# University of Maryland BioPark 

## Tax Increment Financing Application

Baltimore City, Maryland

OCTOBER 27, 2015

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# University of Maryland BioPark ApPLICATION FOR TAX Increment Financing 

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## I. Transmittal Letter

The transmittal letter addressed to Steve Kraus and the City of Baltimore Board of Finance from Bill Cole of the sponsoring agency, Baltimore Development Corporation (the "BDC"), is included on the following page.

October 15, 2015

Baltimore City Board of Finance

c/o Steve Kraus
200 N. Holiday Street, Room 7
Baltimore, MD 21202

RE: Tax Increment Financing Proposal--850 and 873. W Baltimore Street
Dear Mr. Kraus:

I am pleased to submit a proposal for consideration by the Board of Finance for Tax Increment Financing (TIF) at 850 and 873 W . Baltimore Street to fund installation and maintenance of improvements associated with the construction of 873 W. Baltimore Street.

The bond proceeds will be used to assist Wexford Science \& Technology, LLC (Wexford) construct a 250,000 gross square-foot development within the University of Maryland Baltimore (UMB) BioPark at 873 W . Baltimore Street. The project will include research, laboratory, and office space. The facility will be the third commercial lab and office building in the BioPark. The total development will require a capital investment of $\$ 114,000,000$.

The anchor tenant for the project will be the CIC, a leader in shared spaces for innovation and entrepreneurship. CIC's national model focuses on growing small startups and using its vast networks to expand these businesses. 873 W . Baltimore Street will create collaborative and flexible workspace environments, bring the CIC to Baltimore City, retain and attract businesses, and create over 600 construction jobs and over 700 permanent jobs.

In order to qualify for TIF, UMB must be designated as a "Qualified Institution" under the State's Regional Institution Strategic Enterprise (RISE) Zone Program; and a RISE district that includes 873 W . Baltimore Street must be approved by the State of Maryland and Baltimore City. This designation and approval is under consideration by the Maryland Department of Commerce and the Mayor and City Council of Baltimore City.

The Baltimore Development Corporation recommends approval by the Board of Finance bond proceeds in the amount not to exceed $\$ 17,250,000$ including $\$ 250,000$ in issuance costs. The TIF District will include 873 W. Baltimore Street, as well as The Maryland Proton Treatment Center located at 850 W . Baltimore Street, currently under construction.

Baltimore City hired MuniCap, Inc. an Ellicott City-based firm specializing in tax increment financing and financial analysis, to perform a But-For test and fiscal impact analysis of the proposal. The analysis has been reviewed by BDC Staff and the BDC Board of Directors and it was determined that the TIF was a necessary financing structure for this project, that it passes the But-For test, and that expected revenues generated by the development exceed the corresponding costs to Baltimore City. The development of 873 W . Baltimore Street is critical to moving the BioPark and economic development in West Baltimore forward and I have approved submission of the proposal for consideration by the Board of Finance.

Thank you for your consideration. Please contact me or BDC's West Team Director Michael Snidal at 410-837-9305 with any concerns or questions.

Sincerely,


William H. Cole, IV President \& CEO

cc: Kimberly A. Clark<br>Michael Snidal

## II. APPROVAL OF THE COORDINATING AgENCY

Please see Schedule I for evidence of approval of the TIF by BDC.

## III. DEVELOPMENT TEAM

## A. Applicant

## Wexford Maryland BioPark 3, LLC

Wexford Maryland BioPark 3, LLC is the owner of the 873 West Baltimore Street and the applicant for the University of Maryland BioPark Tax Increment Financing (TIF). Wexford Maryland BioPark 3, LLC is wholly owned by Wexford Science \& Technology, LLC.

## Corporate Overview

Wexford Science \& Technology, LLC (Wexford) a wholly-owned subsidiary of BioMed Realty Trust, Inc., provides real estate strategies and solutions exclusively to universities, academic medical centers, and major research institutions. Wexford works collaboratively with their partner institutions to help create and develop vibrant, mixed-use, amenity-rich "Knowledge Communities," that are built on a foundation of research, discovery, and entrepreneurial activity.

These Knowledge Communities operate as a nexus for leveraging academic intellectual capital, innovation, and infrastructure; concentrating talent, resources, and service providers; and enabling pathways for corporate collaboration, startup creation and growth, and place-based networking and idea exchange. When harnessed into a single location, these elements provide the hub of an innovation that unites a region's innovation ecosystem into a powerful economic development engine.

The live, work, play and learn environment that Knowledge Communities offer helps to advance strategic institutional goals while simultaneously acting as a catalyst for significant regional, economic, and community development impacts.

To build a successful live, work, play, learn environment within the Knowledge Communities, Wexford establishes strategic alliances with the industry's leading architects, engineers, general contractors, residential and hospitality developers, and specialty consultants. Wexford's partners share its focus on major research institutions as centers of gravity for innovation; its dedication to long-term relationship building; and its commitment to transparency and sound execution.

Additionally, Wexford is able to leverage the financial strength, life science industry connections, and premier tenant base of its parent company, BioMed Realty Trust, Inc., owners of over 18 million square feet of world-class real estate for life sciences and biotechnology industries.

Finally, with a critical mass of top research universities and growing Knowledge Communities across its portfolio, Wexford created the Wexford Innovation Network, bringing together its university partners and leading companies to promote the exchange of ideas, identification of best practices, and creation of value-added programming.

Wexford has planned, developed/redeveloped, financed, constructed, and leased over 3,100,000 square feet of research and research support space. Currently, the firm has an additional $1,500,000$ square feet of research space under development and $6,600,000$ square feet of development potential within its Knowledge Communities.

Wexford's capabilities encompass the full life cycle of a real estate project including strategy, master planning, market and feasibility studies, financing, development, construction, marketing, and leasing. Its unique combination of strategy, facilities and financial expertise enables Wexford to optimize value and minimize costs for its client partners.

## History

Wexford was originally established in 1998 as a business line of Townsend Capital, LLC, a Baltimore-based investment company. Jim Beren, then President of Townsend Capital, LLC, formed the business line specifically to meet the growing and specialized real estate needs of institutions, including universities, university-related innovation center, and academic healthcare systems. In 2005, Jim and his investors purchased the university business segment from Townsend Capital, LLC and named the new company Wexford Science \& Technology, LLC.

In May 2013, Wexford merged with BioMed Realty Trust, Inc., (NYSE: BMR) a real estate investment trust (REIT), which delivers optimal real estate solutions for biotechnology and pharmaceutical companies, scientific research institutions, government agencies, and other entities involved in the life science industry. BioMed Realty Trust, Inc. owns, or has interest in, properties comprising approximately 18 million rentable square feet valued at over seven billion dollars. BioMed Ventures is the firm's $\$ 100$ million captive fund.

## Market Presence

Wexford's portfolio extends across eight states including Pennsylvania, Maryland, Virginia, North Carolina, Florida, Illinois, Missouri, and Connecticut. With projects in key markets including Philadelphia, Baltimore, Miami, and St. Louis, Wexford is creating a platform for leaning and sharing between university partners, community, and private sector.

Its market presence is elevated through Wexford's parent company, BioMed Realty Trust, Inc., which focuses its investments in life science and biotech properties in the seven core U.S. life science markets of Cambridge/Boston, San Francisco, San Diego, Maryland, New York, Pennsylvania, and Seattle. These target markets have emerged as primary hubs for research, development and production in the life science industry, have reputations for scientific excellence, and are often associated with a concentration of academic centers. Each market's reputation is enhanced by the presence of mature life science and technology companies, which provide scale and stability to the market, and startup companies, which are drawn to the market by their ability to leverage the existing industry infrastructure to their advantage. Furthermore, these markets provide a high quality of life for the skilled workforce and access to venture capitalists and other partners that collectively provide the network and infrastructure essential for their work.

Additional information on Wexford and BioMed Realty Trust, Inc. is available at www.wexfordscitech.com and www.biomedrealty.com.

## Relevant Experience

- Wake Forest Innovation Quarter's BioTech Place, Wake Forest University; WinstonSalem, North Carolina
- University of Miami Life Science Park, University of Miami; Miami, Florida
- University of Maryland Baltimore BioPark Building 1, University of Maryland Baltimore; Baltimore, Maryland
- University of Maryland Baltimore BioPark Building 2, University of Maryland Baltimore; Baltimore, Maryland
- 3711 \& 3737 Market Street, Science Center; Philadelphia, Pennsylvania
- @4260, Cortex Innovation Development District; St. Louis, Missouri
- BioResearch and Development Growth Park at the Danforth Center, The Danforth Center; St. Louis, Missouri
- South Street Landing Mixed Use Development, Brown University/State of Rhode Island; Providence, Rhode Island


## B. OWNER

## Wexford Science \& Technology, LLC

Wexford Science \& Technology, LLC is the owner of Wexford Maryland BioPark 3, LLC.

## C. Construction Manager

## Whiting-Turner Contracting Company

Whiting-Turner provides construction management, general contracting and design/build services on projects small and large for a diverse group of customers. Successful markets includes, but are not limited to, higher education, life sciences, pharmaceutical, research laboratories, healthcare, hospital, mixed use, retail, office and headquarters, transportation, entertainment, cultural, urban development, public sector, and green building projects.

Whiting-Turner was founded in 1909 by George William Carlyle Whiting and LeBaron Turner. Whiting, a native of Baltimore, attended the Johns Hopkins University for his first two years of college and then completed his studies a Massachusetts Institute of Technology, where he received a bachelor's degree in civil engineering. He returned to Baltimore where, four years later, he created the vision for Whiting-Turner with his good friend and class mate at Massachusetts Institute of Technology, LeBaron Turner. It is interesting to note that Turner never actually worked for the company, fearing the loss of their friendship. In keeping the name, Whiting demonstrated the loyalty that to this day is a core value of the firm.

In reviewing Whiting-Turner's past, three important concepts become apparent: 1) a value system based on integrity and customer dedication, 2) employing engineers to run the company,
and 3) a history of growth and development led by its young people. Whiting-Turner is a company that has been driven from the bottom up.

In 1938, Whiting hired as a timekeeper a brilliant, 19 year old, civil engineering graduate of Johns Hopkins University by the name of Willard Hackerman. He did not last in that position very long. In 1955, Hackerman was made president of Whiting-Turner, only the second president in the company's history. Under his leadership, the company has grown and prospered because of his unwavering commitment to Whiting-Turner's beliefs and core values.

Examination of the firm's current management structure reveals the continued dedication to people. Staff continues to be developed and promoted from within, and their average years with the firm set industry standards. As a result, Whiting-Turner has perennially climbed up the list of top domestic general building constructors (currently ranked $4^{\text {th }}$ by Engineering News Record) and has done so purely through growth, not acquisition. Whiting-Turner has operated solely under the name of The Whiting-Turner Contracting Company for the past 104 years.

The mission of Whiting-Turner is to build on its reputation for integrity, excellence, experience, and leadership as the nation's finest construction organization by:

- Continuously improving the quality of its work and services.
- Constantly striving to exceed each client's expectations.
- Maintaining our dedication to the highest moral principles.
- Providing its people with a challenging, secure, and safe environment in which to achieve personal career goals.

The strength and stability of the firm is well documented. Whiting-Turner enjoys a 5A-1 Dun \& Bradstreet rating, the only top 25 Engineering News Record domestic builder with this highest rating, and a bonding capacity of four billion dollars. The firm is financially independent, having not borrowed money since 1938.

Whiting-Turner is headquartered in Baltimore, with 30 regional offices across the country. The size of the firm gives it the ability to pool from over 2,300 salaried professionals, leveraging a vast amount of experience to meet its project's needs.

## Relevant Experience

- University of Maryland Baltimore BioPark Building 1, University of Maryland; Baltimore, Maryland
- University of Maryland Baltimore BioPark Building 2, University of Maryland; Baltimore, Maryland
- University of Miami Life Science Park, University of Miami; Miami, Florida


## D. Asset \& Property Manager

## Wexford Operations \& Management

Wexford's asset management strategy focuses on maintaining and improving the asset and the tenant experience by proactively managing building issues and concerns in an efficient and sustainable format. Wexford maintains a "hand-on" approach to its asset management through programs that use a systematic approach to tracking performance and identifying issues, as described on the following page:

- Monthly calls with property management staff to review building and tenant operations and budget comparisons;
- Detailed property management inspections through quarterly Quality Assurance Reports (QAR). The QAR's provide a detailed review of the physical aspects of the building, mechanical systems, operational challenges and potential capital items;
- Periodic service inspections performed as required for particular systems and equipment, and scheduled with maintenance staff and vendors using Computerized Maintenance Management System, which creates, tracks, and records maintenance for all building systems and equipment;
- Comprehensive annual asset review to develop the annual budget, which includes fiveyear projections;
- Experienced management and maintenance staff with average experience in excess of 12 years;
- Engagement of top tier vendors to implement and maintain best housekeeping practices; and,
- Robust accounting and financial reporting capabilities, which include industry standard monthly, quarterly, and annual reporting packages, as well as customized reports as required.

With regard to Wexford's operations and management approach for the Speculative Office Development scenario, Wexford understands the challenges of working with today's innovative and creative tenant base, and encourages collaboration between tenants, as well as the business and local communities. Wexford regularly holds and sponsors events at its buildings to give tenants and related businesses an opportunity to meet and interact. To encourage an atmosphere of collaboration and creativity, Wexford's property managers work with tenants to hold special events throughout the building common area, conference rooms, and tenants' spaces.

## E. Primary Capital Source

## BioMed Realty Trust, Inc.

Since the company's initial public offering (IPO) in August of 2004, BioMed Realty Trust, Inc. (NYSE: BMR) has executed on a capital strategy predicated on managing the company's balance sheet prudently, while simultaneously creating multiple capital sources to fund future investment opportunities. In April 2010, BioMed Realty Trust, Inc. received investment grade corporate credit ratings from both Standard \& Poor's Rating Services (S\&P) and Moody's Investors

Services (Moody's), with subsequent upgrades from both agencies to BBB and Baa2, respectively. These ratings are a testament to the consistent focus which management has placed on maintaining a solid capital position, in addition to the strong execution of the company's capital strategy.

BioMed Realty Trust, Inc.'s investment grade credit ratings and access to public debt markets, in combination with public equity offerings, provide compelling efficiency in match funding future investments. Since the beginning of 2013, BioMed Realty Trust, Inc. has publicly raised more than one billion dollars of unsecured bonds and equity capital while simultaneously increasing the size of the capital structure which provides the company significant availability and optionality in pursuing future funding alternatives.

As of March 31, 2015, the company's total-debt-to-gross-assets ratio was less than thirty-eight percent ( $38 \%$ ) and the company had $\$ 670$ million of availability under its unsecured line of credit. With over seven billion dollars in gross assets and an equity market capitalization of approximately four billion dollars, BioMed Realty Trust, Inc. has invested in state-of-the-art research facilities nationwide and in the United Kingdom. The company's strong financial position provides a solid foundation for its team of world-class professionals to continue to execute for its stockholders, clients, and partners.

## F. ARCHITECT

## GaUdreau, Inc.

Guadreau, Inc. has been providing comprehensive design services for state-of-the-art medical and non-medical research and development facilities for the public and private sector for over 40 years. These services have resulted in science and technology facilities for research, teaching, and manufacturing facilities. Gaudreau Inc.'s staff of design professionals has successfully managed the programming, planning, and design of research and teaching laboratories for colleges and universities, and leading biotechnology and pharmaceutical companies, as well as public and government institutions such as the U.S. Army Corps of Engineers, Food and Drug Administration, the National Institutes of Health and the Drug Enforcement Administration. Gaudreau, Inc. has designed facilities encompassing containment operations through BSL-3 and clean rooms (class 1000 through 100,000 ) in research, manufacturing and bio production facilities. Gaudreau, Inc.'s experience in serving the life science industry, and in particular, working with emerging growth companies, has provided them with unique insight to assist developers in creating speculative or build-to-suit fit-outs for this market sector. Gaudreau, Inc. understands the critical balance between designing flexible buildings and meeting investment demands. It follows research and development trends and has complimented its experience with significant work in biodefense facility design, which includes BLS-2 and BLS-3 containment.

## Relevant Experience

- University of Maryland Baltimore BioPark Building 2, University of Maryland; Baltimore, Maryland
- Maryland State Forensic Medical Center; Baltimore, Maryland
- Wake Forest BioTech Place; Winston-Salem, North Carolina


## G. LEGAL

## BALLARD SPAHR, LLP

Ballard Spahr, LLP has more than 500 attorneys in 14 offices in the United States. Ballard Spahr, LLP provides counsel and exceptional service in litigation, business and finance, real estate, intellectual property, and public finance.

## Relevant Experience

Ballard Spahr's experience with TIFs, PILOTs, and special assessment and special tax district transactions is considerable. In the past ten years, its attorneys have been involved in over 50 tax increment or special tax/assessment transactions throughout the country, exceeding more than $\$ 1$ billion. Ballard Spahr's attorneys have participated as bond counsel, underwriter's counsel, and developer's counsel on numerous transactions. Those attorneys have also assisted in drafting legislation for many of these programs.

Ballard Spahr has been involved in three of the largest developments on the east coast, the National Harbor development in Prince George's County, Maryland, representing the county, the Xanadu Project in the Meadowlands, New Jersey, representing The Mills Corporation prior to the sale of its interest in the project to Colony Capital Acquisitions LLC, and Harbor Point in Stamford, Connecticut, representing Banc of America Securities LLC. Each project exceeds \$1 billion in development costs.

## H. University Partner

## University of Maryland BioPark

The BioPark is an urban life science research park located on a twelve-acre site bounded by Martin Luther King, Jr. Boulevard (MLK Boulevard) on the east and extending along Baltimore Street to Schroeder Street on the west. The mission of the BioPark is to create a universityassociated research park that accelerates biotechnology commercialization and economic development in the surrounding community and throughout the region by providing sophisticated laboratory and office environments.

The creation of the BioPark was a first for the University of Maryland (UM) in that it expanded the campus westward across the wide, busy thoroughfare that is MLK Boulevard. Since its construction in 1982, MLK Boulevard has served as a dividing border, cutting off the campus and Baltimore's central business district on the east from the mostly poor neighborhoods, like the BioPark's Poppleton community, to the west. Most of the land on which the BioPark sits has been vacant for years or contained vacant commercial properties.

Today the BioPark consists of:

- 453,000 square feet of lab and office space in two multi-tenant buildings:
o 800 West Baltimore Street, also known as Building One; and
o 801 West Baltimore Street, also known as Building Two
- Approximately 750 employees;
- 638-space parking garage;
- New Maryland State Forensic Medical Center; and,
- New \$200 million dollar Maryland Proton Treatment Center.

At full buildout, the BioPark will have:

- Twelve buildings for a total of 1.8 million square feet of office, lab space, retail, hotel, and other uses;
- More than $\$ 1$ billion invested in real estate projects;
- Generated 5,220 construction jobs; and,
- Home to more than 4,000 employees.


## IV. PROJECT INFORMATION

## A. Project Description

## Executive Overview

Wexford, a leading developer of university-associated urban research parks, is developing 873 West Baltimore Street (the Project). This 250,000 square foot building represents the beginning of the next phase of the UM BioPark, transforming it into a diverse, twenty-four/seven, mixeduse innovation district. The planned tenants for the Project represent the future new business creation and will be engines for job creation in West Baltimore.

Located at the southeast corner of West Baltimore Street and North Poppleton Street, illustrated in Exhibits 1 and 2 attached hereto, the state-of-the-art building will offer sophisticated laboratory and office environments for early-stage and mature bioscience companies in accordance with the BioPark Master Plan. It will house:

- 83,064 square feet of shared office and meeting space for Cambridge Innovation Center (CIC);
- 20,000 square feet of CIC Shared Lab space modeled off of LabCentral in Cambridge, Massachusetts; and,
- 140,000 square feet of spec office and lab space for high-growth life science and technology companies.

A site plan and rendering of the proposed Project are shown in Exhibits 3 and 4, attached hereto.
CIC and CIC Shared Labs are infrastructure for $21^{\text {st }}$ century entrepreneurs and small businesses. In addition to the direct jobs that will be created at the Project, estimated to be more than 500 construction-related jobs and 1,400 permanent jobs, the Project is expected to have a catalytic impact on the surrounding area, spurring additional development and private investment in and around the BioPark, including a hotel and the redevelopment of a former manufacturing building. CIC, the anchor tenant, is known worldwide as a magnet for start-up companies, and the creation of an innovation district will stimulate economic growth as businesses grow, choose to stay in the community, and invest in the City.

The Regional Institution Enterprise Zone (RISE) legislation, approved during the 2014 General Assembly Session, has enabled the use of TIF funds for innovation centers and their supporting facilities. Innovation districts are the manifestation of changing locational preferences of people and businesses toward urban, high density, high connectivity environments. CIC and CIC Shared Labs are the cornerstone of the BioPark Innovation District and the leading operators of shared space for innovation and entrepreneurship. The Mayor and City Council of Baltimore (the City Council) approval of the RISE Zone is required. Legislation was introduced into City Council September 21, 2015. A map of the proposed RISE Zone is attached hereto as Exhibit 5.

## Cambridge Innovation Center

## Corporate Overview

Cambridge Innovation Centers' mission is to make the world better through innovation by supporting exceptional entrepreneurs to build the next generation of job-creating, worldimproving businesses. Cambridge Innovation Center does this in the following ways:

- Building hub facilities designed to attract and concentrate innovation actors, including startups, venture investors, and larger firms’ innovation arms, in dense, collaborative workplaces; and,
- Creating programs that increase the level of innovation activity in the city. Where promising programs already exist, CIC partners with them and helps them obtain additional funding. Programming partners are activity-based organizations, initiatives, and groups that specifically identify gaps in an innovation ecosystem (i.e. lack of risk capital, weak entrepreneurial culture, insufficient talent, etc.). CIC programs serve as a catalyst to develop innovation activity in these areas, support a more inclusive innovation community, and build on the existing strengths of the local innovation system.


## History

Cambridge Innovation Center was founded in 1999 in Kendall Square (Cambridge, Massachusetts), and today is the largest cluster of startups in the world, housing more than 800 companies in 433,000 square feet of premium office and co-working space across seven facilities in two states. Since its founding in 1999, CIC has subsequently expanded to Boston, Massachusetts and St. Louis, Missouri. Cambridge Innovation Center companies come from a wide variety of industries and encompass startups, larger companies, capital, and service providers.

## Wexford Partnership

Building on that early success, CIC is expanding nationally and globally. Most recently, CIC opened a new facility as part of Wexford's Knowledge Community in St. Louis, Missouri. Cambridge Innovation Center has signed an agreement to build a similar facility in Baltimore, and is actively identifying other potential cities nationally and globally in which to expand its network of innovation campuses. CIC and Wexford foresee a high degree of interaction within the global network, including flows of talent, companies, and venture capital.

## Program Partners

In total, CIC collaborates with over 250 local groups, including incubators, accelerators, and educational and training programs to provide its tenants and the local community with over 50 business, social, and informational events each month. Cambridge Innovation Center will bring best-in class programming partners to the Project and will also partner with established local programs and organizations.

The Venture Café Foundation (VCF, www.venacar.org) is the not-for-profit sister organization to CIC, dedicated to helping innovators make the world a better place by envisioning, implementing, and managing initiatives and programs that build, strengthen, and connect the innovation community. VCF will locate within CIC to provide programmatic and community support for the Baltimore innovation ecosystem. The VCF oversees five principal programs

- The Venture Café: Organization large weekly gatherings that seek to spark conversation and collaboration between participants and provide a portal for individuals to access the innovation ecosystems (www.vencaf.org).
- The Captains of Innovation Program: Managing a targeted matchmaking program that connects global corporations and startups (www.captains.vencaf.org).
- District Hall: Programming for Boston's first public innovation center, at the center of Boston's Innovation District (www.districthallboston.org).
- The Innovation Visitors Bureau: The visitor bureau for the innovation community (www.vencaf.org/vib/).
- Roxbury Innovation Center: A mission-driven not-for-profit gather and event space available for groups in the Roxbury and Dudley Square communities to provide programs that support local innovators, entrepreneurs and business founders (www.roxburyinnovationcenter.org/).

Cambridge Innovation Center's programming partners include, but are not limited to, the following:

- MassChallenge: The world's largest accelerator program, headquartered in Boston with programs running in multiple locations internationally;
- Youth Cities: A non-profit organization that partners with local schools and innovation leaders to teach middle and high school students entrepreneurial thinking through a variety of programs, including boot camps and hackathons;
- LaunchCode: Non-profit program that pairs developers looking for jobs with companies looking to hire. Programmers train candidates until the programmer decides whether the candidate is qualified for full-time hire; and
- Startup Institute: A non-profit that provides an application-based eight-week career development course for individuals interested in working at, rather than founding, a startup. Following graduation, students are placed with startups seeking employees.


## Measuring Success

Cambridge Innovation Center measures its success through its economic impact. Dozens of companies have grown to international prominence at CIC Cambridge.

Google Android was co-founded by Rich Miner who grew his portion of the company (that later become Google New England) from one to more than 200 people while located at CIC Cambridge. Today, Google has an office with over 800 employees a block away from CIC Cambridge.

Two Massachusetts Institute of Technology (MIT) students founded the next-generation marketing technology startup Hubspot at CIC Cambridge. Hubspot now employs over 800 people within a few block of CIC Cambridge. The company has raised more than $\$ 100$ million in venture capital and recently completed a successful IPO.

Greatpoint Energy, a company revolutionizing the coal industry through groundbreaking coalgastification technology, was founded at CIC Cambridge. In 2012, Greatpoint Energy raised $\$ 430$ million in venture funding and announced a $\$ 1.25$ billion deal to build a series of plants in Western China.

Other examples of well known organizations that got their start at CIC Cambridge include the fibrosis and organ failure therapeutics company Stromedix; prostate cancert therapeutics company Tokai, which recently went public; and MassChallenge, the world's largest venture accelerator.

## Relevant Experience

- CIC@4240, Cortex Innovation Community; St. Louis, Missouri
- Kendall Square; Cambridge, Massachusetts
- CIC Cambridge; Cambridge, Massachusetts
- District Hall; Boston, Massachusetts


## CIC Shared Labs

CIC Shared Labs space will be designed and operated as a hub for high-potential life-sciences and biotech startups. Modeled after Cambridge's LabCentral and operated by the same key personnel, the facility will offer fully permitted laboratory and office space for as many as 25 startups comprising approximately 100 scientists and entrepreneurs. The shared labs, operated by CIC, will provide first-class facilities, administrative support, skilled laboratory personnel, a domain-relevant expert speaker series, as well as the other critical services and support that early-stage companies need to begin laboratory operations day one.

Laboratory infrastructure is extremely costly, and the initial investment is much larger than even the highest quality office space. Lease, fit-out, and permitting of lab space consumes precious resources, both human and capital, that could be better spent fine-tuning technology to prepare for clinical trials or commercialization. The shared labs solve this problem by adopting conscious design choices to optimize use of available space, to facilitate shared use of resources, equipment, and infrastructure, and to obtain the needed compliance documents to operate laboratory space, which is typically an enormous barrier for startup bio and life science companies. Combine this with a goal-oriented understanding of "concierge" services that remove many operational burdens from startup companies, and small research businesses succeed.

The shared labs fulfill a key mission of the BioPark to nurture biotechnical and life science companies in order to drive business creation and economic development in the surrounding communities. It will be a new and different catalyst for technology transfer and commercialization at UM Baltimore and across the entire state system.

## B. Existing Conditions

Despite the strength of its medical institutions and universities, proximity to Washington, D.C., and revitalized downtown, Baltimore has not previously been known as a center for biotechnology or innovation. This situation has changed dramatically with the UM's renewed focus on the commercialization of research and hiring of entrepreneurially-focused researchers and faculty. The first two labs and office buildings in the BioPark are leased to a variety of biotech companies, UM departments, and education institutions and retailers (a complete tenant list can be found at www.umbiopark.com).

The BioPark has served as a focal point for this emerging industry, but in spite of the presence of the UM, there remain high barriers to entry west of MLK Boulevard. There has been little to no development on the west side outside of the BioPark boundaries, and even with the BioPark, the Project has existed as a hole in the ground for the past several years pending the availability of subsidy to stabilize the Project financials. The Project will be an important next step toward creating an urban campus feel for the BioPark, and for introducing key Knowledge Community elements such as an innovation cluster and quality retail. Significantly, the Project will serve as a job engine for historically underserved West Baltimore, creating a demand for goods and services that will spur additional neighborhood-scale economic development opportunities.

Photographs of the existing site conditions are attached hereto as Exhibit 6.

## C. Site Constraints

Despite the significant investment and success of the UM BioPark, West Baltimore Street and the surrounding neighborhoods continue to suffer from a high degree of blight and abandonment. A range of criminal activity predominantly around drug use, plague the neighborhood.

## D. Environmental Constraints

Hillman Consulting, LLC performed a Phase 1 Environmental Site Assessment (the Assessment) in fourth quarter 2014. This Assessment was performed in accordance with the scope and limitations of ASTM Practice E 1527-13, which is the latest version of the E1527 standard published by ASTM.

A regulatory Oil Control Program (OCP) case is associated with the removal of a heating oil underground storage tank from the property in March 2008. Subsurface investigations following the removal of the underground storage tank identified petroleum hydrocarbons in the soil and groundwater at the property. Correction actions to address the subsurface impacted was performed using Modified Fenton's Reagent injections in September through November 2008. The Maryland Department of the Environment (MDE) subsequently closed the OCP case in August 2009.

There was no evidence of any Recognized Environmental Conditions (REC) in connection with the property.

There was no evidence of any Controlled Recognized Environmental Conditions (CREC) in connection with the property.

The closed regulatory OCP case associated with the removal of a 1,000 -gallon heating oil underground storage tank from the property in 2008 is considered to be an Historical Recognized Environmental Conditions (HREC) in connection with the property.

## E. Time Constraints and Schedule

- January 2016: Apply for building permit
- March 2016: Finance closing
- March 2016: Begin construction
- September 2017: First tenant occupancy

This schedule assumes complete passage of the proposed TIF in December 2015.

## F. Required Permits

The Project is fully designed and permitted. Wexford received Urban Design and Architectural Review Panel (UDARP) Final Approval on January 22, 2015 and Planning Commission Approval on June 25, 2015. Construction could begin as soon as the necessary funding sources are committed.

All approvals associated with the University of Maryland BioPark Planned Unit Development (PUD) have been obtained. The relevant zoning information is attached hereto as Exhibit 7.

## G. Site Control

Wexford Maryland BioPark 3, LLC purchased the land in 2009. The land is owned outright.

## H. Project Sources and Uses

The preliminary sources and uses for the Project is shown in Table A on the following page. Additional details relating to the total sources and uses of funds for the Project can be found in Addendum D attached hereto.

Table A
Total Sources and Uses

| Sources and Uses | Total |
| :--- | :---: |
| Sources of Funds |  |
| Developer equity | $\$ 86,363,835$ |
| DBED grant | $\$ 2,500,000$ |
| TIF proceeds | $\$ 17,000,000$ |
| Total sources of funds | $\$ 105,863,835$ |
|  |  |
| Uses of Funds | $\$ 6,061,101$ |
| Land/site costs | $\$ 4,425,403$ |
| Predevelopment costs | $\$ 45,184,483$ |
| Hard construction costs | $\$ 41,342,000$ |
| Tenant improvements | $\$ 3,597,000$ |
| Leasing commissions | $\$ 5,253,848$ |
| Soft costs | $\$ 105,863,835$ |
| Total uses of funds |  |

As subsequently discussed and noted in Addendum D, attached hereto, the Maryland Department of Business and Economic Development (DBED) contribution may be a total of $\$ 5,000,000$ rather than the $\$ 2,500,000$ grant shown in Table A. Wexford has previously pursued the availability of a DBED loan that is provided in addition to the $\$ 2,500,000$ million DBED grant. Wexford has not yet determined if the DBED loan will be utilized as a result of the cost/benefit analysis related to the loan accretion and other available developer equity.

## I. Other Public Assistance

## Tax Increment Financing

Special obligation tax increment financing bonds in the total amount of $\$ 17,500,000$ are proposed to be issued to finance the construction costs associated with the 249,432 square feet 873 W. Baltimore Street building. The proposed special obligation tax increment financing bonds are being issued in conjunction with the RISE and TIF enabling legislation. It is proposed that the bonds will be issued to the developer for a term of twenty years and secured with tax increment revenues generated by the Project and the proton treatment center, as well as a backup special tax. The projected costs proposed to be financed by the bonds are illustrated in Table B.

Table B
Improvement Cost Estimates

| Improvement | Cost Estimate |
| :---: | :---: |
| 873 W. Baltimore Street qualified costs | $\$ 105,863,835$ |

The tax parcels comprising the proposed University of Maryland BioPark Development District (the "Development District") are shown in Table C below.

Table C
Tax Parcels Comprising the Development District

| Account <br> Identifier | Owner | Address | Acres |
| :---: | :---: | :---: | :---: |
| 18090220001 | Wexford Maryland BioPark 3 LLC | 873 W. Baltimore St. | 0.98 |
| 18100203001 B | Maryland Proton Treatment | 850 W. Baltimore St. | 1.49 |
|  | Total | $\mathbf{2 . 4 7}$ |  |

Corresponding tax parcel maps are attached hereto as Exhibit 8. Additionally, a map outlining the boundaries of the Development District is attached hereto as Exhibit 9.

As previously mentioned, the special obligation tax increment financing bonds will be secured by tax increment revenues generated by the proton treatment center and the Project. A summary of the proposed development located within the Development District is shown in Table D.

Table D
Proposed Summary of Development

| Development District ${ }^{1}$ | GSF |
| :---: | :---: |
| Proton Treatment Center | 110,000 |
| Lab - Building 3 (873 W. Baltimore) | 249,432 |
| Total | $\mathbf{3 5 9 , 4 3 2}$ |
| Provided by Wexford Science + Technology. |  |

## Enterprise Zone Tax Credits

As illustrated in Exhibit 10, attached hereto, the Project is located within one of the City's Enterprise Zones. Furthermore, the Enterprise Zone is deemed an Empowerment or Focus Zone for this particular Project. Wexford plans to apply for the Enterprise Zone Tax Credit for the Project. Additionally, it is anticipated that the proton treatment center will also apply for the available Enterprise Zone Tax Credit. The projected dollar figure associated with the receipt of the tax credit is calculated on Schedule XV-A in Addendum A: University of Maryland BioPark Tax Increment Bond Financing Projections. Additionally, the affect of the receipt of the tax credit is factored into the debt service coverage of the tax increment bonds on Schedule XVII-A of Addendum A. The total Enterprise Zone Tax Credit benefit for the Development District is shown in Table E on the following page.

Table E
Projected Development District Enterprise Zone Tax Credits

| Development District | Tax Credit |
| :---: | :---: |
| Proton Treatment Center | $\$ 10,165,473$ |
| Lab - Building 3 (873 W. Baltimore) | $\$ 6,684,834$ |
| Total Enterprise Zone Tax Credits | $\mathbf{\$ 1 6 , 8 5 0 , 3 0 7}$ |

The total Enterprise Zone Tax Credit benefit for the Project is shown in Table F below.
Table F
Projected Project Enterprise Zone Tax Credits

| Project | Tax Credit |
| :---: | :--- |
| Lab - Building 3 (873 W. Baltimore) | $\$ 6,684,834$ |

The Enterprise Zone Tax Credit is a ten year tax credit granted for City real property taxes on commercial property. Property owners receive an annual tax credit in the amount of eighty percent ( $80 \%$ ) of the increase in assessed value from the base assessed value to the improved assessed value for a period of five years. For the remaining five years, the percentage of the tax credit received decreases by ten percent $(10 \%)$ annually. In the eleventh year, full property taxes are paid. Since the Project is located within an Empowerment or Focus Zone, property owners receive an annual tax credit in the amount of eight percent ( $80 \%$ ) of the increase in assessed value from the base assessed value to the improved assessed value for a period of ten years, rather than five years. In the eleventh year, full property taxes are paid.

## Regional Institution Strategic Enterprise (RISE) Tax Credits

As previously noted, the special obligation tax increment financing bonds are being issued in conjunction with the RISE legislation. A RISE District is being created consistent with the RISE legislation and the Project is located within the boundaries of the proposed RISE District, as illustrated in Exhibit 5, attached hereto. Resultantly, the property owner will receive the benefit of the RISE Zone Tax Credit that is available due to the RISE legislation. According to DBED, the property owner must apply for the RISE Zone Tax Credit as a result of its use to finance the construction costs of the Project. The projected dollar figure associated with the receipt of the tax credit is calculated on Schedule XV-B in Addendum A: University of Maryland BioPark Tax Increment Bond Financing Projections. Additionally, the affect of the receipt of the tax credit is factored into the debt service coverage of the tax increment bonds on Schedule XVII-A of Addendum A. The proton treatment center is not located within a RISE Zone. As a result, the proton treatment center is not projected to receive the benefit of the RISE Zone Tax Credit. Furthermore, the Development District benefit resulting from the RISE Zone Tax Credit is the same as the Project. The total RISE Zone Tax Credit benefit for the Project is shown in Table G on the following page.

Table G
Projected Development District \& Project RISE Zone Tax Credits

| Development District/Project | Tax Credit |
| :---: | :--- |
| Lab - Building 3 (873 W. Baltimore) | $\$ 6,629,530$ |

The RISE Zone Tax Credit is a five year tax credit granted for City real property taxes. Property owners receive an annual tax credit in the amount of at least fifty percent (50\%) of the increase in assessed value from the base assessed value to the improved assessed value for the first year. For the remaining four years, the percentage of the tax credit received is at least ten percent ( $10 \%$ ) of the incremental assessed value. For property located within an Enterprise Zone, the five year tax credit is equal to eight percent ( $80 \%$ ) of the increase in assessed value from the base assessed value to the improved assessed value for five years. Furthermore, for property located within an Empowerment or Focus Zone, the five year tax credit is equal to one-hundred percent $(100 \%)$ of the increase in assessed value from the base assessed value to the improved assessed value for five years. Should the property owner choose to reapply for the Empowerment or Focus Zone Credit after the first five years, the property owner is eligible for the Empowerment or Focus Zone Tax Credit in the amount of eight percent ( $80 \%$ ) of the increase in assessed value from the base assessed value to the improved assessed value for the remaining five years. In the eleventh year, full property taxes are paid. As shown in Appendix B and C to Addendum A, it is assumed the property owner reapplies and receives the Empowerment or Focus Zone Tax Credit for the additional five year period.

## Maryland Department of Business and Economic Development Grant

The Maryland Department of Business and Economic Development is providing a $\$ 5,000,000$ loan to support CIC and CIC Shared Labs. Should certain employment targets be met, $\$ 2,500,000$ of this loan will convert to a grant.

## J. LETTER(S) OF INTENT

An outline of the terms of the DBED grant as provided by DBED to Wexford is attached hereto as Exhibit 11.

## K. Maps Relating to the Project

Each of the maps relating to the Project has been specifically identified in previous sections correlating to the text that best describes the representation.

## L. Special Taxing District

Consistent with City policy, a special taxing district is proposed to be created for the purposes of levying and collecting special taxes in the event the available tax increment revenues are insufficient to repay debt service. The proposed University of Maryland BioPark Special Taxing District (the "Special Taxing District") is proposed to consist of a sole parcel, the parcel on
which the Project will be constructed. Table H illustrates the tax parcel comprising the Special Taxing District.

Table H
Tax Parcels Comprising the Special Taxing District

| Account <br> Identifier | Owner | Address | Acres |
| :---: | :---: | :---: | :---: |
| 18090220001 | Wexford Maryland BioPark 3 LLC | 873 W. Baltimore St. | 0.98 |

A map outlining the boundaries of the Special Taxing District is attached hereto as Exhibit 12.

## V. City Charter and TIF Enabling Act

The developer's budget related to the proposed bond issue is previously shown in Table B. This budget has been provided to the City's bond counsel for preliminary review and discussions have been held between bond counsel, developer's counsel, and the developer concerning the proposed improvements. The financing of the proposed improvements is expected to be consistent with the improvements which are permitted to be financed under Sections 5-1401 to 51407 and Sections 12-201 to 12-212 of the Economic Development Article of the Maryland Code, which are related to RISE Zones (the RISE legislation), as well as Article II, Section 62 and 62A of the Baltimore City Charter (the Charter).

## VI. Inclusionary Housing

There is no residential component proposed for the Project. As a result, there are no regulations under which the Project must comply.

## VII. Private Sector Contribution

In reviewing the gap analysis, MuniCap also reviewed the developer's share of investment in the project compared to the City's guidelines for private versus public investment in a partnership project.

The purpose of this guideline is to evaluate the City contribution to other sources of funds, as it is the City's goal to leverage the investment it makes in a project. This results in each dollar of City investment having a greater impact. This guideline also ensures that the City is not making too large of a share of the total investment; that is, other parties are also investing in the project. The contribution from sources other than the City is estimated to be $\$ 88,863,835$ for the entire development, representing eighty-five percent ( $84 \%$ ) of the total sources of funds, based on the information presented on Summary Schedule 1 of Addendum D and shown in Table I below.

## Table I

Private Contribution

| Sources of Funds | Amount | Percent <br> of Total |
| :---: | :---: | :---: |
| City Sources: <br> TIF Proceeds <br> Other Sources: <br> Developer equity <br>  <br> Economic Development grant | $\$ 17,000,000$ | $16 \%$ |
| Sub-total other sources | $\$ 86,363,835$ | $82 \%$ |
| Total sources of funds | $\$ 2,500,000$ | $2 \%$ |

This results in $\$ 5.23$ of other sources of funds for each dollar of City investment as calculated in Table J below. This ratio fall below the range expected with the City's TIF policy, which are eight to twelve private dollars per dollar of public investment.

Table J
Private to City Investment

| Sources of Funds | Dollar for Dollar <br> Investment |
| :---: | :---: |
| Private sources of funds | $\$ 88,863,835$ |
| City sources of funds | $\$ 17,000,000$ |
| Private to City investment | $\mathbf{\$ 5 . 2 3}$ |

## VIII. Advances the City's Land Use, Economic Development and Public IMPROVEMENT GOALS

This Project is about building the infrastructure critical to $21^{\text {st }}$ century job creation. At the core of all of the City's goals are training, job creation, small business development, and entrepreneurship. CIC and CIC Shared Labs are infrastructure for the entrepreneur and small businesses. Rather than using economic development incentives to support the growth of one company, the same incentive can be used to support the creation and growth of hundreds of Baltimore businesses. Additionally, CIC and Lab Central are the industry leaders in providing the physical space and human capital resources to drive innovation.

## City Goals

This Project will advance key goals of the Baltimore Development Corporation's (BDC) and the City's Comprehensive Economic Development Strategy for Baltimore 2014: Seizing the Momentum, Building a Bright Future: Jobs. Investment. Growth. A review of the eight major strategies outlined in the aforementioned report, in conjunction with the Project, indicate that there are three specific strategies the Project most clearly assist the City to fulfill. The eight major strategies are as follows:

1. Focus on Business Retention and Attraction
2. Improve Baltimore's Resources for Small Business and Entrepreneurship
3. Foster Economic Inclusion
4. Expand Support for Mid-Size Companies
5. Recruit Nationally and Internationally
6. Focus Economic Development Efforts on Six Key Industry Clusters
7. Use Investments and Real Estate Development to Support Economic Goals
8. Work Strategically to Position Baltimore Regionally and Nationally as a Premier Place to do Business and Invest

## Strategy 2. Improve Baltimore's Resources for Small Business and Entrepreneurship

CIC and CIC Shared Labs are designed to support startups and growing businesses. CIC and CIC Shared Labs provide all-inclusive, highly flexible services so that entrepreneurs and small businesses can focus on their product rather than on running a work place. All of their services are unmetered and bundled in one monthly price.

CIC Services:

- Office furniture and flexible offices to accommodate growth overnight
o Co-working desks to 25+ employee offices
- Conference rooms, phone booths, auditoriums
- Internet, phones, printing, copying, and technical support
- Concierge services
- Fully stocked kitchens
- Programming and innovation activities

CIC Shared Lab Services:

- Functional, permitted lab space
o Individual lab benches
o Private lab suites design for up to eight scientists
- Waste handling
- Lab equipment specific for bioresearch
- Conference rooms, event space, and kitchens
- Programming and innovation activities specific to life sciences


## Strategy 3. Foster Economic Inclusion

The Project partners have been working collaboratively to build a robust community engagement program, which is essential to creating a dynamic and inclusive economy. A major component of this strategy is ensuring that opportunities that arise in the innovation ecosystem are inclusive and accessible to all, especially traditionally underrepresented populations.

- CIC and VentureCafe Foundation. CIC and VentureCafe Foundation are committed to community engagement and will develop a positive and productive relationship with the community surrounding the BioPark. At CIC's Cambridge, Boston, and St. Louis locations, CIC has worked with a wide range of community partners to broaden exposure to the innovation economy. Examples of collaborations include a partnership with the Cambridge Office of Workforce Development to place students each summer with CIC startups, and free event space for organizations also working to make the innovation economy inclusive.

CIC's sister non-profit, VentureCafe Foundation seeks to:

1) Build and connect communities of innovation,
2) Expand the definition of innovation and entrepreneurship, and
3) Build a more inclusive innovation economy.

VentureCafe Foundation accomplishes this mission through hosting free, weekly gatherings (attracting up to 400 people per event at its St. Louis location), sponsoring office hours for startups, and organizing free seminars on topics such as women in entrepreneurship.

- LaunchCode. LaunchCode is a coder development program that seeks to connect job seekers with coding education and then connect them with employers seeking qualified coders. They will be located within the Project. LaunchCode specializes in identifying talented, drive individuals who lack the traditional credentials for a job in technology, and assessing these individuals for skill, aptitude, and drive. Candidates are then offered mentorship and education programs to prepare them for full-time employment and those who are successful are placed into paid apprenticeships with a broad range of employers.

The premise of LaunchCode's work is to expand opportunities for individuals with the ambition and aptitude needed to fill the nearly 20,000 open information technology
positions in the Baltimore region, but lack the traditional qualifiers, often a college degree and three to five years of work experience, to even be invited to interview. Through collaboration with local workforce development organizations and education institutions that can provide access to free programming courses, LaunchCode will be able to match residents of Southwest Baltimore with career-track coding opportunities. In their pilot year in St. Louis, LaunchCode placed 144 people in paid apprenticeships with more than 80 employers. Over ninety percent ( $90 \%$ ) of apprentices were converted to full-time hires at an average apprenticeship length of 94 days.

LaunchCode is working to obtain the funding needed to open a Baltimore location. Wexford and LaunchCode are currently in preliminary discussions.

CIC, VentureCafe Foundation and Wexford will continue to build existing community partnerships and programming focused on making the BioPark more inclusive and accessible. These partnerships include:

- The Southwest Partnership. In addition to providing financial support for the organization, Wexford, the BioPark and the UM have actively participated in the infrastructure of the organization, sitting on committees and the board, as well as working closing alongside other community residents on the community revitalization plan.
- The Baltimore City Community College's (BCCC) Life Sciences Institute. Located in Building Two of the BioPark, the partnership between BCCC Life Sciences Institute, Wexford, and the UM has provided access and opportunity for neighborhood residents to find employment in the life sciences workforce. Many BioPark tenants have BCCC Life Sciences Institute students as interns, and some have found permanent positions.
- UM Community Engagement Programs. Wexford and the BioPark support the strong engagement of the UM's School of Social Work, Medicine and other programs in the Southwest Baltimore neighborhood schools adjacent to the BioPark.
- BioTechnical Institute of Maryland. A specialized lab technician training program offered to unemployed and underemployed Baltimore residents at no cost. Participants graduate with in-demand lab skills which prepare them for successful careers in the life science sector. The BioTechnical Institute of Maryland has graduated 345+ technicians, some of whom have been employed by companies in the BioPark.
- New Programming. Other possibilities include educational programming, including speakers' series on the entrepreneurial process for high school students, internship programs for high school students with small startups and entrepreneurs, and workforce programs to teach and disseminate skills required to work in jobs in the innovation economy, like project management and computer programming.


## Strategy 5. Recruit Nationally and Internationally

CIC and LabCentral have attracted nationally acclaimed companies as sponsors, co-tenants, member clients, and partners. CIC Cambridge has been home to Google, Android, Apple, Microsoft, Royal Dutch Shell, and numerous other national and global businesses. When CIC announced it was opening at the St. Louis, Missouri location, Boeing Ventures moved its entire research and development team into the same building.

LabCentral is sponsored by Johnson \& Johnson, Amgen, Locke Lord, ThermoFisher, and Roche, among many others. Pfizer opened a 280,000 square foot research and development facility next door to LabCentral, which brought 1,000 employees into Cambridge, Massachusetts.

## MAYOR GOALS

As outlined by the Mayoral Initiatives, there are five areas in which the Mayor strives to improve: better schools and youth opportunities, safer streets, stronger neighborhoods, growing economy, cleaner and healthier City, and innovative government. The Project most clearly improves two of the five areas as subsequently described.

## 1. Growing the Economy

The tenants of the Project are poised to have a significant impact on Baltimore's technology sector. It is expected that many of the companies that start up in this new innovation district will stay in the area as they grow, so that they can continue to be part of the innovation ecosystem. This dynamic has been seen in Cambridge and Boston, where CIC estimates it has generated between 35,000 and 40,000 local innovation economy jobs.

In addition to startup companies, their acquirers, and venture capital, CIC also forms a magnet for large innovation companies. Amazon, Apple, Facebook, Disney, Dutch Royal Shell, Boeing, and many others have established substantial presences within CIC buildings, in most cases their first presence in the respective regions.

CIC's unique approach has proven to attract substantial venture capital and the presence of corporate technology giants. CIC develops a city's entrepreneurial talent base and assists a city in becoming globally competitive as an innovation hub. Companies started at CIC have seen success large and small. Android, the largest mobile phone operating system in the world, was founded at CIC. After being purchased by Google, the Android team's core strength and the innovation environment of Kendall Square attracted Google to start an operation in Cambridge. Google's Cambridge office, which stayed a CIC client for many years until it outgrew CIC's space, now spans over 300,000 square feet, which is bigger than the entire CIC Cambridge campus, and employs over 800 people.

The strength of the entrepreneurial ecosystem at CIC has brought other benefits as well, attracting funding sources to the area. CIC's two main Cambridge buildings are home today to more than $\$ 7$ billion of venture capital, putting just this CIC location ahead of most U.S. states, and approximately equivalent to all the venture capital in Europe.

The Project will have a tremendous catalytic effect on the BioPark, the surrounding area, and Baltimore as a whole. Within the BioPark, construction of the Project will help spur the continued buildout of the BioPark, which includes over one million square feet of additional mixed use development, to include an extended stay hotel. In the Hollins Market neighborhood, the Project will advance the development of the 38,000 square foot historic Lion Brothers building and the 15,000 square foot historic St. Peter the Apostle school, both historic preservation adaptive reuse projects. Continued development at the BioPark will also help drive the economics of a restoration of the historic Hollins Market, the surrounding commercial district, and the shops along West Baltimore Street. The Project will generate significant demand for goods and services in and around the BioPark, facilitating the growth of retail establishments, neighborhood small businesses, and increased job creation.

## 2. Stronger Neighborhoods

The community impact of the Project is enhanced by the fact that it is not just another building in a research park, but will be a significant step towards creating a Knowledge Community, a dense, twenty-four/seven, mixed used, high energy environment that is integrated into the urban fabric, attracting a creative and diverse group of people. Knowledge Communities seek robust community partnerships and find ways to include the general public in the science and technology activities happening inside the park, these relationships are essential to creating a dynamic ecosystem, and sought out by tenants like CIC and VentureCafe Foundation. Drawing inspiration from successful global innovation centers, Wexford now looks to integrate high performance research buildings into a broader mixed use framework of universities, creative industries, housing, retail, and transit.

Making places that are attractive to young people seeking to live in urban, walkable neighborhoods is a key component of creating the critical mass for a successful Knowledge Community. To advance the vision of West Baltimore Street as a pedestrian-friendly boulevard, the Project is designed to generate street-level activity and enhance the pedestrian experience. Ground floor retail uses like Milk \& Honey Market will draw additional pedestrian traffic along West Baltimore Street, which will help encourage additional retail activity in the corridor and the surrounding West Baltimore communities. More pedestrians and outdoor seating at the café will also pub more "eyes on the street," increasing the safety and security of all street users. The building base is also designed with the pedestrian in mind. The large glass openings create a high level of visibility into the lobby and ground floor retail, which will help to draw users into the space and create interest along the streetscape.

## Citywide Master Plan Goals

As more fully described in the City of Baltimore Comprehensive Master Plan 2007-2012, Revised July 9, 2009, there are four broad areas in which the City further identified specific related goals and objectives. Those four broad areas include: live, earn, play, and learn. The most appropriate goals and objectives supported by the Project are subsequently conveyed.

## Earn - Goal 1: Strengthen Identified Growth Sectors

## Objective 2: Retain and Attract Business in Bioscience

Baltimore is losing bioscience researchers and workers due to a lack of affordable lab space. CIC Shared Labs provides an opportunity to commercialize research quickly and economically. CIC Shared Labs provides a platform to retain the human and intellectual capital generated by the City's strong anchor institutions and to attract new bio and life science companies interested in being a part of an innovation community.

Objective 4: Retain and Attract Business in Computer, Internet, Data, and Software (CIDS) Related Services

Approximately thirty-two percent (32\%) of CIC's clientele are software, web, or mobile companies. CIC has a long history of supporting CIDS-related businesses.

## Learn - Goal 2: Capitalize on Untapped Potential of Higher Education Institutions

Objective 1: Attract and Retain College Students and Recent Graduates
Baltimore has numerous institutions producing an impressive number of college graduates each year. These graduates are attracted to the startup and innovation community. Building a robust innovation ecosystem at the BioPark and providing access to the world's best innovation spaces, helps retain millennials.

## IX. But For Test

A summary of the quantitative findings and the 873 West Baltimore Street project pro forma is found in the Pro Forma Analysis of 873 W. Baltimore (the "But For Analysis") attached hereto as Addendum D.

Upon detailed review of the proposed Project, along with the corresponding assumptions used to estimate the return on the Project, there are several factors justifying the but for test. Factors justifying the but for test are reviewed on both a qualitative and a quantitative basis. Qualitative factors include items such as costs constraint and market constraints; whereas, quantitative factors include the financial returns on the development to the developer, the private investment in the Project, and the financial gap that exists within the sources of financing to ensure the Project is feasible.

