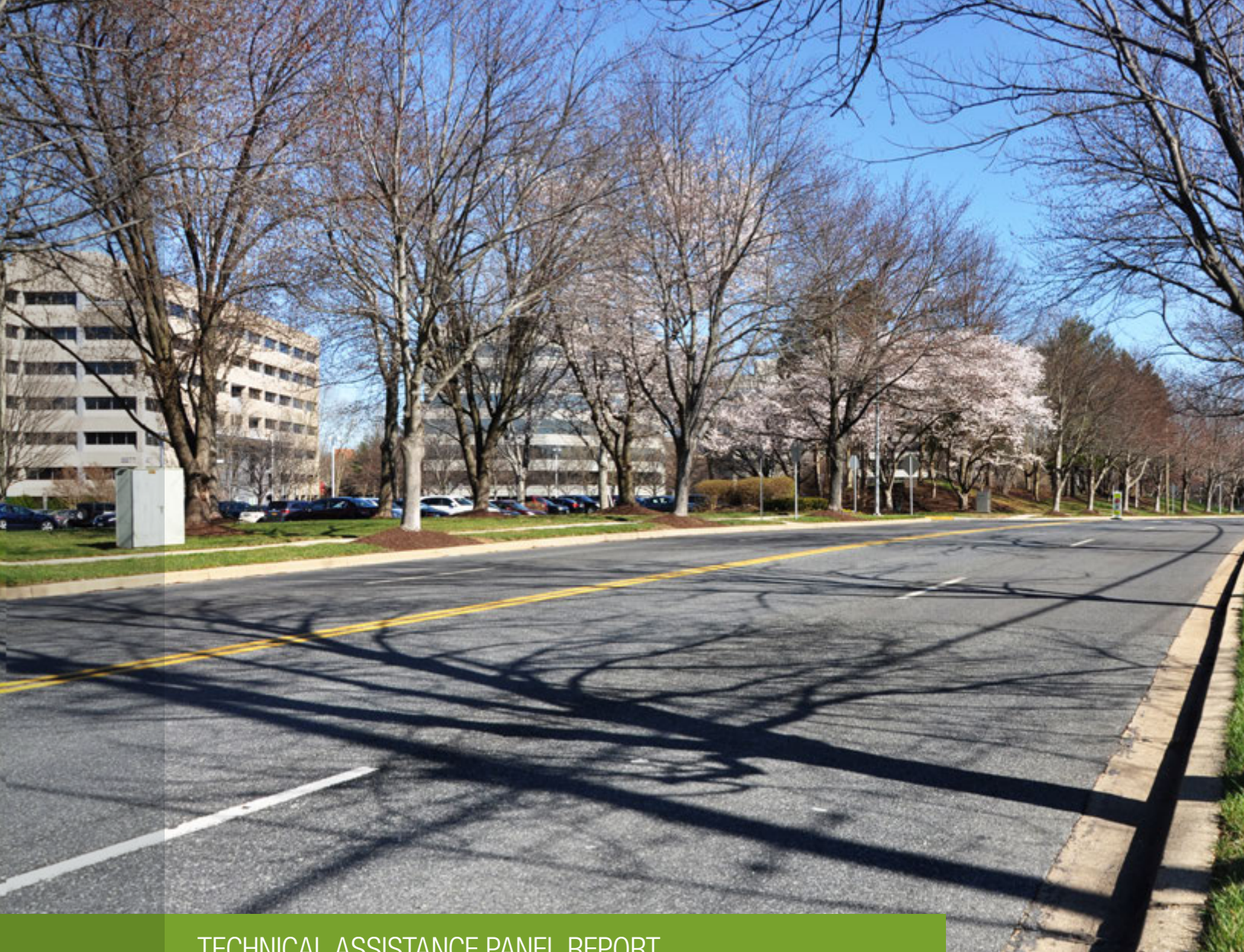




TECHNICAL ASSISTANCE PANEL REPORT

Research Boulevard – It's Not an Office Park!

THE CITY OF ROCKVILLE, MD

SPONSORED BY:
The City of Rockville, MD
The Metropolitan Washington Council of Governments

March 27-28, 2017

ABOUT ULI WASHINGTON

A DISTRICT COUNCIL OF THE URBAN LAND INSTITUTE

ULI Washington is a district council of the Urban Land Institute (ULI), a non-profit education and research organization supported by its members. Founded in 1936, the Institute today has over 32,000 members worldwide representing the entire spectrum of land use planning and real estate development disciplines working in private enterprise and public service. As the pre-eminent, multidisciplinary real estate forum, ULI facilitates the open exchange of ideas, information, and experience among local, national, and international industry leaders and policy makers dedicated to creating better communities.

ULI's mission is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide. ULI Washington carries out the ULI mission locally by sharing best practices, building consensus, and advancing solutions through educational programs and community outreach initiatives.

ABOUT THE TECHNICAL ASSISTANCE PANEL (TAP) PROGRAM

The objective of ULI Washington's Technical Assistance Panel (TAP) program is to provide expert, multidisciplinary, and objective advice on land use and real estate issues facing public agencies and nonprofit organizations in the Metropolitan Washington Region. Drawing from its extensive membership base, ULI Washington conducts one and one-half day panels offering objective and responsible advice to local decision-makers on a wide variety of land use and real estate issues, ranging from site-specific projects to public policy questions. The TAP program is intentionally flexible to provide a customized approach to specific land use and real estate issues. Learn more at <http://washington.uli.org/TAPs>.

Bob Youngentob

Chair, ULI Washington
President, EYA

Lisa W. Rother

Executive Director
ULI Washington

Richard Perlmutter

Chair, Technical Assistance
Panel Committee
Managing Member, Argo Development
Company

Deborah Kerson Bilek

Senior Director, Community Outreach
ULI Washington

Table of Contents

ULI WASHINGTON PANEL & PROJECT STAFF	2
ACKNOWLEDGMENTS	3
EXECUTIVE SUMMARY	4
BACKGROUND AND SCOPE	7
PROBLEM DEFINITION: VISION, SITE ANALYSIS & MARKET ANALYSIS	10
MARKET OVERVIEW: OFFICE & LABORATORY BUILDINGS	13
ILLUSTRATIVE SCENARIOS	19
RECOMMENDATIONS	24
CONCLUSION	25
PANELISTS	26

ULI Washington Panel & Project Staff

PANEL CHAIR

Nat Bottigheimer

Fehr & Peers DC
Washington, DC

PANELISTS

Robert Atkinson

Davis Carter Scott
Fairfax, VA

Marvin A. Poole

StonebridgeCarras
Bethesda, MD

Dawn Volz

Dewberry
Rockville, MD

Eduardo Han

Keller Williams
Alexandria, VA

Kaushambi Shah

Urban Designer
Rockville, MD

Arlova Vonhm

Arlington County
Arlington, VA

Patricia Larrabee

Facility Logix
Burtonsville, MD

Tammy Shoham

JLL
Washington, DC

PROJECT STAFF

Deborah Kerson Bilek

ULI Washington
Washington, DC

REPORT AUTHOR

Kaushambi Shah

Urban Designer
Rockville, MD

Acknowledgments

ULI Washington is grateful to a variety of people for making this Technical Assistance Panel (TAP) experience successful. David Levy, Chief of Long Range Planning, and Barry Gore, Principal Planner from the City of Rockville provided top notch staff support before and throughout the duration of the program. ULI Washington is also grateful for the partnership with the Metropolitan Washington Council of Governments, who served as a cosponsor for this project with the intent to further development and growth in the Metropolitan Washington Region's Activity Centers.

ULI Washington would like to convey special thanks to the following staff members and elected officials from The City of Rockville:

Andrew Gunning, Acting Director, Community Planning & Development Services (CPDS)

David B. Levy, Chief of Long Range Planning, CPDS

Barry Gore, Project Manager, CPDS

Clark Larson, CPDS

Manisha Tewari, CPDS

Rob DiSpirito, City Manager

Jenny Kimball, Deputy City Manager

Michael Stievfater, Rockville Economic Development, Inc.

