

A nighttime photograph of the Richmond, Virginia skyline. The image shows a dense cluster of illuminated skyscrapers and commercial buildings against a dark blue twilight sky. In the foreground, there are silhouettes of trees and a multi-story brick building with many windows. The overall scene is a vibrant urban landscape at night.

Downtown Richmond

Market Analysis

February 7th, 2018

HR&A

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Introduction

Executive Summary

Market Conditions

District Redevelopment Case Studies

HR&A Advisors completed a market analysis to inform development potential in Downtown Richmond.

The following market analysis examines residential, office, retail, and hotel uses across Downtown Richmond to inform the appropriate scale, form, and mix of development that is feasible in the North of Broad/Downtown neighborhood.

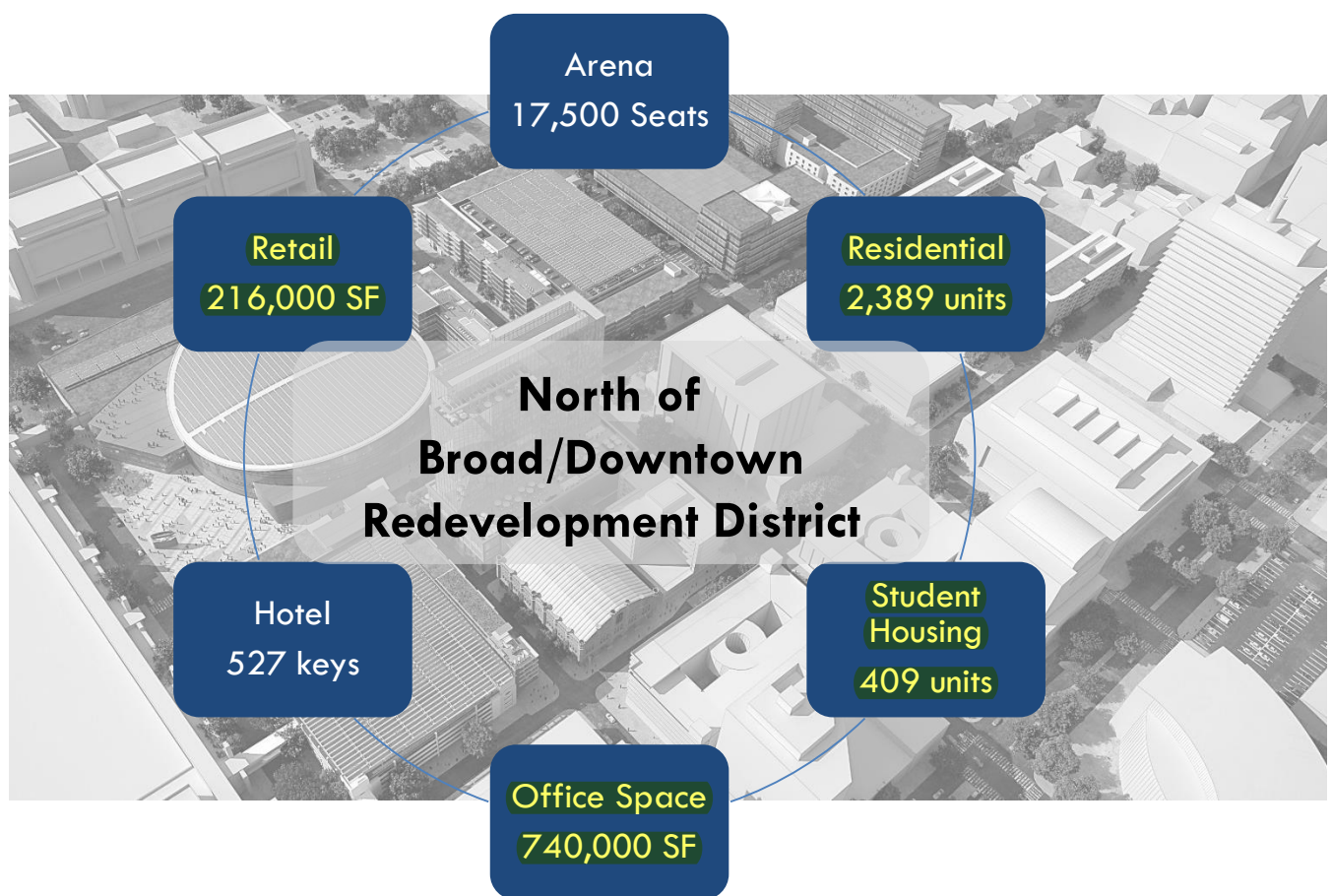
For each development use, this report provides an overview of existing market context, examines current demographic and economic conditions, as well as current and past real estate market fundamentals, and seeks to quantify supportable demand based on key drivers. This analysis provides a baseline assessment of current and projected market conditions to inform future redevelopment Downtown, and how local and regional real estate market dynamics may affect real estate development in the future.

Following the analytical component of this report, a set of district redevelopment case studies are provided to illustrate key strategies and best practices in facilitating catalytic district redevelopment.



Capital City Partners seeks to redevelop Downtown Richmond through catalytic mixed-use development, building on key City assets to establish a new tax base, provide a source of revenue to the City for public benefit, and to establish a more connected Downtown Core.

In response to City of Richmond's request for proposals (RFP) to redevelop the North of Broad/Downtown Neighborhood, Capital City Partners proposes a catalytic, large-scale redevelopment to create a new vibrant residential community within Downtown Richmond, building on key adjacent assets including the Blues Armory, Richmond Coliseum, and Greater Richmond Convention Center, as well as VCU's Medical College of Virginia (MCV) Campus, the Virginia Biotechnology Research Park, and the active business and government center in the heart of Downtown Richmond.



Note: Capital City Partners' North of Broad/Downtown Neighborhood Redevelopment Plan also calls for mixed-use development to occur across other select sites in Downtown Richmond, outside the boundaries of the study area identified above.

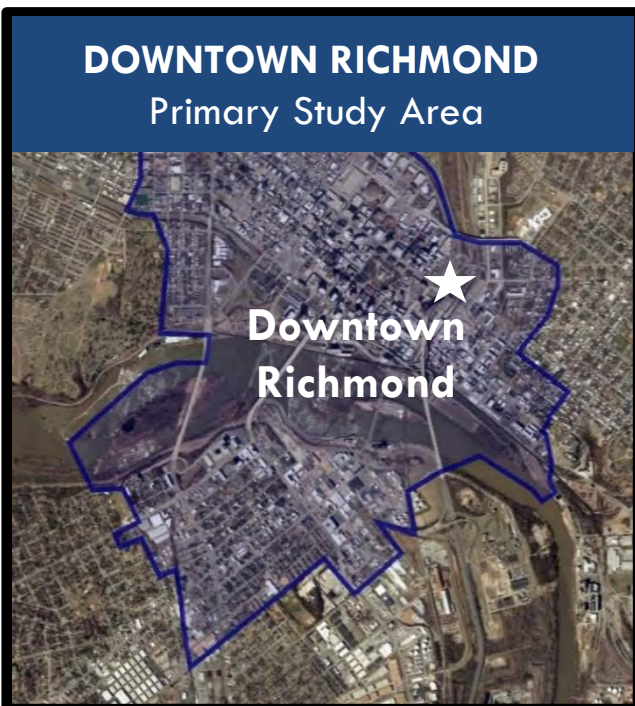
HR&A's market analysis focuses on Downtown Richmond, but is examined within the context of market dynamics across the City.

HR&A Advisors' market analysis focused on two key geographies: Downtown Richmond as broadly defined by the City, referred to in this report as "Downtown Richmond", or "Downtown", and the administrative boundaries of the City of Richmond.

Study Area Overview

Primary Study Area – Downtown Richmond: The "Downtown" study area boundaries, as defined in this analysis, are modified slightly for each use examined; however, is largely consistent with the boundaries of "Downtown" as defined by the City of Richmond. Further detail regarding study area boundaries is provided in each subsection of this report.

Secondary Study Area – City of Richmond: represents the City of Richmond, using official administrative boundaries.



Introduction

Executive Summary

Market Conditions

District Redevelopment Case Studies

Downtown Richmond has the opportunity to capture robust growth projected across the region to create a vibrant new district in the heart of Downtown.

HR&A Advisors' analysis of residential, office, hotel, and retail uses in Downtown Richmond has determined there is robust demand to support downtown development, building on several key factors:

Strong Foundation

As the Virginia State Capitol, a regional employment hub, and a major medical, research and educational center, Downtown Richmond offers a firm foundation for further redevelopment of the City's downtown core. Eight Fortune 500 companies choose the Richmond Region for their headquarters. Key business, government, and institutional anchors in Downtown Richmond serve as the drivers of employment and population growth in the City.

Projected Growth

Downtown Richmond is projected to see continued population and job growth as a result of its primary business and institutional anchors. Over the next several years, Downtown Richmond is projected to see the addition of thousands of new residents and significant growth across industries including healthcare, government, and other office-occupying employment sectors.

Planned Investment

In addition to ongoing City investments across the City of Richmond, Virginia Commonwealth University (VCU) is in the process of investing in continued development of its Medical College of Virginia (MCV) Campus, with over 1.9 million square feet of space planned over the coming years. With its location in the core of Downtown, there is an opportunity to build on this growth, and continue to support a vibrant medical research node in the Richmond region.

HR&A's analysis found there is robust demand for new development across various uses in Downtown Richmond.

RESIDENTIAL



HR&A projects annual absorption of **415 – 425** market-rate multifamily rental units, and **30 – 32** for sale ownership units Downtown over the next twelve years. This does not account for additional demand for affordable housing. HR&A expects multifamily rental pricing will achieve upwards **\$2.20** per square foot, and for sale pricing upwards of **\$400** per square foot, as seen in other Southeast markets, by 2021.

OFFICE



As a regional employment hub, center for state government, as well as medical and educational anchors, job growth projections across the City of Richmond indicate there will be projected demand for between **525,000 and 750,000 square feet** of new office space in Downtown over the next ten years.

HOTEL



HR&A projections indicate that Downtown will see demand for between **460 and 590 hotel rooms**, to meet demand, and further support growth of the Greater Richmond Convention Center. It is estimated that room rates will increase to roughly **\$220** by 2021.

RETAIL



Based on HR&A estimates of household, worker, student, and visitor demand in Downtown Richmond, there is current unmet retail demand of approximately \$338 million, equating to upwards of **580,000 to 690,000 square feet** of space demanded in Downtown.

Source: HR&A Advisors analysis, Esri, Inc., EMSI, Virginia LMI, Smith Travel Research, City of Richmond, Richmond CVB.

Residential Market Summary

There is robust residential demand projected for Downtown, capturing expected population growth and further development of VCU's MCV Campus.

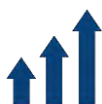
Summary Residential Market Findings



Vacancy continues to compress across Downtown, despite a 27% increase in Class A inventory over the past five years. Current Class A vacancy sits at 4%, below its long-term average, indicating residential absorption remains strong.



Multifamily residential rental rates continue to increase steadily, up roughly 12% over the past five years. HR&A projections indicate by 2021 new multifamily pricing may average \$2.20/SF, and for sale pricing may achieve upwards of \$400/SF, in-line with pricing seen elsewhere in comparable Southeast markets.



Robust population growth is projected for Downtown over the next ten years, at roughly 3.2% annually; projected absorption estimates indicate base year annual demand of 415- 425 rental units, and 30 – 32 for sale units. This represents market-rate residential demand, based on price points identified in this report, and does not account for additional demand for affordable housing.



VCU maintains plans for continued development of the MCV Campus, which may present an opportunity to develop housing to serve additional undergraduate and graduate students, faculty, and staff within a short walk to class and work. There may be an opportunity to develop both micro units to serve the Downtown student community, as well as larger units for staff and faculty families and individuals.

Downtown Richmond is projected to see robust population growth over the coming years; through catalytic mixed-use development, Downtown can capture this growth and create a new, vibrant residential-anchored district in the Downtown core.

Office Market Summary

As a regional employment hub, with strong projected employment growth, there will be continued demand for office development in Downtown.

Summary Office Market Findings



Office vacancy across Downtown Richmond has declined to its lowest rate in years, while Downtown Class A vacancy has returned to its long-term average of 9%, in-line with comparable, healthy Downtown office markets.



Downtown Richmond is a regional employment hub, with eight Fortune 500 companies headquartered in the Richmond Region; as such, most new office development in Downtown Richmond over the past ten years has been build-to-suit space for major local employers.



Downtown is projected to see 0.6% to 0.9% compound annual growth in jobs over the next ten years, translating to between 525,000 and 750,000 square feet of new office space, or roughly 52,000 to 75,000 square feet annually.



VCU has plans for continued development of the MCV Campus Downtown, presenting an opportunity for further development of office and research space to serve and support the medical campus and adjacent Virginia Biotechnology Research Park.

As a regional employment hub, Richmond's Downtown office market is expected to see continued growth with demand projected for upwards of 750,000 square feet of space over the next ten years, and an opportunity to further support development of VCU's MCV Campus.

Hotel Market Summary

Additional hotel room capacity is required Downtown to meet growing demand and support the Greater Richmond Convention Center.

Summary Hotel Market Findings



An analysis of Downtown hotel offerings indicates that the Greater Richmond Convention Center (GRCC) is unable to accommodate large block groups of 1,500 or more at hotels within ½ mile of the Center, or within greater Downtown.



Occupancy rates have increased in Downtown, consistently achieving 70% across a subset of hotels within close proximity to the GRCC. A number of new hotels have delivered in Downtown, while three existing hotels have recently renovated.



Average Daily Rates (ADR) and Revenue per Available Room (RevPAR) have increased by 25% over the past three years, indicating there is growing demand for Downtown hotels. HR&A projections indicate room rates in Downtown Richmond may achieve upwards of \$220 by 2021.



Job and population growth estimates, coupled with expectations for visitation to Downtown Richmond, indicate there is demand for between 460 and 590 new hotel rooms. HR&A believes a large-scale, new downtown hotel located within close proximity to the Greater Richmond Convention Center (GRCC), a redeveloped Richmond Coliseum, and new mixed-used development Downtown, may achieve stabilized occupancy within three years, and achieve roughly 63% to 64% occupancy at the end of the first year in operation.

Recent growth in average daily rates, a steady increase in occupancy, and current constraints on the Greater Richmond Convention Center, indicates there is demand for upwards of 590 additional hotel rooms Downtown.

Retail Market Summary

There is unmet retail demand in Downtown Richmond, presenting an opportunity for significant development Downtown.

Summary Retail Market Findings



Current Downtown demand dynamics across residents, workers, students, and visitors, indicate there is an existing retail gap of upwards of \$338 million.



Based on unmet demand, there is potential to support roughly 580,000 to 690,000 square feet (SF) of additional retail space Downtown. Over the past three years Downtown has seen average annual retail absorption of 44,000 SF; there may be an opportunity for increased absorption to support induced demand from new mixed-use development Downtown, translating to 50,000 SF annually over the next ten years.



There is current unmet demand for Downtown grocery, restaurant and nightlife, as well as other shopping-oriented retail. Through repositioning of the North of Broad/Downtown neighborhood, there is an opportunity to address this demand in establishing a new vibrant mixed-use district.



A number of competing vibrant districts exist across the City; creating a sense of place in the North of Broad/Downtown neighborhood will be crucial to any redevelopment project.



Increasing retail rents in Downtown Richmond indicate that pricing may achieve \$20 - \$21 per square foot triple net (NNN) by 2021.

Without accounting for new development or projected growth in Downtown, there is currently upwards of \$338 million in unmet demand across a broad range of retail categories, translating to upwards of 580,000 to 690,000 square feet of retail space.

Mixed-Use District Analysis

Building on projected demand metrics, Downtown Richmond has the opportunity to create a new vibrant Downtown center, with the right mix of key elements.



Distinct Identity

A curated, **unique retail program and iconic architectural features** can add **character and identity** to the development and increase capture of demand.



Public Realm

Creating a sense of place through **actively programmed open space, pocket parks, and plazas**, can serve to create a new node in the City.



Highly Amenitized

Offering highly amenitized space, for residential mixed use, can help **differentiate a product**.



Connection to Adjacent Districts

Connection to adjacent districts, including medical, government, and educational institutions, will be crucial.

Source: HR&A Research

Mixed-Use District Analysis

Strategies from successful catalytic district redevelopment projects across the United States can inform redevelopment in Downtown Richmond.

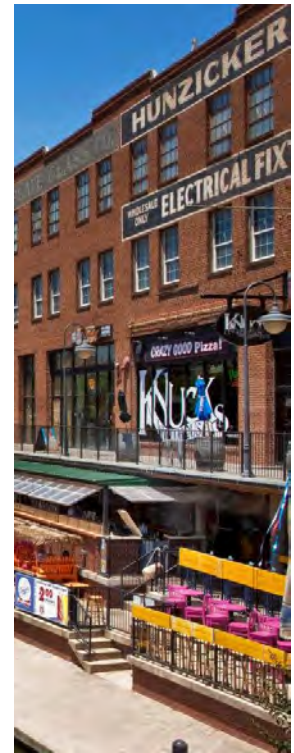
The following provides an overview of successful catalytic district redevelopment projects from across the United States, and the key strategies used to achieve district repositioning.



Washington, DC



Durham, NC



Oklahoma City, OK

Source: HR&A Research

Mixed-Use District Analysis Large-scale, catalytic redevelopment projects require connection to key anchor institutions, and a vibrant mix of uses, programming, entertainment, and public space.

Summarized below are key lessons learned from successful catalytic district redevelopment projects from across the country.

A mix of uses or proximity to office, hotel, residential, retail, public spaces and entertainment components is crucial for district repositioning. The most successful mixed-use redevelopment projects were able to either create or build upon a vibrant local environment and attract significant numbers of new visitors to the area.

A connection to key local partners and existing assets provides an anchor for district repositioning. Local community, employer, and institutional partners serve as anchors in any redevelopment.

Successful sports/entertainment venues have the potential to be a great asset, but must be supported by adjacent uses. While an important demand generator, entertainment venues must be supported by a mix of other catalytic uses to drive demand outside of event days.

Quality urban design can make a difference. It is critical to create a sense of place that attracts people because they “feel good” being there. Every project component needs to be designed, tenanted, and programmed with the community and end users in mind.

Public investment early on in district repositioning can provide necessary support to ensure redevelopment success, through tax increment financing, infrastructure, and other sources of public investment.

Source: HR&A Research

Market Conditions

Demographic & Economic Overview

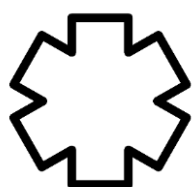
Residential

Office

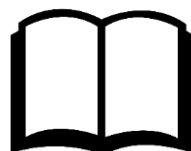
Hotel

Retail

Downtown Richmond is a center for education, government, medicine, and the region's major employers.



18,000
Employed at VCU's
MCV Medical Campus



4
Colleges and universities
within the City limits, with
31,000+ students Downtown
across two VCU campuses



4.0%
Compound Annual Growth
in Downtown Population
2010 - 2017



2.9%
Job Growth Across
Richmond
2010 - 2017



Headquarters for
5
of the region's top-10
employers in Downtown

8

Fortune 500
Headquarters
across the
Richmond Region

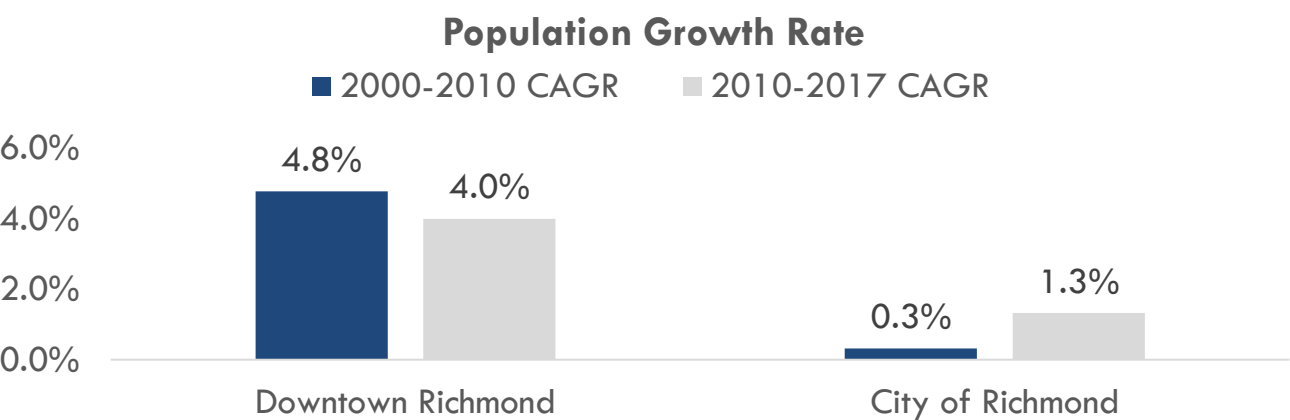


45,000
Local and State
Government
Employees

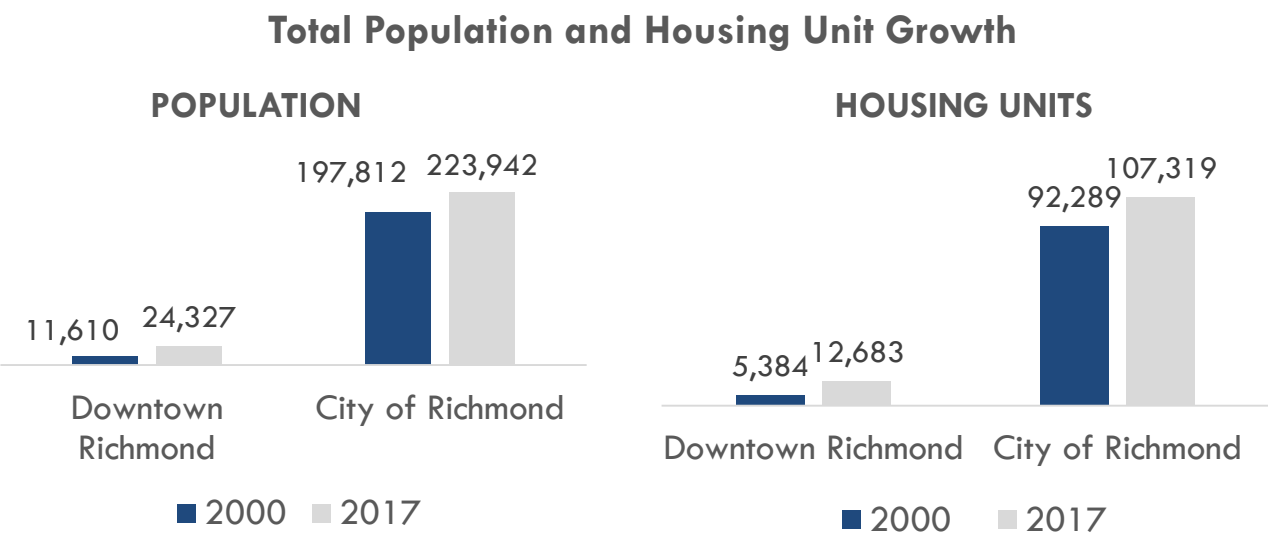
Source: Virginia Commonwealth University (VCU), EMSI, Esri Business Analyst, Virginia LMI.

Downtown Richmond has experienced significant relative population growth over the past several years, above rates seen across the City.

From the period 2010 to 2017 Downtown Richmond experienced robust population growth, at a compound annual growth rate (CAGR) of 4.0%, resulting in over 5,800 new residents. This is slightly behind the 4.8% compound growth seen from 2000 to 2010, where nearly 6,900 residents were added to Downtown.



Today, Downtown Richmond has a population of over 24,000, representing roughly 11% of the total City population, which currently sit at roughly 224,000.



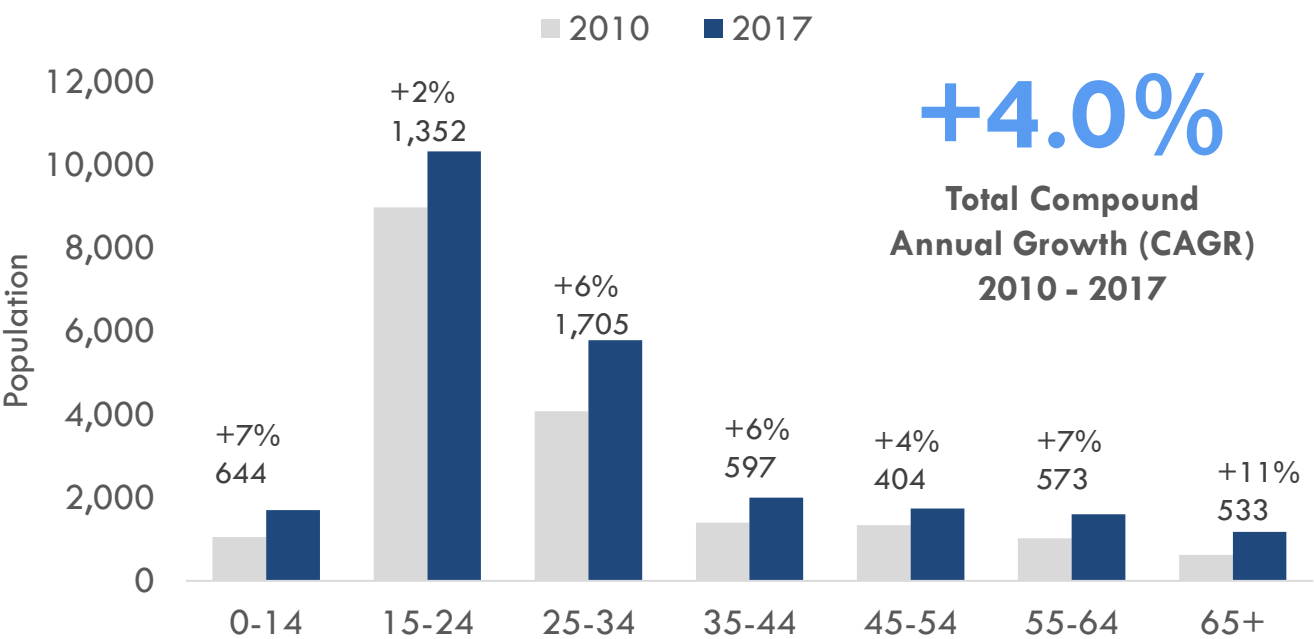
Source: ESRI Business Analyst

The greatest relative growth has occurred among an older population; however, Downtown is home to a significant student and young professional population which has experienced significant growth.

Over the past seven years, Downtown has seen the greatest relative growth among older cohorts of the population, 65 years and older, consistent with broader trends seen across the United States. However, the greatest absolute gains have been seen across young professionals aged 25 to 34, and 35-44, attributed in part to the ongoing redevelopment in Downtown Richmond and significant growth in housing stock over the past decade.

The large population of young adults, age 15-24 years old can be attributed to the presence of four colleges and universities within the City limits, and Virginia Commonwealth University’s (VCU) two Downtown campuses at Monroe Park Campus, and the VCU Medical College of Virginia (MCV) Campus.

Population Growth
Downtown Richmond, 2010 - 2017



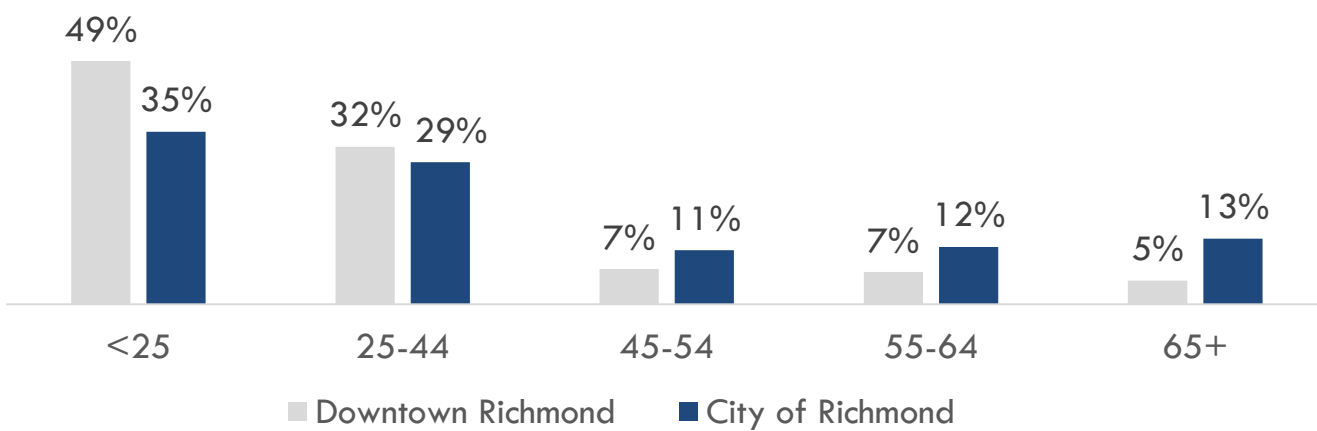
Source: ESRI Business Analyst. Note: percentage growth rate by age cohort represents cumulative growth 2010 – 2017

Residents of Downtown Richmond are younger than the City as a whole.

With the presence of VCU's Monroe Park undergraduate campus, and the MCV Campus, home to predominantly graduate research and medical students, the overall age in Downtown Richmond skews somewhat younger than the City as a whole. Housing tenure Downtown also skews toward rental occupants, which may be attributed to the overall younger population.

