







White Oak Science Gateway Redevelopment

Montgomery County, Maryland

Prepared by:
Montgomery County
Department of Transportation
101 Monroe Street, 10th Floor
Rockville, Maryland 20850







Point of Contact:

Mr. Al Roshdieh, Director

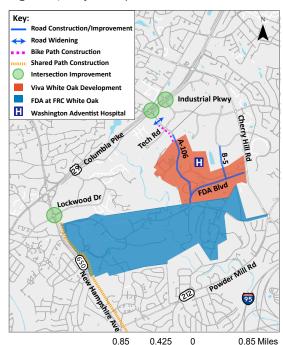
Montgomery County Department of Transportation 101 Monroe Street, 10th Floor Rockville, MD 20850

240-777-7168

al.roshdieh@montgomerycountymd.gov

Montgomery County DUNS Number: 062014378

Figure 1 | Project Improvements



Project Overview

Project Name:

White Oak Science Gateway Redevelopment

Project Type:

Neighborhood Redevelopment

Project Location:

Montgomery County (County), Maryland; 3rd and 8th Congressional Districts of Maryland; National Capital Region Transportation Planning Board (TPB) Metropolitan Planning Organization

Project Description:

To enable the significant redevelopment envisioned by the White Oak Science Gateway Master Plan, the Montgomery County Department of Transportation (MCDOT) is implementing transportation system upgrades that will improve network connectivity, provide a broader range of multimodal travel options and ease congestion along major transportation corridors in eastern Montgomery County. The changes to the area include a series of transportation enhancements, such as constructing new roads to improve access to private development and Federal property, upgrading three major intersections, installing bike lanes and shared use paths, and providing additional buses to the White Oak Circulator service.

These transportation improvements are a vital component to the future success of the public-private partnership that will enable the redevelopment of a 280-acre, mixed-use, global biomedical innovation epicenter called

Viva White Oak™. The Viva White Oak™ redevelopment entails over 12 million square feet of residential, commercial, and retail land uses that will leverage a public-private partnership as well as a partnership with the Federal government at the Food & Drug Administration campus, to support economic activity and access for Federal, State and local stakeholders. The redevelopment will result in increasing land values; significant new jobs, residences and commercial activity; developer-led roadway construction; increased access for all parties to state highways and interstate freeways; and improved multimodal transportation options in the area. Montgomery County is applying for the Federal BUILD Grant for forward funding of the transportation improvements necessary to support the White Oak community and complete the redevelopment project.

Total Project Cost: \$74,340,000

Committed Local Match: \$49,340,000

BUILD Funds Requested: \$25,000,000 (33.6%)

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Impact Analysis for LifeSci Villiage Mixed-Use

The following transportation improvements included in the grant application are required to enable planned development:

Construct planned County Roads

Industrial Parkway extended (A-106)

FDA Boulevard extension to adjoin Washington Adventist Hospital property through Percontee property (B-5)

Reconstruct/improve FDA Boulevard (B-10)

At- Grade Intersection Treatments US 29 at Industrial Parkway

Install one southbound left turn lane and relocate two northbound right turns

US 29 at Tech Road

Install northbound and southbound turn restrictions

MD 650 (New Hampshire Avenue) at Lockwood Drive

Install one northbound left turn lane, install one westbound through lane and install one receiving lane on the west leg

Purchase buses for the White Oak Circulator Ride-On Service

New Buses

Construct the MD 650 Bikeway shared use path

Between FDA and I-495 (1.0 miles) on the east side of MD 650 with a short gap between FDA's north end and Lockwood Drive

Widen existing Industrial Parkway to accommodate bike lanes

Between Industrial Road Extension to US 29

I. Project Description

Introduction and Funding Request

The White Oak area is located in the eastern part of Montgomery County, Maryland, at the southern end of the corridor connecting Baltimore and Washington, D.C. The area is characterized by late 20th Century residential, commercial and industrial land uses. Between 2010 and the present, the County has undertaken sustained efforts to encourage renewal and redevelopment in this area. Those efforts included the adoption in 2014 of the White Oak Science Gateway (WOSG) Master Plan.

As framed by the WOSG Master Plan, several new development projects are underway in the area including construction of a new, stateof-the art, Washington Adventist Hospital, new residential projects, and commercial development along U.S. 29 and Maryland 650. The largest project includes the Master Plan recommended, Life Sciences/FDA Village Center redevelopment of a 110-acre County-owned parcel on Industrial Parkway along with an adjacent 170-acre privatelyowned parcel. This public-private partnership will enable the redevelopment to occur as a comprehensive and coordinated 280-acre mixed-use, global biomedical innovation epicenter called Viva White Oak™. The project is located adjacent to the US Food and Drug Administration (FDA) Headquarters, which is currently undergoing a major expansion.

The Viva White Oak™ redevelopment will leverage a public-private partnership between Montgomery County and Percontee, Inc. (private developer), as well as partnership with the Federal government at the FDA, to support increased economic activity and access for Federal, State, and local stakeholders in the White Oak community. The project represents a significant economic development opportunity for eastern Montgomery County. Initial projections from the Maryland-National Capital Parks & Planning Commission indicate that the project will generate over 22,000 new jobs. In addition, Viva White Oak™ will have substantial statewide, national, and global significance in the biomedical and biotechnological innovation economy (which is of utmost value to Montgomery County, the State of Maryland, and the Federal Government's critical safety and national security missions carried out by the FDA).

To support and enable the Viva White Oak redevelopment, the County is implementing the White Oak Science Gateway Local Area Transportation Improvement Program (LATIP).² The LATIP identifies and quantifies the transportation impacts and mitigation measures required for new development in the area, and it provides a new and dedicated source of transportation revenue from the private sector. As part of this process, Montgomery County, in partnership with private land owners, is implementing a series of infrastructure investments to the

2004-2010

Gathering Community Support

Percontee has actively sought to foster, and has earned, a genuine and inclusive relationship with the surrounding communities during the early stages of the planning of Viva White Oak.

Quarterly community input meetings with representatives of the surrounding communities to keep informed of progress, and give the stakeholders a voice in shaping what Viva White Oak will look like.

Public meetings showcasing the Viva White Oak concept, followed by surveys filled out by the audiences at meetings, showing **94% in favor** of the Viva White Oak concept.

2011

Montgomery County announces Percontee as builder of \$3 billion science center in Montgomery County in a public-private partnership.

2012-2014

Montgomery County Council approves White Oak Science Gateway Master Plan, paving the way for the project to move forward.

2015-2016

The community is officially named Viva White Oak.

Biomedical Roundtable Conference hosted by Montgomery County.

Montgomery County finalizes General Development Agreement.

International health collaboration agreement.

2017-2018

County Council approves \$49.04M in Capital Funding of for transportation projects and site improvements necessary for redeveloping the 280-acre bioscience-focused mixed-use community through public-private partnership with Percontee, Inc./Global LifeSci Devleopment Corporation.

transportation system in the WOSG area that will improve network connectivity, provide a broader range of multimodal travel options, improve safety, and ease congestion along major transportation corridors.

To catalyze the redevelopment, and to ensure that transportation improvements occur at a pace to support the redevelopment, MCDOT is seeking partial funding from the U.S. Department of Transportation (USDOT) Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grant program for improvements recommended as part of the Master Plan and LATIP. Specifically, the County is seeking \$25 million in Federal BUILD grant funding, supported by over \$49 million in County-approved and programmed matching funds for master planned transportation and infrastructure improvements.

Project Context and History

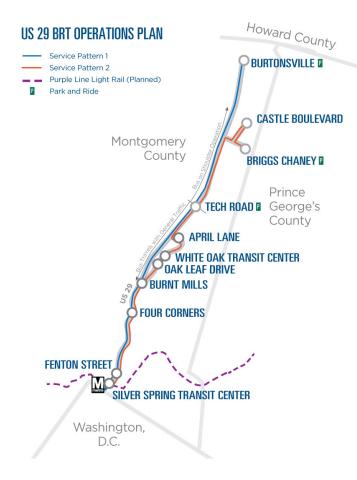
White Oak is located in eastern Montgomery County, within several **Metropolitan Washington Council of Governments** (MWCOG) Equity Emphasis Areas.³

The area has the highest poverty rate in the County. Historically, redevelopment in this portion of the County has been limited by factors including development moratoria (which have since been lifted), aging infrastructure, traffic congestion, limited transportation options, and disconnected land uses. To address these issues, the County adopted the WSOG Master Plan, to expand local and regional transportation infrastructure, and partnered with public and

private interests to foster redevelopment. As a result, plans are in place and projects underway to address the need for additional roadway connectivity, multimodal travel options, intersection throughput, and a connected mix of land uses.

In 2009, Montgomery County purchased a 110-acre site from the Washington Suburban Sanitary Commission (WSSC) for the express purpose of creating a "World Class Bio/ Life Sciences, Education and Research Community." A Request for Proposals was issued for a public-private partnership, and in 2011 the County chose Percontee, Inc., owner of the adjacent 170 acre gravel operation, as its development partner. This partnership to redevelop 280 acres of industrial uses into a mixed-use center with a focus on bio/life sciences will take place over the next 20-30 vears. Regulatory applications were submitted with the Montgomery County Planning Department and Department of Permitting Services in 2017 with approvals expected by the end of 2018. Permitting and construction of the first phase will follow shortly after approvals are received.

While the 280-acre project known as Viva White Oak™ is poised to transform the WOSG area, new development and redevelopment in the area is not limited only to this project. A new master plan was approved in 2014 covering nearly 3,000 acres, allowing mixed uses on other properties historically dominated by a single use. Construction is nearing completion on the Washington Adventist Hospital on a 50-acre site near Cherry Hill Road. The hospital is estimated



to open in 2019. Smaller infill projects, both commercial and residential, have been taking place since the development moratorium ended in 2002. In addition, the White Oak area includes two Federal **Opportunity Zones**⁴, created through the 2017 Tax Cuts and Jobs Act. The zones encourage capital investment in underserved communities through federal tax incentives.

Additionally, the Federal Research Center (FRC) at White Oak, which includes the FDA campus, has consolidated thousands of employees to the WOSG in both new and relocated jobs. FDA plans to expand facilities and grow employment further as part of their current master plan. As outlined in the 2018 Federal Research Center **Master Plan Draft Environmental** Impact Statement⁵, there are unique opportunities for FDA employment growth to support additional retail, housing, and office opportunities that would benefit the entire White Oak community. The location of the FDA campus in the project area also provides a "reverse commute" benefit to the region; whereas most Federal employees commute into Washington D.C. and most jobs within Montgomery County are located on the west side of the county, many FDA employees commute from D.C. and western parts of the County, alleviating congestion from typical commute patterns.

In addition to diversifying and connecting land uses in the White Oak area, these projects include roadway infrastructure that will improve the local transportation network, and will also help connect White Oak to improved transit service along US 29.

Despite its automobile-oriented development patterns, US 29 is the busiest transit corridor in Maryland. Nevertheless, many areas along the corridor remain poorly-served for transit dependent residents. At the same time, the White Oak area experiences extensive traffic congestion that shapes the perception of the area. While that traffic severely limits the mobility of local residents, 80 percent of traffic on Route 29 is through traffic.

A vital component of the area's redevelopment is the US 29 Bus Rapid Transit (BRT) project⁶, which received \$10 million in Federal TIGER Grant funding in 2016 with final approval. The US 29 BRT project will transform US 29, the only US Route in the County, providing robust transit connections to activity centers along the corridor, within the County, and throughout the region. It will provide vital transit connections to 22 local bus routes, six MTA commuter bus routes, Metrorail, MARC Commuter Rail, and Amtrak on one of the most congested road corridors in the region. The BRT will also provide future connections to the Purple Line Light Rail project at the Silver Spring Transit Center, which is also a Metrorail Red Line Station. When complete, the system will link a continuous corridor of shopping centers, Federal offices, residential neighborhoods, regional park-and-rides, and an increasingly dense residential and jobs center in Silver Spring. The proposed circulator bus routes as part of this BUILD request will connect the new White Oak developments with the new US 29 BRT stations, thus supporting new opportunities in this historically underserved part of Montgomery County.

Viva White Oak represents a significant leap forward for the East County and a tremendous opportunity for global innovation partnerships for Montgomery County and the region. It will not only create a new community with homes, shopping and dining opportunities, but it will facilitate world-class research and development efforts right at the front door of the U.S. Food and Drug Administration (FDA) in White Oak and boost cooperation with that agency.

The project represents a huge opportunity to expand our partnership with the private sector, to improve infrastructure, to foster environmentally-responsive redevelopment and to create jobs.

- Isiah Leggett, County Executive

An additional plan to improve economic conditions and update the area's aging infrastructure is **ultraMontgomery**⁷, a technology-based, multi-year, economic development initiative. Its objective is to grow knowledge-based jobs by making gigabit broadband more affordable and widely available to public, private, education and government institutions in major corridors and transit-oriented smart growth communities within the County.

Given all of these economic development initiatives, the White Oak area is poised to redevelop as a vibrant mixed-use community that provides equitable access to jobs, housing, and community facilities. The BUILD funding will provide forward funding to improve the area's transportation network and support proposed redevelopment that can strengthen this community. Through the groundwork laid by Montgomery County and its developer partner, Federal investment in White Oak will leverage significant private development along with a dedicated and local source of private revenue for transportation projects from the LATIP.

Local Area Needs

Limited Roadway Network

The existing roadway network within the White Oak area significantly hinders the potential for development and redevelopment. Improvements in the area will require expanded vehicular connections as well as additional roadway capacity. Historically, disjointed property ownership, large Federal holdings, and underinvestment in

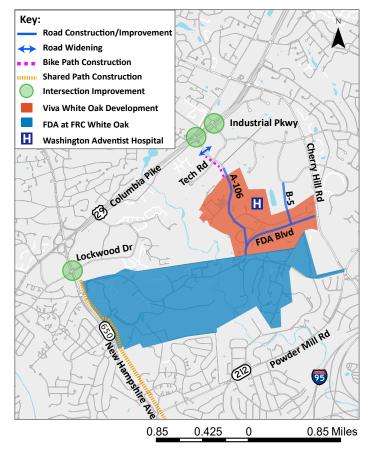
infrastructure have constrained the degree to which the network could be improved, but the recent property acquisitions, Federal campus plans, and development partnerships described herein have created new opportunities. Improvements are needed for circulation within the project area, but also to connect the area to the broader region.

Intersection Safety and Congestion

As identified in the WOSG Master Plan, improvements to the capacity and safety of existing intersections are needed to support development in the area. The throughput capacity and the operational geometry of existing intersections cause congestion and would severely limit development potential in the absence of the proposed improvements. Furthermore, crash data at the intersections indicate improvements are necessary to mitigate existing safety issues, which could be exacerbated by increased traffic volumes without such improvements.

Limited Transit Service

Existing transit operations are limited by congestion, which hinders bus ontime performance and speed. As the area develops, and transit demand and ridership grow, high-quality transit service is needed. Without an adequate and attractive service, automobile traffic will increase, leading to greater congestion and further reduced bus performance. Enhancements are also needed to capitalize on and connect to the proposed US 29 BRT system, which recently received TIGER grant funding.



Lacking Multimodal Network

Dedicated bicycle and pedestrian facilities are limited within the project area. As mixed-use development occurs, transportation choice will prove critical to the realization of a vibrant and healthy community and to attract residential and commercial tenants. By providing non-automobile options for local trips, these facilities can help alleviate congestion on area roadways. Multimodal facilities are needed to help complete the transportation network that will spur and support development in White Oak. Connections to regional trail facilities are also needed.

Quality of Life

The proposed transportation infrastructure improvements would serve as the catalyst for master planned redevelopment of the White Oak area. The area currently lacks access to jobs, multimodal transportation, housing choice, and community services. The master planning process has identified these needs through a deliberate public engagement strategy. Along with our private sector and government partners, the County has begun implementation of the WOSG Master Plan. Forward funding is now needed to ensure that transportation infrastructure is timed to promote development in an efficient way. As with other transportation improvements, there is a need to address equity in the provision of these facilities to an underserved community.

How the Proposed Transportation Improvements Can Help

Expand and Connect the Roadway Network

Construction of Industrial Parkway Extended (A-106), Plum Orchard/FDA Boulevard Connector (B-5), and reconstruction of FDA Boulevard (B-10) would dramatically improve the local and regional roadway network, facilitating redevelopment of this area and alleviating network congestion¹. The new and expanded/reconstructed roads will form the transportation framework for the WOSG area and will directly link the Viva White Oak™ redevelopment to US 29, Cherry Hill Road, and the regional highway network, including the I-95 interstate corridor. These roadway projects, along with associated site utility work, are the WOSG transportation and site improvements included in the Montgomery County Capital Budget and represent the County's matching funds for the BUILD grant application:

- The extension of Industrial Parkway into the Viva White Oak™ development, intersecting with FDA Blvd (0.88 miles), will be constructed as a part of the Viva White Oak™ development.
- A new connector street between Plum Orchard Drive and FDA Blvd (0.35 miles) will be constructed for Viva White Oak™ (the southern portion), connecting to a northern segment currently being constructed by the Washington Adventist Hospital.

 $^{1\} Montgomery\ County\ uses\ letter\ designations\ for\ different\ roadway\ classifications:\ A\ is\ for\ arterial\ roadways\ and\ B\ is\ for\ business\ roadways.$

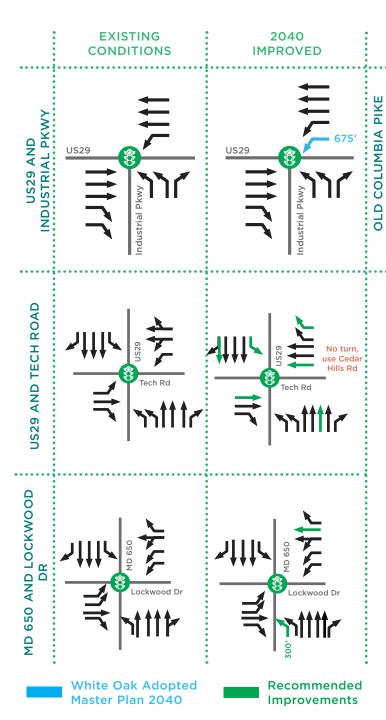
2040

IMPROVED

EXISTING

CONDITIONS

LUMBI



 Widening to provide for parking lanes along each direction of FDA Blvd (0.5 miles). This work will be addressed as part of the Viva White Oak™ development.

2040

IMPROVED

Pike

500'

Improve Intersection Safety and Traffic Efficiency

EXISTING

CONDITIONS

Pike

The LATIP identified specific intersection improvements needed to support the proposed development. This application focuses on three of the most important intersections that would address safety concerns, reduce multimodal congestion, and facilitate access to jobs.

- US 29 at Industrial Parkway / Old Columbia Pike
 - Relocate two northbound right-turns from the primary intersection to a secondary intersection and the addition of a second southbound left-turn lane.
 - A new westbound right-turn lane from Industrial Pkwy onto Prosperity Drive,

and a traffic signal at this intersection.

- Old Columbia Pike / Prosperity Drive would be converted to right-only upon approach to Industrial Pkwy.
- US 29 at Tech Road
 - · Add a northbound right-turn lane,
 - Convert the southbound right-turn lane to a shared thru/right lane
 - Add a second southbound left-turn lane
 - Add a second westbound right-turn lane
 - Redirect westbound left turns to Cedar Hill Drive
 - Redirect eastbound left turns to Industrial Drive
 - Remove split phasing from the signal
- MD 650 at Lockwood Drive

The County's proposal supports economic competitiveness, promotes alternative travel options, improves road safety and incentivizes technology in the region by combining public and private investment in an area that is currently underserved by multimodal transportation and access to jobs and housing.

Benjamin L. CardinUnited States Senator

Chris Van Hollen United States Senator

John P. Sarbanes Member of Congress

John K. Delaney Member of Congress

Jamie B. Raskin Member of Congress Add a northbound left-turn lane on MD 650 and extend the receiving lane along the west leg of the intersection on Lockwood Drive.

Improve the Quality of Transit Service

The White Oak Circulator would expand transit options for local and regional trips, providing enhanced modal choice for residents and employees, while also reducing motor vehicle demand and associated congestion. The project would provide transit to an underserved population in the White Oak community.

The transit service includes a new route traveling between Viva White Oak™ and the Silver Spring Transit Center initially, converting to a Circulator around the White Oak Science Gateway area after construction of the US 29 BRT. Under both cases, the new WOSG Circulator is expected to operate at 15-minute headways.

Provide Modal Choice and Active Transportation

As part of a comprehensive transportation network, based on master plan outcomes, the proposed multimodal improvements would encourage travel by means other than the automobile, allowing people to walk or bike to jobs, shopping, community facilities, and transit stops.

 Industrial Parkway Bike Lanes (0.4 miles) involve converting existing parking lanes to travel lanes and adding new bike lanes along each direction of Industrial Parkway, necessitating 7 feet of additional

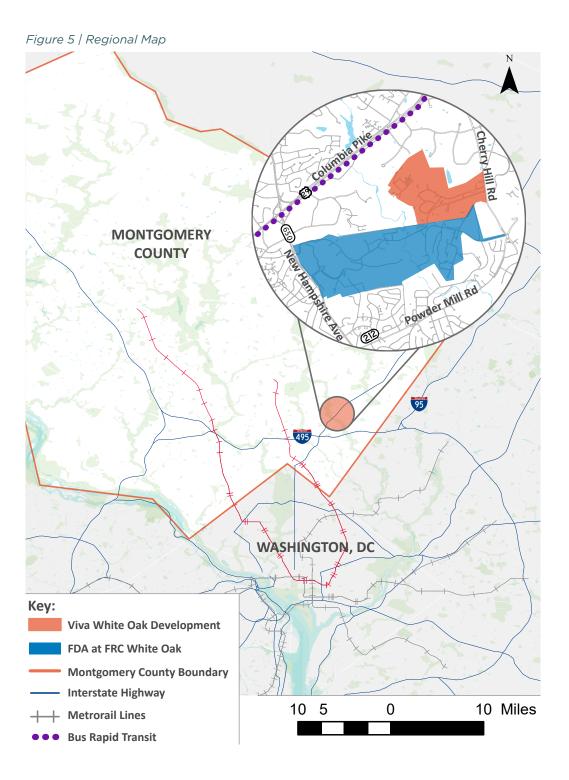
- pavement and reconstruction of curb lines and drainage systems.
- MD 650 Shared Use Path includes a new shared use path on the east side of MD 650 between the FDA and I-495 (1.0 miles) with a short gap between FDA's north end and Lockwood Drive

Enhance the Quality of Life

The requested BUILD funding will promote the timely provision of infrastructure to leverage significant master planned development. The resulting job creation, multimodal accessibility, housing choice, and access to community services would dramatically improve the quality of life for residents and stakeholders. In addition, the proposed transportation infrastructure improvements will provide opportunity in the form of better access to jobs and services. By reducing travel times and improving alternative transportation facilities/options, the project will provide diverse populations more flexibility in their daily lives.

Sustainable and Cost-Effective

The project represents a sustainable approach to infrastructure and leveraged development. A portion of the project area includes a former gravel mining area and provides an opportunity for brownfield redevelopment. Furthermore, the reduced vehicular congestion will result in air quality benefits.



II. Project Location

The White Oak Science Gateway Redevelopment project is located in Montgomery County, Maryland. Montgomery County is located just north of Washington, D.C., and is an integral part of the economic, social, and political fabric of the Washington D.C. Metropolitan Area. The County is part of the Metropolitan Planning Organization's National Capital Region Transportation Planning Board and the Washington-Baltimore-Northern Virginia Combined Statistical Area, which has a population of more than 9 million people. Montgomery County is the most populous county in the state of Maryland with over 1 million residents, and it is the second most populous county in the metropolitan region.

The White Oak Science Gateway Redevelopment BUILD Grant transportation projects are primarily located between University Blvd, to the south, and Cherry Hill Road, to the north along Columbia Road (US 29).

The area has seen minimal redevelopment in recent years, as outlined below, and has lacked an adequate and connected transportation network to support actual development potential. The requested BUILD funding would capitalize on the recent development and allow the Viva White Oak^{TM} project to occur such that it expands opportunity while also reducing congestion and linking the area to the broader regional transportation network, including the US 29 BRT.

White Oak Area Demographics







East County unemployment rate

5.9%



White Oak Average Age



Population Distribution of White Oak

of MoCo



Lowest median household income in the County

~\$66K

A key anchor in the White Oak Neighborhood is the 660-acre Federal Research Center (home to the US FDA Headquarters, the Air Force Wind Tunnel Research Facility operated under the auspices of the Arnold Engineering Development Complex). With the FDA expansion, approximately 18,000 employees are projected to work at the state-of-the art campus, presenting synergistic opportunities to reimagine and rethink the possibilities for surrounding communities. FDA could serve as a gateway to attract companies that offer high quality employment in fields such as health care, pharmaceuticals, life sciences, and advanced technology.

Similarly, the new Adventist Healthcare/
White Oak Medical Center located adjacent to
the Viva White Oak™ development will open
in Summer 2019. The new hospital campus
will be located near the FDA headquarters
and will enhance the emerging Life Sciences
Gateway.

In Hillandale, a neighborhood located just south of White Oak, a new office building was completed in 2010 (10001 New Hampshire Avenue) that is leased by the FDA. A former furniture store on US 29 just north of Northwest Branch was redeveloped in 2005 as the Shoppes of Burnt Mills, anchored by Trader Joe's. Most recently, in 2014, the Amalgamated Transit Union (ATU) purchased the National Labor College campus for its international headquarters and is contemplating residential and mixeduse development along its New Hampshire Avenue (MD 650) frontage.

The White Oak area has shown promise for potential redevelopment, and development completed since the late 1990s in the area has included a mix of uses that are already prepared to support new businesses, residents, and employment in the area. Developments include Gatestone, Whitehall Square, and Seaton Square townhouse communities. Retail developments include Orchard Center on Cherry Hill Road and Westech Corner on Tech Road. The new Marriott Residence Inn and Hilton Garden Inn hotels and two office buildings built in the Westech Business Park have expanded commercial opportunities. The White Oak community will thrive and experience economic transformation as the BUILD Grant funding and County support enable the redevelopment outlined in White Oak Science Gateway Master Plan.

The East County Neighborhood Analytics from County stat provide extensive demographic information for White Oak and East County.



Figure 6 | Washington Adventist Hospital

Project Budget

Federal BUILD Funds:

\$25,000,000

County Contribution:

\$49,340,000

US 29 at Industrial Parkway

At-Grade Intersection Treatments

\$4,400,000

US 29 at Tech Road

At-Grade Intersection Treatments

\$3,300,000

MD 650 at Lockwood Drive

At-Grade Intersection Treatments

\$1,400,000

Buses for the White Oak Circulator

New & Increased Ride-On Service

\$1,200,000

MD 650 Bikeway Shared Use Path

\$6,600,000

Industrial Parkway

Road Widening for Bike Lanes

\$8,400,000

White Oak Science Gateway Redevelopment Transportation

& Site Improvements

\$49,040,000

TOTAL COST:

\$74,340,000

*Operating costs of circulator are not included in BUILD Grant.

III. Grant Funds, Sources and Uses of Project Funds

The implementation cost for the White Oak Science Gateway Redevelopment project is estimated to be over \$74 million, \$25 million of which will be supported by the U.S. Department of Transportation BUILD Transportation Discretionary Grant program. Montgomery County has allocated \$49.04 million in the Montgomery County Capital Budget for **transportation project funding**⁸ to support access roadway construction for the White Oak Science Gateway Redevelopment Project. In addition to the roadway construction, the County has identified six transportation projects in the WOSG planning area essential to the redevelopment project and requiring forward funding for construction.

In addition to the County and Federal funds, the WOSG LATIP process administered by Montgomery County will provide \$300,000 of private-sector funding to support the initial transportation improvements. Scheduling of the transportation related projects can be flexible and occur concurrently when funding becomes available.

For at least the foregoing reasons, Montgomery County's \$25 Million BUILD grant request represents among the most costeffective and efficient "Leveraging" (which, of course, is the "L" in the BUILD program) of the federal taxpayer's dollars, because this investment would leverage, among other investments:

1. The \$49.04 Million that Montgomery County has already authorized and approved

for the Viva White Oak™ public-private partnership investments in transportation infrastructure

- **2.** The ~\$21 Million that Montgomery County has budgeted to spend on the US Route 29 corridor BRT infrastructure (in addition to the US Government's previous \$10 Million transportation infrastructure grant for this same BRT corridor)
- **3.** The estimated \$3.2 Billion of new private sector investment in Viva White Oak^{TM} at full buildout
- **4.** The estimated \$1.3 Billion already invested by the federal government in the consolidation of the FDA Headquarters to date
- **5.** Leveraging all the investments in the area that would create greater cost-efficiencies for transportation infrastructure that would be necessitated by further consolidation of the FDA Headquarters (as reflected in the GSA's current master planning NEPA process)
- **6.** The estimated \$600 Million of new private sector investment in the Adventist HealthCare/White Oak Medical Center (opening in the Summer of 2019)
- **7.** The additional investments of other redevelopment projects in the White Oak Science Gateway master plan area, which will be encouraged by the major anchor investments of the FDA Headquarters, Adventist HealthCare/White Oak Medical Center, and Viva White Oak™.

Figure 7 | FDA Campus



Figure 8 | Washington Adventist Hospital (under construction)

IV. Criteria

1. Merit Criteria

The White Oak Science Gateway BUILD project aligns directly with the grant program merit criteria. As part of a project that will stimulate job growth, economic development, and multimodal connectivity, the proposed improvements will utilize transportation infrastructure to leverage private development. By providing front money to ensure timely provision of infrastructure, the project will help sustain an innovative non-federal source of transportation revenue, in the form of LATIP contributions (described below), contributing to long-term state of good repair. The project will enhance safety, expand modal choice, and improve the area's quality of life. By promoting brownfield redevelopment, the improvements will represent a sustainable approach to economic competitiveness. Finally, the project brings an extensive group of local, regional, federal, and private partners together to transform a 280-acre brownfield into a bioscience focused mixed use community.

A. Safety

The existing congested roadway network offers limited multimodal transportation options and has high crash rates. The BUILD project will enhance the safety of all modes. By installing well-designed, safe, and interconnected, vehicular, transit, bicycle and pedestrian facilities, the project will reinforce the County's commitment to safe travel options and modal choice. It will also provide options to the single occupant vehicle travel.

Montgomery County is also one of the first county governments in the United States to initiate a Vision Zero plan. The County is putting resources in place to reduce severe and fatal collisions on County roads by 35 percent for vehicle occupants, bicyclists, and pedestrians, by November 2019. To reach the goal of zero severe and fatal collisions by 2030, the Two-Year Action Plan9 lays out specific activities with deadlines for implementation. All 41 action items are built around five key action areas: Engineering; Enforcement; Education and Training; Traffic Incident Management; and Law, Policy, and Advocacy. The proposed improvements will improve safety and help the County achieve their Vision Zero goals.

Creating Safe Transportation Options

The project will reduce traffic congestion and the potential for rear-end collisions by improving intersection visibility and by providing lane capacity improvements at three intersections. The project provides additional lanes for high volume turning movements to reduce aggressive driving, red-light running and increased delays linked to long cycle wait times. The intersection improvements will result in a reduction in severe crashes, including both injury and fatal crash outcomes.

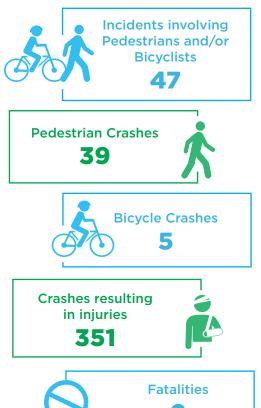
Additionally, investment in new buses to support a new circulator route with 15-minute headways will expand service coverage leading to increased transit service and ridership, and thereby reducing traffic volumes and crashes in the White Oak area.

Figure 9 | Industrial Parkway Extended Roadway Design



Source: White Oak Science Gateway Master Plan Design Guidelines, page 23

Figure 10 | Crash Statistics



TOTAL CRASHES

The project will also deliver new infrastructure for pedestrians and bicyclists. The proposed one-mile bikeway/shared use path on MD 650 will provide greater separation from traffic and be a safer option for walking and cycling along a high-volume arterial roadway to connect compatible land uses in the master plan area. The proposed separated bicycle lanes on Industrial Parkway (0.4 miles) will provide a safer dedicated facility for cyclists to access the White Oak Science Gateway area and improve accessibility to existing bicycle facilities west of US 29. The separated bicycle lane improvements include both widening the existing segment of Industrial Parkway and constructing the Industrial Parkway extension to Viva White Oak™ with bicycle lanes.

Reducing Crash Rates

The proposed multimodal improvements, including intersection improvements, transit service, shared use path, and dedicated bike lanes will improve safety throughout the project area by reducing vehicle conflicts and increasing use of dedicated facilities for non-automobile modes. Based on analysis of appropriate crash modification factors (CMFs) for the various improvements and Federal Highway Administration guidelines regarding the cost of various crash types, the value of safety benefits from reduced crashes will be \$9 million per year.

B. State of Good Repair

The project is consistent with the County's efforts to maintain transportation facilities and systems in a state of good repair to address current and projected vulnerabilities. If left unimproved, the poor condition of the area will threaten future transportation network

efficiency, mobility of goods, accessibility and mobility of people, or economic growth.

Infrastructure and Transportation Systems Improvement

The associated projects will significantly improve the accessibility, condition, and functionality of the transportation network throughout the White Oak Science Gateway area. The project supports new and proposed infrastructure and transportation systems, including:

- US 29 BRT (TIGER VIII Grant funded)
- New Hampshire Avenue (MD 650) and Randolph Road BRT Corridors
- Metrobus routes K9/K6
- Takoma Langley Transit Center (TIGER I Grant funded)
- High-speed fiber optic broadband infrastructure (ultraMontgomery)

The project also promotes the use of alternative modes that will reduce traffic congestion and volume. A reduction in automobile traffic reduces the roadway maintenance burden and cost. These improvements and connectivity expansions create a transportation system in a state of good repair that builds an environment that inherently promotes the success of all people.

Regional Redevelopment Opportunity

The project involves substantial upgrades to existing conditions within the White Oak Science Gateway Master Plan area. The project proposes mixed use development with associated public access and infrastructure enhancements representing a significant

FDA Campus Expansion

Recently acquired responsibility for the regulation of Cosmetics and Tobacco as an addition to current Food and Drug regulation

130-acre campus

Development up to an additional 1,191, **309 gsf** of office space and **557,525 gsf** of special/shared use space to support FDA's mission for a total of up to **8,977,671 gsf**

5,900 additional jobs by 2019

Hillandale Gateway
Mixed-use zoning

Joint venture with the Housing Opportunities Commission

400+ residential units

25,000 SF retail

Located adjacent to the Amalgamated Transit Union (aka National Labor College)

Washington Adventist Hospital
Under Construction

803,000SF

Scheduled to Open Spring 2019

Campus comprised of main hospital with **170** beds, ambulatory care building, **two** medical office buildings, Center for Spiritual Life and Healing building, parking lots and helipad

improvement in public facilities and land uses accessible to the public. Additional projects linked with the redevelopment, see left.

To maintain a state of good repair after the development has been constructed, the project is appropriately capitalized up front and uses asset management approaches that optimize its long-term cost structure. Similarly, to reduce overall life-cycle costs, a sustainable source of revenue is available for operations and maintenance of the project.

C. Economic Competitiveness

Equity Emphasis Area

The project is located in eastern Montgomery County within several Metropolitan Washington Council of Governments (MWCOG)/ Transportation Planning Board (TPB) Equity Emphasis Areas. The project enables significant redevelopment in an historically underserved area, thereby increasing economic productivity and access to jobs and resulting in long-term job creation and other economic opportunities. Viva White Oak™ census tract was recently nominated by Maryland Governor Larry Hogan and officially certified by the US Treasury as a "Designated Opportunity Zone" under the provisions of the Tax Cut and Jobs Act of 2017. Federal Opportunity Zones offer tax incentives for capital gains reinvested into designated census tracts. Capital gains can be invested in businesses, equipment, and real property located in Opportunity Zones. They are designed to allow flexibility in ownership and enable responsive investment to local needs.

Master Planned Development Economic Opportunity

The project development enables the following new land uses incorporated in the White Oak Master Plan mixed-use program.

5,000,000 SF Office
1,900,000 SF Retail
600,000 SF Industrial
3,900,000 SF BioScience
900,000 SF Hospital
Over 100,000 SF Other
131 Single Family Detached
372 Single Family Attached
6,231 Multifamily Low
1,814 Multifamily High

FDA Expansion to ~18,000 employees

Economic benefits from reduced congestion include decreased transportation costs and improved reliability for access to employment centers and job opportunities. The improved access to the US 29 and MD 650 corridors increases the movement of workers and goods which ultimately leads to improved long-term efficiency and reliability of the transportation system. The Viva White Oak™ project's location and roadway improvements provide strong accessibility to I-95 and will improve access options to the FDA campus from US 29. Additionally, the project will promote transit-oriented development and help attract tenants to transit-accessible office space.

As defined in the **Viva White Oak Sketch Plan**¹⁰, the project is planned to include up to

Natural Environment Restoration Practices

Restore streams and satbilize site conditions

Orient development to maximize exposure to the natural environment while minimizing disturbance of buffers and retaining forest

Avoid new stream crossings and use existing stream crossings, where possible, when redeveloping the site and creating a circulation system.

Minimize disturbance of steep slopes when new development occurs.

Restore and protect streams and buffers, while still allowing nonmotorized access and visibility.

Work with adjacent property owners to create a trail system to take advantage of natural features.

Integrate stormwater management as urban design features.

Investigate options for power generation.

Source: Montgomery County Planning Department Sketch Plan Staff Report for Viva White Oak 12,180,270 sqft of a mix of land uses including academic, research and development, office, residential, conference center/lodging, retail, restaurant and entertainment uses. The project will be developed in multiple phases over many years and each phase of the project will be planned with an appropriate balance and mix of uses in response to market conditions and in furtherance of the vision of the project to encourage employment and economic development. The Maryland-National Capital Parks & Planning Commission's East County Neighborhood Analytics Report estimates development will produce 22,100 new jobs in the White Oak area by 2030, including thousands of new jobs generated by both the Viva White Oak development and FDA campus expansion.

D. Environmental Protection

The project will reduce energy consumption, prevent water pollution, and improve air quality by reducing emissions throughout the area. In addition, the project will avoid adverse environmental impacts by limiting right-of-way impacts, limiting impacts to parkland, avoiding impacts to cultural resources, and utilizing best managements practices to minimize and accommodate stormwater runoff.

Environmental Remediation

The project also represents a significant brownfield redevelopment effort. A portion of the project area was operated as a gravel quarry from the mid-1930s through approximately 1980, when it was acquired by Washington Suburban Sanity Commission (WSSC). WSSC filled the quarry

with unknown materials and developed the site as the Montgomery County Regional Composting Facility to compost the County's sludge. The site has since gone through extensive environmental remediation through the Maryland Department of Environment (MDE)'s Voluntary Cleanup Program (VCP). The property is now ready for sustainable redevelopment and has been graded out into generally flat areas with pockets of steep slopes to help protect and restore some of the tributaries to the Paint Branch stream system.

E. Quality of Life

The White Oak Science Gateway BUILD project supports the County's efforts to promote upward mobility and improve the quality of life for all residents, employees, and visitors. The proposed transportation improvements will expand access to essential services and improve connectivity to jobs, schools, and health care. The project expands transportation choices by adding additional transit, pedestrian, and bicycle options, and by improving connectivity to the multimodal transportation system. The intersection improvements will reduce congestion and therefore improve travel time reliability for both automobiles and transit. The additional bike lanes and shared-use path will provide additional non-auto options for travel.

Providing Transportation Choice

The proposed improvements will significantly expand the transportation options available to the area, and will provide for a range of safe and efficient modal choices. New buses and a new circulator route with 15-minute headways will facilitate transit access within

Viva White Oak Open Space



4

urban plazas are envisioned as being retail-oriented spaces

academic quad, thru-block connections, sitting areas, and play space

ice-skating rink in winter, farmers market, and foodtruck events



12

twelve greenways and/or linear parks

active walking and hiking areas, BBQ and picnic areas, covered shelters, bocce lawns, and horseshoe play areas



7

civic green spaces

play lawns, playgrounds and tot lots, benches and game tables, lunch and picnic tables, and outdoor performance space



neighborhood parks

two community centers with pools, tot lots and playgrounds, and open play lawns



active local parks

forest preservation, walking and hiking trails, and possibly active play space/ courts/surfaces the project area and also connect to the larger regional network, including the Route 29 BRT system. Montgomery County estimates an approximate annual ridership of 184,000 riders for the new circulator. The proposed bike lanes and shared use path will encourage active transportation by providing multimodal access to local destinations; the shared use path will also connect to the regional bicycle network. Intersection improvements will reduce travel time, improve system reliability, and reduce vehicle emissions. The overall result will be a unified network of transportation alternatives that improve people's daily lives.

Promoting Transportation Equity

Compared to the rest of Montgomery County, the White Oak area has higher percentages of minority populations and the lowest median household income (approximately \$66,000), while the countywide median income in 2017 was \$102,582. In addition, the area is currently underserved by transportation infrastructure. The BUILD project will directly address this inequity and will also enable mixed use redevelopment that will bring housing, jobs, and services to the area.

Leveraging Mixed Use Development

The quality of life improvements offered by the BUILD project, including the Viva White Oak™ development and transportation infrastructure improvements, will transform the neighborhood into an environment where people will want to live, work and play. The BUILD-funded transportation improvements will expand modal choice and reliability; improve access to jobs, schools, and services; reduce congestion; and improve air quality. The transportation

improvements will enable the Viva White Oak^{TM} development to thrive in this currently underserved area.

The Viva White Oak™ development will have multiple parks, urban plazas, greens, and open spaces totaling approximately 65 acres, in addition to the approximately 26 acres of stream valley buffers, which will provide a significant amount of open space on-site. The parks and open spaces are envisioned to be well-dispersed throughout the development, and they will be linked by an extensive network of trails and sidewalks, which will further connect to nearby amenities and public facilities.

The Viva White Oak™ development provides a central public space in the town center for community gatherings, supplemented by smaller public spaces or public squares in the various neighborhoods to encourage social interaction and recreation. As shown on the project's open space plan, Viva White Oak™ includes gathering spaces, including large spaces anchoring the main street, and a central academic green.

Streets are designed to be complete streets, walkable, pedestrian friendly, and provide well-integrated and efficient pedestrian circulation throughout the proposed development. The proposed trail and separately bicycle lane transportation projects will provide dedicated facilities for pedestrians and cyclists and promote seamless transition between the redevelopment site and existing land uses. Streets will be treelined with planting strips between the sidewalk and the curb and will link the various open spaces, uses, and activity centers throughout the development. The new White OakTM circulator transit service will help minimize travel times

ultraMontgomery Goals

To enhance our broadband connectivity.

we are considering a range of options, including requirements to improve building access for broadband networks and policies to add conduit for fiber installation in road and transit projects.

To enhance our economic development, we are working to identify and nurture forward-looking businesses and have opened the County's Thingstitute, a new Internet of Things lab, to encourage and demonstrate innovation.



By lowering infrastructure deployment costs and creating public-private partnerships, ultraMontgomery will expand knowledge-based jobs and businesses within the County.



Continue to connect Montgomery County to other gigabit economies to share in a national gigabit community of ideas and innovation.

for local trip activity and improve accessibility for the entire community, especially elderly and disabled individuals with few other options.

The four urban plazas are envisioned as being retail-oriented spaces, will total approximately 1.4 acres and will include a combination of hardsurface and landscaping, and will provide spaces for active and passive gathering, potentially an ice-skating rink in winter, farmers market, and food-truck events. The four neighborhood green spaces will total approximately 3.4 acres and will include a combination of an academic quad, thru-block connections, sitting areas, and play space. The seven civic green spaces envisioned as a combination of civic and residential squares will total approximately 5 acres, and will include a combination of play lawns, playgrounds and tot lots, benches and game tables, lunch and picnic tables, and outdoor performance space, which includes the Master Plan recommended Civic Green Urban Park (page 89, WOSG Master Plan). The four neighborhood parks envisioned as small active recreation parks will total approximately 318,000 square feet (7.3 acres), and will include a combination of two community centers with pools, tot lots and playgrounds, and open play lawns. The two active local parks total approximately 479,800 square feet (11 acres), and are envisioned as providing potential areas of forest preservation, walking and hiking trails, and possibly active play space/courts/surfaces. Lastly, the twelve greenways and/or linear parks total approximately 1,517,000 square feet (34.8 acres), and are envisioned to provide active walking and hiking areas, BBQ and picnic areas, covered shelters, bocce lawns, and horseshoe play areas.

F. Innovation

As part of the overall redevelopment of the White Oak area, this project incorporates state-of-the-art technology and innovative financing already in place with a partnership between Montgomery County and Percontee, Inc. (private developer). The incorporation of high speed broadband and the application of the new LATIP transportation funding mechanism both represent innovative and repeatable ways to use infrastructure to leverage private development.

Innovative Technologies

As part of both the Viva White Oak[™] Redevelopment and transportation improvement project, the White Oak communication network will be upgraded to include high speed broadband as one component of the ultraMontgomery program. The ultraMontgomery program is designed to make broadband more affordable and widely available to public, private, education and government institutions in major corridors and transit-oriented smart growth communities within the County.

Innovative Financing

This project uses an innovative financing approach that combines private, local, and federal funding to ensure that infrastructure investments are timed to leverage significant private development in an area of the County currently under-served by multimodal transportation and access to jobs and housing.

The BUILD funding request is for "forward money" to seed over \$100 million in private investment in transportation infrastructure along with the previously-secured \$49 million

Partners and Stakeholders

County Project ID: P501540

Development review/approval. \$49M roadway investment, LATIP administration

Developer: Global LifeSci **Development Corporation**

Mixed use private development in under-served area of County, LATIP contributions over \$100M)

Adventist Hospital Relocating to White Oak

Food & Drug Administration

Major master plan and EIS for campus expansion within project area

State Highway Administration Including input into LATIP state highways

M-NCPPC

Including WOSG Master Plan and input into LATIP

Citizen Advisory Groups

in County roadway investment in the project area (\$6.25 million of the \$49 million of County investment will serve as the match for the requested \$25 million in BUILD funds). The private funding results from application of the County's Local Area Transportation Improvement Program (LATIP) for the White Oak Master Plan area. The LATIP requires developers to contribute to transportation improvements. The County Council established the LATIP as mechanism for significant private investment in public infrastructure, using a single pro-rata fee to be applied for every new vehicle-trip a development generates. The private developers pay the associated fee, satisfying the LATIP requirements.

The private contributions are quantified in the LATIP White Paper¹¹, based on impacts and needs from a defined mixed-use buildout plan. The contributions will occur at the time of building permits. This represents the first application of the LATIP impact assessment program, which will serve as a model for future infrastructure and development projects.

The requested BUILD funding will ensure that infrastructure is delivered early in the redevelopment process and that the resulting development will occur according to plan. The BUILD funding is needed to support necessary transportation infrastructure and upgrades that will maintain momentum for the master planned development in region of Montgomery County in need of increased investment.

G. Partnership

This complex project involves multiple public and private partners and stakeholders. Collaboration between the stakeholders has helped develop a well thought-out plan through the development of the Master Plan Development, LATIP improvements selection, campus planning and NEPA review (in the case of FDA expansion).

H. Non-Federal Revenue for **Transportation Infrastructure** Investment

Based on the 2014 White Oak Master Plan, the County reviewed and revised its method of assessing development-related transportation impacts and generating revenue to address those impacts. The result was the development of the White Oak Science Gateway Local **Area Transportation Improvement Program (LATIP)**¹², which defines the LATIP transportation improvements and establishes a dedicated funding stream for area-wide investment in transportation infrastructure.

The application of the LATIP funding to the planned private development at White Oak will result in new transportation revenue of over \$100M. The LATIP revenue does not supplant existing sources of revenue, but adds to the County's available transportation funding program. By using this program, the County does not face legal or fiscal constraints in generating the LATIP revenue – but the timing of the private contributions will not allow infrastructure investment to occur at a pace that effectively leverages the planned private development. The requested BUILD funding will address this timing issue, will leverage the private investment, and will lead to a new source of non-federal transportation revenue that supports private development over the long term.

2008

Montgomery County released the request for proposals for redevelopment of County property in White Oak Science Gateway

2011

Montgomery County selects the developer

June 2016

Private/Public Partnership, P3, General Development Agreement (GDA) reached

November 30, 2017

Sketch Plan for the entire Viva White Oak project was approved by the Montgomery County Planning Board

Spring 2018

Preliminary Plan application submitted

2. Project Readiness

The White Oak Science Gateway BUILD project is part of a larger development initiative resulting from the **White Oak Science Gateway Master Plan**¹³. The County has partnered with various government agencies and private interests on implementation.

Local development approvals are in place, and portions of the project are underway. The requested funding will provide front-money to ensure that transportation infrastructure is timed to fully support the associated development.

This project is unique in that it already has dedicated funding from Montgomery County, in the form of \$49 million in Capital Budget roadway funding in addition to anticipated funding from the LATIP (\$100 million). Coordination with the Maryland State Highway Administration (SHA) also occurred from the earliest stages, with SHA staff involved in defining transportation analyses and recommendations for state highways, including US 29 and MD 650. These factors have set the stage for the White Oak development and supplemental infrastructure improvements to be implemented as soon as funding becomes available.

A. Technical Feasibility

The proposed transportation improvements are the result of extensive planning, impact analysis, and preliminary design. A traffic operations analysis was also conducted to analyze the impacted intersections highlighted in the White Oak Master Plan¹⁴. As part of the LATIP process, Montgomery County completed conceptual design for the intersection improvements and bicycle facilities projects. Final design and construction will be completed using the BUILD grant funding. The infrastructure changes will largely use existing road rightsof-way; where additional right-of-way is needed, it will be secured by the County. Traffic modeling assessments have been completed to support the technical feasibility of the project.

The Viva White Oak™ development project proposes a mix of uses, building heights and massing that are appropriate for the development of a village center as recommended by the Master Plan, and will provide necessary vehicular and pedestrian connections to surrounding uses. The proposed vehicular, bicycle, and pedestrian connections will integrate and complement the surrounding neighborhood. The Sketch Plan for the entire Viva White Oak™ project was approved by the Montgomery County Planning Board on November 30, 2017.

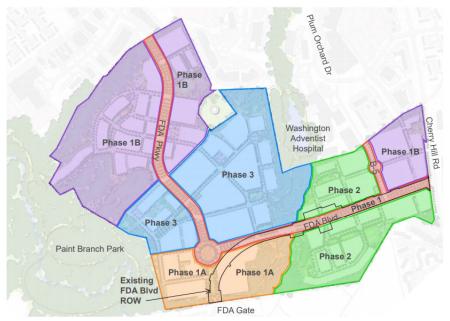


Figure 11 | Viva White Oak Development Phasing

The Viva White Oak™ project is proposed to be implemented in multiple sub-phases within the two primary Land Bays and three phases.

The transportation projects can be implemented using the BUILD grant funding according to the following schedule:

Construction/Commissioning



Planning & Design

C. Required Approvals

The Montgomery County Council and Planning Board have developed and approved the broad policy framework to implement the White Oak Science Gateway Master Plan and the process for review and implementation. Remaining approvals relate to individual development projects proceeding through a process described further below.

Local Approvals: The 2016-2020 Subdivision Staging Policy established the LATIP for the White Oak Science Gateway Master Plan area, in lieu of the standard Local Area Transportation Review test. fee for any development in the WOSG master plan area as follows: ${\bf NEPA/Environmental\ Approvals:\ Given}$

the level of planning, analysis, and design that has taken place for specific projects as well as the overall master plan for the area, much of the data collection, affected environment, alternatives development, and impact assessment has been done to support the anticipated Environmental Assessment. In addition, the EIS developed for the expansion of the FDA campus provides additional supporting material for the EA. We anticipate that FHWA will be the lead agency for the EA. Anticipated participating agencies have also been involved in various elements of the project, and public involvement has been an important part of the master plan development. Given these factors, completion of the BUILD project EA, and receipt of a Finding of No Significant Impact, are achievable within the grant funding timeframe.

Project Approvals

January 20, 2015

Established Transportation Management District in White Oak Policy Area April 14, 2015

Established LATIP fee structure for White Oak Policy Area February 14, 2017

Adopted CIP Project to use LATIP fees for transportation infrastructure

February 14, 2017

Established infrastructure credit structure against the LATIP fees

September 28, 2017

Approved fee of \$5,010 per vehicle trip

For the Policy Area Review test, under the 2016-2020 Subdivision Staging Policy, an applicant is required to pay the updated General District Transportation Impact Tax. Any affordable housing is not subject to the Impact Tax. The timing and amount of the payment will be in accordance with Chapter 52 of the Montgomery County Code, as amended.

D. Assessment of Project Risks and Mitigation Strategies

The risks associated with the project relate primarily to the complex nature and timing of the overall development, the status of brownfield cleanup, and the large number of project partners. These risks have been mitigated by the extensive planning and coordination that have characterized the project to-date.

Risk Development Timing and infrastructure Funding

The anticipated LATIP fees will result in a dedicated non-federal funding source, but the timing of the fees may not allow infrastructure construction to occur in a manner that fully supports and leverages private development.

Mitigation Strategy: Forward funding from the BUILD grant will ensure that necessary infrastructure and services are in place to serve the growing needs of the White Oak Policy Area. The extensive planning and design that have taken place make these improvements ready for implementation based on available funding streams.

Risk Brownfield Cleanup

A portion of the site was contaminated due to leakage from underground storage tanks (USTs) and off-site groundwater contamination that had migrated.

Mitigation Strategy: In the last year, this portion of the site has gone through extensive environmental remediation through the Maryland Department of Environment (MDE)'s Voluntary Cleanup Program (VCP). MDE has determined that the site has no further requirements for mitigation and was released for residential fee-simple development. The specific location contains nine main buildings and approximately 11 support buildings, as well as a large stormwater retention basin, which will be demolished and removed.

Risk Multiple Project Partners and Required Coordination

The range of partners for this project has resulted in a well-planned, technically feasible, and shovel-ready project. However, continued partner coordination will be necessary as the project moves forward.

Mitigation Strategy: The County continues to engage all stakeholder parties in the development review, approval, and implementation process. We will continue to lead the public-private collaboration efforts as the BUILD project moves forward. The County has a General Development Agreement (GDA) with the developer.

Figure 13 | Benefit Cost Analysis Table

BENEFIT DESCRIPTION	BENEFIT VALUE (7% DISCOUNT RATE)	BENEFIT VALUE (3% DISCOUNT RATE)
STATE OF GOOD REPAIR	DISCOUNT RATE)	DISCOURT RAIL)
Reduction in Pavement Damage	\$108,144	\$170,259
CATEGORY SUBTOTAL	\$108,144	\$170,259
Fuel Savings for Automobiles		
Reduction in Oil Imports	\$12,724,998	\$20,084,751
Fare Revenues	\$1,137,519	\$1,795,426
Tax Revenues	\$2,121,871	\$3,435,278
Category subtotal	\$449,989,766	\$796,515,262
SUSTAINABILITY LIVABILITY	\$465,974,154	\$821,830,716
\$18,794,105		
\$2,446	\$39,532,428	\$62,238,888
\$18,796,551	\$611,552	\$934,447
SAFETY	\$40,143,980	\$63,173,335
Safety Increase		
Category subtotal	\$2,812,767	\$4,428,351
TOTAL PROJECT BENEFITS	\$2,812,767	\$4,428,351
COSTS	\$509,039,045	\$889,602,661
Total Costs		
TOTAL PROJECT COSTS	\$72,017,596	\$80,908,526
NET PRESENT VALUE	\$72,017,596	\$80,908,526
BENEFIT COST RATIO	\$437,021,449	\$808,694,135
	7.07	11.00

3. Benefit Cost Analysis

A formal benefit-cost (BCA) was conducted for the project in accordance with USDOT's recommended methodology for a period of 20 years. The transportation improvements enabled through the combination of BUILD Grant and County matching funds will provide congestion relief, multimodal transportation options, and provide the spark for planned WOSG redevelopment that generates significant tax revenues, which will be the greatest monetized benefit for the project. A range of benefits are assumed to start in 2022, commensurate with the County's Capital Budget schedule for completing the WOSG roadway construction, with the tax revenue benefits beginning in 2023, and are considered through 2041 (20-year period).

The project benefits and costs were discounted to current dollars using the USDOT's recommend 7.0% discount rate and the alternative 3.0% discount rate. The BCA ratios, comparing the discounted benefits and costs are summarized in Appendix C. All monetized benefits and costs are in 2018 dollars and reflect net present value (NPV).

Costs

The capital, operations and maintenance costs are the primary costs associated with this project. Capital costs for the transportation improvements are evenly distributed across the projected years of construction/commissioning. Operations and maintenance costs are included for the new additional roadways, bike lanes, sidewalks, shared use paths, and bus fleet. These unit costs were applied to the projected improvements and included beginning in the year following construction for each improvement.

Benefits

There are many benefits that outweigh the costs associated with this project yielding significant value to Montgomery County. A projected reduction in vehicle miles traveled (VMT) reduces emissions, pavement quality oil imports, and fuel consumption. Similarly, travel time savings and safety benefits were estimated for transportation improvement projects. Travel time savings were estimated in person- hour savings modeling throughput and delay associated with the planned intersection capacity improvements. A safety analysis identified the total number of crashes in a three-year period (2015-2017) at each of the transportation improvement sites and potential crash reductions were calculated using FHWA-approved crash modification factors. The expected reduction in crashes was then monetized using a FHWA crash cost database.

While the aforementioned benefits provide

significant impact on the day to day operation of the transportation network, the expected increase in tax revenue increase associated with enabling the WOSG redevelopment is the most important element supporting Federal investment in the project. County projections indicate the Viva White Oak™ project will provide over \$2.3 billion of new tax revenues to Montgomery County and the State of Maryland (over a 30-year bond period based on the Economic Analysis for LifeSci Villiage™ Deveopment in Appendix E), which could not be realized without the new roadways and transportation improvements identified in the BUILD grant application. The WOSG redevelopment represents a truly transformational project that combines private and public investment to realize significant potential tax revenue that can be re-invested in the White Oak community.

Resource List

- 1 **White Oak Science Gateway (WOSG) Master Plan.** http://www.montgomeryplanning.org/community/wosg/documents/ap-proved_ and_adopted_final.pdf
- White Oak Science Gateway Local Area Transportation Improvement Program (LATIP). https://apps.montgomerycountymd. gov/BASISCAPITAL/Common/Project.aspx?ID=P501540
- Metropolitan Washington Council of Governments (MWCOG) Equity Emphasis Areas. https://www.mwcog.org/assets/1/6/ MontgomeryCounty.pdf
- 4 **Opportunity Zones.** http://eig.org/wp-content/uploads/2018/02/Opportunity-Zones-Fact-Sheet.pdf
- **2018 Federal Research Center Master Plan Draft Environmental Impact Statement.** https://www.gsa.gov/cdnstat-ic/2018FederalResearchCenter_Master_Plan_Draft_Environmental_Impact_Statement.pdf
- 6 **US 29 Bus Transit (BRT).** https://www.montgomerycountymd.gov/BRT/us29project.html
- 7 **ultraMontgomery.** http://www.montgomerycountymd.gov/ultramontgomery/
- 8 **transportation project funding.** https://apps.montgomerycountymd.gov/BASISCAPITAL/Common/Project.as-px?ID=P361701&CID=7&SCID=0https://apps.montgomerycountymd.gov/BASISCAPITAL/Common/Project.aspx-?ID=P361701&CID=7&SCID=0
- 9 **Two-Year Action Plan**. http://montgomerycountymd.gov/visionzero/action.html
- 10 **Viva White Oak Sketch Plan** http://montgomeryplanningboard.org/wp-content/uploads/2017/11/320180040-VIVA-Staff-Report-Final.pdf
- 11 **LATIP White Paper.** https://www.montgomerycountymd.gov/dot-dir/Resources/Files/LATR-WhitePaper.pdf
- 12 White Oak Science Gateway Local Area Transportation Improvement Program (LATIP). https://apps.montgomerycountymd. gov/BASISCAPITAL/Common/Project.aspx?ID=P501540
- White Oak Science Gateway Master Plan. https://montgomeryplanning.org/community/wosg/documents/feb2015_wosg_design_guidelines.pdf
- 14 White Oak Master Plan. https://montgomeryplanning.org/community/wosg/documents/feb2015_wosg_design_guidelines.pdf

Appendix A

Letters of Support



Office of the Secretary

Larry Hogan Governor Boyd K. Rutherford Lt. Governor Pete K. Rahn

July 13, 2018

Ms. Elaine Chao Secretary U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington DC 20590

Dear Secretary Chao:

I write to offer my strong support for Montgomery County Maryland's application for Better Utilizing Investments to Leverage Development (BUILD) grant funding for the *White Oak Science Gateway* project. The project's proposed improvements will support economic competitiveness, reduce congestion, improve road safety, and stimulate innovative technology in the White Oak Science Gateway Master Plan area.

The project represents a significant economic development opportunity for eastern Montgomery County, which has historically experienced less investment that other parts of the county. It includes the redevelopment of a 110-acre county-owned parcel on Industrial Parkway in White Oak. The site will be redeveloped in conjunction with the adjacent 170-acre parcel in a public-private partnership as one comprehensive and coordinated 280-acre bioscience-focused mixed-use community called VIVA White Oak. The redevelopment site also provides access to the neighboring Food and Drug Administration (FDA) campus, which has recently completed a Draft Environmental Impact Statement proposing expansion.

This project uses an innovative financing approach that combines private, local, and federal funding to ensure that infrastructure investments are timed to leverage significant private development in an area of the county, which is currently under-served by multimodal transportation and access to jobs and housing. To facilitate the redevelopment, the county is seeking \$25 million in BUILD grant funding, supported by over \$49 million in county-approved matching funds for master planned transportation and infrastructure improvements.

Ms. Elaine Chao Page Two

I respectfully urge that Montgomery County's application for grant funding for this important project receive favorable consideration. Should you have any questions or concerns, please contact Ms. Heather Murphy, MDOT Office of Planning and Capital Programming (OPCP) Director, at 410-865-1275, toll free at 888-713-1414, or by email at hmurphy@mdot.state.md.us. Of course, you may always contact me directly.

