
New York State Capital Region

Economic Development Potential for Offshore Wind Infrastructure

Prepared for Capital Region NY Partners
by Karp Strategies, LLC
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Developed in Partnership with



Center for Economic Growth:
Capital Region, New York



Carver Companies



Port of Albany



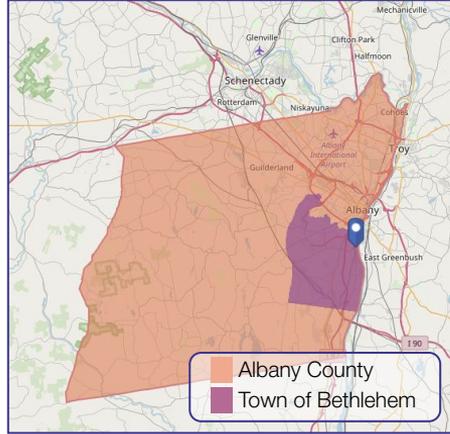
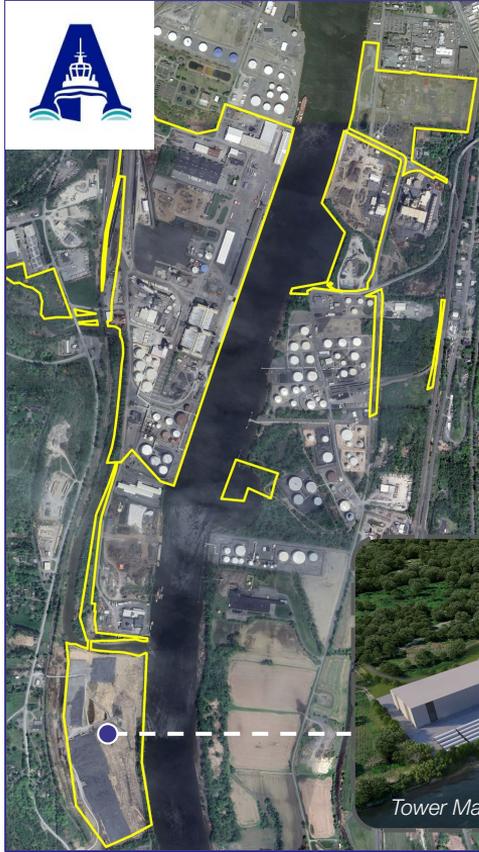
Advance Albany County Alliance

List of Acronyms

AAA	Advance Albany County Alliance
CEG	Center for Economic Growth
CLPA	Climate Leadership and Community Protections Act
CNC	Computer Numerically Controlled
DAC	Disadvantaged Community
EJ	Environmental Justice
MWBE	Minority-, Women-Owned Business Enterprise
NAICS	North American Industry Classification System
NREL	National Renewable Energy Laboratory
NYSERDA	New York State Energy and Research Development Authority
OREC	Offshore Wind Renewable Energy Certificates
OSW	Offshore Wind
SBMT	South Brooklyn Marine Terminal
SDVOB	Service Disabled Veteran Owned Business

**Proposed
Offshore Wind Facilities
in the Capital Region**

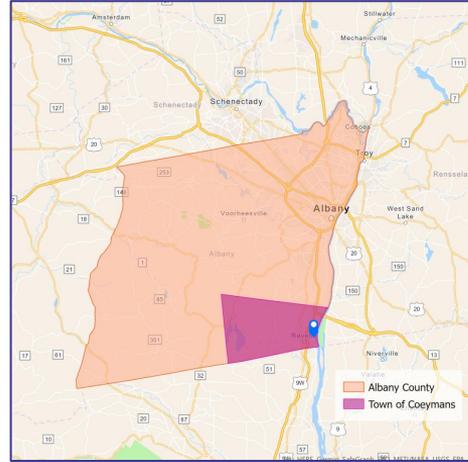
Tower Manufacturing at the Port of Albany



Tower Manufacturing and Transition Piece Assembly Site

- **Town of Bethlehem, Albany County**
- The facility will **produce, store, and deliver tower sections** to the SBMT for staging, with a production capacity of 150 towers per year.
- **600,000 sq ft** manufacturing complex located on **95.5 acres** of land.
 - 81-acres - “Beacon Island”
for Towers and Transition Pieces
 - 14.5-acres
receiving yard for steel and other materials
- Capital expenditure: **\$802M**
- Project timeline: 5 years (2021-2026)
- To be developed jointly with and operated by **Marmen and Welcon.**
- Construction of the facility is underway.