## Qualitative

The proposed Project is located within the greater UM BioPark development. As currently proposed, tax increment financing is being used to finance the vertical construction of the Project through the RISE enabling legislation. The Project is proposed to be constructed as an office and lab building, of which a portion will be fit-out as the CIC. Specifically, 103,064 square feet of the total 249,432 square feet will be fit-out for housing CIC. The CIC is a space in which entrepreneurs can occupy and rent out the space for early stage start-up space or co-working space, acting as a business incubator. Business owners and operators can be temporary or transition into long-term tenancy with the CIC having providing all necessary supplies and materials to complete standard business activity.

It is proposed that the TIF will be used to finance the extraordinary costs associated with constructing, fitting out, and operating the CIC. As proven in other markets, the CIC creates jobs, acts a catalyst for economic development, provides for the transfer of thoughts and information, and is a center for both collaboration and innovation. The presence of the CIC within the greater UM BioPark creates a synergy that will further enhance the existing tenants of the UM BioPark development.

For the CIC to function as intended, the costs to provide operational materials, specific to the CIC lab space, requires a greater cost than usual for tenant fit-out. The additional costs not typically included in tenant fit-out includes furniture and fixtures, personal property, readily available lab equipment and materials, and operating expenses for the shared 103,064 square feet of space. Though the space is commanding market rent, and the typical construction costs to construct the space has been reviewed and is deemed to be reasonable, the tenant fit-out costs are greater than the average tenant fit-out costs. These extraordinary costs associated with the fit-out of the CIC space cannot be offset by increasing the requested rents since the rents that the developer is currently assuming are deemed to be market. In summary, the cost of lab space for R\&D start-ups, compared to the rents that can be obtained for this incubator space, results in a deficit. For this reason, the CIC would not be possible and the development of the Project would not be justified, or feasible, without tax increment financing.

## Quantitative

The developer's pro forma has been reviewed and compared to third party market standard sources. Specifically, the developer's costs, sources of funding and assumptions for net operating income were reviewed. Various resources were used to review and compare the developer's pro forma to market standards. The developer's costs were compared to estimates generated by Marshall \& Swift. In addition, assumptions used by the developer to estimate the project's revenues and expenses were compared to third party sources such as the Real Estate Investor Survey published by Price Waterhouse Coopers and market data and discussed with the Maryland State Department of Assessments and Taxation. Based on this review, the overall costs estimated for the project and the income generated by the project is reasonable. In addition, the developer's assumptions are reasonably consistent with the aforementioned third party sources.

Overall sources and uses were generally reviewed and found to be reasonable. Each of the sources of financing for the Project developer were reviewed to ensure assumptions and amounts illustrated are reasonable. Discussions were held with individuals at the Maryland State Department of Assessments and Taxation, as well as additional information was requested from the developer. It has been determined that the sources of financing are reasonable.

The review of the developer's pro forma and sources of financing has enabled MuniCap, Inc. to draw a conclusion that but for the assistance from the City, the project would not have the ability to attract a tenant such as CIC, which provides the incubator space. A review of project yield, on the basis of cost and net operating income, was completed since the Project is proposed to be comprised of only income producing property. The market yield generated by the Project results in a return that is below market. The returns projected by the developer, including the TIF incentive provided by the City, do not generate an extraordinary return on investment to the developer.

## X. Public Benefit

As articulated in Section IV the proposed Project will facilitate interaction between the greater BioPark, the UM, and the neighborhood. Furthermore, it will act as an incubator to enhance employment opportunities in the greater Baltimore region. The construction of the CIC and the CIC Shared Labs is imperative to nurturing the innovative district and Knowledge Community.

## TAX BASE

Currently, the two properties comprising the Development District have an assessed value of $\$ 2,368,100$. In the final year in which bonds are proposed to be outstanding, the Development District is projected to have an assessed value of $\$ 192,969,725$ and generate approximately $\$ 4,337,959$ annually in City real property taxes using the current tax rate.

Table K
Projected Increase in Tax Base

|cccc|| | Development District | Current | Year 20 | Increase |
| :---: | :---: | :---: | :---: |
| 873 W. Baltimore Street ${ }^{1}$ | $\$ 1,068,300$ | $\$ 101,256,661$ | $\$ 100,188,361$ |
| 850 W. Baltimore Street ${ }^{1}$ | $\$ 1,299,800$ | $\$ 91,713,064$ | $\$ 90,413,264$ |
| Total assessable base $^{1}$ | $\$ 2,368,100$ | $\$ 192,969,725$ | $\$ 190,601,625$ |
| Baltimore City tax rate fiscal year 2015-2016 $^{\text {Projected tax revenues }}$ | $\$ 2.248$ | $\$ 2.248$ | - |
| Proce | $\$ 53,235$ | $\$ 4,337,959$ | $\$ 4,284,725$ |

Current assessable base represents the current assessed value as report by the Maryland State Department of Assessments and Taxation.

## Employment and Wage Estimates

Fiscal impact analyses were prepared and are attached as Addenda B and C to estimate the fiscal impacts to the City resulting from the total development within the Development District, as well as the Project. The analyses also include estimates of employment impacts from the Development District and Project.

A description of the development in the Development District used to project the total employment impacts is shown in Table L.

Table L
Total Development District Development

| Development District ${ }^{\mathbf{1}}$ | GSF |
| :---: | :---: |
| Proton Treatment Center | 110,000 |
| Lab - Building 3 (873 W. Baltimore) | 249,432 |
| Total | $\mathbf{3 5 9 , 4 3 2}$ |
| Provided by Wexford Science + Technology. |  |

A description of the development used to project the Project employment impacts is shown in Table M.

Table M
Total Project Development

| Project | GSF |
| :---: | :---: |
| Lab - Building 3 (873 W. Baltimore) | 249,432 |
| Provided by Wexford Science + Technology. |  |

## Projection of Impacts

MuniCap, Inc. estimated future impacts to the City using a combination of accepted approaches for projecting employment impacts.

To calculate employment impacts, MuniCap, Inc. used IMPLAN Professional 3.0 software developed by IMPLAN Group LLC. IMPLAN is an industry-accepted economic impact assessment software system with which trained users can create local area Social Accounting Matrices and develop Multiplier Models that can be used to estimate detailed economic impacts of new firms moving into an area, special events such as conventions or professional sports games, recreation and tourism, military base closures, and many more activities. For the inputs used in developing the models, such as square footage and employees, MuniCap, Inc. relied on a variety of sources, which are noted in Addenda B and C, attached hereto.

Temporary construction employment impacts were calculated based on estimates generated by Marshall \& Swift, as well as development budgets and pro formas supplied by Wexford.

The specific calculations used to estimate these impacts, along with the sources of the underlying assumptions, are included in Addenda B and C, attached hereto.

## Results of the Analysis - Employment Impacts

Table N on the following page outlines the permanent projected employment impacts resulting from the development in the Development District. Direct impacts are jobs at the new development; indirect impacts are jobs created within City, but not at the new development. The construction of the property within the Development District is projected to create an estimated total 1,475 permanent jobs on site and 2,128 permanent jobs in the City, including jobs created from the indirect and induced effects of the employees at the site. As calculated by IMPLAN, "jobs" represent distinct one-year position, and can be either full-time or part-time. Similarly, "labor income" as calculated by IMPLAN includes all payroll expenses, including wages and salary, benefits, and payroll taxes. IMPLAN Group, LLC provides multipliers for purposes of converting estimates of total jobs to estimates of full-time employees ("FTE's"), and for converting estimates of total labor income into estimates of employee wages. The methodology is more fully illustrated in Addenda B and C, attached hereto. The subsequent tables illustrate both total jobs and total income.

The development of the Development District will also result in significant temporary employment impacts. These positions are based on the construction efforts associated with the project and are considered to be one-time impacts. Although the impacts will be spread throughout the construction period, there are represented as one-year impacts in Table N.

Table N

## Development District Employment Impacts

| Development District Employment Impacts | Jobs | Annual Compensation |
| :--- | :---: | :---: |
| Total permanent direct impacts | 1,475 | $\$ 144,100,558$ |
| Total permanent indirect impacts | 653 | $\$ 39,083,231$ |
| Total permanent impacts | $\mathbf{2 , 1 2 8}$ | $\mathbf{\$ 1 8 3 , 1 8 3 , 7 8 9}$ |
| Total temporary direct impacts: | 600 | $\$ 55,567,766$ |
| Total temporary Indirect impacts | 313 | $\$ 19,367,983$ |
| Total temporary impacts | $\mathbf{9 1 3}$ | $\mathbf{\$ 7 4 , 9 3 5 , 7 4 9}$ |

Similar to the permanent and temporary employment impacts projected for the Development District, estimates were also generated for the Project. Table O illustrates the estimate permanent and temporary employment impacts to the City for the Project.

Table 0
Project Employment Impacts

| Project Employment Impacts | Jobs | Annual Compensation |
| :--- | :---: | :---: |
| Total permanent direct impacts | 1,023 | $\$ 111,301,087$ |
| Total permanent indirect impacts | 435 | $\$ 25,412,427$ |
| Total permanent impacts | $\mathbf{1 , 4 5 8}$ | $\mathbf{\$ 1 3 6 , 7 1 3 , 5 1 4}$ |
| Total temporary direct impacts: | 378 | $\$ 34,998,615$ |
| Total temporary Indirect impacts | 197 | $\$ 12,198,665$ |
| Total temporary impacts |  | $\mathbf{5 7 5}$ |
| $\mathbf{\$ 4 7 , 1 9 7 , 2 8 0}$ |  |  |

XI. Positive Net Fiscal Impact

## Fiscal Impact Analysis

## Purpose of Analysis

As previously mentioned in Section X, the purpose of the fiscal impact analyses, attached as Addenda B and C, is to estimate the fiscal impacts to the City resulting from the Development District, as well as solely the Project. This summary provides an estimate of the additional tax revenues and expenses that the City will receive or incur as a result of the Development District and Project and contrasts the expected costs with expected revenue. The analysis shows that the expected revenues generated by the Development District and Project exceed the corresponding costs to the Baltimore City. A description of the development used to project the fiscal impacts is shown above in Tables L and M , respectively.

## Projection of Impacts

Based on the projected development pro forma, MuniCap, Inc. estimated future impacts for Baltimore City using a combination of accepted approaches for projecting fiscal impacts.

For the calculation of economic benefits, primarily in the form of increased tax revenue, MuniCap applied the actual taxing methodology by multiplying the applicable tax rate by the estimated taxable item in question whenever possible. For instance, real property taxes were estimated by multiplying estimated assessed value by the current applicable real property tax rate. Other revenues calculated in this manner include personal property taxes, energy taxes, personal income taxes, and recordation taxes. In some instances, revenues were estimated on a per capita basis, typically when the revenue source was not in the form of a tax. In still other cases, revenues that will likely increase as a result from the development of the Development District and proposed Project were dismissed altogether, as they represent charges for services that will likely be offset by the cost of providing the services.

To calculate fiscal impacts in the form of additional costs to Baltimore City, MuniCap reviewed the budget to determine the most appropriate approach to estimating potential increases. In some cases, expenses were estimated on a per capita basis using residents or employees, while in other cases, another pro rata basis was used, such as thousands of total tax revenues. Finally, in cases when a charge for services was eliminated from the estimation of revenues, the corresponding costs for services were also eliminated from the estimation of expenses.

While estimating impacts in future years, MuniCap uniformly assumed a net increase in both revenues and expenses of three percent per year. Tax rates are expressed at their level as of the date of this analysis.

The specific calculations used to estimate these impacts, along with the sources of the underlying assumptions, are included in Addenda B and C, attached hereto.

## Results of the Analysis

## A. Net Fiscal Impact

Table P outlines the projected fiscal impacts for the Development District for a period of twenty years, ending in fiscal year 2035-2036. Annual revenues and expenditures are shown at full buildout in current dollars. The twenty year cumulative revenues and expenses reflect projected absorption and an inflation factor of three percent.

## Table $\mathbf{P}$ <br> Development District Net Fiscal Impact to the City of Baltimore

| Baltimore City | Annual ${ }^{1}$ | 20 Years ${ }^{2}$ |
| :---: | :---: | :---: |
| Projected City Revenues: |  |  |
| Real property tax increment revenues | \$1,726,179 | \$36,249,764 |
| Supplemental special tax revenue ${ }^{3}$ | \$221,250 | \$2,212,500 |
| Less: TIF debt service paid by property taxes ${ }^{4}$ | (\$1,610,882) | (\$33,828,522) |
| Net real property tax increment revenues | \$336,547 | \$4,633,742 |
| Special taxes paid by the developer | \$401,127 | \$4,813,528 |
| Net real property tax increment revenues to the City | \$737,675 | \$9,447,269 |
| Personal property tax revenues | \$171,701 | \$4,502,933 |
| Enterprise Zone Tax Credit reimbursement revenues | \$923,080 | \$11,076,966 |
| Energy tax revenues | \$75,865 | \$1,989,588 |
| Personal income tax revenues - employees | \$1,028,343 | \$26,968,794 |
| Local recordation tax revenues ${ }^{5}$ |  | \$1,135,646 |
| Transfer tax revenues ${ }^{6}$ |  |  |
| Additional revenues | \$81,232 | \$2,130,361 |
| Projected City revenues | \$3,017,896 | \$57,251,558 |
| Projected City Expenses | $(\$ 611,826)$ | (\$15,833,161) |
| Net fiscal impact to Baltimore City | \$2,406,071 | \$41,418,397 |
| Projected change in State aid to schools ${ }^{7}$ | $(\$ 722,508)$ | (\$15,172,676) |
| Total fiscal impact to Baltimore City | \$1,683,562 | \$26,245,721 |
| ${ }^{1}$ Represents the average annual tax increment revenues generated by the University of Maryland BioPark development over the 20 year period shown in the projections. Supplemental special taxes, special taxes paid by the developer and Enterprise Zone Tax Credit reimbursement revenues are shown as an average for the years in which the revenues are projected to be received. <br> ${ }^{2}$ Projected revenues for twenty years are shown cumulatively, assuming inflation of three percent annually. <br> ${ }^{3}$ Assumes $\$ 250,000$ is paid as a supplemental special tax during the ten years in which the Enterprise Zone and Rise Tax Credits are applied to 873 W . Baltimore Street. Assumes $25 \%$ of the $\$ 250,000$ supplemental special tax is paid in year one, $60 \%$ of the $\$ 250,000$ supplemental special tax is paid in year two, and the full amount is paid for years eight through ten. <br> ${ }^{4}$ Represents the average annual debt service over 20 years. <br> ${ }^{5}$ Since recordation taxes are a one-time revenue, excludes from the annual average. <br> ${ }^{6}$ According to Wexford Science + Technology, the property will not be sold. As a result, transfer taxes are not assumed to be incurred. <br> ${ }^{7}$ As further detailed in Addenda B and C, factors such as student enrollment and wealth are used to determine the amount of State aid related to schools that each jurisdiction will receive. In the event the projected wealth exceeds the projected student enrollment, there is a reduction in the amount of the State aid received by each jurisdiction. |  |  |
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Table Q outlines the projected fiscal impacts for the Project for a period of twenty years, ending in fiscal year 2035-2036. Annual revenues and expenditures are shown at full buildout in current dollars. The twenty year cumulative revenues and expenses reflect projected absorption and an inflation factor of three percent.

Table Q
Project (Lab Only) Net Fiscal Impact to the City of Baltimore

| Baltimore City | Annual ${ }^{1}$ | 20 Years ${ }^{2}$ |
| :---: | :---: | :---: |
| Projected City Revenues: |  |  |
| Real property tax increment revenues | \$802,895 | \$16,860,794 |
| Supplemental special tax revenue ${ }^{3}$ | \$184,375 | \$2,212,500 |
| Less: TIF debt service paid by property taxes ${ }^{4}$ | (\$1,610,882) | (\$33,828,522) |
| Net real property tax increment revenues | $(\$ 623,612)$ | (\$14,755,228) |
| Special taxes paid by the developer ${ }^{5}$ | \$481,353 | \$4,813,528 |
| Net real property tax increment revenues to the City | $(\$ 142,259)$ | (\$9,941,700) |
| Personal property tax revenues | \$119,154 | \$3,048,616 |
| Enterprise Zone Tax Credit reimbursement revenues | \$599,423 | \$5,994,229 |
| Energy tax revenues | \$44,159 | \$1,129,824 |
| Personal income tax revenues - employees | \$795,370 | \$20,349,995 |
| Local recordation tax revenues ${ }^{6}$ |  | \$612,619 |
| Transfer tax revenues ${ }^{7}$ |  |  |
| Additional revenues | \$56,372 | \$1,442,317 |
| Projected city revenues | \$1,472,218 | \$22,635,900 |
| Projected City Expenses | (\$416,571) | (\$10,582,334) |
| Net fiscal impact to Baltimore City | \$1,055,647 | \$12,053,566 |
| Projected change in State aid to schools ${ }^{8}$ | (\$453,376) | $(\$ 9,520,897)$ |
| Total fiscal impact to Baltimore City | \$602,271 | \$2,532,669 |
| ${ }^{1}$ Represents the average annual tax increment revenues generated by the University of Maryland BioPark development over the 20 year period shown in the projections. Supplemental special taxes, special taxes paid by the developer and Enterprise Zone Tax Credit reimbursement revenues are shown as an average for the years in which the revenues are projected to be received. <br> ${ }^{2}$ Projected revenues for twenty years are shown cumulatively, assuming inflation of three percent annually. <br> ${ }^{3}$ Assumes $\$ 250,000$ is paid as a supplemental special tax during the ten years in which the Enterprise Zone and Rise Tax Credits are applied to 873 W . Baltimore Street. Assumes $25 \%$ of the $\$ 250,000$ supplemental special tax is paid in year one, $60 \%$ of the $\$ 250,000$ supplemental special tax is paid in year two, and the full amount is paid for years eight through ten. <br> ${ }^{4}$ Represents the average annual debt service over 20 years. <br> ${ }^{5}$ Represents the projected special taxes to be paid after the available tax increment revenues from the proton treatment center are applied and result in one-hundred percent debt service coverage for the full University of Maryland BioPark Development District. <br> ${ }^{6}$ Since recordation taxes are a one-time revenue, excludes from the annual average. <br> ${ }^{7}$ According to Wexford Science + Technology, the property will not be sold. As a result, transfer taxes are not assumed to be incurred. <br> ${ }^{8}$ As further detailed in Addenda B and C, factors such as student enrollment and wealth are used to determine the amount of State aid related to schools that each jurisdiction will receive. In the event the projected wealth exceeds the projected student enrollment, there is a reduction in the amount of the State aid received by each jurisdiction. |  |  |
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As shown on Schedule XIV of Addenda B and C, the City's internal rate of return for the Development District is estimated to be $11.71 \%$ and the City's internal rate of return for the Project is estimated to be $3.51 \%$.

## Sources

Employment impacts for the Development District and the Project were calculated using IMPLAN software developed by IMPLAN Group LLC. The software calculates labor income and the number of jobs based on industry multipliers derived from national income and product accounts data published by the U.S. Bureau of Economic Analysis. This data is then indexed to local industry data compiled in the U.S. Economic Census. Development data was provided, by Wexford Science + Technology. Assessed values for tax increment projections were estimated by MuniCap, Inc. based on data from the Maryland State Department of Assessment and Taxation and the Assessor's Office for Baltimore City.

## Limitations

Projecting fiscal and employment impacts is not a precise science. Furthermore, there are different methods of projecting fiscal and employment impacts and different analysts will arrive at different conclusions. The conclusions in this analysis are not intended to be precise results, but rather, reasonable estimates that provide a general indication of the fiscal and employment impacts to the Baltimore City from the Development District and the Project.

## XII. RISK to the City

Special obligation tax increment financing bonds are proposed to be issued by the City for the purpose of financing specific improvements. As a result of the issuance of bonds, there are several risks to the City; however, several mechanisms have been implemented to mitigate the City's risk.

One risk is that the developer may not move forward with the development once the tax increment financing district and documents authorizing the issuance of bonds have been approved by the City. Provided that is the case, the tax increment financing district would remain in place but the bonds would not be issued and debt would not be incurred.

Another risk is that the bonds will be issued prematurely. However, bonds will not be issued until the Project is ready to move forward and the developer can provide proof that other financing and equity is in place. Additionally, letters of intent with tenants for the Project will need to be in place to facilitate bond market requirements.

An in-depth due diligence process will be conducted prior to the issuance of bonds ensuring all necessary factors related to the Project have been investigated. For, example, independent studies, such as a market study and an appraisal, will be conducted to ensure the Project's feasibility.

There is also the risk associated with either a slower absorption rate than originally expected or the property is generating tax increment revenues less than originally projected for the development. To mitigate this risk, a special tax will be imposed on the property in the tax increment financing district to ensure sufficient revenues are available to pay debt service. The special tax collected will be in the amount of the shortfall existing between the available annual tax increment revenues and the annual debt service payments on the bonds.

The imposition of a special tax on the proposed tax increment financing district will also mitigate risk associated with the interest rate placed on the bonds at issuance. Should the interest rate be fixed at a higher rate than expected based on the demand from the investors, the special tax will be in place to cover any shortfall.

The bonds are not backed by the City and are sold to buyers who understand the risk. In addition, buyers are compensated for the risk associated with the unrated bonds.

## XIII. Project Fiscal Analysis

Tax increment bond financing projections for the proton treatment center and the Project have been prepared by MuniCap, Inc. and are attached as Addendum A, hereto. The items listed below are included within Addendum A on the schedules noted.

- Debt service projections: Schedules IV through VI
- Project absorption: Schedule XII
- Total estimated market value: Schedule XIII
- Net incremental property taxes: Schedules XVI-A and XVI-B
- Payment of debt service: Schedules XVII-A and XVII-B

It is proposed that a single series of special obligation tax increment financing bonds will be issued with a special tax backup in the total amount of $\$ 17,500,000$. The bonds are proposed to be issued to finance the hard construction costs associated with 873 W . Baltimore Street.

The bonds will be secured by real property tax revenues from the property within the Development District and backup special taxes on property in the Special Taxing District. The backup special taxes will ensure there are adequate revenues in the event a shortfall exists between debt service on the bonds and real property tax increment revenues available to repay the bonds.

The bonds will not be a debt or general obligation of the City, State, or any other political subdivision. The bonds will be twenty year taxable bonds with interest payable in March and September and principal payable in September. The total estimated sources and uses for the proposed bonds are shown in Table R.

Table R
Total Bond Sources and Uses

| Sources and Uses | Bond <br> Proceeds |
| ---: | ---: |
| Sources of Funds <br> Bond proceeds | $\$ 17,500,000$ |
| Total sources of funds | $\mathbf{\$ 1 7 , 5 0 0 , 0 0 0}$ |
| Uses of Funds |  |
| Improvements | $\$ 17,000,000$ |
| Issuance costs | $\$ 500,000$ |
| Total uses of funds | $\mathbf{\$ 1 7 , 5 0 0 , 0 0 0}$ |

Bonds have been sized for $\$ 17$ million in improvements financed. Table S illustrates both the total estimated annual surplus tax increment revenues available for the General Fund and the
cumulative amount after debt service has been paid. The revenues shown in Table S represent those of the entire Development District, since revenues generated by the Development District are securing the proposed debt service.

## Table S

## Total Surplus Tax Increment Revenues Available for General Fund

|  | Annual ${ }^{1}$ | 20 Years ${ }^{2}$ |
| :---: | :---: | :---: |
| Tax increment revenues | \$1,726,179 | \$36,249,764 |
| Less: TIF debt service paid by property taxes ${ }^{3}$ | (\$1,610,882) | (\$33,828,522) |
| Surplus tax increment revenues available for General Fund | \$115,297 | \$2,421,242 |
| ${ }^{1}$ Represents the average annual tax revenues generated by the Development District at full buildout. <br> ${ }^{2}$ Projected revenues for twenty years are shown cumulatively, assuming inflation of three percent annually. <br> ${ }^{3}$ Represents the average annual debt service over 20 years. |  |  |

## Exhibit 1

## Baltimore City Location Map



Imagery © 2015 Google, Map data ©2015 Google 1000 ft

## Exhibit 2

## Neighborhood Location Map



Imagery © 2015 Google, Map data © 2015 Google 200 ft

## Exhibit 3

873 W. Baltimore Street Site Plan


## Exhibit 4

Project Rendering

## Exhibit 5

RISE Zone Map


Exhibit 6
Current Land Use Photographs


Image capture: Jun 2011 © 2015 Google
Baltimore, Maryland
Street View - Jun 2011

Google Maps 10 S Poppleton St


Image capture: Sep 2014 © 2015 Google
Baltimore, Maryland
Street View - Sep 2014

Exhibit 7
Zoning Documents

October 15, 2015

BALTIMORE


STEPHANIE RAWLINGS-BLAKE Mayor

## PAUL T. GRAZIANO


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Wexford Maryland BioPark 3, LLC
c/o Justin A. Williams. Esq.
Rosenberg Martin Greenberg, LLP
25 S. Charles Street, Suite 2115
Baltimore, Maryland 21201
Re: 873 W. Baltimore Street
Mr. Williams:
This is in response to your inquiry referencing the above-listed property (the "Property"). A review of the zoning records for Baltimore City revealed the following.

The property is governed by the University of Maryland BioPark Planned Unit Development (the "PUD"), which was originally enacted as City Council Ordinance No. 03-163 and subsequently repealed and reenacted by Ordinance No. 11-477. On June 25, 2015, the Planning Commission approved a Minor Amendment to the PUD to authorize the construction of an eight-story, 268,700 square foot building on the Property. The PUD expressly permits "offices," "restaurants," and "laboratories for research and testing." The proposed development of Building 3 with an eight-story, 268,700 square foot building on the Property to be used as an incubator for start-up companies with shared lab space, office space and a cafe is therefore permitted under the PUD and complies with the Zoning Code of Baltimore City.

There are currently no outstanding zoning violations with respect to the Property. The Property complies with applicable zoning regulations.

If you should require additional zoning information regarding this property, you may contact this office at (410) 396-4126.

Sincerely,


Geoffrey Vale
Zoning Administrator
GV:bd


Stephanic Rawlings-Blake Mayor

## PLANNING COMMISSION

Wilbur E. "Bill" Cunningham, Chairman
STAFF REPORT


Thomas J. Stosur Director

June 25, 2015

REQUEST: Minor Amendment and Final Design Approval - University of Maryland Biopark PUD \#151/873 West Baltimore Street Wexford Science and Technology

RECOMMENDATION: Approval
STAFF: Eric Tiso
PETITIONER: Wexford Maryland Biopark 3, LLC
OWNER: Wexford Maryland Biopark 3, LLC

## SITE/GENERAL AREA

Site Conditions: 873 West Baltimore Street is located on the southeastern corner of the intersection with South Poppleton Street, and is currently unimproved.

General Area: This site is located on the northern edge of the Hollins Market neighborhood, with the southern boundary of the Poppleton neighborhood immediately to the north. This area has residential uses mixed among institutional uses, such as the University of Maryland Biopark development. The Maryland Proton Treatment Center is across the street, and slightly to the east.

## HISTORY

- The University of Maryland Biopark Planned Unit Development (PUD) was established by Ordinance \#1 1-477, dated July 20, 2011.
- On October 20, 2011, the Planning Commission approved a Minor Amendment and Final Design for the Maryland Proton Therapy Center.
- On June 21, 2012, the Planning Commission approved a Revised Final Design for the Maryland Proton Therapy Center in order to reduce the height of the building.
- On August 7, 2014, the Planning Commission approved Minor Subdivision Final Plans for 801 and 825 West Baltimore Street, which adjusted a property boundary to allow for a café expansion.


## ANALYSIS

Project: This proposal will allow for the construction of an eight-story building on the UMD Biopark campus. At the beginning of the Planning Unit Development (PUD), there was a 180,000 sqft building planned for this site. Since that building was in the review process, it was expected to begin the permit process before the PUD would be enacted, and so the building was treated as an existing condition of the new PUD while it was going through the legislative approval process. That building was never built as expected, and this parcel is now returning for review of a new proposal. The proposal today is for an eight-story, 268,700 sqft building, which is an increase over the previously proposed five-story building. The Proposed Building Heights Plan from the 2011 PUD development plan set shows this building surrounded by a proposed five-story building adjacent to the southeast, a proposed ten-story building adjacent to the east, and a proposed 24 -story building across West Baltimore Street to the northeast beside the existing ten-level parking garage. The proposed increase in building height will be compatible with the surrounding buildings of the Biopark campus. The overall building mass of the PUD will be more or less consistent, as the Maryland Proton Therapy Center was built several floors lower than their permitted maximum.

The lead tenant for the proposed building is Cambridge Innovation Center, an entrepreneurial center which will operate like an incubator for start-up companies. They will have shared lab space and co-working office areas for their tenants. There will also be a small café on the first floor, and some smaller additional office space in the building that is not yet leased.

Elevations: The building will be eight stories in height, composed of metal plate wall systems, spandrel glazing, and a curtainwall system with brick facing in portions of the lower two floors. An equipment penthouse will be located on the roof of the building. This project received final approval from UDARP on November 13, 2014.

Community Notification: The following community organizations have been notified of this action: Hollins Round House, Inc., the Poppleton Co-Op, and the Poppleton Cooperative, Inc.

Board of Municipal and Zoning Appeals

14th FLOOR 417 E. FAYETTE STREET
PHONE: 410-396-4301
BALTIMORE, MARYLAND 21202

## THIS IS NOT A PERMIT

DO NOT START WORK OR USE THE PROPERTY IF THIS APPLICATION IS APPROVED UNTIL YOU GET A PERMIT OR CERTIFICATE OF OCCUPANCY FROM THE DEPARTMENT OF HOUSES AND COMMUNITY DEVELOPMENT WITHIN ONE YEAR OF THE HEARING DATE.

## NOV 202014

At a meeting of the Board of Municipal and Zoning Appeals on
Tuesday, November 18, 2014
the following resolution was adopted:
"Resolved, that in the matter of Appeal No. $\qquad$ 209-08

Stanley Fine 25 S. Charles Street, Ste. 2115 21201 Appellant, to permit to consolidate lots and construct a six story medical research and office facility

```
at 873-99 W. Baltimore St., 5-9 S. Poppleton St., & 884-90 Booth St. (pending
consolidation)
```

the BOARD OF MUNICIPAL AND ZONING APPEALS

Tuesday, April 1, 2008, March 17, 2009, February 15, 2011, January 24, 2012, December 11, 2012 \& December 10,2013 , so as to give approval to the application for an additional period of time or until November 18, 2015.


David C. Tanner
Executive Director



VICINITYMAP

GENERAL NOTES









EXISTING CONDITIONS University of Maryland BioPark PLANNED UNIT DEVELOPMENT



GENERAL NOTES


## 











DEVELOPMENT PLAN MASTERPLAN SHEET 2 OF 4 University of Maryland BioPark PLANNED UNIT DEVELOPMENT



BUILDING HEIGHT NOTES





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BioPark
UNIVERSITY OF MARYLAND BIOPARK
BALTIMORE CITY, MARYLAND
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Exhibit 8
Map of Tax Parcels Comprising Development District



Exhibit 9
University of Maryland BioPark Development District Map


This map is for reference only. Not a legal document.

## Exhibit 10

Baltimore City Enterprise Zone Map


## Exhibit 11

## Financing Letter

## 873 West Baltimore - University of Maryland BioPark

The Department of Business and Economic Development ("Department") has approved a $\$ 2,500,000$ repayable loan (the "Loan") and a $\$ 2,500,000$ conditional loan (the "Conditional Loan") from the Maryland Economic Development Assistance Fund ("MEDAF") under the One Maryland capability for the City of Baltimore Development Corporation ("BDC"), to be reloaned to the Cambridge Innovation Center ("CIC"), or an entity acceptable to the Department. Funds will be used to assist CIC with tenant build-out costs for approximately 110,000 square feet of leased space in a newly constructed, 8 story, 261,000 square foot building, being built by Wexford Science and Technology, located at 873 West Baltimore Street, Baltimore, Maryland (the "Project Site"), aka Building 3 in the University of Maryland BioPark (the "Park"). The total development budget for the building is currently estimated to be $\$ 103,000,000$ with approximately $\$ 18,500,000$ identified in tenant improvement costs for the CIC space (the "Project Costs"). Construction of the building is anticipated to begin in the summer of 2015 and be completed by the end of 2016.

## Terms \& Conditions

## \$2,500,000 Loan

Borrower: CIC., or an entity acceptable to the Department.
Approval: The Loan is subject to approval by the Secretary of the Department.
Purpose: The proceeds of the Loan would be used to reimburse Eligible Project Costs at the Project Site.

Term: $\quad$ The term of the Loan will be ten (10) years.
Interest Rate: Variable.
Repayment: Monthly interest only payments of $1 \%$ in year one, $2 \%$ in year 2, then monthly principal payments of $\$ 20,000$ plus $2 \%$ interest on the outstanding balance in years 3 through 10, with a balloon payment at the end of the term to retire any outstanding principal and interest under the Loan. If at any time after December 31, 2020, full-time employment at the Project Site is less than 800, the interest rate on the Loan would increase by one percent ( $1 \%$ ) for every 25 permanent full-time employees less than the goal. The rate change would be effective on January $1^{\text {st }}$ after each measurement date.

Collateral: The Loan will be fully collateralized for the term of the Loan.
Guarantors: To be determined based upon a financial and collateral review of the Borrower and the final structure of the Loan.

## \$2,500,000 Conditional Loan

Borrower: CIC., or an entity acceptable to the Department.
Approval: The Loan is subject to approval by the Secretary of the Department.
Purpose: The proceeds of the Loan would be used to reimburse Eligible Project Costs at the Project Site.

Term: $\quad$ The term of the Loan will be ten (10) years.
Interest Rate: Three percent (3\%) fixed per annum.
Repayment: All principal and accrued interest would be deferred over the term of the Conditional Loan. In the event that all of the Performance Criteria are met over the term, all outstanding deferred principal and accrued interest would be forgiven at the end of the term. If at any time after December 31, 2020, full-time employment at the Project Site is less than 800, but greater than 600; the Borrower would repay a pro-rata portion of principal $(\$ 3,125)$ and the associated portion of accrued interest due for every employee below the goal.

Collateral: The Loan will be fully collateralized for the term of the Loan.
Guarantors: To be determined based upon a financial and collateral review of the Borrower and the final structure of the Loan.

## Conditions over the Term:

(1) The Borrower will certify that there are 800 permanent full-time employees at the Project Site by December 31, 2020 and retain at least that amount at the Project Site for the remaining term of the Loan/Conditional Loan.
"Full-time" means that an employee works at least 1,800 hours in a 12-month period, is paid an hourly wage of at least $150 \%$ of the prevailing federal minimum wage and is eligible for an employer-subsidized health care benefits package.

Reporting Requirement: Full-time employment within its leased space will be certified to the Department by the Borrower annually as of December $31^{\text {st }}$ of each required year and delivered to the Department by January 31 ${ }^{\text {st }}$ of the following year with the first certification beginning the first December $31^{\text {st }}$ following disbursement.
(2) If at any time after December 31, 2020, full-time employment at the Project Site falls below 600 full-time employees, both the Loan and Conditional Loan would be repaid in full.
(3) If the Borrower does not spend or cause to be spent a minimum of $\$ 18,500,000$ in Project Costs at the Project Site by December 31, 2017, both the Loan and Conditional Loan would be repaid in full. The Loan/Conditional Loan proceeds may count as part of the Borrower's spending requirement.
(4) If the Borrower does not retain its lease for at least 110,000 square feet of space at the Project Site for the term of the Loan/Conditional Loan, both would be repaid in full.
(5) The Loan/Conditional Loan must be documented and closed by April 1, 2016.

## Conditions Prior to Disbursement

(1) The Borrower, Wexford, and Research Park Corporation will provide all necessary information to underwrite and document the Loan/Conditional Loan to the satisfaction of the Department.
(2) The Borrower will furnish evidence acceptable to the Department of its 110,000 square feet of leased space at the Project Site for a term of not less than the Loan/Conditional Loan term.
(3) The Borrower will have directly expended at least $\$ 8,000,000$ of Eligible Project Costs at the Project Site against which the Loan/Conditional Loan may be disbursed.

Eligible Project Costs: Those costs associated with the Project that are eligible for reimbursement under the Maryland Economic Development Assistance Fund program. This would include the construction or acquisition of a building or real property and the acquisition, construction, or installation of machinery, equipment, furnishings, fixtures, leasehold improvements, site improvements, or infrastructure improvements at the facility.

## Exhibit 12

University of Maryland BioPark Special Taxing District Boundary Map


This map is for reference only. Not a legal document.

ADDENDUM A
Tax Increment Bond Financing Projections

# University of Maryland BioPark City of Baltimore, Maryland 

Tax Increment Financing Projections

Assumptions<br>Developer Held Draw Down Bonds<br>Total Private Improvements Financed: \$17,000,000<br>Backup Special Tax<br>Taxable Bonds<br>Bonds Convert to a Higher Fixed Coupon Rate After Construction<br>No Debt Service Reserve Fund<br>No Capitalized Interest<br>Assumes Only 873 W. Baltimore is Within RISE Zone<br>Enterprise Zone Tax Credits<br>Assumes RISE Zone Tax Credits Must Be Applied<br>Includes Proton Treatment Center<br>20 Year Term<br>10 Year Interest Only<br>Includes Supplemental Special Tax

Prepared By:
MuniCap, Inc.
Public Finance

October 18, 2015

# University of Maryland BioPark <br> City of Baltimore, Maryland 

## Tax Increment Financing Projections

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# University of Maryland BioPark City of Baltimore, Maryland 

## Tax Increment Financing Projections

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# University of Maryland BioPark City of Baltimore, Maryland 

BOND PROJECTIONS

## University of Maryland BioPark <br> City of Baltimore, Maryland

Schedule I: Sources and Uses of Funds and Bond Issuance Assumptions

|  | Bond |  |
| :--- | ---: | ---: |
| Proceeds |  |  | Percent | Sources of funds: |  |  |
| :--- | ---: | ---: |
| Total bond proceeds | $\$ 17,500,000$ | $100.00 \%$ |
| Interest earned in the improvement fund | $\$ 0$ | $0.00 \%$ |
| Total sources of funds |  |  |
|  |  |  |
| Total uses of funds: | $\$ 17,500,000$ | $100.00 \%$ |
| Improvements (see Schedule II) | $\$ 500,000$ | $97.14 \%$ |
| Issuance costs | $\$ 0$ | $0.86 \%$ |
| Administrative expenses | $\$ 0$ | $0.00 \%$ |
| Underwriter's discount | $\$ 0$ | $0.00 \%$ |
| Rounding | $\$ 17,500,000$ | $100.00 \%$ |
| $\quad$ Total uses of funds |  |  |

Assumptions:

| Maturity | 20 years |
| :---: | :---: |
| Interest only | 10 years |
| Amortization | 10 years |
| Drawdown interest rate | 3.40\% |
| Conversion coupon rate | 6.00\% |
| Reinvestment rates: |  |
| Improvement fund | NA |
| Date bonds issued | 1-Sep-16 |
| Dates payments due: |  |
| Interest | March 1 and September 1 |
| Principal | September 1 |
| MuniCap, Inc. | $\geq$ IUMB \( |
| ) [Projection No. 10.xlsx]I |  |

## University of Maryland BioPark

City of Baltimore, Maryland
Schedule II: Improvements ${ }^{1}$

| Improvement | Total |
| :--- | :---: |
| 873 W. Baltimore Street qualified costs | $\$ 105,863,835$ |
| Less: sources of other funds | $(\$ 88,863,835)$ |
| Total improvement costs financed | $\$ 17,000,000$ |
| MuniCap, Inc. |  |
|  |  |
| ${ }^{1}$ Based on information provided by Wexford Science + Technology. See Summary Schedule 1 of Pro |  |
| Forma Analysis for detailed list of qualified costs. |  |

## University of Maryland BioPark

City of Baltimore, Maryland
Schedule III: Construction Expenditures ${ }^{1}$

| Date | 873 W. Baltimore <br> Qualified Costs | Less: Other <br> Sources <br> of Funds | Total <br> Improvement Costs <br> to be Financed |
| :---: | :---: | :---: | :---: |
| 1-Sep-16 | $\$ 105,863,835$ | $(\$ 88,863,835)$ | $\$ 17,000,000$ |
| 1-Oct-16 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Nov-16 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Dec-16 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jan-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Feb-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Mar-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Apr-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-May-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jun-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Aug-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Sep-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Oct-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Nov-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Dec-17 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jan-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Feb-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Mar-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Apr-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-May-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jun-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Aug-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Sep-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Oct-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Nov-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Dec-18 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jan-19 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Feb-19 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Mar-19 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Apr-19 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-May-19 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jun-19 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-19 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Aug-19 | $\$ 0$ | $\$ 000$ |  |
| 1-Sep-19 | $\$ 0$ | $\$ 00$ |  |
| Total | $\$ 105,835$ |  | $\$ 0$ |


| MuniCap, Inc. | S:ICONSULTING\Baltimore\UMB\[Projection No. 10.xlsx]III |
| :--- | ---: |
| $18-O c t-15$ |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IV: Drawdown of Bonds


## University of Maryland BioPark City of Baltimore, Maryland

Schedule V: Debt Service for Developer Held Bonds (Prior to Conversion)

| Date | Principal of Bonds Not Converted |  |  |  | Interest <br> Rate ${ }^{2}$ | Interest ${ }^{1}$ | Annual <br> Interest | Administrative Expenses ${ }^{1}$ | Net Annual <br> Debt <br> Service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beginning <br> Balance | Draws on Bonds ${ }^{1}$ | Bonds Converted ${ }^{2}$ | Ending <br> Balance |  |  |  |  |  |
| 1-Sep-16 | \$0 | \$17,500,000 |  | \$17,500,000 |  |  |  |  |  |
| 1-Mar-17 | \$17,500,000 | \$0 |  | \$17,500,000 | 3.40\% | \$297,500 |  | \$15,000 |  |
| 1-Sep-17 | \$17,500,000 | \$0 |  | \$17,500,000 | 3.40\% | \$297,500 | \$595,000 | \$15,000 | \$625,000 |
| 1-Mar-18 | \$17,500,000 | \$0 |  | \$17,500,000 | 3.40\% | \$297,500 |  | \$15,000 |  |
| 1-Sep-18 | \$17,500,000 | \$0 |  | \$17,500,000 | 3.40\% | \$297,500 | \$595,000 | \$15,000 | \$625,000 |
| 1-Mar-19 | \$17,500,000 | \$0 |  | \$17,500,000 | 3.40\% | \$297,500 |  | \$15,000 |  |
| 1-Sep-19 | \$17,500,000 | \$0 | (\$17,500,000) | \$0 | 3.40\% | \$297,500 | \$595,000 | \$15,000 | \$625,000 |
| Total |  | \$17,500,000 | (\$17,500,000) |  |  | \$1,785,000 | \$1,785,000 | \$90,000 | \$1,875,000 |
| MuniCap, Inc. |  |  |  |  |  |  | S:ICONSULTING 1 BaltimorelUMB\|[Projection No. 10.xlsx]V |  |  |
|  |  |  |  |  |  |  |  |  | 18-Oct-15 |
| ${ }^{1}$ See Schedule IV. |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ See Schedule I. |  |  |  |  |  |  |  |  |  |

## University of Maryland BioPark

City of Baltimore, Maryland
Schedule VI: Debt Service Projections - Conversion

| Date | Principal | Interest <br> Rate | Interest | Gross <br> Debt Service <br> Payments | Gross Annual Debt Service Payments | Administrative Expenses | Net Annual Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-Sep-16 |  |  |  |  |  |  |  |
| 1-Mar-17 |  |  | \$0 | \$0 |  |  |  |
| 1-Sep-17 | \$0 |  | \$0 | \$0 | \$0 | \$0 | \$0 |
| 1-Mar-18 |  |  | \$0 | \$0 |  |  |  |
| 1-Sep-18 | \$0 |  | \$0 | \$0 | \$0 | \$0 | \$0 |
| 1-Mar-19 |  |  | \$0 | \$0 |  |  |  |
| 1-Sep-19 | \$0 |  | \$0 | \$0 | \$0 | \$0 | \$0 |
| 1-Mar-20 |  |  | \$525,000 | \$525,000 |  |  |  |
| 1-Sep-20 | \$0 | 6.00\% | \$525,000 | \$525,000 | \$1,050,000 | \$30,000 | \$1,080,000 |
| 1-Mar-21 |  |  | \$525,000 | \$525,000 |  |  |  |
| 1-Sep-21 | \$0 | 6.00\% | \$525,000 | \$525,000 | \$1,050,000 | \$30,600 | \$1,080,600 |
| 1-Mar-22 |  |  | \$525,000 | \$525,000 |  |  |  |
| 1-Sep-22 | \$0 | 6.00\% | \$525,000 | \$525,000 | \$1,050,000 | \$31,212 | \$1,081,212 |
| 1-Mar-23 |  |  | \$525,000 | \$525,000 |  |  |  |
| 1-Sep-23 | \$0 | 6.00\% | \$525,000 | \$525,000 | \$1,050,000 | \$31,836 | \$1,081,836 |
| 1-Mar-24 |  |  | \$525,000 | \$525,000 |  |  |  |
| 1-Sep-24 | \$0 | 6.00\% | \$525,000 | \$525,000 | \$1,050,000 | \$32,473 | \$1,082,473 |
| 1-Mar-25 |  |  | \$525,000 | \$525,000 |  |  |  |
| 1-Sep-25 | \$0 | 6.00\% | \$525,000 | \$525,000 | \$1,050,000 | \$33,122 | \$1,083,122 |
| 1-Mar-26 |  |  | \$525,000 | \$525,000 |  |  |  |
| 1-Sep-26 | \$0 | 6.00\% | \$525,000 | \$525,000 | \$1,050,000 | \$33,785 | \$1,083,785 |
| 1-Mar-27 |  |  | \$525,000 | \$525,000 |  |  |  |
| 1-Sep-27 | \$1,142,000 | 6.00\% | \$525,000 | \$1,667,000 | \$2,192,000 | \$34,461 | \$2,226,461 |
| 1-Mar-28 |  |  | \$490,740 | \$490,740 |  |  |  |
| 1-Sep-28 | \$1,255,000 | 6.00\% | \$490,740 | \$1,745,740 | \$2,236,480 | \$35,150 | \$2,271,630 |
| 1-Mar-29 |  |  | \$453,090 | \$453,090 |  |  |  |
| 1-Sep-29 | \$1,375,000 | 6.00\% | \$453,090 | \$1,828,090 | \$2,281,180 | \$35,853 | \$2,317,033 |
| 1-Mar-30 |  |  | \$411,840 | \$411,840 |  |  |  |
| 1-Sep-30 | \$1,503,000 | 6.00\% | \$411,840 | \$1,914,840 | \$2,326,680 | \$36,570 | \$2,363,250 |
| 1-Mar-31 |  |  | \$366,750 | \$366,750 |  |  |  |
| 1-Sep-31 | \$1,639,000 | 6.00\% | \$366,750 | \$2,005,750 | \$2,372,500 | \$37,301 | \$2,409,801 |
| 1-Mar-32 |  |  | \$317,580 | \$317,580 |  |  |  |
| 1-Sep-32 | \$1,785,000 | 6.00\% | \$317,580 | \$2,102,580 | \$2,420,160 | \$38,047 | \$2,458,207 |
| 1-Mar-33 |  |  | \$264,030 | \$264,030 |  |  |  |
| 1-Sep-33 | \$1,941,000 | 6.00\% | \$264,030 | \$2,205,030 | \$2,469,060 | \$38,808 | \$2,507,868 |
| 1-Mar-34 |  |  | \$205,800 | \$205,800 |  |  |  |
| 1-Sep-34 | \$2,106,000 | 6.00\% | \$205,800 | \$2,311,800 | \$2,517,600 | \$39,584 | \$2,557,184 |
| 1-Mar-35 |  |  | \$142,620 | \$142,620 |  |  |  |
| 1-Sep-35 | \$2,283,000 | 6.00\% | \$142,620 | \$2,425,620 | \$2,568,240 | \$40,376 | \$2,608,616 |
| 1-Mar-36 |  |  | \$74,130 | \$74,130 |  |  |  |
| 1-Sep-36 | \$2,471,000 | 6.00\% | \$74,130 | \$2,545,130 | \$2,619,260 | \$41,184 | \$2,660,444 |
| Total | \$17,500,000 |  | \$13,853,160 | \$31,353,160 | \$31,353,160 | \$600,362 | \$31,953,522 |

MuniCap, Inc.

S:ICONSULTING\BaltimorelUMB\[Projection No. 10.xlsx]VI
18-Oct-15

# University of Maryland BioPark City of Baltimore, Maryland 

## University of Maryland BioPark

City of Baltimore, Maryland
Schedule VII: Summary of Development

| Property Type | Estimated Completion | Property Area ${ }^{1}$ |  |  |  | Market Value ${ }^{2}$ |  |  | $\begin{gathered} \text { Adjustment } \\ \text { Ratio }^{3} \\ \hline \end{gathered}$ | Adjusted Market Value |  |  | Total <br> Market Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | GSF Per |  |  | Units |  |  |  |  |  |  |  |  |
|  |  | GSF | Room/Unit ${ }^{4}$ | Rooms |  | Per GSF | Per Room | Per Unit |  | Per GSF | Per Room | Per Unit |  |
| Phase I |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proton Treatment Center | 2015 | 110,000 | - | - | - | \$462 | - | - | 100\% | \$462 | - | - | \$50,779,300 |
| Lab - Building 3 (873 W. Baltimore) | 2017 | 249,432 | - | - | - | \$225 | - | - | 100\% | \$225 | - | - | \$56,063,358 |
| Total |  | 359,432 |  |  |  |  |  |  |  |  |  |  | \$106,842,658 |
| $\overline{\text { MuniCap, Inc. }}$ |  |  |  |  |  |  |  |  |  | S:ICONSULTING IBaltimorelUMB\[Projection No. 10.xlsx]VII |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 18-OCt-15 |
| ${ }^{1}$ Provided by Wexford Science + Technology. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Assessed value is equal to $100 \%$ of market value. See Schedule VIIII. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Ratio used to adjust for changes in comparable values due to location or other property characteristics. |  |  |  |  |  |  |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

$\underline{\text { Schedule VIII: Comparison of Valuation Methods }}{ }^{1}$

Income


## University of Maryland BioPark <br> City of Baltimore, Maryland

## Schedule IX: Projected Market Value - Income Capitalization (Commercial)

Office/Lab

| Income Capitalization Approach |  |
| :--- | :--- |
| Annual rent $\mathrm{PSF}^{1}$ | $\$ 30.70$ |
|  |  |
| Assumed vacancy rate ${ }^{2}$ | $9.00 \%$ |
| Less: assumed vacancy | $(\$ 2.76)$ |

Effective gross income
\$27.94
Assumed expense ratio ${ }^{3}$
7.50\%

Less: assumed expenses
Net operating income ..... \$26
Capitalization rate ${ }^{4}$ ..... 10.36\%

| Estimated market value PSF | \$249.43 |
| :--- | ---: |
| MuniCap, Inc. | \|BaltimorelUMB\[Projection No. 10.xlsx]IX |
|  | $18-$ Oct-15 |

${ }^{1}$ Based on information provided by Wexford Science + Technology.
${ }^{2}$ Based on discussions with the Supervisor of Assessments for Baltimore City as appointed by the Maryland State Department of Assessments and Taxation. Additional information needed.
${ }^{3}$ According to Wexford Science + Technology, rents are projected to be triple net. According to the Supervisor of Assessments for Baltimore City as appointed by the Maryland State Department of Assessments and Taxation, expenses are still assumed for triple net property though lower than the amount assumed for gross leases. Expense ratio provided by the Supervisor of Assessments for Baltimore City as appointed by the Maryland State Department of Assessments and Taxation.
${ }^{4}$ The Maryland State Department of Assessments and Taxation uses a fully-loaded capitalization rate, which is reflected by adding the real property tax rate to the market capitalization rate. As a result, real property taxes are netted out of the assumed expenses shown above. The cap rate assumes a $8.0 \%$ market rate plus real property tax rates of $\$ 2.248$ (City of Baltimore), and $\$ 0.112$ (State of Maryland) per $\$ 100$. Based on discussions held with the Supervisor of Assessments for Baltimore City as appointed by the Maryland State Department of Assessments and Taxation.

## University of Maryland BioPark <br> \section*{City of Baltimore, Maryland}

Schedule X: Projected Market Value - Comparables (Commercial)


Based on the information obtained by corresponding assessment website
Information illustrated for each property based on information provided by Maryland State Department of Assessments and Taxation. Value chosen for each type of development is underlined and shown in bold and italics.
Includes the additional tax parcel with the following account identifiers: 18-10-0203-200,18-10-0203-201, and 18-10-0203-202

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI: Projected Market Value - Cost Approach (Commercial) ${ }^{1}$


## University of Maryland BioPark

## City of Baltimore, Maryland

## Schedule XII: Projected Absorption - Phase I ${ }^{1}$

| Development |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Proton Treatment Center |  |  | Lab - Building 3 (873 W. Baltimore) |  |
| Ending | SF | Cumulative | SF | Cumulative |  |
| 31-Dec-14 | 0 | 0 | 0 | 0 |  |
| 31-Dec-15 | 110,000 | 110,000 |  | 0 | 0 |
| 31-Dec-16 | 0 | 110,000 |  | 0 | 0 |
| 31-Dec-17 | 0 | 110,000 |  | 249,432 | 249,432 |
| 31-Dec-18 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-19 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-20 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-21 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-22 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-23 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-24 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-25 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-26 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-27 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-28 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-29 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-30 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-31 | 0 | 110,000 |  | 0 | 249,432 |
| 31-Dec-32 | 0 | 110,000 | 0 | 249,432 |  |
| 31-Dec-33 | 0 | 110,000 | 0 | 249,432 |  |
| 31-Dec-34 | 0 | 110,000 |  | 0 | 249,432 |
| Total | 110,000 |  |  | 249,432 |  |

MuniCap, Inc.
${ }^{1}$ Provided by Wexford Science + Technology.

