



Addendum 1

Issued March 24, 2022

This Addendum includes more information about existing site conditions at the Diamond District via a brief report, *Diamond District Existing Site Conditions* (AECOM, March 23, 2022). The Report mentions a few other reports:

- Preliminary Market Analysis of the Boulevard Site (Tripp Umbach, April 16, 2016) – this report is included in this addendum as a reference.
- Richmond 300: A Guide for Growth: www.rva.gov/planning-development-review/master-plan
- Greater Scott's Addition Small Area Plan (included within the Richmond 300 plan)

All map data is available on the City's ArcGIS portal: www.rva.gov/assessor-real-estate/gismapping

Richmond Diamond Property – Existing Site Conditions

City of Richmond

March 23, 2022

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Table of Contents

Existing Conditions.....	4
Existing Water Infrastructure	4
Existing Gas Infrastructure	4
Existing Street Light and Electrical Infrastructure	4
Existing Sewer Infrastructure	5
Existing Stormwater Management Infrastructure	5
Existing Communications Infrastructure	5
Plans, Studies, and Ongoing Efforts	5
General Limiting Conditions	8
Appendix A Utility Maps	9

Figures

Figure 4: Greater Scott's Addition Framework Plan	7
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Existing Conditions

AECOM conducted a general overview of existing infrastructure conditions on and surrounding the site, based on resources provided by the City, including previous studies and current geoinformation systems (GIS) information. The City of Richmond's Department of Public Utilities (DPU) is an enterprise utility, and operates and maintains gas, water, wastewater, stormwater, and electric streetlighting services. The City's sewer and stormwater systems in Greater Scott's Addition are a combined sewer system (CSS), which carries stormwater and wastewater to the wastewater treatment plant prior to discharging it into the James River. Maps showing existing utilities on the site are included in **Appendix A** of this report. Use/reuse of existing infrastructure, where appropriate, is encouraged to reduce project costs; however, depending on the actual conditions on site, some existing infrastructure may need to be abandoned/demolished.

Existing Water Infrastructure

There is approximately 3,100 feet of a large water transmission line (the "Hanover" transmission line), an approximately 36" diameter water line that runs parallel to Hermitage Road, west of the right-of-way (ROW), and then turns to the west, south of current Sports Backers Stadium, currently located on the site. It may not be necessary to relocate the line, depending on the ultimate design of the development. The 36" main would need to remain accessible to the City via a public utility easement or public ROW.

The project site is located within water pressure zone 2-North, with a maximum hydraulic grade line of 325 feet, normal operating pressures across the site at the ground floor should be around 50 psi. New distribution system water pump stations would most likely not be required to service the new development; however, high-rise commercial or residential buildings would need interior booster pumps to convey adequate water within the plumbing and fire systems.

There are 4" and 6" diameter water lines located in the Avenue of Champions, and just to the north and south of Sports Backers Stadium. Lines of this size are more easily abandoned/removed without significantly increasing total cost or impacting the City's water capacity in the area. DPU is currently in the design phase of upgrading the water main along Hermitage road. According to the City, the project site has large diameter water transmission and distribution mains around the periphery of the site which have sufficient capacity to support a moderate-to-high density development; however, additional mains may be needed within proposed ROWs/utility easements to support maximum day domestic water demands and Insurance Services Office (ISO) fire flow, and to ensure there is adequate fire hydrant coverage for the proposed buildings. At the start of project development, Richmond DPU would require an overall water model and phasing plan to verify the adequacy of the existing and proposed water system, and guide development of additional infrastructure.

Based on current information, it does not appear that there would be significant water capacity issues, even with substantial redevelopment on the site, but a more detailed study will need to be done to determine whether or not this is the case. The developer of the Diamond site would be responsible for all water utility infrastructure costs necessary to support the development, including water and wastewater connection charges, which include meter installation charges and capacity charges based on the size of the domestic water meter and/or fire line detector check.

Existing Gas Infrastructure

There are several smaller gas lines between 1" and 4" diameter, located in the Avenue of Champions, and just to the north and south of Sports Backers Stadium. It is assumed that abandoning or relocating these lines would not be a significant cost item, should they need to be moved or demolished, and should also not significantly impact gas service in the area. Because of the City's sustainability goals, the environmental costs and benefits of extending gas service to the site should be carefully weighed prior to extending infrastructure for gas.

Existing Street Light and Electrical Infrastructure

City streetlights and City-owned electric service lines line the roadways immediately adjacent to the Diamond property. This power grid provides power to the City's streetlights and traffic signals, and is independent of the power grid owned by private-sector provider Dominion Energy that provides electric service to nearly all buildings within the City of Richmond and surrounding counties.

Although it is an additional expense, undergrounding of transmission lines is recommended, if possible, to increase the resilience of the development to climate change/natural disasters. Most of the electric transmission lines owned by Dominion Energy on and adjacent to the site are overhead, but some small sections are underground. It is assumed that the surrounding existing transmission lines along Arthur Ashe Boulevard, Hermitage Road, and Robin Hood Road will remain.

Because Dominion Energy is a private provider, it is assumed that they would charge the cost to build any new electrical infrastructure required to service development on the site back to their rate base via fees for service.

Existing Sewer Infrastructure

As previously noted, the City's sewer system in this area is part of a CSS that combines sewer and stormwater drainage into a single system. It would be up to the City/developer's discretion on how stormwater conveyance infrastructure would be retrofitted/constructed on site to service the new development; it could be combined onsite, or separated onsite and then allowed to flow to the same source offsite. Much would depend on the City's preferences, and the cost difference between installing new CSS infrastructure to service the new buildings versus installing separate piping. Either way, the infrastructure onsite would connect to the existing combined sewer mains running along Arthur Ashe Boulevard, Hermitage Road, Robin Hood Road, and Sherwood Avenue.

Existing Stormwater Management Infrastructure

As previously noted, the stormwater management infrastructure currently on site is part of the City's CSS, which would need to be replaced as part of redeveloping the site. The site is in FEMA Floodplain X, the lowest-flood-risk category, and is not located within a special flood hazard zone. There are also no Chesapeake Bay Preservation Areas (CBPAs), which are also referred to as Resource Protection Areas (RPAs), or Chesapeake Bay Resource Management Areas (RMAs) located on or adjacent to the Diamond property. Per Richmond DPU, any new development on the site would be required to meet predevelopment discharge levels. Because much of the site is currently paved (and therefore considered impervious), and not a greenfield site, that would reduce the stormwater treatment requirements for the site; however, best management practices (BMPs), such as detention ponds, bioswales, and infiltration areas would still be required to manage runoff on-site.

All proposed public utility infrastructure is subject to review and approval through Richmond DPU Development Services. Once accepted and constructed within public ROW or easement, Richmond DPU would take ownership of the infrastructure subject to the terms identified in the deed of public easement which is prepared by the City Attorney's Office.

Existing Communications Infrastructure

Verizon and Comcast are the largest private internet and television providers in the region. They both provide broadband and fiber optic coverage. Fiber optic coverage has expanded significantly in recent years, but is not yet comprehensive. Much of their existing infrastructure is located on poles shared by Dominion Energy along the ROWs adjacent to the Diamond Property, which directly serves most of the existing buildings currently on site and in the surrounding areas.

Most of the existing communications infrastructure on and around the site is overhead, but some has been installed underground. Again, from a resilience standpoint, undergrounding communications lines is the preferred approach, but like with electric power, undergrounding adds significant cost. As with electrical service, the developer of the Diamond site would need to work with the private utility companies to cost the infrastructure needed to service the development, and determine how those costs would be covered, whether through user/subscriber fees or some other mechanism. Those costs are not included in this analysis, as they would most likely be passed on to the site's users, and not included in the amount that would need to be financed to service the development.

AECOM recommends a thorough study of existing utilities, connections, and capacities on the site and in the surrounding area prior to beginning the development process.

Plans, Studies, and Ongoing Efforts

The City's **2022 – 2026 Capital Improvement Program** does not include any specific projects on or adjacent to the Diamond property or immediate area, other than regular operations and maintenance. As previously noted, DPU is

currently in the design phase of upgrading the water main along Hermitage road. The City is also drafting an ordinance to encourage the use of stormwater recapture onsite, to use for irrigation and other uses that do not require potable water.

Tripp-Umbach Market Study, 2016

In 2016, the City of Richmond engaged consulting firm Tripp-Umbach to conduct a market study for the Diamond property. Key findings/recommendations of the study were as follows:

- The site under current/2016 conditions, with the existing baseball stadium being used by the Flying Squirrels, VCU Sportsbackers Stadium, and the Arthur Ashe Athletic Center, has limited economic impact on the City of Richmond. Tripp-Umbach estimated that, in 2016, the site supported approximately 250 jobs and generated no more than \$400,000 in total tax revenue to the City.
- Tripp Umbach recommended that the City and key stakeholders pursue a joint sports and entertainment district on a property, funded by a private developer/financier or some combination of public and private financing.
- Estimated costs to raze the current baseball stadium were calculated at a minimum of \$2,750,000 by the study
- According to the study, the most viable option to maximize the potential of the site is an urban scale mixed-use development with housing, retail, flex space, innovation-oriented office space, and lodging, constructed on a high-density scale
- The site has "tremendous economic potential," which the study estimated could be up to 20 times higher than the \$14.4 million in 2016 estimated impact.
- The study also recommended that the city undertake a transparent, clearly structured development process, and involve as many stakeholders and members of the public as possible.

Preliminary Infrastructure Analysis of the Boulevard Site, Timmons Group, 2016

This report was issued to accompany the Market Analysis conducted by Tripp-Umbach for the Richmond Diamond Property in 2016, and provided an analysis of existing site conditions, along with estimated ROM costs for utility upgrades to service new development on the site, based on the estimated supportable development program developed by Tripp-Umbach for the Market Analysis. The report also included a trip generation/travel demand analysis for the supportable development, along with an analysis of ROM costs for park, streetscape, bicycle, and pedestrian infrastructure.

Richmond 300 Master Plan: A Guide for Growth, 2020

The Richmond 300 Master Plan, adopted by City Council on December 14, 2020, seeks to guide Richmond's growth in a more equitable and sustainable manner, with the overarching goal of improving quality of life for all residents, as well as continuing to attract talent, business, and industry. The Richmond 300 Master Plan included small area plans for each one of the City's targeted growth nodes, including Greater Scott's Addition. The plan's overarching goals relevant to redeveloping the Diamond property include:

- Re-writing Richmond's Zoning Ordinance to growth to appropriate areas, while maintaining existing neighborhoods, and creating new, "authentic," transit-oriented neighborhoods
- Targeting growth in jobs and population to key areas of the City, including Downtown, Greater Scott's Addition, Route 1 Corridor, Southside Plaza, and Stony Point Fashion Park
- Expanding housing opportunities for all residents by offering a wide range of housing options at varying price point throughout the city to expand the geography of opportunity.

As part of expanding opportunities for all residents, the City makes special emphasis of the importance of offering more affordable and workforce/missing-middle housing throughout the City. One of the City's specific goals is to create 10,000 new affordable housing units for low- and very low-income households over the next 10 years. The City also wants to prioritize projects that provide housing to very low-income individuals and families, including supportive housing, within a half mile of high-frequency transit stops. The City also plans to amend the rehabilitation tax abatement program to provide incentives for developers to create mixed-income residential housing where at least 20 % of the units are affordable to households earning less than 50 % of the area median income (AMI).

Greater Scott's Addition Small Area Plan (part of the Richmond 300 Master Plan), 2020

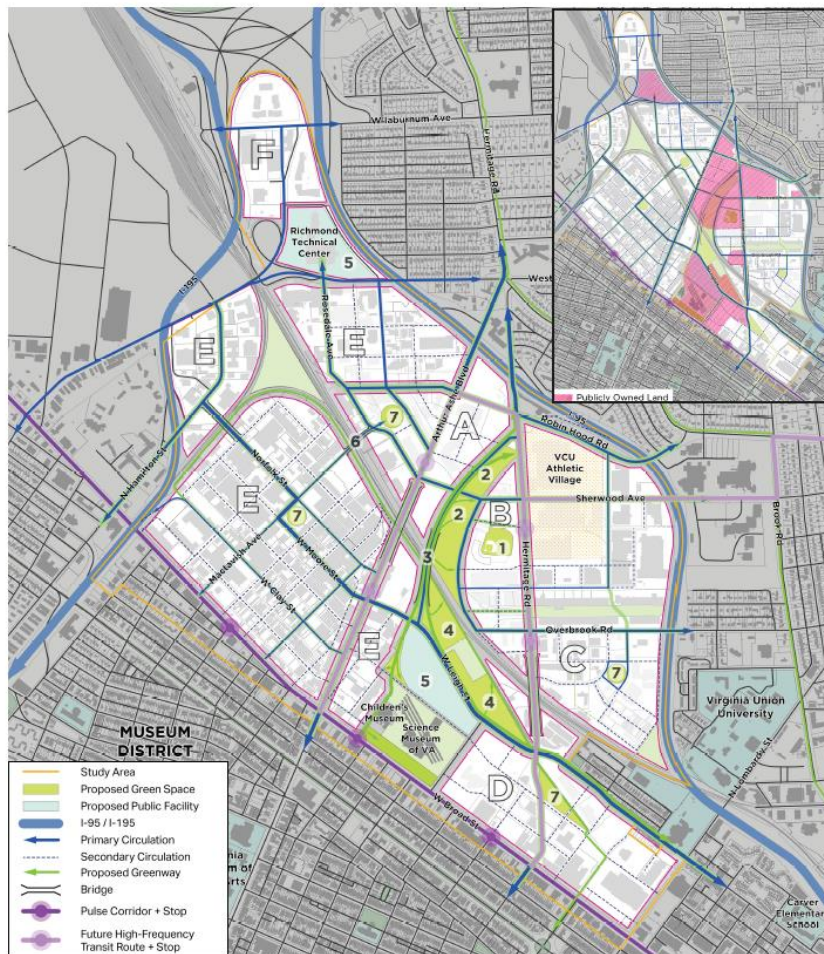
The Greater Scott's Addition Small Area plan, part of the Richmond 300 Master Plan, contains multiple goals and targets for the Diamond property and the GSA area, including:

- To rezone Greater Scott's Addition in alignment with the Future Land Use Plan
- Redevelop the City-owned land (the Diamond Property) between N. Ashe Boulevard and Hermitage Road using the GSA Framework Plan, and including a public park and low-income housing, along with a walkable, bikeable, transit-accessible street grid

- To provide engaging architecture, public space, sidewalks, street trees, buildings built to the street, and street furniture throughout the area
- Transform N. Ashe Boulevard and Hermitage Road into “Great Streets,” featuring buildings that interface with the streetscape, underground utilities, street trees, lighting, enhanced transit, and other amenities
- Increase connectivity and access in GSA by creating new bridges from Leigh Street to the Diamond property, Mactavish Street to Rosedale Avenue, and Norfolk to Hamilton Street
- Market GSA to grow, retain, and attract businesses in the target industries (Goal 11).
- As part of the redevelopment of the Diamond site, develop a district-wide green infrastructure system to reduce flow of stormwater into the City’s combined sewage system; reduce the heat-island effect, and increase the tree canopy
- As part of the redevelopment of the Diamond site, create more housing, including rental and ownership opportunities, at various price points, including units for low-income households
- As part of the redevelopment of the Diamond site, develop a series of parks, including the signature crescent park (see Figure 1), investigate a funding source for park creation and maintenance (such as a bond or a special park district assessment)

Part of the vision of the GSA Small Area Plan is to extend GRTC Bus Rapid Transit “Pulse” service to the Diamond Property, which would support the growth and redevelopment of the site, and allow residents, commuters, visitors, and Flying Squirrels fans an alternative to driving or using ride-hailing services.

Figure 1: Greater Scott's Addition Framework Plan



Source: Richmond 300: A Guide for Growth Greater Scott's Addition Small Area Plan, 2020