Laurie Boyer, Rockville Economic Development, Inc.

Mayor Bridget Donnell Newton

Councilmember Beryl L. Feinberg

Councilmember Virginia D. Onley

Councilmember Julie Palakovich Carr

Councilmember Mark Pierzchala

Executive Summary

The Research Boulevard study area is a 272 acre site in the City of Rockville (City). Located 12 miles northwest of Washington D.C., it is just outside the Capital Beltway and in a regional corridor defined by Interstate 270 and MD-355 (also known as Rockville Pike). The west branch of the Metrorail Red Line roughly parallels MD-355 and serves the city with three Metro stations, terminating at the Shady Grove Metro Station. Rockville is the seat of Montgomery County, and the County Executive and County Council offices are located in downtown Rockville along with a County Circuit Court and a Maryland District Courthouse.



Map showing study area within the limits of City of Rockville, and in context with Montgomery County and City of Gaithersburg jurisdictional boundaries.

Image source: Sponsor briefing materials.

The study area has clear boundaries defined by major roadways: I-270 to the east, MD-28 (West Montgomery Avenue) to the west, and Shady Grove Road to the north. Moreover, the site is bisected by Research Boulevard from south to north, and roughly divided in half by West Gude Drive. Much of the land along Research Boulevard is subdivided into large parcels that extend from the interstate to Research Boulevard or from Research Boulevard to MD-28.

Research Boulevard is proximate to the Montgomery County Life Sciences Center, located outside the city boundary and west of Shady Grove Road. This center includes Shady Grove Adventist Hospital, the Universities at Shady Grove, a satellite campus of Johns Hopkins University, and prominent biotechnology companies. Research Boulevard was built before the Life Sciences Center and played a role in forming the technology industry cluster. There are synergies to being proximate to these businesses and institutions, but also competition for tenants from the high-quality office and research facilities in the area, many of them offering newer, more up-to-date facilities.

With about 3.7 million square feet in 46 buildings, the study area rivals any other part of Rockville as an employment center. Some of the major employers are Westat Inc., IDT Biologika, Lockheed Information Systems, Thomson Reuters International, Otsuka American Pharmaceutical, Meso Scale Diagnostics, American Speech Language Hearing Association, and others. There are also a large number of medical offices in leased buildings especially along Shady Grove Road. Many other small companies lease space in the corridor, which has acted as an incubator for businesses over the decades. Some of the key landowners and real estate brokers include – Foulger Pratt, Lerner Corporation, Brandywine Realty Trust, Alexandria Real Estate, Avison Young, Transwestern and Scheer Partners.

The oldest structure dates to 1967 and the newest is a research laboratory built in 2005. The remainder properties are developed as four hotels (with a total of 538 rooms) and two banks. Many of the office buildings have their own on site cafeterias or small eateries for the use of employees.

The study area has only two zoning categories applied across its 272 acres – Mixed Use Employment (MXE) and Planned Development-Fallsgrove (PD-FG). Previously, the study area was zoned as Restricted Industrial Park (I-3) since 1959. The I-3 development standards guided the master plan vision of a low intensity, open campus office park with large lots, low lot coverage, and primarily at-grade parking. Restaurants were allowed only when intended for employees in each building, and a cap was set on the size of retail sales and personal services uses. Residential and stand-alone retail uses were excluded.

The results of this Technical Assistance Panel (TAP) are intended to assist the sponsor in updating The City of Rockville's Comprehensive Master Plan under

a process branded as *Rockville 2040*. The Panel's expertise was sought to address a current topic of much discussion in the planning and real estate professions: what is the future of first-generation suburban office parks; and how should the City of Rockville's planning efforts respond to changing market conditions and changing work culture with regard to employment center context, mix of land uses, amenities, and other urban design issues.

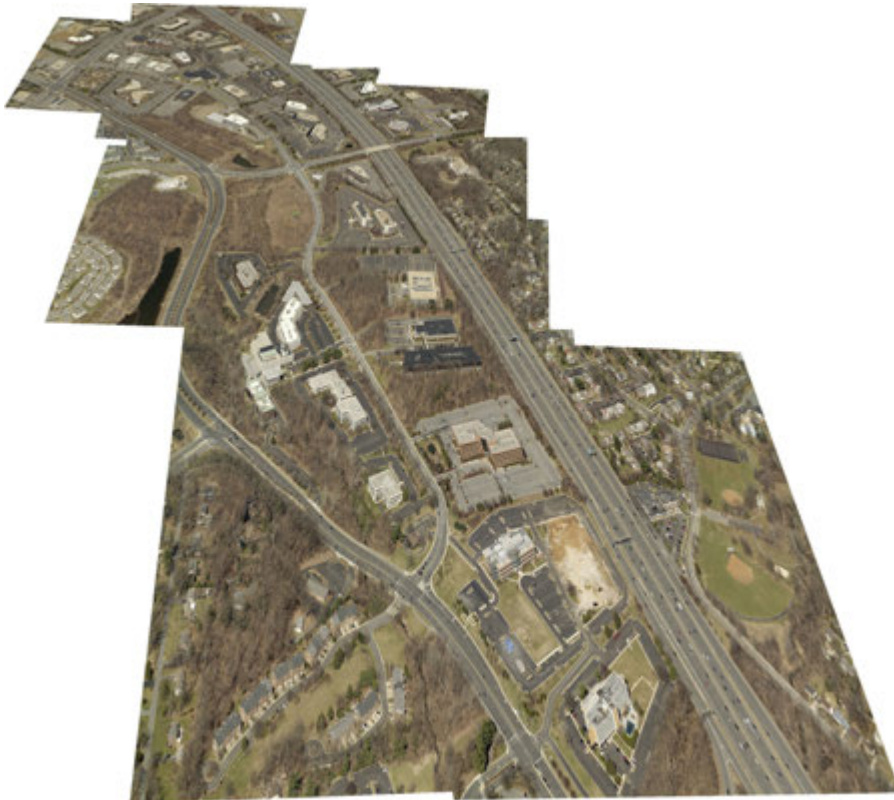
In spite of the overall declining trend for suburban office uses, the study area has been a success through multiple decades, serving the employment and property tax needs of the City by generating significant property tax revenue. Further, while the overall market for office space shows weakness in the region and in the study area, one recent trend in the study area shows promise as an adaptive reuse: self-storage space. The second oldest remaining building in the study area at 4 Research Place was converted to self-storage in 2016, and a second self-storage building is proposed for construction on a portion of the existing parking lot on that site. In addition, two other new self-storage projects are proposed: one on Redland Boulevard just east of the I-270 off-ramp and as infill next to I-270 east of the Best Western hotel at the south end of the study corridor.

Panelists approached this TAP by dividing the challenges into four categories, which are outlined in this report as follows: Problem Definition, Market Overview, Illustrative Scenarios, and Recommendations.

Background & Scope

The study area is a key employment center in the City of Rockville, home to some of the City's prominent businesses and to roughly 9,000 employees. The development pattern on both sides of Research Boulevard is comprised of office, laboratory, and medical research buildings. According to The City of Rockville, the 272 acre study area is developed with 78% office use, 8% lodging, 5% private undeveloped land and 9% public open space.

The City of Rockville's 1960 and 1970 master plans foresaw the potential for a new land use in the city: a modern, automobile oriented office research park and mapped areas along both sides of I-270 for 'Restricted Industrial' uses, including the area that became Research Boulevard. A complementary I-3 zoning district, adopted in 1959, regulated this use with development standards requiring the following: minimum 5 acre lot size, maximum 20% lot coverage, 100 foot setbacks, and 300-foot minimum street frontages. This site design pattern reflects these restrictions.



Aerial view showing the study area in 2015.

Image source: Sponsor briefing materials



Photo showing the Westat Inc. property.

Image source: ULI Washington.