# University of Maryland BioPark City of Baltimore, Maryland 

## PROJECTED TAX INCREMENT REVENUES

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XIII: Projected Assessed Value - Phase I

| Development | Tax | Bond |  |  |  |  | Proton Trea | tment Center |  |  |  |  |  | ab-Building | 73 W. Baltim |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Year | Year | Inflation |  | Value Pe | Phase-In | Phased-In | Projected | Residual |  |  | Value Per | Phase-In | Phased-In | Projected | Residual |  | Total |
| Ending | Beginning | Ending | Factor ${ }^{1}$ | $\mathrm{SF}^{2}$ | $\mathrm{SF}^{3}$ | Percentage ${ }^{4}$ | Value Per SF | Assessed Value | Land Value ${ }^{5}$ | Total | $\mathrm{SF}^{2}$ | $\mathrm{SF}^{3}$ | Percentage ${ }^{4}$ | Value Per SF | Assessed Value | Land Value ${ }^{5}$ | Total | Assessed Value |
| 31-Dec-14 | 1-Jul-15 | 1-Sep-16 | 100.0\% | 0 | \$462 | 80\% | \$369 | \$0 | \$12,998,400 | \$12,998,400 | 0 | \$225 | 80\% | \$180 | \$0 | \$1,068,300 | \$1,068,300 | \$14,066,700 |
| 31-Dec-15 | 1-Jul-16 | 1-Sep-17 | 103.0\% | 110,000 | \$475 | 80\% | \$380 | \$41,842,143 | \$0 | \$41,842,143 | 0 | \$232 | 80\% | \$185 | \$0 | \$1,068,300 | \$1,068,300 | \$42,910,443 |
| 31-Dec-16 | 1-Jul-17 | 1-Sep-18 | 106.1\% | 110,000 | \$490 | 87\% | \$424 | \$46,688,858 | \$0 | \$46,688,858 | 0 | \$238 | 80\% | \$191 | \$0 | \$1,068,300 | \$1,068,300 | \$47,757,158 |
| 31-Dec-17 | 1-Jul-18 | 1-Sep-19 | 109.3\% | 110,000 | \$504 | 93\% | \$471 | \$51,788,718 | \$0 | \$51,788,718 | 249,432 | \$246 | 80\% | \$196 | \$49,009,556 | \$0 | \$49,009,556 | \$100,798,274 |
| 31-Dec-18 | 1-Jul-19 | 1-Sep-20 | 112.6\% | 110,000 | \$520 | 100\% | \$520 | \$57,152,550 | \$0 | \$57,152,550 | 249,432 | \$253 | 87\% | \$219 | \$54,686,496 | \$0 | \$54,686,496 | \$111,839,046 |
| 31-Dec-19 | 1-Jul-20 | 1-Sep-21 | 115.9\% | 110,000 | \$535 | 100\% | \$535 | \$58,867,126 | \$0 | \$58,867,126 | 249,432 | \$261 | 93\% | \$243 | \$60,659,944 | \$0 | \$60,659,944 | \$119,527,070 |
| 31-Dec-20 | 1-Jul-21 | 1-Sep-22 | 119.4\% | 110,000 | \$551 | 100\% | \$551 | \$60,633,140 | \$0 | \$60,633,140 | 249,432 | \$268 | 100\% | \$268 | \$66,942,581 | \$0 | \$66,942,581 | \$127,575,721 |
| 31-Dec-21 | 1-Jul-22 | 1-Sep-23 | 123.0\% | 110,000 | \$568 | 100\% | \$568 | \$62,452,134 | \$0 | \$62,452,134 | 249,432 | \$276 | 100\% | \$276 | \$68,950,859 | \$0 | \$68,950,859 | \$131,402,993 |
| 31-Dec-22 | 1-Jul-23 | 1-Sep-24 | 126.7\% | 110,000 | \$585 | 100\% | \$585 | \$64,325,698 | \$0 | \$64,325,698 | 249,432 | \$285 | 100\% | \$285 | \$71,019,384 | \$0 | \$71,019,384 | \$135,345,082 |
| 31-Dec-23 | 1-Jul-24 | 1-Sep-25 | 130.5\% | 110,000 | \$602 | 100\% | \$602 | \$66,255,469 | \$0 | \$66,255,469 | 249,432 | \$293 | 100\% | \$293 | \$73,149,966 | \$0 | \$73,149,966 | \$139,405,435 |
| 31-Dec-24 | 1-Jul-25 | 1-Sep-26 | 134.4\% | 110,000 | \$620 | 100\% | \$620 | \$68,243,133 | \$0 | \$68,243,133 | 249,432 | \$302 | 100\% | \$302 | \$75,344,465 | \$0 | \$75,344,465 | \$143,587,598 |
| 31-Dec-25 | 1-Jul-26 | 1-Sep-27 | 138.4\% | 110,000 | \$639 | 100\% | \$639 | \$70,290,427 | \$0 | \$70,290,427 | 249,432 | \$311 | 100\% | \$311 | \$77,604,799 | \$0 | \$77,604,799 | \$147,895,226 |
| 31-Dec-26 | 1-Jul-27 | 1-Sep-28 | 142.6\% | 110,000 | \$658 | 100\% | \$658 | \$72,399,140 | \$0 | \$72,399,140 | 249,432 | \$320 | 100\% | \$320 | \$79,932,943 | \$0 | \$79,932,943 | \$152,332,083 |
| 31-Dec-27 | 1-Jul-28 | 1-Sep-29 | 146.9\% | 110,000 | \$678 | 100\% | \$678 | \$74,571,114 | \$0 | \$74,571,114 | 249,432 | \$330 | 100\% | \$330 | \$82,330,931 | \$0 | \$82,330,931 | \$156,902,045 |
| 31-Dec-28 | 1-Jul-29 | 1-Sep-30 | 151.3\% | 110,000 | \$698 | 100\% | \$698 | \$76,808,247 | \$0 | \$76,808,247 | 249,432 | \$340 | 100\% | \$340 | \$84,800,859 | \$0 | \$84,800,859 | \$161,609,106 |
| 31-Dec-29 | 1-Jul-30 | 1-Sep-31 | 155.8\% | 110,000 | \$719 | 100\% | \$719 | \$79,112,495 | \$0 | \$79,112,495 | 249,432 | \$350 | 100\% | \$350 | \$87,344,885 | \$0 | \$87,344,885 | \$166,457,380 |
| 31-Dec-30 | 1-Jul-31 | 1-Sep-32 | 160.5\% | 110,000 | \$741 | 100\% | \$741 | \$81,485,870 | \$0 | \$81,485,870 | 249,432 | \$361 | 100\% | \$361 | \$89,965,231 | \$0 | \$89,965,231 | \$171,451,101 |
| 31-Dec-31 | 1-Jul-32 | 1-Sep-33 | 165.3\% | 110,000 | \$763 | 100\% | \$763 | \$83,930,446 | \$0 | \$83,930,446 | 249,432 | \$372 | 100\% | \$372 | \$92,664,188 | \$0 | \$92,664,188 | \$176,594,634 |
| 31-Dec-32 | 1-Jul-33 | 1-Sep-34 | 170.2\% | 110,000 | \$786 | 100\% | \$786 | \$86,448,359 | \$0 | \$86,448,359 | 249,432 | \$383 | 100\% | \$383 | \$95,444,114 | \$0 | \$95,444,114 | \$181,892,473 |
| 31-Dec-33 | 1-Jul-34 | 1-Sep-35 | 175.4\% | 110,000 | \$809 | 100\% | \$809 | \$89,041,810 | \$0 | \$89,041,810 | 249,432 | \$394 | 100\% | \$394 | \$98,307,437 | \$0 | \$98,307,437 | \$187,349,247 |
| 31-Dec-34 | 1-Jul-35 | 1-Sep-36 | 180.6\% | 110,000 | \$834 | 100\% | \$834 | \$91,713,064 | \$0 | \$91,713,064 | 249,432 | \$406 | 100\% | \$406 | \$101,256,661 | \$0 | \$101,256,661 | \$192,969,725 |

MuniCap, Inc
${ }^{1}$ Assumes an annual inflation rate of $3 \%$. Inflation rate accounts for annual increasing assessed value, along with the decreasing real property tax rates.
${ }^{2}$ See Schedule XII.
${ }^{3}$ See Schedule VII
${ }^{4}$ Assumes property is initially assessed at $80 \%$ of its full market value with the remaining value phased-in over a three year period.
${ }^{5}$ Represents the residual land value associated with each proposed development type as shown on Table 2 of Schedule XIV. Assumes residual land value is reduced at the inverse rate of absorption for each development type shown on Schedule XII.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XIV: Base Value ${ }^{1}$

## Table 1: Base Value

| Account Identifier | Owner | Acres | Property Address | Value As of ${ }^{2}$ | Total Assessed Value |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Land | Improvement | Total |
| Phase I |  |  |  |  |  |  |  |
| Proton Treatment Center |  |  |  |  |  |  |  |
| 18-10-0203-001B | Maryland Proton Treatment Center LLC | 1.49 | 850 W. Baltimore Street | January 1, 2014 | \$1,299,800 | \$0 | \$1,299,800 |
| Lab - Building 3 (873 W. Baltimore) |  |  |  |  |  |  |  |
| 18-09-0220-001M | Wexford Maryland BioPark 3 LLC | 0.98 | 873 W. Baltimore Street | January 1, 2014 | \$1,068,300 | \$0 | \$1,068,300 |
| Total |  | 2.47 |  |  | \$2,368,100 | \$0 | \$2,368,100 |

## Table 2: January 1, 2015 Assessed Value

| Account Identifier | Owner | Acres | Property Address | Value As of | Total Assessed Value |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Land | Improvement | Total |
| Phase I |  |  |  |  |  |  |  |
| Proton Treatment Center |  |  |  |  |  |  |  |
| 18-10-0203-001B | Maryland Proton Treatment Center LLC | 1.49 | 850 W. Baltimore Street | January 1, 2015 | \$12,998,400 | \$0 | \$12,998,400 |
| Lab - Building 3 (873 W. Baltimore) |  |  |  |  |  |  |  |
| 18-09-0220-001M | Wexford Maryland BioPark 3 LLC | 0.98 | 873 W. Baltimore Street | January 1, 2015 | \$1,068,300 | \$0 | \$1,068,300 |
| Total |  | 2.47 |  |  | \$14,066,700 | \$0 | \$14,066,700 |


18-Oct-15
${ }^{1}$ Represents the tax parcels comprising the proposed University of Maryland BioPark Development District. Tax parcels provided by Wexford Science + Technology. Information illustrated based on the Maryland State Department of Assessments and Taxation.
${ }^{2}$ Assumes University of Maryland BioPark Development District is created in 2015. As a result, the base value is based on the value as of January 1, 2014. The last triennial reassessment occurred January 1 , 2012. As a result, the value is based on the January 1, 2012 value.

University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XV-A: Projected Tax Credits to Developer - Enterprise Zone ${ }^{1}$

| Tax <br> Year <br> Beginning | Bond <br> Year <br> Ending | PTC | Lab | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1-Jul-15 | 1-Sep-16 | \$0 | \$0 | \$0 |
| 1-Jul-16 | 1-Sep-17 | \$729,114 | \$0 | \$729,114 |
| 1-Jul-17 | 1-Sep-18 | \$816,277 | \$0 | \$816,277 |
| 1-Jul-18 | 1-Sep-19 | \$907,993 | \$0 | \$907,993 |
| 1-Jul-19 | 1-Sep-20 | \$1,004,456 | \$0 | \$1,004,456 |
| 1-Jul-20 | 1-Sep-21 | \$1,035,291 | \$0 | \$1,035,291 |
| 1-Jul-21 | 1-Sep-22 | \$1,067,051 | \$0 | \$1,067,051 |
| 1-Jul-22 | 1-Sep-23 | \$1,099,764 | \$0 | \$1,099,764 |
| 1-Jul-23 | 1-Sep-24 | \$1,133,458 | \$1,258,000 | \$2,391,458 |
| 1-Jul-24 | 1-Sep-25 | \$1,168,163 | \$1,296,317 | \$2,464,479 |
| 1-Jul-25 | 1-Sep-26 | \$1,203,909 | \$1,335,783 | \$2,539,691 |
| 1-Jul-26 | 1-Sep-27 | \$0 | \$1,376,432 | \$1,376,432 |
| 1-Jul-27 | 1-Sep-28 | \$0 | \$1,418,302 | \$1,418,302 |
| 1-Jul-28 | 1-Sep-29 | \$0 | \$0 | \$0 |
| 1-Jul-29 | 1-Sep-30 | \$0 | \$0 | \$0 |
| 1-Jul-30 | 1-Sep-31 | \$0 | \$0 | \$0 |
| 1-Jul-31 | 1-Sep-32 | \$0 | \$0 | \$0 |
| 1-Jul-32 | 1-Sep-33 | \$0 | \$0 | \$0 |
| 1-Jul-33 | 1-Sep-34 | \$0 | \$0 | \$0 |
| 1-Jul-34 | 1-Sep-35 | \$0 | \$0 | \$0 |
| 1-Jul-35 | 1-Sep-36 | \$0 | \$0 | \$0 |
| Total |  | \$10,165,473 | \$6,684,834 | \$16,850,307 |

MuniCap, Inc.
18-Oct-15
${ }^{1}$ See Appendix B.

University of Maryland BioPark
City of Baltimore, Maryland
Schedule XV-B: Projected Tax Credits to Developer - Regional Institution Strategic Enterprise (RISE) Zone Tax Credits ${ }^{1}$

| Tax <br> Year Beginning | Bond Year <br> Ending | Lab | Total |
| :---: | :---: | :---: | :---: |
| 1-Jul-15 | 1-Sep-16 | \$0 | \$0 |
| 1-Jul-16 | 1-Sep-17 | \$0 | \$0 |
| 1-Jul-17 | 1-Sep-18 | \$0 | \$0 |
| 1-Jul-18 | 1-Sep-19 | \$1,077,719 | \$1,077,719 |
| 1-Jul-19 | 1-Sep-20 | \$1,205,337 | \$1,205,337 |
| 1-Jul-20 | 1-Sep-21 | \$1,339,620 | \$1,339,620 |
| 1-Jul-21 | 1-Sep-22 | \$1,480,854 | \$1,480,854 |
| 1-Jul-22 | 1-Sep-23 | \$1,526,000 | \$1,526,000 |
| 1-Jul-23 | 1-Sep-24 | \$0 | \$0 |
| 1-Jul-24 | 1-Sep-25 | \$0 | \$0 |
| 1-Jul-25 | 1-Sep-26 | \$0 | \$0 |
| 1-Jul-26 | 1-Sep-27 | \$0 | \$0 |
| 1-Jul-27 | 1-Sep-28 | \$0 | \$0 |
| 1-Jul-28 | 1-Sep-29 | \$0 | \$0 |
| 1-Jul-29 | 1-Sep-30 | \$0 | \$0 |
| 1-Jul-30 | 1-Sep-31 | \$0 | \$0 |
| 1-Jul-31 | 1-Sep-32 | \$0 | \$0 |
| 1-Jul-32 | 1-Sep-33 | \$0 | \$0 |
| 1-Jul-33 | 1-Sep-34 | \$0 | \$0 |
| 1-Jul-34 | 1-Sep-35 | \$0 | \$0 |
| 1-Jul-35 | 1-Sep-36 | \$0 | \$0 |
| Total |  | \$6,629,530 | \$6,629,530 |
| MuniCap, Inc. |  | S:ICONSULTING\BaltimorelUMB\[Projection No. 10.xlsx]XV-B |  |
|  |  |  | 18-Oct-15 |
| ${ }^{1}$ See Appendix |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XV-C: Projected Total Tax Credits to Developer - Total

| Tax | Bond | Inflation | Projected Total Tax Credits to Developer |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Enterprise Zone | RISE Zone |  |
| Year | Year |  | Phase I | Phase I |  |
| Beginning | Ending | Factor ${ }^{1}$ | (Schedule XV-A) | (Schedule XV-B) |  |
| 1-Jul-15 | 1-Sep-16 | 100.0\% | \$0 | \$0 | \$0 |
| 1-Jul-16 | 1-Sep-17 | 103.0\% | \$729,114 | \$0 | \$729,114 |
| 1-Jul-17 | 1-Sep-18 | 106.1\% | \$816,277 | \$0 | \$816,277 |
| 1-Jul-18 | 1-Sep-19 | 109.3\% | \$907,993 | \$1,077,719 | \$1,985,712 |
| 1-Jul-19 | 1-Sep-20 | 112.6\% | \$1,004,456 | \$1,205,337 | \$2,209,793 |
| 1-Jul-20 | 1-Sep-21 | 115.9\% | \$1,035,291 | \$1,339,620 | \$2,374,911 |
| 1-Jul-21 | 1-Sep-22 | 119.4\% | \$1,067,051 | \$1,480,854 | \$2,547,905 |
| 1-Jul-22 | 1-Sep-23 | 123.0\% | \$1,099,764 | \$1,526,000 | \$2,625,763 |
| 1-Jul-23 | 1-Sep-24 | 126.7\% | \$2,391,458 | \$0 | \$2,391,458 |
| 1-Jul-24 | 1-Sep-25 | 130.5\% | \$2,464,479 | \$0 | \$2,464,479 |
| 1-Jul-25 | 1-Sep-26 | 134.4\% | \$2,539,691 | \$0 | \$2,539,691 |
| 1-Jul-26 | 1-Sep-27 | 138.4\% | \$1,376,432 | \$0 | \$1,376,432 |
| 1-Jul-27 | 1 -Sep-28 | 142.6\% | \$1,418,302 | \$0 | \$1,418,302 |
| 1-Jul-28 | 1-Sep-29 | 146.9\% | \$0 | \$0 | \$0 |
| 1-Jul-29 | 1-Sep-30 | 151.3\% | \$0 | \$0 | \$0 |
| 1-Jul-30 | 1-Sep-31 | 155.8\% | \$0 | \$0 | \$0 |
| 1-Jul-31 | 1-Sep-32 | 160.5\% | \$0 | \$0 | \$0 |
| 1-Jul-32 | 1-Sep-33 | 165.3\% | \$0 | \$0 | \$0 |
| 1-Jul-33 | 1-Sep-34 | 170.2\% | \$0 | \$0 | \$0 |
| 1-Jul-34 | 1-Sep-35 | 175.4\% | \$0 | \$0 | \$0 |
| 1-Jul-35 | 1-Sep-36 | 180.6\% | \$0 | \$0 | \$0 |
| Total |  |  | \$16,850,307 | \$6,629,530 | \$23,479,837 |

MuniCap, Inc.
S: $\backslash C O N S U L T I N G \backslash B a l t i m o r e \backslash U M B \backslash[P r o j e c t i o n ~ N o . ~ 10 . x l s x] X V-C ~$
18-Oct-15
${ }^{1}$ Assumes an annual inflation rate of $3 \%$. Inflation rate accounts for annual increasing assessed value, along with the decreasing real property tax rates.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XVI-A: Projected Total Incremental Real Property Taxes Available for Debt Service - Including All Tax Credits

| Tax <br> Year <br> Beginning | Bond <br> Year <br> Ending | Total <br> Assessed Value ${ }^{1}$ | Base Value ${ }^{2}$ | Estimated <br> Incremental Value | $\begin{gathered} \text { City } \\ \text { Tax Rate } \\ (\text { Per } \$ 100 \text { A.V. })^{3} \end{gathered}$ | City <br> Incremental Tax Revenues | Total $\text { Tax Credits }{ }^{4}$ | Total Incremental Tax Revenues | Percent <br> Available for <br> Debt Service ${ }^{5}$ | Total Available Incremental Tax Revenues | City Collection Rate ${ }^{6}$ | Total Increment Tax Revenues |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-Jul-15 | 1-Sep-16 | \$14,066,700 | (\$2,368,100) | \$11,698,600 | \$2.248 | \$262,985 | \$0 | \$262,985 | 100\% | \$262,985 | 94\% | \$247,205 |
| 1-Jul-16 | 1-Sep-17 | \$42,910,443 | (\$2,368,100) | \$40,542,343 | \$2.248 | \$911,392 | $(\$ 729,114)$ | \$182,278 | 100\% | \$182,278 | 94\% | \$171,342 |
| 1-Jul-17 | 1-Sep-18 | \$47,757,158 | (\$2,368,100) | \$45,389,058 | \$2.248 | \$1,020,346 | $(\$ 816,277)$ | \$204,069 | 100\% | \$204,069 | 94\% | \$191,825 |
| 1-Jul-18 | 1-Sep-19 | \$100,798,274 | (\$2,368,100) | \$98,430,174 | \$2.248 | \$2,212,710 | (\$1,985,712) | \$226,998 | 100\% | \$226,998 | 94\% | \$213,378 |
| 1-Jul-19 | 1-Sep-20 | \$111,839,046 | (\$2,368,100) | \$109,470,946 | \$2.248 | \$2,460,907 | (\$2,209,793) | \$251,114 | 100\% | \$251,114 | 94\% | \$236,047 |
| 1-Jul-20 | 1-Sep-21 | \$119,527,070 | (\$2,368,100) | \$117,158,970 | \$2.248 | \$2,633,734 | (\$2,374,911) | \$258,823 | 100\% | \$258,823 | 94\% | \$243,293 |
| 1-Jul-21 | 1-Sep-22 | \$127,575,721 | (\$2,368,100) | \$125,207,621 | \$2.248 | \$2,814,667 | $(\$ 2,547,905)$ | \$266,763 | 100\% | \$266,763 | 94\% | \$250,757 |
| 1-Jul-22 | 1-Sep-23 | \$131,402,993 | (\$2,368,100) | \$129,034,893 | \$2.248 | \$2,900,704 | (\$2,625,763) | \$274,941 | 100\% | \$274,941 | 94\% | \$258,444 |
| 1-Jul-23 | 1-Sep-24 | \$135,345,082 | (\$2,368,100) | \$132,976,982 | \$2.248 | \$2,989,323 | $(\$ 2,391,458)$ | \$597,865 | 100\% | \$597,865 | 94\% | \$561,993 |
| 1-Jul-24 | 1-Sep-25 | \$139,405,435 | (\$2,368,100) | \$137,037,335 | \$2.248 | \$3,080,599 | (\$2,464,479) | \$616,120 | 100\% | \$616,120 | 94\% | \$579,153 |
| 1-Jul-25 | 1-Sep-26 | \$143,587,598 | (\$2,368,100) | \$141,219,498 | \$2.248 | \$3,174,614 | (\$2,539,691) | \$634,923 | 100\% | \$634,923 | 94\% | \$596,827 |
| 1-Jul-26 | 1-Sep-27 | \$147,895,226 | (\$2,368,100) | \$145,527,126 | \$2.248 | \$3,271,450 | $(\$ 1,376,432)$ | \$1,895,017 | 100\% | \$1,895,017 | 94\% | \$1,781,316 |
| 1-Jul-27 | 1-Sep-28 | \$152,332,083 | (\$2,368,100) | \$149,963,983 | \$2.248 | \$3,371,190 | (\$1,418,302) | \$1,952,889 | 100\% | \$1,952,889 | 94\% | \$1,835,715 |
| 1-Jul-28 | 1-Sep-29 | \$156,902,045 | (\$2,368,100) | \$154,533,945 | \$2.248 | \$3,473,923 | \$0 | \$3,473,923 | 100\% | \$3,473,923 | 94\% | \$3,265,488 |
| 1-Jul-29 | 1-Sep-30 | \$161,609,106 | (\$2,368,100) | \$159,241,006 | \$2.248 | \$3,579,738 | \$0 | \$3,579,738 | 100\% | \$3,579,738 | 94\% | \$3,364,954 |
| 1-Jul-30 | 1-Sep-31 | \$166,457,380 | (\$2,368,100) | \$164,089,280 | \$2.248 | \$3,688,727 | \$0 | \$3,688,727 | 100\% | \$3,688,727 | 94\% | \$3,467,403 |
| 1-Jul-31 | 1-Sep-32 | \$171,451,101 | (\$2,368,100) | \$169,083,001 | \$2.248 | \$3,800,986 | \$0 | \$3,800,986 | 100\% | \$3,800,986 | 94\% | \$3,572,927 |
| 1-Jul-32 | 1-Sep-33 | \$176,594,634 | (\$2,368,100) | \$174,226,534 | \$2.248 | \$3,916,612 | \$0 | \$3,916,612 | 100\% | \$3,916,612 | 94\% | \$3,681,616 |
| 1-Jul-33 | 1-Sep-34 | \$181,892,473 | (\$2,368,100) | \$179,524,373 | \$2.248 | \$4,035,708 | \$0 | \$4,035,708 | 100\% | \$4,035,708 | 94\% | \$3,793,565 |
| 1-Jul-34 | 1-Sep-35 | \$187,349,247 | (\$2,368,100) | \$184,981,147 | \$2.248 | \$4,158,376 | \$0 | \$4,158,376 | 100\% | \$4,158,376 | 94\% | \$3,908,874 |
| 1-Jul-35 | 1-Sep-36 | \$192,969,725 | (\$2,368,100) | \$190,601,625 | \$2.248 | \$4,284,725 | \$0 | \$4,284,725 | 100\% | \$4,284,725 | 94\% | \$4,027,641 |
| Total |  |  |  |  |  | \$62,043,416 | (\$23,479,837) | \$38,563,579 |  | \$38,563,579 |  | \$36,249,764 |

$\overline{\text { MuniCap, Inc. }}$
${ }^{1}$ See Schedule XIII.
${ }^{2}$ See Table 1 on Schedule XIV
${ }^{3}$ City of Baltimore real property tax rate for fiscal year 2015-2016. Source: Maryland State Department of Assessments and Taxatior
${ }^{4}$ See Schedule XV-C.
${ }^{5}$ Assumes $100 \%$ of incremental tax revenues are available for the repayment of debt service
${ }^{6}$ Assumes a collection rate of $94 \%$ by tax sale. Based on City of Baltimore tax increment financing regulation

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XVI-B: Projected Total Incremental Real Property Taxes Available for Debt Service - Excluding Tax Credits to the Developer

| Tax <br> Year <br> Beginning | Bond Year <br> Ending | Total Assessed Value ${ }^{1}$ | Base Value ${ }^{2}$ | Estimated <br> Incremental Value | City <br> Tax Rate (Per \$100 A.V.) ${ }^{3}$ | City Incremental Tax Revenues | Percent Available for Debt Service ${ }^{4}$ | Total Available Incremental Tax Revenues | $\begin{gathered} \text { City } \\ \text { Collection } \\ \text { Rate }^{5} \\ \hline \end{gathered}$ | Total Increment Tax Revenues |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-Jul-15 | 1-Sep-16 | \$14,066,700 | (\$2,368,100) | \$11,698,600 | \$2.248 | \$262,985 | 100\% | \$262,985 | 94\% | \$247,205 |
| 1-Jul-16 | 1-Sep-17 | \$42,910,443 | (\$2,368,100) | \$40,542,343 | \$2.248 | \$911,392 | 100\% | \$911,392 | 94\% | \$856,708 |
| 1-Jul-17 | 1-Sep-18 | \$47,757,158 | (\$2,368,100) | \$45,389,058 | \$2.248 | \$1,020,346 | 100\% | \$1,020,346 | 94\% | \$959,125 |
| 1-Jul-18 | 1-Sep-19 | \$100,798,274 | (\$2,368,100) | \$98,430,174 | \$2.248 | \$2,212,710 | 100\% | \$2,212,710 | 94\% | \$2,079,948 |
| 1-Jul-19 | 1-Sep-20 | \$111,839,046 | (\$2,368,100) | \$109,470,946 | \$2.248 | \$2,460,907 | 100\% | \$2,460,907 | 94\% | \$2,313,252 |
| 1-Jul-20 | 1-Sep-21 | \$119,527,070 | (\$2,368,100) | \$117,158,970 | \$2.248 | \$2,633,734 | 100\% | \$2,633,734 | 94\% | \$2,475,710 |
| 1-Jul-21 | 1-Sep-22 | \$127,575,721 | (\$2,368,100) | \$125,207,621 | \$2.248 | \$2,814,667 | 100\% | \$2,814,667 | 94\% | \$2,645,787 |
| 1-Jul-22 | 1-Sep-23 | \$131,402,993 | (\$2,368,100) | \$129,034,893 | \$2.248 | \$2,900,704 | 100\% | \$2,900,704 | 94\% | \$2,726,662 |
| 1-Jul-23 | 1-Sep-24 | \$135,345,082 | (\$2,368,100) | \$132,976,982 | \$2.248 | \$2,989,323 | 100\% | \$2,989,323 | 94\% | \$2,809,963 |
| 1-Jul-24 | 1-Sep-25 | \$139,405,435 | (\$2,368,100) | \$137,037,335 | \$2.248 | \$3,080,599 | 100\% | \$3,080,599 | 94\% | \$2,895,763 |
| 1-Jul-25 | 1-Sep-26 | \$143,587,598 | (\$2,368,100) | \$141,219,498 | \$2.248 | \$3,174,614 | 100\% | \$3,174,614 | 94\% | \$2,984,137 |
| 1-Jul-26 | 1-Sep-27 | \$147,895,226 | (\$2,368,100) | \$145,527,126 | \$2.248 | \$3,271,450 | 100\% | \$3,271,450 | 94\% | \$3,075,163 |
| 1-Jul-27 | 1-Sep-28 | \$152,332,083 | (\$2,368,100) | \$149,963,983 | \$2.248 | \$3,371,190 | 100\% | \$3,371,190 | 94\% | \$3,168,919 |
| 1-Jul-28 | 1-Sep-29 | \$156,902,045 | (\$2,368,100) | \$154,533,945 | \$2.248 | \$3,473,923 | 100\% | \$3,473,923 | 94\% | \$3,265,488 |
| 1-Jul-29 | 1-Sep-30 | \$161,609,106 | (\$2,368,100) | \$159,241,006 | \$2.248 | \$3,579,738 | 100\% | \$3,579,738 | 94\% | \$3,364,954 |
| 1-Jul-30 | 1-Sep-31 | \$166,457,380 | (\$2,368,100) | \$164,089,280 | \$2.248 | \$3,688,727 | 100\% | \$3,688,727 | 94\% | \$3,467,403 |
| 1-Jul-31 | 1-Sep-32 | \$171,451,101 | (\$2,368,100) | \$169,083,001 | \$2.248 | \$3,800,986 | 100\% | \$3,800,986 | 94\% | \$3,572,927 |
| 1-Jul-32 | 1-Sep-33 | \$176,594,634 | (\$2,368,100) | \$174,226,534 | \$2.248 | \$3,916,612 | 100\% | \$3,916,612 | 94\% | \$3,681,616 |
| 1-Jul-33 | 1-Sep-34 | \$181,892,473 | (\$2,368,100) | \$179,524,373 | \$2.248 | \$4,035,708 | 100\% | \$4,035,708 | 94\% | \$3,793,565 |
| 1-Jul-34 | 1-Sep-35 | \$187,349,247 | (\$2,368,100) | \$184,981,147 | \$2.248 | \$4,158,376 | 100\% | \$4,158,376 | 94\% | \$3,908,874 |
| 1-Jul-35 | 1-Sep-36 | \$192,969,725 | (\$2,368,100) | \$190,601,625 | \$2.248 | \$4,284,725 | 100\% | \$4,284,725 | 94\% | \$4,027,641 |

$\overline{\text { MuniCap, Inc. }}$

S:ICONSULTING\Baltimore\UMB\[Projection No. 10.xlsx]XVI-B
${ }^{1}$ See Schedule XIII.
${ }^{2}$ See Table 1 on Schedule XIV.
${ }^{3}$ City of Baltimore real property tax rate for fiscal year 2015-2016. Source: Maryland State Department of Assessments and Taxation.
${ }^{4}$ Assumes $100 \%$ of incremental tax revenues are available for the repayment of debt service.
${ }^{5}$ Assumes a collection rate of $94 \%$ by tax sale. Based on City of Baltimore tax increment financing regulation.

# University of Maryland BioPark City of Baltimore, Maryland 

## PROJECTED DEBT SERVICE COVERAGE

## University of Maryland BioPark

## City of Baltimore, Maryland

## Schedule XVII-A: Projected Payment of Debt Service and Debt Service Coverage - Including All Tax Credits



See Schedule V.
${ }^{2}$ See Schedule VI.
${ }^{3}$ See Schedule XVI-A.
 is paid in year two, and the full amount is paid for years eight through ten.
Special taxes partly recover the Enterprise Zone and RISE Zone Tax Credits, as it is not possible to fully utilize both property tax credits and tax increment financing

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XVII-B: Projected Payment of Debt Service and Debt Service Coverage - Excluding Tax Credits to the Developer

|  |  |  |  |  |  |  |  |  |  | Debt Serv | Coverage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tax | Bond |  |  |  |  |  |  |  |  | Tax |  |
| Year | Year | Net | Annual Debt Servic |  | Tax Increment |  |  | Net Surplus/ | Cumulative | Increment | Total |
| Beginning | Ending | Before Conversion ${ }^{1}$ | After Conversion ${ }^{2}$ | Total | Revenue ${ }^{3}$ | Surplus/(Deficit) | Special Tax | Deficit | Surplus/Deficit | Revenues | Revenues |
| 1-Jul-15 | 1-Sep-16 | \$0 | \$0 | \$0 | \$247,205 | \$247,205 | \$0 | \$247,205 | \$247,205 | NA | NA |
| 1-Jul-16 | 1-Sep-17 | \$625,000 | \$0 | \$625,000 | \$856,708 | \$231,708 | \$0 | \$231,708 | \$478,914 | 137\% | 137\% |
| 1-Jul-17 | 1-Sep-18 | \$625,000 | \$0 | \$625,000 | \$959,125 | \$334,125 | \$0 | \$334,125 | \$813,039 | 153\% | 153\% |
| 1-Jul-18 | 1-Sep-19 | \$625,000 | \$0 | \$625,000 | \$2,079,948 | \$1,454,948 | \$0 | \$1,454,948 | \$2,267,987 | 333\% | 333\% |
| 1-Jul-19 | 1-Sep-20 | \$0 | \$1,080,000 | \$1,080,000 | \$2,313,252 | \$1,233,252 | \$0 | \$1,233,252 | \$3,501,239 | 214\% | 214\% |
| 1-Jul-20 | 1-Sep-21 | \$0 | \$1,080,600 | \$1,080,600 | \$2,475,710 | \$1,395,110 | \$0 | \$1,395,110 | \$4,896,349 | 229\% | 229\% |
| 1-Jul-21 | 1-Sep-22 | \$0 | \$1,081,212 | \$1,081,212 | \$2,645,787 | \$1,564,575 | \$0 | \$1,564,575 | \$6,460,924 | 245\% | 245\% |
| 1-Jul-22 | 1-Sep-23 | \$0 | \$1,081,836 | \$1,081,836 | \$2,726,662 | \$1,644,826 | \$0 | \$1,644,826 | \$8,105,750 | 252\% | 252\% |
| 1-Jul-23 | 1-Sep-24 | \$0 | \$1,082,473 | \$1,082,473 | \$2,809,963 | \$1,727,490 | \$0 | \$1,727,490 | \$9,833,240 | 260\% | 260\% |
| 1-Jul-24 | 1-Sep-25 | \$0 | \$1,083,122 | \$1,083,122 | \$2,895,763 | \$1,812,641 | \$0 | \$1,812,641 | \$11,645,881 | 267\% | 267\% |
| 1-Jul-25 | 1-Sep-26 | \$0 | \$1,083,785 | \$1,083,785 | \$2,984,137 | \$1,900,353 | \$0 | \$1,900,353 | \$13,546,234 | 275\% | 275\% |
| 1-Jul-26 | 1-Sep-27 | \$0 | \$2,226,461 | \$2,226,461 | \$3,075,163 | \$848,702 | \$0 | \$848,702 | \$14,394,936 | 138\% | 138\% |
| 1-Jul-27 | 1-Sep-28 | \$0 | \$2,271,630 | \$2,271,630 | \$3,168,919 | \$897,289 | \$0 | \$897,289 | \$15,292,225 | 139\% | 139\% |
| 1-Jul-28 | 1-Sep-29 | \$0 | \$2,317,033 | \$2,317,033 | \$3,265,488 | \$948,455 | \$0 | \$948,455 | \$16,240,680 | 141\% | 141\% |
| 1-Jul-29 | 1-Sep-30 | \$0 | \$2,363,250 | \$2,363,250 | \$3,364,954 | \$1,001,704 | \$0 | \$1,001,704 | \$17,242,384 | 142\% | 142\% |
| 1-Jul-30 | 1-Sep-31 | \$0 | \$2,409,801 | \$2,409,801 | \$3,467,403 | \$1,057,602 | \$0 | \$1,057,602 | \$18,299,986 | 144\% | 144\% |
| 1-Jul-31 | 1-Sep-32 | \$0 | \$2,458,207 | \$2,458,207 | \$3,572,927 | \$1,114,719 | \$0 | \$1,114,719 | \$19,414,705 | 145\% | 145\% |
| 1-Jul-32 | 1-Sep-33 | \$0 | \$2,507,868 | \$2,507,868 | \$3,681,616 | \$1,173,748 | \$0 | \$1,173,748 | \$20,588,453 | 147\% | 147\% |
| 1-Jul-33 | 1-Sep-34 | \$0 | \$2,557,184 | \$2,557,184 | \$3,793,565 | \$1,236,381 | \$0 | \$1,236,381 | \$21,824,834 | 148\% | 148\% |
| 1-Jul-34 | 1-Sep-35 | \$0 | \$2,608,616 | \$2,608,616 | \$3,908,874 | \$1,300,258 | \$0 | \$1,300,258 | \$23,125,092 | 150\% | 150\% |
| 1-Jul-35 | 1-Sep-36 | \$0 | \$2,660,444 | \$2,660,444 | \$4,027,641 | \$1,367,197 | \$0 | \$1,367,197 | \$24,492,289 | 151\% | 151\% |
| Total |  | \$1,875,000 | \$31,953,522 | \$33,828,522 | \$58,320,811 | \$24,492,289 | \$0 | \$24,492,289 |  |  |  |
| MuniCap, Inc. |  |  |  |  |  |  |  | S:\|CONSULTING\Baltimore\UMB\[Projection No. 10.xlsx]XVII-B |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | 18-Oct-15 |
| ${ }^{1}$ See Schedule V. |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ See Schedule VI. |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ See Schedule XVI-B. |  |  |  |  |  |  |  |  |  |  |  |

# University of Maryland BioPark City of Baltimore, Maryland 

## APPENDICES

## University of Maryland BioPark

## City of Baltimore, Maryland

Appendix A: Determination of Applicable Tax Credits

|  | Enterprise \& Empowerment Zone Determinant ${ }^{2}$ | RISE Zone <br> Determinant ${ }^{4}$ | Tax Credit ${ }^{6}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1st Qualification: | 2nd Qualification: | Enterprise \& | RISE |
| Development Type ${ }^{1}$ | Located Within ${ }^{3}$ | Located Within ${ }^{5}$ | Empower. Zone | Zone |

Conclusion

| Phase I |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Proton Treatment Center | Both | No | X | NA | Lies within an Enterprise \& Empowerment Zone; lies outside a RISE Zone |
| Lab - Building 3 (873 W. Baltimore) | Both | Yes | X | X | Lies within an Enterprise \& Empowerment Zone; lies within a RISE Zone |

## MuniCap, Inc.

S:ICONSULTING |BaltimorelUMB|[Projection No. 10.xlsx]A
18-Oct-15
'See Schedule VII.
${ }^{2}$ To determine if a property is eligible for either of the tax credits, it must first be determined if the property lies within at least one of the two types of areas: (1) Enterprise Zone and (2) Empowerment Zone.
${ }^{3}$ Determines if the property is eligible for the Enterprise Zone Tax Credit and enhanced Enterprise Zone Tax Credit based on location. To be eligible for the Enterprise Zone Tax Credit, a property must lie within an Enterprise Zone. To be eligible for the enhanced version of the Enterprise Zone Tax Credit, a property must lie within a designated Empowerment Zone. Source: Baltimore City Department of Finance. All properties are located within both zones as determined by Baltimore City iMap through the Baltimore Development Corporation.
${ }^{4}$ To determine if a property is eligible for the Regional Institution Strategic Enterprise Zone (RISE) credit, it must determined if the property is in a designated RISE zone
${ }^{5}$ Based on information received from Wexford Science + Technology
${ }^{6}$ Assumes property owner opts for the most financially advantageous tax credit. An "X" indicates which tax credit is applied

## University of Maryland BioPark <br> City of Baltimore, Maryland

Appendix B-1: Projected Enterprise Zone Tax Credit - Phase I (Proton Treatment Center)

| Development Year Ending | Tax <br> Year <br> Beginning | Bond <br> Year <br> Ending | Proton Treatment Center |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Eligible Assessment ${ }^{1}$ |  |  | Enterprise <br> Zone Tax <br> Credit Percent ${ }^{4}$ | Amount Eligible for Enterprise Zone Credit | City <br> Tax Rate (Per \$100 A.V.) ${ }^{5}$ | Enterprise <br> Zone <br> Tax Credit |
|  |  |  | Total | Base Year Total | Sub-total |  |  |  |  |
|  |  |  | Assessed Value ${ }^{2}$ | Assessment ${ }^{3}$ | Eligible Assessment |  |  |  |  |
| 31-Dec-14 | 1-Jul-15 | 1-Sep-16 | \$0 | (\$1,299,800) | \$0 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-15 | 1-Jul-16 | 1-Sep-17 | \$41,842,143 | (\$1,299,800) | \$40,542,343 | 80\% | \$32,433,875 | \$2.248 | \$729,114 |
| 31-Dec-16 | 1-Jul-17 | 1-Sep-18 | \$46,688,858 | (\$1,299,800) | \$45,389,058 | 80\% | \$36,311,246 | \$2.248 | \$816,277 |
| 31-Dec-17 | 1-Jul-18 | 1-Sep-19 | \$51,788,718 | (\$1,299,800) | \$50,488,918 | 80\% | \$40,391,134 | \$2.248 | \$907,993 |
| 31-Dec-18 | 1-Jul-19 | 1-Sep-20 | \$57,152,550 | (\$1,299,800) | \$55,852,750 | 80\% | \$44,682,200 | \$2.248 | \$1,004,456 |
| 31-Dec-19 | 1-Jul-20 | 1-Sep-21 | \$58,867,126 | (\$1,299,800) | \$57,567,326 | 80\% | \$46,053,861 | \$2.248 | \$1,035,291 |
| 31-Dec-20 | 1-Jul-21 | 1-Sep-22 | \$60,633,140 | (\$1,299,800) | \$59,333,340 | 80\% | \$47,466,672 | \$2.248 | \$1,067,051 |
| 31-Dec-21 | 1-Jul-22 | 1-Sep-23 | \$62,452,134 | (\$1,299,800) | \$61,152,334 | 80\% | \$48,921,867 | \$2.248 | \$1,099,764 |
| 31-Dec-22 | 1-Jul-23 | 1-Sep-24 | \$64,325,698 | (\$1,299,800) | \$63,025,898 | 80\% | \$50,420,718 | \$2.248 | \$1,133,458 |
| 31-Dec-23 | 1-Jul-24 | 1-Sep-25 | \$66,255,469 | (\$1,299,800) | \$64,955,669 | 80\% | \$51,964,535 | \$2.248 | \$1,168,163 |
| 31-Dec-24 | 1-Jul-25 | 1-Sep-26 | \$68,243,133 | (\$1,299,800) | \$66,943,333 | 80\% | \$53,554,666 | \$2.248 | \$1,203,909 |
| 31-Dec-25 | 1-Jul-26 | 1-Sep-27 | \$70,290,427 | (\$1,299,800) | \$68,990,627 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-26 | 1-Jul-27 | 1-Sep-28 | \$72,399,140 | (\$1,299,800) | \$71,099,340 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-27 | 1-Jul-28 | 1-Sep-29 | \$74,571,114 | (\$1,299,800) | \$73,271,314 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-28 | 1-Jul-29 | 1-Sep-30 | \$76,808,247 | (\$1,299,800) | \$75,508,447 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-29 | 1-Jul-30 | 1-Sep-31 | \$79,112,495 | (\$1,299,800) | \$77,812,695 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-30 | 1-Jul-31 | 1-Sep-32 | \$81,485,870 | (\$1,299,800) | \$80,186,070 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-31 | 1-Jul-32 | 1-Sep-33 | \$83,930,446 | (\$1,299,800) | \$82,630,646 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-32 | 1-Jul-33 | 1-Sep-34 | \$86,448,359 | (\$1,299,800) | \$85,148,559 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-33 | 1-Jul-34 | 1-Sep-35 | \$89,041,810 | (\$1,299,800) | \$87,742,010 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-34 | 1-Jul-35 | 1-Sep-36 | \$91,713,064 | (\$1,299,800) | \$90,413,264 | 0\% | \$0 | \$2.248 | \$0 |

 Assessments for Baltimore City as appointed by the Maryland Department of Assessments and Taxation
${ }^{2}$ See Schedule XIII.
${ }^{3}$ Represents the total base value of tax parcel developed as Proton Treatment Center. See Table 1 on Schedule XIV.
${ }^{4}$ The credit is $80 \%$ of the increased assessment for ten years for properties located within an Empowerment Zone. Source: Baltimore Development Corporation.
${ }^{5}$ City of Baltimore real property tax rate for fiscal year 2015-2016. Source: Maryland State Department of Assessments and Taxation.

## University of Maryland BioPark <br> City of Baltimore, Maryland

Appendix B-2: Projected Enterprise Zone Tax Credit - Phase I (Lab - Building 3 ( 873 W. Baltimore))

| Development Year | Tax <br> Year | Bond Year | Lab - Building 3 (873 W. Baltimore) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ligible Assessmen |  | Enterprise | Amount Eligible | City | Enterprise |
|  |  |  | Total | Base Year Total | Sub-total | Zone Tax | for Enterprise | Tax Rate | Zone |
| Ending | Beginning | Ending | Assessed Value ${ }^{2}$ | Assessment ${ }^{3}$ | Eligible Assessment | Credit Percent ${ }^{4}$ | Zone Credit | (Per \$100 A.V.) ${ }^{5}$ | Tax Credit |
| 31-Dec-14 | 1-Jul-15 | 1-Sep-16 | \$0 | (\$1,068,300) | \$0 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-15 | 1-Jul-16 | 1-Sep-17 | \$0 | (\$1,068,300) | \$0 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-16 | 1-Jul-17 | 1-Sep-18 | \$0 | (\$1,068,300) | \$0 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-17 | 1-Jul-18 | 1-Sep-19 | \$49,009,556 | (\$1,068,300) | \$47,941,256 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-18 | 1-Jul-19 | 1-Sep-20 | \$54,686,496 | (\$1,068,300) | \$53,618,196 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-19 | 1-Jul-20 | 1-Sep-21 | \$60,659,944 | (\$1,068,300) | \$59,591,644 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-20 | 1-Jul-21 | 1-Sep-22 | \$66,942,581 | (\$1,068,300) | \$65,874,281 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-21 | 1-Jul-22 | 1-Sep-23 | \$68,950,859 | (\$1,068,300) | \$67,882,559 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-22 | 1-Jul-23 | 1-Sep-24 | \$71,019,384 | (\$1,068,300) | \$69,951,084 | 80\% | \$55,960,868 | \$2.248 | \$1,258,000 |
| 31-Dec-23 | 1-Jul-24 | 1-Sep-25 | \$73,149,966 | (\$1,068,300) | \$72,081,666 | 80\% | \$57,665,333 | \$2.248 | \$1,296,317 |
| 31-Dec-24 | 1-Jul-25 | 1-Sep-26 | \$75,344,465 | (\$1,068,300) | \$74,276,165 | 80\% | \$59,420,932 | \$2.248 | \$1,335,783 |
| 31-Dec-25 | 1-Jul-26 | 1-Sep-27 | \$77,604,799 | (\$1,068,300) | \$76,536,499 | 80\% | \$61,229,199 | \$2.248 | \$1,376,432 |
| 31-Dec-26 | 1-Jul-27 | 1-Sep-28 | \$79,932,943 | (\$1,068,300) | \$78,864,643 | 80\% | \$63,091,714 | \$2.248 | \$1,418,302 |
| 31-Dec-27 | 1-Jul-28 | 1-Sep-29 | \$82,330,931 | (\$1,068,300) | \$81,262,631 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-28 | 1-Jul-29 | 1-Sep-30 | \$84,800,859 | (\$1,068,300) | \$83,732,559 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-29 | 1-Jul-30 | 1-Sep-31 | \$87,344,885 | (\$1,068,300) | \$86,276,585 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-30 | 1-Jul-31 | 1-Sep-32 | \$89,965,231 | (\$1,068,300) | \$88,896,931 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-31 | 1-Jul-32 | 1-Sep-33 | \$92,664,188 | (\$1,068,300) | \$91,595,888 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-32 | 1-Jul-33 | 1-Sep-34 | \$95,444,114 | (\$1,068,300) | \$94,375,814 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-33 | 1-Jul-34 | 1-Sep-35 | \$98,307,437 | (\$1,068,300) | \$97,239,137 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-34 | 1-Jul-35 | 1-Sep-36 | \$101,256,661 | (\$1,068,300) | \$100,188,361 | 0\% | \$0 | \$2.248 | \$0 |

$\frac{\text { Total }}{\text { MuniCap, Inc. }}$

S:ICONSULTING\BaltimorelUMB\[Projection No. 10.xlsx]B. 2
 Assessments for Baltimore City as appointed by the Maryland Department of Assessments and Taxation.
${ }^{2}$ See Schedule XIII.
${ }^{3}$ Represents the total base value of tax parcel developed as lab - Building 3 ( 873 W . Baltimore). See Table 1 on Schedule XIV.

 Empowerment Zone. Assumes property owner reapplies for second five year period.
${ }^{5}$ City of Baltimore real property tax rate for fiscal year 2015-2016. Source: Maryland State Department of Assessments and Taxation.

## University of Maryland BioPark

## City of Baltimore, Maryland

Appendix C-1: Projected RISE Zone Tax Credit - Phase I (Lab - Building 3 ( 873 W. Baltimore)) ${ }^{1}$

|  |  |  | Lab - Building 3 (873 W. Baltimore) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

MuniCap, Inc.

S:|CONSULTING\Baltimore\UMB\[Projection No. 10.xlsx]C. 1
${ }^{1}$ For eligible properties located with a RISE Zone, the RISE Zone Tax Credit is available for a period of five years. On the fifth year, property owners can apply for an additional five year designation. Source:
 eligible to receive the second five year RISE designation. As a result only five years are shown.
${ }^{2}$ See Appendix B-2.
${ }^{3}$ For properties receiving the Enterprise Zone Tax Credit and located within an Empowerment Zone, $100 \%$ of the increase in assessed value is eligible for the RISE Zone Tax Credit for five years. Source: Maryland State Department of Business \& Economic Development.
${ }^{4}$ City of Baltimore real property tax rate for fiscal year 2015-2016. Source: Maryland State Department of Assessments and Taxation.

## University of Maryland BioPark

## City of Baltimore, Maryland

Appendix D-1: Projected Enterprise Zone Tax Credit for Purpose of Reimbursement - Phase I (Proton Treatment Center) ${ }^{1}$

| Development | Tax | Bond | Proton Treatment Center |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Enterprise | Enterprise | Amount Eligible | City |  |
|  | Year | Year | Tax Credit | Zone Tax | for Enterprise | Tax Rate | Enterprise Zone |
| Ending | Beginning | Ending | Eligible Assessment ${ }^{2}$ | Credit Percent ${ }^{4}$ | Zone Credit | (Per \$100 A.V.) ${ }^{5}$ | Tax Credit |
| 31-Dec-14 | 1-Jul-15 | 1-Sep-16 | \$0 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-15 | 1-Jul-16 | 1-Sep-17 | \$40,542,343 | 80\% | \$32,433,875 | \$2.248 | \$729,114 |
| 31-Dec-16 | 1-Jul-17 | 1-Sep-18 | \$45,389,058 | 80\% | \$36,311,246 | \$2.248 | \$816,277 |
| 31-Dec-17 | 1-Jul-18 | 1-Sep-19 | \$50,488,918 | 80\% | \$40,391,134 | \$2.248 | \$907,993 |
| 31-Dec-18 | 1-Jul-19 | 1-Sep-20 | \$55,852,750 | 80\% | \$44,682,200 | \$2.248 | \$1,004,456 |
| 31-Dec-19 | 1-Jul-20 | 1-Sep-21 | \$57,567,326 | 80\% | \$46,053,861 | \$2.248 | \$1,035,291 |
| 31-Dec-20 | 1-Jul-21 | 1-Sep-22 | \$59,333,340 | 80\% | \$47,466,672 | \$2.248 | \$1,067,051 |
| 31-Dec-21 | 1-Jul-22 | 1-Sep-23 | \$61,152,334 | 80\% | \$48,921,867 | \$2.248 | \$1,099,764 |
| 31-Dec-22 | 1-Jul-23 | 1-Sep-24 | \$63,025,898 | 80\% | \$50,420,718 | \$2.248 | \$1,133,458 |
| 31-Dec-23 | 1-Jul-24 | 1-Sep-25 | \$64,955,669 | 80\% | \$51,964,535 | \$2.248 | \$1,168,163 |
| 31-Dec-24 | 1-Jul-25 | 1-Sep-26 | \$66,943,333 | 80\% | \$53,554,666 | \$2.248 | \$1,203,909 |
| 31-Dec-25 | 1-Jul-26 | 1-Sep-27 | \$68,990,627 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-26 | 1-Jul-27 | 1-Sep-28 | \$71,099,340 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-27 | 1-Jul-28 | 1-Sep-29 | \$73,271,314 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-28 | 1-Jul-29 | 1-Sep-30 | \$75,508,447 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-29 | 1-Jul-30 | 1-Sep-31 | \$77,812,695 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-30 | 1-Jul-31 | 1-Sep-32 | \$80,186,070 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-31 | 1-Jul-32 | 1-Sep-33 | \$82,630,646 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-32 | 1-Jul-33 | 1-Sep-34 | \$85,148,559 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-33 | 1-Jul-34 | 1-Sep-35 | \$87,742,010 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-34 | 1-Jul-35 | 1-Sep-36 | \$90,413,264 | 0\% | \$0 | \$2.248 | \$0 |
| Total |  |  |  |  | \$452,200,775 |  | \$10,165,473 |

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S:|CONSULTING\Baltimore\UMB\[Projection No. 10.xlsx]D. 1
18-Oct-15
${ }^{1}$ Fifty percent (50\%) of Enterprise Zone Tax Credits are reimbursed to City of Baltimore from State of Maryland and is allocated to the General Fund for fiscal year 2015-2016. As a result, assumes 50\% of tota Enterprise Zone Tax Credits are assumed to be available to City of Baltimore. Based on discussions with City of Baltimore Bureau of the Budget and Management Research. According to the Maryland State Department of Business \& Economic Development, the City will receive a reimbursement for ten years based on the eligible Enterprise Zone component of the tax credits granted.
${ }^{2}$ See Appendix B-1.
${ }^{3}$ The credit is $80 \%$ of the increased assessment for ten years for properties located within an Empowerment Zone. Source: Baltimore Development Corporation
${ }^{4}$ City of Baltimore real property tax rate for fiscal year 2015-2016. Source: Maryland State Department of Assessments and Taxation.