General Limiting Conditions

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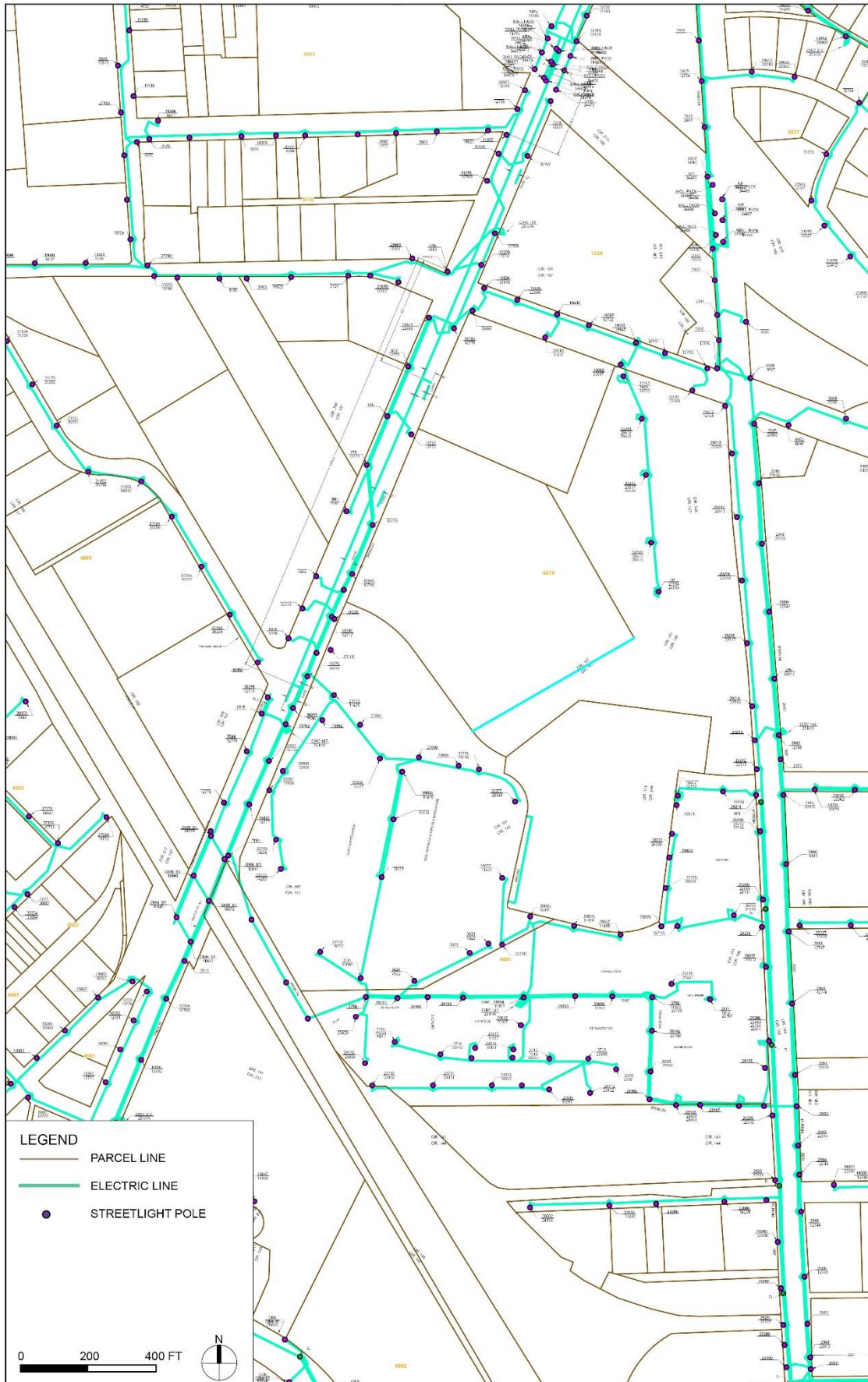
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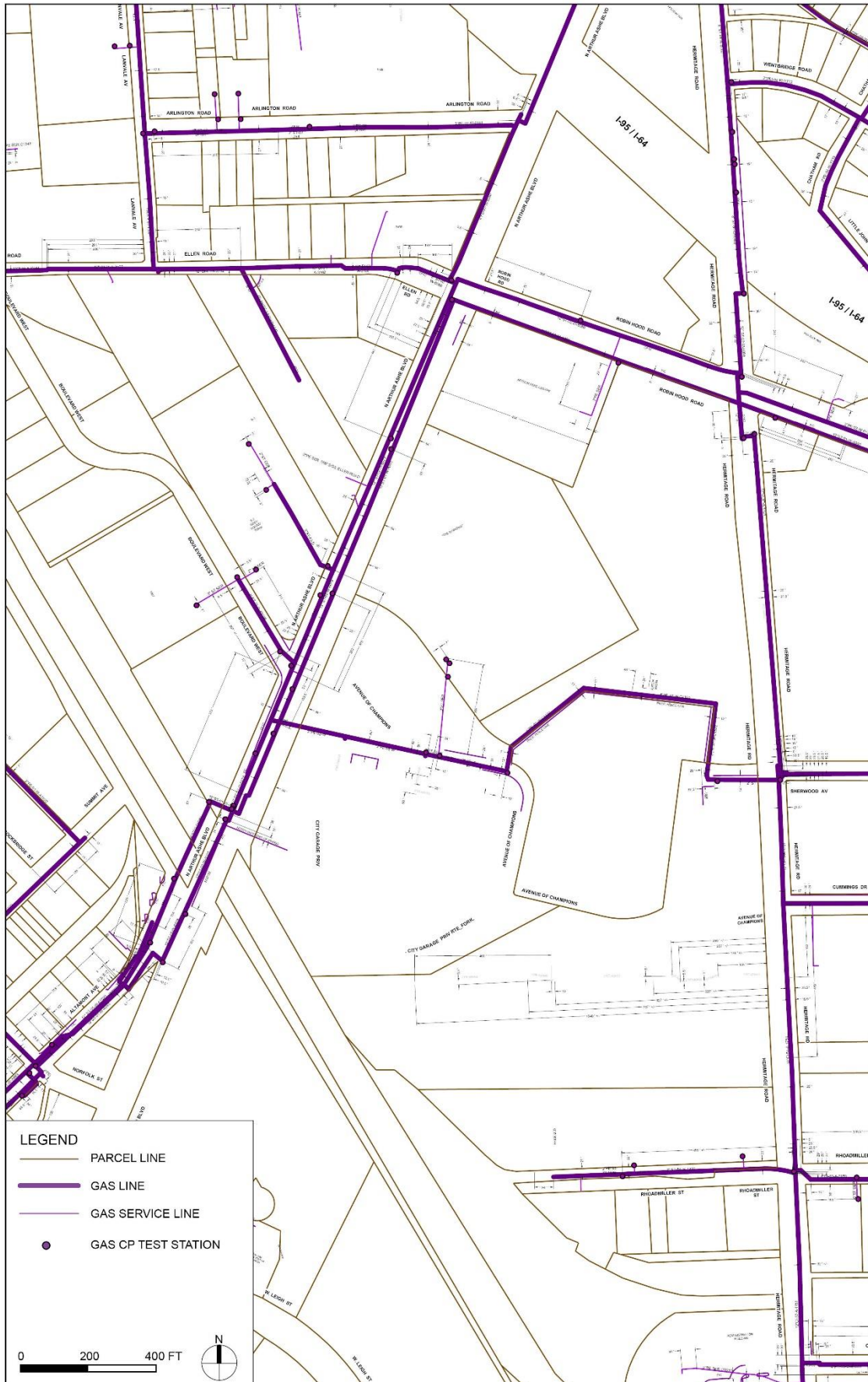
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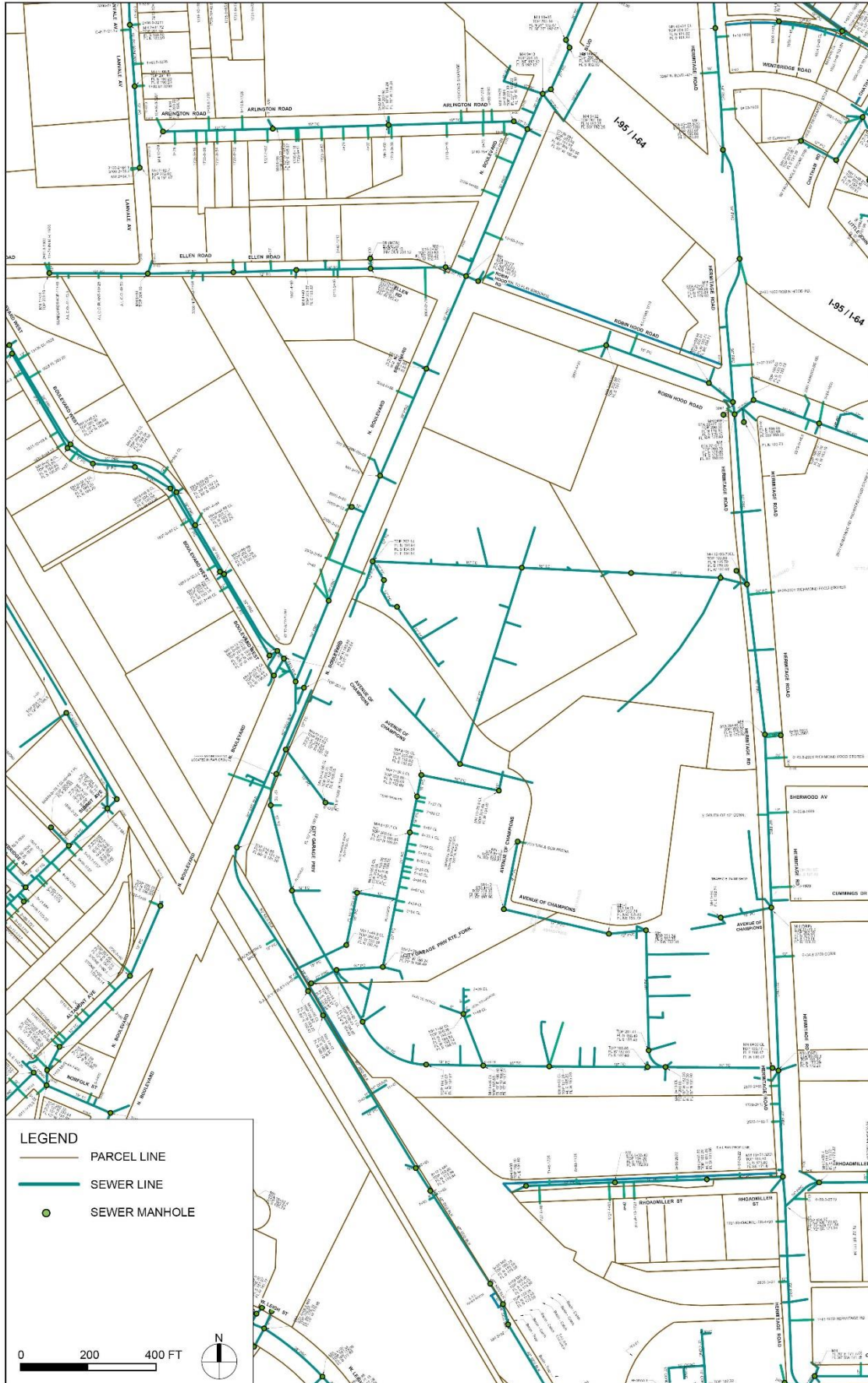
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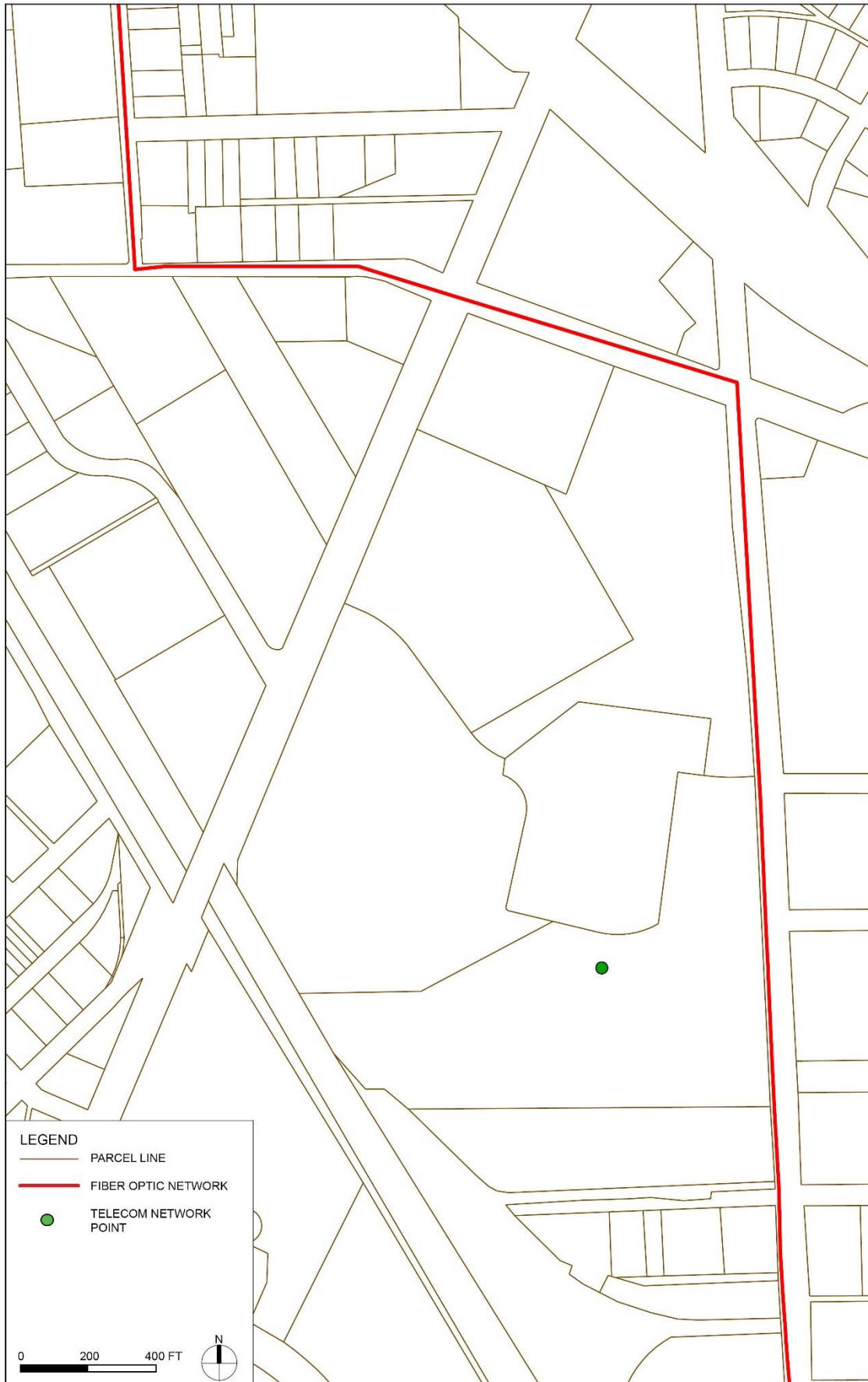
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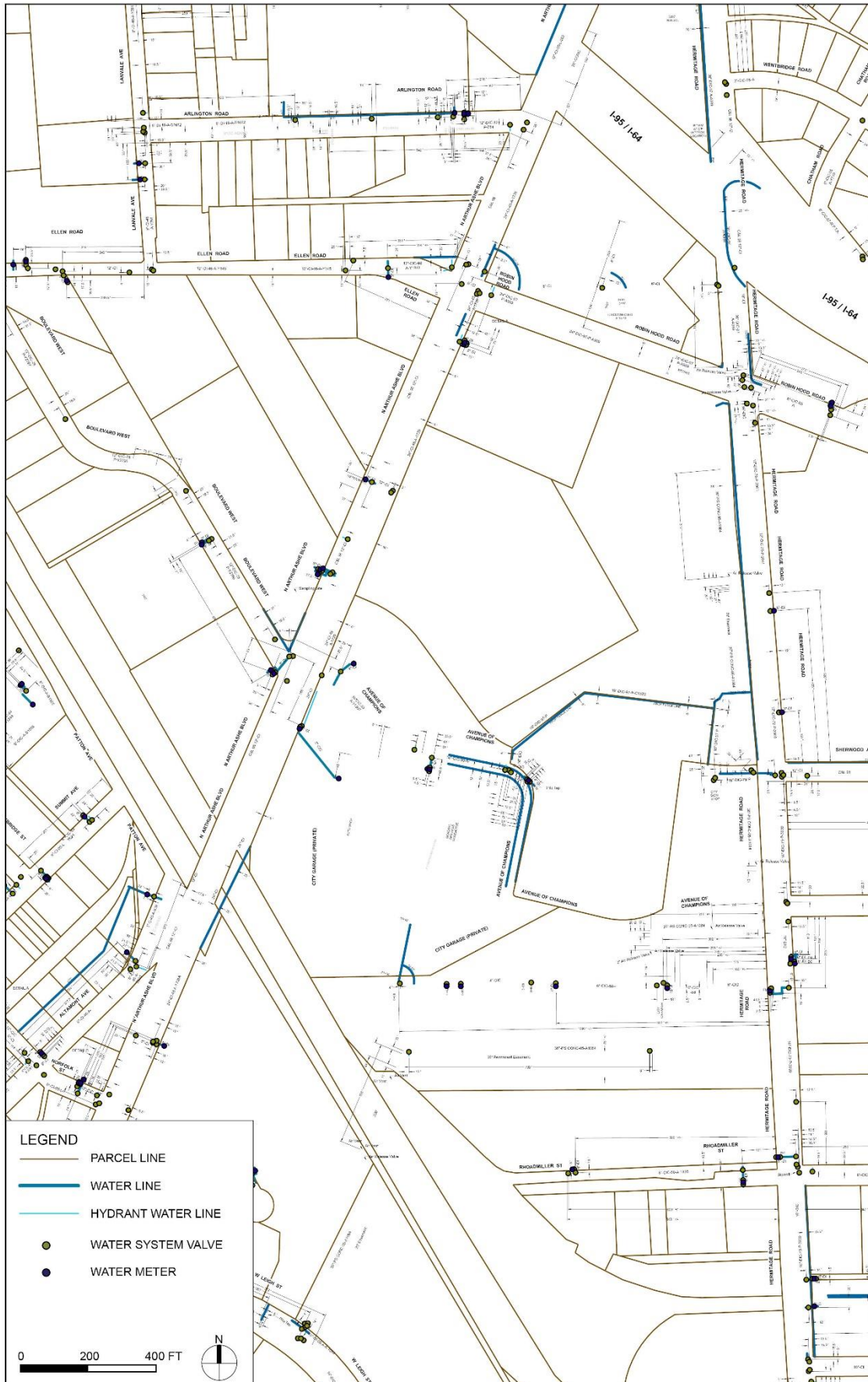
Appendix A Utility Maps













** Image courtesy of Tom Stiles and skyshots.com*

Preliminary Market Analysis of the Boulevard Site

April 25, 2016



Table of Contents

Executive Summary.....	3
Vision Statement.....	8
Research Methodology	10
Stakeholder Interviews	12
Site Analysis	13
Primary Market Areas	18
Demographic/Economic Overview	21
Market Demand Review	24
Richmond Commercial Office Market Overview	29
Retail Market Demand Overview.....	30
Hotel Demand Overview	35
Transformative Development Guiding Principles	36
Economic Impact Analysis.....	37
Ideal Highest and Best Use Recommendation.....	42
Appendix A: National Best Practices	43
Appendix B: Next Steps: Path Towards Developer Solicitation	46
Appendix C: Timmons Group Maps	48
Appendix D: Economic Impact Term Definitions	53
Appendix E: Resources	54
Appendix F: Tripp Umbach Qualifications.....	55

Executive Summary

The city's future development will depend in part on its ability to remain competitive and attractive within a growing city and region. The Boulevard site is one of few underdeveloped, publicly owned urban tracts of land in the United States and therefore provides tremendous future opportunity to the citizens of Richmond. Tripp Umbach, under support of the Timmons Group annual contract, was hired by the City of Richmond to conduct a preliminary economic analysis for future redevelopment of the Boulevard site. In this role, Tripp Umbach evaluated various land uses in order to measure the development scenario that has the highest and best sustainable economic, employment, and city revenue impact of the 60 acre site in the City of Richmond. Tripp Umbach understands that the Boulevard site has been the subject of several studies since 2008, focusing mostly on market potential. The City has done its part to clear buildings and other portions of the site, relocated a number of City operations, and have taken steps to remediate the site – thereby setting the stage for significant economic development.

This report serves as an important foundation for further analysis, review, and public engagement in all future phases that will take place in 2016 and beyond. For the purpose of informing the public conversation, Tripp Umbach identifies the term “highest and best use” as *the scenario that generates both the maximum market potential while meeting community need.*

The approach for this review involved collecting research from primary and secondary sources, and developing projections based on current market dynamics and trends. Using a community-driven economic design process where the needs of the community, the maximum potential of the market, and best use of the site are brought into focus, Tripp Umbach concludes that Richmond's economic, population, and real estate drivers are healthy enough to support economic development on the Boulevard site over the next 20 years.

To fully understand the economic potential, Tripp Umbach conducted a series of steps to analyze the Boulevard site. These steps included: stakeholder interviews; a review of secondary market data; an inventory of prior studies; spatial and access analysis of the site; analysis of adjacent neighborhoods; and market potential analysis for the redevelopment of the Boulevard site. After completing this preliminary analysis, Tripp Umbach conducted an economic impact study to measure the direct, indirect, and induced impacts stemming from recommended highest and best uses on the 60 acres of the Boulevard property. These impacts fall within the following categories: companies' expenditures for capital improvements, goods, and services; spending by employees; and spending by vendors and suppliers.

Research shows the Boulevard site will be a catalyst for significant additional economic impact within a half-mile radius of the center simultaneously when development of the site is underway and over the next 20 years. Economic, employment and tax revenue impacts related to proposed development on adjacent properties to the 60 acres controlled by the City are in addition to the findings presented below.

If planned accordingly, the City has the opportunity to create one of the best examples of large-scale urban place-making projects in the country. Tripp Umbach recommends the proposed redevelopment will enhance the economic potential of all City neighborhoods, including Downtown, as this project is designed to complement current and planned developments in the City.

Key Findings and Recommendations:

1. **Currently the site has limited economic impact on the City of Richmond.** The current status of the Boulevard site is not reaching full market potential. The site currently has four uses
 - a. Richmond Flying Squirrels Minor League baseball team
 - b. The Arthur Ashe Community Center
 - c. Sportsbacker's Stadium (on land owned by Virginia Commonwealth University)
 - d. City of Richmond Department of Public Works Operations

Currently, these uses support 253 jobs, more than 100 of which will be moved in 2016 by the City of Richmond to other locations. In addition, Tripp Umbach's analysis indicates that the site generates no more than \$400,000 in total tax revenue to the City.

2. **A city-owned or publicly subsidized baseball stadium on the 60 acre Boulevard site will not have the highest and best economic impact for potential development; however keeping it near is important to community members.** Tripp Umbach recommends the City of Richmond, in conjunction with the Commonwealth of Virginia, Virginia Commonwealth University, private foundations, regional stakeholders, and local neighborhood and commercial civic associations; begin a separate master planning process that encompasses the greater Boulevard area that is outside of the 60 acre city-owned parcel. In this master planning group, Tripp Umbach recommends the group pursue a joint sports and entertainment district on a property that is close and adjacent to the current 60-acres that is funded by a private developer/financier or some combination of public and private financing. Furthermore, it is important to factor in the cost of demolition for the current Diamond facility. Estimated costs to raze the current baseball stadium are calculated at a minimum of \$2,750,000.
3. **The most viable option to maximize the potential of the site is an urban scale mixed use development with housing, retail, urban flex space (innovation oriented office space), and lodging.** Recognizing that the current land uses do not generate sufficient economic benefits for the City of Richmond and the proposed Children's Hospital complex lacks stakeholder commitment, Tripp Umbach recommends the City of Richmond pursue a high-density, urban, mixed-use, development on the 60 acres of the Boulevard property. Detailed analysis of the market potential for housing (both rental and owned), retail space to fulfill local demand, 21st century spaces for innovation (office and technology related work spaces), and additional extended stay lodging was calculated by Tripp Umbach and projected in five year time increments. Data supporting this recommendation includes:
 - a. The city's population is growing after decades of decline and is projected to continue over the next 10 years.
 - b. Demand for market rate rental housing is projected to continue in the future.
 - c. Demand for retail shopping options within the city is very strong with approximately 80 percent of City purchases being spent outside of the city.
 - d. Urban flex space is needed in the market to support technology based companies.
 - e. Demand for extended stay lodging is increasing in the city.

