







# White Oak Science Gateway Redevelopment

Montgomery County, Maryland

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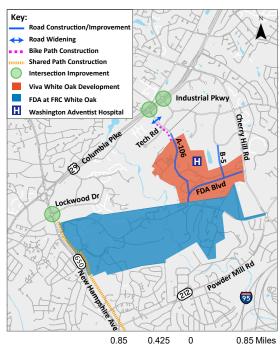
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# Montgomery County DUNS Number: 062014378

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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RCLCO Real Estate Fiscal and Economic

Development

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).<sup>2</sup> 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**

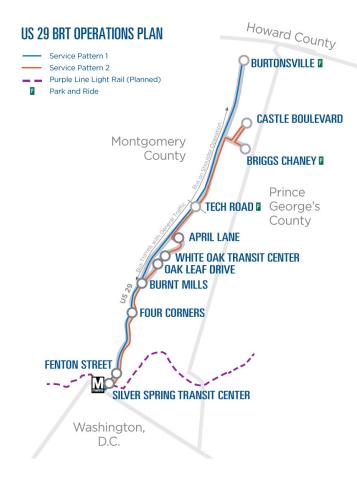
White Oak is located in eastern Montgomery County, within several **Metropolitan Washington Council of Governments** (MWCOG) Equity Emphasis Areas.<sup>3</sup>

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**<sup>4</sup>, 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 Statement<sup>5</sup>, 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) project<sup>6</sup>, 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**<sup>7</sup>, 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

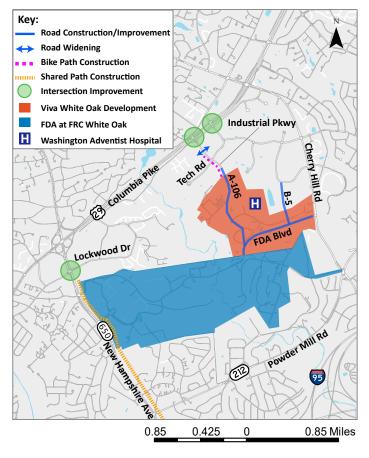
infrastructure have constrained the degree to which the network could be improved, but the recent property acquisitions, Federal campus plans, and development partnerships described herein have created new opportunities. Improvements are needed for circulation within the project area, but also to connect 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 congestion<sup>1</sup>. 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 (o.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.

 $<sup>1\</sup> Montgomery\ County\ uses\ letter\ designations\ for\ different\ roadway\ classifications:\ A\ is\ for\ arterial\ roadways\ and\ B\ is\ for\ business\ roadways.$ 

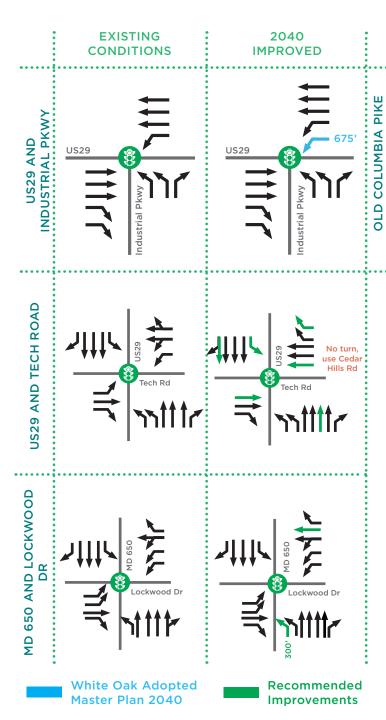
2040

**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

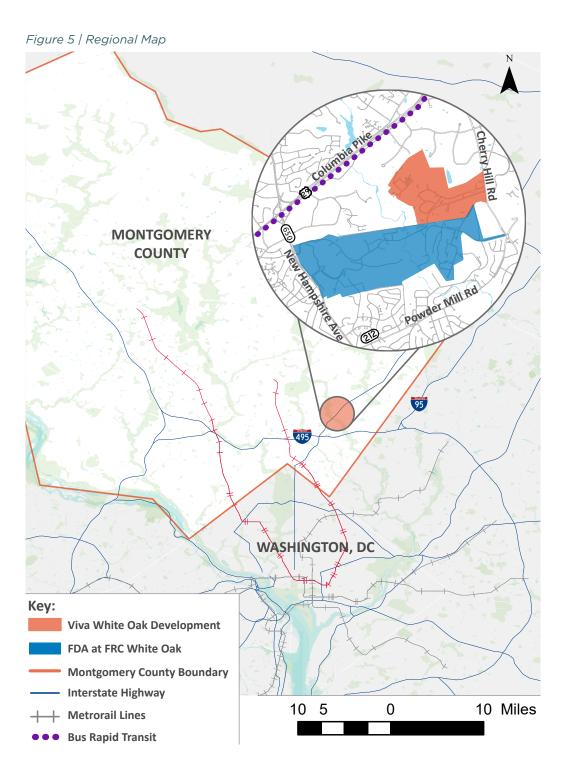
- pavement and reconstruction of curb lines and drainage systems.
- MD 650 Shared Use Path includes a new shared use path on the east side of MD 650 between the FDA and I-495 (1.0 miles) with a short gap between FDA's north end and Lockwood Drive

#### 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**<sup>8</sup> 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.

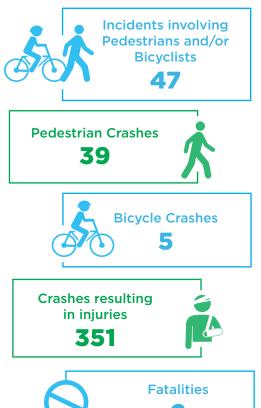
Additionally, investment in new buses to support a new circulator route with 15-minute headways will expand service coverage leading to increased transit service and ridership, and thereby reducing traffic volumes and crashes in the White Oak area.

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**<sup>10</sup>, 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 Oak<sup>TM</sup> 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<sup>™</sup> 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 Paper<sup>11</sup>, 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)**<sup>12</sup>, 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**<sup>13</sup>. 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 Plan<sup>14</sup>. 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.

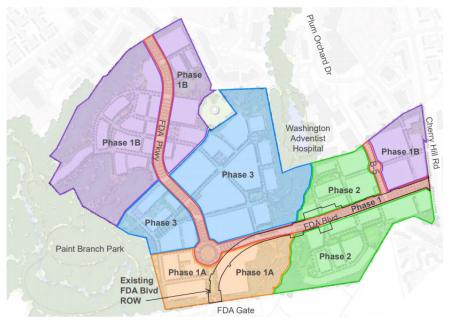


Figure 11 | Viva White Oak Development Phasing

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%<br>DISCOUNT RATE) |
|---------------------------------|----------------------------------|-------------------------------------|
| STATE OF GOOD REPAIR            | DISCOURT RATE)                   | DIOCOURT RAIL)                      |
| Reduction in Pavement Damage    | \$108,144                        | \$170,259                           |
| CATEGORY SUBTOTAL               | \$108,144                        | \$170,259                           |
| Fuel Savings for<br>Automobiles |                                  |                                     |
| Reduction in Oil<br>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<br>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<br>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



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 Oak<sup>TM</sup>, 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 Oak<sup>TM</sup>, 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 Oak<sup>TM</sup>, 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 \* 2<sup>nd</sup> 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, 10<sup>th</sup> 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 treatments<sup>1</sup> 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-trip<sup>2</sup> a development generates. The applicant would pay the associated fee, satisfying the LATIP requirements. Other payments – TPAR<sup>3</sup> 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.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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.<sup>4</sup> 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.

<sup>&</sup>lt;sup>4</sup> 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 MCDOT<sup>5</sup>, MCDGS<sup>6</sup>, M-NCPPC<sup>7</sup>, SHA<sup>8</sup>, the County Council<sup>9</sup>, 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.<sup>10</sup>

<sup>&</sup>lt;sup>5</sup> MCDOT = Montgomery County Department of Transportation, a department under jurisdiction of the County Executive with authority over most non-numbered roadways throughout the County.

<sup>&</sup>lt;sup>6</sup> 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.

<sup>&</sup>lt;sup>7</sup> 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.

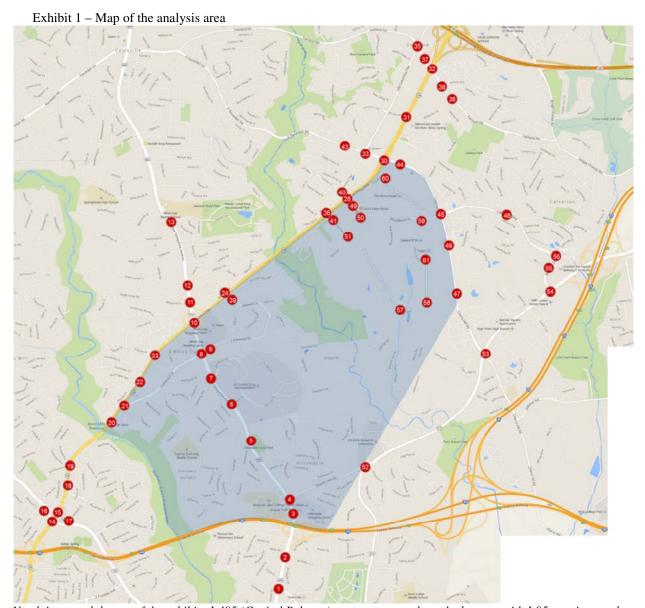
<sup>&</sup>lt;sup>8</sup> SHA = Maryland State Highway Administration, a State agency within the Maryland Department of Transportation with authority over all numbered roadways – generally major arterials – throughout the County and State.

<sup>&</sup>lt;sup>9</sup> Per the Full Council Session on April 14, 2015

<sup>&</sup>lt;sup>10</sup> 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.

<sup>&</sup>lt;sup>11</sup> 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)<sup>12</sup> 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.

<sup>&</sup>lt;sup>12</sup> 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                                       | <b>Estimated Cost</b> | 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   |  |  |  |
| ,  | <b>44.400.000</b>     | 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 /<br>Cherry Hill Rd | \$2,000,000           | Add: 1 EBT   Reconfigure: SBR to shared right-<br>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  |  |  |  |
| Tech Road and Prosperity Drive                 | \$2,300,000           | Signalization   Turn Restrictions: NBR, SBR only  |  |  |  |
| 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. <sup>14</sup> 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.<sup>2</sup>

<sup>&</sup>lt;sup>13</sup> 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).

<sup>&</sup>lt;sup>14</sup> 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.

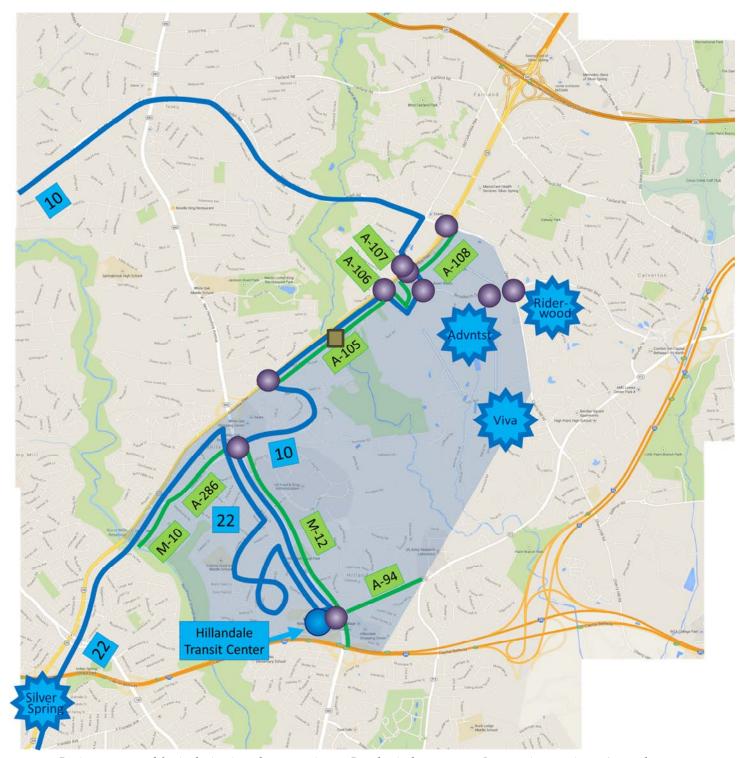
# Cost Estimates for the White Oak Science Gateway Master Plan

|               |            | 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   |  |
| In 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   | Ŝ        | 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  |  |
|               |            | 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 goals for the policy area).  |  |
| 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                                | \$<br>\$ | 1,000,000        | \$ -           | \$           | 1,000,000   | \$<br>\$ | 2,000,000  |   |  |
|               | **         |  | ې        |                  | \$ -           | \$           |             | 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  |  |
|               | <b>△</b> † | 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  | 0   |  |
|               |            | 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/<br>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     | <del>Ľ</del> |             | \$       | 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 <sup>18</sup> |                    |                            |  |  |
|---------------------------|--|--------------------|----------------------------|--|--|
|                           | 9 at Industrial Pkwy <sup>18</sup>                     |                    | \$3,300,000<br>\$4,400,000 |  |  |
| • US 2                    | 9 at Tech Road <sup>18</sup>                           |                    | \$3,300,000                |  |  |
| • US 2                    | US 29 at Randolph Rd / Cherry Hill Rd                  |                    |                            |  |  |
|                           | Rd at Prosperity Dr / Old Columbia                     | Pike <sup>18</sup> | \$2,000,000<br>\$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                |  |  |
|                           | 650 at Lockwood Dr                                     |                    | \$1,400,000                |  |  |
|                           |  | Subtotal           | \$31,400,000               |  |  |
| ΓRANSIT (b)               | <u>ue)<sup>19</sup></u>                                |                    |                            |  |  |
|                           | e Oak Circulator                                       |                    | \$2,400,000                |  |  |
| <ul> <li>New</li> </ul>   | Ride-On Service  |                    | \$8,400,000                |  |  |
| <ul> <li>Incre</li> </ul> | ased Ride-On Service                                   |                    | \$3,800,000                |  |  |
| <ul> <li>Hilla</li> </ul> | Hillandale Transit Center                              |                    |                            |  |  |
| • Bus                     | Bus Stop Improvements                                  |                    |                            |  |  |
|                           | Bikeshare  |                    |                            |  |  |
|                           |  | Subtotal           | \$19,800,000               |  |  |
| BIKEWAYS                  | green) <sup>19</sup>                                   |                    |                            |  |  |
| • 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 Traffic<sup>28</sup> and Regional Planner<sup>29</sup> 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.

<sup>&</sup>lt;sup>28</sup> 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.

<sup>&</sup>lt;sup>29</sup> 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 unit<sup>30</sup>) 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.<sup>31</sup> 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.

<sup>&</sup>lt;sup>30</sup> Units being measured in Gross Square Feet (GSF) or Dwelling Units (DU)

<sup>&</sup>lt;sup>31</sup> 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 obligation<sup>32</sup>. 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.

<sup>32</sup> 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

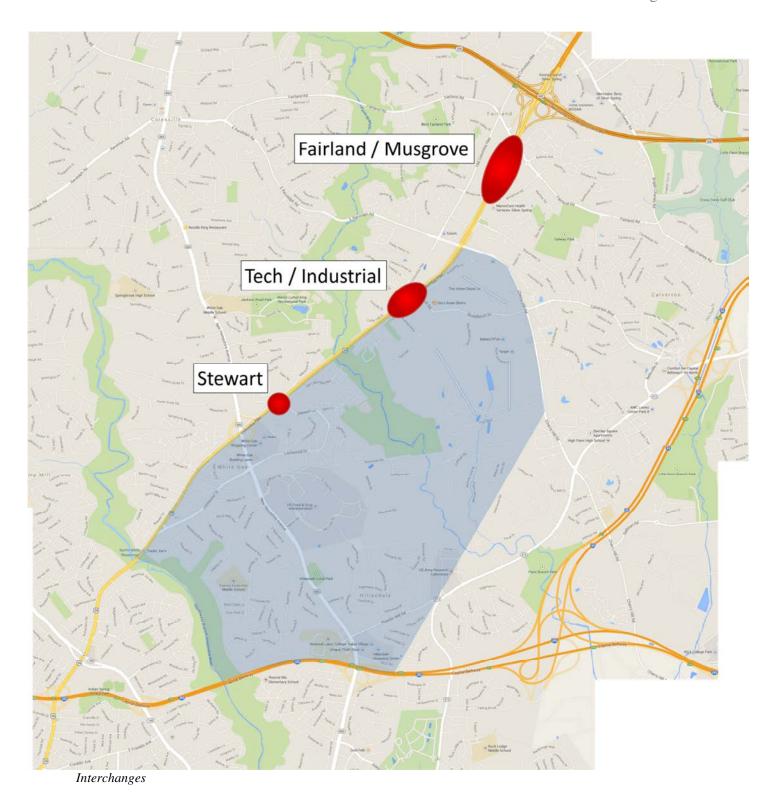
\$96,000,000

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

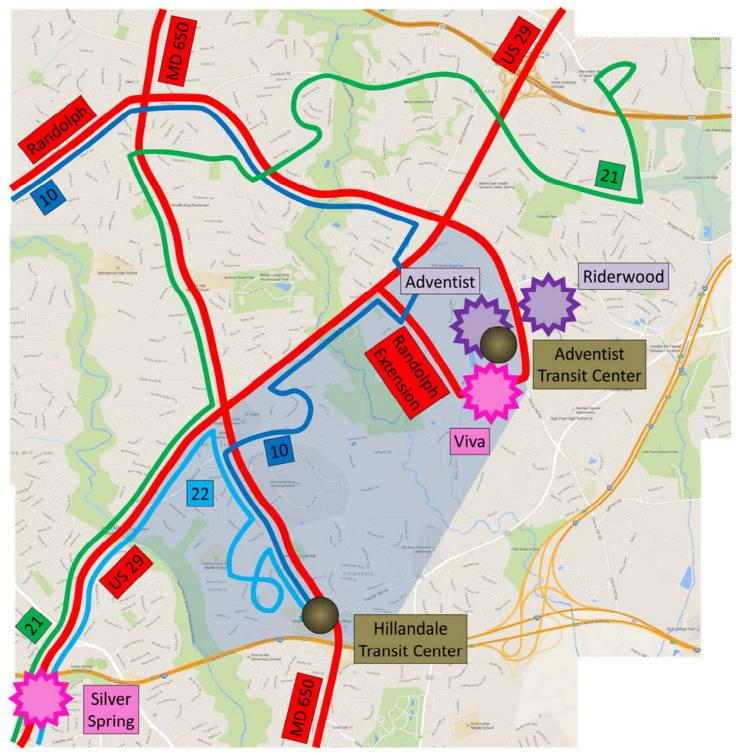
Miscellaneous bus stop improvements through the White Oak Policy Area, including upgraded landing areas, ADA treatments, and improved amenities.

• 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

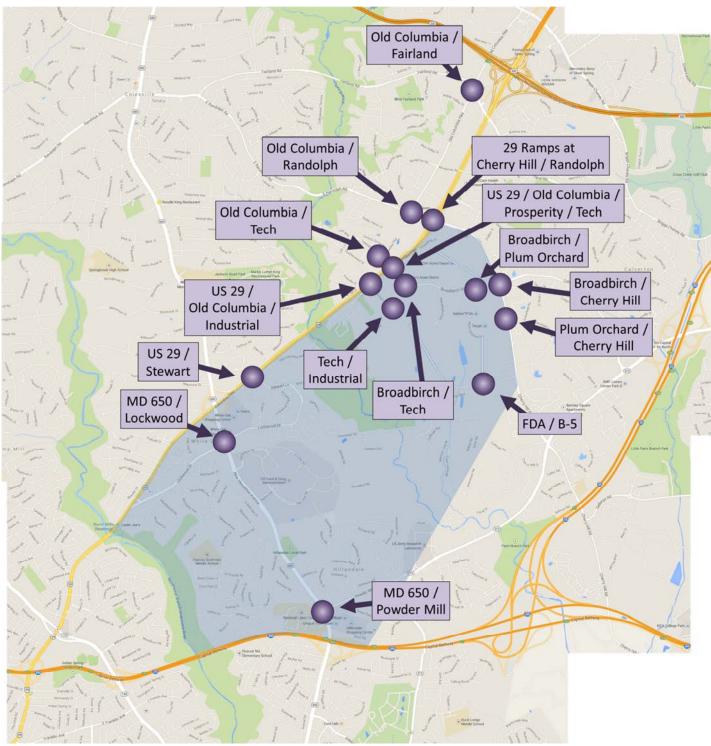
\$1,400,000

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

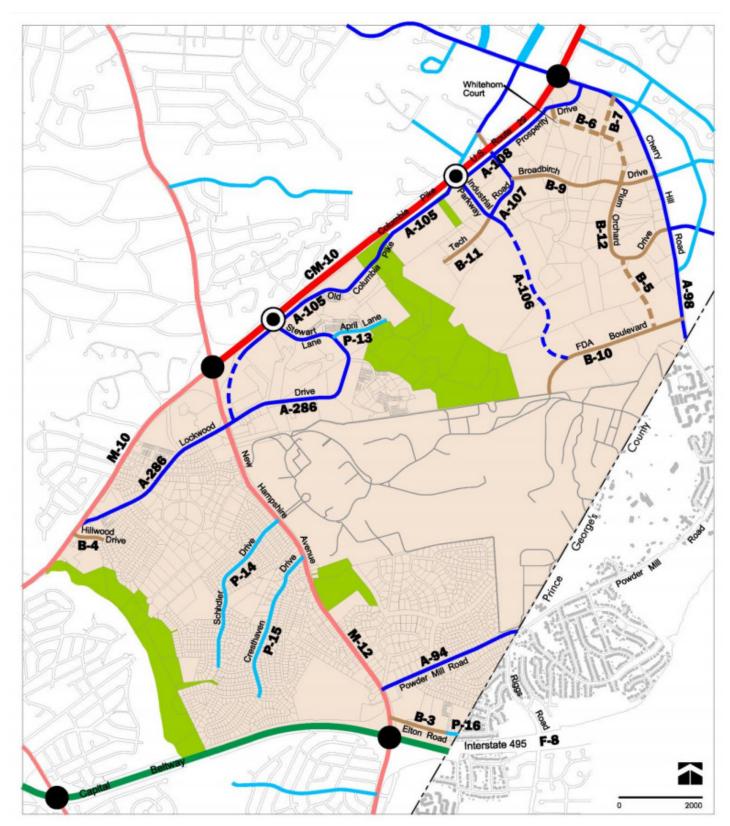
\$25,100,000

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

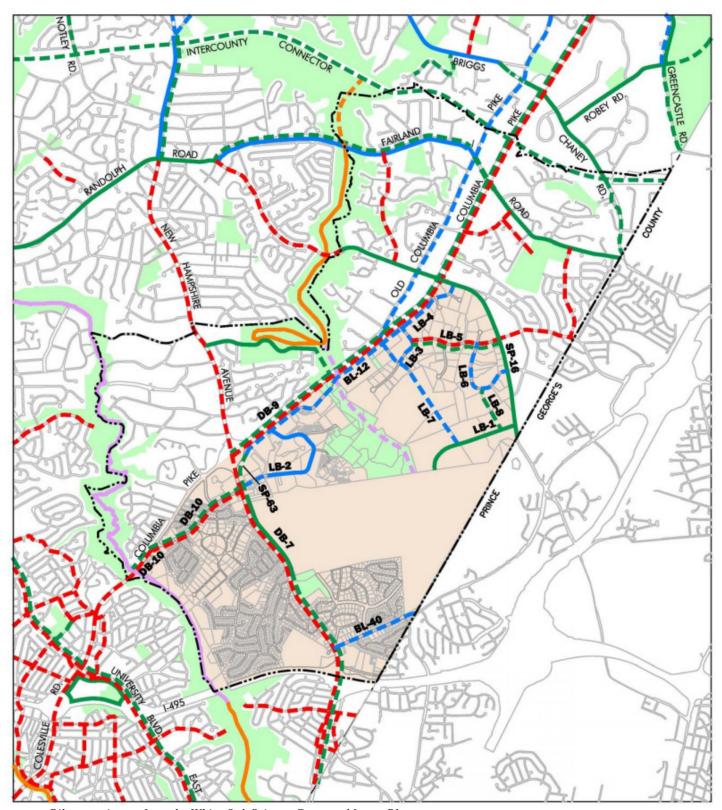
\$5,700,000

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

| 09/2014 - 02/2015 | Fee Conception                              |
|-------------------|---|
| 02/2015 - 07/2015 | Scoping                                     |
| 08/2015 - 10/2015 | Obtaining Base Model                        |
| 10/2015 - 03/2016 | Performing Analysis                         |
| 04/2016 - 06/2016 | Cost Estimating                             |
| 06/2016 - 09/2016 | Presentation of Findings w/ Public Agencies |
| 09/2016 - 12/2016 | Finalizing                                  |
| 01/2017 - 02/2017 | Council Action                              |
| 02/2017 - 04/2017 | Implementation Policies                     |
|                   |   |

# **PUBLIC PRESENTATIONS**

| 04/14/2015<br>05/14/2015<br>05/26/2015<br>09/02/2015<br>04/06/2016<br>08/02/2016<br>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<br>09/16/2016<br>11/17/2016<br>12/08/2016<br>01/04/2017<br>01/12/2017<br>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<br>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, 10<sup>th</sup> 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).<sup>1</sup> 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.