Percentage of Households by Age of Householder

Downtown Richmond, 2017



Median Age (Years)

Downtown

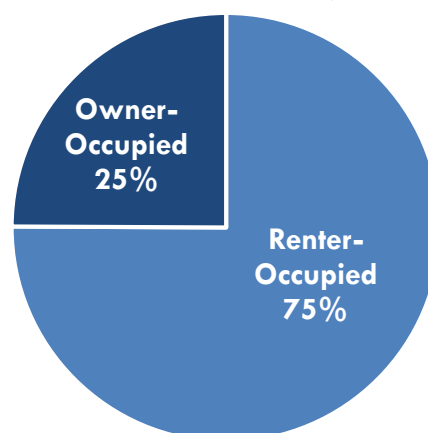
25.2

City of Richmond

33.5

Housing Tenure

Downtown Richmond, 2017

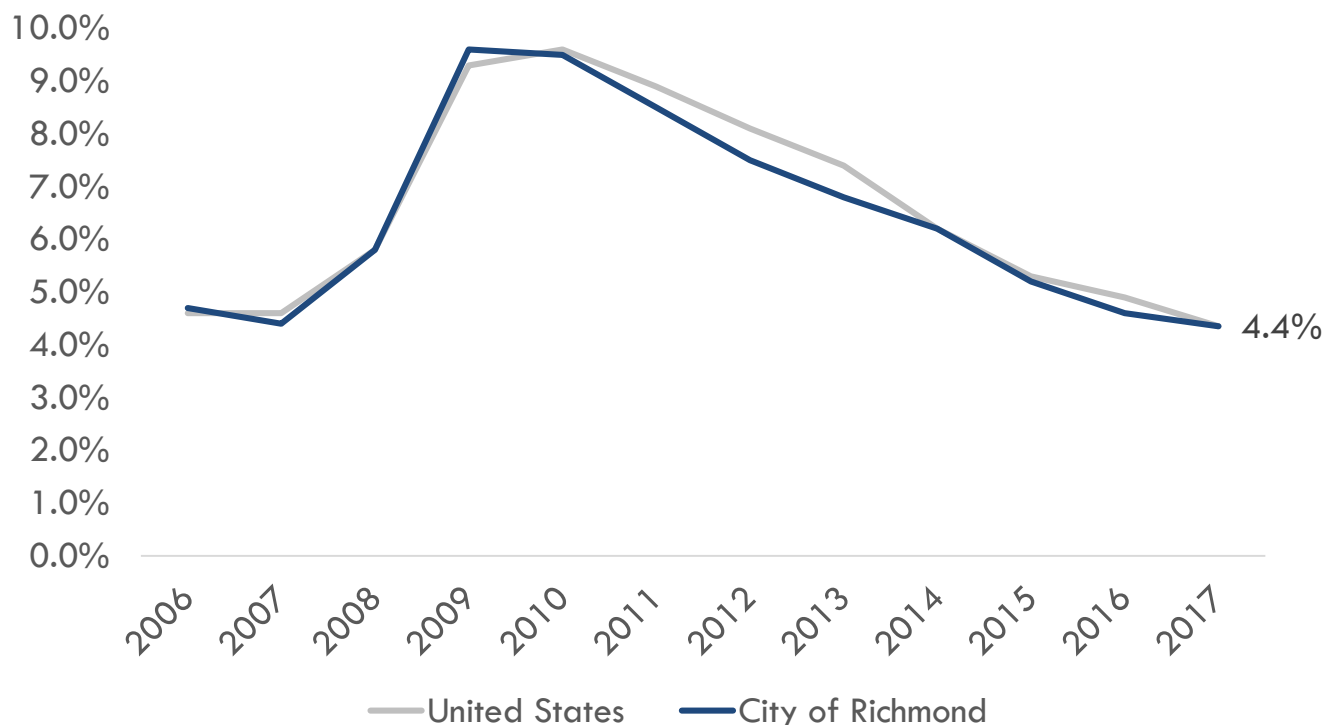


Source: ESRI Business Analyst

The City of Richmond is a regional employment hub; eight Fortune 500 companies have headquarters in the Richmond Region.

Unemployment Rate Overtime

City of Richmond and United States, as of 2017



As a regional employment hub, the City has maintained an unemployment rate that largely tracks the national average. The Richmond Region is home to eight Fortune 500 company headquarters, including Dominion Energy, Altria Group, Owens & Minor, Performance Food Group, Genworth Financial, WestRock, CarMax, and Markel.



Altria



WestRock



Source: Venture Richmond, Richmond Times-Dispatch, Virginia Employment Commission, Emsi, Esri Business Analyst online.
Data as of June 2017.

Of the 169,500 jobs across the City, government and healthcare sectors comprise over 40% of the total workforce.

There is a total of approximately 169,500 jobs across the City of Richmond, of which roughly 54,000 are located within Downtown. From 2010 to 2017, the City saw 2.9% total growth in jobs.

169,500

Total jobs in the City of Richmond

+2.9%

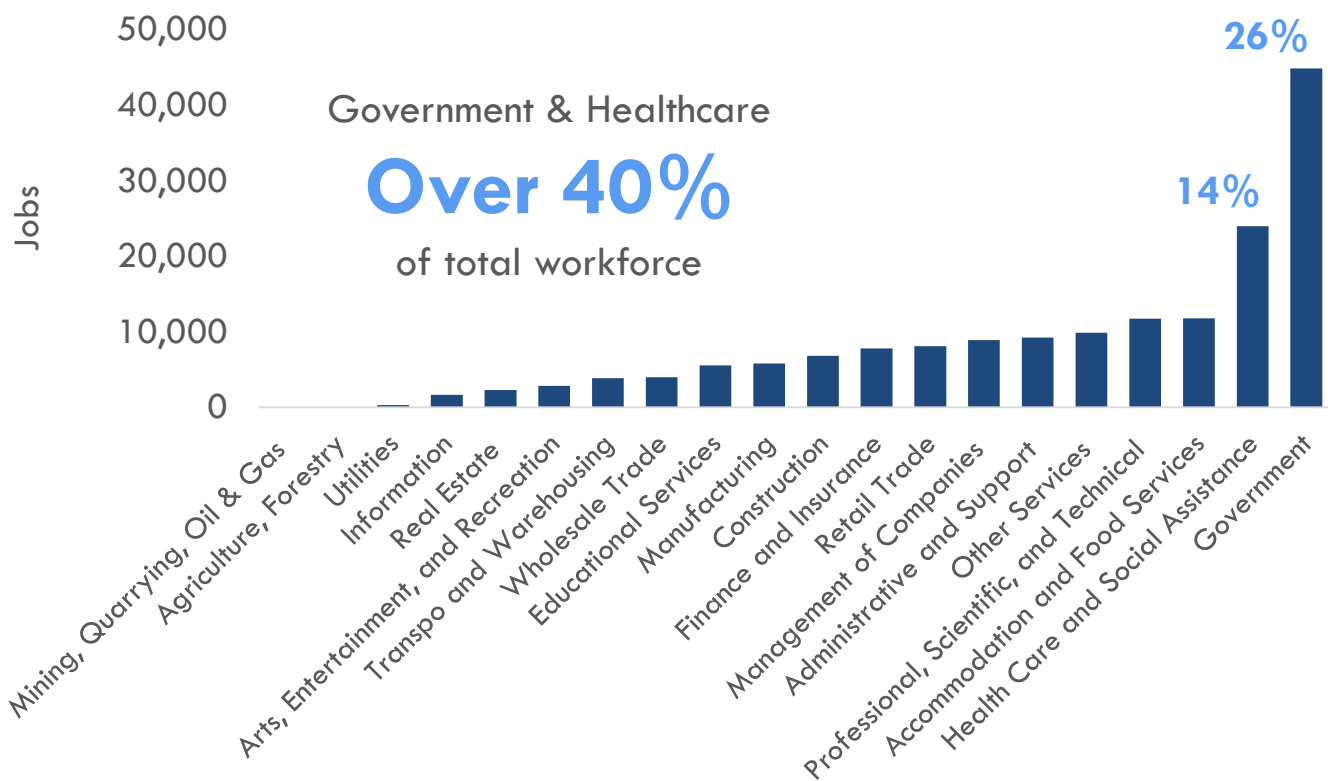
Job growth 2010 to 2017

\$69,600

Average earnings across jobs in the City, 2017

City of Richmond

Employment Industry Overview, 2017



Source: Emsi, Esri Business Analyst online, HR&A Advisors.
Data as of June 2017.

Market Conditions

Demographic & Economic Overview

Residential

Office

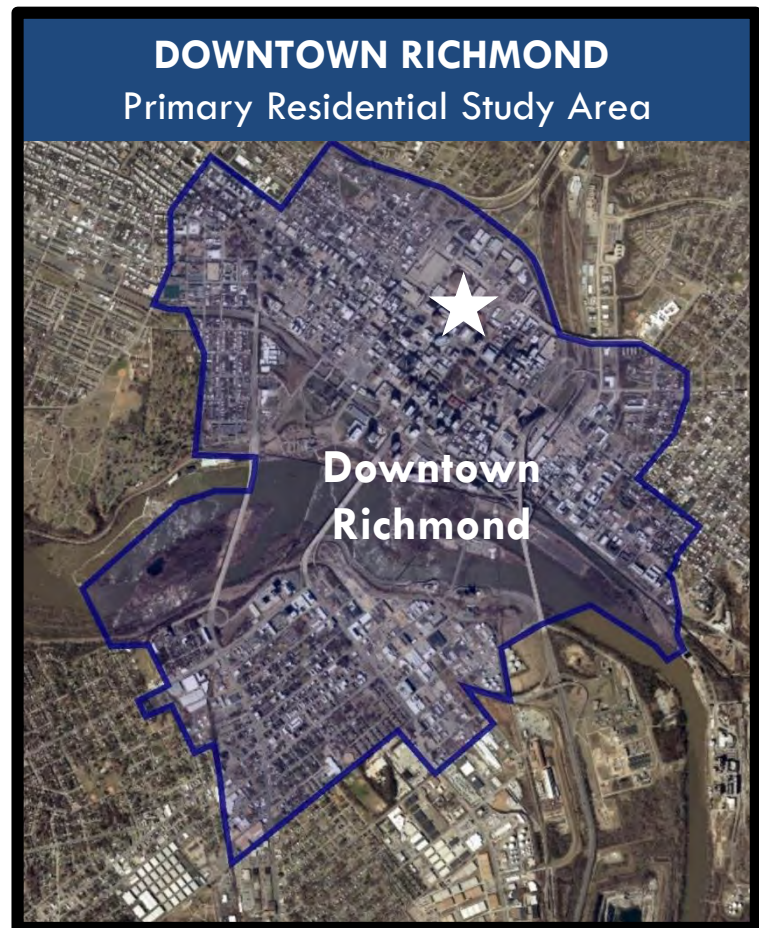
Hotel

Retail

The following analysis examines residential market dynamics across neighborhoods that comprise Downtown Richmond.

HR&A's residential analysis defines a primary residential study area as those neighborhoods considered by the City of Richmond to be "Downtown", comprised of the following:

- Broad Street Corridor
- City Center
- Central Business District (CBD)
- Gambles Hill
- Jackson Ward
- Manchester
- Oregon Hill
- Shockoe Slip
- Shockoe Bottom
- VCU's Monroe Park Campus
- VCU's Medical College of Virginia (MCV) Campus



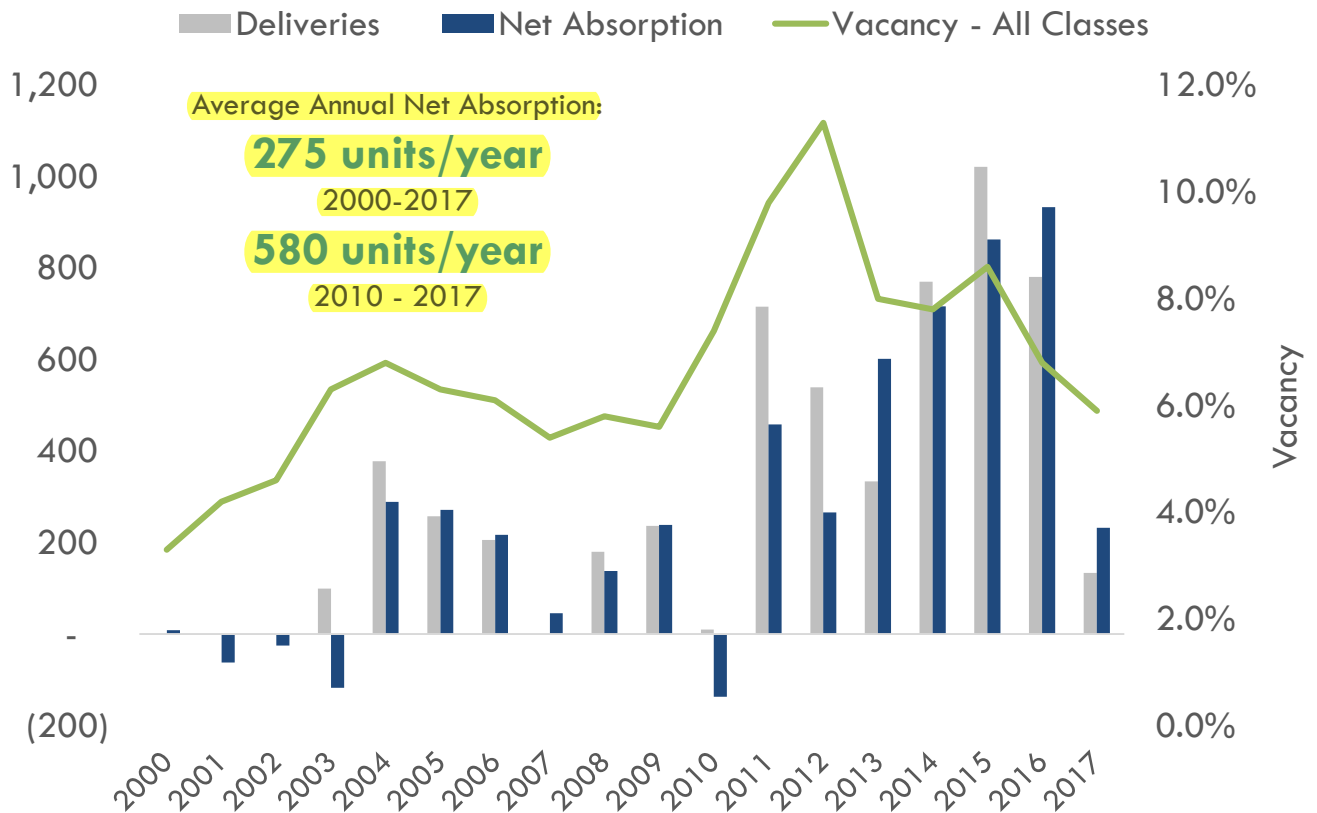
Source: ESRI, Inc.

Existing Conditions

Downtown Richmond has seen a surge in multifamily apartment deliveries since 2010, comprised of both new construction and historic renovation.

Multifamily Apartment Activity

Downtown Richmond, 2000 - 2017



Since 2010, Downtown Richmond has seen a surge in the delivery of residential units – both rehab of existing buildings and new construction. Since 2010, Downtown Richmond has seen the delivery of nearly 4,300 residential units, representing a 38% increase in the overall stock of housing units. Over this same period the market has seen total net absorption of roughly 4,100 units, bringing overall vacancy to just under 6.0%, below the long-term average of 6.7%.

Average annual absorption over the total period from 2000 to 2017 was 275 units per year, while over the past seven years Downtown has seen average annual net absorption of over 580 units per year.

Source: CoStar, HR&A Advisors

Existing Conditions Most new residential construction has occurred over the James River in Manchester.

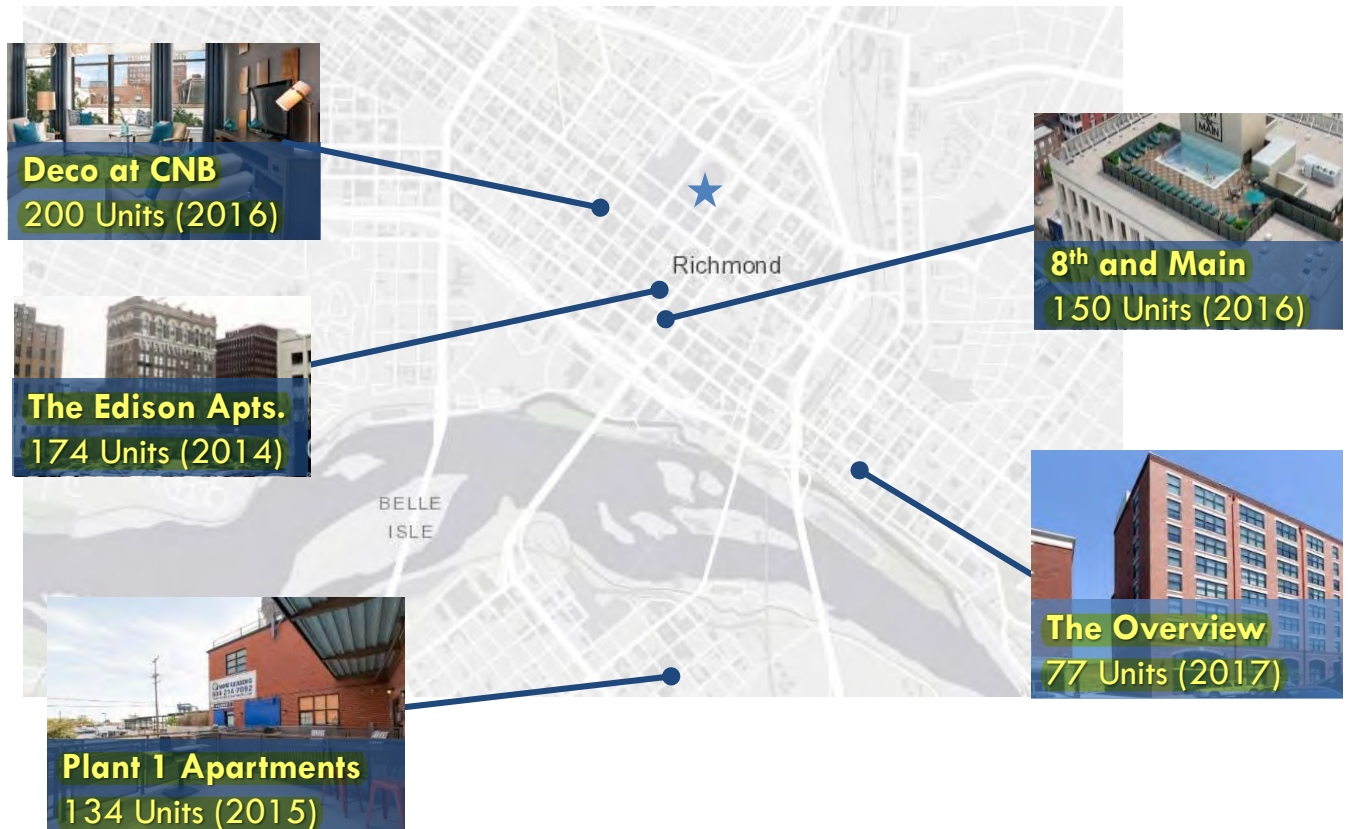


Several new construction projects have delivered in Downtown Richmond over the past three or four years, the majority of which have occurred over the James River in Manchester. Most new product delivered in the heart of Downtown has been smaller projects, under 80 units, with the exception of The Square, which is larger. Matrix Midtown and Terrace 202 represent smaller new construction projects, while The Overview in Shockoe Bottom is a mix of existing rehab and new construction. Across the James River in Manchester, larger mid-rise wood frame construction projects have delivered, including 219 units at City View Lofts, and 152 units at the Hatcher Tobacco Flats, among others.

Source: CoStar, Richmond Times-Dispatch, HR&A Advisors.

Existing Conditions Many of the larger residential deliveries Downtown have been a repurpose of existing historic buildings.

Recent Residential Development
City of Richmond



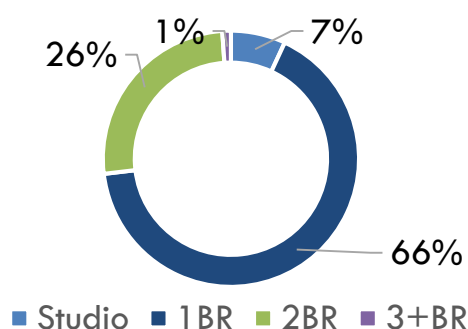
Richmond's Downtown core has seen the repurpose of several iconic buildings into residential apartments, utilizing historic tax credits. Both the Deco at CNB and The Edison Apartments projects represent the repurpose of iconic downtown Richmond buildings, while The Overview in Shockoe Bottom is a mix of a rehabilitated existing building, and adjacent new construction. Not shown on this map, outside the primary residential study area are historic rehabilitation or repurposing projects completed or underway in Scott's Addition, including the Preserve at Scott's Addition, 1 Scott's Addition, and the Courtyard Lofts at Scott's Addition, among others.

Source: CoStar, Richmond Times-Dispatch, HR&A Advisors.

Existing Conditions Most new product delivered in Downtown has offered a majority of 1-bedroom units.

Average Unit Mix

Recently Delivered Multifamily Projects



Unit mix across a subset of recently delivered projects Downtown indicates that most new projects have units mixes toward 1- and 2-bedroom unit mixes. Overall, historic rehab projects in Downtown Richmond tend to skew toward slightly more studio and 1-bedroom units, which may be a result of more unusual room and floorplate sizes across these older buildings.

Recently Delivered Multifamily Projects					
Unit Mix Overview					
	Total Units	Studio	1 BR	2BR	3BR+
New Construction					
1200 SEMMES	129	4%	84%	12%	0%
The Terraces	148	0%	47%	53%	0%
Matrix Midtown	47	0%	55%	28%	17%
City View Lofts	219	0%	37%	63%	0%
Port RVA	106	36%	60%	4%	0%
The Square	152	0%	49%	30%	21%
Terrace 202	56	0%	71%	23%	5%
701 James Street	41	24%	24%	51%	0%
Tobacco Flats	152	0%	18%	63%	18%
Average - New Construction		7%	50%	36%	7%
Historic Rehabilitation					
The Overview	77	0%	93%	7%	0%
Deco at CNB	200	17%	67%	16%	0%
The Edison Apartments	174	32%	44%	21%	3%
8th & Main	197	0%	91%	9%	0%
Plant 1 Apartments	134	0%	67%	31%	2%
Average - Rehab		10%	72%	17%	1%
Average - Total		8%	58%	29%	5%

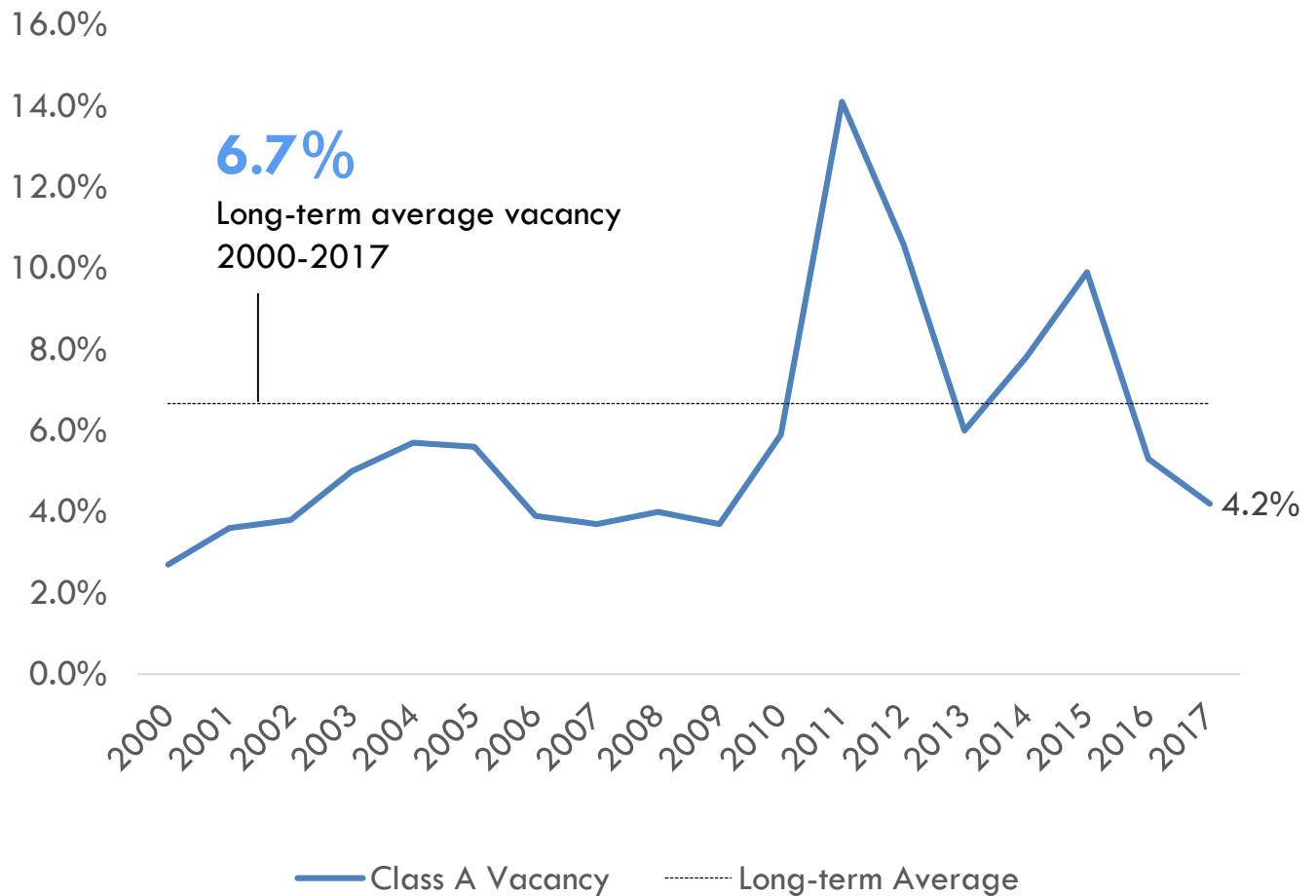
Source: CoStar. Note: Data set represents projects delivered Downtown since 2010.

Existing Conditions

Residential absorption has kept pace with the surge of new deliveries, bringing current vacancy below its long-term average across Downtown.

Multifamily Apartment Vacancy

Downtown Richmond



Class A multifamily vacancy in Downtown Richmond currently sits at 4.2%, below the long-term average for space Downtown, and relatively in-line with levels seen prior to the surge of deliveries beginning in 2010. While vacancy saw a spike in 2011, the Downtown Richmond market absorbed units quickly, bringing vacancy back in-line with long term averages.

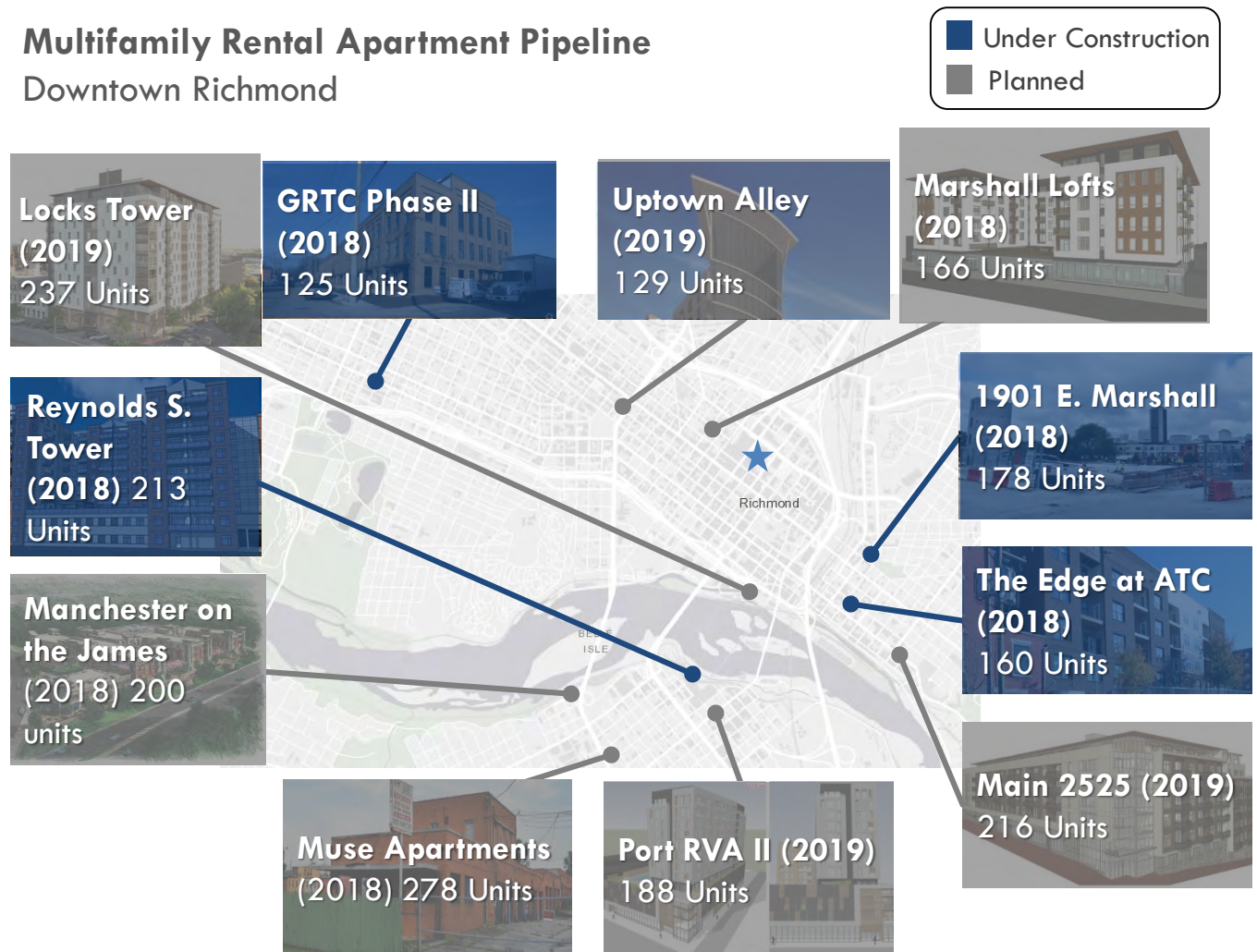
Source: CoStar, HR&A.