Figure 1 represents what can be achieved as the highest and best use for the Boulevard site to be implemented over a 20-year timeframe based on current market needs and future projections of demographic changes in the City of Richmond.

Figure 1: 20-year timeframe for cumulative buildout of Boulevard site

	2020 (5 YEARS)	2025 (10 YEARS)	2035 (20 YEARS)
USES	TIME FRAME #1	TIME FRAME #2	TIME FRAME #3
<i>Housing</i>	800 units	2,000 units	4,000 units
<i>Retail/Entertainment</i>	200,000 square ft.	400,000 square ft.	500,000 square ft.
<i>Working Space (Flex)</i>	75,000 square ft.	225,000 square ft.	375,000 square ft.
<i>Hotel</i>	150 rooms	250 rooms	250 rooms

**Note – Each time frame denotes cumulative totals*

4. **The site has tremendous economic potential.** Tripp Umbach’s strategy for the Boulevard site will generate significant economic impact in the City of Richmond. Figure 2 indicates that when the site is fully developed, the potential economic impact per acre is projected to be up to 20 times higher than currently. Figure 3 represents the proposed annual economic impact of the Boulevard site in benchmark years. Calculations are based on the total economic impact (\$14.4 million) generated in the City of Richmond from the operations currently on the site using IMPLAN (See ‘*Research Methodology*’). The tax revenue of \$0.4 million is what is generated citywide from the operations currently on the site, which include both direct payments to the city and real estate taxes and other city taxes paid by employees on the site that live in the city.

Figure 2: Estimated Economic Impact per year of current and proposed land use

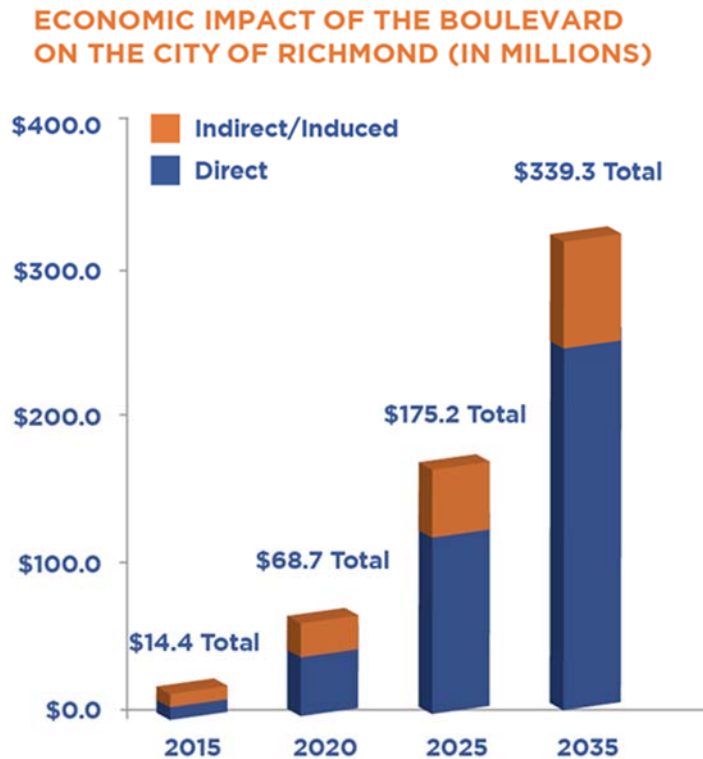
	Current per acre, per year	Tf1 ¹ per acre, per year	Tf1 cumulative total	Tf2 ² per year, per acre	Tf2 cumulative total	Tf3 ³ per year, per acre	Tf3 cumulative total
Economic Impact	\$240,000	\$1,145,000	\$68,700,000	\$2,920,000	\$175,200,000	\$5,655,000	339,300,000
Employment Impact	4.2 jobs	18.7 jobs	1120 jobs	44.5 jobs	2672 jobs	84.8 jobs	5087 jobs
Government Tax Revenue Impact	\$6,667	\$30,000	\$1,800,000	\$76,667	\$4,600,000	\$146,667	\$8,800,000

¹ Tf1 – ‘Timeframe 1’ period from 2015 to 2020 (5 year period)

² Tf2 – ‘Timeframe 2’ period from 2015 to 2025 (10 year period)

³ Tf3 – ‘Timeframe 3’ period from 2015 to 2035 (20 year period)

Figure 3: Proposed Annual Economic Impact of Boulevard site in benchmark years:



5. **The City of Richmond is in a strong position to control the potential of this site.** Tripp Umbach recommends that the City of Richmond strategically move forward with the redevelopment of the Boulevard site as follows:
- Adopt the Preliminary Market Analysis: This analysis identifies highest and best uses for the site based on potential market absorption rates.
 - Communication Plan and Public Engagement (December 2015 –April 2016; and continuing afterwards as necessary): It is recommended that the City engage key community stakeholders and the public on the City’s goals for redevelopment of the Boulevard property, the findings of the Preliminary Market and Economic Analysis (referenced above), and seek input on land use opportunities and challenges. Tripp Umbach recommends a series of community meetings across the City where dialog is encouraged. Moving forward, the public engagement process should include a monthly update that is prepared for wide distribution through multiple channels.
 - Conceptual Land Use Plan (February – March/April, 2016): It is recommended that the results of the Preliminary Market and Economic Analysis and the information obtained from the Communication Plan be synthesized into a very conceptual land use plan that identifies types of desired uses and adjacencies. It is recommended that this plan identify City commitments and timeframes for infrastructure investment, rezoning and other redevelopment support that it is prepared to provide.

- d. **Implementation Plan (May – July, 2016):** The City will be in a strong position to successfully issue a Request for Qualifications (RFQ) by May, 2016 that clearly articulates the types of development desired, the potential phasing of the project, and specific City responsibilities in the redevelopment process. The purpose of this timing is that the ICSC RECon national conference will be held from May 22nd through 26th 2016. While originally a convention for the retail industry, it has become a significant step for the real estate industry for redevelopment purposes. In the past, developers have expressed a lot of interest in working on the Boulevard site. Attending this conference is an important step to take in order to get in front of potential national developers from around the country.

The benefits of moving forward in this process are as follows:

- a. **Ensure Interest from Master Developers.** Potential partners, including a master developer with whom the City would like to sell or partner with in the redevelopment of the site, need to understand that risks have been reduced to a reasonable level. These risks are currently numerous in the eyes of would-be partners and as unknowns are likely to keep qualified developers from engaging. Some of these risks include:
 - a. No guarantee of infrastructure commitment by City
 - b. No guarantee of zoning categories
 - c. No guarantee of ultimate cooperation from important stakeholders
 - d. No guarantee of timeline or schedule incentives

The City should minimize these unknowns to certainties in order to attract meaningful development partners.

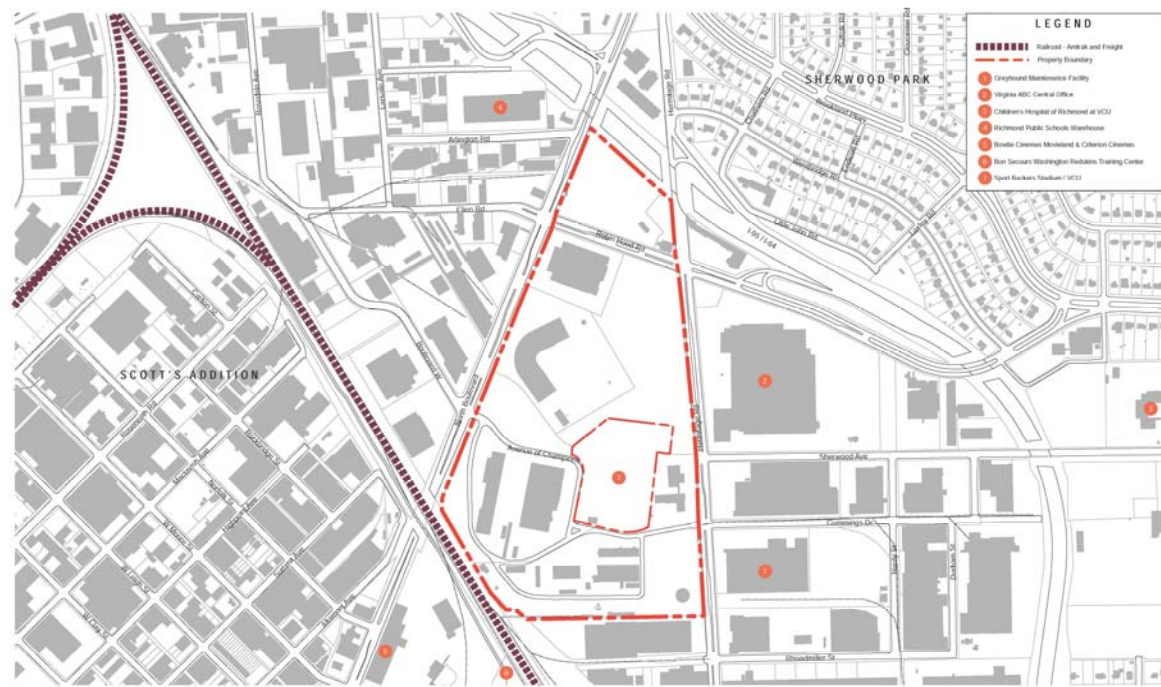
The City issued a similar RFQ in 2008, which received limited interest. The City needs to take these steps outlined above in order to convince the development community that it is committed to this process.

- b. **Direct the Development Community on Desired Outcomes and Expectations.** The more specific the City can be on the types of land uses that it desires the more attention and better qualified developers it will attract. This will give the City more, and better, options for redevelopment partners.
- c. **Provide Criteria for the Evaluation of RFQ Responses.** By following the steps outlined above, the City can identify and communicate how it will evaluate the RFQ responses once received. This will also provide the framework on how to make recommendations to City Council on how to proceed with a potential developer(s) for the site. The City issued a similar RFQ in 2008.
- d. **Opportunity for public engagement does not end with the RFQ process.** As with other projects in the City of Richmond, community engagement will continue throughout the process to ensure input is received and taken into account while development occurs.

Vision Statement

Across the globe, cities are investing in new developments and infrastructure to support the rising demand for urban living. These communities are exploring ways to target investments in core urban areas and their surrounding inner ring suburbs with the intent of creating walkable neighborhoods. Within the city, neighborhoods are the foundation of cultural and social identity. This delicate balance preserves a rich foundation for friends, family, and neighbors that make-up each distinct community. The City of Richmond, Virginia is no exception. Situated along the fall line of the James River, Richmond is the capital city that reflects the rich history and identity of one of our nation's most compelling narratives.

Defined by boundaries of the Boulevard, Hermitage Road, and Robin Hood Road, a 60-acre site sits with limited economic impact in the heart of Richmond. This location is surrounded by the prominent neighborhoods of The Fan, Northside, Ginter Park, Scott's Addition, and Downtown – and has strong access to I95/I64. There is a new beginning – a second act or sorts – on the horizon for the City, which is poised at a critical moment in terms of its economic development. There is the potential to use its deep roots in industry, academia, and technology to move into emerging niches within these areas and potentially many more. The city's future development will depend in part on its ability to remain competitive and attractive within a growing city and region.



The Boulevard site is one of few underdeveloped, publicly owned urban tracts of land in the United States and therefore provides tremendous future opportunity to the citizens of Richmond. Over the last 30 years, cities such as Richmond have been in transition as they make the leap from industrial sites to areas of cultural enhancement and technological innovation. With a push toward global-centric views

of rising communities, the City of Richmond can and must make the effort to revitalize these 60 acres to their highest and best use. Capturing the full potential of this site is vital for the city's future. More importantly, gaining the public's attention through a sophisticated transformative development will help to position Richmond not only as Virginia's capital city, but also as an economically and socially important city within the region, state and nation.

A transformative mixed-use development outlined in this document will support ongoing economic and social development efforts vital to the city's progress beyond the site. To be successful in these regards, the City must have a development partner which understands the magnitude and value the Boulevard site brings to the larger competitive position for the city and subsequently work together toward getting the development, timing, targets, mix, and potential, accurate.

Purposeful and innovative planning is the central vision for the Boulevard site to achieve its highest and best use. Current urban trends call for sustainable development that is inclusive for all to enjoy. This site is primed to be the epitome of Richmond for generations to come. As we plant the seeds for growth in the City, the Boulevard has potential to include development space for living, retail, urban flex, and walkable greenways that will join work life, living, and leisure all in one vibrant neighborhood community.

Richmond is on the cusp of development to begin a new wave of urban spectacle in the City. The Boulevard will be viewed as an impressive display of public renewal that involves the effort of the market, social relations, and the flow of emerging capital. Market analysis shows Richmond is in a position to capture regional growth in paving a path toward the City being the next premier destination on the I-95 and I-64 corridors.

Research Methodology

Tripp Umbach completed three approaches of research to aid in the analysis of this report. The methodology used included:

1. A series of 15 stakeholder interviews
2. Preliminary market analysis of the City of Richmond and the surrounding area
3. Economic Impact

Stakeholder Interviews

Timmons Group and Tripp Umbach conducted a series of 15 stakeholder interviews in Richmond, Virginia. Interviews were conducted over three days in October 2015, and included members from the community, city government officials, developers, and potential site hosts. Interviews were held using group lead discussions in an open-format. Stakeholders were encouraged to provide candid feedback about possible various land uses in the City.

Preliminary Market Analysis

A preliminary market analysis was developed as a screen of current market trends to provide a picture of how the local market is performing. This analysis is based on data provided by CoStar real estate advisory reports and additional secondary real estate advisory reports.

CoStar is universally accepted and used by commercial real estate brokers when reporting and analyzing key real estate market trends. This includes absorption, vacancy, and rental rates for retail and commercial real estate, which served as the basis for the conservative projected first phase development square footage.

For the report, third quarter 2015 data reported by CoStar was examined for trends in absorption, vacancy, rental rates, and commercial office leasing to gauge how the Richmond market is currently performing. This data was analyzed by submarket trade area to further relate the trends to the City of Richmond and the Boulevard site area. A review of additional secondary real estate reports and studies were reviewed to further gauge the activity for 3rd quarter trends as reported by CoStar.

On the residential side, two major studies were conducted that shed light on the housing demand trends, the George Mason Study on housing demand for the region and the Volk Zimmerman study on downtown housing. Together the two studies provided a glimpse into the demand for housing in the Richmond area and to examine the current activity against.

In addition, the central residential trade area was examined, which includes the area where the Boulevard development site is located. This area has absorbed more than 2,200 residential units between 2012 and 2014. According to additional secondary real estate reports by Capstone Apartment Partners and Integra Realty Resources, the demand has not reached a saturation point with more than 2,400 additional units in the development pipeline in the central residential submarket area. Given the time from conception to completion for residential development, as indicated in the GMU study, and as further discussed in the Volk Zimmerman downtown study, the trend supporting more than 500 units per year in new residential development appears to be absorbable in the central residential submarket area. Moreover, this is being supported by solid stable vacancy rates, growing rents, and a healthy top 20 region for return on rentals as reported by Realty Trac/HUD.

Economic Impact Analysis

The economic impact of the Boulevard site was estimated using IMPLAN (Impact Analysis for PLANing), an econometric modeling system developed by applied economists at the University of Minnesota and the U.S. Forest Service. The IMPLAN modeling system has been in use since 1979 and is currently used by over 500 private consulting firms, university research centers and government agencies. The IMPLAN modeling system combines the U.S. Bureau of Economic Analysis' Input-Output Benchmarks with other data to construct quantitative models of trade flow relationships between businesses and between businesses and final consumers. From this data, one can examine the effects of a change in one or several economic activities to predict its effect on a specific state, regional or local economy (impact analysis). The IMPLAN input-output accounts capture all monetary market transactions for consumption in a given time period. The IMPLAN input-output accounts are based on industry survey data collected periodically by the U.S. Bureau of Economic Analysis and follow a balanced account format recommended by the United Nations.

IMPLAN's Regional Economic Accounts and the Social Accounting Matrices were used to construct state-level multipliers, which describe the response of the state economy to a change in demand or production as a result of the activities and expenditures of the Boulevard site. Each industry that produces goods or services generates demand for other goods and services; and this demand is multiplied through a particular economy until it dissipates through "leakage" to economies outside the specified area. IMPLAN models discern and calculate leakage from local, regional and state economic areas based on workforce configuration, the inputs required by specific types of businesses, and the availability of both inputs in the economic area. Consequently, economic impacts that accrue to other regions or states as a consequence of a change in demand are not counted as impacts within the economic area.

The model accounts for substitution and displacement effects by deflating industry-specific multipliers to levels well below those recommended by the U.S. Bureau of Economic Analysis. In addition, multipliers are applied only to personal disposable income to obtain a more realistic estimate of the multiplier effects from increased demand. Importantly, IMPLAN's Regional Economic Accounts exclude imports to an economic area, so the calculation of economic impacts identifies only those impacts specific to the economic impact area, in this case Richmond, VA. IMPLAN calculates this distinction by applying Regional Purchase Coefficients (RPC) to predict regional purchases based on an economic area's particular characteristics. The RPC represents the proportion of goods and services that will be purchased regionally under normal circumstances, based on the area's economic characteristics described in terms of actual trade flows within the area.

Stakeholder Interviews

Timmons Group and Tripp Umbach conducted a series of 15 stakeholder interviews in Richmond, Virginia. Interviews were conducted over three days in October 2015, and included members from the community, city government officials, developers, and potential site hosts. Interviews were held using group lead discussions in an open-format. Stakeholders were encouraged to provide candid feedback about possible various land uses in the City.

For this portion of research, Tripp Umbach and Timmons Group interviewed a number of stakeholders from varying backgrounds. These people were selected based on their affiliation with the City and the surrounding region. Interviews were conducted with people from the following categories:

- City of Richmond departments – total of five departments
- Development industry
- Hospitality and Leisure industry
- Housing industry
- Medical industry
- Retail industry

Community leaders see the development of the Boulevard site as transformational for the City of Richmond. As a development that will spur economic growth in and around the City, those interviewed expressed a number of key findings that have been taken into account for this report:

Key Findings:

- The Boulevard development site should be inclusive to all residents living within the City, and it needs to preserve the fabric of identity that is in the neighborhood
- The site needs to have infrastructure and zoning requirements already in place in order to attract the best developers and to ensure that the development process moves quickly.
- Development should be structured in phasing and/or plots on the site
- The Boulevard site has major potential to serve as a driving factor for growth in the region
- Development needs to be mindful of walkability and availability of public, green space
- There is a need for mixed-use development, with affordable pricing
- There is currently unmet retail demand in close proximity to the site
- Structured and/or shared parking should be used to accommodate high density uses
- Uses should be mixed for a phase development approach

Site Analysis

The 60-acre site, known as the Boulevard, is a tremendous development opportunity in the City of Richmond. The narrative below is broken into summary points related to transportation/connectivity, site view points, neighborhood character and content, surface conditions, and topography, which produce a comprehensive perspective of the site and its potential.

The associated maps that follow the site analysis provide vantage points related to its general context, the site in relation to the region, travel distance, site in the context of similar developments and the current land use zoning. Please see the appropriate maps below.

Transportation/Connectivity

- The site is bounded on the northern edge of I-95/64 corridor, which provides connectivity to Charlottesville, Charlotte and Atlanta to the south, Hampton Roads to the east, Washington D.C., and the North East corridor to the north.
- Active freight and Amtrak rail, bounds the site on the southwest, and is central to Richmond Main Street Station (RVM).
- The Richmond Greyhound Bus Station is currently located across from the site on North Boulevard (denoted on the Site Analysis map by point 4).
- North Boulevard is a main connector to the interstate and nearby neighborhoods of the Museum District, the Fan, and Carytown, terminating at Byrd Park to the south. Hermitage Road provides connectivity to neighborhoods like Bellevue, Ginter Park, Lakeside, and Rosedale to the north.
- The site is within walking distance of the Bon Secours Washington Redskins Training Center, Movieland, the Children's Museum of Richmond, The Science Museum of Virginia, and many restaurants and breweries. Pedestrian access including sidewalks, crosswalks, and pedestrian signals at major intersections are already in place along all major roads surrounding the site.
- Public transportation via the GRTC bus route along North Boulevard provides connectivity to the surrounding city fabric, while I-95/64 serves the GRTC Express Routes to the greater Richmond area and surrounding counties with hubs all over the city.
- Bicycle routes exist along Hermitage Road and North Boulevard, with excellent connectivity throughout the city bike network. Sharrows and dedicated bike lanes are painted on these roads for awareness and safety.
- Bus Rapid Transit is under development along Broad Street and is slated to open in 2017.
- Additional transportation (light speed rail, trails, etc.) can be utilized near the site; however, the need for space for parking and other amenities to include it will come at an additional expense.

