

Calverton Aviation Technologies Innovation Hub MARKET REPORT & ECONOMIC BENEFITS ANALYSIS

JLP+D

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EXECUTIVE SUMMARY

This market report and economic benefits analysis evaluates the current market and the first phase of development that is planned for the Enterprise Park at Calverton ("The Site"). The report assesses job creation, economic output, and compensation potential of the first one million square feet of development planned for The Site. Triple Five Group of Edmonton, Alberta, Canada proposes to build a Calverton Aviation & Technology ("CAT", "The Project") Innovation Hub at The Site.

Construction Economic Benefits (Annual Average in a 5-Year Period)	Direct Impact	Total Impact
Employment	235/year	342/year
Labor Income	\$21M/year	\$30M/year
Value Added	\$21M/year	\$36M/year
Output	\$34M/year	\$57M/year

Permanent Economic Benefits (Annual)	Direct Impact (range)	Total Impact (range)
Employment	1047-1425/year	1873-3088/year
Labor Income	\$95-\$207M/year	\$167-\$365M/year
Value Added	\$128-\$283M/year	\$246-\$525M/year
Output	\$359-\$806M/year	\$540-\$1169M/
I	,	year

The range of permanent impact reflects different assumptions on the tenant mix of the proposed development.

Anticipated Economic Benefit

The first one million square feet of development falls into four overarching development program typologies: Technology Office, Research and Development, Industrial / Warehouse, and Education. The uses in these spaces include Warehouse and Distribution; Fabricated Metal Products; Computer and Electronic Products; Aircraft Manufacturing; Airport Engine and Engine Parts Manufacturing; Other Aircraft Parts and Auxiliary Manufacturing; ISPs, Search Portals and Data Processing; and Professional, Scientific and Technical Services.

Construction Benefit

The economic benefit analysis completed for the fiveyear construction period — which provides the shortterm regional benefit anticipated from the construction of the first phase of development — the capital investment for which is estimated to be \$171M, shows the following:

During construction, the size of direct, on-site employment supported by such an investment is estimated to be 235 construction jobs/year, on average, in this 5-year period, with approximately \$21 million/year in construction labor income. Other direct construction benefits estimated during this period include \$21 million/year in contribution to GDP and \$34 million/year in total output.

Each dollar invested in construction is projected to generate \$1.67 additional economic output elsewhere. Taking into account the indirect and induced benefits in other parts of the town and the state, the overall economic benefit is estimated at: 342 total jobs/ year, on average, during the construction period, \$30 million labor income/year, \$36 million GDP/year, and \$57 million output/year, inclusive of all direct, indirect, and induced economic benefits, per assumptions detailed in the methodology.

Permanent Benefit

The permanent economic benefit analysis completed — which estimates the annual regional economic benefit of the first phase of development once it is occupied by anticipated tenants and functioning at its highest and best use — shows the following:

Upon buildout and lease-up, the size of direct, onsite employment is estimated to be 1,047 to 1,425 permanent direct jobs, with approximately \$95 million to \$207 million in labor income. Other direct benefits estimated include \$128 million to \$283 million in contribution to GDP and \$359 million to \$806 million in total output. The range reflects different assumptions on the composition of industries on site.

Definitions:

1. **Employment**: The same as the definition of employment used by Bureau of Labor Statistics and Bureau of Economic Analysis, which includes full-time, part-time, and seasonal workers. Both wage and salary employees as well as proprietors (self-employed individuals and unincorporated business owners) are included.

2. Labor income: Employee compensation plus proprietor income.

3. **Value Add**: Equivalent to the Industry's contribution to GDP. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported).

4. **Output**: The value of industry production. For manufacturers this would be sales plus/minus change in inventory. For service sectors production this equals sales. For retail and wholesale trade, output is gross margin and not gross sales.

5. Direct Impact: The direct economic impact associated with the activities on-site.

6. **Total Impact**: The total economic impact associated with activities on-site, including the Direct Impact, Indirect Impact, and Induced Impact.

7. **Multiplier**: Describes the rate of change associated with one unit of impact. For example, if an Output Multiplier is 2.25, that means that for every dollar of production in this industry, \$2.25 of activity is generated in the local economy: the original dollar and an additional \$1.25.

Each permanent job on-site is projected to support 0.79 to 1.17 additional jobs elsewhere. Taking into account the indirect and induced benefits in other parts of the town and the state, the overall operations benefit that the proposed development will support is estimated at: 1,873 to 3,088 total permanent jobs annually, \$167 million to \$356 million labor income annually, \$246 million to \$525 million GDP annually, and \$540 million to \$1.2 billion output annually, inclusive of all direct, indirect, and induced economic benefits, per assumptions detailed in the methodology.

These anticipated economic benefits represent a conservative estimate of the number of jobs, labor income, GDP, and total output anticipated from both the short-term and permanent investments in The Site. They are based on assumptions provided by the client and informed by the market report. High level summaries of both economic benefit statements can be found on the previous page

Context for Planned Development

The Site, located in Calverton, NY, within the Town of Riverhead and Suffolk County, sits in a sparsely developed context. Located approximately eight miles from Riverhead's Downtown, it is primarily surrounded by natural conservation and preservation areas, the Calverton National Cemetery, multiple parks, a golf club, agricultural land uses to the north and east, and some low-density residential and commercial development concentrated further into Riverhead to the east. This context informs what is possible at The Site, allowing for the potential of predominantly industrial uses.

However, this relative remoteness and sparsely developed community context also presents challenges as there's a limited amount of quality of life cultural and other community amenities near The Site. But, proximity to nearby downtown Riverhead can provides access to many cultural amenities. It is likely that, over time, additional investments in new amenities and services in downtown Riverhead and closer to The Site, from quality housing choices, to additional retail, entertainment, restaurants and recreation, would attract a quality labor force to help sustain the proposed Innovation Hub. Despite these aforementioned local challenges and those affecting most of Long Island, there are a number of unique and advantageous characteristics to the Enterprise Park at Calverton which could position it well to attract both tenants and talent. The access that The Site

offers to a metropolitan area as large and vibrant as New York City would be relatively unique for an innovation cluster offering advanced manufacturing, technology, and aerospace research and development opportunities at this scale. Additional, close proximity to Long Island's beaches, schools, institutions, and agglomeration of industries are other draws to the area.

The Site represents one of the largest development sites in single ownership in the entire New York Metropolitan Area ("NY Metro Area", which includes New York City, Long Island, Northern and Central New Jersey, the Lower and Mid-Hudson Valley, Western Connecticut, Monroe and Pike Counties, Pennsylvania, and the Lehigh Valley) — and a unique opportunity to create a cluster of users with synergistic potential. The Site enjoys convenient arterial access to a metropolitan region of over 20 million residents with a regional Gross Domestic Product (GDP) of \$1.7 trillion. This represents a share of approximately 9% of the national GDP and 6% of the country's total population. Over 44 million people live within 5 hours' drive of The Site, or over 13% of the country's total population.

The Site features proximate vehicular access to a large, educated workforce in New York City and its suburbs, and could offer high-paying positions through which potential employees could take advantage of Long Island's desirable quality of life. The Site is located 25 miles from Macarthur Airport and is within 60 miles of both John F Kennedy and LaGuardia International Airports. Development of The Site would provide access to a robust advanced industries economy (Computer Systems Design and Related Services, Scientific Research and Development Services, Management, Scientific, and Technical Consulting Services, etc.) in the NY Metro Area. The NY Metro Area is first in the country in advanced industries jobs, and second to Houston in advanced industries economic output.

Ultimately, the analysis finds that The Site is wellpositioned to attract tenants which would utilize the improved runway infrastructure for aviationrelated research and development, or would stand to benefit from locating proximate to these tenants. This potential programming mix includes those in the manufacturing, aerospace, technology, information, defense, and other complementary industries, and could create a vibrant and synergistic innovation ecosystem.

Key takeaways of this analysis include:

- Industrial space demand has grown by about 55% since 2010, due to economic behavior changes impacted by COVID-19.
- Aviation-related uses with revenue-generational potential include the development of hangering and maintenance, repair, and overhaul facilities, both of which feature strong demand in the NY Metro Area.
- There are substantial economic opportunities to generate green jobs over the next 10 years, specifically in the wind energy sector.
- The Site benefits from an alignment with policy, economic development, and funding priorities in the Riverhead and Suffolk County IDAs, Empire State Development's Regional Economic Development Council, and other public agencies.
- 1 in 5 private sector jobs in the Long Island region are related to Educational and Health Services, contributing to the higher median age in the region.
- Though Long Island faces a higher median age, a relatively slowly growing population and will need to increase housing affordability and diversity, the region still offers a very desirable quality of life for current and future residents, which will position The Site well to attract and retain workers and tenants.

SECTION I:

MARKET ANALYSIS



REGIONAL CONDITIONS

Located on the mouth of the Peconic River, where the North and South Forks of Long Island converge, Riverhead is a town in Suffolk County with a population of 35,902¹, up from 33,716 residents in 2018. The city has an approximate land area of 67.4 square miles.

Riverhead has been the county seat of Suffolk County since 1727 and is home to a handful of attractions, such as Splish Splash water park, the newly-opened Long Island Birding Trail², Riverhead Raceway, the Long Island Aquarium, and a branch of Long Island University. The greater regional area is also home to many scientific research and engineering institutions, anchored by an array of local universities and colleges, but predominantly by Stony Brook. The Town of Riverhead consists of nine hamlets: Aquebogue, Baiting Hollow, Calverton, Jamesport & South Jamesport, Laurel, Manorville, Northville, Riverhead, and Wading River.



Figure 1: Site, 15-minute driveshed; 30-minute driveshed. Source: James Lima Planning + Development, ESRI.

Population

Long Island, overall, has seen mixed fortunes with regard to economic and population growth in the past decade. Population has grown, though more slowly than at its peak in the 1950s and 1960s. In that stretch, fueled by substantial suburban development following World War II, Long Island more than doubled in size. In the forty years since, Long Island has seen much more limited growth, (only approximately 300,000 people) but has experienced significant shifts in this population's makeup. Overall, population growth in Long Island has been about 0.1% from 2010-2018³. Compared to Chicago, a metropolitan area with a similar population size, the growth rate was 0.2%, and New York City's growth rate was 0.3% during the same period⁴. The population of Long Island, specifically, has seen increased diversity, stratification in terms of income, and has become older.

In Suffolk County, population growth has occurred at a rapid rate from about 1980-2000, but this trend has reversed in the last two decades. There was very little growth in the population from 2010-2020. The 2010 population for Suffolk County was 1,493,350, and in 2020 the population was 1,525,920, a 2.2% increase in 10 years⁵. This could indicate that the combination of limited housing options, impacts of COVID-19, and transit accessibility to job centers closer to New York City, may impact the choices of newcomers to the region.

Period	Long Island	Suffolk	Calverton
2020	2,917,251	1,525,920	5,934
2010	2,832,882	1,493,350	6,510
2000	2,753,913	1,419,369	5,704

Figure 2: Population Change - 2000-2020.

Source: James Lima Planning + Development, Data Census

As illustrated in Figure 2 above, Suffolk County, since 2000, has grown the population at a rate of approximately 7.5% from 1,419,369⁶. This figure is largely attributable to a boom in population during 2000 – 2005, before median sales prices in the region reached their peak and before the housing crisis. The immediate drivesheds to The Site show similar trends, in that over the last 20 years, population growth has been prodigious but predominantly due to pre-2010 in-migration⁷.

14.6% of Manhattan residents moved to Suffolk County, and only 3.7% moved to Nassau County in 2020.

Shown in Figure 3, since 2010, Long island has seen a much slower population growth rate; it has seen only 3% growth, and 60% of that growth has been concentrated in Nassau County (where housing options are slightly more diverse and proximity to jobs both on the Island and within Manhattan is improved). The pandemic has introduced new patterns. According to a report by the Comptroller of New York City, in 2020 about 14.6% of Manhattan residents moved to Suffolk County, and only 3.7% moved to Nassau County⁸. However, as indicated earlier, this flux of residents, likely due to residents seeking less dense living options during the COVID-19 pandemic, still does not outpace population growth in Nassau County during the last 11 years.

According to the Long Island Index's 2018 Indicators Report, Long Island's net outmigration has been generally outstripping in-migration since 2000 (not including international immigration). This trend reached its peak in the three years preceding the Recession (when housing prices were at their relative peak as well) and has improved in the recovery years but still has not reached an equilibrium.

REGIONAL CONDITIONS

Population Growth from 2010 to 2020: Nassau and Suffolk



Figure 3: Population Growth in Nassau and Suffolk Counties Source: James Lima Planning + Development, Data Census Bureau.

The median age of Riverhead, 46.9, is 20.3% higher than the median age of New York State.

Figure 4 illustrates how the population has aged between 2010 and 2020 in Long Island, Suffolk County, and within Riverhead. The Site's immediate surroundings feature an older population in terms of median age, a figure which has increased at a more rapid rate than in Long Island overall or in Suffolk County. Riverhead's current median age is 46.9 years old, which is approximately 12.4% higher than the median in Suffolk County and approximately 20.3% higher than the median of New York State. This trend is likely related to a substantial decline in manufacturing jobs, as well as a limited array of housing options affordable to young workers. As an example, Northrop Grumman, a previous tenant at the Site, employed approximately 22,500 people on Long Island throughout the 1980s; at the end of 2021 Northrop Grumman hired a brokerage firm to sell the property after relocating employees throughout the United States⁹.

Period Long Island		Suffolk	Riverhead	
2010	40.5	39.8	38.7	
2020	41.8	41.7	46.9	

Figure 4: Median Age.

Source: James Lima Planning + Development, Census Data.

Employment and Education

The market potential in Riverhead, to a certain extent, reflects the broader trends exhibited in Long Island overall. Long Island has demonstrated growth in both economy and population over the past two decades, but has shown a moderate weakness in its competitive position on a national and regional scale. While its economic expansion has been positive despite two significant recessions (in 2001 and in 2007), its overall growth has trailed the national average as well as of the greater New York metropolitan area. Long Island has shown greater growth, however, in terms of employment as well as number of businesses, than other New York City suburban markets¹⁰.

