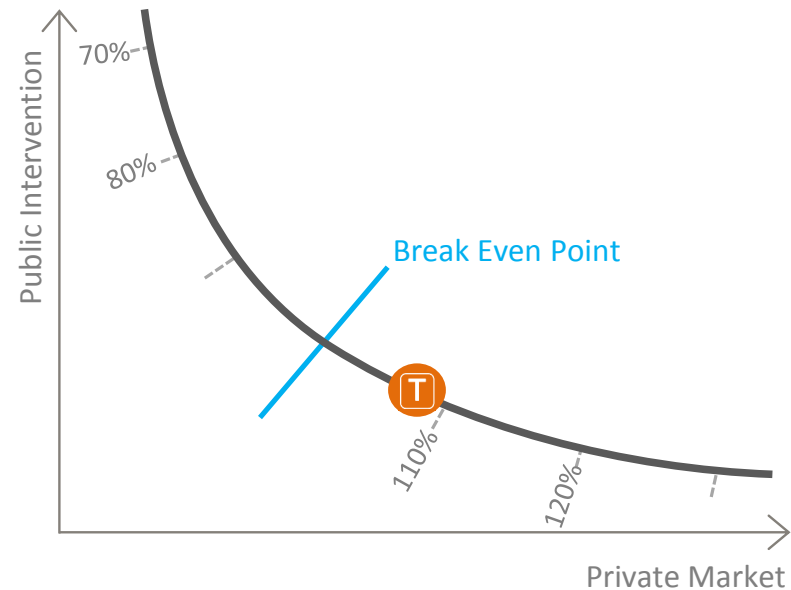
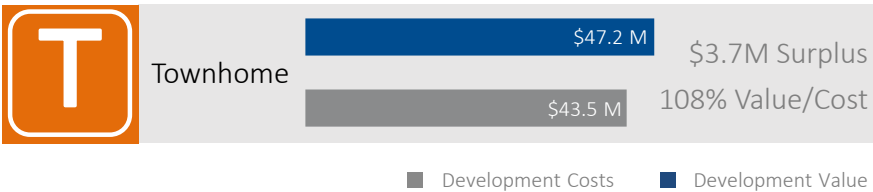


## Uptown: The Middle School Site

### Zone 2: Empty Nester/Mid-Career Townhomes

#### Proposed Development Details

Avg. Unit Size:	1,800 SF
Units/Acre:	15
Total Units:	150
Sale Price/Square Foot:	\$190
Development Costs/ SQ Ft:	\$150





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Appendix E  
DEMAND METHODOLOGIES

## Demand: Outmigration and Leakage

In estimating the number of outmigrants from Blacksburg that could be potentially captured with new development Downtown, Development Strategies used three data sources: the 2006-2010 American Community Survey County-to-County Migration numbers for Montgomery County, stratified by age; the 2010 U.S. Census total population by age for the migration destination categories (see below); and the 2013 Tapestry Segmentation Area Profile for the migration destination categories.

The top migration destination cities and counties were grouped into the following six categories:

**Radford** – includes Radford City, VA

**Northern Virginia/DC/Baltimore** – includes Fairfax and Arlington counties, VA; Alexandria City, VA; and Anne Arundel and Montgomery counties, MD

**Richmond Area** – includes Richmond City and Chesterfield and Henrico counties, VA

**Virginia Beach Area** – includes Chesapeake and Virginia Beach cities, VA

**Roanoke Area** – includes Roanoke and Salem cities, VA

**Out of State Counties** – includes Mecklenberg, New Hanover, and Wake counties, NC; Dane County, WI; Allegheny County, PA; Suffolk County, MA; Orange County, FL; New Castle County, DE; Charleston County, SC; and Hamilton County, OH

For each migration destination category, we calculated the ratio of the number of Montgomery County migrants in each age group to the total population in each age group. The age groups are: 0-19, 20-24, 25-34, 35-44, 45-54, 55-64, 65-74, and 75 years and older. These ratios were then applied to the population in each Tapestry segment based on the median age for that segment. The resulting number provides an estimate of how many households in each Tapestry group consist of migrants from Montgomery County in each migration destination category.