Viewpoints

- A vegetated buffer of trees along the I-95/64 corridor interrupts views of the interstate to and from the site except for two locations, denoted on the Site Analysis map as points 1 & 2. The primary viewpoint (1) from the Interstate occurs at the overpass of North Boulevard, with views to the site from the north and southbound routes. The secondary viewpoint (2) is located at the overpass of Hermitage Road and provides a narrow view into the site from the northbound lanes, with minimal visibility from the southbound lanes. The interstate can also be seen from

- within the site. Visibility to and from the site may increase in winter when trees are defoliated.
- Another significant view into the site occurs at the North Boulevard railroad overpass, which provides an unimpeded and elevated view from the northbound lanes.

Neighborhood Character & Context

- To the south and east, the site borders an industrial area characterized by large warehouses, equipment storage yards, and surface parking with a high percentage of impervious surface and minimal landscaping and vegetative buffers.
- To the west, the site is in walking distance of Scott's Addition, which maintains a post-industrial character but includes warehouses and industrial buildings that have been converted into apartment offices, restaurants, breweries, and distilleries.
- The I-95/64 corridor visually and physically separates the site from neighboring residential areas of Sherwood Park to the north and Virginia Union to the east.
- The dominant character of the existing neighborhood includes 1 story industrial buildings and warehouses surrounded by surface parking and 1-2 story storefront commercial buildings with brick facades.

Site Surface Conditions

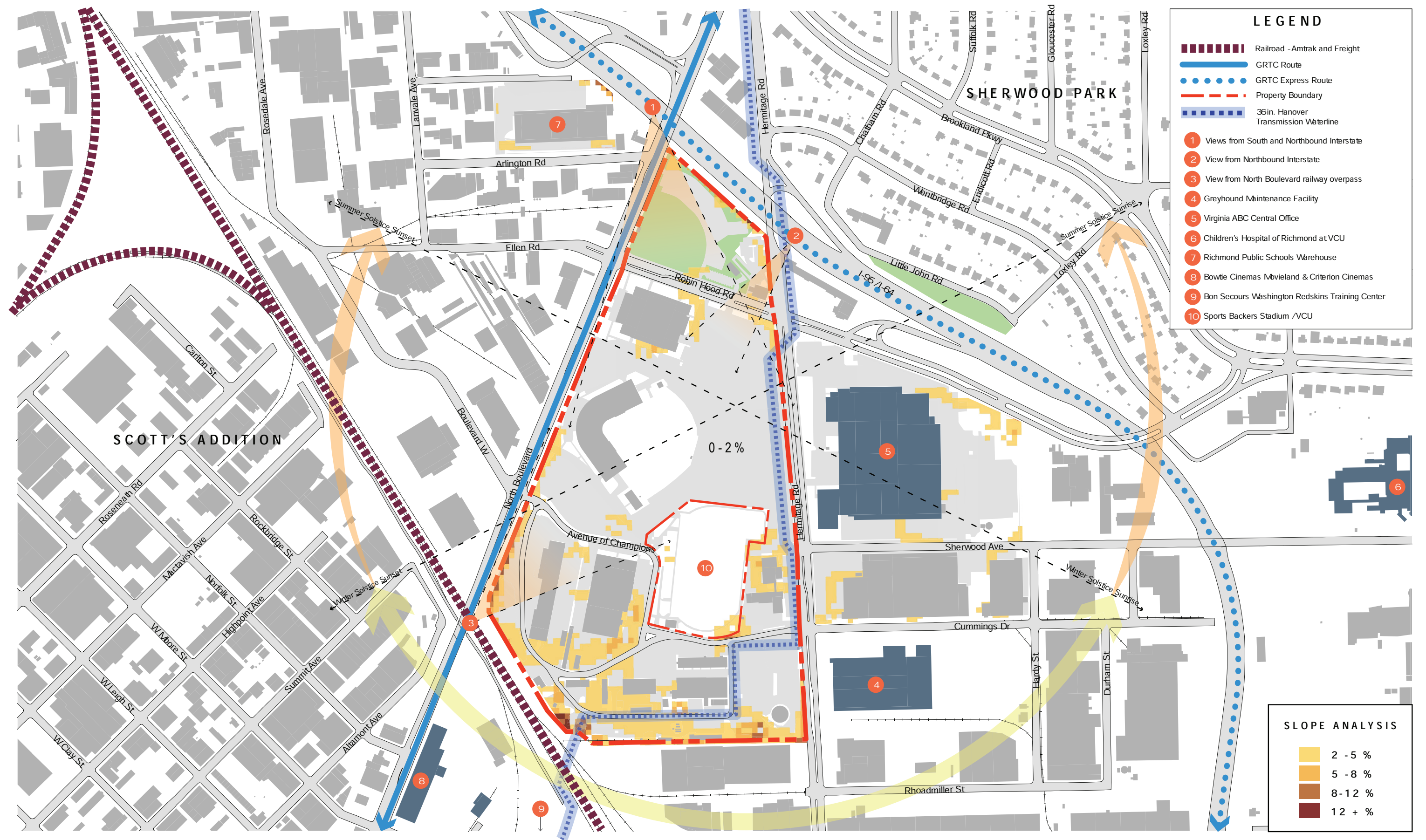
- Approximately 80% of the site is dedicated to impervious surface in the form of parking lots, roads, building footprints, and concrete pedestrian surfaces.
- The remaining pervious surface includes recreational turf fields, and lawn areas around Arthur Ashe Junior Athletic Center. Street trees are planted along portions of Robin Hood Rd. to the north, North Boulevard to the west, Hermitage Rd. to the east, and a buffer of trees and scrubby vegetation approximately 45 ft. wide separating the southern edge of the site from the railroad tracks.

Topography

- The majority of the site topography is a relatively constant 0-2% slope, with the highest point at the northeastern corner of the site and most of the site draining to the southwest.
- The slope increases toward the periphery of the site but remains relatively flat, with slopes from 2-5% throughout the industrial lots and equipment yards.
- Slopes of 8-12% and above occur on the southern and southeastern edge of the site, and may be accounted for by the adjacency to the railroad easement, the North Boulevard rail overpass, and materials stockpiles in the industrial areas.
- All slopes are suitable for development.

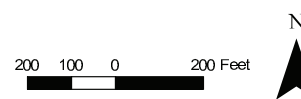
Infrastructure

- Timmons Group has completed a preliminary infrastructure analysis for the site that considers the existing conditions of roads, intersections, and water, sewer, gas and streetlight utilities. Copies of these complete preliminary analyses are provided in Appendix C.
- Maintenance and safety inspection costs to maintain the Diamond in its current state exceed \$300,000 annually. For the aged Diamond, City of Richmond Department of Public Works spends \$120,000 – \$200,000 annually to maintain the facility. Furthermore, there is approximately a \$425,000 cost every two years to provide safety, engineering, and other structural inspections to keep the Diamond in usable conditions.

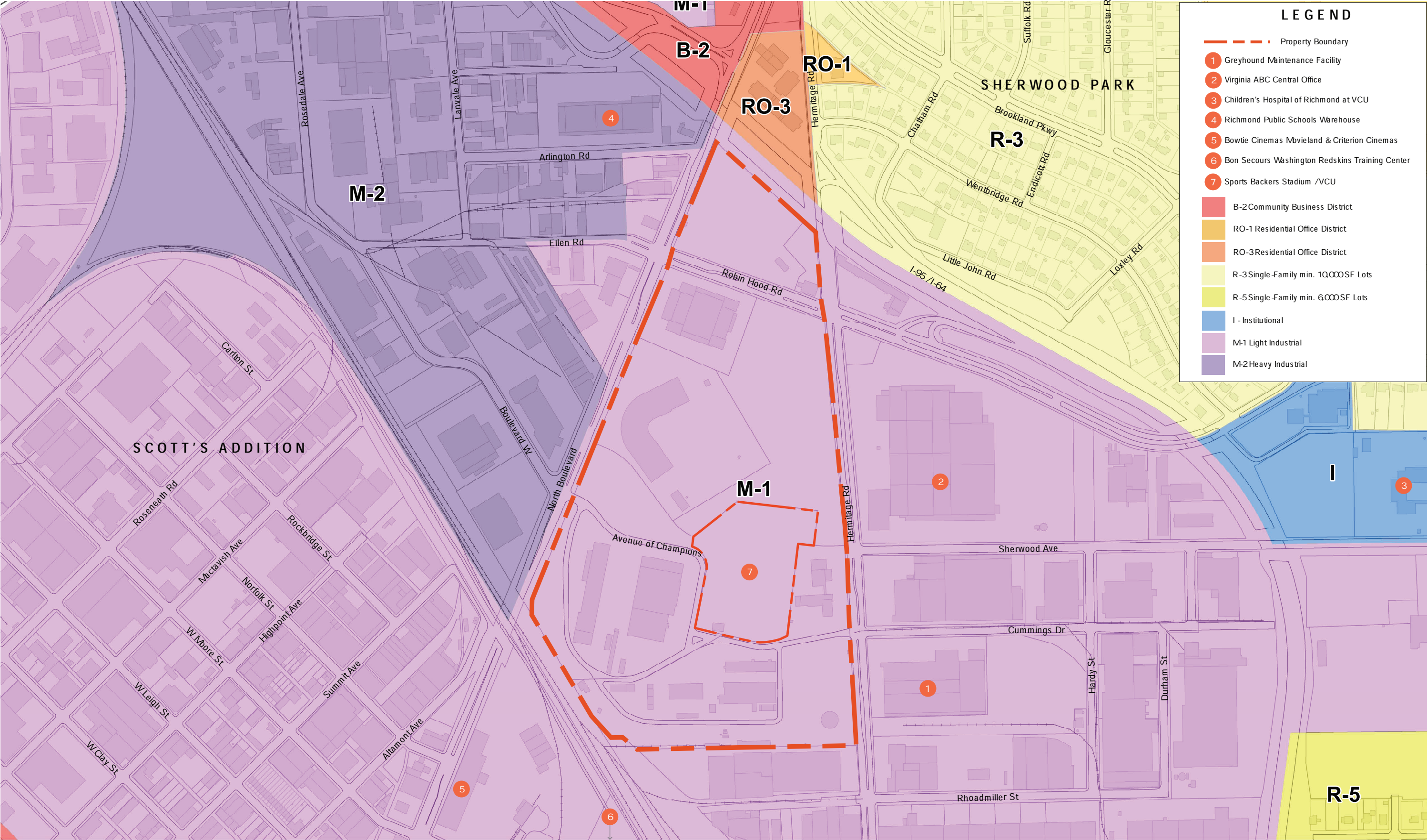


BOULEVARD LAND PLANNING

SITE ANALYSIS



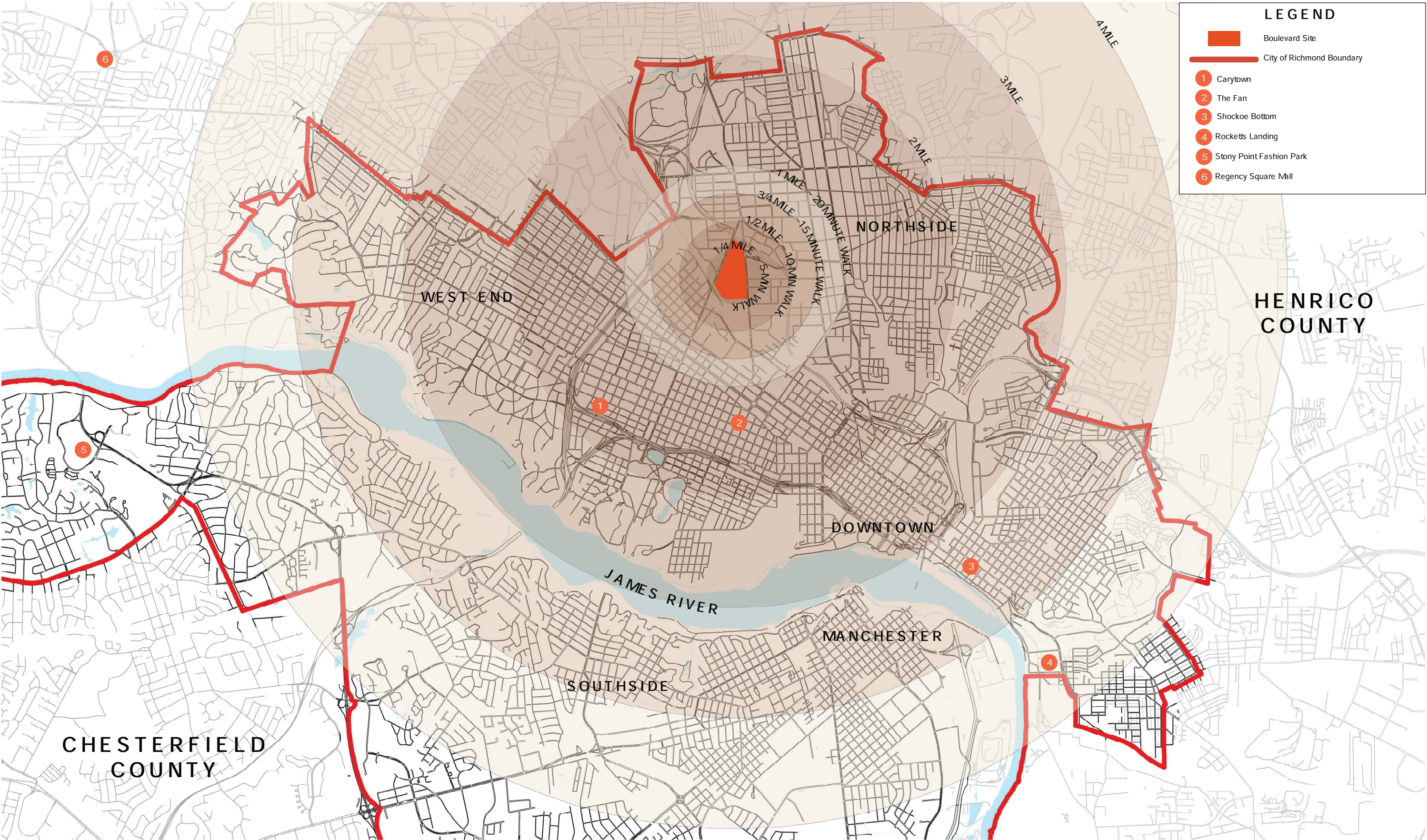
WWW.TIMMONS.COM



BOULEVARD LAND PLANNING

NEIGHBORHOOD ZONING





BOULEVARD LAND PLANNING

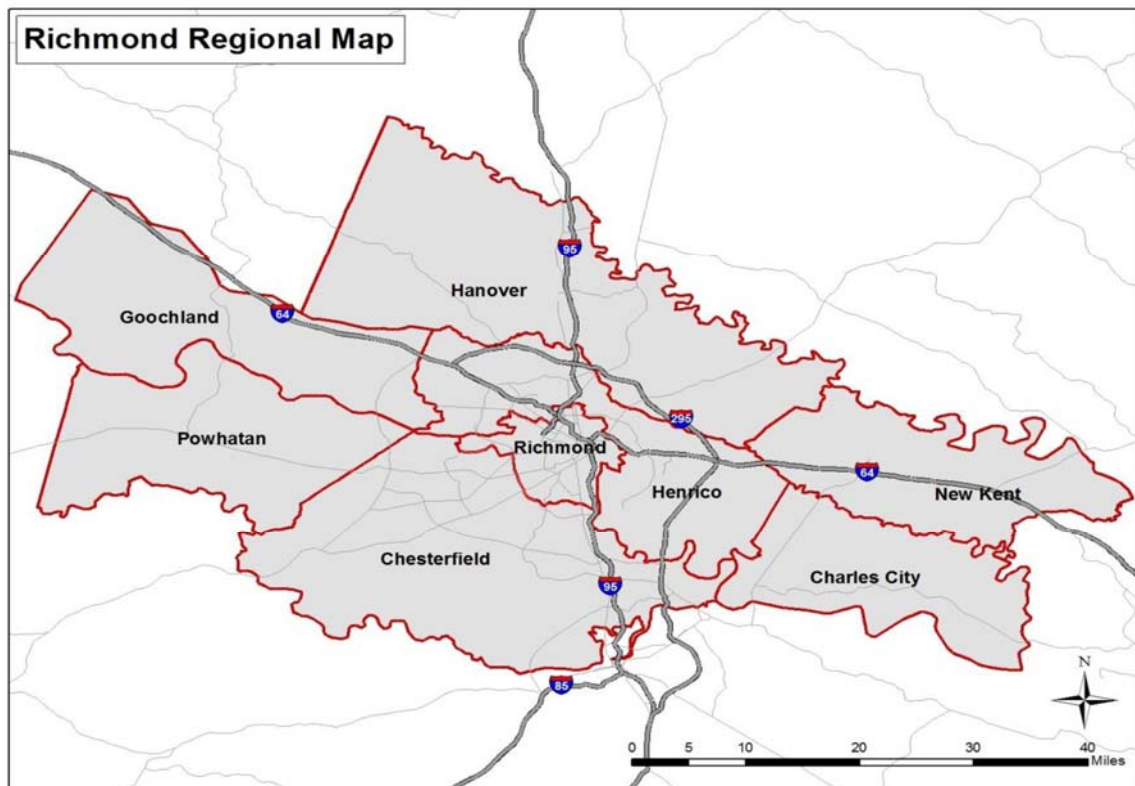
TRAVEL DISTANCES



Primary Market Areas

The City of Richmond's population is rising for the first time in a generation. The 2010 U.S. Census listed the City having 204,214. In 2014, it was to have a population of 217,853. The Richmond Metropolitan Statistical Area (MSA) and the Greater Richmond Region has a population of 1,260,029, the third-most populous metro in the state and includes Henrico and Chesterfield counties.

The city is located at the intersection of Interstate 95 and Interstate 64. It is encircled by Interstates 295 and 895 and Virginia State Route 288. Major suburbs include Midlothian to the southwest, Glen Allen to the north and west, Short Pump to the west and Mechanicsville to the northeast.



Source: Richmond Regional Planning District

The geographic areas for this review comprise of several trade areas of analysis to get a relatively clear picture as it relates to general real estate trends for residential, retail and office taking place in the Richmond area that are critical in supporting a transformative development on the Boulevard site.

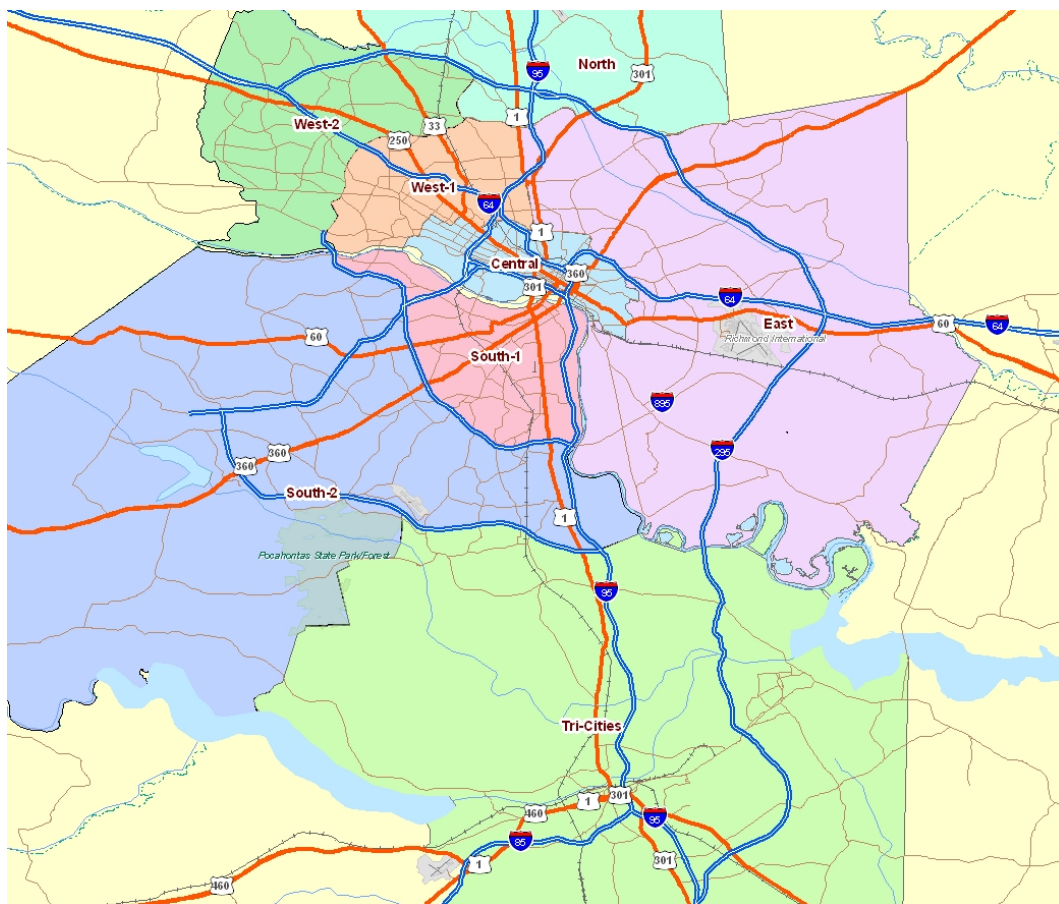
Basis for real estate review; CoStar submarkets

In the real estate world, residential and retail properties often have two market areas; one from which the majority of potential tenants or buyers will be drawn, and another in which key competitors are located. The retail trade areas for this report are those areas as defined by CoStar as described in the map below.