Blade and Nacelle Manufacturing at the Port of Coeymans



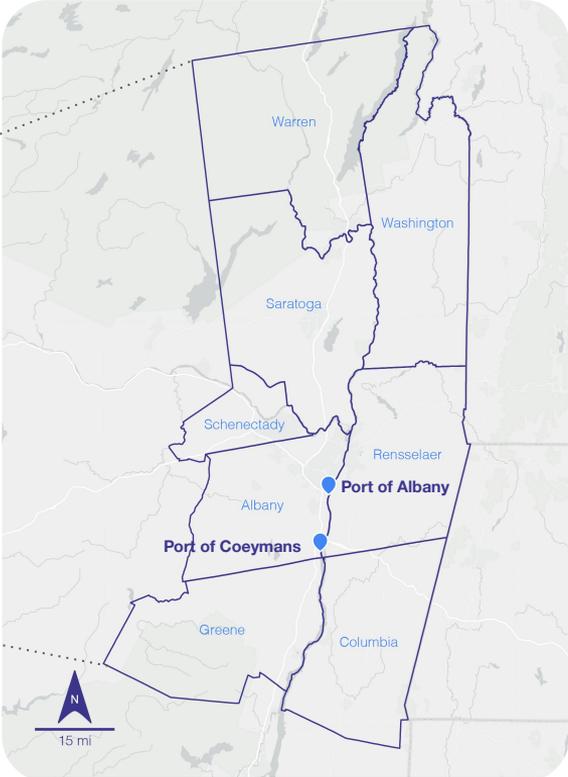
- **Town of Coeymans, Albany County**
- The facility will **fabricate, stage, and transport** heavy wind turbine components such as blades and nacelles.
- **450 acre marine terminal**
 - 400 ft by 70 ft concrete wharf
 - 34 ft deep water port for vessels
- Capital expenditure: **\$800-\$900M**
- Project timeline: 3 years (2024-2027)
- Facilities have been approved for development.