<sup>&</sup>lt;sup>1</sup> 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<br>(7% Discount<br>Rate) | Benefit Value<br>3% Discount<br>Rate) |
|---------------------------------|--|---------------------------------------|
| State of Good Repair            |  |                                       |
| Reduction in Pavement Damage    | \$<br>108,144                          | \$<br>170,259                         |
| Category subtotal               | \$<br>108,144                          | \$<br>170,259                         |
| <b>Economic Competitiveness</b> |  |                                       |
| Fuel Savings for Automobiles    | \$<br>12,724,998                       | \$<br>20,084,751                      |
| Reduction in Oil Imports        | \$<br>1,137,519                        | \$<br>1,795,426                       |
| Fare Revenues                   | \$<br>2,121,871                        | \$<br>3,435,278                       |
| Tax Revenues                    | \$<br>449,989,766                      | \$<br>796,515,262                     |
| Category subtotal               | \$<br>465,974,154                      | \$<br>821,830,716                     |
| Sustainability and Livability   |  |                                       |
| Travel Time Savings             | \$<br>39,532,428                       | \$<br>62,238,888                      |
| Emission Abatement              | \$<br>611,552                          | \$<br>934,447                         |
| Category subtotal               | \$<br>40,143,980                       | \$<br>63,173,335                      |
| Safety                          |  |                                       |
| Safety Improvements             | \$<br>2,812,767                        | \$<br>4,428,351                       |
| Category subtotal               | \$<br>2,812,767                        | \$<br>4,428,351                       |
| <b>Total Project Benefits</b>   | \$<br>509,039,045                      | \$<br>889,602,661                     |
| Costs                           |  |                                       |
| Total Costs                     | \$<br>72,017,596                       | \$<br>80,908,526                      |
| <b>Total Project Costs</b>      | \$<br>72,017,596                       | \$<br>80,908,526                      |
| Net Present Value               | \$<br>437,021,449                      | \$<br>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,<sup>2</sup> 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).<sup>3</sup> 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).<sup>4,5</sup>

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%.

<sup>&</sup>lt;sup>2</sup> U.S. Department of Transportation, Federal Highway Administration, "Addendum to the 1997 Federal Highway Cost Allocation Study Final Report," May 2000.

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

<sup>&</sup>lt;sup>4</sup> U.S. Energy Information Administration, "Short-Term Energy Outlook," available at <a href="https://www.eia.gov/outlooks/steo/">https://www.eia.gov/outlooks/steo/</a>, accessed on June 12, 2018.

<sup>&</sup>lt;sup>5</sup> 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 <a href="https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/historical-data/inflation-forecasts">https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/historical-data/inflation-forecasts</a>.



## 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).<sup>8</sup> 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.<sup>9</sup>

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).

<sup>&</sup>lt;sup>6</sup> National Highway Traffic Safety Administration, "Corporate Average Fuel Economy for MY 2017-MY 2025 Passenger Cars and Light Trucks," August 2012.

<sup>&</sup>lt;sup>7</sup> U.S. Department of Transportation, Office of the Secretary, "Benefit-Cost Analysis Guidance for Discretionary Grant Programs," June 2018.

<sup>&</sup>lt;sup>8</sup> National Capital Region, Transportation Planning Board, "Air Quality Conformity Analysis of the 2015 CLRP Amendment and FY 2015-2020 TIP," October 21, 2015.

<sup>&</sup>lt;sup>9</sup> 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<br>(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.<sup>10</sup> 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

<sup>&</sup>lt;sup>10</sup> Montgomery County Department of Transportation, Department of Transportation – Transit Services, "FARES: Effective June 25, 2017," available at <a href="https://www.montgomerycountymd.gov/dot-transit/routesandschedules/fares/fares/fares/fares/fares/">https://www.montgomerycountymd.gov/dot-transit/routesandschedules/fares/fares/fares/fares/fares/fares/fares/<a href="https://www.montgomerycountymd.gov/dot-transit/">https://www.montgomerycountymd.gov/dot-transit/<a href="https://www.montgomerycountymd.gov/dot-transit/">https://www.montgomerycountymd.gov/dot-transit/</

<sup>&</sup>lt;sup>11</sup> 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 <a href="https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/historical-data/inflation-forecasts">https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/historical-data/inflation-forecasts</a>.

<sup>&</sup>lt;sup>12</sup> 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.<sup>13</sup> 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).<sup>14</sup> 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<br>Crashes | Expected<br>Crashes | Reduced<br>Crashes | 3-Year<br>Benefits |  |  |  |  |
|---|-------|------------------|---------------------|--------------------|--------------------|--|--|--|--|
| US 29 at Industrial Parkway                                 | 0.743 |                  | 2 22.2              |                    |                    |  |  |  |  |
| 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.

<sup>&</sup>lt;sup>13</sup> U.S. Department of Transportation, Office of the Secretary, "Benefit-Cost Analysis Guidance for Discretionary Grant Programs," June 2018.

<sup>&</sup>lt;sup>14</sup> U.S. Department of Transportation, Federal Highway Administration, "Crash Modifications Factors Clearinghouse," available at <a href="http://cmfclearinghouse.org/index.cfm">http://cmfclearinghouse.org/index.cfm</a>.



#### 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 \$1.1M<sup>15</sup> per year, held constant throughout the analysis period.

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

<sup>&</sup>lt;sup>15</sup> 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<br>Hour | Time Savings per<br>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 |               | 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

| <b>Total Crashes (2015-2017)</b> | 933 |
|----------------------------------|-----|
| <b>Pedestrian Crashes</b>        | 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<br>Crashes | Expected<br>Crashes | Reduced<br>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 Plan<sup>1</sup> 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.

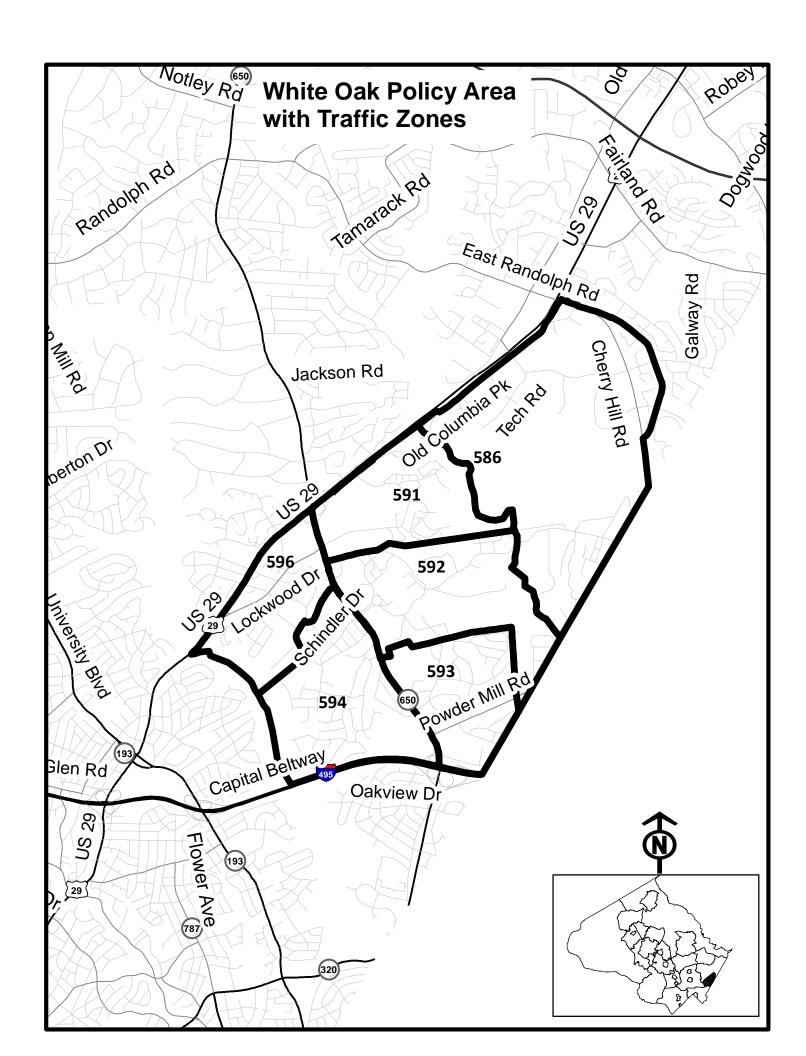
Based on the expected changes in mode share cited in the WOSG Master Plan, the LATIP improvements will produce a 16% decrease in SOV work-related trips to the area and 10% decrease in SOV trips by residents in the area for the TAZ containing the Life Sciences/FDA Village Center (Viva White Oak). An 11% 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.

<sup>&</sup>lt;sup>1</sup> 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 NonS | 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 | 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 | 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

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 - ł | 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   |  |
| Total                      |     | 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 | SOVOrig | SOVDest | IntSOV | HOV2Orig | HOV2Dest | IntHOV2 | HOV3Orig | HOV3Des | IntHOV3 | TranOrig | TranDest | IntTran | SOVOrig | SOVDest | HOVOrig | HOVDest | TranOrig | TranDest |
|-----|---------|---------|--------|----------|----------|---------|----------|---------|---------|----------|----------|---------|---------|---------|---------|---------|----------|----------|
| 58  | 6 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%    |
| 59  | 5,073   | 4,266   | 655    | 728      | 525      | 78      | 238      | 319     | 23      | 3,677    | 7 965    | 0       | 52.2%   | 70.2%   | 9.9%    | 13.9%   | 37.8%    | 15.9%    |
| 59  | 2 0     | 8,701   | 0      | 0        | 1,088    | 0       | 0        | 710     | 0       | (        | 1,519    | 0       |         | 72.4%   |         | 15.0%   |          | 12.6%    |
| 59  | 3 552   | 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%    |
| 59  | 4 985   | 949     | 33     | 140      | 111      | 3       | 41       | 76      | 1       | 534      | 1 217    | 0       | 58.0%   | 70.2%   | 10.6%   | 13.8%   | 31.4%    | 16.0%    |
| 59  | 6 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 Village<sup>TM</sup> 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 | <b>Impacts</b> |
|--------|--------|-----------|---------|----------|--------|--------|----------------|
|        |        |           |         |          |        |        |                |

|  | 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                        | \$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 EXPENDITORES  TOTAL NET FISCAL BENEFIT     | \$1,347,318,000       |                     |
|  | <b>41,041,010,000</b> |                     |
| 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                 |                     |



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 <sup>†</sup> | 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 |        |         |          |          |           |        | 60000  |        |        |          |          |        |        |        |        |        | A-21-14 |        |        |        |        |        |            |
| 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  |          |          |           |        |        |        |        |          | - 1      | 400    |        |        |        |        |         |        |        |        |        |        |            |
| Retail: Movie Theater/Entertainment                       | 60,000       |                       |        |        |        | 60,000  |          | 1        |           | 450    | D. 20  | - 46   |        |          | - 8      |        |        |        |        |        |         |        |        |        |        |        |            |
| Retail: Health Club                                       | 25,000       |                       |        |        | 25,000 |         | 411-1    | 9        | -         | 1      | 7      | 1      | -49    |          | _        |        |        |        |        |        |         |        |        |        |        |        |            |
| Hotel   | 300          |                       |        |        | 200    |         |          | 100      |           |        |        |        | 12     |          |          |        |        |        |        |        |         |        |        |        |        |        |            |
| RESIDENTIAL   | Units        |                       |        |        | 1 1    |         | - 4      | -        | 100       | 13     | 30     |        | - 2    |          |          |        |        |        |        |        |         |        |        |        |        |        |            |
| Non-Age Restricted  |              |                       |        |        |        |         |          |          | 48        | W.     | 4      |        | 1      |          |          | -      |        |        |        |        |         |        |        |        |        |        |            |
| SFD   | 0            |                       |        |        |        |         | -        |          | WA.       |        |        | -      |        |          |          |        |        |        |        |        |         |        |        |        |        |        |            |
| Townhomes   | 975          |                       | 68     | 68     | 68     | 68      | 68<br>69 | 68<br>69 | 68        | 68     | 68     | 68     | 68     | 68       | 68<br>69 | 68     | 23     |        |        |        |         |        |        |        |        |        |            |
| Condominiums  | 1,675        |                       | 69     | 69     | 69     | 69      | 69       | 69       | 69<br>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        |        |        |        |        |          |          |        |        |        |        |        |         |        |        |        |        |        |            |
| AC 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)      |                       |        |        |        |         |          |          |           |        |        |        |        |          |          |        |        |        |        |        |         |        |        |        |        |        |            |
| ADDI Medderer Tourbones                                   | 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



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

<sup>&</sup>lt;sup>2</sup> 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 Village<sup>TM</sup>.



#### **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<sup>™</sup>. 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**

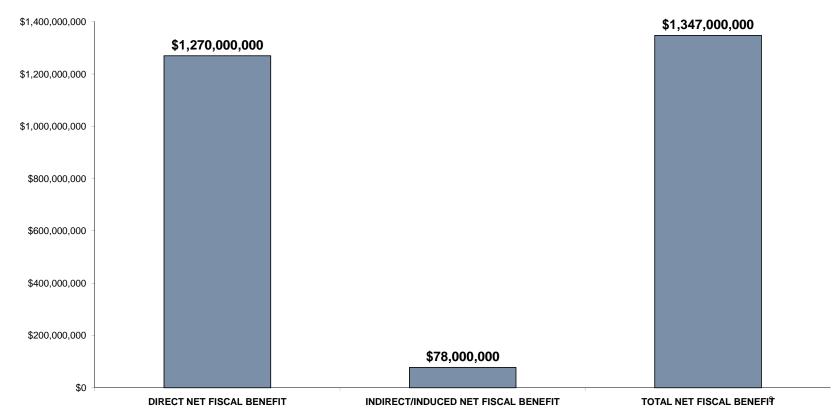
| Exhibit 1 | Summary of Total Direct & Indirect Net Fiscal Benefit for Montgomery County, MD; LifeSci Village <sup>™</sup> ; 2011 − 2040 |
|-----------|---|
| Exhibit 2 | Summary of Fiscal Impact on Montgomery County, MD; LifeSci Village <sup>™</sup> ; 2011 – 2040                               |
| Exhibit 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 <sup>™</sup> ; 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 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%                |
| <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<br>ADR/ROOM          | AVERAGE<br>VALUE | AVERAGE           |                       |                   | SF/RMS                    |              | % IMPROV.<br>VALUE - |                      |         |
|---|------------------|-----------------------|---------------------------------|------------------|-------------------|-----------------------|-------------------|---------------------------|--------------|----------------------|----------------------|---------|
| LAND USE  | (2008<br>LAND    | Dollars)<br>TOTAL     | RENT/UNIT                       | PER SF           | SIZE              | OCCUPANCY             | EFFICIENCY        | PER EMPL.                 | CALEC/CE     | CONSTR.              | INCOME ASS           | CHMD    |
| COMMERCIAL                                      | LAND             | TOTAL                 | KEN1/ONI1                       | FER SI           | SIZE              | OCCOPANCI             | EFFICIENCE        | FER LIVIFE.               | SALLS/SI     | CONSTR.              | INCOME ASC           | JUIVIF. |
| 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%                  |         |
| Townhomes                                       | 26% Lot-Value    | \$541,750 (include    | s 10% in options)               | \$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             |                       | NT RATE           |                           | LAND VALUE   |                      |                      |         |
| Student Population                              | 146,649          |                       | dget 2012 p.3-3 (20             |                  | Real Property     | \$0.876 /             |                   | Office                    |              | \$1.40               | per SF of GB/        |         |
| Population                                      | 996,319          |                       | und 8.0, 2011 calc              |                  | Personal Property |                       | \$100 AV          | Retail                    |              | \$1.40               | per SF of GLA        | A       |
| Households                                      | 363,100          |                       | und 8.0, 2011 calc              |                  | Income Tax        |                       | 0%                | Hotel                     | Data also al | \$943                | per Room             |         |
| Household Size, Avg. Single-Family Detached     | 2.72<br>3.08     |                       | ACS 2005-09; SFI Full-Time Res. | J/SFA ratio 2000 | Admissions Tax    | 7.0                   | 0%                | Single-Family I           | Detached     | \$3,842<br>\$2,840   | per Unit<br>per Unit |         |
| Townhome  | 2.75             |                       | Full-Time Res.                  |                  | Transfer Tax      |                       | ale Price         | Townhomes<br>Condominiums |              | \$2,840<br>\$1.450   | per Unit             |         |
| Condominiums                                    | 1.64             |                       | Full-Time Res.                  |                  | Recordation Tax   | \$6.90 /\$1K Sale I   |                   | Rental Apartm             |              | \$1,398              | per Unit             |         |
| Rental Apartments                               | 2.12             |                       | Full-Time Res.                  |                  | necoluation rax   | \$10.00 /\$1K Sale    |                   |                           | onio         | ψ1,330               | per Onic             |         |
| Active Adult                                    | 1.70             |                       | Full-Time Res.                  |                  |                   | less \$50.000         | i iice ovei 4300K | 1                         |              |                      |                      |         |
| Employment                                      | 508,305          |                       | und 8.0, 2011 calc              |                  | Note:             | : \$6.90 per \$1K (ov | er \$50K) is      | Assessment                |              | \$18,952,800         | )                    |         |
| Total Population and Employment                 | 1,504,624        | Data No               | .aa 0.0, 2011 0010              |                  | 14010.            | the total collecte    |                   | , iooooomoni              |              | ψ.0,00 <b>2</b> ,000 | •                    |         |
| Owner Turnover                                  |                  | U.S. Census 2000      | )                               |                  |                   | \$4.40 per \$1K q     |                   |                           |              |                      |                      |         |
|   |                  |                       |                                 |                  |                   |                       | inder earmarked   |                           |              |                      |                      |         |
| SOURCE: Bureau of Labor Statistics: U.S. Census | Bureau MMCOC:    | Cohoor Bortnoro: B    | CI CO: Porconton                |                  | ĺ                 | for MCPS              |                   |                           |              |                      |                      |         |



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

#### Exhibit 4

# SELECT ASSUMPTIONS MONTGOMERY COUNTY, MARYLAND SEPTEMBER 2011

|  |  |  | 5  | CHOOLS & IMPA  | CT FEE INFORMATI  | ON   |  |
|--|--|--|--|--|---|--|--|
| STUDENT GENERATION RATES   | CHILD/UNIT   | ELEMENTARY   | MIDDLE   | HIGH SCHOOL  | SCHOOL IMPACT<br>TAXES/UNIT                                   | TRANSPORTATION IMPACT TAX (GENERAL RATE)   | LOCAL COST<br>SCHOOL BUDGET TOTAL PER PUPIL  |
| SFD Townhomes/Villas Multifamily (Garden) Multifamily (Low-rise w/parking) Multifamily (High-rise w/parking) AAC (All)                     | 0.595<br>0.440<br>0.248<br>0.114<br>0.114<br>n/a     | 0.320<br>0.211<br>0.153<br>0.042<br>0.042<br>n/a     | 0.144<br>0.122<br>0.056<br>0.039<br>0.039<br>n/a     | 0.131<br>0.107<br>0.039<br>0.033<br>0.033<br>n/a     | \$21,920<br>\$16,503<br>\$10,431<br>\$4,422<br>\$4,422<br>\$0 | \$5,708 /Unit<br>\$4,669 /Unit<br>\$3,630 /Unit<br>\$2,593 /Unit<br>\$2,593 /Unit<br>\$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<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a | n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a | n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a | n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a<br>n/a | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0          | \$5.20 /SF GFA<br>\$2.60 /SF GFA<br>\$0.00 /SF GFA<br>\$4.65 /SF GFA<br>\$0.30 /SF GFA<br>\$0.30 /SF GFA<br>\$0.00 /SF GFA<br>\$0.00 /SF GFA<br>\$2.60 /SF GFA | Sources: 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<br>(2011-2040) | 2011 | 2012 2 | 013 20° | 14 2015 | 2010  | 2017     | 2018    | 2019   | 2020   | 2021   | 2022   | 2023   | 30-YEAR<br>2024 | STUDY<br>2025 | PERIOI<br>2026 | D (2011-<br>2027 | 2040)<br>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 <sup>1</sup> | 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