Educational and Health services constitute 1 in 5 private sector jobs for the Long Island region.

Long Island's overall economy has seen similar shifts in makeup. It has seen a decline in the vitality of its export industries (particularly of Manufacturing, see below), and an increase in the prominence of Health Care and Education Services employment. Figure 5 shows the transition of manufacturing industry roles throughout Long Island. This industry currently employs approximately 268,000 Long Islanders. Before COVID-19 shifted employment, the Health Care and Education Services sector had approximately 280,000 Long Islanders. After Health Care and Education Services, Trade, Transportation & Utilities, and Professional & Business Services employ the largest segments of the employable workforce region. However, these gains predominantly lie in moderate wage jobs (Health Services jobs average between \$50,000 and \$60,000), whereas higher earning positions in Finance, Information/ Communication Services, and Business Services each employ a smaller share of Long Island's working residents. Manufacturing, which offers average wages between \$70,000 and \$80,000, currently employs about 67,000 residents in the region.

In 1990, there were over 140,000 people employed in Manufacturing; this figure has diminished considerably in the 20+ years since. In 2022, there were only 65,000 people working in Manufacturing throughout Long Island. However, the food manufacturing industry was one of five significant industries that recovered all employment since the start of the global pandemic. 5.2% of Long Island's employable (16+ in age) population works in manufacturing.



Figure 5: Decline of Adults Employed in the Manufacturing Industry. Source: CUNY Center for Urban Research, Regional Plan Association.

REGIONAL CONDITIONS

Employment trends in Long Island have generally reflected the characteristics of the greater economy: ages and wages.

The region continues to be near full employment, as the unemployment rate in Long Island as of February 2022 was 3.7%, compared to 5.1% in New York State, and 4.1% nationally. In Riverhead, New York, the unemployment rate is 6.3%, compared to 7.3% in 2018. The median household income in Riverhead is \$64,865 as of 2020, which decreased compared to \$68,422 in 2018. In Suffolk County more broadly, the median income was almost double that of Riverhead at \$105,362 in 2021¹¹.

Of non-farm employment, the Education & Health Services private sector employs the largest portion of the Long Island population at 20.8% as of February 2022. This is significant, as these sectors typically employ an older population, and service an older population. This is up 0.9% from 19.9% in 2018. Given Long Island's generally aging population, the health services sector is likely to remain a jobs leader into the near future, as demand for aides, attendants, nurses, benefits programs specialists, coordinators, and others increases.

According to the Department of Labor, there has been a 4.7% increase in private sector employment from 2021 to 2022. These four industries comprise 69% of total nonfarm jobs on Long Island: Educational & Health Services, Trade, Transportation, & Utilities, Government, and Professional & Business Services¹². As Long Island starts to rebound from the impacts of COVID-19, the largest portion of jobs created from 2021 to 2022 were in the Leisure and Hospitality industry. This can partially be explained by the mandates being lifted for traveling and wearing masks to prevent the spread of COVID-19 towards the end of 2021 and into 2022. Overall, Long Island has a well-educated workforce. Educational attainment in Nassau and Suffolk is greater than the metropolitan region, NY State, and the U.S averages; 19.2% of Long Island residents have graduate degrees as compared to 12.7% across the United States. Furthermore, educational attainment has been steadily increasing across Long Island. In 2019, over 42% of adults in Long Island over the age of 25 had at least four years of college, compared to 15% of adults in 1970. Between 2010 and 2020, total degree completions increased as did non-degree certificate completions.

The Long Island Regional Economic Development Council has specifically allocated resources to support engineering and STEM programs at New York Institute of Technology, Stony Brook University, Hofstra University, and Farmingdale State College, and has seen enrollment in these programs increase by approximately 66% between 2011 and 2016. As of 2022, Farmingdale State College recently partnered with Estee Lauder Companies to increase STEM talent by leasing the Broad Hollow Bioscience Park on the FSC campus. Long Island University, in early 2022, announced a partnership with Dassault Systemes in life sciences to amplify the STEM ecosystem of the region. A STEMcentric programming mix at The Site could yield advantageous partnership opportunities in terms of the lease-up of research and development space, collaboration opportunities, and a workforce pipeline from programs¹³.

Existing Site Conditions

Situated between New York City and the east end, The Site is uniquely poised to leverage its accessibility for commercial uses.

The Site is located between Grumman Boulevard and NY State Route 25 and is accessible from Exit 769 off of the Long Island Expressway. The Site is in close proximity to airports in the region. JFK, LGA, and EWR are 60, 65, and 85 miles away, respectively. Additionally, there is a Long Island RailRoad spur undergoing redevelopment that cuts through the EPCAL site.

The planned development consists of a 2,921-acre property that was formerly the Naval Weapons Industrial Reserve Plant. The United States Navy established The Site in 1954 as a Government-Owned Contractor-Operated facility and used it for the development, assembly, testing, refitting, and retrofitting of Naval combat aircraft, which were built by the Northrop Grumman Corporation. Expansion plans for the airport have long been proposed by New York State. In 1965, Governor Nelson Rockefeller suggested the idea that Calverton be converted into the fourth New York City metropolitan airport. This proposal, however, was abandoned after it failed to gain support from Northrop Grumman and the Riverhead community. In 1996, Northrop Grumman left The Site and two years later, the Navy donated the bulk of the developed land to the Town of Riverhead, with the condition it be reused for economic development purposes.

Calverton has two asphalt and concrete runways, which are 10,000 sf and 7,000 sf long. The 10,000 square foot runway meets the aircraft runway requirements for any long range commercial aircraft; as reference, Boeing 747 requires a 9,743 ft runway. The 10k sf runway is also sufficiently long enough to handle almost all cargo aircraft, with the exception of the Antonov An-225 (10,334 ft) and the Boeing 747 LCF (10,039 ft). It should be noted that all other Boeing 747 models require only a 9,743 ft runway. The runways, however, require at least \$1MM in capital investments in order to make them serviceable. The Site also already features a control tower, aircraft service buildings, and office buildings.

	Net Rent				
Submarket	High Tech	Manufacturing	Office / Service	Warehouse / Dist.	
Western Suffolk	\$15.00	\$10.75	\$30,73	\$12.88	
Central Suffolk	\$11.36	\$12.10	\$26.15	\$13.71	
Eastern Suffolk	N/A	N/A	N/A	\$12.02	
Long Island (Suffolk & Nassau)	\$12.13	\$13.75	\$31.80	\$14.03	

Figure 6: Industrial Real Estate Market Data. Source: Cushman & Wakefield.¹⁷

REGIONAL CONDITIONS

Industrial Market Analysis

Suffolk County has experienced positive growth in the industrial sector over the past few years as it reaches the top of the average 10-year real estate cycle. Calverton is part of the Eastern Suffolk submarket, which includes: Aquebogue, Calverton, Center Moriches, East Moriches, Eastport, Flanders, Greenport, Hampton Bays, Manorville, Mastic Beach, Montauk, Moriches, Riverhead, Shelter Island, Shirley, Southampton, Southold, Speonk, Wading River, Westhampton, and Westhampton Beach. This submarket has the second lowest inventories of Industrial SF out of all Long Island, with 14,181,032 square feet. This compares to Central Suffolk, which has 43,217,905 SF and Western Suffolk with 30,698,646 SF. All the submarkets in Suffolk County total 88,097583 SF, which is greater than the 44,861,325 SF of industrial space in Nassau County. In 1Q of 2022, the industrial office sector had an overall vacancy rate of 2.3% and net absorption of 320,155 SF14.

Suffolk County has greater industrial supply than Nassau County, along with higher absorption rates. YTD absorption in Nassau county in 2022 was 29,827 vs 290,328 in Suffolk County, and the submarket of Eastern Suffolk experienced net absorption of -100,000. Vacancy rates in the Eastern Suffolk submarket were 3.1%, compared to 2.2% in Suffolk County and 2.5% in Nassau County. 177,620 SF of industrial space are currently under construction in the Eastern Suffolk submarket. Due to construction delays, the absorption rate has been hampered in Eastern Suffolk. Several factors contributing to construction delays include: COVID-19 supply chains, repurposing light industrial spaces in the region for distribution, and land available for more industrial development. Across Long Island, demand has trended toward exceeding industrial supply over the last two years.

Industrial space vacancy rates are at historic lows, and asking rents are at historic highs.

Across Long Island, rental rates increased from \$13.11 psf to \$13.79 psf from 2021 to 2022. This improved market is indicative of greater national demand for industrial space. It is important to note that the rental price is the highest on record for Long Island. Comparatively, in 2010 the asking rent per square foot was \$8.91 for industrial space¹⁵. As such, demand for industrial space in Suffolk has increased due to limited supply available in Nassau County, which is roughly half the size of Suffolk's industrial market. Potential tenants have been looking further east to Suffolk County because Nassau County's industrial market is more constricted.

Nationally, high demand for warehouse spaces and low vacancy rates are fueling demand for industrial real estate. As E-commerce captures a larger market share, especially due to COVID-19 and Work From Home environments, demand for warehouse space for distribution centers increases. From 2010 to 2020, demand (24%) for industrial and warehouse space outpaced supply (18%). With aging industrial space at an average of 42 years old, about 70% of Class A renovated spaces are already pre-leased, indicating the demand for these typologies¹⁶. Proximity to major metropolitan areas is highly advantageous for distribution centers as E-commerce and logistics companies target investments in "last-mile" locations. Thus, proximity to New York City is the key drive for warehouses in the region.

Submarket	Inventory	Vacancy Rate	Asking Rent (Average)
Western Nassau	7,107,263	6.8%	\$37.53
Central Nassau	9,060,037	14.4%	\$36.07
Eastern Nassau	6,583,349	8.9%	\$37.96
Nassau Total	22,750,649	10.4%	\$36.58
Western Suffolk	8,668,087	16.8%	\$33.65
Central Suffolk	5,630,724	15.8%	\$32.77
Suffolk Total	14,298,811	16.4%	\$33.57
Long Island Total	37,049,460	12.7%	\$35.57

Figure 7: Office Real Estate Data.

Source: James Lima Planning + Development, Cushman & Wakefield.²⁰

Office Market Analysis

While the overall economy in Long Island showed positive growth in 1Q22, gaining 11,500 jobs and ending the quarter with 1.3 million jobs. The offices using sectors (information, financial, professional, business services) have reached their highest point of growth since the start of the global pandemic. The predominant increase of jobs during 1Q22 were within the Leisure and Hospitality industry, indicating a reactivation of tourism and vacation in the region. After, the Professional & Business Services industry had the second strongest growth rate, adding 11,000 new jobs since 2021.

Office space vacancy continues to trend down from 2020, in light of the impacts from COVID-19.

Despite this, the office market continued to strengthen due to lack of new construction and tenants moving toward higher-quality spaces. Overall vacancy in Long Island office real estate fell to 12.7% from 13.5% in 4Q21. Occupancy, however, varies between Nassau and Suffolk, with the former outperforming the latter. Nassau County has a vacancy rate that trended lower at 10.4%, while Suffolk County has a vacancy rate that was substantially higher at 16.4%.

Rental rates in both Suffolk and Nassau Counties have remained constant, but were lower than usual for the 1Q22 timeframe. This more likely has to do with lease cycling, rather than market economics impacted by COVID-19. Additionally, office space has been negatively absorbed, with YTD absorption total of -435,728 SF across Long Island. In fact, Net absorption has trended negatively since 2020, due to the impacts of the global pandemic. Across Long Island as of 1Q22, there is no new construction currently in the pipeline.

Attracting and retaining talent remains a challenge for employers. As such, companies have sought out Class A assets in close proximity to walkable downtown areas. Class A leasing accounted for 62.3% of all deals for 1Q22. Tenants are looking for office spaces that enable more collaborative spaces, along with amenities to lure employees back into the office. Tenants are interested in the versatility of the space through hybrid office models. Many of these expectations are crafted from the impacts of COVID-19 and WFH models.

REGIONAL CONDITIONS

Legacy of Industry in Long Island

Long Island has strong ties to the aviation and manufacturing industries, two industries impacted drastically by COVID-19. The pandemic has shaped how these two industries are operating in the greater region.

1. Aviation

The aviation and aerospace industries have a long history in Long Island and as such, there are several corporations and institutions in these industries that have made the area their homes. Known as the "cradle of aviation," Long Island experienced an aviation golden age between World War I and World War II. From 1919 to 1939, more than two dozen companies, including Sperry, Brewster, Fairchild Camera & Instruments, Grumman, Republic, and Airborne Instruments Laboratory, built military and civilian aircrafts on Long Island. During World War II, more than 100,000 employees in Long Island worked on airplanes that flew in Europe and in the Pacific during the war. Following World War II, aviation manufacturing shifted from military to commercial aviation. Although no more aircraft are built in Long Island in their entirety, approximately 240 companies remain on Long Island producing a wide variety of parts for most American aircrafts¹⁸.

Although Long Island's commuter towns are known for supplying a skilled labor force for New York City, its two counties, Nassau and Suffolk, employ more workers than those who commute into the city. This has been exacerbated by Work From Home models, decreasing the use of transit into New York City. According to Partnership for New York City, Long Island Rail Road ridership was down 48% from pre-pandemic as of March 2022¹⁹. Long Island has been home to industries such as aerospace, defense, pharmaceutical, financial services, biotech/ biomedical, agriculture, software and information technology, printing, food processing, government, manufacturing, and travel and hospitality. Though, travel and hospitality have seen drastic reductions in employment due to COVID-19.

Given Long Island's history as hub of aviation during the 20th century, there is a lasting legacy of aerospace and defense companies operating in

the region. As of December 2021, growth in aviation continues to grow, with Breeze Airways selecting Long Island MacArthur Airport to be the 17th and first New York State airport. The Infrastructure Investment and Jobs Act, a bill recently passed by President Biden to rebuild United States infrastructure over the next 10-15 years, has many funding opportunities for the aviation sector. In fact, through the passage of the Infrastructure Bill, Long Island MacArthur Airport secured \$21.5 million in infrastructure funding, indicating how investments in aviation are critical to the economy of Long Island²⁰. In 2018, there were over 500 companies and 25,000 workers in the aerospace and defense industry in Long Island. While significant, these figures are drastically lower than the industry's peak in 1980, when the sector employed over 80,000 people.