Analysis Methodology

Methodology - Geographies



New York's Capital Region

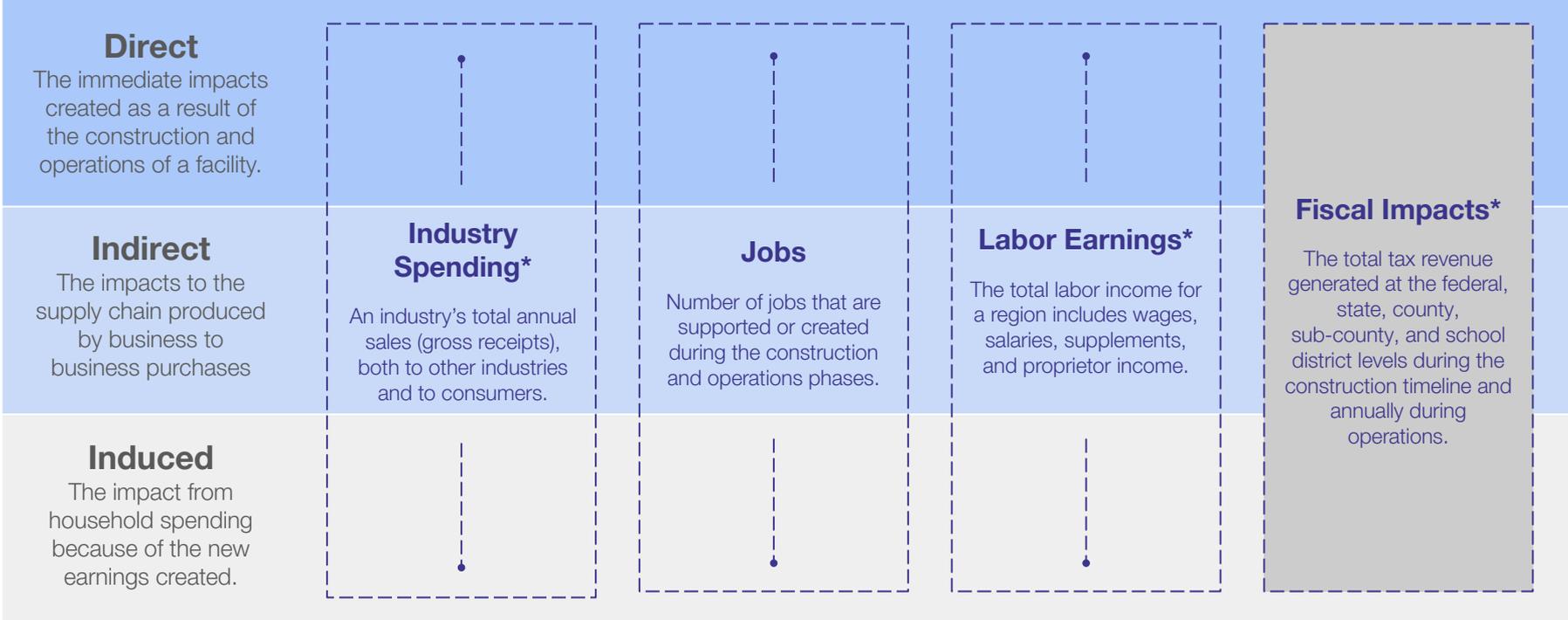


Studied Counties within the Capital Region

Methodology - Datasets

Analysis Type	Work Streams	Data Sources
Demographic	Baseline existing conditions analysis to understand demographic, socioeconomic, and housing conditions.	<i>US Census American Community Survey</i>
Industry Baseline	Review industry reports and analyze the flow of direct and indirect benefits into industries supporting operations.	<i>Bureau of Labor Statistics, Industry Reports (NREL, NYSERDA), Lightcast</i>
Economic Impact	Estimate the direct, indirect, and induced impacts of the construction and operations of the proposed facilities.	<i>Bureau of Economic Analysis, Lightcast, IMPLAN</i>
Supply Chain	Assess potential procurement opportunities for existing MWBEs and SDVOBs	<i>New York State Comptroller's Office, Office of General Service Division of SDVOB Development</i>
Workforce Conditions	Assess impacts of proposed facilities' and industries' expansion on the eligible and prospective workforce in the region.	<i>Bureau of Labor Statistics</i>

What is Economic Impact Assessment?



* Industry spending and labor earnings are reported in 2022 dollars; fiscal impacts are reported in 2023 dollars.

Impacts of the Offshore Wind Facilities

Overall **Construction**-related Impact (direct + indirect)

Facility	Industry Spending	Jobs Supported	Labor Earnings
Albany Tower Manufacturing Facility	\$883 million	3,178 jobs	\$321 million
Coeymans Blade & Nacelle Manufacturing Facility	\$1.2 billion	4,416 jobs	\$452 million
Total	\$2.1 billion	Up to 7,594 jobs	\$773 million

increase in total industry spending stemming from **initial investment and supply chain spending**

supported **at the facilities and in the supply chain** during the construction timeline

increase in labor income resulting from the jobs supported **at the facilities and in the supply chain**

The above table only includes the [sum of direct and indirect impacts](#) created by the facility's [construction](#).
 The above table includes the [consolidated impacts](#) that will be delivered over the course of the construction timelines of the projects.
 The [total number of jobs supported](#) during the construction of these facilities may vary depending on overlapping construction timelines (on site and in the area), and will not be a sum of jobs supported individually.