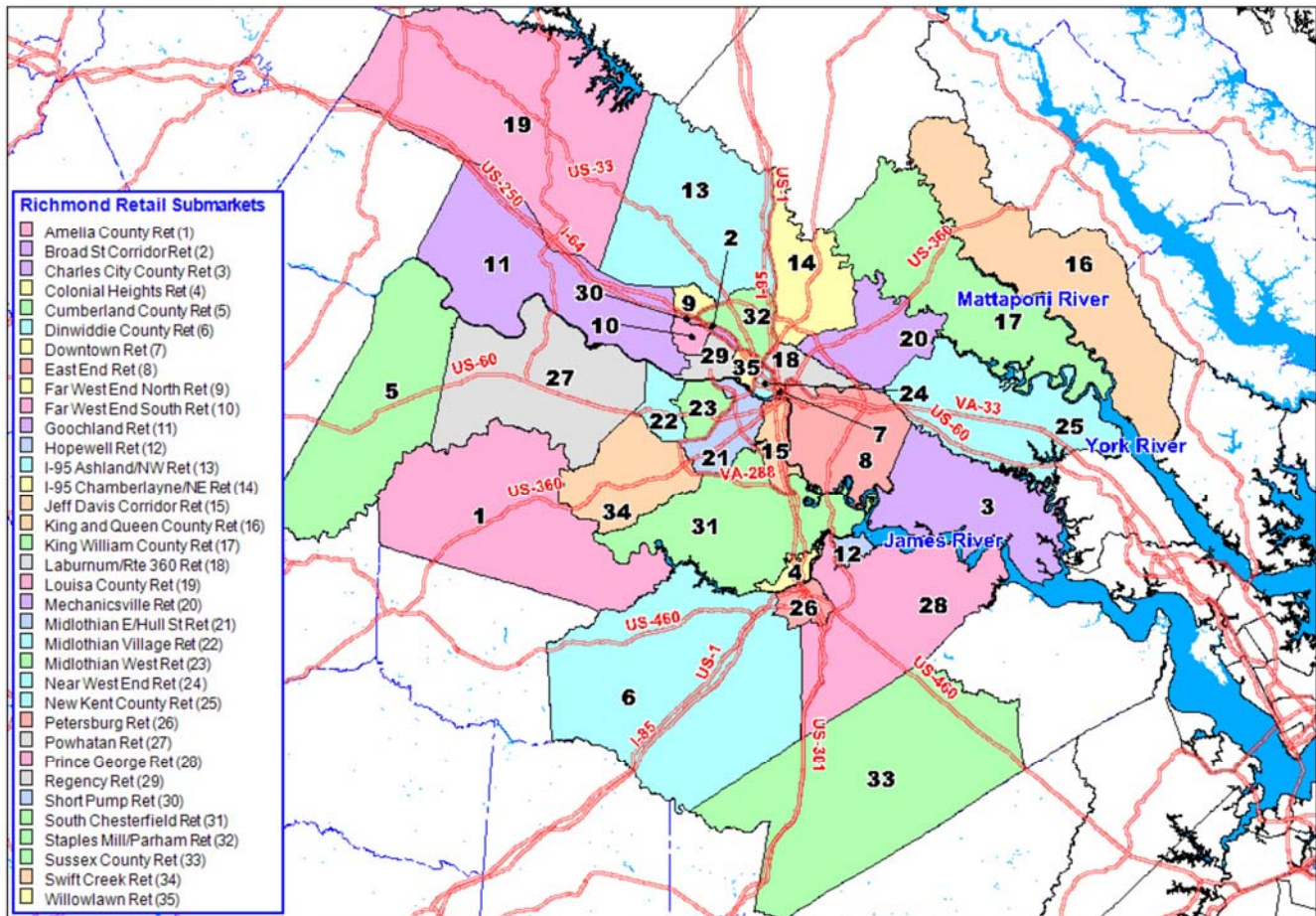
As the leader in commercial real estate analysis, CoStar has developed geographic designations to help group properties, called markets, submarket clusters and submarkets. Markets are the equivalent to metropolitan areas, or areas containing a large population nucleus, that together with adjacent communities has high degree of economic and social integration.

Markets are then divided into submarket clusters, which are core areas within a metropolitan area that are known to be competitive with each other in terms of attraction and keeping tenants. Markets are then further subdivided into smaller units called submarkets, which serve to delineate a core group of buildings that are competitive with each other and constitute a generally accepted competitive set, or peer group. The submarkets were examined to determine the areas that were trending positively in the direction of rents achieved, space absorbed, vacancy levels and new retail space under construction. Submarkets examined include: commercial, residential, and retail.

Map of Residential Trade Areas in Richmond



Map of Retail Trade Areas in Richmond



Richmond Retail Submarket Overview

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Demographic/Economic Overview

The unemployment rate in Richmond, Virginia, is 4.5%, with job growth of 3.73%. Future job growth over the next ten years is predicted to be 41.80%. Richmond is trending in a positive direction as a best performing city according to the Milken Institute 2014 best performing report up three spots from 2013.

The population of the Richmond MSA is nearly 1.3 million. A growing international community adds to the area's cultural diversity and cosmopolitan character.

The Greater Richmond region accounts for 77% of the Richmond MSA's population. The population growth rate is slightly higher than the Richmond MSA's growth rate:

In 2013, the Richmond MSA was the nation's 44th largest metro area:

- Nearly 56% of the total population is in the prime working ages of 25-64, higher than the national average of 53%
- Median household income 2013: \$57,286, above the U.S. average of \$52,520

Figure 4: Population

Area	2010	2014	2019 (p)	2010-2014	2014-2019
Richmond City	204,214	217,853	225,661	6.68%	3.58%
Chesterfield	316,236	332,499	344,568	5.14%	3.63%
Hanover	99,863	101,918	106,568	2.06%	4.56%
Henrico	306,935	321,924	334,195	4.88%	3.81%
Greater Richmond	927,248	974,194	1,010,992	5.06%	3.78%
Richmond MSA	1,208,101	1,260,029	1,312,622	4.30%	4.17%
Virginia	8,001,024	8,326,289	8,690,202	4.07%	4.37%

(p): Esri forecasts for 2019

Notes: Greater Richmond includes the City of Richmond and Chesterfield, Hanover, and Henrico counties. The Richmond MSA includes these localities plus the cities of Petersburg, Colonial Heights, and Hopewell and the counties of Amelia, Caroline, Charles City, Dinwiddie, Goochland, King William, New Kent, Powhatan, Prince George, and Sussex.

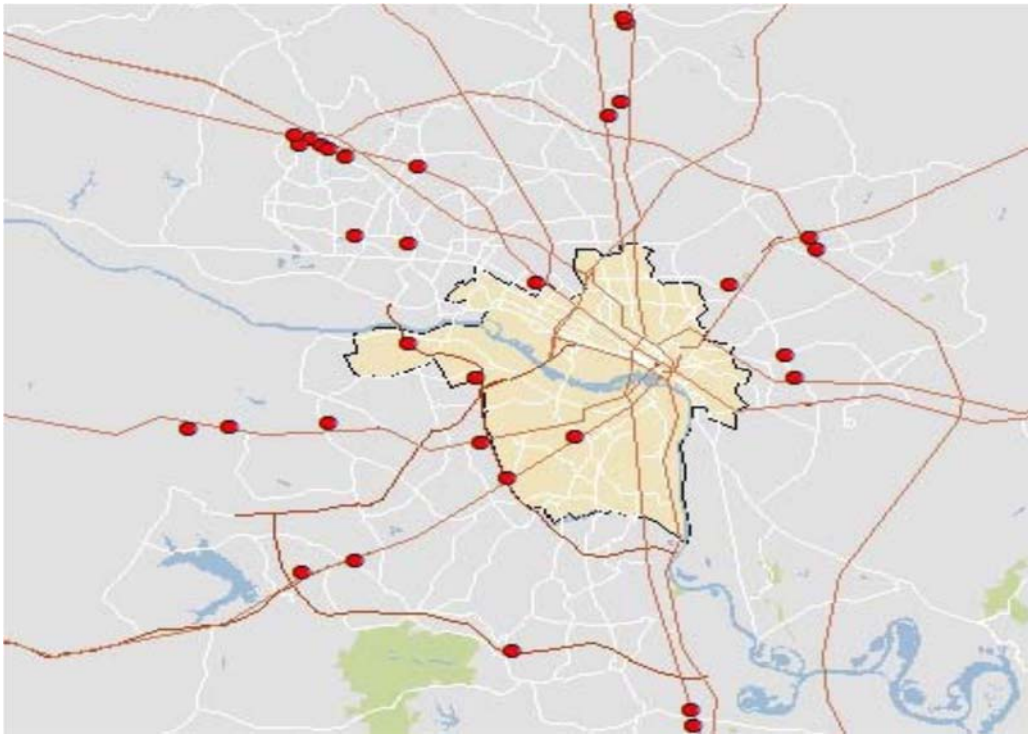
Labor Data

Historically, Greater Richmond has enjoyed low levels of unemployment. In 2010, due to the recession, unemployment rates rose to uncharacteristically high levels, reaching nearly 8 percent. In recent years, the rates have dropped and remain at or below the national average. The current unemployment rate is 4.5%, which is lower than U.S rate of 5.1%, but slightly higher than the Commonwealth of Virginia at 4.1%.

Competitive Market Review

Any competitive review of the market for a proposed development at the Boulevard site has to begin with what options consumers have at their immediate disposal as it relates to retail/commercial, shopping, and housing. As seen in the chart below, the red dots represent retail/commercial shopping areas within 15 miles from the City of Richmond. This relationship has an impact on the consumer decision-making given the lack of shopping opportunities available to residents within the City of Richmond.

Map depicting Richmond retail/commercial relationship



Source: RLCO/ERSI Study

According to the RCLCO/ERSI study of in-town Richmond spending capturing the retail trade area associated with the Boulevard site, the consumer choice is limited by the fact that the City of Richmond has very limited choices for retail/commercial shopping compared to the outlying suburban areas. Figure 5 below summarizes the situation:

Figure 5:

	City of Richmond	Richmond Suburbs (15 Miles)
Number of Centers	4	28
Gross Lease Area (GLA)	1.7 Million sq. feet	12.5 Million sq. feet
Average GLA/retail Center	430,000 sq. feet	450,000 sq. feet (represents the average leasing area of retail space in the suburbs per CoStar analysis)

Source: RLCLO/ERSI

Given the separation between the distance and availability of commercial and retail shopping, the average resident has no choice but to travel to the suburbs for services and spend their disposable income outside the City of Richmond. The context as currently situated creates a market opportunity with limited competition within the City of Richmond and the Boulevard redevelopment site.

Retail/Commercial in proximity to Boulevard development site:

- Stony Point Regional Mall: *City of Richmond* – Class A national tenants, cinema, sports, restaurants, etc.
- Grace/Broad Local Retailers: *City of Richmond* - Mainly fast food and sit down dining options, some service oriented retail, minimal hard goods, student services
- Carytown Local Retailers: *City of Richmond* – Antique shops, local dining, higher end boutiques, jewelry, home furnishings, local services
- Shockoe Bottom Local Retailers: *City of Richmond* – Historic neighborhood with art studios and galleries, boutique shops, restaurants, and night clubs
- Willow Lawn Regional Mall: *Henrico County* – Anchored by Gold’s Gym, Old Navy, Ross, Staples
- Libbie Grove Local Retailers: *Henrico County* – Antique shops, service oriented retail, jewelry, specialty food, health wellness and beauty
- Lowes and Target on Forest Hill – *City of Richmond and Chesterfield County*

Please note, that all planning and implementation should be planned so as to not cannibalize existing City retail and commercial entities.

From a housing perspective, the completion and demand for new multifamily and affordable units are heating up in the central residential submarket of Richmond where the Boulevard site is situated.

The central residential submarket area as defined by CoStar encompasses the neighborhood areas of The Fan, Scott’s Addition, Shockoe Bottom, Shockoe Slip, VCU medical Campus, Northside, Scott’s Addition, the Fan District, Court End, the Riverfront, City Center, the Financial District, Jackson Ward, Monroe Ward, Carver, VCU, Oregon Hill, south of the James River, and Old Manchester. Note: the bulk of the residential development underway in Richmond is taking place in these areas. The research is indicating that while the pace has increased in terms of unit production, the trade area has not yet hit saturation and opportunity is still trending in a positive direction.

From a competitive advantage, most of the current multifamily units being developed are not place making developments. They are apartments with limited retail and very little green, open space. A Boulevard site development that is planned as a unique place making project with distinctive retail, open space, and quality multi-family units may be able to capture a significant portion of the continuing residential growth in the central submarket area of Richmond.

Market Demand Review

Richmond Housing Market, the Larger View

According to GMU Center for Regional Analysis, it is anticipated that the Richmond region will add more than 134,000 jobs over the next 20 years. As a result, this projection is estimating that more than 94,000 housing units will need to be constructed between the years 2012-2032.

This estimated demand would equate to 4,700 new housing units being built per year in the region. When changing demographics in the region are taken into consideration, as well as the need for a range of housing that matches the different wage occupations, the forecasted demand by the GMU Center for Regional Analysis suggests 66,000 single family homes and 23,000 townhome/multifamily units will need to be constructed.

This projected demand also is estimating that housing affordability is an issue with a significant portion (29%) of the region's homeowners experience a cost burden related to spending more than 30% of income on housing costs when compared to actual wages earned. More specifically, it is anticipated that future homeowners (52%) will need homes in the \$175,000 range while two-thirds of future renters will need rent in the range of \$875 a month.

When looking at the region and analyzing where the majority of job growth and housing demand/need is emerging, Henrico County is projected to capture the bulk of the job growth and command 45.6% of the projected housing units.

The jobs-driven housing demand forecasts indicate a need for 33,099 rental units in the Richmond region to accommodate new workers over the next 20 years.

About 12 percent of those units need to have rents below \$625 per month, 54.6 percent—of forecasted rental units need to have rents between \$625 and \$874 and about 27 percent of the forecasted units are projected to need to have rents between \$875 and \$1,124.

Only 6.3 percent of the rental units forecasted for the Richmond region has rents at \$1,125 or higher and only 4.4% between \$1,125 and \$1,399 and just 1.9% at \$1,400 or above.

There is a need for 66,412 homeownership units in the Richmond region to accommodate job growth over the next 20 years. Projections are based on current income from Richmond MSA, and do not include inflation.

As with rental housing, the majority of the need is in the moderate price ranges with 36 percent needing prices between \$87,500 and \$174,999 while 31.2 percent are projected for between \$175,000 and \$259,999. The demand for owner-occupied units includes 17.7 percent in the \$260,000 - \$349,999 price range and 9.3 percent at prices of \$350,000 and above.

The City of Richmond Demand

When reviewing the City of Richmond need specifically during the 20-year period of 2012-2032, the demand is estimated for a need for 7,551 new housing units or 8% of the regions' new units over the years 2012-2032. To accommodate this demand, Richmond would need to build 378 units a year for a 20-year period. The estimated 7,551 equates to needing 4,172 single-family homes and 3,379 units multifamily units in Richmond over the 20-year period. Figure 6 denotes the projected units.

Figure 6:

Household Income	Single-Family		Multi-Family		Total
	Owner	Renter	Owner	Renter	
Less than 25k	22	0	1	56	79
\$25-49K	1,079	518	75	1,819	3,491
\$50-74k	1,264	439	194	1,017	2,914
\$75-99K	471	67	0	184	722
\$100k-Plus	203	110	0	33	346
Total	3,038	1,134	270	3,109	7,551

Source: Housing the Richmond Region's Future Workforce: GMU March 2013

The largest need exists for two bedroom apartments with rents between \$625 and \$1,124 dollars per month and home for purchase in the \$87,500 to \$260,000 range.

The Downtown/Urban Factor

Approximately 83 percent of America's population resides either in a metropolitan area or its surrounding suburbs, according to US census and labor statistics.

Strong demographic and economic trends are contributing to a "new urbanism" that is changing how Americans want to live and work — both in our cities and their surrounding inner ring suburbs. A combination of lifestyle and economic factors, as well as heightened environmental consciousness, are all contributing to this New Urbanism direction.

As a response, many real estate investment companies are responding by targeting investments to core urban areas and their surrounding inner ring suburbs. The driving point is a desire for easy access to a range of housing, retail, cultural and employment options reminiscent of the small towns of the past.

Emerging Economic Trends

Baby Boomers: Baby Boomers are the 79 million Americans who were born between 1946 and 1964. As their children leave the nest, single-family home ownership sometimes becomes less attractive. As they prepare for retirement, it can make good financial sense for Baby Boomers to downsize from the larger homes they preferred when raising a family. Housing that can allow them to downsize while gaining access to amenities in close proximity is critical to serving this population.

Generation X and Echo Boomers: The Echo Boomers, those born between 1980 and 1994, are an especially important demographic group because, with a population of 73.7 million in 2007, they are nearly as numerous as the Baby Boomers.

Combined with Generation X, those born between 1965 and 1980, these generations of young Americans are expected to provide a historically strong driver for near-term growth in the demand for multifamily housing.