Sincerely,

Pete K. Rahn

Secretary

cc: Mr. Gary Erenrich, Special Assistant to the Director, Montgomery County Department of Transportation

Ms. Heather Murphy, Director, OPCP, MDOT



Larry Hogan | Governor

Boyd Rutherford | Lt. Governor

R. Michael Gill | Secretary of Commerce

Benjamin H. Wu | Deputy Secretary of Commerce

July 19, 2018

The Honorable Elaine L. Chao, Secretary United States Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590

Re: Support for BUILD Grant Application from Montgomery County, Maryland

Dear Secretary Chao,

As Secretary of the Maryland Department of Commerce, I would like to express my strong support for Montgomery County's application for a \$25 million U.S Department of Transportation BUILD grant. This grant would leverage resources that have already been committed from the State of Maryland, Montgomery County, and local private businesses to help improve the transportation infrastructure as part of the ongoing consolidation of the U.S. Food and Drug Administration headquarters.

The grant would also benefit a number of local community development projects currently underway, which are slated to create thousands of new jobs, increase home values and the area's tax base by millions, and generate hundreds of millions of dollars of additional tax revenues for the county. The grant would also serve as a catalyst to help stimulate new economic development opportunities in an area of Montgomery County that has remained rather stagnant for the past couple of decades due to the closure of the former Naval Ordinance Laboratory/Naval Surface Warfare Center in the 1990s.

In addition, this grant would complement efforts by Montgomery County, which recently enacted the White Oak Science Gateway (WOSG) Master Plan to revitalize that area and leverage the federal government's investment of more than \$1.3 billion to date in the consolidated FDA headquarters. The goal of the consolidation is to create a unique international biomedical epicenter proximate to the FDA Headquarters that can further leverage and support the agency's mission to advance the health of U.S. citizens.

The economic growth in the White Oak area is well-underway with several new developments, including the new state-of-the-art Adventist HealthCare White Oak Medical Center (formerly known as Washington Adventist Hospital), which is slated to open in the Summer 2019. In addition, a preliminary plan has been filed for the roughly 280-acre, 12 million-square-foot mixed-use biomedical cluster known as Viva White OakTM, which is expected to break ground in October 2018. The project, which further supports the FDA's mission and will serve as a physical connector between the FDA campus, the Adventist Medical Center and the Route 29 and I-95 corridors, is projected to create more than 10,000 new direct, permanent jobs, 6,000 indirect or induced jobs, and 5,000 construction jobs. It is estimated that the project will generate a more than \$1 billion direct net fiscal benefit for Montgomery County and more than \$3 billion in direct on-site building investment.

To support the planned community development of VIVA White Oak™, Adventist HealthCare White Oak Medical Center, and additional development within the WOSG Master Plan, Montgomery County

has identified more than \$900 million in local transportation improvements. The State of Maryland, Montgomery County, and the local private developers are committing substantial capital resources to commence these transportation infrastructure investments.

A \$25 Million BUILD grant would help accelerate these significant economic development projects by providing the necessary up-front resources to expand the infrastructure already planned to be implemented through an innovative public-private partnership and county-developed local area transportation improvement program. Federal participation will serve as a catalyst for more rapid development and will help the United States General Services Administration (GSA) by more quickly developing the infrastructure needed to accommodate FDA's planned growth in White Oak.

Thank you for your consideration and the opportunity to express my strong support for this grant, which will have a significant impact on the continued growth of Montgomery County. Please feel free to contact me if you have any questions, or if I can be of further assistance.

Sincerely,

R. Michael Gill

Secretary of Commerce

Michael Stell



July 13, 2018

The Honorable Elaine L. Chao, Secretary United States Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590

Re: Support for BUILD Grant Application from Montgomery County, Maryland

Dear Secretary Chao:

As the Comptroller of the State of Maryland, I write to you to express my strong support for Montgomery County's application for a \$25 Million BUILD Grant. This grant would accelerate and further leverage the already committed resources from the State of Maryland, Montgomery County, and local private businesses to design, construct, and implement needed transportation infrastructure that will not only serve the on-going consolidation of the FDA Headquarters; but also, serve the local community development projects now underway.

The local community development projects now underway are projected to create thousands of new jobs, millions of dollars of increase in home values and the area's tax base, generate hundreds of millions of dollars of tax revenues to support the local economy, and stimulate new economic opportunities to an area of Montgomery County that has had had relatively stagnant economic growth in the past couple of decades (which coincided with the 1990's BRAC closure of the former Naval Ordinance Laboratory/Naval Surface Warfare Center).

Recently, Montgomery County, Maryland enacted a new master plan for the area, known as the White Oak Science Gateway (WOSG) Master Plan, to revitalize the area and leverage the Federal government's more than \$1.3 Billion investment to date in the consolidated FDA Headquarters, all as part of Montgomery County's efforts to create a unique international biomedical epicenter proximate to the FDA Headquarters that can further leverage and support the FDA's mission to advance the health of US citizens (including protecting US citizens from the effects of disease originating world-wide). The economic growth in the White Oak area is well-underway with the new state-of-the-art Adventist HealthCare White Oak Medical Center (formerly known as Washington Adventist Hospital) slated to open in the Summer of 2019; the preliminary plan filed for the ~280 acre, 12 million square foot mixed-use biomedical cluster known as Viva White OakTM, which is expected to break ground in October of 2018; and additional supporting commercial and residential development within the WOSG Master Plan area.

A \$25 Million USDOT BUILD Grant, therefore, would help accelerate the implementation of the needed infrastructure in White Oak by providing necessary up-front resources to expand the infrastructure already planned to be implemented through an innovative public-private partnership and county-developed local area transportation improvement program. Federal participation will serve as a catalyst for more rapid development and will help the United States General Services Administration (GSA) by developing more of the infrastructure needed to accommodate FDA's planned growth in White Oak faster.

I firmly believes that a \$25 million USDOT BUILD Grant to further leverage the federal, state, local, and private investment in the needed transportation infrastructure in the White Oak area will make a major difference in job creation, economic opportunities and access to prosperity by its diverse citizens, and stimulate further private sector investment, all of which will further support the consolidating FDA Headquarters.

Thank you for your kind consideration and the opportunity to express my support for this important initiative. To the extent that I or my Office can be of assistance, please do not hesitate to contact me.

Sincerely,

Peter Franchot Comptroller

Em Franchof



June 20, 2018

Ms. Elaine Chao Secretary of Transportation U.S. Department of Transportation 1200 New Jersey Ave, SE Washington, DC 20590

Dear Ms. Chao:

I am writing to express the support of the National Capital Region Transportation Planning Board (TPB), the Metropolitan Planning Organization (MPO) for the National Capital Region, for an application by Montgomery County, Maryland for a grant under the FY 2018 Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants Program.

The BUILD Grant will improve safety and relieve congestion by constructing intersection improvements, purchasing transit buses for a circulator, and building a bicycle connection between the Food and Drug Administration (FDA) campus and the community of Hillandale along highway Maryland 650 (New Hampshire Avenue).

Enhancing safety and promoting alternative modes of travel and transit usage are regional priorities for the TPB. The project proposed for this grant directly responds to these regional transportation goals and priorities adopted by the Transportation Planning Board and identified in the Washington region's long-range transportation plan. As such the TPB appreciates your favorable consideration of Montgomery County's application. I anticipate that upon a successful grant award, subject to the availability of the required matching funding, the region's transportation improvement program (TIP) will be amended to include this project.

Sincerely

Charles Allen

Chair, National Capital Region Transportation Planning Board

The Labquest Partnership 10733 Kinloch Road, Silver Spring, MD 20903

July 17, 2018

The Honorable Elaine L. Chao Secretary United States Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590

Re: Support for BUILD Grant Application from Montgomery County, Maryland

Dear Secretary Chao,

The LABQUEST Partnership is a bi-county chartered, public-private partnership constituted by representatives of federal, state, and county governments, together with community residents and local private enterprises located in the White Oak area of Montgomery County, Maryland. As the entity focused on supporting the ongoing consolidation of the US Food and Drug Administration (FDA) Headquarters in White Oak, we write to express support for Montgomery County's application for a \$25 million BUILD Grant.

If awarded, this grant will serve to accelerate the already committed resources from the State of Maryland, Montgomery County, and local private businesses to implement needed transportation infrastructure that will serve both the ongoing consolidation of the FDA Headquarters and the local community development projects now underway. These projects are projected to create thousands of new jobs, increase home values and the area's tax base, generate hundreds of millions of dollars in tax revenue, and stimulate new economic opportunities to an area of Montgomery County that has had relatively stagnant economic growth since the BRAC closure of the former Naval Ordinance Laboratory/Naval Surface Warfare Center in the 1990s.

As part of Montgomery County's efforts to create an international biomedical epicenter adjacent to the FDA Headquarters, it enacted the White Oak Science Gateway (WOSG) Master Plan to revitalize the area and leverage the Federal government's more than \$1.3 billion investment to date in the consolidated FDA Headquarters. Included in this plan are the new state-of-the-art Adventist HealthCare White Oak Medical Center slated to open in the Summer of 2019; the preliminary plan filed for the 280 acre, 12 million square foot mixed-use biomedical cluster known as Viva White OakTM, expected to break ground in October of 2018; and additional supporting commercial and residential development within the WOSG Master Plan area. To support the planned community development of VIVA White OakTM, Adventist HealthCare White Oak Medical Center, and additional development within the WOSG Master Plan, Montgomery County has identified over \$900 Million of local transportation improvements. The State of Maryland, Montgomery County, and the local private developers are committing substantial capital resources to commence these transportation infrastructure investments.

Furthermore, the General Service Administration (GSA) has commenced an updated master plan process to further the consolidation of the FDA Headquarters from its current limit of 9,000 FDA employees to 18,000 FDA employees over the next 10 to 15 years. The GSA is currently proceeding through the NEPA process. Additional transportation infrastructure requirements that would be associated with that

such as further consolidation of the FDA Headquarters would be an important criterion in that NEPA process. Moreover, given the commitment to invest in the area's transportation infrastructure by local stakeholders, there is a unique opportunity to leverage these resources, together with this applied-for \$25 million BUILD Grant, to be most cost-effective for the US taxpayers.

LABQUEST firmly believes that a \$25 million USDOT BUILD Grant will provide the up-front resources required to implement the needed transportation infrastructure in the White Oak area and will make a major difference in job creation, economic opportunities and access to prosperity by its diverse citizens. Accordingly, we strongly encourage your approval of Montgomery County's BUILD Grant application.

Sincerely,

Betsy Bretz

LABQUEST Chair

Executive Directors Dan Marren, Rob Richardson, Marc Bloom



July 16, 2018

Elaine Chao, Secretary United States Department of Transportation 1200 New Jersey Ave, SE Washington, DC 20590

Re: Support for the BUILD Grant Application for the White Oak Science Gateway in Montgomery County, MD

Dear Secretary Chao,

Please accept this letter from the *Friends of White Oak* (FOWO) in support of the Montgomery County BUILD Grant Application for the White Oak Science Gateway. The FOWO is a community based body focusing on the implementation of the 3,000-acre White Oak Science Gateway Master Plan, approved by the Montgomery County Council in 2014. FOWO Board Members include residents, business owners, and property owners who represent a broad diversity of backgrounds and interests; advocating for responsible development in White Oak. Having overwhelming support from the public, the 2014 Master Plan focuses on unprecedented economic development for an area of Maryland that has gone unnoticed for decades.

The BUILD grant funding will improve safety and relieve congestion by constructing intersection improvements, purchasing transit buses for a circulator, and building a bicycle connection between the Food and Drug Administration campus and Hillandale along New Hampshire Avenue.

Transportation infrastructure improvements are needed to support private investment in projects such as the new Washington Adventist Hospital and a Hilton Hotel that are almost finished along with several other developments being reviewed or recently approved by the

Friends of White Oak
Office of the County Executive * Montgomery County, Maryland
101 Monroe Street * 2nd Floor * Rockville, MD 20850

Montgomery County Planning Board. Amongst these new projects is *Viva White Oak*, a proposed mixed-use community with a strong emphasis on the bio-life science industry. Being directly adjacent to the Food & Drug Administration (a new gate will connect the FDA and Viva), Viva is the ideal location for such a proposal.

To insure the success of the White Oak Master Plan, as well as Viva, the transportation infrastructure must be constructed. This includes the first bus rapid transit system in the state already funded with a TIGER grant and Montgomery County, improvements to existing state roads, the building of planned county roads, at-grade intersection treatments, providing new/increased bus service, and constructing new bike lanes.

Efficient and reliable transportation options will increase the economic productivity of land, capital and labor resulting in long term employment creation and a competitive advantage in Montgomery County; and the State of Maryland. The assistance of the BUILD Grant funding is essential in making White Oak successful.

Sincerely,

Friends of White Oak

Elisse Wright Barnes Shana Davis-Cook Fatmata Barrie David Feehan June Henderson Brian Downie Jeremiah Pope Barry Wides

&

Richard Romer Shane Pollin Fizie Haleem

AND

Peter Fosselman

White Oak Science Gateway Master Plan Coordinator



EAST COUNTY CITIZENS ADVISORY BOARD

Isiah Leggett

County Executive

Jewru Bandeh Director

July 13, 2018

Montgomery County Department of Transportation Attn: Al Roshdieh, Director 101 Monroe Street, 10th Floor Rockville, MD 20878

RE: BUILD Grant for White Oak

Dear Mr. Roshdieh,

The East County Citizens Advisory Board (ECCAB) supports the Montgomery County Department of Transportation's request for a BUILD Grant for the White Oak Transportation Infrastructure request for \$25 million.

This request is in-line with the Montgomery County Council-approved *White Oak Science Gateway Development Project* CIP (\$49M) related to the Viva White Oak project that includes the reconstruction of FDA Boulevard, the Construction of FDA Parkway and the extension of Kress Drive (adjacent to the new Washington Adventist Hospital) as local match for the grant. This grant request with matching private funds will support the planned transportation infrastructure, and the White Oak Local Area Transportation Improvement Program, designed to expedite development in this area of the County through developer contributions to this CIP or developer-implementation for off-site infrastructure. Also benefitting from this grant will be the GSA's planned for expansion of the FDA campus.

With Maryland Department of Transportation already supporting Montgomery County's application for the White Oak Science Gateway BUILD application, we're hoping to achieve improvements in the multimodal transportation network within the White Oak Plan area including the US 29 BRT TIGER grant, US 29 intersection improvements, the FDA expansion on its White Oak campus and the VIVA White Oak redevelopment.

The BUILD project will additionally support economic competitiveness, reduce congestion, improve road safety for all users, and stimulate innovative technology in the White Oak Science Gateway Master Plan area. The benefits from reduced congestion will decrease transportation costs and will improve access through reliable and timely access to employment centers and job opportunities – key goals desired by the East County residences and businesses. Efficient and reliable transportation options will increase the economic productivity of land, capital and labor resulting in long term job creation and a competitive advantage in Montgomery County and the State of Maryland.

We appreciate the opportunity to provide these comments and are available to answer questions about them at your convenience.

Very truly yours,

Peter Myo Khin

Chair, East County Citizens Advisory Board

Cc: Isiah Leggett, County Executive

Tom Hucker, County Council, District 5

Jewru Bandeh, Director, East County Regional Services Office

7600 Carroll Avenue Takoma Park, MD 20912 www.AdventistHealthCare.com

July 17, 2018

Elaine Chao, Secretary United States Department of Transportation 1200 New Jersey Ave. SE Washington, DC 20590

Re: Support for the BUILD Grant Application for the White Oak Science Gateway

Dear Secretary Chao:

Please accept this letter from Washington Adventist Hospital in support of the Montgomery County BUILD Grant Application for the White Oak Science Gateway.

Washington Adventist Hospital is an acute care facility that resides in Takoma Park, MD. We are currently underway building a replacement hospital in White Oak which will be named Adventist HealthCare White Oak Medical Center. The proposed transportation infrastructure improvements will go far towards insuring the success of the White Oak Medical Center after it commences service to the community in summer 2019.

The BUILD grant funding will improve safety and relieve congestion by constructing intersection improvements, purchasing transit buses for a circulator, and building a bicycle connection between the Food and Drug Administration campus and Hillandale along New Hampshire Avenue.

The BUILD grant funding is necessary in making the White Oak Medical Center successful.

Sincerely,

Seoff Morgan, VP, Project Executive

Washington Adventist Hospital



OFFICE OF THE COUNTY EXECUTIVE ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

July 16, 2018

The Honorable Elaine Chao Secretary of Transportation U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590

Re: BUILD Grant Application: White Oak Science Gateway Redevelopment

Dear Secretary Chao:

Montgomery County has been working hard to foster increased economic growth and business activity in the White Oak Science Gateway over the last five years. A key example of this initiative is the Viva White Oak (Viva) project - a public-private partnership between the County and Percontee, Inc. This project will transform a 280-acre brownfield into a bioscience-focused, mixed-use community that will support the headquarters campus of the Food and Drug Administration (FDA) and the opening of a new Washington Adventist Hospital.

I am writing to request the U.S. Department of Transportation's support for Montgomery County's application for the FY2018 BUILD Transportation grant program. With the BUILD funds, Montgomery County will implement an expanded system of transportation improvements to support the White Oak Science Gateway. New connections will also be made between the Viva project and the U.S. 29 Bus Rapid Transit System, known as Flash, and between the FDA campus and emerging commercial and housing development along New Hampshire Avenue. The County is seeking \$25 million of BUILD funds that will be supported by over \$49 million in County-approved matching funds. The BUILD grant will allow the County to advance multimodal improvements earlier to accelerate development and job creation. The BUILD grant will also leverage private investment in infrastructure through the County's P3 arrangement with Percontee, Inc., as well as through developer-funded transportation projects in the County's innovative Local Area Transportation Improvement Program.

Thank you for your consideration and support in funding this important grant to construct critical multimodal infrastructure to support the White Oak Science Gateway.

Sincerely,

Isiah Leggett County Executive

Soil Tysett

IL:al



MONTGOMERY COUNTY COUNCIL ROCKVILLE, MARYLAND

July 17, 2018

Elaine L. Chao, Secretary
United States Department of Transportation
1200 New Jersey Avenue, S.E.
Washington, DC 20590

Dear Secretary Chao:

We are writing to urge your approval of Montgomery County Government's Better Utilizing Investments to Leverage Development (BUILD) grant application to help fund road and bikeway improvements and transit service in our White Oak Science Gateway, the home of our planned eastern county life science center and companion to our existing Shady Grove Life Science Center in the western county. The White Oak Science Gateway will partner closely with its neighbor, the U.S. Food and Drug Administration, in promoting bioscience research and enterprise that ultimately will benefit the nation and the world.

Our request is for the maximum grant of \$25 million, to which we will provide well more than the required 20% local match. In fact, we have already included in our capital program more than \$49 million in transportation and infrastructure improvements in the area. An overview of our application is attached.

We thank you in advance for your consideration of our request. If you need any more information, I urge you to contact our Department of Transportation, who will be more than happy to assist you.

STELLA B. WERNER COUNCIL OFFICE BUILDING . 100 MARYLAND AVENUE . ROCKVILLE, MARYLAND 20850

PRINTED ON RECYCLED PAPER

Sincerely

Hans Riemer, President

Montgomery County Council

cc: The Honorable Isiah Leggett, Montgomery County Executive

Montgomery County Councilmembers

Al Roshdieh, Director, Montgomery County Department of Transportation

The Honorable Ben Cardin, United States Senate

The Honorable Christopher Van Hollen, United States Senate

The Honorable Jamie Raskin, United States House of Representatives

The Honorable John Sarbanes, United States House of Representatives

The Honorable John Delaney, United States House of Representatives

Congress of the United States

Washington, DC 20510

July 5, 2018

The Honorable Elaine Chao Secretary U.S. Department of Transportation 1200 New Jersey Avenue SE Washington, DC 20003-3660

Dear Secretary Chao:

We are pleased to support Montgomery County, Maryland's application for funding through the Better Utilizing Investments to Leverage Development (BUILD) transportation discretionary grant program. Montgomery County is seeking a \$25 million BUILD grant that will be supported with over \$49 million in locally-approved matching funds for master-planned transportation and infrastructure improvements.

Montgomery County seeks to improve transportation network connectivity by focusing on several multimodal options, including intersection improvements on US 29, new transit buses for the White Oak Circulator Ride-On service, and a bikeway shared-use path on MD 650 (New Hampshire Avenue). This will enable Montgomery County to advance a significant economic development opportunity for the eastern portion of the county that borders Prince George's County, Maryland. This area of Montgomery County has had less investment than other areas of Montgomery County.

The County's proposal supports economic competitiveness, promotes alternative travel options, improves road safety, and incentivizes innovative technology in the region by combining public and private investment in an area that is currently underserved by multimodal transportation and access to jobs and housing.

We strongly support Montgomery County's efforts to enhance its transportation network in the eastern portion of the County, which will spur economic development and improve access to jobs and housing. We urge you to give its proposal for BUILD funding favorable consideration.

Sincerely,

Benjamin L. Cardin United States Senator Chris Van Hollen United States Senator

John P. Sarbanes Member of Congress

John K. Delaney Member of Congress Jamie B. Raskin Member of Congress

Appendix B

White Oak Science Gateway LATR/LATIP Cost Estimating Analysis White Paper



White Oak Science Gateway LATR / LATIP Cost Estimating Analysis White Paper

December 2016 Updated December 2017

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INTRODUCTION

Following approval of the White Oak Science Gateway (WOSG) Master Plan, the County Council directed that the Montgomery County Department of Transportation (MCDOT) estimate costs for LATR-scale treatments¹ across the entire White Oak Policy Area. The Council's direction was intended to replace this LATR process with a single pro-rata fee (this fee will be referred to as the Local Area Transportation Improvement Program, or LATIP).

The LATIP fee would be applied for every new vehicle-trip² a development generates. The applicant would pay the associated fee, satisfying the LATIP requirements. Other payments – TPAR³ and Impact Taxes – would remain applicable.

This document describes the analysis used to identify transportation needs and estimate associated costs, states the determined fee, and then provides information on how LATIP is to be implemented.

During development of this analysis other definitions of a Trip were considered using variants of the following metrics:

- Using a time scale of Peak Period Trip or a Daily Trip.
- Defining a trip as a vehicle-trip (trip only by automobile) or a person-trip (a mode-neutral trip that includes automobiles as well as other modes such as walking, bicycling, transit, and carpooling).
- Changing the directionality to specify a trip in the peak flow direction. This metric had been advocated by Viva White Oak on the basis that this development would attract trips in the reverse flow along US 29, utilizing underused capacity.
- Whether the trips used in the denominator should consist only of mitigated trips. Mitigated Trips being only those trips which cause a Level of Service (LOS) F and must be mitigated to achieve LOS E. At intersections failing under existing conditions, any additional trips must be mitigated at 1.5x the amount of trips.

¹ LATR = "Local Area Transportation Review" and is a component of the Subdivision Staging Policy (SSP) which requires each new development to analyze and address traffic impacts to nearby intersections. Each development completes a traffic analysis that identifies existing traffic patterns, new trips generated by approved but unbuilt development, new trips generated by the applicant's development, and then assigns these trips onto the network to identify impacts. At locations deemed to have failing levels of service, the applicant is responsible for identifying – in coordination with public agencies – treatments to either increase capacity or reduce demand.

² A "trip" is defined as a "PM peak hour vehicle-trip" based on Local Area Model (LAM) trip generation rates. These trips do not account for trips removed by demolishing a previous land use. They do include trips reduced by internal capture (trips generated within an often mixed use development) as well as pass-by trips (existing trips utilizing the development, common to land uses such as fast-food and gas stations). Developments going through the development approval process are expected to use the LAM for trip generation purposes.

³ TPAR = "Transportation Policy Area Review" and is another part of the SSP prior to January 1, 2017, which looks at a wider area than LATR. Whereas LATR looks at nearby intersections, TPAR looks at roadway segments, focused explicitly on arterial roadways. Using planning models to gauge travel speeds, it is measured as a ratio between the modeled travel speed versus the free-flowing travel speed. So if a vehicle can travel at 40 MPH along a roadway with a design speed of 45 MPH: its ratio would be 40 divided by 45, or 88%. As of January 1, 2017, TPAR is no longer required for development approval.

PURPOSE

Coordination

The scattered nature of development in an area can result in a number of uncoordinated transportation projects being pursued by various developers. In some cases an agreement can be struck between developers to provide shared and coordinated treatments, though these agreements can be difficult to implement as intended.⁴ The LATIP fee reduces these issues, allowing for a unified analysis that can identify all treatments required across the policy area. Implementation is at the behest of public agencies, coordinated by Council-appropriated funds and each project managed by either County or State transportation agencies.

Equity

Intersections generally tend to have some degree of excess capacity before they are considered to be failing and in need of treatment. The first developers to proceed with project approvals will tend to have first claim over this capacity, and later developers tend to be the projects left to mitigate impacts. This is further complicated in that as new master plans potentially free up new capacity by relaxing congestion thresholds, it is the larger and more organized developments which will tend to be more able to proceed quickly. With little transportation capacity remaining, the smaller developments may be left with disproportionate mitigation needs (building a new lane can serve several hundred new vehicles, but the constructing developer may only need to mitigate a dozen vehicles).

Transparency

A comprehensive analysis offers the potential for greater public awareness of what mitigating treatments are proposed for an area. While each new development goes through a public process before the Planning Board, public awareness may tend to be focused only on a few select developments of interest, and interested parties may not be cognizant of transportation treatments proposed elsewhere in an area. The analysis associated with the LATIP fee can potentially provide a more transparent and visible source of information for the public to weigh in, with potential projects being identified comprehensively before the County Council rather than piecemeal before the Planning Board.

Time and Fiscal Savings

The LATIP fee can reduce the number of traffic analyses which must be performed. As most of these analyses do not necessitate any treatments, this saves resources both for the private and public sectors. This relieves developers of the need to perform intensive studies and public officials of the resources spent reviewing them, which can often involve many months of back-and-forth comments & revisions. The centralized analysis is itself a significant undertaking, but the consolidated analysis can provide a fiscal and time savings to all parties. The "pay and go" approach significantly reduces risk to new development by providing a clear one-time payment for an applicant, serving to streamline the development review process.

⁴ Though even as a part of LATIP: private developers may still voluntarily enter into agreements to construct LATIP treatments and may subsequently receive credit toward the LATIP fee, as noted on page 15.

SCOPING

The scoping process occurred over approximately 6 months in 2014 and was formed based on the input of multiple sources, including MCDOT⁵, MCDGS⁶, M-NCPPC⁷, SHA⁸, the County Council⁹, and members of the public.

In total, 61 intersections were included in the analysis, as shown in Exhibit 1 on the next page. These intersections generally represent major intersections, often accompanied by traffic signals. They include intersections within the White Oak Policy Area as well as approximately two intersections beyond the edge of the policy area. Some additional intersections were included beyond the policy area, including several locations located in Prince George's County. All intersections were publicly vetted, with several intersections being added at the public's request.

The analysis is intended to focus on intersection treatments within the White Oak Policy Area. The purpose of evaluating intersections outside the policy area was to ensure that such information was available were it later determined to be of interest.

The analysis included the proposed BRT lines within the policy area, the reconstruction of the Old Columbia Pike Bridge, and new roadways proposed by the WOSG Master Plan. Of note, however, is that the analysis did *not* include the three master planned interchanges at Stewart Ave, Tech Rd / Industrial Pkwy, or at Fairland Rd / Musgrove Rd.

The exclusion of these interchanges was to ensure that a worst-case basis – in terms of highway capacity – was evaluated. Noting that none of these interchanges are funded for construction (and would therefore not typically be included in a developer's traffic impact analysis), the analysis was scoped to identify surface-level treatments that might be necessary were an interchange not built.¹⁰

⁵ MCDOT = Montgomery County Department of Transportation, a department under jurisdiction of the County Executive with authority over most non-numbered roadways throughout the County.

⁶ MCDGS = Montgomery County Department of General Services, a department under jurisdiction of the County Executive with authority over County-owned facilities, materials, and right-of-way. In the interest of full-disclosure: at the time the scope was being developed, MCDGS was a partner in the development of the Viva White Oak development located along FDA Boulevard and Cherry Hill Road. While MCDGS has been kept apprised of the project's scope and progress, this analysis has been careful to ensure that Viva White Oak did not have any effect on the analysis different from how any other trip-generating project would be handled.

⁷ M-NCPPC = Maryland-National Capital Park and Planning Commission, a State-created bi-county agency with authority over parks as well as planning in Montgomery and Prince George's Counties. Each county has a separate office that largely functions independently of the other county, with a Planning Board appointed by the County Council. All references to M-NCPPC apply to the Montgomery County office of M-NCPPC.

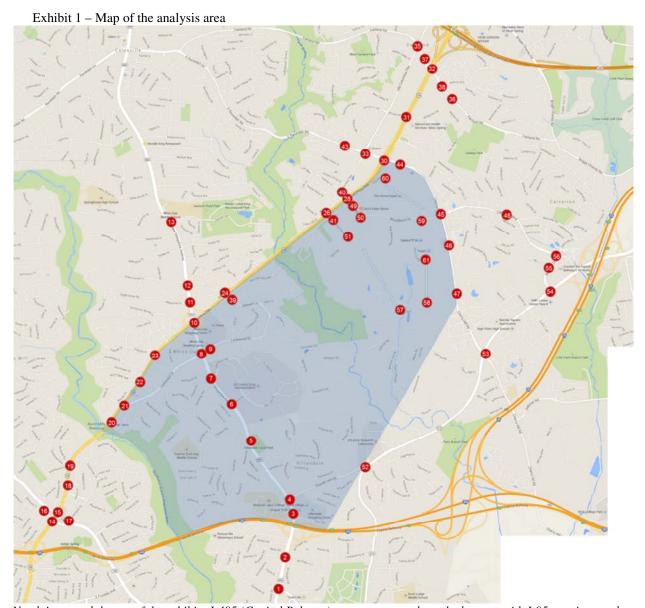
⁸ SHA = Maryland State Highway Administration, a State agency within the Maryland Department of Transportation with authority over all numbered roadways – generally major arterials – throughout the County and State.

⁹ Per the Full Council Session on April 14, 2015

¹⁰ This is to ensure the information is available if found to be necessary, and is not to imply that the interchanges will not be built. The interchanges at Tech/Industrial and at Fairland/Musgrove were #5 and #9 on the County's 2015 Priorities Letter to the State, though neither is currently funded for planning, design, or construction.

Master plans typically assume that 75% of the development potential would be built-out over the lifetime of the plan. Based on public testimony suggesting that the LATIP fee would make it easier to develop, the County Council directed that this analysis be scoped to assume 100% build-out by its horizon year of 2040. While it is unlikely that development would achieve 100% of potential density for the entirety of the policy area, it was agreed that it is likely that development will exceed the typical 75% build-out.

Additional detail on the methodology behind the analysis can be found in the enclosed technical memorandum prepared by our consultant, Sabra, Wang, & Associates (SWA).



North is toward the top of the exhibit. I-495 (Capital Beltway) runs east-west along the bottom, with I-95 running north-south along the right side and MD 200 (Intercounty Connector) at the top-right. US 29 runs diagonal from bottom-left to top-right, and MD 650 runs north-south along just left of the center. The blue-shaded area shows the White Oak Policy Area. Intersections included in the scope are marked in red.

¹¹ 75% build-out is a standard value used by M-NCPPC and is based on their experience with previous master plans.

FINDINGS

The analysis was scoped to generally adhere to the practices as defined and required by the LATR process prior to the 2016 rewrite of the Subdivision Staging Policy (approved by Council on November 15, 2016). The findings presented in the enclosed SWA technical memorandum reflect the results of the analysis.

Based on the LATR methodology, treatments were identified at a total of 16 intersections:

- These results do not include work to be performed by Washington Adventist Hospital along Plum Orchard Dr at both Cherry Hill Rd as well as at B-5, nor do they include work to be completed by Viva White Oak at FDA Blvd and B-5.
- Three intersections are located outside of the White Oak Policy Area, along Old Columbia Pike at Tech Rd, Randolph Rd, and Fairland Rd. For this reason these three intersections are not included in the LATIP fee.
- Four of these intersections would be addressed by an interchange at US 29 and Tech Rd / Industrial Pkwy.
- One of these intersections would be addressed by an interchange at US 29 and Stewart Lane.

On the next page, Exhibit 2 shows the 13 intersections with identified treatments included in the LATIP fee.

Along US 29 there are 9 intersections identified south of the MD 650 interchange which, in most cases, require an additional through lane in each direction to satisfy the LATR methodology. The issues faced along US 29 are, to a degree, a representation of the WOSG Master Plan having been approved with the recognition that the plan fails both the Roadway and Transit TPAR Tests.

It is critical to highlight that MCDOT has no expectation that US 29 will be widened to accommodate an additional continuous thru lane in each direction, which could have significant impacts to residents and businesses. Improvements to transit, bicycle, and pedestrian accessibility, and through Traffic Mitigation Agreements (TMAgs) with developments will further reduce the generation of vehicle-trips and help to achieve compliance with LATR requirements along the corridor.

The master plan sets the Non-Auto Driver Mode Share (NADMS)¹² at between 25% and 30% for all new development. Our analysis did not explicitly factor in this NADMS value as an input, though the analysis does generate an NADMS as an output. The model estimated that based on the inputted infrastructure and development, an NADMS of 32.7% would be achieved. Additional efforts to increase NADMS not already included in the model could contribute to exceeding the master plan's NADMS goals and reducing vehicular demand.

¹² NADMS is the percentage of trips being made by non-auto modes such as by walking, bicycling, transit, carpooling, and telecommuting. The inverse of this is how many trips are performed in single occupant vehicle.

COST ESTIMATES

The enclosed SWA technical memorandum provides cost estimates for each identified intersection project. Cost estimates are summarized in Exhibit 2, with several intersections combined into singular projects (as along Broadbirch Dr as well as along Old Columbia Pike).

These estimates utilize SHA's Major Quantities Estimates methodology, which do not include utilities, stormwater management, structures, or detailed information on environmental impacts. Accordingly, contingency factors were applied to compensate for a number of these items. A 10% Environmental contingency was applied to compensate for general impacts to environmental elements and as a measure of stormwater management needs. A 5% Utilities contingency was applied to compensate for related impacts. And a large 50% General contingency was applied as a matter of general practice for a planning-level cost estimate. These contingencies were applied before adding in estimated right-of-way costs.

It is expected that all values – particularly items covered by contingencies – would change significantly should a project enter into detailed design. Future monitoring and reassessments of project costs are expected to consider the most accurate and precise information available, refining these costs over time and adjusting the associated LATIP fee accordingly.

These contingencies were overridden at several locations. For the work at the intersections of US 29, Old Columbia Pike / Prosperity Dr, Industrial Pkwy, and Tech Rd: the General contingency was replaced with a 100% contingency to account for the additional complexity and maintenance of traffic needs associated with the proposed work.

Exhibit 2 – Intersection Cost Estimates

Location	Estimated Cost	Identified Needs			
US 29 and Stewart Lane	\$3,300,000	Add: 1 NBT, 1 SBT, 1 SBL			
US 29 and Industrial Parkway		Add: 1 SBL Relocation of 2 NBR from			
,	44.400.000	intersection			
US 29 Spur and Old Columbia Pike	\$4,400,000	Relocate 2 NBR on US 29 to spur connecting to Old Columbia Pike just south of Industrial Pkwy			
Old Columbia Pike and Industrial Pkwy		Signalization Add: 1 WBR			
US 29 and Tech Road	\$3,300,000	Add: NBT, SBT, SBL, WBR Prohibit EBL, WBL			
US 29 Ramps at Randolph Rd / Cherry Hill Rd	\$2,000,000	Add: 1 EBT Reconfigure: SBR to shared right- left			
MD 650 and Powder Mill Road	\$5,000,000	[requires further evaluation]			
MD 650 and Lockwood Drive	\$1,400,000	Add: 1 NBL, 1 WBT, +receiving lane on west leg Signalization Turn Restrictions: NBR, SBR only			
Tech Road and Prosperity Drive	\$2,300,000				
Tech Road and Broadbirch Drive	\$1,700,000	Signalization Add: 1 WBR,1 NBR			
Tech Road and Industrial Pkwy	\$4,400,000	Signalization Add: 2 EBL, 1 WBR, 1 SBL			
Broadbirch Drive at Cherry Hill Rd		Add: 1 SBT, 1 SBR, 1 WBT, 1 EBT, 1 EBR			
Broadbirch Drive at Plum Orchard Rd	\$3,600,000	Signalization Restripe: NB and SB Approaches to 4-lane Cross-Section			
TOTAL	\$31,400,000				

FEE CALCULATION

The large table included on the following page is split into several groupings of rows and columns. The rows are color-coded and grouped as follows: interchanges (**red**), transit (**blue**), intersections (**purple**), new roads (**brown**), road widening (**orange**), and bikeways (**green**). 13

The focus of the analysis tasked by Council – and the subject of this analysis – is to identify the Intersections (**purple**) costs. ¹⁴ However, a nexus was recognized by the Executive Office, Council, and M-NCPPC that as local connectivity and the NADMS goal are critical toward achieving transportation adequacy: a nexus exists toward incorporating additional projects into the cost assessed as the LATIP fee (that is: including projects from the non-**purple** sections).

Exhibit 3 details the projects approved by Council for inclusion in the LATIP fee, totaling \$101,800,000. This is the numerator in the \$/trip LATIP fee.

The denominator (trips) was established by Council to be 20,324 trips.

Cost	\$101,800,000
÷ Trips	20,324
\$/Trip	\$5008.86

Rounding up: the LATIP fee has been established by Council to be \$5010 per PM peak hour vehicle-trip (using Local Area Model trip generation rates), which does not include trips removed by demolishing the preceding land use, but does account for internal capture and pass-by trips.²

¹³ Note that summations may not be exact due to rounding upward to the nearest \$100,000 value. Note that all costs are over the 2040 lifetime of the plan. This is particularly applicable with transit projects, which include bus and bike replacements over time (operating costs are not included).

¹⁴ The other color-coded sections are sourced from existing project cost estimates, or from other planning level cost estimates performed separately from this analysis as a part of the development of the WOSG Master Plan.

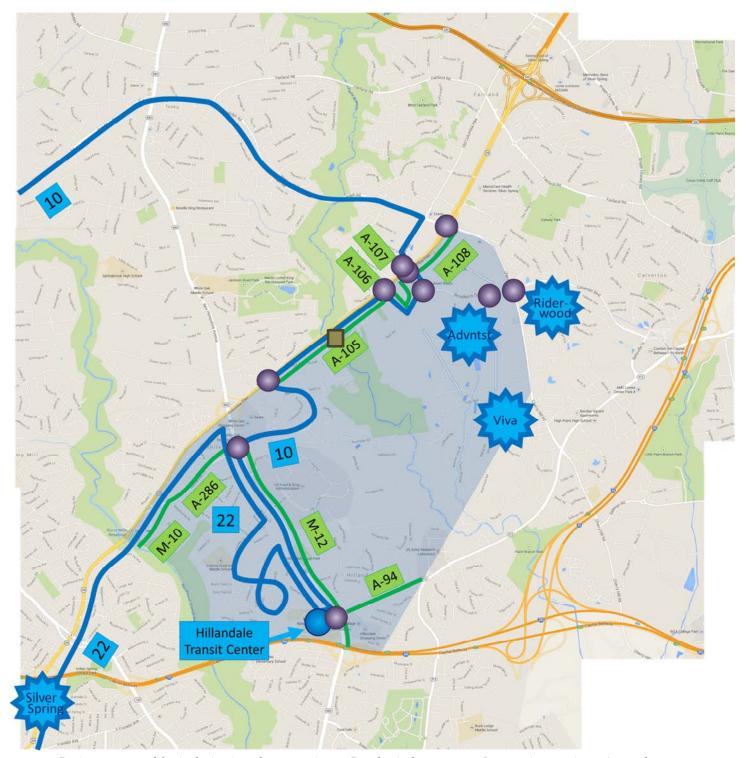
Cost Estimates for the White Oak Science Gateway Master Plan

		Project	A	oprox Total Cost	County / State		Developers		UMP	Notes	
Si		Stewart La	\$	130,000,000	\$ 130,000,000	\$	-	\$	-		
Interchanges		Tech Rd / Industrial Pkwy	\$	96,000,000	\$ 96,000,000	\$	-	\$	-	Fairland/Musgrove based on SHA estimates as of July 2016. Stewart La and Tech/Industrial based on SHA estimates as of September 2013. Greencastle and Blackburn interchanges are excluded on account of being a	
ich.		Fairland Rd / Musgrove Rd	Ś	139,000,000	\$ 139,000,000	+	-	Ś	-	significant distance outside of the plan area. Fairland/Montrose is included on account of being within 2	
ln te		SUBTOTAL	\$	365,000,000	\$ 365,000,000	\$	_	\$	-	intersections distant of the plan area.	
		US 29	Ś	65,800,000	\$ 65,800,000	ŝ	-	ŝ	-		
		MD 650	\$	64,100,000	\$ 64,100,000	-	-	\$	-	BRT accounts for the span within the master plan area only; full build-out of the system would be necessary fo	
		Randolph Rd	Ś	13,900,000	\$ 13,900,000		-	Ś		adequate functionality. Costs are based on a per-mile estimate prepared for each line by VHB. Circulator	
		Circulator	\$	2,400,000	\$ -	\$	-	\$	2,400,000	assumes 2 buses with approximately 2 replacements at 12 year increments. Operating costs not i	
		New Ride-On Service	Ś	8,400,000	\$ -	Ś		Ś	8,400,000		
_		Increased Ride-On 10 Service	\$		·	7		Ś			
oita				6,000,000	,,,,,,,,,,	+			2,000,000	These items are not explicitly in the Master Plan, but are outstanding needs identified for the area which could	
(Capital)		Increased Ride-On 21 Service	\$	2,400,000	\$ 2,400,000		-	\$	-	contribute toward a ped, bike, and transit usage (and subsequently contribute toward achieving the NADMS	
Transit		Increased Ride-On 22 Service	\$	3,600,000	\$ 1,800,000	+-	-	\$	1,800,000	goals for the policy area).	
<u>a</u>	W	Vashington Adventist Hospital Transit Center	\$	200,000	\$ -	\$	200,000	\$	-	Washington Adventist Hospital Transit Center assumed to be built by the Hospital.	
		Hillandale Transit Center	\$	500,000	\$ -	\$	-	\$	500,000	Bikeshare costs are for capital costs only over the lifetime of the plan and do not include operating costs.	
		Bus Stop Improvements	\$	100,000	\$ -	\$	-	\$	100,000		
		Bikeshare	\$	4,600,000	\$ -	\$	-	\$	4,600,000		
	1	Transportation Management District (TMD)	\$	13,900,000	\$ 13,900,000	\$	-	\$	-	The TMD accounts for the total estimated costs to the County over the lifetime of the plan, considering linear	
		SUBTOTAL	\$	185,900,000	\$ 165,900,000	\$	200,000	\$	19,800,000	commercial development growth and adjusting for incoming revenue.	
		LATR Analysis (per each analysis)	Ś	400,000	\$ -	ŝ	-	\$	400,000		
		US 29 at Randolph Rd / Cherry Hill Rd	\$	2,000,000	\$ -	\$	-	\$	2,000,000		
	*	FDA Blvd at B-5	Ś	1,000,000	\$ -	\$	1,000,000	\$ \$	2,000,000		
	**		٥		\$ -	\$		ې	-		
		Cherry Hill Rd at Plum Orchard Dr	\$	2,800,000	*	7	2,800,000	\$			
	Broa	adbirch Dr at Cherry Hill Rd & Plum Orchard Dr	\$	3,600,000	\$ -	\$	=	\$	3,600,000	* = Assumed to be constructed as part of the Viva White Oak development access	
		Broadbirch Dr at Tech Rd	\$	1,700,000	\$ -	\$	-	\$	1,700,000	** = Assumed to be constructed by Washington Adventist Hospital	
S	*	Tech Rd at Industrial Pkwy	\$	2,800,000	\$ -	\$	-	\$	2,800,000	- Assumed to be constructed by Washington Adventist Hospital	
Intersections	Δ	US 29 at Stewart Lane	\$	3,300,000	\$ -	\$	-	\$	3,300,000	Δ = Would be negated by an interchange at US 29 and Stewart Lane	
sec	+	US 29 at Industrial Pkwy	\$	4,400,000	\$ -	\$	-	\$	4,400,000		
nter	t	US 29 at Tech Rd	\$	3,300,000	\$ -	\$	-	\$	3,300,000	† = Would be negated by an interchange at US 29 and Tech Rd / Industrial Pkwy	
	t	Tech Rd at Prosperity Dr / Old Columbia Pike	\$	2,300,000	\$ -	\$	-	\$	2,300,000	Would be accepted by an interest and a turn 20 and 5-lide of Dd / Marrows Dd	
	△ †	Old Columbia Pike at Tech Rd	\$	500,000	\$ 500,000	\$	-	\$	-	‡ = Would be negated by an interchange at US 29 and Fairland Rd / Musgrove Rd	
		Old Columbia Pike at Randolph Rd	\$	1,100,000	\$ 1,100,000	\$	-	\$	-	△= Located outside of the WOSG Policy Area	
	△‡	Old Columbia Pike at Fairland Rd	\$	2,300,000	\$ 2,300,000	\$	-	\$	-		
		MD 650 at Lockwood Dr	\$	1,400,000	\$ -	\$	-	\$	1,400,000		
		MD 650 at Powder Mill Rd	\$	5,000,000	\$ -	\$	-	\$	5,000,000		
		SUBTOTAL	\$	37,900,000	\$ 3,900,000	Ś	3,800,000	\$	30,200,000		
	A-105	(White Oak Shopping Center)	ċ	23,400,000	\$ -	Ś	23,400,000	ċ	-	Assumed built by White Oak Shopping Center	
	A-106		¢	49,500,000	\$ -	\$	49,500,000	\$		Assumed built by Viva White Oak	
sp	B-5	(Industrial Pkwy Extended)	ç	18,300,000	\$ -	\$	18,300,000	Ś	-		
Roads		(Plum Orchard / FDA Blvd Connector)	2		\$ -	\$		-		Assumed built by Adventist Hospital & Viva White Oak	
New	B-6	(Plum Orchard Extended)	\$	26,400,000		+	26,400,000	-		Assumed built by adjacent development.	
Z	B-7	(Cherry Hill / Plum Orchard Connector)	\$	8,600,000	\$ -	\$	8,600,000	\$	-	Assumed built by adjacent development.	
		SUBTOTAL	\$	126,200,000	\$ -	\$	126,200,000	\$	-		
	CM-10	US 29 (Columbia Pike) over MD 650	\$	43,500,000	\$ 43,500,000	\$	-	\$	-		
	A-105	Old Columbia Pike Bridge	\$	12,000,000	\$ -	\$	=	\$	12,000,000		
8	A-105	Old Columbia Pike	\$	58,100,000	\$ 53,100,000	\$	-	\$	5,000,000		
Widening	M-12	MD 650 (New Hampshire Ave)	\$	5,900,000	\$ 5,900,000	+-	-	\$	-	All projects are for road widening for either additional capacity or parking, and includes any master planned	
Nio.	P-16	Elton Rd	\$	100,000	\$ 100,000	+		\$	-	bicycle infrastructure.	
/ay	B-9	Broadbirch Dr	Ś	33,700,000	\$ 33,700,000	+ -		\$		CM-10 (US 29) and M-12 (MD 650) widening are for additional thru lanes along in each southbound direction	
Roadway	B-10	FDA Blvd	Ś	25,100,000	\$ 33,700,000	Ś	25,100,000	\$		at US 29 and MD 650. M-12 assumes no bridge reconstruct: lanes narrowed; bikeway behind piers w/ reconstructed wall. CM-10 assumes a bridge reconstruct.	
8	B-10	Tech Rd (south of Industrial Pkwy)	¢	10,400,000	\$ -	S		_			
	D-11	· · · · · · · · · · · · · · · · · · ·	,			-					
		SUBTOTAL	\$	188,800,000	\$ 136,300,000	\$	35,500,000	\$	17,000,000		
New Bikeways	M-10	US 29 (Columbia Pike)	\$	2,800,000	\$ -	\$	=	\$	2,800,000		
	M-12	MD 650 (New Hampshire Ave)	\$	6,600,000	\$ -	\$	-	\$	6,600,000		
	A-94	Powder Mill Rd	\$	3,400,000	\$ -	\$	-	\$	3,400,000		
	A-106	Industrial Pkwy	\$	8,400,000	\$ -	\$	-	\$	8,400,000	Cost estimates based on DO+DTE evaluation on 2/10/2017.	
	A-107	Tech Rd (north of Industrial Pkwy)	\$	2,700,000	\$ -	\$	-	\$	2,700,000		
	A-108	Prosperity Dr	Ś	3,600,000	\$ -	\$	-	\$	3,600,000		
	A-286	Lockwood Dr (west of New Hampshire Ave)	\$	5,700,000	\$ -	\$	-	\$	5,700,000		
	B-3	Elton Rd	5	500,000	\$ 500,000	Ľ		\$	5,730,000		
	D-3		,								
		SUBTOTAL	Ś	33,700,000	\$ 500,000	\$	-	\$	33,200,000		
		302101712									

Exhibit 3 – LATIP Fee Projects

• US 2	RSECTIONS (purple) US 29 at Stewart Lane ¹⁸						
	9 at Industrial Pkwy ¹⁸		\$3,300,000 \$4,400,000				
• US 2	9 at Tech Road ¹⁸		\$3,300,000				
• US 2	US 29 at Randolph Rd / Cherry Hill Rd						
	Rd at Prosperity Dr / Old Columbia	Pike ¹⁸	\$2,000,000 \$2,300,000				
	Rd at Industrial Pkwy		\$4,400,000				
	dbirch Dr at Tech Rd		\$1,700,000				
	dbirch Dr at Cherry Hill Rd & Plum	Orchard Dr	\$3,600,000				
	650 at Powder Mill Rd		\$5,000,000				
		Subtotal	\$1,400,000 \$31,400,000				
ΓRANSIT (b)	<u>ue)¹⁹</u>						
	e Oak Circulator		\$2,400,000				
 New 	Ride-On Service		\$8,400,000				
 Incre 	ased Ride-On Service		\$3,800,000				
 Hilla 	Hillandale Transit Center						
• Bus	Bus Stop Improvements						
• Bike	* *		\$4,600,000				
		Subtotal	\$19,800,000				
BIKEWAYS	green) ¹⁹						
• M-10	US 29 (Columbia Pike)		\$2,800,000				
• M-12	MD 650 (New Hampshire Ave		\$6,600,000				
• A-94	Powder Mill Rd		\$3,400,000				
• A-10	5 Old Columbia Pike		\$5,000,000				
• A-10	6 Industrial Pkwy		\$8,400,000				
• A-10	7 Tech Rd		\$2,700,000				
• A-10	8 Prosperity Dr		\$3,600,000				
• A-28	6 Lockwood Dr		\$5,700,000				
		Subtotal	\$38,200,000				
Old Columbi	a Pike Bridge Reconstruction		\$12,000,000				
	ses every 6 yrs, from 2017 to 2040		\$400,000				

These could be removed if respective interchanges along US 29 are funded for construction.On the basis that these will contribute toward NADMS, reducing issues encountered along US 29 and elsewhere. All costs are over the 2040 lifetime of the plan. Operating costs are not included.



Projects proposed for inclusion into the cost estimate. Purple circles represent Intersections projects. Areas shown within the 12-shaped stars are service areas to be addressed by the Circulator & future Ride-On lines, along routes not yet determined

SHA FEEDBACK

Coordination with the State Highway Administration (SHA) occurred from the earliest stages, with SHA staff being involved in defining the analyses' scope. Findings were presented to SHA in August 30, 2016, with SHA represented by the Assistant District Engineer for Traffic²⁸ and Regional Planner²⁹ for Montgomery County. An email response on behalf of SHA was received from the Regional Planner on September 26, 2016 indicating the following information:

Technical Concurrence

SHA concurs with the scope, methodology, and cost estimates.

Required Analyses for SHA Permitting

SHA's response on their buy-in to the LATIP structure is copied verbatim:

While the State defers to local APFOs, where established, for required improvements, MDOT is concerned as to how pending changes in countywide LATR requirements may affect this specific application. The State expects to retain the right, as established in COMAR, to request an applicant perform a [Traffic Impact Study] to determine roadway improvements needed to mitigate additional traffic generated by a proposed development. All proposed roadway improvements will be constructed under an SHA-issued access permit. In addition, partial funding of requested improvements may not be an adequate basis for approval of an access permit.

Funding Allocation

SHA buy-in into the LATIP structure – particularly in reducing the need for additional Traffic Impact Studies – will be contingent on how the LATIP fee structure can fund necessary State projects in a timely manner.

As the County will collect the LATIP fees, considerations must be made as to how funding will provide for State needs. As noted in the preceding section on Council Considerations, a CIP mechanism will be necessary to allocate revenue from the LATIP fee toward SHA projects.

The LATIP fee is not expected to address transportation projects pursued by SHA that are not identified in our analysis, though such treatments may be incorporated during subsequent monitoring reassessments.

SHA noted a desire that LATIP revenue be used solely for projects in the White Oak Policy Area. SHA has also expressed an interest in participating in project selection and how such funds are applied to planned projects along State roadways.

²⁸ Representing SHA's District 3 Office in Greenbelt and acting on behalf of the Assistant District Engineer for Project Development as well as District 3's Access Management and Engineering System Teams.

²⁹ Located in the Regional and Intermodal Planning Division of SHA's headquarters in Baltimore.

IMPLEMENTATION (DEVELOPERS)

Fee Estimation

On September 28, 2017, the Planning Board approved clearly designating the fee as being tied directly to the Local Area Model trip generation rates utilized in the analysis. This allows a direct conversion of the fee (\$ per trip) and land uses (trips per unit³⁰) into an easy-to-reference (\$ per unit) value. For convenience, these converted values are provided below:

USE	UNIT	LATIP (\$/unit)	USE	UNIT	LATIP (\$/unit)
Single Family Detached	DU	\$6420	Office	GSF	\$6.01
Single Family Attached	DU	\$3273	Industrial	GSF	\$5.01
Multi-Family High-Rise	DU	\$2615	Bioscience Facility	GSF	\$4.94
Multi-Family Low-Rise	DU	\$1687	Retail	GSF	\$15.03
Multi-Family Senior	DU	\$6420	Place of Worship	GSF	\$4.62
Student-Built Houses	DU	\$6420	Prvt Elem / Scndry School	GSF	\$4.62
Clergy House	DU	\$6420	Hospital	GSF	\$5.36
			Charitable / Philanthropic	GSF	\$6.01
			Other Non-Residential	GSF	\$4.62

An applicant can use this table to estimate the trips being generated by the existing land use as well as the proposed land use. Subtracting the Existing from the Proposed yields the total fee due.³¹ The fee is due at a schedule concurrent with payment of the Impact Tax.

Reductions for internal capture and pass-by trips are already accounted for by the Local Area Model trip generation rates. Note that Moderately Priced Dwelling Units (MPDUs) are subject to the LATIP fee.

Local Access Analyses

LATR (which the LATIP replaces) evaluates intersections located away from the development site, but not the intersections immediately at the development site. Furthermore, this analysis uses macroscopic models that do not necessarily focus on the intricacies of an individual development, which may have a varying number of access points spread out across one or multiple roadways. New developments are therefore still required to evaluate site frontage and access points for any necessary treatments and mitigate as necessary.

Developments Outside White Oak

Developments located outside the White Oak Policy Area but generating trips to, from, or through the White Oak Policy Area operate entirely under the Subdivision Staging Policy or applicable future regulations. They are not a part of the White Oak LATIP fee. Normal traffic impact analyses are expected, with mitigation required as per the Subdivision Staging Policy.

³⁰ Units being measured in Gross Square Feet (GSF) or Dwelling Units (DU)

³¹ If there is a net reduction in trips from Existing conditions (that is: Existing trip generation is greater than the Proposed trip generation), then the LATIP fee due is zero.

Credits to LATIP Fee and Impact Tax

If a developer constructs a project included in the LATIP fee, the developer is to be credited this amount toward their LATIP obligation³². The LATIP credit for any individual project may not exceed the corresponding cost estimate utilized in this analysis to determine the LATIP fee. Costs in excess of the LATIP estimate may be credited toward the Impact Tax. Work on LATIP projects along State roads and intersections is eligible for these credits.

If a developer constructs a project not included in the LATIP fee, it falls under regular Impact Tax regulations. The LATIP fee is not itself creditable toward Impact Tax.

A developer (or group of developers) may submit for MCDOT (and possibly also SHA) approval a traffic analysis for an LATIP intersection to identify what specific modifications are necessary to achieve adequacy for their development, or to propose an alternative to the LATIP's proposed infrastructure. If approved, a workplan must be agreed upon whereby private development will build out the necessary modifications, whether all at once or incrementally based on phases of development.

Of particular interest to the public will be ensuring that proposed modifications adequately meet the transportation needs, are implemented at a schedule reflective of anticipated need, and that necessary work is not left to future development phases that may or may not proceed in a timely manner.

³² Project costs are subject to approval

IMPLEMENTATION (PUBLIC AGENCIES)

Forward Funding

Revenues from the LATIP fee will not be generated quickly or early enough to allow for design and implementation of associated needs. Without forward funding, new developments may be built and become occupied before design has even begun on a project, no less a project's timeline for design, public coordination, and construction.

Forward funding either individual projects or an area-wide White Oak CIP will be critical to ensuring that necessary infrastructure and services are in place to serve the growing needs of the White Oak Policy Area.

It is anticipated that funding will initially focus on detailed planning and design for some, most, or all of the projects included in the fee, such that they are effectively "shovel ready" for construction funding when need becomes imperative.

Public Involvement

Each LATIP project is expected to proceed through a typical design and construction process, including public involvement. An exception is where developers opt to construct LATIP treatments in addition to or in lieu of fee payment. In such cases, public input would occur much like the typical process outside of LATIP, with public testimony being received before the Planning Board as part of the development review process.

Monitoring / Reassessment

The cost estimates in the LATIP fee will be reassessed every 2 years (odd numbered years) and updated accordingly to reflect changes in the planning-level unit prices, detailed design estimates, or to reflect constructed infrastructure. A full reanalysis will be performed at 6 year intervals (the next analysis to be completed in 2023). A cost update or reanalysis may be performed prior to this time if a special situation warrants.

Collection & Application

The LATIP fee will be collected following the same schedule as Impact Taxes. The fee will be collected by DPS and deposited into an account explicitly designated for use with projects included in the LATIP fee. It is anticipated that this account would fund a CIP designated for exclusive use with the WOSG LATIP projects.

As some projects will impact State roads, consideration must be given toward a mechanism for how to apply LATIP revenue to State projects. A potential mechanism for this is to utilize the State Transportation Participation CIP (P500722), which has already laid a framework for cost participation with SHA under SHA-managed projects. Another option that has been considered by SHA is for the projects to be County-managed under an SHA permit.

PROJECT DESCRIPTIONS

<u>Interchanges (red)</u>

• US 29 / Stewart Lane

\$130,000,000

An SHA-run project. Only conceptual designs & estimates are available. There is no funding scheduled for detailed design. Cost estimate provided by SHA in September 2013. No further information on the design is available.

US 29 / Tech Rd / Industrial Pkwy

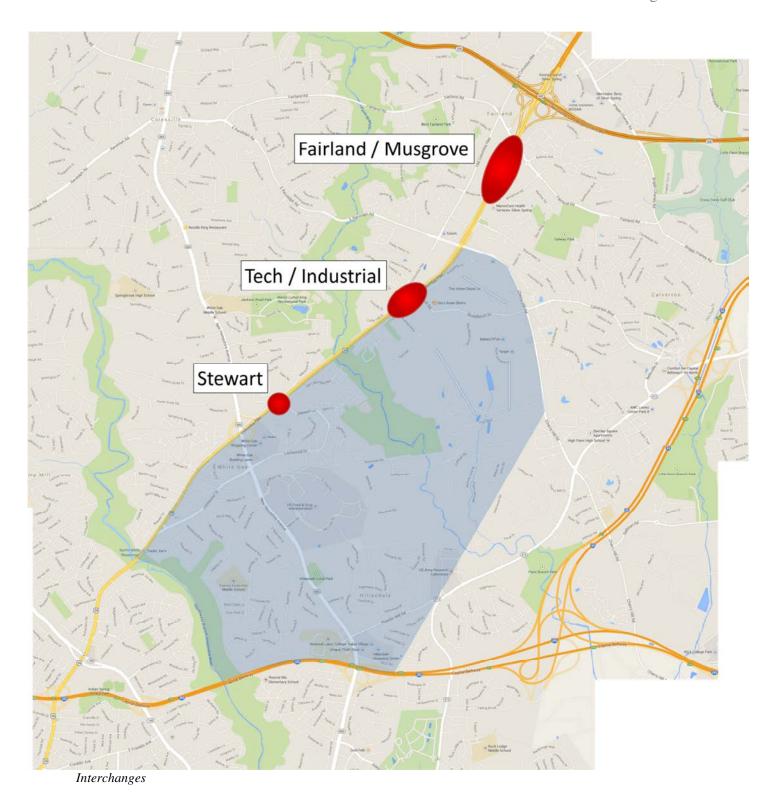
\$96,000,000

An SHA-led project. Only conceptual designs & estimates are available. There is no funding scheduled for detailed design, though the interchange is #5 on the County's Priorities Letter for the Construction Program. Cost estimate provided by SHA in September 2013. Two intersections identified by this LATR Analysis would be impacted by this interchange. The conceptual design shows movements to/from northbound US 29 accessed via Industrial Pkwy (which would not extend across US 29). Tech Rd would bridge over US 29 and serve movements to/from southbound US 29. This interchange is expected to serve a large proportion of traffic to the large Viva White Oak development.

• US 29 / Fairland Rd / Musgrove Rd

\$139,000,000

An SHA-led project. The project is presently on hold at 60% Design, having been put on hold in September 2016 due to State budget cuts deferring design funding indefinitely. The interchange is #9 on the County's Priorities Letter for the Construction Program. Cost estimate provided by SHA in June 2016. This interchange is not located in the White Oak Policy Area. One intersection identified by this LATR Analysis would be impacted by this interchange. The current design shows movements to/from northbound US 29 accessed via Montrose Rd (which would not extend across US 29). Fairland Rd would bridge over US 29 and serve movements to/from southbound US 29.



Transit (blue)

• US 29 BRT \$65,800,000

This cost estimate utilizes a per-mile estimate (\$31,900,000/mi) from 2014 for dedicated bus lanes and applies it to the 2.06 miles within the WOSG Master Plan. Operating costs are not included.

• MD 650 BRT \$64,100,000

This cost estimate utilizes a per-mile estimate (\$33,900,000/mi) from 2014 for dedicated bus lanes and applies it to the 1.89 miles within the WOSG Master Plan. Operating costs are not included.

Randolph Rd BRT

\$13,900,000

This cost estimate utilizes a per-mile estimate (\$10,200,000/mi) from 2014 for shared traffic express buses and applies it to the 1.36 miles within the WOSG Master Plan. Operating costs are not included.

