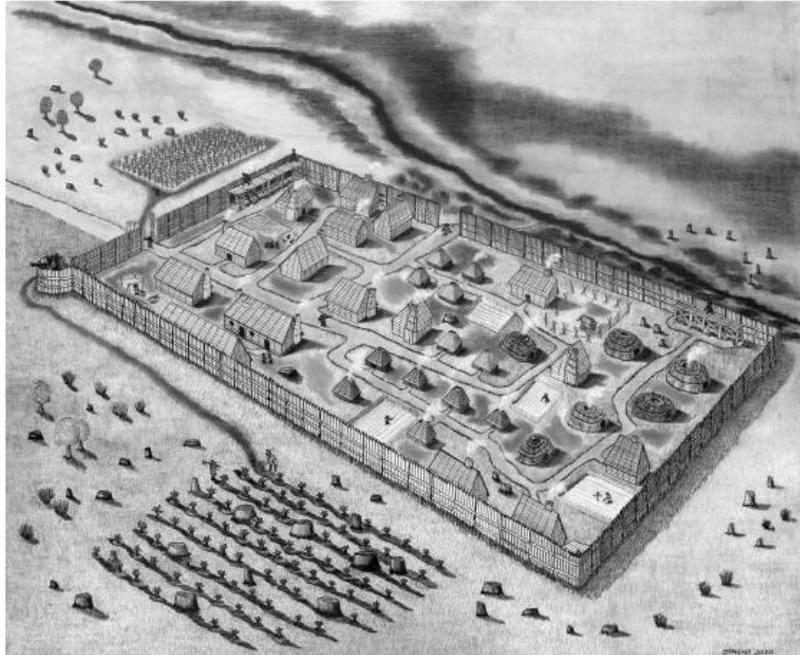


PHASE 2 – ECONOMIC IMPACT ANALYSIS OF THE ST. MARY’S FORT IN A STABILIZED YEAR OF OPERATIONS



— Conjectural drawing of St. Mary's Fort based on the geophysical survey.
Jeffrey R. Panno

Presented to:



Prepared by:



FINAL REPORT – JANUARY 2023

January 2023

Mr. Al Tyler, Vice President
Maryland Stadium Authority – Capital Projects Development Group
The Warehouse at Camden Yards – South Warehouse
351 West Camden Street – Suite 300
Baltimore, Maryland 21201

Dear Mr. Tyler:

Crossroads Consulting Services LLC has completed its economic impact analysis for the Maryland Stadium Authority and Historic St. Mary's City associated with ongoing operations of the St. Mary's Fort and other adjacent planned developments in a stabilized year. The report presented herein includes the summary of our analysis.

The information contained in the report reflects analysis of secondary sources of information including, but not limited to, data obtained from management at the Maryland Stadium Authority and Historic St. Mary's City. We have utilized sources that are deemed to be reliable but cannot guarantee their accuracy. All information provided to us by others was not audited or verified and was assumed to be correct. We have no obligation, unless subsequently engaged, to update our report or revise the information contained therein to reflect events and transactions occurring after the date of this report.

In accordance with the terms of our engagement letter, the accompanying report is restricted to internal use by the Maryland Stadium Authority and may not be relied upon by any third party for any purpose including financing. Notwithstanding these limitations, it is understood that this document may be subject to public information laws and, as such, can be made available to the public upon request.

Although you have authorized reports to be sent electronically for your convenience, only the final hard copy report should be viewed as our work product.