Overall **Operations**-related Impact (direct + indirect)

Facility	Industry Spending	Jobs <u>Created</u>	Labor Earnings
Albany Tower Manufacturing Facility	\$593 million	853 jobs	\$119 million
Coeymans Blade & Nacelle Manufacturing Facility	\$938 million	1,348 jobs	\$188 million
Total	\$1.5 billion	2,201 jobs	\$307 million
	increase in total annual industry spending resulting from on-site facilities' operations and supply chain spending	created at the facilities and in the supply chain to sustain day-to-day operations	increase in annual labor income resulting from jobs created at the facilities and in the supply chain

The above table only includes the [sum of direct and indirect impacts](#) created by the facility's [operations](#).
 The above table includes the [annual impacts](#) that will be delivered year-on-year throughout the lifecycle of the facility.

Transformative Impacts on the Economy & Workforce

The table **summarizes the direct, indirect, and induced impacts** delivered to the Capital Region’s economy and workforce **throughout the construction and operations timelines.**¹

Timeline	Industry Spending	Employment
Construction Timeline	\$2.5 billion	Up to 9,877 jobs supported
1st year of Operations	+ \$1.7 billion	3,241 jobs added
After the 1st year of Operations	\$4.2 billion	3,241 jobs
After 5th year of Operations*	\$11 billion	-

*Throughout the facilities’ lifecycle, an estimated additional \$1.7 billion (2023 dollars) of industry spending is added annually during operations.

¹ Construction-related impacts are spread out throughout the construction timeline. For the Port of Albany, the timeline is an estimated 5 years (from 2021-2026). For the Port of Coeymans, the timeline is an estimated 3 years (from 2024-2027).

Comparing the Construction-related Multiplier Effect

Benchmarking the **construction-related multiplier effect demonstrated by the OSW facilities at Ports of Albany and Coeymans** against that of New York City’s total construction industry activity.

The **return on the facilities’ construction spending** is expected to **surpass the respective trends observed in New York City**, indicating that this will be a key driver to the Central Region’s economy and workforce.

The Multiplier Effect translates how a single transaction can have broader effects as the money circulates through the economy – in this case, the effects on the parameters below per dollar/job increase.	OSW Facilities at Albany & Coeymans	Construction industry activity in New York City ¹
Industry spending created per \$1 spent on construction	\$1.44	\$1.31
Construction jobs supported per \$1 million spent on construction	6 jobs	8 jobs
Jobs supported per construction jobs on site	1.67 jobs	1.32 jobs

¹ The multiplier effects of New York City’s construction industry is based on the “Rebuilding and Renewing New York City” report by Urbanomics for BTEA released in 2021.

Contextualizing Economic Impacts

Benchmarking the total impacts delivered by the OSW facilities at the Ports of Albany and Coeymans against that of **New York’s Industrial Development Agency (IDA)** projects and other notable large scale infrastructure projects.

Economic Impact Indicators	OSW Facilities at Albany & Coeymans	IDA Facilities in Capital Region in 2021 ¹
Construction Jobs Supported	Up to 9,877 jobs (across a 3-5 year of construction timeline)	580 jobs (in 2021)
Construction-related Labor Earnings	\$907 million (across a 3-5 year of construction timeline)	\$47 million (in 2021)
Permanent Jobs Created throughout Operations	3,241 jobs (across three facilities)	84,165 jobs (across all IDA-related projects)
Annual Operations-related Industry Spending	\$1.7 billion	\$25.8 billion

¹ The impacts of IDA facilities in 2021 are based on the “The Economic Impact of NYS IDAs” report by Camoin for NYS Economic Development Council released in October 2023.