• Circulator \$2,400,000

A new route serving between Viva White Oak and the Silver Spring Transit Center initially, converting to a Circulator around the White Oak Science Gateway area after construction of the US 29 BRT. Under both cases it is expected to operate at 15 minute headways, requiring 2 buses with 3 replacements at 12 year intervals. Operating costs are not included.

• New Ride-On Route

\$8,400,000

A new route serving Washington Adventist Hospital, Cherry Hill Rd, Viva White Oak, Riderwood, and the Silver Spring Transit Center. Assumed to begin in 2020, operating at 15 minute headways, requiring 7 buses with 1 set of replacements at a 12 year interval. Operating costs are not included. There is a potential that after the US 29 BRT is constructed, this route may be converted into a Circulator for the master plan area. This service would largely extend and augment the Circulator service noted above.

• Increased Ride-On Route 10 Service

\$6,000,000

Increasing frequency to 10 minute headways and improving service from the PM peak to midnight. Assumed to occur in 2020 and require 5 additional buses with 1 set of replacements at a 12 year interval. For the LATIP fee the total cost is apportioned by the percentage of the route serving the WOSG plan area (approx. 30%). Operating costs are not included.

• Increased Ride-On Route 21 Service

\$2,400,000

Increasing frequency to 15 minute headways and adding midday, late-evening, and weekend services. Assumed to occur in 2020 and require 2 additional buses with 1 set of replacements at a 12 year interval. However, as this line does not explicitly serve WOSG activity centers: this cost is excluded from the LATIP fee. Operating costs are not included.

Increased Ride-On Route 22 Service

\$3,600,000

Increasing frequency to 10 minute headways and adding midday and late-evening services. Assumed to occur in 2020 and requires 3 additional buses with 1 set of replacements at a 12 year interval. For the LATIP fee the total cost is apportioned by the percentage of the route serving the WOSG plan area (approx. 50%). Operating costs are not included.

• Washington Adventist Hospital Transit Center

\$200,000

The Transit Center is located at the intersection of Plum Orchard Dr and B-5 (the connector to Viva White Oak). This work is being performed entirely by the Washington Adventist Hospital as a condition upon the development.

• Hillandale Transit Center

\$500,000

The Transit Center includes layover areas and a restroom for bus operators, located along the Powder Mill Rd cul-de-sac west of MD 650.

• Bus Stop Improvements

\$100,000

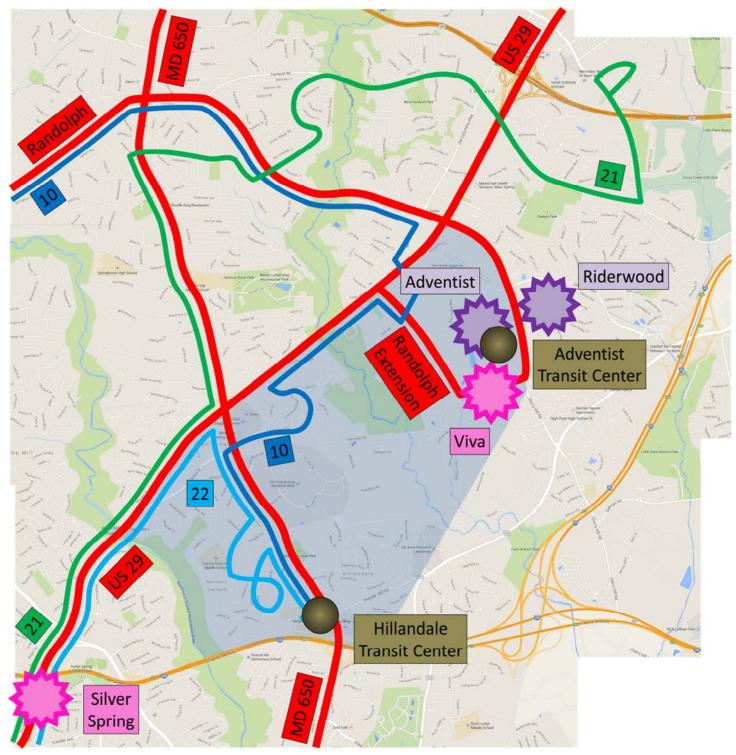
Miscellaneous bus stop improvements through the White Oak Policy Area, including upgraded landing areas, ADA treatments, and improved amenities.

• Bikeshare \$4,600,000

Conservative estimates of 67 total Bikeshare stations across the entire White Oak Policy Area under a 100% build-out scenario (spanning the full lifetime of the plan). Assuming linear development rates, approximately 2 stations are added per year beginning in 2020. Bikes are assumed to be replaced every 12 years, therefore 1 set of replacements per station is included in the cost estimate. Operating costs are not included.

• White Oak TMD \$13,900,000

The White Oak Transportation Management District (TMD) is currently unfunded and has no developed commercial square footage contributing revenue. This value represents what would have been the public cost for operating the TMD (the TMD Fee would represent a separate Dollar value). This item was excluded from the LATIP fee on the basis that the TMD fee is being addressed through an alternative bill seeking to strengthen and improve funding for TMDs.



Transit, color-coded as follows: BRT, Ride-On 10, Ride-On 21, Ride-On 22, Transit Centers,

Service areas for Circulator and New Ride-On Service, or only the latter

Intersections (purple)

• LATR Analyses

\$400,000

Estimated at \$100,000 each, with reassessments / monitoring occurring at 6 year intervals between 2017 and 2040. This includes the first analysis completed in 2017 and the final analysis in 2035; a total of 4 analyses.

US 29 at Randolph Rd / Cherry Hill Rd

\$2,000,000

Add an eastbound thru lane. Reconfigure the southbound right-turn lane to a shared right/left lane. This includes 65% in contingencies and an estimated \$459,000 in commercial property impacts (no impacts to buildings or total takes are expected).

• FDA Blvd at B-5

\$1,000,000

Add 1 westbound left-turn lane and southbound lanes accompanied by construction of B-5. Construct a new traffic signal (if warranted + justified). This includes 65% in contingencies and no property impacts. It is assumed this intersection work will be completed by the Viva White Oak development.

• Cherry Hill Rd at Plum Orchard Dr

\$2,800,000

Add a southbound right-turn lane and a channelized southbound acceleration lane (serving eastbound right-turns). This includes 65% in contingencies and no property impacts. It is assumed this intersection work will be constructed by the Washington Adventist Hospital as a condition of development.

Broadbirch Dr at Cherry Hill Rd & Plum Orchard Dr

\$3,600,000

At Plum Orchard: restripe the north- and southbound approaches to a four-lane cross-section. Construct a new traffic signal (if warranted + justified). Note that these treatments may not be applicable until such time as B-6 (Plum Orchard Dr) is extended to connect with Prosperity Terrace by the Darcars properties.

At Cherry Hill Rd: add a southbound thru, southbound right, westbound right, eastbound thru, and eastbound right-turn lanes.

Combined, these intersections include 65% in contingencies and an estimated \$20,000 in residential property impacts and \$155,400 in commercial property impacts (no impacts to buildings or total takes are expected).

Broadbirch Dr at Tech Rd

\$1,700,000

Add a westbound right-turn lane and a northbound right-turn lane. Construct a new traffic signal (if warranted + justified). This includes 65% in contingencies and an estimated \$11,550 in commercial property impacts (no impacts to buildings or total takes are expected).

• Tech Rd at Industrial Pkwy

\$2,800,000

Add two eastbound left-turn lanes and a westbound right-turn lane along Industrial Pkwy, and 1 southbound left-turn lane. Construct a new traffic signal (if warranted + justified). This includes 65% in contingencies and an estimated \$245,130 in commercial property impacts (no impacts to buildings or total takes are expected).

• US 29 at Stewart Lane

\$3,300,000

Addition of a northbound thru lane, conversion of the southbound right-turn lane to a shared thru/right lane, addition of an additional southbound left-turn lane, and divert eastbound+westbound thrus+lefts to an adjacent spur intersection. This includes 115% in contingencies – owing to the higher complexity of the proposed treatments. This project would be obsoleted if the interchange at US 29 and Stewart Lane proceeds.

• US 29 at Industrial Pkwy / Old Columbia Pike

\$4,400,000

Relocation of two northbound right-turns from the primary intersection to a secondary intersection and the addition of a second southbound left-turn lane. A new westbound right-turn lane from Industrial Pkwy onto Prosperity Dr, and signalization at this intersection (if warranted + justified). Old Columbia Pike / Prosperity Dr would be converted to right-only upon approach to Industrial Pkwy. This includes 115% in contingencies – owing to the higher complexity of the proposed treatments – and an estimated \$4,800 in commercial property impacts (no impacts to buildings or total takes are expected). This project would be obsoleted if the interchange at US 29 and Tech Rd / Industrial Pkwy proceeds.

• US 29 at Tech Road

\$3,300,000

Addition of a northbound right-turn lane, convert the southbound right-turn lane to a shared thru/right lane, add a second southbound left-turn lane, add a second westbound right-turn lane, redirect westbound lefts to Cedar Hill Dr, redirect eastbound lefts to Industrial Dr, and remove split phasing from the signal. This includes 115% in contingencies – owing to the higher complexity of the proposed treatments – and an estimated \$4,800 in commercial property impacts (no impacts to buildings or total takes are expected). This project would be obsoleted if the interchange at US 29 and Tech Rd / Industrial Pkwy proceeds.

• Tech Rd at Prosperity Dr / Old Columbia Pike

\$2,300,000

Restrict each approach along Old Columbia Pike / Prosperity Dr to right-only. Construct a traffic signal (if warranted + justified). This includes 115% in contingencies – owing to the higher complexity of the proposed treatments – and does not anticipate any property impacts. This project would be obsoleted if the interchange at US 29 and Tech Rd / Industrial Pkwy proceeds.

• Old Columbia Pike at Tech Rd

\$500,000

Add a westbound right-turn lane and construct a new traffic signal (if warranted + justified). This project is not located in the White Oak Policy Area. This includes 65% in contingencies and does not anticipate any property impacts. This project would be obsoleted if the interchange at US 29 and Tech Rd / Industrial Pkwy proceeds.

• Old Columbia Pike at Randolph Rd

\$1,100,000

Reconfigure the eastbound lane configuration to a double-left and a shared thruright. This includes 65% in contingencies and an estimated \$13,500 in commercial property impacts (no impacts to buildings or total takes are expected). This project is not located in the White Oak Policy Area.

Old Columbia Pike at Fairland Rd

\$2,300,000

Add a southbound thru lane and an accompanying receiving lane on the south leg. Reconfigure the westbound right to a shared thru-right and add an additional receiving lane on the west leg. Add an eastbound left-turn lane. This includes 65% in contingencies and an estimated \$52,050 in commercial property impacts (no impacts to buildings or total takes are expected). This project would be obsoleted if the interchange at US 29 and Fairland Rd / Musgrove Rd proceeds. This project is not located in the White Oak Policy Area.

• MD 650 at Lockwood Dr

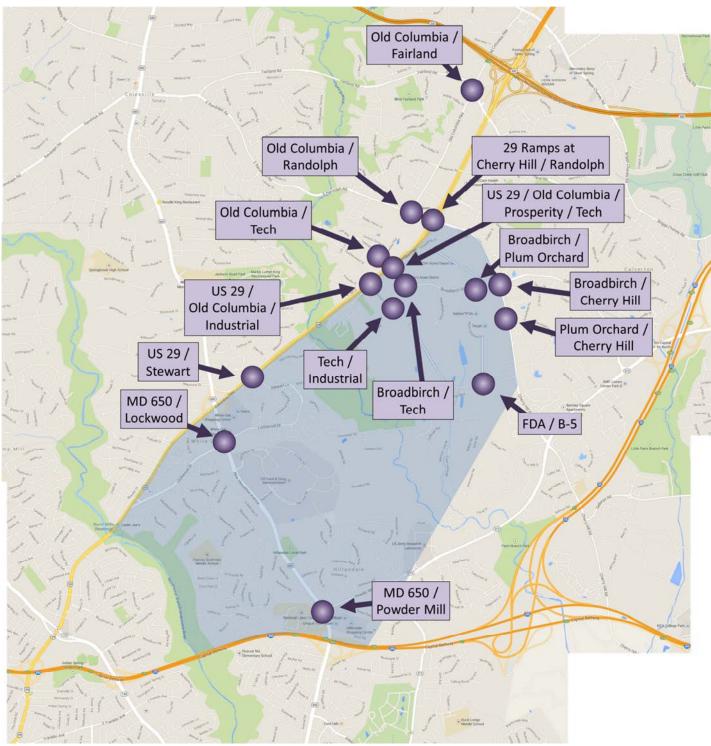
\$1,400,000

Add a northbound left-turn lane and extend the receiving lane along the west leg. This includes 65% in contingencies and does not anticipate any property impacts.

• MD 650 at Powder Mill Rd

\$5,000,000

Differing findings between this LATR analysis, the master plan analysis, and treatments being pursued by SHA are such that this cost estimate is considered a placeholder value dependent on further intersection-specific analysis.



Intersections

New Roads (brown)

• A-105 White Oak Shopping Center

\$23,400,000

Extension of Old Columbia Pike through the White Oak Shopping Center, intersecting with Lockwood Drive immediately east of MD 650 (0.31 miles). Assumed to be constructed as a part of a future redevelopment of the shopping center. The cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• A-106 Industrial Pkwy Extended

\$49,500,000

Extension of Industrial Pkwy into the Viva White Oak development, intersecting with FDA Blvd (0.88 miles). Assumed to be constructed as a part of the Viva White Oak development. The cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• B-5 Plum Orchard / FDA Blvd Connector

\$18,300,000

A new connector street between Plum Orchard Dr and FDA Blvd (0.35 miles). Assumed to be constructed partly by the Washington Adventist Hospital (the northern portion) and Viva White Oak (the southern portion). The cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• B-6 Plum Orchard Dr Extended

\$26,400,000

Extension of Plum Orchard Dr to Prosperity Terrace (0.46 miles). Assumed to be constructed by future developments in the area. The cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• B-7 Cherry Hill / Plum Orchard Connector

\$8,600,000

A new connector street between B-6 (Plum Orchard Extended) and Cherry Hill Rd (0.17 miles). Assumed to be constructed by future developments in the area. The cost estimate is based on a preliminary conceptual design with 35% in contingencies.

Road Widening (orange)

• CM-10 US 29 over MD 650

\$43,500,000

Reconstruction of the US 29 bridge over MD 650 (\$29.8m) as well as widening in the vicinity of the ramps (\$13.7m) to provide for a third continuous southbound thru lane. The cost estimate assumes 90% in contingencies for the widening (a standard amount for a planning-level estimate), and 110% in contingencies for the bridge reconstruction (accounting for additional complexities with regard to the maintenance of traffic).

• A-105 Old Columbia Pike Bridge

\$12,000,000

Reconstruction of the Old Columbia Pike bridge over Paint Branch to a four-lane arterial. Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• A-105 Old Columbia Pike

\$58,100,000

Widening of Old Columbia Pike (along the east side of US 29) to a four-lane arterial and construction of a shared use path (1.3 miles) [the shared use path is \$5,000,000 of the total cost]. Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• M-12 MD 650

\$5,900,000

Widening of MD 650 to provide a third continuous southbound thru lane as it travels beneath US 29. Not intended to necessitate reconstruction of the US 29 bridge, though the estimate for CM-10 does include such work. Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• P-16 Elton Rd

\$100,000

Widening of a short segment (300 ft) of the residential portion of Elton Rd (P-6) to provide for 1 travel lane and 1 parking lane in each direction. Cost estimate is based on a preliminary conceptual design with 35% in contingencies. It is unlikely this project would proceed unless there were strong community demand.

• B-9 Broadbirch Dr

\$33,700,000

Widening to provide for parking lanes along each direction of Broadbirch Dr as well as provide a shared use path (0.7 miles). Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• B-10 FDA Blvd

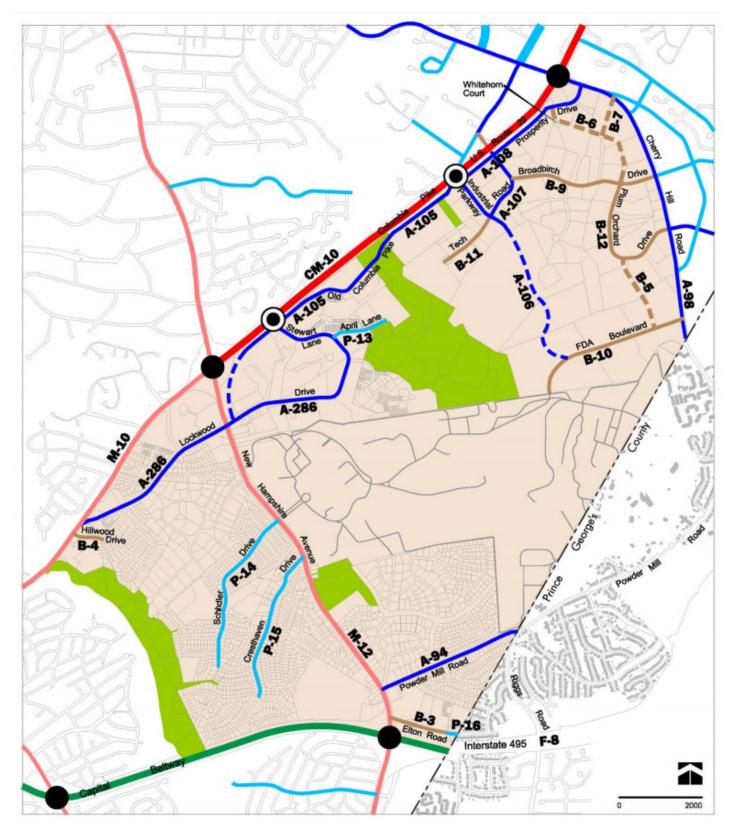
\$25,100,000

Widening to provide for parking lanes along each direction of FDA Blvd (0.5 miles). Cost estimate is based on a preliminary conceptual design with 35% in contingencies. It is anticipated that this work will be addressed as part of the Viva White Oak development.

• B-11 Tech Rd

\$10,400,000

Widening of Tech Rd south of Industrial Pkwy to provide for an additional travel lane in each direction (0.4 miles). Cost estimate is based on a preliminary conceptual design with 35% in contingencies. It is likely that this work would be completed as a condition upon adjacent developments.



Roadways, image from the White Oak Science Gateway Master Plan

Bikeways (green)

• M-10 US 29 DB-9 \$2,800,000

New shared use path between Lockwood Dr and the Northwest Branch (0.3 miles). Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• M-12 MD 650 DB-7 \$6,600,000

New shared use path between Lockwood Dr and I-495 (1.0 miles). Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• A-94 Powder Mill Rd BL-40

\$3,400,000

New bike lanes along each direction of Powder Mill Rd, necessitating 12 ft of additional pavement (0.7 miles) and impacting curblines, utilities, and drainage systems along both sides of the roadway. Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• A-106 Industrial Pkwy LB-7

\$8,400,000

Conversion of existing parking lanes to travel lanes, and the addition of new bike lanes along each direction of Industrial Pkwy, necessitating 7 ft of additional pavement and reconstruction of curb lines and drainage systems (0.4 miles). Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• A-107 Tech Rd LB-3

\$2,700,000

New bike lanes along each direction of Tech Rd, necessitating 7 ft of additional pavement and reconstruction of curb lines and drainage systems (0.4 miles). Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• A-108 Prosperity Dr LB-4

\$3,600,000

Conversion of existing parking lanes to travel lanes, and the addition of new bike lanes along each direction of Prosperity Dr, necessitating 7 ft of additional pavement and reconstruction of curb lines and drainage systems (0.7 miles). Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• A-286 Lockwood Dr DB-10

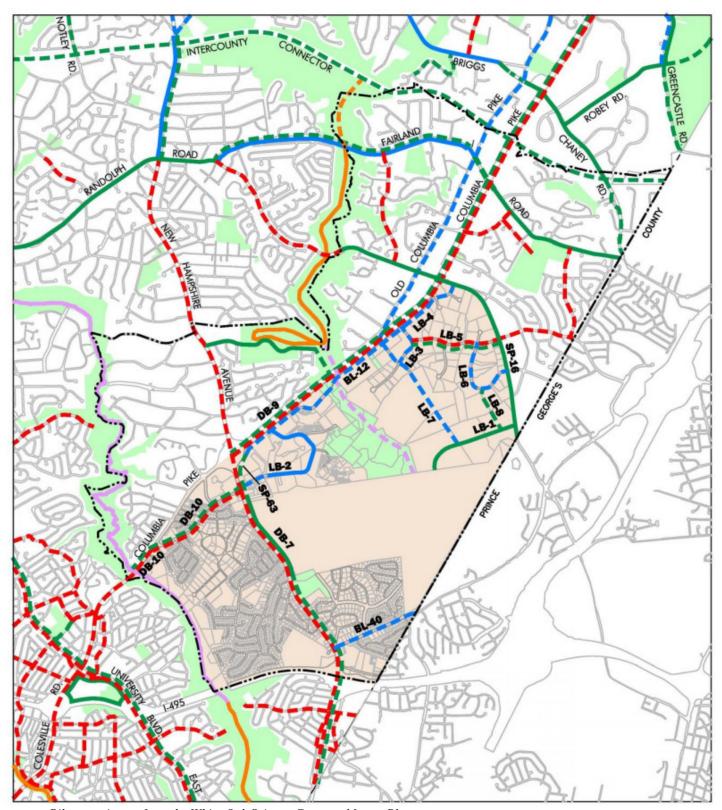
\$5,700,000

New shared use path between US 29 and approximately 400 ft west of MD 650 (0.7 miles). Significant grading impacts and potential utility impacts. Cost estimate is based on a preliminary conceptual design with 35% in contingencies.

• B-3 Elton Rd

\$500,000

Assumes minor pedestrian treatments along the business street portion (B-3) (0.2 miles). Cost estimate is based on a preliminary conceptual design. It is unlikely this project would proceed unless there were strong community demand with 35% in contingencies, and accordingly: it has been excluded from inclusion in the LATIP.



Bikeways, image from the White Oak Science Gateway Master Plan

ADDITIONAL INFORMATION

ANALYSIS SCHEDULE

Fee Conception
Scoping
Obtaining Base Model
Performing Analysis
Cost Estimating
Presentation of Findings w/ Public Agencies
Finalizing
Council Action
Implementation Policies

PUBLIC PRESENTATIONS

04/14/2015 05/14/2015 05/26/2015 09/02/2015 04/06/2016 08/02/2016 08/30/2016	Update to Council on Scoping Meeting with Harriet Quinn (resident) on Scoping Meeting with Eileen Finnegan (resident) on Scoping Update to the East County Citizens Advisory Board Update to the East County Citizens Advisory Board Update to Viva White Oak Presentation of findings to M. NCPPC
09/14/2016 09/16/2016 11/17/2016 12/08/2016 01/04/2017 01/12/2017 01/17/2017	Presentation of findings to M-NCPPC Presentation of findings to Glenn Orlin (Council Staff) Update to the Greater Silver Spring Chamber of Commerce Transmitted to County Council Presentation of findings to East County Citizens Advisory Board Meeting with Harriet Quinn (resident) on Findings Council Public Hearing
02/06/2017 02/14/2017	Council Committee Worksession (GO/PHED) Council Approval

REVISION HISTORY

12/22/2017	Planning Board Action Draft	[current draft]
04/11/2017	Council Approval Draft	
12/12/2016	First Draft	

ANALYSIS COST

Invoice Period	Invoice Amount
08/2015	\$11,334.50
09/2015	\$7,555.00
10/2015	\$28,148.50
11/2015	\$5,888.00
12/2015	\$19,172.00
01/2016	\$10,219.00
02/2016	\$6,357.50
Total	\$88,674.50

This analysis cost does not account for time spent on County staff estimating the costs of non-LATR/intersection projects, or in preparing the WOSG analysis and accompanying documentation.

CONTACT INFORMATION

This analysis was led by Andrew Bossi, Senior Engineer in the Director's Office of the Montgomery County Department of Transportation. Any questions, comments, or concerns are welcomed at:

andrew.bossi@montgomerycountymd.gov (240) 777-7200

101 Monroe Street, 10th Floor Rockville, MD 20850

AB

Attachments: Sabra, Wang, & Associates Technical Memorandum

Appendix C

Benefit Cost Analysis



Appendix C. Benefit Cost Analysis

A formal benefit-cost (BCA) was conducted for the project in accordance with USDOT's recommended methodology (BCA Guidance).¹ The transportation improvements enabled through the combination of BUILD Grant and County matching funds will provide congestion relief, multimodal transportation options, and provide the spark for planned White Oak Science Gateway (WOSG) redevelopment that generates significant tax revenues, which will be the greatest monetized benefit for the project. A range of benefits are assumed to start in 2022, commensurate with the County's Capital Budget schedule for completing the WOSG roadway construction, with the tax revenue benefits beginning in 2023, and are considered through 2041 (a 20-year period).

The project benefits and costs were discounted to current dollars using the USDOT's recommend 7.0% discount rate and an alternative 3.0% discount rate. All monetized benefits and costs are in 2017 dollars and reflect net present value (NPV). This memorandum summarizes the results of the BCA, and describes the assumptions and methodology used to estimate each of the benefits and costs.

1. Summary of Results

Table C-1 summarizes the results of the BCA. In total, the \$95.4 million of undiscounted costs are offset by approximately \$1.41 billion of undiscounted benefits. This is equivalent to a present value (PV) of approximately \$72.0 million of costs and \$509.0 million of benefits discounted at a 7% rate, for a NPV of \$437.0 million and a benefit-cost ratio of 7.07).

There are many benefits that outweigh the costs associated with this project yielding significant value to Montgomery County. A projected reduction in vehicle miles traveled (VMT) reduces emissions, pavement quality oil imports, and fuel consumption. Similarly, travel time savings and safety benefits were estimated for transportation improvement projects. Meanwhile, the expected increase in tax revenue increase associated with enabling the WOSG redevelopment is the most important element supporting Federal investment in the project. County projections indicate the Viva White Oak™ project will provide over \$2.3 billion of new tax revenues to Montgomery County and the State of Maryland (over a 30-year bond period), which could not be realized without the new roadways and transportation improvements identified in the BUILD grant application. The WOSG redevelopment represents a truly transformational project that combines private and public investment to realize significant potential tax revenue that can be re-invested in the White Oak community.

The capital and operations and maintenance (O&M) costs are the primary costs associated with this project. Capital costs for the transportation improvements total over \$74 million of the undiscounted costs, with the majority of the remaining O&M costs associated with the bus circulator.

¹ U.S. Department of Transportation, Office of the Secretary, "Benefit-Cost Analysis Guidance for Discretionary Grant Programs," June 2018.



Table C-1: Summary of Benefits and Costs

Benefit Description	Benefit Value (7% Discount Rate)	Benefit Value (3% Discount Rate)		
State of Good Repair				
Reduction in Pavement Damage	\$ 108,144	\$	170,259	
Category subtotal	\$ 108,144	\$	170,259	
Economic Competitiveness				
Fuel Savings for Automobiles	\$ 12,724,998	\$	20,084,751	
Reduction in Oil Imports	\$ 1,137,519	\$	1,795,426	
Fare Revenues	\$ 2,121,871	\$	3,435,278	
Tax Revenues	\$ 449,989,766	\$	796,515,262	
Category subtotal	\$ 465,974,154	\$	821,830,716	
Sustainability and Livability				
Travel Time Savings	\$ 39,532,428	\$	62,238,888	
Emission Abatement	\$ 611,552	\$	934,447	
Category subtotal	\$ 40,143,980	\$	63,173,335	
Safety				
Safety Improvements	\$ 2,812,767	\$	4,428,351	
Category subtotal	\$ 2,812,767	\$	4,428,351	
Total Project Benefits	\$ 509,039,045	\$	889,602,661	
Costs				
Total Costs	\$ 72,017,596	\$	80,908,526	
Total Project Costs	\$ 72,017,596	\$	80,908,526	
Net Present Value	\$ 437,021,449	\$	808,694,135	
Benefit Cost Ratio	7.07		11.00	

2. Benefits

1. Reduction in Pavement Damage

The White Oak Science Gateway is anticipated to result in regional VMT reductions in numerous ways:

- 1) As a mixed-use development, White Oak will result in some internal capture of trips
- 2) White Oak will provide a circulator connection to the Montgomery County Bus Rapid Transit (BRT), encouraging a modal shift from auto to transit
- 3) White Oak will provide bicycle lanes along Industrial Parkway and will include a shared use path along MD 650, encouraging a modal shift from auto to non-motorized modes

The BCA analysis estimated this VMT reduction using the 2040 White Oak Science Gateway Master Plan travel forecasting model outputs. Based on these outputs, the transportation improvements are expected to result in a daily reduction of 50,021 VMT. Annualizing this, assuming 250 weekdays per year, results in an annual reduction of 12,505,250 VMT.



The reduction in pavement damage is directly associated with this reduction in VMT. Per FHWA guidance,² each VMT corresponds to a 0.1-cent cost per mile of pavement damage. An annual reduction of 12,505,250 VMT is therefore equivalent to an annual reduction of \$12,505 of pavement damage (non-discounted) and a PV of over \$108,000 over the 20-year period using a discount rate of 7%.

2. Fuel Savings for Automobiles

The fuel savings benefits similarly monetize fuel savings based on the reductions in VMT described in Section C.2.1. This benefit assumes a reduced cost to operators of fuel consumption due to the reduced VMT. The reduced VMT is converted to a reduction in fuel consumption using the projected fuel efficiency in miles per gallon (mpg) for light-duty stock (combined "on-the road" estimate for all cars and light trucks), as projected by the U.S. Energy Information Administration (EIA).³ Table C-2 identifies the fuel efficiency by year, as estimated by the EIA. This fuel reduction is then monetized using the EIA's projected average regular pump price for gasoline in 2019, \$2.77 per gallon, and inflated at an annual rate of 2.30% (an estimated annualized rate of inflation over a 10-year look-ahead, as of 2018 Q2).^{4,5}

Table C-2: Fuel Efficiency By Year

Year	Fuel Efficiency (mpg)	Year	Fuel Efficiency (mpg)
2022	25.43	2032	32.98
2023	26.15	2033	33.58
2024	26.93	2034	34.14
2025	27.76	2035	34.66
2026	28.58	2036	35.13
2027	29.39	2037	35.56
2028	30.18	2038	35.95
2029	30.93	2039	36.30
2030	31.65	2040	36.61
2031	32.34	2041	36.68

Using the annual reduction of 12,505,250 VMT, the fuel efficiency identified in Table C-2, and the projected fuel prices, the non-discounted total value of fuel savings is \$29.58 million over the 20-year period. This equates to a PV of \$12.72 million using a discount rate of 7%.

² U.S. Department of Transportation, Federal Highway Administration, "Addendum to the 1997 Federal Highway Cost Allocation Study Final Report," May 2000.

³ U.S. Energy Information Administration, "Annual Energy Outlook 2018: Transportation Sector Key Indicators and Delivered Energy Consumption," available at https://www.eia.gov/outlooks/aeo/data/browser/#/?id=7-AEO2018&cases=ref2018&sourcekey=0.

⁴ U.S. Energy Information Administration, "Short-Term Energy Outlook," available at https://www.eia.gov/outlooks/steo/, accessed on June 12, 2018.

⁵ Federal Reserve Bank of Philadelphia, "One-Year-Ahead and 10-Year-Ahead Inflation Forecasts from the Survey of Professional Forecasters," May 11, 2018, available at https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/historical-data/inflation-forecasts.



3. Reduction in Oil Imports

This benefit assumes a reduced cost associated with oil imports due to the reduced VMT (described in Section C.2.1). As noted by the National Highway Traffic Safety Administration (NHTSA), "U.S. consumption and imports of petroleum products imposes costs on the domestic economy that are not reflected in the market price for crude petroleum, or in the prices paid by consumers of petroleum products such as gasoline." These external costs include the U.S. demand impacting the world oil price, economic risk associated with imported oil supply reductions, and expenses related to securing oil supplies and maintaining an oil reserve. As noted by NHTSA, reduced U.S. fuel consumption reduces the values of these costs. NHTSA estimates this cost to be \$0.233/gallon (in 2010 dollars). The BCA analysis converts this to 2017 dollars using the inflation adjustment values provided in Table A-7 of the BCA Guidance.

This value is used to monetize the projected reduction in fuel imported. Similar to Section C.2.2, the annual reduction of 12,505,250 VMT is combined with the fuel efficiency identified in Table C-2 to estimate the number of gallons of fuel saved per year. The BCA analysis reduces this number by 5% to estimate the *imported* gallons saved, assuming that U.S. import market is not fully efficient and that a portion of the reduced usage will come from domestic production. The non-discounted total value of oil import reduction benefits is \$2.64 million over the 20-year period. This equates to a PV of \$1.14 million using a discount rate of 7%.

4. Emissions Reductions

The emissions reductions similarly monetize emissions reductions based on the reductions in VMT described in Section C.2.1. These estimates use emissions rates per mile, as projected by the National Capital Region Transportation Planning Board (TPB).⁸ This document identifies emissions rates at a sequence of years between 2015 and 2040 for Ozone Volatile Organic Compounds (VOCs), Ozone Nitrous Oxides (NOx), Particulate Matter (PM) 2.5 Direct, Precursor NOx, and Winter Carbon Monoxide (CO). Table A-6 of the BCA Guidance recommends monetized values to use for VOCs, NOx, and PM.⁹

To limit the analysis to the emissions with recommended monetized values, the BCA analysis uses only the emissions rates for Ozone VOCs, Precursor NOx, and PM 2.5 Direct. The analysis uses the emissions rate for Precursor NOx to measure the direct emissions in lieu of Ozone NOx, which can be formed during a secondary reaction. Table C-3 identifies the emissions rates and recommended monetized values for each of the emissions included in the analysis (all values expressed are in 2017 dollars).

⁶ National Highway Traffic Safety Administration, "Corporate Average Fuel Economy for MY 2017-MY 2025 Passenger Cars and Light Trucks," August 2012.

⁷ U.S. Department of Transportation, Office of the Secretary, "Benefit-Cost Analysis Guidance for Discretionary Grant Programs," June 2018.

⁸ National Capital Region, Transportation Planning Board, "Air Quality Conformity Analysis of the 2015 CLRP Amendment and FY 2015-2020 TIP," October 21, 2015.

⁹ U.S. Department of Transportation, Office of the Secretary, "Benefit-Cost Analysis Guidance for Discretionary Grant Programs," June 2018.



Table C-3: Summary of Emissions Rates

Year	Ozone VOC (grams/mile)	Precursor NOx (grams/mile)	PM 2.5 Direct (grams/mile)
2015	0.372	0.52	0.02
2017	0.301	0.34	0.01
2025	0.201	0.16	0.01
2030	0.135	0.10	0.01
2040	0.095	0.06	0.01
Value	\$1,905/short ton	\$7,508/short ton	\$343,442/short ton

Using the annual reduction of 12,505,250 VMT and the emissions factors and monetized values identified in Table C-3, the non-discounted total value of emissions abatement benefits is \$1.34 million over the 20-year period. This equates to a PV of over \$611,000 using a discount rate of 7%.

5. Fare Revenues

The project will include a bus circulator, which will provide a connection to the Silver Spring Transit Center and/or US29 BRT. MCDOT estimates that bus circulator will serve 184,000 riders on an annual basis. This circulator ridership is monetized based on the monthly pass rate for the Montgomery County Department of Transportation's *Ride On* transit services. The existing Ride On monthly pass costs \$45.00 per month; assuming that each user takes 22 round-trips per month equates to a per trip cost of \$1.02.¹⁰ The per trip average fares were assumed to keep pace with inflation over the 20-year period. The combination of this per trip cost with the monthly ridership results in a total non-discounted value of \$5.16 million over the 20-year period. This equates to a PV of \$2.12 million using a discount rate of 7%.

6. Travel Time Savings

Travel time savings were estimated by modeling throughput and delay associated with the planned intersection capacity improvements. AM and PM Peak hour travel time savings were estimated for the three intersections included in the BUILD grant (estimated to be 506 hours of vehicular travel time savings per peak hour in total). The daily estimates were then converted to an annual basis assuming 250 weekdays per year. These estimates projected vehicle-hour savings per day; vehicle-hour savings were then converted to person-hour savings assuming a vehicle occupancy factor of 1.22, developed using the 2040 White Oak Science Gateway Master Plan travel forecasting model outputs, a more conservative factor than the 1.39 recommended in Table A-4 of the BCA Guidance. The BCA analysis then monetizes the person-hours of travel time savings using the in-vehicle travel time value of \$14.80 per person hour

¹⁰ Montgomery County Department of Transportation, Department of Transportation – Transit Services, "FARES: Effective June 25, 2017," available at https://www.montgomerycountymd.gov/dot-transit/routesandschedules/fares/fares2.html.

¹¹ Federal Reserve Bank of Philadelphia, "One-Year-Ahead and 10-Year-Ahead Inflation Forecasts from the Survey of Professional Forecasters," May 11, 2018, available at https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/historical-data/inflation-forecasts.

¹² U.S. Department of Transportation, Office of the Secretary, "Benefit-Cost Analysis Guidance for Discretionary Grant Programs," June 2018.



recommended for all purposes by Table A-3 of the BCA Guidance.¹³ This value is appropriate to the context, as the delay will include both personal and business travel.

This methodology results in a total non-discounted value of travel time savings of \$86.9 million over the 20-year period. This equates to a PV of \$37.59 million using a discount rate of 7%.

7. Safety Improvements

A safety analysis identified the total number of crashes in a three-year period (2015-2017) at each of the transportation improvement sites and potential crash reductions were calculated using FHWA-approved crash modification factors (CMF).¹⁴ The expected reduction in crashes was then monetized using a FHWA crash cost database. Table C-4 details the projected safety improvements and value over a three-year period, based on this data.

Table C-4: Summary of Projected Safety Improvements over Three-Year Period

Treatment	CMF	Total Crashes	Expected Crashes	Reduced Crashes	3-Year Benefits			
US 29 at Industrial Parkway	0.743	2 2 000 2 2 0 0						
Install one southbound left turn lane	0.748	29	22	7	\$375,607			
Relocate two northbound right turns	0.993							
US 29 at Tech Road	-							
Install northbound and southbound left turn restrictions	-	57	57	0	N/A			
MD 650 (New Hampshire Avenue at Lockwood Drive)	0.748							
Install one northbound left turn lane	0.748	37	28	9	\$469,468			
Install one westbound through lane	-	37						
Install one receiving lane on the west leg	-							
Construct the MD 650 Bikeway shared use path	0.75	1	0.75	0.25	\$130,691			
Widen existing Industrial Parkway to accommodate bike lanes	0.42	0	N/A	N/A	N/A			
Total (3-Year Period)								
Total (Per Year)								

The transportation improvements are therefore projected to result in safety benefits valued at \$325,255 per year (non-discounted) and a PV of over \$2.81 million over the 20-year period at a 7% discount rate.

¹³ U.S. Department of Transportation, Office of the Secretary, "Benefit-Cost Analysis Guidance for Discretionary Grant Programs," June 2018.

¹⁴ U.S. Department of Transportation, Federal Highway Administration, "Crash Modifications Factors Clearinghouse," available at http://cmfclearinghouse.org/index.cfm.



8. Tax Revenues

MCDOT projects that the Viva White Oak project will provide over \$2.3 billion of new tax revenues to Montgomery County and the State of Maryland (over a 30-year bond period), which could not be realized without the transportation improvements identified in the BUILD grant. The BCA distributes this \$2.3 billion over a 30-year period beginning in 2023 (after the construction of the transportation improvements) proportional to the square feet of development in place each year, based on the assumed phasing plan for the project. This approach results in an estimate of approximately \$1.27 billion of undiscounted tax revenues in the first 20 years of the 30-year bond period, just over half of the total projected new tax revenues (since the development construction is phased, it will result in less than two-thirds of the total 30-year tax revenues in the first 20-year period). This equates to a PV of \$449.99 million over the 20-year period at a 7% discount rate.

3. Costs

The capital, operations and maintenance costs are the primary costs associated with this project. Capital costs for the transportation improvements are evenly distributed across the projected years of construction/commissioning. Operations and maintenance costs are included for the new additional roadways, bike lanes, sidewalks, shared use paths, and bus fleet. These unit costs were applied to the projected improvements and included beginning in the year following construction for each improvement.

1. Capital Costs:

The capital costs for the Project were prepared as of the White Oak Science Gateway Project and is included within Montgomery County's current capital budget. For the purposes of the BCA, the capital cost of intersection improvements, multi-modal improvements and bus replacement procurement were identified for BUILD Grant program. The capital costs are applied over a 5-year construction and procurement period beginning in 2018 and ending in 2022.

The roadway costs (funded by the Montgomery County Capital Budget) are distributed by year according to planned spending, as identified by Montgomery County. Capital costs for multimodal improvements are identified in the BUILD grant application, with projected capital costs evenly distributed across the projected years of construction/commissioning as identified in the BUILD grant.

In addition, \$300,000 of the MD 650 Bikeway Shared Use Path projected to be funded by LATIP developer contributions is included as a capital cost in the BCA analysis.

The capital cost for the project discounted at 7% total to \$58.24M.

2. O&M Costs:

The Project will require additional annual operating and maintenance (O&M) for the reconstructed intersections, multi-modal improvements and the bus circulator. Maintenance of the infrastructure begins in 2022, and beginning in 2023 is estimated to be \$1.1M¹⁵ per year, held constant throughout the analysis period.

The total O&M costs over the analysis period discounted at 7% total is \$14.18M.

¹⁵ Assumes O&M costs of \$1.1M per year. O&M unit costs per lane mile for roads, on-street bikeways, sidewalks, and off-street bikeways, and unit costs per bus per year for local buses provided by Montgomery County DOT.

Appendix D

Traffic Data and Assumptions for Benefit-Cost Analysis



To: Gary Erenrich
Special Assistant to the Director
Montgomery County Department of
Transportation

Project #: 38828.00

Date: July 13, 2018

From: Daniel Lovas, PE

Bethany Turner, PE

Re: Traffic Data and Assumptions for Benefit-Cost Analysis
White Oak Science Gateway Redevelopment BUILD Grant

White Oak, MD

This memorandum describes the technical methodologies and assumptions applied to develop transportation inputs for the Benefit-Cost Analysis. This memorandum addresses the travel time, safety and vehicle miles traveled (VMT) analysis elements.

Travel Time Savings Analysis

A traffic study was performed by Sabra Wang Associates for the White Oak Local Area Transportation Review Intersection Improvement Evaluation in 2016 and used as a baseline for the travel time analysis. The study collected twenty-two (22) peak period (6-10 AM & 4-7 PM) turning movement counts were collected in May of 2015. Three additional peak period turning movement counts (6-10 AM & 4-7 PM) were collected in October of 2015. The remaining locations were obtained from historical counts posted on the State Highway Administration's (SHA) I-TMS website. The raw intersection traffic volumes were then balanced to account for sinks and sources from other intersections and driveways to develop a baseline set of project traffic data.

An analysis was performed at all study intersections using the Highway Capacity Manual (HCM) methodology. A Synchro network was developed for the baseline conditions. Synchro is a deterministic and macroscopic signal analysis computer software program that models street networks and traffic signal systems. Geometric data such as number of lanes, lane configuration, storage lengths, tapers, and distances between intersections were inputted into Synchro. Additionally, existing signal timings and phasing were obtained and coded into the Synchro traffic model along with existing traffic volumes.

Intersection capacity analyses were performed using the industry standard National Academy of Sciences Transportation Research Board's Highway Capacity Manual (HCM) methodology for all study intersections. Performance measures of effectiveness include level of service (LOS), volume-to-capacity (v/c) ratio, and average vehicle delay. Key performance measures are defined as follows:

• Level of Service (LOS) is a qualitative measure describing operational conditions of an intersection or any other transportation facility. LOS measures the quality of traffic service, and may be determined for intersections, roadway segments, or arterial corridors on the basis of delay, congested speed, volume to capacity (v/c) ratio, or vehicle density by functional class. At intersections, LOS is a letter designation that corresponds to a certain range of roadway operating conditions. The levels of service range from 'A' to 'F', with 'A' indicating the best operating conditions and 'F' indicating the worst, or a failing, operating condition.

- Volume-to-capacity ratio (v/c ratio) is the ratio of current flow rate to the capacity of the intersection. This ratio is often used to determine how sufficient capacity is on a given roadway. Generally speaking, a ratio of 1.0 indicates that the roadway is operating at capacity. A ratio of greater than 1.0 indicates that the facility is operating above capacity as the number of vehicles exceeds the roadway capacity.
- Delay (Control delay) is the portion of delay attributed to traffic signal operation for signalized intersections.
 Control delay (overall delay) can be categorized into deceleration delay, stopped delay, and acceleration delay.

The travel time analysis used the delay associated with each of the three intersections that had geometric changes based on the proposed improvements. The scenarios used in the travel time analysis included a 2040 No Build and 2040 Build to reflect the impact of the intersection upgrades in the future build out year. Table 1 shows the travel time savings analysis used in the benefit cost study.

Table 1: Travel Time Savings Analysis

AM Peak										
	Intersection	Delay (s)		Entering	Hours of Travel					
Intersection	2040 No Build	2040 Build	Delay Savings (s)	Volume in Peak Hour	Time Savings per Intersection					
US 29 at Industrial Parkway	101.6	53.5	48.1	6100	82					
US 29 at Tech Road	45.5	28.2	17.3	2115	10					
MD 650 at Lockwood	71.4	38.7	7305	79						
		PM P	eak							
	Intersection	Delay (s)		Entering	Hours of Travel					
Intersection	2040 No Build	2040 Build	Delay Savings (s)	Volume in Peak	Time Savings per					
	2040 NO Bullu	2040 Bullu		Hour	Intersection					
US 29 at Industrial Parkway	156.7	64.2	92.5	9390	241					
US 29 at Tech Road	51.8	28.1	23.7	2400	16					
MD 650 at Lockwood 112.6 72.5		40.1	7100	79						

The total travel time savings during the weekday AM and PM peak hours combined is 506 hours. It is assumed that the similar benefits will be observed during a significant portion of the morning and evening peak periods. The peak hours' travel time savings were doubled to provide a four-hour time saving value, and that value was conservatively used to represent a daily travel time savings in the benefit-cost analysis.

Safety Analysis

Montgomery County Department of Transportation provided crash data from 2015-2017 in the study area. Table 2 shows the crash summary of the entire study area.

Table 2: 2015-2017 Crash Data

Total Crashes (2015-2017)	933
Pedestrian Crashes	39
Bicycle Crashes	5
Injury Crashes	351
PDO Crashes	580
Fatalities	2

To identify the reduction of crashes expected at each of the proposed improvements, crashes at each of the intersections or roadway segments associated with transportation improvements included in the WOSG BUILD Grant application were isolated. Crash modification factors (CMFs) were selected based on the appropriate geometric designs proposed in the White Oak LATIP recommendations. CMFs were chosen from the FHWA-approved CMF Clearinghouse, a comprehensive database of information on all available CMFs, such as the CMF value and all published details about the CMF; citations and related information about the study that produced each CMF.

Table 3 shows the annual safety benefits using the appropriate CMF for each proposed improvement. Costs associated with each crash were developed using the AASHTO 2010 Highway Safety Manual methodology.

Table 3: Safety Analysis

Treatments	CMF	Total Crashes	Expected Crashes	Reduced Crashes
US 29 at Industrial Parkway	0.743			
Install one southbound left turn lane	0.748	29	22	7
Relocate two northbound right turns	0.993			
US 29 at Tech Road	N/A			
Install northbound and southbound left turn restrictions	N/A	57	57	0
MD 650 (New Hampshire Avenue) at Lockwood Drive	0.748			
Install one northbound left turn lane	0.748	37	28	9
Install one westbound through lane	N/A			
Install one receiving lane on the west leg	N/A			
Construct the MD 650 Bikeway shared use path	0.75	1	0.75	0.25
Widen existing Industrial Parkway to accommodate bike lanes	0.42	0	N/A	N/A

Vehicle Miles Traveled (VMT) Analysis

Travel demand forecasting was conducted by another Montgomery County Department of Transportation (MCDOT) consultant for the White Oak Local Area Transportation Review Intersection Improvement Evaluation in 2016. The travel forecasting was conducted for the full White Oak Science Gateway (WOSG) Master Plan area and included all the Local Area Transportation Improvement Program (LATIP) transportation improvement projects proposed for the full WOSG Master Planned redevelopment. VHB reviewed the travel forecasting files to develop an estimate of vehicle miles traveled reductions associated with the proposed LATIP transportation improvements included in the WOSG BUILD Grant application.

The travel forecasts included a 2040 WOSG Master Plan model that provides an overall Vehicle Miles Traveled (VMT) output for the WOSG planning area. The model includes all LATIP transportation improvements, but a 2040 travel forecast without the transportation improvements included in the BUILD Grant application has not been conducted for comparison to determine the change in VMT. By reviewing travel forecast data included in the following 2040 model files, VHB developed a profile of the trip activity and mode choice for the WOSG planning area:

- Total balanced productions and attractions
- Person trip tables by mode by time of day
- Distance and time congested skims by time of day

The approved White Oak Science Gateway Master Plan¹ includes recommended targets for Non-Auto Driver Mode Share (NADMS). The plan recommends a 25 percent NADMS goal for all new development, residential and commercial, in the White Oak Center and Hillandale Center of the Plan area based on the area's future transit service (assuming BRT) and connectivity opportunities. The plan recommends a 30 percent NADMS for all new development, residential and commercial, in the Life Sciences/FDA Village Center of the Plan area based on the area's future transit service and connectivity opportunities.

The White Oak Science Gateway Master Plan also cites 2010 U.S. Census data that indicates current non-single occupant vehicle travel to jobs by employees working in the Plan area is estimated at 14 percent. Based on data derived from the County's Census Update Survey, current non-single occupant vehicle travel to work trips by residents living in the Fairland planning area is estimated at roughly 20 percent.

Through implementation of the LATIP transportation improvements, the WOSG planning area will achieve the NADMS goals cited in the master plan. Based on the difference between the current NADMS levels obtained from Census data resources and the future NADMS goals cited for the WOSG redevelopment, it is possible to calculate a reduction in Single-occupant Vehicle (SOV) percentages and the total change in VMT for all Traffic Analysis Zones (TAZ) in the WOSG planning area associated with the LATIP Transportation projects.

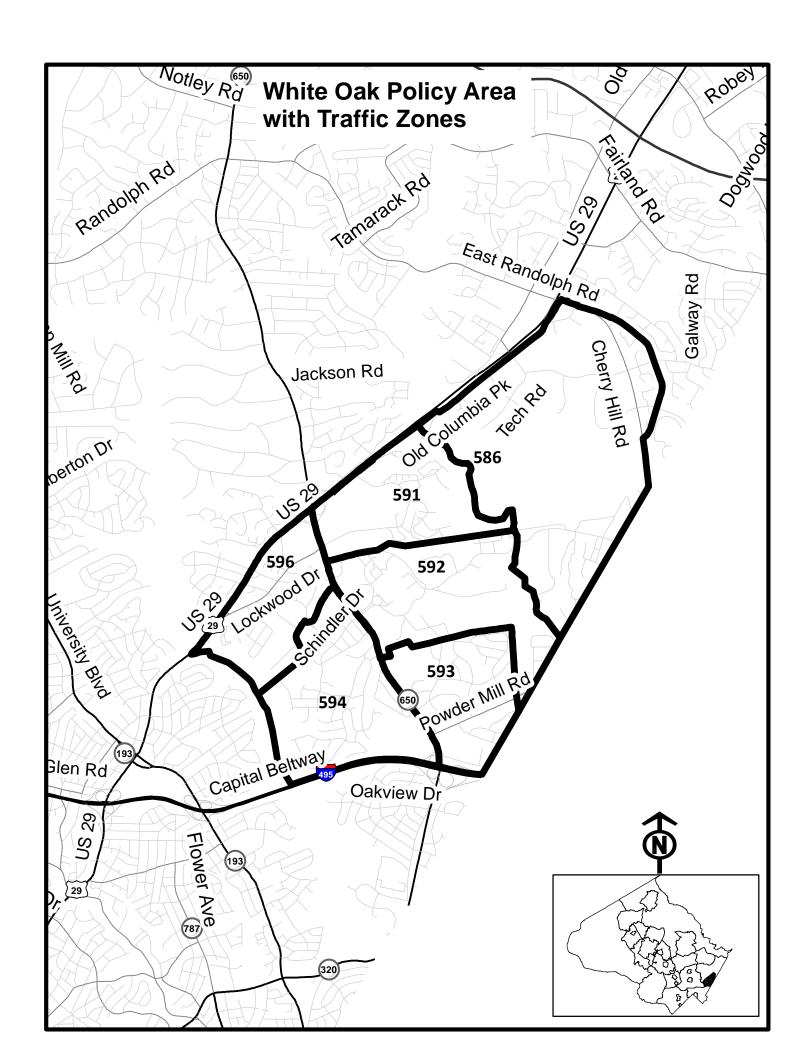
Based on the expected changes in mode share cited in the WOSG Master Plan, the LATIP improvements will produce a 16% decrease in SOV work-related trips to the area and 10% decrease in SOV trips by residents in the area for the TAZ containing the Life Sciences/FDA Village Center (Viva White Oak). An 11% decrease in SOV work-related trips to the area and 5% decrease in SOV trips by residents in the area was applied for all other TAZs. The total change in VMT for the WOSG planning area associated with the LATIP transportation improvements is 200,083 vehicle-miles.

The total change in VMT for the WOSG planning area was factored downward to account for the approximate proportion of the overall LATIP transportation improvements (all of which were included in the travel forecast modeling) that is represented by the improvements included only in the WOSG BUILD Grant application (25% of overall LATIP). The change in VMT related to the WOSG BUILD Grant application transportation improvements is calculated at 50,021 vehicle-miles per day. This daily figure is annualized in the BCA based on an assumed 250 weekdays per year for typical work trip activity. A map showing the travel model TAZs and a summary of the VMT calculations performed using the 2040 WOSG travel forecast model outputs are included at an attachment.

¹ White Oak Science Gateway Master Plan, Montgomery County Planning Department, 2016, http://montgomeryplanning.org/planning/communities/area-2/white-oak-science-gateway/

Attachments

- White Oak Science Gateway Traffic Analysis Zone (TAZ) Map
- 2040 WOSG Travel Forecast Model Outputs and VMT Calculations



2040 Model WOSG Mode Choice Output and VMT Calculations

	SOV	SOV	Total	Total	Percent SO	V	Percent n	non-SOV	Change in NonSo	OV Share	Non WO SOV m	ode share	SOV Non WO SOV non WO	Factor Trip Table
TAZ	Productions	Attractions	Productions	Attractions	Productions Att	ractions	Productions	Attractions	Productions A	Attractions	Productions A	ttractions	Productions Attractions	Productions Attractions
586	6580.046875	33567.8477	9861.243927	47138.74	66.7%	71.2%	33.3%	28.8%	-10%	-16%	76.7%	87.2%	7566.171268 41110.05	1.149865861 1.224685
591	5072.653809	4265.9419	9715.726731	6074.172	52.2%	70.2%	47.8%	29.8%	-5%	-11%	57.2%	81.2%	5558.440146 4934.101	1.095765718 1.156626
592	0	8700.59082	0	12017.95		72.4%		27.6%	-5%	-11%	5.0%	83.4%	0 10022.57	#DIV/0! 1.151941
593	552.333008	1763.90601	918.159005	2605.297	60.2%	67.7%	39.8%	32.3%	-5%	-11%	65.2%	78.7%	598.2409583 2050.489	1.083116434 1.16247
594	985.440979	949.072998	1700.173996	5 1352.424	58.0%	70.2%	42.0%	29.8%	-5%	-11%	63.0%	81.2%	1070.449679 1097.84	1.086264628 1.156749
596	1321.329956	996.594971	2521.252968	3 1417.963	52.4%	70.3%	47.6%	29.7%	-5%	-11%	57.4%	81.3%	1447.392604 1152.571	1.095405881 1.156509

VMT Change - Entire WASCOG Model Area WOSG VMT (lower SOV) 48,023,697

Total

High model share VMT 48,223,394 199,697 0.414%

Only trips that are produced or destined to WO TAZs.

WOSG VMT - lower SOV Share				WOSG w/o	LATIP VMT - h	nigher SOV Share	Difference in V				
	Production	Attraction	total	Production	Attractions	total	Production	Attractions	total		
586	41,909	620,703	662,613	48,190	759,895	808,086	-6,281	-139,192	-145,473		
591	49,330	72,079	121,408	54,054	83,363	137,416	-4,724	-11,284	-16,008		
592	0	168,850	168,850	0	194,457	194,457	0	-25,606	-25,606		
593	5,519	30,570	36,090	5,978	35,531	41,509	-459	-4,961	-5,420		
594	10,662	17,665	28,326	11,581	20,431	32,012	-920	-2,766	-3,686		
596	13,227	16,811	30,038	14,489	19,439	33,928	-1,262	-2,628	-3,890		
	120,647	926,678	1,047,325	134,293	1,113,115	1,247,408	-13,645	-186,437	-200,083		
									-16.0%		

Approximate BUILD Grant project share of overall LATIP Projects:

BUILD Grant projects share of VMT reduction:

-50023

2040 Model WOSG Mode Choice Output and VOR Calculation

TAZ S	SOVOrig S	SOVDest In	ntSOV	HOV2Orig	HOV2Dest	IntHOV2	HOV3Orig	HOV3Des I	ntHOV3	TranOrig	TranDest	IntTran	SOVOrig	SOVDest	HOVOrig	HOVDest	TranOrig	TranDest
586	6,580	33,568	3,328	879	4,244	397	274	2,647	117	2,129	6,680	0	66.7%	71.2%	11.7%	14.6%	21.6%	14.2%
591	5,073	4,266	655	728	525	78	238	319	23	3,67	7 965	0	52.2%	70.2%	9.9%	13.9%	37.8%	15.9%
592	0	8,701	0	0	1,088	0	0	710	0	(1,519	0		72.4%		15.0%		12.6%
593	552	1,764	34	76	211	4	22	141	1	268	3 489	0	60.2%	67.7%	10.7%	13.5%	29.2%	18.8%
594	985	949	33	140	111	3	41	76	1	534	4 217	0	58.0%	70.2%	10.6%	13.8%	31.4%	16.0%
596	1,321	997	57	189	107	6	59	59	1	952	2 256	0	52.4%	70.3%	9.8%	11.7%	37.8%	18.1%
		Total	80,376		Total	10,248		Total	5,277									

WOSG Vehicle Occupanacy Ratio: 1.22

Appendix E

RCLCO Real Estate Fiscal and Economic Impact Analysis for LifeSci Village Mixed-Use Development

Fiscal and Economic Impact Analysis for LifeSci Village™ Mixed-Use Development Montgomery County, Maryland

Percontee Incorporated | September 2011





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EXECUTIVE SUMMARY

RCLCO (Robert Charles Lesser & Co.), a national independent real estate consulting and economic analysis firm headquartered in Bethesda, Maryland, was retained by Percontee Incorporated (Percontee) to update a fiscal and economic impact of the proposed mixed-use development, LifeSci Village™, near the new FDA headquarters in White Oak, Maryland. The original impact analysis was conducted in 2008.

The objective of this analysis was to determine the fiscal and economic impact on Montgomery County, Maryland. The analysis took into account all categories of revenues and expenditures expected to be received and incurred as a result of the projected development, and incorporated them into a detailed model. The assumptions used for the fiscal impact analysis were based on inputs from Montgomery County's Approved Fiscal Year 2012 Operating and Capital Budget, conversations with officials from Montgomery County and Montgomery County Public Schools, and assumptions from various other sources, including the U.S. Census, the Bureau of Labor Statistics, and Claritas, Inc. Scheer Partners provided inputs with regard to the office development program and the anticipated absorption schedules for all office uses. RCLCO conducted an independent market analysis in 2008 to determine likely values and absorption schedule for the proposed residential, retail, and hospitality uses at LifeSci Village™. RCLCO assumed that the same annual absorption rates, values, and other market assumptions derived from the 2008 market analysis would apply to the revised development program devised by Percontee.

The proposed commercial development program includes a variety of office uses relating to the new FDA headquarters, retail, hotel, movie theater, and fitness club. In addition, the residential program contains a mix of rental and for-sale residential featuring rental apartments, condominiums, and townhomes. It also includes age-restricted rental and for-sale residential products, including rental apartments, condominiums, and townhomes. Exhibits 4 and 5 provide information regarding the development program and other key assumptions.



Types of Impacts

The analysis includes various types of impacts, defined as follows:

- Direct Revenues include all county revenues received as a direct result of development and activities at the project.
- Additional real property taxes emanating from the positive impact that development at LifeSci Village™ will have on assessed values of surrounding properties in White Oak.
- Direct Net Fiscal Impact includes all revenues received after subtracting the cost of additional county services required as a result of the project.
- Indirect/Induced Revenues and Expenditures include additional county revenues and expenditures as a result of the economic activity that LifeSci Village™ will generate elsewhere in the county. For example, this includes the estimated county income tax paid by employees elsewhere in Montgomery County who are likely to live in the county, whose jobs are an indirect result of the project, net of county operating expenses generated by the additional employees.

We have taken a similar approach in this analysis as we used in the fiscal and economic impact analyses for Downtown Silver Spring (in Montgomery County) and for National Harbor (in Prince George's County). These analyses were reviewed and accepted by respective county staff. For the indirect and induced impacts, we used 2006 IMPLAN multipliers for Montgomery County produced by the Minnesota IMPLAN Group, Inc., which developed the nationally recognized IMPLAN economic impact modeling system.

Summary of Fiscal Impact Analysis

Over a 30-year period, from 2011 through 2040, the LifeSci VillageTM development as proposed will have a very positive fiscal impact on Montgomery County, Maryland. The total direct net fiscal impact through the year 2040 is estimated to be \$1.27 billion to Montgomery County. We estimate additional induced/indirect net fiscal benefit of \$78 million to the county, for a total of \$1.35 billion in net fiscal benefit for the county through the year 2040.

The LifeSci Village™ program will generate a large number of jobs on-site. By the time the development is built out, according to RCLCO's forecast, the LifeSci Village™ development program will generate approximately **10,600 direct on-site jobs**, along with 6,000 indirect/induced jobs elsewhere in the



county. Additionally, there will be non-permanent on-site construction jobs generated by the project, which we anticipate will peak at over 500 in 2018, with total full-time equivalent annual construction jobs of 5,000 during the life of the development.

We estimate that 87% of on-site jobs generated by the project will be held by Maryland residents. Of these, we estimate that 60% will be held by Montgomery County residents.



See Figure 1 below and Exhibits 1 and 2 for a summary of the total fiscal impacts on Montgomery County.