2. Manufacturing

Fueled by demand during World War II, manufacturing thrived in Long Island during the mid 20th century. The abundance of high-paying manufacturing jobs, specifically in the aeronautical and defense industries, attracted families to the Long Island suburbs. At the height of manufacturing in the mid 60's, there were more than 165,000 manufacturing jobs and more than 2,000 machine and tool shops in Long Island. Companies, such as Northrop Grumman employed over 22,000 people in the 1980's. Ultimately, cheaper labor was available elsewhere, as energy rates and cost of living expenses were extremely high and so manufactures began to depart Long Island.

The food manufacturing sector has fully recovered all jobs lost due to COVID-19.

Over the last decade, however, the regional manufacturing economy has restructured. The industry still employs 70,000 people and hosts over 3,000, according to a report by the Long Island Regional Economic Development Council²¹. Despite the impacts of COVID-19, 74 firms indicated that production increased over a 6-month timeframe in 2020. Almost 65% of manufacturing firms expect production levels to continue increasing. At the same time, factories across the region have reported they are having difficulty finding qualified applicants to hire. This is partially due to affordable housing options, adequate childcare options, and health concerns that have been shaped by COVID-19.

Long Island's offshore wind manufacturing industry, however, has experienced growth. Long Island has five active offshore wind developments to be completed; the South Fork Wind project began construction in early February 2022. New York State pledged \$500 million to build up the manufacturing and supply chain infrastructure for the development of these offshore wind projects. These new developments are expected to generate over 10,000 new green jobs in manufacturing and supply chain²². Following industry trends for more sustainable energy, the offshore wind projects provide immense opportunities to enhance the STEM focus of Long Island schools, and attract young talent in STEM fields to the greater Long Island region.

The food manufacturing industry has recovered all jobs lost due to the pandemic. Employment in this sector is expected to grow by 2.6% from 2018 to 2028. Similarly, the chemical manufacturing industry employed the most people in the manufacturing sector in 2020, with over 13,000 employees. Employment is expected to grow by 11.6% from 2018 to 2028. Most of the employment has been driven by increasing numbers of companies that produce pharmaceuticals and supplements on Long Island.





Figure 8: Long Island Industry Spread.

Source: James Lima Planning + Development, Department of Labor Market Briefing: Long Island





MACROECONOMIC AND LOCAL TRENDS

Strengths

1. Academic Institutions

As Long Island's largest single-site employer, with about 26,800 students enrolled, 15,000 employees, and over 2,700 faculty, Stony Brook University is uniquely positioned as a potential partner for The Site. Founded in 1957, Stony Brook is located 60 miles east of New York City on the North Shore of Long Island. It is a public sea-grant and space-grant research university and is part of the State University of New York system. The University has a pronounced presence in Long Island that exceeds its campus footprint; Stony Brook owns Stony Brook Medicine, co-manages Brookhaven National Laboratory, and operates four business incubators, one of which is located in Calverton, and runs the Research and Development Park, which it acquired in 2005. The incubators offer support to startup companies through offering workshops and mentorships as well as through providing research and professional space. One of the incubators, Long Island High Technology Incubator (LIHTI) has been associated with more than 120 companies and has contributed \$2.5 billion to the national economy and 500 jobs since its inception in 1992. As one of the top 100 research institutions in the world, Stony Brook has proven it has the capability to develop an educational pipeline for the engineering sectors. EPCAL would thus be a potential home for companies that have outgrown the incubators and are looking to relocate on Long Island.

2. Existing Laboratories and Research.

Long Island is home to numerous multipurpose research institutions. Fewer than 10 miles west of Calverton and 60 miles east of New York City is Brookhaven National Laboratory. Funded primarily by the U.S. Department of Energy's Office of Science, the lab operates facilities for the research of physics, chemistry, biology, medicine, applied science, and other advanced technologies. Brookhaven Lab is the only national lab in the Northeast and is one of New York State's largest scientific research centers. The lab is operated by Stony Brook University and Battelle, a private nonprofit applied science and technology development company. Recently, the passing of the federal budget has paved the way for more investment in the national lab. As announced in December 2021, new federal funding will provide \$8 million to fund the Battery500 Phase 2 project, focused on electric vehicles. The Office of Sciences is expecting a budget increase of 4-7% during the fiscal year 2022-2023²³. Brookhaven National Laboratory is home to the Center for Functional Nanomaterials, NASA Space Radiation Facility, Accelerator Test Facility, Computational Science Center, Brookhaven Linac Isotope Producer, National Synchrotron Light Source-II, and Relativistic Heavy Ion Collide. Both Battelle and Stonybrook are committed establishing Brookhaven National Laboratory as a world-leading scientific organization and both institutions have been working with the local scientific community to identify opportunities for developing the lab's capabilities and opportunities for growth. \$41 million in federal and state grants funded the establishment of the National Offshore Wind Research and Development Consortium based at Stony Brook University's Advanced Energy Research and Technology Center. As of January 2022, the Consortium received an additional \$3.4 million for new projects²⁴. The EPCAL site thus has the potential to provide greater capacity for the Brookhaven National Laboratory, Stony Brook, and other leaders in Long Island's R+D efforts to increase advanced manufacturing for alternative energy, aviation, and other tech transfer initiatives.

3. Regional Educational Emphasis on STEM.

Educating and training the workforce is crucial to the continued economic stability of Long Island. Academic institutions, including New York Institute of Technology, Stony Brook University, Hofstra University, Farmingdale State College have worked together to form the Long Island Regional Economic Development Council (LIREDC) with the aim of increasing the amount of engineering graduates to fill demand in that field.

Continuing and building the status of Long Island as a high-tech region is dependent on motivating students to prepare for STEM career paths early on in their lives. The Long Island STEM Hub has sought to prepare students for the local workforce by creating more regional STEM educational opportunities. In its Gap Analysis Report from 2013, the Long Island STEM Hub found that there are significant gaps in STEM programming; specifically, there are few opportunities for students at the K-8 levels to participate in STEM after school activities, inadequate amounts of workplace internships for students, and insufficient professional development opportunities for educators teaching STEM. The median wage of Long Island Region STEM occupations is \$82,420 a year, which is 65% higher than the median annual wage of \$50,040 for all workers in the region. New York State has experienced growth in core STEM employment in many regions. According to the Bureau of Labor Statistics, the top 10 fastest growing occupations are in STEM, with home health and personal care aides leading the way. On a political front, New York State announced in February 2022 that 230 Master Teachers were added to the program, emphasizing the focus on STEM development²⁵.

The following is a list of Long Island Institutions with STEM as a core mission:

Organization Name	Туре	# Programs Offered
Cold Spring Harbor Laboratory	Informal Education	86
Brookhaven National Laboratory	Informal Education	51
Stony Brook University	Higher Education	41
Long Island Science Center	Informal Education	40
Long Island Aquarium	Informal Education	36
Cradle of Aviation Museum	Informal Education	27
Hofstra University	Higher Education	23
Science Museum of Long Island	Informal Education	20
Center for Science Teaching and Learning	Informal Education	14

Figure 9: Long Island Institutions with STEM as a Core Mission Source: Long Island Community Foundation.

MACROECONOMIC AND LOCAL TRENDS

4. Low Capacity Rival Airports

Given Long Island's long aviation history, there are several regional airports in the surrounding in area with ranging capacities and uses. Notably, the EPCAL site has the longest runways, which 10,000 ft and 7,000 ft, respectively. Nearby airports (and their respective capacities) include:

Francis S. Gabreski (FOK)

- Runway Lengths (9,000ft; 5,000ft; 5,000ft)
- Parking: hangars and tiedowns
- Rates: \$5 for landing, \$15/night tie down.
- Certified FAA Repair Station
- Control tower

Brookhaven Airport (KHWV)

- No control tower
- Parking: hangars and tiedowns
- Runway Lengths (4,222ft, 4,200ft)

East Hampton Airport (KHTO)

- Control tower
- Parking: hangars and tiedowns
- Runway lengths (4,255ft; 2,060ft)

Long Island Mac Arthur Airport (ISP)

- Control tower
- Parking: hangars and tiedowns
- Runway lengths (7,006ft; 5,186ft; 3,175ft)
- Certified FAA Repair Station

Republic Airport (KFRG)

- Control tower
- Runway lengths (6,833ft; 5,516ft)
- Parking: hangars and tiedowns
- Demand for aviation

Weaknesses / Challenges in Long Island

1. Regional "Brain Drain"

Despite Long Island's high ranking public and private high schools as well as its many public and private higher-education institutions, it has not been able to retain talent. Young professionals have been leaving the area upon their graduations; in fact, over the last 25 years, Long Island's population of 18-35-vear-olds declined 16%. Suffolk County lost 30,600 residents between the ages of 25 from 2000 to 20009. Long Island's high cost of living and aging population has resulted in an annual increase in outmigration. The brain drain is made worse by the fact that major industries have left the region, creating fewer employment opportunities. From 1997 to 2013, Suffolk experienced personal income levels increase 3.6%, while home values jumped 5.2%. As of 2015, the Suffolk population aged 25-44 was 375,206, and in 2020, the population aged 25-44 years-old was 349,712. This shows a decline in this population right as the pandemic started. However, the LIEDC indicated that there is some evidence that COVID-19 has pushed this age population of people to move back to Long Island. This provides an opportunity for Long Island to retain some of this talent in a long-term setting. Recent college graduates will only stay in Long Island, if there is ample affordable housing and employment opportunities. Similarly, availability of housing and safety are primary concerns for younger residents in Long Island.

2. Execution Risk Due to Lack of Clarity in Entitlement Process

Past development proposals for The Site have been met with disapproval by the Town of Riverhead. In 2008, Riverhead Resorts, composed of Niven's Baldragon Homes of Dundee, Scotland and New York's Bayrock Group, planned for a \$2.1 billion project consisting of eight themed resorts and a convention center. Under the deal, developers would have paid the town \$108 million for 755 acres at EPCAL. In 2010 the developer failed to secure financing for the acquisition and town leaders in Riverhead canceled plans for the development. Conservationists had also opposed the project, citing increased traffic as well as air and water pollution. Plans for an industrial park have been proposed previously; in 2011 Rechler Equity Partners outbid two other development groups to build a high-tech industrial park that would create 7,600 jobs. Rechler Equity Partners abruptly pulled out of the deal to purchase the 300 acres after the town refused to allow some residential and retail uses in the project. Soon thereafter, International Polo Development, consisting of a group of Argentine investors, proposed building six polo fields, stables, and a 10,000-person stadium on The Site for \$50,000 an acre for a total of \$75 million. This proposal, however, failed to win approval from the town.

MACROECONOMIC AND LOCAL TRENDS

Opportunities in Long Island

1. Growing Wind Energy Industry

The U.S. wind energy industry is fast growing. According to the American Wind Energy Association's 2021 U.S. Wind Industry Market Report, 116,836 MW (megawatts) of wind capacity were developed in 2020. This brought the total to 121,955 MW²⁶. From 2003-2020, over 87,000 wind turbines were installed throughout the United States. Minnesota and Iowa were the top states with new distributed wind power capacity in 2020. This was due to the Mason City Wind project in Iowa and the Rock County Wind Fuel project in Minnesota; combined these two projects represented 95% of the 2020 installed distributed wind capacity. New York had the most reported small wind projects in 2020.

The offshore wind industry will generate over 10,000 new green jobs in the Long Island region.

Offshore wind energy in the U.S. is relatively new. Different from land-based wind energy installations, this technology constructs wind farms in water bodies, which can bring higher wind speeds and hence yield greater efficiency in electricity generation. Globally speaking, most large offshore wind farms are located in northern Europe. In the United States, the first commercial offshore wind project was commissioned by Deepwater Wind in December 2016, off Rhode Island. This project is planned to generate power for 17,000 homes in the state. In 2020, the offshore wind energy pipeline grew 24% to 35,324 MW, compared to the reported 28,521 MW in 2019.

New York has committed to building 9,000 MW of offshore wind by 2035. The federal and the state governments granted \$40 million to fund a new National Offshore Wind Research and Development Consortium based at Stony Brook University's Advanced Energy Research and Technology Center. More recently, AERTC received an additional \$5 million to fund the development of offshore wind energy. Deepwater Wind has obtained a fullyapproved Power Purchase Agreement to construct New York's 1st offshore wind farm in South Fork, Long Island. The construction of this windfarm began in early 2022, and should be fully operational by 2023.

Wind energy is a major job creator. BNEF and 4C Offshore predict that offshore wind energy will reach the 2030 goals. The prediction states that the future deployment of most offshore wind energy will take place on the East Coast in regions that have plans already in the pipeline for development. Further, states throughout the U.S. will be incentivized to develop wind energy due to the recent passage of the Infrastructure Investment and Jobs Act.

2. Rebounding Aviation Sector

The aviation industry was drastically impacted by COVID-19. In 2020, this led to a revenue loss for airlines of about \$168 billion nationally. In previous years, airlines lost a profit of about \$17 billion annually, approximately 10% of the losses in the fiscal year 2020²⁷. The only industries not impacted dramatically were freight forwarders and cargo airlines, two sectors within aviation that benefited from air cargo demands and made substantial profits. Passenger air traffic in 2020 remained 60% lower than it was in 2019²⁸. On top of this, business travel has not returned to pre-pandemic levels due to the substitution of technology for meetings. Lower-fare airlines experienced a faster return of passengers than other airlines that are less accessible. This is partially due to a lower barrier to entry for passengers, and low-fare airlines had faster revenue growth since March 2020. Further, many airlines parked and/ or retired large portions of their aircrafts, ultimately impacting the manufacturers and suppliers. According to the report by the United States, the Government Accountability Office (GAO), interviews with manufacturers and suppliers revealed that they had a decline in revenue due to supply chain delays and deferrals.