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

<sup>&</sup>lt;sup>2</sup> 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 <sup>™</sup> Proposed Development  |
|------------|---|
| Appendix 2 | Montgomery County Fiscal Year 2012 Adopted Budget; Allocation of Revenues; LifeSci Village <sup>™</sup> Development                                     |
| Appendix 3 | Montgomery County Fiscal Year 2012 Adopted Budget; Allocation of Expenditures; LifeSci Village <sup>™</sup> 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 <sup>™</sup> 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<br>Years 1-30 | 2011<br>Year 1 | 2012<br>Year 2 | 2013<br>Year 3 | 2014<br>Year 4 | 2015<br>Year 5   | 2016<br>Year 6 | 2017<br>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                            |             | 0.00/ |          |                     | 4.000          | 4 000          | 4.004          | 4.000          | 4.400            | 4.450          | 4 404          |
| Office<br>Retail                                |             | 3.0%  |          |                     | 1.000<br>1.000 | 1.030<br>1.030 | 1.061<br>1.061 | 1.093<br>1.093 | 1.126<br>1.126   | 1.159<br>1.159 | 1.194<br>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                                 |             | 3.0%  |          |                     | 1.000          | 1.030          | 1.001          | 1.093          | 1.120            | 1.139          | 1.194          |
| 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                             |             |       |          | 4.075.000           |                |                | •              | •              | 440.500          | 000 000        | F 40 000       |
| Total Space                                     |             |       |          | 4,975,000           | 0              | 0              | 0              | 0              | 112,500          | 300,000        | 540,000        |
| Cumulative Space                                |             |       |          | 4,975,000           | 0              | Ü              | Ü              | U              | 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)                      | (III GBA)   |       |          | 1,400,000           | 0              | 0              | 0              | 0              | 87,500<br>87,500 | 175,000        | 262,500        |
| Cumulative Office (in GBA)                      |             |       |          | 1,400,000           | U              | U              | U              | U              | 67,300           | 175,000        | 202,500        |
| 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           | Ō              | Ö              | Ö              | Õ              | Ö                | 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        |
| 0// 0   | ( ODA)      |       |          |                     |                |                |                | _              |                  |                |                |
| 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<br>Years 1-30              | 2011<br>Year 1   | 2012<br>Year 2 | 2013<br>Year 3 | 2014<br>Year 4 | 2015<br>Year 5 | 2016<br>Year 6   | 2017<br>Year 7                   |
|--|------------|--------------|----------------------------------|------------------|----------------|----------------|----------------|----------------|------------------|----------------------------------|
| Retail Total (in GLA)<br>Cumulative Retail (in GLA)  |            |              | 510,000<br>510,000               | 0<br>0           | 0<br>0         | 0              | 0<br>0         | 0              | 0                | 130,000<br>130,000               |
| Retail: Lifestyle/Town Center<br>Cumulative Retail (in GLA)                                      | (in GLA)   |              | 380,000<br>380,000               | 0                | 0<br>0         | 0              | 0              | 0              | 0                | 90,000<br>90,000                 |
| Retail: Restaurants<br>Cumulative Retail (in GLA)  | (in GLA)   |              | 45,000<br>45,000                 | 0<br>0           | 0              | 0              | 0              | 0              | 0                | 15,000<br>15,000                 |
| Retail: Movie Theater/Entertainment<br>Cumulative Retail (in GLA)                                | (in GLA)   |              | 60,000<br>60,000                 | 0                | 0              | 0              | 0              | 0              | 0                | 0                                |
| Retail: Health Club<br>Cumulative Retail (in GLA)  | (in GLA)   |              | 25,000<br>25,000                 | 0                | 0              | 0              | 0              | 0<br>0         | 0                | 25,000<br>25,000                 |
| Hotel<br>Hotel<br>Cumulative Hotel Rooms<br>Hotel Square Feet<br>Cumulative Square Feet (in GSF) | (Rooms)    | 675 GSF/room | 300<br>300<br>202,500<br>202,500 | 0<br>0<br>0<br>0 | 0<br>0<br>0    | 0<br>0<br>0    | 0<br>0<br>0    | 0<br>0<br>0    | 0<br>0<br>0<br>0 | 200<br>200<br>135,000<br>135,000 |
| Residential Units Total<br>Cumulative  |            |              | 4,789<br>4,789                   | 0                | 0<br>0         | 0              | 0<br>0         | 475<br>475     | 475<br>950       | 475<br>1,425                     |
| Residential Units [Non Seniors] Cumulative   |            |              | 3,754<br>3,754                   | 0<br>0           | 0              | 0              | 0              | 329<br>329     | 329<br>658       | 329<br>987                       |
| Single-Family Detached (Total)<br>Cumulative   |            |              | 0<br>0                           | 0                | 0<br>0         | 0<br>0         | 0<br>0         | 0              | 0                | 0                                |
| SFD<br>Cumulative  |            |              | 0<br>0                           | 0                | 0<br>0         | 0<br>0         | 0<br>0         | 0              | 0                | 0                                |
| Townhome (Total)<br>Cumulative   |            |              | 975<br>975                       | 0                | 0              | 0              | 0<br>0         | 68<br>68       | 68<br>136        | 68<br>204                        |
| Townhomes<br>Cumulative  |            |              | 975<br>975                       | 0                | 0<br>0         | 0              | 0              | 68<br>68       | 68<br>136        | 68<br>204                        |
| Condominium (Total)<br>Cumulative  |            |              | 1,104<br>1,104                   | 0                | 0<br>0         | 0<br>0         | 0              | 69<br>69       | 69<br>138        | 69<br>207                        |
| Condominiums<br>Cumulative   |            |              | 1,104<br>1,104                   | 0                | 0              | 0              | 0              | 69<br>69       | 69<br>138        | 69<br>207                        |
| Rental Apartment (Total)<br>Cumulative   |            |              | 1,675<br>1,675                   | 0<br>0           | 0              | 0              | 0              | 192<br>192     | 192<br>384       | 192<br>576                       |
| Rental Apartments<br>Cumulative  |            |              | 1,675<br>1,675                   | 0                | 0              | 0              | 0              | 192<br>192     | 192<br>384       | 192<br>576                       |
| Active Adult Residential Units Total<br>Cumulative   |            |              | 1,035<br>1,035                   | 0<br>0           | 0              | 0              | 0              | 146<br>146     | 146<br>292       | 146<br>438                       |
| AAC Townhomes<br>Cumulative  |            |              | 200<br>200                       | 0                | 0              | 0              | 0              | 21<br>21       | 21<br>42         | 21<br>63                         |
| AAC Condominiums<br>Cumulative   |            |              | 245<br>245                       | 0<br>0           | 0<br>0         | 0              | 0              | 35<br>35       | 35<br>70         | 35<br>105                        |
| AAC Rental Apartments<br>Cumulative  |            |              | 590<br>590                       | 0                | 0<br>0         | 0              | 0<br>0         | 90<br>90       | 90<br>180        | 90<br>270                        |

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#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

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



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | ASSUMPTIONS            | COMMENTS | TOTAL<br>Years 1-30 | 2011<br>Year 1         | 2012<br>Year 2         | 2013<br>Year 3         | 2014<br>Year 4         | 2015<br>Year 5         | 2016<br>Year 6         | 2017<br>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<br>\$536,580 |          |                     | \$208,670<br>\$536,580 | \$214,930<br>\$552,677 | \$221,378<br>\$569,258 | \$228,019<br>\$586,335 | \$234,860<br>\$603,926 | \$241,906<br>\$622,043 | \$249,163<br>\$640,705 |
| Improvements                                  | \$536,560              |          |                     | φουσ,οσυ<br>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 <del>44</del> 3,303  | ψ <del>4</del> 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<br>\$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<br>Year 1   | 2012<br>Year 2   | 2013<br>Year 3   | 2014<br>Year 4   | 2015<br>Year 5   | 2016<br>Year 6   | 2017<br>Year 7   |
|--|--|------------------|--------------------------------|--|--|--|--|--|--|--|
| CONSTRUCTION VALUE Office: R&D/Lab/Applied Sciences Offices/Manuf.                               | % of Impro<br>(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<br>\$712,452<br>\$282,885                            | \$6,133,201<br>\$733,826<br>\$291,372                            | \$6,317,197<br>\$755,841<br>\$300,113                            | \$6,506,713<br>\$778,516<br>\$309,117                            | \$6,525,031<br>\$801,871<br>\$318,390                            | \$6,234,942<br>\$825,927<br>\$327,942                            | \$5,963,277<br>\$633,859<br>\$112,593                            |
| RESIDENTIAL Single-Family Detached Townhome Condominium Rental Apartment Total Land in Inventory | (includes AAC)<br>(includes AAC)<br>(includes AAC)<br>(includes AAC) |                  |                                | \$0<br>\$3,337,000<br>\$1,956,647<br>\$3,167,444<br>\$15,410,993 | \$0<br>\$3,437,110<br>\$2,015,347<br>\$3,262,467<br>\$15,873,322 | \$0<br>\$3,540,224<br>\$2,075,807<br>\$3,360,341<br>\$16,349,522 | \$0<br>\$3,646,430<br>\$2,138,081<br>\$3,461,151<br>\$16,840,008 | \$0<br>\$3,471,340<br>\$2,032,445<br>\$3,121,133<br>\$16,270,210 | \$0<br>\$3,282,462<br>\$1,918,547<br>\$2,757,599<br>\$15,347,418 | \$0<br>\$3,079,127<br>\$1,795,985<br>\$2,369,444<br>\$13,954,284 |



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### FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | ASSUM                          | PTIONS  | COMMENTS     | TOTAL<br>Years 1-30 | 2011<br>Year 1  | 2012<br>Year 2  | 2013<br>Year 3  | 2014<br>Year 4  | 2015<br>Year 5   | 2016<br>Year 6   | 2017<br>Year 7   |
|---|--------------------------------|---|--------------|---------------------|---|---|---|---|--|--|--|
| REAL PROPERTY MARKET VALUES  Non-Residential  |                                |   |              |                     |   |   |   |   |  |  |  |
| Office Land Inventory Improved Land Buildings Total Office Value  |                                |   |              |                     | \$5,954,564<br>\$0<br>\$0<br>\$5,954,564                  | \$6,133,201<br>\$0<br>\$0<br>\$6,133,201                  | \$6,317,197<br>\$0<br>\$0<br>\$6,317,197                  | \$6,506,713<br>\$0<br>\$0<br>\$6,506,713                  | \$6,525,031<br>\$9,074,415<br>\$19,766,748<br>\$35,366,194         | \$6,234,942<br>\$29,778,853<br>\$75,570,179<br>\$111,583,973       | \$5,963,277<br>\$49,926,312<br>\$132,017,407<br>\$187,906,995      |
| Retail<br>Land Inventory<br>Improved Land<br>Buildings<br>Total Retail Value  |                                |   |              |                     | \$712,452<br>\$0<br>\$0<br>\$712,452                      | \$733,826<br>\$0<br>\$0<br>\$733,826                      | \$755,841<br>\$0<br>\$0<br>\$755,841                      | \$778,516<br>\$0<br>\$0<br>\$778,516                      | \$801,871<br>\$0<br>\$0<br>\$801,871                               | \$825,927<br>\$0<br>\$0<br>\$825,927                               | \$633,859<br>\$7,761,340<br>\$20,477,997<br>\$28,873,196           |
| Hotel Land Inventory Improved Land Buildings Total Hotel Value  |                                |   |              |                     | \$282,885<br>\$0<br>\$0<br>\$282,885                      | \$291,372<br>\$0<br>\$0<br>\$291,372                      | \$300,113<br>\$0<br>\$0<br>\$300,113                      | \$309,117<br>\$0<br>\$0<br>\$309,117                      | \$318,390<br>\$0<br>\$0<br>\$318,390                               | \$327,942<br>\$0<br>\$0<br>\$327,942                               | \$112,593<br>\$4,776,209<br>\$31,045,360<br>\$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<br>\$0<br>\$0   | \$0<br>\$0<br>\$0   | \$0<br>\$0<br>\$0   | \$0<br>\$0<br>\$0   | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  |
| Townhome  Land Inventory Improved (Land & Building) Total Townhome Value  | (includes AAC)                 |   |              |                     | \$3,337,000<br>\$0<br>\$3,337,000                         | \$3,437,110<br>\$0<br>\$3,437,110                         | \$3,540,224<br>\$0<br>\$3,540,224                         | \$3,646,430<br>\$0<br>\$3,646,430                         | \$3,471,340<br>\$54,592,242<br>\$58,063,582                        | \$3,282,462<br>\$112,460,019<br>\$115,742,480                      | \$3,079,127<br>\$173,750,729<br>\$176,829,856                      |
| Condominium Land in Inventory Improved (Land & Building) Total Condominium Value  | (includes AAC)                 |   |              |                     | \$1,956,647<br>\$0<br>\$1,956,647                         | \$2,015,347<br>\$0<br>\$2,015,347                         | \$2,075,807<br>\$0<br>\$2,075,807                         | \$2,138,081<br>\$0<br>\$2,138,081                         | \$2,032,445<br>\$43,528,828<br>\$45,561,273                        | \$1,918,547<br>\$89,669,386<br>\$91,587,932                        | \$1,795,985<br>\$138,539,201<br>\$140,335,186                      |
| Rental Apartment<br>Land in Inventory<br>Improved (Land & Building)<br>Total Rental Apartment Value   | (includes AAC)                 |   |              |                     | \$3,167,444<br>\$0<br>\$3,167,444                         | \$3,262,467<br>\$0<br>\$3,262,467                         | \$3,360,341<br>\$0<br>\$3,360,341                         | \$3,461,151<br>\$0<br>\$3,461,151                         | \$3,121,133<br>\$52,943,934<br>\$56,065,068                        | \$2,757,599<br>\$109,064,505<br>\$111,822,104                      | \$2,369,444<br>\$168,504,660<br>\$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<br>6.5%<br>20.1% | Percontee Factor inc<br>20.0%<br>20.0%<br>3.0%<br>\$1,230,412,160 | 1.3%<br>4.0% |                     | 1.000<br>\$1,230,412,160<br>0.0%<br>1.000<br>0.00%<br>\$0 | 1.030<br>\$1,267,324,525<br>0.0%<br>1.000<br>0.00%<br>\$0 | 1.061<br>\$1,305,344,261<br>0.0%<br>1.000<br>0.00%<br>\$0 | 1.093<br>\$1,344,504,589<br>0.0%<br>1.000<br>0.00%<br>\$0 | 1.126<br>\$1,384,839,726<br>1.3%<br>1.013<br>1.32%<br>\$18,333,749 | 1.159<br>\$1,426,384,918<br>1.3%<br>1.027<br>2.67%<br>\$38,017,524 | 1.194<br>\$1,469,176,466<br>1.3%<br>1.040<br>4.02%<br>\$59,126,733 |



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

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



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

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



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

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



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

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



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

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



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|  | ASSUMPTIONS                        | COMMENTS   | TOTAL<br>Years 1-30 | 2011<br>Year 1                     | 2012<br>Year 2                     | 2013<br>Year 3                     | 2014<br>Year 4                     | 2015<br>Year 5                     | 2016<br>Year 6                     | 2017<br>Year 7                     |
|--|------------------------------------|--|---------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| TOTAL HOUSEHOLD INCOME-INCOME PER HOUSEHOLD Residential Units                                |                                    |  |                     |                                    |                                    |                                    |                                    |                                    |                                    |                                    |
| Single-Family Detached<br>SFD<br>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<br>AAC Townhomes<br>AAC Condominiums<br>AAC Rental Apartments | \$138,875<br>\$101,925<br>\$79,200 | 25% income to home value<br>25% income to home value<br>25% rent to income ratio |                     | \$138,875<br>\$101,925<br>\$79,200 | \$143,041<br>\$104,983<br>\$81,576 | \$147,332<br>\$108,132<br>\$84,023 | \$151,752<br>\$111,376<br>\$86,544 | \$156,305<br>\$114,717<br>\$89,140 | \$160,994<br>\$118,159<br>\$91,815 | \$165,824<br>\$121,704<br>\$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)<br>Cumulative   |                                    |  | 0                   | 0                                  | 0                                  | 0<br>0                             | 0                                  | 0                                  | 0                                  | 0                                  |
| SFD<br>Cumulative  |                                    | 3.08 pop/occ. unit   | 0                   | 0                                  | 0                                  | 0                                  | 0<br>0                             | 0                                  | 0                                  | 0                                  |
| Townhome (Total)<br>Cumulative   |                                    |  | 2,612<br>2,612      | 0                                  | 0                                  | 0                                  | 0                                  | 182<br>182                         | 182<br>364                         | 182<br>547                         |
| Townhomes<br>Cumulative  |                                    | 2.75 pop/occ. unit   | 2,612<br>2,612      | 0                                  | 0                                  | 0                                  | 0                                  | 182<br>182                         | 182<br>364                         | 182<br>547                         |
| Condominium (Total)<br>Cumulative  |                                    |  | 1,713<br>1,713      | 0                                  | 0                                  | 0                                  | 0                                  | 107<br>107                         | 107<br>214                         | 107<br>321                         |
| Condominiums<br>Cumulative   |                                    | 1.64 pop/occ. unit   | 1,713<br>1,713      | 0                                  | 0<br>0                             | 0                                  | 0                                  | 107<br>107                         | 107<br>214                         | 107<br>321                         |
| Rental Apartment (Total)<br>Cumulative   |                                    |  | 3,448<br>3,448      | 0                                  | 0<br>0                             | 0                                  | 0                                  | 395<br>395                         | 395<br>791                         | 395<br>1,186                       |
| Rental Apartments<br>Cumulative  |                                    | 2.12 pop/occ. unit   | 3,448<br>3,448      | 0                                  | 0                                  | 0                                  | 0                                  | 395<br>395                         | 395<br>791                         | 395<br>1,186                       |
| Active Adult Population Units Total Cumulative   |                                    |  | 1,699<br>1,699      | 0                                  | 0                                  | 0                                  | 0                                  | 240<br>240                         | 240<br>479                         | 240<br>719                         |
| AAC Townhomes<br>Cumulative  |                                    | 1.70 pop/occ. unit   | 331<br>331          | 0                                  | 0                                  | 0                                  | 0<br>0                             | 35<br>35                           | 35<br>70                           | 35<br>104                          |
| AAC Condominiums<br>Cumulative   |                                    | 1.70 pop/occ. unit   | 394<br>394          | 0                                  | 0                                  | 0                                  | 0<br>0                             | 56<br>56                           | 56<br>113                          | 56<br>169                          |
| AAC Rental Apartments<br>Cumulative  |                                    | 1.70 pop/occ. unit   | 974<br>974          | 0                                  | 0                                  | 0<br>0                             | 0<br>0                             | 149<br>149                         | 149<br>297                         | 149<br>446                         |



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | ASSUMPTIONS    | COMMENTS            | TOTAL<br>Years 1-30 | 2011<br>Year 1 | 2012<br>Year 2 | 2013<br>Year 3 | 2014<br>Year 4 | 2015<br>Year 5 | 2016<br>Year 6 | 2017<br>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          |
| Camadavo  |                |                     | .,                  | · ·            | Ü              | · ·            | · ·            | 000            | 1,000          | 2,00           |
| Single-Family Detached (Total)<br>Cumulative                |                |                     | 0                   | 0              | 0              | 0              | 0              | 0              | 0              | 0<br>0         |
| SFD<br>Cumulative   |                | 100% full-time pop  | 0                   | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| Townhome (Total)<br>Cumulative                              |                |                     | 2,612<br>2,612      | 0              | 0              | 0              | 0              | 182<br>182     | 182<br>364     | 182<br>547     |
| Cambianto   |                |                     | 2,012               | · ·            | Ü              | Ü              | ŭ              | .02            | 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<br>214     | 107<br>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               | 0              | 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               | Ü              | ŭ              | · ·            | · ·            | 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            | 05             | 0.5            |
| AAC Townhomes Cumulative                                    |                | 100% full-time pop  | 331<br>331          | 0              | 0              | 0              | 0              | 35<br>35       | 35<br>70       | 35<br>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<br>Multifamily                                     | 0.211<br>0.153 |                     | 200<br>160          | 0              | 0              | 0              | 0              | 14<br>10       | 14             | 14<br>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                 | Ö              | Ö              | 0              | 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<br>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                 | Ō              | 0              | 0              | Ö              | 16             | 16             | 16             |
| Total Students by Year                                      |                |                     | 677                 | 0              | 0              | 0              | 0              | 45             | 45             | 45             |
|   |                |                     |                     |                |                |                |                |                |                |                |



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|  | ASSUMPTIONS          | COMMENTS  | TOTAL<br>Years 1-30              | 2011<br>Year 1 | 2012<br>Year 2 | 2013<br>Year 3 | 2014<br>Year 4 | 2015<br>Year 5     | 2016<br>Year 6              | 2017<br>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<br>Multifamily  |                      |           | 200<br>160                       | 0              | 0              | 0              | 0              | 14<br>10           | 28<br>20                    | 42<br>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<br>\$246,269,436 | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$3,235,871 | \$14,685,536<br>\$6,665,893 | \$30,252,204<br>\$6,865,870 |
| Office: Clinical/Medical Office                                |                      |           | \$5,529,653,323                  | \$0<br>\$0     | \$0<br>\$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<br>Years 1-30                  | 2011<br>Year 1                         | 2012<br>Year 2                         | 2013<br>Year 3                         | 2014<br>Year 4                         | 2015<br>Year 5                           | 2016<br>Year 6                                | 2017<br>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<br>\$0.876 | Per \$100 | 100% Asses. | \$242.458.086                        | \$5,954,564<br>\$5,781,130<br>\$50,643 | \$6,133,201<br>\$5,954,564<br>\$52,162 | \$6,317,197<br>\$6,133,201<br>\$53,727 | \$6,506,713<br>\$6,317,197<br>\$55,339 | \$35,366,194<br>\$6,506,713<br>\$56,999  | \$111,583,973<br>\$35,366,194<br>\$309.808    | \$187,906,995<br>\$111,583,973<br>\$977,476   |
| Retail Market Value<br>Prior Year Market Value Subject To Tax  | 100% Taxable            |           |             |                                      | \$712,452<br>\$691,701                 | \$733,826<br>\$712,452                 | \$755,841<br>\$733,826                 | \$778,516<br>\$755,841                 | \$801,871<br>\$778,516                   | \$825,927<br>\$801,871                        | \$28,873,196<br>\$825,927                     |
| Total Retail Real Property Tax Revenues  Hotel Assessed Value  | \$0.876<br>100% Taxable | Per \$100 | 100% Asses. | \$32,412,397                         | \$6,059<br>\$282,885                   | \$6,241<br>\$291,372                   | \$6,428<br>\$300,113                   | \$6,621<br>\$309,117                   | \$6,820<br>\$318,390                     | \$7,024<br>\$327,942                          | \$7,235<br>\$35,934,162                       |
| Prior Year Market Value Subject To Tax<br>Total Hotel Real Property Tax Revenues                             | \$0.876                 | Per \$100 | 100% Asses. | \$14,811,950                         | \$274,646<br>\$2,406                   | \$282,885<br>\$2,478                   | \$291,372<br>\$2,552                   | \$300,113<br>\$2,629                   | \$309,117<br>\$2,708                     | \$318,390<br>\$2,789                          | \$327,942<br>\$2,873                          |
| Residential Market Value Prior Year Market Value Subject To Tax Total Residential Real Property Tax Revenues | 100% Taxable<br>\$0.876 | Per \$100 | 100% Asses. | \$443,967,103                        | \$8,461,091<br>\$8,214,652<br>\$71,960 | \$8,714,924<br>\$8,461,091<br>\$74,119 | \$8,976,372<br>\$8,714,924<br>\$76,343 | \$9,245,663<br>\$8,976,372<br>\$78,633 | \$159,689,923<br>\$9,245,663<br>\$80,992 | \$319,152,517<br>\$159,689,923<br>\$1,398,884 | \$488,039,146<br>\$319,152,517<br>\$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<br>\$10,745,094,737 | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                             | \$18,333,749<br>\$0                      | \$38,017,524<br>\$18,333,749                  | \$59,126,733<br>\$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<br><b>\$94,127,030</b>  | \$0<br><b>\$0</b>                      | \$0<br><b>\$0</b>                      | \$0<br><b>\$0</b>                      | \$0<br><b>\$0</b>                      | \$0<br><b>\$0</b>                        | \$160,604<br><b>\$160,604</b>                 | \$333,034<br><b>\$333,034</b>                 |
| Personal Property Tax Revenues   |                         |           |             |                                      |  |  |  |  |  |   |   |
| Office Personal Property Market Value<br>Total Office Personal Property Taxes                                | 100% Taxable<br>\$2.192 | Per \$100 | 100% Asses. | \$104,256,545                        | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                             | \$4,326,174<br>\$94,830                  | \$15,802,355<br>\$346,388                     | \$27,291,558<br>\$598,231                     |
| Retail Personal Property Market Value<br>Total Retail Personal Property Taxes                                | 100% Taxable<br>\$2.192 | Per \$100 | 100% Asses. | \$12,903,171                         | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                               | \$0<br>\$0                                    | \$4,235,901<br>\$92,851                       |
| Hotel Personal Property Assessed Value<br>Total Hotel Personal Property Taxes                                | 100% Taxable<br>\$2.192 | Per \$100 | 100% Asses. | \$5,900,167                          | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                             | \$0<br>\$0                               | \$0<br>\$0                                    | \$5,373,235<br>\$117,781                      |
| Total Personal Property Taxes  |                         |           |             | \$123,059,883                        | \$0                                    | \$0                                    | \$0                                    | \$0                                    | \$94,830                                 | \$346,388                                     | \$808,863                                     |