Existing Conditions

There is a significant pipeline of multifamily rental projects in planning or under construction across the City, a majority of which are in Downtown.

Multifamily Rental Apartment Pipeline

Downtown Richmond



Over 1,900 residential units are in the pipeline with planned delivery in the next two-to-three years, in-line with the level of deliveries from 2014 to 2017. A number of new construction projects are planned near the Downtown core, delivering more units than seen in most recent new construction in the core.

Source: CoStar, HR&A, Richmond Times-Dispatch.

Pipeline projects not shown on map above: 2201 E Franklin Street project (rehab), 106 Foushee Street Project (rehab), 115 Hull Street project (Fountainhead), James at Riverbend, Symbol Apartments, Scott's View, and South Bank Apartments.

Existing Conditions

Downtown Class A rents have seen a 12% increase over the past five years, even with significant new residential units coming on the market.

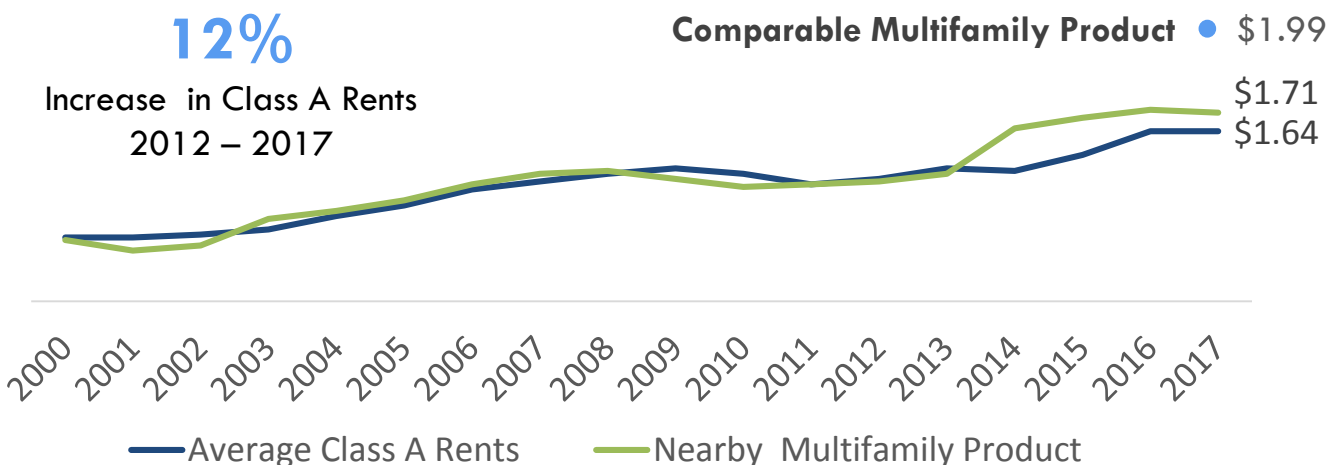
A subset of 'Comparable Multifamily Product', comprised of the Deco at CNB, the Terraces at Manchester, and The Overview, currently offer average asking rents at roughly \$2.00 per square foot. This subset of multifamily product in Downtown Richmond represents the level of apartment finishes and amenities in-line with plans in the North of Broad/Downtown district.

Asking rents for a broader group of 'Nearby Multifamily Product', within ½ mile of the North of Broad/Downtown district, average just above \$1.70 per square foot, and seeing an 18% increase in rents over the past five years. Asking rents across all Class A multifamily projects downtown average \$1.64 per square foot, following a 12% increase over the past five years, or 2.4% on a compound annual basis. This steady increase in asking rents, despite significant new supply of housing coming online, speaks to the interest in Downtown housing and health of the overall residential market.



Multifamily Apartment Asking Rents (\$/SF)

Downtown Richmond



Source: CoStar

Existing Conditions

Richmond's existing high-rise condos were built before 2007; however, several smaller, for sale townhome projects have delivered or are in planning Downtown.

Following the Great Recession, for sale condominium development stalled in markets across the United States, with only the strongest markets seeing new development over the past few years. A majority of Richmond's higher-density, for sale condominium projects were built in the 1980s, 1990s, or early 2000s, including more recent projects such as Vistas on the James and Fall Line Condominiums (not shown below), or historic rehabilitation projects such as The Tuckahoe and The Prestwould (not shown below).

However, a number of small scale, for sale townhome new construction projects have begun to emerge across the City, as seen on the map below.

Recent or Planned For Sale Projects

Downtown Richmond



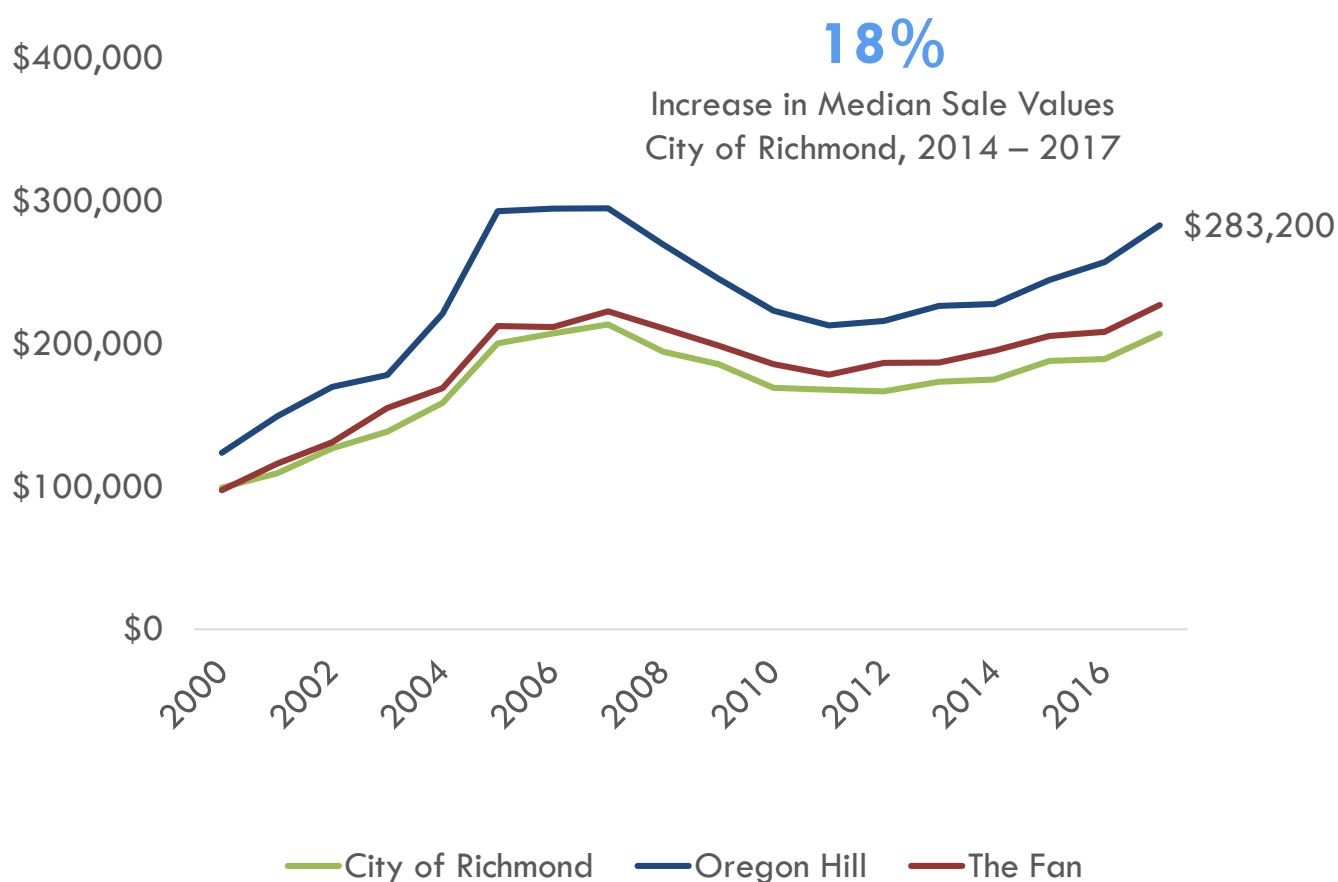
Source: Zillow, HR&A.

Note: Several older condo projects are not shown here, including: Edge Mill Towers, Fall Line, Ginter Place, Hathaway Tower, Nolde Bakery, The Prestwould, Skyline Condominiums, The Tuckahoe, Vistas on the James.

Existing Conditions Recent sales in Downtown Richmond indicate that pricing has rebounded to pre-Recession levels.

Condominium Sale Pricing

Median Sale Value, by Neighborhood, Richmond, as of 2017



Median sales across Downtown Richmond have recently returned to pre-Recession levels, with median sale values across the City of Richmond seeing an 18% increase over the past three years.

On a dollar per square foot basis, recent sales of older condominium units currently average \$290 per square foot, consistent with pricing for older, for-sale product.

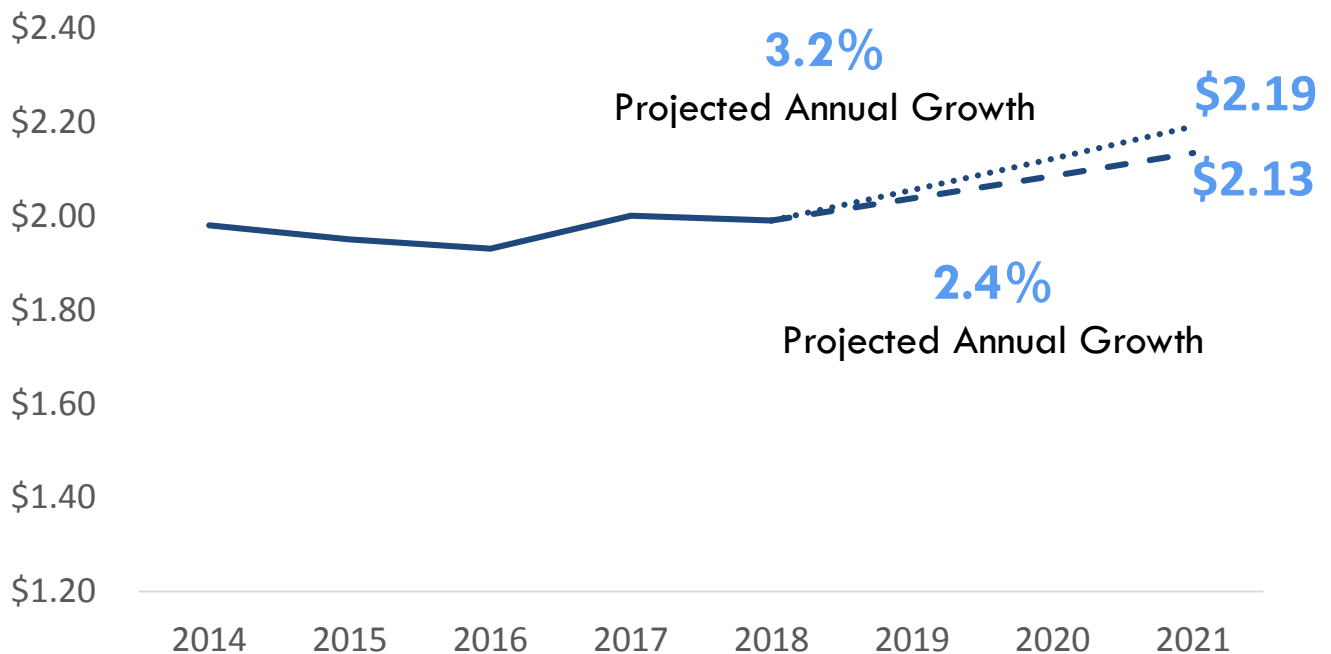
Source: Zillow, HR&A.

Residential Projections

Current rent growth estimates indicate that multifamily pricing may achieve upwards of \$2.20 per square foot by 2021.

Comparable Multifamily Apartment Asking Rent Projections*

Downtown Richmond



Pricing across Class A multifamily product in Downtown Richmond has experienced 3.2% compound annual growth over the past three years, reflective of the strong demand for Downtown living. If these trends continue, new comparable multifamily residential product Downtown may achieve pricing of roughly \$2.20 per square foot by 2021. Over the past five years, Class A multifamily product experienced 2.4% compound annual growth; if this trend persists, new comparable multifamily residential product in Downtown may achieve pricing upwards of \$2.13 per square foot.

National trends across the United States indicate that rent growth has begun to moderate in most markets; however, more recent trends in Richmond indicate that rent growth remains strong.

Source: CoStar, ULI, HR&A Advisors.

* Represents a subset of comparable properties based on proximity to the proposed project location and/or targeted level of finishes and amenities, including: Deco at CNB, The Overview, the Terraces at Manchester.

Residential Projections

New condominium projects planned or delivered in comparable submarkets across the Southeast achieve average pricing above \$400 per square foot.

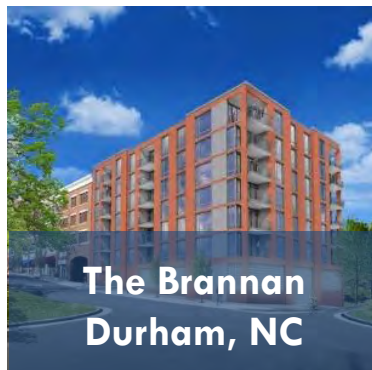
While condominium development has been limited in Downtown Richmond over the past 10 years, comparable markets in the Southeast have and continue to see demand for new, high-end luxury condos, as cohorts of the population seek proximity to walkable, urban environments with immediate access to amenities and entertainment.

Durham and Raleigh, North Carolina, two submarkets within North Carolina's Research Triangle area, continue to see development of luxury downtown condominiums, as the Downtown core of both markets experience a redevelopment renaissance. Current pricing across recently delivered, and upcoming pipeline projects, averages \$400-425 per square foot across low- and mid-rise product, while high-rise product is achieving pricing above \$500 per square foot.

Through catalytic mixed-used development in Downtown Richmond, with the appropriate mix of walkable amenities and entertainment, redevelopment in the North of Broad/Downtown neighborhood may achieve comparable pricing.

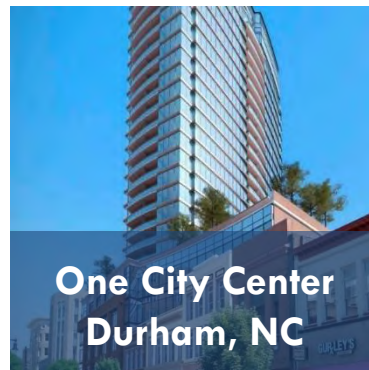
Comparable Southeast Condominium Pricing

\$370 – 475/SF



2019 Delivery

\$500 – 530/SF



2018 Delivery

\$420 – 430/SF



2019 Delivery

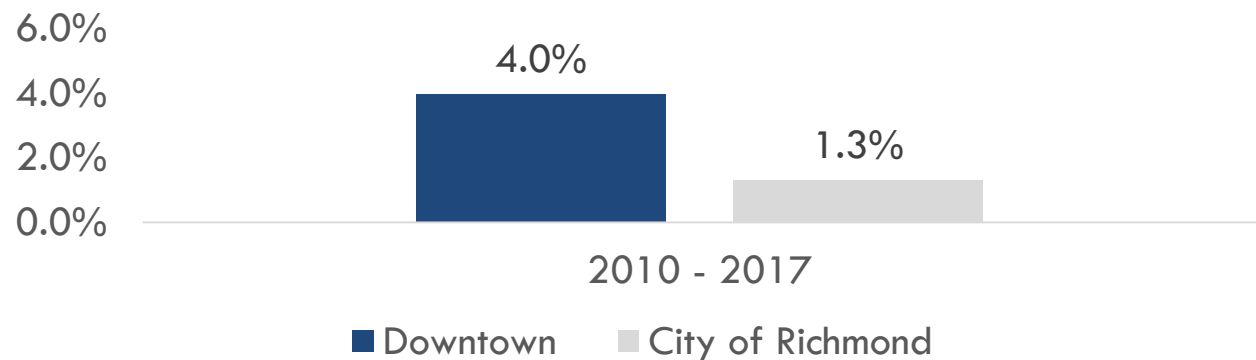
Source: Zillow, Triangle Business Journal, HR&A Advisors.

Residential Projections

Over the past seven years, Downtown Richmond has experienced 4.0% compound annual growth in population.

Population Growth Rate 2010 – 2017

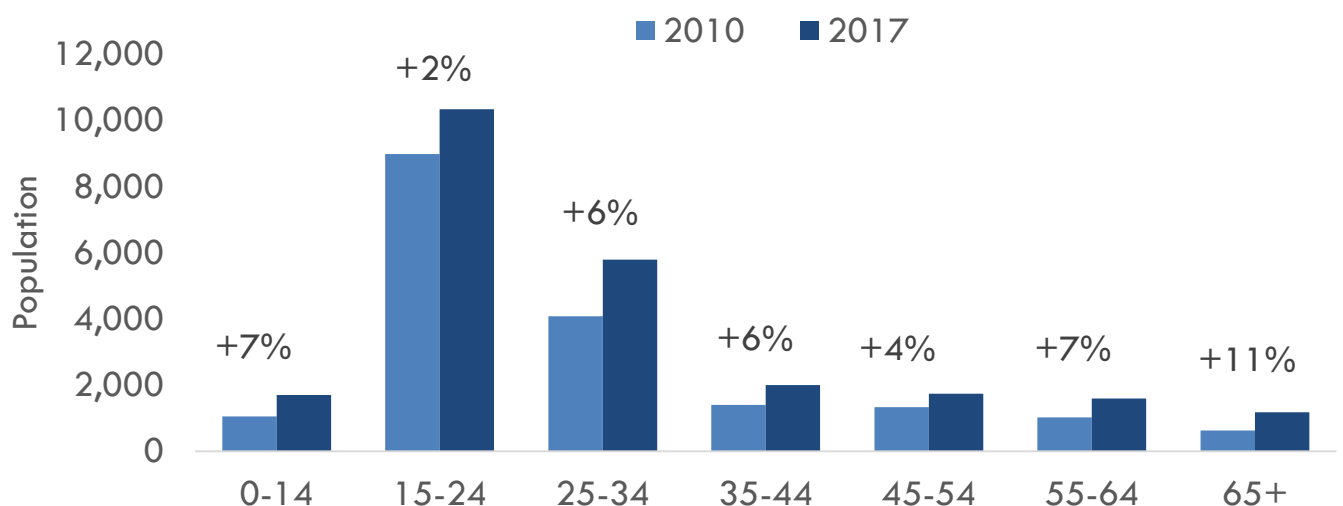
City of Richmond and Downtown



Over the past seven years, Downtown Richmond has seen strong relative growth in young professionals and older segments of the population.

Population Growth Rate by Age Cohort, 2010 – 2017

Downtown Richmond



Note: Population growth rate reflects compound annual growth rate (CAGR).
Source: ESRI Business Analyst

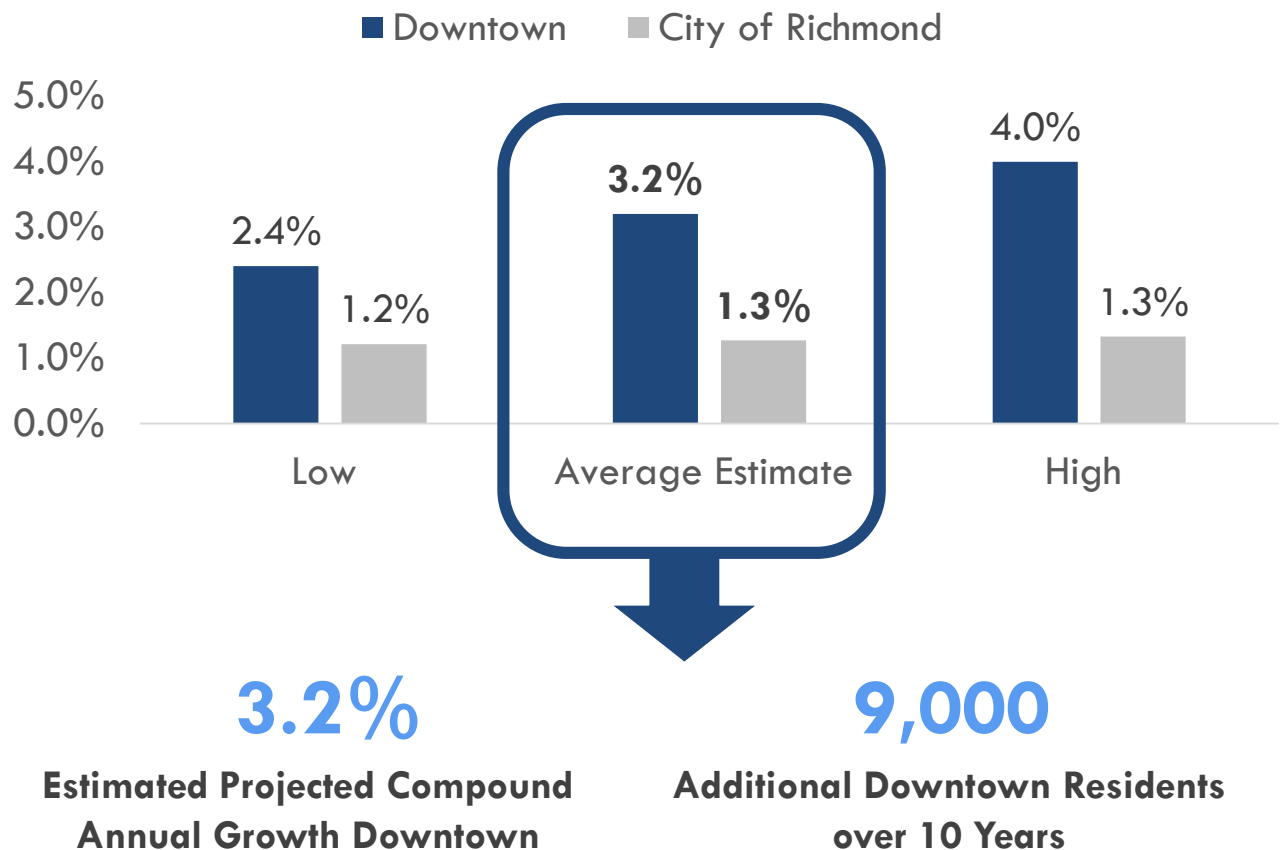
Residential Projections

Average projection estimates indicate that Downtown will see projected annual growth of 3.2%, resulting in nearly 9,000 residents over the next 10 years.

Projected Annual Population Growth

Compound Annual Growth Rates (CAGR)

City of Richmond and Downtown



Over the past seven years Downtown Richmond has experienced 4.0% compound annual population growth, a trend just behind average annual growth of 4.8% seen from 2000 to 2010. Projections provided by Esri, Inc., derived from US Census data, indicate that over the next five years Downtown is expected to see a slower pace of growth, at 2.4% annually. A simple average of annual growth experienced over the past several years, and near-term projections, results in a 3.2% estimate of projected growth, as shown above. These growth estimates indicate that Downtown could experience upwards of 9,000 new residents over the next ten years.

Source: ESRI Business Analyst, HR&A Advisors.

Residential Projections

VCU's current Master Site Plan calls for continued development of the MCV Campus, located adjacent to the North of Broad/Downtown neighborhood.

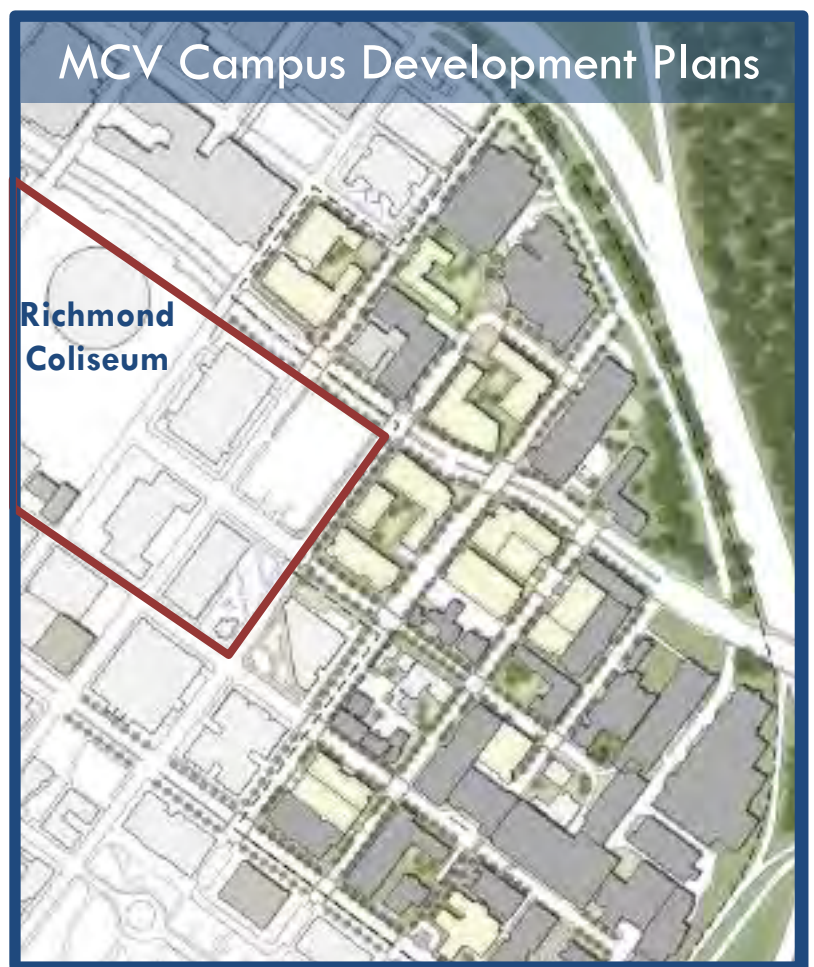
Located immediately adjacent to the North of Broad/Downtown neighborhood, VCU's 52-acre MCV Campus is home to 10,000 employees and 4,400 students, and poised for continued development over the coming years. According to VCU's 2013-2020 Master Site Plan, the University has plans for up to 1.9 million square feet of rehabilitated or new space to accommodate and support the medical center's integrated health sciences research and education programs.

Projects include VCU's 154,000 square foot Health Professions Building currently in development at MCV Campus, as well as future plans for additional graduate, undergraduate, faculty, and staff housing at MCV Campus, among other projects.

VCU's plans for continued development at the MCV Campus may present an opportunity for student, faculty, and staff housing in the North of Broad/Downtown neighborhood.



Medical Center



Proposed Building or Redevelopment



North of Broad/Downtown
Redevelopment Study Area

Source: ESRI Business Analyst, VCU Master Site Plan (2013), VCU Housing Master Plan (2014).

Residential Projections

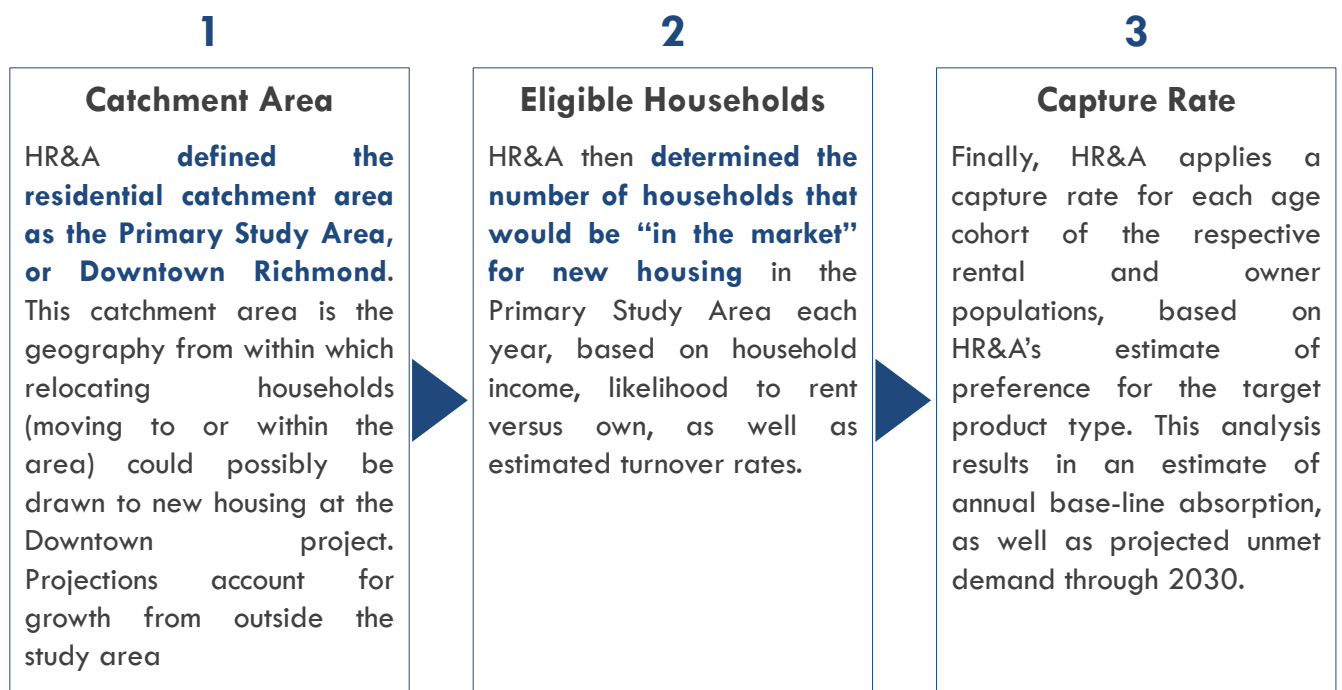
This report estimates projected demand for multifamily rental and for sale housing over the next several years.