Summar	v of L	Direct ar	าd Indi	rect/Ind	uced i	Fiscal	Impacts

	PROPOSED LIFES	CI VILLAGE™ PROGRAM
REVENUES/EXPENDITURES	\$	%
REVENUES		
Real Property Tax Revenues	\$733,650,000	36%
Real Property Tax Revenues from Surrounding Area	\$94,127,000	5%
Personal Property Tax Revenues	\$123,060,000	6%
Income Tax Revenues	\$746,207,000	37%
Recordation Fees and Transfer Tax	\$80,968,000	4%
Hotel Room Tax	\$35,303,000	2%
Admissions Tax	\$960,000	0%
Impact Taxes	\$59,219,000	3%
Miscellaneous Revenues	\$157,049,000	8%
TOTAL REVENUE	\$2,030,542,000	105%
EXPENDITURES		
Non-Educational Operating Expenditures	\$455,379,000	60%
Non-Educational Capital Expenditures	\$44,437,000	6%
Educational Operating Expenditures	\$220,272,000	29%
Educational Capital Expenditures	\$40,771,000	5%
TOTAL EXPENDITURES	\$760,859,000	100%
DIRECT NET FISCAL BENEFIT		
DIRECT NET FISCAL BENEFIT	\$1,269,683,000	
INDIRECT/INDUCED REVENUES	\$187,134,000	
INDIRECT/INDUCED EXPENDITURES	\$109,498,000	
INDIRECT/INDUCED NET FISCAL BENEFIT	\$77,635,000	
TOTAL REVENUES	\$2,217,676,000	
TOTAL EXPENDITURES	\$870,357,000	
TOTAL NET FISCAL BENEFIT	\$1,347,318,000	
JOB CREATION		
PERMANENT JOBS		
NEW FULL-TIME JOBS CREATED (DIRECT)	10,629	
NEW FULL-TIME JOBS CREATED (INDIRECT)	6,014	
CONSTRUCTION JOBS		
NEW FTE CONSTRUCTION JOBS (DIRECT)	5,001	
MENT TE CONSTITUCTION SODS (DIRECT)	3,001	



Figure 1

See Figure 2 below and Exhibit 5 for a summary of development program assumptions:

Figure 2 Development Program

	TOTAL													ERIOD (2													
PROGRAM	(2011-2040)	2011 2012 2013 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2026	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039 20
ROPOSED ~290 ACRE LIFESCI VILLAGE™ F	ROGRAM																										
COMMERCIAL	SF/Rooms																										
Office: R&D/Lab/Applied Sciences Offices/Manuf.	2,225,000		87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500 37,
Office: Science Related Educational/Academic 1	2.060.000			87.500	87.500	87,500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	47.500
Office: Incubator	50,000		25,000	25,000							color																
Office: Clinical/Medical Office	870,000			50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	20,000						
Office: General	1,000,000			50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000)			
Retail: Lifestyle/Town Center	380,000				90,000	275,000	15,000									4											
Retail: Restaurants	45,000				15,000	30,000										400											
Retail: Movie Theater/Entertainment	60,000					60,000		4000		400		-			- 6												
Retail: Health Club	25,000				25,000		411-1	9	-	1	7	1	-49		_												
Hotel	300				200		-	100					- 1														
RESIDENTIAL	Units				1 1		- 1	-		13	0 0		-														
Non-Age Restricted									48	W.	4		1			-											
SFD	0						-		WA.			-															
Townhomes	975		68	68	68	68	68 69	68 69	68	68	68	68	68	68	68 69	68	23										
Condominiums	1,675		69	69	69	69	69	69	69 238	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	19
Rental Apartments	1,675		192	192	192	192	192		238			239			238												
Age Restricted																											
AAC Townhomes	200		21	21	21	21	21	21	21	21	21	11															
AAC Condominiums	245		35	35	35	35	35	35	35																		
AAC Rental Apartments	590		90	90	90	90	90	90	50																		
ADDITIONAL PROGRAM NOT INCLUDED IN TI	HE FISCAL AN	D ECONOMIC ANALYSIS 2	8																								
MPDUs (not included in this study)	(Units)	D Education All All Sid																									
MODUMA de Tourbonne	50																										

Other Uses (not included in this study) (SF)

800

75,000 not in FAR Day Care/Senior Day Care/Emp. Related Services Public Facilities Miscellaneous 55,000

SOURCE: Scheer Partners; RCLCO; Percontee

MPDU/Workforce Condos/Apartments (multifamily)

MPDU/Workforce Townhomes



¹ Note: 200,000 square feet is considered owned and occupied by a tax-exempt educational institution, and thus does not generate real property tax.

² Though these program elements are not included in the fiscal and economic impact study, it is likely these program elements will not have a significantly positive or negative impact on the overall results of this study.

REVENUES

Real Property Tax

We multiplied the unimproved and estimated improved value of each of the land uses by the county tax rate of \$0.876 per \$100 of assessed value, based on an assessed value of 100% of the fair market value. This rate includes the countywide general fund rate (\$0.713), mass transit rate (\$0.038), fire district tax (\$0.121), storm drainage (\$0.003), and advanced land acquisition rate (\$0.001).

In addition to the real property taxes that the development itself will generate for the county, we have identified surrounding properties that we believe will realize an increase in assessed values as a result of the development at LifeSci Village™, quantified what we believe will be the increase in value over time, and estimated the real property taxes arising from increasing assessments. Our analysis was informed by the experience in Silver Spring, Maryland, where the revitalization at Downtown Silver Spring turned around the trend of declining values in the surrounding area, and resulted in a spike in values following the completion of the Downtown Silver Spring project.

The relative size of the area we selected in White Oak relative to the development project is similar to the relative size of the Silver Spring Central Business District and the Downtown Silver Spring development. These parcels stretch from Fairland Road to the north (excluding properties north of Shanandale Drive, and west of Deer Ridge Drive), Paint Branch Park to the south, Columbia Pike (Route 29) to the west, and the Montgomery County-Prince George's County border to the east.

In Silver Spring, we found that, in anticipation of the development and during early years of construction, values began increasing and then rose dramatically after 2004, when the project was complete. We believe a similar trend will prevail in White Oak for the properties that we identified; however, we believe the magnitude of increase may be somewhat more muted, considering that White Oak does not have the same level of distress as was the case in Silver Spring in the mid- to late-1990s. Furthermore, in addition to private developers, the public sector made considerable efforts to improve Silver Spring, such as instituting an Enterprise Zone, providing tax credits, and implementing other programs. Therefore, we have estimated that the compounded annual increase in assessed values of surrounding properties in the surrounding area will be one-fifth (20%) of the compounded increases calculated for the Silver Spring CBD. This analysis results in \$94 million through 2040 of additional real property taxes to Montgomery County from the LifeSci Village™ program.

Appendices 4 through 6 provide detail on the impact of development at Downtown Silver Spring and how we used our analysis to determine the impact of LifeSci Village™ on surrounding properties in White Oak.



Personal Property Tax

Based on data we have analyzed in various jurisdictions, we estimate that personal property will be valued at 15% of the improvements' value of real property assessed values for non-residential uses. We multiplied the estimated personal property tax base by the county tax rate of \$2.192 per \$100 of assessed value.

Income Tax

Montgomery County will collect income taxes from residents at LifeSci Village™ and from on-site employees residing in Montgomery County.

Residential Income Tax: RCLCO calculated residential income tax revenues by using approximate average incomes for the number of occupied households multiplied by the income tax rate. We calculated the projected average household income of each housing type, based on the approximate income needed to rent or purchase a unit at the prices estimated, based on secondary resources and our knowledge of the local market. We assumed approximately 75% of the household income is likely to be taxable.

Non-Residential Income Tax: RCLCO estimated that approximately 87% of the employees on-site would live in Maryland, and that 60% of employees living in the state would live in Montgomery County (not including those also working at LifeSci Village™, to avoid double counting. These estimates are based on commuting data from the U.S. Census. We estimated the average income per employee by commercial development type from the Bureau of Labor Statistics by industry for Montgomery County, adjusted to reflect the estimated percentage of part-time employment. Occupied square footage per full-time equivalent employee and rooms per full-time equivalent employee were estimated based on Urban Land Institute reports, other industry sources, information provided by Scheer Partners, and RCLCO's experience and judgment. We estimated that 75% of the income is likely to be taxable.

We multiplied the total net taxable income of anticipated county residents by the county income tax rate, 3.20%.



Recordation and Transfer Tax

Recordation tax in Montgomery County is \$6.90 per \$1,000 of the sale price excluding the first \$50,000. This rate applies up to \$500,000; over \$500,000 a rate of \$10.00 per \$1,000 of sale price applies. These rates are applied to the anticipated sale prices, determined in the residential market study performed by RCLCO. Recordation taxes were calculated for the initial sale of residential units, as well as subsequent transfers, based on annual homeowner turnover rates of 8.4%.1

Transfer tax in Montgomery County is 1% of the sale price of a residential unit. Using the sale prices and homeowner turnover rates described above, RCLCO calculated the transfer tax revenues generated by the initial sale of residential units, as well as subsequent transfers.

Hotel Rooms Tax

The hotel use is expected to have an average daily rate (ADR) of \$165 (in 2011 dollars), based on the hotel market study performed by RCLCO. We assumed an average occupancy rate of 70% and multiplied the resulting room revenues by the county tax rate of 7%.

Admissions Tax

The admissions tax is imposed on the gross receipts from admissions, including tickets (excluding concessions) at a movie theater. Montgomery County collects a 7% tax, which we applied to projected revenues from the movie theater.

Based on homeowner turnover rates in Montgomery County, Maryland; calculated based on 2000 U.S. Census data.



Impact Taxes

<u>School Impact Tax:</u> Montgomery County imposes a school impact tax on new residential construction, which is used to fund school capital improvements. The current charges are the following:

- \$21,920 per Single-Family Detached Unit
- \$16,503 per Townhome/Villa Unit
- \$10,431 per Multifamily Unit (Garden & Low-rise)
- \$4,422 per Multifamily Unit (High-rise)
- \$0 per Age-restricted Unit

In the fiscal model, we have inflated the impact fees by 3% annually, and applied them to the number and type of units coming on line per year.

<u>Transportation Impact Tax:</u> Montgomery County imposes a transportation impact tax on most new residential and commercial construction, which is used to fund transportation infrastructure and capital improvements. The current charges are the following:

- \$5,708 per Single-Family Detached Unit
- \$4,669 per Townhome/Villa Unit
- \$3,630 per Multifamily Unit (Garden & Low-rise)
- \$2,593 per Multifamily Unit (High-rise)
- \$1,037 per Age-restricted Unit
- \$5.20 per square foot: Office
- \$2.60 per square foot: Industrial
- \$0.00 per square foot: Bioscience Facility
- \$4.65 per square foot: Retail
- \$2.60 per square foot: Other Non-Residential

In the fiscal model, we have inflated the impact fees by 3% annually, and applied them to the units and non-residential square footage coming online per year.



Miscellaneous Fees/Taxes:

RCLCO allocated additional miscellaneous county revenues that would be likely to increase as a result of the proposed new development on a per-resident and per-employee basis, as detailed in Appendix 2. Allocated revenues include such items as energy taxes, telephone taxes, business license fees, parking permits, charges for services, etc. We divided applicable revenues by the current employment and population, taking account of the likely mix of revenues between residents and businesses. The resulting average revenues are \$223.47 per resident and \$221.23 per employee, which we inflated at an annual rate of 3% and applied to new residents and employees at LifeSci VillageTM.



EXPENDITURES

Non-Educational Operating Expenditures

Appendix 3 provides detail on how we allocated operating expenditures in the Montgomery County General Fund on a per-resident and per-employee basis that would be likely to increase as a result of development at the subject site. We estimated what share is attributable to residential versus commercial uses and divided by the number of employees working in the county and the current county population, respectively. We multiplied these per-employee (\$541.52) and per-population (\$753.18) factors by the number of employees and residents anticipated at LifeSci Village[™]. The resulting expenditures were inflated by 3% annually.

Non-Educational Capital Expenditures

In addition to operating expenditures, we included capital costs for public services that the development would generate. We assumed that the per-unit costs would be equivalent to the transportation impact fees that the county will collect and will be paid over time by means of a bond issue (20-year bonds at a 5.0% interest rate).

Educational Operating Expenditures

The County School budget indicates that the county spends \$9,459 (excluding state and federal aid and other non-county revenues) per student for annual operations. This rate was applied to the number of new school students generated by the on-site residents. RCLCO used current county student generation rates by product type as outlined in the Department of Permitting Services Document: *Development Impact Tax Changes Effective December* 1, 2007.

Educational Capital Expenditures

RCLCO assumed that the per-unit education oriented capital costs would be equivalent to the school impact fees that the county will collect for new residential units. Debt service was calculated over 20 years at a 5.0% interest rate.



INDIRECT/INDUCED IMPACTS

The estimates of induced/indirect impact are based on multipliers obtained from the Minnesota IMPLAN Group, Inc., the nationally renowned developer of the IMPLAN economic impact modeling system. We estimated the number of indirect/induced employees that development at LifeSci Village™ would generate elsewhere in the county using the employment multiplier. We estimated indirect/induced income taxes for the county based on employment income multipliers for the respective areas, applied to taxable income from the number of indirect/induced employees that would be likely to also reside within the county. Finally, we also took account of the net cost of providing services to the indirect/induced number of employees that would be likely to reside within the county. Indirect hotel taxes were based on indirect gross output multipliers.

To calculate the multipliers for retail uses, we used a combination of the following categories from IMPLAN: Miscellaneous Store Retailers (IMPLAN Industry Code 411) for the lifestyle retail and movie theater; Food Services and Drinking Places (481) for the restaurants; and Fitness and Recreational Sports Centers (476) for the health club. For office uses, we used scientific research and development services (446) for Office: R&D/Lab/Applied Sciences Offices/Manufacturing and Office: Incubator; colleges, universities, and junior colleges (462) for Office: Science Related Educational/Academic; offices of physicians- dentists- and other health care (465) for Office: Clinical Medical; and management of companies and enterprises (451) for Office: General. For hotels, we used Hotels and Motels, Including Casino Hotels (479). For construction, we used New Residential Structures, Nonfarm (33).

* * * * *

This engagement was conducted by Leonard Bogorad, Managing Director. If you have any questions regarding the conclusions and recommendations included herein, or wish to learn about other RCLCO advisory services, please call (301) 907-6600.



CRITICAL ASSUMPTIONS

The conclusions and recommendations presented in this report are based on our analysis of the information available to us from our own sources and from the client as of the date of this report. We assume that the information is correct, complete, and reliable.

Our conclusions and recommendations are based on certain assumptions about the future performance of the global, national, and/or local economy and real estate market, and on other factors similarly outside either our control or that of the client. We analyzed trends and the information available to us in drawing conclusions and making the appropriate recommendations. However, given the fluid and dynamic nature of the economy and real estate markets, it is critical to monitor the economy and markets continuously and to revisit the aforementioned conclusions and recommendations periodically to ensure that they stand the test of time.

We assume that, in the future, the economy and real estate markets will grow at a stable and moderate rate. However, history tells us that stable and moderate growth patterns are not sustainable over extended periods of time. Indeed, we find that the economy is cyclical and that the real estate markets are typically highly sensitive to business cycles. Our analysis does not necessarily take into account the potential impact of major economic "shocks" on the national and/or local economy and does not necessarily account for the potential benefits from a major "boom." Similarly, the analysis does not necessarily reflect the residual impact on the real estate market and the competitive environment of such a shock or boom. The future is always difficult to predict, particularly given changing consumer and market psychology. Therefore, we recommend the close monitoring of the economy and the marketplace. The project and investment economics should be "stress tested" to ensure that potential fluctuations in the economy and real estate market conditions will not cause failure.

In addition, we assume that economic, employment, and household growth will occur more or less in accordance with current expectations, along with other forecasts of trends and demographic and economic patterns. Along these lines, we are not taking into account any major shifts in the level of consumer confidence; in the cost of development and construction; in tax laws (i.e., property and income tax rates, deductibility of mortgage interest, and so forth); or in the availability and/or cost of capital and mortgage financing for real estate developers, owners, and buyers. Should any of the above change, this analysis should probably be updated, with the conclusions and recommendations summarized herein reviewed accordingly (and possibly revised).

We also assume that competitive projects will be developed as planned (active and future) and that a reasonable stream of supply offerings will satisfy real estate demand. Finally, we assume that major public works projects occur and are completed as planned.



GENERAL LIMITING CONDITIONS

Reasonable efforts have been made to ensure that the data contained in this study reflect accurate and timely information and are believed to be reliable. This study is based on estimates, assumptions, and other information developed by RCLCO from its independent research effort, general knowledge of the industry, and consultations with the client and its representatives. No responsibility is assumed for inaccuracies in reporting by the client, its agent, and representatives or in any other data source used in preparing or presenting this study. This report is based on information that to our knowledge was current as of the date of this report, and RCLCO has not undertaken any update of its research effort since such date.

Our report may contain prospective financial information, estimates, or opinions that represent our view of reasonable expectations at a particular time, but such information, estimates, or opinions are not offered as predictions or assurances that a particular level of income or profit will be achieved, that particular events will occur, or that a particular price will be offered or accepted. Actual results achieved during the period covered by our prospective financial analysis may vary from those described in our report, and the variations may be material. Therefore, no warranty or representation is made by RCLCO that any of the projected values or results contained in this study will be achieved.

Possession of this study does not carry with it the right of publication thereof or to use the name of "Robert Charles Lesser & Co." or "RCLCO" in any manner without first obtaining the prior written consent of RCLCO. No abstracting, excerpting, or summarization of this study may be made without first obtaining the prior written consent of RCLCO. This report is not to be used in conjunction with any public or private offering of securities or other similar purpose where it may be relied upon to any degree by any person other than the client without first obtaining the prior written consent of RCLCO. This study may not be used for any purpose other than that for which it is prepared or for which prior written consent has first been obtained from RCLCO.



LIST OF EXHIBITS

Exhibit 1	Summary of Total Direct & Indirect Net Fiscal Benefit for Montgomery County, MD; LifeSci Village [™] ; 2011 − 2040
Exhibit 2	Summary of Fiscal Impact on Montgomery County, MD; LifeSci Village [™] ; 2011 – 2040
Exhibit 3	Annual Net Fiscal Impact on Montgomery County, MD; LifeSci Village™; 2011 − 2040
Exhibit 4	Select Assumptions; Montgomery County, Maryland; September 2011
Exhibit 5	Development Program; LifeSci Village [™] ; 2011 – 2040



SUMMARY OF TOTAL DIRECT & INDIRECT NET FISCAL BENEFIT FOR MONTGOMERY COUNTY, MD LIFESCI VILLAGE™

Exhibit 1

2011 - 2040

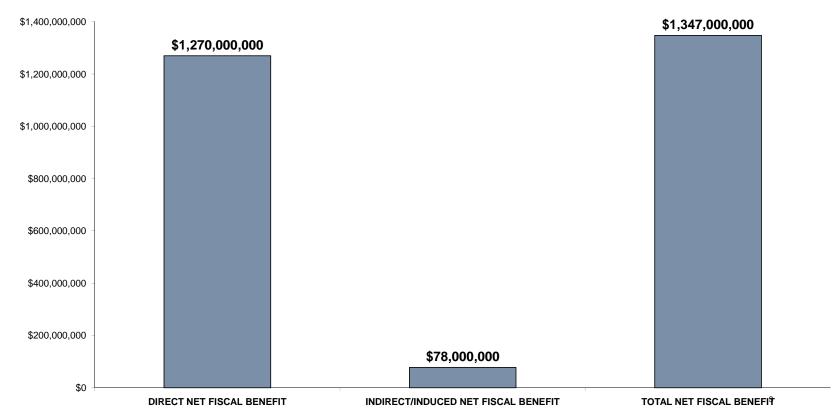




Exhibit 2

SUMMARY OF FISCAL IMPACT ON MONTGOMERY COUNTY, MD LIFESCI VILLAGE™ 2011-2040

	PROPOSED LIFESCI VILLAGE™ PROGI					
REVENUES/EXPENDITURES	\$	%				
REVENUES						
Real Property Tax Revenues	\$733,650,000	36%				
Real Property Tax Revenues from Surrounding Area	\$94,127,000	5%				
Personal Property Tax Revenues	\$123,060,000	6%				
Income Tax Revenues	\$746,207,000	37%				
Recordation Fees and Transfer Tax	\$80,968,000	4%				
Hotel Room Tax	\$35,303,000	2%				
Admissions Tax	\$960,000	0%				
Impact Taxes	\$59,219,000	3%				
Miscellaneous Revenues	\$157,049,000	8%				
TOTAL REVENUE	\$2,030,542,000	105%				
<u>EXPENDITURES</u>						
Non-Educational Operating Expenditures	\$455,379,000	60%				
Non-Educational Capital Expenditures	\$44,437,000	6%				
Educational Operating Expenditures	\$220,272,000	29%				
Educational Capital Expenditures	\$40,771,000	5%				
TOTAL EXPENDITURES	\$760,859,000	100%				
DIRECT NET FISCAL BENEFIT	\$1,269,683,000					
INDIRECT/INDUCED REVENUES	\$187,134,000					
INDIRECT/INDUCED EXPENDITURES	\$109,498,000					
INDIRECT/INDUCED NET FISCAL BENEFIT	\$77,635,000					
TOTAL REVENUES	\$2,217,676,000					
TOTAL EXPENDITURES	\$870,357,000					
TOTAL NET FISCAL BENEFIT	\$1,347,318,000					
JOB CREATION						
PERMANENT JOBS						
NEW FULL-TIME JOBS CREATED (DIRECT)	10,629					
NEW FULL-TIME JOBS CREATED (INDIRECT)	6,014					
CONSTRUCTION JOBS						
NEW FTE CONSTRUCTION JOBS (DIRECT)	5,001					



Exhibit 2 U4-11812.03 Printed: 9/6/2011

Exhibit 3

ANNUAL NET FISCAL IMPACT ON MONTGOMERY COUNTY, MD LIFESCI VILLAGE $^{\text{TM}}$ 2011-2040

					MONTGOMERY COUNT	ГҮ			
_	DIRECT	DIRECT	ANNUAL NET	CUMULATIVE NET	INDIRECT/INDUCED	INDIRECT/INDUCED	ANNUAL NET	CUMULATIVE NET	TOTAL NET
YEAR	REVENUES	EXPENDITURES	FISCAL IMPACT	FISCAL IMPACT	REVENUES	EXPENDITURES	INDIRECT IMPACT	INDIRECT IMPACT	FISCAL IMPACT
2011	\$131,000	\$0	\$131,068	\$131,068	\$0	\$0	\$0	\$0	\$131,000
2012	\$135,000	\$0	\$135,000	\$266,068	\$0	\$0	\$0	\$0	\$266,000
2013	\$139,050	\$0	\$139,050	\$405,118	\$0	\$0	\$0	\$0	\$405,000
2014	\$2,795,737	\$212,845	\$2,582,892	\$2,988,010	\$0	\$0	\$0	\$0	\$2,988,000
2015	\$7,124,602	\$1,871,505	\$5,253,097	\$8,241,107	\$269,671	\$90,074	\$179,597	\$179,597	\$8,421,000
2016	\$12,873,952	\$3,988,991	\$8,884,961	\$17,126,068	\$727,182	\$353,241	\$373,941	\$553,538	\$17,680,000
2017	\$20,489,119	\$6,502,501	\$13,986,618	\$31,112,686	\$1,511,679	\$668,372	\$843,307	\$1,396,845	\$32,510,000
2018	\$25,911,351	\$9,241,026	\$16,670,325	\$47,783,011	\$2,116,216	\$1,020,143	\$1,096,073	\$2,492,918	\$50,276,000
2019	\$32,286,709	\$11,642,811	\$20,643,898	\$68,426,909	\$2,501,327	\$1,309,141	\$1,192,186	\$3,685,104	\$72,112,000
2020	\$38,420,736	\$13,773,536	\$24,647,200	\$93,074,109	\$3,118,132	\$1,628,671	\$1,489,461	\$5,174,565	\$98,249,000
2021	\$44,995,753	\$16,396,345	\$28,599,408	\$121,673,517	\$3,656,737	\$1,947,430	\$1,709,307	\$6,883,872	\$128,557,000
2022	\$51,043,453	\$18,501,743	\$32,541,710	\$154,215,227	\$4,135,948	\$2,283,849	\$1,852,099	\$8,735,971	\$162,951,000
2023	\$57,179,607	\$20,710,770	\$36,468,837	\$190,684,064	\$4,715,714	\$2,638,699	\$2,077,015	\$10,812,986	\$201,497,000
2024	\$64,278,030	\$23,553,535	\$40,724,495	\$231,408,559	\$5,373,028	\$3,012,786	\$2,360,242	\$13,173,228	\$244,582,000
2025	\$70,359,129	\$25,960,214	\$44,398,915	\$275,807,474	\$5,957,610	\$3,406,943	\$2,550,667	\$15,723,895	\$291,531,000
2026	\$76,401,909	\$28,483,387	\$47,918,523	\$323,725,997	\$6,634,280	\$3,822,037	\$2,812,243	\$18,536,138	\$342,262,000
2027	\$83,699,279	\$31,720,076	\$51,979,202	\$375,705,199	\$7,402,893	\$4,258,972	\$3,143,921	\$21,680,059	\$397,385,000
2028	\$89,266,281	\$34,382,298	\$54,883,983	\$430,589,182	\$8,094,841	\$4,718,682	\$3,376,159	\$25,056,218	\$455,645,000
2029	\$94,261,404	\$36,641,076	\$57,620,327	\$488,209,509	\$8,852,383	\$5,202,142	\$3,650,241	\$28,706,459	\$516,916,000
2030	\$97,976,465	\$38,585,334	\$59,391,131	\$547,600,640	\$9,662,905	\$5,710,362	\$3,952,543	\$32,659,002	\$580,260,000
2031	\$101,254,886	\$39,600,339	\$61,654,547	\$609,255,187	\$9,804,979	\$5,881,673	\$3,923,306	\$36,582,308	\$645,837,000
2032	\$104,292,532	\$40,645,793	\$63,646,739	\$672,901,926	\$10,099,129	\$6,058,124	\$4,041,005	\$40,623,313	\$713,525,000
2033	\$107,421,308	\$41,722,612	\$65,698,696	\$738,600,622	\$10,402,103	\$6,239,867	\$4,162,236	\$44,785,549	\$783,386,000
2034	\$110,643,947	\$42,618,890	\$68,025,057	\$806,625,679	\$10,714,166	\$6,427,063	\$4,287,103	\$49,072,652	\$855,698,000
2035	\$113,963,266	\$43,495,093	\$70,468,172	\$877,093,851	\$11,035,591	\$6,619,875	\$4,415,716	\$53,488,368	\$930,582,000
2036	\$117,382,164	\$44,320,792	\$73,061,371	\$950,155,222	\$11,366,658	\$6,818,471	\$4,548,187	\$58,036,555	\$1,008,192,000
2037	\$120,903,629	\$45,100,192	\$75,803,436	\$1,025,958,658	\$11,707,658	\$7,023,026	\$4,684,632	\$62,721,187	\$1,088,680,000
2038	\$124,530,737	\$46,063,590	\$78,467,148	\$1,104,425,806	\$12,058,888	\$7,233,716	\$4,825,172	\$67,546,359	\$1,171,972,000
2039	\$128,266,660	\$47,045,139	\$81,221,520	\$1,185,647,326	\$12,420,654	\$7,450,728	\$4,969,926	\$72,516,285	\$1,258,164,000
2040	\$132,114,659	\$48,078,727	\$84,035,932	\$1,269,683,258	\$12,793,274	\$7,674,250	\$5,119,024	\$77,635,309	\$1,347,319,000



Exhibit 4

SELECT ASSUMPTIONS MONTGOMERY COUNTY, MARYLAND SEPTEMBER 2011

		D VALUES	SALE PRICE ADR/ROOM	AVERAGE VALUE	AVERAGE			SF/RMS		% IMPROV. VALUE -		
LAND USE	(2008 LAND	Dollars) TOTAL	RENT/UNIT	PER SF	SIZE	OCCUPANCY	EFFICIENCY	PER EMPL.	SALES/SE	CONSTR.	INCOME ASS	CLIMD
COMMERCIAL	LAND	TOTAL	KEN1/ONI1	PER SI	SIZE	OCCOPANCI	LITICILING	FER LIVIFE.	SALLS/SI	CONSTR.	INCOME ASS	SOWIF.
Office: R&D/Lab/Applied Sciences Offices/Manuf.	\$75 /FAR FT	\$250 /FAR FT				95%	70%	400 SF/Emp		60%	\$76.121	BLS
Office: Science Related Educational/Academic	\$75 /FAR FT	\$250 /FAR FT				95%	75%	330 SF/Emp		60%	\$67,054	200
Office: Incubator	\$60 /FAR FT	\$150 /FAR FT				95%	65%	250 SF/Emp		60%	\$46,559	200
Office: Clinical/Medical Office	\$30 /FAR FT	\$195 /FAR FT				95%	82%	330 SF/Emp		60%	\$94,660	
Office: General	\$30 /FAR FT	\$160 /FAR FT				95%	82%	250 SF/Emp		60%	\$67,138	
Retail: Lifestyle/Town Center	\$50 /FAR FT	\$185 /FAR FT				95%	100%	400 SF/Emp		60%	\$28,368	
Retail: Restaurants	\$50 /FAR FT	\$300 /FAR FT				95%	100%	400 SF/Emp		60%	\$20,536	
Retail: Movie Theater/Entertainment	\$50 /FAR FT	\$190 /FAR FT		1,200 Seats	3,100 SF/Screen	95%	100%	1500 SF/Emp	\$253,575	60%	\$16,915	
Retail: Health Club	\$50 /FAR FT	\$100 /FAR FT				95%	100%	750 SF/Emp		60%	\$18,059	
Hotel	\$20,000	\$150,000	\$165 ADR		675 GSF/Room	70%		0.75 Emp/Rm		60%	\$31,133	
	(Note: Movie the	ater ticket sales are	e expressed Per So	reen not Per SF)					Cons	truction Worker	\$65,158	
RESIDENTIAL											(Income-Home	. Value
Non-Age Restricted											Ratio/Rent-Inco	
SFD	28% Lot-Value	\$745,250 (include	s 10% in options)	\$271	2,750	98%				41%	30%	
Γownhomes		\$541,750 (include		\$264	2,050	97%				41%	30%	
Condominiums	22% Lot-Value	\$353,700 (include	es 8% in options)	\$354	1,000	95%				41%	30%	
Rental Apartments	\$15,000	\$170,000	\$1,588	\$1.63	975	97%				41%	25%	
Age Restricted												
AAC Townhomes		\$555,500 (include		\$285	1,950	97%				41%	25%	
AAC Condominiums		\$407,700 (include		\$314	1,300	95%				41%	25%	
AAC Rental Apartments	\$15,000	\$160,000	\$1,650	\$1.53	1,075	97%				41%	25%	
DEMOGRAPHICS		SOURCE			TAXES	CURREN			LAND VALUE			
Student Population	146,649	MC Operating Bu			Real Property	\$0.876 /		Office		\$1.40	per SF of GB/	
Population	996,319	MWCOG Data Ro			Personal Property	\$2.192 /		Retail		\$1.40	per SF of GLA	A
Households	363,100	MWCOG Data Ro			Income Tax	3.2		Hotel		\$943	per Room	
Household Size, Avg.	2.72		ACS 2005-09; SFI	D/SFA ratio 2000		7.0		Single-Family I	Detached	\$3,842	per Unit	
Single-Family Detached Townhome	3.08		Full-Time Res.		Admissions Tax Transfer Tax	7.0		Townhomes		\$2,840	per Unit	
Condominiums	2.75 1.64		Full-Time Res.			1% of Sa		Condominiums Rental Apartme		\$1,450 \$1,398	per Unit	
Rental Apartments	1.64 2.12		Full-Time Res. Full-Time Res.		Recordation Tax	\$6.90 /\$1K Sale F \$10.00 /\$1K Sale			ents	\$1,396	per Unit	
Active Adult	2.12 1.70		Full-Time Res.			less \$50.000	Flice over \$500K	·[
Employment	508,305	MWCOG Data Ro			Noto:	\$6.90 per \$1K (ov	or \$50K) is	Assessment		\$18,952,800	1	
Total Population and Employment	1,504,624	WIVVOOG Data KU	una 0.0, 2011 Galc		Note.	the total collecte		A S C S S I I C I I		ψ10,332,000	,	
Owner Turnover		U.S. Census 2000	1			\$4.40 per \$1K g		1				
	3. 170 tarriover/yr	3.3. Johnson 2000	•				inder earmarked	1				
SOURCE: Bureau of Labor Statistics: U.S. Census					l	for MCPS		1				



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Exhibit 4

SELECT ASSUMPTIONS MONTGOMERY COUNTY, MARYLAND SEPTEMBER 2011

			8	CHOOLS & IMPA	CT FEE INFORMATI	ON	
STUDENT GENERATION RATES	CHILD/UNIT	ELEMENTARY	MIDDLE	HIGH SCHOOL	SCHOOL IMPACT TAXES/UNIT	TRANSPORTATION IMPACT TAX (GENERAL RATE)	LOCAL COST SCHOOL BUDGET TOTAL PER PUPIL
SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All)	0.595 0.440 0.248 0.114 0.114 n/a	0.320 0.211 0.153 0.042 0.042 n/a	0.144 0.122 0.056 0.039 0.039 n/a	0.131 0.107 0.039 0.033 0.033 n/a	\$21,920 \$16,503 \$10,431 \$4,422 \$4,422 \$0	\$5,708 /Unit \$4,669 /Unit \$3,630 /Unit \$2,593 /Unit \$2,593 /Unit \$1,037 /Unit	County General Fund \$1,387,101,480 \$9,459 Total Local Costs \$1,387,101,480 \$9,459
Office Industrial Bioscience Facility Retail Place of Worship Private Elem./Secondary School Hospital Social Service Agency Other non-res.	n/a n/a n/a n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a n/a n/a n/a	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$5.20 /SF GFA \$2.60 /SF GFA \$0.00 /SF GFA \$4.65 /SF GFA \$0.30 /SF GFA \$0.30 /SF GFA \$0.00 /SF GFA \$0.00 /SF GFA \$2.60 /SF GFA	School Budget Information: MC Operating Budget 2012 Student Generation/Impact Tax Information from: Department of Permitting Services Document: Development Impact Tax Changes Effective Dec. 1, 2007

SOURCE: Montgomery County Public Schools; Montgomery County Department of Permitting Services; RCLCO



Exhibit 4 U4-11812.03 Printed: 9/6/2011

Exhibit 5

DEVELOPMENT PROGRAM LIFESCI VILLAGE™ SEPTEMBER 2011

PROGRAM	TOTAL (2011-2040)	2011	2012 2	013 20°	14 2015	2010	2017	2018	2019	2020	2021	2022	2023	30-YEAR 2024	STUDY 2025	PERIOI 2026	D (2011- 2027	2040) 2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
PROPOSED ~290 ACRE LIFESCI VILLAGE™ PRO	·																													
COMMERCIAL	SF/Rooms																													
Office: R&D/Lab/Applied Sciences Offices/Manuf.	2,225,000				87,50	87,50	0 87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	37,500
Office: Science Related Educational/Academic ¹	2,060,000					87,50	0 87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	87,500	47,500	
Office: Incubator	50,000				25,00	25,00	0																							
Office: Clinical/Medical Office	870,000						0 50,000																							
Office: General	1,000,000					50,00	0 50,000				50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000					
Retail: Lifestyle/Town Center	380,000							275,000	15,000																					
Retail: Restaurants	45,000						15,000	30,000																						
Retail: Movie Theater/Entertainment	60,000							60,000																						
Retail: Health Club	25,000						25,000																							
Hotel	300						200			100																				
RESIDENTIAL	Units																													
Non-Age Restricted																														
SFD	0																													
Townhomes	975				68	68	68	68	68	68	68	68	68	68	68	68	68	68	23											
Condominiums	1,675				69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	19	
Rental Apartments	1,675				192	192	192	192	192		238			239			238													
Age Restricted																														
AAC Townhomes	200				21	21	21	21	21	21	21	21	21	11																
AAC Condominiums	245				35	35	35	35	35	35	35																			
AAC Rental Apartments	590				90	90	90	90	90	90	50																			

ADDITIONAL PROGRAM NOT INCLUDED IN THE FISCAL AND ECONOMIC ANALYSIS MPDUs (not included in this study) (Units)

MPDU/Workforce Townhomes
MPDU/Workforce Condos/Apartments (multifamily)

Other Uses (not included in this study)

Day Care/Senior Day Care/Emp. Related Services
Public Facilities
Miscellaneous

50,000

SOURCE: Scheer Partners; RCLCO; Percontee



¹ Note: 200,000 square feet is considered owned and occupied by a tax-exempt educational institution, and thus does not generate real property to

² Though these program elements are not included in the fiscal and economic impact study, it is likely these program elements will not have a significantly posi<u>or</u> negative impact on the overall results of this study

LIST OF APPENDICES

Appendix 1	Fiscal and Economic Impact Analysis; LifeSci Village [™] Proposed Development
Appendix 2	Montgomery County Fiscal Year 2012 Adopted Budget; Allocation of Revenues; LifeSci Village [™] Development
Appendix 3	Montgomery County Fiscal Year 2012 Adopted Budget; Allocation of Expenditures; LifeSci Village [™] Development
Appendix 4	Overview of Downtown Silver Spring Revitalization; Silver Spring, MD; March 2008
Appendix 5	Assessment Trends; Silver Spring Montgomery County, MD; 1995-2008
Appendix 6	Methodology in Determining Impact of Development of LifeSci Village [™] on Surrounding Properties; Silver Spring and White Oak, MD; March 2008



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
ESCALATION RATES	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Expenditures	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Revenues	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Unimproved Land Values										
Office	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Retail	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Hotel	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Residential	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Improved Land Values Office	3.0%			4.000	1.030	1.061	4.000	1.126	1.159	1.194
Retail	3.0%			1.000 1.000	1.030	1.061	1.093 1.093	1.126	1.159	1.194
Hotel	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Residential	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Building Values	3.070			1.000	1.000	1.001	1.000	1.120	1.100	1.104
Office	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Retail	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Hotel	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
Residential	3.0%			1.000	1.030	1.061	1.093	1.126	1.159	1.194
DEVELOPMENT PROGRAM										
Total Space			4,975,000	0	0	0	0	112,500	300,000	540,000
Cumulative Space			4,975,000	0	0	0	0	112,500	412,500	952,500
Office Total (in GBA) (in GBA)			4,262,500	0	0	0	0	112,500	300,000	275,000
Cumulative Office (in GBA)			4,262,500	0	0	0	0	112,500	412,500	687,500
Office: R&D/Lab/Applied Sciences Offices/Manuf. (in GBA)			1,400,000	0	0	0	0	87,500	87,500	87,500
Cumulative Office (in GBA)			1,400,000	0	0	0	0	87,500	175,000	262,500
Office: Science Related Educational/Academic (in GBA)			1,312,500	0	0	0	0	0	87,500	87,500
Cumulative Office (in GBA)			1,312,500	0	0	0	0	0	87,500	175,000
Office: Incubator (in GBA)			50,000	0	0	0	0	25,000	25,000	0
Cumulative Office (in GBA)			50,000	0	0	0	0	25,000	50,000	50,000
Office: Clinical/Medical Office (in GBA)			750,000	0	0	0	0	0	50,000	50,000
Cumulative Office (in GBA)			750,000	0	0	0	0	0	50,000	100,000
Office: General (in GBA)			750,000	0	0	0	0	0	50,000	50,000
Cumulative Office (in GBA)			750,000	0	0	0	0	0	50,000	100,000



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTION	S COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
Retail Total (in GLA) Cumulative Retail (in GLA)			510,000 510,000	0 0	0 0	0	0 0	0	0	130,000 130,000
Retail: Lifestyle/Town Center Cumulative Retail (in GLA)	(in GLA)		380,000 380,000	0	0 0	0	0	0	0	90,000 90,000
Retail: Restaurants Cumulative Retail (in GLA)	(in GLA)		45,000 45,000	0 0	0	0	0	0	0	15,000 15,000
Retail: Movie Theater/Entertainment Cumulative Retail (in GLA)	(in GLA)		60,000 60,000	0	0	0	0	0	0	0
Retail: Health Club Cumulative Retail (in GLA)	(in GLA)		25,000 25,000	0	0	0	0	0 0	0	25,000 25,000
Hotel Hotel Cumulative Hotel Rooms Hotel Square Feet Cumulative Square Feet (in GSF)	(Rooms)	675 GSF/room	300 300 202,500 202,500	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0 0	200 200 135,000 135,000
Residential Units Total Cumulative			4,789 4,789	0	0 0	0	0	475 475	475 950	475 1,425
Residential Units [Non Seniors] Cumulative			3,754 3,754	0 0	0	0	0	329 329	329 658	329 987
Single-Family Detached (Total) Cumulative			0 0	0	0 0	0 0	0 0	0	0	0
SFD Cumulative			0 0	0	0 0	0 0	0 0	0	0	0
Townhome (Total) Cumulative			975 975	0	0	0	0 0	68 68	68 136	68 204
Townhomes Cumulative			975 975	0	0 0	0	0	68 68	68 136	68 204
Condominium (Total) Cumulative			1,104 1,104	0	0 0	0 0	0	69 69	69 138	69 207
Condominiums Cumulative			1,104 1,104	0	0	0	0	69 69	69 138	69 207
Rental Apartment (Total) Cumulative			1,675 1,675	0 0	0	0	0	192 192	192 384	192 576
Rental Apartments Cumulative			1,675 1,675	0	0	0	0	192 192	192 384	192 576
Active Adult Residential Units Total Cumulative			1,035 1,035	0 0	0	0	0	146 146	146 292	146 438
AAC Townhomes Cumulative			200 200	0	0	0	0	21 21	21 42	21 63
AAC Condominiums Cumulative			245 245	0 0	0 0	0	0	35 35	35 70	35 105
AAC Rental Apartments Cumulative			590 590	0	0 0	0	0 0	90 90	90 180	90 270

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Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
UNIMPROVED LAND ASSESSMENTS Office (Per GBA Foot)	\$1.	40		\$1.40	\$1.44	\$1.48	\$1.53	\$1.57	\$1.62	\$1.67
Retail (Per GBA Foot) Hotel (Per Room) Residential (Per Unit)	\$1. \$1. \$9	40		\$1.40 \$1.40 \$943	\$1.44 \$1.44 \$971	\$1.48 \$1.48 \$1,000	\$1.53 \$1.53 \$1,030	\$1.57 \$1.57 \$1,061	\$1.62 \$1.62 \$1,093	\$1.67 \$1.67 \$1,126
Single-Family Detached Townhome Condominium	\$3,8 \$2,8 \$1,4	40		\$3,842 \$2,840 \$1,450	\$3,957 \$2,925 \$1,494	\$4,076 \$3,013 \$1,539	\$4,198 \$3,103 \$1,585	\$4,324 \$3,196 \$1,632	\$4,454 \$3,292 \$1,681	\$4,587 \$3,391 \$1,732
Rental Apartment	\$1,3			\$1,398	\$1,440	\$1,484	\$1,528	\$1,574	\$1,621	\$1,670
IMPROVED REAL PROPERTY ASSESSMENTS										
COMMERCIAL										
Office: R&D/Lab/Applied Sciences Offices/Manuf. Land Building	(Per GBA Foot) \$ \$1	75 75		\$75.00 \$175.00	\$77.25 \$180.25	\$79.57 \$185.66	\$81.95 \$191.23	\$84.41 \$196.96	\$86.95 \$202.87	\$89.55 \$208.96
Total	\$2			\$250.00	\$257.50	\$265.23	\$273.18	\$281.38	\$289.82	\$298.51
Office: Science Related Educational/Academic Land	(Per GBA Foot)	75		\$75.00	\$77.25	\$79.57	\$81.95	\$84.41	\$86.95	\$89.55
Building Total	\$1 \$2	75		\$175.00 \$250.00	\$180.25 \$257.50	\$185.66 \$265.23	\$191.23 \$273.18	\$196.96 \$281.38	\$202.87 \$289.82	\$208.96 \$298.51
Office: Incubator Land	(Per GBA Foot)	60		\$60.00	\$61.80	\$63.65	\$65.56	\$67.53	\$69.56	\$71.64
Building Total		90		\$90.00 \$150.00	\$92.70 \$154.50	\$95.48 \$159.14	\$98.35 \$163.91	\$101.30 \$168.83	\$104.33 \$173.89	\$107.46 \$179.11
Office: Clinical/Medical Office Land	(Per GBA Foot)	30		\$30.00	\$30.90	\$31.83	\$32.78	\$33.77	\$34.78	\$35.82
Building Total	\$1 \$1	65		\$165.00 \$195.00	\$169.95 \$200.85	\$175.05 \$206.88	\$180.30 \$213.08	\$185.71 \$219.47	\$191.28 \$226.06	\$197.02 \$232.84
Office: General Land	(Per GBA Foot)	30		\$30.00	\$30.90	\$31.83	\$32.78	\$33.77	\$34.78	\$35.82
Building Total	\$1 \$1	30		\$130.00 \$160.00	\$133.90 \$164.80	\$137.92 \$169.74	\$142.05 \$174.84	\$146.32 \$180.08	\$150.71 \$185.48	\$155.23 \$191.05
Retail: Lifestyle/Town Center Land	(Per GLA Foot)	50		\$50.00	\$51.50	\$53.05	\$54.64	\$56.28	\$57.96	\$59.70
Building Total	\$1 \$1			\$135.00 \$185.00	\$139.05 \$190.55	\$143.22 \$196.27	\$147.52 \$202.15	\$151.94 \$208.22	\$156.50 \$214.47	\$161.20 \$220.90
Retail: Restaurants Land	(Per GLA Foot)	50		\$50.00	\$51.50	\$53.05	\$54.64	\$56.28	\$57.96	\$59.70
Building Total	\$2 \$3	50		\$250.00 \$250.00 \$300.00	\$257.50 \$309.00	\$265.23 \$318.27	\$273.18 \$327.82	\$281.38 \$337.65	\$289.82 \$347.78	\$298.51 \$358.22
Retail: Movie Theater/Entertainment Land	(Per GLA Foot)	50		\$50.00	\$51.50	\$53.05	\$54.64	\$56.28	\$57.96	\$59.70
Building Total	\$1 \$1	40		\$140.00 \$190.00	\$144.20 \$195.70	\$148.53 \$201.57	\$152.98 \$207.62	\$157.57 \$213.85	\$162.30 \$220.26	\$167.17 \$226.87
Retail: Health Club	(Per GLA Foot)									
Land Building Total		50 50 00		\$50.00 \$50.00 \$100.00	\$51.50 \$51.50 \$103.00	\$53.05 \$53.05 \$106.09	\$54.64 \$54.64 \$109.27	\$56.28 \$56.28 \$112.55	\$57.96 \$57.96 \$115.93	\$59.70 \$59.70 \$119.41
Hotel Land Building	(Per Room) \$20,0			\$20,000	\$20,600 \$133,000	\$21,218 \$137,017	\$21,855	\$22,510 \$146.316	\$23,185 \$150,706	\$23,881 \$155,227
Building Total	\$130,0 \$150,0			\$130,000 \$150,000	\$133,900 \$154,500	\$137,917 \$159,135	\$142,055 \$163,909	\$146,316 \$168,826	\$150,706 \$173,891	\$155,227 \$179,108



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
RESIDENTIAL										
SFD										
Average Sale Price	\$745,250			\$745,250	\$767,608	\$790,636	\$814,355	\$838,785	\$863,949	\$889,867
Lot to Value Ratio	28.00%									
Land	\$208,670 \$536,580			\$208,670 \$536,580	\$214,930 \$552,677	\$221,378 \$569,258	\$228,019 \$586,335	\$234,860 \$603,926	\$241,906 \$622,043	\$249,163 \$640,705
Improvements	\$536,560			φουσ,οσυ Φουσ,οσυ	\$552,677	\$309,238	\$566,335	\$603,926	\$622,043	\$640,705
Townhomes										
Average Sale Price (wtd average at buildout)	\$541,750			\$541,750	\$558,003	\$574,743	\$591,985	\$609,744	\$628,037	\$646,878
Lot to Value Ratio	26.00%									
Land	\$140,855			\$140,855	\$145,081	\$149,433	\$153,916	\$158,534	\$163,290	\$168,188
Improvements	\$400,895			\$400,895	\$412,922	\$425,310	\$438,069	\$451,211	\$464,747	\$478,690
Condominiums										
Average Sale Price	\$353,700			\$353,700	\$364,311	\$375,240	\$386,498	\$398,092	\$410,035	\$422,336
Lot to Value Ratio	22.00%									
Land	\$77,814			\$77,814	\$80,148	\$82,553	\$85,029	\$87,580	\$90,208	\$92,914
Improvements	\$275,886			\$275,886	\$284,163	\$292,687	\$301,468	\$310,512	\$319,827	\$329,422
Rental Apartments										
Average Monthly Rent per Unit	\$1,588			\$1,588	\$1,636	\$1,685	\$1,735	\$1,787	\$1,841	\$1,896
Average Value per Unit	\$170,000			\$170,000	\$175,100	\$180,353	\$185,764	\$191,336	\$197,077	\$202,989
Land	\$15,000			\$15,000	\$15,450	\$15,914	\$16,391	\$16,883	\$17,389	\$17,911
Improvements	\$155,000			\$155,000	\$159,650	\$164,440	\$169,373	\$174,454	\$179,687	\$185,078
AAC Townhomes										
Average Sale Price	\$555,500			\$555,500	\$572,165	\$589,330	\$607,010	\$625,220	\$643,977	\$663,296
Lot to Value Ratio	28.00%			ψ000,000	ψ072,100	φοσο,σσσ	ψουτ,στο	ψ020,220	ψ0+0,011	φ000,200
Land	\$155,540			\$155,540	\$160,206	\$165,012	\$169,963	\$175,062	\$180,313	\$185,723
Improvements	\$399,960			\$399,960	\$411,959	\$424,318	\$437,047	\$450,159	\$463,663	\$477,573
AAO Oo ah										
AAC Condominiums Average Sale Price	\$407,700			\$407,700	\$419,931	\$432,529	\$445,505	\$458,870	\$472,636	\$486,815
Lot to Value Ratio	24.00%			φ407,700	ψ413,331	Ψ402,029	ψ 44 3,303	ψ 4 30,070	9472,030	ψ400,013
Land	\$97,848			\$97,848	\$100,783	\$103,807	\$106,921	\$110,129	\$113,433	\$116,836
Improvements	\$309,852			\$309,852	\$319,148	\$328,722	\$338,584	\$348,741	\$359,203	\$369,979
AAO Destal Assertances										
AAC Rental Apartments Average Monthly Rent	\$1,650									
Average Monthly Rent Average Value per Unit	\$1,650 \$160,000			\$160,000	\$164,800	\$169,744	\$174,836	\$180,081	\$185,484	\$191,048
Land	\$15,000			\$15,000	\$15,450	\$15,914	\$16,391	\$16,883	\$17,389	\$17,911
Improvements	\$145,000			\$145,000	\$149,350	\$153,831	\$158,445	\$163,199	\$168,095	\$173,138



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS		TOTAL COMMENTS Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
CONSTRUCTION VALUE Office: R&D/Lab/Applied Sciences Offices/Manuf.	% of Impro (Building Improvemen	ovements Value f	rom Construction \$208,434,493	\$0	\$0	\$0	\$0	\$10,340,612	\$10,650,831	\$10,970,355
Office: Science Related Educational/Academic	(Building Improvemen	60%	\$198,093,880	\$0	\$0	\$0	\$0	\$10,340,012	\$10,650,831	\$10,970,355
	, , ,									
Office: Incubator	(Building Improvemen	60%	\$3,084,457	\$0	\$0	\$0	\$0	\$1,519,437	\$1,565,020	\$0
Office: Clinical/Medical Office	(Building Improvemen	60%	\$106,728,131	\$0	\$0	\$0	\$0	\$0	\$5,738,407	\$5,910,559
Office: General	(Building Improvemen	60%	\$84,088,831	\$0	\$0	\$0	\$0	\$0	\$4,521,169	\$4,656,804
Retail: Lifestyle/Town Center	(Building Improvemen	60%	\$37,639,207	\$0	\$0	\$0	\$0	\$0	\$0	\$8,704,641
Retail: Restaurants	(Building Improvemen	60%	\$8,221,050	\$0	\$0	\$0	\$0	\$0	\$0	\$2,686,618
Retail: Movie Theater/Entertainment	(Building Improvemen	60%	\$6,198,564	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail: Health Club	(Building Improvemen	60%	\$895,539	\$0	\$0	\$0	\$0	\$0	\$0	\$895,539
Hotel(Rooms)	(Building Improvemen	60%	\$28,804,447	\$0	\$0	\$0	\$0	\$0	\$0	\$18,627,216
SFD	(Building Improvemen	41%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Townhomes	(Building Improvemen	41%	\$221,377,779	\$0	\$0	\$0	\$0	\$12,579,759	\$12,957,151	\$13,345,866
Condominiums	(Building Improvemen	41%	\$177,065,866	\$0	\$0	\$0	\$0	\$8,784,388	\$9,047,920	\$9,319,357
Rental Apartments	(Building Improvemen	41%	\$139,812,782	\$0	\$0	\$0	\$0	\$13,733,008	\$14,144,999	\$14,569,349
AAC Townhomes	(Building Improvemen	41%	\$42,024,291	\$0	\$0	\$0	\$0	\$3,875,865	\$3,992,141	\$4,111,905
AAC Condominiums	(Building Improvemen	41%	\$38,346,298	\$0	\$0	\$0	\$0	\$5,004,436	\$5,154,569	\$5,309,206
AAC Rental Apartments	(Building Improvemen	41%	\$42,947,781	\$0	\$0	\$0	\$0	\$6,022,035	\$6,202,696	\$6,388,777
Total Construction Value			\$1,343,763,398	\$0	\$0	\$0	\$0	\$61,859,539	\$84,625,731	\$116,466,547
UNIMPROVED LAND IN INVENTORY COMMERCIAL										
Office Retail Hotel				\$5,954,564 \$712,452 \$282,885	\$6,133,201 \$733,826 \$291,372	\$6,317,197 \$755,841 \$300,113	\$6,506,713 \$778,516 \$309,117	\$6,525,031 \$801,871 \$318,390	\$6,234,942 \$825,927 \$327,942	\$5,963,277 \$633,859 \$112,593
RESIDENTIAL Single-Family Detached Townhome Condominium Rental Apartment Total Land in Inventory	(includes AAC) (includes AAC) (includes AAC) (includes AAC)			\$0 \$3,337,000 \$1,956,647 \$3,167,444 \$15,410,993	\$0 \$3,437,110 \$2,015,347 \$3,262,467 \$15,873,322	\$0 \$3,540,224 \$2,075,807 \$3,360,341 \$16,349,522	\$0 \$3,646,430 \$2,138,081 \$3,461,151 \$16,840,008	\$0 \$3,471,340 \$2,032,445 \$3,121,133 \$16,270,210	\$0 \$3,282,462 \$1,918,547 \$2,757,599 \$15,347,418	\$0 \$3,079,127 \$1,795,985 \$2,369,444 \$13,954,284



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUM	PTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
REAL PROPERTY MARKET VALUES Non-Residential											
Office Land Inventory Improved Land Buildings Total Office Value					\$5,954,564 \$0 \$0 \$5,954,564	\$6,133,201 \$0 \$0 \$6,133,201	\$6,317,197 \$0 \$0 \$6,317,197	\$6,506,713 \$0 \$0 \$6,506,713	\$6,525,031 \$9,074,415 \$19,766,748 \$35,366,194	\$6,234,942 \$29,778,853 \$75,570,179 \$111,583,973	\$5,963,277 \$49,926,312 \$132,017,407 \$187,906,995
Retail Land Inventory Improved Land Buildings Total Retail Value					\$712,452 \$0 \$0 \$712,452	\$733,826 \$0 \$0 \$733,826	\$755,841 \$0 \$0 \$755,841	\$778,516 \$0 \$0 \$778,516	\$801,871 \$0 \$0 \$801,871	\$825,927 \$0 \$0 \$825,927	\$633,859 \$7,761,340 \$20,477,997 \$28,873,196
Hotel Land Inventory Improved Land Buildings Total Hotel Value					\$282,885 \$0 \$0 \$282,885	\$291,372 \$0 \$0 \$291,372	\$300,113 \$0 \$0 \$300,113	\$309,117 \$0 \$0 \$309,117	\$318,390 \$0 \$0 \$318,390	\$327,942 \$0 \$0 \$327,942	\$112,593 \$4,776,209 \$31,045,360 \$35,934,162
Total Non-Residential Value					\$6,949,901	\$7,158,398	\$7,373,150	\$7,594,345	\$36,486,455	\$112,737,842	\$252,714,353
Residential											
Single-Family Detached Land in Inventory Improved (Land & Building) Total Single-Family Detached Value	(includes AAC)				\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0
Townhome Land Inventory Improved (Land & Building) Total Townhome Value	(includes AAC)				\$3,337,000 \$0 \$3,337,000	\$3,437,110 \$0 \$3,437,110	\$3,540,224 \$0 \$3,540,224	\$3,646,430 \$0 \$3,646,430	\$3,471,340 \$54,592,242 \$58,063,582	\$3,282,462 \$112,460,019 \$115,742,480	\$3,079,127 \$173,750,729 \$176,829,856
Condominium Land in Inventory Improved (Land & Building) Total Condominium Value	(includes AAC)				\$1,956,647 \$0 \$1,956,647	\$2,015,347 \$0 \$2,015,347	\$2,075,807 \$0 \$2,075,807	\$2,138,081 \$0 \$2,138,081	\$2,032,445 \$43,528,828 \$45,561,273	\$1,918,547 \$89,669,386 \$91,587,932	\$1,795,985 \$138,539,201 \$140,335,186
Rental Apartment Land in Inventory Improved (Land & Building) Total Rental Apartment Value	(includes AAC)				\$3,167,444 \$0 \$3,167,444	\$3,262,467 \$0 \$3,262,467	\$3,360,341 \$0 \$3,360,341	\$3,461,151 \$0 \$3,461,151	\$3,121,133 \$52,943,934 \$56,065,068	\$2,757,599 \$109,064,505 \$111,822,104	\$2,369,444 \$168,504,660 \$170,874,104
Total Residential Value					\$8,461,091	\$8,714,924	\$8,976,372	\$9,245,663	\$159,689,923	\$319,152,517	\$488,039,146
IMPACT ON CURRENT ASSESSMENTS OF EXISTING PROPERTIES											
initial increase subsequent increase Baseline Increase in Current Assessments Value of Current Assessments of Existing Properties Increase in Current Assessments and Existing Properties Compounded Annual Growth of Properties Above Baseline Increased Value of Current Assessments of Existing Properties	silver spring 6.5% 20.1%	Percontee Factor inc 20.0% 20.0% 3.0% \$1,230,412,160	1.3% 4.0%		1.000 \$1,230,412,160 0.0% 1.000 0.00% \$0	1.030 \$1,267,324,525 0.0% 1.000 0.00% \$0	1.061 \$1,305,344,261 0.0% 1.000 0.00% \$0	1.093 \$1,344,504,589 0.0% 1.000 0.00% \$0	1.126 \$1,384,839,726 1.3% 1.013 1.32% \$18,333,749	1.159 \$1,426,384,918 1.3% 1.027 2.67% \$38,017,524	1.194 \$1,469,176,466 1.3% 1.040 4.02% \$59,126,733



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
PERSONAL PROPERTY ASSESSMENT (As a % of Real Property Assessment, including improved land)										
Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office Office: General Retail: Lifestyle/Town Center Retail: Restaurants Retail: Movie Theater/Entertainment Retail: Health Club Hotel		15.0% 15.0% 15.0% 15.0% 15.0% 15.0% 15.0% 15.0%		\$37.50 \$37.50 \$22.50 \$29.25 \$24.00 \$27.75 \$45.00 \$28.50 \$15.00	\$38.63 \$38.63 \$23.18 \$30.13 \$24.72 \$28.58 \$46.35 \$29.36 \$15.45 \$23,175	\$39.78 \$39.78 \$23.87 \$31.03 \$25.46 \$29.44 \$47.74 \$30.24 \$15.91 \$23,870	\$40.98 \$40.98 \$24.59 \$31.96 \$26.23 \$30.32 \$49.17 \$31.14 \$16.39 \$24,586	\$42.21 \$42.21 \$25.32 \$32.92 \$27.01 \$31.23 \$50.65 \$32.08 \$16.88 \$25,324	\$43.47 \$43.47 \$26.08 \$33.91 \$27.82 \$32.17 \$52.17 \$33.04 \$17.39 \$26,084	\$44.78 \$44.78 \$26.87 \$34.93 \$28.66 \$33.13 \$53.73 \$34.03 \$17.91 \$26,866
PERSONAL PROPERTY ASSESSED VALUES Non-Residential Office Retail Hottel Total Non-Residential Personal Property Value				\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$4,326,174 \$0 \$0 \$4,326,174	\$15,802,355 \$0 \$0 \$15,802,355	\$27,291,558 \$4,235,901 \$5,373,235 \$36,900,694
OCCUPIED NON-RESIDENTIAL SPACE Total Non-Residential Total Space Cumulative Space			3,550,031 3,550,031	0	0 0	0 0	0 0	73,625 73,625	213,869 287,494	321,931 609,425
Office Total (in GBA) Cumulative Office (in GBA)			3,065,531 3,065,531	0	0	0	0	73,625 73,625	213,869 287,494	198,431 485,925
Office: R&D/Lab/Applied Sciences Offices/Manuf. Cumulative Office (in GBA)	70% efficiency	95% occupancy	931,000 931,000	0	0	0	0	58,188 58,188	58,188 116,375	58,188 174,563
Office: Science Related Educational/Academic Cumulative Office (in GBA)	75% efficiency	95% occupancy	935,156 935,156	0	0	0	0	0	62,344 62,344	62,344 124,688
Office: Incubator Cumulative Office (in GBA)	65% efficiency	95% occupancy	30,875 30,875	0	0	0	0	15,438 15,438	15,438 30,875	0 30,875
Office: Clinical/Medical Office Cumulative Office (in GBA)	82% efficiency	95% occupancy	584,250 584,250	0	0	0	0	0	38,950 38,950	38,950 77,900
Office: General Cumulative Office (in GBA)	82% efficiency	95% occupancy	584,250 584,250	0	0	0	0	0	38,950 38,950	38,950 77,900
Retail Total (in GLA) Cumulative Retail (in GLA)			484,500 484,500	0	0	0	0	0	0	123,500 123,500
Retail: Lifestyle/Town Center Cumulative Retail (in GLA)	100% efficiency	95% occupancy	361,000 361,000	0	0	0	0	0	0	85,500 85,500
Retail: Restaurants Cumulative Retail (in GLA)	100% efficiency	95% occupancy	42,750 42,750	0	0	0	0	0	0	14,250 14,250
Retail: Movie Theater/Entertainment Cumulative Retail (in GLA)	100% efficiency	95% occupancy	57,000 57,000	0	0	0	0	0	0	0
Retail: Health Club Cumulative Retail (in GLA)	100% efficiency	95% occupancy	23,750 23,750	0	0	0	0	0	0	23,750 23,750
Hotel Hotel Rooms Cumulative Hotel Rooms		70% occupancy	210 210	0 0	0 0	0 0	0 0	0 0	0	140 140