## University of Maryland BioPark

## City of Baltimore, Maryland

Appendix D-2: Projected Enterprise Zone Tax Credit for Purpose of Reimbursement - Phase I (Lab - Building 3 ( 873 W. Baltimore)) ${ }^{1}$

| Development Year | Tax | Bond Year | Lab - Building 3 (873 W. Baltimore) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Enterprise | Enterprise | Amount Eligible | City |  |
|  | Year |  | Tax Credit | Zone Tax | for Enterprise | Tax Rate | Enterprise Zone |
| Ending | Beginning | Ending | Eligible Assessment ${ }^{2}$ | Credit Percent ${ }^{4}$ | Zone Credit | (Per \$100 A.V.) ${ }^{5}$ | Tax Credit |
| 31-Dec-14 | 1-Jul-15 | 1-Sep-16 | \$0 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-15 | 1-Jul-16 | 1-Sep-17 | \$0 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-16 | 1-Jul-17 | 1-Sep-18 | \$0 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-17 | 1-Jul-18 | 1-Sep-19 | \$47,941,256 | 80\% | \$38,353,005 | \$2.248 | \$862,176 |
| 31-Dec-18 | 1-Jul-19 | 1-Sep-20 | \$53,618,196 | 80\% | \$42,894,557 | \$2.248 | \$964,270 |
| 31-Dec-19 | 1-Jul-20 | 1-Sep-21 | \$59,591,644 | 80\% | \$47,673,315 | \$2.248 | \$1,071,696 |
| 31-Dec-20 | 1-Jul-21 | 1-Sep-22 | \$65,874,281 | 80\% | \$52,699,425 | \$2.248 | \$1,184,683 |
| 31-Dec-21 | 1-Jul-22 | 1-Sep-23 | \$67,882,559 | 80\% | \$54,306,047 | \$2.248 | \$1,220,800 |
| 31-Dec-22 | 1-Jul-23 | 1-Sep-24 | \$69,951,084 | 80\% | \$55,960,868 | \$2.248 | \$1,258,000 |
| 31-Dec-23 | 1-Jul-24 | 1-Sep-25 | \$72,081,666 | 80\% | \$57,665,333 | \$2.248 | \$1,296,317 |
| 31-Dec-24 | 1-Jul-25 | 1-Sep-26 | \$74,276,165 | 80\% | \$59,420,932 | \$2.248 | \$1,335,783 |
| 31-Dec-25 | 1-Jul-26 | 1-Sep-27 | \$76,536,499 | 80\% | \$61,229,199 | \$2.248 | \$1,376,432 |
| 31-Dec-26 | 1-Jul-27 | 1-Sep-28 | \$78,864,643 | 80\% | \$63,091,714 | \$2.248 | \$1,418,302 |
| 31-Dec-27 | 1-Jul-28 | 1-Sep-29 | \$81,262,631 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-28 | 1-Jul-29 | 1-Sep-30 | \$83,732,559 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-29 | 1-Jul-30 | 1-Sep-31 | \$86,276,585 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-30 | 1-Jul-31 | 1-Sep-32 | \$88,896,931 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-31 | 1-Jul-32 | 1-Sep-33 | \$91,595,888 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-32 | 1-Jul-33 | 1-Sep-34 | \$94,375,814 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-33 | 1-Jul-34 | 1-Sep-35 | \$97,239,137 | 0\% | \$0 | \$2.248 | \$0 |
| 31-Dec-34 | 1-Jul-35 | 1-Sep-36 | \$100,188,361 | 0\% | \$0 | \$2.248 | \$0 |
| Total |  |  |  |  | \$533,294,394 |  | \$11,988,458 |

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S:|CONSULTING\Baltimore|UMB\[Projection No. 10.xlsx]D. 2
18-Oct-15
 Enterprise Zone Tax Credits are assumed to be available to City of Baltimore. Based on discussions with City of Baltimore Bureau of the Budget and Management Research. According to the Maryland State Department of Business \& Economic Development, the City will receive a reimbursement for ten years based on the eligible Enterprise Zone component of the tax credits granted. Though the property owner is
 Tax Credits were received for all ten years.
${ }^{2}$ See Appendix B-2.
${ }^{3}$ The credit is $80 \%$ of the increased assessment for ten years for properties located within an Empowerment Zone. Source: Baltimore Development Corporation
${ }^{4}$ City of Baltimore real property tax rate for fiscal year 2015-2016. Source: Maryland State Department of Assessments and Taxation.

## University of Maryland BioPark

## City of Baltimore, Maryland

## Appendix D-3: Projected Enterprise Zone Tax Credit for Purpose of Reimbursement - Total ${ }^{1}$

| Tax <br> Year <br> Beginning | Bond <br> Year <br> Ending | PTC | Lab | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1-Jul-15 | 1-Sep-16 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-16 | 1-Sep-17 | $\$ 729,114$ | $\$ 0$ | $\$ 729,114$ |
| 1-Jul-17 | 1-Sep-18 | $\$ 816,277$ | $\$ 0$ | $\$ 816,277$ |
| 1-Jul-18 | 1-Sep-19 | $\$ 907,993$ | $\$ 862,176$ | $\$ 1,770,168$ |
| 1-Jul-19 | 1-Sep-20 | $\$ 1,004,456$ | $\$ 964,270$ | $\$ 1,968,725$ |
| 1-Jul-20 | 1-Sep-21 | $\$ 1,035,291$ | $\$ 1,071,696$ | $\$ 2,106,987$ |
| 1-Jul-21 | 1-Sep-22 | $\$ 1,067,051$ | $\$ 1,184,683$ | $\$ 2,251,734$ |
| 1-Jul-22 | 1-Sep-23 | $\$ 1,099,764$ | $\$ 1,220,800$ | $\$ 2,320,564$ |
| 1-Jul-23 | 1-Sep-24 | $\$ 1,133,458$ | $\$ 1,258,000$ | $\$ 2,391,458$ |
| 1-Jul-24 | 1-Sep-25 | $\$ 1,168,163$ | $\$ 1,296,317$ | $\$ 2,464,479$ |
| 1-Jul-25 | 1-Sep-26 | $\$ 1,203,909$ | $\$ 1,335,783$ | $\$ 2,539,691$ |
| 1-Jul-26 | 1-Sep-27 | $\$ 0$ | $\$ 1,376,432$ | $\$ 1,376,432$ |
| 1-Jul-27 | 1-Sep-28 | $\$ 0$ | $\$ 1,418,302$ | $\$ 1,418,302$ |
| 1-Jul-28 | 1-Sep-29 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-29 | 1-Sep-30 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-30 | 1-Sep-31 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-31 | 1-Sep-32 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-32 | 1-Sep-33 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-33 | 1-Sep-34 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-34 | 1-Sep-35 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 1-Jul-35 | 1-Sep-36 | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| Total |  |  | $\$ 10,165,473$ | $\$ 11,988,458$ |

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[^0]ADDENDUM B
Fiscal Impact Analysis (Development District)

# University of Maryland BioPark City of Baltimore, Maryland 

Fiscal Impact Analysis Scenario A Development District

Prepared By:
MuniCap, Inc.
Public Finance

October 19, 2015

# University of Maryland BioPark City of Baltimore, Maryland 

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# University of Maryland BioPark City of Baltimore, Maryland 

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# University of Maryland BioPark City of Baltimore, Maryland 

## Fiscal Impact Analysis Scenario A

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## University of Maryland BioPark <br> City of Baltimore, Maryland

## Summary of Fiscal Impacts

Baltimore City Tax Revenues - Full Build-Out

| City's Return on Investment | 11.71\% |  |
| :---: | :---: | :---: |
|  | Annual ${ }^{1}$ | 20 Years $^{2}$ |
| Projected City Revenues: |  |  |
| Real property tax increment revenues | \$1,726,179 | \$36,249,764 |
| Supplemental special tax revenue ${ }^{3}$ | \$221,250 | \$2,212,500 |
| Less: TIF debt service paid by property taxes ${ }^{4}$ | (\$1,610,882) | (\$33,828,522) |
| Net real property tax increment revenues | \$336,547 | \$4,633,742 |
| Special taxes paid by the developer | \$401,127 | \$4,813,528 |
| Net real property tax increment revenues to the City | \$737,675 | \$9,447,269 |
| Personal property tax revenues | \$171,701 | \$4,502,933 |
| Enterprise Zone Tax Credit reimbursement revenues | \$923,080 | \$11,076,966 |
| Energy tax revenues | \$75,865 | \$1,989,588 |
| Personal income tax revenues - employees | \$1,028,343 | \$26,968,794 |
| Local recordation tax revenues ${ }^{5}$ | - | \$1,135,646 |
| Transfer tax revenues ${ }^{6}$ | - | - |
| Additional revenues | \$81,232 | \$2,130,361 |
| Projected city revenues | \$3,017,896 | \$57,251,558 |
| Projected City Expenses | (\$611,826) | $(\$ 15,833,161)$ |
| Net fiscal impact to Baltimore City | \$2,406,071 | \$41,418,397 |
| Projected change in State aid to schools ${ }^{7}$ | $(\$ 722,508)$ | (\$15,172,676) |
| Total fiscal impact to Baltimore City | \$1,683,562 | \$26,245,721 |

Baltimore City Permanent Employment Impacts ${ }^{8}$

|  | Jobs from Proton Treatment Center |  |
| :--- | :---: | :---: |
|  |  |  |
| Permanent Proton Treatment Center direct impacts | Permanent Jobs | Annual Compensation |
| Permanent Proton Treatment Center indirect impacts | 451 | $\$ 32,799,471$ |
| Total permanent Proton Treatment Center impacts | 218 | $\$ 13,670,804$ |
|  | 669 | $\$ 46,470,275$ |
|  |  | Jobs from Lab - Building 3 (873 W. Baltimore) |
|  |  | Annual Compensation |
| Permanent 873 Building direct impacts | 1,023 | $\$ 111,301,087$ |
| Permanent 873 Building indirect impacts | 435 | $\$ 25,412,427$ |
| Total permanent lab impacts | 1,458 | $\$ 136,713,514$ |

Baltimore City Temporary Employment Impacts ${ }^{9}$

|  | Temporary Jobs from Construction |  |
| :--- | :---: | :---: |
| Temporary direct impacts: | Temporary Jobs | Annual Compensation |
| Temporary indirect impacts | 600 | $\$ 55,567,766$ |
| Total temporary impacts | 313 | $\$ 19,367,983$ |

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more\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xlsx]Summary
19-Oct-15
${ }^{1}$ Represents the average annual tax increment revenues generated by the University of Maryland BioPark development over the 20 year period shown in the projections. Supplemental special taxes, special taxes paid by the developer and Enterprise Zone Tax Credit reimbursement revenues are shown as an average for the years in which the revenues are projected to be received.
${ }^{2}$ Projected revenues for twenty years are shown cumulatively, assuming inflation of three percent annually.
Assumes $\$ 250,000$ is paid as a supplemental special tax during the ten years in which the Enterprise Zone and Rise Tax Credits are applied to 873 W . Baltimore Street. Assumes $25 \%$ of the $\$ 250,000$ supplemental special tax is paid in year one, $60 \%$ of the $\$ 250,000$ supplemental special tax is paid in year two, and the full amount is paid for years eight through ten.
${ }^{4}$ Represents the average annual debt service over 20 years.
${ }^{5}$ Since recordation taxes are a one-time revenue, excludes from the annual average.
${ }^{6}$ According to Wexford Science + Technology, the property will not be sold. As a result, transfer taxes are not assumed to be incurred.
${ }^{7}$ As further detailed in Appendices F and G, factors such as student enrollment and wealth are used to determine the amount of State aid related to schools that each jurisdiction will receive. In the event the projected wealth exceeds the projected student enrollment, there is a reduction in the amount of the State aid received by each jurisdiction.
${ }^{8}$ Represents the estimated increase in jobs, output, and income from development at the University of Maryland BioPark.
${ }^{9}$ Temporary jobs reflect the projected development at full build-out. Temporary jobs are full-time equivalents and assume a one-year duration.

# University of Maryland BioPark City of Baltimore, Maryland 

## University of Maryland BioPark

City of Baltimore, Maryland
Schedule I: Summary of Development - Phase I

| Property Type | Estimated <br> Completion | Property Area ${ }^{1}$ |  |  |  | Market Value ${ }^{2}$ |  |  | $\begin{gathered} \text { Adjustment_ } \\ \text { Ratio }^{3} \\ \hline \end{gathered}$ | Adjusted Market Value |  |  | Total <br> Market Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | GSF Per <br> Room/Unit |  | Units |  |  |  |  |  |  |  |  |
|  |  | GSF |  | Rooms |  | Per GSF | Per Room | Per Unit |  | Per GSF | Per Room | Per Unit |  |
| Phase I |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proton Treatment Center | 2015 | 110,000 | - | - | - | \$462 | - | - | 100\% | \$462 | - | - | \$50,779,300 |
| Lab-Building 3 (873 W. Baltimore) | 2017 | 249,432 | - | - | - | \$225 | - | - | 100\% | \$225 | - | - | \$56,063,358 |
| Total |  | 359,432 |  |  |  |  |  |  |  |  |  |  | \$106,842,658 |
| MuniCap, Inc. |  |  |  |  |  | S:ICONSULTING\|BaltimorelUMB|Fiscal Impact Analysis |[Fiscal Impact Analysis No. 4-A - UMB.x|sx]I |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 19-Oct-15 |
| ${ }^{1}$ Provided by Wexford Science + Technology. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Assessed value is equal to $100 \%$ of market value. Based on tax increment financing projections, as prepared by MuniCap, Inc. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Ratio used to adjust for changes in comparable values due to location or other property char |  |  |  |  |  |  |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule II: Projected Absorption - Phase I ${ }^{1}$

| Development |  |  | Lab - Building 3 (873 W. Baltimore) |  |
| :---: | :---: | :---: | :---: | :---: |
| Ending | SF | Cumulative | SF | Cumulative |
| 31-Dec-14 | 0 | 0 | 0 | 0 |
| 31-Dec-15 | 110,000 | 110,000 | 0 | 0 |
| 31-Dec-16 | 0 | 110,000 | 0 | 0 |
| 31-Dec-17 | 0 | 110,000 | 249,432 | 249,432 |
| 31-Dec-18 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-19 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-20 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-21 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-22 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-23 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-24 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-25 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-26 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-27 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-28 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-29 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-30 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-31 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-32 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-33 | 0 | 110,000 | 0 | 249,432 |
| 31-Dec-34 | 0 | 110,000 | 0 | 249,432 |
| Total | 110,000 |  | 249,432 |  |

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# University of Maryland BioPark City of Baltimore, Maryland 

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule III: Projected Real Property Taxes - Surplus Real Property Tax Increment Revenues

| Development Year Ending | Tax <br> Year <br> Beginning | Inflation <br> Factor ${ }^{1}$ | Net Annual Debt Service ${ }^{2}$ | Total Tax Revenues Available for Debt Service |  |  | Surplus/(Deficit) | Special Tax ${ }^{4}$ | Surplus <br> Real Property Tax <br> Increment Revenues ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Tax Increment | Supplemental |  |  |  |  |
|  |  |  |  | Revenue ${ }^{2}$ | Special Tax ${ }^{3}$ | Total |  |  |  |
| 31-Dec-14 | 1-Jul-15 | 100\% | \$0 | \$247,205 | \$0 | \$247,205 | \$247,205 | \$0 | \$247,205 |
| 31-Dec-15 | 1-Jul-16 | 103\% | \$625,000 | \$171,342 | \$0 | \$171,342 | $(\$ 453,658)$ | \$453,658 | \$0 |
| 31-Dec-16 | 1-Jul-17 | 106\% | \$625,000 | \$191,825 | \$0 | \$191,825 | $(\$ 433,175)$ | \$433,175 | \$0 |
| 31-Dec-17 | 1-Jul-18 | 109\% | \$625,000 | \$213,378 | \$62,500 | \$275,878 | $(\$ 349,122)$ | \$349,122 | \$0 |
| 31-Dec-18 | 1-Jul-19 | 113\% | \$1,080,000 | \$236,047 | \$150,000 | \$386,047 | $(\$ 693,953)$ | \$693,953 | \$0 |
| 31-Dec-19 | 1-Jul-20 | 116\% | \$1,080,600 | \$243,293 | \$250,000 | \$493,293 | $(\$ 587,307)$ | \$587,307 | \$0 |
| 31-Dec-20 | 1-Jul-21 | 119\% | \$1,081,212 | \$250,757 | \$250,000 | \$500,757 | $(\$ 580,455)$ | \$580,455 | \$0 |
| 31-Dec-21 | 1-Jul-22 | 123\% | \$1,081,836 | \$258,444 | \$250,000 | \$508,444 | $(\$ 573,392)$ | \$573,392 | \$0 |
| 31-Dec-22 | 1-Jul-23 | 127\% | \$1,082,473 | \$561,993 | \$250,000 | \$811,993 | (\$270,480) | \$270,480 | \$0 |
| 31-Dec-23 | 1-Jul-24 | 130\% | \$1,083,122 | \$579,153 | \$250,000 | \$829,153 | $(\$ 253,970)$ | \$253,970 | \$0 |
| 31-Dec-24 | 1-Jul-25 | 134\% | \$1,083,785 | \$596,827 | \$250,000 | \$846,827 | $(\$ 236,957)$ | \$236,957 | \$0 |
| 31-Dec-25 | 1-Jul-26 | 138\% | \$2,226,461 | \$1,781,316 | \$250,000 | \$2,031,316 | $(\$ 195,144)$ | \$195,144 | \$0 |
| 31-Dec-26 | 1-Jul-27 | 143\% | \$2,271,630 | \$1,835,715 | \$250,000 | \$2,085,715 | (\$185,915) | \$185,915 | \$0 |
| 31-Dec-27 | 1-Jul-28 | 147\% | \$2,317,033 | \$3,265,488 | \$0 | \$3,265,488 | \$948,455 | \$0 | \$948,455 |
| 31-Dec-28 | 1-Jul-29 | 151\% | \$2,363,250 | \$3,364,954 | \$0 | \$3,364,954 | \$1,001,704 | \$0 | \$1,001,704 |
| 31-Dec-29 | 1-Jul-30 | 156\% | \$2,409,801 | \$3,467,403 | \$0 | \$3,467,403 | \$1,057,602 | \$0 | \$1,057,602 |
| 31-Dec-30 | 1-Jul-31 | 160\% | \$2,458,207 | \$3,572,927 | \$0 | \$3,572,927 | \$1,114,719 | \$0 | \$1,114,719 |
| 31-Dec-31 | 1-Jul-32 | 165\% | \$2,507,868 | \$3,681,616 | \$0 | \$3,681,616 | \$1,173,748 | \$0 | \$1,173,748 |
| 31-Dec-32 | 1-Jul-33 | 170\% | \$2,557,184 | \$3,793,565 | \$0 | \$3,793,565 | \$1,236,381 | \$0 | \$1,236,381 |
| 31-Dec-33 | 1-Jul-34 | 175\% | \$2,608,616 | \$3,908,874 | \$0 | \$3,908,874 | \$1,300,258 | \$0 | \$1,300,258 |
| 31-Dec-34 | 1-Jul-35 | 181\% | \$2,660,444 | \$4,027,641 | \$0 | \$4,027,641 | \$1,367,197 | \$0 | \$1,367,197 |
| Total |  |  | \$33,828,522 | \$36,249,764 | \$2,212,500 | \$38,462,264 | \$4,633,742 | \$4,813,528 | \$9,447,269 |


${ }^{1}$ Assumes an annual inflation rate of $3 \%$. Inflation rate accounts for annual increasing assessed value, along with the decreasing real property tax rates.
${ }^{2}$ Based on tax increment financing projections, as prepared by MuniCap, Inc
 supplemental special tax is paid in year two, and the full amount is paid for years eight through ten.
${ }^{4}$ Special taxes partly recover the Enterprise Zone and RISE Tax Credits, as it is not possible to fully utilize both property tax credits and tax increment financing. Based on tax increment financing projections, as prepared by MuniCap, Inc.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IV: Projected City Personal Property Tax Revenues - Annual

| Development Type | SF ${ }^{1}$ | $\begin{gathered} \text { Value Per } \\ \mathrm{SF}^{2} \end{gathered}$ | Total Market <br> Value | Average Depreciation ${ }^{3}$ | Projected <br> Assessed <br> Value | Personal Property <br> Rate (Per \$100) ${ }^{4}$ | Personal Property Tax Revenue ${ }^{5}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proton Treatment Center | 110,000 | \$34.00 | \$3,740,000 | 75\% | \$935,000 | \$5.620 | \$52,547 |
| Lab - Building 3 (873 W. Baltimore) | 249,432 | \$34.00 | \$8,480,688 | 75\% | \$2,120,172 | \$5.620 | \$119,154 |
| Total | 359,432 |  | \$12,220,688 |  | \$3,055,172 |  | \$171,701 |
| MuniCap, Inc. |  | S:\CONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xlsx]IV |  |  |  |  |  |
|  |  |  |  |  |  |  | 19-Oct-15 |
| ${ }^{1}$ Based on projected development at full buildout. See Schedule I. |  |  |  |  |  |  |  |
| ${ }^{2}$ Values based on averages for offices according to Tax Field Appraiser's Guide 2003, Texas Window on State Government. |  |  |  |  |  |  |  |
| ${ }^{3}$ Personal property is subject to a minimum assessment of $25 \%$ of the original costs. Therefore, it is assumed in any given year, personal property is, on average, $75 \%$ through its useful life. Based on information provided by Maryland State Department of Assessments and Taxation. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| ${ }^{5}$ Figure assumes full build out and is expressed in current dollars. |  |  |  |  |  |  |  |

## University of Maryland BioPark

 City of Baltimore, MarylandSchedule V: Projected Enterprise Zone Tax Credit Reimbursement Revenues to City

| Development Year | Tax <br> Year | Total Enterprise Zone Tax Credits | Reimbursement to City of | Total Enterprise Zone Tax Credit |
| :---: | :---: | :---: | :---: | :---: |
| Ending | Beginning | Phase I ${ }^{1}$ | Baltimore ${ }^{2}$ | Reimbursement Revenues |
| 31-Dec-14 | 1-Jul-15 | \$0 | 50\% | \$0 |
| 31-Dec-15 | 1-Jul-16 | \$729,114 | 50\% | \$364,557 |
| 31-Dec-16 | 1-Jul-17 | \$816,277 | 50\% | \$408,138 |
| 31-Dec-17 | 1-Jul-18 | \$1,770,168 | 50\% | \$885,084 |
| 31-Dec-18 | 1-Jul-19 | \$1,968,725 | 50\% | \$984,363 |
| 31-Dec-19 | 1-Jul-20 | \$2,106,987 | 50\% | \$1,053,493 |
| 31-Dec-20 | 1-Jul-21 | \$2,251,734 | 50\% | \$1,125,867 |
| 31-Dec-21 | 1-Jul-22 | \$2,320,564 | 50\% | \$1,160,282 |
| 31-Dec-22 | 1-Jul-23 | \$2,391,458 | 50\% | \$1,195,729 |
| 31-Dec-23 | 1-Jul-24 | \$2,464,479 | 50\% | \$1,232,240 |
| 31-Dec-24 | 1-Jul-25 | \$2,539,691 | 50\% | \$1,269,846 |
| 31-Dec-25 | 1-Jul-26 | \$1,376,432 | 50\% | \$688,216 |
| 31-Dec-26 | 1-Jul-27 | \$1,418,302 | 50\% | \$709,151 |
| 31-Dec-27 | 1-Jul-28 | \$0 | 50\% | \$0 |
| 31-Dec-28 | 1-Jul-29 | \$0 | 50\% | \$0 |
| 31-Dec-29 | 1-Jul-30 | \$0 | 50\% | \$0 |
| 31-Dec-30 | 1-Jul-31 | \$0 | 50\% | \$0 |
| 31-Dec-31 | 1-Jul-32 | \$0 | 50\% | \$0 |
| 31-Dec-32 | 1-Jul-33 | \$0 | 50\% | \$0 |
| 31-Dec-33 | 1-Jul-34 | \$0 | 50\% | \$0 |
| 31-Dec-34 | 1-Jul-35 | \$0 | 50\% | \$0 |
| Total |  | \$22,153,931 |  | \$11,076,966 |

MuniCap, Inc. $\quad$ S:ICONSULTING\BaltimorelUMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xlsx]V
${ }^{1}$ Based on the Enterprise Zone Tax Credits estimated in the tax increment financing projections, as prepared by MuniCap, Inc..
${ }^{2}$ Fifty percent ( $50 \%$ ) of Enterprise Zone Tax Credits are reimbursed to City of Baltimore from State of Maryland and is allocated to the General Fund for fiscal year 2015-2016. As a result, assumes $50 \%$ of total Enterprise Zone Tax Credits are assumed to be available to City of Baltimore. Based on discussions with Baltimore City Department of Finance, Bureau of the Budget and
Management Research staff.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule VI: Projected City Energy Tax Revenues - Annual
Table 1: Annual Electric Energy Tax Revenue

| Property Use | Square Feet ${ }^{1}$ | Average Annual Electric Consumption Per Square Foot ${ }^{2}$ | Total Annual <br> Electric Consumption | City Electric <br> Energy Tax Rate ${ }^{3}$ | City Electric <br> Energy Tax Revenue ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial |  | (kWh/SF) | (kWh) |  |  |
| Proton Treatment Center | 110,000 | 22.90 | 2,519,000 | \$0.008268 | \$20,827 |
| Lab - Building 3 (873 W. Baltimore) | 249,432 | 17.30 | 4,315,174 | \$0.008268 | \$35,678 |
| Total |  |  |  |  | \$56,505 |

Table 2: Annual Natural Gas Energy Tax Revenue

| Property Use | Square Feet ${ }^{1}$ | Average Annual Natural <br> Gas Consumption <br> Per Square Foot ${ }^{2}$ | Total Annual Natural Gas Consumption | City Natural Gas Energy Tax Rate ${ }^{3}$ | City Natural Gas <br> Energy Tax Revenue ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial |  | (Therm/SF) | (Therm) |  |  |
| Proton Treatment Center | 110,000 | 0.93 | 101,750 | \$0.106919 | \$10,879 |
| Lab - Building 3 (873 W. Baltimore) | 249,432 | 0.32 | 79,319 | \$0.106919 | \$8,481 |
| Total |  |  |  |  | \$19,360 |

Table 3: City of Baltimore Total Annual Energy Tax Revenue

| City of Baltimore | City of Baltimore | Total |
| :---: | :---: | :---: |
| Electric Energy | Natural Gas Energy | City Annual |
|  | Tax Revenue |  |
|  |  | Tax Revenue ${ }^{4}$ |

MuniCap, Inc.

S:|CONSULTING\Baltimore\UMB|Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A-UMB.xlsx]VI
19-Oct-15
${ }^{1}$ See Schedule I.
${ }^{2}$ Based on national average consumption for commercial buildings.Commercial source: Energy Information Administration 2003 Commercial Buildings Energy Consumption Survey: Energy End-Use Consumption Tables.
${ }^{3}$ Represents City of Baltimore energy tax rates for fiscal year 2015-2016. Based on discussions with Department of Finance Bureau of the Budget and Management Research
${ }^{4}$ Figure assumes full build out and is expressed in current dollars.

## University of Maryland BioPark

City of Baltimore, Maryland
Schedule VII: Projected Income Tax Revenues - Personal Income Tax from Employee Residents - Annual


## University of Maryland BioPark

## City of Baltimore, Maryland

## Schedule VIII: Projected Recordation Tax Revenues ${ }^{1}$

| Tax Year | Inflation | Proton Treatment Center |  |  | Lab |  |  | Total Projected Market Value of Security | Recordation Tax Rate $\left(\right.$ Per \$500) ${ }^{4}$ | Total Projected Recordation Tax Revenues |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Value Per | Square | Projected Market | Value Per | Square | Projected Market |  |  |  |
| Beginning | Factor | $\mathrm{SF}^{2}$ | Feet ${ }^{3}$ | Value of Security | $\mathrm{SF}^{2}$ | Feet ${ }^{3}$ | Value of Security |  |  |  |
| 1-Jul-15 | 100\% | \$462 | 0 | \$0 | \$225 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-16 | 103\% | \$475 | 110,000 | \$52,302,679 | \$232 | 0 | \$0 | \$52,302,679 | \$5.00 | \$523,027 |
| 1-Jul-17 | 106\% | \$490 | 0 | \$0 | \$238 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-18 | 109\% | \$504 | 0 | \$0 | \$246 | 249,432 | \$61,261,945 | \$61,261,945 | \$5.00 | \$612,619 |
| 1-Jul-19 | 113\% | \$520 | 0 | \$0 | \$253 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-20 | 116\% | \$535 | 0 | \$0 | \$261 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-21 | 119\% | \$551 | 0 | \$0 | \$268 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-22 | 123\% | \$568 | 0 | \$0 | \$276 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-23 | 127\% | \$585 | 0 | \$0 | \$285 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-24 | 130\% | \$602 | 0 | \$0 | \$293 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-25 | 134\% | \$620 | 0 | \$0 | \$302 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-26 | 138\% | \$639 | 0 | \$0 | \$311 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-27 | 143\% | \$658 | 0 | \$0 | \$320 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-28 | 147\% | \$678 | 0 | \$0 | \$330 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-29 | 151\% | \$698 | 0 | \$0 | \$340 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-30 | 156\% | \$719 | 0 | \$0 | \$350 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-31 | 160\% | \$741 | 0 | \$0 | \$361 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-32 | 165\% | \$763 | 0 | \$0 | \$372 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-33 | 170\% | \$786 | 0 | \$0 | \$383 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-34 | 175\% | \$809 | 0 | \$0 | \$394 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| 1-Jul-35 | 181\% | \$834 | 0 | \$0 | \$406 | 0 | \$0 | \$0 | \$5.00 | \$0 |
| Total |  |  | 110,000 |  |  | 249,432 |  |  |  | \$1,135,646 |
| MuniCap, Inc. |  |  |  |  |  | S:\|CONSULTING\Baltimore|UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]Title |  |  |  |  |
| ${ }^{1}$ Assumes a new note or debt instrument is recorded at the time commercial development is fully developed. |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ See Schedule I. |  |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ See Schedule II. |  |  |  |  |  |  |  |  |  |  |
| ${ }^{4}$ Represents the | fiscal year 20 | x rate. Sour | of Baltim | reau of the Budget | ement Rese |  |  |  |  |  |

## University of Maryland BioPark <br> City of Baltimore, Maryland

Schedule IX-A: Projected Additional Revenues to City of Baltimore - Annual

| Annual Revenues ${ }^{2}$ | Current <br> City Revenues ${ }^{3}$ | Basis for <br> Projecting Revenues ${ }^{4}$ | Current City Service Factors ${ }^{5}$ | Revenues by Factor |  | Projected Increase in Service Factor ${ }^{6}$ | Total Additional Revenues ${ }^{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Per } \\ \text { Employee } \end{gathered}$ | $\begin{gathered} \text { Service } \\ \text { Population } \end{gathered}$ |  |  |
| Taxes |  |  |  |  |  |  |  |
| Property Taxes |  |  |  |  |  |  |  |
| Video lottery terminal | \$8,252,000 | not impacted | - | - | - | - | - |
| Penalties and Interest | \$6,170,000 | not impacted | - | - | - | - | - |
| Sales and Service |  |  |  |  |  |  |  |
| Heavy equipment gross receipts | \$101,000 | not impacted | - | - | - | - | - |
| Fuel Oil | \$575,000 | not impacted | - | - | - | - | - |
| Steam | \$1,254,000 | not impacted | - | - | - | - | - |
| Telephone | \$34,021,000 | service population | 831,527 | - | \$40.91 | 988 | \$40,422 |
| Homeless Relief Assistance Tax | \$736,000 | not impacted | - | - | - | - | - |
| Hotel | \$27,451,063 | not impacted | - | - | - | - | - |
| Liquid Petroleum Gas | \$86,000 | not impacted | - | - | - | - | - |
| Payments in Lieu of Taxes | \$7,593,928 | not impacted | - | - | - | - | - |
| Other Local Taxes |  |  |  |  |  |  |  |
| Tax Sales Fees and Other | \$410,000 | not impacted | - | - | - | - | - |
| Simulated Slot Machine Registration Tax | \$756,000 | not impacted | - | - | - | - | - |
| Billboard Tax | \$1,700,000 | not impacted | - | - | - | - | - |
| Taxicab Excise Tax | \$1,300,000 | not impacted | - | - | - | - | - |
| Locally Imposed - State Collected |  |  |  |  |  |  |  |
| Admissions | \$7,690,000 | service population | 831,527 | - | \$9.25 | 988 | \$9,137 |
| Taxes - State Shared | \$137,796,122 | not impacted | - | - | - | - | - |
| License and Permits |  |  |  |  |  |  |  |
| General Government |  |  |  |  |  |  |  |
| City/state business | \$1,900,000 | not impacted | - | - | - | - | - |
| Alcoholic beverage | \$2,000,000 | not impacted | - | - | - | - | - |
| Marriage | \$25,000 | not impacted | - | - | - | - | - |
| Public Safety and Regulation ${ }^{8}$ |  |  |  |  |  |  |  |
| Media production services | \$55,000 | not impacted | - | - | - | - | - |
| Cable TV Franchise Fee | \$6,617,000 | service population | 831,527 | - | \$7.96 | 988 | \$7,862 |
| Fire Protection - Fire Code | \$1,369,210 | service population | 831,527 | - | \$1.65 | 988 | \$1,627 |
| Rental Property Registrations | \$5,090,000 | not impacted | - | - | - | - | - |
| Miscellaneous Building Inspection Revenues | \$1,119,800 | not impacted | - | - | - | - | - |
| Building Construction Permits | \$5,090,000 | not impacted | - | - | - | - | - |
| Electrical Installation Permits | \$916,200 | not impacted | - | - | - | - | - |
| Mechanical Equipment Permits | \$814,400 | not impacted | - | - | - | - | - |
| Plumbing Permits | \$529,360 | not impacted | - | - | - | - | - |
| Elevator Permits | \$1,018 | not impacted | - | - | - | - | - |
| Filing Fees - Building Permits | \$1,153,000 | not impacted | - | - | - | - | - |
| Public Assembly Permits | \$10,180 | not impacted | - | - | - | - | - |
| Professional and Occupation Licenses | \$498,820 | not impacted | - | - | - | - | - |
| Vacant Structure Fee | \$458,100 | not impacted | - | - | - | - | - |
| MuniCap, Inc. |  |  | S:ICONSULTING IBaltimorelUMB\|Fiscal Impact Analysis [Fiscal Impact Analysis No. 4-A - UMB.x/sx]IX-A |  |  |  |  |
|  |  |  |  |  |  |  | 19-Oct |
| ${ }^{1}$ Revenue line items shown inCity of Baltimore Fiscal 2016 Executive Summary and not shown on this schedule are accounted for and calculated on the prior schedules. |  |  |  |  |  |  |  |
| ${ }^{2}$ Not all sources of revenues are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |
| ${ }^{3}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |
| ${ }^{4}$ Method of apportioning revenues: Per employee revenues are calculated by taking current revenues and apportioning them among current total employees. Service population revenues are calculated by taking current revenues and apportioning them among current total service population. |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |
| ${ }{ }^{\top}$ Represents total increase in revenues as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars. |  |  |  |  |  |  |  |
| ${ }^{8}$ Assumes permits and fees are one-time revenues and are off-set by one-time expenses, which are also excluded from this study. As a result, these line items remain unimpacted. |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IX-A: Projected Additional Revenues to City of Baltimore - Annual, continued

| Annual Revenues ${ }^{2}$ | Current <br> City Revenues ${ }^{3}$ | Basis for <br> Projecting Revenues ${ }^{4}$ | Current City Service Factors ${ }^{5}$ | Revenues by Factor |  | Projected Increase in Service Factor ${ }^{6}$ | Total Additional Revenues ${ }^{\text {' }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Service Population |  |  |
| Amusement Device Licenses | \$712,600 | not impacted | - | - | - | - |  |
| Dog Licenses and Kennel Permits | \$30,540 | not impacted | - | - | - | - | - |
| Special Police Appointment Fees | \$10,689 | not impacted | - | - | - | - | - |
| Vacant Lot Registration Fees | \$111,980 | not impacted | - | - | - | - | - |
| Trades Licenses | \$147,610 | not impacted | - | - | - | - | - |
| Health ${ }^{8}$ |  |  |  |  |  |  |  |
| Food Dealer Permits | \$2,086,900 | not impacted | - | - | - | - | - |
| Swimming Pool Licenses | \$50,900 | not impacted | - | - | - | - | - |
| Solid Waste Collection Permits | \$142,520 | not impacted | - | - | - | - | - |
| Highways ${ }^{8}$ |  |  |  |  |  |  |  |
| Minor Privilege Permits | \$2,400,000 | not impacted | - | - | - | - | - |
| Public Utility Pole Permits | \$539,540 | not impacted | - | - | - | - | - |
| Telephone Conduit Franchise | \$121,142 | not impacted | - | - | - | - | - |
| Permits and inspection - private paving | \$61,080 | not impacted | - | - | - | - | - |
| Developer agreement fees | \$407,200 | not impacted | - | - | - | - | - |
| Street cut permit fees | \$509,000 | not impacted | - | - | - | - | - |
| Fines and Forfeits |  |  |  |  |  |  |  |
| Court ordered restitution and misc. fines | \$3,000 | service population | 831,527 | - | \$0.00 | 988 | \$4 |
| Civil Citations | \$135,000 | service population | 831,527 | - | \$0.16 | 988 | \$160 |
| Sheriff Revenue | \$206,000 | service population | 831,527 | - | \$0.25 | 988 | \$245 |
| Forfeiture drug/gambling contraband | \$1,500,000 | not impacted | - | - | - | - | - |
| Minimum wage violations | \$120,700 | per employee | 311,544 | \$0.39 | - | 1,475 | \$571 |
| Environmental Control Board fines | \$6,000,000 | not impacted | - | - | - | - | - |
| Bad check charge | \$35,000 | not impacted | - | - | - | - | - |
| District court housing fines | \$4,000 | not impacted | - | - | - | - | - |
| Liquor board fines | \$125,000 | not impacted | - | - | - | - | - |
| Library fines | \$188,000 | not impacted | - | - | - | - | - |
| Stormwater and sediment control penalties | \$2,000 | not impacted | - | - | - | - | - |
| Street cut fines | \$250,000 | not impacted | - | - | - | - | - |
| Red light fines | \$2,000,000 | not impacted | - | - | - | - | - |
| Right turn on red fines | \$500,000 | not impacted | - | - | - | - | - |
| Speed cameras | \$2,500,000 | not impacted | - | - | - | - | - |
| Federal Grants | \$179,000 | not impacted | - | - | - | - | - |
| State Aid | \$102,824,797 | not impacted | - | - | - | - | - |
| Use of Money | \$2,636,500 | not impacted | - | - | - | - | - |
| Use of Property |  |  |  |  |  |  |  |
| Rental of City property | \$1,000,000 | not impacted | - | - | - | - | - |
| Expressway air space leases | \$8,400 | not impacted | - | - | - | - | - |
| Rental from Inner Harbor shoreline | \$1,025,000 | not impacted | - | - | - | - | - |
| Rental from C.L. Benton, Jr. office building | \$1,547,000 | not impacted | - | - | - | - | - |
| SW Resource Recovery Facility - lease | \$1,198,000 | not impacted | - | - | - | - | - |
| Rental from Harborplace Pavilions | \$150,000 | not impacted | - | - | - | - | - |
| Harbor Shoreline - docking fees | \$125,000 | not impacted | - | - | - | - | - |
| MuniCap, Inc. |  |  | S:ICONSULTING IBaltimorelUMB\|Fiscal Impact Analysis [FFiscal Impact Analysis No. 4-A - UMB.xisx][|X-A. |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{1}$ Revenue line items shown in City of Baltimore Fiscal 2016 Executive Summary and not shown on this schedule are accounted for and calculated on the prior schedules. |  |  |  |  |  |  |  |
| ${ }^{2}$ Not all sources of revenues are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |
| ${ }^{3}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |
| ${ }^{4}$ Method of apportioning revenues: Per employee revenues are calculated by taking current revenues and apportioning them among current total employees. Service population revenues are calculated by taking current revenues and apportioning the among current total service population. |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |
| ${ }^{7}$ Represents total increase in revenues as a result of propo | velopment on an ann | sis. Figures assume full buil | d are expressed in cur | dollars. |  |  |  |
| ${ }^{8}$ Assumes permits and fees are one-time revenues and are off-set by one-time expenses, which are also excluded from this study. As a result, these line items remain unimpacted. |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IX-A: Projected Additional Revenues to City of Baltimore - Annual ${ }^{1}$, continued

| Annual Revenues ${ }^{2}$ | Current City Revenues ${ }^{3}$ | Basis for <br> Projecting Revenues ${ }^{4}$ | Current City Service Factors ${ }^{5}$ | Revenues by Factor |  | Projected Increase in Service Factor ${ }^{6}$ | Total <br> Additional <br> Revenues ${ }^{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service <br> Population |  |  |
| Rental from community centers | \$240,000 | not impacted | - | - | - | - | - |
| Rentals from wharfage - piers and docks | \$20,000 | not impacted | - | - | - | - | - |
| 1st Mariner Arena Naming Rights | \$250,000 | not impacted | - | - | - | - | - |
| Convention Center | \$9,109,920 | not impacted | - | - | - | - | - |
| Private Grants | \$26,000 | not impacted | - | - | - | - | - |
| Charges - Current Services |  |  |  |  |  |  |  |
| General Government |  |  |  |  |  |  |  |
| Transcriber service charges | \$25,450 | not impacted | - | - | - | - | - |
| RBDL administration fee | \$6,000 | not impacted | - | - | - | - | - |
| Bill drafting service | \$22,396 | not impacted | - | - | - | - | - |
| Zoning appeal fees | \$90,602 | not impacted | - | - | - | - | - |
| Rehab loan application fees | \$6,108 | not impacted | - | - | - | - | - |
| Civil marriage ceremonies | \$15,372 | not impacted | - | - | - | - | - |
| Lien reports | \$1,351,350 | not impacted | - | - | - | - | - |
| Election filing fees | \$6,108 | not impacted | - | - | - | - | - |
| Surveys sales of maps and records | \$25,450 | not impacted | - | - | - | - | - |
| 3rd party disability recoveries | \$55,990 | not impacted | - | - | - | - | - |
| Semi-annual tax payment fee | \$200,000 | not impacted | - | - | - | - | - |
| Tax roll service charge | \$20,360 | not impacted | - | - | - | - | - |
| Audit fees - Comptroller's Office | \$585,350 | not impacted | - | - | - | - | - |
| Sub-division plat charges | \$13,234 | not impacted | - | - | - | - | - |
| Vending machine commissions | \$46,000 | not impacted | - | - | - | - | - |
| Reimbursement for use of city vehicles | \$20,000 | not impacted | - | - | - | - | - |
| Charges for Central City Services | \$11,500,000 | not impacted | - | - | - | - | - |
| Public Safety and Regulation |  |  |  |  |  |  |  |
| Liquor board advertising fees | \$70,000 | not impacted | - | - | - | - | - |
| Sale of accident and incident reports | \$260,000 | not impacted | - | - | - | - | - |
| Stadium security service charges | \$1,600,000 | not impacted | - | - | - | - | - |
| Port fire protection | \$1,399,940 | not impacted | - | - | - | - | - |
| Sheriff - District Court charges | \$5,346,000 | not impacted | - | - | - | - | - |
| False alarm fees | \$250,000 | not impacted | - | - | - | - | - |
| Fire Department - sales of reports | \$21,000 | not impacted | - | - | - | - | - |
| Fire ambulance stadium services | \$27,000 | not impacted | - | - | - | - | - |
| MuniCap, Inc. $\quad$ S:ICONSULTING\|BaltimorelUMBIFiscal Impact Analysis|[Fiscal Impact Analysis No. 4-A - UMB.xIsx]IX-A.3 |  |  |  |  |  |  |  |

${ }^{1}$ Revenue line items shown in City of Baltimore Fiscal 2016 Executive Summary and not shown on this schedule are accounted for and calculated on the prior schedules.
${ }^{2}$ Not all sources of revenues are expected to be impacted as a result of University of Maryland BioPark development.
${ }^{3}$ Source: City of Baltimore Fiscal 2016 Executive Summary.
${ }^{4}$ Method of apportioning revenues: Per employee revenues are calculated by taking current revenues and apportioning them among current total employees. Service population revenues are calculated by taking current revenues and apportioning them among current total service population.
${ }^{5}$ Represents current statistics for City. See Appendix A
${ }^{6}$ Represents proposed increase to City as a result of new development. See Appendix A.
${ }^{7}$ Represents total increase in revenues as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IX-A: Projected Additional Revenues to City of Baltimore - Annual ${ }^{1}$, continued

| Annual Revenues ${ }^{2}$ | Current <br> City Revenues ${ }^{3}$ | Basis for <br> Projecting Revenues ${ }^{4}$ | $\begin{gathered} \text { Current City } \\ \text { Service Factors }{ }^{5} \end{gathered}$ | Revenues by Factor |  | Projected <br> Increase in Service Factor ${ }^{6}$ | Total Additional Revenues ${ }^{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per Employee | Service Population |  |  |
| Health |  |  |  |  |  |  |  |
| Miscellaneous environmental fees | \$15,000 | not impacted | - | - | - | - | - |
| New health plan review | \$22,461 | not impacted | - | - | - | - | - |
| Hazard analysis critical control point plan | \$1,500 | not impacted | - | - | - | - | - |
| Social Services |  |  |  |  |  |  |  |
| Sheriff - DHR service agreement | \$345,384 | not impacted | - | - | - | - | - |
| Recreation and Culture |  |  |  |  |  |  |  |
| Video rental and other charges | \$120,000 | not impacted | - | - | - | - | - |
| Swimming pool passes | \$125,000 | not impacted | - | - | - | - | - |
| Highways |  |  |  |  |  |  |  |
| Impounding cars - storage | \$4,700,000 | service population | 831,527 | - | \$5.65 | 988 | \$5,584 |
| Impounding cars | \$3,500,000 | service population | 831,527 | - | \$4.21 | 988 | \$4,159 |
| Stormwater and sediment control fee | \$100,000 | not impacted | - | - | - | - | - |
| General revenue highways | \$3,500,000 | not impacted | - | - | - | - | - |
| Traffic engineering | \$31,000 | not impacted | - | - | - | - | - |
| Sanitation and Waste Removal |  |  |  |  |  |  |  |
| Landfill disposal tipping fees | \$7,647,000 | service population | 831,527 | - | \$9.20 | 988 | \$9,086 |
| Solid waste surcharge | \$2,000,000 | service population | 831,527 | - | \$2.41 | 988 | \$2,376 |
| Southwest Resource Recovery Facility | \$700,000 | not impacted | - | - | - | - | - |
| Other Revenue | \$965,000 | not impacted | - | - | - | - | - |
| Revenue Transfers | \$37,840,861 | not impacted | - | - | - | - | - |
| Total projected revenues | \$487,236,035 |  |  | \$0.39 | \$81.64 |  | \$81,232 |
| MuniCap, Inc. |  |  | S:\CONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xlsx]IX-A. |  |  |  |  |
|  |  |  |  |  |  |  | 19-Oct |
| ${ }^{1}$ Revenue line items shown in City of Baltimore Fiscal 2016 Executive Summary and not shown on this schedule are accounted for and calculated on the prior schedule |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |
| ${ }^{4}$ Method of apportioning revenues: Per employee revenues are calculated by taking current revenues and apportioning them among current total employees. Service population revenues are calculated by taking current revenue and apportioning them among current total service population. |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |
| ${ }^{7}$ Represents total increase in revenues as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars. |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IX-B: Projected Additional Revenues to City of Baltimore - 20 Years

| Tax <br> Year | Inflation | Additional Revenues |  |  |  |  |  | Total Projected Additional Revenues |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Projected | Revenue Per | Total | Service | Revenue Per | Total Service |  |
| Beginning | Factor ${ }^{1}$ | Employees ${ }^{2}$ | Employee ${ }^{3}$ | Employee Revenues | Population ${ }^{4}$ | Service Population ${ }^{3}$ | Population Revenues |  |
| 1-Jul-15 | 100\% | 0 | \$0.39 | \$0 | 0 | \$82 | \$0 | \$0 |
| 1-Jul-16 | 103\% | 451 | \$0.40 | \$180 | 302 | \$84 | \$25,426 | \$25,606 |
| 1-Jul-17 | 106\% | 451 | \$0.41 | \$185 | 302 | \$87 | \$26,189 | \$26,374 |
| 1-Jul-18 | 109\% | 1,475 | \$0.42 | \$624 | 988 | \$89 | \$88,141 | \$88,765 |
| 1-Jul-19 | 113\% | 1,475 | \$0.44 | \$643 | 988 | \$92 | \$90,785 | \$91,428 |
| 1-Jul-20 | 116\% | 1,475 | \$0.45 | \$662 | 988 | \$95 | \$93,508 | \$94,171 |
| 1-Jul-21 | 119\% | 1,475 | \$0.46 | \$682 | 988 | \$97 | \$96,314 | \$96,996 |
| 1-Jul-22 | 123\% | 1,475 | \$0.48 | \$703 | 988 | \$100 | \$99,203 | \$99,906 |
| 1-Jul-23 | 127\% | 1,475 | \$0.49 | \$724 | 988 | \$103 | \$102,179 | \$102,903 |
| 1-Jul-24 | 130\% | 1,475 | \$0.51 | \$745 | 988 | \$107 | \$105,245 | \$105,990 |
| 1-Jul-25 | 134\% | 1,475 | \$0.52 | \$768 | 988 | \$110 | \$108,402 | \$109,170 |
| 1-Jul-26 | 138\% | 1,475 | \$0.54 | \$791 | 988 | \$113 | \$111,654 | \$112,445 |
| 1-Jul-27 | 143\% | 1,475 | \$0.55 | \$815 | 988 | \$116 | \$115,004 | \$115,818 |
| 1-Jul-28 | 147\% | 1,475 | \$0.57 | \$839 | 988 | \$120 | \$118,454 | \$119,293 |
| 1-Jul-29 | 151\% | 1,475 | \$0.59 | \$864 | 988 | \$123 | \$122,007 | \$122,871 |
| 1-Jul-30 | 156\% | 1,475 | \$0.60 | \$890 | 988 | \$127 | \$125,668 | \$126,558 |
| 1-Jul-31 | 160\% | 1,475 | \$0.62 | \$917 | 988 | \$131 | \$129,438 | \$130,354 |
| 1-Jul-32 | 165\% | 1,475 | \$0.64 | \$944 | 988 | \$135 | \$133,321 | \$134,265 |
| 1-Jul-33 | 170\% | 1,475 | \$0.66 | \$973 | 988 | \$139 | \$137,320 | \$138,293 |
| 1-Jul-34 | 175\% | 1,475 | \$0.68 | \$1,002 | 988 | \$143 | \$141,440 | \$142,442 |
| 1-Jul-35 | 181\% | 1,475 | \$0.70 | \$1,032 | 988 | \$147 | \$145,683 | \$146,715 |
| Total |  |  |  | \$14,982 |  |  | \$2,115,379 | \$2,130,361 |
| MuniCap, Inc. |  |  |  |  | S:ICONSULTING\BaltimorelUMB\|Fiscal Impact Analysis|[Fiscal Impact Analysis No. 4-A - UMB.xlsx]IX-B |  |  |  |
|  |  |  |  |  |  |  |  | 19-Oct-15 |
| ${ }^{1}$ Assumes an annual inflation rate of 3\%. |  |  |  |  |  |  |  |  |
| ${ }^{2}$ See Appendix B. |  |  |  |  |  |  |  |  |
| ${ }^{3}$ See Schedule IX-A. |  |  |  |  |  |  |  |  |
| ${ }^{4}$ See Appendix C. |  |  |  |  |  |  |  |  |

## University of Maryland BioPark City of Baltimore, Maryland

Schedule X: Total Projected Revenues to City of Baltimore - 20 Years

| Tax <br> Year <br> Beginning | Inflation <br> Factor $^{1}$ | Surplus <br> Revenues <br> (Schedule III) | Personal Property <br> Tax Revenues <br> (Schedule IV) | Enterprise Zone Tax <br> Credit Reimb. Revenues <br> (Schedule V) | Energy <br> Tax Revenues <br> (Schedule VI) | Income Tax <br> Tax Revenues <br> (Schedule VII) | Local Recordation <br> Tax Revenues <br> (Schedule VIII) | Transfer <br> Tax Revenues ${ }^{2}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-Jul-15 | $100 \%$ | $\$ 247,205$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| (Schedule IX-B) |  |  |  |  |  |  |  |  |  |  |


| MuniCap, |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

19-Oct-15

[^1]
## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for <br> Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service <br> Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Board of Elections |  |  |  |  |  |  |  |  |  |
| Fair conduct of elections | \$7,155,182 | not impacted | - | - | - | - | - | - | - |
| City Council | \$6,128,301 | not impacted | - | - | - | - | - | - | - |
| Controller |  |  |  |  |  |  |  |  |  |
| Executive direction and control - controller | \$1,275,563 | not impacted | - | - | - | - | - | - | - |
| Audits | \$4,011,472 | not impacted | - | - | - | - | - | - | - |
| Real estate acquisition and management | \$1,013,704 | not impacted | - | - | - | - | - | - | - |
| Council Services | \$666,564 | not impacted | - | - | - | - | - | - | - |
| Courts: Circuit Court | \$9,754,421 | service population | 831,527 | - | \$11.73 | - | - | 988 | \$11,590 |
| Courts: Orphans' Court | \$487,868 | not impacted | - | - | - | - | - | - | - |
| Enoch Pratt Free Library |  |  |  |  |  |  |  |  |  |
| Information services | \$24,164,275 | not impacted | - | - | - | - | - | - | - |
| Finance |  |  |  |  |  |  |  |  |  |
| Revenue collection | \$6,211,605 | total tax revenues | \$1,720,853 | - | - | - | \$3.61 | \$3,818 | \$13,783 |
| Treasury and debt management | \$1,126,384 | not impacted | - | - | - | - | - | - | - |
| Administration - finance | \$1,427,437 | not impacted | - | - | - | - | - | - | - |
| Procurement | \$3,115,130 | not impacted | - | - | - | - | - | - | - |
| Accounts payable | \$1,208,813 | not impacted | - | - | - | - | - | - | - |
| Payroll | \$3,410,720 | not impacted | - | - | - | - | - | - | - |
| Accounting | \$1,557,133 | not impacted | - | - | - | - | - | - | - |
| Operating budget management | \$1,672,128 | total tax revenues | \$1,720,853 | - | - | - | \$0.97 | \$3,818 | \$3,710 |
| Property tax billing integrity and recovery | \$1,042,424 | property tax revenues | \$857,184 | - | - | \$1.22 | - | \$4,028 | \$4,898 |
| Finance project management | \$175,676 | not impacted | - | - | - | - | - | - | - |
| Fire |  |  |  |  |  |  |  |  |  |
| Administration - fire | \$7,923,555 | service population | 831,527 | - | \$9.53 | - | - | 988 | \$9,414 |
| Fire suppression and emergency rescue | \$144,605,958 | not impacted | - | - | - | - | - | - | - |
| Emergency management | \$775,530 | service population | 831,527 | - | \$0.93 | - | - | 988 | \$921 |
| Emergency medical services | \$21,585,776 | service population | 831,527 | - | \$25.96 | - | - | 988 | \$25,647 |
| Fire and emergency community outreach | \$326,183 | service population | 831,527 | - | \$0.39 | - | - | 988 | \$388 |
| Fire code enforcement | \$4,507,583 | service population | 831,527 | - | \$5.42 | - | - | 988 | \$5,356 |
| Fire investigation | \$962,575 | service population | 831,527 | - | \$1.16 | - | - | 988 | \$1,144 |
| Fire facilities maintenance and replacement | \$14,755,319 | service population | 831,527 | - | \$17.74 | - | - | 988 | \$17,531 |
| MuniCap, Inc. |  |  |  | S:\|CONSULTING\BaltimorelUMB|Fiscal Impact Analysis|[Fiscal Impact Analysis No. 4-A - UMB.xIsx]XI-A |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct |
| ${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Method of apportioning expenses: Per employee expenses are calculated by taking current expenses and apportioning them among total employees. Service population expenses are calculated by taking current expenses and apportioning them among current total servic population. Pro rata property tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of property tax expenses. Pro rata total tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of total tax revenues. |  |  |  |  |  |  |  |  |  |
| ${ }_{4}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars. |  |  |  |  |  |  |  |  |  |

