

Port Detroit Innovation Terminal

Economic and Fiscal Impact Analysis

September 18, 2026



Introduction and Approach

Port Detroit Innovation Terminal | Proposed Facility

Background on Terminal Site

The Port of Detroit is exploring uses for its site along the Rouge River. A principal usage is a Tech Commercialization Lab, the Port is also considering additional assets such as:

- A storage warehouse (Water Authority)
- A designated spot for Great Lakes Towing
- A facility that supports pilot exchange



Total Tech Commercialization Campus*

50k SF

Office space

Available for lease for startups and established companies

12.5k SF

Lab Space

Available for lease for startups and established companies

12.5k SF

Warehouse

Co-working, businesses accelerator

25K SF

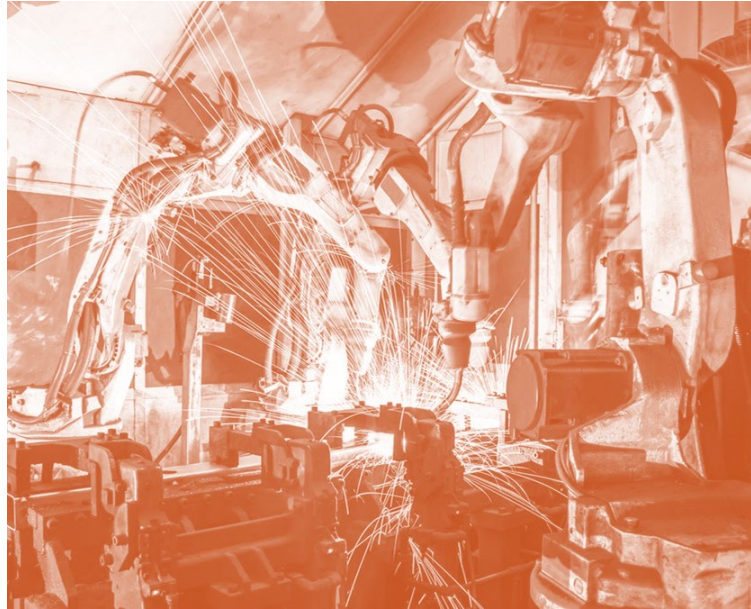
* Square footage totals are calculated for the Tech Commercialization Lab, which is the focus of this section on economic and fiscal impacts.

The Innovation Terminal will capitalize on the Detroit region's unique concentration of maritime-supportive innovation industries to catalyze growth in the region.