Hudson Yards, New York City

During the construction timeline (2012-2025), this **\$20.4 billion** project will have directly **supported an average of 3,649 full-time equivalent jobs** each year and **paid workers \$7.1 billion** (2018 dollars) in total.

source: *The Economic and Fiscal Impact of Development of Hudson Yards, May 2016* ([link](#))

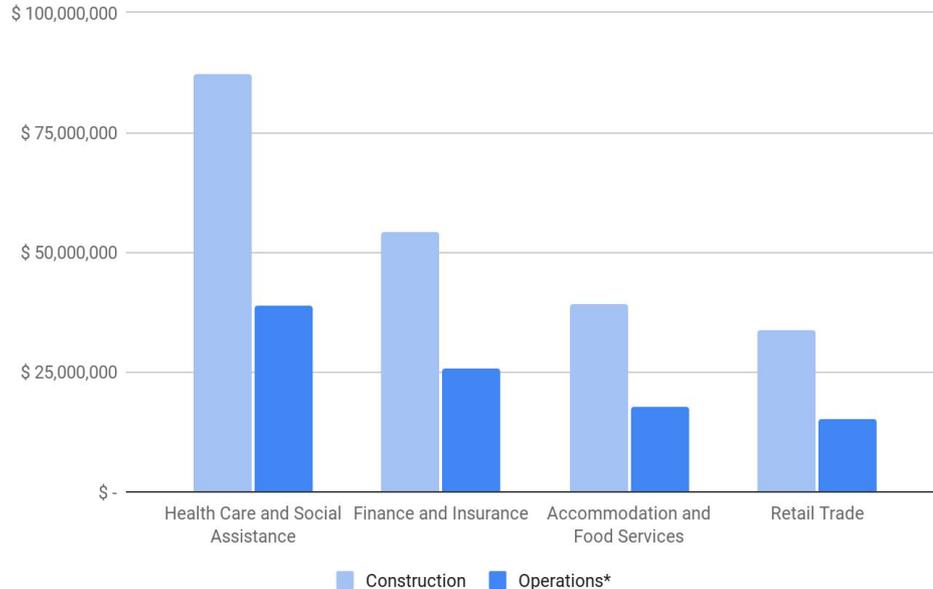
Micron Semiconductor Manufacturing Facility, Onondaga County, NY

This **\$99.6 billion** project will **create an average of 45,418 jobs** (2025-2055) and **generate \$378.5 million in taxes for New York State** each year during its operational life cycle.

source: *The Economic and Fiscal Impact of Establishing a Semiconductor Manufacturing Facility, Sept 2022* ([link](#))

Increased Household Spending (induced)

Industries within the Capital Region with the highest **induced spending** during the construction timeline and first year of operations



* operations-related Induced Spending recurs annually throughout the facilities' lifecycle.

New earnings created through direct and indirect jobs will lead to **increased household spending**, **across various industry sectors** within the Capital Region's economy:

- **\$360 million induced spending** during construction
- **\$165 million induced spending** during the first year of operations

This spending increase will lead to the **creation of 1,040 new jobs¹** and **\$61 million in annual labor earnings** during the facilities' operations.

The **\$126.2 million induced spending in the Health Care and Social Assistance industry** represents **new taxable revenue** that would otherwise not have been received by the current 2,711 industry-related establishments in the Capital Region.

¹ These new jobs will be created as a result of increased demand.

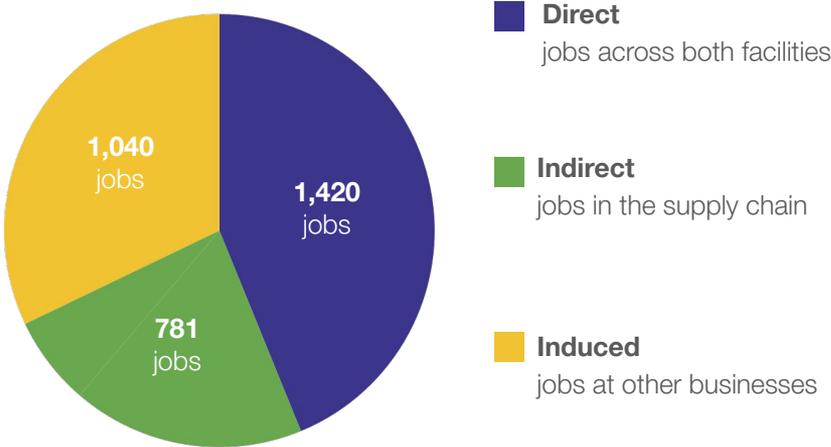
Potential Benefits for Local Workforce & Businesses