HR&A's residential demand analysis follows three key steps:

1. **Catchment Area:** First, identifying the primary residential study or “catchment” area, defined as Downtown Richmond, detailed earlier;
2. **Eligible Households:** HR&A then identifies eligible households that would be “in the market” for new housing, based on household income at the appropriate price point as determined in the previous section of this report (\$2.20 per square foot rental pricing, \$400 per square condominium pricing). HR&A's analysis then applies a “renter” or “owner” estimate based on likelihood to rent versus own by age cohort from the US Census, then applies a “turnover” estimate based US Census mobility data. This seeks to capture market-rate housing demand, and does account for additional affordable housing demand.
3. **Capture Rate:** Once the subset of eligible households has been defined, HR&A applies a capture rate for each age cohort's preference for the target product type planned for new development in Downtown Richmond.

A detailed overview of this process is included on the following slides.

Residential Demand Projections Process



Source: HR&A Advisors.

Residential Projections

Rental Demand | HR&A estimates annual rental demand among eligible households at roughly 415 - 425 units per year.

Consistent with the process outlined on the previous page of identifying eligible rental households, then applying a turnover and capture rate, summarized below are HR&A's base year annual projections for residential rental demand in Downtown Richmond. HR&A estimates that base year annual demand for rental housing in Downtown equates to roughly 415 – 425 units per year. This represents market-rate residential demand, based on price points identified in this report, and does not account for additional demand for affordable housing.

Projected Annual Residential Demand – Rental Downtown Richmond

Householder Age	Eligible Renter Households	Turnover Rate	Capture Rate	Rental Demand (Base Year)
<25	479	61%	35%	102
25 - 34	1,275	38%	55%	266
35 - 44	370	23%	35%	29
45 - 64	538	22%	20%	23
65+	125	10%	10%	1
Total	2,786			415 - 425

Note: Turnover Rate represents the percentage of eligible households that move annually. Capture Rate represents HR&A's estimate of the capturable percentage of moving eligible households for the target type of rental product planned in Downtown new construction.

Source: ESRI, HR&A Analysis

Residential Projections

Rental Demand - Detail | HR&A estimates annual rental demand among eligible households at roughly 415 - 425 units per year.

Summarized below is a more detailed description of the process HR&A has employed to determine baseline annual demand for rental housing in Downtown Richmond.

Income Eligibility Metrics

	Assumption
Average Monthly Rent Per SF	\$2.20
Average Unit Size (SF)	725 SF
Average Rent per Unit	\$1,595
Annual Housing Cost	\$19,140
Annual Housing Allocation	30%
Minimum Eligible Household Income	\$64,000

All Households by Income and Age

Category	<25	25-34	35-44	45-64	65+	Total	% Eligibility
<\$15,000	1,218	696	250	477	237	2,878	0%
\$15,000 - \$24,999	614	452	173	263	201	1,703	0%
\$25,000 - \$34,999	345	437	162	211	100	1,255	0%
\$35,000 - \$49,999	329	445	163	239	88	1,264	0%
\$50,000 - \$74,999	349	780	255	364	112	1,860	75%
\$75,000 - \$99,999	128	349	126	217	61	881	100%
\$100,000 - \$149,999	76	328	117	168	36	725	100%
\$150,000 - \$199,999	17	97	27	66	13	220	100%
\$200,000+	12	74	43	49	5	183	100%
Total Households	3,088	3,658	1,316	2,054	853	10,969	

Rental Demand

Category	<25	25-34	35-44	45-64	65+	Total
Eligible Households	495	1,433	504	773	199	3,404
Renter Estimate	97%	89%	73%	70%	63%	82%
Renter Market	479	1,275	370	538	125	2,786
Turnover Rate	61%	38%	23%	22%	10%	35%
Preference for Target Product Type	35%	55%	35%	20%	10%	43%
Total Rental Demand	102	266	29	23	1	422

Note: Turnover Rate represents the percentage of eligible households that move annually. Capture Rate represents HR&A's estimate of the capturable percentage of moving eligible households for the target type of rental product planned in Downtown new construction.

Source: ESRI, HR&A Analysis

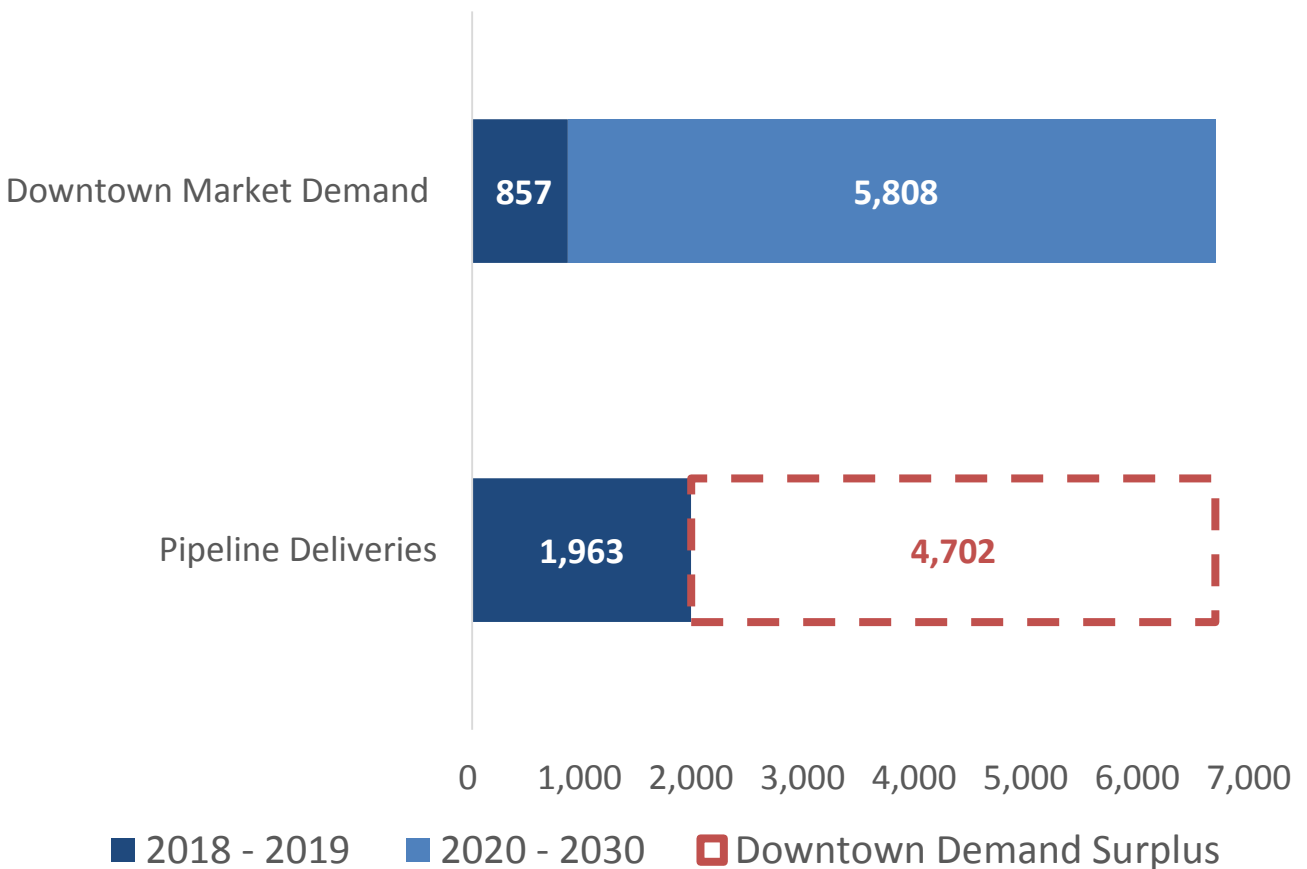
Residential Projections

Rental Demand | HR&A's projection indicates there will be unmet demand for over 4,700 residential rental units Downtown through 2030.

As summarized below in red, HR&A's analysis indicates that there will be unmet demand for a total of 4,700 rental units over the next 12 years. This represents market-rate residential demand, based on price points identified in this report, and does not account for additional demand for affordable housing. Based on current pipeline estimates for Downtown Richmond, it is estimated that a total of over 1,900 residential rental units will be delivered in Downtown by 2020. Plans for these pipeline projects may shift in the coming months and years, but this figure reflects current estimates for future deliveries.

Cumulative Demand Surplus for Rental Units (2017 – 2030)

Downtown Richmond



Source: ESRI Business Analyst, HR&A Advisors.

Residential Projections

Owner Demand | HR&A estimates annual owner demand among eligible households at roughly 30 – 32 units per year.

Consistent with the process outlined on an earlier page of this report, HR&A's process for identifying eligible households and applying relevant capture rates to determine supportable demand, is summarized below. HR&A estimates that base year annual demand for sale housing in Downtown equates to roughly 30 – 32 units per year. This represents market-rate residential demand, based on price points identified in this report, and does not account for additional demand for affordable housing.

Projected Annual Residential Demand – Owner

Downtown Richmond

Householder Age	Eligible Renter Households	Turnover Rate	Capture Rate	For Sale Demand (Base Year)
<25	6	61%	5%	--
25 - 34	84	38%	30%	10
35 - 44	75	23%	25%	4
45 - 64	136	22%	55%	16
65+	37	10%	55%	2
Total	338			30 - 32

Note: Turnover Rate represents the percentage of eligible households that move annually. Capture Rate represents HR&A's estimate of the capturable percentage of moving eligible households for the target type of owner product planned in Downtown new construction.

Source: ESRI, HR&A Analysis

Residential Projections

Owner Demand - Detail | HR&A estimates annual owner demand among eligible households at roughly 30 – 32 units per year.

Summarized below is a more detailed description of the process HR&A has employed to determine baseline annual demand for owner housing in Downtown Richmond.

Income Eligibility Metrics

	Assumption
Average Sale Price Per SF	\$400
Average Unit Size (SF)	1,050 SF
Average Purchase Price	\$420,000
Down Payment Assumption	20%
Mortgage Principal	\$336,000
Term (Years)	30
Annual Percentage Rate (APR)	4.15%
Monthly Payment	\$1,633
Annual Property Tax Rate	1.2%
Annual Property Tax Payment	\$5,040
Annual Insurance Cost Estimate	\$900
Annual Housing Costs	\$25,540
Housing Allocation	30%
Minimum Eligible Household Income	\$85,000

Note: Turnover Rate represents the percentage of eligible households that move annually. Capture Rate represents HR&A's estimate of the capturable percentage of moving eligible households for the target type of owner product planned in Downtown new construction.

Source: ESRI, HR&A Analysis

All Households by Income and Age

Category	<25	25-34	35-44	45-64	65+	Total	% Eligibility
<\$15,000	1,218	696	250	477	237	2,878	0%
\$15,000 - \$24,999	614	452	173	263	201	1,703	0%
\$25,000 - \$34,999	345	437	162	211	100	1,255	0%
\$35,000 - \$49,999	329	445	163	239	88	1,264	0%
\$50,000 - \$74,999	349	780	255	364	112	1,860	0%
\$75,000 - \$99,999	128	349	126	217	61	881	75%
\$100,000 - \$149,999	76	328	117	168	36	725	100%
\$150,000 - \$199,999	17	97	27	66	13	220	100%
\$200,000+	12	74	43	49	5	183	100%
Total Households	3,088	3,658	1,316	2,054	853	10,969	

For-Sale Demand

Category	<25	25-34	35-44	45-64	65+	Total
Eligible Households	201	761	282	446	100	1,789
Owner Estimate	3%	11%	27%	30%	37%	19%
Owner Market	6	84	75	136	37	338
Turnover Rate	61%	38%	23%	22%	10%	25%
Preference for Target Product Type	5%	30%	25%	55%	55%	38%
Total For-Sale Demand	0	10	4	16	2	32

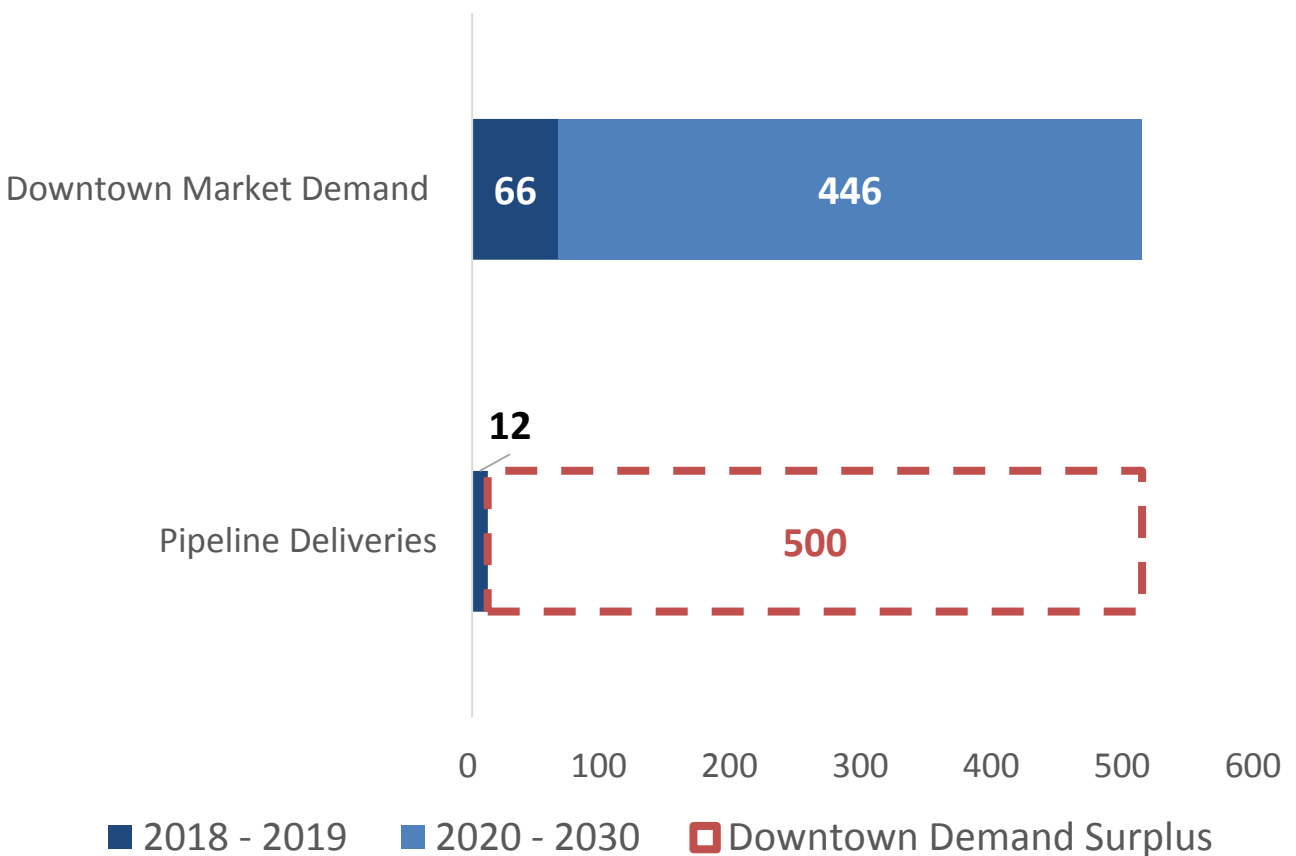
Residential Projections

Owner Demand | HR&A's projection indicates there will be unmet demand for over 500 residential owner units Downtown through 2030.

As summarized below in red, HR&A's analysis indicates that there will be unmet demand for a total of 500 owner units over the next 12 years. This represents market-rate residential demand, based on price points identified in this report, and does not account for additional demand for affordable housing. Based on current pipeline estimates for Downtown Richmond, it is estimated that a total of only 12 residential owner units will be delivered in Downtown by 2020. Plans for these pipeline projects may shift in the coming months and years, but this figure reflects current estimates for future deliveries.

Cumulative Demand Surplus for Owner Units (2017 – 2030)

Downtown Richmond



Source: ESRI Business Analyst, HR&A Advisors.

Residential Market Summary

There is robust residential demand projected for Downtown, capturing expected population growth and further development of VCU's MCV Campus.

Summary Residential Market Findings



Vacancy continues to compress across Downtown, despite a 27% increase in Class A inventory over the past five years. Current Class A vacancy sits at 4%, below its long-term average, indicating residential absorption remains strong.



Multifamily residential rental rates continue to increase steadily, up roughly 12% over the past five years. HR&A projections indicate by 2021 new multifamily pricing may average \$2.20/SF, and for sale pricing may achieve upwards of \$400/SF, in-line with pricing seen elsewhere in comparable Southeast markets.



Robust population growth is projected for Downtown over the next ten years, at roughly 3.2% annually; projected absorption estimates indicate base year annual demand of 415- 425 rental units, and 30 – 32 for sale units. This represents market-rate residential demand, based on price points identified in this report, and does not account for additional demand for affordable housing.



VCU maintains plans for continued development of the MCV Campus, which may present an opportunity to develop housing to serve additional undergraduate and graduate students, faculty, and staff within a short walk to class and work. There may be an opportunity to develop both micro units to serve the Downtown student community, as well as larger units for staff and faculty families and individuals.

Downtown Richmond is projected to see robust population growth over the coming years; through catalytic mixed-use development, Downtown can capture this growth and create a new, vibrant residential-anchored district in the Downtown core.

Market Conditions

Demographic & Economic Overview

Residential

Office

Hotel

Retail

HR&A identified a primary office study area comprised of the key districts in the City's Downtown core.

HR&A established a primary office study area for the analysis of Downtown Richmond, encompassing those neighborhoods considered to be the core of the City's downtown office district, focusing on the following neighborhoods:

- Broad Street Corridor
- Jackson Ward
- VCU's Monroe Park Campus
- VCU Medical College of Virginia (MCV) Campus
- City Center
- Central Business District (CBD)

HR&A's office analysis uses this primary study area as the basis for our existing conditions analysis, as well as in later demand projections.

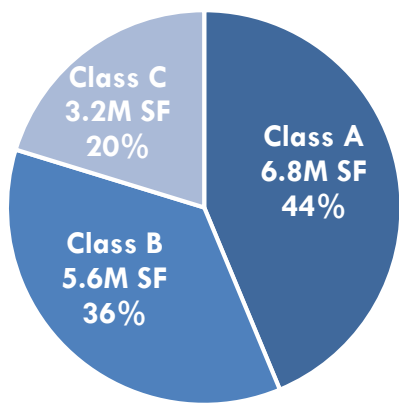


Source: CoStar Group, ESRI Business Analysis

Existing Conditions Richmond’s Downtown Class A space comprises 6.8M square feet, just under half of total inventory.

Composition of Office Space by Class

Downtown Richmond



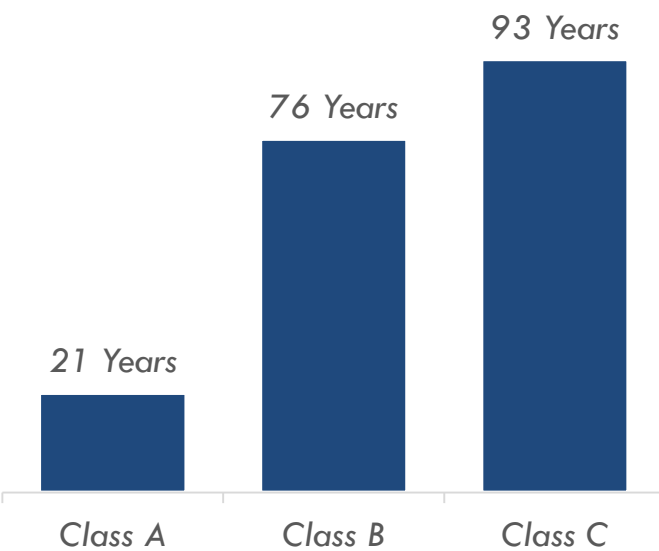
6.8M

SF Class A Space

15.6M

SF Total Space

Average Age of Downtown Space
Downtown Richmond



Downtown Richmond’s total office inventory comprise 15.6M square feet of space, of which 44% or 6.8M square feet of space is considered Class A. The average age of Richmond’s Downtown Class A space is 21 years, while much of the City’s Class C space is older buildings.

Source: CoStar Group
Note: average age of building accounts for building renovation.

Existing Conditions

Downtown Richmond is home to the headquarters of several of the region's largest employers, and is the region's office hub.

The largest employers across the City of Richmond are located in Downtown, including VCU, VCU's medical campus, as well as Altria, the vast majority of City employees, as well as the Federal Reserve of Richmond, and Dominion Energy, among others.

Top Employers, Capital Region Workforce Partnership

- 1) Virginia Commonwealth University (VCU)
- 2) MCV Hospital
- 3) Richmond City Public Schools
- 4) City of Richmond
- 5) U.S Department of Veterans Affairs
- 6) HCA Virginia Health System
- 7) University of Richmond
- 8) Federal Reserve Bank, Richmond
- 9) Altria Group, Inc.
- 10) MCV Physicians
- 11) Dominion Energy
- 12) Crestar Mortgage Corporation
- 13) Virginia Department of Transportation
- 14) SunTrust Bank
- 15) Estes Express Lines



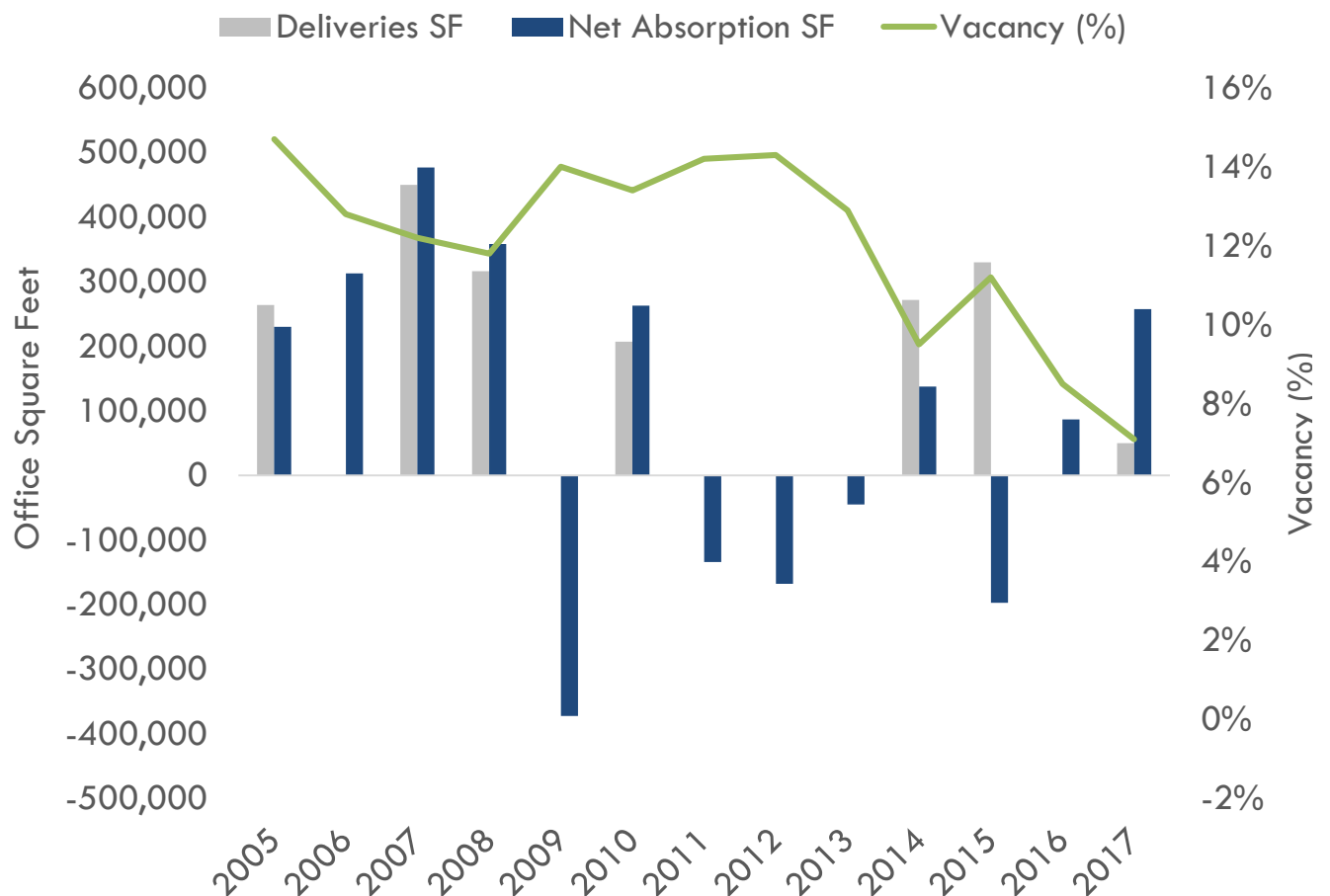
Source: Esri Business Analyst, LED on the Map, Virginia Labor Market Information (LMI), Emsi (Economic Modeling Specialists International).

Existing Conditions Downtown Richmond's office market has seen strong absorption, bringing overall vacancy to all-time lows.

In the mid-to-late 2000s, the City of Richmond experienced increases in office vacancy, feeling the results of the Great Recession; however, in recent years the Downtown office market has experience significant positive net absorption, bringing vacancy to the lowest levels experienced in years, below 8%.

Downtown Total Office Market Activity

Downtown Richmond



Source: CoStar Group

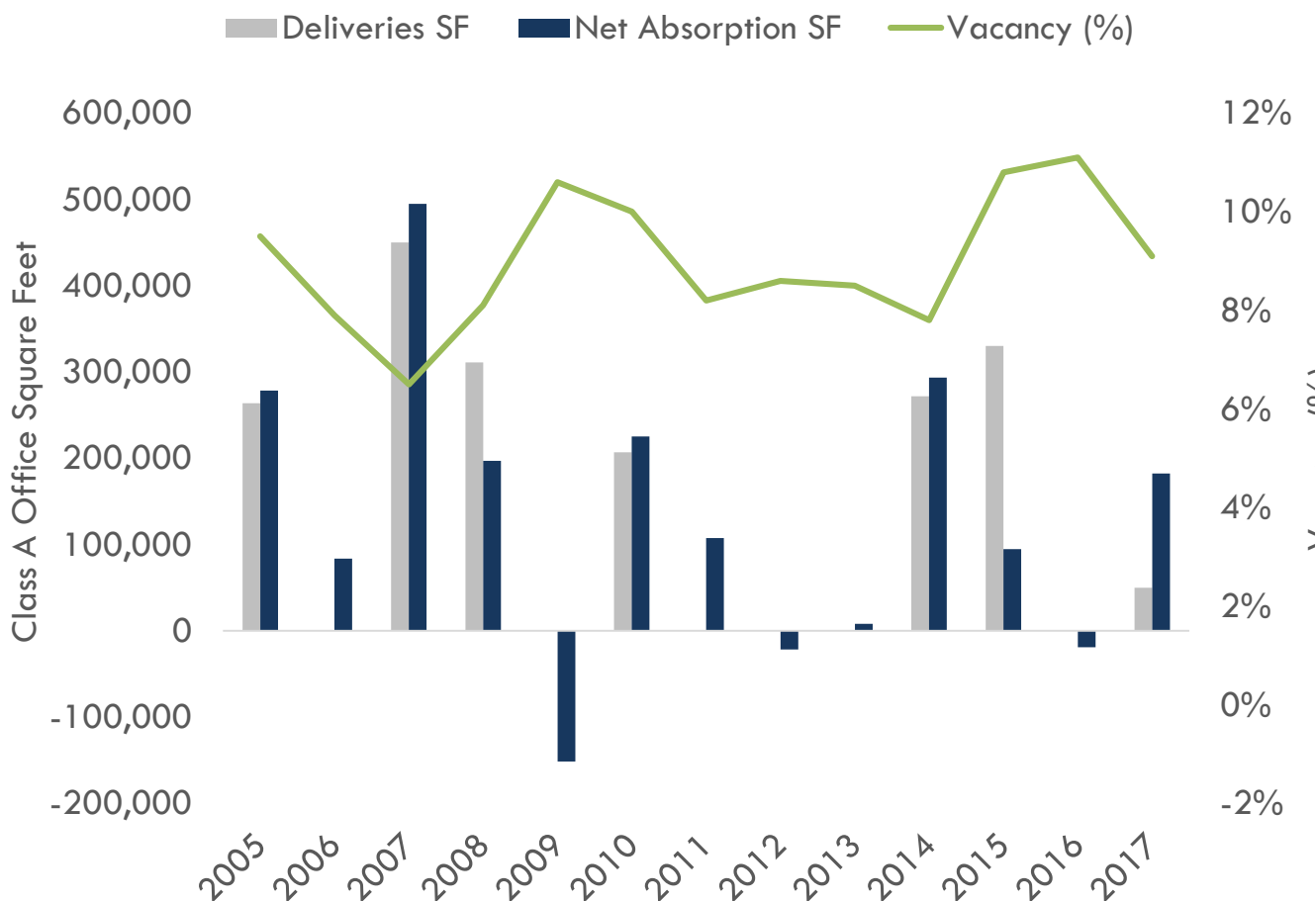
Existing Conditions

Vacancy across Class A space increased modestly in 2015 with the delivery of Gateway Plaza; however, has recently returned to the long-term average.