MARITIME-SUPPORTIVE INNOVATION INDUSTRIES



Maritime Operations



Components Manufacturing

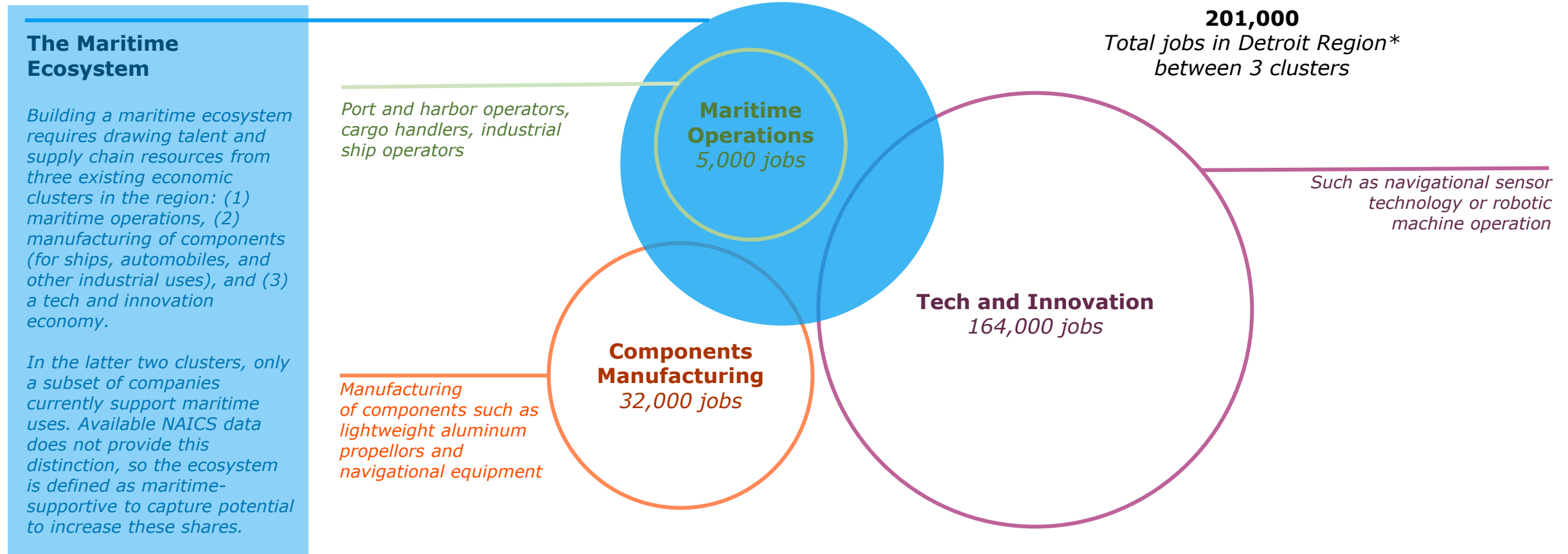


Tech and Innovation

** Detroit Region is defined by 11 counties: Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Shiawassee, Washtenaw, Wayne*

Source: HR&A Analysis of Lightcast Data. Segment definitions are as follow: Maritime-supportive manufacturing - Common industries supplying naval shipbuilding from U.S. Navy Maritime Industrial Base. Tech and Innovation- derived from HR&A definition of tech and innovation sector. Maritime Operations – From shipbuilding industry mapping from University of Michigan.

The existing maritime-supportive ecosystem currently encompasses over 200,000 jobs and is positioned to grow with new investment in an innovative facility combined with industry and academic partnerships.



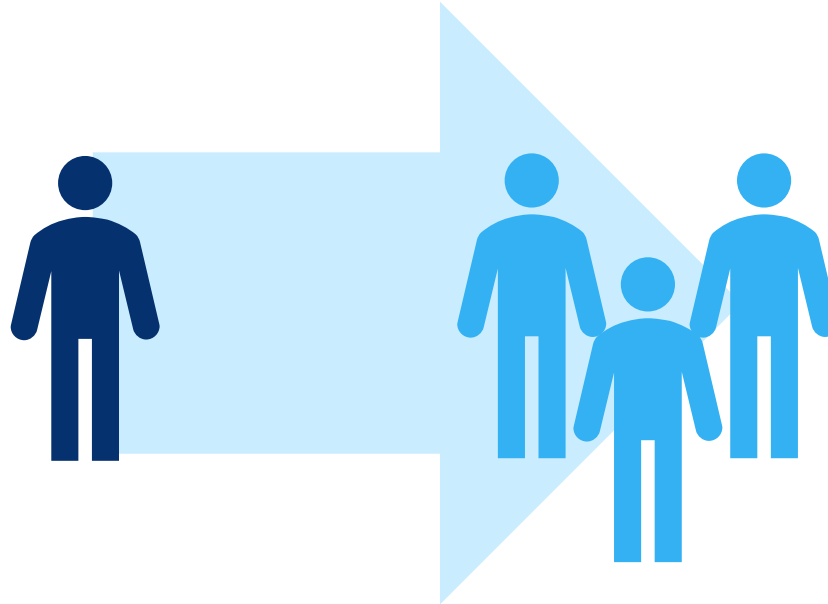
* Detroit Region is defined by 11 counties: Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Shiawassee, Washtenaw, Wayne

Source: HR&A Analysis of Lightcast Data. Segment definitions are as follow: Maritime-supportive manufacturing - Common industries supplying naval shipbuilding from U.S. Navy Maritime Industrial Base. Tech and Innovation- derived from HR&A definition of tech and innovation sector. Maritime Operations - From shipbuilding industry mapping from University of Michigan.