## University of Maryland BioPark <br> \section*{City of Baltimore, Maryland}

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per Employee | Service <br> Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Fire communications and dispatch | \$5,929,311 | not impacted | - | - | - | - | - | - | - |
| Fire training and education | \$3,661,532 | not impacted | - | - | - | - | - | - | - |
| General Services |  |  |  |  |  |  |  |  |  |
| Administration - general services | \$1,624,614 | not impacted | - | - | - | - | - | - | - |
| Facilities management | \$14,553,327 | not impacted | - | - | - | - | - | - | - |
| Design and construction/major projects division | \$340,000 | not impacted | - | - | - | - | - | - | - |
| Health |  |  |  |  |  |  |  |  |  |
| Clinical services | \$4,913,580 | service population | 831,527 | - | \$5.91 | - | - | 988 | \$5,838 |
| Healthy homes | \$885,262 | not impacted | - | - | - | - | - | - | - |
| Substance abuse and mental health | \$1,851,443 | not impacted | - | - | - | - | - | - | - |
| Maternal and child health | \$922,802 | not impacted | - | - | - | - | - | - | - |
| School health services | \$2,618,724 | not impacted | - | - | - | - | - | - | - |
| Emergency services - health | \$668,784 | service population | 831,527 | - | \$0.80 | - | - | 988 | \$795 |
| Youth violence prevention | \$735,378 | not impacted | - | - | - | - | - | - | - |
| Administration - health | \$4,468,511 | not impacted | - | - | - | - | - | - | - |
| Animal services | \$3,164,962 | not impacted | - | - | - | - | - | - | - |
| Environmental health | \$3,055,320 | not impacted | - | - | - | - | - | - | - |
| Chronic disease prevention | \$373,382 | not impacted | - | - | - | - | - | - | - |
| HIV treatment services for the uninsured | \$1,271,409 | not impacted | - | - | - | - | - | - | - |
| Senior centers | \$780,750 | not impacted | - | - | - | - | - | - | - |
| Administration - CARE | \$377,927 | not impacted | - | - | - | - | - | - | - |
| Advocacy and supportive care for seniors | \$99,956 | not impacted | - | - | - | - | - | - | - |
| Community services for seniors | \$145,176 | not impacted | - | - | - | - | - | - | - |
| Housing and Community Development |  |  |  |  |  |  |  |  |  |
| Before and after care | \$169,776 | not impacted | - | - | - | - | - | - | - |
| Administration - HCD | \$2,606,373 | not impacted | - | - | - | - | - | - | - |
| Dawson Center | \$31,000 | not impacted | - | - | - | - | - | - | - |
| Housing code enforcement | \$14,362,285 | not impacted | - | - | - | - | - | - | - |
| Register and license properties and contractors | \$579,120 | not impacted | - | - | - | - | - | - | - |
| Blight elimination | \$2,749,163 | not impacted | - | - | - | - | - | - | - |
| Building and zoning inspections and permits | \$5,525,710 | not impacted | - | - | - | - | - | - | - |
| Community outreach services | \$1,050,272 | not impacted | - | - | - | - | - | - | - |
| Summer food service program | \$250,000 | not impacted | - | - | - | - | - | - | - |
| Retention, expansion, and attraction of businesses | \$1,530,330 | not impacted | - | - | - | - | - | - | - |
| Real estate development | \$1,787,471 | not impacted | - | - | - | - | - | - | - |
| Inner Harbor coordination | \$521,238 | not impacted | - | - | - | - | - | - | - |
| Business support - Small Business Resource Center | \$466,848 | not impacted | - | - | - | - | - | - | - |
| MuniCap, Inc. |  |  |  | S:ICONSULTING\|BaltimorelUMB|Fiscal Impact Analysis|[Fiscal Impact Analysis No. 4-A - UMB.xlsx]XI-A |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct |
| ${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |  |  |
|  <br>  revenues. |  |  |  |  |  |  |  |  |  |
| ${ }^{4}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars. |  |  |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for <br> Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected <br> Increase in Service Factor ${ }^{5}$ | Total <br> Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service <br> Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Technology development - Emerging Technology Center | \$815,156 | not impacted | - | - | - | - | - | - | - |
| Improve and promote retail districts beyond downtown | \$1,586,557 | not impacted | - | - | - | - | - | - | - |
| Live Baltimore | \$575,842 | not impacted | - | - | - | - | - | - | - |
| Human Resources |  |  |  |  |  |  |  |  |  |
| Administration - human resources | \$2,511,754 | not impacted | - | - | - | - | - | - | - |
| Benefits administration | \$4,474,699 | not impacted | - | - | - | - | - | - | - |
| Civil service management | \$1,696,320 | not impacted | - | - | - | - | - | - | - |
| Law |  |  |  |  |  |  |  |  |  |
| Administration - law | \$1,012,370 | not impacted | - | - | - | - | - | - | - |
| Controversies | \$3,802,762 | not impacted | - | - | - | - | - | - | - |
| Transaction | \$2,402,959 | not impacted | - | - | - | - | - | - | - |
| Minority and women's business opportunity office | \$675,439 | not impacted | - | - | - | - | - | - | - |
| Legislative Reference |  |  |  |  |  |  |  |  |  |
| Legislative reference services | \$543,070 | not impacted | - | - | - | - | - | - | - |
| Archives and records management | \$507,262 | not impacted | - | - | - | - | - | - | - |
| Liquor License Board |  |  |  |  |  |  |  |  |  |
| Liquor licensing | \$826,954 | not impacted | - | - | - | - | - | - | - |
| Liquor license compliance | \$939,893 | not impacted | - | - | - | - | - | - | - |
| Mayoralty |  |  |  |  |  |  |  |  |  |
| Executive direction and control - mayoralty | \$4,369,331 | not impacted | - | - | - | - | - | - | - |
| Art and Culture |  |  |  |  |  |  |  |  |  |
| Art and culture grants | \$6,156,975 | not impacted | - | - | - | - | - | - | - |
| Events, art, culture, and film | \$2,279,499 | not impacted | - | - | - | - | - | - | - |
| Bromo Seltzer Arts Tower | \$75,000 | not impacted | - | - | - | - | - | - | - |
| MuniCap, Inc. |  |  |  | S:ICONSULTING\Baltimore\|UMB|Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xlsx]XI-A. 3 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct-15 |
| ${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |  |  |
|  <br>  revenues. |  |  |  |  |  |  |  |  |  |
| ${ }^{4}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars. |  |  |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for <br> Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total <br> Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Baltimore City Public Schools | \$258,212,181 | not impacted | - | - | - | - | - | - | - |
| Cable and Communications |  |  |  |  |  |  |  |  |  |
| Media production | \$701,381 | not impacted | - | - | - | - | - | - | - |
| Civic Promotion |  |  |  |  |  |  |  |  |  |
| Civic promotion grants | \$468,145 | not impacted | - | - | - | - | - | - | - |
| Convention sales and tourism marketing | \$13,973,885 | not impacted | - | - | - | - | - | - | - |
| Conditional Purchase Agreements | \$22,066,813 | not impacted | - | - | - | - | - | - | - |
| Contingent Fund | \$1,000,000 | not impacted | - | - | - | - | - | - | - |
| Convention Center Hotel | \$7,325,000 | not impacted | - | - | - | - | - | - | - |
| Convention Center Complex |  |  |  |  |  |  |  |  |  |
| Royal Farms Arena operations | \$592,713 | not impacted | - | - | - | - | - | - | - |
| Convention Center | \$12,417,786 | not impacted | - | - | - | - | - | - | - |
| Debt Service | \$88,848,893 | not impacted | - | - | - | - | - | - | - |
| Educational Grants | \$7,736,930 | not impacted | - | - | - | - | - | - | - |
| Employees' Retirement Contribution | \$8,950,000 | not impacted | - | - | - | - | - | - | - |
| Environmental Control Board | \$787,844 | not impacted | - | - | - | - | - | - | - |
| Health and Welfare Grants | \$1,190,058 | not impacted | - | - | - | - | - | - | - |
| Innovation Fund | \$1,326,000 | not impacted | - | - | - | - | - | - | - |
| Miscellaneous General Expenses | \$27,064,856 | not impacted | - | - | - | - | - | - | - |
| Office of CitiStat Operations | \$1,246,199 | not impacted | - | - | - | - | - | - | - |
| Office of Criminal Justice |  |  |  |  |  |  |  |  |  |
| Crime camera management | \$1,486,011 | not impacted | - | - | - | - | - | - | - |
| Coordination of public safety strategy | \$883,757 | not impacted | - | - | - | - | - | - | - |
| Office of Employment Development |  |  |  |  |  |  |  |  |  |
| MuniCap, Inc. |  |  |  | S:ICONSULTING\|Baltimore|UMB|Fiscal Impact Analysis|[Fiscal Impact Analysis No. 4-A - UMB.xIsx]XI-A. |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct- |
| ${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Method of apportioning expenses: Per employee expenses are calculated by taking current expenses and apportioning them among total employees. Service population expenses are calculated by taking current expenses and apportioning them among curren total service population. Pro rata property tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of property tax expenses. Pro rata total tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of total tax revenues. |  |  |  |  |  |  |  |  |  |
| ${ }^{4}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents total increase in expenses as a result of | roposed developmen | annual basis. Figures ass | d out and are exp | n current |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total <br> Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service <br> Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Administration - MOED | \$1,508,639 | not impacted | - | - | - | - | - | - | - |
| Workforce services for ex-offenders | \$88,085 | not impacted | - | - | - | - | - | - | - |
| Workforce services for out of school youth-youth opportunity | \$2,911,862 | not impacted | - | - | - | - | - | - | - |
| Youth Works summer job program | \$1,772,101 | not impacted | - | - | - | - | - | - | - |
| Office of Human Services |  |  |  |  |  |  |  |  |  |
| Human services | \$716,828 | not impacted | - | - | - | - | - | - | - |
| Head start | \$575,000 | not impacted | - | - | - | - | - | - | - |
| Community action centers | \$1,346,104 | not impacted | - | - | - | - | - | - | - |
| Temporary housing for the homeless | \$5,210,053 | not impacted | - | - | - | - | - | - | - |
| Permanent housing for the homeless | \$716,537 | not impacted | - | - | - | - | - | - | - |
| Office of Information Technology |  |  |  |  |  |  |  |  |  |
| Administration - MOIT | \$1,184,030 | not impacted | - | - | - | - | - | - | - |
| Enterprise innovation and application services | \$6,665,120 | not impacted | - | - | - | - | - | - | - |
| Enterprise unified call center | \$16,364,981 | not impacted | - | - | - | - | - | - | - |
| Enterprise IT delivery services | \$5,735,427 | not impacted | - | - | - | - | - | - | - |
| Office of Neighborhoods | \$784,024 | not impacted | - | - | - | - | - | - | - |
| Office of the Inspector General | \$741,280 | not impacted | - | - | - | - | - | - | - |
| Office of the Labor Commissioner |  |  |  |  |  |  |  |  |  |
| Labor contract negotiations and administration | \$775,781 | not impacted | - | - | - | - | - | - | - |
| Retirees' Benefits | \$55,335,181 | not impacted | - | - | - | - | - | - | - |
| Self-Insurance Fund | \$23,347,275 | not impacted | - | - | - | - | - | - | - |
| TIF Debt Service | \$11,562,093 | not impacted | - | - | - | - | - | - | - |
| Municipal and Zoning Appeals |  |  |  |  |  |  |  |  |  |
| Zoning, tax and other appeals | \$630,079 | not impacted | - | - | - | - | - | - | - |
| Office of Civil Rights |  |  |  |  |  |  |  |  |  |
| Wage investigation and enforcement | \$199,664 | per employee | 311,544 | \$0.64 | - | - | - | 1,475 | \$945 |
| Discrimination investigations, resolutions and conciliations | \$848,237 | per employee | 311,544 | \$2.72 | - | - | - | 1,475 | \$4,015 |
| Police community relations | \$151,749 | per employee | 311,544 | \$0.49 | - | - | - | 1,475 | \$718 |
| Disabilities commission | \$202,379 | per employee | 311,544 | \$0.65 | - | - | - | 1,475 | \$958 |
| MuniCap, Inc. |  |  |  | S:\|CONSULTING\BaltimorelUMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xIsx]XI-A.5 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct-1 |

Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development.
Source: City of Baltimore Fiscal 2016 Executive Summary.

 evenues.
Represents current statistics for City. See Appendix A.
${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A.
Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued


MuniCap, Inc.
${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development.
${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary.

 revenues.
${ }^{4}$ Represents current statistics for City. See Appendix A.
${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A.
${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current <br> City Expenses ${ }^{2}$ | Basis for Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Per } \\ \text { Employee } \\ \hline \end{gathered}$ | Service <br> Population | $\$ 1,000 \text { Prop. }$ <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Park maintenance | \$9,619,553 | service population | 831,527 | - | \$11.57 | - | - | 988 | \$11,429 |
| Youth and adult sports | \$538,284 | not impacted | - | - | - | - | - | - | - |
| Community recreation centers | \$13,021,158 | not impacted | - | - | - | - | - | - | - |
| Special facilities management - recreation | \$23,025 | not impacted | - | - | - | - | - | - | - |
| Horticulture | \$942,976 | not impacted | - | - | - | - | - | - | - |
| Recreation for seniors | \$121,493 | not impacted | - | - | - | - | - | - | - |
| Therapeutic recreation | \$281,730 | not impacted | - | - | - | - | - | - | - |
| Urban forestry | \$3,731,710 | not impacted | - | - | - | - | - | - | - |
| Sheriff |  |  |  |  |  |  |  |  |  |
| Courthouse security | \$4,199,517 | not impacted | - | - | - | - | - | - | - |
| Deputy sheriff enforcement | \$10,919,349 | not impacted | - | - | - | - | - | - | - |
| Service of protective and peace orders | \$1,770,011 | not impacted | - | - | - | - | - | - | - |
| District Court sheriff services | \$2,532,333 | not impacted | - | - | - | - | - | - | - |
| Child support enforcement | \$1,017,524 | not impacted | - | - | - | - | - | - | - |
| State Attorney's |  |  |  |  |  |  |  |  |  |
| Prosecution of criminals | \$26,249,750 | not impacted | - | - | - | - | - | - | - |
| Administration - State Attorney's | \$4,689,704 | not impacted | - | - | - | - | - | - | - |
| Victim and witness services | \$1,499,725 | not impacted | - | - | - | - | - | - | - |
| Transportation |  |  |  |  |  |  |  |  |  |
| Street and park lighting | \$18,100,320 | not impacted | - | - | - | - | - | - | - |
| Administration - DOT | \$8,279,204 | not impacted | - | - | - | - | - | - | - |
| Street management | \$26,622,201 | not impacted | - | - | - | - | - | - | - |
| Traffic management and safety | \$11,559,956 | not impacted | - | - | - | - | - | - | - |
| Special events support | \$471,977 | not impacted | - | - | - | - | - | - | - |
| Inner Harbor services - transportation | \$925,027 | not impacted | - | - | - | - | - | - | - |
| Snow and Ice control | \$2,864,399 | not impacted | - | - | - | - | - | - | - |
| Vehicle impounding and disposal | \$7,634,293 | not impacted | - | - | - | - | - | - | - |
| Complete streets ad sustainable transportation | \$4,018,335 | not impacted | - | - | - | - | - | - | - |
| Public rights-of-way landscape management | \$3,856,516 | not impacted | - | - | - | - | - | - | - |
| Bridge and culvert management | \$3,321,075 | not impacted | - | - | - | - | - | - | - |
| Survey control | \$744,881 | not impacted | - | - | - | - | - | - | - |
| Street cut management | \$891,633 | not impacted | - | - | - | - | - | - | - |
| Traffic safety | \$7,737,775 | not impacted | - | - | - | - | - | - | - |
| Building permits and municipal consents | \$1,668,245 | not impacted | - | - | - | - | - | - | - |
| Real property database management | \$725,266 | not impacted | - | - | - | - | - | - | - |
| Special events | \$917,540 | not impacted | - | - | - | - | - | - | - |


${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development.
${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary:
${ }^{3}$ Method of apportioning expenses: Per employee expenses are calculated by taking current expenses and apportioning them among total employees. Service population expenses are calculated by taking current expenses and apportioning them among current total service population. Pro rata property tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of property tax expenses. Pro rata total tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of total tax revenues.
${ }^{4}$ Represents current statistics for City. See Appendix A
Represents proposed increase to City as a result of new development. See Appendix A.
${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.

## University of Maryland BioPark <br> City of Baltimore, Maryland

Schedule XI-B: Projected Additional Expenses for City of Baltimore - 20 Years

| Tax <br> Year <br> Beginning | Inflation <br> Factor $^{1}$ | Projected <br> Employees $^{2}$ | Expense Per <br> Employee $^{3}$ | Total <br> Employee Expenses | Service <br> Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-Jul-15 | $100 \%$ | 0 | $\$ 4.50$ | Expense Per <br> Service Population | Total Service <br> Population Expenses |  |  |
| 1-Jul-16 | $103 \%$ | 451 | $\$ 0$ | 0 | $\$ 584$ | $\$ 0$ |  |
| 1-Jul-17 | $106 \%$ | 451 | $\$ 4.64$ | $\$ 2,092$ | 302 | $\$ 602$ | $\$ 181,914$ |
| 1-Jul-18 | $109 \%$ | 1,475 | $\$ 4.77$ | $\$ 2,155$ | 302 | $\$ 620$ | $\$ 187,372$ |
| 1-Jul-19 | $113 \%$ | 1,475 | $\$ 4.92$ | $\$ 7,251$ | 988 | $\$ 638$ | $\$ 630,616$ |
| 1-Jul-20 | $116 \%$ | 1,475 | $\$ 5.07$ | $\$ 7,469$ | 988 | $\$ 657$ | $\$ 649,535$ |
| 1-Jul-21 | $119 \%$ | 1,475 | $\$ 5.22$ | $\$ 7,693$ | 988 | $\$ 677$ | $\$ 669,021$ |
| 1-Jul-22 | $123 \%$ | 1,475 | $\$ 5.37$ | $\$ 7,924$ | 988 | $\$ 697$ | $\$ 689,091$ |
| 1-Jul-23 | $127 \%$ | 1,475 | $\$ 5.53$ | $\$ 8,162$ | 988 | $\$ 718$ | $\$ 709,764$ |
| 1-Jul-24 | $130 \%$ | 1,475 | $\$ 5.70$ | $\$ 8,406$ | 988 | $\$ 740$ | $\$ 731,057$ |
| 1-Jul-25 | $134 \%$ | 1,475 | $\$ 5.87$ | $\$ 8,659$ | 988 | $\$ 762$ | $\$ 752,989$ |
| 1-Jul-26 | $138 \%$ | 1,475 | $\$ 6.05$ | $\$ 8,918$ | 988 | $\$ 785$ | $\$ 775,578$ |
| 1-Jul-27 | $143 \%$ | 1,475 | $\$ 6.23$ | $\$ 9,186$ | 988 | $\$ 809$ | $\$ 798,846$ |
| 1-Jul-28 | $147 \%$ | 1,475 | $\$ 6.42$ | $\$ 9,461$ | 988 | $\$ 833$ | $\$ 822,811$ |
| 1-Jul-29 | $151 \%$ | 1,475 | $\$ 6.61$ | $\$ 9,745$ | 988 | $\$ 858$ | $\$ 847,496$ |
| 1-Jul-30 | $156 \%$ | 1,475 | $\$ 6.81$ | $\$ 10,038$ | 988 | $\$ 884$ | $\$ 872,920$ |
| 1-Jul-31 | $160 \%$ | 1,475 | $\$ 7.01$ | $\$ 10,339$ | 988 | $\$ 910$ | $\$ 899,108$ |
| 1-Jul-32 | $165 \%$ | 1,475 | $\$ 7.22$ | $\$ 10,649$ | 988 | $\$ 937$ | $\$ 926,081$ |
| 1-Jul-33 | $170 \%$ | 1,475 | $\$ 7.44$ | $\$ 10,968$ | 988 | $\$ 965$ | $\$ 953,864$ |
| 1-Jul-34 | $175 \%$ | 1,475 | $\$ 7.66$ | $\$ 11,297$ | 988 | $\$ 994$ | $\$ 982,480$ |
| 1-Jul-35 | $181 \%$ | 1,475 | $\$ 8.13$ | $\$ 11,636$ | 988 | $\$ 1,024$ | $\$ 1,011,954$ |
|  |  | $\$ 11,985$ | 988 | $\$ 1,055$ | $\$ 1,042,313$ |  |  |
| Total |  |  |  |  |  |  |  |

MuniCap, Inc.

S:|CONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xIsx]XI-B
19-Oct-15

[^2]
## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-B: Projected Additional Expenses for City of Baltimore -20 years, continued

| Tax |  | Additional Expenses |  |  |  |  |  | Total Projected <br> Additional Expenses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Inflation <br> Factor ${ }^{1}$ | $\$ 1,000$ 's of Prop. <br> Tax Revenue ${ }^{2}$ | Expense Per \$1,000's | Total Additional | $\$ 1,000$ 's of Total | Expense Per \$1,000's | Total Additional |  |
| 1-Jul-15 | 100\% | \$247 | \$2.63 | \$650 | \$247 | \$4.58 | \$1,133 | \$1,783 |
| 1-Jul-16 | 103\% | \$171 | \$2.71 | \$464 | \$1,315 | \$4.72 | \$6,207 | \$190,677 |
| 1-Jul-17 | 106\% | \$192 | \$2.79 | \$535 | \$849 | \$4.86 | \$4,125 | \$194,187 |
| 1-Jul-18 | 109\% | \$213 | \$2.87 | \$613 | \$2,981 | \$5.01 | \$14,922 | \$653,403 |
| 1-Jul-19 | 113\% | \$236 | \$2.96 | \$699 | \$2,512 | \$5.16 | \$12,952 | \$670,654 |
| 1-Jul-20 | 116\% | \$243 | \$3.05 | \$742 | \$2,627 | \$5.31 | \$13,951 | \$691,406 |
| 1-Jul-21 | 119\% | \$251 | \$3.14 | \$788 | \$2,746 | \$5.47 | \$15,023 | \$712,826 |
| 1-Jul-22 | 123\% | \$258 | \$3.23 | \$836 | \$2,829 | \$5.63 | \$15,942 | \$734,704 |
| 1-Jul-23 | 127\% | \$562 | \$3.33 | \$1,872 | \$2,915 | \$5.80 | \$16,917 | \$758,252 |
| 1-Jul-24 | 130\% | \$579 | \$3.43 | \$1,988 | \$3,003 | \$5.98 | \$17,951 | \$781,585 |
| 1-Jul-25 | 134\% | \$597 | \$3.53 | \$2,110 | \$3,094 | \$6.16 | \$19,048 | \$805,654 |
| 1-Jul-26 | 138\% | \$1,781 | \$3.64 | \$6,485 | \$2,567 | \$6.34 | \$16,278 | \$830,795 |
| 1-Jul-27 | 143\% | \$1,836 | \$3.75 | \$6,884 | \$2,644 | \$6.53 | \$17,271 | \$856,427 |
| 1-Jul-28 | 147\% | \$3,265 | \$3.86 | \$12,613 | \$2,941 | \$6.73 | \$19,790 | \$889,643 |
| 1-Jul-29 | 151\% | \$3,365 | \$3.98 | \$13,387 | \$3,055 | \$6.93 | \$21,167 | \$917,511 |
| 1-Jul-30 | 156\% | \$3,467 | \$4.10 | \$14,208 | \$3,172 | \$7.14 | \$22,640 | \$946,295 |
| 1-Jul-31 | 160\% | \$3,573 | \$4.22 | \$15,080 | \$3,293 | \$7.35 | \$24,205 | \$976,016 |
| 1-Jul-32 | 165\% | \$3,682 | \$4.35 | \$16,005 | \$3,417 | \$7.57 | \$25,873 | \$1,006,710 |
| 1-Jul-33 | 170\% | \$3,794 | \$4.48 | \$16,986 | \$3,547 | \$7.80 | \$27,663 | \$1,038,426 |
| 1-Jul-34 | 175\% | \$3,909 | \$4.61 | \$18,028 | \$3,680 | \$8.03 | \$29,563 | \$1,071,181 |
| 1-Jul-35 | 181\% | \$4,028 | \$4.75 | \$19,133 | \$3,818 | \$8.27 | \$31,594 | \$1,105,025 |
| Total |  |  |  | \$150,105 |  |  | \$374,213 | \$15,833,161 |
| MuniCap, Inc. |  |  |  |  | S:ICONSULTING\BaltimorelUMB\|Fiscal Impact Analysis|[Fiscal Impact Analysis No. 4-A - UMB.xlsx]XI-B. 2 |  |  |  |
| ${ }^{1}$ Assumes an annual inflation rate of 3\%. |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Based on tax increment projections, prepared by MuniCap, Inc. Includes the Enterprise Zone and RISE Tax Credits and assumes $94 \%$ collection rate based on City of Baltimore tax increment financing policy. See Schedule III. |  |  |  |  |  |  |  |  |
| ${ }^{3}$ See Schedule XI-A. |  |  |  |  |  |  |  |  |
| ${ }^{4}$ See Schedule X. |  |  |  |  |  |  |  |  |

## University of Maryland BioPark

 City of Baltimore, Maryland
## Schedule XII: Projected Change in State Aid to Schools ${ }^{1}$

| DevelopmentYear | Tax | Inflation | Total Current State | Projected Total New Program Share |  |  | Projected Impact to State $\mathrm{Aid}^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Projected | Total Projected |  |  |
|  | Year |  |  | Total Program School | Local Share of | Projected Total State |  |
| Ending | Beginning | Factor | Program Share ${ }^{2}$ | Enrollment Funding ${ }^{3}$ | School Funding ${ }^{4}$ | Program Share ${ }^{5}$ |  |
| 31-Dec-14 | 1-Jul-15 | 100\% | \$389,709,733 | \$552,862,431 | $(\$ 163,185,487)$ | \$389,676,943 | (\$32,790) |
| 31-Dec-15 | 1-Jul-16 | 103\% | \$401,401,025 | \$569,448,304 | (\$168,228,368) | \$401,219,935 | $(\$ 181,090)$ |
| 31-Dec-16 | 1-Jul-17 | 106\% | \$413,443,056 | \$586,531,753 | (\$173,285,395) | \$413,246,358 | $(\$ 196,698)$ |
| 31-Dec-17 | 1-Jul-18 | 109\% | \$425,846,348 | \$604,127,706 | (\$178,869,018) | \$425,258,688 | $(\$ 587,660)$ |
| 31-Dec-18 | 1-Jul-19 | 113\% | \$438,621,738 | \$622,251,537 | (\$184,257,758) | \$437,993,779 | $(\$ 627,959)$ |
| 31-Dec-19 | 1-Jul-20 | 116\% | \$451,780,390 | \$640,919,083 | (\$189,797,834) | \$451,121,249 | $(\$ 659,142)$ |
| 31-Dec-20 | 1-Jul-21 | 119\% | \$465,333,802 | \$660,146,655 | (\$195,504,477) | \$464,642,178 | $(\$ 691,624)$ |
| 31-Dec-21 | 1-Jul-22 | 123\% | \$479,293,816 | \$679,951,055 | (\$201,369,810) | \$478,581,245 | $(\$ 712,572)$ |
| 31-Dec-22 | 1-Jul-23 | 127\% | \$493,672,631 | \$700,349,587 | (\$207,411,104) | \$492,938,483 | $(\$ 734,148)$ |
| 31-Dec-23 | 1-Jul-24 | 130\% | \$508,482,809 | \$721,360,074 | (\$213,633,636) | \$507,726,438 | (\$756,371) |
| 31-Dec-24 | 1-Jul-25 | 134\% | \$523,737,294 | \$743,000,876 | (\$220,042,844) | \$522,958,032 | $(\$ 779,262)$ |
| 31-Dec-25 | 1-Jul-26 | 138\% | \$539,449,413 | \$765,290,903 | (\$226,644,329) | \$538,646,574 | $(\$ 802,839)$ |
| 31-Dec-26 | 1-Jul-27 | 143\% | \$555,632,895 | \$788,249,630 | (\$233,443,858) | \$554,805,772 | $(\$ 827,123)$ |
| 31-Dec-27 | 1-Jul-28 | 147\% | \$572,301,882 | \$811,897,119 | (\$240,447,373) | \$571,449,746 | $(\$ 852,136)$ |
| 31-Dec-28 | 1-Jul-29 | 151\% | \$589,470,938 | \$836,254,032 | (\$247,660,993) | \$588,593,039 | $(\$ 877,899)$ |
| 31-Dec-29 | 1-Jul-30 | 156\% | \$607,155,066 | \$861,341,653 | (\$255,091,022) | \$606,250,631 | $(\$ 904,435)$ |
| 31-Dec-30 | 1-Jul-31 | 160\% | \$625,369,718 | \$887,181,903 | (\$262,743,952) | \$624,437,951 | $(\$ 931,767)$ |
| 31-Dec-31 | 1-Jul-32 | 165\% | \$644,130,810 | \$913,797,360 | (\$270,626,469) | \$643,170,891 | $(\$ 959,919)$ |
| 31-Dec-32 | 1-Jul-33 | 170\% | \$663,454,734 | \$941,211,281 | (\$278,745,463) | \$662,465,818 | $(\$ 988,916)$ |
| 31-Dec-33 | 1-Jul-34 | 175\% | \$683,358,376 | \$969,447,619 | (\$287,108,026) | \$682,339,594 | (\$1,018,783) |
| 31-Dec-34 | 1-Jul-35 | 181\% | \$703,859,128 | \$998,531,048 | (\$295,721,465) | \$702,809,582 | (\$1,049,545) |

## Tota

(\$15,172,676)
MuniCap, Inc.

S:|CONSULTING\BaltimorelUMB|Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xlsx]XII
${ }^{1}$ This schedule calculates the impact on state education aid projected to occur as a result of the increase in enrollment and total wealth from the development of University of Maryland BioPark. The formula for the Foundation Program State Education Grant is illustrated in Appendix G.
${ }^{2}$ Represents the total current program share from the Foundation Program State Education Grant as shown in the formula on Appendix G-3, Table 1. Assumes $3 \%$ annual inflationary increase.
${ }^{3}$ See Appendix F-1(b)
See Appendix F-2(b).
Represents the projected new program share from the Foundation Program State Education Grant resulting from the development.
${ }^{6}$ Represents the change resulting from the increase in students and wealth using the formula for the Foundation Program State Education Grant (projected total program share less the total current program share). As further detailed in Appendices F and G, factors such as student enrollment and wealth are used to determine the amount of State aid related to schools that each jurisdiction will receive. In the event the projected wealth exceeds the projected student enrollment, there is a reduction in the amount of the State aid received by each jurisdiction.

## University of Maryland BioPark

## City of Baltimore, Maryland

## Schedule XIII: Projected Total Impact to the City of Baltimore - 20 Years

| Development <br> Year <br> Ending | Tax <br> Year <br> Beginning | Inflation <br> Factor $^{1}$ | Total <br> Revenue $^{2}$ | Total <br> Expenses $^{3}$ | Net <br> Impact | Change In State <br> Aid to Schools | Total <br> Impact |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-Dec-14 | 1-Jul-15 | $100 \%$ | $\$ 247,205$ | $(\$ 1,783)$ | $\$ 245,423$ | $(\$ 32,790)$ | $\$ 212,633$ |
| 31-Dec-15 | 1-Jul-16 | $103 \%$ | $\$ 1,315,381$ | $(\$ 190,677)$ | $\$ 1,124,704$ | $(\$ 181,090)$ | $\$ 943,614$ |
| 31-Dec-16 | 1-Jul-17 | $106 \%$ | $\$ 848,770$ | $(\$ 194,187)$ | $\$ 654,583$ | $(\$ 196,698)$ | $\$ 457,885$ |
| 31-Dec-17 | 1-Jul-18 | $109 \%$ | $\$ 2,980,688$ | $(\$ 653,403)$ | $\$ 2,327,286$ | $(\$ 587,660)$ | $\$ 1,739,626$ |
| 31-Dec-18 | 1-Jul-19 | $113 \%$ | $\$ 2,511,837$ | $(\$ 670,654)$ | $\$ 1,841,183$ | $(\$ 627,959)$ | $\$ 1,213,224$ |
| 31-Dec-19 | 1-Jul-20 | $116 \%$ | $\$ 2,626,792$ | $(\$ 691,406)$ | $\$ 1,935,385$ | $(\$ 659,142)$ | $\$ 1,276,244$ |
| 31-Dec-20 | 1-Jul-21 | $119 \%$ | $\$ 2,746,364$ | $(\$ 712,826)$ | $\$ 2,033,538$ | $(\$ 691,624)$ | $\$ 1,341,914$ |
| 31-Dec-21 | 1-Jul-22 | $123 \%$ | $\$ 2,829,394$ | $(\$ 734,704)$ | $\$ 2,094,690$ | $(\$ 712,572)$ | $\$ 1,382,119$ |
| 31-Dec-22 | 1-Jul-23 | $127 \%$ | $\$ 2,914,915$ | $(\$ 758,252)$ | $\$ 2,156,662$ | $(\$ 734,148)$ | $\$ 1,422,514$ |
| 31-Dec-23 | 1-Jul-24 | $130 \%$ | $\$ 3,003,001$ | $(\$ 781,585)$ | $\$ 2,221,416$ | $(\$ 756,371)$ | $\$ 1,465,044$ |
| 31-Dec-24 | 1-Jul-25 | $134 \%$ | $\$ 3,093,730$ | $(\$ 805,654)$ | $\$ 2,288,076$ | $(\$ 779,262)$ | $\$ 1,508,814$ |
| 31-Dec-25 | 1-Jul-26 | $138 \%$ | $\$ 2,566,817$ | $(\$ 830,795)$ | $\$ 1,736,022$ | $(\$ 802,839)$ | $\$ 933,184$ |
| 31-Dec-26 | 1-Jul-27 | $143 \%$ | $\$ 2,644,109$ | $(\$ 856,427)$ | $\$ 1,787,682$ | $(\$ 827,123)$ | $\$ 960,559$ |
| 31-Dec-27 | 1-Jul-28 | $147 \%$ | $\$ 2,941,462$ | $(\$ 889,643)$ | $\$ 2,051,819$ | $(\$ 852,136)$ | $\$ 1,199,683$ |
| 31-Dec-28 | 1-Jul-29 | $151 \%$ | $\$ 3,054,501$ | $(\$ 917,511)$ | $\$ 2,136,990$ | $(\$ 877,899)$ | $\$ 1,259,091$ |
| 31-Dec-29 | 1-Jul-30 | $156 \%$ | $\$ 3,171,984$ | $(\$ 946,295)$ | $\$ 2,225,689$ | $(\$ 904,435)$ | $\$ 1,321,254$ |
| 31-Dec-30 | 1-Jul-31 | $160 \%$ | $\$ 3,292,532$ | $(\$ 976,016)$ | $\$ 2,316,517$ | $(\$ 931,767)$ | $\$ 1,384,750$ |
| 31-Dec-31 | 1-Jul-32 | $165 \%$ | $\$ 3,416,895$ | $(\$ 1,006,710)$ | $\$ 2,410,185$ | $(\$ 959,919)$ | $\$ 1,450,265$ |
| 31-Dec-32 | 1-Jul-33 | $170 \%$ | $\$ 3,546,823$ | $(\$ 1,038,426)$ | $\$ 2,508,397$ | $(\$ 988,916)$ | $\$ 1,519,481$ |
| 31-Dec-33 | 1-Jul-34 | $175 \%$ | $\$ 3,680,013$ | $(\$ 1,071,181)$ | $\$ 2,608,832$ | $(\$ 1,018,783)$ | $\$ 1,590,049$ |
| 31-Dec-34 | 1-Jul-35 | $181 \%$ | $\$ 3,818,345$ | $(\$ 1,105,025)$ | $\$ 2,713,320$ | $(\$ 1,049,545)$ | $\$ 1,663,775$ |

[^3]${ }^{1}$ Assumes an annual inflation rate of $3 \%$.
${ }^{2}$ See Schedule X.
${ }^{3}$ See Schedule XI-B.
${ }^{4}$ See Schedule XII.

## University of Maryland BioPark

City of Baltimore, Maryland

## Schedule XIV: Projected City Internal Rate of Return



MuniCap, Inc. S:|CONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xIsx]XIV 19-Oct-15
${ }^{1}$ Based on tax increment financing projections, as prepared by MuniCap, Inc.
${ }^{2}$ Represents the sum of the total projected tax revenues, shown on Schedule X, and the real property tax increment revenues available for debt service, as well as the supplemental special tax revenues and special tax revenues, shown on Schedule III. The rate of return is based on total projected revenues, and therefore, is not net of debt service. As a result, total projected tax revenues exclude surplus revenues from the revenues shown on Schedules III and X (these are revenues after debt service).
${ }^{3}$ Represents the sum of the total projected expenses, shown on Schedule XI-B, and the projected impact to State aid, shown on Schedule XII.

# University of Maryland BioPark City of Baltimore, Maryland 

## APPENDICES

## University of Maryland BioPark <br> City of Baltimore, Maryland

## Appendix A: Revenues and Expenses to City of Baltimore (Allocation Factors)

| City of Baltimore permanent population $^{1}$ | 622,793 |
| :--- | :--- |
| City of Baltimore current employees $^{2}$ | 311,544 |
| Non-resident workers $^{3}$ | 208,734 |
| Employee population equivalent $^{4}$ | 208,734 |
| Total service population ${ }^{5}$ | 831,527 |

## Live-work rates

Percent of newly created City of Baltimore employees assumed to live in City of Baltimore ${ }^{2} \quad 33.0 \%$
Percent of newly created City of Baltimore employees assumed to live outside City of Baltimore ${ }^{2} \quad 67.0 \%$
Service population rates
Resident ..... 1.00
Employee ${ }^{4}$ ..... 1.00
Expected employee increase
Projected new employees ${ }^{6}$ ..... 1,475
Projected non-resident employees ..... 988
Projected employee population equivalent (service population) ${ }^{7}$ ..... 988
Total service population increase ..... 988
Current real property tax revenues to City of Baltimore ${ }^{8}$ ..... \$857,184,430
Projected increase in real property tax revenues to City of Baltimore ${ }^{9}$ ..... \$4,027,641
Current total tax revenues to City of Baltimore ${ }^{8}$ ..... \$1,720,853,247
Projected increase in total tax revenues to City of Baltimore ${ }^{10}$ ..... \$3,818,345

[^4]University of Maryland BioPark
City of Baltimore, Maryland
Appendix B: Projected Employees

| $\begin{gathered} \text { Development } \\ \text { Year } \\ \text { Ending } \\ \hline \end{gathered}$ | Total Projected Employees |  |  |  |  |  | Total <br> Employees |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Proton Center | Employees |  | Lab | Employees |  |  |
|  | $\mathrm{SF}^{1}$ | Per 1,000 SF | Total ${ }^{2}$ | $\mathrm{SF}^{1}$ | Per 1,000 SF | Total ${ }^{2}$ |  |
| 31-Dec-14 | 0 | 4.10 | 0 | 0 | 4.10 | 0 | 0 |
| 31-Dec-15 | 110,000 | 4.10 | 451 | 0 | 4.10 | 0 | 451 |
| 31-Dec-16 | 110,000 | 4.10 | 451 | 0 | 4.10 | 0 | 451 |
| 31-Dec-17 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-18 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-19 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-20 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-21 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-22 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-23 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-24 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-25 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-26 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-27 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-28 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-29 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-30 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-31 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-32 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-33 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |
| 31-Dec-34 | 110,000 | 4.10 | 451 | 249,432 | 4.10 | 1,023 | 1,475 |

MuniCap, Inc.

S:ICONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xlsx]B 19-Oct-15
${ }^{1}$ See Schedule II.
${ }^{2}$ Jobs were calculated using IMPLAN software by IMPLAN Group LLC. See Appendix D.

## University of Maryland BioPark

## City of Baltimore, Maryland

## Appendix C: Projected Residents and Service Population

| Development Year <br> Ending | Projected Resident Increase ${ }^{1}$ |  |  |  |  | Service Population Increase |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rental | Vacancy | Occupied | Residents | Total Residents |  | rojected Service Emp | loyees | Projected | Service |
|  | Units | Rate | Rental Units | Per Unit | Per Household | Employees ${ }^{2}$ | Service Percentage ${ }^{3}$ | Service Employees | Residents | Population Increase ${ }^{4}$ |
| 31-Dec-14 | 0 | 0\% | 0 | 0.00 | 0 | 0 | 67\% | 0 | 0 | 0 |
| 31-Dec-15 | 0 | 0\% | 0 | 0.00 | 0 | 451 | 67\% | 302 | 0 | 302 |
| 31-Dec-16 | 0 | 0\% | 0 | 0.00 | 0 | 451 | 67\% | 302 | 0 | 302 |
| 31-Dec-17 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-18 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-19 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-20 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-21 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-22 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-23 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-24 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-25 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-26 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-27 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-28 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-29 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-30 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-31 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-32 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-33 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |
| 31-Dec-34 | 0 | 0\% | 0 | 0.00 | 0 | 1,475 | 67\% | 988 | 0 | 988 |

MuniCap, Inc
${ }^{1}$ No residential units proposed at development. As result, no new residents are projected at the development.
${ }^{2}$ See Appendix B.
${ }^{3}$ See Appendix A. Represents the percentage of employees assumed to reside outside of Baltimore City.
${ }^{3}$ Represents the increase in employees who work but do not live in the City and new residents as a result of the proposed development.

## University of Maryland BioPark

City of Baltimore, Maryland

## Appendix D-1: Proton Treatment Center Jobs and Indirect Impacts

|  | Total |
| :---: | :---: |
| Proton Treatment Center square feet ${ }^{1}$ | 110,000 |
| Square feet per Proton Treatment Center worker ${ }^{2}$ | 244 |
| Total Proton Treatment Center employees ${ }^{3}$ | 451 |
| Proton Treatment Center full-time equivalent factor ${ }^{4}$ | 0.9423 |
| Total Proton Treatment Center full-time equivalent employees ("FTE's) | 425 |
| Total Proton Treatment Center employees per 1,000 sq. ft | 4.10 |
| Total cost of labor ${ }^{3}$ | \$32,799,471 |
| Labor cost to wages factor ${ }^{5}$ | 1.2191 |
| Total wages | \$26,904,753 |
| Average labor income per Proton Treatment Center FTE - annual | \$77,129 |
| Average wage per Proton Treatment Center FTE - annual | \$63,267 |
| Proton Treatment Center operating revenue | \$66,159,270 |
| Multiplier for Proton Treatment Center wages ${ }^{3}$ | 1.4168 |
| Total earnings | \$46,470,275 |
| Indirect earnings | \$13,670,804 |
| Multiplier for Proton Treatment Center jobs ${ }^{3}$ | 1.4829 |
| Total jobs | 669 |
| Indirect jobs | 218 |
| Multiplier for Proton Treatment Center output ${ }^{3}$ | 1.4740 |
| Total economic output | \$97,516,779 |
| Indirect output | \$31,357,509 |
| MuniCap, Inc. | Isx]D-1 Proton |
|  | 19-Oct-15 |
| ${ }^{1}$ Based on projected development at full buildout. See Schedule I. <br> ${ }^{2}$ Based on average square feet per office worker as reported for the Baltimore, MD market in theBOMA Experience Exchange Report for 2014. |  |
| ${ }^{3}$ Proton Treatment Center wages, jobs, and output were calculated using IMPLAN software by IMPLAN Group, LLC. The software calculates labor income and the number of jobs based on industry multipliers derived from National Income and Product Accounts data published by the U.S. Bureau of Economic Analysis. This data is then indexed to local industry data compiled by the U.S. Census Bureau. For ease of interpretation, multipliers are shown to illustrate the effects Proton Treatment Center development within the University of Maryland BioPark development will have in Baltimore City, Maryland. The multiplier for Proton Treatment Center jobs is 1.4829 , meaning that for each job at the development, 1.4829 jobs will be created in Baltimore City, including the job at the development. Similarly, the multiplier for Proton Treatment Center wages is 1.4168 , meaning that for every $\$ 1.00$ paid in pad wages at the development, $\$ 1.4168$ will be paid in Baltimore City, including the $\$ 1.00$ at the development. The multiplier for Proton Treatment Center output is 1.4740 , meaning that for each dollar of Proton Treatment Center economic activity at the development, the economic activity in Baltimore City will be $\$ 1.4740$, including the $\$ 1.00$ at the development. |  |
| ${ }^{4}$ Total jobs include all full-year employees, including part-time and full-time employees. This factor, provided by IMPLAN Group, LLC, converts total jobs into total full-time equivalent employees ("FTE's"). |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

## Appendix D-2: Lab Jobs and Indirect Impacts

TotalLab square feet ${ }^{1}$ ..... 249,432
Square feet per lab worker ${ }^{2}$ ..... 244
Total lab employees ${ }^{3}$ ..... 1,023
Lab full-time equivalent factor ${ }^{4}$ ..... 0.8970
Total lab full-time equivalent employees ("FTE's) ..... 918
Total lab employees per 1,000 sq. ft ..... 4.10
Total cost of labor ${ }^{3}$ ..... \$111,301,087
Labor cost to wages factor ${ }^{5}$ ..... 1.2117
Total wages ..... \$91,852,541
Average labor income per lab FTE - annual ..... \$121,259
Average wage per lab FTE - annual ..... \$100,070
Lab operating revenue ..... \$141,302,607
Multiplier for lab wages ${ }^{3}$ ..... 1.2283
Total earnings ..... \$136,713,514
Indirect earnings ..... \$25,412,427
Multiplier for lab jobs ${ }^{3}$ ..... 1.4251
Total jobs ..... 1,458
Indirect jobs ..... 435
Multiplier for lab output ${ }^{3}$ ..... 1.4431
Total economic output ..... \$203,907,716
Indirect output ..... \$62,605,109

[^5]
## University of Maryland BioPark <br> City of Baltimore, Maryland

## Appendix E: Temporary Construction Jobs and Indirect Impacts (Phase I)

Total
Project costs ${ }^{1}$
\$137,180,783

Total construction jobs ${ }^{2} \quad 600$
$\begin{array}{ll}\text { Construction full-time equivalent factor } \\ & 3\end{array} 0.9595$
Total construction full-time equivalent employees ("FTE's") 576
Total construction labor income ${ }^{2} \quad \$ 55,567,766$
Labor income to wages factor ${ }^{4} \quad 1.1989$
Total wages \$46,350,597
Average labor income per construction FTE -- annual \$96,455
Average wage per construction FTE -- annual $\quad \$ 80,455$
$\begin{array}{ll}\text { Multiplier for construction wages }{ }^{2} & 1.3485\end{array}$
Total earnings $\quad \$ 74,935,749$
Indirect earnings $\$ 19,367,983$
$\begin{array}{ll}\text { Multiplier for construction jobs }{ }^{2} & 1.520819454\end{array}$
Total jobs (one year full time equivalents) 913
Indirect jobs (one year full time equivalents) 313
Multiplier for construction output ${ }^{2} \quad 1.349807334$
Total economic output \$185,167,627
Indirect output \$47,986,844

MuniCap, Inc.
nalysis No. 4-A - UMB.xlsx]E-1 (Phase I)
19-Oct-15
${ }^{1}$ Provided by Wexford Science + Technology. Includes vertical construction and BioPark streetscape improvement hard costs, and tenant improvements.
${ }^{2}$ Construction wages, indirect jobs and output were calculated using the IMPLAN software by IMPLAN Group, LLC. Multipliers function in the same manner as with Proton Treatment Center impacts.
${ }^{3}$ Total jobs include all full-year employees, including part-time and full-time employees. This factor, provided by IMPLAN Group, LLC, converts total jobs into total full-time equivalent employees ("FTE's").
${ }^{4}$ Total labor income includes wages and salary, benefits, payroll taxes, and proprietor's income. This factor, provided by IMPLAN Group, LLC. converts total labor income into direct wages and salary.

## University of Maryland BioPark

## City of Baltimore, Maryland

Appendix F-1(a): Projected Change in State Aid - Projected Total Program Enrollment Increase Multiplier ${ }^{1}$

| DevelopmentYear | Tax | Total Program Enrollment Increase Multiplier |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Total | UMB | Total Program |
|  | Year | Current Eligible | Projected | Enrollment |
| Ending | Beginning | Students ${ }^{2}$ | New Students ${ }^{3}$ | Multiplier ${ }^{4}$ |
| 31-Dec-14 | 1-Jul-15 | 79,503 | 0 | 1.000 |
| 31-Dec-15 | 1-Jul-16 | 79,503 | 0 | 1.000 |
| 31-Dec-16 | 1-Jul-17 | 79,503 | 0 | 1.000 |
| 31-Dec-17 | 1-Jul-18 | 79,503 | 0 | 1.000 |
| 31-Dec-18 | 1-Jul-19 | 79,503 | 0 | 1.000 |
| 31-Dec-19 | 1-Jul-20 | 79,503 | 0 | 1.000 |
| 31-Dec-20 | 1-Jul-21 | 79,503 | 0 | 1.000 |
| 31-Dec-21 | 1-Jul-22 | 79,503 | 0 | 1.000 |
| 31-Dec-22 | 1-Jul-23 | 79,503 | 0 | 1.000 |
| 31-Dec-23 | 1-Jul-24 | 79,503 | 0 | 1.000 |
| 31-Dec-24 | 1-Jul-25 | 79,503 | 0 | 1.000 |
| 31-Dec-25 | 1-Jul-26 | 79,503 | 0 | 1.000 |
| 31-Dec-26 | 1-Jul-27 | 79,503 | 0 | 1.000 |
| 31-Dec-27 | 1-Jul-28 | 79,503 | 0 | 1.000 |
| 31-Dec-28 | 1-Jul-29 | 79,503 | 0 | 1.000 |
| 31-Dec-29 | 1-Jul-30 | 79,503 | 0 | 1.000 |
| 31-Dec-30 | 1-Jul-31 | 79,503 | 0 | 1.000 |
| 31-Dec-31 | 1-Jul-32 | 79,503 | 0 | 1.000 |
| 31-Dec-32 | 1-Jul-33 | 79,503 | 0 | 1.000 |
| 31-Dec-33 | 1-Jul-34 | 79,503 | 0 | 1.000 |
| 31-Dec-34 | 1-Jul-35 | 79,503 | 0 | 1.000 |

MuniCap, Inc. ¡|Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-A - UMB.xlsx]F-1(a)
19-Oct-15
${ }^{\text {I }}$ Change in state aid is determined using the formula for the Foundation Program State Education Grant, which includes student enrollment as a positive factor and total wealth as a negative factor. This schedule calculates the impact on student enrollment of new students at University of Maryland BioPark. The formula for the Foundation Program State Education Grant is illustrated in Appendix G.
${ }^{2}$ Represents the total current eligible student enrollment in the Baltimore City Public School System. See Table 1 on Appendix G-2(a).
${ }^{3}$ No residential units are proposed for the University of Maryland BioPark Development District. As a result, no new students are projected to be generated.
${ }^{4}$ Represents the annual increase in eligible student enrollment as a result of the development.

## University of Maryland BioPark

## City of Baltimore, Maryland

## Appendix F-1(b): Projected Change in State Aid - Projected Total Program Enrollment Budget Impact ${ }^{1}$

| Developmen Year Ending | Tax <br> Year <br> Beginning | Inflation <br> Factor | Total Current School <br> Enrollment Funding ${ }^{2}$ | Total Program Enrollment Multiplier ${ }^{3}$ | Projected <br> Total Program School <br> Enrollment Funding ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 31-Dec-14 | 1-Jul-15 | 100\% | \$552,862,431 | 1.000 | \$552,862,431 |
| 31-Dec-15 | 1-Jul-16 | 103\% | \$569,448,304 | 1.000 | \$569,448,304 |
| 31-Dec-16 | 1-Jul-17 | 106\% | \$586,531,753 | 1.000 | \$586,531,753 |
| 31-Dec-17 | 1-Jul-18 | 109\% | \$604,127,706 | 1.000 | \$604,127,706 |
| 31-Dec-18 | 1-Jul-19 | 113\% | \$622,251,537 | 1.000 | \$622,251,537 |
| 31-Dec-19 | 1-Jul-20 | 116\% | \$640,919,083 | 1.000 | \$640,919,083 |
| 31-Dec-20 | 1-Jul-21 | 119\% | \$660,146,655 | 1.000 | \$660,146,655 |
| 31-Dec-21 | 1-Jul-22 | 123\% | \$679,951,055 | 1.000 | \$679,951,055 |
| 31-Dec-22 | 1-Jul-23 | 127\% | \$700,349,587 | 1.000 | \$700,349,587 |
| 31-Dec-23 | 1-Jul-24 | 130\% | \$721,360,074 | 1.000 | \$721,360,074 |
| 31-Dec-24 | 1-Jul-25 | 134\% | \$743,000,876 | 1.000 | \$743,000,876 |
| 31-Dec-25 | 1-Jul-26 | 138\% | \$765,290,903 | 1.000 | \$765,290,903 |
| 31-Dec-26 | 1-Jul-27 | 143\% | \$788,249,630 | 1.000 | \$788,249,630 |
| 31-Dec-27 | 1-Jul-28 | 147\% | \$811,897,119 | 1.000 | \$811,897,119 |
| 31-Dec-28 | 1-Jul-29 | 151\% | \$836,254,032 | 1.000 | \$836,254,032 |
| 31-Dec-29 | 1-Jul-30 | 156\% | \$861,341,653 | 1.000 | \$861,341,653 |
| 31-Dec-30 | 1-Jul-31 | 160\% | \$887,181,903 | 1.000 | \$887,181,903 |
| 31-Dec-31 | 1-Jul-32 | 165\% | \$913,797,360 | 1.000 | \$913,797,360 |
| 31-Dec-32 | 1-Jul-33 | 170\% | \$941,211,281 | 1.000 | \$941,211,281 |
| 31-Dec-33 | 1-Jul-34 | 175\% | \$969,447,619 | 1.000 | \$969,447,619 |
| 31-Dec-34 | 1-Jul-35 | 181\% | \$998,531,048 | 1.000 | \$998,531,048 |

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${ }^{1}$ This schedule calculates the impact on the baseline for state aid based on the increase in student enrollment from University of Maryland BioPark. The formula for the Foundation Program State Education Grant is illustrated in Appendix G.
${ }^{2}$ Represents the current program enrollment, which represents the total costs of current students. See Table 3 on Appendix G-2(a). Assumes $3 \%$ annual inflationary increase.
${ }^{3}$ See Appendix F-1(a).
${ }^{4}$ Represents the annual increase in student costs resulting from the development.

