

## **IMPLAN ANALYSIS:**

# PROPOSED REAL ESTATE ESSEX COUNTY

# IMPLAN ECONOMIC IMPACT ANALYSIS FOR: Proposed Real Estate Essex County

Report Date: 2/13/2023

Prepared For: Shiree Monterio CEO and Founder 7 and M Development, LLC 80 M Street Southeast 1st Floor Washington, DC 20003

Prepared By: Novogradac Consulting LLP 1300 East Ninth Street, 9<sup>th</sup> Floor Cleveland, OH 44114 Phone (216) 239-5529





February 12, 2023

Shiree Monterio CEO and Founder 7 and M Development, LLC 80 M Street Southeast 1<sup>st</sup> Floor Washington, DC 20003

#### Re: Economic Impact Analysis for Proposed Real Estate Development in Essex County, Virginia

Dear Shiree Monterio:

At your request, Novogradac Consulting LLP has performed an Economic Impact Analysis of the above referenced project using the "IMPLAN" software and data produced by IMPLAN Group, LLC. We have not examined the data or the assumptions underlying such data in accordance with the standards prescribed by the AICPA and, accordingly, do not express an opinion or any other form of assurance on the data estimates obtained for use in our economic impact analysis. Further, this analysis is subject to the Assumptions and Limiting Conditions found in Addendum B of this report.

This report contains, to the fullest extent possible and practical, explanations of the data, reasoning, and analyses that were used to develop the opinions contained herein. The depth of discussion contained in the report is specific to the needs of the client.

7 and M Development, LLC is the client in this engagement and intended user of this report. As our client, 7 and M Development, LLC owns this report and permission must be granted from them before another third party can use this document. We assume that by reading this report another third party has accepted the terms of the original engagement letter including scope of work and limitations of liability. We are prepared to modify this document to meet any specific needs of the potential uses under a separate agreement.

The Stated Purpose of this assignment is to assist with project job, tax, and wage information. You agree not to use the Report other than for the Stated Purpose, and you agree to indemnify us for any claims, damages or losses that we may incur as the result of your use of the Report for other than the Stated Purpose. Without limiting the general applicability of this paragraph, under no circumstances may the Report be used in advertisements, solicitations and/or any form of securities offering.

The authors of this report certify that we are not part of the development team, nor are we affiliated with any member of the development team. Please do not hesitate to contact us if there are any questions regarding the report or if Novogradac Consulting LLP can be of further assistance. It has been our pleasure to assist you with this project.

Respectfully submitted,

Brad Weinberg, MAI, CVA, CRE Partner

Matt Yunker Manager

Jenna Jordan Analyst

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#### BACKGROUND

7 and M Development, LLC (hereinafter, the "Sponsor") has represented to us that they intend to acquire financing for a proposed mixed-use development in Essex County, VA and (hereinafter, the "Project"). The Project is the proposed construction of a mixed-use development to include 138 mixed-income units, 128 of which will be encumbered by low-income housing tax credits (LIHTC) restricted to households earning 50, 60, and 80 percent of the area median income (AMI) and ten unrestricted units. The remaining development will include retail, office, and other commercial uses. The Subject will total 574,382 square feet and will be delivered in phases from August 2025 to November 2027.

As represented by the Sponsor, the investments made will generate both short-term and long-term impacts for the Virginia economy. The Sponsor has engaged us to estimate these impacts, which include short-term and long-term direct, indirect, and induced economic impacts on the state's economy.

Tremendous amounts of data are required in order to produce reliable economic impact models that accurately estimate the effects of a given event on an economy. There are numerous factors that need to be taken into account to accurately estimate direct, indirect and induced effects of an event. The expense and labor of Novogradac Consulting LLP doing this independently are prohibitive. However, there are companies that do specialize in creating data sets that can be used to estimate impacts. Novogradac Consulting LLP utilizes the software and data sets developed by IMPLAN Group, LLC. IMPLAN Group, LLC has developed an input-output model known as "IMPLAN." Input-output methodology and the IMPLAN software are discussed in greater detail in Addendum A. IMPLAN, using data produced by IMPLAN Group LLC and updated annually, is used by us in conjunction with user provided inputs to help us determine reliable estimates of economic impact for a specific project or projects.

IMPLAN Group LLC has been developing complex localized databases since 1993, and is an industry recognized leader in input-output databases and data modeling. As a result, we believe the information provided is a reliable basis to use in developing the economic impacts for the Project. However, we have not examined the data or the assumptions underlying such data in accordance with the standards prescribed by the AICPA and, accordingly, do not express an opinion or any other form of assurance on the data estimates obtained for use in our economic impact analysis.