According to the U.S. Census Bureau, workers in the professional, scientific, and technical services category accounted for nearly half of the employees working in the area in 2014. Among the city's top ten employers, two have offices within the study area – Lockheed Information Systems and Westat, Inc. Some other major employers in the corridor include – Aeras, IDT Biologika, Thomson Reuters International, Meso Scale Diagnostics, Emergent Biosolutions, Otsuka American Pharmaceutical Inc., and others. Amongst all the employers, Westat Inc. is the biggest private employer in the City of Rockville; with headquarter buildings that were built in early 1980s and 1990s. Since these buildings house only Westat employees, they are not subject to market trends, and Westat is expected to occupy the buildings for many years to come. Other buildings offer leased space, and the expiration of a lease can greatly impact vacancy rates. Overall, the area has been a net revenue generator for the City for decades, bringing in more in property taxes than it costs in services.

Per the 2002 Master Plan and the Planned Land Use map, the study area is divided into two zoning districts. The majority of the study area is labeled as 'Restricted Industrial' / 'Office Park' (RIOP). The two areas north and south of Gude Drive, annexed as part of the Fallsgrove project are labeled as 'Comprehensive Planned Development' (CPD), a designation that references the zoning for that property which is 'Planned Development-Fallsgrove,' which is a specific set of development approvals for that property.

In 2009 the City of Rockville amended its zoning ordinance to allow a mix of uses in all commercial zones, including the properties within the study area. These new mixed-use zones, MXE (Mixed Use Employment) in the case of the study area, allow development of residential, retail, or office uses, and added flexibility in site design requirements.

Today, older buildings in the study area dating to the 1960s are becoming functionally obsolete, particularly regarding physical plant for laboratory space and information technology. A handful of sites have been redeveloped or renovated as new office space, as seen with the major investment by the U.S. Consumer Product Safety Commission in an existing building at 5 Research Place. Other buildings, however, have lost tenants, and been demolished or proposed for other uses – such as self-storage.

This evolution of land uses in and around the study area has the potential to create a mixed development pattern without the guidance of City Master Plan policies or infrastructure. Of particular concern are the urban design challenges for land use changes from office to residential uses, especially on five acre parcels fronting a single street corridor (Research Boulevard) without a network of local streets or other neighborhood amenities, such as parks and schools. Under current zoning rules, higher density multifamily developments

with retail spaces, as well as new office space, can be developed without a coordinated Area Master Plan. Moreover, opportunities for finer-grain place-making could be lost in a series of individual development projects that fail to take into account the larger context. Water and sewer infrastructure may also require upgrades under these scenarios and should be implemented through a coordinated process.

The vision and reality of this area as an employment center that held consistent for the past 50 years is challenged. The City is seeking input from the Technical Assistance Panel (TAP) to better understand the market position of the existing office parks, and to consider options and recommendations for future land use, urban design, and economic development actions as the City drafts their next Comprehensive Master Plan.

QUESTIONS TO BE ANSWERED BY THE PANEL

1. What are effective policies to guide future development in the study area to create office environments that are attractive to today's tenants?
2. How can flexibility in land use regulation be balanced with good planning that seeks to coordinate a mix of uses at a walkable scale and integrate new development into a cohesive activity center?
3. What approach to mixed use zoning is most effective regarding retaining employment? Should single use projects be allowed, i.e. those that simply change the office use to residential or retail?
4. How can the large lot parcels on Research Boulevard transition to new uses without becoming a hodgepodge of single uses that do not relate to each other?
5. Where are the best locations for retail and community nodes with place-making amenities and how can City regulations shape this outcome?



Photo showing older building from the 1960s at 2401 Research Boulevard.

Image source: ULI Washington.

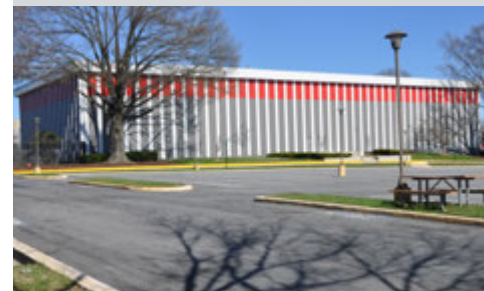


Photo showing new self-storage facility at 4 Research Place.

Image source: ULI Washington.

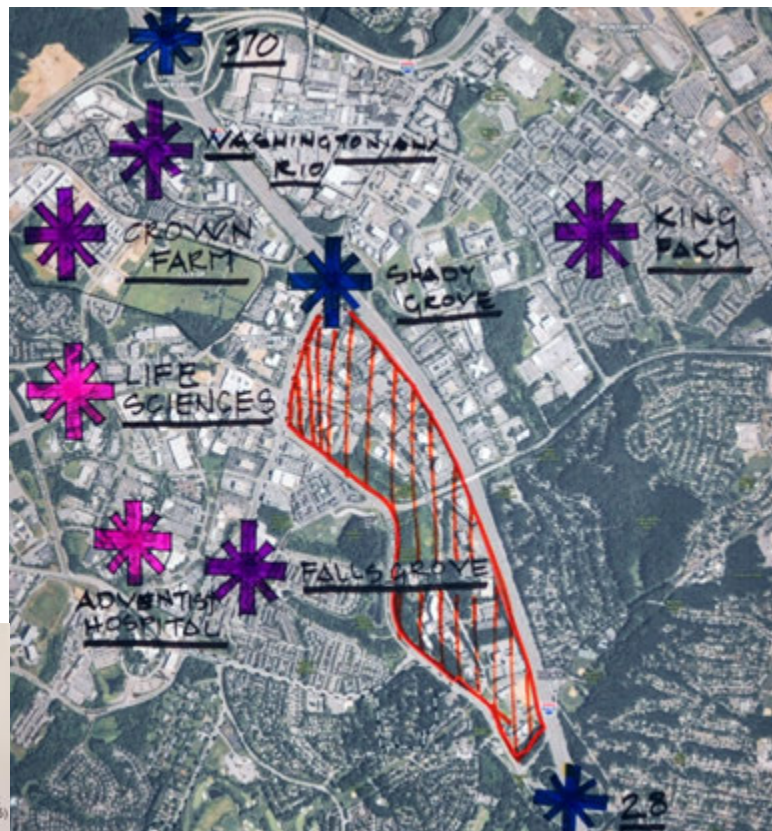
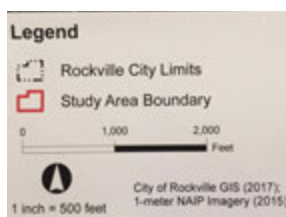
Problem Definition: Vision, Site Analysis & Market Analysis

WHAT'S THE VISION?

At the onset of the TAP, Panelists clarified that the study area has characteristics different from traditional office parks. Traditional office parks are typically developed by a large developer, on a single contiguous parcel of land, and include a unified vision for the property. Some examples of these traditional office parks include: Westfields in Chantilly VA, and The Preserve at Tower Oaks in Rockville MD. Research Boulevard, on the other hand, is an amalgamation of different property owners with different concerns, all located along a contiguous suburban corridor.

Illustrative site analysis diagram highlighting surrounding context of the site.

Image source: ULI Washington.



The Panel acknowledged that the City of Rockville is rethinking the future of Research Boulevard in a timely manner, and there is time on hand to plan for its future. The current situation is not desperate so there is adequate time for a coordinated review of policies and recommendations to guide the future development of the area. The City lacks a vision for defining the area's future and will have to take steps to articulate and define such a vision in order to develop an appropriate market-informed strategy that is also informed by the policy priorities of the City.

SITE ANALYSIS: CONTEXT & PHYSICAL ATTRIBUTES

In order to recommend future scenarios for Research Boulevard, Panelists studied the surrounding context and physical attributes of the study area. They pointed out that the study area is bracketed by two major interchanges with direct access to I-270, which are very beneficial from a marketing standpoint for property owners. In terms of transit, Shady Grove Metrorail Station is about 2 miles away from the intersection of Research Boulevard and West Gude Drive. Though this is not a walkable distance, multiple RideOn bus routes 54, 63 and 66 operate from the Shady





Photos showing deep setbacks from buildings to the street curb.

Image source: ULI Washington.



Photo showing the Shulman Rogers building in the Park Potomac development in North Bethesda MD, designed to leverage its presence along I-270.

Image source: Google Earth Pro.