Opportunities for Positive Workforce Impacts

Boost the declining job market¹ in the Capital Region. Together, the facilities will **support up to 9,877 construction jobs** and **create 3,241 jobs during operations.**

These facilities demonstrate a high potential to **promote industry diversity**. By delivering jobs that are **distributed across the 20 NAICS industries**, it could empower the Capital Region to be **more economically balanced** and withstand economic fluctuations.

Operations-related jobs by impact type



¹ The job market in the Capital Region declined by 3.8% between 2017 to 2022, compared to the national growth rate of 3.8% according to Bureau of Labor Statistics' Quarterly Census of Employment and Wages 2022.

Opportunities for Positive Workforce Impacts

Maintain the competitive workforce advantage that the Capital Region has in **Manufacturing & Assembly**, compared to national trends.

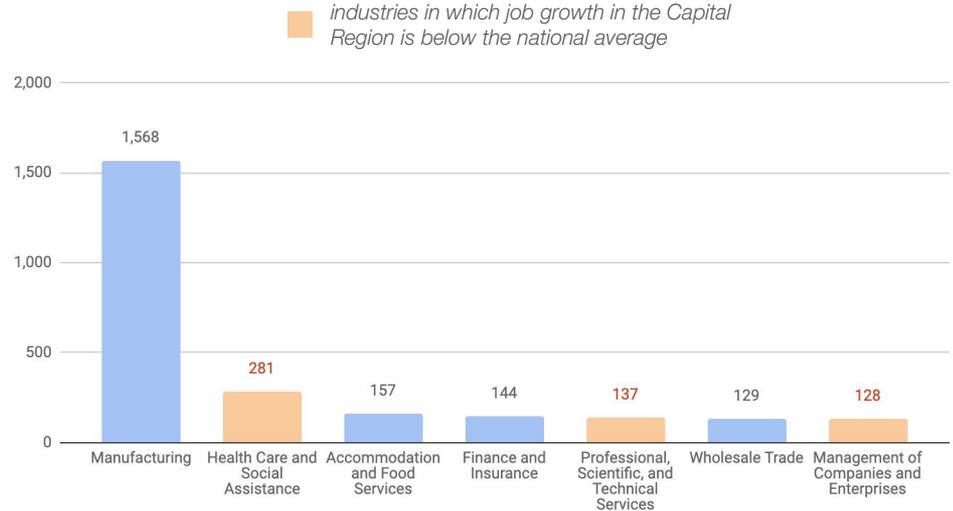
The facilities will **deliver over 1,500 permanent, full-time manufacturing jobs** to the Capital Region.

These include *direct* jobs at the facilities, and *indirect* jobs in the supply chain and in businesses across the region.

Revive industries with job growth lower than the national average, at a time when the region's labor market continues to be mostly dependant on government jobs.