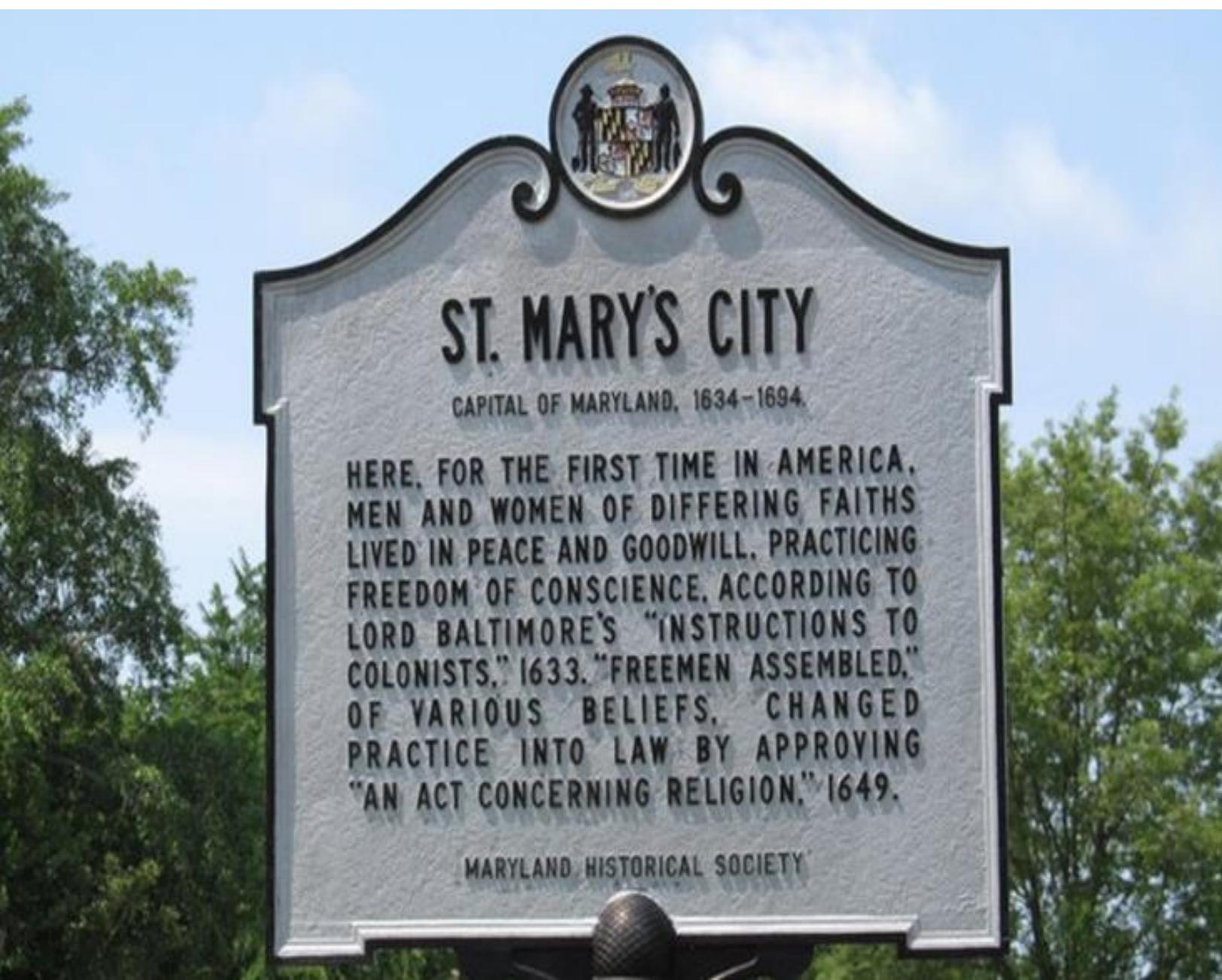
We have enjoyed our ongoing relationship with the Maryland Stadium Authority and look forward to providing you with continued service in the future.

Sincerely,

Crossroads Consulting Services LLC

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INTRODUCTION

In November 1633, Cecilius Calvert sent his brothers George & Leonard Calvert, along with 140 passengers aboard the Ark and the Dove with a planned destination for Maryland. The two ships eventually settled on a bluff overlooking what is now known as the St. Mary's River where the English settlers were befriended and interacted with the Yaocomico branch of the Piscataway Indian Nation. In exchange for bolts of fabric, axes, and other farm tools the English newcomers purchased thirty miles of land along the river. The site was officially named St. Mary's City on March 27, 1634. As noted in the HSMC Master Plan dated April 2021, "Historic St. Mary's City is Maryland's founding site, its first city and first capital, where Natives, Europeans, and Africans came face to face in the 1600's." Today Historic St. Mary's City (HSMC) is one of the best-preserved colonial landscapes in the country and the only place where active archaeology and living history interpretation occur on the authentic, historic site.



HSMC is an independent agency under the Governor's Office. It is owned by the State of Maryland (State) and governed by the HSMC Commission (HSMCC) that was established in 1966. The mission of the HSMCC is "to preserve and protect the archaeological and historical record of Maryland's first colonial capital and to appropriately develop and use this historic and scenic site for the education, enjoyment, and general benefit of the public." HSMC is responsible for the preservation of more than 800 acres of land and three miles of shoreline. HSMC has been recognized as a National Historic Landmark since 1969. A summary of some important archaeological discoveries that HSMC has made include the following.