#### **PROJECT ASSUMPTIONS**

The inputs into the IMPLAN software were developed based on information provided by the Sponsor, independent analysis of Sponsor-provided information, and independent assumptions based on industry standards and independent research, as needed. The following are a list of input assumptions.

- The effective date of this report is January 16, 2023 and all figures are represented in 2023 dollars. The study area used in this development was the state of Virginia. However, the IMPLAN model can individually calculate projected local, state, and federal impacts.
- According to Sponsor-provided information, the total hard construction amount is estimated to be \$45,356,931. It should be noted that this figure does not include acquisition costs and furniture, fixtures, and equipment (FF&E).
- The following table details the industry classification and employment total, for the Project's initial construction and operation phases, as provided by the Sponsor and described previously. It should be noted that the IMPLAN impacts are based on this information, and represent the facility operating at full capacity.

Phase	Description	IMPLAN Code	Start Date
Construction	New Construction	55 - Construction of new commercial structures, including farm structures	2025/2026
Construction	New Construction	58 - Construction of new multifamily strutures	2024
Household Spending	Household Spending	10002, 10003, 10004, 10005, 10006	2025
Operations	Residential Management	448 - Tenant-occupied housing	2025
Operations	Office/Commercial	447 - Other real estate	2026
Operations	Quick-service restaurant	510 - Limited-service restaurants	2026/2027
Operations	Recreation Centers/Community services	505 - Fitness and recreation centers	2026
Source: Sponsor prov	ided information		

Source: Sponsor-provided information

- At the direction of the Sponsor, we utilized IMPLAN estimates on the number of construction jobs that the construction phase is expected to create.
- We used the Sponsor-provided unit mix to estimate household size and household income to estimate household spending in the local economy that the Project will generate once operating at full capacity.
- To determine household spending impacts, we utilized household size and income assumptions from the Novogradac Rent and Income Limit Calculator<sup>1</sup> to determine impacts at the 50, 60, and 80 percent of AMI, or less in addition to the unrestricted units.
- We have not accounted for inflation or revenue growth rates for the Project. All figures are presented in 2023 dollars.
- Impacts for the construction and operation phases are reported in direct, indirect, and induced impacts and are defined as the following for the purpose of this report:
  - Direct effects are applied to internal IMPLAN multipliers to display production changes or expenditures made by producers/consumers as a result of an activity how a region will respond.
  - Indirect effects are the business to business purchases in the supply chain taking place in the region that stem from the initial industry input purchases.

<sup>&</sup>lt;sup>1</sup> <u>https://ric.novoco.com/tenant/rentincome/calculator/z4.jsp</u>



• Induced effects are the values stemming from household spending of labor income, after removal of taxes, savings and commuter income.

#### **ECONOMIC IMPACTS**

Based on our analysis of the IMPLAN modeling results, the Project will generate lasting effects for the entire state. The direct impacts are the total financial equivalents of the number of employees in a given industry. Indirect effects are impacts caused by the iteration of industries purchasing from other industries. Induced effects are the impacts on all local industries caused by the expenditures of new household income generated by the direct and indirect effects.

#### **Construction Phase**

During the construction phase, the Project is expected to support an estimated 361 direct jobs, according to IMPLAN estimates, with a total financial impact of \$45,356,931. Additionally, IMPLAN estimates the Project's construction phase will support approximately 159 induced and indirect jobs as a result of the construction phase, with a total indirect and induced impact of approximately \$31,312,969.

	Construction Financial Impact					
Project		Direct		Indirect		Induced
Commercial Construction	\$	23,695,431	\$	7,679,549	\$	9,905,223
Residential Construction	\$	21,661,500	\$	4,480,938	\$	9,247,259
Total	\$	45,356,931	\$	12,160,487	\$	19,152,481
				Total	\$	76,669,900

	Construction Employment Impact					
Project	Direct	Indirect	Induced			
Commercial Construction	181	31	55			
Residential Construction	180	22	51			
Total	361	53	106			
		Total	520			

The following tables demonstrate the IMPLAN model's tax output during the Project's construction phase. These estimates represent total tax impacts during this phase only, and therefore, these impacts do not recur. The IMPLAN model estimates that the construction phase will generate approximately \$9,443,959 in combined total tax revenue, with approximately \$1,169,829 in total taxes generated at the local level.