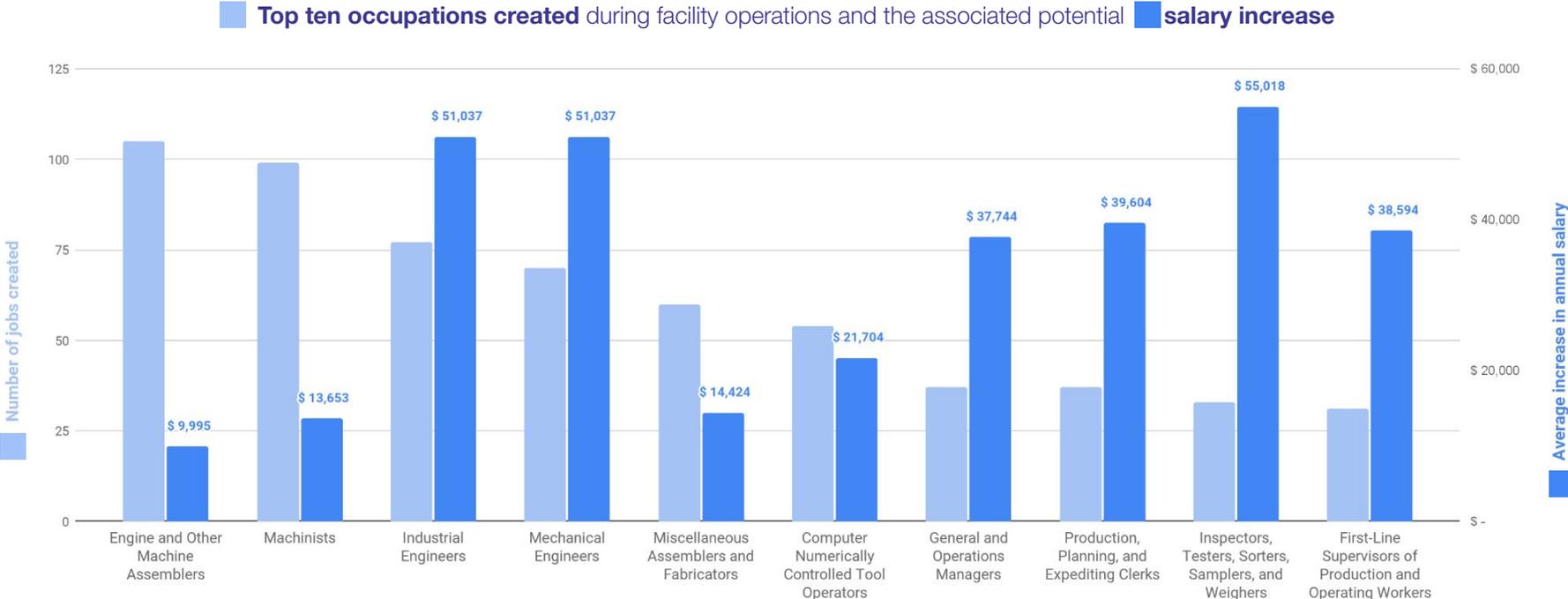
- + **281 jobs** in Healthcare and Social Assistance
- + **137 jobs** in Professional Services
- + **128 jobs** in Management of Companies

Industries with **most jobs created** during facility operations

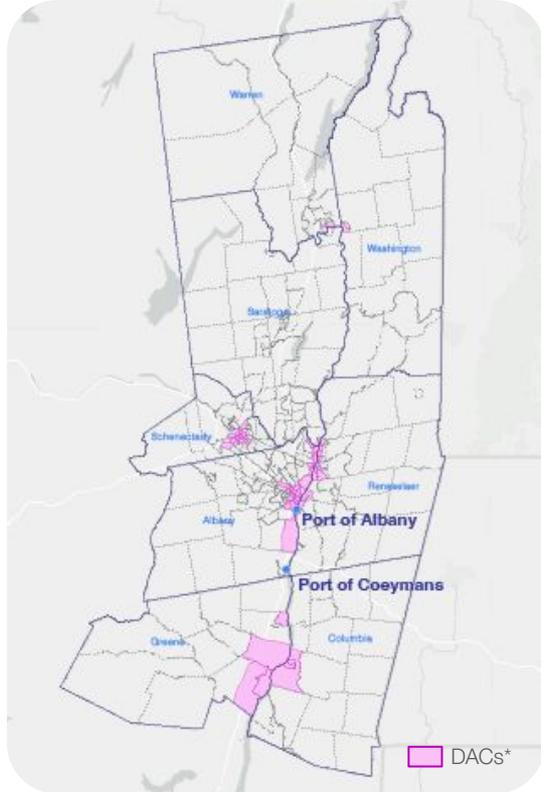


Opportunities for Positive Workforce Impacts

Develop transferable skills for workers at the facilities, enabling them to advance into a range of higher-earning occupations, within and outside the manufacturing industry.