To quantify the total economic impacts of the Innovation Terminal's jobs and spending throughout the Detroit region, HR&A's economic impact methodology relies on "multipliers".

ECONOMIC IMPACT MULTIPLIERS

For every **1 direct job** in an industry...



Multiplier jobs are created across the economy.

Multiplier jobs include **indirect jobs** produced by business-to-business spending as well as **induced jobs** produced by household spending.

HR&A's analysis calculates the direct and multiplier economic impacts on the Detroit region.

DIRECT IMPACTS

The effects of spending and employment associated with the Innovation Terminal



MULTIPLIER IMPACTS

Indirect Impacts

The effects from business-to-business spending that stems from the direct impacts of industrial jobs (i.e. purchases from vendors by businesses located the Innovation Terminal)

Induced Impacts

The effects of household spending of employees compensated for working in the directly affected industries (i.e. purchases by workers employed by businesses located in the Innovation Terminal)



TOTAL IMPACTS

Combined direct, indirect, and induced economic impacts

* Detroit Region is defined by 11 counties: Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Shiawassee, Washtenaw, Wayne.

Economic impact reporting uses the Lightcast EMSI Input-Output Model. Developed by Lightcast (formerly Economic Modeling Specialists Intl.), the model uses federal, state, and regional labor market and economic data to provide regionally-specific estimates of effects stimulated by changes in economic demand, with geographic resolution down to the county or custom-region level. Light cast's Input-Output Model is widely used by economic developers, workforce boards, and regional analysts for its integration of labor market and industry data alongside traditional input-output multipliers.

HR&A's analysis evaluates two scenarios of economic impacts—the first stabilized year of the Innovation Terminal and the impacts of projected growth over 10 years in the broader region.

STABILIZED YEAR TERMINAL IMPACTS

Direct Jobs and Output

Employment from companies that lease space or use testing infrastructure at the Terminal

Multiplier Jobs and Output

Regional employment and economic activity supported by companies at the Terminal

Fiscal Impacts of Jobs and Output

Fiscal revenue generated by jobs and spending from companies at or supported by the Terminal

10-YEAR INNOVATION TERMINAL IMPACTS

Direct Jobs and Output

Employment from companies that lease space or use testing infrastructure at the Terminal or have graduated from the facility and remained in the region

Multiplier Jobs and Output

Regional employment and economic activity supported by companies described above

Fiscal Impacts of Jobs and Output

Fiscal revenue generated by jobs and spending from companies described above

Stabilized Year Impacts

Space at the Innovation Terminal will be split into three principal programs to support the maritime-innovation industries. A mix of anchor companies and startups will occupy the facility.

Program	Users	Uses	Size
 Office	- Established anchor companies - Academic researchers	<i>Technical validation and certification support</i> <i>Applied university partnerships</i> <i>Digital maritime applications</i>	12,500 SF
 Lab	- Established anchor companies - Startup companies - Academic researchers	<i>Development of technologies</i> <i>Maritime convenings and showcases</i> <i>Technology testing and shared demonstration infrastructure</i> <i>Validation of technologies in Great Lakes maritime environment</i>	12,500 SF
 Warehouse	- Established anchor companies - Startup companies - Academic researchers	<i>Pilot manufacturing</i> <i>Vessel retrofit</i> <i>Electrification</i>	25,000 SF
			50,000 SF

Once fully operational, based on estimated job densities for each component of the program, the Innovation Terminal will support 122 direct on-site jobs every year.

Program		Square Footage	SF per Job	Total Jobs
	Office	12,500	300	42
	Lab	12,500	500	25
	Warehouse	25,000	750	33
	Academic Research	<i>Shared across facility</i>	-	20
	Facility Management	<i>Shared across facility</i>	-	2
Total		50,000	-	122

Source: HR&A Analysis of Ramboll data. All square footage, square footage per job, and facility management headcount assumptions are sourced from Ramboll. HR&A calculated total jobs by dividing the programmed square feet by job density assumptions by use. HR&A then added in 20 academic research jobs and 2 facility management roles, as reported by Ramboll.