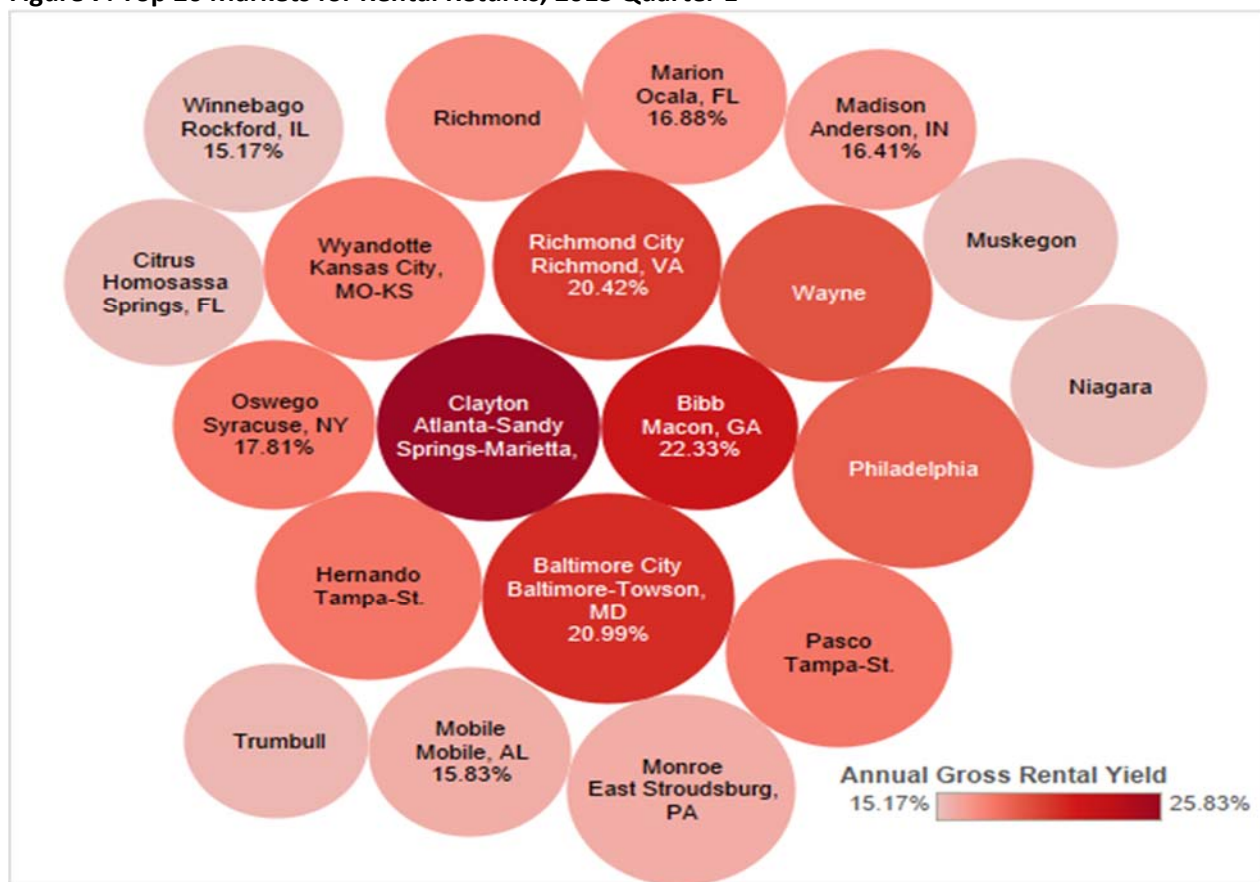
Echo Boomers are more than 30 percent more likely to live within 3 miles of a city center than those of prior generations, according to The Concord Group, a boutique real estate consulting firm based in Newport Beach, California. “They prefer... character, distinctive architecture, and style,” The Concord Group says. “Think urban density, infill, transit-oriented development and the kind of adaptive reuse of existing properties that typically comes with today’s downtown redevelopment efforts.”

The convergence of these generations—simultaneously reaching a point when urban housing matches their life stage—is unprecedented. There are about 41 million Americans between the ages of 20 and 29, forecast to grow to over 44 million by 2015. In that same year, the population aged 50 to 59 will have also reached 44 million, from 38 million today. The synchronization of these two demographic waves will mean that there will be an additional eight million potential urban housing consumers nine years from now. – *Zimmerman/Volk Associates, 2006*

Millennials: Richmond, VA is becoming a hub for Millennials and millennial entrepreneurs, which in part is helping to drive the rental returns depicted in Figure 7 (below). The figure shows Richmond within the top 20 markets for rental rate returns. Also in January 2014, CNN Money named Richmond as one of the country’s 10 hottest housing markets.

The urban focus on residential housing in Richmond has been gaining steam and is communicated effectively in the Volk Zimmerman study of Downtown Richmond which included the urban neighborhoods of Shockoe Bottom, Shockoe Slip, the VCU Medical Campus, Court End, the Riverfront, City Center, the Financial District, Jackson Ward, Monroe Ward, Carver, VCU, Oregon Hill, south of the James River, and Old Manchester concluded that these areas would have a demand of over 6,000 units (608 per year) for a 10 year period with 30% or 1,824 units (182 per year) at 80% of AMI to support affordability.

Figure 7: Top 20 Markets for Rental Returns, 2015 Quarter 1



Residential Demand Estimation

Estimating demand is not an exact science. Many variables, shifts, and market adjustments can affect estimation in relatively quick periods of time. For this study the Richmond demand was compiled by reviewing and combining the results of two studies completed by George Mason University (GMU 2013) and Volk Zimmerman and Associates (VZ 2009).

The GMU study estimates demand based on job growth projections for the region while the Volk Zimmerman study focuses on the urban downtown context of Richmond. Together these two analyses provide the most recent trend analysis of residential demand for the City of Richmond and serves to speak directly to the need in the City versus the larger demand based on a regional perspective.

Using these two reports, the demand trend for Richmond is estimated in the 14,000 new units range or the potential of 1,400 new units per year of which 4,200 (420 year) are projected to meet affordable needs at 80% AMI, or area median income. It is important to keep in mind that the City must include some portion of low-income housing on this development. One solution is to introduce an inclusionary zoning component of up to 10 percent, which would be consistent with anti-poverty efforts in the City.

GMU stated potential demand is calculated as: $378 \text{ units} \times 20 \text{ years} = 7751 + 608 \text{ units} \times 10 \text{ years} = 6098 = 13,640 \text{ units}$ rounded up to 14,000 – or 588 per year for a 20 year period. The 14,000 is further reduced by the 2,250 units that were completed in downtown Richmond from 2012-2014 bringing the adjusted estimated demand trend to an 11,750 units or 589 units per year.

Current Overview of Apartment Market Performance

At the end of the second quarter of 2015, the Richmond region apartment trends, according to MF Research, is experiencing an effective rent of \$900 dollars, occupancy at 95%, vacancy at 5%, annual job change at a positive 2,800, 1,333 annual permits being requested, a housing demand of 2,160 units with 1,401 delivered leaving a demand/need for an additional 759 units.

On the pricing side, rents rose 2.3% in the second quarter of 2015, resulting in a 2.4% growth.⁴ Heitman Research during the VCU annual U.S. Real Estate Trends Conference reported that apartment rents in Richmond are growing by 2.70%, which is above the national inflation rate.

Of further interest, Capstone Apartment Partners are reporting that developers remain focused on building apartments units in the central submarket of Richmond many of which they suggest are adaptive reuse projects from older, historic building and general development supported by resurgence in interest in the urban core by both the retiring baby boom generation and the emerging gen xer's and millennials. This trend they attribute to the City of Richmond support via historic tax credits that have supported investment and resulting in an increase of 2.2% in rent resulting in an average rent of \$933 per month.

Integra Realty in a report to the Richmond Dispatch further explains that, "a total of 2,250 apartments were completed in downtown Richmond from the second half of 2012 through the second half of 2014." An additional 2,400 units are in the pipeline, with about half on the drawing board and the rest under construction.

The data are for the area encompassing the central business district, Shockoe Slip, Shockoe Bottom, Tobacco Row and Scott's Addition, but does not include Manchester. Moreover, Integra further states that "the market statistics suggest that the downtown apartment market is reaching maturation, not necessarily saturation, with the average monthly rental rate of \$1,300 in the urban core is stable and leads the Richmond-area market".⁵

⁴ Source: MPF Research, www.mpfresearch.com, 2015

⁵ Integra Realty via Richmond Dispatch, February 2015+

Richmond Commercial Office Market Overview

The following was reported during the third-quarter by CoStar in 2015:

- Total commercial office market for the Richmond area totals more than 3,100 buildings
- 61 million square feet of rental space area
- 6 million square feet for lease by building owners
- Vacancy rate of 9.6%
- Space absorption of 505,000 square feet of space
- 318, 000 square feet of space under construction
- Average rent of \$17.49 per square foot

The top three office markets by space:

- Northwest suburban area of Richmond
 - Over 26 million square feet of space
 - Rental price per square foot: \$17.43
- Downtown office market
 - Slightly above 17 million square feet of space
 - Rental price per square foot: \$20.06
- Southwest suburban office market
 - 12 million square feet of space
 - Rental price per square foot: \$15.82

By class, office market space is defined in different ways. Class A is defined as an extremely desirable investment grade property that can command the highest rents and sale prices. Class B is defined as a more desirable speculative investment which commands lower rents and sales price. For the City of Richmond, we find new class A developments under construction of 181,000 square feet of space in the Northwest corner of the City.

However, when reviewing class B office construction in the quarter, we find that 63,000 square feet of space at \$16.81 per square feet is under construction in the Downtown market. This point is of interest for several reasons. First, it suggests there is an appetite to build speculative development within the urban core downtown market. Second, it further suggests that for a transformation development such as the Boulevard project that flex commercial office space of appropriate scale may be viable.

Lee-Associates indicated in its 3rd quarter 2015 office market report speculative office development is on the rise nationally due to in part to optimistic projections for rent growth, and net absorption. Moreover, they point to secondary markets increasing development activity that are posting declines in vacancies. The key to speculative office development they suggest still may require some pre-leasing and moderate space proposed for development to be successfully absorbed.

Following this train of thought, the development of speculative space in the range of 75,000 square feet may be appropriate for the Boulevard development as part of a well designed urban mixed use development that is marketed to new economic entrepreneurs and emerging economic growth sectors in Richmond.

Retail Market Demand Overview

According to CoStar retail report for the 3rd quarter of 2015, the Richmond retail market appears to be performing extremely well. More importantly, the report highlights the fact that for the past nine (9) quarters, 2013-3q to 2015-3q, retail vacancies are trending downward while rents are stabilized and trending upward.

Retail Rental Overview

Over the past 9 quarters retail rental rates in Richmond trade areas have hovered around \$14.00 dollars per square foot ending the 3rd quarter of 2015 at \$14.21 per square foot. This compares to \$14.33 in the 2nd quarter of 2015 and \$13.85 per square foot at the end of the fourth quarter 2014. This represents a 0.8% decrease in rental rates in the current quarter, and a 2.53% increase from four quarters ago.

Retail Vacancy Trends

The vacancy rates in the Richmond retail market experienced some turbulence but are trending downward in a positive direction at the end of the third quarter of 2015 to 5.7%. To put the trend in context, over the past four quarters, vacancies are down in the Richmond retail market from 6.1% in the fourth quarter of 2014 to 5.9% at the end of the first quarter 2015 to an increase back to 6.1% at the end of the 2nd quarter of 2015 and back down to the current quarter at 5.7%.

Retail Net Absorption Trends

The net retail absorption in the Richmond retail market can be described as strong in the 3rd quarter of 2015 with over 370,000 square feet of space being absorbed. However, in the second quarter of 2015 173,000 square feet of space was not absorbed while the first quarter of 2015 absorbed a positive 333,000 square feet of space. The fourth quarter 2014 closed out the year with a positive 144,000 square feet of space being absorbed.

The negative absorption taking place can be attributed to large blocks of space totaling 131,000 square feet becoming vacant in 2014 . Moreover, in 2015, over 217,000 square feet of the 370,165 of square feet of space absorbed in 2015 can be attributed to large blocks of space being leased.

While retail activity in the greater Richmond region trade areas appears strong, there are some glaring distinctions that can be drawn as it relates to suburban retail markets versus in town real estate trade areas in closer proximity to the proposed Boulevard development site.

Retail activity by selected suburban and in town trade areas

In the third quarter of 2015, the retail trade areas in the outlying suburban areas reporting the greatest level of activity is the Midlothian West area with a reported 4.5% vacancy rate, over 29,000 of absorbed space, 234,356 of new retail space under construction and an average retail rental rate of \$17.38 per square feet.

The other retail trade area is the Short Pump area reporting a vacancy rate of 2.8%, 7,419 of new space absorbed, 212,265 of new retail space under construction and an average retail rental rate per square feet of \$24.94. These two retail trade areas combined represented 446,621 or 87% of the reported 509, 220 square feet of retail space under construction in the region for the third quarter of 2015.

By contrast the in town retail trade areas which are a 15 minute drive away from the Boulevard development site, as represented by Downtown, Broad Street Corridor, and the Mechanicville area, in the third quarter of 2015 reported a combined average vacancy rate of 5.3%, absorption of 95,272 square feet of retail, 0% in new construction and an average retail rental rate of \$14 per square feet. The 95,272 of absorbed space represents 18% of the 529,804 of the space absorbed in the Richmond retail market for the third quarter of 2015.

The untapped retail opportunity

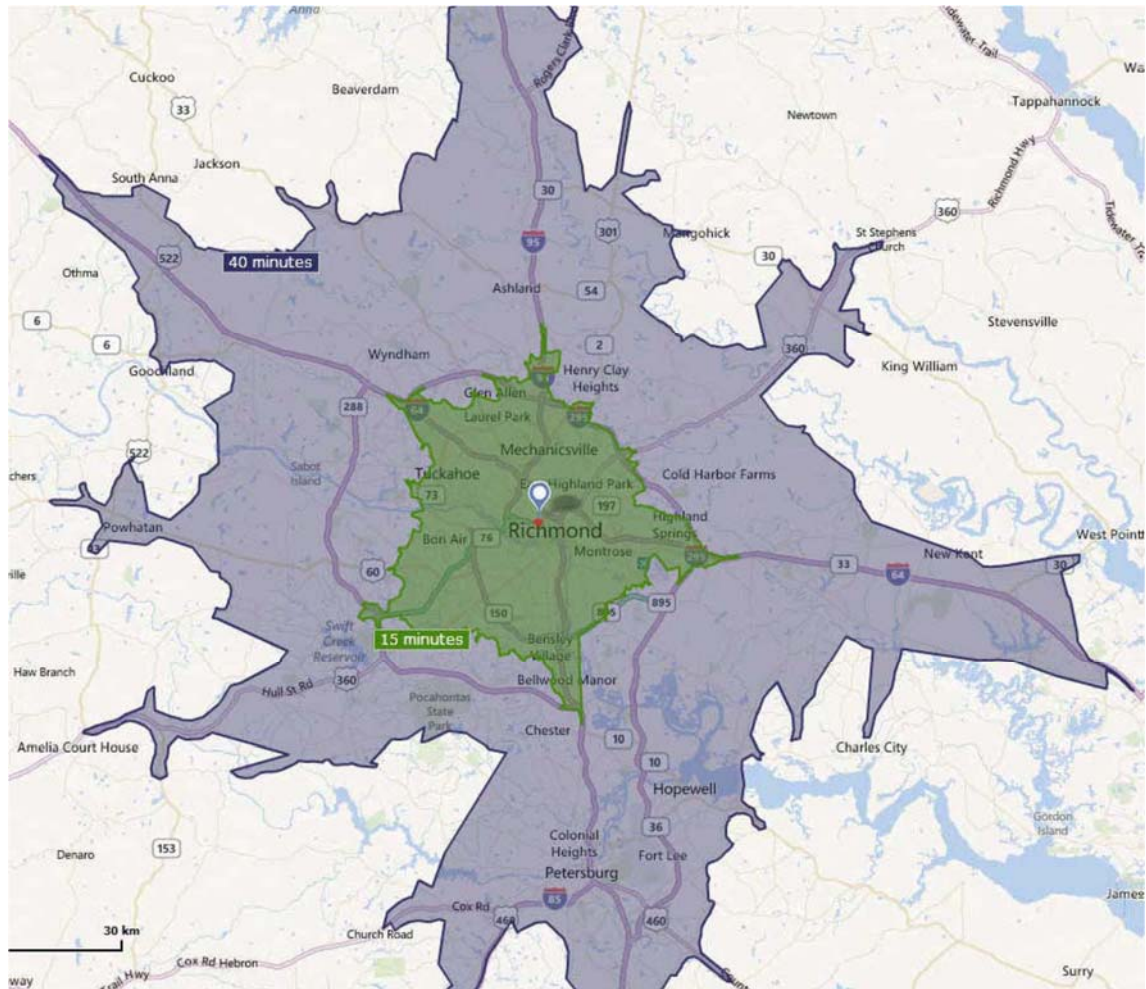
Like many American cities, retail establishments within the city have taken a back seat to suburban markets. In this respect, Richmond is no different where spending power to support retail exists but its output is relegated to suburban markets.

To put this into perspective, residents within a 40-minute drive time of the Boulevard site project site area (plus or minus a few miles) exceed spending power of over \$9 billion dollars annually. The Richmond suburbs capture 80% of the spending potential while the interior areas of the City of Richmond only capture an estimated 10% with internet sales and travelers outside the market making up the remaining 10% (RCLO/ERSI Study).

The issue of underserved retail has been a topic of conversation for years as communicated in the City of Richmond Comprehensive Economic Development Strategy in 2010. It was recognized by TIP Strategies (2010) in their study that the City's retail services and food service expenditures were below the threshold, given the City's 10% share of jobs for the region.

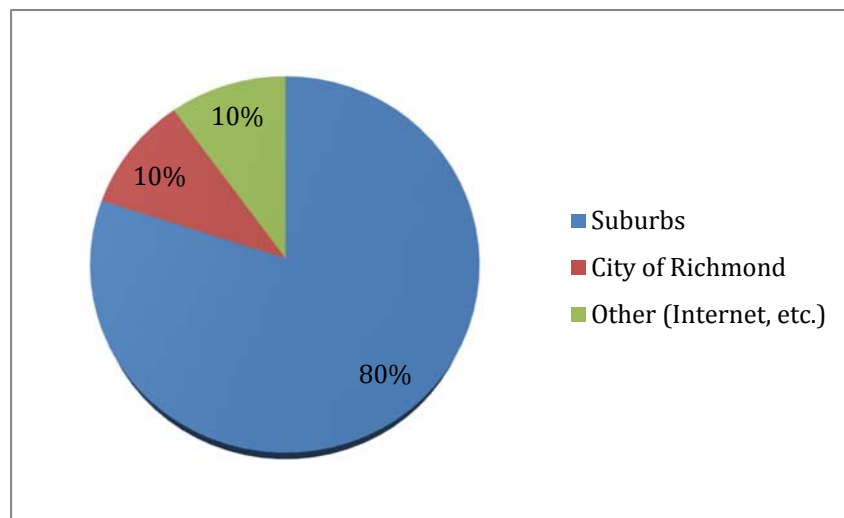
More specifically, as described in Figure 8 below, the 15% spending capture rate within the City of Richmond is being captured by one main retail area with several other serving as key points of interest for retail activity.

Figure 8: Map of Boulevard retail trade area showing drive time outward for 40-minute drive



Source: RCLO/ERSI Study

Figure 9: Richmond Spending Capture



Source: RCLCO/ERSI Study

Untapped market spending potential: Retail market demand context

As described in figure 10, the available spending power reaching outward from the Boulevard site beginning with a 10 minute walk up to a 40 a minute drive is more than sufficient to support in town retail. More importantly, the City of Richmond is losing potential revenue, capturing 11% of the available spending power within its city borders.

Figure 10: Spending Power

Distance	Spending Power	City of Richmond Capture Rate
10 Minute Walk / 15 Minute Drive	\$4.7 Billion Dollars	7%
15-40 Minute Drive	\$4.4 Billion Dollars	4%

Source: U.S. Census RCLO Study

**Note: Sustainable retail on this scale will not compete with those existing retail centers located in Broad Street, Carytown, and Stonypoint.*

What's Achievable? Estimating Retail Demand

According to the U.S. Census, the site around the Boulevard is considered to be the retail trade area. This area has over 212,000 plus households, which boasts a household growth rate of 21% from 2000-2010; a median income of \$71,000; and household retail spending of an estimated \$30,000. When taking these factors into consideration the spending power from area residents in proximity to the Boulevard site and beyond, it is recommended to develop 160,000 square feet of neighborhood retail.

Figure 11: Sample of types of retailers/scale appropriate for urban mixed use developments

Retailer Type	Total Square Feet	Example Type
Grocery Store	45,000	Urban Grocery Store which minimizes parking requirements in a vertical design concept
General Store	40,000	Urban Target for example
Pharmacy/Beauty Salons/Health	30,000	Combination of boutique users to include urban CVS or Walgreens
Restaurants/Entertainment	45,000	Combination of destination local and unique chain restaurants to include coffee shops, bakery, ice cream, etc.
Urban Clothing/Boutiques	30,000	Unique shops and boutiques with trendy urban edgy feel
Neighborhood Services (Cleaners, Florist, etc.),	10,000	Basic human need categories

Note: Key to retail success is planning via a retail strategy that takes in to consideration the creation of a great place that has a balance of unique local retailers combined with limited chains. This requires careful selection and placement of key users with a key emphasis on design to make the place unique and special and not like anything else in the areas or region to drive long term success of the projects.

Development keys to capturing untapped retail potential

Retail development plays a central role in the economic development and quality of life for a city and its region. Thriving stores and local businesses help define the character of urban neighborhoods and provide numerous jobs to local residents.

Since purchasing power is extensive within the City, but most retail is in the suburbs, the redevelopment of the Boulevard site offers an opportunity to reverse the outward flow trend of spending through the creation of a transformative development. This development will emphasize place making in a phased approach overtime, while utilizing human scale design, retail strategy planning, and a mix of uses which set a new trend to convince the market of its attractiveness as a place to live, work and shop.