## University of Maryland BioPark

City of Baltimore, Maryland
Appendix F-2(a): Projected Change in State Aid - Projected Total Wealth

Projected Total New Wealth

|  |  |  |  |  |  | Projected | New Wealth |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Projected New | sonal Prope | Value Included |  | Projected New | eal Proper | alue Included |  |
| Developmen 1 | Tax |  | Projected |  | Projected New |  | Projected |  | Projected New | Projected |
| Year | Year | Inflation | New Personal | Percent | Personal Property | Projected | New Real | Percent | Real Property | Total New |
| Ending | Beginning | Factor | Property Value ${ }^{2}$ | Included ${ }^{3}$ | Value Included | New Income ${ }^{4}$ | Property Value ${ }^{5}$ | Included ${ }^{6}$ | Value Included | Wealth ${ }^{7}$ |
| 31-Dec-14 | 1-Jul-15 | 100\% | \$0 | 50\% | \$0 | \$0 | \$11,698,600 | 40\% | \$4,679,440 | \$4,679,440 |
| 31-Dec-15 | 1-Jul-16 | 103\% | \$963,050 | 50\% | \$481,525 | \$9,144,926 | \$40,542,343 | 40\% | \$16,216,937 | \$25,843,388 |
| 31-Dec-16 | 1-Jul-17 | 106\% | \$991,942 | 50\% | \$495,971 | \$9,419,273 | \$45,389,058 | 40\% | \$18,155,623 | \$28,070,867 |
| 31-Dec-17 | 1-Jul-18 | 109\% | \$3,338,469 | 50\% | \$1,669,234 | \$42,823,869 | \$98,430,174 | 40\% | \$39,372,070 | \$83,865,173 |
| 31-Dec-18 | 1-Jul-19 | 113\% | \$3,438,623 | 50\% | \$1,719,312 | \$44,108,586 | \$109,470,946 | 40\% | \$43,788,378 | \$89,616,275 |
| 31-Dec-19 | 1-Jul-20 | 116\% | \$3,541,782 | 50\% | \$1,770,891 | \$45,431,843 | \$117,158,970 | 40\% | \$46,863,588 | \$94,066,322 |
| 31-Dec-20 | 1-Jul-21 | 119\% | \$3,648,035 | 50\% | \$1,824,018 | \$46,794,798 | \$125,207,621 | 40\% | \$50,083,048 | \$98,701,864 |
| 31-Dec-21 | 1-Jul-22 | 123\% | \$3,757,476 | 50\% | \$1,878,738 | \$48,198,642 | \$129,034,893 | 40\% | \$51,613,957 | \$101,691,338 |
| 31-Dec-22 | 1-Jul-23 | 127\% | \$3,870,200 | 50\% | \$1,935,100 | \$49,644,602 | \$132,976,982 | 40\% | \$53,190,793 | \$104,770,495 |
| 31-Dec-23 | 1-Jul-24 | 130\% | \$3,986,306 | 50\% | \$1,993,153 | \$51,133,940 | \$137,037,335 | 40\% | \$54,814,934 | \$107,942,027 |
| 31-Dec-24 | 1-Jul-25 | 134\% | \$4,105,896 | 50\% | \$2,052,948 | \$52,667,958 | \$141,219,498 | 40\% | \$56,487,799 | \$111,208,705 |
| 31-Dec-25 | 1-Jul-26 | 138\% | \$4,229,073 | 50\% | \$2,114,536 | \$54,247,997 | \$145,527,126 | 40\% | \$58,210,850 | \$114,573,383 |
| 31-Dec-26 | 1-Jul-27 | 143\% | \$4,355,945 | 50\% | \$2,177,972 | \$55,875,436 | \$149,963,983 | 40\% | \$59,985,593 | \$118,039,002 |
| 31-Dec-27 | 1-Jul-28 | 147\% | \$4,486,623 | 50\% | \$2,243,312 | \$57,551,700 | \$154,533,945 | 40\% | \$61,813,578 | \$121,608,589 |
| 31-Dec-28 | 1-Jul-29 | 151\% | \$4,621,222 | 50\% | \$2,310,611 | \$59,278,251 | \$159,241,006 | 40\% | \$63,696,403 | \$125,285,264 |
| 31-Dec-29 | 1-Jul-30 | 156\% | \$4,759,858 | 50\% | \$2,379,929 | \$61,056,598 | \$164,089,280 | 40\% | \$65,635,712 | \$129,072,239 |
| 31-Dec-30 | 1-Jul-31 | 160\% | \$4,902,654 | 50\% | \$2,451,327 | \$62,888,296 | \$169,083,001 | 40\% | \$67,633,200 | \$132,972,824 |
| 31-Dec-31 | 1-Jul-32 | 165\% | \$5,049,734 | 50\% | \$2,524,867 | \$64,774,945 | \$174,226,534 | 40\% | \$69,690,614 | \$136,990,425 |
| 31-Dec-32 | 1-Jul-33 | 170\% | \$5,201,226 | 50\% | \$2,600,613 | \$66,718,193 | \$179,524,373 | 40\% | \$71,809,749 | \$141,128,555 |
| 31-Dec-33 | 1-Jul-34 | 175\% | \$5,357,263 | 50\% | \$2,678,631 | \$68,719,739 | \$184,981,147 | 40\% | \$73,992,459 | \$145,390,829 |
| 31-Dec-34 | 1-Jul-35 | 181\% | \$5,517,980 | 50\% | \$2,758,990 | \$70,781,331 | \$190,601,625 | 40\% | \$76,240,650 | \$149,780,971 |

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19-Oct-15
 the Foundation Program State Education Grant is illustrated in Appendix G.
${ }^{2}$ Represents the total projected assessed value (after depreciation) increased at the rate of commercial absorption, assuming 3\% annual inflationary increase. Based on information shown on Schedules IV and II
${ }^{3}$ Represents a constant provided by the Maryland State Department of Education. See Table 1 on Appendix G-2(b).
${ }^{4}$ Represents the projected total new income increased at the rate of absorption, assuming $3 \%$ annual inflationary increase. Based on information shown on Schedules VII and II.
${ }^{5}$ Represents the projected total assessed value. Based on information shown the tax increment financing projections, as prepared by MuniCap, Inc.
${ }^{6}$ Represents a constant provided by the Maryland State Department of Education. See Table 3 on Appendix G-2(b).
${ }^{7}$ Represents the sum of projected new personal property value included, projected new income, and projected new real property value included

## University of Maryland BioPark

City of Baltimore, Maryland

## Appendix F-2(b): Projected Change in State Aid - Projected Impact on City Wealth ${ }^{1}$

| Development | Tax | Inflation | Total Current <br> Local Share of | Projected New Wealth Impact on School Funding |  |  | Total Projected |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Projected | Local | Projected New |  |
|  | Year |  |  | Total New | Share | Local Share | Local Share of |
| Ending | Beginning | Factor | School Funding ${ }^{2}$ | Wealth ${ }^{3}$ | Percentage ${ }^{4}$ | of School Funding | School Funding ${ }^{5}$ |
| 31-Dec-14 | 1-Jul-15 | 100.0\% | \$163,152,698 | \$4,679,440 | 0.70072\% | \$32,790 | \$163,185,487 |
| 31-Dec-15 | 1-Jul-16 | 103.0\% | \$168,047,279 | \$25,843,388 | 0.70072\% | \$181,090 | \$168,228,368 |
| 31-Dec-16 | 1-Jul-17 | 106.1\% | \$173,088,697 | \$28,070,867 | 0.70072\% | \$196,698 | \$173,285,395 |
| 31-Dec-17 | 1-Jul-18 | 109.3\% | \$178,281,358 | \$83,865,173 | 0.70072\% | \$587,660 | \$178,869,018 |
| 31-Dec-18 | 1-Jul-19 | 112.6\% | \$183,629,799 | \$89,616,275 | 0.70072\% | \$627,959 | \$184,257,758 |
| 31-Dec-19 | 1-Jul-20 | 115.9\% | \$189,138,693 | \$94,066,322 | 0.70072\% | \$659,142 | \$189,797,834 |
| 31-Dec-20 | 1-Jul-21 | 119.4\% | \$194,812,853 | \$98,701,864 | 0.70072\% | \$691,624 | \$195,504,477 |
| 31-Dec-21 | 1-Jul-22 | 123.0\% | \$200,657,239 | \$101,691,338 | 0.70072\% | \$712,572 | \$201,369,810 |
| 31-Dec-22 | 1-Jul-23 | 126.7\% | \$206,676,956 | \$104,770,495 | 0.70072\% | \$734,148 | \$207,411,104 |
| 31-Dec-23 | 1-Jul-24 | 130.5\% | \$212,877,265 | \$107,942,027 | 0.70072\% | \$756,371 | \$213,633,636 |
| 31-Dec-24 | 1-Jul-25 | 134.4\% | \$219,263,583 | \$111,208,705 | 0.70072\% | \$779,262 | \$220,042,844 |
| 31-Dec-25 | 1-Jul-26 | 138.4\% | \$225,841,490 | \$114,573,383 | 0.70072\% | \$802,839 | \$226,644,329 |
| 31-Dec-26 | 1-Jul-27 | 142.6\% | \$232,616,735 | \$118,039,002 | 0.70072\% | \$827,123 | \$233,443,858 |
| 31-Dec-27 | 1-Jul-28 | 146.9\% | \$239,595,237 | \$121,608,589 | 0.70072\% | \$852,136 | \$240,447,373 |
| 31-Dec-28 | 1-Jul-29 | 151.3\% | \$246,783,094 | \$125,285,264 | 0.70072\% | \$877,899 | \$247,660,993 |
| 31-Dec-29 | 1-Jul-30 | 155.8\% | \$254,186,587 | \$129,072,239 | 0.70072\% | \$904,435 | \$255,091,022 |
| 31-Dec-30 | 1-Jul-31 | 160.5\% | \$261,812,185 | \$132,972,824 | 0.70072\% | \$931,767 | \$262,743,952 |
| 31-Dec-31 | 1-Jul-32 | 165.3\% | \$269,666,550 | \$136,990,425 | 0.70072\% | \$959,919 | \$270,626,469 |
| 31-Dec-32 | 1-Jul-33 | 170.2\% | \$277,756,547 | \$141,128,555 | 0.70072\% | \$988,916 | \$278,745,463 |
| 31-Dec-33 | 1-Jul-34 | 175.4\% | \$286,089,243 | \$145,390,829 | 0.70072\% | \$1,018,783 | \$287,108,026 |
| 31-Dec-34 | 1-Jul-35 | 180.6\% | \$294,671,920 | \$149,780,971 | 0.70072\% | \$1,049,545 | \$295,721,465 |

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19-Oct-15

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## University of Maryland BioPark <br> City of Baltimore, Maryland

## Appendix G-1: State Education Aid: Baltimore City Public School Education Grants ${ }^{1}$

## Maryland State Department of Education

| Major State Aid Programs: | Baltimore City Public <br> Schools (FY 2016) |
| :--- | ---: |
| Foundation Program ${ }^{2}$ | $\$ 400,310,957$ |
| Student Transportation | $\$ 19,504,310$ |
| Compensatory Education | $\$ 322,245,503$ |
| Limited English Proficient | $\$ 19,446,655$ |
| Special Education Model | $\$ 52,901,194$ |
| Guaranteed Tax Base | $\$ 31,420,381$ |
| Supplemental Grant | $\$ 18,310,933$ |
| Net Tax Income Adjustment | $\$ 453,884$ |
| Total Direct Mandated Grants | $\$ 864,593,817$ |
| MuniCap, Inc. | It Analysis No. 4-A - UMB.xlsx]G.1 |
|  | $19-O C t-15$ |

${ }^{1}$ Source: Maryland State Department of Education Memo dated June12, 2015. Provided by the State Department of Budget and Management. It has been confirmed that the Major State Aid Programs are illustrated under "State Sources" of the Proposed Operating Budget Fiscal Year 2016 for Baltimore City Public School. Numbers differ due to the fiscal years reviewed and information available.
${ }^{2}$ Represents the only state education grant allocated based on assessed value, amongst other factors.

## University of Maryland BioPark

City of Baltimore, Maryland
Appendix G-2(a): Inputs for Foundation Program Grant Calculation - Total Enrollment

Table 1: Total Enrollment

|  | Pupil Types |
| :--- | ---: |
| Total Enrollment | Students |
| SEED | 84,976 |
| Total Enrollment | 173 |
| Less Ineligible: | 85,149 |
| Prekinder |  |
| Kinder | 4,810 |
| Evening High | 0 |
| Part Time | 0 |
| Out-of-State | 0 |
| Other Ineligible | 0 |
| Total Ineligible | 836 |
| Total Eligible Enrollments |  |

Table 2: Target Per Pupil Foundation Amount

| Prior Fiscal Year Amount | $\$ 6,860$ |
| :--- | ---: |
| Increase in Implicit Price Deflator | 1.0137 |
| Target Per Pupil Foundation Amount | $\mathbf{\$ 6 , 9 5 4}$ |

Table 3: Total Program Enrollment Input

| Total Eligible Enrollments | 79,503 |
| :--- | ---: |
| Target Per Pupil Foundation Amount | $\$ 6,954$ |
| Total Program Enrollment ${ }^{2}$ | $\mathbf{\$ 5 5 2 , 8 6 2 , 4 3 1}$ |
| MuniCap, Inc. | $4-A-$ UMB.xIsx]G.2(a) |
|  | $19-O c t-15$ |

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## University of Maryland BioPark

City of Baltimore, Maryland

Appendix G-2(b): Inputs for Foundation Program Grant Calculation - Local Share ${ }^{1}$

Table 1: Personal Property

| Personal Property Types | Total |
| :--- | ---: |
| Railroad Operating | $\$ 32,916,000$ |
| Utility Operating | $\$ 813,110,000$ |
| Business | $\$ 1,038,830,000$ |
| Total Personal Property | $\$ 1,884,856,000$ |
| Percent Included in Calculation | $50 \%$ |
| Total Personal Property Included | $\mathbf{\$ 9 4 2 , 4 2 8 , 0 0 0}$ |

Table 2: Income
Total Income $\$ 8,375,515,816$

Table 3: Real Property

| Real Property Types | Total |
| :--- | ---: |
| Full Year | $\$ 34,340,267,000$ |
| New Construction | $\$ 32,330,000$ |
| Railroad Operating | $\$ 208,537,000$ |
| Total Real Property | $\$ 34,581,134,000$ |
| Percent Included in Calculation | $40 \%$ |
| Sub-Total Real Property Included | $\$ 13,832,453,600$ |
| Utility Operating | $\$ 133,182,000$ |
| Total Real Property Included | $\mathbf{\$ 1 3 , 9 6 5 , 6 3 5 , 6 0 0}$ |

## Table 4: Total Wealth

|  | Categories |
| :--- | ---: |
| Personal Property | Total |
| Income | $\$ 942,428,000$ |
| Real Property | $\$ 8,375,515,816$ |
| Total Wealth | $\$ 13,965,635,600$ |

Table 5: Total Local Share

| Total Wealth | $\$ 23,283,579,416$ |
| :--- | ---: |
| Local Share Percentage | $0.70072 \%$ |
| Total Local Share Included | $\mathbf{\$ 1 6 3 , 1 5 2 , 6 9 8}$ |
| MuniCap, Inc. | t Analysis No. 4-A - UMB.xlsx]G.2(b) |
|  | 19-Oct-15 |

${ }^{1}$ Source: Maryland State Department of Education Memo dated June 12, 2015. Provided by the State Department of Budget and Management.

## University of Maryland BioPark

City of Baltimore, Maryland

Appendix G-2(c): Inputs for Foundation Program Grant Calculation - Minimum
State Share

| Total Program Enrollment (See Table 3 on Appendix G-2(a)) | $\$ 552,862,431$ |
| :--- | ---: |
| Minimum State Share Percentage ${ }^{1}$ | $15.000 \%$ |
| Total Minimum State Share | $\mathbf{\$ 8 2 , 9 2 9 , 3 6 5}$ |
| MuniCap, Inc. | pact Analysis No. 4-A - UMB.xlsx]G.2(c) |
|  | $19-O c t-15$ |
| ${ }^{1}$ Provided by the State Department of Budget and Management. |  |

# University of Maryland BioPark <br> City of Baltimore, Maryland 

## Appendix G-3: Total Foundation Program Grant Amount ${ }^{1}$

## Table 1: Total Program Share

Total Enrollment (See Table 3 on Appendix G-2(a))
\$552,862,431
Less: Total Local Share (See Table 5 on Appendix G-2(b))
(\$163,152,698)
Total Program Share \$389,709,733

Table 2: Total State Share ${ }^{2}$

| Total Program Share | $\$ 389,709,733$ |
| :--- | :---: |
| Minimum State Share (See Appendix G-2(c)) | $\$ 82,929,365$ |
| Total State Share | $\mathbf{\$ 3 8 9 , 7 0 9 , 7 3 3}$ |

Table 3: Total Foundation Program Grant Amount

| Total State Share | $\$ 389,709,733$ |
| :--- | ---: |
| GCEI $^{3}$ | $\$ 11,610,141$ |
| Total Foundation Program Grant Amount ${ }^{4}$ | $\mathbf{\$ 4 0 1 , 3 1 9 , 8 7 4}$ |
| MuniCap, Inc. | lact Analysis No. 4-A - UMB.xlsx]G.3 |
|  | 19-Oct-15 |

${ }^{1}$ Source: Maryland State Department of Education Memo dated June 12, 2015. Provided by the State Department of Budget and Management.
${ }^{2}$ Represents the maximum between the total program share and the minimum state share. Source: Maryland State Department of Education Memo dated June 12, 2015. Provided by the State Department of Budget and Management.
${ }^{3}$ The purpose of the GCEI is to provide additional funding to jurisdictions with a higher cost of education. The base value for the index is one. Jurisdictions with a high cost of education will have a value greater than one and jurisdictions with a lower cost of education will have a value less than one. The GCEI is calculated by multiplying the local index value times the foundation amount. The GCEI only provides additional funds to counties with an index greater than one; funding is not reduced for jurisdictions with an index less than one. GCEI funding is discretionary. Explanation provided by Maryland State Department of Budget and Management.
${ }^{4}$ Amount slightly different than figure published in the Maryland State Department of Education Memo, dated June 12, 2015, as provided by the State Department of Budget and Management due to rounding.

ADDENDUM C
Fiscal Impact Analysis (Project)

# University of Maryland BioPark City of Baltimore, Maryland 

Fiscal Impact Analysis Scenario B

Includes 873 W. Baltimore Building Only

## Prepared By:

MuniCap, Inc.
Public Finance

October 19, 2015

# University of Maryland BioPark City of Baltimore, Maryland 

## Fiscal Impact Analysis Scenario B

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# University of Maryland BioPark City of Baltimore, Maryland 

## Fiscal Impact Analysis Scenario B

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# University of Maryland BioPark City of Baltimore, Maryland 

## Fiscal Impact Analysis Scenario B

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## University of Maryland BioPark City of Baltimore, Maryland

## Summary of Fiscal Impacts <br> Baltimore City Tax Revenues - Full Build-Out

City's Return on Investment $\quad 3.51 \%$

|  | Annual ${ }^{1}$ | 20 Years $^{2}$ |
| :---: | :---: | :---: |
| Projected City Revenues: |  |  |
| Real property tax increment revenues | \$802,895 | \$16,860,794 |
| Supplemental special tax revenue ${ }^{3}$ | \$184,375 | \$2,212,500 |
| Less: TIF debt service paid by property taxes ${ }^{4}$ | (\$1,610,882) | (\$33,828,522) |
| Net real property tax increment revenues | $(\$ 623,612)$ | (\$14,755,228) |
| Special taxes paid by the developer ${ }^{5}$ | \$481,353 | \$4,813,528 |
| Net real property tax increment revenues to the City | (\$142,259) | (\$9,941,700) |
| Personal property tax revenues | \$119,154 | \$3,048,616 |
| Enterprise Zone Tax Credit reimbursement revenues | \$599,423 | \$5,994,229 |
| Energy tax revenues | \$44,159 | \$1,129,824 |
| Personal income tax revenues - employees | \$795,370 | \$20,349,995 |
| Local recordation tax revenues ${ }^{6}$ | - | \$612,619 |
| Transfer tax revenues ${ }^{7}$ | - | - |
| Additional revenues | \$56,372 | \$1,442,317 |
| Projected city revenues | \$1,472,218 | \$22,635,900 |
| Projected City Expenses | $(\$ 416,571)$ | (\$10,582,334) |
| Net fiscal impact to Baltimore City | \$1,055,647 | \$12,053,566 |
| Projected change in State aid to schools ${ }^{8}$ | (\$453,376) | $(\$ 9,520,897)$ |
| Total fiscal impact to Baltimore City | \$602,271 | \$2,532,669 |

Baltimore City Permanent Employment Impacts ${ }^{9}$

|  | Jobs from Lab - Building 3 (873 W. Baltimore) |  |
| :--- | :---: | :---: |
|  |  | Permanent Jobs |

Baltimore City Temporary Employment Impacts ${ }^{10}$

|  | Temporary Jobs from Construction |  |
| :--- | :---: | :---: |
|  |  | Temporary Jobs |

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# University of Maryland BioPark City of Baltimore, Maryland 

## University of Maryland BioPark

City of Baltimore, Maryland
Schedule I: Summary of Development


## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule II: Projected Absorption ${ }^{1}$

| Development | Year |  |
| :---: | :---: | :---: |
| Ending | Lab - Building 3 (873 W. Baltimore) |  |
| 31-Dec-14 | SF | Cumulative |
| 31-Dec-15 | 0 | 0 |
| 31-Dec-16 | 0 | 0 |
| 31-Dec-17 | 0 | 0 |
| 31-Dec-18 | 249,432 | 249,432 |
| 31-Dec-19 | 0 | 249,432 |
| 31-Dec-20 | 0 | 249,432 |
| 31-Dec-21 | 0 | 249,432 |
| 31-Dec-22 | 0 | 249,432 |
| 31-Dec-23 | 0 | 249,432 |
| 31-Dec-24 | 0 | 249,432 |
| 31-Dec-25 | 0 | 249,432 |
| 31-Dec-26 | 0 | 249,432 |
| 31-Dec-27 | 0 | 249,432 |
| 31-Dec-28 | 0 | 249,432 |
| 31-Dec-29 | 0 | 249,432 |
| 31-Dec-30 | 0 | 249,432 |
| 31-Dec-31 | 0 | 249,432 |
| 31-Dec-32 | 0 | 249,432 |
| 31-Dec-33 | 0 | 249,432 |
| 31-Dec-34 | 0 | 249,432 |
|  | 0 | 249,432 |
| Total | 249,432 |  |

MuniCap, Inc. $\quad$ Ict Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]II 19-Oct-15
${ }^{1}$ Provided by Wexford Science + Technology.

# University of Maryland BioPark City of Baltimore, Maryland 

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule III: Projected Real Property Taxes - Surplus Real Property Tax Increment Revenues

| Development Year Ending | Tax <br> Year <br> Beginning | Inflation <br> Factor ${ }^{1}$ | $\begin{gathered} \text { Net Annual } \\ \text { Debt Service }{ }^{2} \end{gathered}$ | Total Tax Revenues Available for Debt Service |  |  | Surplus/(Deficit) | Special Tax ${ }^{4}$ | Surplus/Deficit <br> Real Property Tax <br> Increment Revenues ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Tax Increment | Supplemental |  |  |  |  |
|  |  |  |  | Revenue ${ }^{2}$ | Special Tax ${ }^{3}$ | Total |  |  |  |
| 31-Dec-14 | 1-Jul-15 | 100\% | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 31-Dec-15 | 1-Jul-16 | 103\% | \$625,000 | \$0 | \$0 | \$0 | $(\$ 625,000)$ | \$453,658 | $(\$ 171,342)$ |
| 31-Dec-16 | 1-Jul-17 | 106\% | \$625,000 | \$0 | \$0 | \$0 | $(\$ 625,000)$ | \$433,175 | $(\$ 191,825)$ |
| 31-Dec-17 | 1-Jul-18 | 109\% | \$625,000 | \$0 | \$62,500 | \$62,500 | $(\$ 562,500)$ | \$349,122 | $(\$ 213,378)$ |
| 31-Dec-18 | 1-Jul-19 | 113\% | \$1,080,000 | \$0 | \$150,000 | \$150,000 | $(\$ 930,000)$ | \$693,953 | $(\$ 236,047)$ |
| 31-Dec-19 | 1-Jul-20 | 116\% | \$1,080,600 | \$0 | \$250,000 | \$250,000 | $(\$ 830,600)$ | \$587,307 | $(\$ 243,293)$ |
| 31-Dec-20 | 1-Jul-21 | 119\% | \$1,081,212 | \$0 | \$250,000 | \$250,000 | $(\$ 831,212)$ | \$580,455 | (\$250,757) |
| 31-Dec-21 | 1-Jul-22 | 123\% | \$1,081,836 | \$0 | \$250,000 | \$250,000 | $(\$ 831,836)$ | \$573,392 | $(\$ 258,444)$ |
| 31-Dec-22 | 1-Jul-23 | 127\% | \$1,082,473 | \$295,630 | \$250,000 | \$545,630 | $(\$ 536,843)$ | \$270,480 | $(\$ 266,363)$ |
| 31-Dec-23 | 1-Jul-24 | 130\% | \$1,083,122 | \$304,634 | \$250,000 | \$554,634 | $(\$ 528,488)$ | \$253,970 | (\$274,518) |
| 31-Dec-24 | 1-Jul-25 | 134\% | \$1,083,785 | \$313,909 | \$250,000 | \$563,909 | (\$519,876) | \$236,957 | (\$282,919) |
| 31-Dec-25 | 1-Jul-26 | 138\% | \$2,226,461 | \$323,462 | \$250,000 | \$573,462 | (\$1,652,999) | \$195,144 | (\$1,457,855) |
| 31-Dec-26 | 1-Jul-27 | 143\% | \$2,271,630 | \$333,301 | \$250,000 | \$583,301 | (\$1,688,329) | \$185,915 | $(\$ 1,502,414)$ |
| 31-Dec-27 | 1-Jul-28 | 147\% | \$2,317,033 | \$1,717,177 | \$0 | \$1,717,177 | $(\$ 599,856)$ | \$0 | $(\$ 599,856)$ |
| 31-Dec-28 | 1-Jul-29 | 151\% | \$2,363,250 | \$1,769,369 | \$0 | \$1,769,369 | $(\$ 593,880)$ | \$0 | $(\$ 593,880)$ |
| 31-Dec-29 | 1-Jul-30 | 156\% | \$2,409,801 | \$1,823,128 | \$0 | \$1,823,128 | $(\$ 586,673)$ | \$0 | $(\$ 586,673)$ |
| 31-Dec-30 | 1-Jul-31 | 160\% | \$2,458,207 | \$1,878,499 | \$0 | \$1,878,499 | $(\$ 579,708)$ | \$0 | $(\$ 579,708)$ |
| 31-Dec-31 | 1-Jul-32 | 165\% | \$2,507,868 | \$1,935,531 | \$0 | \$1,935,531 | $(\$ 572,337)$ | \$0 | (\$572,337) |
| 31-Dec-32 | 1-Jul-33 | 170\% | \$2,557,184 | \$1,994,274 | \$0 | \$1,994,274 | $(\$ 562,910)$ | \$0 | $(\$ 562,910)$ |
| 31-Dec-33 | 1-Jul-34 | 175\% | \$2,608,616 | \$2,054,780 | \$0 | \$2,054,780 | $(\$ 553,836)$ | \$0 | $(\$ 553,836)$ |
| 31-Dec-34 | 1-Jul-35 | 181\% | \$2,660,444 | \$2,117,100 | \$0 | \$2,117,100 | $(\$ 543,343)$ | \$0 | $(\$ 543,343)$ |
| Total |  |  | \$33,828,522 | \$16,860,794 | \$2,212,500 | \$19,073,294 | (\$14,755,228) | \$4,813,528 | (\$9,941,700) |
| MuniCap, Inc. |  |  |  |  |  |  | ING\BaltimorelUMB\F | ct Analysis\[Fisc | nalysis No. 4-B-UMB.xlsx |

${ }^{1}$ Assumes an annual inflation rate of $3 \%$. Inflation rate accounts for annual increasing assessed value, along with the decreasing real property tax rates.
${ }^{2}$ Based on tax increment financing projections, as prepared by MuniCap, Inc.
 supplemental special tax is paid in year two, and the full amount is paid for years eight through ten.


## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IV: Projected City Personal Property Tax Revenues - Annual

|  |  |  |  | Projected <br> Assessed <br> Development Type | SF $^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |

${ }^{1}$ Based on projected development at full buildout. See Schedule I.
${ }^{2}$ Values based on averages for offices according to Tax Field Appraiser's Guide 2003, Texas Window on State Government.
${ }^{3}$ Personal property is subject to a minimum assessment of $25 \%$ of the original costs. Therefore, it is assumed in any given year, personal property is, on average, $75 \%$ through its useful life. Based on information provided by Maryland State Department of Assessments and Taxation.
${ }^{4}$ City of Baltimore personal property tax rate for fiscal year 2016. Source: Maryland State Department of Assessments and Taxation.
${ }^{5}$ Figure assumes full build out and is expressed in current dollars.

## University of Maryland BioPark

City of Baltimore, Maryland
Schedule V: Projected Enterprise Zone Tax Credit Reimbursement Revenues to City

| Development <br> Year | Tax <br> Year | Total Enterprise <br> Zone Tax Credits | Reimbursement <br> to City of | Total Enterprise <br> Zone Tax Credit |
| :---: | :---: | :---: | :---: | :---: |
| Beginning | 873 W. Baltimore Street |  |  |  |
| 31-Dec-14 | 1-Jul-15 | $\$ 0$ | $50 \%$ | Reimbursement Revenues |
| 31-Dec-15 | 1-Jul-16 | $\$ 0$ | $50 \%$ | $\$ 0$ |
| 31-Dec-16 | 1-Jul-17 | $\$ 0$ | $50 \%$ | $\$ 0$ |
| 31-Dec-17 | 1-Jul-18 | $\$ 862,176$ | $50 \%$ | $\$ 0$ |
| 31-Dec-18 | 1-Jul-19 | $\$ 964,270$ | $50 \%$ | $\$ 431,088$ |
| 31-Dec-19 | 1-Jul-20 | $\$ 1,071,696$ | $50 \%$ | $\$ 482,135$ |
| 31-Dec-20 | 1-Jul-21 | $\$ 1,184,683$ | $50 \%$ | $\$ 535,848$ |
| 31-Dec-21 | 1-Jul-22 | $\$ 1,220,800$ | $50 \%$ | $\$ 592,342$ |
| 31-Dec-22 | 1-Jul-23 | $\$ 1,258,000$ | $50 \%$ | $\$ 610,400$ |
| 31-Dec-23 | 1-Jul-24 | $\$ 1,296,317$ | $50 \%$ | $\$ 629,000$ |
| 31-Dec-24 | 1-Jul-25 | $\$ 1,335,783$ | $50 \%$ | $\$ 648,158$ |
| 31-Dec-25 | 1-Jul-26 | $\$ 1,376,432$ | $50 \%$ | $\$ 667,891$ |
| 31-Dec-26 | 1-Jul-27 | $\$ 1,418,302$ | $50 \%$ | $\$ 688,216$ |
| 31-Dec-27 | 1-Jul-28 | $\$ 0$ | $50 \%$ | $\$ 709,151$ |
| 31-Dec-28 | 1-Jul-29 | $\$ 0$ | $50 \%$ | $\$ 0$ |
| 31-Dec-29 | 1-Jul-30 | $\$ 0$ | $50 \%$ | $\$ 0$ |
| 31-Dec-30 | 1-Jul-31 | $\$ 0$ | $50 \%$ | $\$ 0$ |
| 31-Dec-31 | 1-Jul-32 | $\$ 0$ | $50 \%$ | $\$ 0$ |
| 31-Dec-32 | 1-Jul-33 | $\$ 0$ | $50 \%$ | $\$ 0$ |
| 31-Dec-33 | 1-Jul-34 | $\$ 0$ | $50 \%$ | $\$ 0$ |
| 31-Dec-34 | 1-Jul-35 | $\$ 0$ | $50 \%$ | $\$ 0$ |
| Total |  |  |  | $\$ 0$ |

MuniCap, Inc. $\quad$ S:ICONSULTING\BaltimorelUMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]V
${ }^{1}$ Based on the Enterprise Zone Tax Credits estimated in the tax increment financing projections, as prepared by MuniCap, Inc.
${ }^{2}$ Fifty percent ( $50 \%$ ) of Enterprise Zone Tax Credits are reimbursed to City of Baltimore from State of Maryland and is allocated to the General Fund for fiscal year 2015-2016. As a result, assumes $50 \%$ of total Enterprise Zone Tax Credits are assumed to be available to City of Baltimore. Based on discussions with Baltimore City Department of Finance, Bureau of the Budget and
Management Research staff.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule VI: Projected City Energy Tax Revenues - Annual
Table 1: Annual Electric Energy Tax Revenue

| Property Use | Square Feet ${ }^{1}$ | Average Annual Electric Consumption Per Square Foot ${ }^{2}$ | Total Annual <br> Electric Consumption | City Electric <br> Energy Tax Rate ${ }^{3}$ | City Electric <br> Energy Tax Revenue ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial |  | (kWh/SF) | (kWh) |  |  |
| Lab - Building 3 (873 W. Baltimore) | 249,432 | 17.30 | 4,315,174 | \$0.008268 | \$35,678 |
| Total |  |  |  |  | \$35,678 |

Table 2: Annual Natural Gas Energy Tax Revenue

| Property Use | Square Feet ${ }^{1}$ | Average Annual Natural Gas Consumption Per Square Foot ${ }^{2}$ | Total Annual Natural Gas Consumption | City Natural Gas Energy Tax Rate ${ }^{3}$ | City Natural Gas Energy Tax Revenue ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial |  | (Therm/SF) | (Therm) |  |  |
| Lab - Building 3 (873 W. Baltimore) | 249,432 | 0.32 | 79,319 | \$0.106919 | \$8,481 |
| Total |  |  |  |  | \$8,481 |

Table 3: City of Baltimore Total Annual Energy Tax Revenue

${ }^{1}$ See Schedule I.
${ }^{2}$ Based on national average consumption for commercial buildings.Commercial source: Energy Information Administration 2003 Commercial Buildings Energy Consumption Survey: Energy End-Use Consumption Tables.
${ }^{3}$ Represents City of Baltimore energy tax rates for fiscal year 2015-2016. Based on discussions with Department of Finance Bureau of the Budget and Management Research.
${ }^{4}$ Figure assumes full build out and is expressed in current dollars.

## University of Maryland BioPark

City of Baltimore, Maryland
Schedule VII: Projected Income Tax Revenues - Personal Income Tax from Employee Residents - Annual

Lab - Building 3 (873 W. Baltimore)

| Costs of labor ${ }^{1}$ | $\$ 91,852,541$ |
| :--- | :---: |
| Percent of employees assumed to reside in Baltimore City ${ }^{2}$ | $33.0 \%$ |
| Baltimore City direct income | $\$ 30,311,338$ |
| Taxable direct income $(82 \%)^{3}$ | $\$ 24,855,298$ |
| Baltimore City income tax rate ${ }^{4}$ | $3.2 \%$ |
| Direct Baltimore City income tax ${ }^{5}$ | $\$ 795,370$ |
| MuniCap, Inc. | 1pact Analysisl[Fiscal Impact Analysis No. 4-B - UMB.xlsx]Title |
|  | $19-$ Cct-15 |
| ${ }^{1}$ Costs of labor calculations were generated using IMPLAN software by IMPLAN Group LLC. See Appendix D. |  |
| ${ }^{2}$ Represents the percentage of employees who live and work within Baltimore City. See Appendix A. |  |
| ${ }^{3}$ Assumes that only $82 \%$ percent of income will be taxable, due to deductions. |  |
| ${ }^{4}$ Represents 2015 tax year Baltimore City local income tax rate. Source: Comptroller of Maryland. |  |
| ${ }^{5}$ Figure assumes full build out and is expressed in current dollars. |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

## Schedule VIII: Projected Recordation Tax Revenues ${ }^{1}$


${ }^{1}$ Assumes a new note or debt instrument is recorded at the time commercial development is fully developed.
${ }^{2}$ See Schedule I.
${ }^{3}$ See Schedule II.
${ }^{4}$ Represents the fiscal year 2016 tax rate. Source: City of Baltimore Bureau of the Budget and Management Research.

## University of Maryland BioPark <br> City of Baltimore, Maryland

Schedule IX-A: Projected Additional Revenues to City of Baltimore - Annual

| Annual Revenues ${ }^{2}$ | Current <br> City Revenues ${ }^{3}$ | Basis for Projecting Revenues ${ }^{4}$ | Current City Service Factors ${ }^{5}$ | Revenues by Factor |  | Projected Increase in Service Factor ${ }^{6}$ | Total Additional Revenues ${ }^{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Per } \\ \text { Employee } \\ \hline \end{gathered}$ | Service <br> Population |  |  |
| Taxes |  |  |  |  |  |  |  |
| Property Taxes |  |  |  |  |  |  |  |
| Video lottery terminal | \$8,252,000 | not impacted | - | - | - | - | - |
| Penalties and Interest | \$6,170,000 | not impacted | - | - | - | - | - |
| Sales and Service |  |  |  |  |  |  |  |
| Heavy equipment gross receipts | \$101,000 | not impacted | - | - | - | - | - |
| Fuel Oil | \$575,000 | not impacted | - | - | - | - | - |
| Steam | \$1,254,000 | not impacted | - | - | - | - | - |
| Telephone | \$34,021,000 | service population | 831,527 | - | \$40.91 | 686 | \$28,051 |
| Homeless Relief Assistance Tax | \$736,000 | not impacted | - | - | - | - | - |
| Hotel | \$27,451,063 | not impacted | - | - | - | - | - |
| Liquid Petroleum Gas | \$86,000 | not impacted | - | - | - | - | - |
| Payments in Lieu of Taxes | \$7,593,928 | not impacted | - | - | - | - | - |
| Other Local Taxes |  |  |  |  |  |  |  |
| Tax Sales Fees and Other | \$410,000 | not impacted | - | - | - | - | - |
| Simulated Slot Machine Registration Tax | \$756,000 | not impacted | - | - | - | - | - |
| Billboard Tax | \$1,700,000 | not impacted | - | - | - | - | - |
| Taxicab Excise Tax | \$1,300,000 | not impacted | - | - | - | - | - |
| Locally Imposed - State Collected |  |  |  |  |  |  |  |
| Admissions | \$7,690,000 | service population | 831,527 | - | \$9.25 | 686 | \$6,341 |
| Taxes - State Shared | \$137,796,122 | not impacted | - | - | - | - | - |
| License and Permits |  |  |  |  |  |  |  |
| General Government |  |  |  |  |  |  |  |
| City/state business | \$1,900,000 | not impacted | - | - | - | - | - |
| Alcoholic beverage | \$2,000,000 | not impacted | - | - | - | - | - |
| Marriage | \$25,000 | not impacted | - | - | - | - | - |
| Public Safety and Regulation ${ }^{8}$ |  |  |  |  |  |  |  |
| Media production services | \$55,000 | not impacted | - | - | - | - | - |
| Cable TV Franchise Fee | \$6,617,000 | service population | 831,527 | - | \$7.96 | 686 | \$5,456 |
| Fire Protection - Fire Code | \$1,369,210 | service population | 831,527 | - | \$1.65 | 686 | \$1,129 |
| Rental Property Registrations | \$5,090,000 | not impacted | - | - | - | - | - |
| Miscellaneous Building Inspection Revenues | \$1,119,800 | not impacted | - | - | - | - | - |
| Building Construction Permits | \$5,090,000 | not impacted | - | - | - | - | - |
| Electrical Installation Permits | \$916,200 | not impacted | - | - | - | - | - |
| Mechanical Equipment Permits | \$814,400 | not impacted | - | - | - | - | - |
| Plumbing Permits | \$529,360 | not impacted | - | - | - | - | - |
| Elevator Permits | \$1,018 | not impacted | - | - | - | - | - |
| Filing Fees - Building Permits | \$1,153,000 | not impacted | - | - | - | - | - |
| Public Assembly Permits | \$10,180 | not impacted | - | - | - | - | - |
| Professional and Occupation Licenses | \$498,820 | not impacted | - | - | - | - | - |
| Vacant Structure Fee | \$458,100 | not impacted | - | - | - | - | - |
|  |  |  |  |  |  |  | UMB.1/Ix]IX |
|  |  |  |  |  |  |  | 19 -Oct- |


${ }^{2}$ Not all sources of revenues are expected to be impacted as a result of University of Maryland BioPark development.
${ }^{3}$ Source: City of Baltimore Fiscal 2016 Executive Summary.
${ }^{4}$ Method of apportioning revenues: Per employee revenues are calculated by taking current revenues and apportioning them among current total employees. Service population revenues are calculated by taking current revenues and apportioning them among current total service population.
${ }^{5}$ Represents current statistics for City. See Appendix $A$
Represents proposed increase to City as a result of new development. See Appendix A
Represents total increase in revenues as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.
Assumes permits and fees are one-time revenues and are off-set by one-time expenses, which are also excluded from this study. As a result, these line items remain unimpacted.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IX-A: Projected Additional Revenues to City of Baltimore - Annual, continued

| Annual Revenues ${ }^{2}$ | Current <br> City Revenues ${ }^{3}$ | Basis for <br> Projecting Revenues ${ }^{4}$ | Current City Service Factors ${ }^{5}$ | Revenues by Factor |  | Projected Increase in Service Factor ${ }^{6}$ | Total Additional Revenues ${ }^{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Service Population |  |  |
| Amusement Device Licenses | \$712,600 | not impacted | - | - | - | - |  |
| Dog Licenses and Kennel Permits | \$30,540 | not impacted | - | - | - | - | - |
| Special Police Appointment Fees | \$10,689 | not impacted | - | - | - | - | - |
| Vacant Lot Registration Fees | \$111,980 | not impacted | - | - | - | - | - |
| Trades Licenses | \$147,610 | not impacted | - | - | - | - | - |
| Health ${ }^{8}$ |  |  |  |  |  |  |  |
| Food Dealer Permits | \$2,086,900 | not impacted | - | - | - | - | - |
| Swimming Pool Licenses | \$50,900 | not impacted | - | - | - | - | - |
| Solid Waste Collection Permits | \$142,520 | not impacted | - | - | - | - | - |
| Highways ${ }^{8}$ |  |  |  |  |  |  |  |
| Minor Privilege Permits | \$2,400,000 | not impacted | - | - | - | - | - |
| Public Utility Pole Permits | \$539,540 | not impacted | - | - | - | - | - |
| Telephone Conduit Franchise | \$121,142 | not impacted | - | - | - | - | - |
| Permits and inspection - private paving | \$61,080 | not impacted | - | - | - | - | - |
| Developer agreement fees | \$407,200 | not impacted | - | - | - | - | - |
| Street cut permit fees | \$509,000 | not impacted | - | - | - | - | - |
| Fines and Forfeits |  |  |  |  |  |  |  |
| Court ordered restitution and misc. fines | \$3,000 | service population | 831,527 | - | \$0.00 | 686 | \$2 |
| Civil Citations | \$135,000 | service population | 831,527 | - | \$0.16 | 686 | \$111 |
| Sheriff Revenue | \$206,000 | service population | 831,527 | - | \$0.25 | 686 | \$170 |
| Forfeiture drug/gambling contraband | \$1,500,000 | not impacted | - | - | - | - | - |
| Minimum wage violations | \$120,700 | per employee | 311,544 | \$0.39 | - | 1,023 | \$396 |
| Environmental Control Board fines | \$6,000,000 | not impacted | - | - | - | - | - |
| Bad check charge | \$35,000 | not impacted | - | - | - | - | - |
| District court housing fines | \$4,000 | not impacted | - | - | - | - | - |
| Liquor board fines | \$125,000 | not impacted | - | - | - | - | - |
| Library fines | \$188,000 | not impacted | - | - | - | - | - |
| Stormwater and sediment control penalties | \$2,000 | not impacted | - | - | - | - | - |
| Street cut fines | \$250,000 | not impacted | - | - | - | - | - |
| Red light fines | \$2,000,000 | not impacted | - | - | - | - | - |
| Right turn on red fines | \$500,000 | not impacted | - | - | - | - | - |
| Speed cameras | \$2,500,000 | not impacted | - | - | - | - | - |
| Federal Grants | \$179,000 | not impacted | - | - | - | - | - |
| State Aid | \$102,824,797 | not impacted | - | - | - | - | - |
| Use of Money | \$2,636,500 | not impacted | - | - | - | - | - |
| Use of Property |  |  |  |  |  |  |  |
| Rental of City property | \$1,000,000 | not impacted | - | - | - | - | - |
| Expressway air space leases | \$8,400 | not impacted | - | - | - | - | - |
| Rental from Inner Harbor shoreline | \$1,025,000 | not impacted | - | - | - | - | - |
| Rental from C.L. Benton, Jr. office building | \$1,547,000 | not impacted | - | - | - | - | - |
| SW Resource Recovery Facility - lease | \$1,198,000 | not impacted | - | - | - | - | - |
| Rental from Harborplace Pavilions | \$150,000 | not impacted | - | - | - | - | - |
| Harbor Shoreline - docking fees | \$125,000 | not impacted | - | - | - | - | - |
| MuniCap, Inc. |  |  | S:ICONSULTING \| BaltimorelUMB|Fiscal Impact Analysis [FFiscal Impact Analysis No. 4-B- UMB.x|sx]|X- 19 - |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{1}$ Revenue line items shown in City of Baltimore Fiscal 2016 Executive Summary and not shown on this schedule are accounted for and calculated on the prior schedules. ${ }^{2}$ Not all sources of revenues are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |
| ${ }^{4}$ Method of apportioning revenues: Per employee revenues are calculated by taking current revenues and apportioning them among current total employees. Service population revenues are calculated by taking current revenues and apportioning the among current total service population. |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |
| ${ }^{\top}$ Represents total increase in revenues as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars. |  |  |  |  |  |  |  |
| ${ }^{8}$ Assumes permits and fees are one-time revenues and are off-set by one-time expenses, which are also excluded from this study. As a result, these line items remain unimpacted. |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IX-A: Projected Additional Revenues to City of Baltimore - Annual ${ }^{1}$, continued

| Annual Revenues ${ }^{2}$ | Current City Revenues ${ }^{3}$ | Basis for <br> Projecting Revenues ${ }^{4}$ | Current City Service Factors ${ }^{5}$ | Revenues by Factor |  | Projected Increase in Service Factor ${ }^{6}$ | Total <br> Additional <br> Revenues ${ }^{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service <br> Population |  |  |
| Rental from community centers | \$240,000 | not impacted | - | - | - | - | - |
| Rentals from wharfage - piers and docks | \$20,000 | not impacted | - | - | - | - | - |
| 1st Mariner Arena Naming Rights | \$250,000 | not impacted | - | - | - | - | - |
| Convention Center | \$9,109,920 | not impacted | - | - | - | - | - |
| Private Grants | \$26,000 | not impacted | - | - | - | - | - |
| Charges - Current Services |  |  |  |  |  |  |  |
| General Government |  |  |  |  |  |  |  |
| Transcriber service charges | \$25,450 | not impacted | - | - | - | - | - |
| RBDL administration fee | \$6,000 | not impacted | - | - | - | - | - |
| Bill drafting service | \$22,396 | not impacted | - | - | - | - | - |
| Zoning appeal fees | \$90,602 | not impacted | - | - | - | - | - |
| Rehab loan application fees | \$6,108 | not impacted | - | - | - | - | - |
| Civil marriage ceremonies | \$15,372 | not impacted | - | - | - | - | - |
| Lien reports | \$1,351,350 | not impacted | - | - | - | - | - |
| Election filing fees | \$6,108 | not impacted | - | - | - | - | - |
| Surveys sales of maps and records | \$25,450 | not impacted | - | - | - | - | - |
| 3rd party disability recoveries | \$55,990 | not impacted | - | - | - | - | - |
| Semi-annual tax payment fee | \$200,000 | not impacted | - | - | - | - | - |
| Tax roll service charge | \$20,360 | not impacted | - | - | - | - | - |
| Audit fees - Comptroller's Office | \$585,350 | not impacted | - | - | - | - | - |
| Sub-division plat charges | \$13,234 | not impacted | - | - | - | - | - |
| Vending machine commissions | \$46,000 | not impacted | - | - | - | - | - |
| Reimbursement for use of city vehicles | \$20,000 | not impacted | - | - | - | - | - |
| Charges for Central City Services | \$11,500,000 | not impacted | - | - | - | - | - |
| Public Safety and Regulation |  |  |  |  |  |  |  |
| Liquor board advertising fees | \$70,000 | not impacted | - | - | - | - | - |
| Sale of accident and incident reports | \$260,000 | not impacted | - | - | - | - | - |
| Stadium security service charges | \$1,600,000 | not impacted | - | - | - | - | - |
| Port fire protection | \$1,399,940 | not impacted | - | - | - | - | - |
| Sheriff - District Court charges | \$5,346,000 | not impacted | - | - | - | - | - |
| False alarm fees | \$250,000 | not impacted | - | - | - | - | - |
| Fire Department - sales of reports | \$21,000 | not impacted | - | - | - | - | - |
| Fire ambulance stadium services | \$27,000 | not impacted | - | - | - | - | - |
| MuniCap, Inc. $\quad$ S:ICONSULTING\|BaltimorelUMBIFiscal Impact Analysis|[Fiscal Impact Analysis No. 4-B - UMB.xIsx]IX-A.3 |  |  |  |  |  |  |  |

${ }^{1}$ Revenue line items shown in City of Baltimore Fiscal 2016 Executive Summary and not shown on this schedule are accounted for and calculated on the prior schedules.
${ }^{2}$ Not all sources of revenues are expected to be impacted as a result of University of Maryland BioPark development.
${ }^{3}$ Source: City of Baltimore Fiscal 2016 Executive Summary.
${ }^{4}$ Method of apportioning revenues: Per employee revenues are calculated by taking current revenues and apportioning them among current total employees. Service population revenues are calculated by taking current revenues and apportioning them among current total service population.
${ }^{5}$ Represents current statistics for City. See Appendix A.
${ }^{6}$ Represents proposed increase to City as a result of new development. See Appendix A.
${ }^{7}$ Represents total increase in revenues as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IX-A: Projected Additional Revenues to City of Baltimore - Annual ${ }^{1}$, continued

| Annual Revenues ${ }^{2}$ | Current <br> City Revenues ${ }^{3}$ | Basis for <br> Projecting Revenues ${ }^{4}$ | Current City <br> Service Factors ${ }^{5}$ | Revenues by Factor |  | Projected <br> Increase in Service Factor ${ }^{6}$ | Total <br> Additional <br> Revenues ${ }^{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service Population |  |  |
| Health |  |  |  |  |  |  |  |
| Miscellaneous environmental fees | \$15,000 | not impacted | - | - | - | - | - |
| New health plan review | \$22,461 | not impacted | - | - | - | - | - |
| Hazard analysis critical control point plan | \$1,500 | not impacted | - | - | - | - | - |
| Social Services |  |  |  |  |  |  |  |
| Sheriff - DHR service agreement | \$345,384 | not impacted | - | - | - | - | - |
| Recreation and Culture |  |  |  |  |  |  |  |
| Video rental and other charges | \$120,000 | not impacted | - | - | - | - | - |
| Swimming pool passes | \$125,000 | not impacted | - | - | - | - | - |
| Highways |  |  |  |  |  |  |  |
| Impounding cars - storage | \$4,700,000 | service population | 831,527 | - | \$5.65 | 686 | \$3,875 |
| Impounding cars | \$3,500,000 | service population | 831,527 | - | \$4.21 | 686 | \$2,886 |
| Stormwater and sediment control fee | \$100,000 | not impacted | - | - | - | - | - |
| General revenue highways | \$3,500,000 | not impacted | - | - | - | - | - |
| Traffic engineering | \$31,000 | not impacted | - | - | - | - | - |
| Sanitation and Waste Removal |  |  |  |  |  |  |  |
| Landfill disposal tipping fees | \$7,647,000 | service population | 831,527 | - | \$9.20 | 686 | \$6,305 |
| Solid waste surcharge | \$2,000,000 | service population | 831,527 | - | \$2.41 | 686 | \$1,649 |
| Southwest Resource Recovery Facility | \$700,000 | not impacted | - | - | - | - | - |
| Other Revenue | \$965,000 | not impacted | - | - | - | - | - |
| Revenue Transfers | \$37,840,861 | not impacted | - | - | - | - | - |
| Total projected revenues | \$487,236,035 |  |  | \$0.39 | \$81.64 |  | \$56,372 |

MuniCap, Inc.

S:ICONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]IX-A. 4
19-Oct-15
${ }^{1}$ Revenue line items shown in City of Baltimore Fiscal 2016 Executive Summary and not shown on this schedule are accounted for and calculated on the prior schedules
${ }^{2}$ Not all sources of revenues are expected to be impacted as a result of University of Maryland BioPark development.
${ }^{3}$ Source: City of Baltimore Fiscal 2016 Executive Summary.
${ }^{4}$ Method of apportioning revenues: Per employee revenues are calculated by taking current revenues and apportioning them among current total employees. Service population revenues are calculated by taking current revenues and apportioning them among current total service population.
${ }^{5}$ Represents current statistics for City. See Appendix A.
${ }^{6}$ Represents proposed increase to City as a result of new development. See Appendix A.
${ }^{7}$ Represents total increase in revenues as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule IX-B: Projected Additional Revenues to City of Baltimore - 20 Years

| TaxYear | Inflation | Additional Revenues |  |  |  |  |  | Total Projected Additional Revenues |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Projected | Revenue Per | Total | Service | Revenue Per | Total Service |  |
| Beginning | Factor ${ }^{1}$ | Employees ${ }^{2}$ | Employee ${ }^{3}$ | Employee Revenues | Population ${ }^{4}$ | Service Population ${ }^{3}$ | Population Revenues |  |
| 1-Jul-15 | 100\% | 0 | \$0.39 | \$0 | 0 | \$82 | \$0 | \$0 |
| 1-Jul-16 | 103\% | 0 | \$0.40 | \$0 | 0 | \$84 | \$0 | \$0 |
| 1-Jul-17 | 106\% | 0 | \$0.41 | \$0 | 0 | \$87 | \$0 | \$0 |
| 1-Jul-18 | 109\% | 1,023 | \$0.42 | \$433 | 686 | \$89 | \$61,166 | \$61,599 |
| 1-Jul-19 | 113\% | 1,023 | \$0.44 | \$446 | 686 | \$92 | \$63,001 | \$63,447 |
| 1-Jul-20 | 116\% | 1,023 | \$0.45 | \$460 | 686 | \$95 | \$64,891 | \$65,351 |
| 1-Jul-21 | 119\% | 1,023 | \$0.46 | \$473 | 686 | \$97 | \$66,838 | \$67,311 |
| 1-Jul-22 | 123\% | 1,023 | \$0.48 | \$488 | 686 | \$100 | \$68,843 | \$69,331 |
| 1-Jul-23 | 127\% | 1,023 | \$0.49 | \$502 | 686 | \$103 | \$70,908 | \$71,411 |
| 1-Jul-24 | 130\% | 1,023 | \$0.51 | \$517 | 686 | \$107 | \$73,036 | \$73,553 |
| 1-Jul-25 | 134\% | 1,023 | \$0.52 | \$533 | 686 | \$110 | \$75,227 | \$75,760 |
| 1-Jul-26 | 138\% | 1,023 | \$0.54 | \$549 | 686 | \$113 | \$77,484 | \$78,032 |
| 1-Jul-27 | 143\% | 1,023 | \$0.55 | \$565 | 686 | \$116 | \$79,808 | \$80,373 |
| 1-Jul-28 | 147\% | 1,023 | \$0.57 | \$582 | 686 | \$120 | \$82,202 | \$82,785 |
| 1-Jul-29 | 151\% | 1,023 | \$0.59 | \$600 | 686 | \$123 | \$84,668 | \$85,268 |
| 1-Jul-30 | 156\% | 1,023 | \$0.60 | \$618 | 686 | \$127 | \$87,208 | \$87,826 |
| 1-Jul-31 | 160\% | 1,023 | \$0.62 | \$636 | 686 | \$131 | \$89,825 | \$90,461 |
| 1-Jul-32 | 165\% | 1,023 | \$0.64 | \$655 | 686 | \$135 | \$92,519 | \$93,175 |
| 1-Jul-33 | 170\% | 1,023 | \$0.66 | \$675 | 686 | \$139 | \$95,295 | \$95,970 |
| 1-Jul-34 | 175\% | 1,023 | \$0.68 | \$695 | 686 | \$143 | \$98,154 | \$98,849 |
| 1-Jul-35 | 181\% | 1,023 | \$0.70 | \$716 | 686 | \$147 | \$101,098 | \$101,815 |
| Total |  |  |  | \$10,144 |  |  | \$1,432,173 | \$1,442,317 |
| MuniCap, Inc. |  |  |  |  | S:ICONSULTING\Baltimore\|UMB|Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]IX-B |  |  |  |
|  |  |  |  |  |  |  |  | 19-Oct-15 |
| ${ }^{1}$ Assumes an annual inflation rate of 3\%. |  |  |  |  |  |  |  |  |
| ${ }^{2}$ See Appendix B. |  |  |  |  |  |  |  |  |
| ${ }^{3}$ See Schedule IX-A. |  |  |  |  |  |  |  |  |
| ${ }^{4}$ See Appendix C. |  |  |  |  |  |  |  |  |

## University of Maryland BioPark City of Baltimore, Maryland

Schedule X: Total Projected Revenues to City of Baltimore - 20 Years

| Tax <br> Year <br> Beginning | Inflation Factor ${ }^{1}$ | Surplus/Deficit Revenues (Schedule III) | Personal Property Tax Revenues (Schedule IV) | Enterprise Zone Tax Credit Reimb. Revenues (Schedule V) | Energy Tax Revenues (Schedule VI) | Income Tax Tax Revenues (Schedule VII) | Local Recordation Tax Revenues (Schedule VIII) | Transfer Tax Revenues ${ }^{2}$ | Additional Tax Revenues (Schedule IX-B) | Total $\begin{gathered}\text { Projected Revenues } \\ \text { to Baltimore City }\end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-Jul-15 | 100\% | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 1-Jul-16 | 103\% | (\$171,342) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | (\$171,342) |
| 1-Jul-17 | 106\% | (\$191,825) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | (\$191,825) |
| 1-Jul-18 | 109\% | $(\$ 213,378)$ | \$130,202 | \$431,088 | \$48,253 | \$869,122 | \$612,619 | \$0 | \$61,599 | \$1,939,506 |
| 1-Jul-19 | 113\% | $(\$ 236,047)$ | \$134,109 | \$482,135 | \$49,701 | \$895,195 | \$0 | \$0 | \$63,447 | \$1,388,540 |
| 1-Jul-20 | 116\% | $(\$ 243,293)$ | \$138,132 | \$535,848 | \$51,192 | \$922,051 | \$0 | \$0 | \$65,351 | \$1,469,281 |
| 1-Jul-21 | 119\% | (\$250,757) | \$142,276 | \$592,342 | \$52,728 | \$949,713 | \$0 | \$0 | \$67,311 | \$1,553,612 |
| 1-Jul-22 | 123\% | $(\$ 258,444)$ | \$146,544 | \$610,400 | \$54,310 | \$978,204 | \$0 | \$0 | \$69,331 | \$1,600,344 |
| 1-Jul-23 | 127\% | (\$266,363) | \$150,940 | \$629,000 | \$55,939 | \$1,007,550 | \$0 | \$0 | \$71,411 | \$1,648,478 |
| 1-Jul-24 | 130\% | (\$274,518) | \$155,469 | \$648,158 | \$57,617 | \$1,037,777 | \$0 | \$0 | \$73,553 | \$1,698,055 |
| 1-Jul-25 | 134\% | (\$282,919) | \$160,133 | \$667,891 | \$59,345 | \$1,068,910 | \$0 | \$0 | \$75,760 | \$1,749,120 |
| 1-Jul-26 | 138\% | (\$1,457,855) | \$164,937 | \$688,216 | \$61,126 | \$1,100,977 | \$0 | \$0 | \$78,032 | \$635,434 |
| 1-Jul-27 | 143\% | $(\$ 1,502,414)$ | \$169,885 | \$709,151 | \$62,960 | \$1,134,007 | \$0 | \$0 | \$80,373 | \$653,961 |
| 1-Jul-28 | 147\% | $(\$ 599,856)$ | \$174,981 | \$0 | \$64,848 | \$1,168,027 | \$0 | \$0 | \$82,785 | \$890,785 |
| 1-Jul-29 | 151\% | $(\$ 593,880)$ | \$180,231 | \$0 | \$66,794 | \$1,203,068 | \$0 | \$0 | \$85,268 | \$941,480 |
| 1-Jul-30 | 156\% | $(\$ 586,673)$ | \$185,638 | \$0 | \$68,798 | \$1,239,160 | \$0 | \$0 | \$87,826 | \$994,748 |
| 1-Jul-31 | 160\% | $(\$ 579,708)$ | \$191,207 | \$0 | \$70,862 | \$1,276,335 | \$0 | \$0 | \$90,461 | \$1,049,155 |
| 1-Jul-32 | 165\% | (\$572,337) | \$196,943 | \$0 | \$72,987 | \$1,314,625 | \$0 | \$0 | \$93,175 | \$1,105,392 |
| 1-Jul-33 | 170\% | $(\$ 562,910)$ | \$202,851 | \$0 | \$75,177 | \$1,354,063 | \$0 | \$0 | \$95,970 | \$1,165,151 |
| 1-Jul-34 | 175\% | $(\$ 553,836)$ | \$208,937 | \$0 | \$77,432 | \$1,394,685 | \$0 | \$0 | \$98,849 | \$1,226,067 |
| 1-Jul-35 | 181\% | $(\$ 543,343)$ | \$215,205 | \$0 | \$79,755 | \$1,436,526 | \$0 | \$0 | \$101,815 | \$1,289,957 |
| Total |  | (\$9,941,700) | \$3,048,616 | \$5,994,229 | \$1,129,824 | \$20,349,995 | \$612,619 | \$0 | \$1,442,317 | \$22,635,900 |


19-Oct-15

[^10]
## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for <br> Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total <br> Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service <br> Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Board of Elections |  |  |  |  |  |  |  |  |  |
| Fair conduct of elections | \$7,155,182 | not impacted | - | - | - | - | - | - | - |
| City Council | \$6,128,301 | not impacted | - | - | - | - | - | - | - |
| Controller |  |  |  |  |  |  |  |  |  |
| Executive direction and control - controller | \$1,275,563 | not impacted | - | - | - | - | - | - | - |
| Audits | \$4,011,472 | not impacted | - | - | - | - | - | - | - |
| Real estate acquisition and management | \$1,013,704 | not impacted | - | - | - | - | - | - | - |
| Council Services | \$666,564 | not impacted | - | - | - | - | - | - | - |
| Courts: Circuit Court | \$9,754,421 | service population | 831,527 | - | \$11.73 | - | - | 686 | \$8,043 |
| Courts: Orphans' Court | \$487,868 | not impacted | - | - | - | - | - | - | - |
| Enoch Pratt Free Library |  |  |  |  |  |  |  |  |  |
| Information services | \$24,164,275 | not impacted | - | - | - | - | - | - | - |
| Finance |  |  |  |  |  |  |  |  |  |
| Revenue collection | \$6,211,605 | total tax revenues | \$1,720,853 | - | - | - | \$3.61 | \$1,290 | \$4,656 |
| Treasury and debt management | \$1,126,384 | not impacted | - | - | - | - | - | - | - |
| Administration - finance | \$1,427,437 | not impacted | - | - | - | - | - | - | - |
| Procurement | \$3,115,130 | not impacted | - | - | - | - | - | - | - |
| Accounts payable | \$1,208,813 | not impacted | - | - | - | - | - | - | - |
| Payroll | \$3,410,720 | not impacted | - | - | - | - | - | - | - |
| Accounting | \$1,557,133 | not impacted | - | - | - | - | - | - | - |
| Operating budget management | \$1,672,128 | total tax revenues | \$1,720,853 | - | - | - | \$0.97 | \$1,290 | \$1,253 |
| Property tax billing integrity and recovery | \$1,042,424 | property tax revenues | \$857,184 | - | - | \$1.22 | - | \$2,117 | \$2,575 |
| Finance project management | \$175,676 | not impacted | , | - | - | - | - | - | - |
| Fire |  |  |  |  |  |  |  |  |  |
| Administration - fire | \$7,923,555 | service population | 831,527 | - | \$9.53 | - | - | 686 | \$6,533 |
| Fire suppression and emergency rescue | \$144,605,958 | not impacted | - | - | - | - | - | - | - |
| Emergency management | \$775,530 | service population | 831,527 | - | \$0.93 | - | - | 686 | \$639 |
| Emergency medical services | \$21,585,776 | service population | 831,527 | - | \$25.96 | - | - | 686 | \$17,798 |
| Fire and emergency community outreach | \$326,183 | service population | 831,527 | - | \$0.39 | - | - | 686 | \$269 |
| Fire code enforcement | \$4,507,583 | service population | 831,527 | - | \$5.42 | - | - | 686 | \$3,717 |
| Fire investigation | \$962,575 | service population | 831,527 | - | \$1.16 | - | - | 686 | \$794 |
| Fire facilities maintenance and replacement | \$14,755,319 | service population | 831,527 | - | \$17.74 | - | - | 686 | \$12,166 |
| MuniCap, Inc. |  |  |  | S:ICONSULTING \|Baltimore|UMB|Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.x|sx]XI-A |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct- |
| ${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |  |  |
|  <br>  revenues. |  |  |  |  |  |  |  |  |  |
| ${ }^{4}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars. |  |  |  |  |  |  |  |  |  |

## University of Maryland BioPark <br> \section*{City of Baltimore, Maryland}

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per Employee | Service <br> Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Fire communications and dispatch | \$5,929,311 | not impacted | - | - | - | - | - | - | - |
| Fire training and education | \$3,661,532 | not impacted | - | - | - | - | - | - | - |
| General Services |  |  |  |  |  |  |  |  |  |
| Administration - general services | \$1,624,614 | not impacted | - | - | - | - | - | - | - |
| Facilities management | \$14,553,327 | not impacted | - | - | - | - | - | - | - |
| Design and construction/major projects division | \$340,000 | not impacted | - | - | - | - | - | - | - |
| Health |  |  |  |  |  |  |  |  |  |
| Clinical services | \$4,913,580 | service population | 831,527 | - | \$5.91 | - | - | 686 | \$4,051 |
| Healthy homes | \$885,262 | not impacted | - | - | - | - | - | - | - |
| Substance abuse and mental health | \$1,851,443 | not impacted | - | - | - | - | - | - | - |
| Maternal and child health | \$922,802 | not impacted | - | - | - | - | - | - | - |
| School health services | \$2,618,724 | not impacted | - | - | - | - | - | - | - |
| Emergency services - health | \$668,784 | service population | 831,527 | - | \$0.80 | - | - | 686 | \$551 |
| Youth violence prevention | \$735,378 | not impacted | - | - | - | - | - | - | - |
| Administration - health | \$4,468,511 | not impacted | - | - | - | - | - | - | - |
| Animal services | \$3,164,962 | not impacted | - | - | - | - | - | - | - |
| Environmental health | \$3,055,320 | not impacted | - | - | - | - | - | - | - |
| Chronic disease prevention | \$373,382 | not impacted | - | - | - | - | - | - | - |
| HIV treatment services for the uninsured | \$1,271,409 | not impacted | - | - | - | - | - | - | - |
| Senior centers | \$780,750 | not impacted | - | - | - | - | - | - | - |
| Administration - CARE | \$377,927 | not impacted | - | - | - | - | - | - | - |
| Advocacy and supportive care for seniors | \$99,956 | not impacted | - | - | - | - | - | - | - |
| Community services for seniors | \$145,176 | not impacted | - | - | - | - | - | - | - |
| Housing and Community Development |  |  |  |  |  |  |  |  |  |
| Before and after care | \$169,776 | not impacted | - | - | - | - | - | - | - |
| Administration - HCD | \$2,606,373 | not impacted | - | - | - | - | - | - | - |
| Dawson Center | \$31,000 | not impacted | - | - | - | - | - | - | - |
| Housing code enforcement | \$14,362,285 | not impacted | - | - | - | - | - | - | - |
| Register and license properties and contractors | \$579,120 | not impacted | - | - | - | - | - | - | - |
| Blight elimination | \$2,749,163 | not impacted | - | - | - | - | - | - | - |
| Building and zoning inspections and permits | \$5,525,710 | not impacted | - | - | - | - | - | - | - |
| Community outreach services | \$1,050,272 | not impacted | - | - | - | - | - | - | - |
| Summer food service program | \$250,000 | not impacted | - | - | - | - | - | - | - |
| Retention, expansion, and attraction of businesses | \$1,530,330 | not impacted | - | - | - | - | - | - | - |
| Real estate development | \$1,787,471 | not impacted | - | - | - | - | - | - | - |
| Inner Harbor coordination | \$521,238 | not impacted | - | - | - | - | - | - | - |
| Business support - Small Business Resource Center | \$466,848 | not impacted | - | - | - | - | - | - | - |
| MuniCap, Inc. |  |  |  | S:ICONSULTING\|BaltimorelUMB|Fiscal Impact Analysis|[Fiscal Impact Analysis No. 4-B - UMB.xlsx]XI-A |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct |
| ${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |  |  |
|  <br>  revenues. |  |  |  |  |  |  |  |  |  |
| ${ }^{4}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars. |  |  |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for <br> Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service <br> Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Technology development - Emerging Technology Center | \$815,156 | not impacted | - | - | - | - | - | - | - |
| Improve and promote retail districts beyond downtown | \$1,586,557 | not impacted | - | - | - | - | - | - | - |
| Live Baltimore | \$575,842 | not impacted | - | - | - | - | - | - | - |
| Human Resources |  |  |  |  |  |  |  |  |  |
| Administration - human resources | \$2,511,754 | not impacted | - | - | - | - | - | - | - |
| Benefits administration | \$4,474,699 | not impacted | - | - | - | - | - | - | - |
| Civil service management | \$1,696,320 | not impacted | - | - | - | - | - | - | - |
| Law |  |  |  |  |  |  |  |  |  |
| Administration - law | \$1,012,370 | not impacted | - | - | - | - | - | - | - |
| Controversies | \$3,802,762 | not impacted | - | - | - | - | - | - | - |
| Transaction | \$2,402,959 | not impacted | - | - | - | - | - | - | - |
| Minority and women's business opportunity office | \$675,439 | not impacted | - | - | - | - | - | - | - |
| Legislative Reference |  |  |  |  |  |  |  |  |  |
| Legislative reference services | \$543,070 | not impacted | - | - | - | - | - | - | - |
| Archives and records management | \$507,262 | not impacted | - | - | - | - | - | - | - |
| Liquor License Board |  |  |  |  |  |  |  |  |  |
| Liquor licensing | \$826,954 | not impacted | - | - | - | - | - | - | - |
| Liquor license compliance | \$939,893 | not impacted | - | - | - | - | - | - | - |
| Mayoralty |  |  |  |  |  |  |  |  |  |
| Executive direction and control - mayoralty | \$4,369,331 | not impacted | - | - | - | - | - | - | - |
| Art and Culture |  |  |  |  |  |  |  |  |  |
| Art and culture grants | \$6,156,975 | not impacted | - | - | - | - | - | - | - |
| Events, art, culture, and film | \$2,279,499 | not impacted | - | - | - | - | - | - | - |
| Bromo Seltzer Arts Tower | \$75,000 | not impacted | - | - | - | - | - | - | - |
| MuniCap, Inc. |  |  |  | S:\CONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]XI-A.3 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct-15 |
| ${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |  |  |
|  <br>  revenues. |  |  |  |  |  |  |  |  |  |
| ${ }^{4}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars. |  |  |  |  |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for <br> Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total <br> Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Baltimore City Public Schools | \$258,212,181 | not impacted | - | - | - | - | - | - | - |
| Cable and Communications |  |  |  |  |  |  |  |  |  |
| Media production | \$701,381 | not impacted | - | - | - | - | - | - | - |
| Civic Promotion |  |  |  |  |  |  |  |  |  |
| Civic promotion grants | \$468,145 | not impacted | - | - | - | - | - | - | - |
| Convention sales and tourism marketing | \$13,973,885 | not impacted | - | - | - | - | - | - | - |
| Conditional Purchase Agreements | \$22,066,813 | not impacted | - | - | - | - | - | - | - |
| Contingent Fund | \$1,000,000 | not impacted | - | - | - | - | - | - | - |
| Convention Center Hotel | \$7,325,000 | not impacted | - | - | - | - | - | - | - |
| Convention Center Complex |  |  |  |  |  |  |  |  |  |
| Royal Farms Arena operations | \$592,713 | not impacted | - | - | - | - | - | - | - |
| Convention Center | \$12,417,786 | not impacted | - | - | - | - | - | - | - |
| Debt Service | \$88,848,893 | not impacted | - | - | - | - | - | - | - |
| Educational Grants | \$7,736,930 | not impacted | - | - | - | - | - | - | - |
| Employees' Retirement Contribution | \$8,950,000 | not impacted | - | - | - | - | - | - | - |
| Environmental Control Board | \$787,844 | not impacted | - | - | - | - | - | - | - |
| Health and Welfare Grants | \$1,190,058 | not impacted | - | - | - | - | - | - | - |
| Innovation Fund | \$1,326,000 | not impacted | - | - | - | - | - | - | - |
| Miscellaneous General Expenses | \$27,064,856 | not impacted | - | - | - | - | - | - | - |
| Office of CitiStat Operations | \$1,246,199 | not impacted | - | - | - | - | - | - | - |
| Office of Criminal Justice |  |  |  |  |  |  |  |  |  |
| Crime camera management | \$1,486,011 | not impacted | - | - | - | - | - | - | - |
| Coordination of public safety strategy | \$883,757 | not impacted | - | - | - | - | - | - | - |
| Office of Employment Development |  |  |  |  |  |  |  |  |  |
| MuniCap, Inc. |  |  |  | S:ICONSULTING\Baltimore\UMB\|Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]XI-A.4 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct- |
| ${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development. |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary. |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Method of apportioning expenses: Per employee expenses are calculated by taking current expenses and apportioning them among total employees. Service population expenses are calculated by taking current expenses and apportioning them among current total service population. Pro rata property tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of property tax expenses. Pro rata total tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of total tax revenues. |  |  |  |  |  |  |  |  |  |
| ${ }^{4}$ Represents current statistics for City. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A. |  |  |  |  |  |  |  |  |  |
| ${ }^{6}$ Represents total increase in expenses as a result of | roposed development | annual basis. Figures ass | d out and are exp | in current |  |  |  |  |  |

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for <br> Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service <br> Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Administration - MOED | \$1,508,639 | not impacted | - | - | - | - | - | - | - |
| Workforce services for ex-offenders | \$88,085 | not impacted | - | - | - | - | - | - | - |
| Workforce services for out of school youth-youth opportunity | \$2,911,862 | not impacted | - | - | - | - | - | - | - |
| Youth Works summer job program | \$1,772,101 | not impacted | - | - | - | - | - | - | - |
| Office of Human Services |  |  |  |  |  |  |  |  |  |
| Human services | \$716,828 | not impacted | - | - | - | - | - | - | - |
| Head start | \$575,000 | not impacted | - | - | - | - | - | - | - |
| Community action centers | \$1,346,104 | not impacted | - | - | - | - | - | - | - |
| Temporary housing for the homeless | \$5,210,053 | not impacted | - | - | - | - | - | - | - |
| Permanent housing for the homeless | \$716,537 | not impacted | - | - | - | - | - | - | - |
| Office of Information Technology |  |  |  |  |  |  |  |  |  |
| Administration - MOIT | \$1,184,030 | not impacted | - | - | - | - | - | - | - |
| Enterprise innovation and application services | \$6,665,120 | not impacted | - | - | - | - | - | - | - |
| Enterprise unified call center | \$16,364,981 | not impacted | - | - | - | - | - | - | - |
| Enterprise IT delivery services | \$5,735,427 | not impacted | - | - | - | - | - | - | - |
| Office of Neighborhoods | \$784,024 | not impacted | - | - | - | - | - | - | - |
| Office of the Inspector General | \$741,280 | not impacted | - | - | - | - | - | - | - |
| Office of the Labor Commissioner |  |  |  |  |  |  |  |  |  |
| Labor contract negotiations and administration | \$775,781 | not impacted | - | - | - | - | - | - | - |
| Retirees' Benefits | \$55,335,181 | not impacted | - | - | - | - | - | - | - |
| Self-Insurance Fund | \$23,347,275 | not impacted | - | - | - | - | - | - | - |
| TIF Debt Service | \$11,562,093 | not impacted | - | - | - | - | - | - | - |
| Municipal and Zoning Appeals |  |  |  |  |  |  |  |  |  |
| Zoning, tax and other appeals | \$630,079 | not impacted | - | - | - | - | - | - | - |
| Office of Civil Rights |  |  |  |  |  |  |  |  |  |
| Wage investigation and enforcement | \$199,664 | per employee | 311,544 | \$0.64 | - | - | - | 1,023 | \$656 |
| Discrimination investigations, resolutions and conciliations | \$848,237 | per employee | 311,544 | \$2.72 | - | - | - | 1,023 | \$2,786 |
| Police community relations | \$151,749 | per employee | 311,544 | \$0.49 | - | - | - | 1,023 | \$498 |
| Disabilities commission | \$202,379 | per employee | 311,544 | \$0.65 | - | - | - | 1,023 | \$665 |
| MuniCap, Inc. |  |  |  | S:ICONSULTING\BaltimorelUMB\|Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.x|sx]XI-A.5 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 19-Oct- |

Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development.
Source: City of Baltimore Fiscal 2016 Executive Summary.

 evenues.
Represents current statistics for City. See Appendix A.
${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A.
Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current <br> City Expenses ${ }^{2}$ | Basis for <br> Projecting Expenses ${ }^{3}$ | Current City <br> Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total Additional Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Per } \\ \text { Employee } \\ \hline \end{gathered}$ | Service <br> Population | \$1,000 Prop. <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Planning |  |  |  |  |  |  |  |  |  |
| Development oversight | \$1,212,098 | property tax revenues | \$857,184 | - | - | \$1.41 | - | \$2,117 | \$2,994 |
| Historic preservation | \$590,948 | not impacted | - | - | - | - | - | - | - |
| Community planning and resource management | \$1,377,265 | not impacted | - | - | - | - | - | - | - |
| Planning for sustainable Baltimore | \$841,320 | not impacted | - | - | - | - | - | - | - |
| Administration - planning | \$851,268 | not impacted | - | - | - | - | - | - | - |
| Police |  |  |  |  |  |  |  |  |  |
| Administration - police | \$30,905,620 | service population | 831,527 | - | \$37.17 | - | - | 686 | \$25,483 |
| Police patrol | \$240,368,907 | service population | 831,527 | - | \$289.07 | - | - | 686 | \$198,191 |
| Crime investigation | \$54,149,017 | service population | 831,527 | - | \$65.12 | - | - | 686 | \$44,647 |
| Target violent criminals | \$40,204,483 | not impacted | - | - | - | - | - | - | - |
| Special operations SWAT | \$8,436,973 | not impacted | - | - | - | - | - | - | - |
| Homeland security - intelligence | \$8,064,622 | not impacted | - | - | - | - | - | - | - |
| Police internal affairs | \$6,262,924 | not impacted | - | - | - | - | - | - | - |
| Manage police records and evidence control systems | \$8,747,083 | service population | 831,527 | - | \$10.52 | - | - | 686 | \$7,212 |
| Crowd, traffic, and special events management | \$11,065,902 | not impacted | - | - | - | - | - | - | - |
| Police recruiting and training | \$14,671,192 | service population | 831,527 | - | \$17.64 | - | - | 686 | \$12,097 |
| Special operations - K-9 and mounted unit | \$3,846,076 | not impacted | - | - | - | - | - | - | - |
| Special operations - marine unit and emergency service unit | \$307,358 | not impacted | - | - | - | - | - | - | - |
| Special operations - aviation | \$5,747,435 | not impacted | - | - | - | - | - | - | - |
| Crime laboratory | \$11,406,199 | service population | 831,527 | - | \$13.72 | - | - | 686 | \$9,405 |
| Public Works |  |  |  |  |  |  |  |  |  |
| Administration - DPW - SW | \$1,409,939 | not impacted | - | - | - | - | - | - | - |
| Public right-of-way cleaning | \$18,554,053 | not impacted | - | - | - | - | - | - | - |
| Vacant/abandoned property cleaning and boarding | \$6,863,449 | not impacted | - | - | - | - | - | - | - |
| Waste removal and recycling | \$25,167,904 | service population | 831,527 | - | \$30.27 | - | - | 686 | \$20,752 |
| Waste re-use and disposal | \$20,305,715 | service population | 831,527 | - | \$24.42 | - | - | 686 | \$16,743 |
| Administration - DPW | \$2,306,448 | not impacted | - | - | - | - | - | - | - |
| Recreation and Parks |  |  |  |  |  |  |  |  |  |
| Administration - rec. and parks | \$4,202,364 | service population | 831,527 | - | \$5.05 | - | - | 686 | \$3,465 |
| Aquatics | \$2,320,643 | not impacted | - | - | - | - | - | - | - |

MuniCap, Inc.
${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development.
${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary.

 revenues.
${ }^{4}$ Represents current statistics for City. See Appendix A.
${ }^{5}$ Represents proposed increase to City as a result of new development. See Appendix A.
${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-A: Projected Additional Expenses for City of Baltimore - Annual, continued

| Annual Expenses ${ }^{1}$ | Current City Expenses ${ }^{2}$ | Basis for Projecting Expenses ${ }^{3}$ | Current City Service Factors ${ }^{4}$ | Expenses by Factor |  |  |  | Projected Increase in Service Factor ${ }^{5}$ | Total <br> Additional <br> Expenses ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per <br> Employee | Service <br> Population | $\$ 1,000 \text { Prop. }$ <br> Tax Revenues | \$1,000 Total <br> Tax Revenues |  |  |
| Park maintenance | \$9,619,553 | service population | 831,527 | - | \$11.57 | - | - | 686 | \$7,932 |
| Youth and adult sports | \$538,284 | not impacted | - | - | - | - | - | - | - |
| Community recreation centers | \$13,021,158 | not impacted | - | - | - | - | - | - | - |
| Special facilities management - recreation | \$23,025 | not impacted | - | - | - | - | - | - | - |
| Horticulture | \$942,976 | not impacted | - | - | - | - | - | - | - |
| Recreation for seniors | \$121,493 | not impacted | - | - | - | - | - | - | - |
| Therapeutic recreation | \$281,730 | not impacted | - | - | - | - | - | - | - |
| Urban forestry | \$3,731,710 | not impacted | - | - | - | - | - | - | - |
| Sheriff |  |  |  |  |  |  |  |  |  |
| Courthouse security | \$4,199,517 | not impacted | - | - | - | - | - | - | - |
| Deputy sheriff enforcement | \$10,919,349 | not impacted | - | - | - | - | - | - | - |
| Service of protective and peace orders | \$1,770,011 | not impacted | - | - | - | - | - | - | - |
| District Court sheriff services | \$2,532,333 | not impacted | - | - | - | - | - | - | - |
| Child support enforcement | \$1,017,524 | not impacted | - | - | - | - | - | - | - |
| State Attorney's |  |  |  |  |  |  |  |  |  |
| Prosecution of criminals | \$26,249,750 | not impacted | - | - | - | - | - | - | - |
| Administration - State Attorney's | \$4,689,704 | not impacted | - | - | - | - | - | - | - |
| Victim and witness services | \$1,499,725 | not impacted | - | - | - | - | - | - | - |
| Transportation |  |  |  |  |  |  |  |  |  |
| Street and park lighting | \$18,100,320 | not impacted | - | - | - | - | - | - | - |
| Administration - DOT | \$8,279,204 | not impacted | - | - | - | - | - | - | - |
| Street management | \$26,622,201 | not impacted | - | - | - | - | - | - | - |
| Traffic management and safety | \$11,559,956 | not impacted | - | - | - | - | - | - | - |
| Special events support | \$471,977 | not impacted | - | - | - | - | - | - | - |
| Inner Harbor services - transportation | \$925,027 | not impacted | - | - | - | - | - | - | - |
| Snow and Ice control | \$2,864,399 | not impacted | - | - | - | - | - | - | - |
| Vehicle impounding and disposal | \$7,634,293 | not impacted | - | - | - | - | - | - | - |
| Complete streets ad sustainable transportation | \$4,018,335 | not impacted | - | - | - | - | - | - | - |
| Public rights-of-way landscape management | \$3,856,516 | not impacted | - | - | - | - | - | - | - |
| Bridge and culvert management | \$3,321,075 | not impacted | - | - | - | - | - | - | - |
| Survey control | \$744,881 | not impacted | - | - | - | - | - | - | - |
| Street cut management | \$891,633 | not impacted | - | - | - | - | - | - | - |
| Traffic safety | \$7,737,775 | not impacted | - | - | - | - | - | - | - |
| Building permits and municipal consents | \$1,668,245 | not impacted | - | - | - | - | - | - | - |
| Real property database management | \$725,266 | not impacted | - | - | - | - | - | - | - |
| Special events | \$917,540 | not impacted | - | - | - | - | - | - | - |


|  | Total | \$1,699,053,017 | \$4.50 | \$584.13 | \$2.63 | \$4.58 | \$416,571 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MuniCap, Inc. |  |  | S:ICONSULTING IBaltimore\|UMB|Fiscal Impact Analysis|[Fiscal Impact Analysis No. 4-B - UMB.xIsx]XI-A. 7 |  |  |  |  |

${ }^{1}$ Not all City expenses are expected to be impacted as a result of University of Maryland BioPark development.
${ }^{2}$ Source: City of Baltimore Fiscal 2016 Executive Summary:
${ }^{3}$ Method of apportioning expenses: Per employee expenses are calculated by taking current expenses and apportioning them among total employees. Service population expenses are calculated by taking current expenses and apportioning them among current total service population. Pro rata property tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of property tax expenses. Pro rata total tax revenues are calculated by taking current expenses and apportioning them among $\$ 1,000$ 's of total tax revenues.
${ }^{4}$ Represents current statistics for City. See Appendix A
Represents proposed increase to City as a result of new development. See Appendix A.
${ }^{6}$ Represents total increase in expenses as a result of proposed development on an annual basis. Figures assume full build out and are expressed in current dollars.

## University of Maryland BioPark <br> City of Baltimore, Maryland

Schedule XI-B: Projected Additional Expenses for City of Baltimore - 20 Years

| Tax <br> Year <br> Beginning | Inflation <br> Factor $^{1}$ | Projected <br> Employees $^{2}$ | Expense Per <br> Employee $^{3}$ | Total <br> Employee Expenses | Service <br> Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-Jul-15 | $100 \%$ | 0 | $\$ 4.50$ | Expense Per <br> Service Population | Total Service <br> Population Expenses |  |  |
| 1-Jul-16 | $103 \%$ | 0 | $\$ 0$ | 0 | $\$ 584$ | $\$ 0$ |  |
| 1-Jul-17 | $106 \%$ | 0 | $\$ 4.64$ | $\$ 0$ | 0 | $\$ 602$ | $\$ 0$ |
| 1-Jul-18 | $109 \%$ | 1,023 | $\$ 4.77$ | $\$ 0$ | 0 | $\$ 620$ | $\$ 0$ |
| 1-Jul-19 | $113 \%$ | 1,023 | $\$ 4.92$ | $\$ 5,032$ | 686 | $\$ 638$ | $\$ 437,623$ |
| 1-Jul-20 | $116 \%$ | 1,023 | $\$ 5.07$ | $\$ 5,183$ | 686 | $\$ 657$ | $\$ 450,752$ |
| 1-Jul-21 | $119 \%$ | 1,023 | $\$ 5.22$ | $\$ 5,339$ | 686 | $\$ 677$ | $\$ 464,275$ |
| 1-Jul-22 | $123 \%$ | 1,023 | $\$ 5.37$ | $\$ 5,499$ | 686 | $\$ 697$ | $\$ 478,203$ |
| 1-Jul-23 | $127 \%$ | 1,023 | $\$ 53$ | $\$ 5,664$ | 686 | $\$ 718$ | $\$ 492,549$ |
| 1-Jul-24 | $130 \%$ | 1,023 | $\$ 5.87$ | $\$ 5,834$ | 686 | $\$ 740$ | $\$ 507,326$ |
| 1-Jul-25 | $134 \%$ | 1,023 | $\$ 6.05$ | $\$ 6,009$ | 686 | $\$ 762$ | $\$ 522,545$ |
| 1-Jul-26 | $138 \%$ | 1,023 | $\$ 6.23$ | $\$ 6,189$ | 686 | $\$ 785$ | $\$ 538,222$ |
| 1-Jul-27 | $143 \%$ | 1,023 | $\$ 6.42$ | $\$ 6,375$ | 686 | $\$ 809$ | $\$ 554,368$ |
| 1-Jul-28 | $147 \%$ | 1,023 | $\$ 6.61$ | $\$ 6,566$ | 686 | $\$ 833$ | $\$ 570,999$ |
| 1-Jul-29 | $151 \%$ | 1,023 | $\$ 6.81$ | $\$ 6,763$ | 686 | $\$ 858$ | $\$ 588,129$ |
| 1-Jul-30 | $156 \%$ | 1,023 | $\$ 7.01$ | $\$ 6,966$ | 686 | $\$ 884$ | $\$ 605,773$ |
| 1-Jul-31 | $160 \%$ | 1,023 | $\$ 7.22$ | $\$ 7,175$ | 686 | $\$ 910$ | $\$ 623,946$ |
| 1-Jul-32 | $165 \%$ | 1,023 | $\$ 7.44$ | $\$ 7,390$ | 686 | $\$ 937$ | $\$ 642,665$ |
| 1-Jul-33 | $170 \%$ | 1,023 | $\$ 7.66$ | $\$ 7,840$ | 686 | $\$ 965$ | $\$ 661,945$ |
| 1-Jul-34 | $175 \%$ | 1,023 | $\$ 7.89$ | $\$ 8,075$ | 686 | $\$ 994$ | $\$ 681,803$ |
| 1-Jul-35 | $181 \%$ | 1,023 | $\$ 8.13$ | $\$ 8,317$ | 686 | $\$ 1,024$ | $\$ 702,257$ |
|  |  |  | 686 | $\$ 1,055$ | $\$ 723,325$ |  |  |
| Total |  |  |  |  |  |  |  |

MuniCap, Inc.

S:|CONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xIsx]XI-B
19-Oct-15

[^11]
## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XI-B: Projected Additional Expenses for City of Baltimore -20 years, continued

| Tax |  | Additional Expenses |  |  |  |  |  | Total Projected <br> Additional Expenses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Inflation <br> Factor ${ }^{1}$ | $\$ 1,000 \text { 's of Prop. }$ | Expense Per \$1,000's | Total Additional | \$1,000's of Total Tax Revenue ${ }^{4}$ | Expense Per \$1,000's | Total Additional |  |
| 1-Jul-15 | 100\% | \$0 | \$2.63 | \$0 | \$0 | \$4.58 | \$0 | \$0 |
| 1-Jul-16 | 103\% | \$0 | \$2.71 | \$0 | \$0 | \$4.72 | \$0 | \$0 |
| 1-Jul-17 | 106\% | \$0 | \$2.79 | \$0 | \$0 | \$4.86 | \$0 | \$0 |
| 1-Jul-18 | 109\% | \$0 | \$2.87 | \$0 | \$1,940 | \$5.01 | \$9,709 | \$452,365 |
| 1-Jul-19 | 113\% | \$0 | \$2.96 | \$0 | \$1,389 | \$5.16 | \$7,160 | \$463,095 |
| 1-Jul-20 | 116\% | \$0 | \$3.05 | \$0 | \$1,469 | \$5.31 | \$7,803 | \$477,417 |
| 1-Jul-21 | 119\% | \$0 | \$3.14 | \$0 | \$1,554 | \$5.47 | \$8,499 | \$492,201 |
| 1-Jul-22 | 123\% | \$0 | \$3.23 | \$0 | \$1,600 | \$5.63 | \$9,017 | \$507,230 |
| 1-Jul-23 | 127\% | \$296 | \$3.33 | \$985 | \$1,648 | \$5.80 | \$9,567 | \$523,711 |
| 1-Jul-24 | 130\% | \$305 | \$3.43 | \$1,045 | \$1,698 | \$5.98 | \$10,150 | \$539,750 |
| 1-Jul-25 | 134\% | \$314 | \$3.53 | \$1,110 | \$1,749 | \$6.16 | \$10,769 | \$556,289 |
| 1-Jul-26 | 138\% | \$323 | \$3.64 | \$1,178 | \$635 | \$6.34 | \$4,030 | \$565,950 |
| 1-Jul-27 | 143\% | \$333 | \$3.75 | \$1,250 | \$654 | \$6.53 | \$4,272 | \$583,087 |
| 1-Jul-28 | 147\% | \$1,717 | \$3.86 | \$6,633 | \$891 | \$6.73 | \$5,993 | \$607,518 |
| 1-Jul-29 | 151\% | \$1,769 | \$3.98 | \$7,039 | \$941 | \$6.93 | \$6,524 | \$626,302 |
| 1-Jul-30 | 156\% | \$1,823 | \$4.10 | \$7,471 | \$995 | \$7.14 | \$7,100 | \$645,692 |
| 1-Jul-31 | 160\% | \$1,878 | \$4.22 | \$7,928 | \$1,049 | \$7.35 | \$7,713 | \$665,696 |
| 1-Jul-32 | 165\% | \$1,936 | \$4.35 | \$8,414 | \$1,105 | \$7.57 | \$8,370 | \$686,341 |
| 1-Jul-33 | 170\% | \$1,994 | \$4.48 | \$8,930 | \$1,165 | \$7.80 | \$9,087 | \$707,660 |
| 1-Jul-34 | 175\% | \$2,055 | \$4.61 | \$9,477 | \$1,226 | \$8.03 | \$9,849 | \$729,658 |
| 1-Jul-35 | 181\% | \$2,117 | \$4.75 | \$10,057 | \$1,290 | \$8.27 | \$10,674 | \$752,373 |
| Total |  |  |  | \$71,516 |  |  | \$146,286 | \$10,582,334 |
| MuniCap, Inc. |  |  |  |  | S:ICONSULTING\Baltimore\|UMB|Fiscal Impact Analysis|[Fiscal Impact Analysis No. 4-B - UMB.xlsx]XI-B. 2 |  |  |  |
| ${ }^{1}$ Assumes an annual inflation rate of 3\%. |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Based on tax increment projections, prepared by MuniCap, Inc. Includes the Enterprise Zone and RISE Tax Credits and assumes $94 \%$ collection rate based on City of Baltimore tax increment financing policy. See Schedule III. |  |  |  |  |  |  |  |  |
| ${ }_{4}$ See Schedule X. |  |  |  |  |  |  |  |  |

## University of Maryland BioPark

 City of Baltimore, Maryland
## Schedule XII: Projected Change in State Aid to Schools ${ }^{1}$

| Developmenı Year | Tax | Inflation | Total Current State | Projected Total New Program Share |  |  | Projected Impact to State $\mathrm{Aid}^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Projected | Total Projected |  |  |
|  | Year |  |  | Total Program School | Local Share of | Projected Total State |  |
| Ending | Beginning | Factor | Program Share ${ }^{2}$ | Enrollment Funding ${ }^{3}$ | School Funding ${ }^{4}$ | Program Share ${ }^{5}$ |  |
| 31-Dec-14 | 1-Jul-15 | 100\% | \$389,709,733 | \$552,862,431 | (\$163,152,698) | \$389,709,733 | \$0 |
| 31-Dec-15 | 1-Jul-16 | 103\% | \$401,401,025 | \$569,448,304 | (\$168,047,279) | \$401,401,025 | \$0 |
| 31-Dec-16 | 1-Jul-17 | 106\% | \$413,443,056 | \$586,531,753 | (\$173,088,697) | \$413,443,056 | \$0 |
| 31-Dec-17 | 1-Jul-18 | 109\% | \$425,846,348 | \$604,127,706 | (\$178,655,941) | \$425,471,764 | (\$374,583) |
| 31-Dec-18 | 1-Jul-19 | 113\% | \$438,621,738 | \$622,251,537 | (\$184,027,500) | \$438,224,037 | $(\$ 397,701)$ |
| 31-Dec-19 | 1-Jul-20 | 116\% | \$451,780,390 | \$640,919,083 | (\$189,560,559) | \$451,358,524 | $(\$ 421,867)$ |
| 31-Dec-20 | 1-Jul-21 | 119\% | \$465,333,802 | \$660,146,655 | (\$195,259,975) | \$464,886,681 | $(\$ 447,121)$ |
| 31-Dec-21 | 1-Jul-22 | 123\% | \$479,293,816 | \$679,951,055 | (\$201,117,864) | \$478,833,191 | $(\$ 460,625)$ |
| 31-Dec-22 | 1-Jul-23 | 127\% | \$493,672,631 | \$700,349,587 | (\$207,151,489) | \$493,198,097 | $(\$ 474,533)$ |
| 31-Dec-23 | 1-Jul-24 | 130\% | \$508,482,809 | \$721,360,074 | (\$213,366,124) | \$507,993,950 | $(\$ 488,859)$ |
| 31-Dec-24 | 1-Jul-25 | 134\% | \$523,737,294 | \$743,000,876 | (\$219,767,197) | \$523,233,679 | $(\$ 503,615)$ |
| 31-Dec-25 | 1-Jul-26 | 138\% | \$539,449,413 | \$765,290,903 | (\$226,360,303) | \$538,930,600 | $(\$ 518,813)$ |
| 31-Dec-26 | 1-Jul-27 | 143\% | \$555,632,895 | \$788,249,630 | (\$233,151,202) | \$555,098,428 | $(\$ 534,467)$ |
| 31-Dec-27 | 1-Jul-28 | 147\% | \$572,301,882 | \$811,897,119 | (\$240,145,828) | \$571,751,291 | $(\$ 550,591)$ |
| 31-Dec-28 | 1-Jul-29 | 151\% | \$589,470,938 | \$836,254,032 | (\$247,350,293) | \$588,903,740 | $(\$ 567,199)$ |
| 31-Dec-29 | 1-Jul-30 | 156\% | \$607,155,066 | \$861,341,653 | (\$254,770,891) | \$606,570,762 | $(\$ 584,304)$ |
| 31-Dec-30 | 1-Jul-31 | 160\% | \$625,369,718 | \$887,181,903 | (\$262,414,108) | \$624,767,795 | $(\$ 601,923)$ |
| 31-Dec-31 | 1-Jul-32 | 165\% | \$644,130,810 | \$913,797,360 | (\$270,286,621) | \$643,510,739 | $(\$ 620,071)$ |
| 31-Dec-32 | 1-Jul-33 | 170\% | \$663,454,734 | \$941,211,281 | (\$278,395,309) | \$662,815,971 | $(\$ 638,763)$ |
| 31-Dec-33 | 1-Jul-34 | 175\% | \$683,358,376 | \$969,447,619 | (\$286,747,259) | \$682,700,361 | $(\$ 658,016)$ |
| 31-Dec-34 | 1-Jul-35 | 181\% | \$703,859,128 | \$998,531,048 | (\$295,349,766) | \$703,181,282 | (\$677,846) |

Total

S:|CONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]XII
 Foundation Program State Education Grant is illustrated in Appendix G.
${ }^{2}$ Represents the total current program share from the Foundation Program State Education Grant as shown in the formula on Appendix G-3, Table 1. Assumes 3\% annual inflationary increase.
${ }^{3}$ See Appendix F-1(b)
${ }^{4}$ See Appendix F-2(b)
${ }^{5}$ Represents the projected new program share from the Foundation Program State Education Grant resulting from the development.

 exceeds the projected student enrollment, there is a reduction in the amount of the State aid received by each jurisdiction.

## University of Maryland BioPark

## City of Baltimore, Maryland

Schedule XIII: Projected Total Impact to the City of Baltimore - 20 Years

| Development <br> Year <br> Ending | Tax <br> Year <br> Beginning | Inflation <br> Factor $^{1}$ | Total <br> Revenue $^{2}$ | Total <br> Expenses $^{3}$ | Net <br> Impact | Change In State <br> Aid to Schools | Total <br> Impact |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31-Dec-14 | 1-Jul-15 | $100 \%$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| 31-Dec-15 | 1-Jul-16 | $103 \%$ | $(\$ 171,342)$ | $\$ 0$ | $(\$ 171,342)$ | $\$ 0$ | $(\$ 171,342)$ |
| 31-Dec-16 | 1-Jul-17 | $106 \%$ | $(\$ 191,825)$ | $\$ 0$ | $(\$ 191,825)$ | $\$ 0$ | $(\$ 191,825)$ |
| 31-Dec-17 | 1-Jul-18 | $109 \%$ | $\$ 1,939,506$ | $(\$ 452,365)$ | $\$ 1,487,141$ | $(\$ 374,583)$ | $\$ 1,112,558$ |
| 31-Dec-18 | 1-Jul-19 | $113 \%$ | $\$ 1,388,540$ | $(\$ 463,095)$ | $\$ 925,445$ | $(\$ 397,701)$ | $\$ 527,744$ |
| 31-Dec-19 | 1-Jul-20 | $116 \%$ | $\$ 1,469,281$ | $(\$ 477,417)$ | $\$ 991,864$ | $(\$ 421,867)$ | $\$ 569,997$ |
| 31-Dec-20 | 1-Jul-21 | $119 \%$ | $\$ 1,553,612$ | $(\$ 492,201)$ | $\$ 1,061,412$ | $(\$ 447,121)$ | $\$ 614,290$ |
| 31-Dec-21 | 1-Jul-22 | $123 \%$ | $\$ 1,600,344$ | $(\$ 507,230)$ | $\$ 1,093,114$ | $(\$ 460,625)$ | $\$ 632,489$ |
| 31-Dec-22 | 1-Jul-23 | $127 \%$ | $\$ 1,648,478$ | $(\$ 523,711)$ | $\$ 1,124,767$ | $(\$ 474,533)$ | $\$ 650,233$ |
| 31-Dec-23 | 1-Jul-24 | $130 \%$ | $\$ 1,698,055$ | $(\$ 539,750)$ | $\$ 1,158,306$ | $(\$ 488,859)$ | $\$ 669,447$ |
| 31-Dec-24 | 1-Jul-25 | $134 \%$ | $\$ 1,749,120$ | $(\$ 556,289)$ | $\$ 1,192,831$ | $(\$ 503,615)$ | $\$ 689,216$ |
| 31-Dec-25 | 1-Jul-26 | $138 \%$ | $\$ 635,434$ | $(\$ 565,950)$ | $\$ 69,483$ | $(\$ 518,813)$ | $(\$ 449,330)$ |
| 31-Dec-26 | 1-Jul-27 | $143 \%$ | $\$ 653,961$ | $(\$ 583,087)$ | $\$ 70,874$ | $(\$ 534,467)$ | $(\$ 463,593)$ |
| 31-Dec-27 | 1-Jul-28 | $147 \%$ | $\$ 890,785$ | $(\$ 607,518)$ | $\$ 283,267$ | $(\$ 550,591)$ | $(\$ 267,324)$ |
| 31-Dec-28 | 1-Jul-29 | $151 \%$ | $\$ 941,480$ | $(\$ 626,302)$ | $\$ 315,178$ | $(\$ 567,199)$ | $(\$ 252,021)$ |
| 31-Dec-29 | 1-Jul-30 | $156 \%$ | $\$ 994,748$ | $(\$ 645,692)$ | $\$ 349,056$ | $(\$ 584,304)$ | $(\$ 235,249)$ |
| 31-Dec-30 | 1-Jul-31 | $160 \%$ | $\$ 1,049,155$ | $(\$ 665,696)$ | $\$ 383,459$ | $(\$ 601,923)$ | $(\$ 218,464)$ |
| 31-Dec-31 | 1-Jul-32 | $165 \%$ | $\$ 1,105,392$ | $(\$ 686,341)$ | $\$ 419,052$ | $(\$ 620,071)$ | $(\$ 201,019)$ |
| 31-Dec-32 | 1-Jul-33 | $170 \%$ | $\$ 1,165,151$ | $(\$ 707,660)$ | $\$ 457,491$ | $(\$ 638,763)$ | $(\$ 181,272)$ |
| 31-Dec-33 | 1-Jul-34 | $175 \%$ | $\$ 1,226,067$ | $(\$ 729,658)$ | $\$ 496,409$ | $(\$ 658,016)$ | $(\$ 161,607)$ |
| 31-Dec-34 | 1-Jul-35 | $181 \%$ | $\$ 1,289,957$ | $(\$ 752,373)$ | $\$ 537,584$ | $(\$ 677,846)$ | $(\$ 140,262)$ |

MuniCap, Inc. S:ICONSULTING\BaltimorelUMB|Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]XIII
19-Oct-15

[^12]
## University of Maryland BioPark

City of Baltimore, Maryland
$\underline{\text { Schedule XIV: Projected City Internal Rate of Return }}$
$\operatorname{IRR}=\quad 3.51 \%$

| Development Year Ending | Tax <br> Year <br> Beginning | Gross <br> Bond Proceeds ${ }^{1}$ | Projected <br> Total Revenues ${ }^{2}$ | Projected <br> Total Expenses ${ }^{3}$ | Total City <br> Cash Flow |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 31-Dec-13 | 1-Jul-14 | (\$17,500,000) | \$0 | \$0 | (\$17,500,000) |
| 31-Dec-14 | 1-Jul-15 |  | \$453,658 | \$0 | \$453,658 |
| 31-Dec-15 | 1-Jul-16 |  | \$261,833 | \$0 | \$261,833 |
| 31-Dec-16 | 1-Jul-17 |  | \$219,797 | \$0 | \$219,797 |
| 31-Dec-17 | 1-Jul-18 |  | \$2,783,459 | $(\$ 826,948)$ | \$1,956,511 |
| 31-Dec-18 | 1-Jul-19 |  | \$2,225,847 | $(\$ 860,796)$ | \$1,365,050 |
| 31-Dec-19 | 1-Jul-20 |  | \$2,299,736 | $(\$ 899,283)$ | \$1,400,452 |
| 31-Dec-20 | 1-Jul-21 |  | \$2,377,004 | $(\$ 939,322)$ | \$1,437,682 |
| 31-Dec-21 | 1-Jul-22 |  | \$2,120,824 | $(\$ 967,855)$ | \$1,152,970 |
| 31-Dec-22 | 1-Jul-23 |  | \$2,448,077 | $(\$ 998,244)$ | \$1,449,833 |
| 31-Dec-23 | 1-Jul-24 |  | \$2,489,647 | (\$1,028,609) | \$1,461,038 |
| 31-Dec-24 | 1-Jul-25 |  | \$2,508,174 | $(\$ 1,059,904)$ | \$1,448,269 |
| 31-Dec-25 | 1-Jul-26 |  | \$1,394,810 | (\$1,084,763) | \$310,047 |
| 31-Dec-26 | 1-Jul-27 |  | \$987,262 | (\$1,117,554) | (\$130,292) |
| 31-Dec-27 | 1-Jul-28 |  | \$2,607,962 | (\$1,158,109) | \$1,449,853 |
| 31-Dec-28 | 1-Jul-29 |  | \$2,710,849 | (\$1,193,501) | \$1,517,349 |
| 31-Dec-29 | 1-Jul-30 |  | \$2,817,875 | (\$1,229,996) | \$1,587,879 |
| 31-Dec-30 | 1-Jul-31 |  | \$2,927,654 | (\$1,267,620) | \$1,660,035 |
| 31-Dec-31 | 1-Jul-32 |  | \$3,040,924 | (\$1,306,412) | \$1,734,512 |
| 31-Dec-32 | 1-Jul-33 |  | \$3,159,426 | (\$1,346,423) | \$1,813,003 |
| 31-Dec-33 | 1-Jul-34 |  | \$3,280,847 | (\$1,387,674) | \$1,893,173 |
| 31-Dec-34 | 1-Jul-35 |  | \$3,407,057 | (\$1,430,219) | \$1,976,839 |
| Total |  | (\$17,500,000) | \$46,522,721 | (\$20,103,231) | \$8,919,490 |

MuniCap, Inc. S:|CONSULTING\Baltimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]XIV
19-Oct-15
${ }^{1}$ Based on tax increment financing projections, as prepared by MuniCap, Inc.
${ }^{2}$ Represents the sum of the total projected tax revenues, shown on Schedule $X$, and the real property tax increment revenues available for debt service, as well as the supplemental special tax revenues and special tax revenues, shown on Schedule III. The rate of return is based on total projected revenues, and therefore, is not net of debt service. As a result, total projected tax revenues exclude surplus revenues from the revenues shown on Schedules III and X (these are revenues after debt service).
${ }^{3}$ Represents the sum of the total projected expenses, shown on Schedule XI-B, and the projected impact to State aid, shown on Schedule XII.