In July 2021, passenger airlines carried approximately 66 million people in the United States. This is a drastic increase from July 2020, indicating that recovery in the aviation industry is continuing. However, Fitch Ratings indicated that the emergence of new COVID-19 variants could delay the increase of passengers traveling nationally and internationally. Similarly, there has been a lag in business and international travel. According to a report by McKinsey & Company, business travel accounts from 55-75% of airline profits. Many stakeholders suggest that prepandemic levels of business travel will not be reached until 2023-2025.

The private jet industry was growing until the end of 2019, with a global, total industry valuation at \$27.5 billion. This valuation dropped to \$24.2 billion in 2020, and the first quarter of 2021 had a valuation of \$23.6 billion. This growth of 2.2% shows a slow growth and recovery due to the pandemic. Construction of private aviation jets decreased from 2019 to 2020, from 809 to 443 jets respectively.

3. Growing Demand for Cargo / Air Freight

World air cargo traffic was predicted to more than double from 2015-2035. Due to the impacts of COVID-19, airlines broke records with their carried cargo. This is partially due to the increase of people staying at home during the pandemic. In 2020, cargo airlines carried 1.46 million more tons of cargo than in 2019. Additionally, cargo airlines had a 5.5% increase in revenue from 2019 to 2020, due to this increased demand. From a workforce perspective, these same large, cargo airlines hired approximately 100,000 new employees earlier than the winter season to help keep pace with demand. The only five airline carriers that had profits in 2020 were all cargo carriers. Air cargo yields rose by 40% in 2020 and another 15% in 2021. Part of the success for cargo and freight forwarders was dependent on the size and demand for supplies. At the beginning of the pandemic, there was strong demand for PPE and other medical supplies. This was further developed by the supply chain challenges related to ocean cargo and shipping. As the world shutdown, many cargo ships were sitting outside the ports, unable to deliver goods and products for several weeks or months. In relation to size, many larger cargo airlines indicated an inability to keep up with demand due to supply chain issues. Many of the smaller airlines indicated that 2020 was a year of extreme volatility and unpredictable revenue streams. At the start of the pandemic, of the \$4 billion dispersed to cargo airlines through PSP assistance, only \$828 million was used. The smaller cargo airlines emphasized the importance of the federal funding assistance.

MACROECONOMIC AND LOCAL TRENDS

4. Growing Demand for Maintenance, Repair, and Overhaul (MRO)

In 2020, MRO collectively suffered a loss of \$3,6 billion due to the onset of COVID-19. Total recovery is not expected until approximately 2024. Further, revenues did improve by 40% in 2021, indicating a substantial rebound in this aviation sector over the next few years. Prior to COVID-19, MRO generated stable revenues through its MRO practices. As indicated in a market analysis report by Olivaer Wyman, the MRO demand is expected to reach \$118 billion by 2030. This is 13% lower than the prepandemic forecast of \$135 billion²⁹.

It is important to realize the spatiality of aviation. The MRO fleet has surpassed growth pre-COVID-19 levels in countries like China, but Western Europe does not intend to see recovery until 2025. Spending for MRO was estimated to be \$62 billion in 2021, 31% lower than estimates in 2019. From this, it is clear to see that recovery has not been as expansive as other regions in the world. There were a record number of fleet retirements in 2020, leading to a lower demand for MRO. Almost 1,300 aircrafts permanently left the aviation industry in 2020. Oliver Wyman predicts that MRO growth will stabilize with a CAGR of 2.8% from 2027 to 2032. Airframe MRO is expected to have the largest growth since the beginning of COVID-19 in 2020. 2,400 aircrafts are expected to leave storage and return to service in 2022, and 75% require some inspection as they are past due for checks. This will increase demand for MRO services, but will put a strain on global regions like North America and Europe. Further, the lag in recovery is compounded by the early retirement of those certified and equipped to perform MRO.

The following is a list of MRO locations in Long Island

- Western Suffolk Boces
- Republic Airport
- A & P Aircraft Maintenance, Inc.
- American Airman Ground School
- Aar Aircraft Component Services
- Consolidated Aircraft Supply Co., Inc.
- Hawthorne Global Aviation Services

5. Increasing Costs of Industrial Construction

Due to COVID-19, industrial space has become increasingly unavailable. The current supply of industrial space is not keeping pace with the demand. According to the report by Cushman & Wakefield for Q1 2022, demand has outpaced supply for the sixth consecutive quarter³⁰. The market absorbed approximately 108.7 million square feet in Q1 2022, up 7.8% from Q1 2021. The U.S. vacancy rate declined to an all-time low of 3.3% for Q1 2022. Due to the shortage of space throughout the U.S., the rent has been increasing from 2021 to 2022. As of Q1 2022, the rent stands at \$7.89 per square foot, and is on track to reach \$8 per square foot for the first time in U.S. history.

Industrial construction broke a record with 660.8 msf in Q1 2022, exceeding the previous high point of 600 msf. 94.8% of the product under construction is currently for warehouse and distribution products. Industrial rent growth is predicted to remain strong over the next few years, given the transition in consumer preferences and the impacts of COVID-19. The South has the largest construction pipeline in the United States, consisting of over 33% of the current industrial market. 28% of the construction space under development has been pre-leased upon completion. Long Island specifically has seen a lot of industrial growth. Many industrial firms have been growing their sqft/employee since the start of the pandemic, as employment for warehousing has increased substantially, despite COVID-19. Knowing this, data on different measurements of sqft/employee were compiled from 2020 onward. These numbers were averaged across the different sectors. The range of sqft/employee for industrial was 371-1500 sqft/employee. The average of these numbers was approximately 1,030 sqft/employee. The sqft/employee decreases could be explained through automation in certain industrial processes. This requires more space for the machinery, less personnel, and less space for employees.

6. Recovery in the Global Aerospace and Defense Sector

The A&D industry are expected to recover at varying levels over the next few years, with commercial aerospace companies having slower recovery growth. A&D companies are expected to increase their digital threads and smart factory to increase supply chain efficiency. Many aerospace companies are seeking aftermarket revenue opportunities. Total demand for commercial air travel was down 56% in August 2021 compared to August 2019. Global air travel is expected to recover between 85% to 90% in 2022. An increase in this demand would increase the demand for aftermarket aircraft services³¹.

In addition to these market opportunities, the space market has created opportunities for additional revenue streams. The two revenue opportunities at the forefront include lowering access to low-Earth orbit (LEO). The successful launch and relanding by SpaceX pushed other firms to invest in reusability. This ties into a greater movement towards sustainability in the A&D industry. Many companies are continuing to opt for sustainable manufacturing, and researching new decarbonization efforts that can decrease carbon emissions.

7. Increased Defense Spending

Defense spending has not been as impacted by COVID-19, as compared to other forms of aviation revenue. President Biden requested \$753 billion in a budget proposal, up 2% YoY, indicating a strong investment in defense spending. Global military spending increased to \$1.98 trillion in 2020, an increase of 2.6% from 2019, even though global military spending decreased by 4.4%. Military spending as a share of GDP reached a global average of 2.4% in 2020, a 0.2% increase from 2019. The U.S. Defense Critical Supply Chain Task Force has started to focus attention on the supply chain to prepare for supply "shocks", such as COVID-19.

In 2020, New York state was ranked in the top fifteen states in the U.S. for defense spending budget, comprising 2.2% of the total U.S. defense spending³². 72% of defense contracts are categorized as Supplies and Equipment in New York state. Suffolk County had the second highest defense contract spending for 2020, at approximately \$1.5 billion. Nassau had \$612.7 million in defense contract spending, combining the Long Island regional total to over \$2.1 billion in defense contract spending for 2020.



ANALYSIS OF OPPORTUNITIES AND CHALLENGES

ANALYSIS OF OPPORTUNITIES AND CHALLENGES

Opportunities

1. Aviation Revenue Streams

There are multiple potential revenue streams for The Site that utilize the existing landing strips. Noncommercial airports have been huge economic boons for local economies. As of August 2020, Republic Airport was operating at a net loss, inciting need for greater economic development. East Hampton Airport, a town-owned airport, had 11,000 arriving passengers in 2019. Since the onset of COVID-19, there has been a substantial decrease in revenue generation by this airport, marking an opportunity for increased growth and economic impact. Brookhaven-Calabro Airport is located near a recently announced Amazon warehouse in Shirley. The warehouse is estimated to create 100 warehouse jobs and 100 additional transportation jobs for the economy. Francis S. Gabreski Airport is adjacent to the developing Hampton Business District. This district is expected to bring in substantial jobs. Additionally, an Amazon warehouse is expected to open next to the airport, but has restrictions on using aircraft to carry cargo to the region. These developments will increase job creation throughout the region. The following methods of generating revenue through non-commercial airports are listed as follows:

- Landing Fees range from \$20- \$700 per landing depending on the size of the aircraft in nearby East Hampton Airport. It should be noted that landing fees at commercial airports in the New York Metropolitan area charge as much as \$3,950 per landing, as is the case in LaGuardia Airport.
- Renting out hangar space can generate a significant amount of income, as supply of hangars in Eastern Long Island is extremely limited. The cost to rent a hangar on an annual basis can range from \$20,000-\$100,000+, depending on the size of the aircraft and the corresponding square footage of the hangar.^{32,} ³³ Prices to rent a hangar at Teterboro airport are significantly higher than national averages, given the airport's close proximity to New York City. According to the Teterboro FBO, Meridian, nightly Hangar fees range anywhere from \$250-\$1,800 depending on the make and model of the aircraft.³⁴ "T" Hangars are either airport owned, whereby the airport authority

constructs, finances, and leases them to piston aircraft owners, or they are private investments, meaning that the airport authority may enter into a ground lease with a private entity to construct the "T" hangars. Hangar lease terms typically last 20-30 years.

- Parking Fees are another source of revenues for airports; high demand for parking, coupled with little supply, has pushed fees higher in recent years and created waitlists.
- It is also common for airports to lease out parcels of land for private construction.
 Parcels of land that are part of the East Hampton Airport industrial park, which is located 35 miles from Calverton, lease for \$30,000-\$50,000 per acre per year.
- The highest rates of economic activity and employment are centered around the following aviation business: aviation manufacturing, maintenance/repair/overhaul (MRO), corporate jet aircraft, airline passenger enplanements, and air cargo. At some airports, airport sponsors will provide a ground lease to corporations that want to build hangars to store corporate aircraft. In these cases, the business operator typically enters into a ground lease, constructs the hangar, and provides non-retail use fueling stations.

2. Increased Regional Investment

While the expansion of Republic Airport may decrease demand for regional airports, significant investment in the Aerospace and Defense sector in Long Island may catalyze further industrial development in the region. Recently, Governor Hochul announced an increased investment of \$20.7 million into funding airports across New York State. Of that investment, Long Island is receiving \$0.3 million to help with purchasing and installation of back-up generators. This will improve the operations and enhancements specifically at MacArthur Airport in Suffolk County.

Challenges / Threats

1. Expansion of Republic Airport

Republic Airport, located in Farmingdale just 42 miles from Calverton, plans to develop about 530 aces of land surrounding the airport. Sheltair Aviation, which has locations at 22 airports in Florida, Georgia, and New York, will become the third fixed-base operator at Republic Airport. The \$50 million construction project is being managed by Stratosphere, closely affiliated with Talon Air, the fixed-base operator (FBO) for the airport. According to the New York Aviation Management Association, sales and use taxes had previously been a financial barrier to keeping private planes in New York because most surrounding states do not charge sales taxes or have more favorable tax treatment for such aircraft sales and basing. The airport is undergoing development processes to increase the number of hangars on five currently vacant parcels. New construction will increase annual operations to 212,000 at the airport. This will generate additional revenue for the airport, and boost economic activity in the region. The parcel development is expected to create 73 permanent jobs and 226 construction jobs. Increased demand for private air travel has pushed FBO's such as Jet Aviation and Sheltair to develop more hangar space.

SECTION II:

ECONOMIC BENEFITS ANALYSIS



SUMMARY OF DEVELOPMENT AND ECONOMIC BENEFITS

SUMMARY OF DEVELOPMENT AND ECONOMIC BENEFITS

Construction Economic Benefit:

Total Jobs Supported during 5 years:	1710
Total Labor Income during 5 years:	\$148M
Total Value Added / GDP during 5 years:	\$181M
Total Output during 5 years:	\$286M



Figure 10: Construction Value Add Source: JLP+D



Figure 11: Construction Output Source: JLP+D

According to the development proposal, during the 60-month construction period, the total amount of capital investment is estimated to be \$171 million.

On-Site Economic Benefit:

During construction, the size of direct, on-site employment supported by such an investment is estimated to be 235 construction jobs/year, on average, in this 5-year period, with approximately \$21 million/year in construction labor income. Other direct construction benefits estimated during this period include \$21 million/year in contribution to GDP and \$34 million/year in total output.

Off-Site Economic Benefit:

Each dollar invested in construction is projected to generate \$1.67 additional economic output elsewhere. Taking into account the indirect and induced benefits in other parts of the city and the state, the overall economic benefit is estimated at: 342 total jobs/ year, on average, during the construction period, \$30 million labor income/year, \$36 million GDP/year, and \$57 million output/year, inclusive of all direct, indirect, and induced economic benefits, per assumptions detailed in the methodology.

The following is a summary of the statistics described above for the annual average of regional economic benefit in the New York State-NYC Metro Area during the construction, which assumes it will take 5 years (60 months) to complete.

Construction Economic Benefits NYC MSA (in NYS only) (Annual Average in a 5-Year Period)	Job supported	Labor income	Value Added (GDP)	Output
Direct (Construction on site)	235	\$21M	\$21M	\$34M
Indirect (Business-to-business transactions related to on-site activities)	29	\$3M	\$4M	\$7M
Induced (Increased demand for household goods and services as a result of direct and indirect impacts)	78	\$6M	\$10M	\$16M
Totals	342	\$30M	\$36M	\$57M
Multiplier (Total/Direct)	1.45	1.43	1.71	1.67
On-site Percentage (Direct/Total)	69%	70%	58%	60%

Figure 12: Construction Economic Benefit Summary Table Source: JLP+D

Definitions:

1. **Value Add**: Equivalent to the Industry's contribution to GDP. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported).