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
EMPLOYEES Direct Construction Jobs Construction Value Labor Hours Total Hours FTE Jobs	10.2 per \$1,000 c 50 weeks	construction value 40 hours	10,001,948 5,001	\$0 10.2 0 0	\$0 9.9 0	\$0 9.6 0	\$0 9.4 0 0	\$61,859,539 9.1 562,340 281	\$84,625,731 8.8 746,891 373	\$116,466,547 8.6 997,973 499
Total Permanent Non-Residential Jobs Total Cumulative			10,629 10,629	0	0	0	0	207 207	670 877	994 1,871
Office Total Cumulative Office			9,392 9,392	0	0	0	0 0	207 207	670 877	608 1,485
Office: R&D/Lab/Applied Sciences Offices/Manuf. Cumulative Office		400 occ SF/1 emp	2,328 2,328	0	0	0	0 0	145 145	145 291	145 436
Office: Science Related Educational/Academic Cumulative Office		330 occ SF/1 emp	2,834 2,834	0	0	0	0 0	0	189 189	189 378
Office: Incubator Cumulative Office		250 occ SF/1 emp	124 124	0	0	0	0 0	62 62	62 124	0 124
Office: Clinical/Medical Office Cumulative Office		330 occ SF/1 emp	1,770 1,770	0	0	0	0 0	0	118 118	118 236
Office: General Cumulative Office		250 occ SF/1 emp	2,337 2,337	0	0	0	0 0	0	156 156	156 312
Retail Total Cumulative Retail			1,079 1,079	0	0 0	0	0	0 0	0	281 281
Retail: Lifestyle/Town Center Cumulative Retail		400 occ SF/1 emp	903 903	0	0 0	0	0	0 0	0	214 214
Retail: Restaurants Cumulative Retail		400 occ SF/1 emp	107 107	0	0	0	0	0 0	0 0	36 36
Retail: Movie Theater/Entertainment Cumulative Retail		1,500 occ SF/1 emp	38 38	0	0	0	0	0 0	0 0	0 0
Retail: Health Club Cumulative Retail		750 occ SF/1 emp	32 32	0	0	0	0	0 0	0 0	32 32
Hotel Hotel Rooms Cumulative Hotel		0.75 emp/total rooms	158 158	0	0	0	0	0	0	105 105



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
OCCUPIED RESIDENTIAL HOUSEHOLDS Residential Units Cumulative			4,621 4,621	0 0	0 0	0 0	0 0	459 459	459 918	459 1,377
Single-Family Detached (Total) Cumulative			0	0	0	0	0	0	0	0 0
SFD Cumulative		98% occupancy	0	0	0	0	0	0	0 0	0 0
Townhome (Total) Cumulative			950 950	0	0	0	0	66 66	66 132	66 199
Townhomes Cumulative		97% occupancy	950 950	0	0	0	0	66 66	66 132	66 199
Condominium (Total) Cumulative			1,045 1,045	0	0	0	0	65 65	65 131	65 196
Condominiums Cumulative		95% occupancy	1,045 1,045	0	0	0	0	65 65	65 131	65 196
Rental Apartment (Total) Cumulative			1,627 1,627	0	0	0	0	186 186	186 373	186 559
Rental Apartments Cumulative		97% occupancy	1,627 1,627	0	0	0	0	186 186	186 373	186 559
Active Adult Residential Units Total Cumulative			1,000 1,000	0	0	0	0	141 141	141 282	141 423
AAC Townhomes Cumulative		97% occupancy	195 195	0	0	0	0	20 20	20 41	20 61
AAC Condominiums Cumulative		95% occupancy	232 232	0	0	0	0	33 33	33 66	33 99
AAC Rental Apartments Cumulative		97% occupancy	573 573	0	0	0	0	87 87	87 175	87 262



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS COMM	TOTAL ENTS Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
FULL-TIME RESIDENTIAL HOUSEHOLDS Residential Units Cumulative		3,621 3,621	0	0	0	0	318 318	318 636	318 954
Single-Family Detached (Total) Cumulative		0 0	0	0	0	0	0	0	0
SFD Cumulative	100% Full-Time Re	esidents 0 0	0	0	0 0	0 0	0	0	0
Townhome (Total) Cumulative		950 950	0	0	0 0	0 0	66 66	66 132	66 199
Townhomes Cumulative	100% Full-Time Re	esidents 950 950	0	0	0 0	0 0	66 66	66 132	66 199
Condominium (Total) Cumulative		1,045 1,045	0	0	0	0 0	65 65	65 131	65 196
Condominiums Cumulative	100% Full-Time Ro	esidents 1,045 1,045	0	0	0	0	65 65	65 131	65 196
Rental Apartment (Total) Cumulative		1,627 1,627	0	0	0	0	186 186	186 373	186 559
Rental Apartments Cumulative	100% Full-Time Ro	esidents 1,627 1,627	0	0	0	0 0	186 186	186 373	186 559
Active Adult Residential Units Total Cumulative		1,000 1,000	0	0	0	0 0	141 141	141 282	141 423
AAC Townhomes Cumulative	100% Full-Time Ro	esidents 195 195	0	0	0	0	20 20	20 41	20 61
AAC Condominiums Cumulative	100% Full-Time Re	esidents 232 232	0	0	0	0	33 33	33 66	33 99
AAC Rental Apartments Cumulative	100% Full-Time Ro	esidents 573 573	0	0	0	0	87 87	87 175	87 262



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUM	PTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
INDIRECT/INDUCED IMPACT (County Mulitpliers) EMPLOYMENT Construction	IMPLAN 33	Type SAM 1.7433		3,717	0	0	0	0	209	278	371
Total Permanent (exc. Construction) Total Cumulative				6,014 6,014	0	0	0	0	148 148	415 563	471 1,034
Office Total Cumulative Office				5,755 5,755	0	0	0	0	148 148	415 563	371 934
Office: R&D/Lab/Applied Sciences Offices/Manuf. Cumulative Office	IMPLAN 446	1.7132		1,660 1,660	0	0	0	0	104 104	104 207	104 311
Office: Science Related Educational/Academic Cumulative Office	IMPLAN 462	1.3277		929 929	0	0	0	0	0	62 62	62 124
Office: Incubator Cumulative Office	IMPLAN 446	1.7132		88 88	0 0	0	0	0	44 44	44 88	0 88
Office: Clinical/Medical Office Cumulative Office	IMPLAN 465	1.3687		653 653	0 0	0	0	0	0	44 44	44 87
Office: General Cumulative Office	IMPLAN 451	2.0377		2,425 2,425	0 0	0	0 0	0	0	162 162	162 323
Retail Total Cumulative Retail				182 182	0	0	0	0	0	0	49 49
Retail-Lifestyle Center Cumulative Retail	IMPLAN 411	1.1632		147 147	0	0	0	0	0 0	0 0	35 35
Retail-Restaurants Cumulative Retail	IMPLAN 481	1.2024		22 22	0	0	0	0	0 0	0 0	7 7
Retail-Theater Cumulative Retail	IMPLAN 411	1.1632		6 6	0	0	0	0	0 0	0 0	0 0
Retail-Health Club Cumulative Retail	IMPLAN 476	1.2036		6 6	0	0	0	0	0	0	6 6
Hotel Hotel Cumulative Hotel	IMPLAN 479	1.4911		77 77	0	0	0	0	0	0	52 52
EMPLOYEE INCOME-AVERAGE WAGES PER FTE EMPLOYEE Construction	\$65,158				\$65,158	\$67,113	\$69,126	\$71,200	\$73,336	\$75,536	\$77,802
Office Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office Office: General	\$76,121 \$67,054 \$46,559 \$94,660 \$67,138				\$76,121 \$67,054 \$46,559 \$94,660 \$67,138	\$78,405 \$69,066 \$47,956 \$97,500 \$69,152	\$80,757 \$71,138 \$49,395 \$100,425 \$71,227	\$83,179 \$73,272 \$50,876 \$103,438 \$73,364	\$85,675 \$75,470 \$52,403 \$106,541 \$75,564	\$88,245 \$77,734 \$53,975 \$109,737 \$77,831	\$90,892 \$80,066 \$55,594 \$113,029 \$80,166
Retail Retail: Lifestyle/Town Center Retail: Restaurants Retail: Movie Theater/Entertainment Retail: Health Club	\$28,368 \$20,536 \$16,915 \$18,059				\$28,368 \$20,536 \$16,915 \$18,059	\$29,219 \$21,152 \$17,423 \$18,601	\$30,095 \$21,786 \$17,945 \$19,159	\$30,998 \$22,440 \$18,484 \$19,733	\$31,928 \$23,113 \$19,038 \$20,325	\$32,886 \$23,806 \$19,609 \$20,935	\$33,873 \$24,521 \$20,198 \$21,563
Hotel Hotel	\$31,133				\$31,133	\$32,067	\$33,029	\$34,020	\$35,040	\$36,092	\$37,174



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
TOTAL HOUSEHOLD INCOME-INCOME PER HOUSEHOLD Residential Units										
Single-Family Detached SFD Townhome	\$223,575	30% income to home value		\$223,575	\$230,282	\$237,191	\$244,306	\$251,636	\$259,185	\$266,960
Townhomes	\$162,525	30% income to home value		\$162,525	\$167,401	\$172,423	\$177,595	\$182,923	\$188,411	\$194,063
Condominium Condominiums	\$106,110	30% income to home value		\$106,110	\$109,293	\$112,572	\$115,949	\$119,428	\$123,011	\$126,701
Rental Apartment Rental Apartments	\$76,224	25% rent to income ratio		\$76,224	\$78,511	\$80,866	\$83,292	\$85,791	\$88,365	\$91,015
Active Adult Residential Units AAC Townhomes AAC Condominiums AAC Rental Apartments	\$138,875 \$101,925 \$79,200	25% income to home value 25% income to home value 25% rent to income ratio		\$138,875 \$101,925 \$79,200	\$143,041 \$104,983 \$81,576	\$147,332 \$108,132 \$84,023	\$151,752 \$111,376 \$86,544	\$156,305 \$114,717 \$89,140	\$160,994 \$118,159 \$91,815	\$165,824 \$121,704 \$94,569
POPULATION Residential Population			7,774	0	0	0	0	685	685	685
Cumulative			7,774	0	0	0	0	685	1,369	2,054
Single-Family Detached (Total) Cumulative			0	0	0	0 0	0	0	0	0
SFD Cumulative		3.08 pop/occ. unit	0	0	0	0	0 0	0	0	0
Townhome (Total) Cumulative			2,612 2,612	0	0	0	0	182 182	182 364	182 547
Townhomes Cumulative		2.75 pop/occ. unit	2,612 2,612	0	0	0	0	182 182	182 364	182 547
Condominium (Total) Cumulative			1,713 1,713	0	0	0	0	107 107	107 214	107 321
Condominiums Cumulative		1.64 pop/occ. unit	1,713 1,713	0	0 0	0	0	107 107	107 214	107 321
Rental Apartment (Total) Cumulative			3,448 3,448	0	0 0	0	0	395 395	395 791	395 1,186
Rental Apartments Cumulative		2.12 pop/occ. unit	3,448 3,448	0	0	0	0	395 395	395 791	395 1,186
Active Adult Population Units Total Cumulative			1,699 1,699	0	0	0	0	240 240	240 479	240 719
AAC Townhomes Cumulative		1.70 pop/occ. unit	331 331	0	0	0	0 0	35 35	35 70	35 104
AAC Condominiums Cumulative		1.70 pop/occ. unit	394 394	0	0	0	0 0	56 56	56 113	56 169
AAC Rental Apartments Cumulative		1.70 pop/occ. unit	974 974	0	0	0 0	0 0	149 149	149 297	149 446



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
FULL-TIME RESIDENTIAL POPULATION										
Residential Population			7,774	0	0	0	0	685	685	685
Cumulative			7,774	0	0	0	0	685	1,369	2,054
Carratative			.,	· ·	ŭ	ŭ	Ü	000	1,000	2,00
Single-Family Detached (Total) Cumulative			0	0 0	0	0	0	0	0 0	0 0
SFD Cumulative		100% full-time pop	0	0	0	0	0	0	0	0
Townhome (Total) Cumulative			2,612 2,612	0	0	0	0	182 182	182 364	182 547
Canadaro			2,012	Ü	ŭ	Ü	Ü	102	001	0
Townhomes		100% full-time pop	2,612	0	0	0	0	182	182	182
Cumulative			2,612	0	0	0	0	182	364	547
Condominium (Total)			1,713	0	0	0	0	107	107 214	107 321
Cumulative			1,713	U	0	U	0	107	214	321
Condominiums		100% full-time pop	1,713	0	0	0	0	107	107	107
Cumulative		read tem mile pap	1,713	Ō	0	0	0	107	214	321
Rental Apartment (Total)			3,448	0	0	0	0	395	395	395
Cumulative			3,448	0	0	0	0	395	791	1,186
Rental Apartments		100% full-time pop	3,448	0	0	0	0	395	395	395
Cumulative		100 % Iuli-time pop	3,448	0	0	0	0	395	791	1,186
Camalano			0,110	· ·	ŭ	ŭ	Ü	000		1,100
Active Adult Residential Population Total			1,699	0	0	0	0	240	240	240
Cumulative			1,699	0	0	0	0	240	479	719
AAQ T		1000/ 6 11 1/2	004	•				0.5	25	0.5
AAC Townhomes Cumulative		100% full-time pop	331 331	0	0	0	0	35 35	35 70	35 104
Cumulative			331	U	U	U	U	33	70	104
AAC Condominiums		100% full-time pop	394	0	0	0	0	56	56	56
Cumulative			394	0	0	0	0	56	113	169
AAC Rental Apartments		100% full-time pop	974	0	0	0	0	149	149	149
Cumulative			974	0	0	0	0	149	297	446
NEW STUDENT GENERATION-PER FULL-TIME RESIDENTIAL HOUSEHOLDS										
Elementary										
Single-Family Detached	0.320		0	0	0	0	0	0	0	0
Townhome Multifamily	0.211 0.153		200 160	0	0	0	0	14 10	14	14 10
Middle School	0.153		160	U	U	U	U	10	10	10
Single-Family Detached	0.144		0	0	0	0	0	0	0	0
Townhome	0.122		116	0	Ö	Ö	Ö	8	8	8
Multifamily	0.056		59	0	0	0	0	4	4	4
High School										
Single-Family Detached	0.131		0	0	0	0	0	0	0	0
Townhome	0.107		102	0	0	0	0	7	7	7
Multifamily Total	0.039		41	0	0	0	0	3	3	3
Single-Family Detached	0.595		0	0	0	0	0	0	0	0
Townhome	0.440		418	0	0	0	0	29	29	29
Multifamily	0.248		259	ő	0	0	0	16	16	16
Total Students by Year			677	Ō	0	Ō	0	45	45	45



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
CUMULATIVE NEW STUDENT GENERATION	ACCOMI FICHC	OGMMENTO	rears 1 50	real r	real L	rear o	1001 4	rear 5	rear o	reur r
Elementary										
Single-Family Detached			0	0	0	0	0	0	0	0
Townhome Multifamily			200 160	0	0	0	0	14 10	28 20	42 30
Middle School			100	0	0	U	U	10	20	30
Single-Family Detached			0	0	0	0	0	0	0	0
Townhome			116	0	0	0	0	8	16	24
Multifamily High School			59	0	0	0	0	4	7	11
Single-Family Detached			0	0	0	0	0	0	0	0
Townhome			102	0	0	0	0	7	14	21
Multifamily			41	0	0	0	0	3	5	8
Total Single-Family Detached			0	0	0	0	0	0	0	0
Townhome			418	0	0	0	0	29	58	87
Multifamily			259	0	0	0	0	16	32	49
Total Cumulative Students			677	0	0	0	0	45	91	136
HOTEL ROOM REVENUES										
Hotel Room Nights			1,762,950	0	0	0	0	0	0	51,100
Total Room Revenues		\$165 ADR	\$504,331,527	\$0	\$0	\$0	\$0	\$0	\$0	\$10,067,652
ADMISSIONS & AMUSEMENTS										
Movie Screens	3,100 SF/Screen		445	0	0	0	0	0	0	0
Theater Sales-Tickets	\$253,575 per Screen		\$195,889,186	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EMPLOYEE INCOME										
Total Construction Income			\$447,921,133	\$0	\$0	\$0	\$0	\$20,619,846	\$28,208,577	\$38,822,182
Office										
Office: R&D/Lab/Applied Sciences Offices/Manuf.			\$5,960,884,798	\$0	\$0	\$0	\$0	\$12,463,014	\$25,673,809	\$39,666,035
Office: Science Related Educational/Academic Office: Incubator			\$6,269,624,835 \$246,269,436	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$3,235,871	\$14,685,536 \$6,665,893	\$30,252,204 \$6,865,870
Office: Clinical/Medical Office			\$5,529,653,323	\$0 \$0	\$0 \$0	\$0	\$0	\$3,235,671	\$12,952,278	\$26,681,692
Office: General			\$5,176,947,195	\$0	\$0	\$0	\$0	\$0	\$12,126,123	\$24,979,814
Retail										
Retail: Lifestyle/Town Center			\$1,027,842,760	\$0	\$0	\$0	\$0	\$0	\$0	\$7,240,251
Retail: Restaurants			\$88,472,191	\$0	\$0	\$0	\$0	\$0	\$0	\$873,546
Retail: Movie Theater/Entertainment			\$25,655,152	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail: Health Club			\$23,507,535	\$0	\$0	\$0	\$0	\$0	\$0	\$682,833
Hotel										
Hotel			\$195,533,667	\$0	\$0	\$0	\$0	\$0	\$0	\$3,903,315
Total Employee Income			\$24,992,312,024	\$0	\$0	\$0	\$0	\$36,318,731	\$100,312,216	\$179,967,742
% In State		87%	\$21,743,311,461	\$0	\$0	\$0	\$0	\$31,597,296	\$87,271,628	\$156,571,935
% of State in Montgomery County		60%	\$13,045,986,877	\$0	\$0	\$0	\$0	\$18,958,378	\$52,362,977	\$93,943,161



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTION	NS	COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
DIRECT TAX REVENUES: MONTGOMERY COUNTY											
Real Property Tax Revenues											
Office Market Value Prior Year Market Value Subject To Tax Total Office Real Property Tax Revenues	100% Taxable \$0.876	Per \$100	100% Asses.	\$242.458.086	\$5,954,564 \$5,781,130 \$50,643	\$6,133,201 \$5,954,564 \$52,162	\$6,317,197 \$6,133,201 \$53,727	\$6,506,713 \$6,317,197 \$55,339	\$35,366,194 \$6,506,713 \$56,999	\$111,583,973 \$35,366,194 \$309.808	\$187,906,995 \$111,583,973 \$977,476
Retail Market Value Prior Year Market Value Subject To Tax	100% Taxable				\$712,452 \$691,701	\$733,826 \$712,452	\$755,841 \$733,826	\$778,516 \$755,841	\$801,871 \$778,516	\$825,927 \$801,871	\$28,873,196 \$825,927
Total Retail Real Property Tax Revenues Hotel Assessed Value	\$0.876 100% Taxable	Per \$100	100% Asses.	\$32,412,397	\$6,059 \$282,885	\$6,241 \$291,372	\$6,428 \$300,113	\$6,621 \$309,117	\$6,820 \$318,390	\$7,024 \$327,942	\$7,235 \$35,934,162
Prior Year Market Value Subject To Tax Total Hotel Real Property Tax Revenues	\$0.876	Per \$100	100% Asses.	\$14,811,950	\$274,646 \$2,406	\$282,885 \$2,478	\$291,372 \$2,552	\$300,113 \$2,629	\$309,117 \$2,708	\$318,390 \$2,789	\$327,942 \$2,873
Residential Market Value Prior Year Market Value Subject To Tax Total Residential Real Property Tax Revenues	100% Taxable \$0.876	Per \$100	100% Asses.	\$443,967,103	\$8,461,091 \$8,214,652 \$71,960	\$8,714,924 \$8,461,091 \$74,119	\$8,976,372 \$8,714,924 \$76,343	\$9,245,663 \$8,976,372 \$78,633	\$159,689,923 \$9,245,663 \$80,992	\$319,152,517 \$159,689,923 \$1,398,884	\$488,039,146 \$319,152,517 \$2,795,776
Total Real Property Tax Revenues				\$733,649,536	\$131,068	\$135,000	\$139,050	\$143,222	\$147,518	\$1,718,505	\$3,783,360
Real Property Tax Revenues from Surrounding Area											
Increase in Value of Current Assessments Prior Year Market Value Subject To Tax	100% Taxable			\$11,475,068,085 \$10,745,094,737	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$18,333,749 \$0	\$38,017,524 \$18,333,749	\$59,126,733 \$38,017,524
Total Increase in Real Property Tax Revenues Total Real Property Tax Revenues from Surrounding Area	\$0.876	Per \$100	100% Asses.	\$94,127,030 \$94,127,030	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$160,604 \$160,604	\$333,034 \$333,034
Personal Property Tax Revenues											
Office Personal Property Market Value Total Office Personal Property Taxes	100% Taxable \$2.192	Per \$100	100% Asses.	\$104,256,545	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$4,326,174 \$94,830	\$15,802,355 \$346,388	\$27,291,558 \$598,231
Retail Personal Property Market Value Total Retail Personal Property Taxes	100% Taxable \$2.192	Per \$100	100% Asses.	\$12,903,171	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$4,235,901 \$92,851
Hotel Personal Property Assessed Value Total Hotel Personal Property Taxes	100% Taxable \$2.192	Per \$100	100% Asses.	\$5,900,167	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$5,373,235 \$117,781
Total Personal Property Taxes				\$123,059,883	\$0	\$0	\$0	\$0	\$94,830	\$346,388	\$808,863



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS	TOTAL COMMENTS Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
Income Tax Revenues									
Employee Income Tax Revenues									
Total Construction Income		\$447,921,	33 \$0	\$0	\$0	\$0	\$20,619,846	\$28,208,577	\$38,822,182
Office									
Office: R&D/Lab/Applied Sciences Offices/Manuf.		\$5,960,884,		\$0	\$0	\$0	\$12,463,014	\$25,673,809	\$39,666,035
Office: Science Related Educational/Academic Office: Incubator		\$6,269,624,		\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$14,685,536	\$30,252,204
Office: Incubator Office: Clinical/Medical Office		\$246,269, \$5,529,653.		\$0 \$0	\$0 \$0	\$0 \$0	\$3,235,871 \$0	\$6,665,893 \$12,952,278	\$6,865,870 \$26,681,692
Office: General		\$5,176,947,		\$0	\$0	\$0	\$0	\$12,126,123	\$24,979,814
Retail									
Retail: Lifestyle/Town Center		\$1,027,842,	760 \$0	\$0	\$0	\$0	\$0	\$0	\$7,240,251
Retail: Restaurants		\$88,472,		\$0	\$0	\$0	\$0	\$0	\$873,546
Retail: Movie Theater/Entertainment		\$25,655,		\$0	\$0	\$0	\$0	\$0	\$0
Retail: Health Club		\$23,507,	535 \$0	\$0	\$0	\$0	\$0	\$0	\$682,833
Hotel									
Hotel		\$195,533,	667 \$0	\$0	\$0	\$0	\$0	\$0	\$3,903,315
Total Employee Income		\$26,020,154.	784 \$0	\$0	\$0	\$0	\$36,318,731	\$100,312,216	\$187,207,992
% In State	87%	\$22,637,534,		\$0	\$0	\$0	\$31,597,296	\$87,271,628	\$162,870,953
% of State in Montgomery County	60%	\$13,582,520,	797 \$0	\$0	\$0	\$0	\$18,958,378	\$52,362,977	\$97,722,572
Net Taxable Income	75.00%	\$10,186,890,		\$0	\$0	\$0	\$14,218,783	\$39,272,233	\$73,291,929
County Employee Income Tax Revenues	3.20%	\$325,980,	199 \$0	\$0	\$0	\$0	\$455,001	\$1,256,711	\$2,345,342
Household Income Tax Revenue									
Total Full-time Household Income		\$17,509,438,		\$0	\$0	\$0	\$50,700,380	\$104,442,783	\$161,364,099
Net Taxable Income Total Taxable Household Income	75%	\$13,132,078, \$13,132,078,		\$0 \$0	\$0 \$0	\$0 \$0	\$38,025,285 \$38,025,285	\$78,332,087 \$78,332,087	\$121,023,075 \$121,023,075
County Householder Income Tax Revenues	3.20%	\$420,226,		\$0	\$0	\$0	\$1,216,809	\$2,506,627	\$3,872,738
Total County Income Tax		\$746,207,		\$0	\$0	\$0	\$1,671,810	\$3,763,338	\$6,218,080
Recordation Fees and Transfer Tax									
Values			\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0
Single-Family Detached Value (under \$500K) Single-Family Detached Value (over \$500K)			\$0 \$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Townhome Value (under \$500K)		\$587,500,		\$0	\$0	\$0	\$44,500,000	\$44,500,000	\$44,500,000
Townhome Value (over \$500K)		\$284,515,		\$0	\$0	\$0	\$10,092,242	\$11,730,009	\$13,416,910
Condominium Value (under \$500K)		\$607,049,		\$0	\$0	\$0	\$38,328,828	\$39,634,693	\$40,979,734
Condominium Value (over \$500K) Total New For-Sale Value		\$36,840, \$1.515.904.		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$92.921.070	\$0 \$95.864.702	\$0 \$98.896.643
Total Resale (under \$500K)	8.41% Turnover	\$1,515,904, \$3,216,173,		\$0 \$0	\$0 \$0	\$0 \$0	\$92,921,070	\$8,932,776	\$17,938,172
Total New Units	0.1176 14.116161	4.		0	0	0	475	475	475
Total Resale Units	8.41% Turnover	5,	0 0	0	0	0	0	24	48
Recordation Fees (Only General Fund)									
Recordation Fees New Home Sales		\$10.00 per \$1K >\$500K \$11,455,		\$0	\$0	\$0	\$672,441	\$697,829	\$723,979
Recordation Fees Resales Recordation Fees Total	\$6.90 per \$1K Sale Price up to \$500K	\$22,191, \$33,647,		\$0 \$0	\$0 \$0	\$0 \$0	\$3,016 \$675,457	\$61,636 \$759,466	\$123,773 \$847,753
Transfer Fees		\$33,647,	30	\$0	\$0	\$0	φ0/0,45/	\$159,4bb	\$647,753
Total For-Sale Value		\$1,515,904,	554 \$0	\$0	\$0	\$0	\$92,921,070	\$95,864,702	\$98,896,643
Other transfers		\$3,216,173,	64 \$0	\$0	\$0	\$0	\$437,120	\$8,932,776	\$17,938,172
Total Transfer Value		\$4,732,077,		\$0	\$0	\$0	\$93,358,190	\$104,797,479	\$116,834,816
Transfer Tax Total	1.00% of the Consideration	\$47,320,	778 \$0	\$0	\$0	\$0	\$933,582	\$1,047,975	\$1,168,348
Total Recordation & Transfer Tax		\$80,968,	\$17 \$0	\$0	\$0	\$0	\$1,609,039	\$1,807,440	\$2,016,101



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUI	MPTIONS COMMENTS	TOTAL Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
Hotel Room Tax										
Room Revenues Total Hotel Room Tax		7.0%	\$35,303,207	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$10,067,652 \$704,736
Admissions Tax		1.076	\$33,303,207	40	40	40	40	40	φ0	\$104,130
Theater Ticket Sales			\$13,712,243	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Admissions Tax		7.0%	\$959,857	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Impact Taxes			,,,,,,,		,,		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		
School Impact Tax - New Dwelling Units										
Inflation Rate SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All)	39 \$21,920 /Unit \$16,503 /Unit \$10,431 /Unit \$4,422 /Unit \$0 /Unit	6	\$0 \$21,579,690 \$0 \$6,720,519 \$0 \$0	1.000 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.030 \$0 \$0 \$0 \$0 \$0 \$0	1.061 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.093 \$0 \$1,226,263 \$0 \$333,411 \$0 \$0	1.126 \$0 \$1,263,050 \$0 \$343,413 \$0 \$0	1.159 \$0 \$1,300,942 \$0 \$353,715 \$0 \$0	1.194 \$0 \$1,339,970 \$0 \$364,327 \$0 \$0
Total School Impact Tax - New Dwelling Units			\$28,300,210	\$0	\$0	\$0	\$1,559,673	\$1,606,463	\$1,654,657	\$1,704,297
Transportation Impact Tax Inflation Rate SFD Townhomes/Villas Multfamily (Garden) Multifamily (Low-rise w/parking) Multfamily (High-rise w/parking) AAC (All)	\$5,708 /Unit \$4,669 /Unit \$3,630 /Unit \$2,593 /Unit \$2,593 /Unit \$1,037 /Unit	6	\$0 \$6,105,288 \$0 \$3,940,820 \$0 \$1,245,260	1.000 \$0 \$0 \$0 \$0 \$0 \$0	1.030 \$0 \$0 \$0 \$0 \$0 \$0	1.061 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.093 \$0 \$346,932 \$0 \$195,507 \$0 \$159,752	1.126 \$0 \$357,340 \$0 \$201,373 \$0 \$164,545	1.159 \$0 \$368,060 \$0 \$207,414 \$0 \$169,481	1.194 \$0 \$379,102 \$0 \$213,636 \$0 \$174,566
Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax	\$5.20 /SF GFA \$2.60 /SF GFA \$0.00 /SF GFA \$4.65 /SF GFA \$2.60 /SF GFA	(Office: General) (Office: R&D/Lab/Applied Sciences Offices/M (Remainder of Office in Program) (All Retail) (Hotel)	\$11,173,656 \$5,010,908 \$0 \$2,813,170 \$629,223 \$30,918,326	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$142,055 \$248,595 \$0 \$0 \$0 \$1,092,842	\$731,581 \$256,053 \$0 \$0 \$0 \$1,710,891	\$602,823 \$263,735 \$0 \$700,781 \$406,905 \$2,719,199	\$620,907 \$271,647 \$0 \$2,026,605 \$0 \$3,686,463
Total Impact Taxes			\$59,218,535	\$0	\$0	\$0	\$2,652,515	\$3,317,355	\$4,373,856	\$5,390,760
Miscellaneous Revenues										
Per Employee Total Employees Total Misc. Revenue-Employees Per Resident	\$221.23 /Emp.		10,629 \$80,142,828	0 \$0	0 \$0	0 \$0	0 \$0	207 \$51,596	877 \$224,967	1,871 \$494,358
Per Resident Cumulative Full-Time Residents Misc. Rev: Full-Time Residents Total Misc. Revenue-Residents Total Misc. Revenues	\$223.47 /Res.	100% (% of Rev. Applied)	9,473 \$76,906,208 \$76,906,208 \$157,049,036	0 \$0 \$0 \$0	0 \$0 \$0 \$0	0 \$0 \$0 \$0	0 \$0 \$0 \$0	924 \$232,453 \$232,453 \$284,049	1,848 \$478,853 \$478,853 \$703,820	2,773 \$739,828 \$739,828 \$1,234,186
			\$157,049,036	\$0	\$0	\$0	\$0	\$264,049	\$703,820	\$1,234,100
DIRECT TOTAL REVENUES: MONTGOMERY COUNTY TOTAL REVENUES			\$2,030,542,421	\$131,068	\$135,000	\$139,050	\$2,795,737	\$7,124,602	\$12,873,952	\$20,489,119
REVENUE SUMMARY Real Property Tax Revenues Real Property Tax Revenues from Surrounding Area Personal Property Tax Revenues Income Tax Revenues Recordation Fees and Transfer Tax Hotel Room Tax Admissions Tax			\$733,649,536 \$94,127,030 \$123,059,883 \$746,207,020 \$80,968,317 \$35,303,207 \$959,857	\$131,068 \$0 \$0 \$0 \$0 \$0	\$135,000 \$0 \$0 \$0 \$0 \$0 \$0	\$139,050 \$0 \$0 \$0 \$0 \$0	\$143,222 \$0 \$0 \$0 \$0 \$0 \$0	\$147,518 \$0 \$94,830 \$1,671,810 \$1,609,039 \$0 \$0	\$1,718,505 \$160,604 \$346,388 \$3,763,338 \$1,807,440 \$0 \$0	\$3,783,360 \$333,034 \$808,863 \$6,218,080 \$2,016,101 \$704,736 \$0
Impact Taxes Miscellaneous Revenues			\$59,218,535 \$157,049,036	\$0 \$0	\$0 \$0	\$0 \$0	\$2,652,515 \$0	\$3,317,355 \$284,049	\$4,373,856 \$703,820	\$5,390,760 \$1,234,186
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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTION	ASSUMPTIONS COMMENTS N		2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
DIRECT EXPENDITURES: MONTGOMERY COUNTY										
Non-Educational Operating Expenditures Per Employee										
Per Employees Total Employees Total Operating Expenditures- Employee	\$541.52 /Emp.		10,629 \$196,173,201	0 \$0	0 \$0	0 \$0	0 \$0	207 \$126,297	877 \$550,673	1,871 \$1,210,086
Per Resident Cumulative Full-Time Residents Misc. Rev: Full-Time Residents	\$753.18 /Res.	100% (% of Rev. Applied)	9,473 \$259,205,612	0 \$0	0 \$0	0 \$0	0 \$0	924 \$783,462	1,848 \$1,613,933	2,773 \$2,493,526
Total Operating Expenditures			\$455,378,813	\$0	\$0	\$0	\$0	\$909,759	\$2,164,606	\$3,703,612
Non-Educational Capital Expenditures										
Transportation Inflation Rate SFD Townhomes/Villas Multifamily (Carden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All)	3% \$5,708 /Unit \$4,669 /Unit \$3,630 /Unit \$2,593 /Unit \$2,593 /Unit \$1,037 /Unit		\$0 \$6,105,288 \$0 \$3,940,820 \$0 \$1,245,260	1.000 \$0 \$0 \$0 \$0 \$0 \$0	1.030 \$0 \$0 \$0 \$0 \$0 \$0	1.061 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.093 \$0 \$346,932 \$0 \$195,507 \$0 \$159,752	1.126 \$0 \$357,340 \$0 \$201,373 \$0 \$164,545	1.159 \$0 \$368,060 \$0 \$207,414 \$0 \$169,481	1.194 \$0 \$379,102 \$0 \$213,636 \$0 \$174,566
Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax	\$2.60 /SF GFA (Office		\$11,173,656 \$5,010,908 \$0 \$2,813,170 \$629,223 \$30,918,326	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$142,055 \$248,595 \$0 \$0 \$0 \$1,092,842	\$731,581 \$256,053 \$0 \$0 \$0 \$1,710,891	\$602,823 \$263,735 \$0 \$700,781 \$406,905 \$2,719,199	\$620,907 \$271,647 \$0 \$2,026,605 \$0 \$3,686,463
Total Capital Expenditures (Non-Educational) New Annual Payments w/ 20yr financing New Ann. Payments w/ 20 yr. Financing		5.0% interest rate	\$30,918,326 \$44,437,178	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$1,092,842 \$87,692 \$87,692	\$1,710,891 \$137,286 \$224,979	\$2,719,199 \$218,196 \$443,174	\$3,686,463 \$295,811 \$738,986
Educational Operating Expenditures Per Student Operating Expenditures Total Students Generated by Project-Full-time Households Total Educational Operating Expenditures		\$9,459	677 \$220,272,247	\$9,459 0 \$0	\$9,742 0 \$0	\$10,035 0 \$0	\$10,336 0 \$0	\$10,646 45 \$482,707	\$10,965 91 \$994,377	\$11,294 136 \$1,536,313
Educational Capital Expenditures										
Schools - New Dwelling Units Inflation Rate SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All) Total School Impact Tax - New Dwelling Units	3% \$21,920 /Unit \$16,503 /Unit \$10,431 /Unit \$4,422 /Unit \$4,422 /Unit \$0 /Unit		\$0 \$21,579,690 \$0 \$6,720,519 \$0 \$0 \$28,300,210	1.000 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.030 \$0 \$0 \$0 \$0 \$0 \$0	1.061 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.093 \$0 \$1,226,263 \$0 \$333,411 \$0 \$0 \$1,559,673	1.126 \$0 \$1,263,050 \$0 \$343,413 \$0 \$0 \$1,606,463	1.159 \$0 \$1,300,942 \$0 \$353,715 \$0 \$0 \$1,654,657	1.194 \$0 \$1,339,970 \$0 \$364,327 \$0 \$0 \$1,704,297
Educational Capital Expenditures New Annual Payments w/ 20yr financing New Ann. Payments w/ 20 yr. Financing		5.0% interest rate	\$28,300,210 \$40,770,926	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$1,559,673 \$125,152 \$125,152	\$1,606,463 \$128,907 \$254,059	\$1,654,657 \$132,774 \$386,833	\$1,704,297 \$136,757 \$523,590
DIRECT TOTAL EXPENDITURES: MONTGOMERY COUNTY TOTAL EXPENDITURES			\$760,859,163	\$0	\$0	\$0	\$212,845	\$1,871,505	\$3,988,991	\$6,502,501
EXPENDITURES SUMMARY Non-Educational Operating Expenditures Non-Educational Capital Expenditures Educational Operating Expenditures Educational Operating Expenditures Educational Capital Expenditures			\$455,378,813 \$44,437,178 \$220,272,247 \$40,770,926	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$87,692 \$0 \$125,152	\$909,759 \$224,979 \$482,707 \$254,059	\$2,164,606 \$443,174 \$994,377 \$386,833	\$3,703,612 \$738,986 \$1,536,313 \$523,590
DIRECT FISCAL IMPACT: MONTGOMERY COUNTY			\$1,269,683,258	\$131,068	\$135,000	\$139,050	\$2,582,892	\$5,253,097	\$8,884,961	\$13,986,618



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	ASSUMPTIONS		TOTAL MMENTS Years 1-30	2011 Year 1	2012 Year 2	2013 Year 3	2014 Year 4	2015 Year 5	2016 Year 6	2017 Year 7
INDIRECT/INDUCED: MONTGOMERY COUNTY										
Indirect/Induced Income Tax										
Direct Taxable Income Total Construction Income	87% in State	60% in County	\$233,814,831	\$0	\$0	\$0	\$0	\$10,763,560	\$14,724,877	\$20,265,179
Office										
Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic	87% in State 87% in State	60% in County 60% in County	\$3,111,581,864 \$3,272,744,164	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$6,505,693 \$0	\$13,401,728 \$7,665,850	\$20,705,670 \$15,791,650
Office: Incubator	87% in State	60% in County	\$128,552,646	\$0	\$0	\$0	\$0	\$1,689,124	\$3,479,596	\$3,583,984
Office: Clinical/Medical Office Office: General	87% in State 87% in State	60% in County 60% in County	\$2,886,479,034 \$2,702,366,436	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$6,761,089 \$6,329,836	\$13,927,843 \$13,039,463
Retail										
Retail-Lifestyle Center	87% in State	60% in County	\$536,533,921	\$0	\$0	\$0	\$0	\$0	\$0	\$3,779,411
Retail-Neighborhood	87% in State	60% in County	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail-Restaurants	87% in State	60% in County	\$46,182,484 \$13,391,990	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$455,991 \$0
Retail-Theater Retail-Health Club	87% in State 87% in State	60% in County 60% in County	\$12,270,933	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$356,439
Hotel										
Hotel	87% in State	60% in County	\$102,068,574	\$0	\$0	\$0	\$0	\$0	\$0	\$2,037,531
Indirect/Induced Income Total Construction Income	IMPLAN 33	1.5595	\$130,810,045	\$0	\$0	\$0	\$0	\$6,021,781	\$8,237,980	\$11,337,557
Office				•		•	•			
Office: R&D/Lab/Applied Sciences Offices/Manuf.	IMPLAN 446 IMPLAN 462	1.4492 1.4220	\$1,397,778,582	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$2,922,475	\$6,020,298	\$9,301,360 \$6,664,613
Office: Science Related Educational/Academic Office: Incubator	IMPLAN 446	1.4420	\$1,381,209,310 \$57,748,162	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$758,785	\$3,235,249 \$1,563,097	\$1,609,990
Office: Clinical/Medical Office	IMPLAN 446	1.3697	\$1,067,200,575	\$0	\$0	\$0 \$0	\$0	\$756,765	\$2,499,737	\$5,149,458
Office: General	IMPLAN 451	1.4313	\$1,165,498,215	\$0	\$0	\$0	\$0	\$0	\$2,729,982	\$5,623,764
Retail										
Retail-Lifestyle Center	IMPLAN 411	1.3545	\$190,187,325	\$0	\$0	\$0	\$0	\$0	\$0	\$1,339,703
Retail-Restaurants	IMPLAN 481	1.4332	\$20,006,483	\$0	\$0	\$0	\$0	\$0	\$0	\$197,538
Retail-Theater	IMPLAN 411	1.3545	\$4,747,112	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail-Health Club	IMPLAN 476	1.3762	\$4,616,215	\$0	\$0	\$0	\$0	\$0	\$0	\$134,089
Hotel Hotel	IMPLAN 479	1.5134	\$52,398,229	\$0	\$0	\$0	\$0	\$0	\$0	\$1,045,993
	IVII E/IV 4/3	1.0104		\$0	\$0	\$0	\$0			
Total Direct/Induced Employment Income Total Direct/Induced Construction Income			\$5,341,390,209 \$130,810,045	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$3,681,260 \$6,021,781	\$16,048,363 \$8,237,980	\$31,066,507 \$11,337,557
Total Direct/Induced Employment Income Taxes	75% taxable	3.20%	\$128,193,365	\$0	\$0	\$0	\$0	\$88,350	\$385,161	\$745,596
Total Direct/Induced Construction Income Taxes	75% taxable	3.20%	\$3,139,441	\$0	\$0	\$0	\$0	\$144,523	\$197,712	\$272,101
Indirect/Induced Hotel Tax Revenues										
Direct Hotel Room Revenues			\$504,331,527	\$0	\$0	\$0	\$0	\$0	\$0	\$10,067,652
Indirect Hotel Room Revenues Hotel Tax	IMPLAN 479	1.3135 7.00%	\$158,105,412 \$11,067,379	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$3,156,159 \$220,931
Indirect/Induced Miscellaneous Revenues										
Total Direct/Induced Employment			6,014	0	0	0	0	148	563	1,034
Total Miscellaneous Revenues		\$221 per Emp		\$0	\$0	\$0	\$0	\$36,798	\$144,310	\$273,051
Indirect/Induced Miscellaneous Expenditures										
Total Miscellaneous Expenditures		\$542 per Emp	ployee \$109,498,338	\$0	\$0	\$0	\$0	\$90,074	\$353,241	\$668,372
Total Induced/Indirect Revenues			\$187,133,647	\$0	\$0	\$0	\$0	\$269,671	\$727,182	\$1,511,679
Total Induced/Indirect Expenditures			\$109,498,338	\$0	\$0	\$0	\$0	\$90,074	\$353,241	\$668,372
TOTAL INDUCED/INDIRECT IMPACT: MONTGOMERY COUNTY			\$77,635,310	\$0	\$0	\$0	\$0	\$179,597	\$373,941	\$843,307
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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018 Year 8	2019 Year 9	2020 Year 10	2021 Year 11	2022 Year 12	2023 Year 13	2024 Year 14	2025 Year 15	2026 Year 16	2027 Year 17	2028 Year 18	2029 Year 19
ESCALATION RATES	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Expenditures	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Revenues	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Unimproved Land Values												
Office	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Retail	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Hotel	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Residential	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Improved Land Values												
Office	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Retail	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Hotel	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Residential	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Building Values												
Office	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Retail	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Hotel	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
Residential	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
DEVELOPMENT PROGRAM												
Total Space	640,000	290,000	342,500	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000
Cumulative Space	1,592,500	1,882,500	2,225,000	2,500,000	2,775,000	3,050,000	3,325,000	3,600,000	3,875,000	4,150,000	4,425,000	4,700,000
Office Total (in GBA)	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000	275,000
Cumulative Office (in GBA)	962,500	1,237,500	1,512,500	1,787,500	2,062,500	2,337,500	2,612,500	2,887,500	3,162,500	3,437,500	3,712,500	3,987,500
Office: R&D/Lab/Applied Sciences Offices/Manuf.	87,500	87,500	87,500	87,500	87.500	87,500	87,500	87,500	87,500	87,500	87,500	87,500
Cumulative Office (in GBA)	350,000	437,500	525,000	612,500	700,000	787,500	875,000	962,500	1,050,000	1,137,500	1,225,000	1,312,500
Office: Science Related Educational/Academic	87.500	87.500	87.500	87.500	87.500	87.500	87,500	87.500	87,500	87.500	87,500	87,500
Cumulative Office (in GBA)	262,500	350,000	437,500	525,000	612,500	700,000	787,500	875,000	962,500	1,050,000	1,137,500	1,225,000
Office: Incubator	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Office: Clinical/Medical Office	50,000	50.000	50,000	50,000	50,000	50.000	50,000	50.000	50,000	50,000	50,000	50,000
Cumulative Office (in GBA)	150,000	200,000	250,000	300,000	350,000	400,000	450,000	500,000	550,000	600,000	650,000	700,000
Samualité Office (in ODA)	100,000	200,000	200,000	500,000	550,000	400,000	400,000	300,000	000,000	000,000	000,000	700,000
Office: General	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Cumulative Office (in GBA)	150,000	200,000	250,000	300,000	350,000	400.000	450,000	500,000	550,000	600.000	650,000	700.000
	.00,000	200,000	200,000	000,000	555,555	.00,000	.00,000	000,000	000,000	000,000	000,000	. 00,000



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
Retail Total (in GLA)	365,000	15,000	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	495,000	510,000	510,000	510,000	510,000	510,000	510,000	510,000	510,000	510,000	510,000	510,000
Retail: Lifestyle/Town Center	275,000	15,000	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	365,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000
Retail: Restaurants	30,000	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
Retail: Movie Theater/Entertainment	60,000	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Retail: Health Club	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Hotel Hotel Cumulative Hotel Rooms Hotel Square Feet Cumulative Square Feet (in GSF)	0	0	100	0	0	0	0	0	0	0	0	0
	200	200	300	300	300	300	300	300	300	300	300	300
	0	0	67,500	0	0	0	0	0	0	0	0	0
	135,000	135,000	202,500	202,500	202,500	202,500	202,500	202,500	202,500	202,500	202,500	202,500
Residential Units Total	475	475	283	481	158	158	387	137	137	375	137	92
Cumulative	1,900	2,375	2,658	3,139	3,297	3,455	3,842	3,979	4,116	4,491	4,628	4,720
Residential Units [Non Seniors] Cumulative	329	329	137	375	137	137	376	137	137	375	137	92
	1,316	1,645	1,782	2,157	2,294	2,431	2,807	2,944	3,081	3,456	3,593	3,685
Single-Family Detached (Total) Cumulative	0	0	0	0	0	0	0	0	0	0	0	0
SFD Cumulative	0 0	0	0	0	0	0	0	0 0	0 0	0	0	0 0
Townhome (Total)	68	68	68	68	68	68	68	68	68	68	68	23
Cumulative	272	340	408	476	544	612	680	748	816	884	952	975
Townhomes	68	68	68	68	68	68	68	68	68	68	68	23
Cumulative	272	340	408	476	544	612	680	748	816	884	952	975
Condominium (Total)	69	69	69	69	69	69	69	69	69	69	69	69
Cumulative	276	345	414	483	552	621	690	759	828	897	966	1,035
Condominiums	69	69	69	69	69	69	69	69	69	69	69	69
Cumulative	276	345	414	483	552	621	690	759	828	897	966	1,035
Rental Apartment (Total)	192	192	0	238	0	0	239	0	0	238	0	0
Cumulative	768	960	960	1,198	1,198	1,198	1,437	1,437	1,437	1,675	1,675	1,675
Rental Apartments	192	192	0	238	0	0	239	0	0	238	0	0
Cumulative	768	960	960	1,198	1,198	1,198	1,437	1,437	1,437	1,675	1,675	1,675
Active Adult Residential Units Total	146	146	146	106	21	21	11	0	0	0	0	0
Cumulative	584	730	876	982	1,003	1,024	1,035	1,035	1,035	1,035	1,035	1,035
AAC Townhomes	21	21	21	21	21	21	11	0	0	0	0	0
Cumulative	84	105	126	147	168	189	200	200	200	200	200	200
AAC Condominiums	35	35	35	35	0	0	0	0	0	0	0	0
Cumulative	140	175	210	245	245	245	245	245	245	245	245	245
AAC Rental Apartments	90	90	90	50	0	0	0	0	0	0	0	0
Cumulative	360	450	540	590	590	590	590	590	590	590	590	590

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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018 Year 8	2019 Year 9	2020 Year 10	2021 Year 11	2022 Year 12	2023 Year 13	2024 Year 14	2025 Year 15	2026 Year 16	2027 Year 17	2028 Year 18	2029 Year 19
UNIMPROVED LAND ASSESSMENTS												
Office (Per GBA Foot)	\$1.72	\$1.77	\$1.82	\$1.88	\$1.93	\$1.99	\$2.05	\$2.11	\$2.18	\$2.24	\$2.31	\$2.38
Retail (Per GLA Foot)	\$1.72	\$1.77	\$1.82	\$1.88	\$1.93	\$1.99	\$2.05	\$2.11	\$2.18	\$2.24	\$2.31	\$2.38
Hotel (Per Room)	\$1,160	\$1,195	\$1,230	\$1,267	\$1,305	\$1,344	\$1,385	\$1,426	\$1,469	\$1,513	\$1,559	\$1,605
Residential (Per Unit)	\$4,725	64.000	@E 040	@E 400	®E 240	@E 477	@E C40	\$5.811	©E 00E	\$6.165	ec 250	CC 540
Single-Family Detached Townhome	\$4,725 \$3,493	\$4,866 \$3,598	\$5,012 \$3,706	\$5,163 \$3,817	\$5,318 \$3,931	\$5,477 \$4,049	\$5,642 \$4,171	\$4,296	\$5,985 \$4,425	\$4,557	\$6,350 \$4,694	\$6,540 \$4,835
Condominium	\$1,784	\$1,837	\$1,892	\$1,949	\$2,008	\$2,068	\$2,130	\$2,194	\$2,260	\$2,328	\$2,397	\$2,469
Rental Apartment	\$1,720	\$1,771	\$1,825	\$1,879	\$1,936	\$1,994	\$2,054	\$2,115	\$2,179	\$2,244	\$2,311	\$2,381
IMPROVED REAL PROPERTY ASSESSMENTS												
COMMERCIAL												
Office: R&D/Lab/Applied Sciences Offices/Manuf.												
Land	\$92.24	\$95.01	\$97.86	\$100.79	\$103.82	\$106.93	\$110.14	\$113.44	\$116.85	\$120.35	\$123.96	\$127.68
Building Total	\$215.23 \$307.47	\$221.68 \$316.69	\$228.34 \$326.19	\$235.19 \$335.98	\$242.24 \$346.06	\$249.51 \$356.44	\$256.99 \$367.13	\$264.70 \$378.15	\$272.64 \$389.49	\$280.82 \$401.18	\$289.25 \$413.21	\$297.93 \$425.61
	ψ307.47	ψ310.03	ψ320.19	ψ333.90	ψ340.00	φ330.44	ψ307.13	ψ370.13	ψ309.49	\$401.10	ψ413.21	ψ423.01
Office: Science Related Educational/Academic	600.04	005.04	607.00	0400 70	# 400.00	0.100.00	0440.44	0440.44	0440.05	0400.05	Ø400.00	0407.00
Land Building	\$92.24 \$215.23	\$95.01 \$221.68	\$97.86 \$228.34	\$100.79 \$235.19	\$103.82 \$242.24	\$106.93 \$249.51	\$110.14 \$256.99	\$113.44 \$264.70	\$116.85 \$272.64	\$120.35 \$280.82	\$123.96 \$289.25	\$127.68 \$297.93
Total	\$307.47	\$316.69	\$326.19	\$335.98	\$346.06	\$356.44	\$367.13	\$378.15	\$389.49	\$401.18	\$413.21	\$425.61
Office: Incubator												
Land	\$73,79	\$76.01	\$78.29	\$80.63	\$83.05	\$85.55	\$88.11	\$90.76	\$93.48	\$96.28	\$99.17	\$102.15
Building	\$110.69	\$114.01	\$117.43	\$120.95	\$124.58	\$128.32	\$132.17	\$136.13	\$140.22	\$144.42	\$148.76	\$153.22
Total	\$184.48	\$190.02	\$195.72	\$201.59	\$207.64	\$213.86	\$220.28	\$226.89	\$233.70	\$240.71	\$247.93	\$255.36
Office: Clinical/Medical Office												
Land	\$36.90	\$38.00	\$39.14	\$40.32	\$41.53	\$42.77	\$44.06	\$45.38	\$46.74	\$48.14	\$49.59	\$51.07
Building	\$202.93	\$209.02	\$215.29	\$221.75	\$228.40	\$235.25	\$242.31	\$249.58	\$257.06	\$264.78	\$272.72	\$280.90
Total	\$239.83	\$247.02	\$254.43	\$262.06	\$269.93	\$278.02	\$286.36	\$294.95	\$303.80	\$312.92	\$322.31	\$331.97
Office: General			*****									
Land Building	\$36.90 \$159.88	\$38.00 \$164.68	\$39.14 \$169.62	\$40.32 \$174.71	\$41.53 \$179.95	\$42.77 \$185.35	\$44.06 \$190.91	\$45.38 \$196.64	\$46.74 \$202.54	\$48.14 \$208.61	\$49.59 \$214.87	\$51.07 \$221.32
Total	\$196.78	\$202.68	\$208.76	\$215.03	\$221.48	\$228.12	\$234.97	\$242.01	\$249.27	\$256.75	\$264.46	\$272.39
Date il I ifant de Taura Canta												
Retail: Lifestyle/Town Center Land	\$61.49	\$63.34	\$65.24	\$67.20	\$69.21	\$71.29	\$73.43	\$75.63	\$77.90	\$80.24	\$82.64	\$85.12
Building	\$166.03	\$171.01	\$176.14	\$181.43	\$186.87	\$192.48	\$198.25	\$204.20	\$210.33	\$216.64	\$223.13	\$229.83
Total	\$227.53	\$234.35	\$241.38	\$248.62	\$256.08	\$263.77	\$271.68	\$279.83	\$288.22	\$296.87	\$305.78	\$314.95
Retail: Restaurants												
Land	\$61.49	\$63.34	\$65.24	\$67.20	\$69.21	\$71.29	\$73.43	\$75.63	\$77.90	\$80.24	\$82.64	\$85.12
Building	\$307.47	\$316.69	\$326.19	\$335.98	\$346.06	\$356.44	\$367.13	\$378.15	\$389.49	\$401.18	\$413.21	\$425.61
Total	\$368.96	\$380.03	\$391.43	\$403.17	\$415.27	\$427.73	\$440.56	\$453.78	\$467.39	\$481.41	\$495.85	\$510.73
Retail: Movie Theater/Entertainment												
Land	\$61.49	\$63.34	\$65.24	\$67.20	\$69.21	\$71.29	\$73.43	\$75.63	\$77.90	\$80.24	\$82.64	\$85.12
Building	\$172.18	\$177.35	\$182.67	\$188.15	\$193.79	\$199.61	\$205.59	\$211.76	\$218.12	\$224.66	\$231.40	\$238.34
Total	\$233.68	\$240.69	\$247.91	\$255.34	\$263.00	\$270.89	\$279.02	\$287.39	\$296.01	\$304.89	\$314.04	\$323.46
Retail: Health Club												
Land	\$61.49	\$63.34	\$65.24	\$67.20	\$69.21	\$71.29	\$73.43	\$75.63	\$77.90	\$80.24	\$82.64	\$85.12
Building	\$61.49 \$133.00	\$63.34 \$136.68	\$65.24 \$130.48	\$67.20 \$134.30	\$69.21	\$71.29 \$1.42.59	\$73.43	\$75.63 \$151.36	\$77.90	\$80.24	\$82.64	\$85.12 \$170.24
Total	\$122.99	\$126.68	\$130.48	\$134.39	\$138.42	\$142.58	\$146.85	\$151.26	\$155.80	\$160.47	\$165.28	\$170.24
Hotel												
Land	\$24,597	\$25,335	\$26,095	\$26,878	\$27,685	\$28,515	\$29,371	\$30,252	\$31,159 \$202,536	\$32,094	\$33,057	\$34,049
Building Total	\$159,884 \$184,481	\$164,680 \$190,016	\$169,621 \$195,716	\$174,709 \$201,587	\$179,950 \$207,635	\$185,349 \$213,864	\$190,909 \$220,280	\$196,637 \$226,888	\$202,536 \$233,695	\$208,612 \$240,706	\$214,870 \$247,927	\$221,316 \$255,365
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Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
RESIDENTIAL												
SFD Average Sale Price Lot to Value Ratio	\$916,563	\$944,060	\$972,382	\$1,001,554	\$1,031,600	\$1,062,548	\$1,094,425	\$1,127,257	\$1,161,075	\$1,195,907	\$1,231,785	\$1,268,738
Land	\$256,638	\$264,337	\$272,267	\$280,435	\$288,848	\$297,514	\$306,439	\$315,632	\$325,101	\$334,854	\$344,900	\$355,247
Improvements	\$659,926	\$679,723	\$700,115	\$721,119	\$742,752	\$765,035	\$787,986	\$811,625	\$835,974	\$861,053	\$886,885	\$913,492
Townhomes Average Sale Price (wtd average at buildout) Lot to Value Ratio	\$666,284	\$686,273	\$706,861	\$728,067	\$749,909	\$772,406	\$795,578	\$819,445	\$844,029	\$869,350	\$895,430	\$922,293
Land	\$173,234	\$178,431	\$183,784	\$189,297	\$194,976	\$200,826	\$206,850	\$213,056	\$219,448	\$226,031	\$232,812	\$239,796
Improvements	\$493,050	\$507,842	\$523,077	\$538,769	\$554,932	\$571,580	\$588,728	\$606,390	\$624,581	\$643,319	\$662,618	\$682,497
Condominiums Average Sale Price Lot to Value Ratio	\$435,006	\$448,057	\$461,498	\$475,343	\$489,604	\$504,292	\$519,420	\$535,003	\$551,053	\$567,585	\$584,612	\$602,151
Land	\$95,701	\$98,572	\$101,530	\$104,576	\$107,713	\$110,944	\$114,272	\$117,701	\$121,232	\$124,869	\$128,615	\$132,473
Improvements	\$339,305	\$349,484	\$359,969	\$370,768	\$381,891	\$393,347	\$405,148	\$417,302	\$429,821	\$442,716	\$455,998	\$469,677
Rental Apartments Average Monthly Rent per Unit Average Value per Unit Land Improvements	\$1,953	\$2,012	\$2,072	\$2,134	\$2,198	\$2,264	\$2,332	\$2,402	\$2,474	\$2,548	\$2,625	\$2,703
	\$209,079	\$215,351	\$221,811	\$228,466	\$235,320	\$242,379	\$249,651	\$257,140	\$264,854	\$272,800	\$280,984	\$289,414
	\$18,448	\$19,002	\$19,572	\$20,159	\$20,764	\$21,386	\$22,028	\$22,689	\$23,370	\$24,071	\$24,793	\$25,536
	\$190,630	\$196,349	\$202,240	\$208,307	\$214,556	\$220,993	\$227,623	\$234,451	\$241,485	\$248,729	\$256,191	\$263,877
AAC Townhomes Average Sale Price Lot to Value Ratio	\$683,195	\$703,691	\$724,802	\$746,546	\$768,942	\$792,010	\$815,770	\$840,244	\$865,451	\$891,414	\$918,157	\$945,702
Land	\$191,295	\$197,033	\$202,944	\$209,033	\$215,304	\$221,763	\$228,416	\$235,268	\$242,326	\$249,596	\$257,084	\$264,796
Improvements	\$491,900	\$506,657	\$521,857	\$537,513	\$553,638	\$570,247	\$587,355	\$604,975	\$623,125	\$641,818	\$661,073	\$680,905
AAC Condominiums Average Sale Price Lot to Value Ratio	\$501,420	\$516,462	\$531,956	\$547,915	\$564,352	\$581,283	\$598,721	\$616,683	\$635,183	\$654,239	\$673,866	\$694,082
Land	\$120,341	\$123,951	\$127,669	\$131,500	\$135,445	\$139,508	\$143,693	\$148,004	\$152,444	\$157,017	\$161,728	\$166,580
Improvements	\$381,079	\$392,511	\$404,287	\$416,415	\$428,908	\$441,775	\$455,028	\$468,679	\$482,739	\$497,221	\$512,138	\$527,502
AAC Rental Apartments Average Monthly Rent Average Value per Unit Land Improvements	\$196,780	\$202,683	\$208,764	\$215,027	\$221,477	\$228,122	\$234,965	\$242,014	\$249,275	\$256,753	\$264,456	\$272,389
	\$18,448	\$19,002	\$19,572	\$20,159	\$20,764	\$21,386	\$22,028	\$22,689	\$23,370	\$24,071	\$24,793	\$25,536
	\$178,332	\$183,682	\$189,192	\$194,868	\$200,714	\$206,735	\$212,937	\$219,326	\$225,905	\$232,682	\$239,663	\$246,853