	Construction Direct Tax Impact					act
Project		Federal		State		Local
Commercial Construction	\$	2,306,187	\$	296,752	\$	(14,710)
Residential Construction	\$	2,451,734	\$	320,278	\$	(26,874)
Total	\$	4,757,921	\$	617,031	\$	(41,583)
				Total	\$	5,333,369

	Construction Indirect Tax Impact					
Project		Federal		State		Local
Commercial Construction	\$	459,263	\$	224,590	\$	243,359
Residential Construction	\$	242,346	\$	191,842	\$	237,408
Total	\$	701,609	\$	416,432	\$	480,767
				Total	\$	1,598,808



	Construction Induced Tax Impact					
Project		Federal		State		Local
Commercial Construction	\$	587,562	\$	333,598	\$	377,892
Residential Construction	\$	548,560	\$	311,418	\$	352,754
Total	\$	1,136,121	\$	645,016	\$	730,646
				Total	\$	2 511 782

#### **Operation Phase**

Once fully operational, in the stabilized years detailed in the Project assumptions, the Project is expected to sustain an estimated 18 direct jobs. All jobs reported in the operation phases include full-time, part-time, and temporary positions. According to Sponsor-provided information, the Project is expected to generate \$2,351,794 (in 2023 dollars) in revenue annually. Additionally, the IMPLAN model projects the Project will support approximately 40 indirect and induced jobs, with a recurring annual impact of \$7,476,733.

	Operational Employment Impact					
Project	Direct	Indirect	Induced			
Resdiential Management	3	0	0			
Other Real Estate (Office)	3	2	1			
Quick-Service Restaurant	0.3	0.1	0.1			
Recreation Centers	2	0.4	0.2			
Individual and Family Service	9	1	1			
Household Spending	-	-	34			
Total	18	4	37			
		Total	58			

	<b>Operational Financial Impact</b>					
Project		Direct		Indirect		Induced
Resdiential Management	\$	1,169,328	\$	101,914	\$	80,837
Other Real Estate (Office)	\$	663,634	\$	477,332	\$	163,516
Quick-Service Restaurant	\$	29,286	\$	15,923	\$	8,552
Recreation Centers	\$	127,710	\$	77,675	\$	41,452
Individual and Family Service	\$	361,836	\$	121,415	\$	222,587
Household Spending	\$	-	\$	-	\$	6,165,531
Total	\$	2,351,794	\$	794,258	\$	6,682,475
				Total	\$	9,828,527

The following tables demonstrate the IMPLAN model's tax output during the Project's operation phase. These estimates represent annually recurring total tax impacts. As described previously, impacts during operation assume the Project is fully-operational at 100 percent employment capacity. Taxes are calculated based on internal IMPLAN multipliers from county and state tax data in Virginia. The IMPLAN model estimates that the overall development will generate approximately \$1,259,304 in combined total annual tax revenue, with approximately \$384,572 in total recurring taxes generated at the local level.



#### PROPOSED DEVELOPMENT - ESSEX COUNTY, VA - IMPLAN ECONOMIC IMPACT ANALYSIS

	Operational Direct Tax Impact					
Project		Federal		State		Local
Resdiential Management	\$	14,452	\$	70,947	\$	98,140
Other Real Estate (Office)	\$	19,951	\$	11,881	\$	12,673
Quick-Service Restaurant	\$	1,504	\$	532	\$	492
Recreation Centers	\$	6,722	\$	4,748	\$	1,584
Individual and Family Service	\$	57,669	\$	1,216	\$	(8,628)
Household Spending	\$	-	\$	-	\$	-
Total	\$	100,299	\$	89,323	\$	104,260
				Total	\$	293,882

	Operational Indirect Tax Impact					
Project		Federal		State		Local
Resdiential Management	\$	7,467	\$	2,218	\$	3,081
Other Real Estate (Office)	\$	27,224	\$	10,716	\$	10,355
Quick-Service Restaurant	\$	973	\$	387	\$	382
Recreation Centers	\$	4,280	\$	1,769	\$	1,748
Individual and Family Service	\$	8,132	\$	2,218	\$	1,679
Household Spending	\$	-	\$	-	\$	-
Total	\$	48,076	\$	17,308	\$	17,245
				Total	\$	82,629
	Operational Induced Tax Impact					
Project		Federal		State		Local
Resdiential Management	\$	4,797	\$	2,721	\$	3,081

9,701 \$

2,457 \$

13,198 \$

359,222 \$

389,883 \$

508 \$

5,506 \$

1,397 \$

7,501 \$

Total \$

212,430 \$

229,844 \$

288 \$

6,236

1,584

8,499

243,339

263,066

882,792

327

\$

\$

\$

\$

\$

\$

Other Real Estate (Office)

Quick-Service Restaurant

**Recreation Centers** 

Individual and Family Service

Household Spending

Total

### ADDENDA A IMPLAN and Input-Output Modeling

#### BACKGROUND

The direct impacts are the total financial equivalents of the number of employees in a given industry. Indirect effects are impacts caused by the iteration of industries purchasing from other industries. Induced effects are the impacts on all local industries caused by the expenditures of new household income generated by the direct and indirect effects.