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | ASSUMPTIONS                             | TOTAL COMMENTS Years 1-30          | 2011<br>Year 1 | 2012<br>Year 2 | 2013<br>Year 3 | 2014<br>Year 4 | 2015<br>Year 5               | 2016<br>Year 6               | 2017<br>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<br>Office: Incubator                         |   | \$6,269,624,                       |                | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0                          | \$14,685,536                 | \$30,252,204                   |
| Office: Incubator Office: Clinical/Medical Office   |   | \$246,269,<br>\$5,529,653.         |                | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$3,235,871<br>\$0           | \$6,665,893<br>\$12,952,278  | \$6,865,870<br>\$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,<br>\$13,132,078,     |                | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$38,025,285<br>\$38,025,285 | \$78,332,087<br>\$78,332,087 | \$121,023,075<br>\$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)<br>Single-Family Detached Value (over \$500K) |   |                                    | \$0 \$0<br>\$0 | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0                   | \$0<br>\$0                   | \$0<br>\$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,<br>\$1.515.904.          |                | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$92.921.070          | \$0<br>\$95.864.702          | \$0<br>\$98.896.643            |
| Total Resale (under \$500K)   | 8.41% Turnover                          | \$1,515,904,<br>\$3,216,173,       |                | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$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,<br>\$33,647,             |                | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$3,016<br>\$675,457         | \$61,636<br>\$759,466        | \$123,773<br>\$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                    |



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|  | ASSUI  | MPTIONS COMMENTS  | TOTAL<br>Years 1-30  | 2011<br>Year 1   | 2012<br>Year 2                                      | 2013<br>Year 3   | 2014<br>Year 4  | 2015<br>Year 5   | 2016<br>Year 6  | 2017<br>Year 7  |
|--|--|---|--|--|---|--|---|--|---|---|
| Hotel Room Tax   |  |   |  |  |   |  |   |  |   |   |
| Room Revenues Total Hotel Room Tax   |  | 7.0%  | \$35,303,207   | \$0<br><b>\$0</b>                                      | \$0<br><b>\$0</b>                                   | \$0<br><b>\$0</b>                                      | \$0<br><b>\$0</b>   | \$0<br><b>\$0</b>  | \$0<br><b>\$0</b>   | \$10,067,652<br><b>\$704,736</b>  |
| 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<br>\$21,920 /Unit<br>\$16,503 /Unit<br>\$10,431 /Unit<br>\$4,422 /Unit<br>\$0 /Unit             | 6   | \$0<br>\$21,579,690<br>\$0<br>\$6,720,519<br>\$0<br>\$0  | 1.000<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.030<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0     | 1.061<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.093<br>\$0<br>\$1,226,263<br>\$0<br>\$333,411<br>\$0<br>\$0     | 1.126<br>\$0<br>\$1,263,050<br>\$0<br>\$343,413<br>\$0<br>\$0            | 1.159<br>\$0<br>\$1,300,942<br>\$0<br>\$353,715<br>\$0<br>\$0                     | 1.194<br>\$0<br>\$1,339,970<br>\$0<br>\$364,327<br>\$0<br>\$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<br>\$4,669 /Unit<br>\$3,630 /Unit<br>\$2,593 /Unit<br>\$2,593 /Unit<br>\$1,037 /Unit | 6   | \$0<br>\$6,105,288<br>\$0<br>\$3,940,820<br>\$0<br>\$1,245,260   | 1.000<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0        | 1.030<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0     | 1.061<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.093<br>\$0<br>\$346,932<br>\$0<br>\$195,507<br>\$0<br>\$159,752 | 1.126<br>\$0<br>\$357,340<br>\$0<br>\$201,373<br>\$0<br>\$164,545        | 1.159<br>\$0<br>\$368,060<br>\$0<br>\$207,414<br>\$0<br>\$169,481                 | 1.194<br>\$0<br>\$379,102<br>\$0<br>\$213,636<br>\$0<br>\$174,566                       |
| Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax  | \$5.20 /SF GFA<br>\$2.60 /SF GFA<br>\$0.00 /SF GFA<br>\$4.65 /SF GFA<br>\$2.60 /SF GFA             | (Office: General)<br>(Office: R&D/Lab/Applied Sciences Offices/M<br>(Remainder of Office in Program)<br>(All Retail)<br>(Hotel) | \$11,173,656<br>\$5,010,908<br>\$0<br>\$2,813,170<br>\$629,223<br>\$30,918,326                               | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                 | \$0<br>\$0<br>\$0<br>\$0<br>\$0                     | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                 | \$142,055<br>\$248,595<br>\$0<br>\$0<br>\$0<br>\$1,092,842        | \$731,581<br>\$256,053<br>\$0<br>\$0<br>\$0<br>\$1,710,891               | \$602,823<br>\$263,735<br>\$0<br>\$700,781<br>\$406,905<br>\$2,719,199            | \$620,907<br>\$271,647<br>\$0<br>\$2,026,605<br>\$0<br>\$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<br>Total Employees<br>Total Misc. Revenue-Employees<br>Per Resident   | \$221.23 /Emp.   |   | 10,629<br>\$80,142,828   | 0<br>\$0   | 0<br>\$0  | 0<br>\$0   | 0<br>\$0  | 207<br>\$51,596  | 877<br>\$224,967  | 1,871<br>\$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<br>\$76,906,208<br>\$76,906,208<br><b>\$157,049,036</b>  | 0<br>\$0<br>\$0<br><b>\$0</b>                          | 0<br>\$0<br>\$0<br><b>\$0</b>                       | 0<br>\$0<br>\$0<br><b>\$0</b>                          | 0<br>\$0<br>\$0<br><b>\$0</b>                                     | 924<br>\$232,453<br>\$232,453<br><b>\$284,049</b>                        | 1,848<br>\$478,853<br>\$478,853<br><b>\$703,820</b>                               | 2,773<br>\$739,828<br>\$739,828<br><b>\$1,234,186</b>                                   |
|  |  |   | \$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<br>\$94,127,030<br>\$123,059,883<br>\$746,207,020<br>\$80,968,317<br>\$35,303,207<br>\$959,857 | \$131,068<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0           | \$135,000<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | \$139,050<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0           | \$143,222<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0               | \$147,518<br>\$0<br>\$94,830<br>\$1,671,810<br>\$1,609,039<br>\$0<br>\$0 | \$1,718,505<br>\$160,604<br>\$346,388<br>\$3,763,338<br>\$1,807,440<br>\$0<br>\$0 | \$3,783,360<br>\$333,034<br>\$808,863<br>\$6,218,080<br>\$2,016,101<br>\$704,736<br>\$0 |
| Impact Taxes<br>Miscellaneous Revenues   |  |   | \$59,218,535<br>\$157,049,036  | \$0<br>\$0   | \$0<br>\$0  | \$0<br>\$0   | \$2,652,515<br>\$0  | \$3,317,355<br>\$284,049   | \$4,373,856<br>\$703,820  | \$5,390,760<br>\$1,234,186  |
|  |  |   |  |  |   |  |   |  | F   | Appendix 1  |

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#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | ASSUMPTIO  | ASSUMPTIONS COMMENTS  |  | 2011<br>Year 1   | 2012<br>Year 2                                  | 2013<br>Year 3   | 2014<br>Year 4   | 2015<br>Year 5   | 2016<br>Year 6   | 2017<br>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<br>\$196,173,201  | 0<br>\$0   | 0<br>\$0  | 0<br>\$0   | 0<br>\$0   | 207<br>\$126,297   | 877<br>\$550,673   | 1,871<br>\$1,210,086   |
| Per Resident Cumulative Full-Time Residents Misc. Rev: Full-Time Residents  | \$753.18 /Res.   | 100% (% of Rev. Applied)  | 9,473<br>\$259,205,612   | 0<br>\$0   | 0<br>\$0  | 0<br>\$0   | 0<br>\$0   | 924<br>\$783,462   | 1,848<br>\$1,613,933   | 2,773<br>\$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%<br>\$5,708 /Unit<br>\$4,669 /Unit<br>\$3,630 /Unit<br>\$2,593 /Unit<br>\$2,593 /Unit<br>\$1,037 /Unit |   | \$0<br>\$6,105,288<br>\$0<br>\$3,940,820<br>\$0<br>\$1,245,260                 | 1.000<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0        | 1.030<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.061<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.093<br>\$0<br>\$346,932<br>\$0<br>\$195,507<br>\$0<br>\$159,752            | 1.126<br>\$0<br>\$357,340<br>\$0<br>\$201,373<br>\$0<br>\$164,545            | 1.159<br>\$0<br>\$368,060<br>\$0<br>\$207,414<br>\$0<br>\$169,481            | 1.194<br>\$0<br>\$379,102<br>\$0<br>\$213,636<br>\$0<br>\$174,566            |
| Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax   | \$2.60 /SF GFA (Office<br>\$0.00 /SF GFA (Rem  | ze: General) ze: Reb/Lab/Applied Sciences Offices/M lainder of Office in Program) (etail) | \$11,173,656<br>\$5,010,908<br>\$0<br>\$2,813,170<br>\$629,223<br>\$30,918,326 | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                 | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0          | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                 | \$142,055<br>\$248,595<br>\$0<br>\$0<br>\$0<br>\$1,092,842                   | \$731,581<br>\$256,053<br>\$0<br>\$0<br>\$0<br>\$1,710,891                   | \$602,823<br>\$263,735<br>\$0<br>\$700,781<br>\$406,905<br>\$2,719,199       | \$620,907<br>\$271,647<br>\$0<br>\$2,026,605<br>\$0<br>\$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<br>\$44,437,178   | \$0<br>\$0<br>\$0                                      | \$0<br>\$0<br>\$0                               | \$0<br>\$0<br>\$0                                      | \$1,092,842<br>\$87,692<br>\$87,692  | \$1,710,891<br>\$137,286<br>\$224,979  | \$2,719,199<br>\$218,196<br>\$443,174  | \$3,686,463<br>\$295,811<br>\$738,986  |
| Educational Operating Expenditures  Per Student Operating Expenditures Total Students Generated by Project-Full-time Households  Total Educational Operating Expenditures                                       |  | \$9,459   | 677<br><b>\$220,272,247</b>  | \$9,459<br>0<br><b>\$0</b>                             | \$9,742<br>0<br><b>\$0</b>                      | \$10,035<br>0<br><b>\$0</b>                            | \$10,336<br>0<br><b>\$0</b>  | \$10,646<br>45<br><b>\$482,707</b>   | \$10,965<br>91<br><b>\$994,377</b>   | \$11,294<br>136<br><b>\$1,536,313</b>  |
| 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%<br>\$21,920 /Unit<br>\$16,503 /Unit<br>\$10,431 /Unit<br>\$4,422 /Unit<br>\$4,422 /Unit<br>\$0 /Unit  |   | \$0<br>\$21,579,690<br>\$0<br>\$6,720,519<br>\$0<br>\$0<br>\$28,300,210        | 1.000<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.030<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.061<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.093<br>\$0<br>\$1,226,263<br>\$0<br>\$333,411<br>\$0<br>\$0<br>\$1,559,673 | 1.126<br>\$0<br>\$1,263,050<br>\$0<br>\$343,413<br>\$0<br>\$0<br>\$1,606,463 | 1.159<br>\$0<br>\$1,300,942<br>\$0<br>\$353,715<br>\$0<br>\$0<br>\$1,654,657 | 1.194<br>\$0<br>\$1,339,970<br>\$0<br>\$364,327<br>\$0<br>\$0<br>\$1,704,297 |
| Educational Capital Expenditures<br>New Annual Payments w/ 20yr financing<br>New Ann. Payments w/ 20 yr. Financing  |  | 5.0% interest rate  | \$28,300,210<br>\$40,770,926   | \$0<br>\$0<br>\$0                                      | \$0<br>\$0<br>\$0                               | \$0<br>\$0<br>\$0                                      | \$1,559,673<br>\$125,152<br>\$125,152  | \$1,606,463<br>\$128,907<br>\$254,059  | \$1,654,657<br>\$132,774<br>\$386,833  | \$1,704,297<br>\$136,757<br>\$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<br>\$44,437,178<br>\$220,272,247<br>\$40,770,926                 | \$0<br>\$0<br>\$0<br>\$0                               | \$0<br>\$0<br>\$0<br>\$0                        | \$0<br>\$0<br>\$0<br>\$0                               | \$0<br>\$87,692<br>\$0<br>\$125,152  | \$909,759<br>\$224,979<br>\$482,707<br>\$254,059                             | \$2,164,606<br>\$443,174<br>\$994,377<br>\$386,833                           | \$3,703,612<br>\$738,986<br>\$1,536,313<br>\$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   |



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|  | ASSUMPT                      | TIONS CO                       | TOTAL MMENTS Years 1-30            | 2011<br>Year 1 | 2012<br>Year 2 | 2013<br>Year 3 | 2014<br>Year 4 | 2015<br>Year 5             | 2016<br>Year 6              | 2017<br>Year 7               |
|--|------------------------------|--------------------------------|------------------------------------|----------------|----------------|----------------|----------------|----------------------------|-----------------------------|------------------------------|
| INDIRECT/INDUCED: MONTGOMERY COUNTY  |                              |                                |                                    |                |                |                |                |                            |                             |                              |
| Indirect/Induced Income Tax  |                              |                                |                                    |                |                |                |                |                            |                             |                              |
| Direct Taxable Income<br>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<br>87% in State | 60% in County<br>60% in County | \$3,111,581,864<br>\$3,272,744,164 | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$6,505,693<br>\$0         | \$13,401,728<br>\$7,665,850 | \$20,705,670<br>\$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<br>Office: General   | 87% in State<br>87% in State | 60% in County<br>60% in County | \$2,886,479,034<br>\$2,702,366,436 | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0                 | \$6,761,089<br>\$6,329,836  | \$13,927,843<br>\$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<br>\$13,391,990       | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0                 | \$0<br>\$0                  | \$455,991<br>\$0             |
| Retail-Theater<br>Retail-Health Club   | 87% in State<br>87% in State | 60% in County<br>60% in County | \$12,270,933                       | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0                 | \$0<br>\$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<br>IMPLAN 462     | 1.4492<br>1.4220               | \$1,397,778,582                    | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$2,922,475                | \$6,020,298                 | \$9,301,360<br>\$6,664,613   |
| Office: Science Related Educational/Academic Office: Incubator                               | IMPLAN 446                   | 1.4420                         | \$1,381,209,310<br>\$57,748,162    | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$758,785           | \$3,235,249<br>\$1,563,097  | \$1,609,990                  |
| Office: Clinical/Medical Office  | IMPLAN 446                   | 1.3697                         | \$1,067,200,575                    | \$0            | \$0            | \$0<br>\$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<br>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<br>Total Direct/Induced Construction Income           |                              |                                | \$5,341,390,209<br>\$130,810,045   | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$3,681,260<br>\$6,021,781 | \$16,048,363<br>\$8,237,980 | \$31,066,507<br>\$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<br>Hotel Tax  | IMPLAN 479                   | 1.3135<br>7.00%                | \$158,105,412<br>\$11,067,379      | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0     | \$0<br>\$0                 | \$0<br>\$0                  | \$3,156,159<br>\$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                    |
|  |                              |                                |                                    |                |                |                |                |                            | ,                           | Innondiv 1                   |



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#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | 2018<br>Year 8 | 2019<br>Year 9 | 2020<br>Year 10 | 2021<br>Year 11 | 2022<br>Year 12 | 2023<br>Year 13 | 2024<br>Year 14 | 2025<br>Year 15 | 2026<br>Year 16 | 2027<br>Year 17 | 2028<br>Year 18 | 2029<br>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        |



#### 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 |
| 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)<br>Cumulative   | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| SFD<br>Cumulative  | 0       | 0       | 0       | 0<br>0  | 0       | 0       | 0       | 0<br>0  | 0<br>0  | 0       | 0       | 0<br>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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#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | 2018<br>Year 8         | 2019<br>Year 9         | 2020<br>Year 10        | 2021<br>Year 11        | 2022<br>Year 12        | 2023<br>Year 13        | 2024<br>Year 14            | 2025<br>Year 15        | 2026<br>Year 16        | 2027<br>Year 17        | 2028<br>Year 18        | 2029<br>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                | <b>©E 00E</b>          | \$6.165                | ec 250                 | CC 540                 |
| Single-Family Detached Townhome                 | \$4,725<br>\$3,493     | \$4,866<br>\$3,598     | \$5,012<br>\$3,706     | \$5,163<br>\$3,817     | \$5,318<br>\$3,931     | \$5,477<br>\$4,049     | \$5,642<br>\$4,171         | \$4,296                | \$5,985<br>\$4,425     | \$4,557                | \$6,350<br>\$4,694     | \$6,540<br>\$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<br>Total                               | \$215.23<br>\$307.47   | \$221.68<br>\$316.69   | \$228.34<br>\$326.19   | \$235.19<br>\$335.98   | \$242.24<br>\$346.06   | \$249.51<br>\$356.44   | \$256.99<br>\$367.13       | \$264.70<br>\$378.15   | \$272.64<br>\$389.49   | \$280.82<br>\$401.18   | \$289.25<br>\$413.21   | \$297.93<br>\$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                | <b>#</b> 400.00        | <b>0.100.00</b>        | 0440.44                    | 0440.44                | 0440.05                | 0400.05                | Ø400.00                | 0407.00                |
| Land<br>Building                                | \$92.24<br>\$215.23    | \$95.01<br>\$221.68    | \$97.86<br>\$228.34    | \$100.79<br>\$235.19   | \$103.82<br>\$242.24   | \$106.93<br>\$249.51   | \$110.14<br>\$256.99       | \$113.44<br>\$264.70   | \$116.85<br>\$272.64   | \$120.35<br>\$280.82   | \$123.96<br>\$289.25   | \$127.68<br>\$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<br>Building                                | \$36.90<br>\$159.88    | \$38.00<br>\$164.68    | \$39.14<br>\$169.62    | \$40.32<br>\$174.71    | \$41.53<br>\$179.95    | \$42.77<br>\$185.35    | \$44.06<br>\$190.91        | \$45.38<br>\$196.64    | \$46.74<br>\$202.54    | \$48.14<br>\$208.61    | \$49.59<br>\$214.87    | \$51.07<br>\$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<br>\$133.00    | \$63.34<br>\$136.68    | \$65.24<br>\$130.48    | \$67.20<br>\$134.30    | \$69.21                | \$71.29<br>\$1.42.59   | \$73.43                    | \$75.63<br>\$151.36    | \$77.90                | \$80.24                | \$82.64                | \$85.12<br>\$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<br>\$202,536  | \$32,094               | \$33,057               | \$34,049               |
| Building<br>Total                               | \$159,884<br>\$184,481 | \$164,680<br>\$190,016 | \$169,621<br>\$195,716 | \$174,709<br>\$201,587 | \$179,950<br>\$207,635 | \$185,349<br>\$213,864 | \$190,909<br>\$220,280     | \$196,637<br>\$226,888 | \$202,536<br>\$233,695 | \$208,612<br>\$240,706 | \$214,870<br>\$247,927 | \$221,316<br>\$255,365 |
| Manager Section 1                               | ψ.σ.,.σι               | ψ.00,0.0               | ψ.ου,                  | Ψ201,001               | Ψ=0.,000               | ψ= .0,00 Γ             | Ψ <b>LL</b> 0, <b>L</b> 00 | ΨΕΕΟ,000               | Ψ200,000               | Ψ2.0,.00               | ΨΕ,ΘΕ.                 | Ψ200,000               |



#### 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<br>Average Sale Price<br>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<br>Average Monthly Rent per Unit<br>Average Value per Unit<br>Land<br>Improvements | \$1,953<br>\$209,079<br>\$18,448<br>\$190,630 | \$2,012<br>\$215,351<br>\$19,002<br>\$196,349 | \$2,072<br>\$221,811<br>\$19,572<br>\$202,240 | \$2,134<br>\$228,466<br>\$20,159<br>\$208,307 | \$2,198<br>\$235,320<br>\$20,764<br>\$214,556 | \$2,264<br>\$242,379<br>\$21,386<br>\$220,993 | \$2,332<br>\$249,651<br>\$22,028<br>\$227,623 | \$2,402<br>\$257,140<br>\$22,689<br>\$234,451 | \$2,474<br>\$264,854<br>\$23,370<br>\$241,485 | \$2,548<br>\$272,800<br>\$24,071<br>\$248,729 | \$2,625<br>\$280,984<br>\$24,793<br>\$256,191 | \$2,703<br>\$289,414<br>\$25,536<br>\$263,877 |
| AAC Townhomes<br>Average Sale Price<br>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                                     |



#### Appendix 1

# FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|  | 2018<br>Year 8   | 2019<br>Year 9   | 2020<br>Year 10  | 2021<br>Year 11   | 2022<br>Year 12   | 2023<br>Year 13   | 2024<br>Year 14   | 2025<br>Year 15   | 2026<br>Year 16   | 2027<br>Year 17                                     | 2028<br>Year 18                                     | 2029<br>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   | \$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                                   |
| Retail<br>Hotel  | \$25,771<br>\$115,971  | \$0<br>\$119,450   | \$0<br>\$0   | \$0<br>\$0  | \$0<br>\$0  | \$0<br>\$0  | \$0<br>\$0  | \$0<br>\$0  | \$0<br>\$0  | \$0<br>\$0  | \$0<br>\$0  | \$0<br>\$0                                  |
| RESIDENTIAL Single-Family Detached Townhome Condominium Rental Apartment Total Land in Inventory | \$0<br>\$2,860,638<br>\$1,664,343<br>\$1,955,518<br>\$12,291,940 | \$0<br>\$2,626,268<br>\$1,523,186<br>\$1,514,623<br>\$11,136,669 | \$0<br>\$2,375,262<br>\$1,372,062<br>\$1,395,845<br>\$10,155,655 | \$0<br>\$2,106,831<br>\$1,210,499<br>\$896,461<br>\$8,860,366 | \$0<br>\$1,820,157<br>\$1,108,279<br>\$923,355<br>\$8,105,989 | \$0<br>\$1,514,386<br>\$998,836<br>\$951,055<br>\$7,298,374 | \$0<br>\$1,230,338<br>\$881,830<br>\$488,767<br>\$5,985,893 | \$0<br>\$975,136<br>\$756,904<br>\$503,430<br>\$5,140,893 | \$0<br>\$703,516<br>\$623,689<br>\$518,533<br>\$4,239,806 | \$0<br>\$414,720<br>\$481,800<br>\$0<br>\$2,745,938 | \$0<br>\$107,964<br>\$330,836<br>\$0<br>\$1,708,734 | \$0<br>\$0<br>\$170,380<br>\$0<br>\$824,396 |