In the final step of the analysis, we calculated an estimated number of migrant households from each Tapestry segment that Blacksburg could capture over ten years. The estimated number of migrant households in each Tapestry segment was multiplied by ten, and then multiplied by a capture rate. The capture rates reflect the likelihood that a household in a given Tapestry segment would want to live in Downtown Blacksburg given the right housing product, and are based on our knowledge of the segments and experience in studying other cities. This final estimates are shown in the graph and table presented in the body of the report.



## Demand: Employment Based

Demand for Downtown housing from individuals in different types of occupations is based on data from the Bureau of Labor Statistics (BLS) on number of employees per occupation for the Blacksburg MSA. Occupations whose employees are most likely to live in downtown environments were grouped into four categories: Tech/IT, Creative, Research/Life Science/Engineering/Post-Secondary Education; and Management/Business/Finance/Legal. For each category, a capture rate was applied to the total number of employees in each category. The capture rates reflect the likelihood that an individual in a given occupation would want to live in Downtown Blacksburg given the right housing product, and are based on our knowledge of market trends and experience in studying other cities.

The occupations (as defined by the BLS) included in each category are listed below, along with the capture rates for each category:

### Tech/IT

(Downtown capture rate – 30 percent):

- Computer and Mathematical Occupations

### Creative

(Downtown capture rate – 30 percent):

- Architects, Except Landscape and Naval
- Graphic Designers
- Public Relations Specialists

### Research/Life Science/Engineering/Post-Secondary Education

(Downtown capture rate – 15 percent):

- Civil Engineers
- Electrical Engineers
- Electronics Engineers, Except Computer
- Environmental Engineers
- Industrial Engineers

- Materials Engineers
- Mechanical Engineers
- Mechanical Drafters
- Civil Engineering Technicians
- Electrical and Electronics Engineering Technicians
- Industrial Engineering Technicians
- Mechanical Engineering Technicians
- Surveying and Mapping Technicians
- Life, Physical, and Social Science Occupations
- Business Teachers, Postsecondary
- Mathematical Science Teachers, Postsecondary
- Biological Science Teachers, Postsecondary
- Chemistry Teachers, Postsecondary
- Physics Teachers, Postsecondary
- Economics Teachers, Postsecondary
- Political Science Teachers, Postsecondary
- Psychology Teachers, Postsecondary
- Nursing Instructors and Teachers, Postsecondary
- Art, Drama, and Music Teachers, Postsecondary
- English Language and Literature Teachers, Postsecondary
- Foreign Language and Literature Teachers, Postsecondary
- History Teachers, Postsecondary
- Philosophy and Religion Teachers, Postsecondary

### Management/Business/Finance/Legal

(Downtown capture rate: 15 percent):

- Management Occupations
- Business and Financial Operations Occupations
- Legal Occupations

## Demand: Alumni Housing

As the Baby Boomer generation reaches retirement age, there is a growing interest in “active retiree” communities—places that offer residents a variety of activities in an accessible setting. One type of active retiree communities is the University Based Retirement Community, or UBRC. UBRCs are affiliated with nearby universities and normally provide their residents with access to university facilities, classes, or other resources. Often the communities require that a certain percentage of their residents be affiliated with the partnering university, either as alumni, faculty, or staff. UBRC residents chose the communities both for the access to educational and cultural resources, as well as proximity to a vibrant university environment.

While there may be some demand for retirement housing in Blacksburg among Virginia Tech alumni, the numbers are likely quite modest. Virginia Tech graduated about 51,000 students between 1951 and 1981—students who would today be between the ages of 55 and 85. The greatest potential is among the 30,000 of these alumni aged 55 to 64, as that is the age at which most people will be willing and able to move to a new community for retirement. While a small number may be attracted to dense single family or townhomes near Downtown, potentially at the Middle School site, most of these retirees will be looking for a community setting with some opportunity for assisted living in the future, and are unlikely to be pioneers moving to new Downtown housing development.

# Virginia Tech Alumni

Total Alumni  
(graduated 1951 through 2014):

199,055

Alumni aged 55-64:

29,265

Alumni aged 65-85:

21,744