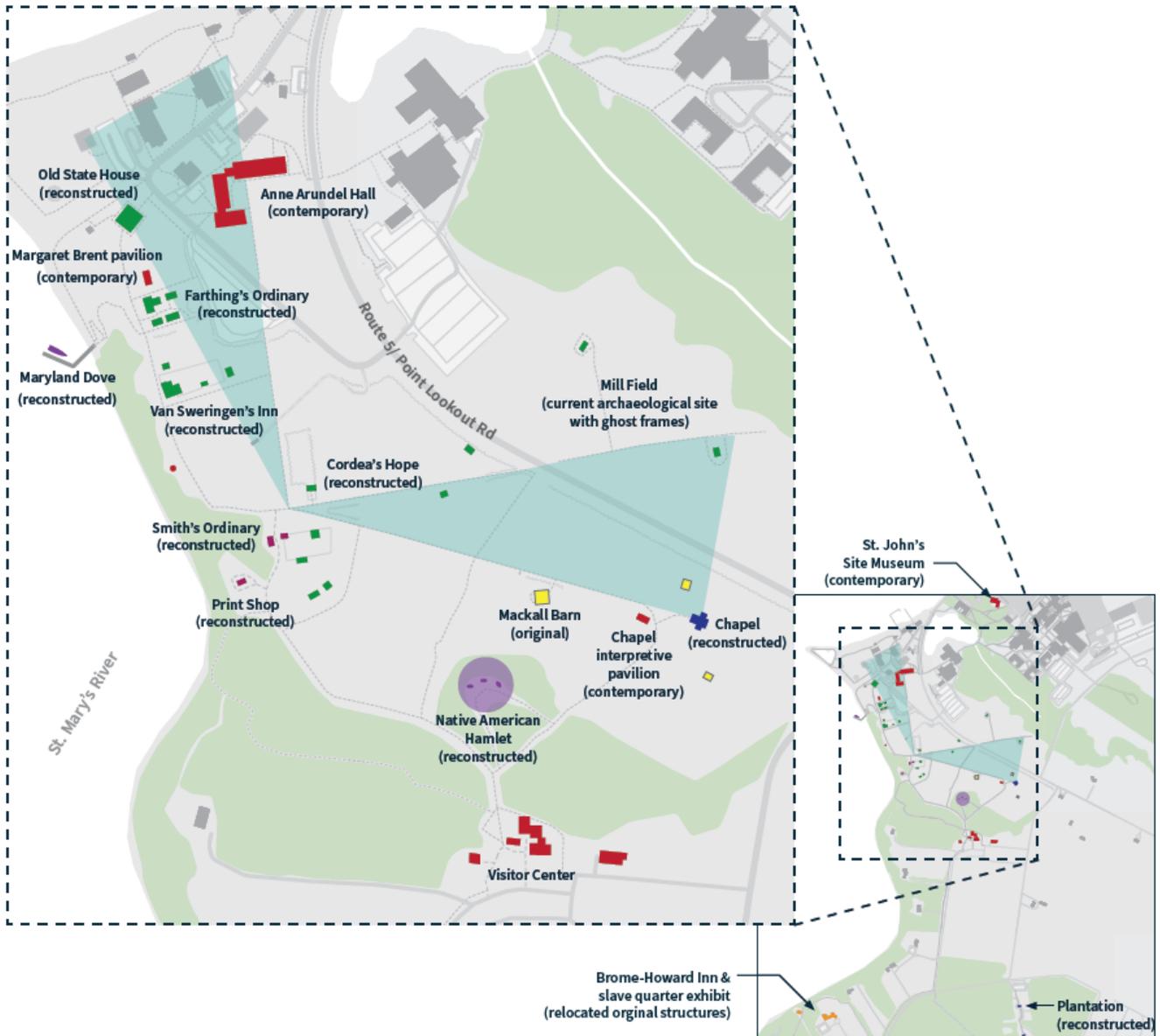
- St. John's Site
- The Brick Chapel
- The Lead Coffins Project
- Nuthead's Print House
- Town Center
- Duplex Quarter
- St. Mary's Fort

Consistent with the mission of HSMCC, HSMC offers general admission as well as guided and scholastic tours of the various historic attractions. In addition, HSMC attracts visitors through several annual events and various recreational opportunities such as trails, camping, boating, etc. In 2019, prior to COVID-19, HSMC attracted over 50,000 visitors. After declining as a result of COVID-19, visitation rebounded in 2022 when were a total of approximately 54,000 visitors.

As outlined in the HSMC Master Plan, it is a goal for HSMC to become a major tourist draw for Southern Maryland and a nationally and internationally recognized historic site of significance.

The following maps depict the location of current historical attractions in HSMC as well as the various recreation sites.

Map of Historical Attractions in HSMC



Source: HSMC Master Plan.