Some of the key challenges associated with core city retail are the real or imagined greater risk of shrinkage, external crime, employee turnover/inexperienced or unqualified workforce and the need for greater operational flexibility to be successful in an urban inner city market. However, from a strategy perspective, and as seen in the chart below, to mitigate such factors, the Boston Consultant Group suggests four key interrelated factors for consideration for transformative urban development projects in pursuing retail that may be applicable to the boulevard site.

Figure 12: Four Interrelated Factors for Core City retail Success



Source: Boston Consulting Group Business Case for Inner City Retail, 1998

Hotel Demand Overview

The hotel estimation is based on the Richmond downtown hotel market having a greater “revpar” (revenue per room determined by multiplying a hotel’s average daily room rate by occupancy rate) versus the suburban Richman area. This formula is the most important formula used by investors in determining investment and sales strategy for hotel use. According to HVS/STR Hotel Valuation Index, market demand in Richmond improved during 2010-2012, took a decline in 2013 and rebounded strong in 2014 with rates increasing at a modest pace.

HVS/STR Hotel Valuation Index is projecting growth in hotel values to remain strong in 2015 and begin to slow somewhat in 2019. PKF-HR, a CBRE company is forecasting that secondary markets like Richmond leading the nation in projected occupancy gains as the economy is projected to grow and the Richmond region capitalizes on this trend.

More importantly given the central location of the Boulevard site, proximity to area anchor institutions and downtown suggests that a hotel in the 150,000 square foot range has the potential to be developed at the boulevard site if designed in accordance with a uniquely urban place-based development. The size and scale of the hotel and its potential ancillary uses (restaurant, apartments/condo’s) will need to be tested and examined in further detail as the potential development reaches implementation stage.

Transformative Development Guiding Principles

Large scale real estate development planning is more than simply planning how much of what property type to place on certain pieces of ground over a definite period. Rather, large-scale developments carry unique risks in terms of their size, costs, complexity and image. Understanding and mitigating these risks requires a holistic view of the economic, social and political context in which development will be placed, as well as a balanced picture of the potential opportunities that these developments can precipitate. Success is predicated on eight key principles:

1. Economic growth and real estate development success go hand in hand and one cannot be separated from the other.
2. Strategic vision, planning, citizen engagement and implementation cannot be underestimated.
3. The creation of a project that wins informal consensus from the relevant agencies through enhanced partnerships and collaboration.
4. A project that builds consensus among the stakeholders and general public, and addresses comprehensive community needs (it's a development for all).
5. Each project development mix is unique and differences in demand drives are subtle. Understanding how each other affects each mix will help determine the project's positioning strategy, mix synergy, and potential demand.
6. Large-scale real estate developments must be marketable and absorbable, that is, they must be planned with market demand in mind. Under this approach, developments can succeed in a stagnant market if they supply a market segment with products or services that are not found in equally competitive surroundings.
7. Project provides elements for long-term job creation.
8. Project incorporates an integrated strategy to support redevelopment over time linked to the larger efforts of the city and larger vision of the future of the community.

Transformative developments alter the environments into which they are placed. They change the character and fabric of their neighborhood and city, sometimes for the worse, but often for the better. Well-designed and planned large-scale developments ultimately do more than just add new quantities of real estate inventory (no matter how attractive) to a place; they help to create a sense of uniqueness that people want to experience.

Economic Impact Analysis

Economic restructuring has taken a toll on many communities in America. Many places search for a recipe for future prosperity, seeking to understand what appropriate action can be taken and what investments will yield economic growth. These concerns are heightened by both social and demographic trends, which suggest that quality of place is increasingly driving economic investment as a means to increase economic vitality in cities. Given this reality, competitive advantages will come to places that can quickly adapt to change, mobilize talent, and leverage resources and bold ideas into new business and development opportunities.

This requires viewing the challenge through a comprehensive lens. Strong economic and demographic trends contribute to a “new urbanism” that is changing how Americans want to live and work — both in our cities and their surrounding inner ring suburbs. A combination of lifestyle and economic factors, as well as heightened environmental consciousness and reducing sprawl are all contributing to this direction.

Many communities are exploring ways to target investments in core urban areas with the intent of creating walkable urban communities designed around the needs of people. Getting ahead of this curve and understanding the dynamics associated with this opportunity are important for communities seeking to encourage future growth.

Boulevard Site Development

Tripp Umbach’s economic impact study measures the direct, indirect, and induced economic impact stemming from operations on the 60 acres of the Boulevard property. These impacts fall within the following categories:

- Companies’ expenditures for capital improvements, goods, and services
- Spending by employees
- Spending by vendors or suppliers

The direct, indirect, and induced economic and employment impact generated from the operations of the new businesses on the Boulevard property includes people who work directly as well as indirectly for these companies. Direct employment represents those jobs that are actual full-time positions created by the established businesses on the site. Indirect employment represents those jobs that are additionally created because of the direct employment growth (i.e. vendor and suppliers). Local companies that provide goods and services to these new businesses will hire additional individuals to support the company’s purchasing and the purchasing practices of the new local employees.

The tax revenue impact of the development includes income, sales, real estate, corporate income, payroll, and capital stock/franchise taxes. This report specifically is looking at the tax revenue gathered by the City of Richmond, which includes those taxes paid by the new businesses operating on the property — as well as the indirect taxes paid by employees of the development, and those paid by vendors who are doing business with the new businesses developed as a result of this plan. Please note that an asset and challenge for the City to generate revenue comes in the form of its’ largest partners of the Commonwealth and state universities, which provide the largest employment numbers, but are not taxable.

The scope of this study takes into account the current impact of the property in 2015 (or the baseline impact) and the impact of the development of the property following the highest and best use plan in 2020, 2025 and then finally at full development in 2035.

Business Volume Impact

A mixed use development with complementary levels of business, residential, entertainment, retail, and lodging for visitors to the City, outlined in Figure 13 will generate the most economic impact for the city on this property. Tripp Umbach projects this development will bring in significant value for the city over time. Currently the property is being used mainly for government office space and with the relocation of these jobs the space will have limited impact. Figure 14 outlines the impact of the current use in 2015, as well as the proposed uses as described in the Tripp Umbach plan over time.

If the development were to start in 2016, Tripp Umbach forecasts that the positive impact of the Boulevard development on the City in 2020 to be \$68.7 million. Over time, this amount will increase as more of the development is implemented and full build-out is achieved in 2035. Once realized, the Boulevard development is projected to have an impact of \$339.3 million over the next 20 years.

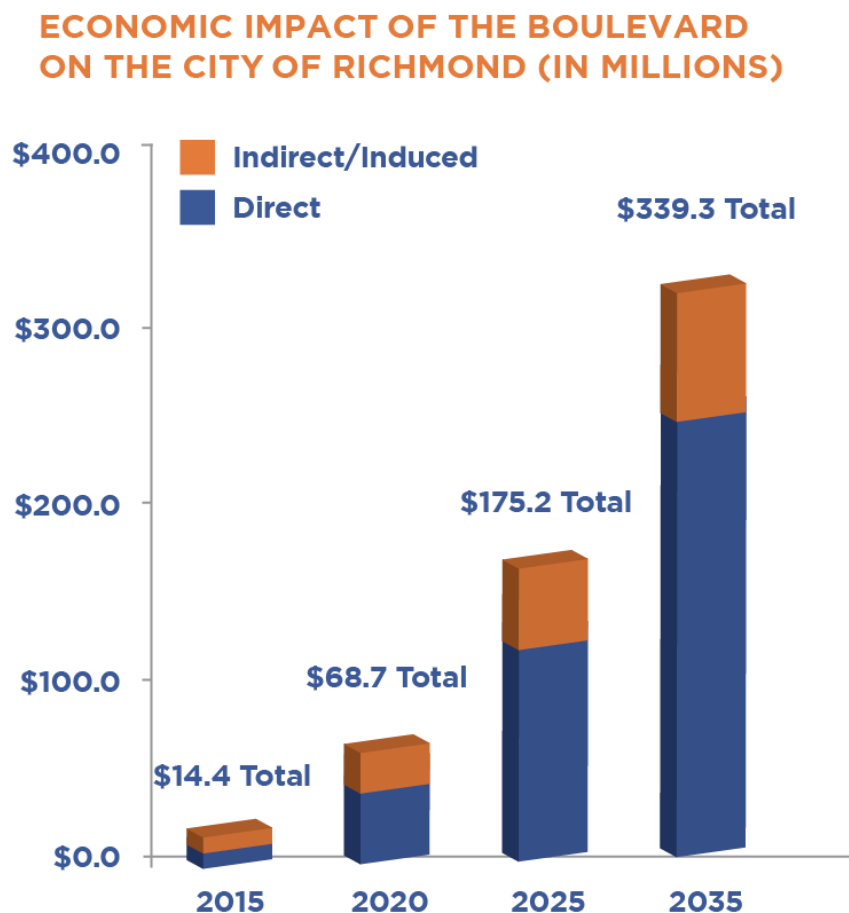
It is important to note, the Tripp Umbach analysis does not take into account the sale of the property, or the construction impacts that will occur. ***Therefore, the impacts of a sale of the property and construction will be in addition to operational impacts presented in this report.***

Figure 13: 20-year timeframe for cumulative buildout of Boulevard site

	2020 (5 YEARS)	2025 (10 YEARS)	2035 (20 YEARS)
USES	TIME FRAME #1	TIME FRAME #2	TIME FRAME #3
<i>Housing</i>	800 units	2,000 units	4,000 units
<i>Retail/Entertainment</i>	200,000 square ft.	400,000 square ft.	500,000 square ft.
<i>Working Space (Flex)</i>	75,000 square ft.	225,000 square ft.	375,000 square ft.
<i>Hotel</i>	150 rooms	250 rooms	250 rooms

**Note – Each time frame denotes cumulative totals*

Figure 14:

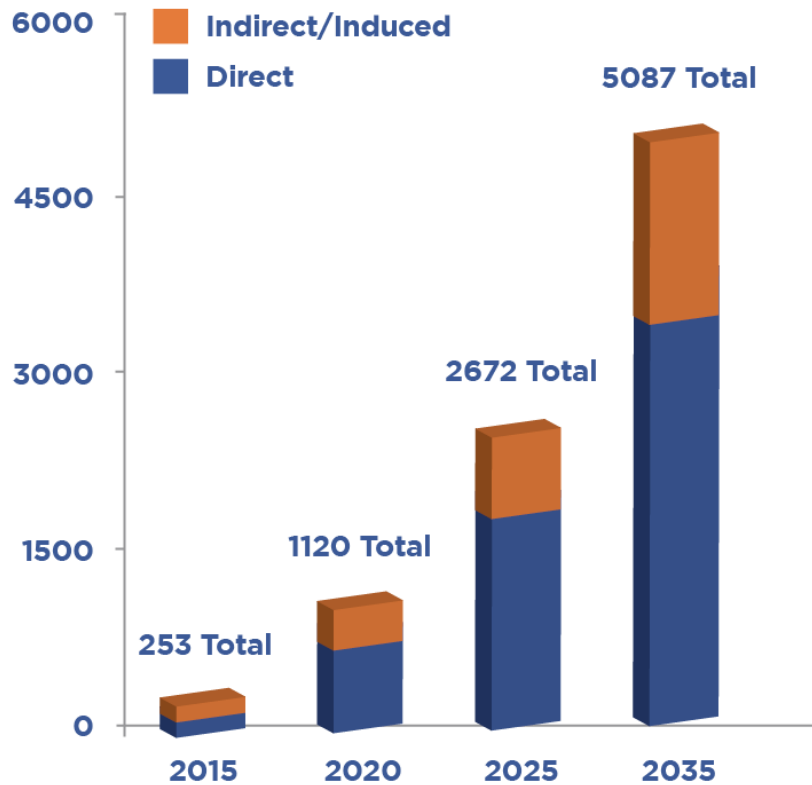


Employment Impact

Tripp Umbach projected total jobs that will be created as a result of this development and the operations of the business on the property. We see a growth of employment in this area of 341% over the initial 5 year period, and that employment impact increases to 20 times the baseline employment by full-buildout in 2035. Tripp Umbach estimates that the Boulevard development will sustain 1,120 total jobs in 2020, which is significantly higher than the 253 jobs currently on the site in the fall of 2015. By 2025 it is anticipated that 2,673 jobs being supported by the development and at the time of full build out in 2035, 5,087 jobs will be supported by the Boulevard redevelopment plan. See Figure 15 for more details. It is important to note that none of the current jobs on the Boulevard site are included in benchmark years after 2015.

Figure 15:

EMPLOYMENT IMPACT OF THE BOULEVARD ON THE CITY OF RICHMOND (IN JOBS)

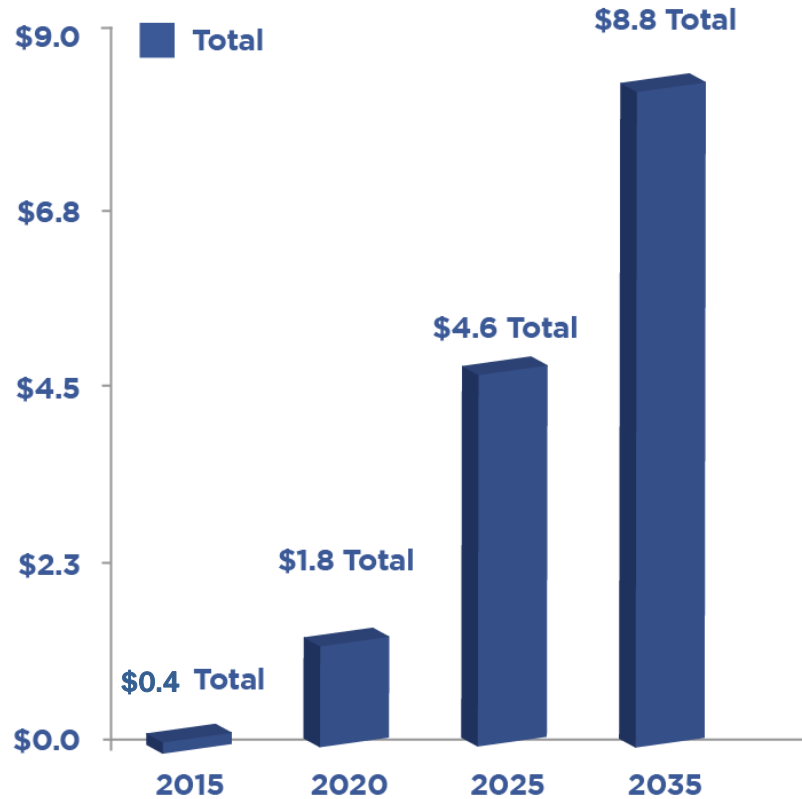


City Government Revenue Impact

Tripp Umbach projects that the Boulevard redevelopment as detailed in this report, following the market absorption guidelines, will increase revenue for the city dramatically. If the city appropriately leverages the value of the Boulevard site, following the highest and best use recommendations for the property, it stands to gain substantial tax revenue. In 2015, the estimated direct and indirect tax value from this property is \$404,727. This number includes both the direct taxes received from businesses on this property but also the indirect receipts from this business activity. In 2020, if the proposed plan were followed, the City of Richmond would receive a \$1.8 million dollars in real estate tax revenue. As seen in Figure 16, Tripp Umbach estimates that this impact will increase as additional levels of the property are developed and leveraged. In 2025 this impact will be \$4.6 million. By the time this property is fully developed, it will generate \$8.8 million in additional city tax revenue.

Figure 16:

GOVERNMENT REVENUE IMPACT OF THE BOULEVARD ON THE CITY OF RICHMOND (IN MILLIONS)



Note: as mentioned previously in this report, the value of the sale to the city, the value of construction and the spin off of economic impact outside of the 60 acres is not included in our calculations. The total economic impact of the Boulevard site will have substantial spin-off economic benefits to the City of Richmond beyond what is reported in this document.

Ideal Highest and Best Use Recommendation

Tripp Umbach views the Boulevard site as an ideal space for transformative development in the City of Richmond, Virginia. Our review of the 60 acres positions the City to implement a phased development over a 20-year period. Upon completion of the development, we view the full build-out being able to sustain the numbers in the Figure 17.

Figure 17:

	2020 (5 YEARS)	2025 (10 YEARS)	2035 (20 YEARS)
USES	TIME FRAME #1	TIME FRAME #2	TIME FRAME #3
<i>Housing</i>	800 units	2,000 units	4,000 units
<i>Retail/Entertainment</i>	200,000 square ft.	400,000 square ft.	500,000 square ft.
<i>Working Space (Flex)</i>	75,000 square ft.	225,000 square ft.	375,000 square ft.
<i>Hotel</i>	150 rooms	250 rooms	250 rooms

**Note – Each time frame denotes cumulative totals*

If planned accordingly, the City has the opportunity to create one of the best examples of large-scale urban place-making projects in the country.

This is a two-fold conclusion, based on the current economics and real estate market drivers being healthy enough to support a phased development of the 60 acres over time beginning with a first phase over a five-year period to include 800 units of multifamily residential housing units, 200,000 square feet of enhanced retail, 75,000 square feet of flex office space and 150 rooms in a boutique hotel.

The recommended development square footage and mix is based on the continuation of a strong demand for housing units, backed by strong equity return rates and absorptions, in particular in the Richmond central submarket area of which the Boulevard site is a part. Tripp Umbach foresees strong growth potential for market rate rental housing and that a total of 800 units could be absorbed in the first five years, with up to 4,000 units being absorbed over a 20 year time period.

The office recommendation is based on speculative Class B space that is beginning to trend positive across the country and as witnessed in Richmond with roughly 63,000 square feet under construction in the central submarket area. Tripp Umbach believes that 75,000 square feet of urban flex space can be absorbed in the first five years.

The City of Richmond is an underserved retail market despite sufficient purchasing power available. Tripp Umbach believes that the retail component in this plan provides the greatest immediate opportunity; whereas, 80% of retail purchasing power is spent by city residents outside of the city limits.

Finally, a boutique hotel concept is being recommended given the site's proximity to area anchor institutions and may have the potential to serve as both an anchor combined with residential, retail and restaurant uses. As the redevelopment plan comes together, an in-depth analysis of the uses will be further examined.

Appendix A: National Best Practices

Tripp Umbach evaluated three similar sites in peer urban areas through the United States in order to provide the City of Richmond with comparable examples of transformative mixed-use development. These sites include:

Nashville, TN – The Gulch⁶

Under the leadership of founder Steve Turner, his son Jay Turner and his business partner Joe Barker, MarketStreet has helped spearhead Nashville's urban revitalization through numerous public and private sector initiatives. Over the course of many years MarketStreet has built a reputation for developing quality projects that respect the unique character of the downtown area and enhance the vitality of Nashville's urban core.



The Gulch – Nashville, TN⁷

Among other investments throughout the southeastern United States, MarketStreet is primarily engaged in the development of The Gulch, an urban mixed-use neighborhood in downtown Nashville encompassing over 60 acres. A bustling railroad yard with origins dating to before the Civil War, The Gulch fell in to neglect and blight following World War II until the urban revitalization initiative led by the Turner family took hold in the early 2000's. Today, The Gulch is a vibrant urban district and a popular local destination for shopping, dining and entertainment due to the firm's concentrated focus on the development of a single neighborhood. In addition to controlling one of the largest privately held land positions in downtown Nashville, MarketStreet owns and operates a diversified portfolio of income-producing commercial and residential real estate including commercial offices, light industrial, multifamily apartments, condominiums, retail, restaurants and entertainment venues.