The Innovation Terminal's 122 direct, well-paid jobs will generate \$51M in annual economic activity in its first fully-operational year.

FULLY-OPERATIONAL YEAR INNOVATION TERMINAL DIRECT IMPACTS



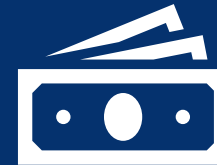
122 DIRECT JOBS

At the Innovation Terminal in the first fully-operational year



\$51M ECONOMIC OUTPUT

At the Innovation Terminal in the first fully-operational year



\$123,000 AVERAGE WAGE

At the Innovation Terminal, compared to \$77,000 across the metro area

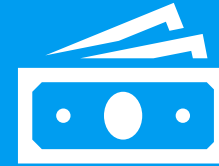
Including multiplier impacts, the Innovation Terminal will support over 330 well-paid jobs and generate nearly \$100M in annual economic activity in its first fully-operational year.

FULLY-OPERATIONAL YEAR INNOVATION TERMINAL TOTAL IMPACTS



331 TOTAL JOBS

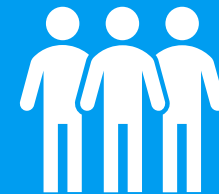
Supported by the Innovation Terminal, including **122 direct jobs** and **209 multiplier jobs**



\$93,000

AVERAGE WAGE

At the Innovation Terminal, compared to \$77,000 across the metro area



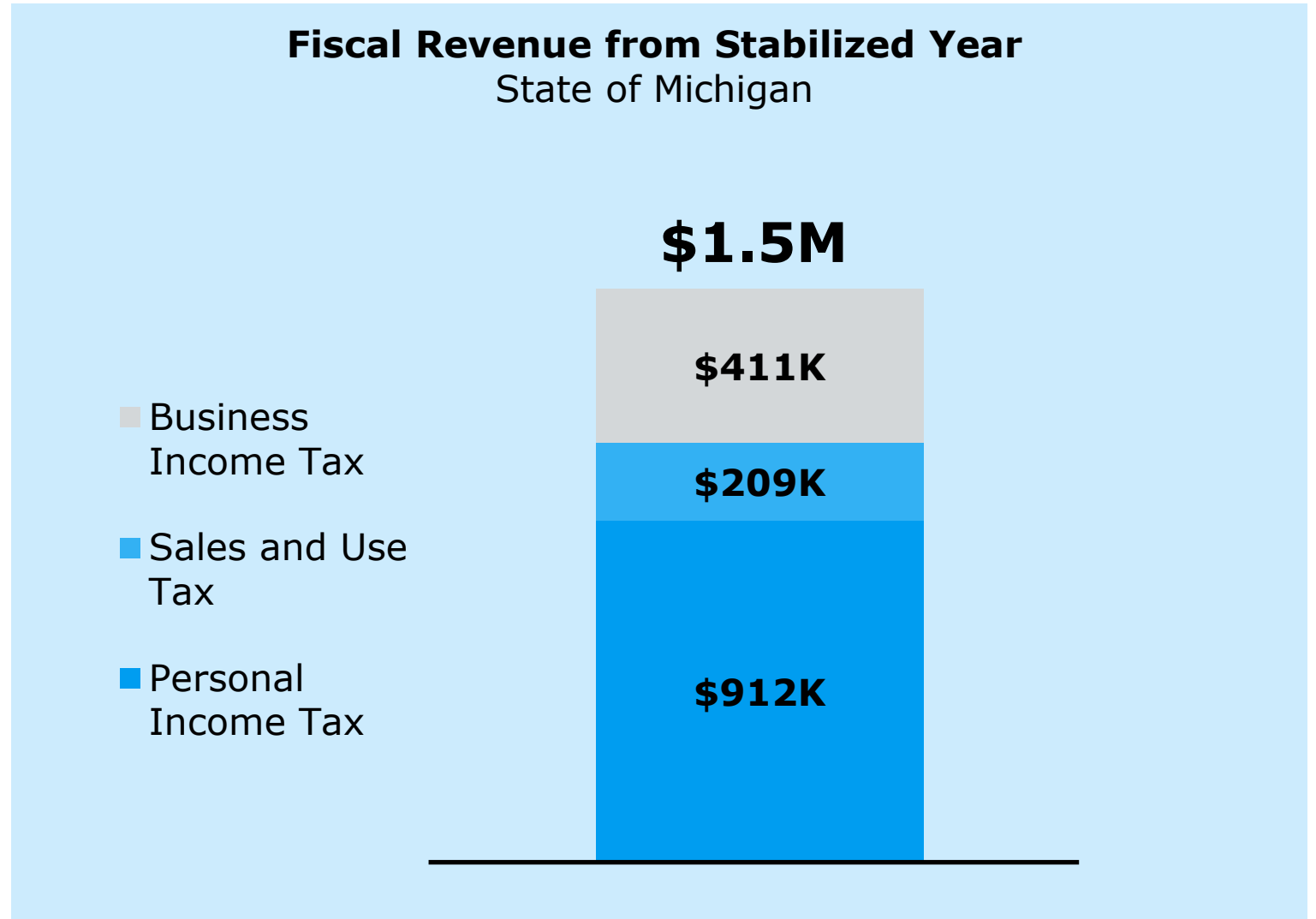
For every **1 job at the Innovation terminal**, **1.7 jobs are created** throughout the Detroit region.