# University of Maryland BioPark City of Baltimore, Maryland 

## APPENDICES

## University of Maryland BioPark <br> City of Baltimore, Maryland

## Appendix A: Revenues and Expenses to City of Baltimore (Allocation Factors)

| City of Baltimore permanent population $^{1}$ | 622,793 |
| :--- | :--- |
| City of Baltimore current employees $^{2}$ | 311,544 |
| Non-resident workers $^{3}$ | 208,734 |
| Employee population equivalent $^{4}$ | 208,734 |
| Total service population ${ }^{5}$ | 831,527 |

## Live-work rates

Percent of newly created City of Baltimore employees assumed to live in City of Baltimore ${ }^{2} \quad 33.0 \%$
Percent of newly created City of Baltimore employees assumed to live outside City of Baltimore ${ }^{2} \quad 67.0 \%$

| Service population rates | 1.00 |
| :--- | :--- |
| Resident | 1.00 |

Expected employee increase
Projected new employees ${ }^{6}$ ..... 1,023
Projected non-resident employees ..... 686
Projected employee population equivalent (service population) ${ }^{7}$ ..... 686
Total service population increase ..... 686
Current real property tax revenues to City of Baltimore ${ }^{8}$ ..... \$857,184,430
Projected increase in real property tax revenues to City of Baltimore ${ }^{9}$ ..... \$2,117,100
Current total tax revenues to City of Baltimore ${ }^{8}$ ..... \$1,720,853,247
Projected increase in total tax revenues to City of Baltimore ${ }^{10}$ ..... \$1,289,957

[^13]University of Maryland BioPark
City of Baltimore, Maryland
Appendix B: Projected Employees

| DevelopmentYear | Total Projected Employees |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Ending | Lab | Employees <br> Per 1,000 SF | Total <br> Total $^{2}$ | Employees |
| 31-Dec-14 | 0 | 4.10 | 0 | 0 |
| 31-Dec-15 | 0 | 4.10 | 0 | 0 |
| 31-Dec-16 | 0 | 4.10 | 0 | 0 |
| 31-Dec-17 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-18 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-19 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-20 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-21 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-22 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-23 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-24 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-25 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-26 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-27 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-28 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-29 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-30 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-31 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-32 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-33 | 249,432 | 4.10 | 1,023 | 1,023 |
| 31-Dec-34 | 249,432 | 4.10 | 1,023 | 1,023 |

MuniCap, Inc. $\quad$ 3altimore\UMB\Fiscal Impact Analysis\[Fiscal Impact Analysis No. 4-B - UMB.xlsx]B
$19-O c t-15$
${ }^{1}$ See Schedule II.
${ }^{2}$ Jobs were calculated using IMPLAN software by IMPLAN Group LLC. See Appendix D.

## University of Maryland BioPark

## City of Baltimore, Maryland

Appendix C: Projected Residents and Service Population

| Development Year <br> Ending | Projected Resident Increase ${ }^{1}$ |  |  |  |  | Service Population Increase |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rental | Vacancy | Occupied |  | Total Residents |  | rojected Service Emp | loyees | Projected | Service |
|  | Units | Rate | Rental Units | Per Unit | Per Household | Employees ${ }^{2}$ | Service Percentage ${ }^{3}$ | Service Employees | Residents | Population Increase ${ }^{4}$ |
| 31-Dec-14 | 0 | 0\% | 0 | 0.00 | 0 | 0 | 67\% | 0 | 0 | 0 |
| 31-Dec-15 | 0 | 0\% | 0 | 0.00 | 0 | 0 | 67\% | 0 | 0 | 0 |
| 31-Dec-16 | 0 | 0\% | 0 | 0.00 | 0 | 0 | 67\% | 0 | 0 | 0 |
| 31-Dec-17 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-18 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-19 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-20 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-21 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-22 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-23 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-24 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-25 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-26 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-27 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-28 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-29 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-30 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-31 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-32 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-33 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |
| 31-Dec-34 | 0 | 0\% | 0 | 0.00 | 0 | 1,023 | 67\% | 686 | 0 | 686 |

MuniCap, Inc
${ }^{1}$ No residential units proposed at development. As result, no new residents are projected at the development.
${ }^{2}$ See Appendix B.
${ }^{3}$ See Appendix A. Represents the percentage of employees assumed to reside outside of Baltimore City.
${ }^{4}$ Represents the increase in employees who work but do not live in the City and new residents as a result of the proposed development.

## University of Maryland BioPark

City of Baltimore, Maryland

## Appendix D: Permanent Lab Jobs and Indirect Impacts

|  | Total |
| :---: | :---: |
| Lab square feet ${ }^{1}$ | 249,432 |
| Square feet per lab worker ${ }^{2}$ | 244 |
| Total lab employees ${ }^{3}$ | 1,023 |
| Lab full-time equivalent factor ${ }^{4}$ | 0.8970 |
| Total lab full-time equivalent employees ("FTE's) | 918 |
| Total lab employees per 1,000 sq. ft | 4.10 |
| Total cost of labor ${ }^{3}$ | \$111,301,087 |
| Labor cost to wages factor ${ }^{5}$ | 1.2117 |
| Total wages | \$91,852,541 |
| Average labor income per lab FTE - annual | \$121,259 |
| Average wage per lab FTE - annual | \$100,070 |
| Lab operating revenue | \$141,302,607 |
| Multiplier for lab wages ${ }^{3}$ | 1.2283 |
| Total earnings | \$136,713,514 |
| Indirect earnings | \$25,412,427 |
| Multiplier for lab jobs ${ }^{3}$ | 1.4251 |
| Total jobs | 1,458 |
| Indirect jobs | 435 |
| Multiplier for lab output ${ }^{3}$ | 1.4431 |
| Total economic output | \$203,907,716 |
| Indirect output | \$62,605,109 |

${ }^{1}$ Based on projected development at full buildout. See Schedule I.
${ }^{2}$ Based on average square feet per office worker as reported for the Baltimore, MD market in theBOMA Experience Exchange Report for 2014.
${ }^{3}$ Lab wages, jobs, and output were calculated using IMPLAN software by IMPLAN Group, LLC. The software calculates labor income and the number of jobs based on industry multipliers derived from National Income and Product Accounts data published by the U.S. Bureau of Economic Analysis. This data is then indexed to local industry data compiled by the U.S. Census Bureau. For ease of interpretation, multipliers are shown to illustrate the effects lab development within the University of Maryland BioPark development will have in Baltimore City, Maryland. The multiplier for lab jobs is 1.4251 , meaning that for each job at the development, 1.4251 jobs will be created in Baltimore City, including the job at the development. Similarly, the multiplier for lab wages is 1.2283 , meaning that for every $\$ 1.00$ paid in pad wages at the development, $\$ 1.2283$ will be paid in Baltimore City, including the $\$ 1.00$ at the development. The multiplier for lab output is 1.4431 , meaning that for each dollar of lab economic activity at the development, the economic activity in Baltimore City will be $\$ 1.4431$, including the $\$ 1.00$ at the development.
${ }^{4}$ Total jobs include all full-year employees, including part-time and full-time employees. This factor, provided by IMPLAR Group, LLC, converts total jobs into total full-time equivalent employees ("FTE's").
${ }^{5}$ Total labor income includes wages and salary, benefits, payroll taxes, and proprietor's income. This factor, provided by IMPLAN Group, LLC, converts total labor income into direct wages and salary.

## University of Maryland BioPark

## City of Baltimore, Maryland

## Appendix E: Temporary Construction Jobs and Indirect Impacts

|  | Total |
| :--- | ---: |
| Project costs ${ }^{1}$ | $\$ 86,401,483$ |
|  |  |
| Total construction jobs $^{2}$ | 378 |
| Construction full-time equivalent factor $^{3}$ | 0.9595 |
| Total construction full-time equivalent employees ("FTE's") | 363 |
|  |  |
| Total construction labor income ${ }^{2}$ | $\$ 34,998,615$ |
| Labor income to wages factor $^{4}$ | 1.1989 |
| Total wages | $\$ 29,193,305$ |
|  |  |
| Average labor income per construction FTE -- annual | $\$ 96,443$ |
| Average wage per construction FTE -- annual | $\$ 80,446$ |
| Multiplier for construction wages ${ }^{2}$ | 1.3485 |
| Total earnings | $\$ 47,197,280$ |
| Indirect earnings | $\$ 12,198,665$ |
| Multiplier for construction jobs ${ }^{2}$ | $\$ 116,625,355$ |
| Total jobs (one year full time equivalents) | $\$ 30,223,872$ |
| Indirect jobs (one year full time equivalents) | 1.5206 |
| Multiplier for construction output ${ }^{2}$ | 575 |
| Total economic output | 197 |
| Indirect output | $\$ 398$ |

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${ }^{1}$ Provided by Wexford Science + Technology. Includes vertical construction and BioPark streetscape improvement hard costs, and tenant improvements.
${ }^{2}$ Construction wages, indirect jobs and output were calculated using the IMPLAN software by IMPLAN Group, LLC. Multipliers function in the same manner as with Lab impacts.
${ }^{3}$ Total jobs include all full-year employees, including part-time and full-time employees. This factor, provided by IMPLAN Group, LLC, converts total jobs into total full-time equivalent employees ("FTE's").
${ }^{4}$ Total labor income includes wages and salary, benefits, payroll taxes, and proprietor's income. This factor, provided by IMPLAN Group, LLC, converts total labor income into direct wages and salary.

## University of Maryland BioPark

## City of Baltimore, Maryland

Appendix F-1(a): Projected Change in State Aid - Projected Total Program Enrollment Increase Multiplier ${ }^{1}$

| DevelopmentYear | Tax | Total Program Enrollment Increase Multiplier |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Total | UMB | Total Program |
|  | Year | Current Eligible | Projected | Enrollment |
| Ending | Beginning | Students ${ }^{2}$ | New Students ${ }^{3}$ | Multiplier ${ }^{4}$ |
| 31-Dec-14 | 1-Jul-15 | 79,503 | 0 | 1.000 |
| 31-Dec-15 | 1-Jul-16 | 79,503 | 0 | 1.000 |
| 31-Dec-16 | 1-Jul-17 | 79,503 | 0 | 1.000 |
| 31-Dec-17 | 1-Jul-18 | 79,503 | 0 | 1.000 |
| 31-Dec-18 | 1-Jul-19 | 79,503 | 0 | 1.000 |
| 31-Dec-19 | 1-Jul-20 | 79,503 | 0 | 1.000 |
| 31-Dec-20 | 1-Jul-21 | 79,503 | 0 | 1.000 |
| 31-Dec-21 | 1-Jul-22 | 79,503 | 0 | 1.000 |
| 31-Dec-22 | 1-Jul-23 | 79,503 | 0 | 1.000 |
| 31-Dec-23 | 1-Jul-24 | 79,503 | 0 | 1.000 |
| 31-Dec-24 | 1-Jul-25 | 79,503 | 0 | 1.000 |
| 31-Dec-25 | 1-Jul-26 | 79,503 | 0 | 1.000 |
| 31-Dec-26 | 1-Jul-27 | 79,503 | 0 | 1.000 |
| 31-Dec-27 | 1-Jul-28 | 79,503 | 0 | 1.000 |
| 31-Dec-28 | 1-Jul-29 | 79,503 | 0 | 1.000 |
| 31-Dec-29 | 1-Jul-30 | 79,503 | 0 | 1.000 |
| 31-Dec-30 | 1-Jul-31 | 79,503 | 0 | 1.000 |
| 31-Dec-31 | 1-Jul-32 | 79,503 | 0 | 1.000 |
| 31-Dec-32 | 1-Jul-33 | 79,503 | 0 | 1.000 |
| 31-Dec-33 | 1-Jul-34 | 79,503 | 0 | 1.000 |
| 31-Dec-34 | 1-Jul-35 | 79,503 | 0 | 1.000 |

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${ }^{\text {I }}$ Change in state aid is determined using the formula for the Foundation Program State Education Grant, which includes student enrollment as a positive factor and total wealth as a negative factor. This schedule calculates the impact on student enrollment of new students at University of Maryland BioPark. The formula for the Foundation Program State Education Grant is illustrated in Appendix G.
${ }^{2}$ Represents the total current eligible student enrollment in the Baltimore City Public School System. See Table 1 on Appendix G-2(a).
${ }^{3}$ No residential units are proposed for the University of Maryland BioPark Development District. As a result, no new students are projected to be generated.
${ }^{4}$ Represents the annual increase in eligible student enrollment as a result of the development.

## University of Maryland BioPark

## City of Baltimore, Maryland

## Appendix F-1(b): Projected Change in State Aid - Projected Total Program Enrollment Budget Impact ${ }^{1}$

| Developmen Year Ending | Tax <br> Year <br> Beginning | Inflation <br> Factor | Total Current School <br> Enrollment Funding ${ }^{2}$ | Total Program Enrollment Multiplier ${ }^{3}$ | Projected <br> Total Program School <br> Enrollment Funding ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 31-Dec-14 | 1-Jul-15 | 100\% | \$552,862,431 | 1.000 | \$552,862,431 |
| 31-Dec-15 | 1-Jul-16 | 103\% | \$569,448,304 | 1.000 | \$569,448,304 |
| 31-Dec-16 | 1-Jul-17 | 106\% | \$586,531,753 | 1.000 | \$586,531,753 |
| 31-Dec-17 | 1-Jul-18 | 109\% | \$604,127,706 | 1.000 | \$604,127,706 |
| 31-Dec-18 | 1-Jul-19 | 113\% | \$622,251,537 | 1.000 | \$622,251,537 |
| 31-Dec-19 | 1-Jul-20 | 116\% | \$640,919,083 | 1.000 | \$640,919,083 |
| 31-Dec-20 | 1-Jul-21 | 119\% | \$660,146,655 | 1.000 | \$660,146,655 |
| 31-Dec-21 | 1-Jul-22 | 123\% | \$679,951,055 | 1.000 | \$679,951,055 |
| 31-Dec-22 | 1-Jul-23 | 127\% | \$700,349,587 | 1.000 | \$700,349,587 |
| 31-Dec-23 | 1-Jul-24 | 130\% | \$721,360,074 | 1.000 | \$721,360,074 |
| 31-Dec-24 | 1-Jul-25 | 134\% | \$743,000,876 | 1.000 | \$743,000,876 |
| 31-Dec-25 | 1-Jul-26 | 138\% | \$765,290,903 | 1.000 | \$765,290,903 |
| 31-Dec-26 | 1-Jul-27 | 143\% | \$788,249,630 | 1.000 | \$788,249,630 |
| 31-Dec-27 | 1-Jul-28 | 147\% | \$811,897,119 | 1.000 | \$811,897,119 |
| 31-Dec-28 | 1-Jul-29 | 151\% | \$836,254,032 | 1.000 | \$836,254,032 |
| 31-Dec-29 | 1-Jul-30 | 156\% | \$861,341,653 | 1.000 | \$861,341,653 |
| 31-Dec-30 | 1-Jul-31 | 160\% | \$887,181,903 | 1.000 | \$887,181,903 |
| 31-Dec-31 | 1-Jul-32 | 165\% | \$913,797,360 | 1.000 | \$913,797,360 |
| 31-Dec-32 | 1-Jul-33 | 170\% | \$941,211,281 | 1.000 | \$941,211,281 |
| 31-Dec-33 | 1-Jul-34 | 175\% | \$969,447,619 | 1.000 | \$969,447,619 |
| 31-Dec-34 | 1-Jul-35 | 181\% | \$998,531,048 | 1.000 | \$998,531,048 |

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${ }^{1}$ This schedule calculates the impact on the baseline for state aid based on the increase in student enrollment from University of Maryland BioPark. The formula for the Foundation Program State Education Grant is illustrated in Appendix G.
${ }^{2}$ Represents the current program enrollment, which represents the total costs of current students. See Table 3 on Appendix G-2(a). Assumes $3 \%$ annual inflationary increase.
${ }^{3}$ See Appendix F-1(a).
${ }^{4}$ Represents the annual increase in student costs resulting from the development.

## University of Maryland BioPark

## City of Baltimore, Maryland

Appendix F-2(a): Projected Change in State Aid - Projected Total Wealth

| Developmen 1Year | TaxYear | Inflation | Projected Total New Wealth |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Projected New Personal Property Value Included |  |  | Projected | Projected New Real Property Value Included |  |  | Projected |
|  |  |  | Projected |  | Projected New |  | Projected |  | Projected New |  |
|  |  |  | New Personal | Percent | Personal Property |  | New Real | Percent | Real Property | Total New |
| Ending | Beginning | Factor | Property Value ${ }^{2}$ | Included ${ }^{3}$ | Value Included | New Income ${ }^{4}$ | Property Value ${ }^{5}$ | Included ${ }^{6}$ | Value Included | Wealth ${ }^{7}$ |
| 31-Dec-14 | 1-Jul-15 | 100\% | \$0 | 50\% | \$0 | \$0 | \$0 | 40\% | \$0 | \$0 |
| 31-Dec-15 | 1-Jul-16 | 103\% | \$0 | 50\% | \$0 | \$0 | \$0 | 40\% | \$0 | \$0 |
| 31-Dec-16 | 1-Jul-17 | 106\% | \$0 | 50\% | \$0 | \$0 | \$0 | 40\% | \$0 | \$0 |
| 31-Dec-17 | 1-Jul-18 | 109\% | \$2,316,769 | 50\% | \$1,158,385 | \$33,122,018 | \$47,941,256 | 40\% | \$19,176,502 | \$53,456,905 |
| 31-Dec-18 | 1-Jul-19 | 113\% | \$2,386,272 | 50\% | \$1,193,136 | \$34,115,678 | \$53,618,196 | 40\% | \$21,447,278 | \$56,756,093 |
| 31-Dec-19 | 1-Jul-20 | 116\% | \$2,457,860 | 50\% | \$1,228,930 | \$35,139,149 | \$59,591,644 | 40\% | \$23,836,658 | \$60,204,737 |
| 31-Dec-20 | 1-Jul-21 | 119\% | \$2,531,596 | 50\% | \$1,265,798 | \$36,193,323 | \$65,874,281 | 40\% | \$26,349,712 | \$63,808,834 |
| 31-Dec-21 | 1-Jul-22 | 123\% | \$2,607,544 | 50\% | \$1,303,772 | \$37,279,123 | \$67,882,559 | 40\% | \$27,153,023 | \$65,735,919 |
| 31-Dec-22 | 1-Jul-23 | 127\% | \$2,685,770 | 50\% | \$1,342,885 | \$38,397,497 | \$69,951,084 | 40\% | \$27,980,434 | \$67,720,816 |
| 31-Dec-23 | 1-Jul-24 | 130\% | \$2,766,344 | 50\% | \$1,383,172 | \$39,549,422 | \$72,081,666 | 40\% | \$28,832,666 | \$69,765,260 |
| 31-Dec-24 | 1-Jul-25 | 134\% | \$2,849,334 | 50\% | \$1,424,667 | \$40,735,904 | \$74,276,165 | 40\% | \$29,710,466 | \$71,871,037 |
| 31-Dec-25 | 1-Jul-26 | 138\% | \$2,934,814 | 50\% | \$1,467,407 | \$41,957,981 | \$76,536,499 | 40\% | \$30,614,600 | \$74,039,988 |
| 31-Dec-26 | 1-Jul-27 | 143\% | \$3,022,858 | 50\% | \$1,511,429 | \$43,216,721 | \$78,864,643 | 40\% | \$31,545,857 | \$76,274,007 |
| 31-Dec-27 | 1-Jul-28 | 147\% | \$3,113,544 | 50\% | \$1,556,772 | \$44,513,222 | \$81,262,631 | 40\% | \$32,505,052 | \$78,575,047 |
| 31-Dec-28 | 1-Jul-29 | 151\% | \$3,206,950 | 50\% | \$1,603,475 | \$45,848,619 | \$83,732,559 | 40\% | \$33,493,024 | \$80,945,118 |
| 31-Dec-29 | 1-Jul-30 | 156\% | \$3,303,159 | 50\% | \$1,651,579 | \$47,224,078 | \$86,276,585 | 40\% | \$34,510,634 | \$83,386,291 |
| 31-Dec-30 | 1-Jul-31 | 160\% | \$3,402,254 | 50\% | \$1,701,127 | \$48,640,800 | \$88,896,931 | 40\% | \$35,558,773 | \$85,900,699 |
| 31-Dec-31 | 1-Jul-32 | 165\% | \$3,504,321 | 50\% | \$1,752,161 | \$50,100,024 | \$91,595,888 | 40\% | \$36,638,355 | \$88,490,540 |
| 31-Dec-32 | 1-Jul-33 | 170\% | \$3,609,451 | 50\% | \$1,804,725 | \$51,603,025 | \$94,375,814 | 40\% | \$37,750,326 | \$91,158,076 |
| 31-Dec-33 | 1-Jul-34 | 175\% | \$3,717,734 | 50\% | \$1,858,867 | \$53,151,115 | \$97,239,137 | 40\% | \$38,895,655 | \$93,905,638 |
| 31-Dec-34 | 1-Jul-35 | 181\% | \$3,829,266 | 50\% | \$1,914,633 | \$54,745,649 | \$100,188,361 | 40\% | \$40,075,344 | \$96,735,626 |

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 the Foundation Program State Education Grant is illustrated in Appendix G.
Represents the total projected assessed value (after depreciation) increased at the rate of commercial absorption, assuming $3 \%$ annual inflationary increase. Based on information shown on Schedules IV and II
${ }^{3}$ Represents a constant provided by the Maryland State Department of Education. See Table 1 on Appendix G-2(b)
${ }^{4}$ Represents the projected total new income increased at the rate of absorption, assuming $3 \%$ annual inflationary increase. Based on information shown on Schedules VII and II
${ }^{5}$ Represents the projected total assessed value. Based on information shown the tax increment financing projections, as prepared by MuniCap, Inc.
${ }^{6}$ Represents a constant provided by the Maryland State Department of Education. See Table 3 on Appendix G-2(b)
${ }^{7}$ Represents the sum of projected new personal property value included, projected new income, and projected new real property value included

## University of Maryland BioPark

City of Baltimore, Maryland

## Appendix F-2(b): Projected Change in State Aid - Projected Impact on City Wealth ${ }^{1}$

| DevelopmentYear | Tax | Inflation | Total Current Local Share of | Projected New Wealth Impact on School Funding |  |  | Total Projected |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Projected | Local | Projected New |  |
|  | Year |  |  | Total New | Share | Local Share | Local Share of |
| Ending | Beginning | Factor | School Funding ${ }^{2}$ | Wealth ${ }^{3}$ | Percentage ${ }^{4}$ | of School Funding | School Funding ${ }^{5}$ |
| 31-Dec-14 | 1-Jul-15 | 100.0\% | \$163,152,698 | \$0 | 0.70072\% | \$0 | \$163,152,698 |
| 31-Dec-15 | 1-Jul-16 | 103.0\% | \$168,047,279 | \$0 | 0.70072\% | \$0 | \$168,047,279 |
| 31-Dec-16 | 1-Jul-17 | 106.1\% | \$173,088,697 | \$0 | 0.70072\% | \$0 | \$173,088,697 |
| 31-Dec-17 | 1-Jul-18 | 109.3\% | \$178,281,358 | \$53,456,905 | 0.70072\% | \$374,583 | \$178,655,941 |
| 31-Dec-18 | 1-Jul-19 | 112.6\% | \$183,629,799 | \$56,756,093 | 0.70072\% | \$397,701 | \$184,027,500 |
| 31-Dec-19 | 1-Jul-20 | 115.9\% | \$189,138,693 | \$60,204,737 | 0.70072\% | \$421,867 | \$189,560,559 |
| 31-Dec-20 | 1-Jul-21 | 119.4\% | \$194,812,853 | \$63,808,834 | 0.70072\% | \$447,121 | \$195,259,975 |
| 31-Dec-21 | 1-Jul-22 | 123.0\% | \$200,657,239 | \$65,735,919 | 0.70072\% | \$460,625 | \$201,117,864 |
| 31-Dec-22 | 1-Jul-23 | 126.7\% | \$206,676,956 | \$67,720,816 | 0.70072\% | \$474,533 | \$207,151,489 |
| 31-Dec-23 | 1-Jul-24 | 130.5\% | \$212,877,265 | \$69,765,260 | 0.70072\% | \$488,859 | \$213,366,124 |
| 31-Dec-24 | 1-Jul-25 | 134.4\% | \$219,263,583 | \$71,871,037 | 0.70072\% | \$503,615 | \$219,767,197 |
| 31-Dec-25 | 1-Jul-26 | 138.4\% | \$225,841,490 | \$74,039,988 | 0.70072\% | \$518,813 | \$226,360,303 |
| 31-Dec-26 | 1-Jul-27 | 142.6\% | \$232,616,735 | \$76,274,007 | 0.70072\% | \$534,467 | \$233,151,202 |
| 31-Dec-27 | 1-Jul-28 | 146.9\% | \$239,595,237 | \$78,575,047 | 0.70072\% | \$550,591 | \$240,145,828 |
| 31-Dec-28 | 1-Jul-29 | 151.3\% | \$246,783,094 | \$80,945,118 | 0.70072\% | \$567,199 | \$247,350,293 |
| 31-Dec-29 | 1-Jul-30 | 155.8\% | \$254,186,587 | \$83,386,291 | 0.70072\% | \$584,304 | \$254,770,891 |
| 31-Dec-30 | 1-Jul-31 | 160.5\% | \$261,812,185 | \$85,900,699 | 0.70072\% | \$601,923 | \$262,414,108 |
| 31-Dec-31 | 1-Jul-32 | 165.3\% | \$269,666,550 | \$88,490,540 | 0.70072\% | \$620,071 | \$270,286,621 |
| 31-Dec-32 | 1-Jul-33 | 170.2\% | \$277,756,547 | \$91,158,076 | 0.70072\% | \$638,763 | \$278,395,309 |
| 31-Dec-33 | 1-Jul-34 | 175.4\% | \$286,089,243 | \$93,905,638 | 0.70072\% | \$658,016 | \$286,747,259 |
| 31-Dec-34 | 1-Jul-35 | 180.6\% | \$294,671,920 | \$96,735,626 | 0.70072\% | \$677,846 | \$295,349,766 |

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## University of Maryland BioPark <br> City of Baltimore, Maryland

## Appendix G-1: State Education Aid: Baltimore City Public School Education Grants ${ }^{1}$

## Maryland State Department of Education

| Major State Aid Programs: | Baltimore City Public <br> Schools (FY 2016) |
| :--- | ---: |
| Foundation Program ${ }^{2}$ | $\$ 400,310,957$ |
| Student Transportation | $\$ 19,504,310$ |
| Compensatory Education | $\$ 322,245,503$ |
| Limited English Proficient | $\$ 19,446,655$ |
| Special Education Model | $\$ 52,901,194$ |
| Guaranteed Tax Base | $\$ 31,420,381$ |
| Supplemental Grant | $\$ 18,310,933$ |
| Net Tax Income Adjustment | $\$ 453,884$ |
| Total Direct Mandated Grants | $\$ 864,593,817$ |
| MuniCap, Inc. | It Analysis No. 4-B - UMB.xlsx]G.1 |
|  | $19-O C t-15$ |

${ }^{1}$ Source: Maryland State Department of Education Memo dated June12, 2015. Provided by the State Department of Budget and Management. It has been confirmed that the Major State Aid Programs are illustrated under "State Sources" of the Proposed Operating Budget Fiscal Year 2016 for Baltimore City Public School. Numbers differ due to the fiscal years reviewed and information available.
${ }^{2}$ Represents the only state education grant allocated based on assessed value, amongst other factors.

## University of Maryland BioPark

City of Baltimore, Maryland
Appendix G-2(a): Inputs for Foundation Program Grant Calculation - Total Enrollment

Table 1: Total Enrollment

|  | Pupil Types |
| :--- | ---: |
| Total Enrollment | Students |
| SEED | 84,976 |
| Total Enrollment | 173 |
| Less Ineligible: | 85,149 |
| Prekinder |  |
| Kinder | 4,810 |
| Evening High | 0 |
| Part Time | 0 |
| Out-of-State | 0 |
| Other Ineligible | 0 |
| Total Ineligible | 836 |
| Total Eligible Enrollments |  |

Table 2: Target Per Pupil Foundation Amount

| Prior Fiscal Year Amount | $\$ 6,860$ |
| :--- | ---: |
| Increase in Implicit Price Deflator | 1.0137 |
| Target Per Pupil Foundation Amount | $\mathbf{\$ 6 , 9 5 4}$ |

Table 3: Total Program Enrollment Input

| Total Eligible Enrollments | 79,503 |
| :--- | ---: |
| Target Per Pupil Foundation Amount | $\$ 6,954$ |
| Total Program Enrollment ${ }^{2}$ | $\mathbf{\$ 5 5 2 , 8 6 2 , 4 3 1}$ |
| MuniCap, Inc. | $4-B$ - UMB.xIsx]G.2(a) |
|  | $19-$ Oct-15 |

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## University of Maryland BioPark

City of Baltimore, Maryland

Appendix G-2(b): Inputs for Foundation Program Grant Calculation - Local Share ${ }^{1}$

Table 1: Personal Property

| Personal Property Types | Total |
| :--- | ---: |
| Railroad Operating | $\$ 32,916,000$ |
| Utility Operating | $\$ 813,110,000$ |
| Business | $\$ 1,038,830,000$ |
| Total Personal Property | $\$ 1,884,856,000$ |
| Percent Included in Calculation | $50 \%$ |
| Total Personal Property Included | $\mathbf{\$ 9 4 2 , 4 2 8 , 0 0 0}$ |

Table 2: Income
Total Income $\$ 8,375,515,816$

Table 3: Real Property

| Real Property Types | Total |
| :--- | ---: |
| Full Year | $\$ 34,340,267,000$ |
| New Construction | $\$ 32,330,000$ |
| Railroad Operating | $\$ 208,537,000$ |
| Total Real Property | $\$ 34,581,134,000$ |
| Percent Included in Calculation | $40 \%$ |
| Sub-Total Real Property Included | $\$ 13,832,453,600$ |
| Utility Operating | $\$ 133,182,000$ |
| Total Real Property Included | $\mathbf{\$ 1 3 , 9 6 5 , 6 3 5 , 6 0 0}$ |

## Table 4: Total Wealth

|  | Categories |
| :--- | ---: |
| Personal Property | Total |
| Income | $\$ 942,428,000$ |
| Real Property | $\$ 8,375,515,816$ |
| Total Wealth | $\$ 13,965,635,600$ |

Table 5: Total Local Share

| Total Wealth | $\$ 23,283,579,416$ |
| :--- | ---: |
| Local Share Percentage | $0.70072 \%$ |
| Total Local Share Included | $\mathbf{\$ 1 6 3 , 1 5 2 , 6 9 8}$ |
| MuniCap, Inc. | t Analysis No. 4-B - UMB.xlsx]G.2(b) |
|  | 19-Oct-15 |

${ }^{1}$ Source: Maryland State Department of Education Memo dated June 12, 2015. Provided by the State Department of Budget and Management.

## University of Maryland BioPark

City of Baltimore, Maryland

Appendix G-2(c): Inputs for Foundation Program Grant Calculation - Minimum
State Share

| Total Program Enrollment (See Table 3 on Appendix G-2(a)) | $\$ 552,862,431$ |
| :--- | ---: |
| Minimum State Share Percentage ${ }^{1}$ | $15.000 \%$ |
| Total Minimum State Share | $\mathbf{\$ 8 2 , 9 2 9 , 3 6 5}$ |
| MuniCap, Inc. | pact Analysis No. 4-B - UMB.xIsx]G.2(c) |
|  | $19-O c t-15$ |
| ${ }^{1}$ Provided by the State Department of Budget and Management. |  |

# University of Maryland BioPark <br> City of Baltimore, Maryland 

## Appendix G-3: Total Foundation Program Grant Amount ${ }^{1}$

## Table 1: Total Program Share

Total Enrollment (See Table 3 on Appendix G-2(a))
\$552,862,431
Less: Total Local Share (See Table 5 on Appendix G-2(b))
(\$163,152,698)
Total Program Share \$389,709,733

Table 2: Total State Share ${ }^{2}$

| Total Program Share | $\$ 389,709,733$ |
| :--- | :---: |
| Minimum State Share (See Appendix G-2(c)) | $\$ 82,929,365$ |
| Total State Share | $\mathbf{\$ 3 8 9 , 7 0 9 , 7 3 3}$ |

Table 3: Total Foundation Program Grant Amount

| Total State Share | $\$ 389,709,733$ |
| :--- | ---: |
| GCEI $^{3}$ | $\$ 11,610,141$ |
| Total Foundation Program Grant Amount ${ }^{4}$ | $\mathbf{\$ 4 0 1 , 3 1 9 , 8 7 4}$ |
| MuniCap, Inc. | lact Analysis No. 4-B - UMB.xlsx]G.3 |
|  | 19-Oct-15 |

${ }^{1}$ Source: Maryland State Department of Education Memo dated June 12, 2015. Provided by the State Department of Budget and Management.
${ }^{2}$ Represents the maximum between the total program share and the minimum state share. Source: Maryland State Department of Education Memo dated June 12, 2015. Provided by the State Department of Budget and Management.
${ }^{3}$ The purpose of the GCEI is to provide additional funding to jurisdictions with a higher cost of education. The base value for the index is one. Jurisdictions with a high cost of education will have a value greater than one and jurisdictions with a lower cost of education will have a value less than one. The GCEI is calculated by multiplying the local index value times the foundation amount. The GCEI only provides additional funds to counties with an index greater than one; funding is not reduced for jurisdictions with an index less than one. GCEI funding is discretionary. Explanation provided by Maryland State Department of Budget and Management.
${ }^{4}$ Amount slightly different than figure published in the Maryland State Department of Education Memo, dated June 12, 2015, as provided by the State Department of Budget and Management due to rounding.

ADDENDUM D
Pro Forma Analysis

# University of Maryland BioPark City of Baltimore, Maryland 

Pro Forma Analysis of 873 W. Baltimore October 27, 2015

# University of Maryland BioPark 

## City of Baltimore, Maryland

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## University of Maryland BioPark City of Baltimore, Maryland

Summary Schedule 1: Project Development and Pro Forma Assumptions

| Development Summary: | Gross SF |
| :---: | :---: |
| Lab - Building 3 (873 W. Baltimore) |  |
| CIC Office/Lab | 103,064 |
| Other tenants | 146,368 |
| Total | 249,432 |


| Costs Summary: | Developer Costs ${ }^{1}$ | Qualified Costs ${ }^{2}$ |
| :---: | :---: | :---: |
| Land/site costs ${ }^{3}$ | \$6,061,101 | \$6,061,101 |
| Predevelopment costs ${ }^{3}$ | \$8,480,994 | \$4,425,403 |
| Hard costs: |  |  |
| Vertical contstruction ${ }^{4}$ | \$44,749,485 | \$44,749,485 |
| Insurance | \$125,000 | \$125,000 |
| BioPark streetscape improvements | \$309,998 | \$309,998 |
| Sub-total hard costs | \$45,184,483 | \$45,184,483 |
| Tenant improvements : |  |  |
| CIC Baltimore (Office/Lab) | \$23,112,000 | \$23,112,000 |
| Other tenants | \$18,230,000 | \$18,230,000 |
| Sub-total tenant improvements | \$41,342,000 | \$41,342,000 |
| Leasing commissions | \$3,597,000 | \$3,597,000 |
| Soft costs: |  |  |
| Design and engineering | \$1,156,643 | \$1,156,643 |
| Permits, licenses, and fees | \$587,878 | \$587,878 |
| Legal | \$138,437 | \$138,437 |
| Marketing | \$250,000 | \$250,000 |
| Building capitalized carry costs | \$1,239,484 | \$1,239,484 |
| Travel | \$20,000 | \$20,000 |
| Owner's contingency ( $2.5 \%$ ) | \$1,361,406 | \$1,361,406 |
| TIF closing costs | \$400,000 | \$0 |
| Up-Front community funding (Wexford Share) | \$500,000 | \$500,000 |
| Sub-total soft costs | \$5,653,848 | \$5,253,848 |
| Total development costs | \$110,319,426 | \$105,863,835 |


| Sources of Funds Summary - Known Sources: | Total |
| :--- | :---: |
| Developer equity <br> State funding: <br> DBED grant | $\$ 86,363,835$ |
| TIF Proceeds | $\$ 2,500,000$ |
| Total sources of funding | $\$ 17,000,000$ |
|  | $\$ 105,863,835$ |
| Sources of Funds Summary - Potential Sources: ${ }^{5}$ |  |
| State funding: | Total |
| DBED loan | $\$ 2 \%$ |
| Total sources of funding | $\$ 2,500,000$ |

[^16]
## University of Maryland BioPark <br> City of Baltimore, Maryland

Summary Schedule 2: Detailed Estimate of Land and Predevelopment

| Land Costs Details: | Developer Costs ${ }^{1}$ |
| :--- | ---: |
| Land/site costs: ${ }^{1}$ |  |
| Land purchase price (assemblage of approximate 1.0 acre) | $\$ 5,151,936$ |
| Interest on land loans | $\$ 909,165$ |
| Total land/site costs | $\$ 6,061,101$ |
| Deferred Land, Predevelopment Costs: |  |
| Construction (site work, base building structure, other) | $\$ 2,225,395$ |
| Soft costs: | $\$ 1,174,728$ |
| Architecture, civil, MEP engineering | $\$ 113,783$ |
| Professional fees | $\$ 226,221$ |
| Geotechnical | $\$ 1,909$ |
| Building permits | $\$ 242,772$ |
| Previous front costs - utilities | $\$ 900$ |
| Other | $\$ 211,563$ |
| Closing/legal | $\$ 2,574$ |
| Liability insurance | $\$ 225,558$ |
| Marketing | $\$ 1,433,128$ |
| Financing costs: | $\$ 2,622,463$ |
| Debt placement fee/financing costs | $\$ 8,480,994$ |
| Financing/interim carry costs |  |
| Total deferred land, predevelopment costs |  |

${ }^{1}$ According to the developer, the land and site costs represents actual costs spent to date. Actual land purchase price was approximately $85 \%$ of total land/site costs of $\$ 6.1$ million total. Includes the costs to assemble multiple parcels in 2007-2009.

## University of Maryland BioPark City of Baltimore, Maryland

## Summary Schedule 3: Cost and NOI Assumption Review



## Land Cost Review

| Estimated land costs: ${ }^{3}$ |  |
| :--- | ---: |
| Land acquisition | $\$ 6,061,101$ |
| Predevelopment costs | $\$ 8,480,994$ |
| Sub-total land costs | $\$ 14,542,095$ |
| Less: financing costs | $(\$ 4,055,591)$ |
| Total estimated land costs | $\$ 10,486,504$ |
| Development square feet | 249,432 |
| Land costs per FAR SF | $\$ 24.30$ |
| Land/predevelopment costs per FAR SF | $\$ 58.30$ |
| Land/predevelopment payment costs per FAR SF (Excludes Financing Costs) | $\$ 42.04$ |


| Rental Rate Review |  | Developer Assumptions ${ }^{4}$ |  |
| :---: | :---: | :---: | :---: |
|  | Square Footage | Rent/PSF | Total Rent |
| CIC | 103,064 | \$31.57 | \$3,253,803 |
| Other tenants | 146,368 | \$30.09 | \$4,403,675 |
| Total | 249,432 | \$30.70 | \$7,657,478 |
| (Excluding additional CIC rent of 4\%) | 249,432 | \$24.18 | \$6,030,576 |


| Net Operating Income Review |  | Developer Assumptions ${ }^{5}$ |
| :--- | ---: | ---: |
|  | $\mathbf{P e r ~ S F}$ | Total <br> Rent |
| Reimbursement revenue | $\$ 30.70$ | $\$ 7,657,478$ |
| Total revenue | $\$ 13.04$ | $\$ 3,253,807$ |
|  |  | $\$ 10,911,285$ |
| Vacancy (9\%) | $-\$ 3.94$ | $(\$ 982,016)$ |
| Adjusted revenue |  | $\$ 9,929,269$ |


| Operating expenses (expenses, utilities, parking, CAM, community fee): |  |  |
| :--- | ---: | ---: |
| Non-basement space | $-\$ 12.93$ | $(\$ 3,224,669)$ |
| Basement space | $-\$ 0.61$ | $(\$ 152,975)$ |
| Total expenditures |  | $(\$ 3,377,644)$ |

Vertical development NOI at stabilization $\frac{\text { Stabilized NOI }}{\$ 6,551,625}$

[^17]
## University of Maryland BioPark

City of Baltimore, Maryland
Summary Schedule 4: Project Feasibility - But For Analysis

| Estimated subsidy requirement: | Developer Estimate | Qualified Costs |
| :---: | :---: | :---: |
| Project costs ${ }^{1}$ | \$110,319,426 | \$105,863,835 |
| Less: available credit and ineligible costs: |  |  |
| Project capitalized interest | (\$1,239,484) | \$0 |
| Additional subsidy (DBED grant) | (\$2,500,000) | (\$2,500,000) |
| PV of rise/enterprise zone credits (8.0\%) | \$0 | (\$8,838,077) |
| Sub-total available credits and ineligible costs | (\$3,739,484) | (\$11,338,077) |
| Sub-total costs | \$106,579,942 | \$94,525,758 |
| Additions: GAAP capitalized interest | \$1,614,847 | \$0 |
| Total costs eligible to estimate gap | \$108,194,789 | \$94,525,758 |
| Operating Income and Market Yield Summary: |  |  |
| Vertical development NOI at stabilization ${ }^{2}$ | \$6,551,625 | \$6,551,625 |
| Projected market yield ${ }^{3}$ | 8.50\% | 8.50\% |
| Estimated project value based on market yield | \$77,077,945 | \$77,077,945 |
| Estimated subsidy requirement ${ }^{4}$ | (\$31,116,844) | (\$17,447,813) |
| Estimated yield on University of Maryland BioPark project: | Developer Assumptions | Qualified Costs |
| Project Costs | \$108,194,789 | \$94,525,758 |
| Vertical development NOI at stabilization | \$6,551,625 | \$6,551,625 |
| Estimated yield on project | 6.06\% | 6.93\% |
| Market yield ${ }^{3}$ | 8.50\% | 8.50\% |

## ${ }^{\prime}$ 'See Summary Schedule 1.

${ }^{2}$ See Summary Schedule 3.
${ }^{3}$ Represents market capitalization rate plus margin for profit. Capitalization rate is based on discussions with the Maryland State Department of Assessments and Taxation and the national average medical office residual capitalization rate for second quarter 2015 as reported in theSecond Quarter 2015 PwC Real Estate Investor Survey.
${ }^{4}$ Represents the estimated shortfall based on market conditions and qualified project costs.


[^0]:    ${ }^{1}$ See Appendix D.

[^1]:    ${ }^{1}$ Assumes an annual inflation rate of $3 \%$.
    ${ }^{2}$ According to Wexford Science + Technology, the property will not be sold. As a result, transfer taxes are not assumed to be incurred.

[^2]:    ${ }^{1}$ Assumes an annual inflation rate of $3 \%$.
    ${ }^{2}$ See Appendix B.
    ${ }^{3}$ See Schedule XI-A.
    ${ }^{4}$ See Appendix C.

[^3]:    MuniCap, Inc. S:ICONSULTING\Baltimore|UMB|Fiscal Impact Analysis|[Fiscal Impact Analysis No. 4-A - UMB.xlsx]XIII

[^4]:    ${ }^{1}$ Source: U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits. Last Revised: Thursday, 5-Aug-2015.
    ${ }^{2}$ Source: U.S. Census Bureau, OnTheMap Application - 2013 Data.
    ${ }^{3}$ Represents the Baltimore City current employed population multiplied by the percent of Baltimore City residents assumed to work outside of Baltimore City.
    ${ }^{4}$ Service rate for employee is assumed to be same as resident population rate.
    ${ }^{5}$ Represents the employee population equivalent plus the City of Baltimore population.
    ${ }^{6}$ Employee impacts estimated using IMPLAN software. See Appendices D.
    ${ }^{7}$ Represents employee population equivalent generated by proposed development within University of Maryland BioPark. Calculated by multiplying projected new non-resident employees (988) by service population rate for employees (1.00).
    ${ }^{8}$ Source: City of Baltimore Fiscal 2016 Executive Summary.
    ${ }^{9}$ Based on tax increment financing projection, as prepared by MuniCap, Inc. Includes the Enterprise Zone and RISE Tax Credits and assumes 94\% collection rate based on City of Baltimore tax increment financing policy. Revenues shown are at full build-out, including inflation. See Schedule III.
    ${ }^{10}$ See Schedule X. Revenues shown are at full build-out, including inflation.

[^5]:    MuniCap, Inc.
    npact Analysis No. 4-A - UMB.xIsx]D-2 Lab
    19-Oct-15
    ${ }^{1}$ Based on projected development at full buildout. See Schedule I.
    ${ }^{2}$ Based on average square feet per office worker as reported for the Baltimore, MD market in the BOMA Experience Exchange Report for 2014.
    ${ }^{3}$ Lab wages, jobs and output were calculated using IMPLAN software by IMPLAN Group, LLC. Multipliers function in the same manner as Proton Treatment Center impacts.
    ${ }^{4}$ Total jobs include all full-year employees, including part-time and full-time employees. This factor, provided by IMPLAN Group, LLC, converts total jobs into total full-time equivalent employees ("FTE's").
    ${ }^{5}$ Total labor income includes wages and salary, benefits, payroll taxes, and proprietor's income. This factor, provided by IMPLAN Group, LLC, converts total labor income into direct wages and salary.

[^6]:    ${ }^{1}$ This schedule calculates the impact of the total wealth estimated for University of Maryland BioPark on the current calculation of total wealth for the city. The formula for the Foundation Program State Education Grant is illustrated in Appendix G.
    ${ }^{2}$ Represents the current local share, or contribution. See Table 5 on Appendix G-2(b). Assumes $3 \%$ annual inflationary increase.
    ${ }^{3}$ See Appendix F-2(a).
    ${ }^{4}$ Represents a constant provided by the Maryland State Department of Education representing the local contribution rate. See Table 5 on Appendix G-2(b).
    ${ }^{5}$ Represents the city wealth for the state aid formula as increased for the impact of University of Maryland BioPark.

[^7]:    ${ }^{1}$ Source: Maryland State Department of Education Memo dated June 12, 2015. Provided by the State Department of Budget and Management.
    ${ }^{2}$ Amount slightly different than figure published in theMaryland State Department of Education Memo, dated June 12, 2015, as provided by the State Department of Budget and Management due to rounding.

[^8]:    Summary of Fiscal Impacts

[^9]:    Represents the average annual tax increment revenues generated by the University of Maryland BioPark development over the 20 year period shown in the projections. Supplemental special taxes, special taxes paid by the developer and Enterprise Zone Tax Credit reimbursement revenues are shown as an average for the years in which the revenues are projected to be received.
    ${ }^{2}$ Projected revenues for twenty years are shown cumulatively, assuming inflation of three percent annually.
    ${ }^{3}$ Assumes $\$ 250,000$ is paid as a supplemental special tax during the ten years in which the Enterprise Zone and Rise Tax Credits are applied to 873 W . Baltimore Street. Assumes $25 \%$ of the $\$ 250,000$ supplemental special tax is paid in year one, $60 \%$ of the $\$ 250,000$ supplemental special tax is paid in year two, and the full amount is paid for years eight through ten.
    Represents the average annual debt service over 20 years
    ${ }^{5}$ Represents the projected special taxes to be paid after the available tax increment revenues from the proton treatment center are applied and result in one-hundred percent debt service coverage for the full University of Maryland BioPark Development District.
    ${ }^{6}$ Since recordation taxes are a one-time revenue, excludes from the annual average.
    ${ }^{7}$ According to Wexford Science + Technology, the property will not be sold. As a result, transfer taxes are not assumed to be incurred.
    ${ }^{8}$ As further detailed in Appendices F and G, factors such as student enrollment and wealth are used to determine the amount of State aid related to schools that each jurisdiction will receive. In the event the projected wealth exceeds the projected student enrollment, there is a reduction in the amount of the State aid received by each jurisdiction.
    ${ }^{9}$ Represents the estimated increase in jobs, output, and income from development at the University of Maryland BioPark.
    ${ }^{10}$ Temporary jobs reflect the projected development at full build-out. Temporary jobs are full-time equivalents and assume a one-year duration.

[^10]:    ${ }^{1}$ Assumes an annual inflation rate of $3 \%$.
    ${ }^{2}$ According to Wexford Science + Technology, the property will not be sold. As a result, transfer taxes are not assumed to be incurred

[^11]:    Assumes an annual inflation rate of $3 \%$.
    ${ }^{2}$ See Appendix B.
    ${ }^{3}$ See Schedule XI-A.
    ${ }^{4}$ See Appendix C.

[^12]:    ${ }^{1}$ Assumes an annual inflation rate of 3\%.
    ${ }^{2}$ See Schedule X.
    ${ }^{3}$ See Schedule XI-B
    ${ }^{3}$ See Schedule XII.

[^13]:    ${ }^{1}$ Source: U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits. Last Revised: Thursday, 5-Aug-2015.
    ${ }^{2}$ Source: U.S. Census Bureau, OnTheMap Application - 2013 Data.
    ${ }^{3}$ Represents the Baltimore City current employed population multiplied by the percent of Baltimore City residents assumed to work outside of Baltimore City.
    ${ }^{4}$ Service rate for employee is assumed to be same as resident population rate.
    ${ }^{5}$ Represents the employee population equivalent plus the City of Baltimore population.
    ${ }^{6}$ Employee impacts estimated using IMPLAN software. See Appendix D.
    ${ }^{7}$ Represents employee population equivalent generated by proposed development within University of Maryland BioPark. Calculated by multiplying projected new non-resident employees (686) by service population rate for employees (1.00).
    ${ }^{8}$ Source: City of Baltimore Fiscal 2016 Executive Summary.
    ${ }^{9}$ Based on tax increment financing projection, as prepared by MuniCap, Inc. Includes the Enterprise Zone and RISE Tax Credits and assumes 94\% collection rate based on City of Baltimore tax increment financing policy. Revenues shown are at full build-out, including inflation. See Schedule III.
    ${ }^{10}$ See Schedule X. Revenues shown are at full build-out, including inflation.

[^14]:    ${ }^{1}$ This schedule calculates the impact of the total wealth estimated for University of Maryland BioPark on the current calculation of total wealth for the city. The formula for the Foundation Program State Education Grant is illustrated in Appendix G.
    ${ }^{2}$ Represents the current local share, or contribution. See Table 5 on Appendix G-2(b). Assumes $3 \%$ annual inflationary increase.
    ${ }^{3}$ See Appendix F-2(a).
    ${ }^{4}$ Represents a constant provided by the Maryland State Department of Education representing the local contribution rate. See Table 5 on Appendix G-2(b).
    ${ }^{5}$ Represents the city wealth for the state aid formula as increased for the impact of University of Maryland BioPark.

[^15]:    ${ }^{1}$ Source: Maryland State Department of Education Memo dated June 12, 2015. Provided by the State Department of Budget and Management.
    ${ }^{2}$ Amount slightly different than figure published in theMaryland State Department of Education Memo, dated June 12, 2015, as provided by the State Department of Budget and Management due to rounding.

[^16]:    Provided by Wexford Science + Technology.
    ${ }^{2}$ MuniCap has independently reviewed the developer's costs and sources of funding assumptions and found them to be reasonable. In reviewing developer supplied assumptions, MuniCap compared developer assumptions to market data including 2015 BOMA Experience Exchange Report , Maryland State Department of Assessments and Taxation, Marshall \& Swift software by CoreLogic, Inc., and comparable projects. In some cases, MuniCap requested additional information from Wexford Science + Technology.
    ${ }^{3}$ Provided by Wexford Science + Technology. See Summary Schedule 2 for a detailed break-down of costs. Excludes the financing costs represented on Summary Schedule 2.
    ${ }^{4}$ Estimate based on Whiting Turner numbers from 12/2/2014.
    ${ }^{5}$ Wexford has previously pursued the availability of a state loan that is provided in addition to the $\$ 2.5$ million DBED grant. The developer has not yet determined if the loan will be utilized as a result of the cost/benefit analysis related to the loan accretion and other available developer equity.

[^17]:    ${ }^{1}$ Construction costs shown represent hard costs estimates as provided by Whiting Turner. Costs include general conditions, permits, fees, services, contingencies for construction and design ( $3 \& 8 \%$ ), GL insurance, and $4 \%$ fee.
    ${ }^{2}$ Tenant improvement costs provided Wexford Science + Technology. According to Wexford Science + Technology, TI Costs per square foot includes hard costs for tenant improvements, FF\&E, IT equipment, and operating costs.
    ${ }^{3}$ See Summary Schedule 2 for a detailed break down of land costs.
    ${ }^{4}$ Provided by Wexford Science + Technology.
    ${ }^{5}$ MuniCap has independently reviewed the developer's costs and sources of funding assumptions and found them to be reasonable. In reviewing develope supplied assumptions, MuniCap compared developer assumptions to market data including2015 BOMA Experience Exchange Report, Maryland State Department of Assessments and Taxation, Marshall \& Swift software by CoreLogic, Inc., and comparable projects. In some cases, MuniCap requested additional information from Wexford Science + Technology.