Map of Recreation Sites in HSMC



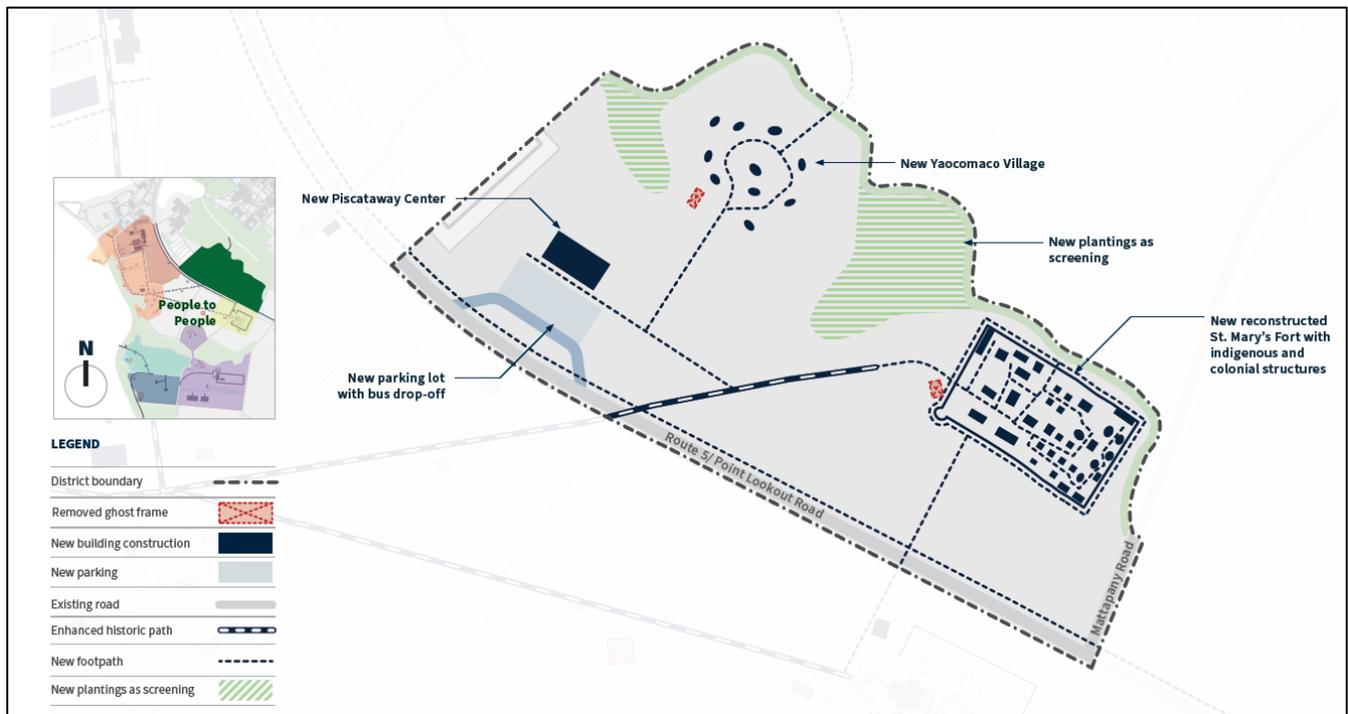
Source: HSMC Master Plan.

In December 2018, St. Mary's Fort (Fort) was found after being undiscovered for nearly 400 years. The Fort was home to the first English settlers who inserted themselves into a complex arrangement of peoples who had lived on the land for thousands of years including the Piscataway, Patuxent, Nanjemoy, Yaocomaco and others. At the time of this study, it is estimated that approximately 2% of the Fort has been excavated. The Fort is currently open to the public through the "Changing Landscapes" tour.

St. Mary's Fort Site



Proximate to the Fort, the HSMC Master Plan and the People to People Strategic Plan outlines the development of the new Piscataway Center and the Yaocomaco Village. The location of the Fort in relation to the Piscataway Center and Yaocomaco Village is shown below.



Source: HSMC Master Plan.

HSMC is positioned to serve as the anchor institution in the State's effort to celebrate the 400th anniversary of Maryland's founding in 2034. In the years leading up to 2034, HSMC plans to coordinate with other State agencies and institutions to foster a marketplace of history across the State. In doing so, and as outlined in HSMC's strategic plan, HSMC aims to become a nationally recognized center for the study and interpretation of 17th century archaeology and public history. The discovery of the Fort

offers a unique opportunity to reveal new information about Maryland's roots, enhance the visitor experience and increase visitation to HSMC and the State.

Given this background, the Maryland Stadium Authority (MSA) retained Crossroads Consulting Services LLC (Crossroads), in association with Entteken Associates, Inc. (EAI), to provide business and economic advisory services related to St. Mary's Fort in HSMC. Building off of the Phase 1 – Market Assessment, the purpose of this Phase 2 – Economic Impact Analysis, is to estimate the economic contribution to the State of Maryland (State) and the fiscal benefits to St. Mary's County (County) and the State in connection with a stabilized year of operations for the Fort Site, assuming the development opportunities identified in Phase 1 are developed. For purposes of this analysis, the Fort Site is defined as the Fort, Piscataway Center and Yaocomaco Village. This report can serve as a tool to assist HSMC in its future planning efforts.

Work Plan

Research tasks completed as part of this study effort included, but were not limited to, the following.

- Held discussions with client representatives to develop an understanding of the background, history and key issues related to the study; confirmed the study scope and objectives; and reviewed existing data related to the project.
- Analyzed data on comparable attractions.
- Estimated total State-level economic impacts generated from the operations of the Fort Site. Specific subtasks included:
 - Estimating direct spending that could be generated from activities related to the Fort Site including operations, attendee spending on items such as lodging, food & beverage, transportation, entertainment, etc. based on data provided by HSMC and other industry research. Different per capita spending amounts were utilized for overnight visitors and segments of day trippers.
 - Allocating the estimated direct spending amounts into industry categories which served as the basis for the multiplier analysis.
 - Applying the multipliers using a regional economic forecasting model provided by the IMPLAN Group, LLC to calculate potential total output (i.e., direct, indirect and induced effects), employment (jobs) and labor income. One of the primary advantages of the IMPLAN model is that it is both location and industry specific. Consequently, our analysis delineates the individual industries that are affected by the direct spending generated by the project.
- Estimated the potential tax revenues at the County and State levels associated with operations of the Fort Site in a stabilized year.