Grove and Rockville Metrorail stations to Research Boulevard. The site is also well connected with its surroundings through a robust street network.

At a larger scale, the study area is surrounded by economic drivers like Shady Grove Life Sciences Center, which include the Shady Grove Adventist Hospital and the Universities of Shady Grove campus. While Research Boulevard lacks amenities within walking distance for employees, mixed use centers like Falls Grove, Washingtonian Rio, Crown Farm, and King Farm are just a few minutes' drive away from the study area. Panelists pointed out that the ideal walking distance of 1800 to 2200 feet between office buildings and amenities equates to a 10-minute stroll. Although that is absent here, these retail centers are a short 10-minute drive, which is a comfortable tether.

According to the Panel, the study area is positioned for success in multiple ways. Location along I-270 is a huge driver, and there is a strong visual relationship between the highway and buildings on Research Boulevard. Other major streets in the area like Shady Grove Road, Montgomery Avenue, and Gude Drive surrounding the study area make it very well positioned to thrive. Also, single ownership large parcels like the one on Shady Grove Road and Westat Inc., are good for future development. The existing Falls Grove Stream Valley Park also has potential to serve the community better. The study area's successful positioning is juxtaposed by several significant challenges. Sidewalks are narrow and lacking in streetscape features; there is no continuity in the way buildings are placed and relate to the street curb; some parcels have exceptionally deep setbacks from building to curb as well as building to building (indicated by yellow stripes in the adjoining site analysis diagram); and few buildings are concentrated together, with most scattered and lacking in urban design.

The Panel acknowledged the upcoming Foulger Pratt retail oriented development at the southern end of the study area by the Best Western Hotel. Though this development is not located in the central part of the study area, it is a reasonable distance from other retail in the vicinity, and hence will likely be positioned for success. The Falls Grove Stream Valley Park offers beautiful views from Montgomery Avenue, but good connections from Research Boulevard to the park are lacking, and it is therefore an underutilized asset. Also, while many properties are situated near I-270, they cannot be seen or identified from the highway because of their positioning away from the major arterial. This creates a missed opportunity for passers-by to identify the types of uses existing along Research Boulevard. The Panel pointed the City to an example of a good urban design gesture – the Shulman Rogers building in the Park Potomac development in North Bethesda, MD which takes full advantage of its presence along I-270. According to the Panel, as properties along Research Boulevard undergo infill, it will be important to place future buildings closer to I-270 to increase visibility and leverage their marketability.

Market Overview: Office & Laboratory Buildings

OFFICE MARKET OVERVIEW

Panelists analyzed the office market trends in and around Research Boulevard, in the Shady Grove area sub-market and overall Montgomery County. In order to determine whether the Research Boulevard office market is undergoing decline or holding steady, Panelists analyzed the current situation. They determined that out of 45 buildings, 29 are not owner-occupied, and out of 3.7 million square feet, 2.7 million square feet is not owner-occupied. About 43% of these buildings are Class A, 38% are Class B and 19% are Class C office spaces; and current rents range from \$25 to \$28 per square foot.

The Panel noted that about 22% of existing buildings in the study area are vacant (equivalent to about 625,000 square feet) along Research Boulevard. However, this vacancy is concentrated in a few buildings. Only one 20,000 square foot block is available within the Research Boulevard corridor. By and large, the buildings have stable tenancy and the existing tenants are there to stay in the foreseeable future. However, the office market in general is too weak to support new office construction; buildings that are partially vacant are going to continue to lose tenants over time until they are fully vacant. Furthermore, as office buildings become vacant, their values decline, and then property owners/developers will start looking for alternative uses – like the new storage facility on Research Boulevard.

Panelists further analyzed office market strengths and weaknesses from the tenant's perspective. They enumerated the strengths, including visibility from I-270, vehicular accessibility, price, availability and proximity to the Life Sciences cluster. Panelists also pointed out the weaknesses, including lack of infrastructure to support walkability and lack of proximity to food and beverage-oriented

retail, and to Metrorail. While tenants can drive to nearby spots for lunch, it would be preferable to have food options within a reasonable walking distance.

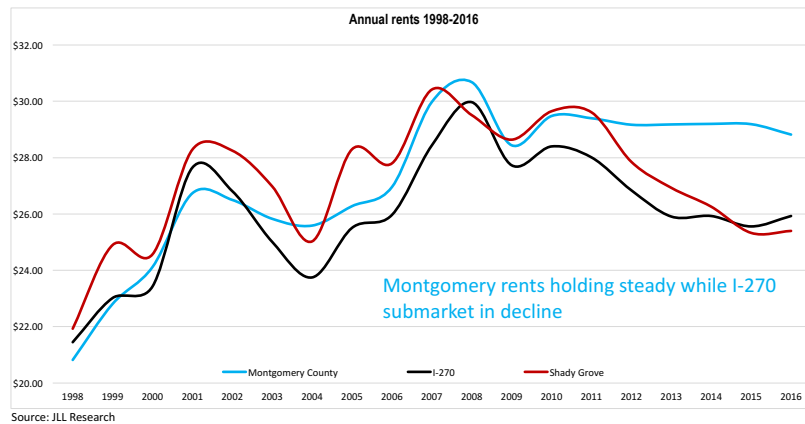
The Panel researched historical rents for office spaces in other areas of Montgomery County, including: the I-270 corridor, a sub-market of Montgomery County; and the Shady Grove area, which is a micro-market in the I-270 corridor where Research Boulevard is located.

Per Graph I prepared by the Panelists, the trend of historical annual rents from 1998 to 2016 shows that rents have fluctuated between \$20 to \$28 per square foot, and there has been no rent increase in the last decade. The Shady Grove and I-270 sub-market rents are lower than Montgomery County generally, which gives a strong indication that the office market on Research Boulevard is not going to recover any time in the near future.

I-270 and Shady Grove rents in steady decline since 2007

Graph I comparing annual vacancy rates from 1998 to 2016 between Montgomery County, Shady Grove area and the I-270 corridor; and indicating Shady Grove rents in steady decline since 2007.

Image source: ULI Washington.

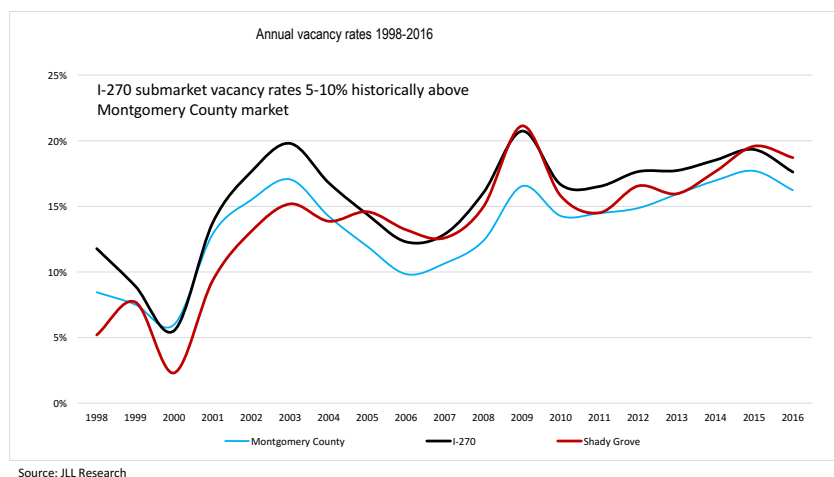


In Graph II, Panelists pointed out that vacancy rates are increasing, slightly more in the Shady Grove area and the I-270 corridor than the rest of Montgomery County.