Input-output accounting describes commodity flows from producers to intermediate and final consumers. The total industry purchases of commodities, services, employment compensation, value added, and imports are equal to the value of the commodities produced.

Purchases for final use (final demand) drive the model. Industries produce goods and services for final demand and purchase goods and services from other producers. These other producers, in turn, purchase goods and services. This buying of goods and services (indirect purchases) continues until leakages from the region (imports and value added) stop the cycle.

These indirect and induced effects (the effects of household spending) can be mathematically derived. The derivation is called the Leontief inverse. The resulting sets of multipliers describe the change of output for each and every regional industry caused by a one dollar change in final demand for any given industry. Creating regional input-output models require a tremendous amount of data. The costs of surveying industries within each region to derive a list of commodity purchases (production functions) are prohibitive. IMPLAN was developed as a cost-effective means to develop regional input-output models.

The IMPLAN accounts closely follow the accounting conventions used in the "Input-Output Study of the U.S. Economy" by the Bureau of Economic Analysis (1980) and the rectangular format recommended by the United Nations. The IMPLAN system was designed to serve three functions: 1) data retrieval, 2) data reduction and model development, and 3) impact analysis. Comprehensive and detailed data coverage of the entire U.S. by county, and the ability to incorporate user-supplied data at each stage of the model building process, provides a high degree of flexibility both in terms of geographic coverage and model formulation. The IMPLAN database consists of two major parts: a national-level technology matrix; and estimates of sectorial activity for final demand, final payments, industry output and employment for each county in the U.S. along with state and national totals.

New databases are developed annually by IMPLAN Group LLC, the developer of IMPLAN.



#### **TECHNICAL INFORMATION**

The notion of a multiplier rests upon the difference between the initial effect of a change in final demand and the total effects of that change. Total effects can be calculated either as direct and indirect effects, or as direct, indirect, and induced effects. Direct effects are production changes associated with the immediate effects or final demand changes. Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly affected industries (for example, additional purchases to produce additional output). Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. Five different sets of multipliers are estimated by IMPLAN corresponding to five measures of regional economic activity: total industry output; personal income; total income; value added; and employment. For each set of multipliers, three types of multipliers are generated, Type I, Type II and Type SAM.

#### Type I Multiplier

A Type I multiplier is the direct effect, produced by a change in final demand, plus the indirect effect divided by the direct effect. Increased demands are assumed to lead to increased employment and population with the average income level remaining constant. The Leontief inverse (Type I multipliers matrix) is derived by inverting the direct coefficients matrix. The result is a matrix of total requirement coefficients, the amount each industry must produce in order for the purchasing industry to deliver one dollar's worth of output to final demand.

#### Type II Multiplier

Type II multipliers incorporate "induced" effects resulting from the household expenditures from new labor income. The linear relationship between labor income and household expenditure can be customized in the IMPLAN Professional® software:

The default relationship is PCE (personal consumption expenditures) and total household expenditures. Each dollar of work-place based income is spent based on the SAM relationship generated by IMPLAN.

The second possibility is a RIMS II style of Type II multiplier, where PCE is adjusted to represent only the spending of the disposable income portion of labor income. In this way there is a direct one-to-one relationship to labor income and PCE. Then a ratio, which the user can specify, is applied to convert total income to disposable income before the rounds of induced effects are calculated.

#### Type SAM

Type SAM multipliers are the direct, indirect, and induced effects where the induced effect is based on information in the social account matrix. This relationship accounts for social security and income tax leakage, institution savings, and commuting. It also accounts for inter-institutional transfers.



### ADDENDA B Assumptions and Limiting Conditions

#### **ASSUMPTIONS AND LIMITING CONDITIONS**

- 1. The economic impact analysis contained herein relies on databases and software developed by IMPLAN Group LLC. MIG Inc. has been developing complex localized databases since 1993, and is an industry recognized leader in input-output databases and data modeling. As a result, we believe the information provided is a reliable basis to use in developing the economic impacts for the Project (s). However, we have not examined the data or the assumptions underlying such data in accordance with the standards prescribed by the AICPA and, accordingly, do not express an opinion or any other form of assurance on the data estimates obtained for use in our economic impact analysis.
- 2. All information contained in the report which was furnished by others was assumed to be true, correct, and reliable. A reasonable effort was made to verify such information, but the author assumes no responsibility for its accuracy.
- 3. The report was made assuming responsible ownership and capable management of the Project.
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