EXECUTIVE SUMMARY

The primary purpose of this study is to estimate the total economic contribution associated with Fort Site operations in a stabilized year that could be generated to the State as well as potential tax revenues at the County and State levels. Total economic impacts are estimated in terms of output, jobs and labor income which create fiscal impacts and are reflected as changes in tax revenues.

The Fort Site is defined as the Fort, Piscataway Center and Yaocomaco Village. The estimated economic and fiscal impacts associated with Fort Site operations reflect both Fort Site operating expenditures and attendee spending outside of the Fort Site on retail, food and beverage, lodging, transportation, etc. A key assumption in the analysis is that the development opportunities identified in Phase 1 including food and beverage establishments, retail establishments, a full-service or boutique style hotel, a conference center, etc. are developed and residential assets owned by HSMC are rented on a short-term basis.

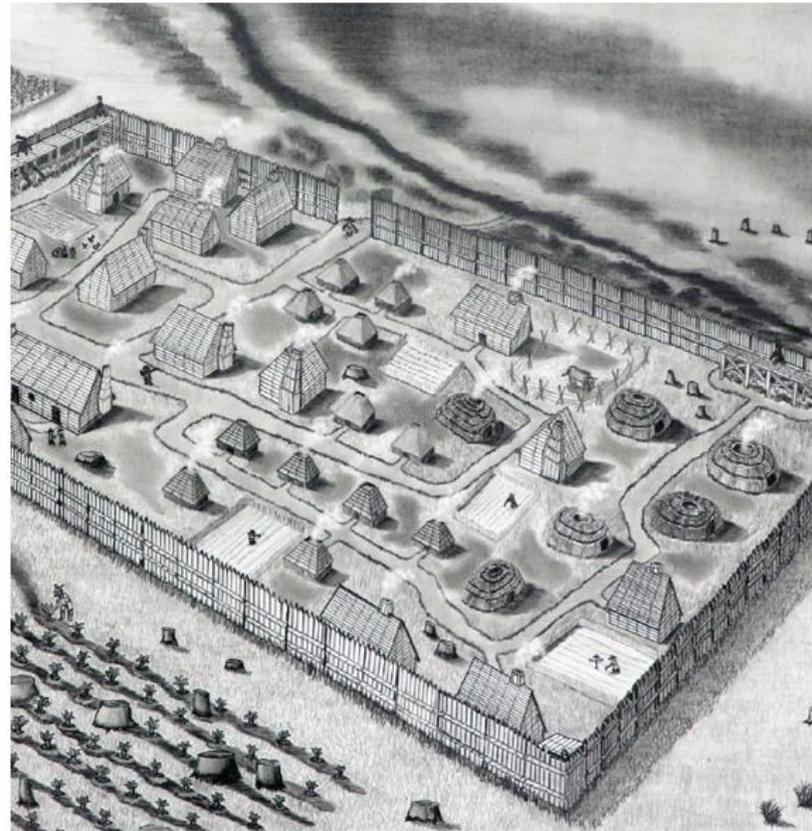
As shown below, Fort Site operations are estimated to generate approximately \$40.5 million in total output which could support 350 total jobs and \$19.4 million in total labor income on an annual basis at the State level in a stabilized year.

Estimated Annual Economic Contribution Generated From Ongoing Fort Site Operations



Annual tax revenues that could potentially be generated from ongoing Fort Site operations are estimated to be \$228,000 at the County-level and \$2.3 million at the State level in a stabilized year.

Estimated Annual Tax Revenues Generated From Ongoing Fort Site Operations



ECONOMIC IMPACT ANALYSIS

This analysis estimates the total economic contribution that could be generated from Fort Site operations. Attractions such as museums, science centers or zoos typically offer changing and/or traveling exhibits on a regular basis in order to attract new visitors and peak interest in existing patrons such as those that have annual memberships. The Fort Site represents a unique attraction in that it is constantly evolving based on the ongoing excavation. As such, it inherently reflects a changing educational and historical exhibit which should favorably impact its ongoing visitation. Further, there will likely be increased visitation related to special events such as Maryland's 400th birthday in 2034. The estimates in this analysis reflect a stabilized year of operations in 2022 dollars.

Methodology Overview

Regional input-output models are typically used by economists as a tool to understand the flow of goods and services among regions and measure the complex interactions among them given an initial spending estimate.

Direct Spending

Estimating direct spending is the first step in calculating economic impact. Direct spending represents the initial change in spending that could occur as a direct result of Fort Site operations including operating expenses as well as spending outside of the site by both local and out-of-town visitors. While it is reasonable to assume that a portion of spending from visitors originating in the region would be displaced or would have occurred somewhere in the regional economy if the Fort had not existed, visitors may not have made purchases without the presence of the Fort and other supporting amenities such as new food and beverage options, etc. As such, this analysis does not exclude local spending and therefore estimates total economic contribution.