2. **Output**: The value of industry production. For manufacturers this would be sales plus/minus change in inventory. For service sectors production this equals sales. For retail and wholesale trade, output is gross margin and not gross sales.

SUMMARY OF DEVELOPMENT AND ECONOMIC BENEFITS

Permanent Economic Benefit:

Total Jobs Supported (annual): Total Labor Income (annual): Total Value Added / GDP (annual): Total Output (annual): 1,873 - 3,088 \$167M - \$356M \$246M - \$525M \$540M - \$1,169M



Figure 13: Permanent Value Add Source: JLP+D



Figure 14: Permanent Output Source: JLP+D

Upon project buildout and leaseup of the one million square foot development, the building operations and commercial tenants would support permanent employment and generate other economic benefit.

The range of figures reflect different assumptions on the composition of industries on site. See methodology for details.

Permanent Value Added:

Upon buildout and lease-up, the size of direct, onsite employment is estimated to be 1,047 to 1,425 permanent direct jobs, with approximately \$95 million to \$207 million in labor income. Other direct benefits estimated include \$128 million to \$283 million in contribution to GDP and \$359 million to \$806 million in total output.

Permanent Output:

Each permanent job on-site is projected to support 0.79 to 1.17 additional jobs elsewhere. Taking into account the indirect and induced benefits in other parts of the city and the state, the overall operations benefit that the proposed development will support is estimated at: 1,873 to 3,088 total permanent jobs annually, \$167 million to \$356 million labor income annually, \$246 million to \$525 million GDP annually, and \$540 million to \$1.2 billion output annually, inclusive of all direct, indirect, and induced economic benefits, per assumptions detailed in the methodology.

The following is a detailed summary of the Permanent statistics described above and shows the economic benefit generated by operating activities on the site after Phase 1 of the project is completed. Per the request of the client, JLP+D analyzed one scenario for Phase 1 of the project, which corresponds to the first 1M square feet of development.

Permanent Economic Benefits NYC MSA (in NYS only) (Annual)	Job supported	Labor income	Value Added (GDP)	Output
Direct (Tenants on site)	1047-1425	\$95m-\$207M	\$128M-\$283M	\$359M-\$806M
Indirect (Business-to-business transactions related to on-site activities)	388-723	\$38m-\$78M	\$60M-\$116M	\$94M-\$179M
Induced (Increased demand for household goods and services as a result of direct and indirect impacts)	439-940	\$33M-\$71M	\$58M-\$125M	\$86M-\$185M
Totals	1873-3088	\$167M-\$356M	\$246M-\$525M	\$540M-\$1169M
Multiplier (Total/Direct)	1.79-2.17	1.75-1.72	1.92-1.85	1.5-1.45
On-site Percentage (Direct/Total)	56%-46%	57%-58%	52%-54%	67%-69%

Figure 15: Permanent Economic Benefit Summary Table Source: JLP+D



BENEFIT ESTIMATION METHODOLOGY

BENEFIT ESTIMATION METHODOLOGY

Key Terms Defined

Dollar	In 2022 dollars.
New York City Metropolitan Statistical Area - New York State Only (NYC MSA - NYS Only)	NYC MSA is the region created for this economic impact analysis. It consists of those municipalities located within the NYC MSA within the State of New York. In contrast with the full NYC MSA, it excludes areas of the MSA in other states.
Impact, Direct	The direct economic impact associated with the activities on-site.
Impact, Indirect	The economic activities that could potentially be supported by business to business transactions as a result of the direct, on-site economic activities.
Impact, Induced	The economic activities that could potentially be supported by household spending as a result of the economic activities generated by direct and indirect impacts.
Job	The same as the definition of employment used by Bureau of Labor Statistics and Bureau of Economic Analysis, which includes full-time, part-time, and seasonal workers. Both wage and salary employees as well as proprietors (self-employed individuals and unincorporated business owners) are included.
Labor Income	Employee compensation plus proprietor income.
Value Added	Equivalent to the Industry's contribution to GDP. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported).
Output / Economic Output	The value of industry production. For manufacturers this would be sales plus/minus change in inventory. For service sectors production this equals sales. For retail and wholesale trade, output is gross margin and not gross sales.
Multiplier	Multipliers describe rates of change for several different variables in the economic benefits analysis. Output - Output is the base Multiplier from which all other Multipliers are derived. The Output Multiplier describes the total Output generated as a result of 1 dollar of Output in the target Industry. Thus, if an Output Multiplier is 2.25, that means that for every dollar of production in this Industry, \$2.25 of activity is generated in the local economy: the original dollar and an additional \$1.25. Employment - Employment Multipliers describe the total jobs generated as a result of 1 job in the target Industry. Thus, if an Employment Multiplier is 2.33, that means that every Direct Job supports 2.33 jobs in the total economy: the original job and 1.33 additional jobs. Labor Income - Labor Income Multipliers describe the dollars of Labor Income generated as a result of one dollar of Labor Income in the target Industry. A Labor Income Multiplier of 2.2 indicates that for every dollar of Direct Labor Income in this Industry another \$1.20 of Labor Income is generated in the local economy. Value Added - Value Added Multipliers describe the total dollars of Value Added generated as a result of one dollar of Value Added in the target Industry. A Value Added Multiplier of 2.3 indicates that for every dollar of Direct Value Added in this Industry another \$1.30 of Value Added is generated in the local economy.

Figure 16: Key Terms Defined Source: JLP+D, IMPLAN

Construction Benefit Methodology

Overview

For the purposes of this study, two different but related economic benefit analyses were completed. The first is a Construction benefit analysis and the second is a Permanent benefit analysis. The Construction benefit measures the temporary economic effect of the construction efforts for a certain number of square feet, type of development, cost of development, and period of time. It provides an estimation of the short term economic benefit of that event on the region. The Permanent economic benefit analysis is what is more often referred to when discussing benefit analyses more broadly. This model demonstrates the annual economic benefit of the development once it is completed and functioning. It utilizes a certain breakdown in square footage per industry along with market data like expected vacancy rates, square footage per employee, and other factors to estimate annual benefit of these events on the region in question. As long as those assumptions remain true, the benefit is expected to be roughly the same each year in perpetuity.

This report will discuss both the Construction and the Permanent methodology and outline the assumptions that went into each in the following sections. Additional information about inputs and assumptions can be found in the Appendix at the end of this report.

Site Construction Analysis

In order to complete the construction economic benefit analysis, the client provided the Total Construction Cost (Inclusive of Design and Consultant Cost, Excluding Financing Cost and Land Cost) by Use. This broke down the estimated \$171M total budget into proportional cost for Technology Office, Research and Development, Industrial, and Education based on the square footage per development program (described in detail in the Permanent benefit Methodology section below). Additionally, the client estimates that the total construction period will be five (5) years, which is utilized to present the annual benefit of construction.

Modeling the Construction Benefit

The construction economic benefits analysis involves modeling the direct, indirect, induced, and total employment, labor income, value added, and output for the development scenario for the time of construction which, in this case, is five years. The modeling is done on the IMPLAN economic benefit assessment software using the input-output multipliers for the NYC MSA (NYS Only) region. The IMPLAN software estimates the benefit of direct economic change (employment change) in terms of the resulting indirect and induced changes to the economy. While indirect effects are the regional supply chain changes (business to business) associated with additional onsite direct jobs, induced effects are associated with the spending increases on goods and services by employees (households) from the direct and indirect jobs. Together, these elements are added to show the total amount of economic benefit expected for the construction period for each category.

After all inputs are obtained, the model can be run using IMPLAN and the result is the economic benefit analysis for a five year period for the construction of the first one million square feet of development. This can be presented as a total, five year benefit, or annualized to show the expected economic benefit of construction each year.

BENEFIT ESTIMATION METHODOLOGY

Permanent Benefit Methodology

Site Development Analysis

Per client request, for the permanent benefit analysis, the model analyzed two scenarios for the first one million square feet of development space. This 1M square feet was divided into five categories of uses; the total gross square footage inputs provided by the client and utilized are as follows:

Gross Square Footage	Scenario A	Scenario B	
Warehouse	600,000	0	
Technology Office	79,606	199,015	
Research and Development	53,885	134,712	
Industrial	226,509	566,273	
Education	40,000	100,000	
Total	1,000,000	1,000,000	

Figure 17: Development Program Source: JLP+D

Space Utilization Inputs

In addition to the breakdown of the development program, the model also requires assumptions about space utilization. These assumptions fall into three categories: square footage required per employee for the different sectors, rentable versus gross square footage per industry, and vacancy rate for each industry.

Square Foot Per Employee

Square footage per employee was defined by JLP+D through the data gathered during market analysis research. The breakdown is as follows:

SF per Employee	Scenario A	Scenario B	
Warehouse	1030	NA	
Technology Office	250	250	
Research and Development	442	442	
Industrial	1030	1030	
Education	740	740	

Figure 18: Square Foot Per Employee Source: JLP+D

For the Technology Office input, there was substantial research indicating that sqft/employee has been decreasing over the last 10 years. Due to the benefits of COVID-19, work from home initiatives have decreased the need for more office space. Knowing this, data on different measurements of sqft/employee were compiled from 2020 onward. These numbers were averaged across the different sectors. The range of sqft/employee for Office/Tech was 150-286 sqft/employee. The average of these numbers was approximately 250 sqft/employee, in alignment with the downward trends of Office/Tech space. This number was sourced from Austin Tenant Advisors, Economic and Planning Systems, Strategic Economics, Cooperative Strategies, and American Community Survey data.

For Research and Development, research on how this space was trending indicates that although certain R&D firms have been growing their sqft/employee since the start of the pandemic, this has not been consistent across the country. This could be explained by the remote, work from home guidelines that have decreased R&D in-person. Knowing this, data on different measurements of sqft/employee were compiled from 2020 onward. These numbers were averaged across the different sectors. The range of sqft/employee for R&D was 300-640 sqft/employee. The average of these numbers was approximately 425 sqft/employee. This number was averaged through data sourced from El Dorado County Transportation Commission, Strategic Economics, Cooperative Strategies, and American Community Survey data.

For Warehouse and Industrial, Cushman and Wakefield indicated a strong growth in this sector. Many industrial firms have been growing their sqft/employee since the start of the pandemic, as employment for warehousing has increased substantially, despite COVID-19. Knowing this, data on different measurements of sqft/employee were compiled from 2020 onward. These numbers were averaged across the different sectors. The range of sqft/employee for industrial was 371-1500 sqft/employee. The average of these numbers was approximately 1,030 sqft/employee. The sqft/ employee decreases could be explained through automation in certain industrial processes. This requires more space for the machinery, fewer personnel, and less space for employees. This number was averaged through data sourced from Economic Planning and Systems, Strategic Economics, Cooperative Strategies, and American Community Survey data.

Finally, for Education, many educational institutions have been hybrid spaces for students and employees throughout the pandemic. Despite the minimal amount of in-person learning, many educational institutions are stationary. This decreases the likelihood that educational institutions would relinquish their real estate and the sqft/employee. In some cases, sqft/ employee has increased due to in-person social distancing protocols. Knowing this, data on different measurements of sqft/employee were compiled from 2020 onward. These numbers were averaged across the different sectors. The range of sqft/employee for R&D was 447-1,000 sqft/employee. The average of these numbers was approximately 740 sqft/ employee. This number was averaged through data sourced from Cooperative Strategies and American Community Survey.

Rentable versus Gross Square Footage

For this input, the client requested that JLP+D assume a conservative estimate of the amount of space that would be rentable within the one million square foot development. Given this requirement and market trends, an 85% rentable versus gross square footage assumption was utilized for all four categories.

Vacancy Rate

Industrial and commercial vacancy rates throughout 2020 varied across the United States in extremes, due to the benefits of COVID-19. For the purposes of the Market Analysis, the data was filtered down to focus on Long Island, New York. This would provide a less volatile perspective on the vacancy rates for different sectors.

For Office/Tech, Cushman and Wakefield conducted a quarterly analysis report of the Office Space for Q4 2020. Q4 2020 data was used, as it provided the most up-to-date data on vacancy rates. Cushman and Wakefield indicated that for Q4 2020, the Office Space vacancy rate for Long Island, NY was measured to be 12.2%. Cushman and Wakefield was the source used in the previous Market Analysis for Calverton in 2018.

For R&D, Century 21 Commercial conducted an analysis of different New York markets for R&D Space for 2020. CoStar also provided updated vacancy information for Flex use in the Long Island market. The midpoint between the two sources, Century 21 and CoStar, indicated that the R&D Space vacancy rate for Long Island, NY was measured to be 3.03%.

For Industrial, Cushman and Wakefield conducted a quarterly analysis report of the Industrial Space for Q4 2020. Q4 2020 data was used, as it provided the most up-to-date data on vacancy rates. Cushman and Wakefield indicated that for Q4 2020, the Industrial Space vacancy rate for Long Island, NY was measured to be 4.0%. Cushman and Wakefield was the source used in the previous Market Analysis for Calverton in 2018.

BENEFIT ESTIMATION METHODOLOGY

Defining the Industry Clusters

We then move on to further breaking down the industry clusters. The five overall types of development program used were as follows: Warehouse, Technology Office, Research and Development, Industrial, and Education. Within each of these categories there is a sectoral breakdown using the assumptions below.