The Gulch is the only neighborhood in Nashville governed by a privately controlled land use Master Plan. MarketStreet was designated the Master Developer of The Gulch by the City of Nashville in 2001, the only such designation in the city's history. MarketStreet maintains and updates the Gulch Master Plan, which serves as a governing document guiding the future development patterns in the neighborhood. The most recent update envisions greater density than ever before, encompassing over 4,500 residential units, over 1.5 million square feet of commercial office space, and over a half million square feet of retail and

⁶ <http://www.nashvillegulch.com/index.php/about>

⁷ http://www.nashvillecityliving.com/Docs/VIL701Docs/WebImages/CLT/Gulch_890x375.jpg

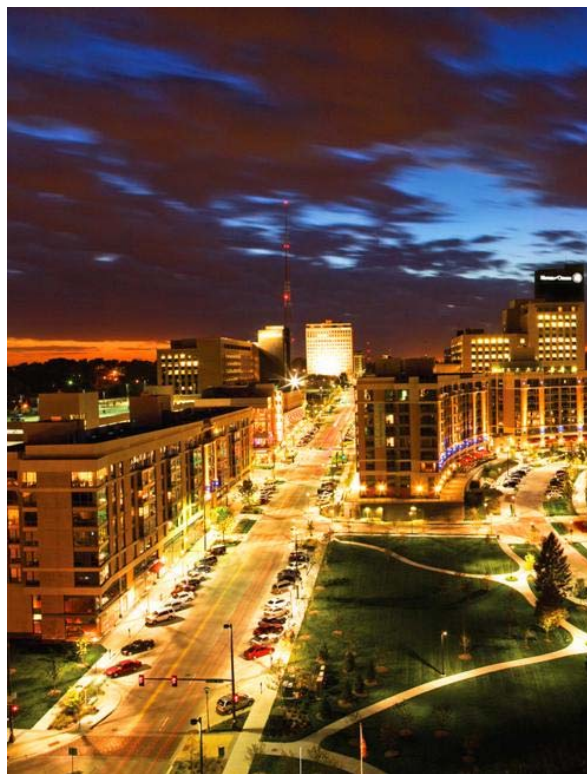
restaurants. This strategic planning promotes controlled, quality development in The Gulch for its residents and businesses.

The Gulch is home to Nashville's only business improvement district outside the downtown Central Business District. Spearheaded by MarketStreet in 2006, the Gulch Business Improvement District (GBID) represents all commercial and residential property owners in the Gulch. Administered by the Nashville Downtown Partnership, the GBID was formed to provide a high level of service for Gulch businesses and residents. The GBID features a comprehensive Clean & Safe program and promotes several events and activities throughout the year.

Omaha, NE – Midtown Crossing

Midtown Crossing – In 2002, Representatives of Midtown's large and small businesses, neighborhood associations, residents, and city leaders met at Mutual of Omaha to discuss concerns about the future of the neighborhood. The result of this meeting was the Destination Midtown project, which began with a detailed study of the neighborhood, identifying opportunities to stabilize and revitalize the area.

The study recommended the development of a mixed-use, pedestrian-friendly neighborhood that would bring much-needed retail to serve current Midtown residents as well as new residential offerings to attract residents to the area.



Midtown Crossings – Omaha, NE⁸

⁸ http://www.spiritofomaha.com/images/cache/cache_6/cache_f/cache_3/Midtown-249573f6.jpeg?ver=1415461562&aspectratio=0.76687116564417

Today, the development boasts⁹:

- A pedestrian-friendly environment with condos for sale, apartments for rent, adjacent parks, shopping, fitness, dining, and entertainment
- A location in the heart of midtown Omaha, minutes from downtown Omaha, CenturyLink Center Omaha, Eppley Airfield, and Omaha's Henry Doorly Zoo, the Old Market, and a host of other attractions.
- A home to an array of Omaha-exclusive destinations, including: Brix – A Wine and Spirits Experience, Wohlner's Neighborhood Grocery & Deli, The Afternoon, and nationally-renowned The Grey Plume, America's greenest restaurant according to the Green Restaurant Association
- An award-winning eco-friendly boutique hotel, Element
- A 31,000 square-foot Prairie Life Fitness Center on site
- Marcus Midtown Cinema featuring Omaha's exclusive CineDine experience

Pittsburgh, PA – Bakery Square¹⁰

In 2007, Pittsburgh-based Walnut Street Capital Partners worked to transform a former Nabisco bakery and surrounding land -- a total of 6.5 acres -- into a mixed-use complex. This development includes 223,000 square feet of office space, 165,000 square feet of retail space, and a 120-room hotel. In conjunction with the Commonwealth of Pennsylvania; Walnut Street Capital Partners received a grant to help develop the site, which was a former brownfield area.

¹¹Today, Bakery Square is a new mixed-use development. The development offers an exciting lifestyle center environment while hosting numerous free events to connect with its neighbors and guests. Bakery Square is shaping Pittsburgh's new urban aesthetic, blending historic architecture with innovative green construction. What was home to a Nabisco Cracker Baking factory in 1918 is now a contemporary center for living, featuring sustainable construction and amenities that support an active, socially centered lifestyle.

It is located in the heart of Pittsburgh's East End, within two miles of top employers like UPMC, Carnegie Mellon University, Chatham University and the University of Pittsburgh. Google also has a headquarters in Bakery Square, just footsteps away from the Bakery Living apartments.



Bakery Square – Pittsburgh, PA¹²

⁹ <http://www.midtowncrossing.com/>

¹⁰ <http://www.post-gazette.com/businessnews/2007/02/10/1-million-state-grant-to-aid-Bakery-Square-project/stories/200702100145>

¹¹ <http://bakery-square.com>

¹² <http://bakery-square.com.s44721.gridserver.com/wp-content/uploads/2015/01/neighborhood-header.jpg>

Appendix B: Next Steps: Path Towards Developer Solicitation

A framework to achieve successful public private partnerships in support of transformative development projects is critical for success.

Often governmental entities issue a request for a development partner without knowing enough about the project to negotiate a fair and reasonable sharing of risks, responsibilities, costs and economic returns.

As such, the conceptual phase is usually completed and the solicitation is issued to the private sector requesting that the developer be responsible for structuring and implementing the public private finance, development and operations of the project.

The challenge in this process for the public entity is to move beyond the traditional, outdated development paradigm as described in Figure 18 toward a new paradigm aligned with a shared value strategy.

The concept of shared value can be defined as policies and operating practices that enhance the competitiveness of a private sector company, and in the urban development sense, the governmental entity, while simultaneously advancing the economic and social conditions in the communities in which it operates. Shared value creation focuses on identifying and expanding the connections between societal and economic progress where the two are not mutually exclusive.

Figure 18:

<i>Developing a Path Forward: A Paradigm Shift in Development Approach Thinking</i>	
<u>Traditional</u>	<u>Emerging (Shared Value)</u>
<ul style="list-style-type: none">• Developers decide for public agencies what's best• Public agencies give-up valuable assets and resources and receive little if any in return for doing so• Revenue generation for the public agency is not a priority• Social ROI is a secondary thought in the development	<ul style="list-style-type: none">• Public agencies decide before engagement of private partners what the development goals are and how to best utilize limited resources• Public agencies retain valuable assets and receive benefit for doing so• Revenue generation for the public agency is a priority• Special ROI is at the forefront of the development process

Source: Based on Shared Value Initiative

One of the most important driving forces behind generating new revenue for the public sector is for the implementing governmental entity to take control of the pre-development process before selecting a development partner in an effort to be in a stronger position to make financially sound decisions rather than be wholly dependent on a developer for such decisions.

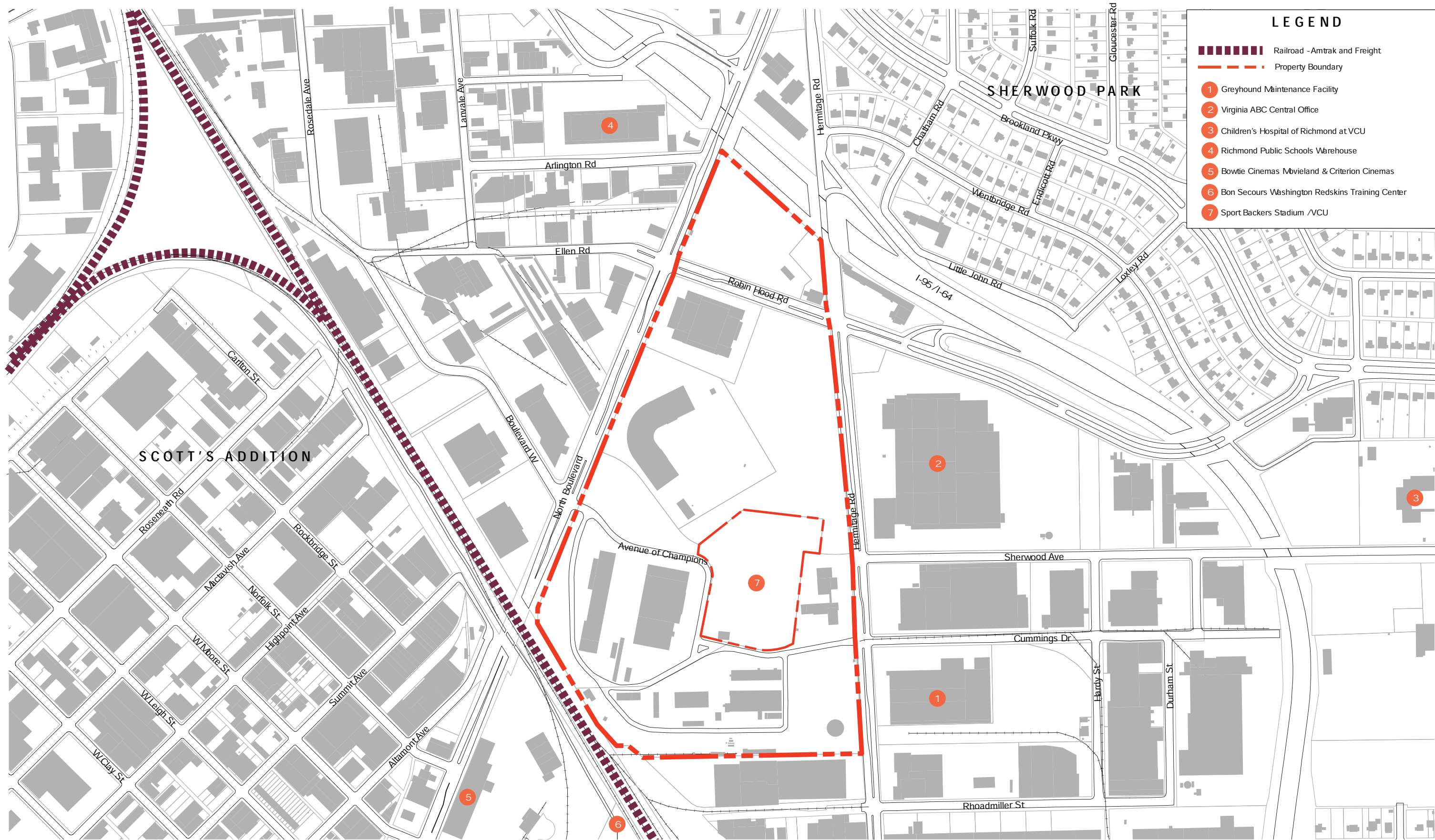
The framework below can serve as a guide for urban development decisions:

- The most advantageous ownership, if any
- The type and amount of capital and or non capital investment if applicable
- Whether the development supports the overall mission of the organization
- The most effective position for the private sector to take regarding financing, design, development, construction and management
- The projected return on equity investment
- The general level of risk for any investment that the organization participates
- The level of responsibility to finance, design, develop, construct, own and operate the development
- Whether the development should be developed in phases
- The approximate schedule required to finance, design, and construct the project

Note on importance of work

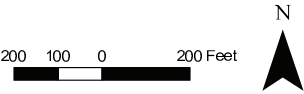
- The world's GDP is roughly \$60 trillion of which the US is \$15 Trillion or 25%
- It is estimated that the world GDP will grow to \$200 Trillion in the next 30 years
- So, that means that \$140 Trillion in new customers and business and jobs will be up for grabs
- Communities that position themselves to capitalize on this trend with an acute emphasis on place making and growing their economies from within will be the centers of economic prosperity
- While all communities are not the same, they all are operating in a constrained environment where thinking comprehensively about redevelopment efforts is as important today as any other time in the regeneration of American communities.

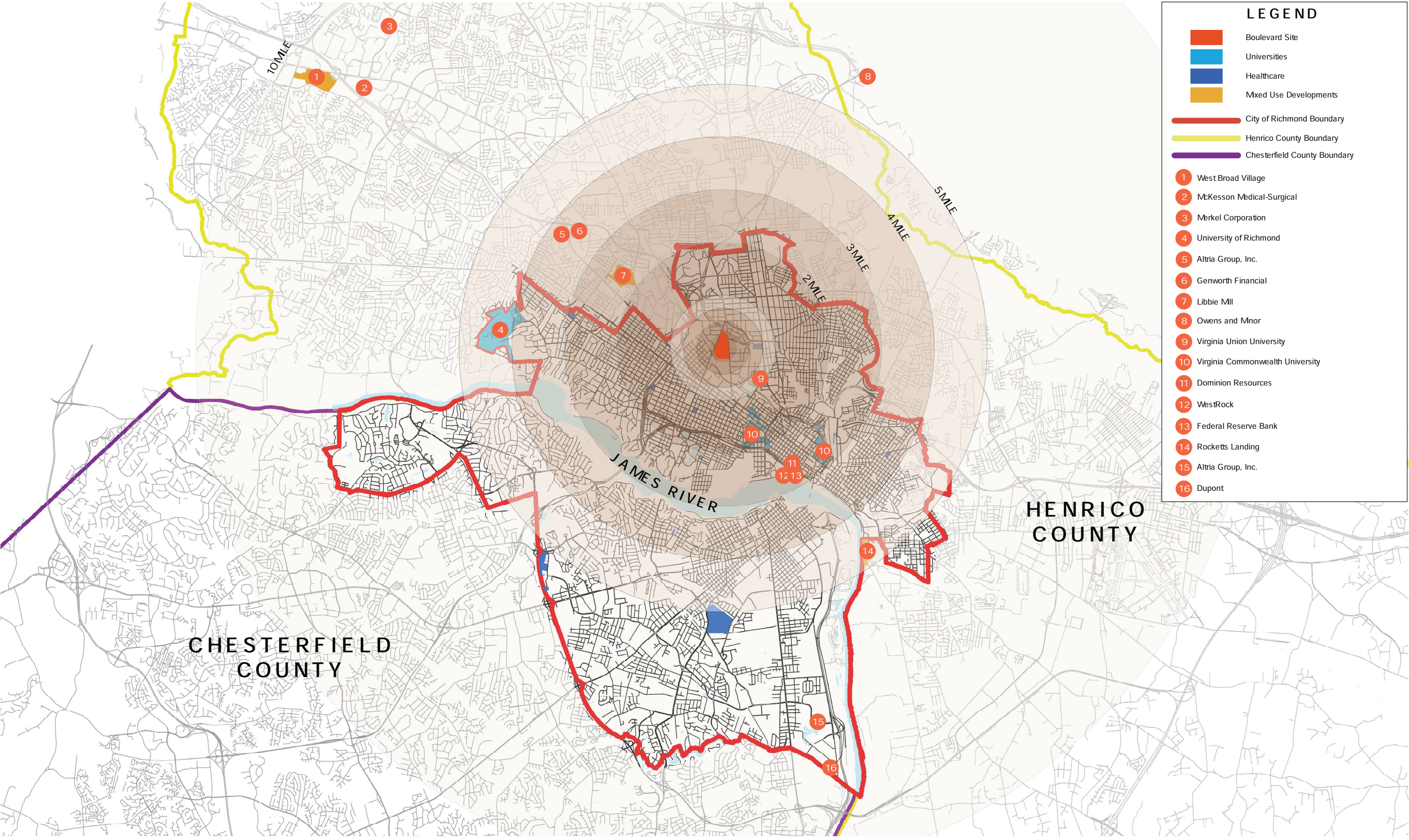
Appendix C: Timmons Group Maps (Following Pages)



BOULEVARD LAND PLANNING

LIMITS OF STUDY





BOULEVARD LAND PLANNING

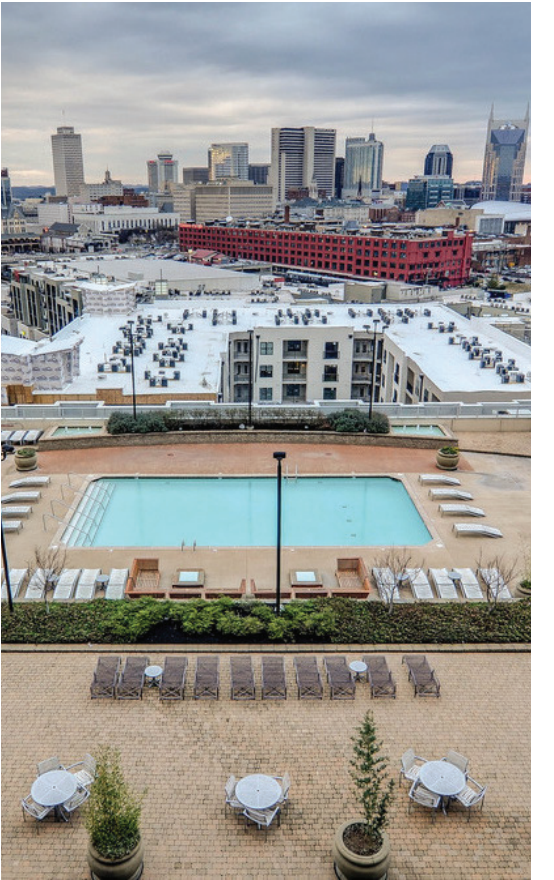
ECONOMIC ASSETS & SIMILAR DEVELOPMENTS





BOULEVARD LAND PLANNING
CASE STUDY – THE GULCH, NASHVILLE, TN





BOULEVARD LAND PLANNING
CASE STUDY – THE GULCH, NASHVILLE, TN



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Appendix D: Economic Impact Term Definitions

TOTAL ECONOMIC IMPACT	The total economic impact of an institution includes both the direct impact and the indirect impact generated in the economy as a result of the institution.
DIRECT ECONOMIC IMPACT	Direct impact includes items such as institutional spending, employee spending and spending by visitors to the institution.
INDIRECT AND INDUCED ECONOMIC IMPACT	Indirect impact, also known as the multiplier effect, includes the respending of dollars within the local economy by vendors/suppliers and households.
MULTIPLIER EFFECT	The multiplier effect is the additional economic impact created as a result of the institution's direct economic impact. Local companies that provide goods and services to an institution increase their purchasing by creating a multiplier.
DIRECT TAX PAYMENTS	Direct tax payments made by an institution to a unit of government.
INDIRECT AND INDUCED TAX PAYMENTS	Government revenue that is collected by governmental units in addition to those paid directly by an institution, including taxes paid directly by employees of the institution, visitors to the institution and vendors who sell products to the institution.
DIRECT EMPLOYMENT	Total employees based on total jobs.
INDIRECT AND INDUCED EMPLOYMENT	Indirect employment is the additional jobs created as a result of the institution's economic impact. Local companies that provide goods and services to an institution increase their number of employees as purchasing increases, thus creating an employment multiplier.

Appendix E: Resources

Boston Consulting Group: Business Case for Inner City Retail 1998

Capstone Apartment Partners Richmond, VA Multifamily Market Report Summer 2015

City of Richmond, VA Comprehensive Economic Development Strategy: TIP Strategies, October 2010

CoStar Commercial Retail Advisory Report Richmond VA, Office Market, 3rd Quarter 2015

CoStar Commercial Office Advisory Report Richmond VA, Office Market, 3rd Quarter 2015

ERSI Forecast 2009

George Mason University (GMU) Center for Regional Analysis Housing the Richmond Region's Future Workforce, March 2013

Heitman Real estate Management Investment Firm: Annual Real Estate Update VCU 2015

Integra Realty Resources via Richmond Dispatch February 2015

Lee-Associates National Commercial Real Estate/ Advisory Services 3rd Quarter Office Market Report 2015

MDF Research and Markets report 2015

Milken Institute- Best Performing Cities 2014

RCLO/ERSI Study of Retail Demand VCU area 2012

Realty Trac/HUD Data 2015

Richmond Economic & Community Development- Community Profile 2015

Shared Value Initiative 2015

Timmons Group

United States Census Bureau Data

Virginia Employment Commission, September 2015

Zimmerman/Volk Market Study Downtown Richmond 2007-2009

Appendix F: Tripp Umbach Qualifications

Since 1990, Tripp Umbach has completed consulting engagements with approximately 1,000 organizations in all regions of the United States and internationally. Headquartered in Pittsburgh, Tripp Umbach completes more than 100 projects annually applying advanced tools in market analysis, strategic planning and economic impact analysis.

Tripp Umbach has completed projects in more than 300 communities in all 50 United States since 1990 as an established leader in community and economic development planning and implementation. Tripp Umbach has a proven track record of helping our clients become stronger financially through implementing clear organization-wide strategies rooted in sound economics. The majority of our clients continue to engage Tripp Umbach in future phases of their planning – moving ideas into action.