Impacts on Disadvantaged Communities (DAC)



18.6% of the Capital Region’s population live in DACs.

25-30% of people within Albany, Rensselaer, Schenectady, and Greene counties live in DACs.

Estimated minimum of 345 potential DAC workers (22% of eligible workers in the Capital Region) at the facilities (direct) and hired by Tier 1 suppliers (indirect), based on existing commute patterns¹. Estimated minimum of 191 potential DAC workers (25% of total workers from Albany) could come from Albany County.

Existing DAC educational attainment levels suggest that with targeted hiring and strategic workforce development investments, the Ports may achieve recruitment ratios that meet, or even exceed the 35-40% DAC recruitment goals set by the CLCPA.

¹ *Commuting patterns from OnTheMap – a web-based mapping and reporting application that shows where workers are employed and where they live.*

* NYSERDA’s Climate Justice Working Group (CJWG) defined DACs using 45 indicators that represent the environmental burdens or climate change risks within a community, or population characteristics and health vulnerabilities that can contribute to more severe adverse effects of climate change.

Supply Chain Impacts during Construction and Operations

Based on current industry trends¹, facilities at the Ports of Albany and Coeymans are estimated to generate **millions in supply chain spending within the Capital Region.**

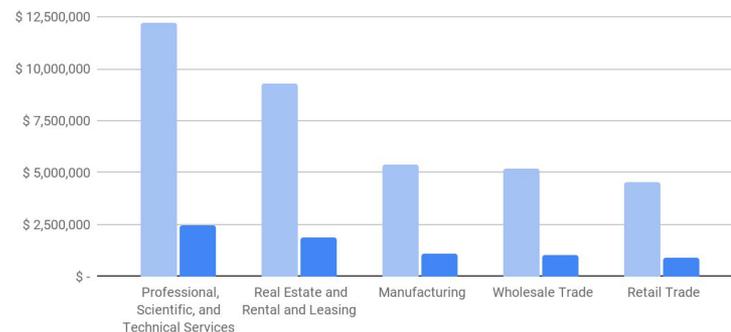
- **\$ 194 million**
*generated during **construction***
- **\$ 65 million**
*generated in the **first year of operations***

Local **MWBEs** and **SDVOBs** will be eligible for **contracting opportunities across multiple industries.**

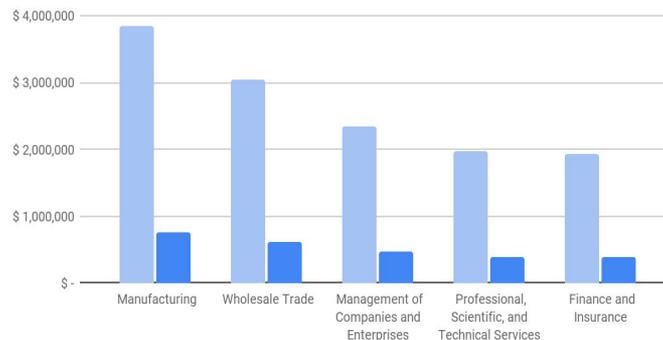
- Contracts estimated worth **\$ 71 million**
*during **construction***
- Contracts estimated worth **\$ 23 million**
*in the **first year of operations***

¹ Sources include Lightcast, the New York State Comptroller's Office, and the Office of General Service Division of SDVOB Development.

Value of supply chain contracts during **construction**



Value of supply chain contracts during **operations**



Transformative Impacts for the Capital Region and for New York

Transformative Impacts on the Economy & Workforce

Summary of cumulative **direct, indirect, and induced impacts** from the Port of Albany and Port of Coeymans delivered to the **Capital Region's economy and workforce** during the construction phase and the first year of facility operations.



** Although this recruitment ratio is lower than the 35% goal set forth by the CLCPA, this is an estimate and educational attainment levels within the region suggest that with targeted hiring and workforce training, the proposed facilities may achieve and possibly exceed the recruitment goals set forth by the CLCPA.*