The vast majority of new Class A space delivered in Downtown Richmond over the past decade has been build-to-suit space, resulting in overall strong positive net absorption. In 2015, law firm McGuire Woods became anchor tenant in Gateway Plaza, a 330,000 square foot office tower, after relocating from its previous headquarters in Downtown.

Downtown Class A Office Market Activity

Downtown Richmond



Source: CoStar Group

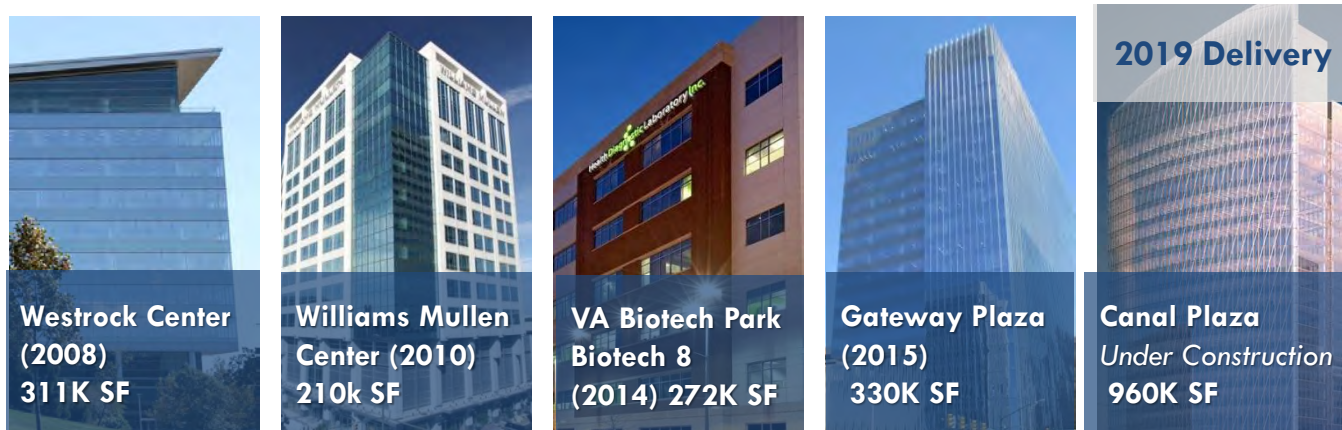
Existing Conditions

All major Downtown office deliveries over the past 10 years have been build-to-suit space for some of the region's largest employers.

As a regional employment hub, office development in Richmond has been driven by predominantly build-to-suit space for some of the region's largest employers.

Going back to 2008, WestRock occupied its headquarters location near the James River, in a building that is now also occupied by CoStar. In 2010, law firm Williams Mullen served as anchor tenant for its new headquarters in Downtown, at the Williams Mullen Center. In 2014, VCU, led by its engineering school, occupied roughly 270,000 square feet of space at Biotech 8, to add to the growing Biotech Park on the north side of Downtown. In 2015, law firm McGuire Woods relocated from its existing headquarters in Downtown Richmond to Gateway Plaza, the newest Class A space in Downtown Richmond.

Currently Dominion Energy is developing its new headquarters in Downtown, with the plans to relocate staff from its existing headquarters Downtown to the new building when completed in 2019.



McGUIREWOODS



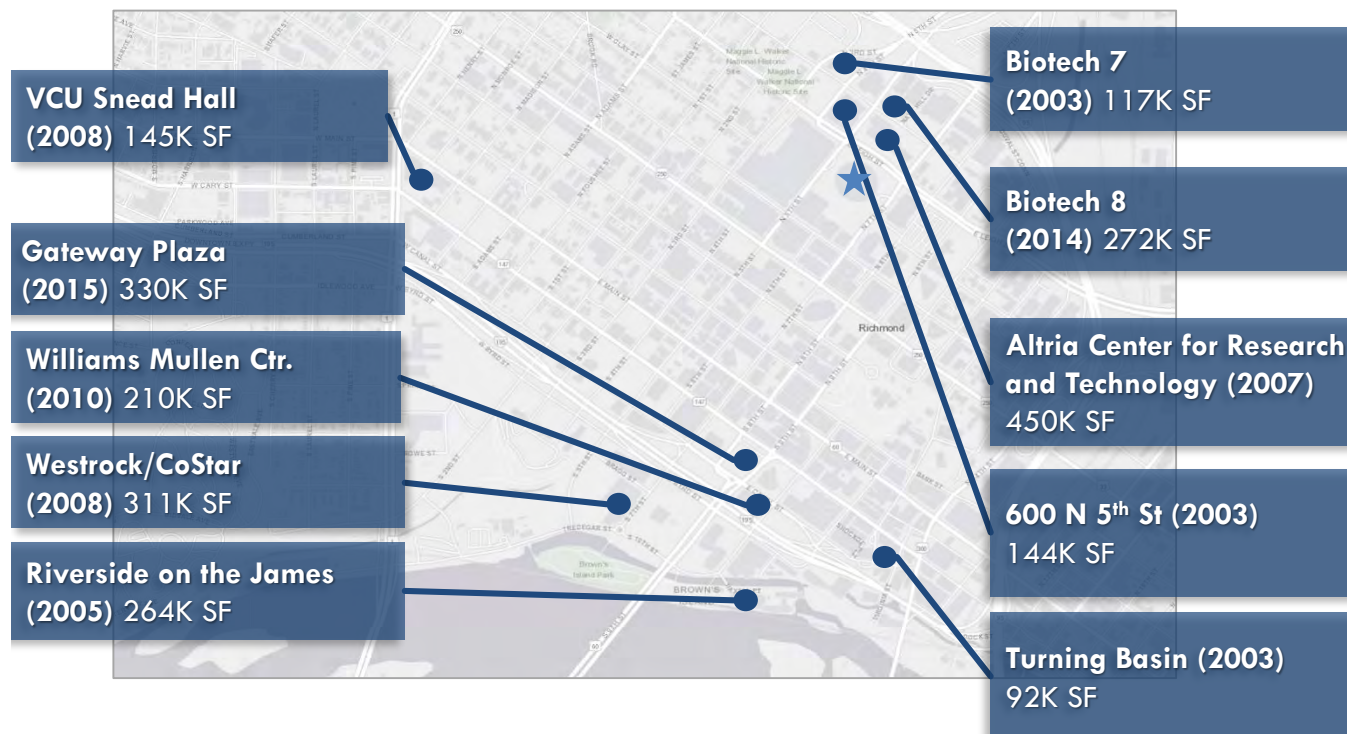
Source: Capital Region Workforce Development Area (CRWDA), HR&A.

Existing Conditions

Most new office development since 2000 has occurred north of Broad Street, or south of Cary Street in the Central Business District (CBD).

Downtown Class A Office Space

Downtown Richmond



In addition to the dedicated office towers shown on the previous page, office space development in Downtown Richmond has reflected a mix of University space, including VCU's Snead Hall in 2008, as well as research and development space, including Altria's Center for Research and Technology on the edge of the Biotechnology Park. Developed in 2005, Riverside on the James represents one of Downtown's well known mixed-use office and residential developments, comprised of high-rise residential condos with views of the James River, as well as a significant component of office space that is currently occupied by a real estate brokerage firm.

The vast majority of office development in Downtown has clustered in the Financial District, near the James River, and north of Broad Street in the Biotechnology Park, on both sides of the State Capital.

Source: CoStar Group

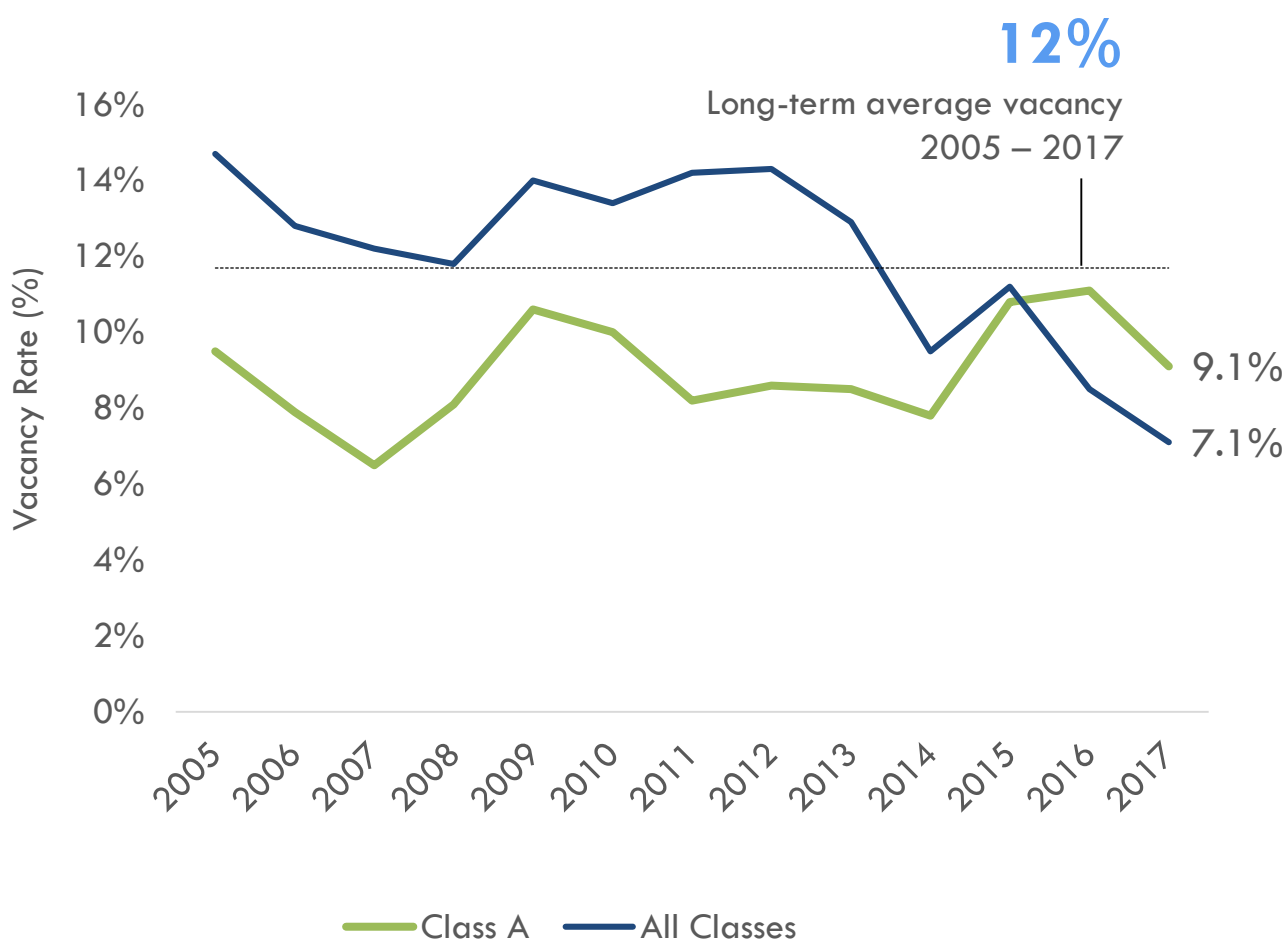
Existing Conditions

Overall Downtown office vacancy has reached its lowest level in years, while Class A vacancy has returned to its long-term average, in-line with other healthy downtowns.

Office vacancy across Downtown Richmond has steadily declined over the past several years, to 7%, well below the long-term average of 12%. Class A space vacancy currently sits at 9%, right at the district's long-term average for Class A space, and in-line with other comparable Downtowns across the Mid-Atlantic region.

Office Vacancy

Downtown Richmond



Source: CoStar Group

Existing Conditions

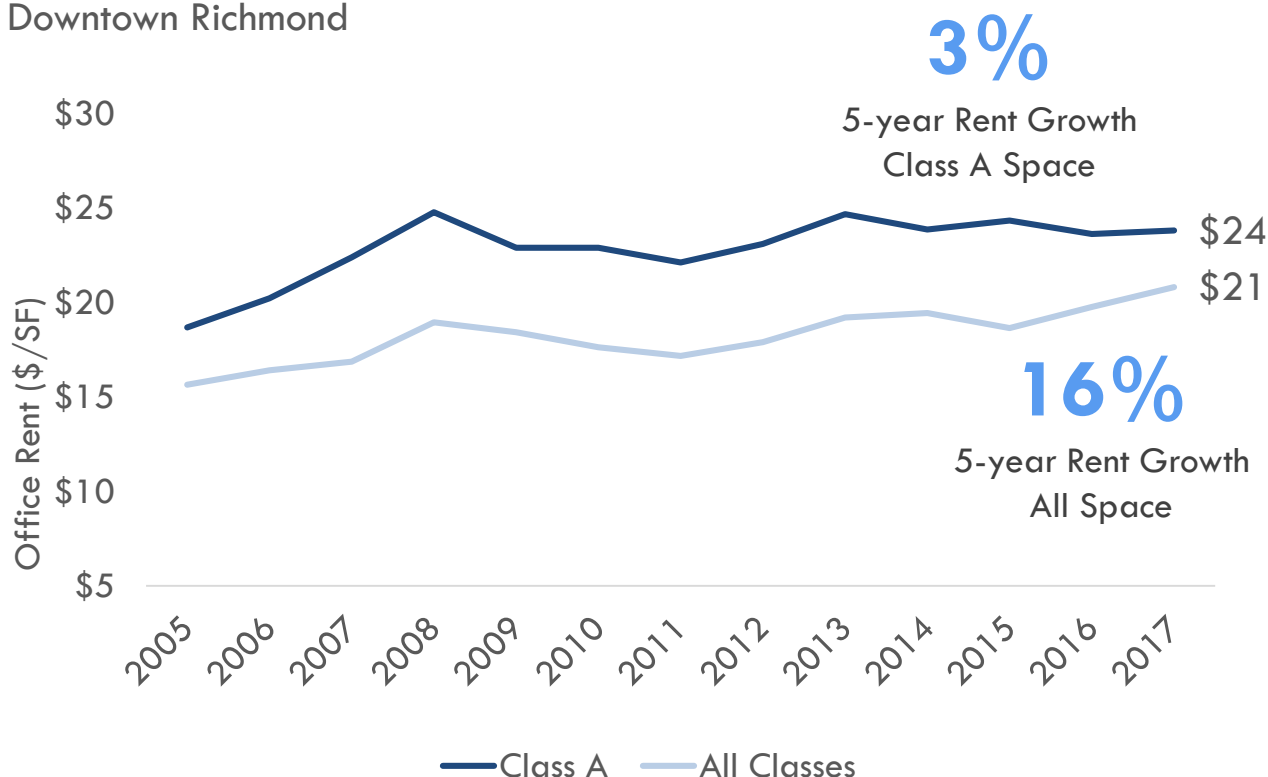
Class A asking rents have remained relatively flat over the past five years, with top-of-market space achieving rents averaging \$30 per square foot.

Given relatively steady office vacancy across Class A space in recent years, Downtown rents have seen modest rent growth, at roughly 3% over the past five years. Rent growth across the broader set of office space Downtown has seen at 15%+ increase over the past five years as vacancy has declined to its lowest level in years. Class A rents Downtown average \$24 per square foot, though the newest, top-of-market spaces achieved rents closer to \$30 per square foot, with Gateway Plaza charging \$35 per square foot for 30,000 SF of space in the building.



Office Rents

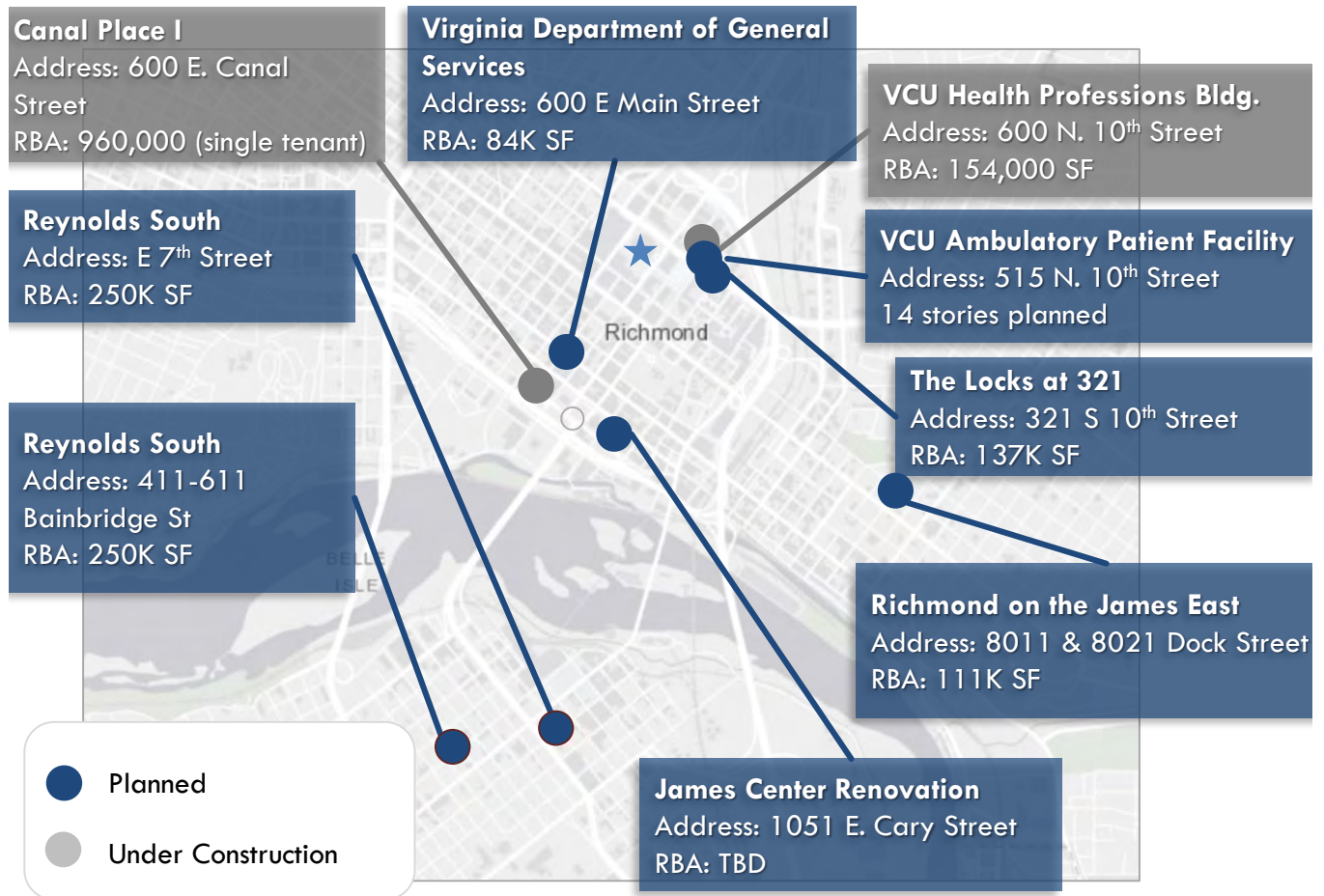
Downtown Richmond



Source: CoStar Group

Office Projections

In addition to Dominion Energy's Canal Place tower, VCU is developing its Health Professions Building, with plans to build a new 14-story Ambulatory Patient Facility, as part of the University's larger MCV Campus Plan.



Downtown Richmond currently has two major office projects in development, including Dominion Energy's new headquarters in the heart of Downtown, as well as VCU's School of Health Professions, representing one of several planned developments for VCU's MCV Campus. VCU also just recently announced plans to break ground on a 14-story Ambulatory Patient (outpatient) Facility, very near the Health Professions Building currently under construction. As noted earlier in this report, VCU has plans for continued

development at the MCV Campus, which may present an opportunity for additional office, lab, and research space development adjacent to MCV Campus and the Biotechnology Research Park, in the North of Broad/Downtown redevelopment district.



Source: REIS, CoStar.

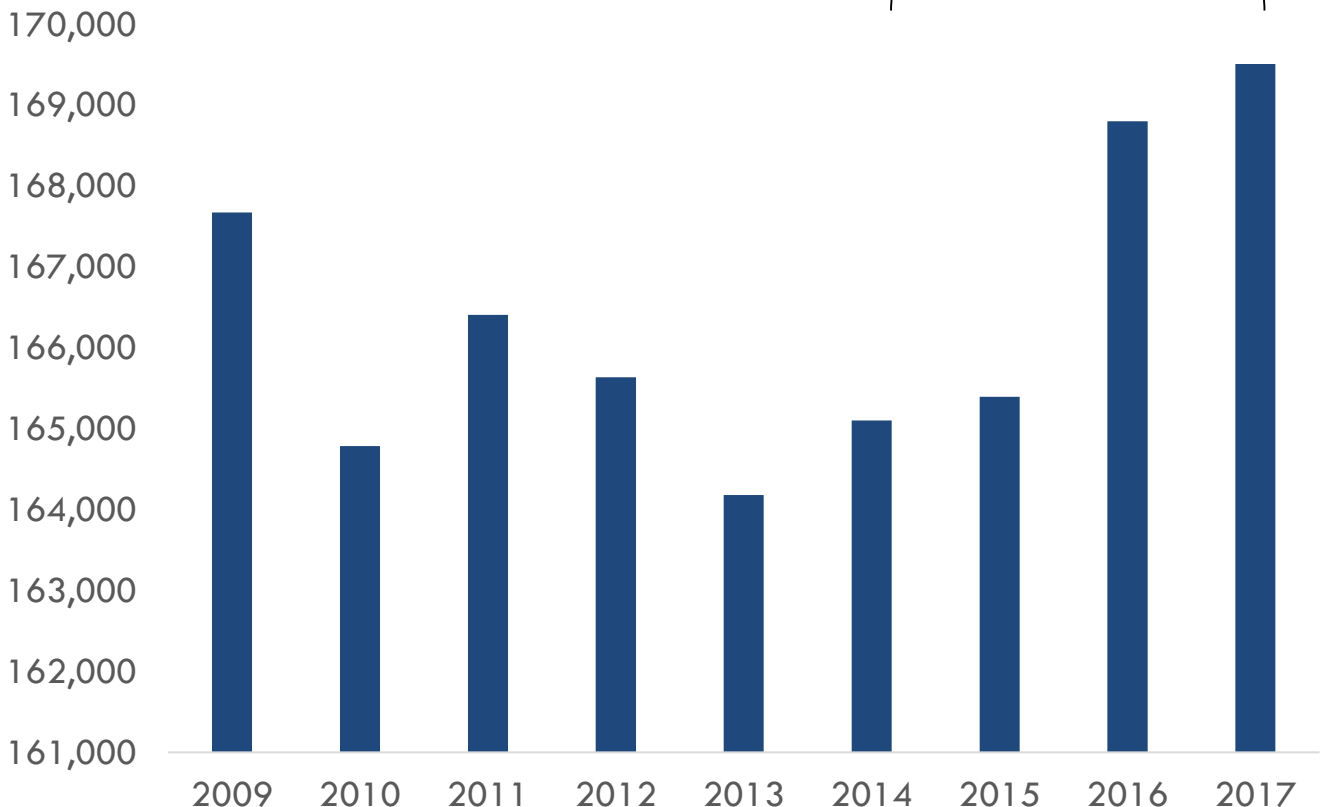
Office Projections Over the past three years, the City of Richmond has seen robust job growth, at 0.9% annually.

The City of Richmond has seen robust job growth over the past three years, seeing 0.9% compound annual growth over the past three years. The City saw the addition of 700 jobs from 2016 to 2017, and a significant increase in 2016 with roughly 3,400 jobs across the City.

Total Jobs
City of Richmond

0.9%

3-Year (2014-2017)
Compound Annual
Growth Rate (CAGR)

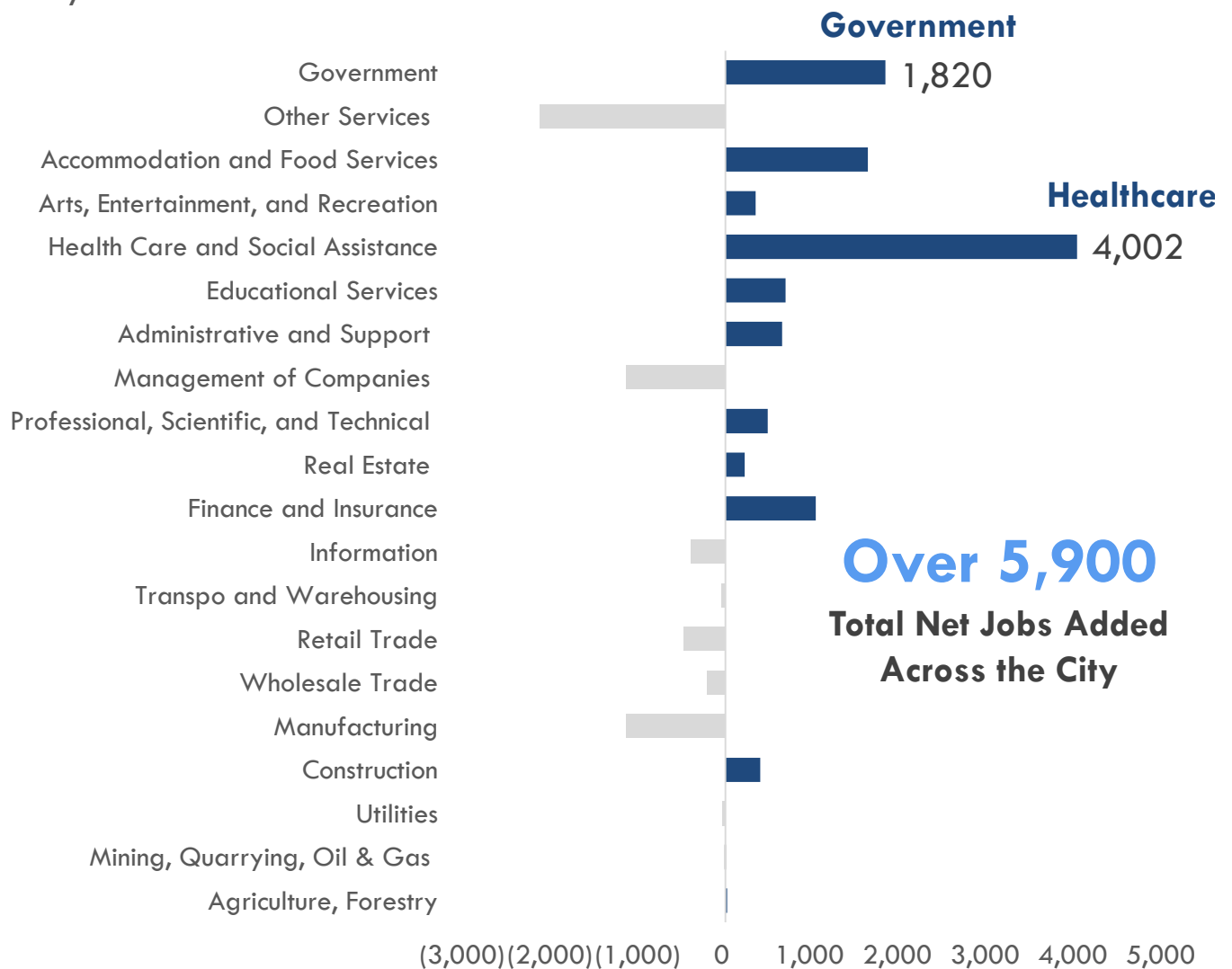


Source: Emsi (Economic Modeling Specialists International), LED on the Map, LEHD, US Census, Emsi.

Office Projections Job growth projections across the City indicate significant gains in healthcare and government sectors.

As a major employment hub for healthcare and local and statewide government, even conservative estimates at 0.6% compound annual growth, indicate significant job growth within the healthcare sector.

Projected Job Growth by Industry 2017 – 2027 (Jobs Added) City of Richmond



Source: Esri, Inc., Emsi (Economic Modeling Specialists International)

Office Projections

Projections across office-occupying job sectors within Downtown indicate strong relative growth for healthcare, education, and finance & insurance jobs.

HR&A's analysis focuses on job growth in office-occupying sectors to determine potential future demand for additional office space in Downtown. Job growth projections across the City of Richmond, as provided by Emsi (Economic Modeling Specialists International), a respected provider of economic statistics and industry projections, indicate double digit percentage gains across most office-occupying sectors over the next ten years, with the greatest absolute gains educational and healthcare sectors, resulting in upwards of over 5,000 additional jobs in the next ten years.