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018 Year 8	2019 Year 9	2020 Year 10	2021 Year 11	2022 Year 12	2023 Year 13	2024 Year 14	2025 Year 15	2026 Year 16	2027 Year 17	2028 Year 18	2029 Year 19
CONSTRUCTION VALUE Office: R&D/Lab/Applied Sciences Offices/Manuf.	\$11,299,466	\$11,638,450	\$11,987,604	\$12,347,232	\$12,717,649	\$13,099,178	\$13,492,153	\$13,896,918	\$14,313,826	\$14,743,240	\$15,185,538	\$15,641,104
Office: Science Related Educational/Academic	\$11,299,466	\$11,638,450	\$11,987,604	\$12,347,232	\$12,717,649	\$13,099,178	\$13,492,153	\$13,896,918	\$14,313,826	\$14,743,240	\$15,185,538	\$15,641,104
Office: Incubator	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office: Clinical/Medical Office	\$6,087,876	\$6,270,512	\$6,458,627	\$6,652,386	\$6,851,958	\$7,057,516	\$7,269,242	\$7,487,319	\$7,711,939	\$7,943,297	\$8,181,596	\$8,427,044
Office: General	\$4,796,508	\$4,940,403	\$5,088,615	\$5,241,274	\$5,398,512	\$5,560,467	\$5,727,281	\$5,899,100	\$6,076,073	\$6,258,355	\$6,446,106	\$6,639,489
Retail: Lifestyle/Town Center	\$27,395,440	\$1,539,126	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail: Restaurants	\$5,534,432	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail: Movie Theater/Entertainment	\$6,198,564	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail: Health Club	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hotel(Rooms)	\$0	\$0	\$10,177,231	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SFD	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Townhomes	\$13,746,242	\$14,158,629	\$14,583,388	\$15,020,890	\$15,471,516	\$15,935,662	\$16,413,732	\$16,906,144	\$17,413,328	\$17,935,728	\$18,473,800	\$6,435,946
Condominiums	\$9,598,938	\$9,886,906	\$10,183,513	\$10,489,019	\$10,803,689	\$11,127,800	\$11,461,634	\$11,805,483	\$12,159,647	\$12,524,437	\$12,900,170	\$13,287,175
Rental Apartments	\$15,006,429	\$15,456,622	\$0	\$20,326,601	\$0	\$0	\$22,304,751	\$0	\$0	\$24,271,024	\$0	\$0
AAC Townhomes	\$4,235,262	\$4,362,320	\$4,493,189	\$4,627,985	\$4,766,825	\$4,909,829	\$2,648,970	\$0	\$0	\$0	\$0	\$0
AAC Condominiums	\$5,468,482	\$5,632,536	\$5,801,512	\$5,975,558	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AAC Rental Apartments	\$6,580,440	\$6,777,853	\$6,981,189	\$3,994,791	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Construction Value	\$127,247,546	\$92,301,808	\$87,742,473	\$97,022,967	\$68,727,797	\$70,789,631	\$92,809,917	\$69,891,882	\$71,988,638	\$98,419,322	\$76,372,746	\$66,071,861
UNIMPROVED LAND IN INVENTORY COMMERCIAL												
Office Retail Hotel RESIDENTIAL	\$5,669,700 \$25,771 \$115,971	\$5,353,142 \$0 \$119,450	\$5,012,487 \$0 \$0	\$4,646,576 \$0 \$0	\$4,254,198 \$0 \$0	\$3,834,096 \$0 \$0	\$3,384,959 \$0 \$0	\$2,905,423 \$0 \$0	\$2,394,069 \$0 \$0	\$1,849,418 \$0 \$0	\$1,269,934 \$0 \$0	\$654,016 \$0 \$0
Single-Family Detached Townhome Condominium Rental Apartment Total Land in Inventory	\$0 \$2,860,638 \$1,664,343 \$1,955,518 \$12,291,940	\$0 \$2,626,268 \$1,523,186 \$1,514,623 \$11,136,669	\$0 \$2,375,262 \$1,372,062 \$1,395,845 \$10,155,655	\$0 \$2,106,831 \$1,210,499 \$896,461 \$8,860,366	\$0 \$1,820,157 \$1,108,279 \$923,355 \$8,105,989	\$0 \$1,514,386 \$998,836 \$951,055 \$7,298,374	\$0 \$1,230,338 \$881,830 \$488,767 \$5,985,893	\$0 \$975,136 \$756,904 \$503,430 \$5,140,893	\$0 \$703,516 \$623,689 \$518,533 \$4,239,806	\$0 \$414,720 \$481,800 \$0 \$2,745,938	\$0 \$107,964 \$330,836 \$0 \$1,708,734	\$0 \$0 \$170,380 \$0 \$824,396



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
REAL PROPERTY MARKET VALUES Non-Residential												
Office Land Inventory Improved Land Buildings Total Office Value	\$5,669,700	\$5,353,142	\$5,012,487	\$4,646,576	\$4,254,198	\$3,834,096	\$3,384,959	\$2,905,423	\$2,394,069	\$1,849,418	\$1,269,934	\$654,016
	\$52,807,709	\$74,818,608	\$98,102,634	\$122,716,364	\$148,718,626	\$176,170,580	\$205,135,803	\$235,680,387	\$267,873,023	\$301,785,105	\$337,490,826	\$375,067,284
	\$148,737,871	\$210,679,699	\$276,204,173	\$345,470,504	\$418,644,231	\$495,897,458	\$577,409,099	\$663,365,131	\$753,958,857	\$849,391,177	\$949,870,874	\$1,055,614,900
	\$207,215,280	\$290,851,449	\$379,319,294	\$472,833,444	\$571,617,056	\$675,902,134	\$785,929,862	\$901,950,941	\$1,024,225,948	\$1,153,025,700	\$1,288,631,633	\$1,431,336,200
Retail Land Inventory Improved Land Buildings Total Retail Value	\$25,771	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$30,439,378	\$32,302,637	\$33,271,716	\$34,269,868	\$35,297,964	\$36,356,903	\$37,447,610	\$38,571,038	\$39,728,169	\$40,920,014	\$42,147,615	\$43,412,043
	\$86,306,399	\$91,460,800	\$94,204,624	\$97,030,763	\$99,941,685	\$102,939,936	\$106,028,134	\$109,208,978	\$112,485,247	\$115,859,805	\$119,335,599	\$122,915,667
	\$116,771,548	\$123,763,437	\$127,476,340	\$131,300,630	\$135,239,649	\$139,296,839	\$143,475,744	\$147,780,016	\$152,213,417	\$156,779,819	\$161,483,214	\$166,327,710
Hotel Land Inventory Improved Land Buildings Total Hotel Value	\$115,971	\$119,450	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$4,919,495	\$5,067,080	\$7,828,639	\$8,063,498	\$8,305,403	\$8,554,565	\$8,811,202	\$9,075,538	\$9,347,804	\$9,628,239	\$9,917,086	\$10,214,598
	\$31,976,721	\$32,936,022	\$50,886,154	\$52,412,739	\$53,985,121	\$55,604,675	\$57,272,815	\$58,990,999	\$60,760,729	\$62,583,551	\$64,461,058	\$66,394,889
	\$37,012,187	\$38,122,553	\$58,714,793	\$60,476,237	\$62,290,524	\$64,159,240	\$66,084,017	\$68,066,538	\$70,108,534	\$72,211,790	\$74,378,143	\$76,609,488
Total Non-Residential Value	\$360,999,015	\$452,737,438	\$565,510,428	\$664,610,312	\$769,147,229	\$879,358,213	\$995,489,623	\$1,117,797,495	\$1,246,547,898	\$1,382,017,309	\$1,524,492,990	\$1,674,273,398
Residential												
Single-Family Detached Land in Inventory Improved (Land & Building) Total Single-Family Detached Value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Townhome Land Inventory Improved (Land & Building) Total Townhome Value	\$2,860,638	\$2,626,268	\$2,375,262	\$2,106,831	\$1,820,157	\$1,514,386	\$1,230,338	\$975,136	\$703,516	\$414,720	\$107,964	\$0
	\$238,617,668	\$307,220,247	\$379,724,225	\$456,301,944	\$537,132,574	\$622,402,370	\$704,147,230	\$780,993,940	\$861,817,720	\$946,788,032	\$1,036,080,927	\$1,088,376,096
	\$241,478,305	\$309,846,515	\$382,099,487	\$458,408,775	\$538,952,731	\$623,916,757	\$705,377,568	\$781,969,076	\$862,521,236	\$947,202,752	\$1,036,188,891	\$1,088,376,096
Condominium Land in Inventory Improved (Land & Building) Total Condominium Value	\$1,664,343	\$1,523,186	\$1,372,062	\$1,210,499	\$1,108,279	\$998,836	\$881,830	\$756,904	\$623,689	\$481,800	\$330,836	\$170,380
	\$190,260,503	\$244,960,398	\$302,771,052	\$363,829,880	\$408,527,420	\$455,579,364	\$505,086,751	\$557,154,560	\$611,891,859	\$669,411,956	\$729,832,557	\$793,275,924
	\$191,924,846	\$246,483,584	\$304,143,113	\$365,040,379	\$409,635,699	\$456,578,201	\$505,968,581	\$557,911,464	\$612,515,548	\$669,893,756	\$730,163,393	\$793,446,304
Rental Apartment Land in Inventory Improved (Land & Building) Total Rental Apartment Value	\$1,955,518 \$231,413,067 \$233,368,584	\$1,514,623 \$297,944,323 \$299,458,946	\$1,395,845 \$325,671,387 \$327,067,232	\$896,461 \$400,567,716 \$401,464,177	\$923,355 \$412,584,748 \$413,508,102	\$951,055 \$424,962,290 \$425,913,345	\$488,767 \$497,377,683 \$497,866,450	\$503,430 \$512,299,014 \$512,802,444	\$518,533 \$527,667,984 \$528,186,517	\$0 \$608,424,446 \$608,424,446	\$0 \$626,677,180 \$626,677,180	\$0 \$645,477,495 \$645,477,495
Total Residential Value	\$666,771,735	\$855,789,045	\$1,013,309,832	\$1,224,913,331	\$1,362,096,532	\$1,506,408,303	\$1,709,212,599	\$1,852,682,984	\$2,003,223,300	\$2,225,520,955	\$2,393,029,464	\$2,527,299,896
IMPACT ON CURRENT ASSESSMENTS OF EXISTING PROPERTIES												
initial increase subsequent increase Baseline Increase in Current Assessments Value of Current Assessments of Existing Properties Increase in Current Assessments Attributable to LifeSci Village™	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702
	\$1,513,251,760	\$1,558,649,312	\$1,605,408,792	\$1,653,571,056	\$1,703,178,187	\$1,754,273,533	\$1,806,901,739	\$1,861,108,791	\$1,916,942,055	\$1,974,450,316	\$2,033,683,826	\$2,094,694,341
	2.3%	2.3%	2.3%	4.0%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Compounded Annual Growth of Properties Above Baseline Increased Value of Current Assessments of Existing Properties	1.064	1.088	1.112	1.157	1.203	1.252	1.252	1.252	1.252	1.252	1.252	1.252
	6.37%	8.76%	11.21%	15.69%	20.34%	25.18%	25.18%	25.18%	25.18%	25.18%	25.18%	25.18%
	\$96,357,221	\$136,590,920	\$180,018,278	\$259,363,927	\$346,370,804	\$441,645,881	\$454,895,257	\$468,542,115	\$482,598,378	\$497,076,329	\$511,988,619	\$527,348,278



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
PERSONAL PROPERTY ASSESSMENT (As a % of Real Property Assessment, including improved land)												
Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office Office: General Retail: Lifestyle/Town Center Retail: Restaurants Retail: Howier Theater/Entertainment Retail: Health Club Hotel	\$46.12 \$46.12 \$27.67 \$35.97 \$29.52 \$34.13 \$55.34 \$35.05 \$18.45	\$47.50 \$47.50 \$28.50 \$37.05 \$30.40 \$35.15 \$57.00 \$36.10 \$19.00 \$28,502	\$48.93 \$48.93 \$29.36 \$38.16 \$31.31 \$36.21 \$58.71 \$37.19 \$19.57 \$29,357	\$50.40 \$50.40 \$30.24 \$39.31 \$32.25 \$37.29 \$60.48 \$38.30 \$20.16	\$51.91 \$51.91 \$31.15 \$40.49 \$33.22 \$38.41 \$62.29 \$39.45 \$20.76 \$31,145	\$53.47 \$53.47 \$32.08 \$41.70 \$34.22 \$39.56 \$64.16 \$40.63 \$21.39 \$32,080	\$55.07 \$55.07 \$33.04 \$42.95 \$35.24 \$40.75 \$66.08 \$41.85 \$22.03 \$33.042	\$56.72 \$54.03 \$44.24 \$36.30 \$41.97 \$68.07 \$43.11 \$22.69 \$34,033	\$58.42 \$58.42 \$35.05 \$45.57 \$37.39 \$43.23 \$70.11 \$44.40 \$23.37 \$35,054	\$60.18 \$60.18 \$36.11 \$46.94 \$38.51 \$44.53 \$72.21 \$45.73 \$24.07	\$61.98 \$61.98 \$37.19 \$48.35 \$39.67 \$45.87 \$74.38 \$47.11 \$24.79 \$37,189	\$63.84 \$63.84 \$38.30 \$49.80 \$40.86 \$47.24 \$76.61 \$48.52 \$25.54 \$38,305
PERSONAL PROPERTY ASSESSED VALUES Non-Residential Office Retail Hotel Total Non-Residential Personal Property Value	\$39,455,891	\$52,325,522	\$65,931,820	\$80,307,403	\$95,486,183	\$111,503,412	\$128,395,738	\$146,201,251	\$164,959,538	\$184,711,741	\$205,500,612	\$227,370,576
	\$17,511,867	\$18,564,516	\$19,121,451	\$19,695,095	\$20,285,947	\$20,894,526	\$21,521,362	\$22,167,002	\$22,832,012	\$23,516,973	\$24,222,482	\$24,949,157
	\$5,534,432	\$5,700,465	\$8,807,219	\$9,071,436	\$9,343,579	\$9,623,886	\$9,912,603	\$10,209,981	\$10,516,280	\$10,831,768	\$11,156,722	\$11,491,423
	\$62,502,190	\$76,590,503	\$93,860,490	\$109,073,933	\$125,115,709	\$142,021,824	\$159,829,702	\$178,578,234	\$198,307,830	\$219,060,482	\$240,879,816	\$263,811,155
OCCUPIED NON-RESIDENTIAL SPACE Total Non-Residential Total Space Cumulative Space	545,181	212,681	198,431	198,431	198,431	198,431	198,431	198,431	198,431	198,431	198,431	198,431
	1,154,606	1,367,288	1,565,719	1,764,150	1,962,581	2,161,013	2,359,444	2,557,875	2,756,306	2,954,738	3,153,169	3,351,600
Office Total (in GBA) Cumulative Office (in GBA)	198,431	198,431	198,431	198,431	198,431	198,431	198,431	198,431	198,431	198,431	198,431	198,431
	684,356	882,788	1,081,219	1,279,650	1,478,081	1,676,513	1,874,944	2,073,375	2,271,806	2,470,238	2,668,669	2,867,100
Office: R&D/Lab/Applied Sciences Offices/Manuf. Cumulative Office (in GBA)	58,188	58,188	58,188	58,188	58,188	58,188	58,188	58,188	58,188	58,188	58,188	58,188
	232,750	290,938	349,125	407,313	465,500	523,688	581,875	640,063	698,250	756,438	814,625	872,813
Office: Science Related Educational/Academic	62,344	62,344	62,344	62,344	62,344	62,344	62,344	62,344	62,344	62,344	62,344	62,344
Cumulative Office (in GBA)	187,031	249,375	311,719	374,063	436,406	498,750	561,094	623,438	685,781	748,125	810,469	872,813
Office: Incubator	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	30,875	30,875	30,875	30,875	30,875	30,875	30,875	30,875	30,875	30,875	30,875	30,875
Office: Clinical/Medical Office	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950
Cumulative Office (in GBA)	116,850	155,800	194,750	233,700	272,650	311,600	350,550	389,500	428,450	467,400	506,350	545,300
Office: General	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950	38,950
Cumulative Office (in GBA)	116,850	155,800	194,750	233,700	272,650	311,600	350,550	389,500	428,450	467,400	506,350	545,300
Retail Total (in GLA)	346,750	14,250	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	470,250	484,500	484,500	484,500	484,500	484,500	484,500	484,500	484,500	484,500	484,500	484,500
Retail: Lifestyle/Town Center	261,250	14,250	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	346,750	361,000	361,000	361,000	361,000	361,000	361,000	361,000	361,000	361,000	361,000	361,000
Retail: Restaurants	28,500	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	42,750	42,750	42,750	42,750	42,750	42,750	42,750	42,750	42,750	42,750	42,750	42,750
Retail: Movie Theater/Entertainment	57,000	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000
Retail: Health Club	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	23,750	23,750	23,750	23,750	23,750	23,750	23,750	23,750	23,750	23,750	23,750	23,750
Hotel Hotel Rooms Cumulative Hotel Rooms	0	0	70	0	0	0	0	0	0	0	0	0
	140	140	210	210	210	210	210	210	210	210	210	210



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
EMPLOYEES Direct Construction Jobs Construction Value Labor Hours Total Hours FTE Jobs	\$127,247,546	\$92,301,808	\$87,742,473	\$97,022,967	\$68,727,797	\$70,789,631	\$92,809,917	\$69,891,882	\$71,988,638	\$98,419,322	\$76,372,746	\$66,071,861
	8.3	8.1	7.8	7.6	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0
	1,058,595	745,510	688,043	738,658	508,000	508,000	646,623	472,766	472,766	627,517	472,766	397,089
	529	373	344	369	254	254	323	236	236	314	236	199
Total Permanent Non-Residential Jobs Total Cumulative	1,371 3,242	644 3,886	661 4,547	608 5,155	608 5,763	608 6,371	608 6,979	608 7,588	608 8,196	608 8,804	608 9,412	608 10,021
Office Total	608	608	608	608	608	608	608	608	608	608	608	608
Cumulative Office	2,094	2,702	3,310	3,918	4,527	5,135	5,743	6,351	6,959	7,568	8,176	8,784
Office: R&D/Lab/Applied Sciences Offices/Manuf. Cumulative Office	145	145	145	145	145	145	145	145	145	145	145	145
	582	727	873	1,018	1,164	1,309	1,455	1,600	1,746	1,891	2,037	2,182
Office: Science Related Educational/Academic Cumulative Office	189	189	189	189	189	189	189	189	189	189	189	189
	567	756	945	1,134	1,322	1,511	1,700	1,889	2,078	2,267	2,456	2,645
Office: Incubator	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Office	124	124	124	124	124	124	124	124	124	124	124	124
Office: Clinical/Medical Office	118	118	118	118	118	118	118	118	118	118	118	118
Cumulative Office	354	472	590	708	826	944	1,062	1,180	1,298	1,416	1,534	1,652
Office: General	156	156	156	156	156	156	156	156	156	156	156	156
Cumulative Office	467	623	779	935	1,091	1,246	1,402	1,558	1,714	1,870	2,025	2,181
Retail Total	762	36	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	1,043	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079
Retail: Lifestyle/Town Center	653	36	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	867	903	903	903	903	903	903	903	903	903	903	903
Retail: Restaurants	71	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	107	107	107	107	107	107	107	107	107	107	107	107
Retail: Movie Theater/Entertainment	38	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	38	38	38	38	38	38	38	38	38	38	38	38
Retail: Health Club	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	32	32	32	32	32	32	32	32	32	32	32	32
Hotel Hotel Rooms Cumulative Hotel	0	0	53	0	0	0	0	0	0	0	0	0
	105	105	158	158	158	158	158	158	158	158	158	158



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
OCCUPIED RESIDENTIAL HOUSEHOLDS Residential Units Cumulative	459	459	273	465	152	152	374	132	132	363	132	88
	1,836	2,295	2,567	3,032	3,184	3,336	3,711	3.842	3,974	4,336	4,468	4,556
Single-Family Detached (Total) Cumulative	0	0	0	0	0	0	0	0	0	0	0	0
SFD Cumulative	0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0
Townhome (Total)	66	66	66	66	66	66	66	66	66	66	66	22
Cumulative	265	331	397	464	530	596	662	729	795	861	927	950
Townhomes	66	66	66	66	66	66	66	66	66	66	66	22
Cumulative	265	331	397	464	530	596	662	729	795	861	927	950
Condominium (Total)	65	65	65	65	65	65	65	65	65	65	65	65
Cumulative	261	327	392	457	522	588	653	718	784	849	914	980
Condominiums	65	65	65	65	65	65	65	65	65	65	65	65
Cumulative	261	327	392	457	522	588	653	718	784	849	914	980
Rental Apartment (Total)	186	186	0	231	0	0	232	0	0	231	0	0
Cumulative	746	932	932	1,163	1,163	1,163	1,395	1,395	1,395	1,627	1,627	1,627
Rental Apartments	186	186	0	231	0	0	232	0	0	231	0	0
Cumulative	746	932	932	1,163	1,163	1,163	1,395	1,395	1,395	1,627	1,627	1,627
Active Adult Residential Units Total	141	141	141	102	20	20	11	0	0	0	0	0
Cumulative	564	705	846	948	968	989	1,000	1,000	1,000	1,000	1,000	1,000
AAC Townhomes	20	20	20	20	20	20	11	0	0	0	0	0
Cumulative	82	102	123	143	164	184	195	195	195	195	195	195
AAC Condominiums	33	33	33	33	0	0	0	0	0	0	0	0
Cumulative	132	166	199	232	232	232	232	232	232	232	232	232
AAC Rental Apartments	87	87	87	49	0	0	0	0	0	0	0	0
Cumulative	350	437	524	573	573	573	573	573	573	573	573	573



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
FULL-TIME RESIDENTIAL HOUSEHOLDS Residential Units Cumulative	318	318	132	363	132	132	364	132	132	363	132	88
	1,272	1,590	1,722	2,084	2,216	2,347	2,711	2.842	2,974	3,337	3,468	3,556
Single-Family Detached (Total) Cumulative	0	0	0	0	0	0	0	0	0	0	0	0
SFD Cumulative	0	0	0	0 0	0	0	0 0	0	0	0	0	0
Townhome (Total)	66	66	66	66	66	66	66	66	66	66	66	22
Cumulative	265	331	397	464	530	596	662	729	795	861	927	950
Townhomes	66	66	66	66	66	66	66	66	66	66	66	22
Cumulative	265	331	397	464	530	596	662	729	795	861	927	950
Condominium (Total)	65	65	65	65	65	65	65	65	65	65	65	65
Cumulative	261	327	392	457	522	588	653	718	784	849	914	980
Condominiums	65	65	65	65	65	65	65	65	65	65	65	65
Cumulative	261	327	392	457	522	588	653	718	784	849	914	980
Rental Apartment (Total)	186	186	0	231	0	0	232	0	0	231	0	0
Cumulative	746	932	932	1,163	1,163	1,163	1,395	1,395	1,395	1,627	1,627	1,627
Rental Apartments	186	186	0	231	0	0	232	0	0	231	0	0
Cumulative	746	932	932	1,163	1,163	1,163	1,395	1,395	1,395	1,627	1,627	1,627
Active Adult Residential Units Total Cumulative	141 564	141 705	141 846	102 948	20 968	20 989	11 1,000	0 1,000	0 1,000	0 1,000	1,000	1,000
AAC Townhomes	20	20	20	20	20	20	11	0	0	0	0	0
Cumulative	82	102	123	143	164	184	195	195	195	195	195	195
AAC Condominiums Cumulative	33 132	33 166	33 199	33 232	0 232	0 232	0 232	0 232	0 232	0 232	0 232	232
AAC Rental Apartments	87	87	87	49	0	0	0	0	0	0	0	0
Cumulative	350	437	524	573	573	573	573	573	573	573	573	573



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
INDIRECT/INDUCED IMPACT (County Mulitpliers) EMPLOYMENT												
Construction	393	277	256	275	189	189	240	176	176	233	176	148
Total Permanent (exc. Construction) Total Cumulative	498	377	397	371	371	371	371	371	371	371	371	371
	1,532	1,908	2,305	2,676	3,047	3,418	3,789	4,159	4,530	4,901	5,272	5,643
Office Total	371	371	371	371	371	371	371	371	371	371	371	371
Cumulative Office	1,304	1,675	2,046	2,417	2,788	3,159	3,530	3,900	4,271	4,642	5,013	5,384
Office: R&D/Lab/Applied Sciences Offices/Manuf.	104	104	104	104	104	104	104	104	104	104	104	104
Cumulative Office	415	519	622	726	830	934	1,037	1,141	1,245	1,349	1,452	1,556
Office: Science Related Educational/Academic	62	62	62	62	62	62	62	62	62	62	62	62
Cumulative Office	186	248	310	371	433	495	557	619	681	743	805	867
Office: Incubator	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Office	88	88	88	88	88	88	88	88	88	88	88	88
Office: Clinical/Medical Office	44	44	44	44	44	44	44	44	44	44	44	44
Cumulative Office	131	174	218	261	305	348	392	435	479	522	566	609
Office: General	162	162	162	162	162	162	162	162	162	162	162	162
Cumulative Office	485	647	808	970	1,132	1,293	1,455	1,617	1,778	1,940	2,102	2,264
Retail Total	127	6	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	176	182	182	182	182	182	182	182	182	182	182	182
Retail-Lifestyle Center	107	6	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	141	147	147	147	147	147	147	147	147	147	147	147
Retail-Restaurants	14	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	22	22	22	22	22	22	22	22	22	22	22	22
Retail-Theater	6	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	6	6	6	6	6	6	6	6	6	6	6	6
Retail-Health Club	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	6	6	6	6	6	6	6	6	6	6	6	6
Hotel Hotel Cumulative Hotel	0 52	0 52	26 77	0 77								
EMPLOYEE INCOME-AVERAGE WAGES PER FTE EMPLOYEE Construction	\$80,136	\$82,540	\$85,016	\$87,567	\$90,194	\$92,900	\$95,687	\$98,557	\$101,514	\$104,559	\$107,696	\$110,927
Office Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office Office: General	\$93,619	\$96,428	\$99,321	\$102,300	\$105,369	\$108,530	\$111,786	\$115,140	\$118,594	\$122,152	\$125,816	\$129,591
	\$82,468	\$84,942	\$87,490	\$90,115	\$92,818	\$95,603	\$98,471	\$101,425	\$104,468	\$107,602	\$110,830	\$114,155
	\$57,262	\$58,980	\$60,749	\$62,572	\$64,449	\$66,382	\$68,374	\$70,425	\$72,538	\$74,714	\$76,955	\$79,264
	\$116,420	\$119,912	\$123,510	\$127,215	\$131,032	\$134,963	\$139,011	\$143,182	\$147,477	\$151,902	\$156,459	\$161,152
	\$82,571	\$85,048	\$87,600	\$90,228	\$92,935	\$95,723	\$98,594	\$101,552	\$104,599	\$107,737	\$110,969	\$114,298
Retail Retail: Lifestyle/Town Center Retail: Restaurants Retail: Movie Theater/Entertainment Retail: Health Club	\$34,889	\$35,935	\$37,013	\$38,124	\$39,268	\$40,446	\$41,659	\$42,909	\$44,196	\$45,522	\$46,887	\$48,294
	\$25,256	\$26,014	\$26,794	\$27,598	\$28,426	\$29,279	\$30,157	\$31,062	\$31,994	\$32,954	\$33,942	\$34,960
	\$20,804	\$21,428	\$22,070	\$22,733	\$23,415	\$24,117	\$24,841	\$25,586	\$26,353	\$27,144	\$27,958	\$28,797
	\$22,210	\$22,876	\$23,563	\$24,270	\$24,998	\$25,748	\$26,520	\$27,316	\$28,135	\$28,979	\$29,848	\$30,744
Hotel Hotel	\$38,290	\$39,438	\$40,622	\$41,840	\$43,095	\$44,388	\$45,720	\$47,091	\$48,504	\$49,959	\$51,458	\$53,002



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
TOTAL HOUSEHOLD INCOME-INCOME PER HOUSEHOLD Residential Units												
Single-Family Detached SFD	\$274,969	\$283,218	\$291,715	\$300,466	\$309,480	\$318,764	\$328,327	\$338,177	\$348,323	\$358,772	\$369,535	\$380,621
Townhome Townhomes	\$199,885	\$205,882	\$212,058	\$218,420	\$224,973	\$231,722	\$238,673	\$245,834	\$253,209	\$260,805	\$268,629	\$276,688
Condominium Condominiums Rental Apartment	\$130,502	\$134,417	\$138,449	\$142,603	\$146,881	\$151,287	\$155,826	\$160,501	\$165,316	\$170,275	\$175,384	\$180,645
Rental Apartments	\$93,746	\$96,558	\$99,455	\$102,439	\$105,512	\$108,677	\$111,938	\$115,296	\$118,755	\$122,317	\$125,987	\$129,766
Active Adult Residential Units AAC Townhomes AAC Condominiums AAC Rental Apartments	\$170,799	\$175,923	\$181,200	\$186,636	\$192,235	\$198,003	\$203,943	\$210,061	\$216,363	\$222,854	\$229,539	\$236,425
	\$125,355	\$129,116	\$132,989	\$136,979	\$141,088	\$145,321	\$149,680	\$154,171	\$158,796	\$163,560	\$168,466	\$173,520
	\$97,406	\$100,328	\$103,338	\$106,438	\$109,631	\$112,920	\$116,308	\$119,797	\$123,391	\$127,093	\$130,906	\$134,833
POPULATION												
Residential Population Cumulative	685	685	289	779	289	289	781	289	289	779	289	169
	2,738	3,423	3,712	4,491	4,780	5,070	5,851	6,140	6,430	7,209	7,498	7,667
Single-Family Detached (Total)	2,730	0,423	0,712	0	4,700	0	0,001	0,140	0,430	0	0 0	0
Cumulative	0	0	0	0	0	0	0	0	0	0	0	0
SFD Cumulative	0	0	0	0	0	0	0	0 0	0	0	0	0
Townhome (Total)	182	182	182	182	182	182	182	182	182	182	182	62
Cumulative	729	911	1,093	1,275	1,457	1,640	1,822	2,004	2,186	2,368	2,550	2,612
Townhomes	182	182	182	182	182	182	182	182	182	182	182	62
Cumulative	729	911	1,093	1,275	1,457	1,640	1,822	2,004	2,186	2,368	2,550	2,612
Condominium (Total)	107	107	107	107	107	107	107	107	107	107	107	107
Cumulative	428	535	643	750	857	964	1,071	1,178	1,285	1,392	1,499	1,606
Condominiums	107	107	107	107	107	107	107	107	107	107	107	107
Cumulative	428	535	643	750	857	964	1,071	1,178	1,285	1,392	1,499	1,606
Rental Apartment (Total)	395	395	0	490	0	0	492	0	0	490	0	0
Cumulative	1,581	1,976	1,976	2,466	2,466	2,466	2,958	2,958	2,958	3,448	3,448	3,448
Rental Apartments	395	395	0	490	0	0	492	0	0	490	0	0
Cumulative	1,581	1,976	1,976	2,466	2,466	2,466	2,958	2,958	2,958	3,448	3,448	3,448
Active Adult Population Units Total Cumulative	240	240	240	174	35	35	18	0	0	0	0	0
	959	1,198	1,438	1,612	1,646	1,681	1,699	1,699	1,699	1,699	1,699	1,699
AAC Townhomes	35	35	35	35	35	35	18	0	0	0	0	0
Cumulative	139	174	209	243	278	313	331	331	331	331	331	331
AAC Condominiums	56	56	56	56	0	0	0	0	0	0	0	0
Cumulative	225	282	338	394	394	394	394	394	394	394	394	394
AAC Rental Apartments	149	149	149	83	0	0	0	0	0	0	0	0
Cumulative	594	743	891	974	974	974	974	974	974	974	974	974



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

PALL PRESIDENTIAL POPULATION PRESIDENTIA		2018 Year 8	2019 Year 9	2020 Year 10	2021 Year 11	2022 Year 12	2023 Year 13	2024 Year 14	2025 Year 15	2026 Year 16	2027 Year 17	2028 Year 18	2029 Year 19
Commander 1,738 1,423 3,712 4,491 4,790 5,071 5,081 5,160 5,080 7,200 7,675 7,755	FULL-TIME RESIDENTIAL POPULATION												
Spring-Energy Desiched (Torag)	Residential Population	685	685	289	779	289	289	781	289	289	779	289	169
Companies	Cumulative	2,738	3,423	3,712	4,491	4,780	5,070	5,851	6,140	6,430	7,209	7,498	7,667
Companies								•					
Complement 728								-					
Condeninium (1088)													
Condeninium (1088)	Townhomes	182	182	182	182	182	182	182	182	182	182	182	62
Considerative 428 535 643 750 867 964 1,071 1,178 1,285 1,392 1,499 1,060													
Cumulative 428 535 643 750 867 964 1,071 1,178 1,285 1,392 1,490 1,060													
Cumulative 428 535 643 750 867 964 1,071 1,178 1,285 1,392 1,490 1,060	Condensirium	407	407	407	407	407	407	407	407	407	407	407	407
Cumulative 1,581 1,976 1,976 2,466 2,466 2,466 2,568 2,958 2,958 3,448 3,448 3,448 Restal Apartments 335 1,976 1,976 2,466 2,466 2,666 2,568 2,958 2,958 3,448													
Rental Apartments													
Cumularive 1,881 1,976 1,976 1,976 2,466 2,466 2,466 2,465 2,958 2,958 2,958 3,448	Cumulative	1,581	1,976	1,976	2,466	2,466	2,466	2,958	2,958	2,958	3,448	3,448	3,448
Active Adult Residential Population Total 240 240 240 174 35 35 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Rental Apartments						0				490		
Cumulative	Cumulative	1,581	1,976	1,976	2,466	2,466	2,466	2,958	2,958	2,958	3,448	3,448	3,448
Cumulative	Active Adult Residential Population Total	240	240	240	174	35	35	18	0	0	0	0	0
Cumulative 139 174 209 243 278 313 331 331 331 331 331 331 331 331 33													
Cumulative 139 174 209 243 278 313 331 331 331 331 331 331 331 331 33	AAC Tourshames	25	25	25	25	25	25	10	0	0	0	0	0
AAC Condominiums 56 56 56 56 56 56 0 0 0 0 0 0 0 0 0 0 0													
Cumulative 225 282 338 394													
AAC Rental Apartments 149 149 149 83 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Cumulative 594 743 891 974 974 974 974 974 974 974 974 974 974													
NEW STUDENT GENERATION-PER FULL-TIME RESIDENTIAL HOUSEHO	Cumulative	225	202	336	394	394	394	394	394	394	394	394	394
Elementary Single-Family Detached 0													
Townhome 1 14 14 14 14 14 14 14 14 14 14 14 14 1	Elementary												
Multifamily Multifamily 10 <td></td>													
Middle School Single-Family Detached 0													
Townhome	Middle School												
Multifamily High School 4		-						-				-	
High School ´ Single-Family Detached 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Townhome 7<		•	•			·	•	•		•	•	·	
Multifamily 3 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													
Total Single-Family Detached 0 </td <td></td> <td>•</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		•				-							
Single-Family Detached 0		3	3	3	3	3	3	3	3	3	3	3	3
Multifamily 16 16 16 16 16 16 16 16 16 16 16 16 16	Single-Family Detached												



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018 Year 8	2019 Year 9	2020 Year 10	2021 Year 11	2022 Year 12	2023 Year 13	2024 Year 14	2025 Year 15	2026 Year 16	2027 Year 17	2028 Year 18	2029 Year 19
CUMULATIVE NEW STUDENT GENERATION												
Elementary												
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0	0
Townhome Multifamily	56 40	70 50	84 60	98 70	112 80	126 90	140 100	154 110	168 120	182 130	196 140	200 150
Middle School	40	30	00	70	80	90	100	110	120	130	140	150
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0	0
Townhome	32	40	48	57	65	73	81	89	97	105	113	116
Multifamily	15	18	22	26	29	33	37	40	44	48	51	55
High School												
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0	0
Townhome	28	35	43	50	57	64	71	78	85	92	99	102
Multifamily	10	13	15	18	20	23	25	28	31	33	36	38
Total												
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0	0
Townhome	117	146	175	204	233	262	291	321	350	379	408	418
Multifamily Total Cumulative Students	65 181	81 227	97 272	113 317	130 363	146 408	162 453	178 499	194 544	211 589	227 635	243 661
Total Cumulative Students	101	221	212	317	363	408	453	499	544	269	635	001
HOTEL ROOM REVENUES												
Hotel Room Nights	51,100	51,100	76,650	76,650	76,650	76,650	76,650	76,650	76,650	76,650	76,650	76,650
Total Room Revenues	\$10,369,681	\$10,680,772	\$16,501,793	\$16,996,846	\$17,506,752	\$18,031,954	\$18,572,913	\$19,130,100	\$19,704,003	\$20,295,124	\$20,903,977	\$21,531,097
ADMISSIONS & AMUSEMENTS												
Movie Screens	19	19	19	19	19	19	19	19	19	19	19	19
Theater Sales-Tickets	\$6,036,110	\$6,217,194	\$6,403,709	\$6,595,821	\$6,793,695	\$6,997,506	\$7,207,431	\$7,423,654	\$7,646,364	\$7,875,755	\$8,112,028	\$8,355,388
Theater dates Tiolets	ψ0,000,110	ψ0,217,104	ψ0,400,703	ψ0,000,021	ψ0,730,030	ψ0,557,500	ψ1,201,401	ψ1,420,004	φ1,040,004	ψ1,010,100	ψ0,112,020	ψο,οοο,οοο
EMPLOYEE INCOME												
Total Construction Income	\$42,415,849	\$30,767,269	\$29,247,491	\$32,340,989	\$22,909,266	\$23,596,544	\$30,936,639	\$23,297,294	\$23,996,213	\$32,806,441	\$25,457,582	\$22,023,954
Office												
Office: R&D/Lab/Applied Sciences Offices/Manuf.	\$54,474,689	\$70,136,162	\$86,688,296	\$104,170,435	\$122,623,484	\$142.089.962	\$162,614,068	\$184,241,739	\$207,020,717	\$231,000,617	\$256,232,992	\$282,771,409
Office: Science Related Educational/Academic	\$46,739,655	\$64,189,126	\$82,643,499	\$102,147,365	\$122,747,084	\$144,490,853	\$167,428,776	\$191.612.933	\$217,097,453	\$243,938,592	\$272,194,813	\$301.926.861
Office: Incubator	\$7,071,846	\$7,284,002	\$7,502,522	\$7,727,597	\$7,959,425	\$8,198,208	\$8,444,154	\$8,697,479	\$8,958,403	\$9,227,155	\$9,503,970	\$9,789,089
Office: Clinical/Medical Office	\$41,223,214	\$56,613,214	\$72,889,513	\$90,091,438	\$108,259,878	\$127,437,342	\$147,668,020	\$168,997,846	\$191,474,559	\$215,147,777	\$240,069,061	\$266,291,990
Office: General	\$38,593,812	\$53,002,169	\$68,240,293	\$84,345,002	\$101,354,577	\$119,308,816	\$138,249,091	\$158,218,404	\$179,261,452	\$201,424,686	\$224,756,378	\$249,306,690
Retail												
Retail: Lifestyle/Town Center	\$30,244,136	\$32,431,657	\$33,404,606	\$34,406,745	\$35,438,947	\$36,502,115	\$37,597,179	\$38,725,094	\$39,886,847	\$41,083,452	\$42,315,956	\$43,585,435
Retail: Restaurants	\$2,699,256	\$2,780,234	\$2,863,641	\$2,949,550	\$3,038,037	\$3,129,178	\$3,223,053	\$3,319,745	\$3,419,337	\$3,521,917	\$3,627,575	\$3,736,402
Retail: Movie Theater/Entertainment	\$790,535	\$814,251	\$838,679	\$863,839	\$889,755	\$916,447	\$943,941	\$972,259	\$1,001,427	\$1,031,469	\$1,062,413	\$1,094,286
Retail: Health Club	\$703,318	\$724,418	\$746,150	\$768,535	\$791,591	\$815,338	\$839,799	\$864,993	\$890,942	\$917,671	\$945,201	\$973,557
Hotel												
Hotel	\$4,020,415	\$4,141,027	\$6,397,887	\$6,589,823	\$6,787,518	\$6,991,144	\$7,200,878	\$7,416,904	\$7,639,411	\$7,868,594	\$8,104,652	\$8.347.791
	ψ.,525,415	ψ.,,oz/	40,001,001	ψ0,000,020	ψο,. ο. ,ο το	ψο,σοι,	ψ.,200,010	ψ.,ο,οοτ	ψ.,οοο,	ψ.,000,004	ψ0,101,302	ψο,ο ,. σ ι
Total Employee Income	\$268,976,724	\$322,883,528	\$391,462,576	\$466,401,319	\$532,799,561	\$613,475,948	\$705,145,597	\$786,364,688	\$880,646,761	\$987,968,371	\$1,084,270,592	\$1,189,847,463
% In State	\$234,009,750	\$280,908,669	\$340,572,442	\$405,769,147	\$463,535,618	\$533,724,074	\$613,476,669	\$684,137,278	\$766,162,682	\$859,532,483	\$943,315,415	\$1,035,167,293
% of State in Montgomery County	\$140,405,850	\$168,545,201	\$204,343,465	\$243,461,488	\$278,121,371	\$320,234,445	\$368,086,002	\$410,482,367	\$459,697,609	\$515,719,490	\$565,989,249	\$621,100,376



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19
DIRECT TAX REVENUES: MONTGOMERY COUNTY												
Real Property Tax Revenues												
Office Market Value	\$207,215,280	\$290,851,449	\$379,319,294	\$472,833,444	\$571,617,056	\$675,902,134	\$785,929,862	\$901,950,941	\$1,024,225,948	\$1,153,025,700	\$1,288,631,633	\$1,431,336,200
Prior Year Market Value Subject To Tax	\$187,906,995	\$207,215,280	\$290,851,449	\$379,319,294	\$472,833,444	\$571,617,056	\$675,902,134	\$785,929,862	\$901,950,941	\$1,024,225,948	\$1,153,025,700	\$1,288,631,633
Total Office Real Property Tax Revenues	\$1,646,065	\$1,815,206	\$2,547,859	\$3,322,837	\$4,142,021	\$5,007,365	\$5,920,903	\$6,884,746	\$7,901,090	\$8,972,219	\$10,100,505	\$11,288,413
Retail Market Value	\$116,771,548	\$123,763,437	\$127,476,340	\$131,300,630	\$135,239,649	\$139,296,839	\$143,475,744	\$147,780,016	\$152,213,417	\$156,779,819	\$161,483,214	\$166,327,710
Prior Year Market Value Subject To Tax	\$28,873,196	\$116,771,548	\$123,763,437	\$127,476,340	\$131,300,630	\$135,239,649	\$139,296,839	\$143,475,744	\$147,780,016	\$152,213,417	\$156,779,819	\$161,483,214
Total Retail Real Property Tax Revenues	\$252,929	\$1,022,919	\$1,084,168	\$1,116,693	\$1,150,194	\$1,184,699	\$1,220,240	\$1,256,848	\$1,294,553	\$1,333,390	\$1,373,391	\$1,414,593
Hotel Assessed Value	\$37,012,187	\$38,122,553	\$58,714,793	\$60,476,237	\$62,290,524	\$64,159,240	\$66,084,017	\$68,066,538	\$70,108,534	\$72,211,790	\$74,378,143	\$76,609,488
Prior Year Market Value Subject To Tax	\$35,934,162	\$37,012,187	\$38,122,553	\$58,714,793	\$60,476,237	\$62,290,524	\$64,159,240	\$66,084,017	\$68,066,538	\$70,108,534	\$72,211,790	\$74,378,143
Total Hotel Real Property Tax Revenues	\$314,783	\$324,227	\$333,954	\$514,342	\$529,772	\$545,665	\$562,035	\$578,896	\$596,263	\$614,151	\$632,575	\$651,553
Residential Market Value	\$666,771,735	\$855,789,045	\$1,013,309,832	\$1,224,913,331	\$1,362,096,532	\$1,506,408,303	\$1,709,212,599	\$1,852,682,984	\$2,003,223,300	\$2,225,520,955	\$2,393,029,464	\$2,527,299,896
Prior Year Market Value Subject To Tax	\$488,039,146	\$666,771,735	\$855,789,045	\$1,013,309,832	\$1,224,913,331	\$1,362,096,532	\$1,506,408,303	\$1,709,212,599	\$1,852,682,984	\$2,003,223,300	\$2,225,520,955	\$2,393,029,464
Total Residential Real Property Tax Revenues	\$4,275,223	\$5,840,920	\$7,496,712	\$8,876,594	\$10,730,241	\$11,931,966	\$13,196,137	\$14,972,702	\$16,229,503	\$17,548,236	\$19,495,564	\$20,962,938
Total Real Property Tax Revenues	\$6,489,001	\$9,003,272	\$11,462,692	\$13,830,465	\$16,552,227	\$18,669,695	\$20,899,315	\$23,693,191	\$26,021,409	\$28,467,996	\$31,602,035	\$34,317,497
Real Property Tax Revenues from Surrounding Area												
Increase in Value of Current Assessments	\$96,357,221	\$136,590,920	\$180,018,278	\$259,363,927	\$346,370,804	\$441,645,881	\$454,895,257	\$468,542,115	\$482,598,378	\$497,076,329	\$511,988,619	\$527,348,278
Prior Year Market Value Subject To Tax	\$59,126,733	\$96,357,221	\$136,590,920	\$180,018,278	\$259,363,927	\$346,370,804	\$441,645,881	\$454,895,257	\$468,542,115	\$482,598,378	\$497,076,329	\$511,988,619
Total Increase in Real Property Tax Revenues	\$517,950	\$844,089	\$1,196,536	\$1,576,960	\$2,272,028	\$3,034,208	\$3,868,818	\$3,984,882	\$4,104,429	\$4,227,562	\$4,354,389	\$4,485,020
Total Real Property Tax Revenues from Surrounding Area	\$517,950	\$844,089	\$1,196,536	\$1,576,960	\$2,272,028	\$3,034,208	\$3,868,818	\$3,984,882	\$4,104,429	\$4,227,562	\$4,354,389	\$4,485,020
Personal Property Tax Revenues												
Office Personal Property Market Value Total Office Personal Property Taxes	\$39,455,891	\$52,325,522	\$65,931,820	\$80,307,403	\$95,486,183	\$111,503,412	\$128,395,738	\$146,201,251	\$164,959,538	\$184,711,741	\$205,500,612	\$227,370,576
	\$864,873	\$1,146,975	\$1,445,225	\$1,760,338	\$2,093,057	\$2,444,155	\$2,814,435	\$3,204,731	\$3,615,913	\$4,048,881	\$4,504,573	\$4,983,963
Retail Personal Property Market Value	\$17,511,867	\$18,564,516	\$19,121,451	\$19,695,095	\$20,285,947	\$20,894,526	\$21,521,362	\$22,167,002	\$22,832,012	\$23,516,973	\$24,222,482	\$24,949,157
Total Retail Personal Property Taxes	\$383,860	\$406,934	\$419,142	\$431,716	\$444,668	\$458,008	\$471,748	\$485,901	\$500,478	\$515,492	\$530,957	\$546,886
Hotel Personal Property Assessed Value	\$5,534,432	\$5,700,465	\$8,807,219	\$9,071,436	\$9,343,579	\$9,623,886	\$9,912,603	\$10,209,981	\$10,516,280	\$10,831,768	\$11,156,722	\$11,491,423
Total Hotel Personal Property Taxes	\$121,315	\$124,954	\$193,054	\$198,846	\$204,811	\$210,956	\$217,284	\$223,803	\$230,517	\$237,432	\$244,555	\$251,892
Total Personal Property Taxes	\$1,370,048	\$1,678,864	\$2,057,422	\$2,390,901	\$2,742,536	\$3,113,118	\$3,503,467	\$3,914,435	\$4,346,908	\$4,801,806	\$5,280,086	\$5,782,741



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018 Year 8	2019 Year 9	2020 Year 10	2021 Year 11	2022 Year 12	2023 Year 13	2024 Year 14	2025 Year 15	2026 Year 16	2027 Year 17	2028 Year 18	2029 Year 19
Income Tax Revenues												
Employee Income Tax Revenues												
Total Construction Income	\$42,415,849	\$30,767,269	\$29,247,491	\$32,340,989	\$22,909,266	\$23,596,544	\$30,936,639	\$23,297,294	\$23,996,213	\$32,806,441	\$25,457,582	\$22,023,954
Office												
Office: R&D/Lab/Applied Sciences Offices/Manuf.	\$54,474,689	\$70,136,162	\$86,688,296	\$104,170,435	\$122,623,484	\$142,089,962	\$162,614,068	\$184,241,739	\$207,020,717	\$231,000,617	\$256,232,992	\$282,771,409
Office: Science Related Educational/Academic Office: Incubator	\$46,739,655 \$7.071,846	\$64,189,126 \$7,284,002	\$82,643,499 \$7,502,522	\$102,147,365 \$7,727,597	\$122,747,084 \$7,959,425	\$144,490,853 \$8,198,208	\$167,428,776 \$8,444,154	\$191,612,933 \$8.697,479	\$217,097,453 \$8.958.403	\$243,938,592 \$9,227,155	\$272,194,813 \$9,503,970	\$301,926,861 \$9,789,089
Office: Clinical/Medical Office	\$41,223,214	\$56,613,214	\$72,889,513	\$90,091,438	\$108,259,878	\$127,437,342	\$147,668,020	\$168,997,846	\$191,474,559	\$215,147,777	\$240,069,061	\$266,291,990
Office: General	\$38,593,812	\$53,002,169	\$68,240,293	\$84,345,002	\$101,354,577	\$119,308,816	\$138,249,091	\$158,218,404	\$179,261,452	\$201,424,686	\$224,756,378	\$249,306,690
Retail												
Retail: Lifestyle/Town Center	\$30,244,136	\$32,431,657	\$33,404,606	\$34,406,745	\$35,438,947	\$36,502,115	\$37,597,179	\$38,725,094	\$39,886,847	\$41,083,452	\$42,315,956	\$43,585,435
Retail: Restaurants Retail: Movie Theater/Entertainment	\$2,699,256 \$790,535	\$2,780,234 \$814,251	\$2,863,641 \$838,679	\$2,949,550 \$863,839	\$3,038,037 \$889,755	\$3,129,178 \$916,447	\$3,223,053 \$943,941	\$3,319,745 \$972,259	\$3,419,337 \$1,001,427	\$3,521,917 \$1,031,469	\$3,627,575 \$1,062,413	\$3,736,402 \$1,094,286
Retail: Health Club	\$703,318	\$724,418	\$746,150	\$768,535	\$791.591	\$815,338	\$839,799	\$864,993	\$890,942	\$917,671	\$945,201	\$973.557
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Hotel												
Hotel	\$4,020,415	\$4,141,027	\$6,397,887	\$6,589,823	\$6,787,518	\$6,991,144	\$7,200,878	\$7,416,904	\$7,639,411	\$7,868,594	\$8,104,652	\$8,347,791
Total Employee Income % In State	\$299,220,860 \$260,322,148	\$355,315,184 \$309,124,210	\$424,867,183 \$369.634.449	\$500,808,063 \$435,703,015	\$568,238,508 \$494,367,502	\$649,978,063 \$565,480,915	\$742,742,776 \$646,186,215	\$825,089,782 \$717.828.110	\$920,533,607 \$800,864,238	\$1,029,051,823 \$895,275,086	\$1,126,586,548 \$980,130,297	\$1,233,432,898 \$1,073,086,621
% of State in Montgomery County	\$156,193,289	\$185,474,526	\$221,780,669	\$261,421,809	\$296,620,501	\$339,288,549	\$387,711,729	\$430,696,866	\$480,518,543	\$537,165,052	\$588,078,178	\$643,851,973
·												
Net Taxable Income	\$117,144,967	\$139,105,895	\$166,335,502	\$196,066,357	\$222,465,376	\$254,466,412	\$290,783,797	\$323,022,650	\$360,388,907	\$402,873,789	\$441,058,634	\$482,888,979
County Employee Income Tax Revenues	\$3,748,639	\$4,451,389	\$5,322,736	\$6,274,123	\$7,118,892	\$8,142,925	\$9,305,081	\$10,336,725	\$11,532,445	\$12,891,961	\$14,113,876	\$15,452,447
Household Income Tax Revenue												
Total Full-time Household Income Net Taxable Income	\$221,606,696 \$166,205,022	\$285,318,622 \$213.988.966	\$334,110,543 \$250.582.907	\$405,114,271 \$303.835.703	\$445,695,316 \$334,271,487	\$488,346,621 \$366,259,966	\$557,148,651 \$417,861,488	\$600,629,286 \$450,471,965	\$646,217,326 \$484.662,995	\$722,269,881 \$541,702,411	\$773,186,101 \$579.889.576	\$814,377,584 \$610,783,188
Total Taxable Household Income	\$166,205,022	\$213,988,966	\$250,582,907	\$303,835,703	\$334,271,487	\$366,259,966	\$417,861,488	\$450,471,965	\$484,662,995	\$541,702,411	\$579,889,576	\$610,783,188
County Householder Income Tax Revenues	\$5,318,561	\$6,847,647	\$8,018,653	\$9,722,743	\$10,696,688	\$11,720,319	\$13,371,568	\$14,415,103	\$15,509,216	\$17,334,477	\$18,556,466	\$19,545,062
Total County Income Tax	\$9,067,200	\$11,299,036	\$13,341,389	\$15,996,866	\$17,815,580	\$19,863,244	\$22,676,649	\$24,751,828	\$27,041,661	\$30,226,438	\$32,670,343	\$34,997,509
Recordation Fees and Transfer Tax												
Values												
Single-Family Detached Value (under \$500K)	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Single-Family Detached Value (over \$500K) Townhome Value (under \$500K)	\$44.500.000	\$44,500,000	\$44.500.000	\$44,500,000	\$44.500.000	\$44.500.000	\$39,500,000	\$34.000.000	\$34.000.000	\$34.000.000	\$34.000.000	\$11.500.000
Townhome Value (over \$500K)	\$15,154,417	\$16,944,049	\$18,787,371	\$20,685,992	\$22,641,572	\$24,655,819	\$23,572,789	\$21,722,293	\$23,393,962	\$25,115,781	\$26,889,254	\$9,712,742
Condominium Value (under \$500K)	\$44,065,441	\$44,965,904	\$45,893,381	\$46,848,682	\$30,332,643	\$34,500,000	\$34,500,000	\$34,500,000	\$34,500,000	\$34,500,000	\$34,500,000	\$34,500,000
Condominium Value (over \$500K)	\$49,685	\$576,176	\$1,118,461	\$1,677,015	\$0	\$296,122	\$1,340,006	\$2,415,206	\$3,522,662	\$4,663,342	\$5,838,242	\$7,048,390
Total New For-Sale Value Total Resale (under \$500K)	\$103,769,543 \$27,329,138	\$106,986,129 \$37,423,745	\$110,299,213 \$48,099,693	\$113,711,689 \$59,382,777	\$97,474,215 \$71,299,818	\$103,951,941 \$81,878,462	\$98,912,795 \$93,335,329	\$92,637,499 \$104,699,596	\$95,416,624 \$115,861,454	\$98,279,123 \$127,598,793	\$101,227,496 \$139,936,098	\$62,761,131 \$152,898,803
Total New Units	475	475	283	481	158	158	387	137	137	375	137	92
Total Resale Units	71	95	119	143	163	176	190	202	214	225	237	248
Recordation Fees (Only General Fund)												
Recordation Fees New Home Sales	\$763,143	\$792,517	\$822,773	\$853,936	\$742,761	\$794,619	\$759,728	\$714,025	\$741,816	\$770,441	\$799,925	\$485,011
Recordation Fees Resales	\$188,571	\$258,224	\$331,888	\$409,741	\$491,969	\$564,961	\$644,014	\$722,427	\$799,444	\$880,432	\$965,559	\$1,055,002
Recordation Fees Total Transfer Fees	\$951,714	\$1,050,741	\$1,154,661	\$1,263,677	\$1,234,730	\$1,359,581	\$1,403,742	\$1,436,452	\$1,541,260	\$1,650,873	\$1,765,484	\$1,540,013
Total For-Sale Value	\$103,769,543	\$106.986.129	\$110.299.213	\$113.711.689	\$97.474.215	\$103.951.941	\$98.912.795	\$92.637.499	\$95.416.624	\$98.279.123	\$101.227.496	\$62.761.131
Other transfers	\$27,329,138	\$37,423,745	\$48,099,693	\$59,382,777	\$71,299,818	\$81,878,462	\$93,335,329	\$104,699,596	\$115,861,454	\$127,598,793	\$139,936,098	\$152,898,803
Total Transfer Value	\$131,098,681	\$144,409,874	\$158,398,906	\$173,094,467	\$168,774,033	\$185,830,403	\$192,248,124	\$197,337,095	\$211,278,077	\$225,877,916	\$241,163,595	\$215,659,934
Transfer Tax Total	\$1,310,987	\$1,444,099	\$1,583,989	\$1,730,945	\$1,687,740	\$1,858,304	\$1,922,481	\$1,973,371	\$2,112,781	\$2,258,779	\$2,411,636	\$2,156,599
Total Recordation & Transfer Tax	\$2,262,700	\$2,494,840	\$2,738,650	\$2,994,622	\$2,922,470	\$3,217,885	\$3,326,223	\$3,409,823	\$3,654,041	\$3,909,652	\$4,177,120	\$3,696,612



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	2018 Year 8	2019 Year 9	2020 Year 10	2021 Year 11	2022 Year 12	2023 Year 13	2024 Year 14	2025 Year 15	2026 Year 16	2027 Year 17	2028 Year 18	2029 Year 19
Hotel Room Tax												
Room Revenues Total Hotel Room Tax	\$10,369,681 \$725,878	\$10,680,772 \$747,654	\$16,501,793 \$1,155,125	\$16,996,846 \$1,189,779	\$17,506,752 \$1,225,473	\$18,031,954 \$1,262,237	\$18,572,913 \$1,300,104	\$19,130,100 \$1,339,107	\$19,704,003 \$1,379,280	\$20,295,124 \$1,420,659	\$20,903,977 \$1,463,278	\$21,531,097 \$1,507,177
Admissions Tax	, ,,,,	, ,,,,,	.,,	, , ,	., ., .	. , . , .	, ,,	. ,,	. 7	., .,	.,,	, ,,,,
Theater Ticket Sales	\$422,528	\$435,204	\$448,260	\$461,707	\$475,559	\$489,825	\$504,520	\$519,656	\$535,245	\$551,303	\$567,842	\$584,877
Total Admissions Tax	\$29,577	\$30,464	\$31,378	\$32,320	\$33,289	\$34,288	\$35,316	\$36,376	\$37,467	\$38,591	\$39,749	\$40,941
Impact Taxes												
School Impact Tax - New Dwelling Units Inflation Rate SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking)	1.230 \$0 \$1,380,169 \$0 \$375,257	1.267 \$0 \$1,421,574 \$0 \$386,514	1.305 \$0 \$1,464,222 \$0 \$398,110	1.344 \$0 \$1,508,148 \$0 \$410,053	1.384 \$0 \$1,553,393 \$0 \$422,355	1.426 \$0 \$1,599,995 \$0 \$435,025	1.469 \$0 \$1,647,994 \$0 \$448,076	1.513 \$0 \$1,697,434 \$0 \$461,518	1.558 \$0 \$1,748,357 \$0 \$475,364	1.605 \$0 \$1,800,808 \$0 \$489,625	1.653 \$0 \$627,370 \$0 \$504,314	1.702 \$0 \$0 \$0 \$0 \$519,443
Multifamily (High-rise w/parking) AAC (All) Total School Impact Tax - New Dwelling Units	\$0 \$0 \$1,755,426	\$0 \$0 \$1,808,089	\$0 \$0 \$1,862,331	\$0 \$0 \$1,918,201	\$0 \$0 \$1,975,747	\$0 \$0 \$2,035,020	\$0 \$0 \$2,096,070	\$0 \$0 \$2,158,953	\$0 \$0 \$2,223,721	\$0 \$0 \$2,290,433	\$0 \$0 \$1,131,683	\$0 \$0 \$519,443
Transportation Impact Tax Inflation Rate SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All)	1.230 \$0 \$390,475 \$0 \$220,045 \$0 \$179,802	1.267 \$0 \$402,189 \$0 \$226,647 \$0 \$185,197	1.305 \$0 \$414,255 \$0 \$233,446 \$0 \$138,195	1.344 \$0 \$426,683 \$0 \$240,449 \$0 \$28,511	1.384 \$0 \$439,483 \$0 \$247,663 \$0 \$29,367	1.426 \$0 \$452,668 \$0 \$255,093 \$0 \$15,844	1.469 \$0 \$466,248 \$0 \$262,746 \$0	1.513 \$0 \$480,235 \$0 \$270,628 \$0 \$0	1.558 \$0 \$494,642 \$0 \$278,747 \$0 \$0	1.605 \$0 \$509,481 \$0 \$287,109 \$0 \$0	1.653 \$0 \$177,494 \$0 \$295,723 \$0	1.702 \$0 \$0 \$0 \$304,594 \$0 \$0
Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax	\$639,534 \$279,796 \$0 \$85,784 \$0 \$1,795,437	\$658,720 \$288,190 \$0 \$0 \$222,318 \$1,983,261	\$678,482 \$296,836 \$0 \$0 \$0 \$0 \$0	\$698,837 \$305,741 \$0 \$0 \$0 \$0 \$0	\$719,802 \$314,913 \$0 \$0 \$0 \$0 \$1,751,228	\$741,396 \$324,361 \$0 \$0 \$0 \$0 \$1,789,361	\$763,638 \$334,091 \$0 \$0 \$0 \$0 \$1,826,722	\$786,547 \$344,114 \$0 \$0 \$0 \$0 \$1,881,524	\$810,143 \$354,438 \$0 \$0 \$0 \$1,937,970	\$834,447 \$365,071 \$0 \$0 \$0 \$0 \$1,996,109	\$859,481 \$376,023 \$0 \$0 \$0 \$0 \$0	\$885,265 \$387,304 \$0 \$0 \$0 \$1,577,163
Total Impact Taxes	\$3,550,863	\$3,791,350	\$3,623,546	\$3,618,422	\$3,726,975	\$3,824,381	\$3,922,793	\$4,040,477	\$4,161,691	\$4,286,542	\$2,840,404	\$2,096,606
Miscellaneous Revenues												
Per Employee Total Employees Total Misc. Revenue-Employees	3,242 \$882,103	3,886 \$1,089,000	4,547 \$1,312,389	5,155 \$1,532,591	5,763 \$1,764,825	6,371 \$2,009,613	6,979 \$2,267,500	7,588 \$2,539,052	8,196 \$2,824,856	8,804 \$3,125,523	9,412 \$3,441,688	10,021 \$3,774,010
Per Resident Cumulative Full-Time Residents Misc. Rev: Full-Time Residents Total Misc. Revenue-Residents Total Misc. Revenues	3,697 \$1,016,031 \$1,016,031 \$1,898,134	4,621 \$1,308,140 \$1,308,140 \$2,397,140	5,150 \$1,501,609 \$1,501,609 \$2,813,997	6,103 \$1,832,827 \$1,832,827 \$3,365,418	6,427 \$1,988,051 \$1,988,051 \$3,752,875	6,751 \$2,150,938 \$2,150,938 \$4,160,551	7,550 \$2,477,845 \$2,477,845 \$4,745,345	7,840 \$2,649,958 \$2,649,958 \$5,189,010	8,129 \$2,830,168 \$2,830,168 \$5,655,024	8,908 \$3,194,511 \$3,194,511 \$6,320,034	9,197 \$3,397,190 \$3,397,190 \$6,838,878	9,366 \$3,563,291 \$3,563,291 \$7,337,300
DIRECT TOTAL REVENUES: MONTGOMERY COUNTY TOTAL REVENUES	\$25,911,351	\$32,286,709	\$38,420,736	\$44,995,753	\$51,043,453	\$57,179,607	\$64,278,030	\$70,359,129	\$76,401,909	\$83,699,279	\$89,266,281	\$94,261,404
REVENUE SUMMARY Real Property Tax Revenues Real Property Tax Revenues from Surrounding Area Personal Property Tax Revenues Income Tax Revenues Recordation Fees and Transfer Tax Hotel Room Tax Admissions Tax Impact Taxes Miscellaneous Revenues	\$6,489,001 \$517,950 \$1,370,048 \$9,067,200 \$2,262,700 \$725,878 \$29,577 \$3,550,863 \$1,898,134	\$9,003,272 \$844,089 \$1,678,864 \$11,299,036 \$2,494,840 \$747,654 \$30,464 \$3,791,350 \$2,397,140	\$11,462,692 \$1,196,536 \$2,057,422 \$13,341,389 \$2,738,650 \$1,155,125 \$31,378 \$3,623,546 \$2,813,997	\$13,830,465 \$1,576,960 \$2,390,901 \$15,996,866 \$2,994,622 \$1,189,779 \$32,320 \$3,618,422 \$3,365,418	\$16,552,227 \$2,272,028 \$2,742,536 \$17,815,580 \$2,922,470 \$1,225,473 \$33,289 \$3,726,975 \$3,752,875	\$18,669,695 \$3,034,208 \$3,113,118 \$19,863,244 \$3,217,885 \$1,262,237 \$34,288 \$3,824,381 \$4,160,551	\$20,899,315 \$3,868,818 \$3,503,467 \$22,676,649 \$3,326,223 \$1,300,104 \$35,316 \$3,922,793 \$4,745,345	\$23,693,191 \$3,984,882 \$3,914,435 \$24,751,828 \$3,409,823 \$1,339,107 \$36,376 \$4,040,477 \$5,189,010	\$26,021,409 \$4,104,429 \$4,346,908 \$27,041,661 \$3,654,041 \$1,379,280 \$37,467 \$4,161,691 \$5,655,024	\$28,467,996 \$4,227,562 \$4,801,806 \$30,226,438 \$3,909,652 \$1,420,659 \$38,591 \$4,286,542 \$6,320,034	\$31,602,035 \$4,354,389 \$5,280,086 \$32,670,343 \$4,177,120 \$1,463,278 \$39,749 \$2,840,404 \$6,838,878	\$34,317,497 \$4,485,020 \$5,782,741 \$34,997,509 \$3,696,612 \$1,507,177 \$40,941 \$2,096,606 \$7,337,300