\$96M ECONOMIC OUTPUT

Generated by the Innovation Terminal, including **\$51M direct output** and **\$45M multiplier output**

The combined earnings and spending activity of businesses and employees supported by the Innovation Terminal will generate \$1.5M in revenues to the State of Michigan in the first stabilized year.



Source: HR&A analysis of Lightcast data and multiplier impacts. HR&A calculated an estimated average wage for employees and applied the State of Michigan's personal income tax rates, sourced from [Tax Foundation](#). HR&A then estimated spending based on the Bureau of Labor Statistics [Consumer Expenditure Survey](#) and applied the State of Michigan's [Sales and Use Tax](#). To estimate business income tax, HR&A estimated the approximate business income tax paid by corporations based on analysis from the [Michigan League for Public Policy](#). Note that an additional \$498,000 in city income tax is paid to the City of Detroit.

10-Year Impacts

As they commercialize their technologies, companies and startups at the Innovation Terminal will ultimately outgrow the facility, establishing themselves elsewhere in the region and continuing to create jobs.



Established Anchor Companies

*Anchor companies are anticipated to dwell at the Innovation Terminal for **approximately 5 years** then move on from the facility but remain in the Detroit region, continuing to generate employment locally.*

Source: HR&A Analysis of Ramboll data. Dwell times were provided directly by Ramboll.

*Anticipated growth rates are estimated based on average year-over-year industry growth in Detroit from 2021-2026. Data was sourced from Lightcast EMSIf for the 11-county Detroit region.

+Anticipated growth rates for startups are based on average hiring rates for startups shared by NewLab.

Note that academic research and facility management roles are expected to remain constant.



Startups

*Startups are anticipated to dwell at the Innovation Terminal for **approximately 2 years**, stabilize from series A to early stage to series B, then leave the facility, remain in the Detroit region, and continue to generate employment locally.*

Established anchor companies and startups will face diverse business challenges: they will grow at different rates, dwell in the Innovation Terminal for different lengths of time, and some will fail.