Office-occupying sectors where there are projected to be losses over the next ten years include the Information sector, connected to data and communications, a relatively small component of Richmond's current workforce, as well as Management of Companies.

Office-occupying Job Growth 2017 – 2027

City of Richmond

Sector	2017-2027 Projected Growth Rate
Information	-24%
Finance and Insurance	13%
Real Estate and Rental and Leasing	10%
Professional, Scientific, and Technical	4%
Management of Companies	-13%
Educational Services	12%
Health Care and Social Assistance	17%
Government	4%

Source: CoStar Group, Emsi, Virginia Labor Market Information (LMI)

Office Projections

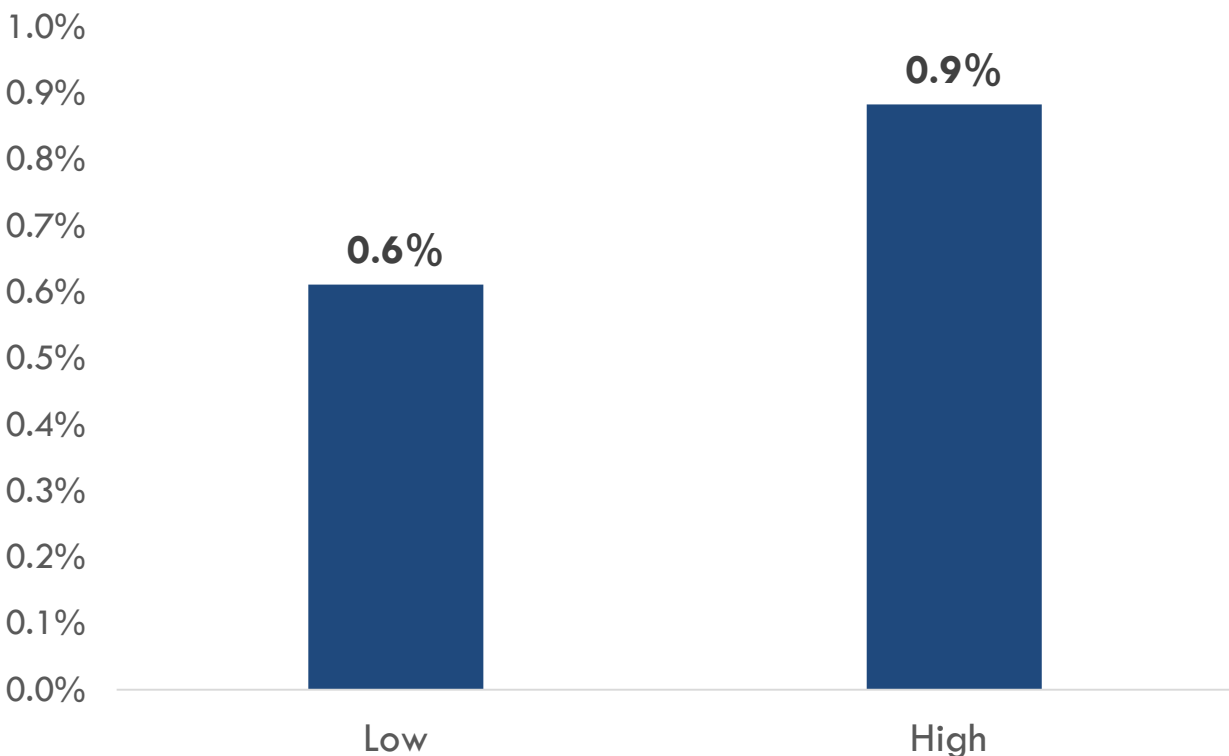
HR&A's job growth projections examine a range of growth scenarios.

Over the past three years, the City of Richmond has seen strong job growth, at roughly 0.9% on a compound annual basis. Projections over the next five years, as provided by Emsi (Economic Modeling Specialists International), a respected provider of economic statistics and industry projections, indicate growth may moderate slightly to 0.6% on a compound annual basis. On the following page, HR&A's analysis reflects a range of potential job growth projections, translating to demand for office space.

Job Growth Projection Range

Compound Annual Growth Rate (CAGR)

City of Richmond



Source: Emsi (Economic Modeling Specialists International), Capital Region Workforce Development Area (CRWDA)

Office Projections Projections indicate demand for upwards of 750,000 SF of office space over the next ten years.

Based on a range of office growth projections as outlined on the previous page of this report, HR&A estimates that the City of Richmond will experience the addition of between 6,700 and 9,800 office-occupying jobs over the next ten years. Based on an assumption of 225 square feet required per employee, this translates to a total of 1.5M to 2.2M total square feet demanded across the City over the next ten years. Based on the current share of Downtown Class A space, relative to the City more broadly, Downtown is projected to see demand for upwards of 525,000 to 750,000 square feet of new space, or roughly 52,000 to 75,000 square feet annually.

Office Space Projections

City of Richmond and Downtown

Projected office-using employment City of Richmond (10 years)	6,700 to 9,800 Jobs
Square feet per employee (HR&A and industry assumption)	225
Net new supportable square feet across City of Richmond (10 years)	1.5M to 2.2M SF Across the City
Downtown share of total Class A space (based on current share)	35%
New space demanded (10 years)	525k to 750k Total Square Feet <i>Roughly 52,000 to 75,000 square feet annually</i>

Source: Emsi, Virginia LMI, HR&A Advisors.

Office Market Summary

As a regional employment hub, with strong projected employment growth, there will be continued demand for office development in Downtown.

Summary Office Market Findings



Office vacancy across Downtown Richmond has declined to its lowest rate in years, while Downtown Class A vacancy has returned to its long-term average of 9%, in-line with comparable, healthy Downtown office markets.



Downtown Richmond is a regional employment hub, with eight Fortune 500 companies headquartered in the Richmond Region; as such, most new office development in Downtown Richmond over the past ten years has been build-to-suit space for major local employers.



Downtown is projected to see 0.6% to 0.9% compound annual growth in jobs over the next ten years, translating to between 525,000 and 750,000 square feet of new office space, or roughly 52,000 to 75,000 square feet annually.



VCU has plans for continued development of the MCV Campus Downtown, presenting an opportunity for further development of office and research space to serve and support the medical campus and adjacent Virginia Biotechnology Research Park.

As a regional employment hub, Richmond's Downtown office market is expected to see continued growth with demand projected for upwards of 750,000 square feet of space over the next ten years, and an opportunity to further support development of VCU's MCV Campus.

Market Conditions

Demographic & Economic Overview

Residential

Office

Hotel

Retail

HR&A identified a primary hotel study as the core of Downtown Richmond.

HR&A established a primary hotel study area for the analysis of Downtown Richmond, encompassing primarily those hotels that serve the Greater Richmond Convention Center (GRCC):

- Central Business District (CBD)
- Jackson Ward
- City Center
- Central Business District
- VCU Medical College of Virginia (MCV) Campus
- VCU's Monroe Park Campus

A subset of key hotels were identified for the demand analysis portion of this report, including Hilton Richmond Downtown, Delta Hotel, Omni Richmond, Marriott Richmond, Jefferson Hotel.



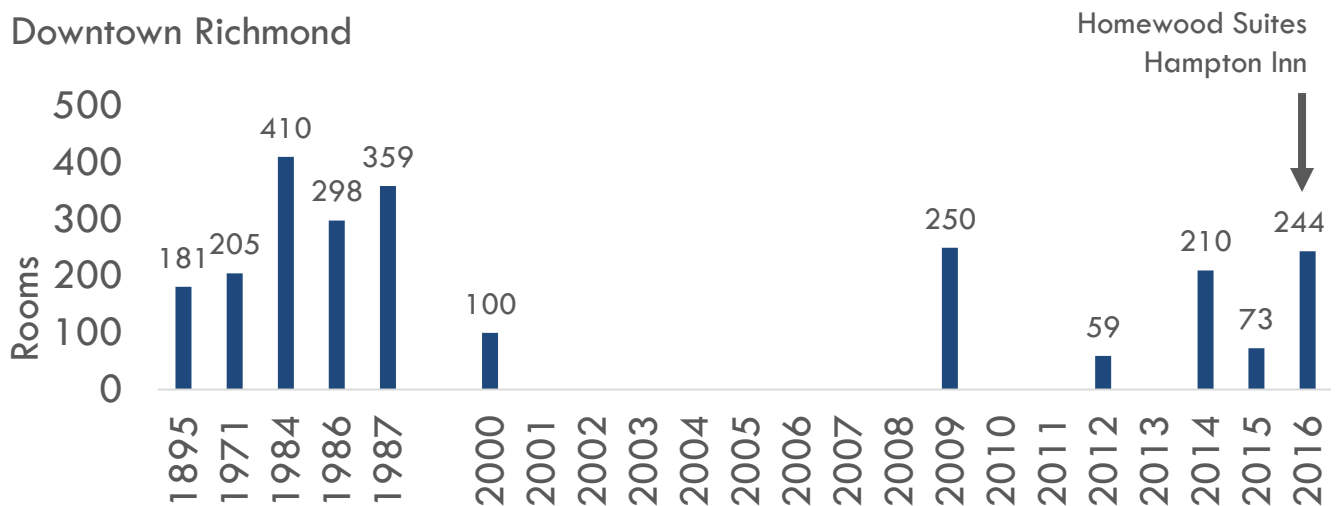
Source: Esri

Existing Conditions

The majority of Downtown Richmond hotels were delivered prior to 1990; however, a number of midscale hotels have delivered or updated in recent years.

Hotel Rooms Delivered Overtime

Downtown Richmond



Downtown Richmond offers a total of 2,389 rooms across 13 hotels. Roughly sixty percent (60%) of Downtown Richmond hotel rooms were built prior to 1990, including Downtown's largest hotel, the Marriott Richmond, adjacent to the Greater Richmond Convention Center with 410 rooms, built in 1984 and renovated in 2009.

Hotel	Rooms (#)	Year Built	Renovated
Graduate Hotel Richmond	205	1971	2017
Hampton Inn & Suites Richmond Downtown	144	2016	
Courtyard Richmond Downtown	135	2014	
Holiday Inn Express Richmond Downtown	100	2000	
Homewood Suites Richmond Downtown	100	2016	
Residence Inn Richmond Downtown	75	2014	
Destination Hotels Quirk Hotel	73	2015	
Marriott Richmond	410	1984	2009
Omni Richmond Hotel	359	1987	
Delta Hotel Richmond Downtown	298	1986	2017
Hilton Richmond Downtown	250	2009	
Jefferson Hotel	181	1895	
Commonwealth Park Suites	59	2012	2017
Total: 13	2,389		

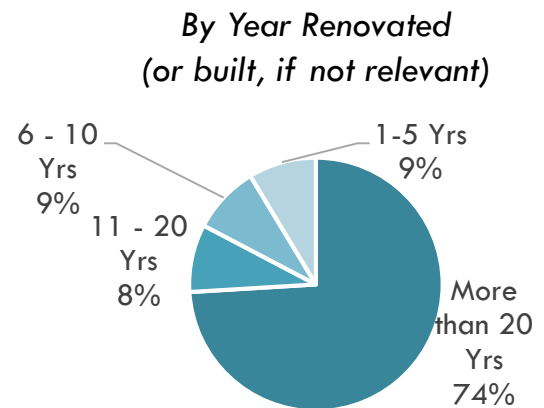
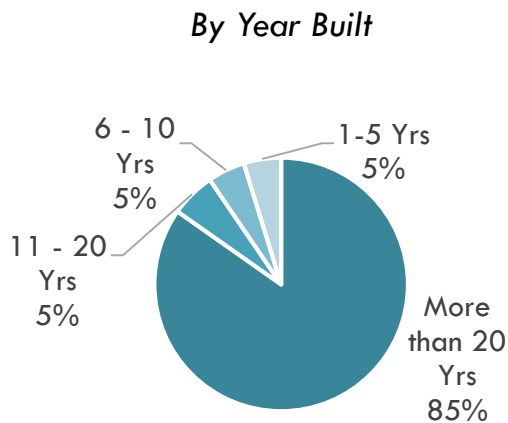
Source: Smith Travel Research, CoStar.

Existing Conditions

The average age of hotels in Downtown Richmond is approximately 25 years; however, a number of projects have renovated in recent years.

Downtown Hotels by Age (based on total room count)

Downtown Richmond



Recent Downtown Hotel Renovations

Downtown Richmond



Graduate Richmond

205 rooms

Renovated 2017



Delta Hotel

298 rooms

Renovated 2017



Commonwealth Park Suites

59 rooms

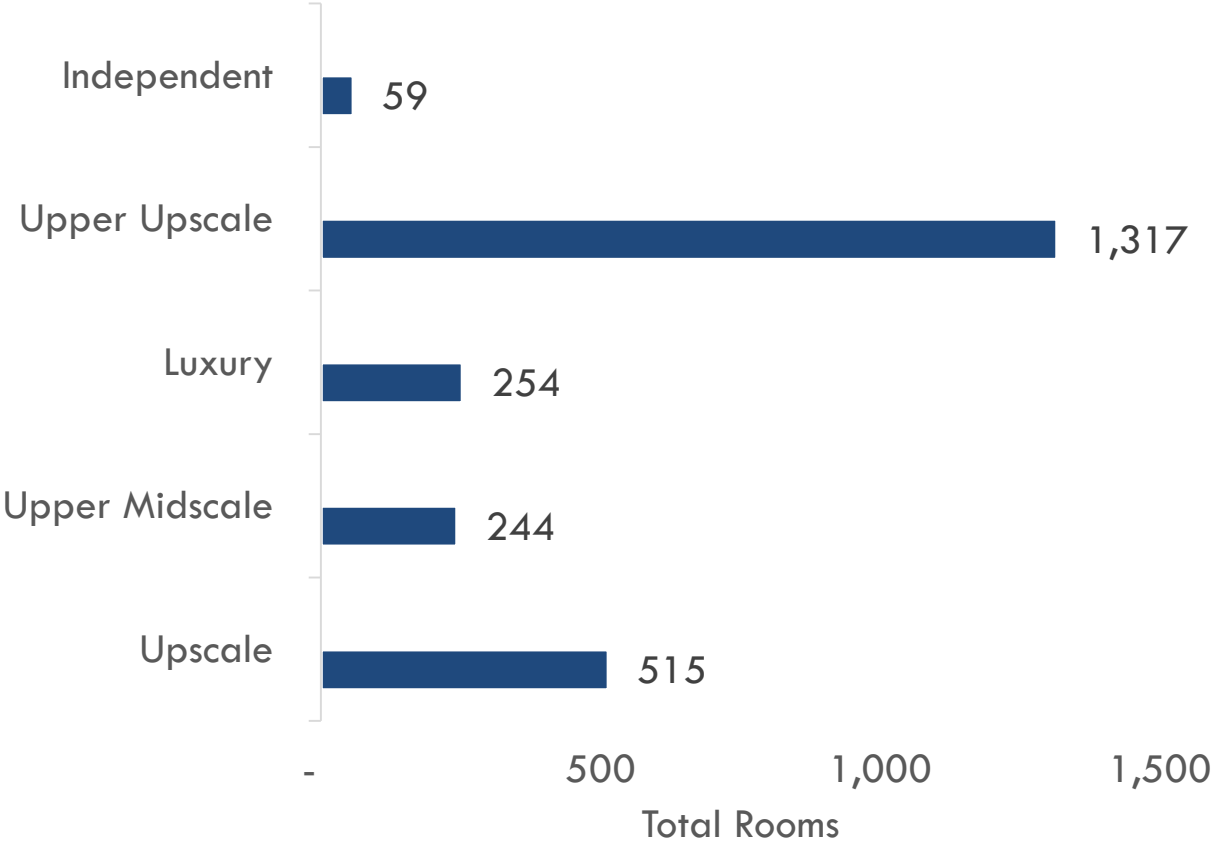
Renovated 2017

With an average age of approximately 25 years, three hotels in Downtown Richmond renovated in 2017, following two new hotel deliveries in 2016. These recent developments and renovations speak to potential demand in the Downtown Richmond hotel market.

Source: Smith Travel Research.

Existing Conditions Most rooms offered Downtown are considered “upper upscale”, though at much older hotels.

Downtown Hotel by Type (based on total room count)
Downtown Richmond



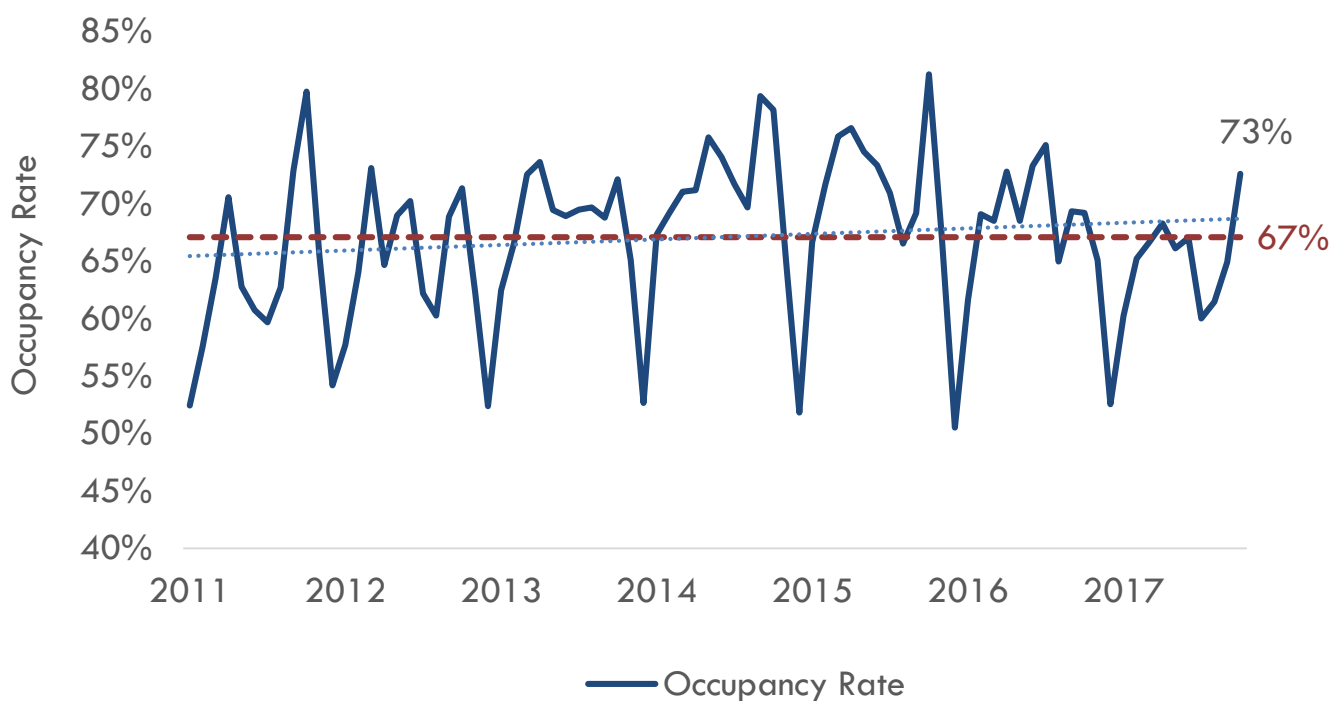
As defined by Smith Travel Research (STR), roughly 55% of the hotel rooms Downtown are considered “upper upscale” (as a percentage of total rooms), such as the Omni Richmond, Marriott Richmond, Delta Hotel, Hilton Richmond, Hampton Inn, and Holiday Inn Express. Roughly 11% are considered “luxury” including the Quick Hotel and Jefferson Hotel, 2% are considered “independent” with the Commonwealth Park, and the remainder are considered “upscale” or “upper midscale”.

Source: Smith Travel Research

Existing Conditions Average occupancy rate across a subset of Downtown hotels has increased over the past five years.

Monthly Hotel Occupancy Overtime

Downtown Richmond Hotel Subset*, as of October, 2017



Year	Average Occupancy
2014	69%
2015	71%
2016	68%

Hotel occupancy data provided by Smith Travel Research (STR), for a subset of Downtown hotels, indicates that average occupancy rates have increased by just under 1.0% over the course of the past five years, with a long-term average of roughly 67%. According to STR, this subset of hotels averaged 71% occupancy in 2015, which may indicate demand among this subset for additional hotel rooms.

Source: Smith Travel Research.

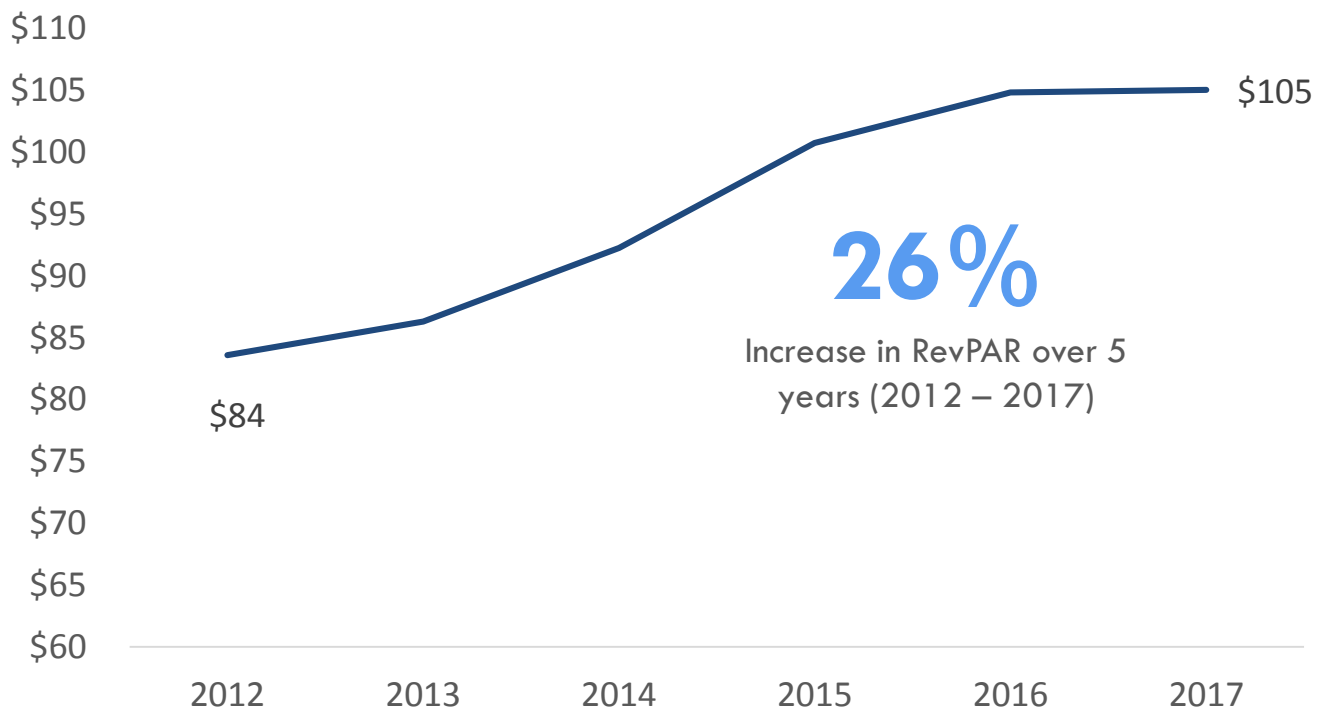
*Data reflects occupancy data for hotel subset containing the following hotels: Hilton Richmond Downtown, Delta Hotel, Omni Richmond, Marriott Richmond, Jefferson Hotel.

Existing Conditions

Revenue per Available Room (“RevPAR”) has increased 26% over the past five years within a subset of Downtown hotels.

Revenue Per Available Room (RevPAR) Overtime

Downtown Richmond Hotel Subset* As of October, 2017



Revenue per Available Room (“RevPAR”) data as provided by Smith Travel Research (STR), for a subset of hotels in Downtown Richmond, indicates that RevPAR increased substantially, by 26%, over the past five years. Steady increase in RevPAR indicates potential demand for additional hotel, where existing hotels are able to increase room rates since demand remains high, with only moderate additions to the city-wide room stock.

Source: Smith Travel Research, HR&A.

*Data reflects occupancy data for hotel subset containing the following hotels: Hilton Richmond Downtown, Delta Hotel, Omni Richmond, Marriott Richmond, Jefferson Hotel.

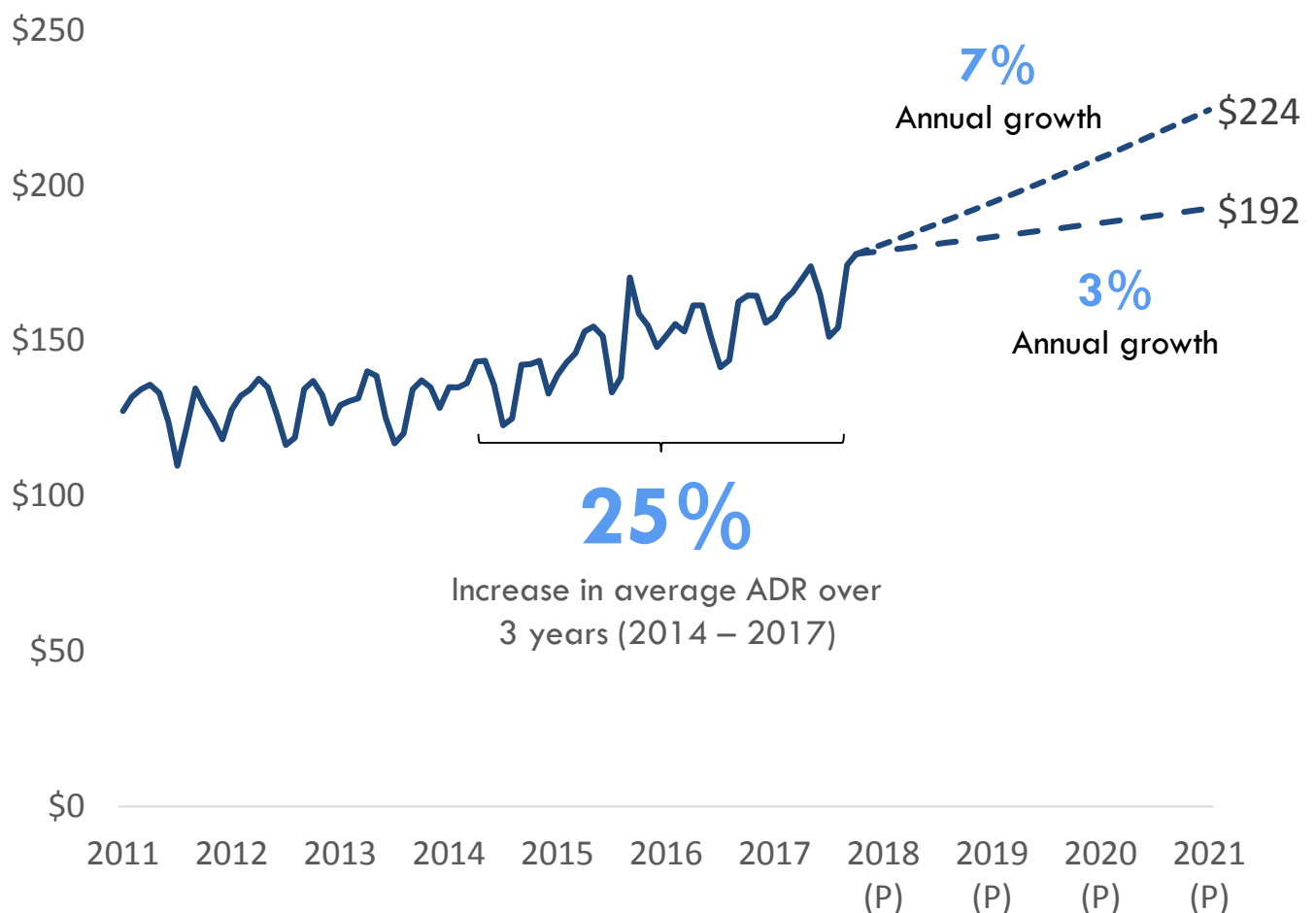
Hotel Projections

Average daily rates have experienced robust growth over the past three years, increasing at a compound annual rate of 7%.

Consistent with RevPAR growth over the past three years, average daily rates (ADR) across this subset of Downtown Hotels have increased 25%, or roughly 7% on a compound annual basis. Should current trends continue, ADRs in Downtown may increase to upwards of \$210-\$220.

Average Daily Rate (ADR)

Downtown Richmond Hotel Subset*



Source: Smith Travel Research, HR&A.