Shady Grove micromarket vacancy rates approaching 20%

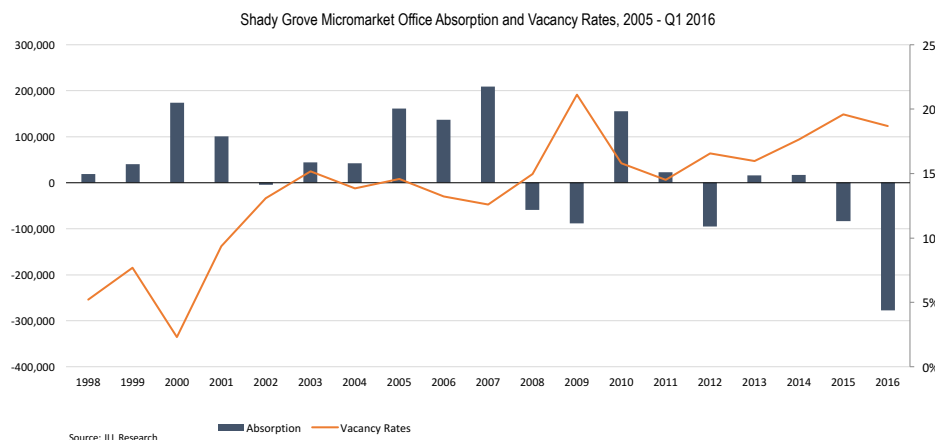
Graph II comparing annual vacancy rates from 1998 to 2016 between Montgomery County, Shady Grove area and the I-270 corridor; and indicating Shady Grove micro-market vacancy rates are approaching 20%.

Image source: ULI Washington.



Per Graph III represents the Shady Grove area micro-market office vacancy and absorption rates. Panelists pointed to a negative absorption rate in the last 8 years.

Negative absorption with growing vacancy in Shady Grove



Graph III showing annual vacancy rates from 1998 to 2016 between Montgomery County, Shady Grove area and the I-270 corridor; and indicating negative absorption with growing vacancy in Shady Grove.

Image source: ULI Washington.

This analysis reinforces that the Shady Grove office market will likely not rebound in the near future.

OFFICE BUILDING ECONOMICS: NEW DEVELOPMENT, REPOSITIONING, & LAND VALUE

Panelists elaborated upon office building economics by comparing new development with repositioning existing buildings, and this impact on land value. According to the Panel, current rents for a new full-service office building in the study area range from \$30 to \$32 per square foot. Rents required for new construction of a full-service building would be about \$45 per square foot (including surface parking), return on cost at an industry standard of 7.5%, and land value about \$40 per FAR. In this scenario, even if the land was assumed to be free, Panelists determined that the rent in the study area would have to be \$42 per square foot to deliver a reasonable profit. These numbers do not justify new construction of office buildings along Research Boulevard.

In the case of a landlord with a building where negative absorption occurs, at some point, the building would be completely vacant. In such a scenario, property owners often consider upgrading the building to attract tenants by adding features like conference centers and fitness centers. This best case scenario, according to Panelists, has the ability to fetch rents in the range of \$27.50 to \$30 per square foot in the study area, with the repositioned building being worth about \$45 per square foot. Since land with an empty building, or even just dirt, is worth about \$40 per square foot, it is more viable to repurpose the land for other uses. This reality seems to be the ongoing trend in the Shady Grove area sub-market on Research Boulevard.

LAB MARKET OVERVIEW

In addition to analyzing the office market along Research Boulevard, the Panel also analyzed the bioscience laboratory market. Panelists determined that in the state of Maryland, there are 3 primary regions for bioscience laboratory/tech hubs. The largest region is in Montgomery County, and other two are in Frederick City/County and Baltimore City/County. While vacancy rate of 7% is considered to be a healthy market in the context of laboratory spaces, vacancy rate in Montgomery County is very low – about 2.9% as of December 2016. There is a negative net absorption rate of -0.14% (-10,447 square feet) noted in the same time frame. However the Panel expects that space to be leased quickly.

Laboratory space is divided into 3 class categories, similar to office space. There is a fair amount of Class B and Class C lab space in Montgomery County, and there has been very little new construction. Rental rates for Class B labs range from \$27 to \$32 per square foot, and Class C rates are just below \$20 per square foot. Class B and Class C lab space is typically 2nd and 3rd generation space previously occupied by other lab users that has not been upgraded. Also, an important point to note in the context of laboratories is that these are triple net rates – and the laboratory tenant has to incur operating costs, which range from about \$8 to \$12 per square foot to arrive at the total rental rate. Baltimore City has a small proportion of Class A space which falls within the range of \$35 to \$45 per square foot..

In the study area, there is some Class C lab space along Shady Grove Road, which is occupied by clients like Integrated Biotherapeutics and MacroGenics. There is also Class B space in buildings originally established for office use on Research Boulevard. Much of the laboratory space in Montgomery County, including buildings in the study area, are not buildings particularly built for lab space, but instead were converted to labs from flex / office buildings.

The Panel compared criteria for the requirements in office and in laboratory buildings. Per the chart below, while office leases are full-service in nature and include operating costs, laboratory space leases are triple net in nature, and exclude the operating cost. These operational costs for lab spaces range from \$8 to \$12 per square foot. If one is looking at a vacant building (i.e. a core and shell), the fit-out cost for turning it into office use would range from \$45 to \$70 per square foot. To fit-out a laboratory in the same space, costs would range from \$225 to \$275 per square foot. If the lab space needs to be even more specialized, and include areas such as clean rooms, research spaces, or regulated spaces for drug production, fit-out costs can run as high as \$1000 per square foot. It is therefore very important to understand the tenant improvement allowance factors associated with bioscience laboratory buildings. Most traditional office/flex landlords approve tenant improvement allowances in the range of \$35 to \$50 per square foot, and the cost is amortized within the lease rate.

Office/Lab Building Use Comparison

Criteria	Office	Lab
Lease Type	FS	NNN
Fit-out Costs (psf)	\$45-\$70	\$225-\$275
Operating Costs (psf)	NA	\$8-\$12
Tenant Improvement Allowance (typ psf)	~\$35-\$50	Lab \$175 Non-Lab \$50
Lease term	Variable	5-7 years
Optimal Clear Height	13 feet or less	15-16 feet or higher
Utilities (electrical service size)	Standard	Heavy electrical
Roof Loads	Standard	Reinforced areas
Parking ratio	3.3/1000	< 3.3/1000
Exterior Requirements (generators, etc.)	Standard	Standard ++
Loading Dock Access	Shared	Standard/Dedicated
Multi-Tenant Options	+++	+
Risk Perception	Understood	High Risk

Chart showing office and lab building use comparison.

Image source: ULI Washington.

Landlords specializing in lab space may approve tenant improvement allowances as high as \$175 per square foot. Landlords in the bioscience industry understand the heavy infrastructure needs of labs; their business models anticipate the risk involved, and they have the ability to evaluate some of the science the prospective tenants might be conducting. Due to such high costs involved in laboratory buildings, leases tend to be a minimum of 5 years or even 7 to 10 years.

According to the Panel, there are multiple physical differences between buildings required for office versus laboratory uses. For instance, with multi-story office buildings, 13 feet clear height is required between the finished floor to the slab or roof structure above. In bioscience laboratories, larger volumes of air need to travel through ducts, along with heavy electrical wiring, and so clear height requirements are higher than with traditional buildings, and range between 15 to 16 feet. Thus, in existing single story as well as multi-story buildings along Research Boulevard, it may not be possible to convert office buildings into laboratory space; or in doing so, may result in greater costs to deliver lab space in buildings not designed to accommodate such uses.

Leasing space in a bioscience laboratory requires a different approach from leasing in a traditional office building. Landlords for traditional office buildings prefer to have the broadest opportunity to attract tenants to their buildings. That often means dividing up the building offering smaller office spaces to multiple tenants. However, in the case of a 100,000 square foot laboratory building, a landlord may only be able to divide that space between 2 to 4 tenants. This is in part because some of the bioscience companies have uses that cannot tolerate cross-contamination. Laboratory spaces are high risk environments, and it can be harder to re-let lab space, compared with traditional

office space. Overall, developing a building for a bioscience use must take into account a variety of restrictions.

IF NOT OFFICE OR LAB – THEN WHAT?

The Panel emphasized the reality that the current market trend is not going to support new office construction on Research Boulevard, and that it may not be worthwhile to reposition existing office space. As tenants leave existing office buildings over time, property owners will consider upgrading their properties; however the poor return on investment will not make it viable for significant investment. In cases where structural conditions are intact and if the market is right, then some buildings could potentially be converted into lab spaces. However, this will not be possible for all vacant buildings, in which case property owners will start considering infill options.