Use	Sector	IMPLAN code	Share of space utilization
Warehouse	Warehousing and storage	422	100%
	Fabricated Metal Products	236	0.68%
	Computer and Electronic Products	298	1.35%
	Aircraft Manufacturing	354	17.37%
Office	Airport Engine and Engine Parts Manufacturing	355	17.37%
	Other Aircraft Parts and Auxiliary Manufacturing	356	17.37%
	ISPs, Search Portals and Data Processing	436	33.67%
Professional, Scientific and Technical Services		464	12.18%
	Computer and Electronic Products	298	0.00%
	Aircraft Manufacturing	354	23.85%
Research	Airport Engine and Engine Parts Manufacturing	355	37.42%
Development	Other Aircraft Parts and Auxiliary Manufacturing	356	37.39%
-	ISPs, Search Portals and Data Processing	436	1.34%
	Professional, Scientific and Technical Services	464	0.00%
	Fabricated Metal Products	236	1.04%
Industrial	Computer and Electronic Products	298	1.05%
	Aircraft Manufacturing	354	26.16%
	Airport Engine and Engine Parts Manufacturing	355	36.16%
Other Aircraft Parts and Auxiliary Manufacturing		356	35.59%
Education	Education	482	100%

Figure 19: Sectoral Breakdown Source: JLP+D

Preparing the Model

Next, the amount of permanent jobs anticipated in each sector is calculated utilizing the inputs described previously for gross square feet per development program, rentable versus gross, vacancy rate, square foot per employee, and the real estate breakdown by sector. The following formula is used to calculate the number of jobs anticipated in each sector:

Gross square feet x percentage of rentable versus gross square feet x (1 - vacancy rate) / square foot per employee x percent of real estate occupied by given industry = jobs anticipated in each industry on an annual basis

Modeling the Permanent Benefits

Similar to the construction benefit modeling process, the final step in the permanent economic benefits analysis involves modeling the direct, indirect, induced, and total employment, labor income, value added, and output for the development scenario on a permanent basis. The result portrays the total economic benefit anticipated on an annual basis for this first one million square feet of development.

APPENDIX + REFERENCES

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Town of Riverhead Comprehensive Plan

The comprehensive plan, originally initiated in the late 1990s, sought to balance two seemingly contradictory objectives: preserving Riverhead's agricultural legacy and natural beauty, while accommodating growth and economic development. While increasing tourism had generated revenue for the Town and supported local retailers, the Town's scenic resources had been stressed and depleted. This activity, according to the document, had contributed to "a diminishment of the Town's unique countryside character that attracted so many residents in the first place." The Plan's goals were designed to be implemented incrementally, with individual components (such as property development or roadway improvements) proposed and executed by the private sector and/or other public agencies.

At the time of the document's drafting, Enterprise Park at Calverton (EPCAL) served as a major asset, comprising a significant share of Riverhead's economic development potential. According to the document, EPCAL represented an opportunity to "attract new businesses and jobs" in a strategic manner, where this activity would be concentrated in a few appropriate sites rather than sprawling into and threatening the vitality of agricultural uses and open space. Two components of Riverhead's Vision Statement involve an eventual buildout of EPCAL, specifically to include "a dynamic office/industrial center" and "regional recreational and entertainment facilities."

The original Master Plan sought the development of commercial and industrial uses within EPCAL, but also called for downzoning in the form of reduced Floor Area Ratios as well as increased open space and minimum lot size requirements in order to "ensure that office and industrial development fits into the Town's rural character." The Plan additionally envisioned the development of a portion of EPCAL into a destination entertainment use, which could absorb local demand and complement existing entertainment uses in the area (Splish Splash Water Park, located in Riverhead, and Animal Farm and Long Island Gamefarm which are located nearby). By introducing a new theme park attraction to the region, the plan envisioned the respective operator optimizing a portion of the expansive undeveloped space on the site as well as driving increased tourist activity into Riverhead's historic downtown and surrounding areas.

The plan also suggested the development of a race track which would likely replace the existing racing facility located on Route 58. The document claimed that while discussions about the feasibility of such a project have been on going, "no firm plans have been determined." The new track would continue to accommodate local racing fans while drawing tourists from throughout the region for more prominent events, particularly during the summer.

Goal 7.5, located in the Plan's Economic Development section, outlined a vision for the establishment and expansion of equestrian facilities throughout Riverhead. The first policy recommendation proposed the development of an equestrian show and event center at EPCAL, as well as the building out of a network of bridle trails throughout the site. Had the Plan's visions of a theme park or other recreational use been executed, this facility would augment the Park's family-friendly offerings, solidifying EPCAL's, and correlatingly the Town of Riverhead's, attractiveness as a destination for tourism and recreation.

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Agreement of Sale

The Agreement of Sale, negotiated between The Town of Riverhead Community Development Agency, The Town of Riverhead (collectively, the "Seller"), and Calverton Aviation & Technology, LLC (the "Purchaser"), lays out the terms and conditions governing a prospective sale of three EPCAL lots for the purposes of redevelopment. The purchase price is \$40,000,000, payable via an initial deposit of \$500,000 immediately following the Execution Date, a second deposit of \$500,000, and the remaining \$39,000,000 upon Closing (following the Due Diligence Period). The conditions of the sale include a positive assessment of Calverton Aviation & Technology, LLC's ability to execute a redevelopment of the site, as well as an approval of the Purchaser's Intended Development Plan's compliance with the Town of Riverhead's Planned Development Zoning District and other applicable regulations.

The Agreement requires the Purchaser to invest more than \$1,000,000 in runway improvements within two years of Closing, with extensions available for "Force Majeure Events", or delays caused by factors outside of the Purchaser's control. An executed completion guaranty is required as part of the deal.

Title Exceptions governing uses and other terms and conditions to which the property's conveyance will be held include sewer infrastructure easements to be referenced in the deed, a non-development buffer of 25' from Grumman Blvd and Route 25, non-development buffers of 1000' from the protected ponds identified in the subdivision map, no residential uses at the Property, and a provision that the Property will not be used as a commercial airport and "will not be listed on aviation charts or maps as a location at which aeronautical services such as fueling, hangaring, tie-down and parking, aircraft rental, aircraft maintenance, and flight instruction are provided to the general public."

The Intended Development Plan for the EPCAL's first phase includes the previously referenced runway improvement guaranty of \$1,000,000, to be completed within two years of Closing. The Development Plan then identifies prospective businesses which will locate at the redeveloped property, to include Luminati Aerospace LLC ("Luminati"), and additional organizations which will support Luminati's operations, those which may benefit from use of the runways, those with synergies which could benefit from proximity to these companies, and the Federal Aviation Administration. The Intended Development Plan proposes building out at least one million square feet of commercial and industrial space. The actual amount and configuration of the space will depend on the tenants who have agreed to locate at the site, as well as on the eventual site plan which will require approvals. Overall programming will emphasize aviation, technology and supportive uses, as well as those permitted under Town of Riverhead Planned Development Zoning District regulations.

EPCAL Reuse & Revitalization Plan

The EPCAL Reuse & Revitalization Plan is an updated urban renewal plan for a portion of the property which was the subject of the 1998 Calverton Enterprise Park Urban Renewal Plan. Since the adoption of the original Urban Renewal Plan, approximately 600 acres had been sold, reused and/ or redeveloped, and this updated document seeks to outline a plan for the remaining area (approximately 2,323 acres). The document summarizes the history of the site, briefly outlining its rich history in defense and aviation manufacturing. The US Navy acquired the site in 1952 for the purposes of runway construction and general aviation purposes, and began leasing to the Grumman Corporation shortly thereafter. Grumman assembled and tested aircraft on the 2,913 acre site for more than 40 years, before the company (now known as Northrup Grumman) closed all of its facilities in Long Island. This closure represented a substantial drop in revenue for the Town of Riverhead, Suffolk County, and the Riverhead Central School District; the annual property tax allocation to these three entities was estimated at approximately \$1,100,000. The termination of the facility also resulted in the loss of approximately 4,000 jobs.

Following this departure, the Navy conveyed 2,913 acres to the Town of Riverhead Community Development Agency ("CDA") for no consideration, "contingent upon the reuse of the property for economic development." The Town underwent an extensive environmental review process and commissioned a reuse planning study to inform how the site might best be developed to create jobs, expand the tax base, and attract investment. EPCAL was designated an Urban Renewal Area and a Plan was adopted to attract a hybrid of industrial and regional recreational uses.

The Town's Comprehensive Master Plan was modified accordingly, and 500 contiguous acres of the site (containing the majority of Grumman's buildings) were sold for reuse and rehabilitation. Approximately 100 acres of the original urban renewal land now host the Stony Brook University Business Incubator, recreational activities, a small private cemetery, and Town of Riverhead Water District infrastructure. The CDA was not able to execute the remainder of the of the original plan, and the remaining 2,323.9 acres remained largely undeveloped. In 2011, it invested significant resources in the reexamination of the site, commissioning a comprehensive study of market, environmental, traffic, and other factors with the participation of multiple local, county, and state agencies. The EPCAL Reuse & Revitalization Plan is the manifestation of this effort, serving as an update to the original urban renewal plan.

The larger urban renewal goals for the site are largely consistent with those of the original plan:

- · Attraction of private investment in the site
- · Maximization of the real property tax ratable base
- Maximization of skilled, high paying employment opportunities
- Protection of the natural environment and the sustaining of the regional quality of life

However, some of these have been modified according to the recommendations laid out in the RKG market assessment and the other studies produced as part of the second Generic Environmental Impact Statement process. Of particular importance was a dedication to coordinating efforts with local and regional agencies to mitigate development issues and improve the site's marketability. The Town was also able to obtain grants from the Regional Economic

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Development Council, which were largely used to upgrade the onsite Sewage Treatment Plant.

The Reuse and Revitalization Plan's Land Use component does not prescribe precise uses or square footages, as it recognizes that the development scheme will likely be executed over multiple decades. This scheme is intended to allow a measure of flexibility in the site's development so as to accommodate a variety of uses and achieve a balance of programming which will meet the Town's economic development objectives. Rather, it serves as the basis for the PD zoning which will codify the entitlements on the site, as well as the subdivision which locates the "development areas" and the natural and recreational areas which would be protected from improvement. These restricted areas include a 200' buffer along Grumman Blvd, 1,000' around designated wetlands, and other maintenance and creation of grassland areas.

The PD Zoning recommended as part of the Reuse and Revitalization Plan was eventually adopted in 2016. It acted as a hybrid form-based code, incorporating bulk and use restrictions as wells as guidelines concerning design and the public realm. The zoning district does not establish regulations which an applicant would be able to meet as of right, but rather lays out a site plan approval process with guiding language to inform the preparation of the submittal. The bulk regulations for individual lots will be determined through the site plan approval process, though the document does establish a four-acre minimum lot size.

Site regulations the zoning district contains include:

- Maximum impervious coverage of 90% (can be modified as part of site plan approval process)
- Maximum building height of 75' (can be modified as part of site plan approval process)
- · Parking and loading governed by the Town's

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standard requirements. This regulation can be modified if the site plan application is accompanied by a parking and loading demand study.

The proposed subdivision developed as part of the DSGEIS process contains 50 lots, on which 42 would be developable (approximately 654 acres). This figure includes roadways and drainage reserve areas. The remaining 8 lots contain open space, recharge areas, Town of Riverhead property, Veterans Memorial Park, the Henry Pfeiffer Community Center, and Sewage Treatment Plant facilities. A near term and full buildout scenario was developed by RKG Associates as part of the DSGEIS process, which included a mix of uses involving multi-modal freight, agri-business and food processing, high-tech business/green technology, specialty uses, and mixed-use planned development.

By 2025, the Reuse and Revitalization Plan projects, in line with RKG's analysis, "289,606 SF of industrial/research and development (R&D)/flex space; 1,330,305 SF of office/medical office/flex or institutional space; 358,785 SF of commercial/ retail space; and 150 Residential Units (supportive of commercial/industrial development at the EPCAL Property)." A full buildout, developed in accordance with the Reuse and Redevelopment, the Planned Development Zoning District, and the Subdivision Plan regulations, would consist of "6,886,836 SF of industrial/research and development (R&D)/flex space; 2,927,232 SF of office/flex and 740,520 SF of medical office space (3,667,752 SF total); 805,860 SF commercial/retail space and 300 Residential Units (supportive of commercial/industrial development at the EPCAL Property)."

As of March 2022, the Town of Riverhead Board approved the transfer of the 1,643 acre site to the Riverhead Industrial Development Agency. This has progressed the final sale of the site to Calverton Aviation & Technology.

RKG Associates and Jeffrey Donohoe Associates Real Estate Market Assessment (2011)

This report was prepared in 2011 in collaboration with VHB, for the purposes of informing the development of a comprehensive plan for EPCAL. The report initially examines the town's demographic characteristics, finding that population growth, in terms of percent change, in Riverhead had outpaced that of Nassau and Suffolk counties as well as the State's. The population also featured an aging population, particularly when taken in comparison with the age structure of the County's population. Riverhead featured a 44.9 median age in 2011, a number that has since increased to 46.9 years old. The 2020 median age is 12.4% higher than the Suffolk County age, and 20.3% higher than the median age of New York State. The median household income for the Town of Riverhead was \$56,487 in 2011, lower than Suffolk County's at \$83,390. Since the time of RKG's analysis, the median income for the Town of Riverhead has increased to \$64,865 as of 2020, while the median income in Suffolk County has increased to \$105,362. These combined figures demonstrate the aging population and pace of income growth in the Town of Riverhead.

The economy in greater Suffolk County lagged, as many did post-Great Recession. However, when compared to Nassau County, it fared relatively well, gaining over 24,000 jobs between 2000 and 2010. whereas Nassau lost over 16,000. Approximately 40% of this job growth was in the government sector, and the four largest employment sectors overall included Health Care and Social Assistance, Retail. Manufacturing, and Accommodations and Food Services. The report noted that both Suffolk and Nassau County experienced declines in Manufacturing positions, but that Suffolk saw far fewer losses and thus exhibited more resiliency. The real estate market analysis portion of the report focused on the Long Island office and industrial markets, as these would be the most appropriate asset classes to be developed at EPCAL based on zoning and the urban renewal plan. The analysis, conducted in 2011, observed that the current office market was weak, reporting a 19.2% vacancy over 17.6% the year prior. Suffolk County showed a slightly higher vacancy rate of 22%. Lease rates for Class A

space were slightly lower than for Nassau County and Long Island as a whole, at \$26.94 per square foot. In more local markets, available leases in Riverhead were listed for approximately \$18-\$22 per square foot with slightly higher rates observed for medical spaces, while neighboring Brookhaven showed office rates slightly lower at \$14-\$18 per square foot.