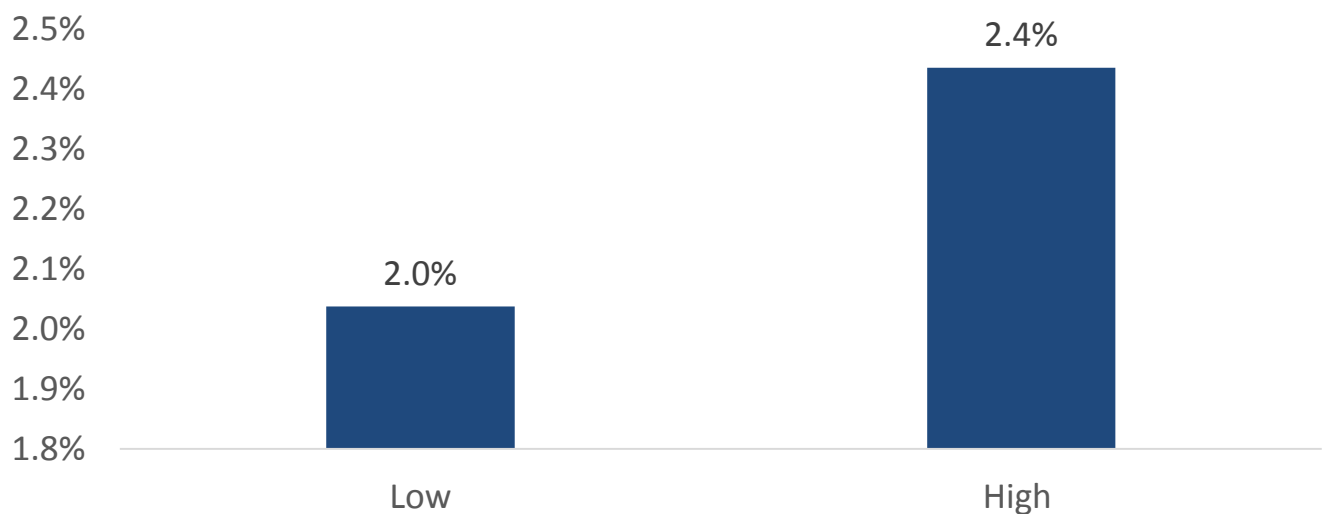
*Data reflects occupancy data for hotel subset containing the following hotels: Hilton Richmond Downtown, Delta Hotel, Omni Richmond, Marriott Richmond, Jefferson Hotel.

Hotel Projections HR&A's analysis examines a range of hotel demand projections.

Projected room growth in Downtown Richmond is derived from two sources: 1) job growth within Downtown, and 2) population growth project for Downtown residents. As shown in earlier sections of this report, average estimates indicate 3.2% compound annual population growth projected in Downtown over the next several years. Concurrently, job growth estimates for Downtown Richmond are expected to range from 0.6% to 0.9% annually over the next several years. Combining these projection estimates, HR&A's estimate of future hotel demand adhered to a range from 2.0% to 2.4% annually.

Hotel Demand - Projected Annual Growth (2017 – 2027)

Downtown Richmond



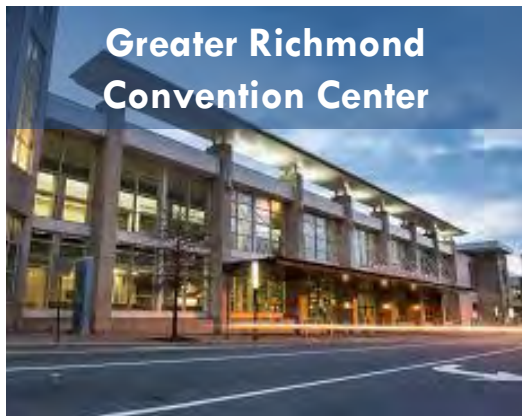
Source: Smith Travel Research, Richmond Convention and Visitors Bureau, CS&L, Esri, Inc..

Hotel Projections

Additional hotel room capacity is required to allow growth and expansion of the Greater Richmond Convention Center.

Analysis completed by the Convention Sports & Leisure International (CS&L) indicates that based on hotel rooms within ½ mile of the Greater Richmond Convention Center (GRCC), it is difficult or impossible to accommodate large room blocks within short walking distance of the GRCC.

Hotels Within ½ Mile of GRCC to Support Room Block Downtown Richmond



City	Room Block		
	500 Rooms	1,000 Rooms	1,500 Rooms
Louisville, KY	1	2	3
Baltimore, MD	2	3	4
Cincinnati, OH	1	3	4
Tampa Bay, FL	2	3	7
Charlotte, NC	2	4	6
Columbus, OH	2	4	7
Milwaukee, WI	2	4	7
Greensboro, NC	2	5	12
Providence, RI	2	5	7
Richmond, VA	3	7	-
Memphis, TN	2	9	10
Birmingham, AL	2	4	-
Average	2	4	6

Source: Convention Sports & Leisure International.

Downtown Richmond continues to receive national attention as a visitor destination, receiving accolades from national critics:

- Southern Living's 2018 Best Places to Travel
- Zagat "Food-rich City" to visit
- Expedia's #10 Must-see places in 2018
- Top 5 Beer Cities in 2018 – Hop Culture

Southern Living
ZAGAT

Hotel Projections

Projections indicate upwards of 590 new hotel rooms could be supported in Downtown, to meet overall demand and adequately support the GRCC.

HR&A's process for estimating future hotel demand begins with an estimate of current, total room-nights demanded in Downtown Richmond. HR&A's current estimate of 590,000 room-nights noted below, is extrapolated from estimated current room-night demanded for a subset of hotels in Downtown Richmond including the Hilton Richmond Downtown, Delta Hotel, Omni Richmond, Marriott Richmond, and Jefferson Hotel. Using an estimate of room-nights per capita (per resident, per job, respectively), derived from current estimates of business and leisure travel expenditures in Richmond, HR&A's analysis estimates additional room-nights demanded based on job and population growth projections, resulting in upwards of 460 to 590 additional rooms demanded.

Projected Annual Hotel Demand, Downtown Richmond

Estimated Total room-nights in Downtown 2017*	590,000 room-nights	
	Business Travel	Leisure Travel
Share of visitor spending** in Downtown Richmond	50%	50%
Total employees / residents In Downtown 2017	54,500	24,000
Room-nights per capita in Primary Study Area	7.0	10.0
Increase in employees / residents In Downtown by 2027	3,400 - 5,000	9,000 to 12,000
Increase in room-nights in Downtown	33,000	113,000
Net new room-nights demanded in Downtown	120k to 146k additional room nights	
Room occupancy goal	70%	
Days per year	365 days	
New Rooms Demanded	460 to 590 rooms	

Source: Smith Travel Research, Richmond Convention and Visitors Bureau.

* Extrapolated from data provided for subset of Downtown hotels, including Hilton Richmond Downtown, Delta Hotel, Omni Richmond, Marriott Richmond, Jefferson Hotel. ** HR&A Advisors estimate based on current share of Downtown employees and residents, as well as input from Richmond CVB information and reporting.

Hotel Market Summary

Additional hotel room capacity is required Downtown to meet growing demand and support the Greater Richmond Convention Center.

Summary Hotel Market Findings



An analysis of Downtown hotel offerings indicates that the Greater Richmond Convention Center (GRCC) is unable to accommodate large block groups of 1,500 or more at hotels within ½ mile of the Center, or within greater Downtown.



Occupancy rates have increased in Downtown, consistently achieving 70% across a subset of hotels within close proximity to the GRCC. A number of new hotels have delivered in Downtown, while three existing hotels have recently renovated.



Average Daily Rates (ADR) and Revenue per Available Room (RevPAR) have increased by 25% over the past three years, indicating there is growing demand for Downtown hotels. HR&A projections indicate room rates in Downtown Richmond may achieve upwards of \$220 by 2021.



Job and population growth estimates, coupled with expectations for visitation to Downtown Richmond, indicate there is demand for between 460 and 590 new hotel rooms. HR&A believes a large-scale, new downtown hotel located within close proximity to the Greater Richmond Convention Center (GRCC), a redeveloped Richmond Coliseum, and new mixed-used development Downtown, may achieve stabilized occupancy within three years, and achieve roughly 63% to 64% occupancy at the end of the first year in operation.

Recent growth in average daily rates, a steady increase in occupancy, and current constraints on the Greater Richmond Convention Center, indicates there is demand for upwards of 590 additional hotel rooms Downtown.

Market Conditions

Demographic & Economic Overview

Residential

Office

Hotel

Retail

HR&A identified relevant retail trade areas to examine potential demand for convenience and comparison goods in Downtown.

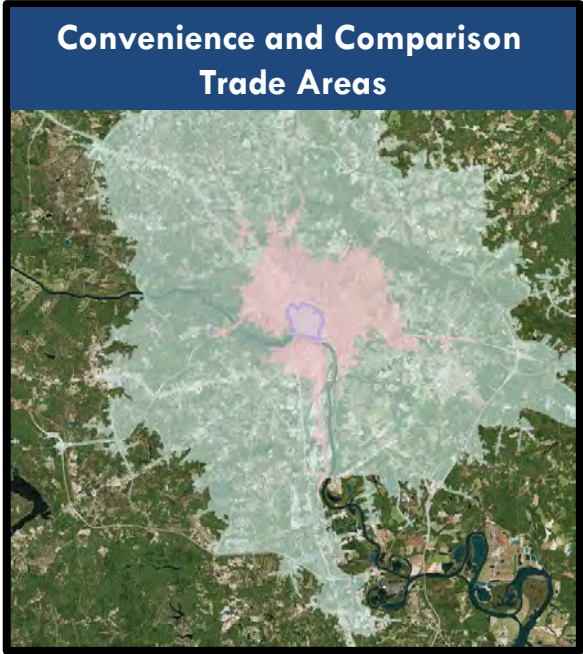
HR&A’s analysis defines a primary retail trade area as the core of Downtown, bounded by I-95 to the North and East, VCU’s Monroe Park Campus to the West, and the James River to the South. A second, Convenience Trade Area was defined as a 10-minute drive-time, to determine demand for convenience retail goods, while a third Comparison Trade Area was defined to evaluate demand for comparison goods, detailed below.

Convenience Retail			Comparison Retail
Convenience Goods	Grocery	Food & Beverage	Comparison Goods
<ul style="list-style-type: none"> • Health and Personal Care Stores • Florists • Newspaper and Magazine • Office Supplies 	<ul style="list-style-type: none"> • Grocery Stores 	<ul style="list-style-type: none"> • Restaurants • Bars and Drinking Establishments 	<ul style="list-style-type: none"> • Furniture • Electronics and Appliance • Clothing • Sporting & Hobby Goods • Books and Music • General Merchandise



■ Immediate Trade Area

Source: ESRI Business Analyst



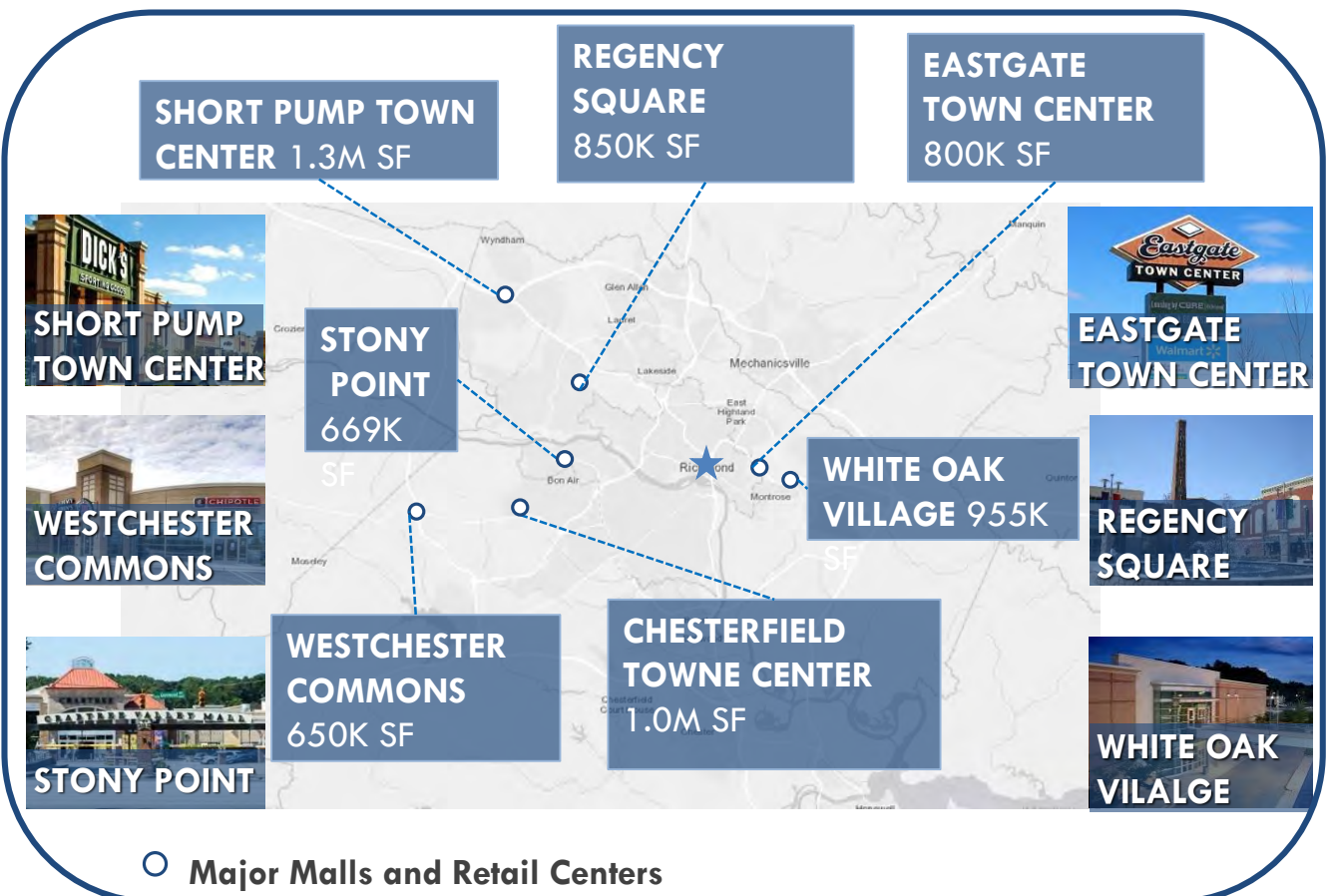
■ Convenience Trade Area – 10 minute drive time
 ■ Comparison Trade Area – 20 minute drive time

Existing Conditions

There are a number of major retail centers outside Downtown, predominantly north and west of the City, serving a significant suburban population.

HR&A's analysis began with a high-level evaluation of major competing retail centers across the City of Richmond and immediate suburbs. Major retail centers outside of Downtown serve large suburban residential populations, and while they are not seen as competing from a convenience retail perspective, these centers do compete as comparison good providers.

Major Retail Centers Outside Downtown City of Richmond and Surrounding Suburbs



Source: CoStar; ESRI Business Analyst

Existing Conditions

Richmond's Downtown has developed a mix of vibrant retail districts, though parts of the North of Broad/Downtown neighborhood lack a retail presence.

Downtown Richmond's core has a number of well-established, vibrant retail districts; however, the North of Broad/Downtown neighborhood, and the area surrounding the Biotechnology Park and MCV Campus are largely void of major retail presence. A vibrant retail district within the North of Broad/Downtown redevelopment area, and connection to these surrounding districts will be important for catalytic redevelopment.

Downtown Richmond Retail Districts



Existing Conditions Aside from Walmart adjacent to VCU's campus, there are limited grocery options within Downtown.

Despite a significant downtown population, there are limited grocery options within Downtown, and virtually no grocery options within the Downtown core. Students at VCU are predominantly served by Walmart near campus; however, additional new grocery or food market will be an important part of any redevelopment comprised of a significant residential component.

Existing Downtown Grocery

Downtown Richmond



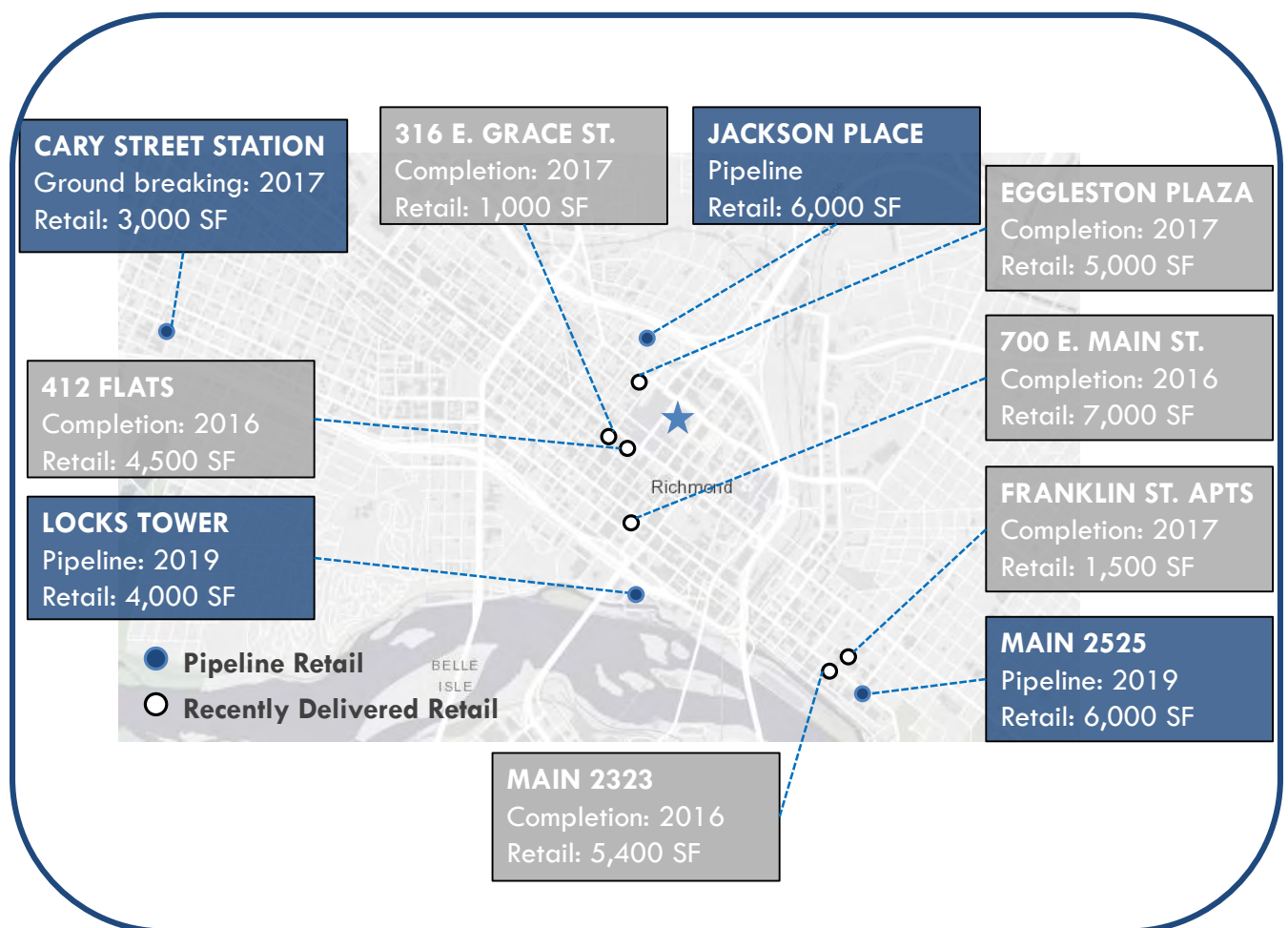
Source: ESRI Business Analyst

Existing Conditions Downtown has seen the delivery of several new or rehabilitated spaces over the past few years.

A number of new or renovated ground floor retail spaces have delivered in Downtown over the past few years, average 4,000 – 5,000 square feet. Several smaller sale retail spaces are under development, expected to deliver in the next two years.

Pipeline Retail Development

Downtown Richmond

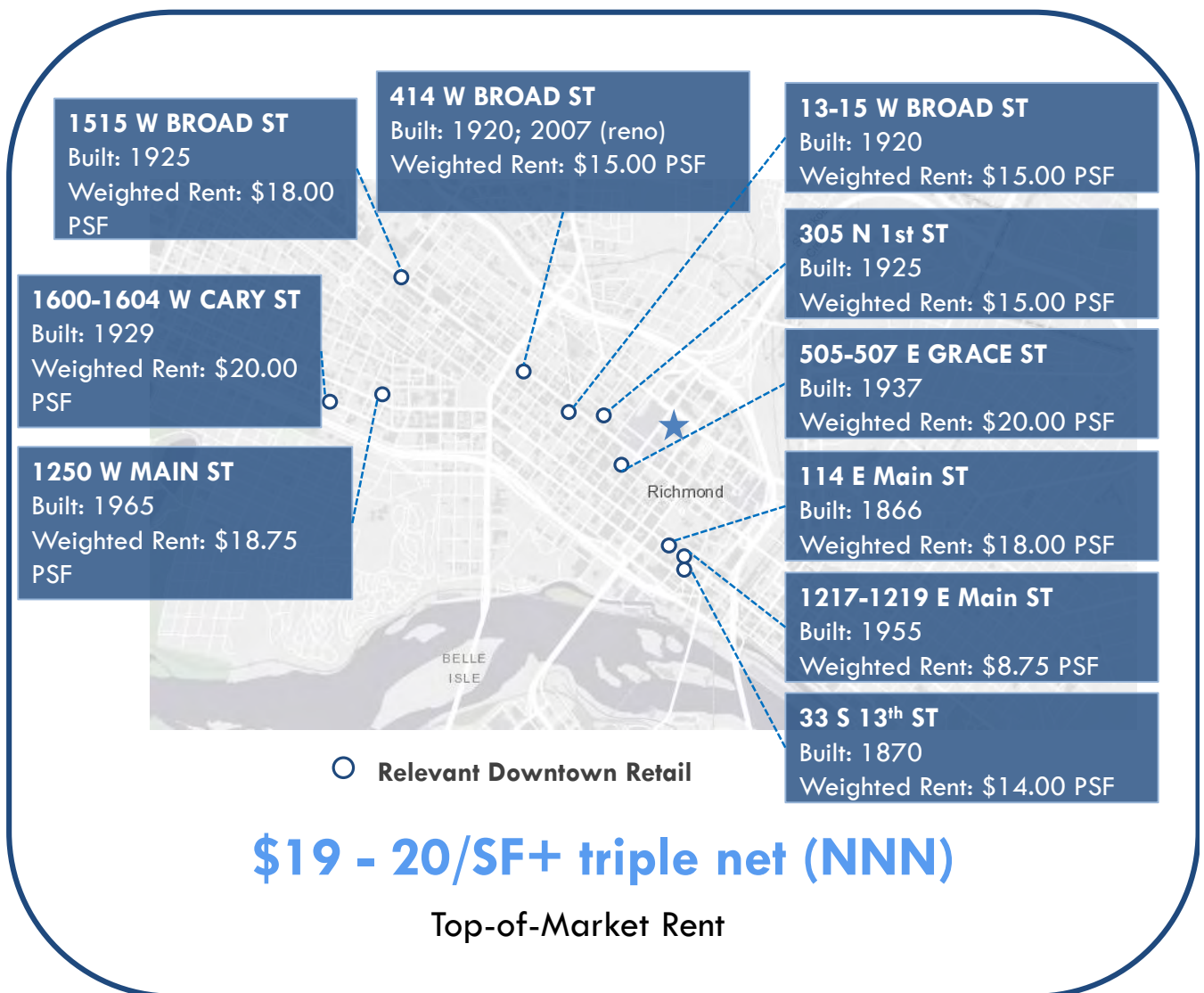


Source: CoStar; LoopNet; Venture Richmond; ESRI Business Analyst

Existing Conditions Top-of-market retail spaces Downtown average \$19 - \$20 per square foot on a triple net (NNN) basis.

Rents across high quality new or rehabilitated retail space in Downtown average roughly \$17.00 per square foot, on a triple net basis (NNN); however, the newest, top-of-market spaces average upwards of \$20 per square foot triple net (NNN).

Current Retail Pricing Downtown Richmond



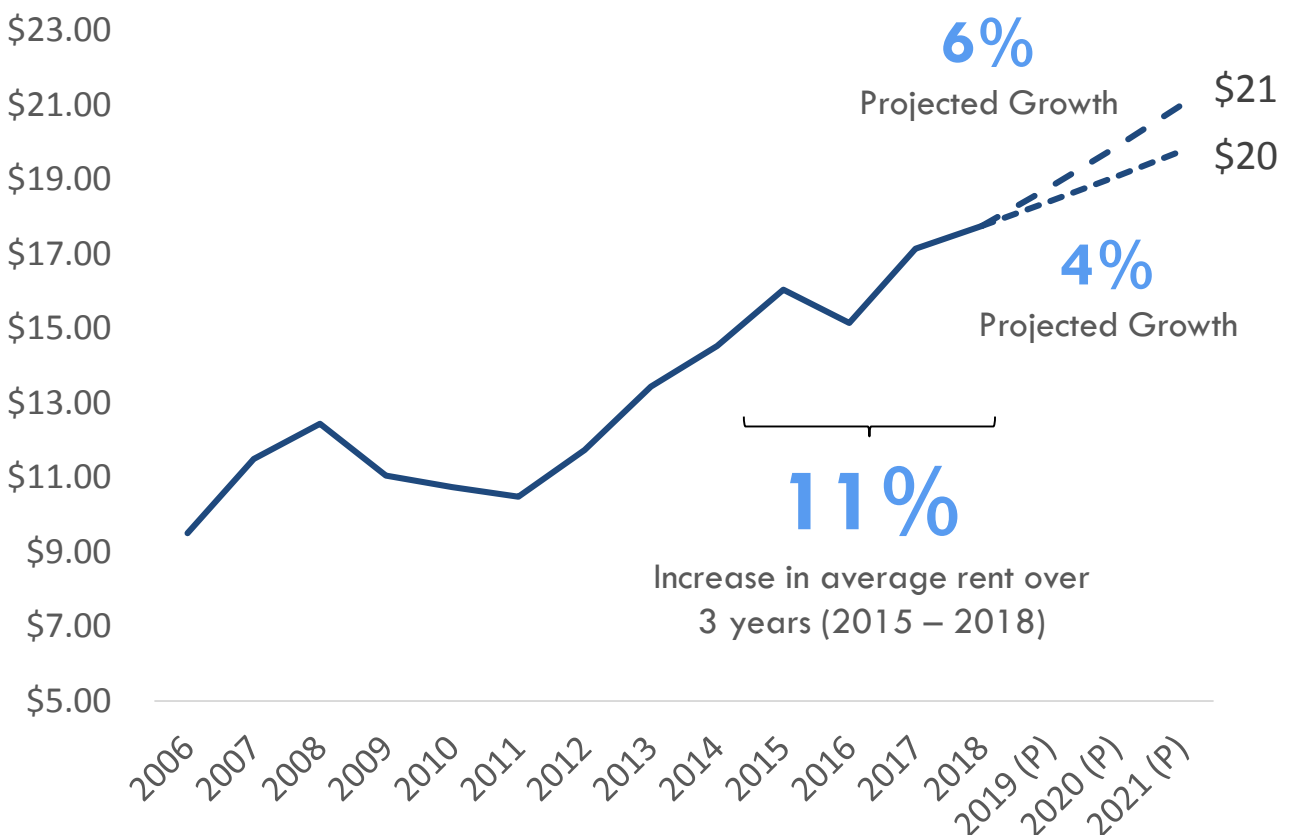
Source: CoStar, LoopNet.

Retail Projections - Projections indicate that average rents may achieve \$20 per square foot triple net (NNN) by 2021.

Over the past 5 years rents for Class A retail space Downtown has increased 11%, or 6% on a compound annual basis. Over the longer period since 2008 rent has averaged roughly 4% compound annual growth. Applying this range of annual growth projections indicates that average retail rents in Downtown may achieved upwards of \$21 per square foot triple net (NNN) by 2021.

Projected Retail Pricing

Downtown Richmond



Source: CoStar; LoopNet

Retail Projections

HR&A performed a retail gap analysis for Downtown Richmond, comprised of the following key steps.



I. IDENTIFY CUSTOMER GROUPS HR&A selected the primary customer groups who will likely make up the base of retail spending in the area: Downtown Residents, Downtown Workers, Students, and Visitors staying in Downtown.



II. ESTIMATE SPENDING POTENTIAL Using multiple sources including the U.S. Census Bureau, ESRI Business Analyst, and International Council of Shopping Centers (ICSC), HR&A estimated the total spending potential by residents, employees, students, and visitors within the Immediate and Convenience Trade areas defined earlier in this section. For the purposes of this analysis HR&A has focused on the Immediate and Convenience trade areas as drivers of retail demand Downtown.



III. DETERMINE RETAIL SUPPLY HR&A determined current retail sales in the Immediate and Convenience Trade Areas by retail segment, using data from ESRI Business Analyst.



IV. UNMET SPENDING POTENTIAL Based on the interplay between existing retail sales and projected spending potential within each of the retail categories, HR&A estimated unmet spending potential for each retail category.