There are multiple residential infill possibilities in the study area, including apartments, town homes, or senior housing. Vacant buildings could be converted to schools, public storage, hotel and medical uses. The Panel underscored that it will be incumbent upon the City to set a vision of the study area in order to avoid disjointed infill development for vulnerable parcels.

Illustrative Scenarios

After analyzing existing conditions and current market trends along Research Boulevard, the Panel suggested three scenarios for the future of the study area. These suggestions are intended to illustrate possible outcomes, but are not intended to be prescriptive. Panelists emphasized that the City of Rockville needs to identify and determine its goals and objectives for the study area, along with its long term contributory role to the City.

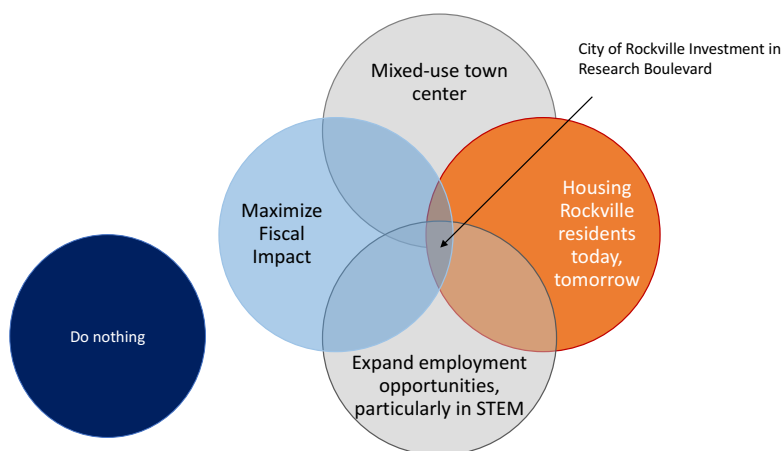
THREE SCENARIOS: WHAT DOES THE CITY WANT TO ACHIEVE?

Scenario I – “Market Responsive.” Here, the City of Rockville would maintain current zoning code as is, and let the uses along Research Boulevard change per market dynamics over time.

Scenario II – “Maximize Fiscal Impact.” This describes a vision where the study area continues to be a fiscally strong contributor to the City, just like it has over the last decades.

Scenario III – “Aging In Place.” Here, the City would facilitate residential development and appropriate housing products to support older residents wishing to downsize and live in the community. This scenario would be driven more by vision and planning policy motivation than by fiscal contribution to the City of Rockville.

What does the City want to achieve?



Possible scenarios for the long-term vision of Research Boulevard, depending on what the City envisions and wishes to achieve.

Image source: ULI Washington.

SCENARIO I: Market Responsive

Research Boulevard has historically been a major source of revenue for the City. Office uses generate taxes, which in turn support public services for residents, like schools, fire safety, and police safety. While Scenario I might facilitate continuity of fiscal solvency, it is very hard to predict the future. As market forces move office uses off Research Boulevard, land may get replaced by uses that could also generate tax revenue for the City. Vacant office buildings will reduce fiscal contribution to the City. According to Panelists, if multifamily residential infill occurs, the market would support that use, which would result in a net negative fiscal impact. Retail could also come in and generate sales tax revenue for the City; however it may not come in locations desired by the City. Other uses which are good tax generators could also develop, such as public storage and hotels. Panelists warned that in the absence of a cohesive vision, this scenario could very well likely lead to hodge-podge development along Research Boulevard.

The Panel emphasized that the City should invest in the study area to maximize its fiscal impact. There are a series of steps the City can take to drive development where it wants it to be, and to drive uses that generate tax revenue. By preparing a Master Plan, the City can designate Strategic Opportunity Areas, implement placemaking for parks and other infrastructure, and then brand and market the new developments. This way, new uses and developments will occur at locations identified by the City, and they will be more viable.

SCENARIO II: MAXIMIZE FISCAL IMPACT

With regard to Scenario II and maximizing fiscal impact for the City, Panelists emphasized the need for a Master Plan or designating Strategic Opportunity Areas. Panelists identified three Strategic Opportunity Areas: North, Central, and South for higher density development which could be office, retail, or other uses. The key common attribute to these sites is the concentration of uses within the critical 1800 to 2200 feet pedestrian-friendly distance, which would not only activate the space between the strategic nodes, but also create the much required connectivity between existing uses.

The area marked “north” is designated as a density anchor. This building cluster is a single ownership and offers the opportunity to serve as a high impact area, with a possibility for adaptive reuse. This site could be developed as a retail-oriented neighborhood anchor, as a neighborhood center, or as something larger in scale. There are few retail destinations to the north and south of the study area. Panelists pointed out to the area marked “south” as the Foulger Pratt property where change is currently underway. Both properties have easy access to I-270. According to the City, this site was approved in 2016 for conversion

to retail uses, which will make it the largest stand-alone retail node in the study area. This parcel has been approved for fast casual dining, fitness center, and grocer or inline retail. The area marked “central” is the Westat Inc. property, which is single use in nature with substantial concentration. Panelists suggested ideas for connectivity between these Strategic Opportunity Areas, including larger scale green corridors and smaller scale pedestrian-friendly streetscaping gestures. With respect to existing open space there are opportunities to link the existing parks with these new developments to create linear parks, which would result in generating a mixture of commercial uses that are interspersed and connected to open spaces .

The Panel reiterated the need for a Master Plan for the three Strategic Opportunity Areas, and to create walkable sub-market amenities in the north, central, and south zones as shown in the adjoining illustrative plan. Panelists encouraged the City to take initiative towards the following: development of private and public amenities in the form of retail, public space, and hotels in specific locations; public programming in the north, south and central area; installation of pedestrian friendly streetscape; and improvement of the parks. The Panel recommended the following planning and zoning tools:

- Higher densities allowed.
- Financial incentives (i.e. property tax abatements).
- Public investment in place making.

Panelists suggested that the City can also restrict uses in the Strategic Opportunity Areas by disallowing them, turning them into conditional uses, or allowing them in Non-Strategic Opportunity Areas. The following planning tools could be effectively used to develop Non-Strategic Opportunity Areas:

- Lower Densities.
- Restrict uses based on Master plan. For example, the City could prohibit retail in these areas while promoting them in the Strategic Opportunity Areas, and only allow hotels in the Non-Strategic Opportunity Areas.



Illustrative Concept Plan for Scenario II with an aim to maximize fiscal impact for the City.

Image source: ULI Washington.

- Retail Density Anchors *High Concentration Impact Areas
- Green Corridor
- ▨ Potential Green Link

Panelists pointed out that zoning and master planning ultimately put the onus of development on the developers. However, the City can also take steps to create a better place and communicate to the development community that the City is a development partner that is dedicated to building an attractive place. The City can do this through the following measures:

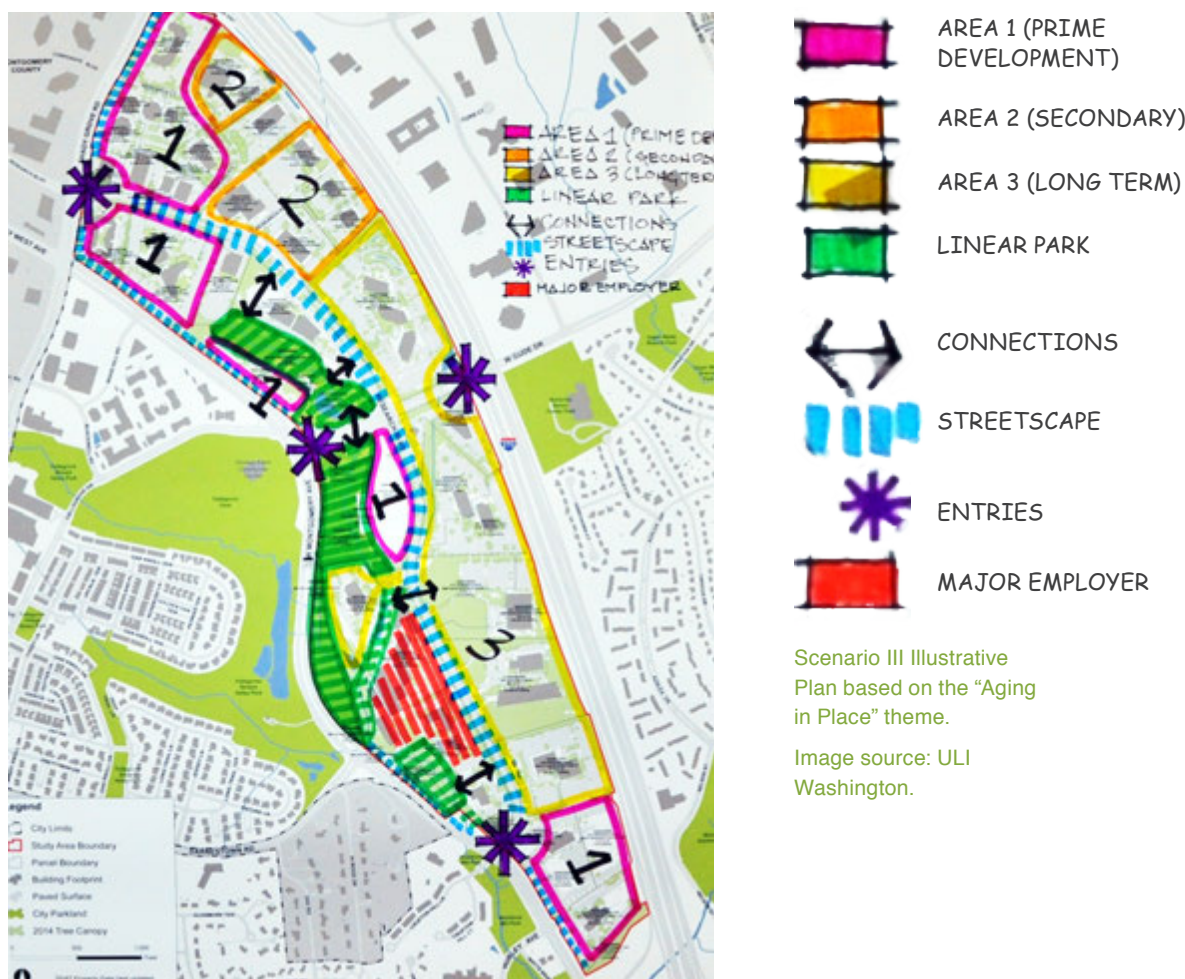
- **Parks.** Build parks even though they are expensive to build and maintain. Panelists pointed to the iconic Emeralds Necklace linear park in Boston, MA as a successful example.
- **Placemaking.** Facilitate wayfinding and creating public plazas for people to gather.
- **Programming.** Facilitate shutting down streets on event days for a bike race, movies, concerts, and other such activities which also attract people to this area besides employees.

SCENARIO III: AGING IN PLACE

Panelists formulated the third scenario to emphasize housing for Rockville residents now and in the future. Market analysis demonstrates that residential uses are viable on Research Boulevard in the current market; it is permitted almost everywhere by right by way of existing zoning; it enables “Aging In Place” if the City chooses this to be a goal; it supports a variety of other uses like retail; and this location is viable for residential use with complementary surrounding uses, such as shopping, institutions and other housing developments.

The Panel explored this scenario and its short-term and long-term development potential. Areas marked 1, 2, and 3 in the adjoining graphic represent the order of chronological development. Site 1 represents the short-term time span, with existing stable employment which is expected to remain, and where current reinvestment efforts are under way. Vacant sites at the intersection of West Montgomery Avenue and West Gude Drive can be catalysts for new development as well as visible entry points to the subarea. In terms of implementation strategies, the City first and foremost must define a vision for their residents and land owners. Panelists suggest that if focusing on housing is a clear intention, then the City should utilize the visible access points to create a strong sense of entry, and install streetscape improvements to create a sense of identity for the study area. Moreover, the Panel acknowledged that the City is currently in the midst of a Master Plan update. If the timeline permits, then the Master Plan update could facilitate housing development on these parcels - as this subarea is the only part of the study area which falls into a slightly different zoning category. Otherwise, the City could work with the property owners and make specific zoning changes for future development.

With regard to long-term development, the City must set a vision for Areas 2 and 3 through updating the Master Plan. In this process the City should



include assessment of current housing needs, identify desired product types, establish area-specific goals to support housing needs, and permit additional uses at specific locations. Additionally, over the long term, the City should consider comprehensive streetscape improvements and create zoning tools to incentivize desired development and limit undesired uses like additional density for lot consolidation. On the private side, larger parcels along I-270 could be consolidated to support housing goals.

2016-2017 Residential Sales

Panelists further researched residential sales of age restricted homes in Montgomery County, and learned that from January 2016 through March 2017, there were about 400 unit sales. The lowest sale was \$67 per square foot, and the highest was \$328 per square foot. Moreover, these 400 properties sold within an average of 44 days, the median being 24 days. Also, the Close Price to List Price ratio for these properties was 98%, and this indicates a very strong seller's market. There is also a trend for older adults to move to rental properties rather than buy new homes so the rental market may be viable in this area as well as the for sale market.

Recommendations

In order to shape the future of Research Boulevard, the Panel made the following global recommendations:

1. **Define a Desired Future.** The City will have to identify a vision for the study area. This vision could be as general as a desired identity or as specific as updated zoning. A market driven strategy will be important, along with implementing any zoning changes in order to lay the foundation for realizing the vision.
2. **Form Business Partnerships.** It will be important to bring the property owners in the study area together, but doing so will require clarity on the part of the City as to the intention of forming such a coalition of stakeholders. In one scenario, property owners might come together to form a Business Improvement District (BID) with the intent to improve the streetscape, provide a common shuttle to employees, and/or invest in common amenities. In another scenario, property owners may come together for a more complex approach to consolidate parcels and create larger properties to achieve multiple objectives. The goal of convening these partners will depend on the City's ultimate vision for the study area.
3. **Program Area-wide Improvements.** Enhancing the identity of Research Boulevard and improving walkability in the area will require assembling a program of area-wide improvements.

Conclusion

Over the course of the TAP, Panelists analyzed the context of the study area, physical attributes of the site, office and laboratory market in the Shady Grove micro market, and explored a list of alternative land uses for infill development along Research Boulevard. After studying existing conditions and understanding the market trends, the Panel presented three illustrative scenarios – Market Responsive, Maximize Fiscal Impact, and Aging in Place – and offered strategies to implement these scenarios.

The Panel acknowledged that the City has questioned the future of Research Boulevard at the right time, and there is still time to act. By and large, Panelists were optimistic about the future of Research Boulevard. They emphasized that the study area is not a traditional office park, and consequently, it is important to consider the study area's subareas, rather than viewing a development approach that is parcel-by-parcel. The 1800 to 2200 feet walkable distance range is a critical benchmark to be used as a tool that can promote walkability between uses. Most importantly, the City will have to define a vision and focus for the area in order to achieve a desired future.

Panelists



Nat Bottigheimer, CHAIR

Chief Fehr & Peers DC
Washington, DC

Nat is the DC Region Market Lead for traffic and transportation planners and analysts Fehr & Peers DC. Mr. Bottigheimer has 24 years of experience in coordinated land use and transportation planning. His practice supports community growth and place-making by addressing the needs of all transportation network users, and by using cutting-edge analysis and the latest data source types, such as using mobile device movement data to sharpen transit and highway demand forecasts, and modeling trip generation based on direct observations from mixed-use development nationally.

Before joining Fehr & Peers DC, Mr. Bottigheimer was an Assistant General Manager at WMATA overseeing the agency's Planning, Real Estate, and Parking programs. His experience at WMATA and prior to that at the Maryland DOT give him expertise in TOD and station access planning, bus service planning, land use and transportation coordination, transportation performance measurement and strategic planning.