Office absorption between 2000 and 2010 in Suffolk County was predominantly concentrated in the Western and Central submarkets, though Brookhaven absorbed almost 650,000 sf in this time period. Riverhead absorbed only 126,000. At the time of the Market Report's production, plans for the development of the Hampton Business District at Gabreski Airport (in Brookhaven) by Rechler Equity were announced and permits approved. The land is owned by the county and will be leased to the developers for 40 vears for \$40M. This project was projected to bring 440,000 sf of mixed-use space online across nine buildings. At the time, the asking rates for office and industrial space were \$30-\$32 and \$15.50-\$16.50 per square foot, respectively, both ranges significantly higher than average market rates.

Due to COVID-19, overall vacancy in Long Island office real estate fell to 12.7% from 13.5% in 4Q21. Nassau County has a vacancy rate at 10.4%, while Suffolk County has a vacancy rate at 16.4%. Office space has been negatively absorbed, with YTD absorption total of -435,728 SF across Long Island. As of 1Q22, there is no new construction scheduled for Long Island.

The industrial market similarly suffered during the Great Recession, with vacancy rates in Suffolk County up to 12.9% from 10.7% in 2010. The County featured approximately 81 million square feet, approximately twice that of Nassau County. However, over the previous year the analysis observed a negative absorption of over 300,000 sf. Eastern Suffolk, featured a vacancy rate of 12.7% which was slightly higher than the average for all of Suffolk County (at 12.1%), but slightly lower than the average for all of Long Island (12.9%). Lease rates for industrial spaces, as with the office spaces, decreased per sf as one moves farther east. The high-tech industrial

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subsector averaged \$5.83 per sf, while warehousing and distribution averaged \$5.41 (the analysis did not include manufacturing subsector lease rates for Eastern Suffolk). These rates were lower than the averages for Long Island as a whole, which showed \$7.56 per sf for high-tech, \$6.93 for manufacturing, and \$6.38 for warehouse and distribution.

As of Q1 2022, there has been a dramatic reduction in vacancy for industrial markets. The industrial space, on a national scale, has reached an all time low of 3.3%. Suffolk County has experienced positive growth in the industrial sector over the past few years as it reaches the top of the average 10-year real estate cycle. All the submarkets in Suffolk County total 88,097,583 SF, which is greater than the 44,861,325 SF of industrial space in Nassau County. In 1Q 2022 2022, the industrial office sector had an overall vacancy rate of 2.3% and net absorption of 320,155 SF.

At EPCAL business park, the market analysis estimated an approximate 17 - 35% vacancy / availability rate based on research and interviews conducted. Asking rents were typically within the \$7- \$8.50 per sf range for warehouse/distribution, \$10 for R & D, and \$5 for flex space. There was a mix of businesses operating at The Site, but most were involved with the manufacture and use of wood products and construction materials. The analysis attempted to assess the levels of satisfaction that these tenants felt toward The Site, finding that those interviewed expressed dissatisfaction with the executive park overall. Specific complaints involved the lack of infrastructure and improvements, poor signage and access, lack of maintenance, security concerns, and the difficulty of obtaining local development approvals.

Due to the impacts of COVID-19, WFH initiatives have decreased the need for more office space. Knowing this, data on different measurements of sqft/ employee were compiled from 2020 onward. These numbers were averaged across the different sectors. The average of these numbers was approximately 250 sqft/employee, in alignment with the downward trends of Office/Tech space. Research on how the R&D space was trending indicates that certain R&D firms have been growing their sqft/employee since the start of the pandemic. The range of sqft/employee for R&D was 300-640 sq ft/employee. The average of these numbers was approximately 425 sq ft/ employee. Many industrial firms have been growing their sqft/employee since the start of the pandemic, as employment for warehousing has increased substantially, despite COVID-19. The range of sqft/ employee for industrial was 371-1500 sq ft/employee. The average of these numbers was approximately 1,030 sqft/employee.

The document then examined specialty uses which could be located at or have been suggested for The Site, including "Aviation uses, Native American casino gaming, solar energy production, professional auto racing, a sports tournament complex, uses associated with Brookhaven National Laboratory, and a polo complex. Regarding aviation uses, the report notes that the runway sizes, 7,000' and 10,000' comprised a potential asset given the size of aircraft they are able to accommodate, but required considerable investment before they could be regularly put in service. That EPCAL is also not sanctioned or regulated by the Federal Aviation Administration, so establishing the location for commercial aviation use would similarly require substantial time and capital. The market analysis ultimately found that while commercial and industrial development had occurred in Brookhaven before 2011, the majority of this activity had not yet reached north to Riverhead and a perception lingered regarding EPCAL's lack of accessibility from the Long Island Expressway.

There were also a number of site constraints related to the conservation of natural resources which inhibited the development potential. In its examination of programming potential at EPCAL, it found the most feasible uses to be the establishment of a "freight village" which would cluster freightdependent companies around shared transportation infrastructure, the establishment of agri-business and eco-tourism uses which could take advantage of The Site's proximity to proximate agricultural facilities and farms, a high-tech business hub and research park which could leverage connections with the adjacent Stony Brook University Incubator as well as Brookhaven Labs, and a mixed-use planned development. Re-establishing the airport was not recommended.

BEST PRACTICES AND PRECEDENTS



The above-referenced research center is Cummings Research Park, currently the second largest research park in the country (after North Carolina's research triangle), and the fourth largest in the world. Its current tenants include UAH, GE Aviation, General Dynamics, Airbus, RollsRoyce, Northrop Grumman, Orbital ATK, Pratt and Whitney and hundreds more technology, defense, and aerospace companies. Multiple other aerospace companies operate manufacturing facilities in and around Huntsville as well, including Science and Engineering Services; Boeing, which operates a research and technology facility in Huntsville as well; and Raytheon. NASA's Space Launch System, which will launch manned crews into space for exploration of Mars and beyond, has finished development. As of March 2022, the SLS has been transported to Florida for final testing, before the Artemis I Launch in June 2022.

Numerous educational partnerships between industry firms and companies and universities and high schools have developed in Huntsville as well. The National Space Science & Technology Center is a partnership between NASA, the National Weather Science and the University of Alabama state university system which offers students collaborative and interdisciplinary research opportunities into Earth science, space science, material science, information technology, biotechnology, propulsion, and advanced optics. Additionally, Alabama governor Kay Ivey announced plans to create a cybertechnology and engineering concentrated high school in 2018. As of 2020, the first-in-the-nation School of Cyber Technology and Engineering was opened, which will leverage Huntsville's status as a global technology power and expose students to career and networking opportunities.

BEST PRACTICES AND PRECEDENTS

UAMMI – Utah Advanced Materials and Manufacturing Initiative

The Utah Advanced Materials and Manufacturing Initiative (UAMMI) is a partnership between public, private, and educational entities for the purposes of furthering the growth and success of Utah's advanced composites and manufacturing industry. The concept for this partnership was prompted in 2005, created via then-Governor Jon Huntsman's Economic Clusters Initiative, of which Carbon Fiber was one. Economic clusters, according to a National Governors Association report, have generally been found to yield positive impacts on wages, employment opportunities, entrepreneurship, and diversification. Research conducted by the United States Department of Agriculture found that "average earnings in rural counties that have high shares of particular industry classifications, defined as clusters, were higher than in rural counties without clusters." Additionally, a 2006 study in Canada found that employment and average income in clustered industries in 'city- regions' grew more than double that of non-clustered industries.

UAMMI leveraged Utah's extensive history in aerospace and advanced materials and offered initial partners supply chain support as well as policies which would align educational programs at Utah's public universities, a forum for information and resource exchange, and industry marketing and branding opportunities. The development of this organization enabled partner organizations to access state financing and subsidies that might not have otherwise been available. The involvement of over a dozen colleges and universities provide R&D capacity as well as a valuable workforce development function which is essential to any healthy economic ecosystem. While initially there were challenges with regards to the protection of intellectual property, the organization was able to overcome these and coalesce, successfully winning an Investing in Manufacturing Communities Partnership (a Department of Commerce program) designation in 2013. The IMCP incentivizes and facilitates collaboration between private and public stakeholders within manufacturing communities. This designation also endows preferential consideration to many Federal program applications submitted by and for these Manufacturing Community members. In a recent report released in late 2021, UAMMI proposed the development of a new center: Utah Aerospace Advanced Manufacturing Center (UAAMC). This center is envisioned to be a public-private partnership to ensure the competitiveness of aircraft industries, coupled with manufacturing and materials.

Aerospace Hub - Huntsville, AL

In 1941, The United States Army selected Huntsville, AL as the location in which it would locate three chemical munitions facilities to support World War II efforts. Once the war ended and the facilities were no longer needed the existing infrastructure (the three sites were renamed Redstone Arsenal) struggled to attract tenants. Ultimately the Army selected the site for rocket and missile research, testing, and development.

The majority of the Army's space and exploration initiatives were transferred to NASA in the late 1950s, and this Huntsville location would become the Marshall Space Flight Center, which would develop the Saturn series boosters used by NASA in the Apollo Lunar Landing program. This substantial level of economic activity prompted the development of an industrial ecosystem, as described by the Encyclopedia of Alabama: As the nation's space program grew, research activities in the Huntsville area expanded. The city also saw an influx of private companies that provided technology and manufacturing for the activities at Marshall and Redstone Arsenal, including Chrysler, Boeing, Lockheed, IBM, and Northrop. Von Braun's team, along with community leaders and company executives, sought to form a partnership and began promoting the idea of a research center that would be affiliated with what is now University of Alabama - Huntsville. They believed it would not only support space and technology research but also provide a prime location for industrial growth. In 1961, von Braun lobbied the Alabama legislature for a research center that would include a university, research institute and industrial park. Lawmakers supported the idea and pledged to invest \$3 million in the project.

Soundview Technology Center – Everett, WA

Soundview Technology Center (STC) is a 500,000 square foot industrial park. Located in Everett, Washington, the site is adjacent to Boeing's 787 and 777-X carbon fiber wing assembly facilities. For more than a century, Washington State has been the epicenter of aerospace innovation. Anchored by Boeing, which was founded in Seattle in 1916, the region is now home to over 1,350 aerospacerelated companies. As of 2020, the workforce was about 30,000 people in the Boeing Everett location, down from 36,000 people in 2017. In the entire state, approximately 120,000 people are employed in the aerospace industry. Additionally, many tech companies have recently moved from Silicon Valley to Seattle, which is just south of Everett.

Google, Facebook, Apple, Twitter, Salesforce, and many other companies have established offices there, in addition to companies already headquartered there, such as Amazon and Microsoft. The greater Seattle area is also home to educational institutions that have invested heavily in the region; besides Washington State, The Everett University Center received \$54 million for a new academic university, which may provide STC with a stream of highly skilled employees.

Soundview Technology Center seeks to leverage the existing innovation ecosystem to attract new tenants. The site has been zoned for industrial use for over fifty years and benefits from close proximity to a regional airport, Paine Field. Although it was formerly used predominantly for private aircrafts, it is now a commercial airport that officially opened in March 2019. In the one year leading up to COVID-19, 1,022,046 passengers flew on aircrafts from Paine Field. The Port of Everett also boasts natural competitive advantages; the deep-water seaport can accommodate oversized vessels with cargo loads and is also the closest American port to Eastern Asia.

STC is now available for lease-of-build-to-suit advanced manufacturing spaces. It comprises three buildings of Class A industrial space, which is designed to be highly flexible and customizable. Zoned M1 in the City of Everett, the current building plans can accommodate up to 25% mezzanine buildout and will feature dock high and grade level loading.

ALIGNMENT WITH ECONOMIC DEVELOPMENT POLICIES AND INITIATIVES

Federal

Economic Development Assistance Programs

The federal Economic Development Administration offers grants and loans of up to \$3m to support job creation, leverage private capital, and spur economic development, particularly if the project reinforces the objectives of the regional economic development council. These awards are typically reserved for district organizations of a designated Economic Development Districts, a political subdivision of a State, non-profits, and educational institutions and so would require a form of partnership, joint development, or other collaboration agreement with such an entity to access these funds. The EDA offers financing for construction, design and engineering, and non-construction projects.

Department of Energy Financing

Brookhaven National Laboratory is a research facility located approximately 10 miles west of The Site, in Upton, NY. Its research focuses on both basic and applied science fields, including energy security, physics, and climate and biosciences. It features almost 3,000 fulltime employees, over 4,400 other users of the facility, and over 1,000 visiting scientists. It is funded primarily through the US Department of Energy's Office of Science, which contains a variety of funding programs of which tenants at The Site could avail themselves. Brookhaven National Laboratory receives the majority of its annual funding through the DOE's Basic Energy Sciences, High Energy Physics, and Nuclear Physics programs (approximately \$500m). Other sources of financing include the Department of Homeland Security, the DOE Office of Energy Efficiency and Renewable Energy, the DOE Office of Environmental Management, and National Nuclear Security Administration.⁶

Brookhaven additionally features substantial academic partnerships at all levels of education. It offers summer science explorations for elementary-aged children, contests open to applicants in grades K - 12, it sponsors an annual Science Bowl for high schoolers, and hosts a variety of internships through the Department of Energy.

New York State

New York State, through Empire State Development and the Department of Taxation and Finance, offers incentives for the creation of jobs, investment in new facilities and operations, and business expansion. These programs are intended to encourage businesses to relocate to the State or expand their footprint within it, while maintaining strict standards of accountability to ensure that an appropriate return on investment is realized. Some of these programs for which EPCAL may be eligible include:

Investment Tax Credit (ITC)

Businesses that place qualified property into service are eligible for an investment tax credit. "Qualified property" in this case refers to property, including structures, that is depreciable, has a useful life of at least four years, and is primarily being used in the production of goods, in service of research and development, or as a film production facility. Usually, a credit of 5% is applied to the initial \$350M of investment credit base, and 4% applied to the amount in excess of that amount.

Economic Development Fund (Empire State Development)

The EDF offers assistance to projects which advance New York State's economic development objectives, including job creation and retention as well as increased business activity. Governor Cuomo allocated \$200M to it in his 2018 budget, which will go towards applicants that are producing feasibility studies, creating worker training programs, acquiring land, building structures, and many other uses.