No intercept surveys with potential visitors were conducted as part of this study. Spending estimates are based on secondary industry research from sources that are deemed to be reliable, but accuracy cannot be guaranteed.

Multiplier Effect

Additional economic impacts could be produced through the re-spending of direct spending. To quantify the inputs needed to produce the total output, economists have developed multiplier models. The estimation of multipliers relies on input-output models, a technique for quantifying interactions between firms, industries and social institutions within a local economy. This analysis uses IMPLAN software and databases which are developed under exclusive rights by the IMPLAN Group, LLC. IMPLAN, which stands for Impact Analysis for Planning, is a computer software package that consists of procedures for estimating local input-output models and associated databases. The IMPLAN software package allows the estimation of the multiplier effects of changes in final demand for one industry on all other industries within a defined economic area. Its proprietary methodology includes a matrix of production and distribution data among all counties and states in the U.S.

Advantages of this model are that it is sensitive to both location and type of spending and can provide indirect and induced spending, employment and labor income information by specific industry category while taking into account the leakages associated with the purchase of certain goods and services outside the economy under consideration.

Once the direct spending amounts are assigned to an appropriate industry category, the IMPLAN model estimates the economic multiplier effects for each type of direct new spending attracted to or retained in the study area.

Indirect and Induced Impacts

Indirect impacts reflect the re-spending of the initial or direct expenditures, or the business-to-business transactions required to satisfy the direct effect (e.g., impacts from non-wage expenditures). For example, a visitor's direct expenditures at a restaurant require the restaurant owner to purchase food and items from suppliers. The portion of these restaurant purchases that are spent within the area economy are indirect impacts.

Induced impacts reflect changes in local spending by households on goods and services that result from income changes in the directly and indirectly affected industry sectors (e.g., impacts from wage expenditures). For instance, a server at a restaurant could have more personal income due to a visitor dining at the restaurant. The amount of increased income that the employee spends in the community is an induced impact.

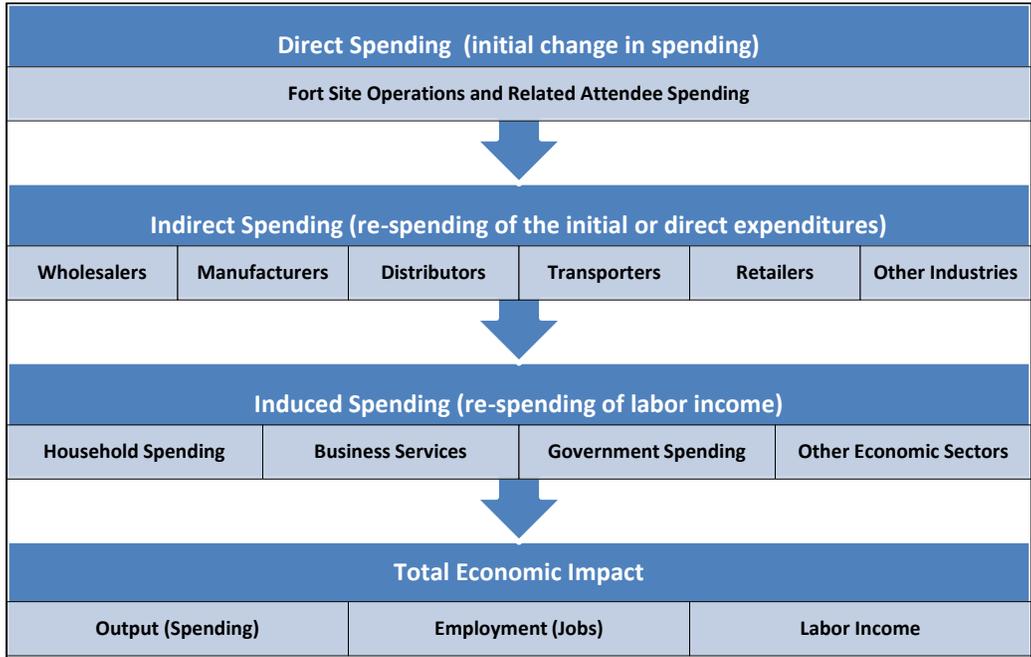
The model generates estimates of these impacts through a series of relationships using average wages, prices and transportation data, considering commute patterns and the relative interdependence of the economy on outside regions for goods and services.