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	2018 Year 8	2019 Year 9	2020 Year 10	2021 Year 11	2022 Year 12	2023 Year 13	2024 Year 14	2025 Year 15	2026 Year 16	2027 Year 17	2028 Year 18	2029 Year 19
DIRECT EXPENDITURES: MONTGOMERY COUNTY												
Non-Educational Operating Expenditures												
Per Employee Total Employees Total Operating Expenditures- Employee	3,242 \$2,159,208	3,886 \$2,665,650	4,547 \$3,212,458	5,155 \$3,751,469	5,763 \$4,319,929	6,371 \$4,919,120	6,979 \$5,550,375	7,588 \$6,215,078	8,196 \$6,914,667	8,804 \$7,650,639	9,412 \$8,424,546	10,021 \$9,238,001
Per Resident Cumulative Full-Time Residents Misc. Rev: Full-Time Residents	3,697 \$3,424,442	4,621 \$4,408,970	5,150 \$5,061,040	6,103 \$6,177,383	6,427 \$6,700,550	6,751 \$7,249,547	7,550 \$8,351,359	7,840 \$8,931,451	8,129 \$9,538,832	8,908 \$10,766,817	9,197 \$11,449,931	9,366 \$12,009,758
Total Operating Expenditures	\$5,583,650	\$7,074,619	\$8,273,498	\$9,928,851	\$11,020,478	\$12,168,667	\$13,901,734	\$15,146,529	\$16,453,499	\$18,417,456	\$19,874,476	\$21,247,759
Non-Educational Capital Expenditures												
Transportation Inflation Rate SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All)	1.230 \$0 \$390,475 \$0 \$220,045 \$0 \$179,802	1.267 \$0 \$402,189 \$0 \$226,647 \$0 \$185,197	1.305 \$0 \$414,255 \$0 \$233,446 \$0 \$138,195	1.344 \$0 \$426,683 \$0 \$240,449 \$0 \$28,511	1.384 \$0 \$439,483 \$0 \$247,663 \$0 \$29,367	1.426 \$0 \$452,668 \$0 \$255,093 \$0 \$15,844	1.469 \$0 \$466,248 \$0 \$262,746 \$0 \$0	1.513 \$0 \$480,235 \$0 \$270,628 \$0 \$0	1.558 \$0 \$494,642 \$0 \$278,747 \$0 \$0	1.605 \$0 \$509,481 \$0 \$287,109 \$0 \$0	1.653 \$0 \$177,494 \$0 \$295,723 \$0 \$0	1.702 \$0 \$0 \$0 \$0 \$304,594 \$0 \$0
Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax	\$639,534 \$279,796 \$0 \$85,784 \$0 \$1,795,437	\$658,720 \$288,190 \$0 \$0 \$222,318 \$1,983,261	\$678,482 \$296,836 \$0 \$0 \$0 \$0 \$1,761,214	\$698,837 \$305,741 \$0 \$0 \$0 \$0 \$1,700,221	\$719,802 \$314,913 \$0 \$0 \$0 \$0 \$1,751,228	\$741,396 \$324,361 \$0 \$0 \$0 \$0 \$1,789,361	\$763,638 \$334,091 \$0 \$0 \$0 \$0 \$1,826,722	\$786,547 \$344,114 \$0 \$0 \$0 \$0 \$1,881,524	\$810,143 \$354,438 \$0 \$0 \$0 \$0 \$1,937,970	\$834,447 \$365,071 \$0 \$0 \$0 \$0 \$1,996,109	\$859,481 \$376,023 \$0 \$0 \$0 \$0 \$1,708,720	\$885,265 \$387,304 \$0 \$0 \$0 \$0 \$1,577,163
Total Capital Expenditures (Non-Educational) New Annual Payments w/ 20yr financing New Ann. Payments w/ 20 yr. Financing	\$1,795,437 \$144,071 \$883,056	\$1,983,261 \$159,142 \$1,042,198	\$1,761,214 \$141,324 \$1,183,523	\$1,700,221 \$136,430 \$1,319,953	\$1,751,228 \$140,523 \$1,460,476	\$1,789,361 \$143,583 \$1,604,059	\$1,826,722 \$146,581 \$1,750,640	\$1,881,524 \$150,978 \$1,901,618	\$1,937,970 \$155,508 \$2,057,126	\$1,996,109 \$160,173 \$2,217,299	\$1,708,720 \$137,112 \$2,354,411	\$1,577,163 \$126,556 \$2,480,966
Educational Operating Expenditures Per Student Operating Expenditures Total Students Generated by Project-Full-time Households Total Educational Operating Expenditures	\$11,633 181 \$2,109,870	\$11,982 227 \$2,716,458	\$12,341 272 \$3,357,541	\$12,712 317 \$4,034,646	\$13,093 363 \$4,749,354	\$13,486 408 \$5,503,314	\$13,890 453 \$6,298,238	\$14,307 499 \$7,135,903	\$14,736 544 \$8,018,160	\$15,178 589 \$8,946,931	\$15,634 635 \$9,924,211	\$16,103 661 \$10,641,469
Educational Capital Expenditures Schools - New Dwelling Units Inflation Rate SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All)	1.230 \$0 \$1,380,169 \$0 \$375,257 \$0 \$0	1.267 \$0 \$1,421,574 \$0 \$386,514 \$0 \$0	1.305 \$0 \$1,464,222 \$398,110 \$0 \$0	1.344 \$0 \$1,508,148 \$0 \$410,053 \$0 \$0	1.384 \$0 \$1,553,393 \$0 \$422,355 \$0 \$0	1.426 \$0 \$1,599,995 \$0 \$435,025 \$0 \$0	1.469 \$0 \$1,647,994 \$0 \$448,076 \$0 \$0	1.513 \$0 \$1,697,434 \$0 \$461,518 \$0 \$0	1.558 \$0 \$1,748,357 \$0 \$475,364 \$0 \$0	1.605 \$0 \$1,800,808 \$0 \$489,625 \$0 \$0	1.653 \$0 \$627,370 \$0 \$504,314 \$0 \$0	1.702 \$0 \$0 \$0 \$519,443 \$0 \$0
Total School Impact Tax - New Dwelling Units Educational Capital Expenditures New Annual Payments w/ 20yr financing New Ann. Payments w/ 20 yr. Financing	\$1,755,426 \$1,755,426 \$140,860 \$664,450	\$1,808,089 \$1,808,089 \$145,086 \$809,536	\$1,862,331 \$1,862,331 \$149,438 \$958,974	\$1,918,201 \$1,918,201 \$153,921 \$1,112,896	\$1,975,747 \$1,975,747 \$158,539 \$1,271,435	\$2,035,020 \$2,035,020 \$163,295 \$1,434,730	\$2,096,070 \$2,096,070 \$168,194 \$1,602,924	\$2,158,953 \$2,158,953 \$173,240 \$1,776,164	\$2,223,721 \$2,223,721 \$178,437 \$1,954,601	\$2,290,433 \$2,290,433 \$183,790 \$2,138,391	\$1,131,683 \$1,131,683 \$90,809 \$2,229,201	\$519,443 \$519,443 \$41,681 \$2,270,882
DIRECT TOTAL EXPENDITURES: MONTGOMERY COUNTY TOTAL EXPENDITURES	\$9,241,026	\$11,642,811	\$13,773,536	\$16,396,345	\$18,501,743	\$20,710,770	\$23,553,535	\$25,960,214	\$28,483,387	\$31,720,076	\$34,382,298	\$36,641,076
EXPENDITURES SUMMARY Non-Educational Operating Expenditures Non-Educational Capital Expenditures Educational Operating Expenditures Educational Capital Expenditures	\$5,583,650 \$883,056 \$2,109,870 \$664,450	\$7,074,619 \$1,042,198 \$2,716,458 \$809,536	\$8,273,498 \$1,183,523 \$3,357,541 \$958,974	\$9,928,851 \$1,319,953 \$4,034,646 \$1,112,896	\$11,020,478 \$1,460,476 \$4,749,354 \$1,271,435	\$12,168,667 \$1,604,059 \$5,503,314 \$1,434,730	\$13,901,734 \$1,750,640 \$6,298,238 \$1,602,924	\$15,146,529 \$1,901,618 \$7,135,903 \$1,776,164	\$16,453,499 \$2,057,126 \$8,018,160 \$1,954,601	\$18,417,456 \$2,217,299 \$8,946,931 \$2,138,391	\$19,874,476 \$2,354,411 \$9,924,211 \$2,229,201	\$21,247,759 \$2,480,966 \$10,641,469 \$2,270,882
DIRECT FISCAL IMPACT: MONTGOMERY COUNTY	\$16,670,325	\$20,643,898	\$24,647,200	\$28,599,408	\$32,541,710	\$36,468,837	\$40,724,495	\$44,398,915	\$47,918,523	\$51,979,202	\$54,883,983	\$57,620,327



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2018 Year 8	2019 Year 9	2020 Year 10	2021 Year 11	2022 Year 12	2023 Year 13	2024 Year 14	2025 Year 15	2026 Year 16	2027 Year 17	2028 Year 18	2029 Year 19
INDIRECT/INDUCED: MONTGOMERY COUNTY												
Indirect/Induced Income Tax												
Direct Taxable Income Total Construction Income	\$22,141,073	\$16,060,515	\$15,267,190	\$16,881,996	\$11,958,637	\$12,317,396	\$16,148,926	\$12,161,187	\$12,526,023	\$17,124,962	\$13,288,858	\$11,496,504
Office Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office	\$28,435,787 \$24,398,100 \$3,691,504 \$21,518,518	\$36,611,076 \$33,506,724 \$3,802,249 \$29,552,098	\$45,251,290 \$43,139,907 \$3,916,316 \$38,048,326	\$54,376,967 \$53,320,925 \$4,033,806 \$47,027,731	\$64,009,459 \$64,073,978 \$4,154,820 \$56,511,656	\$74,170,960 \$75,424,225 \$4,279,465 \$66,522,293	\$84,884,543 \$87,397,821 \$4,407,848 \$77,082,707	\$96,174,188 \$100,021,951 \$4,540,084 \$88,216,875	\$108,064,814 \$113,324,870 \$4,676,286 \$99,949,720	\$120,582,322 \$127,335,945 \$4,816,575 \$112,307,140	\$133,753,622 \$142,085,692 \$4,961,072 \$125,316,050	\$147,606,675 \$157,605,822 \$5,109,904 \$139,004,419
Office: General	\$20,145,970	\$27,667,132	\$35,621,433	\$44,028,091	\$52,907,089	\$62,279,202	\$72,166,025	\$82,590,007	\$93,574,478	\$105,143,686	\$117,322,829	\$130,138,092
Retail Retail-Lifestyle Center Retail-Neighborhood Retail-Restaurants Retail-Theater Retail-Health Club	\$15,787,439 \$0 \$1,409,012 \$412,659 \$367,132	\$16,929,325 \$0 \$1,451,282 \$425,039 \$378,146	\$17,437,205 \$0 \$1,494,821 \$437,790 \$389,490	\$17,960,321 \$0 \$1,539,665 \$450,924 \$401,175	\$18,499,130 \$0 \$1,585,855 \$464,452 \$413,210	\$19,054,104 \$0 \$1,633,431 \$478,385 \$425,607	\$19,625,727 \$0 \$1,682,434 \$492,737 \$438,375	\$20,214,499 \$0 \$1,732,907 \$507,519 \$451,526	\$20,820,934 \$0 \$1,784,894 \$522,745 \$465,072	\$21,445,562 \$0 \$1,838,441 \$538,427 \$479,024	\$22,088,929 \$0 \$1,893,594 \$554,580 \$493,395	\$22,751,597 \$0 \$1,950,402 \$571,217 \$508,197
Hotel Hotel	\$2,098,656	\$2,161,616	\$3,339,697	\$3,439,888	\$3,543,084	\$3,649,377	\$3,758,858	\$3,871,624	\$3,987,773	\$4,107,406	\$4,230,628	\$4,357,547
Indirect/Induced Income Total Construction Income	\$12,387,045	\$8,985,215	\$8,541,382	\$9,444,802	\$6,690,379	\$6,891,090	\$9,034,678	\$6,803,698	\$7,007,809	\$9,580,731	\$7,434,584	\$6,431,834
Office Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office Office: General	\$12,773,868 \$10,296,828 \$1,658,290 \$7,955,912 \$8,688,715	\$16,446,354 \$14,140,977 \$1,708,039 \$10,926,120 \$11,932,502	\$20,327,694 \$18,206,507 \$1,759,280 \$14,067,379 \$15,363,096	\$24,427,112 \$22,503,243 \$1,812,058 \$17,387,281 \$18,988,787	\$28,754,201 \$27,041,397 \$1,866,420 \$20,893,716 \$22,818,193	\$33,318,930 \$31,831,588 \$1,922,413 \$24,594,888 \$26,860,272	\$38,131,665 \$36,884,852 \$1,980,085 \$28,499,327 \$31,124,341	\$43,203,176 \$42,212,664 \$2,039,487 \$32,615,896 \$35,620,079	\$48,544,660 \$47,826,948 \$2,100,672 \$36,953,810 \$40,357,549	\$54,167,750 \$53,740,098 \$2,163,692 \$41,522,645 \$45,347,210	\$60,084,534 \$59,964,993 \$2,228,603 \$46,332,351 \$50,599,928	\$66,307,576 \$66,515,015 \$2,295,461 \$51,393,270 \$56,126,998
Retail Retail-Lifestyle Center Retail-Restaurants Retail-Theater Retail-Health Club	\$5,596,237 \$610,391 \$146,277 \$138,112	\$6,001,005 \$628,703 \$150,665 \$142,255	\$6,181,036 \$647,564 \$155,185 \$146,523	\$6,366,467 \$666,991 \$159,841 \$150,918	\$6,557,461 \$687,000 \$164,636 \$155,446	\$6,754,185 \$707,610 \$169,575 \$160,109	\$6,956,810 \$728,839 \$174,662 \$164,913	\$7,165,514 \$750,704 \$179,902 \$169,860	\$7,380,480 \$773,225 \$185,299 \$174,956	\$7,601,894 \$796,422 \$190,858 \$180,205	\$7,829,951 \$820,314 \$196,584 \$185,611	\$8,064,850 \$844,924 \$202,482 \$191,179
Hotel Hotel	\$1,077,373	\$1,109,694	\$1,714,477	\$1,765,911	\$1,818,888	\$1,873,455	\$1,929,659	\$1,987,549	\$2,047,175	\$2,108,590	\$2,171,848	\$2,237,003
Total Direct/Induced Employment Income Total Direct/Induced Construction Income	\$48,942,002 \$12,387,045	\$63,186,314 \$8,985,215	\$78,568,741 \$8,541,382	\$94,228,610 \$9,444,802	\$110,757,358 \$6,690,379	\$128,193,026 \$6,891,090	\$146,575,152 \$9,034,678	\$165,944,832 \$6,803,698	\$186,344,775 \$7,007,809	\$207,819,364 \$9,580,731	\$230,414,718 \$7,434,584	\$254,178,757 \$6,431,834
Total Direct/Induced Employment Income Taxes Total Direct/Induced Construction Income Taxes	\$1,174,608 \$297,289	\$1,516,472 \$215,645	\$1,885,650 \$204,993	\$2,261,487 \$226,675	\$2,658,177 \$160,569	\$3,076,633 \$165,386	\$3,517,804 \$216,832	\$3,982,676 \$163,289	\$4,472,275 \$168,187	\$4,987,665 \$229,938	\$5,529,953 \$178,430	\$6,100,290 \$154,364
Indirect/Induced Hotel Tax Revenues												
Direct Hotel Room Revenues Indirect Hotel Room Revenues Hotel Tax	\$10,369,681 \$3,250,843 \$227,559	\$10,680,772 \$3,348,369 \$234,386	\$16,501,793 \$5,173,229 \$362,126	\$16,996,846 \$5,328,426 \$372,990	\$17,506,752 \$5,488,279 \$384,180	\$18,031,954 \$5,652,928 \$395,705	\$18,572,913 \$5,822,515 \$407,576	\$19,130,100 \$5,997,191 \$419,803	\$19,704,003 \$6,177,107 \$432,397	\$20,295,124 \$6,362,420 \$445,369	\$20,903,977 \$6,553,292 \$458,730	\$21,531,097 \$6,749,891 \$472,492
Indirect/Induced Miscellaneous Revenues												
Total Direct/Induced Employment Total Miscellaneous Revenues	1,532 \$416,760	1,908 \$534,825	2,305 \$665,363	2,676 \$795,586	3,047 \$933,023	3,418 \$1,077,990	3,789 \$1,230,816	4,159 \$1,391,842	4,530 \$1,561,421	4,901 \$1,739,922	5,272 \$1,927,728	5,643 \$2,125,236
Indirect/Induced Miscellaneous Expenditures												
Total Miscellaneous Expenditures	\$1,020,143	\$1,309,141	\$1,628,671	\$1,947,430	\$2,283,849	\$2,638,699	\$3,012,786	\$3,406,943	\$3,822,037	\$4,258,972	\$4,718,682	\$5,202,142
Total Induced/Indirect Revenues Total Induced/Indirect Expenditures	\$2,116,216 \$1,020,143	\$2,501,327 \$1,309,141	\$3,118,132 \$1,628,671	\$3,656,737 \$1,947,430	\$4,135,948 \$2,283,849	\$4,715,714 \$2,638,699	\$5,373,028 \$3,012,786	\$5,957,610 \$3,406,943	\$6,634,280 \$3,822,037	\$7,402,893 \$4,258,972	\$8,094,841 \$4,718,682	\$8,852,383 \$5,202,142
TOTAL INDUCED/INDIRECT IMPACT: MONTGOMERY COUNTY	\$1,096,073	\$1,192,186	\$1,489,460	\$1,709,307	\$1,852,100	\$2,077,015	\$2,360,242	\$2,550,667	\$2,812,243	\$3,143,922	\$3,376,160	\$3,650,241



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030 Year 20	2031 Year 21	2032 Year 22	2033 Year 23	2034 Year 24	2035 Year 25	2036 Year 26	2037 Year 27	2038 Year 28	2039 Year 29	2040 Year 30
ESCALATION RATES	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Expenditures	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Revenues	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Unimproved Land Values											
Office	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Retail	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Hotel	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Residential	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Improved Land Values											
Office	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Retail	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Hotel	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Residential	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Building Values											
Office	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Retail	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Hotel	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
Residential	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
DEVELOPMENT PROGRAM											
Total Space	275,000	0	0	0	0	0	0	0	0	0	0
Cumulative Space	4,975,000	4,975,000	4,975,000	4,975,000	4,975,000	4,975,000	4,975,000	4,975,000	4,975,000	4,975,000	4,975,000
Office Total (in GBA)	275,000	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	4,262,500	4,262,500	4,262,500	4,262,500	4,262,500	4,262,500	4,262,500	4,262,500	4,262,500	4,262,500	4,262,500
Office: R&D/Lab/Applied Sciences Offices/Manuf.	87,500	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000
Office: Science Related Educational/Academic	87,500	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	1,312,500	1,312,500	1,312,500	1,312,500	1,312,500	1,312,500	1,312,500	1,312,500	1,312,500	1,312,500	1,312,500
Office: Incubator	0	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Office: Clinical/Medical Office	50,000	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Office: General	50,000	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Retail Total (in GLA)	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	510,000	510,000	510,000	510,000	510,000	510,000	510,000	510,000	510,000	510,000	510,000
Retail: Lifestyle/Town Center	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000	380,000
Retail: Restaurants	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
Retail: Movie Theater/Entertainment	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Retail: Health Club	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Hotel Hotel Cumulative Hotel Rooms Hotel Square Feet Cumulative Square Feet (in GSF)	0	0	0	0	0	0	0	0	0	0	0
	300	300	300	300	300	300	300	300	300	300	300
	0	0	0	0	0	0	0	0	0	0	0
	202,500	202,500	202,500	202,500	202,500	202,500	202,500	202,500	202,500	202,500	202,500
Residential Units Total	69	0	0	0	0	0	0	0	0	0	0
Cumulative	4,789	4,789	4,789	4,789	4,789	4,789	4,789	4,789	4,789	4,789	4,789
Residential Units [Non Seniors] Cumulative	69	0	0	0	0	0	0	0	0	0	0
	3,754	3,754	3,754	3,754	3,754	3,754	3,754	3,754	3,754	3,754	3,754
Single-Family Detached (Total) Cumulative	0 0	0 0	0	0 0	0	0	0 0	0	0	0 0	0
SFD Cumulative	0	0	0	0	0	0	0	0	0	0	0
Townhome (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	975	975	975	975	975	975	975	975	975	975	975
Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	975	975	975	975	975	975	975	975	975	975	975
Condominium (Total)	69	0	0	0	0	0	0	0	0	0	0
Cumulative	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104
Condominiums	69	0	0	0	0	0	0	0	0	0	0
Cumulative	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104
Rental Apartment (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675
Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675	1,675
Active Adult Residential Units Total	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035
AAC Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	200	200	200	200	200	200	200	200	200	200	200
AAC Condominiums	0	0	0	0	0	0	0	0	0	0	0
Cumulative	245	245	245	245	245	245	245	245	245	245	245
AAC Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	590	590	590	590	590	590	590	590	590	590	590

RCLO ROBERT CHARLES LESSER & CO

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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030 Year 20	2031 Year 21	2032 Year 22	2033 Year 23	2034 Year 24	2035 Year 25	2036 Year 26	2037 Year 27	2038 Year 28	2039 Year 29	2040 Year 30
UNIMPROVED LAND ASSESSMENTS											
Office (Per GBA Foot)	\$2.45	\$2.52	\$2.60	\$2.68	\$2.76	\$2.84	\$2.92	\$3.01	\$3.10	\$3.20	\$3.29
Retail (Per GLA Foot)	\$2.45	\$2.52	\$2.60	\$2.68	\$2.76	\$2.84	\$2.92	\$3.01	\$3.10	\$3.20	\$3.29
Hotel (Per Room)	\$1,653	\$1,703	\$1,754	\$1,807	\$1,861	\$1,917	\$1,974	\$2,034	\$2,095	\$2,157	\$2,222
Residential (Per Unit) Single-Family Detached	\$6,736	\$6,938	\$7,147	\$7,361	\$7,582	\$7,809	\$8,044	\$8,285	\$8,533	\$8,789	\$9,053
Townhome	\$4,980	\$5,129	\$5,283	\$5,442	\$5,605	\$5,773	\$5,946	\$6,125	\$6,308	\$6,498	\$6,693
Condominium	\$2,543	\$2,620	\$2,698	\$2,779	\$2,863	\$2,948	\$3,037	\$3,128	\$3,222	\$3,319	\$3,418
Rental Apartment	\$2,452	\$2,526	\$2,601	\$2,680	\$2,760	\$2,843	\$2,928	\$3,016	\$3,106	\$3,200	\$3,295
IMPROVED REAL PROPERTY ASSESSMENTS											
COMMERCIAL											
Office: R&D/Lab/Applied Sciences Offices/Manuf.											
Land Building	\$131.51 \$306.86	\$135.46 \$316.07	\$139.52 \$325.55	\$143.71 \$335.32	\$148.02 \$345.38	\$152.46 \$355.74	\$157.03 \$366.41	\$161.74 \$377.40	\$166.60 \$388.73	\$171.59 \$400.39	\$176.74 \$412.40
Total	\$438.38	\$451.53	\$465.07	\$479.03	\$493.40	\$508.20	\$523.44	\$577.40 \$539.15	\$555.32	\$571.98	\$589.14
Office: Science Related Educational/Academic	*******	*	*	*	*******	*****	*******	*******	******	***************************************	***************************************
Land	\$131.51	\$135.46	\$139.52	\$143.71	\$148.02	\$152.46	\$157.03	\$161.74	\$166.60	\$171.59	\$176.74
Building	\$306.86	\$316.07	\$325.55	\$335.32	\$345.38	\$355.74	\$366.41	\$377.40	\$388.73	\$400.39	\$412.40
Total	\$438.38	\$451.53	\$465.07	\$479.03	\$493.40	\$508.20	\$523.44	\$539.15	\$555.32	\$571.98	\$589.14
Office: Incubator											
Land	\$105.21	\$108.37	\$111.62	\$114.97	\$118.42	\$121.97	\$125.63	\$129.40	\$133.28	\$137.28	\$141.39
Building Total	\$157.82 \$263.03	\$162.55 \$270.92	\$167.43 \$279.04	\$172.45 \$287.42	\$177.62 \$296.04	\$182.95 \$304.92	\$188.44 \$314.07	\$194.09 \$323.49	\$199.92 \$333.19	\$205.91 \$343.19	\$212.09 \$353.48
	Ψ203.03	\$210.3Z	\$27 5.04	Ψ201.42	Ψ230.04	ψ304.92	ψ314.07	ψ323.49	φ333.19	φ343.19	φ333.40
Office: Clinical/Medical Office Land	\$52.61	\$54.18	\$55.81	\$57.48	\$59.21	\$60.98	\$62.81	\$64.70	\$66.64	\$68.64	\$70.70
Building	\$289.33	\$298.01	\$306.95	\$316.16	\$325.64	\$335.41	\$345.47	\$355.84	\$366.51	\$377.51	\$388.83
Total	\$341.93	\$352.19	\$362.76	\$373.64	\$384.85	\$396.39	\$408.29	\$420.54	\$433.15	\$446.15	\$459.53
Office: General											
Land	\$52.61	\$54.18	\$55.81	\$57.48	\$59.21	\$60.98	\$62.81	\$64.70	\$66.64	\$68.64	\$70.70
Building	\$227.96	\$234.79	\$241.84	\$249.09	\$256.57	\$264.26	\$272.19	\$280.36	\$288.77	\$297.43	\$306.35
Total	\$280.56	\$288.98	\$297.65	\$306.58	\$315.77	\$325.25	\$335.00	\$345.05	\$355.41	\$366.07	\$377.05
Retail: Lifestyle/Town Center											
Land Building	\$87.68 \$236.72	\$90.31 \$243.83	\$93.01 \$251.14	\$95.81 \$258.67	\$98.68 \$266.43	\$101.64 \$274.43	\$104.69 \$282.66	\$107.83 \$291.14	\$111.06 \$299.87	\$114.40 \$308.87	\$117.83 \$318.14
Total	\$324.40	\$334.13	\$344.15	\$354.48	\$365.11	\$376.07	\$387.35	\$398.97	\$410.94	\$423.27	\$435.96
	,,	***	**	,	****	** **	***	*****	,	,	,
Retail: Restaurants Land	\$87.68	\$90.31	\$93.01	\$95.81	\$98.68	\$101.64	\$104.69	\$107.83	\$111.06	\$114.40	\$117.83
Building	\$438.38	\$451.53	\$465.07	\$479.03	\$493.40	\$508.20	\$523.44	\$539.15	\$555.32	\$114.40 \$571.98	\$589.14
Total	\$526.05	\$541.83	\$558.09	\$574.83	\$592.08	\$609.84	\$628.13	\$646.98	\$666.39	\$686.38	\$706.97
Retail: Movie Theater/Entertainment											
Land	\$87.68	\$90.31	\$93.01	\$95.81	\$98.68	\$101.64	\$104.69	\$107.83	\$111.06	\$114.40	\$117.83
Building	\$245.49	\$252.86	\$260.44	\$268.25	\$276.30	\$284.59	\$293.13	\$301.92	\$310.98	\$320.31	\$329.92
Total	\$333.17	\$343.16	\$353.46	\$364.06	\$374.98	\$386.23	\$397.82	\$409.75	\$422.04	\$434.71	\$447.75
Retail: Health Club											
Land	\$87.68	\$90.31	\$93.01	\$95.81	\$98.68	\$101.64	\$104.69	\$107.83	\$111.06	\$114.40	\$117.83
Building	\$87.68 \$175.35	\$90.31	\$93.01	\$95.81 \$101.61	\$98.68	\$101.64	\$104.69	\$107.83	\$111.06	\$114.40	\$117.83
Total	\$175.35	\$180.61	\$186.03	\$191.61	\$197.36	\$203.28	\$209.38	\$215.66	\$222.13	\$228.79	\$235.66
Hotel	#2F 070	P2C 422	#27.000	#20.222	\$20.470	£40.050	£44.07C	C40 400	£44.40C	£45.750	£47.404
Land Building	\$35,070 \$227,956	\$36,122 \$234,794	\$37,206 \$241,838	\$38,322 \$249,093	\$39,472 \$256,566	\$40,656 \$264,263	\$41,876 \$272,191	\$43,132 \$280,357	\$44,426 \$288,768	\$45,759 \$297,431	\$47,131 \$306,354
Total	\$263,026	\$270,917	\$279,044	\$287,416	\$296,038	\$304,919	\$314,067	\$323,489	\$333,193	\$343,189	\$353,485



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
RESIDENTIAL											
SFD Average Sale Price Lot to Value Ratio	\$1,306,800	\$1,346,004	\$1,386,385	\$1,427,976	\$1,470,815	\$1,514,940	\$1,560,388	\$1,607,200	\$1,655,416	\$1,705,078	\$1,756,230
Land	\$365,904	\$376,881	\$388,188	\$399,833	\$411,828	\$424,183	\$436,909	\$450,016	\$463,516	\$477,422	\$491,745
Improvements	\$940,896	\$969,123	\$998,197	\$1,028,143	\$1,058,987	\$1,090,757	\$1,123,479	\$1,157,184	\$1,191,899	\$1,227,656	\$1,264,486
Townhomes Average Sale Price (wtd average at buildout) Lot to Value Ratio	\$949,962	\$978,461	\$1,007,815	\$1,038,049	\$1,069,190	\$1,101,266	\$1,134,304	\$1,168,333	\$1,203,383	\$1,239,485	\$1,276,669
Land	\$246,990	\$254,400	\$262,032	\$269,893	\$277,990	\$286,329	\$294,919	\$303,767	\$312,880	\$322,266	\$331,934
Improvements	\$702,972	\$724,061	\$745,783	\$768,156	\$791,201	\$814,937	\$839,385	\$864,567	\$890,504	\$917,219	\$944,735
Condominiums Average Sale Price Lot to Value Ratio	\$620,215	\$638,822	\$657,986	\$677,726	\$698,058	\$718,999	\$740,569	\$762,786	\$785,670	\$809,240	\$833,517
Land	\$136,447	\$140,541	\$144,757	\$149,100	\$153,573	\$158,180	\$162,925	\$167,813	\$172,847	\$178,033	\$183,374
Improvements	\$483,768	\$498,281	\$513,229	\$528,626	\$544,485	\$560,819	\$577,644	\$594,973	\$612,823	\$631,207	\$650,143
Rental Apartments Average Monthly Rent per Unit Average Value per Unit Land Improvements	\$2,785 \$298,096 \$26,303 \$271,793	\$2,868 \$307,039 \$27,092 \$279,947	\$2,954 \$316,250 \$27,904 \$288,346	\$3,043 \$325,738 \$28,742 \$296,996	\$3,134 \$335,510 \$29,604 \$305,906	\$3,228 \$345,575 \$30,492 \$315,083	\$3,325 \$355,942 \$31,407 \$324,536	\$3,425 \$366,621 \$32,349 \$334,272	\$3,527 \$377,619 \$33,319 \$344,300	\$3,633 \$388,948 \$34,319 \$354,629	\$3,742 \$400,616 \$35,348 \$365,268
AAC Townhomes Average Sale Price Lot to Value Ratio	\$974,073	\$1,003,295	\$1,033,394	\$1,064,395	\$1,096,327	\$1,129,217	\$1,163,094	\$1,197,986	\$1,233,926	\$1,270,944	\$1,309,072
Land	\$272,740	\$280,923	\$289,350	\$298,031	\$306,972	\$316,181	\$325,666	\$335,436	\$345,499	\$355,864	\$366,540
Improvements	\$701,332	\$722,372	\$744,043	\$766,365	\$789,356	\$813,036	\$837,427	\$862,550	\$888,427	\$915,080	\$942,532
AAC Condominiums Average Sale Price Lot to Value Ratio	\$714,904	\$736,352	\$758,442	\$781,195	\$804,631	\$828,770	\$853,633	\$879,242	\$905,620	\$932,788	\$960,772
Land	\$171,577	\$176,724	\$182,026	\$187,487	\$193,111	\$198,905	\$204,872	\$211,018	\$217,349	\$223,869	\$230,585
Improvements	\$543,327	\$559,627	\$576,416	\$593,708	\$611,520	\$629,865	\$648,761	\$668,224	\$688,271	\$708,919	\$730,187
AAC Rental Apartments Average Monthly Rent Average Value per Unit Land Improvements	\$280,561	\$288,978	\$297,647	\$306,577	\$315,774	\$325,247	\$335,004	\$345,055	\$355,406	\$366,068	\$377,050
	\$26,303	\$27,092	\$27,904	\$28,742	\$29,604	\$30,492	\$31,407	\$32,349	\$33,319	\$34,319	\$35,348
	\$254,258	\$261,886	\$269,743	\$277,835	\$286,170	\$294,755	\$303,598	\$312,706	\$322,087	\$331,750	\$341,702



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030 Year 20	2031 Year 21	2032 Year 22	2033 Year 23	2034 Year 24	2035 Year 25	2036 Year 26	2037 Year 27	2038 Year 28	2039 Year 29	2040 Year 30
CONSTRUCTION VALUE Office: R&D/Lab/Applied Sciences Offices/Manuf.	\$16,110,337	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office: Science Related Educational/Academic	\$16,110,337	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office: Incubator	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office: Clinical/Medical Office	\$8,679,855	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office: General	\$6,838,674	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail: Lifestyle/Town Center	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail: Restaurants	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail: Movie Theater/Entertainment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Retail: Health Club	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hotel(Rooms)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SFD	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Townhomes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Condominiums	\$13,685,790	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rental Apartments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AAC Townhomes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AAC Condominiums	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AAC Rental Apartments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Construction Value	\$61,424,993	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UNIMPROVED LAND IN INVENTORY											
COMMERCIAL Office Retail Hotel	\$0 \$0 \$0										
RESIDENTIAL Single-Family Detached Townhome Condominium Rental Apartment Total Land in Inventory	\$0 \$0 \$0 \$0 \$0										



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
REAL PROPERTY MARKET VALUES Non-Residential											
Office Land Inventory Improved Land Buildings Total Office Value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$414,594,587	\$427,032,425	\$439,843,398	\$453,038,700	\$466,629,861	\$480,628,757	\$495,047,619	\$509,899,048	\$525,196,019	\$540,951,900	\$557,180,457
	\$1,166,848,684	\$1,201,854,145	\$1,237,909,769	\$1,275,047,062	\$1,313,298,474	\$1,352,697,428	\$1,393,278,351	\$1,435,076,702	\$1,478,129,003	\$1,522,472,873	\$1,568,147,059
	\$1,581,443,272	\$1,628,886,570	\$1,677,753,167	\$1,728,085,762	\$1,779,928,335	\$1,833,326,185	\$1,888,325,970	\$1,944,975,749	\$2,003,325,022	\$2,063,424,773	\$2,125,327,516
Retail Land Inventory Improved Land Buildings Total Retail Value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$44,714,404	\$46,055,836	\$47,437,512	\$48,860,637	\$50,326,456	\$51,836,250	\$53,391,337	\$54,993,077	\$56,642,870	\$58,342,156	\$60,092,420
	\$126,603,137	\$130,401,231	\$134,313,268	\$138,342,666	\$142,492,946	\$146,767,734	\$151,170,767	\$155,705,890	\$160,377,066	\$165,188,378	\$170,144,030
	\$171,317,541	\$176,457,068	\$181,750,780	\$187,203,303	\$192,819,402	\$198,603,984	\$204,562,104	\$210,698,967	\$217,019,936	\$223,530,534	\$230,236,450
Hotel Land Inventory Improved Land Buildings Total Hotel Value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$10,521,036	\$10,836,667	\$11,161,767	\$11,496,620	\$11,841,519	\$12,196,765	\$12,562,668	\$12,939,548	\$13,327,734	\$13,727,566	\$14,139,393
	\$68,386,736	\$70,438,338	\$72,551,488	\$74,728,033	\$76,969,874	\$79,278,970	\$81,657,339	\$84,107,059	\$86,630,271	\$89,229,179	\$91,906,055
	\$78,907,772	\$81,275,006	\$83,713,256	\$86,224,653	\$88,811,393	\$91,475,735	\$94,220,007	\$97,046,607	\$99,958,005	\$102,956,745	\$106,045,448
Total Non-Residential Value	\$1,831,668,585	\$1,886,618,643	\$1,943,217,202	\$2,001,513,718	\$2,061,559,130	\$2,123,405,904	\$2,187,108,081	\$2,252,721,323	\$2,320,302,963	\$2,389,912,052	\$2,461,609,413
Residential											
Single-Family Detached Land in Inventory Improved (Land & Building) Total Single-Family Detached Value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Townhome Land Inventory Improved (Land & Building) Total Townhome Value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$1,121,027,379	\$1,154,658,201	\$1,189,297,947	\$1,224,976,885	\$1,261,726,191	\$1,299,577,977	\$1,338,565,317	\$1,378,722,276	\$1,420,083,944	\$1,462,686,463	\$1,506,567,057
	\$1,121,027,379	\$1,154,658,201	\$1,189,297,947	\$1,224,976,885	\$1,261,726,191	\$1,299,577,977	\$1,338,565,317	\$1,378,722,276	\$1,420,083,944	\$1,462,686,463	\$1,506,567,057
Condominium Land in Inventory Improved (Land & Building) Total Condominium Value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$859,869,043	\$885,665,114	\$912,235,068	\$939,602,120	\$967,790,183	\$996,823,889	\$1,026,728,605	\$1,057,530,463	\$1,089,256,377	\$1,121,934,069	\$1,155,592,091
	\$859,869,043	\$885,665,114	\$912,235,068	\$939,602,120	\$967,790,183	\$996,823,889	\$1,026,728,605	\$1,057,530,463	\$1,089,256,377	\$1,121,934,069	\$1,155,592,091
Rental Apartment Land in Inventory Improved (Land & Building) Total Rental Apartment Value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$664,841,820	\$684,787,075	\$705,330,687	\$726,490,607	\$748,285,326	\$770,733,885	\$793,855,902	\$817,671,579	\$842,201,726	\$867,467,778	\$893,491,812
	\$664,841,820	\$684,787,075	\$705,330,687	\$726,490,607	\$748,285,326	\$770,733,885	\$793,855,902	\$817,671,579	\$842,201,726	\$867,467,778	\$893,491,812
Total Residential Value	\$2,645,738,242	\$2,725,110,389	\$2,806,863,701	\$2,891,069,612	\$2,977,801,700	\$3,067,135,751	\$3,159,149,824	\$3,253,924,319	\$3,351,542,048	\$3,452,088,310	\$3,555,650,959
IMPACT ON CURRENT ASSESSMENTS OF EXISTING PROPERTIES											
initial increase subsequent increase Baseline Increase in Current Assessments Value of Current Assessments of Existing Properties Increase in Current Assessments Attributable to LifeSci Village™ Compounded Annual Growth of Properties Above Baseline Increased Value of Current Assessments of Existing Properties	1.754	1.806	1.860	1.916	1.974	2.033	2.094	2.157	2.221	2.288	2.357
	\$2,157,535,171	\$2,222,261,226	\$2,288,929,063	\$2,357,596,935	\$2,428,324,843	\$2,501,174,588	\$2,576,209,826	\$2,653,496,120	\$2,733,101,004	\$2,815,094,034	\$2,899,546,855
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	1.252	1.252	1.252	1.252	1.252	1.252	1.252	1.252	1.252	1.252	1.252
	25.18%	25.18%	25.18%	25.18%	25.18%	25.18%	25.18%	25.18%	25.18%	25.18%	25.18%
	\$543,168,726	\$559,463,788	\$576,247,702	\$593,535,133	\$611,341,187	\$629,681,422	\$648,571,865	\$668,029,021	\$688,069,892	\$708,711,988	\$729,973,348



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
PERSONAL PROPERTY ASSESSMENT (As a % of Real Property Assessment, including improved land)											
Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office Office: General Retait: Lifestyle/Town Center Retait: Restaurants Retait: Movie Theater/Entertainment Retait: Health Club Hotel	\$65.76 \$65.76 \$39.45 \$51.29 \$42.08 \$48.66 \$78.91 \$49.97 \$26.30 \$39,454	\$67.73 \$67.73 \$40.64 \$52.83 \$43.35 \$50.12 \$81.28 \$51.47 \$27.09 \$40,638	\$69.76 \$69.76 \$41.86 \$54.41 \$44.65 \$51.62 \$83.71 \$53.02 \$27.90 \$41,857	\$71.85 \$71.85 \$43.11 \$56.05 \$45.99 \$53.17 \$66.22 \$54.61 \$28.74	\$74.01 \$74.01 \$44.41 \$57.73 \$47.37 \$54.77 \$88.81 \$56.25 \$29.60 \$44,406	\$76.23 \$76.23 \$45.74 \$59.46 \$48.79 \$56.41 \$91.48 \$57.93 \$30.49 \$45,738	\$78.52 \$78.52 \$47.11 \$61.24 \$50.25 \$58.10 \$94.22 \$59.67 \$31.41 \$47,110	\$80.87 \$80.87 \$48.52 \$63.08 \$51.76 \$59.85 \$97.05 \$61.46 \$32.35 \$48,523	\$83.30 \$83.30 \$49.98 \$64.97 \$53.31 \$61.64 \$99.96 \$63.31 \$33.32 \$49,979	\$85.80 \$85.80 \$51.48 \$66.92 \$54.91 \$63.49 \$102.96 \$65.21 \$34.32 \$51,478	\$88.37 \$88.37 \$53.02 \$68.93 \$56.56 \$65.39 \$106.05 \$67.16 \$35.35 \$53,023
PERSONAL PROPERTY ASSESSED VALUES Non-Residential Office Retail Hotel Total Non-Residential Personal Property Value	\$250,367,786	\$257,878,820	\$265,615,184	\$273,583,640	\$281,791,149	\$290,244,884	\$298,952,230	\$307,920,797	\$317,158,421	\$326,673,173	\$336,473,369
	\$25,697,631	\$26,468,560	\$27,262,617	\$28,080,495	\$28,922,910	\$29,790,598	\$30,684,316	\$31,604,845	\$32,552,990	\$33,529,580	\$34,535,467
	\$11,836,166	\$12,191,251	\$12,556,988	\$12,933,698	\$13,321,709	\$13,721,360	\$14,133,001	\$14,556,991	\$14,993,701	\$15,443,512	\$15,906,817
	\$287,901,583	\$296,538,631	\$305,434,790	\$314,597,833	\$324,035,768	\$333,756,841	\$343,769,547	\$354,082,633	\$364,705,112	\$375,646,265	\$386,915,653
OCCUPIED NON-RESIDENTIAL SPACE Total Non-Residential Total Space Cumulative Space	198,431	0	0	0	0	0	0	0	0	0	0
	3,550,031	3,550,031	3,550,031	3,550,031	3,550,031	3,550,031	3,550,031	3,550,031	3,550,031	3,550,031	3,550,031
Office Total (in GBA)	198,431	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	3,065,531	3,065,531	3,065,531	3,065,531	3,065,531	3,065,531	3,065,531	3,065,531	3,065,531	3,065,531	3,065,531
Office: R&D/Lab/Applied Sciences Offices/Manuf.	58,188	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	931,000	931,000	931,000	931,000	931,000	931,000	931,000	931,000	931,000	931,000	931,000
Office: Science Related Educational/Academic	62,344	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	935,156	935,156	935,156	935,156	935,156	935,156	935,156	935,156	935,156	935,156	935,156
Office: Incubator	0	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	30,875	30,875	30,875	30,875	30,875	30,875	30,875	30,875	30,875	30,875	30,875
Office: Clinical/Medical Office	38,950	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	584,250	584,250	584,250	584,250	584,250	584,250	584,250	584,250	584,250	584,250	584,250
Office: General	38,950	0	0	0	0	0	0	0	0	0	0
Cumulative Office (in GBA)	584,250	584,250	584,250	584,250	584,250	584,250	584,250	584,250	584,250	584,250	584,250
Retail Total (in GLA) Cumulative Retail (in GLA)	0	0	0	0	0	0	0	0	0	0	0
	484,500	484,500	484,500	484,500	484,500	484,500	484,500	484,500	484,500	484,500	484,500
Retail: Lifestyle/Town Center	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	361,000	361,000	361,000	361,000	361,000	361,000	361,000	361,000	361,000	361,000	361,000
Retail: Restaurants	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	42,750	42,750	42,750	42,750	42,750	42,750	42,750	42,750	42,750	42,750	42,750
Retail: Movie Theater/Entertainment	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000	57,000
Retail: Health Club	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail (in GLA)	23,750	23,750	23,750	23,750	23,750	23,750	23,750	23,750	23,750	23,750	23,750
Hotel Hotel Rooms Cumulative Hotel Rooms	0	0	0	0	0	0	0	0	0	0	0
	210	210	210	210	210	210	210	210	210	210	210



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
EMPLOYEES Direct Construction Jobs Construction Value Labor Hours Total Hours FTE Jobs	\$61,424,993 5.8 358,409 179	\$0 5.7 0 0	\$0 5.5 0	\$0 5.3 0 0	\$0 5.2 0 0	\$0 5.0 0	\$0 4.9 0	\$0 4.7 0 0	\$0 4.6 0	\$0 4.5 0	\$0 4.3 0
Total Permanent Non-Residential Jobs Total Cumulative	608 10,629	0 10,629	0 10,629	0 10,629	0 10,629	0 10,629	0 10,629	0 10,629	0 10,629	0 10,629	0 10,629
Office Total	608	0	0	0	0	0	0	0	0	0	0
Cumulative Office	9,392	9,392	9,392	9,392	9,392	9,392	9,392	9,392	9,392	9,392	9,392
Office: R&D/Lab/Applied Sciences Offices/Manuf.	145	0	0	0	0	0	0	0	0	0	0
Cumulative Office	2,328	2,328	2,328	2,328	2,328	2,328	2,328	2,328	2,328	2,328	2,328
Office: Science Related Educational/Academic Cumulative Office	189	0	0	0	0	0	0	0	0	0	0
	2,834	2,834	2,834	2,834	2,834	2,834	2,834	2,834	2,834	2,834	2,834
Office: Incubator	0	0	0	0	0	0	0	0	0	0	0
Cumulative Office	124	124	124	124	124	124	124	124	124	124	124
Office: Clinical/Medical Office	118	0	0	0	0	0	0	0	0	0	0
Cumulative Office	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770	1,770
Office: General	156	0	0	0	0	0	0	0	0	0	0
Cumulative Office	2,337	2,337	2,337	2,337	2,337	2,337	2,337	2,337	2,337	2,337	2,337
Retail Total	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079
Retail: Lifestyle/Town Center	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	903	903	903	903	903	903	903	903	903	903	903
Retail: Restaurants	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	107	107	107	107	107	107	107	107	107	107	107
Retail: Movie Theater/Entertainment	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	38	38	38	38	38	38	38	38	38	38	38
Retail: Health Club	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	32	32	32	32	32	32	32	32	32	32	32
Hotel Hotel Rooms Cumulative Hotel	0	0	0	0	0	0	0	0	0	0	0
	158	158	158	158	158	158	158	158	158	158	158



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
OCCUPIED RESIDENTIAL HOUSEHOLDS Residential Units Cumulative	65	0	0	0	0	0	0	0	0	0	0
	4,621	4,621	4,621	4,621	4,621	4,621	4,621	4,621	4,621	4,621	4,621
Single-Family Detached (Total) Cumulative	0 0	0 0	0	0	0	0	0 0	0	0	0	0
SFD Cumulative	0 0	0 0	0	0	0	0	0 0	0	0	0	0
Townhome (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	950	950	950	950	950	950	950	950	950	950	950
Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	950	950	950	950	950	950	950	950	950	950	950
Condominium (Total)	65	0	0	0	0	0	0	0	0	0	0
Cumulative	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045
Condominiums	65	0	0	0	0	0	0	0	0	0	0
Cumulative	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045
Rental Apartment (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627
Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627
Active Adult Residential Units Total	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
AAC Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	195	195	195	195	195	195	195	195	195	195	195
AAC Condominiums	0	0	0	0	0	0	0	0	0	0	0
Cumulative	232	232	232	232	232	232	232	232	232	232	232
AAC Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	573	573	573	573	573	573	573	573	573	573	573



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
FULL-TIME RESIDENTIAL HOUSEHOLDS Residential Units Cumulative	65	0	0	0	0	0	0	0	0	0	0
	3,621	3,621	3,621	3,621	3,621	3,621	3,621	3,621	3,621	3,621	3,621
Single-Family Detached (Total) Cumulative	0	0	0	0	0	0 0	0	0	0	0	0
SFD Cumulative	0	0	0 0	0	0 0	0	0	0	0	0	0
Townhome (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	950	950	950	950	950	950	950	950	950	950	950
Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	950	950	950	950	950	950	950	950	950	950	950
Condominium (Total)	65	0	0	0	0	0	0	0	0	0	0
Cumulative	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045
Condominiums	65	0	0	0	0	0	0	0	0	0	0
Cumulative	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045
Rental Apartment (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627
Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627	1,627
Active Adult Residential Units Total	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
AAC Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	195	195	195	195	195	195	195	195	195	195	195
AAC Condominiums	0	0	0	0	0	0	0	0	0	0	0
Cumulative	232	232	232	232	232	232	232	232	232	232	232
AAC Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	573	573	573	573	573	573	573	573	573	573	573



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
INDIRECT/INDUCED IMPACT (County Mulitpliers) EMPLOYMENT Construction	133	0	0	0	0	0	0	0	0	0	0
Total Permanent (exc. Construction) Total Cumulative	371	0	0	0	0	0	0	0	0	0	0
	6,014	6,014	6,014	6,014	6,014	6,014	6,014	6,014	6,014	6,014	6,014
Office Total	371	0	0	0	0	0	0	0	0	0	0
Cumulative Office	5,755	5,755	5,755	5,755	5,755	5,755	5,755	5,755	5,755	5,755	5,755
Office: R&D/Lab/Applied Sciences Offices/Manuf. Cumulative Office	104	0	0	0	0	0	0	0	0	0	0
	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660
Office: Science Related Educational/Academic	62	0	0	0	0	0	0	0	0	0	0
Cumulative Office	929	929	929	929	929	929	929	929	929	929	929
Office: Incubator	0	0	0	0	0	0	0	0	0	0	0
Cumulative Office	88	88	88	88	88	88	88	88	88	88	88
Office: Clinical/Medical Office	44	0	0	0	0	0	0	0	0	0	0
Cumulative Office	653	653	653	653	653	653	653	653	653	653	653
Office: General	162	0	0	0	0	0	0	0	0	0	0
Cumulative Office	2,425	2,425	2,425	2,425	2,425	2,425	2,425	2,425	2,425	2,425	2,425
Retail Total	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	182	182	182	182	182	182	182	182	182	182	182
Retail-Lifestyle Center	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	147	147	147	147	147	147	147	147	147	147	147
Retail-Restaurants	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	22	22	22	22	22	22	22	22	22	22	22
Retail-Theater	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	6	6	6	6	6	6	6	6	6	6	6
Retail-Health Club	0	0	0	0	0	0	0	0	0	0	0
Cumulative Retail	6	6	6	6	6	6	6	6	6	6	6
Hotel Hotel Cumulative Hotel	0 77										
EMPLOYEE INCOME-AVERAGE WAGES PER FTE EMPLOYEE Construction	\$114,255	\$117,683	\$121,213	\$124,849	\$128,595	\$132,453	\$136,426	\$140,519	\$144,735	\$149,077	\$153,549
Office Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office Office: General	\$133,479	\$137,483	\$141,607	\$145,856	\$150,231	\$154,738	\$159,380	\$164,162	\$169,087	\$174,159	\$179,384
	\$117,580	\$121,107	\$124,740	\$128,482	\$132,337	\$136,307	\$140,396	\$144,608	\$148,946	\$153,415	\$158,017
	\$81,642	\$84,091	\$86,614	\$89,212	\$91,889	\$94,645	\$97,485	\$100,409	\$103,421	\$106,524	\$109,720
	\$165,987	\$170,966	\$176,095	\$181,378	\$186,820	\$192,424	\$198,197	\$204,143	\$210,267	\$216,575	\$223,072
	\$117,727	\$121,259	\$124,896	\$128,643	\$132,503	\$136,478	\$140,572	\$144,789	\$149,133	\$153,607	\$158,215
Retail: Lifestyle/Town Center	\$49,743	\$51,235	\$52,772	\$54,355	\$55,986	\$57,666	\$59,396	\$61,178	\$63,013	\$64,903	\$66,850
Retail: Restaurants	\$36,009	\$37,090	\$38,202	\$39,348	\$40,529	\$41,745	\$42,997	\$44,287	\$45,616	\$46,984	\$48,393
Retail: Movie Theater/Entertainment	\$29,661	\$30,551	\$31,467	\$32,411	\$33,384	\$34,385	\$35,417	\$36,479	\$37,574	\$38,701	\$39,862
Retail: Health Club	\$31,666	\$32,616	\$33,595	\$34,603	\$35,641	\$36,710	\$37,811	\$38,945	\$40,114	\$41,317	\$42,557
Hotel Hotel	\$54,592	\$56,230	\$57,917	\$59,654	\$61,444	\$63,287	\$65,186	\$67,141	\$69,155	\$71,230	\$73,367



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
TOTAL HOUSEHOLD INCOME-INCOME PER HOUSEHOLD Residential Units											
Single-Family Detached SFD Townhome	\$392,040	\$403,801	\$415,915	\$428,393	\$441,245	\$454,482	\$468,116	\$482,160	\$496,625	\$511,523	\$526,869
Townhomes	\$284,989	\$293,538	\$302,344	\$311,415	\$320,757	\$330,380	\$340,291	\$350,500	\$361,015	\$371,845	\$383,001
Condominium Condominiums	\$186,065	\$191,646	\$197,396	\$203,318	\$209,417	\$215,700	\$222,171	\$228,836	\$235,701	\$242,772	\$250,055
Rental Apartment Rental Apartments	\$133,659	\$137,669	\$141,799	\$146,053	\$150,435	\$154,948	\$159,596	\$164,384	\$169,316	\$174,395	\$179,627
Active Adult Residential Units AAC Townhomes AAC Condominiums AAC Rental Apartments	\$243,518	\$250,824	\$258,348	\$266,099	\$274,082	\$282,304	\$290,773	\$299,497	\$308,482	\$317,736	\$327,268
	\$178,726	\$184,088	\$189,611	\$195,299	\$201,158	\$207,193	\$213,408	\$219,811	\$226,405	\$233,197	\$240,193
	\$138,878	\$143,044	\$147,335	\$151,755	\$156,308	\$160,997	\$165,827	\$170,802	\$175,926	\$181,204	\$186,640
POPULATION Residential Population	107	0	0	0	0	0	0	0	0	0	0
Cumulative	7,774	7,774	7,774	7,774	7,774	7,774	7,774	7,774	7,774	7,774	7,774
Single-Family Detached (Total) Cumulative	0	0	0	0	0	0 0	0	0	0	0	0 0
SFD Cumulative	0	0	0	0	0	0 0	0	0	0	0	0 0
Townhome (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612
Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612
Condominium (Total)	107	0	0	0	0	0	0	0	0	0	0
Cumulative	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713
Condominiums	107	0	0	0	0	0	0	0	0	0	0
Cumulative	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713
Rental Apartment (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448
Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448
Active Adult Population Units Total	0	0	0	0	0	0	0	0	0	0	0
Cumulative	1,699	1,699	1,699	1,699	1,699	1,699	1,699	1,699	1,699	1,699	1,699
AAC Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	331	331	331	331	331	331	331	331	331	331	331
AAC Condominiums	0	0	0	0	0	0	0	0	0	0	0
Cumulative	394	394	394	394	394	394	394	394	394	394	394
AAC Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	974	974	974	974	974	974	974	974	974	974	974



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030 Year 20	2031 Year 21	2032 Year 22	2033 Year 23	2034 Year 24	2035 Year 25	2036 Year 26	2037 Year 27	2038 Year 28	2039 Year 29	2040 Year 30
FULL-TIME RESIDENTIAL POPULATION											
Residential Population	107	0	0	0	0	0	0	0	0	0	0
Cumulative	7,774	7,774	7,774	7,774	7,774	7,774	7,774	7,774	7,774	7,774	7,774
	.,	.,	.,	.,	.,	.,	.,	.,	.,	.,	.,
Single-Family Detached (Total) Cumulative	0	0	0	0	0	0	0	0	0	0	0
SFD	0	0	0	0	0	0	0	0	0	0	0
Cumulative	0	0	0	0	Ō	0	0	0	0	0	Ō
Townhome (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612
Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612	2,612
	_,-,-	_,-,-	_,	_,	-,	_,-,-	_,-,-	_,-,-	_,	_,-,-	_,-,-
Condominium (Total)	107	0	0	0	0	0	0	0	0	0	0
Cumulative	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713
Oct benefit on	407	•	•		•	•	•	•			
Condominiums	107 1,713	0	0	0	0	0	0	0	0	0	0 1,713
Cumulative	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713	1,713
Rental Apartment (Total)	0	0	0	0	0	0	0	0	0	0	0
Cumulative	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448
Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448	3,448
Active Adult Residential Regulation Total	0	0	0	0	0	0	0	0	0	0	0
Active Adult Residential Population Total Cumulative	1,699	1,699	1,699	1,699	1,699	1,699	1,699	1,699	1,699	1,699	1,699
Cultulative	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033
AAC Townhomes	0	0	0	0	0	0	0	0	0	0	0
Cumulative	331	331	331	331	331	331	331	331	331	331	331
AAC Condominiums	0	0	0	0	0	0	0	0	0	0	0
Cumulative	394	394	394	394	394	394	394	394	394	394	394
AAC Rental Apartments	0	0	0	0	0	0	0	0	0	0	0
Cumulative	974	974	974	974	974	974	974	974	974	974	974
Sundano	0	0	0.1	0	0	0	0	0.1	0.1	0	0
NEW STUDENT GENERATION-PER FULL-TIME RESIDENTIAL HOUSEHO											
Elementary	_		_			_	_		_		_
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0
Townhome Multifamily	0 10	0	0	0	0	0	0	0	0	0	0
Middle School	10	U	U	U	U	U	U	U	U	U	U
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0
Townhome	0	0	0	0	Ö	0	0	0	Ö	0	ő
Multifamily	4	Ō	Ō	Ö	Ö	Ō	Ō	Ō	Ō	ō	Ö
High School 2											
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0
Townhome	0	0	0	0	0	0	0	0	0	0	0
Multifamily	3	0	0	0	0	0	0	0	0	0	0
Total	•	•	^	•	•	^	^	^	^	•	^
Single-Family Detached Townhome	0	0	0	0	0	0	0	0	0	0	0
Multifamily	16	0	0	0	0	0	0	0	0	0	0
Total Students by Year	16	0	0	0	0	0	0	0	0	Ŏ	0
		•	•	•	•	•	•	•	•	•	·