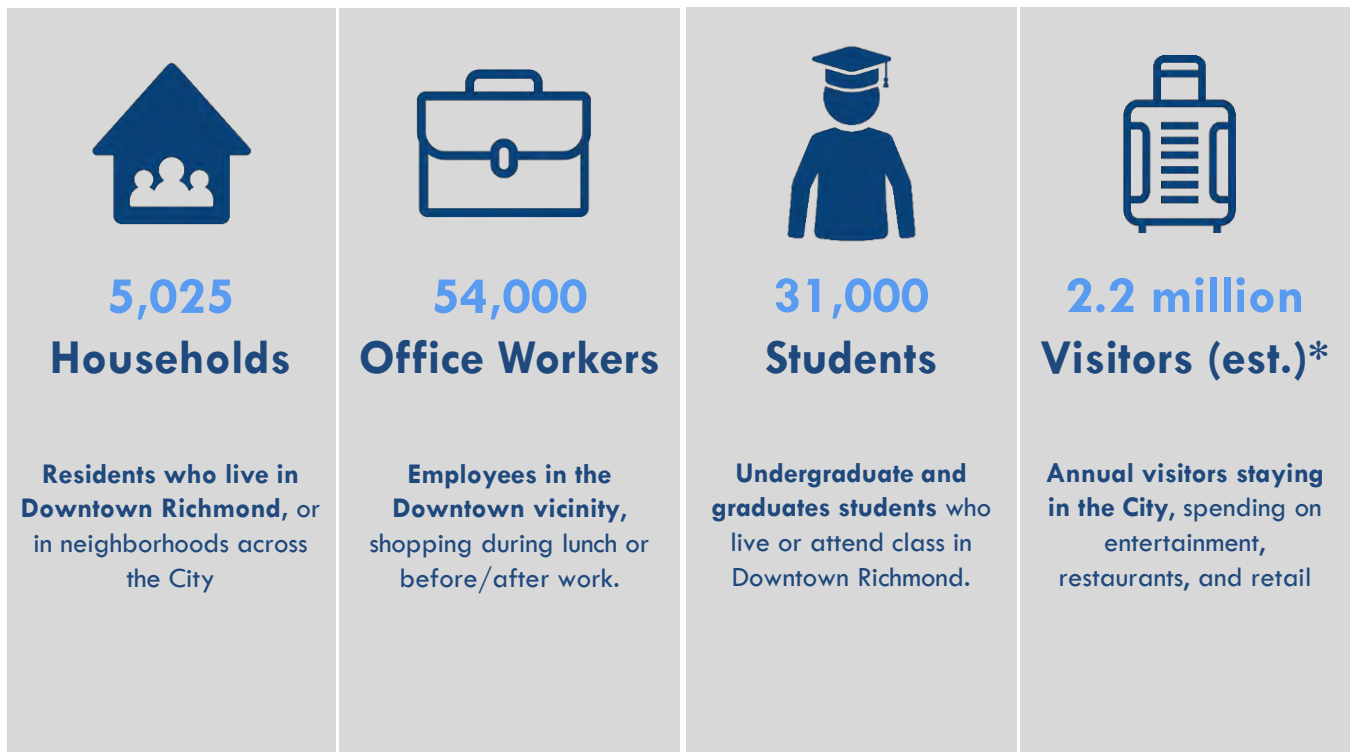


V. SUPPORTABLE RETAIL SQUARE FOOTAGE HR&A utilized metrics on retail sales per square foot to translate unmet retail spending potential into associated square footage. HR&A then applied capture rates to these estimates in order to project the amount of square footage that could be supported.

Retail Projections HR&A examined retail demand from various sources in Downtown.

As outlined on the previous page, HR&A's analysis looks at retail from four key groups in Downtown. Note that data provided for visitors to Downtown Richmond represents visitation across the City of Richmond, based on how data is collected for such analysis.

Based on boundaries of the Immediate Retail Trade Area as defined on the first page of this section, there are over 5,000 households, 54,000 office workers, and 31,000 students in Downtown Richmond. According to the Greater Richmond Convention and Visitors Bureau, there are over 7 million annual visitors to the Greater Richmond Area; based on \$716 million in estimated annual visitor spending within the City of Richmond, HR&A's team has estimated that this translates to over 2.2 million visitors to the City of Richmond, or approximately 1/3 of total visitation across the Greater Richmond Area.

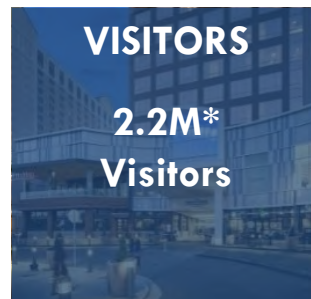
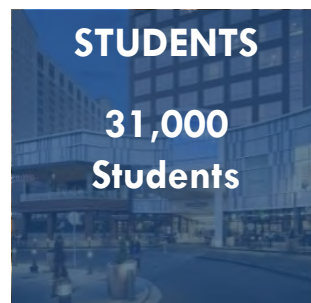


* Represents estimated visitors to City of Richmond based on visitor spending and total visitors across the Greater Richmond Area. Source: ESRI Business Analyst, Emsi, VCU, Richmond Convention and Visitors Bureau (CVB), US Travel Association.

Retail Projections There is upwards of \$420 million in spending potential within the Immediate Trade Area Downtown.

HR&A's analysis indicates that within the Immediate Trade Area there is over \$420 million (M) in spending potential across residents, workers, students, and visitors. A more detailed summary of these sources of spending potential can be found on the following slides, and in greater detail in the appendix of this report.

**IMMEDIATE RETAIL TRADE AREA
(DOWNTOWN RICHMOND)**



\$366M to \$420M

Spending Potential

* Represents estimated visitors to City of Richmond based on visitor spending and total visitors across the Greater Richmond Area. Source: ESRI Business Analyst, Emsi, VCU, Richmond Convention and Visitors Bureau (CVB), US Travel Association.

Retail Projections

Without accounting for projected growth and additional new development Downtown, there is an existing retail gap across the Immediate Trade area.

HR&A's analysis indicates there is \$83 million (M) in exiting sales Downtown, resulting in a retail gap of between \$284 and \$338 million (M).

\$366M - \$420M

Spending Potential within Immediate Trade Area

\$83M

Exiting Sales in Downtown

\$284 - \$338M

Retail Gap

HR&A applied the following sales-per-square-foot assumptions to derive supportable square feet of various retail space across Downtown Richmond.

Convenience Goods	Sales/SF	Comparison Goods	Sales/SF
Grocery Stores	\$702	Bldg Materials, Garden Equip. & Supply	\$316
Specialty Food Stores	\$822	Furniture & Home Furnishings Stores	\$453
Beer, Wine & Liquor Stores	\$396	Electronics & Appliance Stores	\$874
General Merchandise Stores	\$296	Clothing & Clothing Accessories Stores	\$743
Limited-Service Eating Places	\$535	Sporting Goods, Hobby, Book & Music	\$297
Drinking Places	\$470	Full-Service Restaurants	\$534
Health & Personal Care Stores	\$705	Special Food Services	\$534
Miscellaneous Store Retailers	\$296		

Source: Esri, Inc., U.S. Census Bureau, and International Council of Shopping Centers (ICSC), HR&A.

Retail Projections There is current unmet demand for upwards of 220,000 square feet of food-related retail in Downtown.

HR&A's analysis indicates that there is demand across multiple food- and non-food related retail categories in Downtown. A more detailed summary of these sources of demand, including estimated capture rates by retail category, can be found in the appendix of this report.

	Capturable Spending	Existing Sales	Supportable Square Feet
 Grocery	\$73 - \$81M	\$15M	83K – 95K SF
 Limited-Service Dining	\$42 - \$45M	\$16M	48K – 55K SF
 Full-Service Dining	\$47 - \$59M	\$10M	69K – 93K SF
 Clothing & Accessories	\$45 - \$50M	\$5M	55K – 62K SF
 Sporting Goods & Hobby	\$15 - \$19M	\$2M	43K – 56K SF
 Health & Personal	\$52- \$59M	\$5M	67K – 78K SF

Source: ESRI, HR&A Analysis

Retail Projections

Without accounting for projected growth and additional new development Downtown, there is current unmet demand for upwards of 690,000 SF of retail space.

HR&A's analysis indicates that there is demand across multiple food- and non-food related retail categories in Downtown. A more detailed summary of these sources of demand, including estimated capture rates by retail category, can be found in the appendix of this report. Based on unmet demand, there is potential to support roughly 580,000 to 690,000 square feet (SF) of additional retail space Downtown. Over the past three years Downtown has seen average annual retail absorption of 44,000 SF; however, there may be an opportunity for increased absorption to support induced demand from new mixed-use development Downtown, translating to 50,000 SF annually over the next ten years.

\$284 - \$338M Retail Gap



580K SF

Low

690K SF

High

DINING



Food Halls or Food Incubators

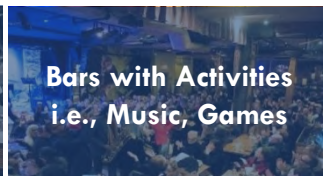


High-Quality Full-Service Restaurants

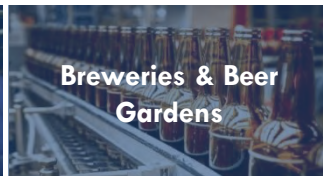


Specialty Grocery/Dining Marketplace Concept

DRINKING



Bars with Activities i.e., Music, Games

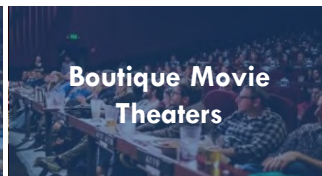


Breweries & Beer Gardens



Upscale Cocktail Lounges or Speakeasys

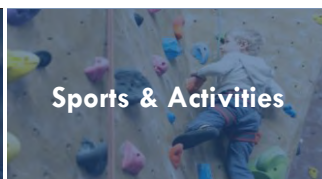
ENTERTAINMENT



Boutique Movie Theaters

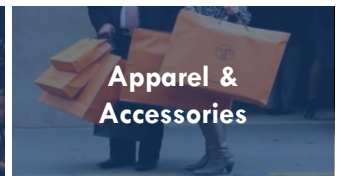


High-Quality Music Venues



Sports & Activities

RETAIL



Apparel & Accessories



Sporting & Outdoor Goods



Furniture and Home Furnishings

Source: ESRI, HR&A Analysis

Retail Market Summary

There is unmet retail demand in Downtown Richmond, presenting an opportunity for significant development Downtown.

Summary Retail Market Findings



Current Downtown demand dynamics across residents, workers, students, and visitors, indicate there is an existing retail gap of upwards of \$338 million.



Based on unmet demand, there is potential to support roughly 580,000 to 690,000 square feet (SF) of additional retail space Downtown. Over the past three years Downtown has seen average annual retail absorption of 44,000 SF; there may be an opportunity for increased absorption to support induced demand from new mixed-use development Downtown, translating to 50,000 SF annually over the next ten years.



There is current unmet demand for Downtown grocery, restaurant and nightlife, as well as other shopping-oriented retail. Through repositioning of the North of Broad/Downtown neighborhood, there is an opportunity to address this demand in establishing a new vibrant mixed-use district.



A number of competing vibrant districts exist across the City; creating a sense of place in the North of Broad/Downtown neighborhood will be crucial to any redevelopment project.



Increasing retail rents in Downtown Richmond indicate that pricing may achieve \$20 - \$21 per square foot triple net (NNN) by 2021.

Without accounting for new development or projected growth in Downtown, there is currently upwards of \$338 million in unmet demand across a broad range of retail categories, translating to upwards of 580,000 to 690,000 square feet of retail space.

Introduction

Executive Summary

Market Conditions

District Redevelopment Case Studies

Mixed-Use District Analysis

Strategies from successful catalytic district redevelopment projects across the United States can inform redevelopment in Downtown Richmond.

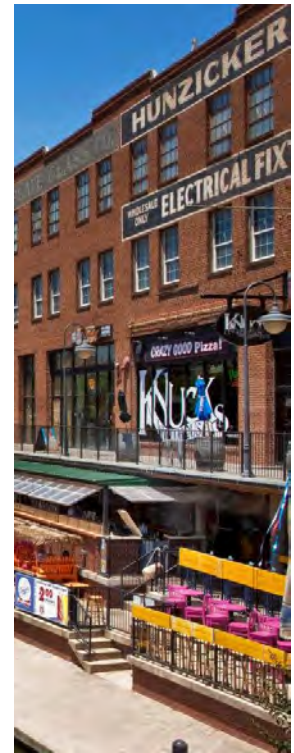
The following provides an overview of successful catalytic district redevelopment projects from across the United States, and the key strategies used to achieve district repositioning.



Washington, DC



Durham, NC



Oklahoma City, OK

Source: HR&A Research

Mixed-Use District Analysis Large-scale, catalytic redevelopment projects require connection to key anchor institutions, and a vibrant mix of uses, programming, entertainment, and public space.

Summarized below are key lessons learned from successful catalytic district redevelopment projects from across the country.

A mix of uses or proximity to office, hotel, residential, retail, public spaces and entertainment components is crucial for district repositioning. The most successful mixed-use redevelopment projects were able to either create or build upon a vibrant local environment and attract significant numbers of new visitors to the area.

A connection to key local partners and existing assets provides an anchor for district repositioning. Local community, employer, and institutional partners serve as anchors in any redevelopment.

Successful sports/entertainment venues have the potential to be a great asset, but must be supported by adjacent uses. While an important demand generator, entertainment venues must be supported by a mix of other catalytic uses to drive demand outside of event days.

Quality urban design can make a difference. It is critical to create a sense of place that attracts people because they “feel good” being there. Every project component needs to be designed, tenanted, and programmed with the community and end users in mind.

Public investment early on in district repositioning can provide necessary support to ensure redevelopment success, through tax increment financing, infrastructure, and other sources of public investment.



Washington, DC's Capitol Riverfront-Navy Yard was transformed from a neglected district to a vibrant center, anchored by National's Park and park space along the Anacostia River.

Through a mix of uses, including offices for major area employers, as well as activated public park space, the Capitol Riverfront-Navy Yard district has become one of DC's most vibrant neighborhoods, seeing over \$7 billion in investment to date. Key elements that were integral to redevelopment of the district included:

**Entertainment/
Sports Anchor**



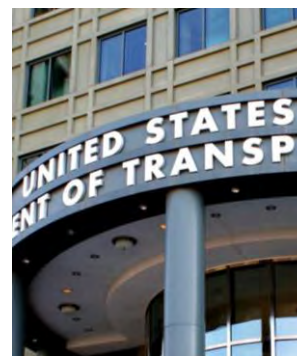
**Public Space &
Placemaking**



**Robust
Mix of Uses**



**Major
Employers**



By building on the same key assets of existing employment anchors, and a sports and entertainment venue, with the right mix of uses and public spaces, the North Broad/Downtown redevelopment has the opportunity to create a catalytic district in the heart of Downtown Richmond.

GALLERY PLACE – CHINATOWN

WASHINGTON, DC

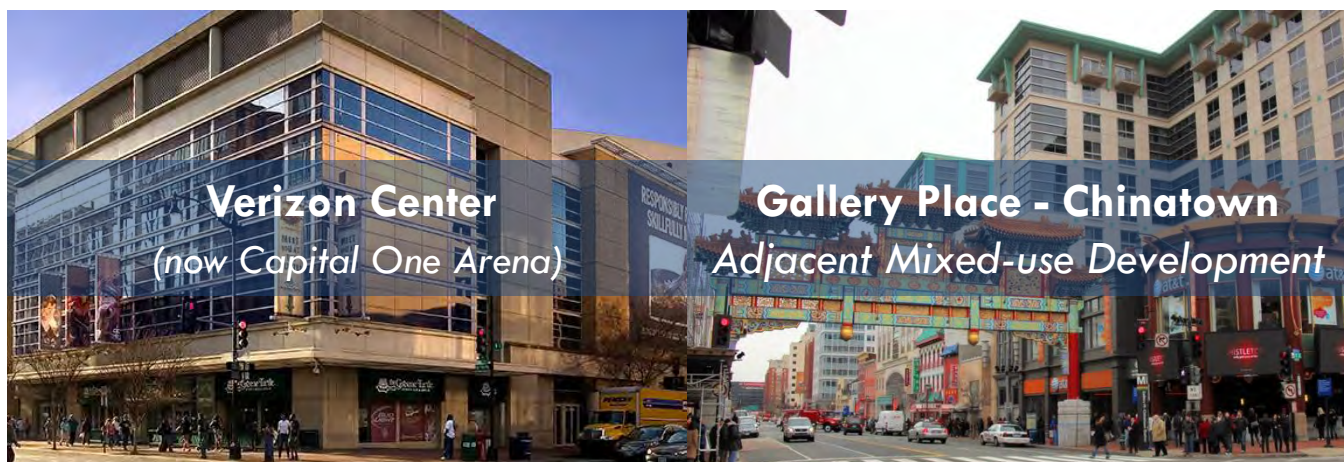


Washington, DC's Gallery Place – Chinatown neighborhood saw repositioning through a public-private partnership that supported the City's new arena, and spurred a vibrant mixed-use district.

Private owners developed the \$263 million Verizon Center (now Capital One Arena), supported by infrastructure investment and site preparation from the District of Columbia and Washington Metropolitan Area Transit Authority (WMATA). Initial city and transit authority investments included \$79 million in infrastructure, along with \$300 million in initial tax increment financing (TIF). Public investments in the district served as a key catalyst for massive private investment that followed.

14:1

Private dollars leveraged
from public investment



Through a public partnership, anchored to a mixed-use district and development of the city's new arena, the Gallery Place – Chinatown District has become one of the city's most vibrant neighborhoods.

Vibrant Mix of Uses

Total Development (Since 1995)

Over 10M SF Class A office

1.5M SF retail and cinema

Over 6,600 residential units

Nearly **2,000** nearby hotel rooms

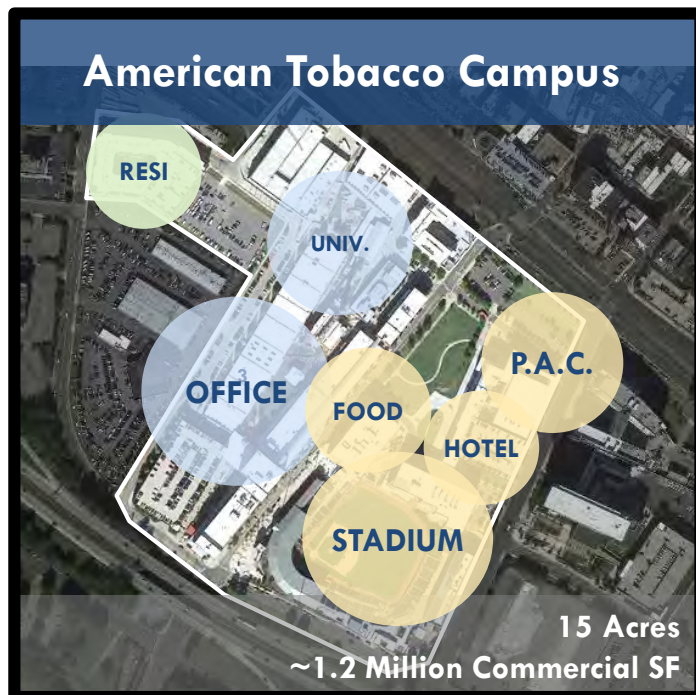
AMERICAN TOBACCO CAMPUS

DURHAM, NC



Durham's American Tobacco Campus has incorporated a range of uses, leveraging historic resources and adjacent venues to create a dynamic day & night campus.

The American Tobacco Campus in Durham, North Carolina has created a vibrant district in Downtown Durham, building on key local institutional anchor Duke University as a major project tenant, while also crafting a diverse mix of uses that drives traffic 24/7 throughout the year. Key assets at the site include, a large on-site office district, a successful minor league baseball park, a performing arts center, as well as mix of restaurants and retail, supported by an on-site hotel.



Development Program

Office: 500k SF

Retail: 50,000 SF

Residential: 450 Units

Hotel: 135 Units

Performing Arts Center ("P.A.C"): 2,800
Seats

Stadium: Minor League Baseball

Key Catalysts

Duke, Shaw Universities; Art Institute (Anchors)

Minor League Baseball, Performing Arts

(Anchors – Combined 220 nighttime events)

Technology Incubator

BRICKTOWN

OKLAHOMA CITY, OK

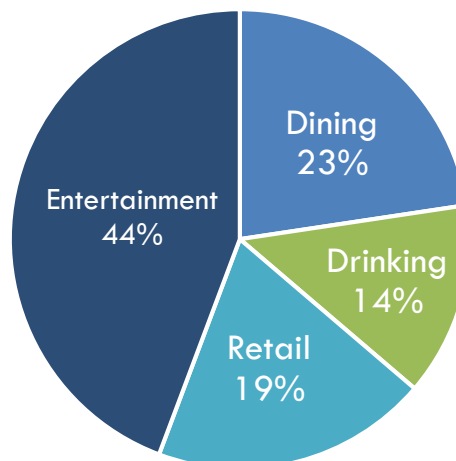


Oklahoma City's Bricktown offers a mix of evening entertainment activities, while also a vibrant daytime scene for families.

Bricktown in Oklahoma City, OK builds on existing historic assets in the core of its district to create a sense of place that is activated in the evening with a vibrant mix of restaurants and entertainment, while also building on the district's outdoor, canal-based activities to attract families. Through a mix of programming and uses, Bricktown offers activity at all times of the day and week.



Additional Anchors
Convention Center Arena
Ball Park
Bricktown Canal



Retail & Entertainment Mix
500,000+ SF

Appendix

Retail Gap Analysis – Detail

Summary of Findings			
	Total Capturable Spending		
	Low	High	
Convenience Goods			
Grocery Stores	\$ 73,408,828	\$ 81,193,765	
Specialty Food Stores	\$ 329,000	\$ 376,000	
Beer, Wine & Liquor Stores	\$ 476,000	\$ 544,000	
Limited-Service Eating Places	\$ 41,501,000	\$ 45,148,000	
Drinking Places - Alcoholic Beverages	\$ 10,496,000	\$ 11,549,500	
Health & Personal Care Stores	\$ 52,420,236	\$ 59,802,829	
Miscellaneous Store Retailers	\$ 19,999,000	\$ 23,315,000	
Subtotal	\$ 198,630,064	\$ 221,929,094	
Shopping Retail			
General Merchandise Stores	\$ 56,124,114	\$ 63,689,249	
Bldg Materials, Garden Equip. & Supply Stores	\$ 1,223,231	\$ 1,630,974	
Furniture & Home Furnishings Stores	\$ 1,276,687	\$ 1,636,355	
Clothing & Clothing Accessories Stores	\$ 45,106,640	\$ 50,462,622	
Electronics & Appliance Stores	\$ 2,466,964	\$ 3,188,402	
Sporting Goods, Hobby, Book & Music Stores	\$ 14,804,956	\$ 18,671,398	
Subtotal	\$ 121,002,591	\$ 139,279,000	
Other Food/Beverage			
Full-Service Restaurants	\$ 46,687,366	\$ 59,277,232	
Special Food Services	\$ 42,000	\$ 56,000	
Subtotal	\$ 46,729,366	\$ 59,333,232	
Total	\$ 366,362,021	\$ 420,541,326	

Summary of Findings				
	Existing Sales Downtown Richmond	Retail Gap		
		Low	High	
Convenience Goods				
Grocery Stores	\$ 14,821,765	\$ 58,587,063	\$ 66,372,000	
Specialty Food Stores	\$ 471,770	\$ (142,770)	\$ (95,770)	
Beer, Wine & Liquor Stores	\$ 680,593	\$ (204,593)	\$ (136,593)	
Limited-Service Eating Places	\$ 15,974,128	\$ 25,526,872	\$ 29,173,872	
Drinking Places - Alcoholic Beverages	\$ 132,590	\$ 10,363,410	\$ 11,416,910	
Health & Personal Care Stores	\$ 4,841,165	\$ 47,579,071	\$ 54,961,664	
Miscellaneous Store Retailers	\$ 3,156,280	\$ 16,842,720	\$ 20,158,720	
Subtotal	\$ 40,078,291	\$ 158,551,773	\$ 181,850,803	
Shopping Retail				
General Merchandise Stores	\$ 16,092,032	\$ 40,032,082	\$ 47,597,217	
Bldg Materials, Garden Equip. & Supply Stores	\$ 4,182,034	\$ (2,958,803)	\$ (2,551,060)	
Furniture & Home Furnishings Stores	\$ 3,196,106	\$ (1,919,419)	\$ (1,559,751)	
Clothing & Clothing Accessories Stores	\$ 4,535,194	\$ 40,571,446	\$ 45,927,428	
Electronics & Appliance Stores	\$ 2,947,720	\$ (480,756)	\$ 240,682	
Sporting Goods, Hobby, Book & Music Stores	\$ 1,990,688	\$ 12,814,268	\$ 16,680,710	
Subtotal	\$ 32,943,774	\$ 88,058,817	\$ 106,335,226	
Other Food/Beverage				
Full-Service Restaurants	\$ 9,583,610	\$ 37,103,756	\$ 49,693,622	
Special Food Services	\$ 135,781	\$ -	\$ -	
Subtotal	\$ 9,719,391	\$ 37,103,756	\$ 49,693,622	
Total	\$ 82,741,456	\$ 283,714,346	\$ 337,879,651	

Source: ESRI, HR&A Analysis

Retail Gap Analysis – Detail

Summary of Findings		
	Supportable Square Footage	
	Low	High
Convenience Goods		
Grocery Stores	83,000	95,000
Specialty Food Stores	-	-
Beer, Wine & Liquor Stores	-	-
Limited-Service Eating Places	48,000	55,000
Drinking Places - Alcoholic Beverages	22,000	24,000
Health & Personal Care Stores	67,000	78,000
Miscellaneous Store Retailers	57,000	68,000
Subtotal		
Shopping Retail		
General Merchandise Stores	135,000	161,000
Bldg Materials, Garden Equip. & Supply Stores	-	-
Furniture & Home Furnishings Stores	-	-
Clothing & Clothing Accessories Stores	55,000	62,000
Electronics & Appliance Stores	-	-
Sporting Goods, Hobby, Book & Music Stores	43,000	56,000
Subtotal		
Other Food/Beverage		
Full-Service Restaurants	69,000	93,000
Special Food Services	-	-
Subtotal		
Total	579,000	692,000

Source: ESRI, HR&A Analysis

Retail Gap Analysis – Detail

Resident Spending Potential Summary - Capture Rates			Worker Spending Potential Summary - Capture Rates		
Convenience Goods	Low	High	Convenience Goods	Low	High
Grocery Stores	70.0%	80.0%	Grocery Stores	50.0%	55.0%
Specialty Food Stores	70.0%	80.0%	Specialty Food Stores	0.0%	0.0%
Beer, Wine & Liquor Stores	70.0%	80.0%	Beer, Wine & Liquor Stores	0.0%	0.0%
Limited-Service Eating Places	70.0%	80.0%	Limited-Service Eating Places	65.0%	70.0%
Drinking Places - Alcoholic Beverages	70.0%	80.0%	Drinking Places - Alcoholic Beverages	50.0%	55.0%
Health & Personal Care Stores	70.0%	80.0%	Health & Personal Care Stores	50.0%	55.0%
Miscellaneous Store Retailers	70.0%	80.0%	Miscellaneous Store Retailers	50.0%	55.0%
Subtotal			Subtotal		
Shopping Retail	Low	High	Shopping Retail	Low	High
General Merchandise Stores	70.0%	80.0%	General Merchandise Stores	50.0%	55.0%
Bldg Materials, Garden Equip. & Supply Stores	30.0%	40.0%	Bldg Materials, Garden Equip. & Supply Stores	0.0%	0.0%
Furniture & Home Furnishings Stores	40.0%	50.0%	Furniture & Home Furnishings Stores	0.0%	0.0%
Clothing & Clothing Accessories Stores	65.0%	75.0%	Clothing & Clothing Accessories Stores	40.0%	45.0%
Electronics & Appliance Stores	30.0%	40.0%	Electronics & Appliance Stores	20.0%	25.0%
Sporting Goods, Hobby, Book & Music Stores	30.0%	40.0%	Sporting Goods, Hobby, Book & Music Stores	20.0%	25.0%
Subtotal			Subtotal		
Other Food/Bev	Low	High	Other Food/Bev	Low	High
Full-Service Restaurants	30.0%	40.0%	Full-Service Restaurants	30.0%	35.0%
Special Food Services	30.0%	40.0%	Special Food Services	0.0%	0.0%
Subtotal			Subtotal		

Retail Gap Analysis – Detail

Visitor Spending Potential Summary - Capture Rates			Student Spending Potential Summary - Capture Rates		
Convenience Goods			Shopping Retail		
	Low	High		Low	High
Grocery Stores	0.0%	0.0%	General Merchandise Stores	5.0%	8.0%
Specialty Food Stores	0.0%	0.0%	Bldg Materials, Garden Equip. & Supply Stores	3.0%	5.0%
Beer, Wine & Liquor Stores	0.0%	0.0%	Furniture & Home Furnishings Stores	3.0%	5.0%
Limited-Service Eating Places	20.0%	25.0%	Clothing & Clothing Accessories Stores	13.0%	15.0%
Drinking Places - Alcoholic Beverages	0.0%	0.0%	Electronics & Appliance Stores	3.0%	5.0%
Health & Personal Care Stores	20.0%	25.0%	Sporting Goods, Hobby, Book & Music Stores	3.0%	5.0%
Miscellaneous Store Retailers	20.0%	25.0%	Subtotal		
Subtotal					
Shopping Retail			Other Food/Bev		
	Low	High		Low	High
General Merchandise Stores	20.0%	25.0%	Full-Service Restaurants	1.0%	2.0%
Bldg Materials, Garden Equip. & Supply Stores	0.0%	0.0%	Special Food Services	0.0%	0.0%
Furniture & Home Furnishings Stores	0.0%	0.0%	Subtotal		
Clothing & Clothing Accessories Stores	45.0%	50.0%			
Electronics & Appliance Stores	0.0%	0.0%			
Sporting Goods, Hobby, Book & Music Stores	20.0%	25.0%			
Subtotal					
Other Food/Bev					
	Low	High			
Full-Service Restaurants	15.0%	20.0%			
Special Food Services	0.0%	0.0%			
Subtotal					



HR&A