Total Economic Impact

The calculated multiplier effect is then added to the direct impact to quantify the total economic impact in terms of output, employment and labor income which are defined below:

- *Total Output* is a measure of the total estimated value of production of goods and services supported by Fort Site operations. Total output is the sum of all intermediate sales (business to business) and final demand (sales to consumers and exports). This calculation measures the total dollar change in spending (output) that occurs in the economy for each dollar of output delivered to final demand.
- *Employment (Jobs)* represents the number of full-time and part-time jobs potentially supported by Fort Site operations. The employment multiplier measures the total change in the number of jobs supported in the economy for each additional \$1.0 million of output delivered to final demand.
- *Labor Income* represent the potential wages and salaries earned by employees of businesses associated with or impacted by Fort Site operations. In other words, the multiplier measures the total dollar change in earnings of households employed by the affected industries for each additional dollar of output delivered to final demand.

The following graphic illustrates the multiplier effects for calculating total economic impact.



Tax Revenues

The estimated spending potentially generated by Fort Site operations would also produce tax revenues for the County and State. Experience in other markets suggests that while a significant portion of the direct spending likely occurs near the site, additional spending occurs in other areas within the State, particularly spending on items such as business services and everyday living expense of residents. Major tax sources impacted by operations were identified and taxable amounts to apply to each respective tax rate were estimated.

In general terms, all State tax proceeds are collected in the State’s General Fund and then allocated to variety of program areas, such as education, transportation, public safety and others. As such, individual revenue sources, such as the sales and use tax, are not designated to fund specific programs. As a result of this process, municipalities and counties may benefit from a variety of State and locally administered programs. For the purposes of this analysis, only collections have been quantified, without regard as to how these funds are ultimately spent through the individual State departments/funds.

The following provides a description of the taxes estimated in this analysis.

Local Taxes

Admissions and Amusement Tax – The admissions and amusement tax is a local tax collected by the Comptroller’s Office for Maryland’s counties and Baltimore City, incorporated cities and towns and the MSA. The tax is imposed on the gross receipts from admissions, the use or rental of recreational or sports equipment and the sale of merchandise, refreshments or services at a nightclub or similar place where entertainment is provided. The admissions and amusement tax rate varies by locality

and by activity. Currently, the admissions and amusement tax rate is 2.0% in St. Mary's County, and 10% in Leonardtown except for movies which are subject to a 1% tax rate. For purposes of this analysis, the County tax rate of 2% was applied to the estimated direct spending on entertainment.

Local Personal Income Tax – St. Mary's County imposes a personal income tax of 3.0% which is calculated as a percentage of taxable income. For the purposes of this analysis and based on information obtained online from the Comptroller of Maryland office, an effective tax rate was calculated.

Public Accommodations Tax – St. Mary's County imposes a tax on accommodations at a rate of 5.0% which was applied to the estimated direct hotel spending at the local level.

State of Maryland Taxes

Corporate Income Tax – A corporate income tax of 8.25% of corporate federal taxable income adjusted by State modifications is levied by the State on corporations. For the purposes of this analysis and based on information obtained online from the Comptroller of Maryland's office, an effective tax rate was calculated and applied to State-level output.

Personal Income Tax – The State imposes a personal income tax assessed against personal income earned in the State. The State income tax is a graduated rate ranging from 2.0% to 5.75% of taxable income. Nonresidents are subject to a special nonresident tax rate of 2.25% in addition to the State income tax rate. For the purposes of this analysis and based on information obtained online from the Comptroller of Maryland's office, an effective tax rate was calculated and applied to a portion of total labor income at the State level.

Sales and Use Tax – The State of Maryland collects 6% sales and use tax from sales and leases of tangible personal property and services throughout the State and a 9% tax on alcoholic beverages. For purposes of this analysis, the 6% tax rate is applied to estimated taxable spending at the State level which represents a conservative estimate relative to the sale of alcoholic beverages.

Summary of Key Assumptions

As previously mentioned, direct spending represents the initial change in spending that could occur as a direct result of Fort Site operations including operating expenses as well as spending outside of the site by both local and out-of-town visitors. Several assumptions were used to estimate direct spending, which are summarized in this section.

Potential Visitation to the Fort Site and Visitor Spending Characteristics

The potential number of visitors to the Fort Site is an important component in the methodology used to calculate total economic contribution. Additionally, the origin of the potential visitors and segmentation of day trippers vs. overnight guests is necessary given the differences in visitor spending levels amongst these groups.

A key assumption in our analysis is that the ancillary amenities as presented in Phase 1 (i.e., food & beverage, retail, lodging, and conference facilities) are developed in order to support the potential visitation levels to the Fort Site. Furthermore, it is assumed that the Fort and other adjacent developments as outlined in the People to People Plan will be open six days a week and feature regularly changing exhibits, programs, and other events as a way to generate sustainable visitation levels over the long-term. Lastly, our analysis assumes sound management practices, including aggressive marketing efforts.