#### Appendix 1

#### FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|  | 2018<br>Year 8  | 2019<br>Year 9  | 2020<br>Year 10   | 2021<br>Year 11  | 2022<br>Year 12  | 2023<br>Year 13  | 2024<br>Year 14  | 2025<br>Year 15  | 2026<br>Year 16  | 2027<br>Year 17  | 2028<br>Year 18  | 2029<br>Year 19  |
|--|---|---|---|--|--|--|--|--|--|--|--|--|
| REAL PROPERTY MARKET VALUES Non-Residential  |   |   |   |  |  |  |  |  |  |  |  |  |
| Office Land Inventory Improved Land Buildings Total Office Value   | \$5,669,700<br>\$52,807,709<br>\$148,737,871<br>\$207,215,280 | \$5,353,142<br>\$74,818,608<br>\$210,679,699<br>\$290,851,449 | \$5,012,487<br>\$98,102,634<br>\$276,204,173<br>\$379,319,294 | \$4,646,576<br>\$122,716,364<br>\$345,470,504<br>\$472,833,444 | \$4,254,198<br>\$148,718,626<br>\$418,644,231<br>\$571,617,056 | \$3,834,096<br>\$176,170,580<br>\$495,897,458<br>\$675,902,134 | \$3,384,959<br>\$205,135,803<br>\$577,409,099<br>\$785,929,862 | \$2,905,423<br>\$235,680,387<br>\$663,365,131<br>\$901,950,941 | \$2,394,069<br>\$267,873,023<br>\$753,958,857<br>\$1,024,225,948 | \$1,849,418<br>\$301,785,105<br>\$849,391,177<br>\$1,153,025,700 | \$1,269,934<br>\$337,490,826<br>\$949,870,874<br>\$1,288,631,633 | \$654,016<br>\$375,067,284<br>\$1,055,614,900<br>\$1,431,336,200 |
| Retail<br>Land Inventory<br>Improved Land<br>Buildings<br>Total Retail Value   | \$25,771<br>\$30,439,378<br>\$86,306,399<br>\$116,771,548     | \$0<br>\$32,302,637<br>\$91,460,800<br>\$123,763,437          | \$0<br>\$33,271,716<br>\$94,204,624<br>\$127,476,340          | \$0<br>\$34,269,868<br>\$97,030,763<br>\$131,300,630           | \$0<br>\$35,297,964<br>\$99,941,685<br>\$135,239,649           | \$0<br>\$36,356,903<br>\$102,939,936<br>\$139,296,839          | \$0<br>\$37,447,610<br>\$106,028,134<br>\$143,475,744          | \$0<br>\$38,571,038<br>\$109,208,978<br>\$147,780,016          | \$0<br>\$39,728,169<br>\$112,485,247<br>\$152,213,417            | \$0<br>\$40,920,014<br>\$115,859,805<br>\$156,779,819            | \$0<br>\$42,147,615<br>\$119,335,599<br>\$161,483,214            | \$0<br>\$43,412,043<br>\$122,915,667<br>\$166,327,710            |
| Hotel Land Inventory Improved Land Buildings Total Hotel Value   | \$115,971<br>\$4,919,495<br>\$31,976,721<br>\$37,012,187      | \$119,450<br>\$5,067,080<br>\$32,936,022<br>\$38,122,553      | \$0<br>\$7,828,639<br>\$50,886,154<br>\$58,714,793            | \$0<br>\$8,063,498<br>\$52,412,739<br>\$60,476,237             | \$0<br>\$8,305,403<br>\$53,985,121<br>\$62,290,524             | \$0<br>\$8,554,565<br>\$55,604,675<br>\$64,159,240             | \$0<br>\$8,811,202<br>\$57,272,815<br>\$66,084,017             | \$0<br>\$9,075,538<br>\$58,990,999<br>\$68,066,538             | \$0<br>\$9,347,804<br>\$60,760,729<br>\$70,108,534               | \$0<br>\$9,628,239<br>\$62,583,551<br>\$72,211,790               | \$0<br>\$9,917,086<br>\$64,461,058<br>\$74,378,143               | \$0<br>\$10,214,598<br>\$66,394,889<br>\$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<br>\$0<br>\$0   | \$0<br>\$0<br>\$0   | \$0<br>\$0<br>\$0   | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0  |
| Townhome  Land Inventory Improved (Land & Building) Total Townhome Value   | \$2,860,638<br>\$238,617,668<br>\$241,478,305                 | \$2,626,268<br>\$307,220,247<br>\$309,846,515                 | \$2,375,262<br>\$379,724,225<br>\$382,099,487                 | \$2,106,831<br>\$456,301,944<br>\$458,408,775                  | \$1,820,157<br>\$537,132,574<br>\$538,952,731                  | \$1,514,386<br>\$622,402,370<br>\$623,916,757                  | \$1,230,338<br>\$704,147,230<br>\$705,377,568                  | \$975,136<br>\$780,993,940<br>\$781,969,076                    | \$703,516<br>\$861,817,720<br>\$862,521,236                      | \$414,720<br>\$946,788,032<br>\$947,202,752                      | \$107,964<br>\$1,036,080,927<br>\$1,036,188,891                  | \$0<br>\$1,088,376,096<br>\$1,088,376,096                        |
| Condominium Land in Inventory Improved (Land & Building) Total Condominium Value   | \$1,664,343<br>\$190,260,503<br>\$191,924,846                 | \$1,523,186<br>\$244,960,398<br>\$246,483,584                 | \$1,372,062<br>\$302,771,052<br>\$304,143,113                 | \$1,210,499<br>\$363,829,880<br>\$365,040,379                  | \$1,108,279<br>\$408,527,420<br>\$409,635,699                  | \$998,836<br>\$455,579,364<br>\$456,578,201                    | \$881,830<br>\$505,086,751<br>\$505,968,581                    | \$756,904<br>\$557,154,560<br>\$557,911,464                    | \$623,689<br>\$611,891,859<br>\$612,515,548                      | \$481,800<br>\$669,411,956<br>\$669,893,756                      | \$330,836<br>\$729,832,557<br>\$730,163,393                      | \$170,380<br>\$793,275,924<br>\$793,446,304                      |
| Rental Apartment<br>Land in Inventory<br>Improved (Land & Building)<br>Total Rental Apartment Value                              | \$1,955,518<br>\$231,413,067<br>\$233,368,584                 | \$1,514,623<br>\$297,944,323<br>\$299,458,946                 | \$1,395,845<br>\$325,671,387<br>\$327,067,232                 | \$896,461<br>\$400,567,716<br>\$401,464,177                    | \$923,355<br>\$412,584,748<br>\$413,508,102                    | \$951,055<br>\$424,962,290<br>\$425,913,345                    | \$488,767<br>\$497,377,683<br>\$497,866,450                    | \$503,430<br>\$512,299,014<br>\$512,802,444                    | \$518,533<br>\$527,667,984<br>\$528,186,517                      | \$0<br>\$608,424,446<br>\$608,424,446                            | \$0<br>\$626,677,180<br>\$626,677,180                            | \$0<br>\$645,477,495<br>\$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 Assessment of Existing Properties | 1.230<br>\$1,513,251,760                                      | 1.267<br>\$1,558,649,312                                      | 1.305<br>\$1,605,408,792                                      | 1.344<br>\$1,653,571,056                                       | 1.384<br>\$1,703,178,187                                       | 1.426<br>\$1,754,273,533                                       | 1.469<br>\$1,806,901,739                                       | 1.513  | 1.558<br>\$1,916,942,055   | 1.605<br>\$1,974,450,316   | 1.653<br>\$2,033,683,826   | 1.702<br>\$2,094,694,341   |
| Value of Current Assessments of Existing Properties<br>Increase in Current Assessments Attributable to LifeSci Village™          | \$1,513,251,760<br>2.3%<br>1.064                              | \$1,558,649,312<br>2.3%<br>1.088                              | \$1,605,408,792<br>2.3%<br>1.112                              | \$1,653,571,056<br>4.0%<br>1.157                               | \$1,703,178,187<br>4.0%<br>1.203                               | \$1,754,273,533<br>4.0%<br>1.252                               | \$1,806,901,739<br>0.0%<br>1.252                               | \$1,861,108,791<br>0.0%<br>1,252                               | \$1,916,942,055<br>0.0%<br>1.252                                 | \$1,974,450,316<br>0.0%<br>1.252                                 | \$2,033,683,826<br>0.0%<br>1.252                                 | \$2,094,694,341<br>0.0%<br>1.252                                 |
| Compounded Annual Growth of Properties Above Baseline<br>Increased Value of Current Assessments of Existing Properties           | 6.37%<br>\$96,357,221   | 8.76%<br>\$136,590,920  | 11.21%<br>\$180,018,278                                       | 15.69%<br>\$259,363,927  | 20.34%<br>\$346,370,804  | 25.18%<br>\$441,645,881  | 25.18%<br>\$454,895,257  | 25.18%<br>\$468,542,115  | 25.18%<br>\$482,598,378  | 25.18%<br>\$497,076,329  | 25.18%<br>\$511,988,619  | 25.18%<br>\$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<br>\$46.12<br>\$27.67<br>\$35.97<br>\$29.52<br>\$34.13<br>\$55.34<br>\$35.05<br>\$18.45 | \$47.50<br>\$47.50<br>\$28.50<br>\$37.05<br>\$30.40<br>\$35.15<br>\$57.00<br>\$36.10<br>\$19.00<br>\$28,502 | \$48.93<br>\$48.93<br>\$29.36<br>\$38.16<br>\$31.31<br>\$36.21<br>\$58.71<br>\$37.19<br>\$19.57<br>\$29,357 | \$50.40<br>\$50.40<br>\$30.24<br>\$39.31<br>\$32.25<br>\$37.29<br>\$60.48<br>\$38.30<br>\$20.16<br>\$30,238 | \$51.91<br>\$51.91<br>\$31.15<br>\$40.49<br>\$33.22<br>\$38.41<br>\$62.29<br>\$39.45<br>\$20.76<br>\$31,145 | \$53.47<br>\$53.47<br>\$32.08<br>\$41.70<br>\$34.22<br>\$39.56<br>\$64.16<br>\$40.63<br>\$21.39<br>\$32,080 | \$55.07<br>\$55.07<br>\$33.04<br>\$42.95<br>\$35.24<br>\$40.75<br>\$66.08<br>\$41.85<br>\$22.03<br>\$33.042 | \$56.72<br>\$54.03<br>\$44.24<br>\$36.30<br>\$41.97<br>\$68.07<br>\$43.11<br>\$22.69<br>\$34,033 | \$58.42<br>\$58.42<br>\$35.05<br>\$45.57<br>\$37.39<br>\$43.23<br>\$70.11<br>\$44.40<br>\$23.37<br>\$35,054 | \$60.18<br>\$60.18<br>\$36.11<br>\$46.94<br>\$38.51<br>\$44.53<br>\$72.21<br>\$45.73<br>\$24.07 | \$61.98<br>\$61.98<br>\$37.19<br>\$48.35<br>\$39.67<br>\$45.87<br>\$74.38<br>\$47.11<br>\$24.79<br>\$37,189 | \$63.84<br>\$63.84<br>\$38.30<br>\$49.80<br>\$40.86<br>\$47.24<br>\$76.61<br>\$48.52<br>\$25.54<br>\$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   |



#### 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       |
| 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<br>Total<br>Cumulative                            | 1,371<br>3,242 | 644<br>3,886 | 661<br>4,547 | 608<br>5,155 | 608<br>5,763 | 608<br>6,371 | 608<br>6,979 | 608<br>7,588 | 608<br>8,196 | 608<br>8,804 | 608<br>9,412 | 608<br>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)<br>Cumulative                 | 0      | 0      | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| SFD<br>Cumulative  | 0      | 0<br>0 | 0       | 0<br>0  | 0       | 0       | 0<br>0  | 0       | 0       | 0<br>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)<br>Cumulative                  | 0          | 0          | 0          | 0          | 0         | 0         | 0           | 0          | 0          | 0          | 0        | 0       |
| SFD<br>Cumulative   | 0          | 0          | 0          | 0<br>0     | 0         | 0         | 0<br>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<br>564 | 141<br>705 | 141<br>846 | 102<br>948 | 20<br>968 | 20<br>989 | 11<br>1,000 | 0<br>1,000 | 0<br>1,000 | 0<br>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<br>132  | 33<br>166  | 33<br>199  | 33<br>232  | 0<br>232  | 0<br>232  | 0<br>232    | 0<br>232   | 0<br>232   | 0<br>232   | 0<br>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<br>Hotel<br>Cumulative Hotel  | 0<br>52   | 0<br>52   | 26<br>77  | 0<br>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<br>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<br>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<br>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<br>Condominiums<br>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<br>Cumulative   | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0<br>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<br>Year 8 | 2019<br>Year 9 | 2020<br>Year 10 | 2021<br>Year 11 | 2022<br>Year 12 | 2023<br>Year 13 | 2024<br>Year 14 | 2025<br>Year 15 | 2026<br>Year 16 | 2027<br>Year 17 | 2028<br>Year 18 | 2029<br>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<br>Year 8               | 2019<br>Year 9               | 2020<br>Year 10              | 2021<br>Year 11              | 2022<br>Year 12                | 2023<br>Year 13                | 2024<br>Year 14                | 2025<br>Year 15                | 2026<br>Year 16 | 2027<br>Year 17                | 2028<br>Year 18                | 2029<br>Year 19                |
|---|------------------------------|------------------------------|------------------------------|------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-----------------|--------------------------------|--------------------------------|--------------------------------|
| CUMULATIVE NEW STUDENT GENERATION               |                              |                              |                              |                              |                                |                                |                                |                                |                 |                                |                                |                                |
| Elementary                                      |                              |                              |                              |                              |                                |                                |                                |                                |                 |                                |                                |                                |
| Single-Family Detached                          | 0<br>56                      | 0<br>70                      | 0<br>84                      | 0<br>98                      | 0                              | 0<br>126                       | 0<br>140                       | 0                              | 0<br>168        | 0<br>182                       | 0<br>196                       | 0<br>200                       |
| Townhome<br>Multifamily                         | 40                           | 70<br>50                     | 60                           | 98<br>70                     | 112<br>80                      | 90                             | 140                            | 154<br>110                     | 120             | 130                            | 140                            | 150                            |
| Middle School                                   | 40                           | 30                           | 00                           | 70                           | 00                             | 30                             | 100                            | 110                            | 120             | 130                            | 140                            | 130                            |
| 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                                     | 65                           | 81                           | 97                           | 113                          | 130                            | 146                            | 162                            | 178                            | 194             | 211                            | 227                            | 243                            |
| Total Cumulative Students                       | 181                          | 227                          | 272                          | 317                          | 363                            | 408                            | 453                            | 499                            | 544             | 589                            | 635                            | 661                            |
| 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                    |
| 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 Office: General | \$41,223,214<br>\$38,593,812 | \$56,613,214<br>\$53,002,169 | \$72,889,513<br>\$68,240,293 | \$90,091,438<br>\$84,345,002 | \$108,259,878<br>\$101,354,577 | \$127,437,342<br>\$119,308,816 | \$147,668,020<br>\$138,249,091 | \$168,997,846<br>\$158,218,404 | \$191,474,559   | \$215,147,777<br>\$201,424,686 | \$240,069,061<br>\$224,756,378 | \$266,291,990<br>\$249,306,690 |
| Office: General                                 | \$38,593,812                 | \$53,002,169                 | \$66,240,293                 | \$64,345,002                 | \$101,354,577                  | \$119,308,816                  | \$136,249,091                  | \$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                    |
| 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 Prior Year Market Value Subject To Tax Total Office Real Property Tax Revenues | \$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    |
|  | \$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    |
|  | \$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   | <b>\$517,950</b> | <b>\$844,089</b> | <b>\$1,196,536</b> | <b>\$1,576,960</b> | \$2,272,028     | \$3,034,208     | \$3,868,818     | \$3,984,882     | <b>\$4,104,429</b> | \$4,227,562     | <b>\$4,354,389</b> | <b>\$4,485,020</b> |
| 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<br>Year 8                 | 2019<br>Year 9                | 2020<br>Year 10                | 2021<br>Year 11               | 2022<br>Year 12               | 2023<br>Year 13               | 2024<br>Year 14                                | 2025<br>Year 15                                | 2026<br>Year 16                | 2027<br>Year 17                | 2028<br>Year 18                | 2029<br>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<br>\$7.071.846    | \$64,189,126<br>\$7,284,002   | \$82,643,499<br>\$7,502,522    | \$102,147,365<br>\$7.727.597  | \$122,747,084<br>\$7,959,425  | \$144,490,853<br>\$8,198,208  | \$167,428,776<br>\$8,444,154                   | \$191,612,933<br>\$8.697,479                   | \$217,097,453<br>\$8.958.403   | \$243,938,592<br>\$9,227,155   | \$272,194,813<br>\$9,503,970   | \$301,926,861<br>\$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<br>\$790,535       | \$2,780,234<br>\$814,251      | \$2,863,641<br>\$838,679       | \$2,949,550<br>\$863,839      | \$3,038,037<br>\$889,755      | \$3,129,178<br>\$916,447      | \$3,223,053<br>\$943,941                       | \$3,319,745<br>\$972,259                       | \$3,419,337<br>\$1,001,427     | \$3,521,917<br>\$1,031,469     | \$3,627,575<br>\$1,062,413     | \$3,736,402<br>\$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<br>Hotel  | £4.020.44E                     | 64 444 007                    | ec 207 007                     | \$6.589.823                   | ©C 707 F40                    | CC 004 444                    | 67 200 070                                     | ©7 44C 004                                     | ©7 COO 444                     | \$7.868.594                    | \$8.104.652                    | \$8.347.791                    |
|   | \$4,020,415<br>\$299,220,860   | \$4,141,027<br>\$355,315,184  | \$6,397,887                    | \$500.808.063                 | \$6,787,518<br>\$568,238,508  | \$6,991,144<br>\$649,978,063  | \$7,200,878<br>\$742,742,776                   | \$7,416,904<br>\$825.089.782                   | \$7,639,411<br>\$920,533,607   | \$1,029,051,823                | \$1,126,586,548                | \$1,233,432,898                |
| Total Employee Income % In State                                    | \$299,220,860<br>\$260,322,148 | \$309,124,210                 | \$424,867,183<br>\$369.634.449 | \$435,703,015                 | \$494.367.502                 | \$565,480,915                 | \$646,186,215                                  | \$717.828.110                                  | \$800,864,238                  | \$895.275.086                  | \$980,130,297                  | \$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                  |
| No. Tourist Lance   | <b>0447.444.007</b>            | #400 405 005                  | \$400 005 F00                  | \$400 000 0F7                 | #000 40F 070                  | <b>#054 400 440</b>           | #000 700 707                                   | #000 000 0F0                                   | #000 000 00 <del>7</del>       | £400 070 700                   | <b>#</b> 444.050.004           | £400.000.070                   |
| Net Taxable Income County Employee Income Tax Revenues              | \$117,144,967<br>\$3,748,639   | \$139,105,895<br>\$4,451,389  | \$166,335,502<br>\$5,322,736   | \$196,066,357<br>\$6,274,123  | \$222,465,376<br>\$7,118,892  | \$254,466,412<br>\$8,142,925  | \$290,783,797<br>\$9,305,081                   | \$323,022,650<br>\$10,336,725                  | \$360,388,907<br>\$11,532,445  | \$402,873,789<br>\$12,891,961  | \$441,058,634<br>\$14,113,876  | \$482,888,979<br>\$15,452,447  |
| * * *   | ψ3,7-40,000                    | ψ+,+01,000                    | ψ0,022,700                     | ψ0,274,120                    | ψ7,110,032                    | ψ0,142,020                    | ψ5,500,001                                     | ψ10,000,720                                    | ψ11,00 <u>2,</u> 440           | Ψ12,031,301                    | ψ14,110,070                    | ψ10,402,447                    |
| Household Income Tax Revenue Total Full-time Household Income       | \$221,606,696                  | \$285,318,622                 | \$334,110,543                  | \$405,114,271                 | \$445.695.316                 | \$488.346.621                 | \$557,148,651                                  | \$600,629,286                                  | \$646,217,326                  | \$722,269,881                  | \$773,186,101                  | \$814,377,584                  |
| Net Taxable 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                  |
| 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                            |
| Single-Family Detached Value (over \$500K)                          | \$0<br>\$0                     | \$0                           | \$0<br>\$0                     | \$0<br>\$0                    | \$0<br>\$0                    | \$0                           | \$0<br>\$0                                     | \$0<br>\$0                                     | \$0<br>\$0                     | \$0<br>\$0                     | \$0<br>\$0                     | \$0                            |
| 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)<br>Condominium Value (over \$500K) | \$44,065,441<br>\$49,685       | \$44,965,904<br>\$576,176     | \$45,893,381<br>\$1,118,461    | \$46,848,682<br>\$1.677.015   | \$30,332,643<br>\$0           | \$34,500,000<br>\$296,122     | \$34,500,000<br>\$1,340,006                    | \$34,500,000<br>\$2,415,206                    | \$34,500,000<br>\$3,522,662    | \$34,500,000<br>\$4,663,342    | \$34,500,000<br>\$5,838,242    | \$34,500,000<br>\$7.048.390    |
| Total New For-Sale Value  | \$49,665<br>\$103,769,543      | \$106.986.129                 | \$1,118,461                    | \$1,677,015                   | \$97.474.215                  | \$103.951.941                 | \$98.912.795                                   | \$2,415,206                                    | \$3,522,662                    | \$98.279.123                   | \$5,636,242<br>\$101.227.496   | \$7,048,390<br>\$62.761.131    |
| Total Resale (under \$500K)   | \$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 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<br>Recordation Fees Resales         | \$763,143<br>\$188.571         | \$792,517<br>\$258,224        | \$822,773<br>\$331.888         | \$853,936<br>\$409,741        | \$742,761<br>\$491.969        | \$794,619<br>\$564.961        | \$759,728<br>\$644.014                         | \$714,025<br>\$722,427                         | \$741,816<br>\$799,444         | \$770,441<br>\$880.432         | \$799,925<br>\$965.559         | \$485,011<br>\$1.055.002       |
| Recordation Fees Resales Recordation Fees Total                     | \$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                    |
| Transfer Fees   | ******                         | <b>\$</b> 1,000,111           | * 1,101,001                    | <b>4</b> .,===,=              | <b>*</b> ·,== ·,· · · ·       | <b>*</b> .,,                  | <b>*</b> · · · · · · · · · · · · · · · · · · · | <b>*</b> · , · · · · · · · · · · · · · · · · · | **,***,=**                     | * 1,000,000                    | **,****                        | * 1,0 10,010                   |
| 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 Total Transfer Value                                | \$27,329,138<br>\$131.098.681  | \$37,423,745<br>\$144,409,874 | \$48,099,693<br>\$158,398,906  | \$59,382,777<br>\$173,094,467 | \$71,299,818<br>\$168,774,033 | \$81,878,462<br>\$185.830.403 | \$93,335,329<br>\$192,248,124                  | \$104,699,596<br>\$197.337.095                 | \$115,861,454<br>\$211,278,077 | \$127,598,793<br>\$225,877,916 | \$139,936,098<br>\$241,163,595 | \$152,898,803<br>\$215.659.934 |
| Transfer Tax Total  | \$131,098,681<br>\$1,310,987   | \$144,409,874<br>\$1,444,099  | \$158,398,906                  | \$173,094,467<br>\$1,730,945  | \$168,774,033                 | \$185,830,403<br>\$1,858,304  | \$192,248,124<br>\$1,922,481                   | \$197,337,095                                  | \$211,278,077                  | \$2,258,77,916                 | \$241,163,595<br>\$2,411,636   | \$215,659,934<br>\$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                    |
| TOTAL NECOTURATION OF TRAINSPET TAX                                 | φ <b>2,262,700</b>             | \$ <b>2,434,04</b> 0          | \$2,130,03U                    | <b>\$2,334,022</b>            | \$2,322,47U                   | \$3,217,085                   | \$3,320,223                                    | <b>\$3,403,023</b>                             | <b>\$3,034,041</b>             | <b>\$3,909,052</b>             | \$4,177,12U                    | <b>\$3,090,012</b>             |