Economic Development Purposes Grants (Empire State Development)

ESD Economic Development Purposes Grants are highly flexible grants for projects that "create or retain jobs, generate increased economic activity, and improve economic and social viability and vitality of local communities". The funds are available to forprofit, not-for-profit, public sector, and institutional applicants, and may be used to fund a broad array of purposes, including acquisition or leasing, demolition, construction, planning, development, infrastructure. The program has been used to fund nine projects across Long Island from 2011-2016, receiving between \$100,000 and \$500,000 each.

Regional Council Capital Fund Program (Empire State Development)

Similarly to Economic Development Purposes Grant program, the Regional Council Capital Fund Program offers flexible grants for capital-based economic development initiatives to create or retain jobs; address unemployment or underemployment, and increase business activity in communities. The funding is made available through the State's **Regional Economic Development Council Initiative** and is available to for-profit entities. Funds may be used for acquisition or leasing, demolition, new construction, planning, and project soft costs up to 25% of total project costs. From 2011 - 2016, eight projects have been funded by the Long Island Regional Economic Development council through the Capital Fund program, with allocations ranging from \$2 million to \$5 million.

ALIGNMENT WITH ECONOMIC DEVELOPMENT POLICIES AND INITIATIVES

Strategic Planning and Feasibility Studies Program (Empire State Development)

The Empire State Development Urban and Community Development Program provides working capital grants of up to \$100,000 to support strategic development plans and feasibility studies for site or facility assessment and planning. Projects should focus on economic development and special consideration shall be given to projects supporting Regional Economic Development Council Opportunity Agenda priorities, Downtown Revitalization Initiative projects, and projects identified in the NY Rising Community Reconstruction Program recovery plans (none of which are currently focused near the Calverton site or Town of Riverhead).

New York State offers a number of programs targeting the creation of jobs.

Although many of these programs are targeted towards companies that would be envisioned as tenants after future site development, these programs present opportunities for companies that settle on site, and may present a competitive advantage for The Site vs. locations in other states. State programs offering considerable support and resources for employee training, retraining, and attraction include:

NYS Innovation Hot Spot Program (Division of Science, Technology, & Innovation)

The program offered up to \$250,000 annually for five years to five business incubators in the Economic Development regions of Long Island, New York City, Mid-Hudson, Capital Region, and Mohawk Valley to coordinate regional entrepreneurship ecosystems, and offer certain tax benefits to client businesses. Applicants are awarded grants to expand services and programs provided to early stage companies served by the incubator. Entities seeking Innovation Hot Spot Designation much have been existing for three or more years, provide a strategic plan, demonstrate that their services align with industry best practices, and have a strong affiliation with a university or college that shows alignment with assisting in technology transfer initiatives. Three Innovation Hot Spots currently existing on Long Island: the Long Island High Tech Incubator (next to Stony Brook University), the Stony Brook University NYS Certified Business Incubator, and the Entrepreneurship & Technology Innovation Center (ETIC) at New York Institute of Technology.

Excelsior Jobs Program (Empire State Development)

This initiative provides four refundable tax credits for which businesses can qualify. These include credits for job creation, qualified investment, research expenditures, and real property tax credits, all sized proportionally to the amount of new investment or the total wages created by the venture. The tax credits are intended to support businesses in specific growth industries which typically create quality jobs, such as biotechnology, high-tech, agriculture, and manufacturing. Most initiatives receive benefits through the "job growth" track, the eligibility for which is included in Figure 1.

Additional NYS Department of Labor jobs-focused programs include:

- Unemployed Worker Skills Training Program
- Business Hiring & Training Incentives Worker Skills Upgrading Program
- Worker Skills Upgrading Existing Employee
 Training Program
- Worker Skills Upgrading New Hire (on-the-job) Training Program
- Special Populations Training Program
- Apprenticeship Expansion Grants
- Sector Partnership National Emergency Grant for Work-Based Training Program
- Dislocated Worker Training National Emergency
 Grant
- Work Opportunity Tax Credit

Given the size of the property under consideration, the presence of environmentally sensitive assets (like wetlands) on The Site, and the scale of water quality issues across Long Island, a number of State-funding programs targeted towards addressing open space and parks infrastructure, sustainability, innovation

Strategic Industry	Minimum Jobs	Regionally Minimum J	Significant Project obs & Investments
Scientific R&D	5	20	\$6,000,000
Software Development	5	N/A	N/A
Agriculture	5	20	\$500,000
Manufacturing	10	50	\$5,000,000
Financial Services	50	300	\$6,000,000
Back Office	50	300	\$6,000,000
Distribution	75	300	\$300,000,000
Music Production	5	N/A	N/A
Entertainment Company	100	200	N/A
Other	N/A	300	\$6,000,000

Figure 22: Excelsior Program Job Growth Track. Source: Empire State Development.

in environmental design, and water quality issues may provide funding options as part of a broad site strategy that may include public-private partnerships with entities that qualify to access these sources of state funding. These mechanisms have the potential to help with infrastructure investments needs that may arise with the development of more intensive uses on The Site.

Many state programs are available to fund projects that meet various policy priorities, but can only disperse funds through other public sector or notfor-profit entities. Although these funds are not available to private sector entities, a broad, site-wide development strategy may include public sector or not-for-profit partnerships that could allow access to these state funds for investments on-site.

Green Innovation Grant Program

The Green Innovation Grant Program (GIGP) provides funding for public or private projects that utilized stormwater infrastructure design and green technologies. Grants are provided on a competitive basis to projects that improve water quality and demonstrate green stormwater infrastructure. The grant provides a minimum of 40% and a maximum of 90% of the total eligible project costs, requiring a state or local source match for the remainder. Eight projects across Long Island received funding through the program from 2011-2016, receiving from as little as \$150,000 to as much as \$6 million in funding.

DEC Water Quality Improvement Project Program (Department of Environmental Conservation)

The Water Quality Improvement Project (WQIP) provides reimbursement grants that directly address documented water quality impairments or protect a drinking water source. The program anticipates having up to \$79 million available for WQIP grants. Eligible projects include wastewater treatment improvements, non-agricultural nonpoint source abatement and control, land acquisition projects for source water protection, salt storage, aquatic habitat restoration, and municipal separate storm sewer systems. Projects must provide between a 25%-60% local match, depending on project type. In 2018, The Town of Riverhead received \$580,000 under this program to connect a hotel, catering hall, and shopping center to the municipal sewer system under this program.

ALIGNMENT WITH ECONOMIC DEVELOPMENT POLICIES AND INITIATIVES

Parks, Recreation, and Historic Preservation Grants

The Office of Parks, Recreation, and Historic has dedicated up to \$19.5 million to its Environmental Protection Fund — dedicated to parks, historic preservation, and heritage area projects. Under its Parks program, funds of up to \$500,000 are allocated as matching grants and may be used by municipalities or not-for-profits for acquisition, planning, development, and improvements to preserve, rehabilitate or restore lands, waters or structure for park, recreation or conservation purposes and for structural assessments and/or planning for such projects. The Town of Riverhead received a \$500,000 award through this program for the EPCAL Athletic Trail.

Other potentially beneficial programs:

- Parks RTP Recreational Trails Program
- NYSERDA CGC3 Cleaner Greener Communities (CGC), Phase II Implementation Grants, Category 3: Sustainability Projects
- Parks PADP Park Acquisition, Development and Planning

Suffolk County

Suffolk County IDA

Suffolk County IDA provides financial assistance for expansion, new construction and equipment purchase for profit and not-for-profit projects. The IDA provides benefits by offering property tax abatements of 5, 10, 12, 15, and 20 years in length, as well as sales tax exemptions on project materials and new equipment, and the waiving of mortgage recording taxes on new projects. For example, in February 2018, the Suffolk County IDA offered \$1.5 million in tax breaks to an aircraft parts distributor that is considering relocating its headquarters from Hauppauge to Florida. Seal Dynamics LLC, which has 76 employees locally, is seeking a larger office and warehouse facility; it is proposing to construct a 51,000-sf building that would cost \$6.3 million to build. The IDA's \$1.5 million incentive package includes a \$1.1 million reduction in property taxes, which is less than the \$1.2 million in tax payments the local government would receive from Seal over the same period.

Suffolk County's Foreign-Trade Zone (FTZ #52)

Foreign Trade Zones are locations throughout the United States in which merchandise is considered to be international commerce and therefore "may enter the designated area without going through customs or paying duties or excise taxes."⁷ The Suffolk County FTZ contains two types of site: a Magnet Site in which multiple users in a variety of industries conduct business at a location near Macarthur Airport (operated by Islip Foreign Trade Zone Authority), and multiple "Usage Driven Sites", which are sites approved for specific operations by specific businesses; these are able to access the benefits of the Foreign Trade Zone without having to relocate to the Magnet Site. The FTZ is applicable to businesses engaged in warehousing, repackaging, and manufacturing in Suffolk County with imports exceeding \$50,000 annually.

Benefits to zone users, according to the Economic Development and Planning Division of Suffolk County, include:

- Duty Exemption No duties or quota charges on re-exports.
- Duty Deferral Customs and Border Protection duty and federal excise tax, if applicable, are paid only when the merchandise is transferred from the zone for consumption.
- Duty Reduction Finished products manufactured or assembled in an FTZ from imported components may be subject to a lower rate of duty. A manufacturer may elect to pay duty on the component parts or the finished product, whichever rate is lower.
- Duty Elimination On Waste, Scrap And Yield Loss

 Imported raw materials lost as waste, scrap or other result in the processing or manufacturing process is not considered imported, and therefore no duty is paid on that portion when the finished product ships into the U.S.
- Weekly Entries Zone users may file one entry as opposed to multiple entries throughout the week, significantly reducing paperwork, time and

expense.

- Zone-To-Zone Transfer Merchandise may be transferred under bond from one FTZ to another with duties paid only when the merchandise is finally admitted into U.S. Customs territory.
- Quality Control The FTZ may be used for quality control inspections to ensure only acceptable products are imported, with substandard goods being destroyed or returned before duty is paid.
- Exhibition Merchandise and machinery may be held for exhibition or displayed without duty payments."⁸

Riverhead IDA

The Riverhead IDA supports the development of new business in Riverhead as well as the expansion of those already operating. It offers financial incentives, including tax exempt or taxable bond financing, property tax abatements, sales tax exemptions, mortgage recording tax exemptions, and other tools to assist qualified projects. The IDA also offers site location assistance for developers and business owners. Projects the agency has assisted in the past encompass a wide variety of commercial activity, from large cultural centers like the Long Island Aquarium & Exhibition Center, to smaller enterprises like the Blue Duck Bakery in downtown Riverhead.

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August 2022

Summary of Calverton Economic Benefits Result - Low Range Scenario (Final) 7/19/2022 James Lima Planning + Development

Table of Content

Definitions Economic Benefits Indicators

Definitions

Dollar	In 2022 dollars.
New York City Metropolitan Statistical Area - New York State Only (NYC MSA - NYS Only)	NYC MSA is the region created for this economic impact analysis. It consists of those municipalities located within the NYC MSA within the State of New York. In contrast with the full NYC MSA, it excludes areas of the MSA in other states.
Impact, Direct	The direct economic impact associated with the activities on-site.
Impact, Indirect	The economic activities that could potentially be supported by business to business transactions as a result of the direct, on-site economic activities.
Impact, Induced	The economic activities that could potentially be supported by household spending as a result of the economic activities generated by direct and indirect impacts.
Job	The same as the definition of employment used by Bureau of Labor Statistics and Bureau of Economic Analysis, which includes full-time, part-time, and seasonal workers. Both wage and salary employees as well as proprietors (self-employed individuals and unincorporated business owners) are included.
Labor Income	Employee compensation plus proprietor income.
Value Added	Equivalent to the Industry's contribution to GDP. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported).
Output / Economic Output	The value of industry production. For manufacturers this would be sales plus/minus change in inventory. For service sectors production this equals sales. For retail and wholesale trade, output is gross margin and not gross sales.
Multiplier	Multipliers describe rates of change for several different variables in the economic benefits analysis. Output - Output is the base Multiplier from which all other Multipliers are derived. The Output Multiplier describes the total Output generated as a result of 1 dollar of Output in the target Industry. Thus, if an Output Multiplier is 2.25, that means that for every dollar of production in this Industry, \$2.25 of activity is generated in the local economy: the original dollar and an additional \$1.25. Employment - Employment Multipliers describe the total jobs generated as a result of 1 job in the target Industry. Thus, if an Employment Multiplier is 2.33, that means that every Direct Job supports 2.33 jobs in the total economy: the original job and 1.33 additional jobs. Labor Income - Labor Income Multipliers describe the dollars of Labor Income generated as a result of one dollar of Labor Income in the target Industry. A Labor Income Multiplier of 2.2 indicates that for every dollar of Direct Labor Income in this Industry another \$1.20 of Labor Income is generated in the local economy. Value Added - Value Added Multipliers describe the total dollars of Value Added generated as a result of one dollar of Value Added in the target Industry. A Value Added Multiplier of 2.3 indicates that for every dollar of Direct Value Added in this Industry another \$1.30 of Value Added is generated in the local economy.

Economic Benefits Indicators

The following statistics refer to the economic impact generated by operating activities on the site after Phase 1 of the project is completed. Per the request of the client, JLP+D analyzed one scenario for Phase 1 of the project, which corresponds to the first 1M square feet of development space.

Permanent Economic Benefits A	Direct Impact	Total Inpact
Employment	1047/year	1873/year
Labor Income	\$95M/year	\$167M/year
Value Added	\$128M/year	\$246M/year
Output	\$359M/year	\$540M/year

Permanent Benefit, NYC MSA (NYS Only)	Job Supported	Labor Income	Value Added / GDP	Output
Direct(Business on Site)	1,047	\$95M	\$128M	\$359M
Indirect (Business-to-business transactions	388	\$38M	\$60M	\$94M
Induced (Increased demand for household goods	439	\$33M	\$58M	\$86M
Totals	1,873	\$167M	\$246M	\$540M
Multiplier (Total/Direct)	1.79	1.75	1.92	1.50
On-Site Percentage (Direct/Total)	56%	57%	52%	67%