A review of regional demographics, historical HSMC visitation as well as the characteristics and visitation attributes of several other comparable attractions and heritage sites, both regionally and nationally, informed our analysis and estimates. Based on industry experience, research and the aforementioned assumptions, total visitor days is estimated to be approximately 211,000. Visitation from the immediate area would likely be primarily driven by the Patuxent River Naval Air Station and St. Mary's College. Patuxent River Naval Air Station is the largest employer in the County, employing approximately 25,000 military, civilian and contract personnel. These employees and their visitors will be a primary source of support for the Fort Site and other ancillary developments. Students, faculty and visitors of St. Mary's College account for a significant portion of the area's population and visitor base and will also provide a source of support in terms of Fort Site attendance from within the immediate area. Ancillary developments related to food & beverage, retail, lodging, conference facilities, etc. are anticipated to better support the college's students, faculty and visitors.

In the broader region, the large population within the Baltimore–Washington metropolitan area provides a significant opportunity for HSMC and the Fort to draw attendance. Colonial buffs could come from a broader distance, many of which may visit HSMC on a trip that also includes various other historical attractions in the region. In addition, it is assumed that HSMC will aggressively market its educational programs to schools to increase the number of scholastic visitors.

Potential visitors were categorized as students, day-trippers or overnighters, which generate hotel room nights. Each group was assigned different per capita spending amounts. These spending amounts were allocated among various categories including lodging, food & beverage, entertainment, transportation and retail.

Operating Expenses

Spending that occurs as a direct result of the Fort Site includes operating expenses such as salaries & benefits, technical and special fees, utilities, supplies and materials, contractual services and other expenses. Based on historical HSMC financial operations, the anticipated size and scope of operations and the performance of comparable attractions, operating expenses were estimated to be approximately \$10.2 million in a stabilized year of operations. HSMC estimates 162 total staff members will be needed to support increase visitation and as such a significant portion of total operating expenses is attributable to salaries and wages.

Other General Assumptions

As identified in the Phase 1 – Market Assessment, this analysis assumes adequate infrastructure and wayfinding to support the Fort Site and increased visitation. Further, it is assumed that the County and State will work together to resolve any zoning issues that may hinder potential future development in HSMC.

Estimate of Total Economic Contribution and Tax Revenues

This section summarizes the estimated total economic contribution to the State and tax revenues generated at the County and State levels that could be generated as a result of Fort Site operations in a stabilized year.

The local area and State could benefit from the Fort's operations in several ways, including such tangible and intangible benefits as:

- Enhancing the area's image as a heritage tourism destination and creating synergies with HSMC's existing historical sites and attractions to generate additional visitation
- Expanding educational opportunities
- Receiving increased regional exposure through destination marketing and visitation
- Drawing visitors to help support area businesses
- Serving as a catalyst for further development initiatives in the area
- Generating additional economic activity and enhanced fiscal revenues



Each of these benefits is important in assessing the potential overall impacts of the Fort Site. While the value of many of these benefits is difficult to measure, the economic activity can be quantified.



The table below summarizes the estimated annual economic contribution in terms of output, jobs and labor income that could be generated at the State level from ongoing Fort Site operations in a stabilized year.

Estimated Annual Economic Contribution to the State Generated From Ongoing Fort Operations – Stabilized Year (2022 Dollars)	
Category	Amount
Output	
Direct Spending	\$23,730,000
Indirect & Induced Spending	\$16,810,000
Total Output	\$40,540,000
Total Jobs (Full- and Part-Time)	350
Total Labor Income	\$19,350,000

As shown in the table above, potential direct spending associated with Fort Site operations in a stabilized year is estimated to be \$23.7 million in the State and total output (i.e., direct, indirect and induced spending) is estimated to be \$40.5 million. It is estimated that approximately \$1.71 could be generated for every \$1 of direct spending.

Outputs from the IMPLAN model indicate that the economic activity associated with Fort Site operations in a stabilized year could potentially support a total of 350 full- and part-time jobs and \$19.4 million in labor income in the State. It should be noted that a person can hold more than one job, so total jobs is not necessarily the same as the number of employed persons. Additionally, these jobs are created in many sectors of the economy, which both directly and indirectly support the increased level of business activity in the area.

As shown in the following table, annual tax revenues related to ongoing Fort Site operations in a stabilized year are estimated to be \$228,000 at the local level and \$2.3 million at the State level.

Estimated Annual Tax Revenues Generated From Ongoing Fort Operations – Stabilized Year (2022 Dollars)	
Entity/Tax Source	Amount
St. Mary's County	
Local Personal Income Tax	119,000
Public Accommodations Tax	87,000
Admissions & Amusement Tax	22,000
Total	\$228,000
State of Maryland	
Sales and Use Tax	\$1,374,000
Personal Income Tax	794,000
Corporate Income Tax	135,000
Total	\$2,303,000
Grand Total	\$2,531,000

Summary

The Fort Site and supporting development opportunities will enhance HSMC’s ability to create a world-class cultural and recreational destination that continues to play a leading role in educating the public about Maryland’s legacy. The Fort is estimated to significantly increase visitation to HSMC which will support area businesses and serve as a catalyst for future development. The ongoing operation of the Fort Site is estimated to generate significant economic and fiscal benefits to the State. Further, costs associated with construction will generate one-time impacts to the State during the construction period.