#### Appendix 1

## FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|  | 2018<br>Year 8   | 2019<br>Year 9  | 2020<br>Year 10  | 2021<br>Year 11  | 2022<br>Year 12  | 2023<br>Year 13  | 2024<br>Year 14  | 2025<br>Year 15  | 2026<br>Year 16  | 2027<br>Year 17  | 2028<br>Year 18  | 2029<br>Year 19  |
|--|--|---|--|--|--|--|--|--|--|--|--|--|
| Hotel Room Tax   |  |   |  |  |  |  |  |  |  |  |  |  |
| Room Revenues<br>Total Hotel Room Tax  | \$10,369,681<br><b>\$725,878</b>   | \$10,680,772<br><b>\$747,654</b>  | \$16,501,793<br><b>\$1,155,125</b>   | \$16,996,846<br><b>\$1,189,779</b>   | \$17,506,752<br><b>\$1,225,473</b>   | \$18,031,954<br><b>\$1,262,237</b>   | \$18,572,913<br><b>\$1,300,104</b>   | \$19,130,100<br><b>\$1,339,107</b>   | \$19,704,003<br><b>\$1,379,280</b>   | \$20,295,124<br><b>\$1,420,659</b>   | \$20,903,977<br><b>\$1,463,278</b>   | \$21,531,097<br><b>\$1,507,177</b>   |
| Admissions Tax   | , ,,,,   | , ,,,,,   | .,,  | , , , , , ,  | ., ., .  | .,.,.  | . ,,   | . ,,   | , ,, ,, ,,   | , , ,,,,,,   | . ,  | , ,,,,,  |
| 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 (Carden) Multifamily (Low-rise w/parking) Multifamily (Hioh-rise w/parking)   | 1.230<br>\$0<br>\$1,380,169<br>\$0<br>\$375,257<br>\$0   | 1.267<br>\$0<br>\$1,421,574<br>\$0<br>\$386,514<br>\$0  | 1.305<br>\$0<br>\$1,464,222<br>\$0<br>\$398,110<br>\$0   | 1.344<br>\$0<br>\$1,508,148<br>\$0<br>\$410,053<br>\$0   | 1.384<br>\$0<br>\$1,553,393<br>\$0<br>\$422,355  | 1.426<br>\$0<br>\$1,599,995<br>\$0<br>\$435,025<br>\$0   | 1.469<br>\$0<br>\$1,647,994<br>\$0<br>\$448,076<br>\$0   | 1.513<br>\$0<br>\$1,697,434<br>\$0<br>\$461,518  | 1.558<br>\$0<br>\$1,748,357<br>\$0<br>\$475,364<br>\$0   | 1.605<br>\$0<br>\$1,800,808<br>\$0<br>\$489,625<br>\$0   | 1.653<br>\$0<br>\$627,370<br>\$0<br>\$504,314<br>\$0   | 1.702<br>\$0<br>\$0<br>\$0<br>\$0<br>\$519,443   |
| AAC (All) Total School Impact Tax - New Dwelling Units   | \$0<br>\$1,755,426   | \$0<br>\$1,808,089  | \$0<br>\$1,862,331   | \$0<br>\$1,918,201   | \$0<br>\$1,975,747   | \$0<br>\$2,035,020   | \$0<br>\$2,096,070   | \$0<br>\$2,158,953   | \$0<br>\$2,223,721   | \$0<br>\$2,290,433   | \$0<br>\$1,131,683   | \$0<br>\$519,443   |
| Transportation Impact Tax Inflation Rate SFD Townhomes/Villas Multifarnily (Coarden) Multifarnily (Low-rise w/parking) Multifarnily (High-rise w/parking) AAC (All)  | 1.230<br>\$0<br>\$390,475<br>\$0<br>\$220,045<br>\$0<br>\$179,802  | 1.267<br>\$0<br>\$402,189<br>\$0<br>\$226,647<br>\$0<br>\$185,197   | 1.305<br>\$0<br>\$414,255<br>\$0<br>\$233,446<br>\$0<br>\$138,195  | 1.344<br>\$0<br>\$426,683<br>\$0<br>\$240,449<br>\$0<br>\$28,511   | 1.384<br>\$0<br>\$439,483<br>\$0<br>\$247,663<br>\$0<br>\$29,367   | 1.426<br>\$0<br>\$452,668<br>\$0<br>\$255,093<br>\$0<br>\$15,844   | 1.469<br>\$0<br>\$466,248<br>\$0<br>\$262,746<br>\$0   | 1.513<br>\$0<br>\$480,235<br>\$0<br>\$270,628<br>\$0   | 1.558<br>\$0<br>\$494,642<br>\$0<br>\$278,747<br>\$0<br>\$0  | 1.605<br>\$0<br>\$509,481<br>\$0<br>\$287,109<br>\$0<br>\$0  | 1.653<br>\$0<br>\$177,494<br>\$0<br>\$295,723<br>\$0<br>\$0  | 1.702<br>\$0<br>\$0<br>\$0<br>\$304,594<br>\$0<br>\$0  |
| Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax  | \$639,534<br>\$279,796<br>\$0<br>\$85,784<br>\$0<br>\$1,795,437  | \$658,720<br>\$288,190<br>\$0<br>\$0<br>\$222,318<br>\$1,983,261  | \$678,482<br>\$296,836<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,761,214  | \$698,837<br>\$305,741<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,700,221  | \$719,802<br>\$314,913<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,751,228  | \$741,396<br>\$324,361<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,789,361  | \$763,638<br>\$334,091<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,826,722  | \$786,547<br>\$344,114<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,881,524  | \$810,143<br>\$354,438<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,937,970  | \$834,447<br>\$365,071<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,996,109  | \$859,481<br>\$376,023<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | \$885,265<br>\$387,304<br>\$0<br>\$0<br>\$0<br>\$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<br>Total Employees<br>Total Misc. Revenue-Employees   | 3,242<br>\$882,103   | 3,886<br>\$1,089,000  | 4,547<br>\$1,312,389   | 5,155<br>\$1,532,591   | 5,763<br>\$1,764,825   | 6,371<br>\$2,009,613   | 6,979<br>\$2,267,500   | 7,588<br>\$2,539,052   | 8,196<br>\$2,824,856   | 8,804<br>\$3,125,523   | 9,412<br>\$3,441,688   | 10,021<br>\$3,774,010  |
| Per Resident Cumulative Full-Time Residents Misc. Rev: Full-Time Residents Total Misc. Revenue-Residents Total Misc. Revenues  | 3,697<br>\$1,016,031<br>\$1,016,031<br><b>\$1,898,134</b>  | 4,621<br>\$1,308,140<br>\$1,308,140<br>\$2,397,140  | 5,150<br>\$1,501,609<br>\$1,501,609<br>\$2,813,997   | 6,103<br>\$1,832,827<br>\$1,832,827<br><b>\$3,365,418</b>  | 6,427<br>\$1,988,051<br>\$1,988,051<br>\$3,752,875   | 6,751<br>\$2,150,938<br>\$2,150,938<br><b>\$4,160,551</b>  | 7,550<br>\$2,477,845<br>\$2,477,845<br><b>\$4,745,345</b>  | 7,840<br>\$2,649,958<br>\$2,649,958<br><b>\$5,189,010</b>  | 8,129<br>\$2,830,168<br>\$2,830,168<br><b>\$5,655,024</b>  | 8,908<br>\$3,194,511<br>\$3,194,511<br><b>\$6,320,034</b>  | 9,197<br>\$3,397,190<br>\$3,397,190<br>\$6,838,878   | 9,366<br>\$3,563,291<br>\$3,563,291<br><b>\$7,337,300</b>  |
| 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<br>\$517,950<br>\$1,370,048<br>\$9,067,200<br>\$2,262,700<br>\$725,878<br>\$29,577<br>\$3,550,863<br>\$1,898,134 | \$9,003,272<br>\$844,089<br>\$1,678,864<br>\$11,299,036<br>\$2,494,840<br>\$747,654<br>\$30,464<br>\$3,791,350<br>\$2,397,140 | \$11,462,692<br>\$1,196,536<br>\$2,057,422<br>\$13,341,389<br>\$2,738,650<br>\$1,155,125<br>\$31,378<br>\$3,623,546<br>\$2,813,997 | \$13,830,465<br>\$1,576,960<br>\$2,390,901<br>\$15,996,866<br>\$2,994,622<br>\$1,189,779<br>\$32,320<br>\$3,618,422<br>\$3,365,418 | \$16,552,227<br>\$2,272,028<br>\$2,742,536<br>\$17,815,580<br>\$2,922,470<br>\$1,225,473<br>\$33,289<br>\$3,726,975<br>\$3,752,875 | \$18,669,695<br>\$3,034,208<br>\$3,113,118<br>\$19,863,244<br>\$3,217,885<br>\$1,262,237<br>\$34,288<br>\$3,824,381<br>\$4,160,551 | \$20,899,315<br>\$3,868,818<br>\$3,503,467<br>\$22,676,649<br>\$3,326,223<br>\$1,300,104<br>\$35,316<br>\$3,922,793<br>\$4,745,345 | \$23,693,191<br>\$3,984,882<br>\$3,914,435<br>\$24,751,828<br>\$3,409,823<br>\$1,339,107<br>\$36,376<br>\$4,040,477<br>\$5,189,010 | \$26,021,409<br>\$4,104,429<br>\$4,346,908<br>\$27,041,661<br>\$3,654,041<br>\$1,379,280<br>\$37,467<br>\$4,161,691<br>\$5,655,024 | \$28,467,996<br>\$4,227,562<br>\$4,801,806<br>\$30,226,438<br>\$3,909,652<br>\$1,420,659<br>\$38,591<br>\$4,286,542<br>\$6,320,034 | \$31,602,035<br>\$4,354,389<br>\$5,280,086<br>\$32,670,343<br>\$4,177,120<br>\$1,463,278<br>\$39,749<br>\$2,840,404<br>\$6,838,878 | \$34,317,497<br>\$4,485,020<br>\$5,782,741<br>\$34,997,509<br>\$3,696,612<br>\$1,507,177<br>\$40,941<br>\$2,096,606<br>\$7,337,300 |

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#### Appendix 1

## FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | 2018<br>Year 8  | 2019<br>Year 9  | 2020<br>Year 10   | 2021<br>Year 11   | 2022<br>Year 12   | 2023<br>Year 13   | 2024<br>Year 14   | 2025<br>Year 15   | 2026<br>Year 16   | 2027<br>Year 17   | 2028<br>Year 18   | 2029<br>Year 19   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DIRECT EXPENDITURES: MONTGOMERY COUNTY  |   |   |   |   |   |   |   |   |   |   |   |   |
| Non-Educational Operating Expenditures  |   |   |   |   |   |   |   |   |   |   |   |   |
| Per Employee<br>Total Employees<br>Total Operating Expenditures- Employee   | 3,242<br>\$2,159,208  | 3,886<br>\$2,665,650  | 4,547<br>\$3,212,458  | 5,155<br>\$3,751,469  | 5,763<br>\$4,319,929  | 6,371<br>\$4,919,120  | 6,979<br>\$5,550,375  | 7,588<br>\$6,215,078  | 8,196<br>\$6,914,667  | 8,804<br>\$7,650,639  | 9,412<br>\$8,424,546  | 10,021<br>\$9,238,001   |
| Per Resident Cumulative Full-Time Residents Misc. Rev: Full-Time Residents  | 3,697<br>\$3,424,442  | 4,621<br>\$4,408,970  | 5,150<br>\$5,061,040  | 6,103<br>\$6,177,383  | 6,427<br>\$6,700,550  | 6,751<br>\$7,249,547  | 7,550<br>\$8,351,359  | 7,840<br>\$8,931,451  | 8,129<br>\$9,538,832  | 8,908<br>\$10,766,817   | 9,197<br>\$11,449,931   | 9,366<br>\$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<br>\$0<br>\$390,475<br>\$0<br>\$220,045<br>\$0<br>\$179,802 | 1.267<br>\$0<br>\$402,189<br>\$0<br>\$226,647<br>\$0<br>\$185,197 | 1.305<br>\$0<br>\$414,255<br>\$0<br>\$233,446<br>\$0<br>\$138,195 | 1.344<br>\$0<br>\$426,683<br>\$0<br>\$240,449<br>\$0<br>\$28,511  | 1.384<br>\$0<br>\$439,483<br>\$0<br>\$247,663<br>\$0<br>\$29,367  | 1.426<br>\$0<br>\$452,668<br>\$0<br>\$255,093<br>\$0<br>\$15,844  | 1.469<br>\$0<br>\$466,248<br>\$0<br>\$262,746<br>\$0<br>\$0       | 1.513<br>\$0<br>\$480,235<br>\$0<br>\$270,628<br>\$0<br>\$0       | 1.558<br>\$0<br>\$494,642<br>\$0<br>\$278,747<br>\$0<br>\$0       | 1.605<br>\$0<br>\$509,481<br>\$0<br>\$287,109<br>\$0<br>\$0       | 1.653<br>\$0<br>\$177,494<br>\$0<br>\$295,723<br>\$0<br>\$0       | 1.702<br>\$0<br>\$0<br>\$0<br>\$0<br>\$304,594<br>\$0<br>\$0      |
| Office Industrial Bioscience Facility Retail Other non-res. Total Transportation Impact Tax   | \$639,534<br>\$279,796<br>\$0<br>\$85,784<br>\$0<br>\$1,795,437   | \$658,720<br>\$288,190<br>\$0<br>\$0<br>\$222,318<br>\$1,983,261  | \$678,482<br>\$296,836<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,761,214 | \$698,837<br>\$305,741<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,700,221 | \$719,802<br>\$314,913<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,751,228 | \$741,396<br>\$324,361<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,789,361 | \$763,638<br>\$334,091<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,826,722 | \$786,547<br>\$344,114<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,881,524 | \$810,143<br>\$354,438<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,937,970 | \$834,447<br>\$365,071<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,996,109 | \$859,481<br>\$376,023<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,708,720 | \$885,265<br>\$387,304<br>\$0<br>\$0<br>\$0<br>\$0<br>\$1,577,163 |
| Total Capital Expenditures (Non-Educational)<br>New Annual Payments w/ 20yr financing<br>New Ann. Payments w/ 20 yr. Financing  | \$1,795,437<br>\$144,071<br>\$883,056                             | \$1,983,261<br>\$159,142<br>\$1,042,198                           | \$1,761,214<br>\$141,324<br>\$1,183,523                           | \$1,700,221<br>\$136,430<br>\$1,319,953                           | \$1,751,228<br>\$140,523<br>\$1,460,476                           | \$1,789,361<br>\$143,583<br>\$1,604,059                           | \$1,826,722<br>\$146,581<br>\$1,750,640                           | \$1,881,524<br>\$150,978<br>\$1,901,618                           | \$1,937,970<br>\$155,508<br>\$2,057,126                           | \$1,996,109<br>\$160,173<br>\$2,217,299                           | \$1,708,720<br>\$137,112<br>\$2,354,411                           | \$1,577,163<br>\$126,556<br>\$2,480,966                           |
| Educational Operating Expenditures  Per Student Operating Expenditures Total Students Generated by Project-Full-time Households  Total Educational Operating Expenditures                           | \$11,633<br>181<br><b>\$2,109,870</b>                             | \$11,982<br>227<br><b>\$2,716,458</b>                             | \$12,341<br>272<br><b>\$3,357,541</b>                             | \$12,712<br>317<br><b>\$4,034,646</b>                             | \$13,093<br>363<br><b>\$4,749,354</b>                             | \$13,486<br>408<br><b>\$5,503,314</b>                             | \$13,890<br>453<br><b>\$6,298,238</b>                             | \$14,307<br>499<br><b>\$7,135,903</b>                             | \$14,736<br>544<br><b>\$8,018,160</b>                             | \$15,178<br>589<br><b>\$8,946,931</b>                             | \$15,634<br>635<br><b>\$9,924,211</b>                             | \$16,103<br>661<br><b>\$10,641,469</b>                            |
| 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<br>\$0<br>\$1,380,169<br>\$0<br>\$375,257<br>\$0<br>\$0     | 1.267<br>\$0<br>\$1,421,574<br>\$0<br>\$386,514<br>\$0<br>\$0     | 1.305<br>\$0<br>\$1,464,222<br>\$398,110<br>\$0<br>\$0            | 1.344<br>\$0<br>\$1,508,148<br>\$0<br>\$410,053<br>\$0<br>\$0     | 1.384<br>\$0<br>\$1,553,393<br>\$0<br>\$422,355<br>\$0<br>\$0     | 1.426<br>\$0<br>\$1,599,995<br>\$0<br>\$435,025<br>\$0<br>\$0     | 1.469<br>\$0<br>\$1,647,994<br>\$0<br>\$448,076<br>\$0<br>\$0     | 1.513<br>\$0<br>\$1,697,434<br>\$0<br>\$461,518<br>\$0<br>\$0     | 1.558<br>\$0<br>\$1,748,357<br>\$0<br>\$475,364<br>\$0<br>\$0     | 1.605<br>\$0<br>\$1,800,808<br>\$0<br>\$489,625<br>\$0<br>\$0     | 1.653<br>\$0<br>\$627,370<br>\$0<br>\$504,314<br>\$0<br>\$0       | 1.702<br>\$0<br>\$0<br>\$0<br>\$519,443<br>\$0<br>\$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<br>\$1,755,426<br>\$140,860<br>\$664,450              | \$1,808,089<br>\$1,808,089<br>\$145,086<br>\$809,536              | \$1,862,331<br>\$1,862,331<br>\$149,438<br>\$958,974              | \$1,918,201<br>\$1,918,201<br>\$153,921<br>\$1,112,896            | \$1,975,747<br>\$1,975,747<br>\$158,539<br>\$1,271,435            | \$2,035,020<br>\$2,035,020<br>\$163,295<br>\$1,434,730            | \$2,096,070<br>\$2,096,070<br>\$168,194<br>\$1,602,924            | \$2,158,953<br>\$2,158,953<br>\$173,240<br>\$1,776,164            | \$2,223,721<br>\$2,223,721<br>\$178,437<br>\$1,954,601            | \$2,290,433<br>\$2,290,433<br>\$183,790<br>\$2,138,391            | \$1,131,683<br>\$1,131,683<br>\$90,809<br>\$2,229,201             | \$519,443<br>\$519,443<br>\$41,681<br>\$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<br>\$883,056<br>\$2,109,870<br>\$664,450              | \$7,074,619<br>\$1,042,198<br>\$2,716,458<br>\$809,536            | \$8,273,498<br>\$1,183,523<br>\$3,357,541<br>\$958,974            | \$9,928,851<br>\$1,319,953<br>\$4,034,646<br>\$1,112,896          | \$11,020,478<br>\$1,460,476<br>\$4,749,354<br>\$1,271,435         | \$12,168,667<br>\$1,604,059<br>\$5,503,314<br>\$1,434,730         | \$13,901,734<br>\$1,750,640<br>\$6,298,238<br>\$1,602,924         | \$15,146,529<br>\$1,901,618<br>\$7,135,903<br>\$1,776,164         | \$16,453,499<br>\$2,057,126<br>\$8,018,160<br>\$1,954,601         | \$18,417,456<br>\$2,217,299<br>\$8,946,931<br>\$2,138,391         | \$19,874,476<br>\$2,354,411<br>\$9,924,211<br>\$2,229,201         | \$21,247,759<br>\$2,480,966<br>\$10,641,469<br>\$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<br>Year 8  | 2019<br>Year 9  | 2020<br>Year 10   | 2021<br>Year 11   | 2022<br>Year 12   | 2023<br>Year 13   | 2024<br>Year 14   | 2025<br>Year 15   | 2026<br>Year 16   | 2027<br>Year 17   | 2028<br>Year 18   | 2029<br>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<br>\$24,398,100<br>\$3,691,504<br>\$21,518,518               | \$36,611,076<br>\$33,506,724<br>\$3,802,249<br>\$29,552,098                 | \$45,251,290<br>\$43,139,907<br>\$3,916,316<br>\$38,048,326                 | \$54,376,967<br>\$53,320,925<br>\$4,033,806<br>\$47,027,731                 | \$64,009,459<br>\$64,073,978<br>\$4,154,820<br>\$56,511,656                 | \$74,170,960<br>\$75,424,225<br>\$4,279,465<br>\$66,522,293                 | \$84,884,543<br>\$87,397,821<br>\$4,407,848<br>\$77,082,707                 | \$96,174,188<br>\$100,021,951<br>\$4,540,084<br>\$88,216,875                | \$108,064,814<br>\$113,324,870<br>\$4,676,286<br>\$99,949,720               | \$120,582,322<br>\$127,335,945<br>\$4,816,575<br>\$112,307,140              | \$133,753,622<br>\$142,085,692<br>\$4,961,072<br>\$125,316,050              | \$147,606,675<br>\$157,605,822<br>\$5,109,904<br>\$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<br>\$0<br>\$1,409,012<br>\$412,659<br>\$367,132              | \$16,929,325<br>\$0<br>\$1,451,282<br>\$425,039<br>\$378,146                | \$17,437,205<br>\$0<br>\$1,494,821<br>\$437,790<br>\$389,490                | \$17,960,321<br>\$0<br>\$1,539,665<br>\$450,924<br>\$401,175                | \$18,499,130<br>\$0<br>\$1,585,855<br>\$464,452<br>\$413,210                | \$19,054,104<br>\$0<br>\$1,633,431<br>\$478,385<br>\$425,607                | \$19,625,727<br>\$0<br>\$1,682,434<br>\$492,737<br>\$438,375                | \$20,214,499<br>\$0<br>\$1,732,907<br>\$507,519<br>\$451,526                | \$20,820,934<br>\$0<br>\$1,784,894<br>\$522,745<br>\$465,072                | \$21,445,562<br>\$0<br>\$1,838,441<br>\$538,427<br>\$479,024                | \$22,088,929<br>\$0<br>\$1,893,594<br>\$554,580<br>\$493,395                | \$22,751,597<br>\$0<br>\$1,950,402<br>\$571,217<br>\$508,197                |
| Hotel<br>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<br>\$10,296,828<br>\$1,658,290<br>\$7,955,912<br>\$8,688,715 | \$16,446,354<br>\$14,140,977<br>\$1,708,039<br>\$10,926,120<br>\$11,932,502 | \$20,327,694<br>\$18,206,507<br>\$1,759,280<br>\$14,067,379<br>\$15,363,096 | \$24,427,112<br>\$22,503,243<br>\$1,812,058<br>\$17,387,281<br>\$18,988,787 | \$28,754,201<br>\$27,041,397<br>\$1,866,420<br>\$20,893,716<br>\$22,818,193 | \$33,318,930<br>\$31,831,588<br>\$1,922,413<br>\$24,594,888<br>\$26,860,272 | \$38,131,665<br>\$36,884,852<br>\$1,980,085<br>\$28,499,327<br>\$31,124,341 | \$43,203,176<br>\$42,212,664<br>\$2,039,487<br>\$32,615,896<br>\$35,620,079 | \$48,544,660<br>\$47,826,948<br>\$2,100,672<br>\$36,953,810<br>\$40,357,549 | \$54,167,750<br>\$53,740,098<br>\$2,163,692<br>\$41,522,645<br>\$45,347,210 | \$60,084,534<br>\$59,964,993<br>\$2,228,603<br>\$46,332,351<br>\$50,599,928 | \$66,307,576<br>\$66,515,015<br>\$2,295,461<br>\$51,393,270<br>\$56,126,998 |
| Retail Retail-Lifestyle Center Retail-Restaurants Retail-Theater Retail-Health Club   | \$5,596,237<br>\$610,391<br>\$146,277<br>\$138,112                        | \$6,001,005<br>\$628,703<br>\$150,665<br>\$142,255                          | \$6,181,036<br>\$647,564<br>\$155,185<br>\$146,523                          | \$6,366,467<br>\$666,991<br>\$159,841<br>\$150,918                          | \$6,557,461<br>\$687,000<br>\$164,636<br>\$155,446                          | \$6,754,185<br>\$707,610<br>\$169,575<br>\$160,109                          | \$6,956,810<br>\$728,839<br>\$174,662<br>\$164,913                          | \$7,165,514<br>\$750,704<br>\$179,902<br>\$169,860                          | \$7,380,480<br>\$773,225<br>\$185,299<br>\$174,956                          | \$7,601,894<br>\$796,422<br>\$190,858<br>\$180,205                          | \$7,829,951<br>\$820,314<br>\$196,584<br>\$185,611                          | \$8,064,850<br>\$844,924<br>\$202,482<br>\$191,179                          |
| Hotel<br>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<br>Total Direct/Induced Construction Income  | \$48,942,002<br>\$12,387,045  | \$63,186,314<br>\$8,985,215   | \$78,568,741<br>\$8,541,382   | \$94,228,610<br>\$9,444,802   | \$110,757,358<br>\$6,690,379  | \$128,193,026<br>\$6,891,090  | \$146,575,152<br>\$9,034,678  | \$165,944,832<br>\$6,803,698  | \$186,344,775<br>\$7,007,809  | \$207,819,364<br>\$9,580,731  | \$230,414,718<br>\$7,434,584  | \$254,178,757<br>\$6,431,834  |
| Total Direct/Induced Employment Income Taxes Total Direct/Induced Construction Income Taxes   | \$1,174,608<br>\$297,289  | \$1,516,472<br>\$215,645  | \$1,885,650<br>\$204,993  | \$2,261,487<br>\$226,675  | \$2,658,177<br>\$160,569  | \$3,076,633<br>\$165,386  | \$3,517,804<br>\$216,832  | \$3,982,676<br>\$163,289  | \$4,472,275<br>\$168,187  | \$4,987,665<br>\$229,938  | \$5,529,953<br>\$178,430  | \$6,100,290<br>\$154,364  |
| Indirect/Induced Hotel Tax Revenues   |   |   |   |   |   |   |   |   |   |   |   |   |
| Direct Hotel Room Revenues<br>Indirect Hotel Room Revenues<br>Hotel Tax   | \$10,369,681<br>\$3,250,843<br>\$227,559                                  | \$10,680,772<br>\$3,348,369<br>\$234,386                                    | \$16,501,793<br>\$5,173,229<br>\$362,126                                    | \$16,996,846<br>\$5,328,426<br>\$372,990                                    | \$17,506,752<br>\$5,488,279<br>\$384,180                                    | \$18,031,954<br>\$5,652,928<br>\$395,705                                    | \$18,572,913<br>\$5,822,515<br>\$407,576                                    | \$19,130,100<br>\$5,997,191<br>\$419,803                                    | \$19,704,003<br>\$6,177,107<br>\$432,397                                    | \$20,295,124<br>\$6,362,420<br>\$445,369                                    | \$20,903,977<br>\$6,553,292<br>\$458,730                                    | \$21,531,097<br>\$6,749,891<br>\$472,492                                    |
| Indirect/Induced Miscellaneous Revenues   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Direct/Induced Employment<br>Total Miscellaneous Revenues   | 1,532<br>\$416,760  | 1,908<br>\$534,825  | 2,305<br>\$665,363  | 2,676<br>\$795,586  | 3,047<br>\$933,023  | 3,418<br>\$1,077,990  | 3,789<br>\$1,230,816  | 4,159<br>\$1,391,842  | 4,530<br>\$1,561,421  | 4,901<br>\$1,739,922  | 5,272<br>\$1,927,728  | 5,643<br>\$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<br>\$1,020,143  | \$2,501,327<br>\$1,309,141  | \$3,118,132<br>\$1,628,671  | \$3,656,737<br>\$1,947,430  | \$4,135,948<br>\$2,283,849  | \$4,715,714<br>\$2,638,699  | \$5,373,028<br>\$3,012,786  | \$5,957,610<br>\$3,406,943  | \$6,634,280<br>\$3,822,037  | \$7,402,893<br>\$4,258,972  | \$8,094,841<br>\$4,718,682  | \$8,852,383<br>\$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<br>Year 20 | 2031<br>Year 21 | 2032<br>Year 22 | 2033<br>Year 23 | 2034<br>Year 24 | 2035<br>Year 25 | 2036<br>Year 26 | 2037<br>Year 27 | 2038<br>Year 28 | 2039<br>Year 29 | 2040<br>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         |
|   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |



#### 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 |
| 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)<br>Cumulative   | 0<br>0  | 0<br>0  | 0       | 0<br>0  | 0       | 0       | 0<br>0  | 0       | 0       | 0<br>0  | 0<br>0  |
| SFD<br>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     |

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Appendix 1

## FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | 2030<br>Year 20       | 2031<br>Year 21       | 2032<br>Year 22       | 2033<br>Year 23       | 2034<br>Year 24       | 2035<br>Year 25       | 2036<br>Year 26       | 2037<br>Year 27       | 2038<br>Year 28       | 2039<br>Year 29                         | 2040<br>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<br>Building                                | \$131.51<br>\$306.86  | \$135.46<br>\$316.07  | \$139.52<br>\$325.55  | \$143.71<br>\$335.32  | \$148.02<br>\$345.38  | \$152.46<br>\$355.74  | \$157.03<br>\$366.41  | \$161.74<br>\$377.40  | \$166.60<br>\$388.73  | \$171.59<br>\$400.39                    | \$176.74<br>\$412.40                    |
| Total   | \$438.38              | \$451.53              | \$465.07              | \$479.03              | \$493.40              | \$508.20              | \$523.44              | \$577.40<br>\$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<br>Total                               | \$157.82<br>\$263.03  | \$162.55<br>\$270.92  | \$167.43<br>\$279.04  | \$172.45<br>\$287.42  | \$177.62<br>\$296.04  | \$182.95<br>\$304.92  | \$188.44<br>\$314.07  | \$194.09<br>\$323.49  | \$199.92<br>\$333.19  | \$205.91<br>\$343.19                    | \$212.09<br>\$353.48                    |
|   | Ψ203.03               | \$210.3Z              | \$213.04              | 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<br>Building                                | \$87.68<br>\$236.72   | \$90.31<br>\$243.83   | \$93.01<br>\$251.14   | \$95.81<br>\$258.67   | \$98.68<br>\$266.43   | \$101.64<br>\$274.43  | \$104.69<br>\$282.66  | \$107.83<br>\$291.14  | \$111.06<br>\$299.87  | \$114.40<br>\$308.87                    | \$117.83<br>\$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<br>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<br>\$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<br>\$175.35   | \$90.31               | \$93.01               | \$95.81<br>\$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               | <b>#27.200</b>        | #20.222               | \$20.470              | £40.050               | £44.07C               | C40 400               | £44.40C               | £45.750                                 | £47.404                                 |
| Land<br>Building                                | \$35,070<br>\$227,956 | \$36,122<br>\$234,794 | \$37,206<br>\$241,838 | \$38,322<br>\$249,093 | \$39,472<br>\$256,566 | \$40,656<br>\$264,263 | \$41,876<br>\$272,191 | \$43,132<br>\$280,357 | \$44,426<br>\$288,768 | \$45,759<br>\$297,431                   | \$47,131<br>\$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<br>Average Sale Price<br>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<br>Average Monthly Rent per Unit<br>Average Value per Unit<br>Land<br>Improvements | \$2,785<br>\$298,096<br>\$26,303<br>\$271,793 | \$2,868<br>\$307,039<br>\$27,092<br>\$279,947 | \$2,954<br>\$316,250<br>\$27,904<br>\$288,346 | \$3,043<br>\$325,738<br>\$28,742<br>\$296,996 | \$3,134<br>\$335,510<br>\$29,604<br>\$305,906 | \$3,228<br>\$345,575<br>\$30,492<br>\$315,083 | \$3,325<br>\$355,942<br>\$31,407<br>\$324,536 | \$3,425<br>\$366,621<br>\$32,349<br>\$334,272 | \$3,527<br>\$377,619<br>\$33,319<br>\$344,300 | \$3,633<br>\$388,948<br>\$34,319<br>\$354,629 | \$3,742<br>\$400,616<br>\$35,348<br>\$365,268 |
| AAC Townhomes<br>Average Sale Price<br>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<br>Average Sale Price<br>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<br>Year 20                 | 2031<br>Year 21                 | 2032<br>Year 22                 | 2033<br>Year 23                 | 2034<br>Year 24                 | 2035<br>Year 25                 | 2036<br>Year 26                 | 2037<br>Year 27                 | 2038<br>Year 28                 | 2039<br>Year 29                 | 2040<br>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<br>Office<br>Retail<br>Hotel  | \$0<br>\$0<br>\$0               |
| RESIDENTIAL Single-Family Detached Townhome Condominium Rental Apartment Total Land in Inventory | \$0<br>\$0<br>\$0<br>\$0<br>\$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<br>\$65.76<br>\$39.45<br>\$51.29<br>\$42.08<br>\$48.66<br>\$78.91<br>\$49.97<br>\$26.30 | \$67.73<br>\$67.73<br>\$40.64<br>\$52.83<br>\$43.35<br>\$50.12<br>\$81.28<br>\$51.47<br>\$27.09<br>\$40,638 | \$69.76<br>\$69.76<br>\$41.86<br>\$54.41<br>\$44.65<br>\$51.62<br>\$83.71<br>\$53.02<br>\$27.90<br>\$41,857 | \$71.85<br>\$71.85<br>\$43.11<br>\$66.05<br>\$45.99<br>\$53.17<br>\$66.22<br>\$54.61<br>\$28.74<br>\$43,112 | \$74.01<br>\$74.01<br>\$44.41<br>\$57.73<br>\$47.37<br>\$54.77<br>\$88.81<br>\$56.25<br>\$29.60<br>\$44,406 | \$76.23<br>\$76.23<br>\$45.74<br>\$59.46<br>\$48.79<br>\$56.41<br>\$91.48<br>\$57.93<br>\$30.49<br>\$45,738 | \$78.52<br>\$78.52<br>\$47.11<br>\$61.24<br>\$50.25<br>\$58.10<br>\$94.22<br>\$59.67<br>\$31.41<br>\$47,110 | \$80.87<br>\$80.87<br>\$48.52<br>\$63.08<br>\$51.76<br>\$59.85<br>\$97.05<br>\$61.46<br>\$32.35<br>\$48,523 | \$83.30<br>\$83.30<br>\$49.98<br>\$64.97<br>\$53.31<br>\$61.64<br>\$99.96<br>\$63.31<br>\$33.32<br>\$49,979 | \$85.80<br>\$85.80<br>\$51.48<br>\$66.92<br>\$54.91<br>\$63.49<br>\$102.96<br>\$65.21<br>\$34.32<br>\$51,478 | \$88.37<br>\$88.37<br>\$53.02<br>\$68.93<br>\$56.56<br>\$65.39<br>\$106.05<br>\$67.16<br>\$35.35<br>\$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<br>5.8<br>358,409<br>179 | \$0<br>5.7<br>0<br>0 | \$0<br>5.5<br>0 | \$0<br>5.3<br>0<br>0 | \$0<br>5.2<br>0<br>0 | \$0<br>5.0<br>0 | \$0<br>4.9<br>0 | \$0<br>4.7<br>0<br>0 | \$0<br>4.6<br>0 | \$0<br>4.5<br>0 | \$0<br>4.3<br>0 |
| Total Permanent Non-Residential Jobs<br>Total<br>Cumulative                            | 608<br>10,629                         | 0<br>10,629          | 0<br>10,629     | 0<br>10,629          | 0<br>10,629          | 0<br>10,629     | 0<br>10,629     | 0<br>10,629          | 0<br>10,629     | 0<br>10,629     | 0<br>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)<br>Cumulative                 | 0<br>0  | 0<br>0  | 0       | 0       | 0       | 0       | 0<br>0  | 0       | 0       | 0       | 0       |
| SFD<br>Cumulative  | 0<br>0  | 0<br>0  | 0       | 0       | 0       | 0       | 0<br>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)<br>Cumulative                  | 0       | 0       | 0       | 0       | 0       | 0<br>0  | 0       | 0       | 0       | 0       | 0       |
| SFD<br>Cumulative   | 0       | 0       | 0<br>0  | 0       | 0<br>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<br>Hotel<br>Cumulative Hotel  | 0<br>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 Retail: Lifestyle/Town Center Retail: Restaurants Retail: Movie Theater/Entertainment Retail: Health Club  | \$49,743  | \$51,235  | \$52,772  | \$54,355  | \$55,986  | \$57,666  | \$59,396  | \$61,178  | \$63,013  | \$64,903  | \$66,850  |
|   | \$36,009  | \$37,090  | \$38,202  | \$39,348  | \$40,529  | \$41,745  | \$42,997  | \$44,287  | \$45,616  | \$46,984  | \$48,393  |
|   | \$29,661  | \$30,551  | \$31,467  | \$32,411  | \$33,384  | \$34,385  | \$35,417  | \$36,479  | \$37,574  | \$38,701  | \$39,862  |
|   | \$31,666  | \$32,616  | \$33,595  | \$34,603  | \$35,641  | \$36,710  | \$37,811  | \$38,945  | \$40,114  | \$41,317  | \$42,557  |
| Hotel<br>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<br>SFD<br>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)<br>Cumulative  | 0         | 0         | 0         | 0         | 0         | 0<br>0    | 0         | 0         | 0         | 0         | 0<br>0    |
| SFD<br>Cumulative   | 0         | 0         | 0         | 0         | 0         | 0<br>0    | 0         | 0         | 0         | 0         | 0<br>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<br>Year 20 | 2031<br>Year 21 | 2032<br>Year 22 | 2033<br>Year 23 | 2034<br>Year 24 | 2035<br>Year 25 | 2036<br>Year 26 | 2037<br>Year 27 | 2038<br>Year 28 | 2039<br>Year 29 | 2040<br>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)<br>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           |
| <del></del>  | _,-,-           | _,-,-           | _,              | _,              | -,              | _,-,-           | _,-,-           | _,-,-           | _,              | _,-,-           | _,-,-           |
| 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<br>1,713    | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0<br>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<br>Multifamily                                  | 0<br>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               | ő               | 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<br>Year 20                | 2031<br>Year 21                | 2032<br>Year 22                | 2033<br>Year 23                | 2034<br>Year 24                         | 2035<br>Year 25                | 2036<br>Year 26                         | 2037<br>Year 27                | 2038<br>Year 28                | 2039<br>Year 29                | 2040<br>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<br>Multifamily                         | 116<br>59                      | 116<br>59                      | 116<br>59                      | 116<br>59                      | 116<br>59                               | 116<br>59                      | 116<br>59                               | 116<br>59                      | 116<br>59                      | 116<br>59                      | 116<br>59                      |
| High School                                     | 59                             | 59                             | 59                             | 59                             | 59                                      | 59                             | 59                                      | 59                             | 59                             | 59                             | 59                             |
| Single-Family Detached                          | 0                              | 0                              | 0                              | 0                              | 0                                       | 0                              | 0                                       | 0                              | 0                              | 0                              | 0                              |
| Townhome  | 102                            | 102                            | 102                            | 102                            | 102                                     | 102                            | 102                                     | 102                            | 102                            | 102                            | 102                            |
| Multifamily                                     | 41                             | 41                             | 41                             | 41                             | 41                                      | 41                             | 41                                      | 41                             | 41                             | 41                             | 41                             |
| Total   |                                |                                |                                |                                | • |                                | • |                                |                                |                                |                                |
| 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 Office: General | \$293,872,231<br>\$275,127,741 | \$302,688,398<br>\$283,381,573 | \$311,769,050<br>\$291,883,020 | \$321,122,122<br>\$300,639,511 | \$330,755,786<br>\$309,658,696          | \$340,678,459<br>\$318,948,457 | \$350,898,813<br>\$328,516,910          | \$361,425,777<br>\$338,372,418 | \$372,268,551<br>\$348,523,590 | \$383,436,607<br>\$358,979,298 | \$394,939,705<br>\$369,748,677 |
| Office: General                                 | \$275,127,741                  | \$283,381,573                  | \$291,883,020                  | \$300,639,511                  | \$309,058,090                           | \$318,948,457                  | \$328,516,910                           | \$336,372,416                  | \$348,523,590                  | \$356,979,296                  | \$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                  |



#### 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        |
|   | <b>\$4,619,571</b> | <b>\$4,758,158</b> | \$4,900,903     | \$5,047,930     | \$5,199,368     | \$5,355,349     | \$5,516,009     | \$5,681,490     | \$5,851,934     | \$6,027,492     | <b>\$6,208,317</b> |
| 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<br>Year 20                  | 2031<br>Year 21                  | 2032<br>Year 22                  | 2033<br>Year 23                  | 2034<br>Year 24                  | 2035<br>Year 25                  | 2036<br>Year 26                  | 2037<br>Year 27                  | 2038<br>Year 28                  | 2039<br>Year 29                  | 2040<br>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<br>\$235,423,744   | \$302,688,398                    | \$311,769,050<br>\$291,883,020   | \$321,122,122                    | \$330,755,786                    | \$340,678,459<br>\$318,948,457   | \$350,898,813                    | \$361,425,777                    | \$372,268,551                    | \$383,436,607                    | \$394,939,705<br>\$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                      | <b>#</b> 50 507 404              | <b>0</b> 50 040 000              | AFO 004 F07                      | 855.040.705                      | <b>#50.000.400</b>               | AF0 F7F 470                      | #00 000 40F                      |
| Retail: Lifestyle/Town Center<br>Retail: Restaurants       | \$44,892,998<br>\$3,848,494      | \$46,239,788<br>\$3,963,949      | \$47,626,981<br>\$4.082.867      | \$49,055,791<br>\$4,205,353      | \$50,527,464<br>\$4.331.514      | \$52,043,288<br>\$4,461,459      | \$53,604,587<br>\$4,595,303      | \$55,212,725<br>\$4,733,162      | \$56,869,106<br>\$4,875,157      | \$58,575,179<br>\$5,021,412      | \$60,332,435<br>\$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<br>\$703,546,224 | \$1,189,406,707<br>\$713,644,024 | \$1,225,088,908<br>\$735,053,345 | \$1,261,841,575<br>\$757,104,945 | \$1,299,696,822<br>\$779,818,093 | \$1,338,687,727<br>\$803,212,636 | \$1,378,848,359<br>\$827,309,015 | \$1,420,213,810<br>\$852,128,286 | \$1,462,820,224<br>\$877,692,134 | \$1,506,704,831<br>\$904,022,898 | \$1,551,905,975<br>\$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<br>\$0                       | \$0<br>\$0                       | \$0<br>\$0                       | \$0                              | \$0<br>\$0                       | \$0                              | \$0<br>\$0                       | \$0<br>\$0                       | \$0<br>\$0                       | \$0                              |
| Townhome Value (under \$500K) Townhome Value (over \$500K) | \$0<br>\$0                       |
| Condominium Value (under \$500K)                           | \$34,500,000                     | \$0                              | \$0                              | \$0                              | \$0                              | \$0<br>\$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<br>Total Resale Units                      | 69<br>256                        | 0<br>262                         | 0<br>262                         | 0<br>262                         | 0                                | 0<br>262                         | 0                                | 0<br>262                         | 0<br>262                         | 0<br>262                         | 0<br>262                         |
|  | 256                              | 202                              | 202                              | 202                              | 262                              | 202                              | 262                              | 202                              | 202                              | 202                              | 202                              |
| Recordation Fees (Only General Fund)                       |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  | <b>.</b>                         |
| Recordation Fees New Home Sales                            | \$320,998                        | \$0                              | \$0                              | \$0                              | \$0<br>\$4,202,475               | \$0                              | \$0                              | \$0                              | \$0<br>\$4.455.470               | \$0                              | \$0                              |
| Recordation Fees Resales Recordation Fees Total            | \$1,124,147<br>\$1,445,145       | \$1,183,438<br>\$1,183,438       | \$1,218,941<br>\$1,218,941       | \$1,255,509<br>\$1,255,509       | \$1,293,175<br>\$1,293,175       | \$1,331,970<br>\$1,331,970       | \$1,371,929<br>\$1,371,929       | \$1,413,087<br>\$1,413,087       | \$1,455,479<br>\$1,455,479       | \$1,499,144<br>\$1,499,144       | \$1,544,118<br>\$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<br>Year 20  | 2031<br>Year 21  | 2032<br>Year 22  | 2033<br>Year 23  | 2034<br>Year 24  | 2035<br>Year 25  | 2036<br>Year 26  | 2037<br>Year 27  | 2038<br>Year 28  | 2039<br>Year 29   | 2040<br>Year 30   |
|--|--|--|--|--|--|--|--|--|--|---|---|
| Hotel Room Tax   |  |  |  |  |  |  |  |  |  |   |   |
| Room Revenues Total Hotel Room Tax   | \$22,177,029<br><b>\$1,552,392</b>   | \$22,842,340<br><b>\$1,598,964</b>   | \$23,527,611<br><b>\$1,646,933</b>   | \$24,233,439<br><b>\$1,696,341</b>   | \$24,960,442<br><b>\$1,747,231</b>   | \$25,709,255<br><b>\$1,799,648</b>   | \$26,480,533<br><b>\$1,853,637</b>   | \$27,274,949<br><b>\$1,909,246</b>   | \$28,093,197<br><b>\$1,966,524</b>   | \$28,935,993<br><b>\$2,025,520</b>  | \$29,804,073<br><b>\$2,086,285</b>  |
| Admissions Tax   | <b>*</b> 1,012,012   | **,===,==  | <b>+</b> 1,-12,-22   | * 1,122,121  | <b>*</b> · , · · · , <b>- ·</b> ·  | <b>*</b> 1,1 22,2 12   | *1,000,000   | <b>*</b> 1,000,010   | **,****  | <del>,,</del>   | <b>\$2,000,200</b>  |
| 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<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | 1.806<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 1.860<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 1.916<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 1.974<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 2.033<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 2.094<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 2.157<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 2.221<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 2.288<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | 2.357<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$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<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | 1.806<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | 1.860<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 1.916<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | 1.974<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | 2.033<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 2.094<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | 2.157<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | 2.221<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | 2.288<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | 2.357<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   |
| Office<br>Industrial<br>Bioscience Facility<br>Retail<br>Other non-res.<br>Total Transportation Impact Tax   | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0   | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0  |
| Total Impact Taxes   | \$0  | \$0  | \$0  | \$0  | \$0  | \$0  | \$0  | \$0  | \$0  | \$0   | \$0   |
| Miscellaneous Revenues   |  |  |  |  |  |  |  |  |  |   |   |
| Per Employee<br>Total Employees<br>Total Misc. Revenue-Employees<br>Per Resident   | 10,629<br>\$4,123,173  | 10,629<br>\$4,246,868  | 10,629<br>\$4,374,274  | 10,629<br>\$4,505,503  | 10,629<br>\$4,640,668  | 10,629<br>\$4,779,888  | 10,629<br>\$4,923,284  | 10,629<br>\$5,070,983  | 10,629<br>\$5,223,112  | 10,629<br>\$5,379,806   | 10,629<br>\$5,541,200   |
| Cumulative Full-Time Residents Misc. Rev: Full-Time Residents Total Misc. Revenue-Residents Total Misc. Revenues   | 9,473<br>\$3,712,154<br>\$3,712,154<br><b>\$7,835,328</b>  | 9,473<br>\$3,823,519<br>\$3,823,519<br><b>\$8,070,387</b>  | 9,473<br>\$3,938,225<br>\$3,938,225<br><b>\$8,312,499</b>  | 9,473<br>\$4,056,371<br>\$4,056,371<br><b>\$8,561,874</b>  | 9,473<br>\$4,178,063<br>\$4,178,063<br><b>\$8,818,730</b>  | 9,473<br>\$4,303,404<br>\$4,303,404<br><b>\$9,083,292</b>  | 9,473<br>\$4,432,507<br>\$4,432,507<br><b>\$9,355,791</b>  | 9,473<br>\$4,565,482<br>\$4,565,482<br><b>\$9,636,465</b>  | 9,473<br>\$4,702,446<br>\$4,702,446<br><b>\$9,925,559</b>  | 9,473<br>\$4,843,520<br>\$4,843,520<br><b>\$10,223,325</b>  | 9,473<br>\$4,988,825<br>\$4,988,825<br><b>\$10,530,025</b>  |
| 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<br>\$4,619,571<br>\$6,310,803<br>\$37,308,128<br>\$3,502,292<br>\$1,552,392<br>\$42,170<br>\$0<br>\$7,835,328 | \$39,222,084<br>\$4,758,158<br>\$6,500,127<br>\$38,163,165<br>\$2,898,566<br>\$1,598,964<br>\$43,435<br>\$0<br>\$8,070,387 | \$40,398,746<br>\$4,900,903<br>\$6,695,131<br>\$39,308,060<br>\$2,985,523<br>\$1,646,933<br>\$44,738<br>\$0<br>\$8,312,499 | \$41,610,709<br>\$5,047,930<br>\$6,895,985<br>\$40,487,302<br>\$3,075,088<br>\$1,696,341<br>\$46,080<br>\$0<br>\$8,561,874 | \$42,859,030<br>\$5,199,368<br>\$7,102,864<br>\$41,701,921<br>\$3,167,341<br>\$1,747,231<br>\$47,462<br>\$0<br>\$8,818,730 | \$44,144,801<br>\$5,355,349<br>\$7,315,950<br>\$42,952,979<br>\$3,262,361<br>\$1,799,648<br>\$48,886<br>\$0<br>\$9,083,292 | \$45,469,145<br>\$5,516,009<br>\$7,535,428<br>\$44,241,568<br>\$3,360,232<br>\$1,853,637<br>\$50,353<br>\$0<br>\$9,355,791 | \$46,833,219<br>\$5,681,490<br>\$7,761,491<br>\$45,568,815<br>\$3,461,039<br>\$1,909,246<br>\$51,863<br>\$0<br>\$9,636,465 | \$48,238,216<br>\$5,851,934<br>\$7,994,336<br>\$46,935,880<br>\$3,564,870<br>\$1,966,524<br>\$53,419<br>\$0<br>\$9,925,559 | \$49,685,362<br>\$6,027,492<br>\$8,234,166<br>\$48,343,956<br>\$3,671,816<br>\$2,025,520<br>\$55,022<br>\$0<br>\$10,223,325 | \$51,175,923<br>\$6,208,317<br>\$8,481,191<br>\$49,794,275<br>\$3,781,971<br>\$2,086,285<br>\$56,672<br>\$0<br>\$10,530,025 |