Mr. Bottigheimer has been an active participant in the ULI DC District Council's TAP committee, has served on numerous TAPs, and has chaired prior TAPs for the Indian Head Rail Trail and for revitalization of Annandale, VA. He is a regular speaker and writer on transportation planning methods and trends.

Robert Atkinson

Davis Carter Scott
Fairfax, VA

Robert Atkinson is an Associate Principal and Vice president at Davis Carter Scott, one of the leading architectural firms in the Washington Metropolitan Area. Prior to joining Davis Carter Scott, Mr. Atkinson spent 14 years with the Department of Economic Development in Arlington Virginia where he was

responsible for the development of the award winning Rosslyn Station Area Plan Addendum, assisted numerous projects through the site plan approval process and was an active participant in developing many of the County's land use policies. Mr. Atkinson began his career as Urban Designer for the City of Little Rock, Arkansas where he was instrumental in developing the Downtown Plan as well as numerous neighborhood plans and other studies. Robert holds a Bachelor of University Studies degree from the University of New Mexico in architecture, planning and architectural history.

Eduardo Han

Keller Williams

Alexandria, VA

Eduardo's real estate career began 15 years ago working in real estate development, management and sales at Packo Investments, Inc. in Los Angeles, CA. After returning to Washington D.C. in 2006, he continued working within commercial real estate. Most recently, he was with the Real Estate Advisory Group at Alvarez & Marsal in Washington D.C. During his tenure at A&M, he worked with several public and private entities in various states as well as around the world on a variety of development projects, including large scale development, public-private partnerships, and housing projects.

As a Realtor® with Keller Williams Metro Center, Mr. Han has applied his knowledge of the real estate market in assisting a variety of clients, including international clients, with buying, selling, leasing, property management, and asset management. Through these relationships, Eduardo found the personal connections he made to be far more rewarding than working solely on the commercial side of the real estate industry.

Mr. Han's extensive experience in real estate provides his clients with a true expert. His knowledge and understanding of how real estate markets work, are financed, and how to best make the market work for buyers and sellers are unparalleled. His ability to analyze a property, whether it be for residential, commercial, or investment use makes him a valuable asset when investing in real estate whether you are buying or selling a home or purchasing an income property.

Marvin A. Poole

StonebridgeCarras

Bethesda, MD

As a Director in Investments and Asset Management for StonebridgeCarras, Marvin Poole leads the firm's underwriting and due diligence efforts for new investments and is involved in asset management, investor reporting, and disposition transactions for all existing investments. During his tenure with StonebridgeCarras, he has been involved in investment activity exceeding \$1 billion in real estate value. Mr. Poole reviews investment opportunities across a wide range of markets, including mixed-use, office, retail, residential, and industrial. Prior to joining StonebridgeCarras, Mr. Poole worked at EDENS, a retail REIT, providing support to the firm's capital markets, development, and investment activities. He also worked at Bank of America Merrill Lynch, formerly Banc of America Securities LLC, where he assisted in structuring investment-grade debt offerings totaling more than \$2 billion for clients within the REIT, lodging, and homebuilding sectors. Mr. Poole earned his Bachelor of Science from Clemson University. He is a member of the Urban Land Institute (ULI) and serves as chairman of ULI's Mentorship Program Committee. He is also a member of the D.C. Real Estate Group.

Kaushambi Shah

Urban Designer

Rockville, MD

Kaushambi Shah is a LEED accredited Urban Designer/Planner with a background in Architecture. She has 12 years of experience in the private sector, including design and planning in the domestic as well as international realm. Besides working on projects in U.S. cities like Philadelphia, Washington D.C., Baltimore, Boston, Fairfax and smaller towns in New York, she has also worked on projects in India, China, Saudi Arabia and Abu Dhabi. Her project experiences range from design of Entertainment Cities, Mixed Use Town Centers, Campus Plans and Redevelopment, Resort Communities, Residential Communities, Waterfront Developments and Transit Oriented Development.

She holds a Bachelor in Architecture from the University of Mumbai, India and a Masters in Urban Design from the University of Michigan, Ann Arbor. She is a member of the American Planning Association and Urban Land Institute, and an enthusiastic supporter of the Urban Land program by ULI.

Tammy Shoham

JLL

Washington, DC

Tammy Shoham recently joined JLL as a Vice President and leads Research Advisory services for the Mid-Atlantic region and nationally. With almost a decade of experience consulting for public agencies, academic institutions, and private developers, Ms. Shoham brings to JLL a nuanced understanding of market feasibility and development economics. Prior to joining the JLL, Ms. Shoham served as a Vice President of Economic Development and Research for the Capitol Riverfront BID. Prior to the BID, Ms. Shoham served as Vice President with RCLCO and a Senior Associate with ERAIAECOM.

Ms. Shoham received her Master in City Planning from Massachusetts Institute of Technology and a Bachelor of Business Administration from The University of Texas at Austin. She is an active member of the Urban Land Institute (ULI), serves on ULI's Washington-Baltimore Regional TOD Product Council, and is a steering committee member of ULI's Women's Leadership Initiative.

Dawn Volzs

Dewberry

Rockville, MD

Dawn Volz is a member of the Planning and Landscape Architecture team for the Dewberry Rockville office. Dewberry is a multi-disciplinary consulting firm specializing in Civil Engineering, Land Planning, Landscape Architecture and Surveying. Her involvement spans all stages from initial concept and feasibility through entitlement and final design/construction phases. As a designer, she has worked on a variety of projects, including Urban and Mixed-Use Planning, Adaptive Reuse and Infill, Site Planning, Green Roofs and Public Space Place-Making. She enjoys the challenges that each new design opportunity brings and strives to create balanced spaces that are thoughtfully designed, aesthetically pleasing, functional and sustainable.

Ms. Volz is an active ULI member and is currently on the Steering Committee of ULI's Women's Leadership Initiative (WLI). She received her Bachelors of Landscape Architecture from Penn State.

Patricia Larrabee

Facility Logix

Burtonsville, MD

Pat is the founder and President of Facility Logix. She has over 30 years of experience in the biotechnology industry, including several years as a bench researcher. For the past 20 years, Ms. Larrabee has applied her technical end-user knowledge to the facility-related needs of the industry. She advises developers and institutions across the United States and manages facility expansion and implementation programs for clients such as Covance, George Mason University, Integrated Biotherapeutics, Johns Hopkins University, the Vaccine & Gene Therapy Institute, United Therapeutics, and the Wisconsin Alumni Research Foundation. Ms. Larrabee has conducted numerous feasibility studies for shared wet-lab co-work, incubation, and accelerator facilities and has developed life science strategies for economic development groups across the country. Prior to founding Facility Logix, Ms. Larrabee was an Executive Vice President at Scheer Partners. She holds an MS in Biotechnology Management and a BA in Biology and sits on the Board of Women in Bio. In 2016, The Daily Record named Ms. Larrabee one of the Top 100 Women in Maryland.

Arlova Vonhm

Arlington County

Arlington, VA

Arlova J. Vonhm, AICP, is the Zoning Administrator for Arlington County, VA, a suburban county in the Washington, DC metropolitan region known for its pioneering work in attracting and supporting high-density, mixed use development along the Metrorail corridors. Ms. Vonhm leads a 30-member team responsible for interpreting, enforcing, and administering the Zoning Ordinance. Prior to joining Arlington County, Ms. Vonhm worked as the Zoning Update Manager for the District of Columbia Office of Planning, leading a comprehensive effort to rewrite and reorganize the city's 50-year old zoning ordinance.

Ms. Vonhm received an undergraduate degree from the University of Virginia and a Master of Urban and Regional Planning from the University of Michigan. Ms. Vonhm served as a board member of the National Capital Area Chapter of the American Planning Association for six years, creating and promoting continuing education opportunities for planners in the DC metropolitan region. Mr. Vonhm is a Chicago native and currently resides in Northeast Washington, DC with her husband Mainlehwon and their son Jackson.



**Urban Land
Institute**

Washington

ULI Washington
2001 L Street, NW, Suite 200
Washington, DC 20036
Phone: (240) 497-0550
www.washington.uli.org