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030 Year 20	2031 Year 21	2032 Year 22	2033 Year 23	2034 Year 24	2035 Year 25	2036 Year 26	2037 Year 27	2038 Year 28	2039 Year 29	2040 Year 30
CUMULATIVE NEW STUDENT GENERATION											
Elementary											
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0
Townhome	200	200	200	200	200	200	200	200	200	200	200
Multifamily	160	160	160	160	160	160	160	160	160	160	160
Middle School											
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0
Townhome	116	116	116	116	116	116	116	116	116	116	116
Multifamily	59	59	59	59	59	59	59	59	59	59	59
High School	0	0	0	0	0	0	0	0	0	0	0
Single-Family Detached Townhome	0 102	102	0 102	102	0 102	0 102	0 102	0 102	0 102	102	0 102
Multifamily	41	41	41	41	41	41	41	41	41	41	41
Total	41	41	41	41	41	41	41	41	41	41	41
Single-Family Detached	0	0	0	0	0	0	0	0	0	0	0
Townhome	418	418	418	418	418	418	418	418	418	418	418
Multifamily	259	259	259	259	259	259	259	259	259	259	259
Total Cumulative Students	677	677	677	677	677	677	677	677	677	677	677
HOTEL ROOM REVENUES											
Hotel Room Nights	76,650	76,650	76,650	76,650	76,650	76,650	76,650	76,650	76,650	76,650	76,650
Total Room Revenues	\$22,177,029	\$22,842,340	\$23,527,611	\$24,233,439	\$24,960,442	\$25,709,255	\$26,480,533	\$27,274,949	\$28,093,197	\$28,935,993	\$29,804,073
ADMISSIONS & AMUSEMENTS											
Movie Screens	19	19	19	19	19	19	19	19	19	19	19
Theater Sales-Tickets	\$8,606,050	\$8,864,231	\$9,130,158	\$9,404,063	\$9,686,185	\$9,976,771	\$10,276,074	\$10,584,356	\$10,901,887	\$11,228,943	\$11,565,812
EMPLOYEE INCOME											
Total Construction Income	\$20,474,998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office											
Office: R&D/Lab/Applied Sciences Offices/Manuf.	\$310,671,521	\$319,991,667	\$329,591,417	\$339,479,159	\$349,663,534	\$360,153,440	\$370,958,043	\$382,086,785	\$393,549,388	\$405,355,870	\$417,516,546
Office: Science Related Educational/Academic	\$333,197,858	\$343,193,793	\$353,489,607	\$364,094,295	\$375,017,124	\$386,267,638	\$397,855,667	\$409,791,337	\$422,085,077	\$434,747,630	\$447,790,058
Office: Incubator	\$10,082,762	\$10,385,245	\$10,696,802	\$11,017,706	\$11,348,237	\$11,688,684	\$12,039,345	\$12,400,525	\$12,772,541	\$13,155,717	\$13,550,389
Office: Clinical/Medical Office	\$293,872,231	\$302,688,398	\$311,769,050	\$321,122,122	\$330,755,786	\$340,678,459	\$350,898,813	\$361,425,777	\$372,268,551	\$383,436,607	\$394,939,705
Office: General	\$275,127,741	\$283,381,573	\$291,883,020	\$300,639,511	\$309,658,696	\$318,948,457	\$328,516,910	\$338,372,418	\$348,523,590	\$358,979,298	\$369,748,677
Retail											
Retail: Lifestyle/Town Center	\$44,892,998	\$46,239,788	\$47,626,981	\$49,055,791	\$50,527,464	\$52,043,288	\$53,604,587	\$55,212,725	\$56,869,106	\$58,575,179	\$60,332,435
Retail: Restaurants	\$3,848,494	\$3,963,949	\$4,082,867	\$4,205,353	\$4,331,514	\$4,461,459	\$4,595,303	\$4,733,162	\$4,875,157	\$5,021,412	\$5,172,054
Retail: Movie Theater/Entertainment	\$1,127,114	\$1,160,928	\$1,195,756	\$1,231,628	\$1,268,577	\$1,306,635	\$1,345,834	\$1,386,209	\$1,427,795	\$1,470,629	\$1,514,748
Retail: Health Club	\$1,002,763	\$1,032,846	\$1,063,832	\$1,095,747	\$1,128,619	\$1,162,478	\$1,197,352	\$1,233,273	\$1,270,271	\$1,308,379	\$1,347,630
Hotel											
Hotel	\$8,598,225	\$8,856,172	\$9,121,857	\$9,395,512	\$9,677,378	\$9,967,699	\$10,266,730	\$10,574,732	\$10,891,974	\$11,218,733	\$11,555,295
Total Employee Income	\$1,302,896,704	\$1,320,894,358	\$1,360,521,189	\$1,401,336,824	\$1,443,376,929	\$1,486,678,237	\$1,531,278,584	\$1,577,216,942	\$1,624,533,450	\$1,673,269,453	\$1,723,467,537
% In State	\$1,133,520,133	\$1,149,178,091	\$1,183,653,434	\$1,219,163,037	\$1,255,737,928	\$1,293,410,066	\$1,332,212,368	\$1,372,178,739	\$1,413,344,101	\$1,455,744,424	\$1,499,416,757
% of State in Montgomery County	\$680,112,080	\$689,506,855	\$710,192,061	\$731,497,822	\$753,442,757	\$776,046,040	\$799,327,421	\$823,307,244	\$848,006,461	\$873,446,655	\$899,650,054
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Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
DIRECT TAX REVENUES: MONTGOMERY COUNTY											
Real Property Tax Revenues											
Office Market Value	\$1,581,443,272	\$1,628,886,570	\$1,677,753,167	\$1,728,085,762	\$1,779,928,335	\$1,833,326,185	\$1,888,325,970	\$1,944,975,749	\$2,003,325,022	\$2,063,424,773	\$2,125,327,516
Prior Year Market Value Subject To Tax	\$1,431,336,200	\$1,581,443,272	\$1,628,886,570	\$1,677,753,167	\$1,728,085,762	\$1,779,928,335	\$1,833,326,185	\$1,888,325,970	\$1,944,975,749	\$2,003,325,022	\$2,063,424,773
Total Office Real Property Tax Revenues	\$12,538,505	\$13,853,443	\$14,269,046	\$14,697,118	\$15,138,031	\$15,592,172	\$16,059,937	\$16,541,735	\$17,037,988	\$17,549,127	\$18,075,601
Retail Market Value	\$171,317,541	\$176,457,068	\$181,750,780	\$187,203,303	\$192,819,402	\$198,603,984	\$204,562,104	\$210,698,967	\$217,019,936	\$223,530,534	\$230,236,450
Prior Year Market Value Subject To Tax	\$166,327,710	\$171,317,541	\$176,457,068	\$181,750,780	\$187,203,303	\$192,819,402	\$198,603,984	\$204,562,104	\$210,698,967	\$217,019,936	\$223,530,534
Total Retail Real Property Tax Revenues	\$1,457,031	\$1,500,742	\$1,545,764	\$1,592,137	\$1,639,901	\$1,689,098	\$1,739,771	\$1,791,964	\$1,845,723	\$1,901,095	\$1,958,127
Hotel Assessed Value	\$78,907,772	\$81,275,006	\$83,713,256	\$86,224,653	\$88,811,393	\$91,475,735	\$94,220,007	\$97,046,607	\$99,958,005	\$102,956,745	\$106,045,448
Prior Year Market Value Subject To Tax	\$76,609,488	\$78,907,772	\$81,275,006	\$83,713,256	\$86,224,653	\$88,811,393	\$91,475,735	\$94,220,007	\$97,046,607	\$99,958,005	\$102,956,745
Total Hotel Real Property Tax Revenues	\$671,099	\$691,232	\$711,969	\$733,328	\$755,328	\$777,988	\$801,327	\$825,367	\$850,128	\$875,632	\$901,901
Residential Market Value	\$2,645,738,242	\$2,725,110,389	\$2,806,863,701	\$2,891,069,612	\$2,977,801,700	\$3,067,135,751	\$3,159,149,824	\$3,253,924,319	\$3,351,542,048	\$3,452,088,310	\$3,555,650,959
Prior Year Market Value Subject To Tax	\$2,527,299,896	\$2,645,738,242	\$2,725,110,389	\$2,806,863,701	\$2,891,069,612	\$2,977,801,700	\$3,067,135,751	\$3,159,149,824	\$3,253,924,319	\$3,351,542,048	\$3,452,088,310
Total Residential Real Property Tax Revenues	\$22,139,147	\$23,176,667	\$23,871,967	\$24,588,126	\$25,325,770	\$26,085,543	\$26,868,109	\$27,674,152	\$28,504,377	\$29,359,508	\$30,240,294
Total Real Property Tax Revenues	\$36,805,782	\$39,222,084	\$40,398,746	\$41,610,709	\$42,859,030	\$44,144,801	\$45,469,145	\$46,833,219	\$48,238,216	\$49,685,362	\$51,175,923
Real Property Tax Revenues from Surrounding Area											
Increase in Value of Current Assessments Prior Year Market Value Subject To Tax Total Increase in Real Property Tax Revenues Total Real Property Tax Revenues from Surrounding Area	\$543,168,726	\$559,463,788	\$576,247,702	\$593,535,133	\$611,341,187	\$629,681,422	\$648,571,865	\$668,029,021	\$688,069,892	\$708,711,988	\$729,973,348
	\$527,348,278	\$543,168,726	\$559,463,788	\$576,247,702	\$593,535,133	\$611,341,187	\$629,681,422	\$648,571,865	\$668,029,021	\$688,069,892	\$708,711,988
	\$4,619,571	\$4,758,158	\$4,900,903	\$5,047,930	\$5,199,368	\$5,355,349	\$5,516,009	\$5,681,490	\$5,851,934	\$6,027,492	\$6,208,317
	\$4,619,571	\$4,758,158	\$4,900,903	\$5,047,930	\$5,199,368	\$5,355,349	\$5,516,009	\$5,681,490	\$5,851,934	\$6,027,492	\$6,208,317
Personal Property Tax Revenues											
Office Personal Property Market Value	\$250,367,786	\$257,878,820	\$265,615,184	\$273,583,640	\$281,791,149	\$290,244,884	\$298,952,230	\$307,920,797	\$317,158,421	\$326,673,173	\$336,473,369
Total Office Personal Property Taxes	\$5,488,062	\$5,652,704	\$5,822,285	\$5,996,953	\$6,176,862	\$6,362,168	\$6,553,033	\$6,749,624	\$6,952,113	\$7,160,676	\$7,375,496
Retail Personal Property Market Value	\$25,697,631	\$26,468,560	\$27,262,617	\$28,080,495	\$28,922,910	\$29,790,598	\$30,684,316	\$31,604,845	\$32,552,990	\$33,529,580	\$34,535,467
Total Retail Personal Property Taxes	\$563,292	\$580,191	\$597,597	\$615,524	\$633,990	\$653,010	\$672,600	\$692,778	\$713,562	\$734,968	\$757,017
Hotel Personal Property Assessed Value	\$11,836,166	\$12,191,251	\$12,556,988	\$12,933,698	\$13,321,709	\$13,721,360	\$14,133,001	\$14,556,991	\$14,993,701	\$15,443,512	\$15,906,817
Total Hotel Personal Property Taxes	\$259,449	\$267,232	\$275,249	\$283,507	\$292,012	\$300,772	\$309,795	\$319,089	\$328,662	\$338,522	\$348,677
Total Personal Property Taxes	\$6,310,803	\$6,500,127	\$6,695,131	\$6,895,985	\$7,102,864	\$7,315,950	\$7,535,428	\$7,761,491	\$7,994,336	\$8,234,166	\$8,481,191



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030 Year 20	2031 Year 21	2032 Year 22	2033 Year 23	2034 Year 24	2035 Year 25	2036 Year 26	2037 Year 27	2038 Year 28	2039 Year 29	2040 Year 30
Income Tax Revenues											
Employee Income Tax Revenues											
Total Construction Income	\$20,474,998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office											
Office: R&D/Lab/Applied Sciences Offices/Manuf.	\$310,671,521	\$319,991,667	\$329,591,417	\$339,479,159	\$349,663,534	\$360,153,440	\$370,958,043	\$382,086,785	\$393,549,388	\$405,355,870	\$417,516,546
Office: Science Related Educational/Academic	\$333,197,858	\$343,193,793	\$353,489,607	\$364,094,295	\$375,017,124	\$386,267,638	\$397,855,667	\$409,791,337	\$422,085,077	\$434,747,630	\$447,790,058
Office: Incubator	\$10,082,762	\$10,385,245	\$10,696,802	\$11,017,706	\$11,348,237	\$11,688,684	\$12,039,345	\$12,400,525	\$12,772,541	\$13,155,717	\$13,550,389
Office: Clinical/Medical Office Office: General	\$293,872,231 \$235,423,744	\$302,688,398	\$311,769,050 \$291,883,020	\$321,122,122	\$330,755,786	\$340,678,459 \$318,948,457	\$350,898,813	\$361,425,777	\$372,268,551	\$383,436,607	\$394,939,705 \$369,748,677
	\$275,127,741	\$283,381,573	\$291,883,020	\$300,639,511	\$309,658,696	\$318,948,457	\$328,516,910	\$338,372,418	\$348,523,590	\$358,979,298	\$309,740,077
Retail	044,000,000	#40.000.700	0.17.000.001	#10 0FF 701	# 50 507 404	0 50 040 000	AFO 004 F07	855.040.705	#50.000.400	AF0 F7F 470	#00 000 40F
Retail: Lifestyle/Town Center Retail: Restaurants	\$44,892,998 \$3,848,494	\$46,239,788 \$3,963,949	\$47,626,981 \$4.082.867	\$49,055,791 \$4,205,353	\$50,527,464 \$4.331.514	\$52,043,288 \$4,461,459	\$53,604,587 \$4,595,303	\$55,212,725 \$4,733,162	\$56,869,106 \$4,875,157	\$58,575,179 \$5,021,412	\$60,332,435 \$5,172,054
Retail: Movie Theater/Entertainment	\$1,127,114	\$1,160,928	\$1,195,756	\$1,231,628	\$1,268,577	\$1,306,635	\$1,345,834	\$1,386,209	\$1,427,795	\$1,470,629	\$1,514,748
Retail: Health Club	\$1,002,763	\$1,032,846	\$1,063,832	\$1,095,747	\$1,128,619	\$1,162,478	\$1,197,352	\$1,233,273	\$1,270,271	\$1,308,379	\$1,347,630
Hotel											
Hotel	\$8,598,225	\$8,856,172	\$9,121,857	\$9,395,512	\$9,677,378	\$9,967,699	\$10,266,730	\$10,574,732	\$10,891,974	\$11,218,733	\$11,555,295
Total Employee Income	\$1,347,789,702	\$1,367,134,146	\$1,408,148,170	\$1,450,392,615	\$1,493,904,393	\$1,538,721,525	\$1,584,883,171	\$1,632,429,666	\$1,681,402,556	\$1,731,844,633	\$1,783,799,972
% In State % of State in Montgomery County	\$1,172,577,041 \$703,546,224	\$1,189,406,707 \$713,644,024	\$1,225,088,908 \$735,053,345	\$1,261,841,575 \$757,104,945	\$1,299,696,822 \$779,818,093	\$1,338,687,727 \$803,212,636	\$1,378,848,359 \$827,309,015	\$1,420,213,810 \$852,128,286	\$1,462,820,224 \$877,692,134	\$1,506,704,831 \$904,022,898	\$1,551,905,975 \$931,143,585
% of State in Montgomery County	\$703,346,224	\$713,044,024	\$730,000,040	\$757,104,945	\$779,010,093	\$603,212,030	\$627,309,013	\$652,126,260	\$677,092,134	\$904,022,090	\$931,143,363
Net Taxable Income	\$527,659,668	\$535,233,018	\$551,290,009	\$567,828,709	\$584,863,570	\$602,409,477	\$620,481,761	\$639,096,214	\$658,269,101	\$678,017,174	\$698,357,689
County Employee Income Tax Revenues	\$16,885,109	\$17,127,457	\$17,641,280	\$18,170,519	\$18,715,634	\$19,277,103	\$19,855,416	\$20,451,079	\$21,064,611	\$21,696,550	\$22,347,446
Household Income Tax Revenue											
Total Full-time Household Income	\$850,959,092	\$876,487,865	\$902,782,501	\$929,865,976	\$957,761,955	\$986,494,814	\$1,016,089,658	\$1,046,572,348	\$1,077,969,519	\$1,110,308,604	\$1,143,617,862
Net Taxable Income	\$638,219,319	\$657,365,899	\$677,086,876	\$697,399,482	\$718,321,467	\$739,871,111	\$762,067,244	\$784,929,261	\$808,477,139	\$832,731,453	\$857,713,397
Total Taxable Household Income	\$638,219,319	\$657,365,899	\$677,086,876	\$697,399,482	\$718,321,467	\$739,871,111	\$762,067,244	\$784,929,261	\$808,477,139	\$832,731,453	\$857,713,397
County Householder Income Tax Revenues	\$20,423,018	\$21,035,709	\$21,666,780	\$22,316,783	\$22,986,287	\$23,675,876	\$24,386,152	\$25,117,736	\$25,871,268	\$26,647,407	\$27,446,829
Total County Income Tax	\$37,308,128	\$38,163,165	\$39,308,060	\$40,487,302	\$41,701,921	\$42,952,979	\$44,241,568	\$45,568,815	\$46,935,880	\$48,343,956	\$49,794,275
Recordation Fees and Transfer Tax											
Values											
Single-Family Detached Value (under \$500K)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Single-Family Detached Value (over \$500K)	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$0 \$0	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0
Townhome Value (under \$500K) Townhome Value (over \$500K)	\$0 \$0										
Condominium Value (under \$500K)	\$34,500,000	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0
Condominium Value (over \$500K)	\$8,294,841	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total New For-Sale Value	\$42,794,841	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Resale (under \$500K)	\$162,919,839	\$171,512,757	\$176,658,140	\$181,957,884	\$187,416,621	\$193,039,119	\$198,830,293	\$204,795,202	\$210,939,058	\$217,267,230	\$223,785,246
Total New Units Total Resale Units	69 256	0 262	0 262	0 262	0	0 262	0	0 262	0 262	0 262	0 262
	256	202	202	202	262	202	262	202	202	202	202
Recordation Fees (Only General Fund)											.
Recordation Fees New Home Sales	\$320,998	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$4.455.470	\$0	\$0
Recordation Fees Resales Recordation Fees Total	\$1,124,147 \$1,445,145	\$1,183,438 \$1,183,438	\$1,218,941 \$1,218,941	\$1,255,509 \$1,255,509	\$1,293,175 \$1,293,175	\$1,331,970 \$1,331,970	\$1,371,929 \$1,371,929	\$1,413,087 \$1,413,087	\$1,455,479 \$1,455,479	\$1,499,144 \$1,499,144	\$1,544,118 \$1,544,118
Transfer Fees	φ1,445,145	\$1,100,438	φ1,∠10,941	φ1,200,009	φ1,283,175	φ1,331,970	φ1,3/1,929	\$1,413,087	φ1,400,479	ক।,4৩৩,144	φ1,344,118
Total For-Sale Value	\$42,794,841	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other transfers	\$162,919,839	\$171,512,757	\$176,658,140	\$181,957,884	\$187,416,621	\$193,039,119	\$198,830,293	\$204,795,202	\$210,939,058	\$217,267,230	\$223,785,246
Total Transfer Value	\$205,714,680	\$171,512,757	\$176,658,140	\$181,957,884	\$187,416,621	\$193,039,119	\$198,830,293	\$204,795,202	\$210,939,058	\$217,267,230	\$223,785,246
Transfer Tax Total	\$2,057,147	\$1,715,128	\$1,766,581	\$1,819,579	\$1,874,166	\$1,930,391	\$1,988,303	\$2,047,952	\$2,109,391	\$2,172,672	\$2,237,852
Total Recordation & Transfer Tax	\$3,502,292	\$2,898,566	\$2,985,523	\$3,075,088	\$3,167,341	\$3,262,361	\$3,360,232	\$3,461,039	\$3,564,870	\$3,671,816	\$3,781,971



Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030 Year 20	2031 Year 21	2032 Year 22	2033 Year 23	2034 Year 24	2035 Year 25	2036 Year 26	2037 Year 27	2038 Year 28	2039 Year 29	2040 Year 30
Hotel Room Tax											
Room Revenues Total Hotel Room Tax	\$22,177,029 \$1,552,392	\$22,842,340 \$1,598,964	\$23,527,611 \$1,646,933	\$24,233,439 \$1,696,341	\$24,960,442 \$1,747,231	\$25,709,255 \$1,799,648	\$26,480,533 \$1,853,637	\$27,274,949 \$1,909,246	\$28,093,197 \$1,966,524	\$28,935,993 \$2,025,520	\$29,804,073 \$2,086,285
Admissions Tax	* 1,012,012	**,===,==	+ 1,-12,-22	* 1,122,121	* · , · · · , - · ·	* 1,1 22,2 12	*1,000,000	* 1,000,010	**,****	,,	\$2,000,200
Theater Ticket Sales	\$602,423	\$620,496	\$639,111	\$658,284	\$678,033	\$698,374	\$719,325	\$740,905	\$763,132	\$786,026	\$809,607
Total Admissions Tax	\$42,170	\$43,435	\$44,738	\$46,080	\$47,462	\$48,886	\$50,353	\$51,863	\$53,419	\$55,022	\$56,672
Impact Taxes											
School Impact Tax - New Dwelling Units Inflation Rate SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All)	1.754 \$0 \$0 \$0 \$0 \$0 \$0	1.806 \$0 \$0 \$0 \$0 \$0 \$0	1.860 \$0 \$0 \$0 \$0 \$0 \$0	1.916 \$0 \$0 \$0 \$0 \$0 \$0	1.974 \$0 \$0 \$0 \$0 \$0 \$0	2.033 \$0 \$0 \$0 \$0 \$0 \$0	2.094 \$0 \$0 \$0 \$0 \$0 \$0	2.157 \$0 \$0 \$0 \$0 \$0 \$0	2.221 \$0 \$0 \$0 \$0 \$0 \$0	2.288 \$0 \$0 \$0 \$0 \$0 \$0	2.357 \$0 \$0 \$0 \$0 \$0 \$0
Total School Impact Tax - New Dwelling Units	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transportation Impact Tax Inflation Rate SFD Townhomes/Villas Multifarnily (Carden) Multifarnily (Low-rise w/parking) Multifarnily (High-rise w/parking) AAC (All)	1.754 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.806 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.860 \$0 \$0 \$0 \$0 \$0 \$0	1.916 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.974 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.033 \$0 \$0 \$0 \$0 \$0 \$0	2.094 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.157 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.221 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.288 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.357 \$0 \$0 \$0 \$0 \$0 \$0
Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0
Total Impact Taxes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Miscellaneous Revenues											
Per Employee Total Employees Total Misc. Revenue-Employees Per Resident	10,629 \$4,123,173	10,629 \$4,246,868	10,629 \$4,374,274	10,629 \$4,505,503	10,629 \$4,640,668	10,629 \$4,779,888	10,629 \$4,923,284	10,629 \$5,070,983	10,629 \$5,223,112	10,629 \$5,379,806	10,629 \$5,541,200
Cumulative Full-Time Residents Misc. Rev: Full-Time Residents Total Misc. Revenue-Residents Total Misc. Revenues	9,473 \$3,712,154 \$3,712,154 \$7,835,328	9,473 \$3,823,519 \$3,823,519 \$8,070,387	9,473 \$3,938,225 \$3,938,225 \$8,312,499	9,473 \$4,056,371 \$4,056,371 \$8,561,874	9,473 \$4,178,063 \$4,178,063 \$8,818,730	9,473 \$4,303,404 \$4,303,404 \$9,083,292	9,473 \$4,432,507 \$4,432,507 \$9,355,791	9,473 \$4,565,482 \$4,565,482 \$9,636,465	9,473 \$4,702,446 \$4,702,446 \$9,925,559	9,473 \$4,843,520 \$4,843,520 \$10,223,325	9,473 \$4,988,825 \$4,988,825 \$10,530,025
DIRECT TOTAL REVENUES: MONTGOMERY COUNTY TOTAL REVENUES	\$97,976,465	\$101,254,886	\$104,292,532	\$107,421,308	\$110,643,947	\$113,963,266	\$117,382,164	\$120,903,629	\$124,530,737	\$128,266,660	\$132,114,659
REVENUE SUMMARY Real Property Tax Revenues Real Property Tax Revenues from Surrounding Area Personal Property Tax Revenues Income Tax Revenues Recordation Fees and Transfer Tax Hotel Room Tax Admissions Tax Impact Taxes Miscellaneous Revenues	\$36,805,782 \$4,619,571 \$6,310,803 \$37,308,128 \$3,502,292 \$1,552,392 \$42,170 \$0 \$7,835,328	\$39,222,084 \$4,758,158 \$6,500,127 \$38,163,165 \$2,898,566 \$1,598,964 \$43,435 \$0 \$8,070,387	\$40,398,746 \$4,900,903 \$6,695,131 \$39,308,060 \$2,985,523 \$1,646,933 \$44,738 \$0 \$8,312,499	\$41,610,709 \$5,047,930 \$6,895,985 \$40,487,302 \$3,075,088 \$1,696,341 \$46,080 \$0 \$8,561,874	\$42,859,030 \$5,199,368 \$7,102,864 \$41,701,921 \$3,167,341 \$1,747,231 \$47,462 \$0 \$8,818,730	\$44,144,801 \$5,355,349 \$7,315,950 \$42,952,979 \$3,262,361 \$1,799,648 \$48,886 \$0 \$9,083,292	\$45,469,145 \$5,516,009 \$7,535,428 \$44,241,568 \$3,360,232 \$1,853,637 \$50,353 \$0 \$9,355,791	\$46,833,219 \$5,681,490 \$7,761,491 \$45,568,815 \$3,461,039 \$1,909,246 \$51,863 \$0 \$9,636,465	\$48,238,216 \$5,851,934 \$7,994,336 \$46,935,880 \$3,564,870 \$1,966,524 \$53,419 \$0 \$9,925,559	\$49,685,362 \$6,027,492 \$8,234,166 \$48,343,956 \$3,671,816 \$2,025,520 \$55,022 \$0 \$10,223,325	\$51,175,923 \$6,208,317 \$8,481,191 \$49,794,275 \$3,781,971 \$2,086,285 \$56,672 \$0 \$10,530,025

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Appendix 1

FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030 Year 20	2031 Year 21	2032 Year 22	2033 Year 23	2034 Year 24	2035 Year 25	2036 Year 26	2037 Year 27	2038 Year 28	2039 Year 29	2040 Year 30
DIRECT EXPENDITURES: MONTGOMERY COUNTY											
Non-Educational Operating Expenditures											
Per Employee Total Employees Total Operating Expenditures- Employee	10,629 \$10,092,682	10,629 \$10,395,462	10,629 \$10,707,326	10,629 \$11,028,546	10,629 \$11,359,402	10,629 \$11,700,184	10,629 \$12,051,190	10,629 \$12,412,725	10,629 \$12,785,107	10,629 \$13,168,660	10,629 \$13,563,720
Per Resident Cumulative Full-Time Residents Misc. Rev: Full-Time Residents	9,473 \$12,511,490	9,473 \$12,886,835	9,473 \$13,273,440	9,473 \$13,671,643	9,473 \$14,081,793	9,473 \$14,504,246	9,473 \$14,939,374	9,473 \$15,387,555	9,473 \$15,849,182	9,473 \$16,324,657	9,473 \$16,814,397
Total Operating Expenditures	\$22,604,172	\$23,282,297	\$23,980,766	\$24,700,189	\$25,441,195	\$26,204,431	\$26,990,564	\$27,800,280	\$28,634,289	\$29,493,318	\$30,378,117
Non-Educational Capital Expenditures											
Transportation Inflation Rate SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All)	1.754 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.806 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.860 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.916 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.974 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.033 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.094 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.157 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.221 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.288 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.357 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0
Total Capital Expenditures (Non-Educational) New Annual Payments w/ 20yr financing New Ann. Payments w/ 20 yr. Financing	\$0 \$0 \$2,480,966	\$0 \$0 \$2,480,966	\$0 \$0 \$2,480,966	\$0 \$0 \$2,480,966	\$0 \$0 \$2,393,274	\$0 \$0 \$2,255,988	\$0 \$0 \$2,037,792	\$0 \$0 \$1,741,981	\$0 \$0 \$1,597,910	\$0 \$0 \$1,438,768	\$0 \$0 \$1,297,444
Educational Operating Expenditures Per Student Operating Expenditures Total Students Generated by Project-Full-time Households Total Educational Operating Expenditures	\$16,586 677 \$11,229,314	\$17,083 677 \$11,566,193	\$17,596 677 \$11,913,179	\$18,124 677 \$12,270,574	\$18,667 677 \$12,638,691	\$19,227 677 \$13,017,852	\$19,804 677 \$13,408,388	\$20,398 677 \$13,810,639	\$21,010 677 \$14,224,959	\$21,641 677 \$14,651,707	\$22,290 677 \$15,091,258
Educational Capital Expenditures Schools - New Dwelling Units Inflation Rate SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All) Total School Impact Tax - New Dwelling Units	1.754 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.806 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.860 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.916 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	1.974 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.033 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.094 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.157 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.221 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.288 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2.357 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Educational Capital Expenditures New Annual Payments w/ 20yr financing New Ann. Payments w/ 20 yr. Financing	\$0 \$0 \$2,270,882	\$0 \$0 \$2,270,882	\$0 \$0 \$2,270,882	\$0 \$0 \$2,270,882	\$0 \$0 \$2,145,730	\$0 \$0 \$2,016,823	\$0 \$0 \$1,884,049	\$0 \$0 \$1,747,292	\$0 \$0 \$1,606,432	\$0 \$0 \$1,461,346	\$0 \$0 \$1,311,908
DIRECT TOTAL EXPENDITURES: MONTGOMERY COUNTY TOTAL EXPENDITURES	\$38,585,334	\$39,600,339	\$40,645,793	\$41,722,612	\$42,618,890	\$43,495,093	\$44,320,792	\$45,100,192	\$46,063,590	\$47,045,139	\$48,078,727
EXPENDITURES SUMMARY Non-Educational Operating Expenditures Non-Educational Capital Expenditures Educational Operating Expenditures Educational Capital Expenditures	\$22,604,172 \$2,480,966 \$11,229,314 \$2,270,882	\$23,282,297 \$2,480,966 \$11,566,193 \$2,270,882	\$23,980,766 \$2,480,966 \$11,913,179 \$2,270,882	\$24,700,189 \$2,480,966 \$12,270,574 \$2,270,882	\$25,441,195 \$2,393,274 \$12,638,691 \$2,145,730	\$26,204,431 \$2,255,988 \$13,017,852 \$2,016,823	\$26,990,564 \$2,037,792 \$13,408,388 \$1,884,049	\$27,800,280 \$1,741,981 \$13,810,639 \$1,747,292	\$28,634,289 \$1,597,910 \$14,224,959 \$1,606,432	\$29,493,318 \$1,438,768 \$14,651,707 \$1,461,346	\$30,378,117 \$1,297,444 \$15,091,258 \$1,311,908
DIRECT FISCAL IMPACT: MONTGOMERY COUNTY	\$59,391,131	\$61,654,547	\$63,646,739	\$65,698,696	\$68,025,057	\$70,468,172	\$73,061,371	\$75,803,436	\$78,467,148	\$81,221,520	\$84,035,932



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FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

	2030 Year 20	2031 Year 21	2032 Year 22	2033 Year 23	2034 Year 24	2035 Year 25	2036 Year 26	2037 Year 27	2038 Year 28	2039 Year 29	2040 Year 30
INDIRECT/INDUCED: MONTGOMERY COUNTY											
Indirect/Induced Income Tax											
Direct Taxable Income Total Construction Income	\$10,687,949	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office											
Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office Office: General	\$162,170,534 \$173,929,282 \$5,263,202 \$153,401,305 \$143,616,681	\$167,035,650 \$179,147,160 \$5,421,098 \$158,003,344 \$147,925,181	\$172,046,720 \$184,521,575 \$5,583,731 \$162,743,444 \$152,362,936	\$177,208,121 \$190,057,222 \$5,751,243 \$167,625,748 \$156,933,824	\$182,524,365 \$195,758,939 \$5,923,780 \$172,654,520 \$161,641,839	\$188,000,096 \$201,631,707 \$6,101,493 \$177,834,156 \$166,491,094	\$193,640,099 \$207,680,658 \$6,284,538 \$183,169,180 \$171,485,827	\$199,449,302 \$213,911,078 \$6,473,074 \$188,664,256 \$176,630,402	\$205,432,781 \$220,328,410 \$6,667,266 \$194,324,183 \$181,929,314	\$211,595,764 \$226,938,263 \$6,867,284 \$200,153,909 \$187,387,194	\$217,943,637 \$233,746,411 \$7,073,303 \$206,158,526 \$193,008,809
Retail Retail-Lifestyle Center	\$23,434,145	\$24,137,169	\$24,861,284	\$25,607,123	\$26,375,336	\$27,166,596	\$27,981,594	\$28,821,042	\$29,685,673	\$30,576,244	\$31,493,531
Retail-Neighborhood Retail-Restaurants Retail-Theater Retail-Health Club	\$25,454,145 \$0 \$2,008,914 \$588,354 \$523,443	\$0 \$2,069,181 \$606,004 \$539,146	\$0 \$2,131,257 \$624,184 \$555,320	\$0 \$2,195,194 \$642,910 \$571,980	\$2,261,050 \$2,261,050 \$662,197 \$589,139	\$0 \$2,328,882 \$682,063 \$606,813	\$0 \$2,398,748 \$702,525 \$625,018	\$0 \$2,470,711 \$723,601 \$643,768	\$2,544,832 \$745,309 \$663,081	\$0,570,244 \$0 \$2,621,177 \$767,668 \$682,974	\$0 \$2,699,812 \$790,698 \$703,463
Hotel Hotel	\$4,488,273	\$4,622,922	\$4,761,609	\$4,904,458	\$5,051,591	\$5,203,139	\$5,359,233	\$5,520,010	\$5,685,610	\$5,856,179	\$6,031,864
Indirect/Induced Income Total Construction Income	\$5,979,480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office Office: R&D/Lab/Applied Sciences Offices/Manuf. Office: Science Related Educational/Academic Office: Incubator Office: Clinical/Medical Office Office: General	\$72,849,923 \$73,404,070 \$2,364,325 \$56,716,144 \$61,940,151	\$75,035,421 \$75,606,193 \$2,435,255 \$58,417,628 \$63,798,355	\$77,286,483 \$77,874,378 \$2,508,312 \$60,170,157 \$65,712,306	\$79,605,078 \$80,210,610 \$2,583,562 \$61,975,262 \$67,683,675	\$81,993,230 \$82,616,928 \$2,661,069 \$63,834,520 \$69,714,186	\$84,453,027 \$85,095,436 \$2,740,901 \$65,749,555 \$71,805,611	\$86,986,618 \$87,648,299 \$2,823,128 \$67,722,042 \$73,959,779	\$89,596,216 \$90,277,748 \$2,907,821 \$69,753,703 \$76,178,573	\$92,284,103 \$92,986,080 \$2,995,056 \$71,846,314 \$78,463,930	\$95,052,626 \$95,775,663 \$3,084,908 \$74,001,704 \$80,817,848	\$97,904,205 \$98,648,933 \$3,177,455 \$76,221,755 \$83,242,383
Retail Retail-Lifestyle Center Retail-Restaurants Retail-Theater Retail-Health Club	\$8,306,795 \$870,271 \$208,556 \$196,914	\$8,555,999 \$896,380 \$214,813 \$202,822	\$8,812,679 \$923,271 \$221,257 \$208,906	\$9,077,059 \$950,969 \$227,895 \$215,174	\$9,349,371 \$979,498 \$234,732 \$221,629	\$9,629,852 \$1,008,883 \$241,774 \$228,278	\$9,918,748 \$1,039,150 \$249,027 \$235,126	\$10,216,310 \$1,070,324 \$256,498 \$242,180	\$10,522,799 \$1,102,434 \$264,193 \$249,445	\$10,838,483 \$1,135,507 \$272,118 \$256,929	\$11,163,638 \$1,169,572 \$280,282 \$264,636
Hotel Hotel	\$2,304,113	\$2,373,237	\$2,444,434	\$2,517,767	\$2,593,300	\$2,671,099	\$2,751,232	\$2,833,769	\$2,918,782	\$3,006,345	\$3,096,536
Total Direct/Induced Employment Income Total Direct/Induced Construction Income	\$279,161,264 \$5,979,480	\$287,536,102 \$0	\$296,162,185 \$0	\$305,047,050 \$0	\$314,198,462 \$0	\$323,624,416 \$0	\$333,333,148 \$0	\$343,333,143 \$0	\$353,633,137 \$0	\$364,242,131 \$0	\$375,169,395 \$0
Total Direct/Induced Employment Income Taxes Total Direct/Induced Construction Income Taxes	\$6,699,870 \$143,508	\$6,900,866 \$0	\$7,107,892 \$0	\$7,321,129 \$0	\$7,540,763 \$0	\$7,766,986 \$0	\$7,999,996 \$0	\$8,239,995 \$0	\$8,487,195 \$0	\$8,741,811 \$0	\$9,004,065 \$0
Indirect/Induced Hotel Tax Revenues											
Direct Hotel Room Revenues Indirect Hotel Room Revenues Hotel Tax	\$22,177,029 \$6,952,388 \$486,667	\$22,842,340 \$7,160,959 \$501,267	\$23,527,611 \$7,375,788 \$516,305	\$24,233,439 \$7,597,062 \$531,794	\$24,960,442 \$7,824,974 \$547,748	\$25,709,255 \$8,059,723 \$564,181	\$26,480,533 \$8,301,515 \$581,106	\$27,274,949 \$8,550,560 \$598,539	\$28,093,197 \$8,807,077 \$616,495	\$28,935,993 \$9,071,289 \$634,990	\$29,804,073 \$9,343,428 \$654,040
Indirect/Induced Miscellaneous Revenues											
Total Direct/Induced Employment Total Miscellaneous Revenues	6,014 \$2,332,860	6,014 \$2,402,846	6,014 \$2,474,931	6,014 \$2,549,179	6,014 \$2,625,654	6,014 \$2,704,424	6,014 \$2,785,557	6,014 \$2,869,123	6,014 \$2,955,197	6,014 \$3,043,853	6,014 \$3,135,169
Indirect/Induced Miscellaneous Expenditures											
Total Miscellaneous Expenditures	\$5,710,362	\$5,881,673	\$6,058,124	\$6,239,867	\$6,427,063	\$6,619,875	\$6,818,471	\$7,023,026	\$7,233,716	\$7,450,728	\$7,674,250
Total Induced/Indirect Revenues Total Induced/Indirect Expenditures	\$9,662,905 \$5,710,362	\$9,804,979 \$5,881,673	\$10,099,129 \$6,058,124	\$10,402,103 \$6,239,867	\$10,714,166 \$6,427,063	\$11,035,591 \$6,619,875	\$11,366,658 \$6,818,471	\$11,707,658 \$7,023,026	\$12,058,888 \$7,233,716	\$12,420,654 \$7,450,728	\$12,793,274 \$7,674,250
TOTAL INDUCED/INDIRECT IMPACT: MONTGOMERY COUNTY	\$3,952,542	\$3,923,306	\$4,041,005	\$4,162,235	\$4,287,102	\$4,415,715	\$4,548,187	\$4,684,633	\$4,825,171	\$4,969,927	\$5,119,024



Appendix 2

MONTGOMERY COUNTY FISCAL YEAR 2012 ADOPTED BUDGET ALLOCATION OF REVENUES LIFESCI VILLAGE™ DEVELOPMENT

Population ¹	996,319	66%					
Employment ¹	508,305	34%					
	FY 2012			ALLOCAT		REVEN	
DEPARTMENT	BUDGET	EXCLUSIONS	ALLOCATION	Pop.	Emp.	Per Pop.	Per Emp.
Property Taxes	\$1,061,687,574	\$1,061,687,574	\$0			\$0.00	\$0.00
Countywide Taxes (Real & Personal)	\$1,228,082,110	\$1,228,082,110	\$0	0%	0%	\$0.00	\$0.00
Storm Drainage Tax	\$4,385,960	\$4,385,960	\$0	0%	0%	\$0.00	\$0.00
Tax Rebate	-\$168,709,600	-\$168,709,600	\$0	0%	0%	\$0.00	\$0.00
New Business Incentive Tax Credit	-\$3,471,922	-\$3,471,922	\$0	0%	0%	\$0.00	\$0.00
County Homeowner Tax Credit Program	-\$2,115,543	-\$2,115,543	\$0	0%	0%	\$0.00	\$0.00
Penalties & Interest on Taxes	\$1,476,848	\$1,476,848	\$0	0%	0%	\$0.00	\$0.00
Property Tax Electric Deregulation	\$0	\$0	\$0	0%	0%	\$0.00	\$0.00
Prior Year Tax	\$2,039,721	\$2,039,721	\$0	0%	0%	\$0.00	\$0.00
Other Taxes	\$1,585,558,000	\$1,282,830,000	\$302,728,000			\$201.20	\$201.20
County Income Tax	\$1,117,243,000	\$1,117,243,000	\$0	0%	0%	\$0.00	\$0.00
Real Property Transfer Tax	\$83,340,000	\$83,340,000	\$0	0%	0%	\$0.00	\$0.00
Recordation Tax Premium	\$8,345,000	\$8,345,000	\$0	0%	0%	\$0.00	\$0.00
Recordation Tax - School Construction	\$0	\$0	\$0	0%	0%	\$0.00	\$0.00
Recordation Tax	\$51,853,000	\$51,853,000	\$0	0%	0%	\$0.00	\$0.00
Solar Tax Credit	-\$500,000	-\$500,000	\$0	0%	0%	\$0.00	\$0.00
Energy Tax	\$251,200,000	\$0	\$251,200,000	66%	34%	\$166.95	\$166.95
Telephone Tax	\$51,528,000	\$0	\$51,528,000	66%	34%	\$34.25	\$34.25
Hotel/Motel	\$19,968,000	\$19,968,000	\$0	0%	0%	\$0.00	\$0.00
Admissions Tax	\$2,581,000	\$2,581,000	\$0	0%	0%	\$0.00	\$0.00
Licenses & Permits	\$9,769,320	\$777,000	\$8,992,320			\$0.88	\$15.96
Business Licenses							
Hazardous Materials Permits	\$710,000	\$710,000	\$0	0%	0%	\$0.00	\$0.00
Traders Licenses	\$780,000	\$0	\$780,000	0%	100%	\$0.00	\$1.53
Miscellaneous - Landlord-Tenant	\$0	\$0	\$0	0%	0%	\$0.00	\$0.00
Clerk of the Court of Business Licenses	\$215,000	\$0	\$215,000	0%	100%	\$0.00	\$0.42
Burglar Alarm Licenses	\$67,000	\$67,000	\$0	0%	0%	\$0.00	\$0.00
Other Business Licenses	\$4,659,660	\$0	\$4,659,660	0%	100%	\$0.00	\$9.17
Public Health Licenses	\$2,456,360	\$0	\$2,456,360	0%	100%	\$0.00	\$4.83
Non-Business Licenses							
Residential Parking Permits	\$185,000	\$0	\$185,000	100%	0%	\$0.19	\$0.00
Marriage License/Ceremony Fees	\$67,000	\$0	\$67,000	100%	0%	\$0.07	\$0.00



Appendix 2

MONTGOMERY COUNTY FISCAL YEAR 2012 ADOPTED BUDGET ALLOCATION OF REVENUES LIFESCI VILLAGE™ DEVELOPMENT

Population ¹ Employment ¹	996,319 508,305	66% 34%					
	FY 2012			ALLOCAT	ION	REVEN	
DEPARTMENT	BUDGET	EXCLUSIONS	ALLOCATION	Pop.	Emp.	Per Pop.	Per Emp.
Marriage Licenses-Battered Spouses	\$260,000	\$0	\$260,000	100%	0%	\$0.26	\$0.00
Other Non-Business Licenses	\$0		\$0	0%	0%	\$0.00	\$0.00
Pet Animal Licenses	\$369,300	\$0	\$369,300	100%	0%	\$0.37	\$0.00
Charges for Services	\$9,465,910	\$0	\$9,465,910			\$8.79	\$1.39
Development Related Charges ²	\$505,810	\$0	\$505,810	66%	34%	\$0.34	\$0.34
Health/Public Safety Related Charges ³	\$7,368,870	\$0	\$7,368,870	100%	0%	\$7.40	\$0.00
Other Charges ⁴	\$1,591,230	\$0	\$1,591,230	66%	34%	\$1.06	\$1.06
Fines & Forfeitures	\$19,508,240	\$19,508,240	\$0	0%	0%	\$0.00	\$0.00
Intergovernmental	\$61,704,090	\$61,704,090	\$0			\$0.00	\$0.00
State-Shared Reimbursements	\$1,780,000	\$1,780,000	\$0	0%	0%	\$0.00	\$0.00
State Aid	\$17,329,480	\$17,329,480	\$0	0%	0%	\$0.00	\$0.00
Intergovernmental Reimbursements	\$42,594,610	\$42,594,610	\$0	0%	0%	\$0.00	\$0.00
Miscellaneous	\$13,361,710	\$13,361,710	\$0	0%	0%	\$0.00	\$0.00
Investment Income	\$179,100	\$179,100	\$0	0%	0%	\$0.00	\$0.00
Urban Districts	\$1,568,010	\$1,304,010	\$264,000			\$0.18	\$0.18
Property Taxes	\$1,304,010	\$1,304,010	\$0	0%	0%	\$0.00	\$0.00
Charges for Services	\$264,000	\$0	\$264,000	66%	34%	\$0.18	\$0.18
Mass Transit	\$109,703,960	\$109,158,960	\$545,000			\$0.36	\$0.36
Property Taxes	\$65,392,360	\$65,392,360	\$0	0%	0%	\$0.00	\$0.00
Licenses & Permitting	\$531,000	\$531,000	\$0	0%	0%	\$0.00	\$0.00
Charges for Services	\$20,665,070	\$20,420,070	\$245,000	66%	34%	\$0.16	\$0.16
Fines & Forefeitures	\$300,000	\$0	\$300,000	66%	34%	\$0.20	\$0.20
Intergovernmental	\$22,815,530	\$22,815,530	\$0	0%	0%	\$0.00	\$0.00
Investment Income	\$0	\$0	\$0	0%	0%	\$0.00	\$0.00



Appendix 2

MONTGOMERY COUNTY FISCAL YEAR 2012 ADOPTED BUDGET ALLOCATION OF REVENUES LIFESCI VILLAGE™ DEVELOPMENT

Population ¹	996,319	66%					
Employment ¹	508,305	34%					
	FY 2012			ALLOCAT	ION	REVEN	IUES
DEPARTMENT	BUDGET	EXCLUSIONS	ALLOCATION	Pop.	Emp.	Per Pop.	Per Emp.
Fire	\$212,563,760	\$211,058,760	\$1,505,000			\$1.00	\$1.00
Property Taxes	\$208,242,760	\$208,242,760	\$0	0%	0%	\$0.00	\$0.00
Licenses & Permitting	\$1,500,000	\$1,500,000	\$0	0%	0%	\$0.00	\$0.00
Charges for Services	\$1,505,000	\$0	\$1,505,000	66%	34%	\$1.00	\$1.00
Intergovernmental	\$1,316,000	\$1,316,000	\$0	0%	0%	\$0.00	\$0.00
Investment Income	\$0	\$0	\$0	0%	0%	\$0.00	\$0.00
Recreation	\$38,580,890	\$26,983,080	\$11,597,810			\$11.06	\$1.14
Property Taxes	\$27,088,440	\$27,088,440	\$0	0%	0%	\$0.00	\$0.00
Charges for Services	\$11,597,810	\$0	\$11,597,810	95%	5%	\$11.06	\$1.14
Miscellaneous	-\$105,360	-\$105,360	\$0	0%	0%	\$0.00	\$0.00
Investment Income	\$0	\$0	\$0	0%	0%	\$0.00	\$0.00
Economic Development Fund	\$195,290	\$195,290	\$0			\$0.00	\$0.00
Intergovernmental	\$0	\$0	\$0	0%	0%	\$0.00	\$0.00
Miscellaneous	\$195,290	\$195,290	\$0	0%	0%	\$0.00	\$0.00
Investment Income	\$0	\$0	\$0	0%	0%	\$0.00	\$0.00
Revenue Stabilization Fund	\$194,950	\$194,950	\$0	0%	0%	\$0.00	\$0.00
TOTAL	\$3,124,040,804	\$2,788,942,764	\$335,098,040	•		\$223.47	\$221.23

¹ 2010 Estimates from MWCOG's Cooperative Forecasts Round 8.0



² Development Related Charges include charges for development related activities such as Developer Fee for Alternative Review, Water & Sewer Plan Review Fee, etc.

³ Health/Public Safety Related Charges include charges for health/public safety related activities such as Health Clinic Fees, Adult Mental Health Clinic Fee, etc.

⁴ Other Charges include all charges for services that are not related to development or health and public safety.

Appendix 3

MONTGOMERY COUNTY FISCAL YEAR 2012 ADOPTED BUDGET ALLOCATION OF EXPENDITURES LIFESCI VILLAGE™ DEVELOPMENT

Population ¹	996,319	66%					
Employment ¹	508,305	34%					
	FY 2011			ALLOCA1	ION	EXPENDI	TURES
DEPARTMENT	BUDGET	EXCLUSIONS	ALLOCATION	Рор.	Emp.	Per Pop.	Per Emp.
General Fund Tax Supported							
General Government	\$121,380,480	\$0	\$121,380,480			\$80.67	\$80.67
County Council	\$8,673,670		\$8,673,670	66%	34%	\$5.76	\$5.76
Board of Appeals	\$549,090		\$549,090	66%	34%	\$0.36	\$0.36
Inspector General	\$665,510		\$665,510	66%	34%	\$0.44	\$0.44
Legislative Oversight	\$1,228,860		\$1,228,860	66%	34%	\$0.82	\$0.82
Merit System Protection Board	\$150,260		\$150,260	66%	34%	\$0.10	\$0.10
People's Counsel	\$0		\$0	0%	0%	\$0.00	\$0.00
Zoning and Administrative Hearings	\$572,500		\$572,500	66%	34%	\$0.38	\$0.38
Circuit Court	\$9,319,730		\$9,319,730	66%	34%	\$6.19	\$6.19
State's Attorney	\$11,911,280		\$11,911,280	66%	34%	\$7.92	\$7.92
County Executive	\$4,051,120		\$4,051,120	66%	34%	\$2.69	\$2.69
Board of Elections	\$4,891,160		\$4,891,160	66%	34%	\$3.25	\$3.25
Community Engagement Cluster	\$2,626,960		\$2,626,960	66%	34%	\$1.75	\$1.75
Commission for Women	\$0		\$0	0%	0%	\$0.00	\$0.00
County Attorney	\$4,039,500		\$4,039,500	66%	34%	\$2.68	\$2.68
Ethics Commission	\$191,430		\$191,430	66%	34%	\$0.13	\$0.13
Finance	\$9,701,210		\$9,701,210	66%	34%	\$6.45	\$6.45
General Services	\$21,354,150		\$21,354,150	66%	34%	\$14.19	\$14.19
Human Resources	\$5,996,540		\$5,996,540	66%	34%	\$3.99	\$3.99
Human Rights	\$891,580		\$891,580	66%	34%	\$0.59	\$0.59
Intergovernmental Relations	\$815,480		\$815,480	66%	34%	\$0.54	\$0.54
Management and Budget	\$3,381,500		\$3,381,500	66%	34%	\$2.25	\$2.25
Public Information	\$4,719,510		\$4,719,510	66%	34%	\$3.14	\$3.14
Regional Services Centers	\$0		\$0	0%	0%	\$0.00	\$0.00
Technology Services	\$25,649,440		\$25,649,440	66%	34%	\$17.05	\$17.05



Appendix 3

MONTGOMERY COUNTY FISCAL YEAR 2012 ADOPTED BUDGET ALLOCATION OF EXPENDITURES LIFESCI VILLAGE™ DEVELOPMENT

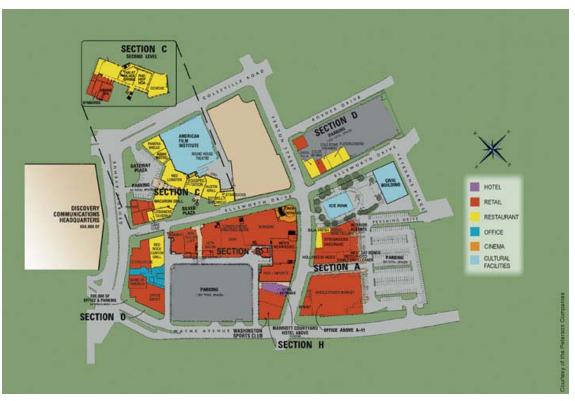
Population ¹	996,319	66%					
Employment ¹	508,305	34%					
	FY 2011			ALLOCAT		EXPEND	
DEPARTMENT	BUDGET	EXCLUSIONS	ALLOCATION	Pop.	Emp.	Per Pop.	Per Emp.
Public Safety	\$316,361,360	\$0	\$316,361,360			\$269.90	\$93.36
Consumer Protection	\$1,948,320		\$1,948,320	85%	15%	\$1.66	\$0.57
Correction and Rehabilitation	\$61,264,450		\$61,264,450	85%	15%	\$52.27	\$18.08
Emergency Management and Homeland :	\$1,247,900		\$1,247,900	85%	15%	\$1.06	\$0.37
Police	\$232,153,140		\$232,153,140	85%	15%	\$198.06	\$68.51
Sheriff	\$19,747,550		\$19,747,550	85%	15%	\$16.85	\$5.83
Transportation	\$36,059,030	\$0	\$36,059,030	66%	34%	\$23.97	\$23.97
Health & Human Services	\$171,748,980	\$0	\$171,748,980	66%	34%	\$114.15	\$114.15
Libraries, Culture, & Recreation	\$28,353,010	\$0	\$28,353,010	100%	0%	\$28.46	\$0.00
Community Development & Housing	\$9,297,870	\$0	\$9,297,870			\$8.43	\$1.77
Economic Development	\$5,990,310		\$5,990,310	85%	15%	\$5.11	\$1.77
Housing & Community Affairs	\$3,307,560		\$3,307,560	100%	0%	\$3.32	\$0.00
Environmental Protection	\$1,669,760	\$0	\$1,669,760	66%	34%	\$1.11	\$1.11
Other County Gov't Functions	\$218,366,730	\$189,840,350	\$28,526,380			\$18.96	\$18.96
Non-Departmental Accounts	\$189,840,350	\$189,840,350	\$0	0%	0%	\$0.00	\$0.00
Utilities	\$28,526,380	\$0	\$28,526,380	66%	34%	\$18.96	\$18.96
Special Funds Tax Supported							
Public Safety	\$179,769,870	\$0	\$179,769,870	66%	34%	\$119.48	\$119.48
Transportation	\$102,750,000	\$0	\$102,750,000	66%	34%	\$68.29	\$68.29
Libraries, Culture & Recreation	\$24,829,990	\$0	\$24,829,990	66%	34%	\$16.50	\$16.50
Community Development and Housing	\$4,922,280	\$0	\$4,922,280	66%	34%	\$3.27	\$3.27
TOTAL	\$1,215,509,360	\$189,840,350	\$1,025,669,010			\$753.18	\$541.52

¹ Estimates from MWCOG's Cooperative Forecasts Round 8.0



Appendix 4

OVERVIEW OF DOWNTOWN SILVER SPRING REVITALIZATION SILVER SPRING, MD MARCH 2008



- Downtown Silver Spring is a 22-acre urban, mixed-use infill and rehabilitation project in Silver Spring, Montgomery County, Maryland.
- * The project was developed through a public/private partnership between Montgomery County and private developer partnership among the Peterson Companies, Foulger-Pratt, and Argo Investment Company.
- * Completed in 2004, the project includes approximately 440,000 square feet of retail space, 185,000 square feet of office space, a 179-room hotel, 23 movie screens in two theaters, parking, and open space.
- * In 1996, the Silver Spring Enterprise Zone was designated by the state of Maryland. The Zone comprises the Silver Spring Central Business District (CBD) and the area south of the CBD between the railroad tracks and Eastern Avenue.
- * The Enterprise Zone allowed the state to issue property tax credits on any new expansions, renovations, or capital improvements to non-residential properties. Income tax credits were available for businesses in downtown Silver Spring with newly hired employees.
- * The Downtown Silver Spring development along with the creation of the Enterprise Zone had a catalytic impact on new development in Silver Spring and helped to dramatically increase the assessed value of properties in the CBD.
- * Spin-off development came sooner than most had anticipated; the majority has been residential development.
- 1,200 residential units have been built over last five years and 696 units are currently under construction. Almost 4,000 proposed units are in the pipeline.

SOURCE: Urban Land Institute, Montgomery County.

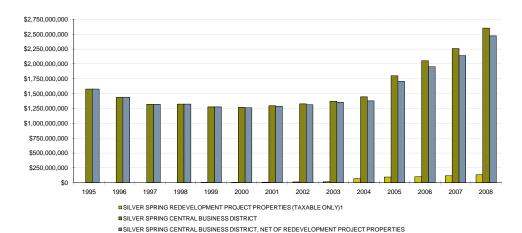


Appendix 5

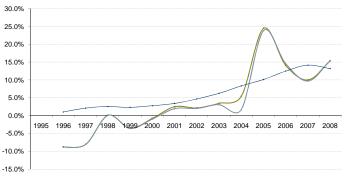
ASSESSMENT TRENDS SILVER SPRING MONTGOMERY COUNTY, MD 1995 - 2008

													ESTIM	IATED
TOTAL ASSESSED VALUE	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
SILVER SPRING REDEVELOPMENT PROJECT PROPE	RTIES (TAXABLE	ONLY)1												
Total	N/A	N/A	N/A	N/A	\$800,000	\$3,388,320	\$10,485,300	\$12,499,800	\$17,940,600	\$69,262,391	\$95,486,096	\$100,889,000	\$117,394,598	\$134,079,696
Change	N/A	N/A	N/A	N/A	N/A	\$2,588,320	\$7,096,980	\$2,014,500	\$5,440,800	\$51,321,791	\$26,223,705	\$5,402,904	\$16,505,598	\$16,685,098
% Change	N/A	N/A	N/A	N/A	N/A	323.5%	209.5%	19.2%	43.5%	286.1%	37.9%	5.7%	16.4%	14.2%
SILVER SPRING CENTRAL BUSINESS DISTRICT														
Total	\$1,577,412,275	\$1,438,039,588	\$1,321,906,700	\$1,322,885,975	\$1,275,830,550	\$1,265,861,850	\$1,297,443,600	\$1,325,261,743	\$1,370,932,312	\$1,445,324,560	\$1,799,146,935	\$2,052,264,898	\$2,257,728,110	\$2,604,077,698
Change		-\$139,372,687	-\$116,132,888	\$979,275	-\$47,055,425	-\$9,968,700	\$31,581,750	\$27,818,143	\$45,670,569	\$74,392,248	\$353,822,375	\$253,117,963	\$205,463,212	\$346,349,588
% Change		-8.8%	-8.1%	0.1%	-3.6%	-0.8%	2.5%	2.1%	3.4%	5.4%	24.5%	14.1%	10.0%	15.3%
SILVER SPRING CENTRAL BUSINESS DISTRICT. NET	OF REDEVELOPN	IENT PROJECT	PROPERTIES											
Total				\$1,322,885,975	\$1,275,030,550	\$1,262,473,530	\$1,286,958,300	\$1,312,761,943	\$1,352,991,712	\$1,376,062,169	\$1,703,660,839	\$1,951,375,898	\$2,140,333,512	\$2,469,998,002
Change		-\$139,372,687	-\$116,132,888	\$979,275	-\$47,855,425	-\$12,557,020	\$24,484,770	\$25,803,643	\$40,229,769	\$23,070,457	\$327,598,670	\$247,715,059	\$188,957,614	\$329,664,490
% Change		-8.8%	-8.1%	0.1%	-3.6%	-1.0%	1.9%	2.0%	3.1%	1.7%	23.8%	14.5%	9.7%	15.4%
MONTGOMERY COUNTY														
Total (Data in Thousands) Change	\$64,490,076	\$65,143,821 \$653,745	\$66,509,131 \$1,365,310	\$68,186,603 \$1,677,472	\$69,765,200 \$1,578,597	\$71,686,385 \$1,921,185	\$74,122,532 \$2,436,148	\$77,574,948 \$3,452,415	\$4,832,390	\$89,263,005 \$6,855,667	\$98,281,725 \$9,018,719	\$110,529,249 \$12,247,524	\$126,132,747 \$15,603,498	\$142,730,013 \$16,597,267
% Change		1.0%	2.1%	2.5%	2.3%	2.8%	3.4%	4.7%	6.2%	8.3%	10.1%	12.5%	14.1%	13.2%

Total Assessed Value by Year



Annual Percentage Change in Total Assessed Value



¹ Historical assessed values were not available for all redevelopment project properties SOURCE: Maryland Department of Assesments and Taxation; RCLCO



^{——}SILVER SPRING CENTRAL BUSINESS DISTRICT
——SILVER SPRING CENTRAL BUSINESS DISTRICT, NET OF REDEVELOPMENT PROJECT PROPERTIES
——MONTGOMERY COUNTY

Appendix 6

METHODOLOGY IN DETERMINING IMPACT OF DEVELOPMENT OF LIFESCI VILLAGE™ ON SURROUNDING PROPERTIES SILVER SPRING AND WHITE OAK, MD MARCH 2008

SILVER SPRING CENTRAL BUSINESS DISTRICT, NET OF REDEVELOPMENT PROJECT PROPERTIES

Increase in A	\ssesse	d Val	ue (Con	npounded Annual Growth Rate)	Comment
From	1995	to	2000:	-4.4%	Declining value of existing properties in Silver Spring CBD.
From	2000	to	2004:	2.2%	Increasing values in anticipation of redevelopment at Downtown Silver Spring.
Total Annual	Change			6.5%	
From	2004	to	2008:	15.7%	Spike in assessments of surrounding areas subsequent to downtown revitalization.
Total Annual	Change			20.1%	

PARCELS SURROUNDING LIFESCI VILLAGE™ 1

Increase in Assessed Value (Compounded Annual Gro	owth Rate) Comment
Estimated impact on White Oak parcels relative to demonstrated impact on Silver Spring CBD:	20.00% There was significantly more distress in Silver Spring than White Oak before redevelopment; values had been declining in Silver Spring up until 2000, which is not the case in White Oak.
From 2012 to 2014: 1.3%	Increasing values in anticipation of redevelopment at LifeSci Village™.
From 2015 to 2017: 2.3%	Compounded growth during development period and until properties are reassessed.
From 2018 to 2020: 4.0%	Spike in assessments of surrounding areas subsequent to downtown revitalization.

¹ The parcels selected as being the most likely to realize increases in assessed values as a result of development of LifeSci Village[™] have an aggregate land area that is similar in proportion relative to the LifeSci Village[™] project size to the land area of the Silver Spring Central Business District in relation to Downtown Silver Spring development area. These parcels stretch from Fairland Road to the north (excluding properties north of Shanandale Drive, and west of Deer Ridge Drive), Paint Branch Park to the south, Columbia Pike (Route 29) to the west, and the Montgomery County-Prince George's County border to the east.