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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 EXPENDITURES: MONTGOMERY COUNTY  |   |   |   |   |   |  |   |  |   |   |  |
| Non-Educational Operating Expenditures  |   |   |   |   |   |  |   |  |   |   |  |
| Per Employee Total Employees Total Operating Expenditures- Employee   | 10,629  | 10,629  | 10,629  | 10,629  | 10,629  | 10,629   | 10,629  | 10,629   | 10,629  | 10,629  | 10,629   |
|   | \$10,092,682  | \$10,395,462  | \$10,707,326  | \$11,028,546  | \$11,359,402  | \$11,700,184   | \$12,051,190  | \$12,412,725   | \$12,785,107  | \$13,168,660  | \$13,563,720   |
| Per Resident Cumulative Full-Time Residents Misc. Rev: Full-Time Residents  | 9,473   | 9,473   | 9,473   | 9,473   | 9,473   | 9,473  | 9,473   | 9,473  | 9,473   | 9,473   | 9,473  |
|   | \$12,511,490  | \$12,886,835  | \$13,273,440  | \$13,671,643  | \$14,081,793  | \$14,504,246   | \$14,939,374  | \$15,387,555   | \$15,849,182  | \$16,324,657  | \$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   | 1.806   | 1.860   | 1.916   | 1.974   | 2.033  | 2.094   | 2.157  | 2.221   | 2.288   | 2.357  |
|   | \$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   | \$0  | \$0   | \$0   | \$0  |
| Office<br>Industrial<br>Bioscience Facility<br>Retail<br>Other non-res.<br>Total Transportation Impact Tax  | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                        | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                 | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                        | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                        | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                        | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                 | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                        | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                               | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                        | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0                        | \$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0          |
| Total Capital Expenditures (Non-Educational)  | \$0   | \$0   | \$0   | \$0   | \$0   | \$0  | \$0   | \$0  | \$0   | \$0   | \$0  |
| New Annual Payments w/ 20yr financing   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0  | \$0   | \$0  | \$0   | \$0   | \$0  |
| New Ann. Payments w/ 20 yr. Financing   | \$2,480,966   | \$2,480,966   | \$2,480,966   | \$2,480,966   | \$2,393,274   | \$2,255,988  | \$2,037,792   | \$1,741,981  | \$1,597,910   | \$1,438,768   | \$1,297,444  |
| Educational Operating Expenditures  Per Student Operating Expenditures Total Students Generated by Project-Full-time Households  Total Educational Operating Expenditures   | \$16,586  | \$17,083  | \$17,596  | \$18,124  | \$18,667  | \$19,227   | \$19,804  | \$20,398   | \$21,010  | \$21,641  | \$22,290   |
|   | 677   | 677   | 677   | 677   | 677   | 677  | 677   | 677  | 677   | 677   | 677  |
|   | <b>\$11,229,314</b>   | <b>\$11,566,193</b>   | <b>\$11,913,179</b>   | <b>\$12,270,574</b>   | <b>\$12,638,691</b>   | <b>\$13,017,852</b>                                    | <b>\$13,408,388</b>   | <b>\$13,810,639</b>  | <b>\$14,224,959</b>   | <b>\$14,651,707</b>   | <b>\$15,091,258</b>                                    |
| Educational Capital Expenditures Schools - New Dwelling Units Inflation Rate SFD Townhomes/Villas Multifarmily (Garden) Multifarmily (Low-rise w/parking) Multifarmily (High-rise w/parking) AAC (All) Total School Impact Tax - New Dwelling Units | 1.754<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.806<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.860<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.916<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 1.974<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 2.033<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 2.094<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 2.157<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 2.221<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 2.288<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 | 2.357<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0<br>\$0 |
| Educational Capital Expenditures  | \$0   | \$0   | \$0   | \$0   | \$0   | \$0  | \$0   | \$0  | \$0   | \$0   | \$0  |
| New Annual Payments w/ 20yr financing   | \$0   | \$0   | \$0   | \$0   | \$0   | \$0  | \$0   | \$0  | \$0   | \$0   | \$0  |
| New Ann. Payments w/ 20 yr. Financing   | \$2,270,882   | \$2,270,882   | \$2,270,882   | \$2,270,882   | \$2,145,730   | \$2,016,823  | \$1,884,049   | \$1,747,292  | \$1,606,432   | \$1,461,346   | \$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 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   |
|   | \$2,480,966   | \$2,480,966   | \$2,480,966   | \$2,480,966   | \$2,393,274   | \$2,255,988  | \$2,037,792   | \$1,741,981  | \$1,597,910   | \$1,438,768   | \$1,297,444  |
|   | \$11,229,314  | \$11,566,193  | \$11,913,179  | \$12,270,574  | \$12,638,691  | \$13,017,852   | \$13,408,388  | \$13,810,639   | \$14,224,959  | \$14,651,707  | \$15,091,258   |
|   | \$2,270,882   | \$2,270,882   | \$2,270,882   | \$2,270,882   | \$2,145,730   | \$2,016,823  | \$1,884,049   | \$1,747,292  | \$1,606,432   | \$1,461,346   | \$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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#### Appendix 1

## FISCAL AND ECONOMIC IMPACT ANALYSIS LIFESCI VILLAGE™ PROPOSED DEVELOPMENT

|   | 2030<br>Year 20   | 2031<br>Year 21   | 2032<br>Year 22   | 2033<br>Year 23   | 2034<br>Year 24   | 2035<br>Year 25   | 2036<br>Year 26   | 2037<br>Year 27   | 2038<br>Year 28   | 2039<br>Year 29   | 2040<br>Year 30   |
|---|---|---|---|---|---|---|---|---|---|---|---|
| INDIRECT/INDUCED: MONTGOMERY COUNTY   |   |   |   |   |   |   |   |   |   |   |   |
| Indirect/Induced Income Tax   |   |   |   |   |   |   |   |   |   |   |   |
| Direct Taxable Income<br>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<br>\$173,929,282<br>\$5,263,202<br>\$153,401,305<br>\$143,616,681 | \$167,035,650<br>\$179,147,160<br>\$5,421,098<br>\$158,003,344<br>\$147,925,181 | \$172,046,720<br>\$184,521,575<br>\$5,583,731<br>\$162,743,444<br>\$152,362,936 | \$177,208,121<br>\$190,057,222<br>\$5,751,243<br>\$167,625,748<br>\$156,933,824 | \$182,524,365<br>\$195,758,939<br>\$5,923,780<br>\$172,654,520<br>\$161,641,839 | \$188,000,096<br>\$201,631,707<br>\$6,101,493<br>\$177,834,156<br>\$166,491,094 | \$193,640,099<br>\$207,680,658<br>\$6,284,538<br>\$183,169,180<br>\$171,485,827 | \$199,449,302<br>\$213,911,078<br>\$6,473,074<br>\$188,664,256<br>\$176,630,402 | \$205,432,781<br>\$220,328,410<br>\$6,667,266<br>\$194,324,183<br>\$181,929,314 | \$211,595,764<br>\$226,938,263<br>\$6,867,284<br>\$200,153,909<br>\$187,387,194 | \$217,943,637<br>\$233,746,411<br>\$7,073,303<br>\$206,158,526<br>\$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<br>Retail-Restaurants<br>Retail-Theater<br>Retail-Health Club   | \$23,404,143<br>\$0<br>\$2,008,914<br>\$588,354<br>\$523,443                    | \$2,069,181<br>\$606,004<br>\$539,146   | \$0<br>\$2,131,257<br>\$624,184<br>\$555,320                                    | \$0<br>\$2,195,194<br>\$642,910<br>\$571,980                                    | \$2,261,050<br>\$2,261,050<br>\$662,197<br>\$589,139                            | \$0<br>\$2,328,882<br>\$682,063<br>\$606,813                                    | \$0<br>\$2,398,748<br>\$702,525<br>\$625,018                                    | \$0<br>\$2,470,711<br>\$723,601<br>\$643,768                                    | \$2,544,832<br>\$745,309<br>\$663,081   | \$0,576,244<br>\$0<br>\$2,621,177<br>\$767,668<br>\$682,974                     | \$0<br>\$2,699,812<br>\$790,698<br>\$703,463                                    |
| Hotel<br>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<br>\$73,404,070<br>\$2,364,325<br>\$56,716,144<br>\$61,940,151     | \$75,035,421<br>\$75,606,193<br>\$2,435,255<br>\$58,417,628<br>\$63,798,355     | \$77,286,483<br>\$77,874,378<br>\$2,508,312<br>\$60,170,157<br>\$65,712,306     | \$79,605,078<br>\$80,210,610<br>\$2,583,562<br>\$61,975,262<br>\$67,683,675     | \$81,993,230<br>\$82,616,928<br>\$2,661,069<br>\$63,834,520<br>\$69,714,186     | \$84,453,027<br>\$85,095,436<br>\$2,740,901<br>\$65,749,555<br>\$71,805,611     | \$86,986,618<br>\$87,648,299<br>\$2,823,128<br>\$67,722,042<br>\$73,959,779     | \$89,596,216<br>\$90,277,748<br>\$2,907,821<br>\$69,753,703<br>\$76,178,573     | \$92,284,103<br>\$92,986,080<br>\$2,995,056<br>\$71,846,314<br>\$78,463,930     | \$95,052,626<br>\$95,775,663<br>\$3,084,908<br>\$74,001,704<br>\$80,817,848     | \$97,904,205<br>\$98,648,933<br>\$3,177,455<br>\$76,221,755<br>\$83,242,383     |
| Retail<br>Retail-Lifestyle Center<br>Retail-Restaurants<br>Retail-Theater<br>Retail-Health Club   | \$8,306,795<br>\$870,271<br>\$208,556<br>\$196,914                              | \$8,555,999<br>\$896,380<br>\$214,813<br>\$202,822                              | \$8,812,679<br>\$923,271<br>\$221,257<br>\$208,906                              | \$9,077,059<br>\$950,969<br>\$227,895<br>\$215,174                              | \$9,349,371<br>\$979,498<br>\$234,732<br>\$221,629                              | \$9,629,852<br>\$1,008,883<br>\$241,774<br>\$228,278                            | \$9,918,748<br>\$1,039,150<br>\$249,027<br>\$235,126                            | \$10,216,310<br>\$1,070,324<br>\$256,498<br>\$242,180                           | \$10,522,799<br>\$1,102,434<br>\$264,193<br>\$249,445                           | \$10,838,483<br>\$1,135,507<br>\$272,118<br>\$256,929                           | \$11,163,638<br>\$1,169,572<br>\$280,282<br>\$264,636                           |
| Hotel<br>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<br>\$5,979,480  | \$287,536,102<br>\$0  | \$296,162,185<br>\$0  | \$305,047,050<br>\$0  | \$314,198,462<br>\$0  | \$323,624,416<br>\$0  | \$333,333,148<br>\$0  | \$343,333,143<br>\$0  | \$353,633,137<br>\$0  | \$364,242,131<br>\$0  | \$375,169,395<br>\$0  |
| Total Direct/Induced Employment Income Taxes<br>Total Direct/Induced Construction Income Taxes  | \$6,699,870<br>\$143,508  | \$6,900,866<br>\$0  | \$7,107,892<br>\$0  | \$7,321,129<br>\$0  | \$7,540,763<br>\$0  | \$7,766,986<br>\$0  | \$7,999,996<br>\$0  | \$8,239,995<br>\$0  | \$8,487,195<br>\$0  | \$8,741,811<br>\$0  | \$9,004,065<br>\$0  |
| Indirect/Induced Hotel Tax Revenues   |   |   |   |   |   |   |   |   |   |   |   |
| Direct Hotel Room Revenues<br>Indirect Hotel Room Revenues<br>Hotel Tax   | \$22,177,029<br>\$6,952,388<br>\$486,667  | \$22,842,340<br>\$7,160,959<br>\$501,267  | \$23,527,611<br>\$7,375,788<br>\$516,305  | \$24,233,439<br>\$7,597,062<br>\$531,794  | \$24,960,442<br>\$7,824,974<br>\$547,748  | \$25,709,255<br>\$8,059,723<br>\$564,181  | \$26,480,533<br>\$8,301,515<br>\$581,106  | \$27,274,949<br>\$8,550,560<br>\$598,539  | \$28,093,197<br>\$8,807,077<br>\$616,495  | \$28,935,993<br>\$9,071,289<br>\$634,990  | \$29,804,073<br>\$9,343,428<br>\$654,040  |
| Indirect/Induced Miscellaneous Revenues   |   |   |   |   |   |   |   |   |   |   |   |
| Total Direct/Induced Employment<br>Total Miscellaneous Revenues   | 6,014<br>\$2,332,860  | 6,014<br>\$2,402,846  | 6,014<br>\$2,474,931  | 6,014<br>\$2,549,179  | 6,014<br>\$2,625,654  | 6,014<br>\$2,704,424  | 6,014<br>\$2,785,557  | 6,014<br>\$2,869,123  | 6,014<br>\$2,955,197  | 6,014<br>\$3,043,853  | 6,014<br>\$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<br>Total Induced/Indirect Expenditures  | \$9,662,905<br>\$5,710,362  | \$9,804,979<br>\$5,881,673  | \$10,099,129<br>\$6,058,124   | \$10,402,103<br>\$6,239,867   | \$10,714,166<br>\$6,427,063   | \$11,035,591<br>\$6,619,875   | \$11,366,658<br>\$6,818,471   | \$11,707,658<br>\$7,023,026   | \$12,058,888<br>\$7,233,716   | \$12,420,654<br>\$7,450,728   | \$12,793,274<br>\$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 <sup>1</sup>                 | 996,319         | 66%             |               |         |      |          |          |
|---|-----------------|-----------------|---------------|---------|------|----------|----------|
| Employment <sup>1</sup>                 | 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 <sup>1</sup><br>Employment <sup>1</sup> | 996,319<br>508,305 | 66%<br>34%    |             |         |      |          |          |
|--|--------------------|---------------|-------------|---------|------|----------|----------|
| Employment   | FY 2012            | 34%           |             | ALLOCAT | ION  | REVEN    | IUES     |
| 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 <sup>2</sup>           | \$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 <sup>1</sup>    | 996,319         | 66%             |               |         |      |          |          |
|----------------------------|-----------------|-----------------|---------------|---------|------|----------|----------|
| Employment <sup>1</sup>    | 508,305         | 34%             |               |         |      |          |          |
|                            | FY 2012         |                 |               | ALLOCAT | ION  | REVEN    | IUES     |
| DEPARTMENT                 | BUDGET          | EXCLUSIONS      | ALLOCATION    | Рор.    | 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 |

<sup>&</sup>lt;sup>1</sup> 2010 Estimates from MWCOG's Cooperative Forecasts Round 8.0



<sup>&</sup>lt;sup>2</sup> Development Related Charges include charges for development related activities such as Developer Fee for Alternative Review, Water & Sewer Plan Review Fee, etc.

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

<sup>&</sup>lt;sup>4</sup> 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 <sup>1</sup>            | 996,319       | 66%        |               |         |      |              |          |
|------------------------------------|---------------|------------|---------------|---------|------|--------------|----------|
| Employment <sup>1</sup>            | 508,305       | 34%        |               |         |      |              |          |
|                                    | FY 2011       |            |               | ALLOCAT | ION  | EXPENDITURES |          |
| 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

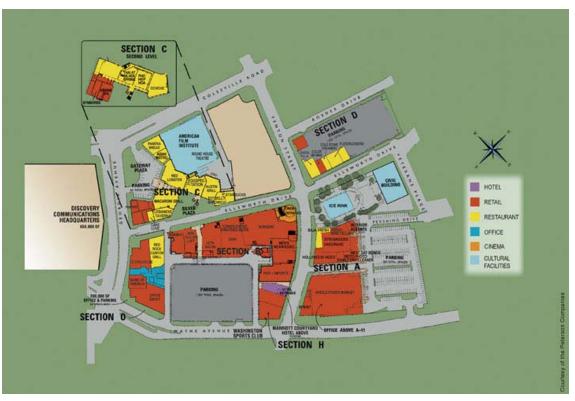
| Population <sup>1</sup>             | 996,319         | 66%           |                 |         |      |          |          |
|-------------------------------------|-----------------|---------------|-----------------|---------|------|----------|----------|
| Employment <sup>1</sup>             | 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   |
| <b>Environmental Protection</b>     | \$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 |

<sup>&</sup>lt;sup>1</sup> 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.

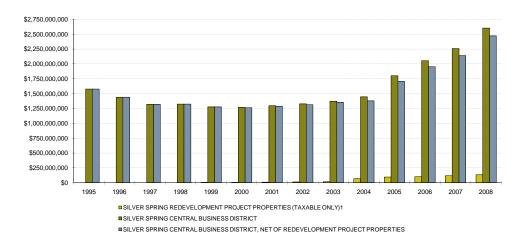


#### Appendix 5

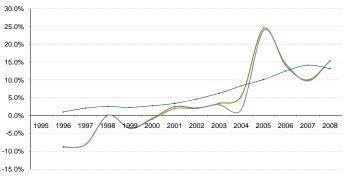
#### **ASSESSMENT TRENDS** SILVER SPRING MONTGOMERY COUNTY, MD 1995 - 2008

|  |                 |                           |                             |                             |                             |                             |                             |                             |                 |                             |                             |                               | 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)<br>Change          | \$64,490,076    | \$65,143,821<br>\$653,745 | \$66,509,131<br>\$1,365,310 | \$68,186,603<br>\$1,677,472 | \$69,765,200<br>\$1,578,597 | \$71,686,385<br>\$1,921,185 | \$74,122,532<br>\$2,436,148 | \$77,574,948<br>\$3,452,415 | \$4,832,390     | \$89,263,005<br>\$6,855,667 | \$98,281,725<br>\$9,018,719 | \$110,529,249<br>\$12,247,524 | \$126,132,747<br>\$15,603,498 | \$142,730,013<br>\$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** 



<sup>&</sup>lt;sup>1</sup> Historical assessed values were not available for all redevelopment project properties SOURCE: Maryland Department of Assesments and Taxation; RCLCO



<sup>——</sup>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.   |

<sup>&</sup>lt;sup>1</sup> The parcels selected as being the most likely to realize increases in assessed values as a result of development of LifeSci Village<sup>™</sup> have an aggregate land area that is similar in proportion relative to the LifeSci Village<sup>™</sup> 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.