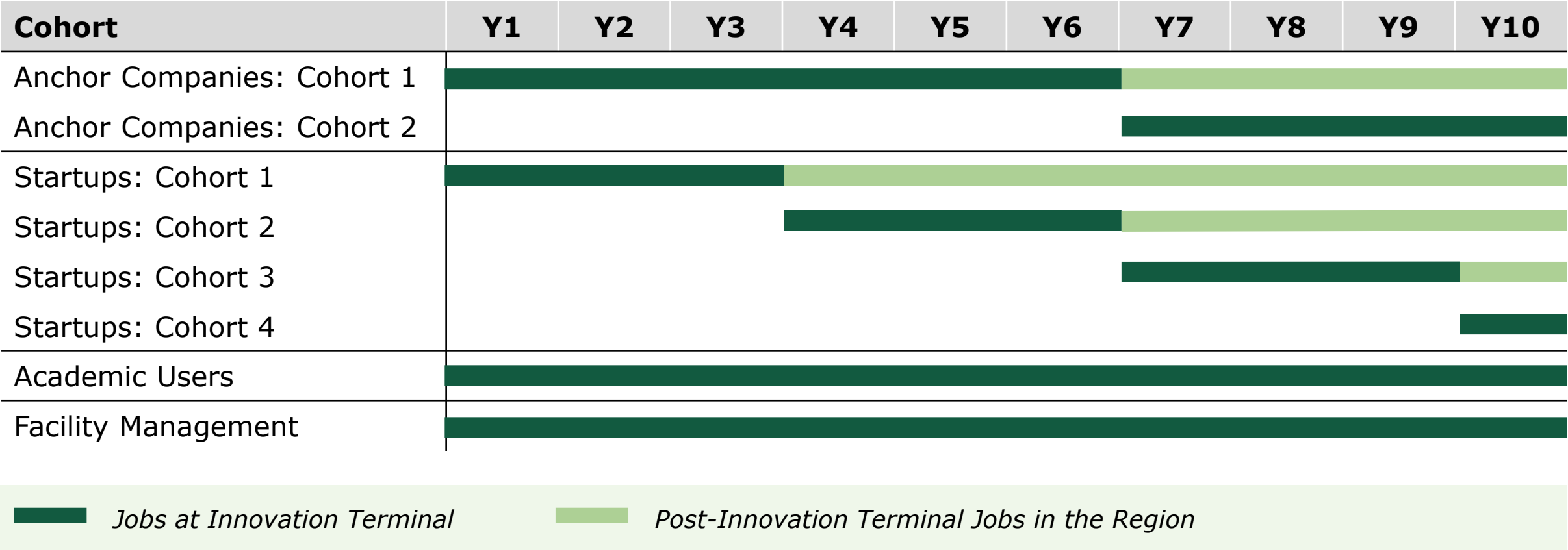
Users	Anticipated Job Growth Rates	Dwell Time at Innovation Terminal	Business Failure Rate
Established Anchor Companies	4.4% per year*	5 Years	N/A
Startups	4-12.5 new employees per company per year+	2 Years	25%

Source: HR&A Analysis of Ramboll data. Dwell times were provided directly by Ramboll.

*Anticipated growth rates are estimated based on average year-over-year industry growth in Detroit from 2021-2026, amplified to account for more robust growth in innovation centers as analyzed by the [Association of University Research Parks](#). Data was sourced from Lightcast EMSI for the 11-county Detroit region.

+Anticipated growth rates for startups are based on average hiring rates for startups shared by NewLab. For startups operating in the Innovation Terminal, HR&A modeled growth at 4 new employees per company per year. Once startups leave the Innovation Terminal, HR&A modeled growth at 12.5 new employees per company per year, aligned with estimates on job growth for Series B startups provided by Newlab. All startup growth estimates were discounted by 25% to account for startup business failure as analyzed by the [Association of University Research Parks](#). The 25% business failure rate is lower than average due to the businesses' location in an innovation hub.

Over 10 years, the Innovation Terminal will grow as successive cohorts of established anchor companies and startups lease space, leave the facility, and continue to generate employment around the Detroit region.



Source: HR&A Analysis of Ramboll data. Dwell times were provided directly by Ramboll.
*Anticipated growth rates are estimated based on average year-over-year industry growth in Detroit from 2021-2026. Data was sourced from Lightcast EMSIf for the 11-county Detroit region.
+Anticipated growth rates for startups are based on average hiring rates for startups shared by NewLab.
Note that academic research and facility management roles are expected to remain constant.

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Each year, the Innovation Terminal will generate between 18 and 145 jobs, with the highest growth occurring once initial cohorts of anchor companies and startups leave the facility and are replaced by new firms.

Cohort	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Anchor Companies: Cohort 1	69 jobs	+3 jobs	+3 jobs	+3 jobs	+3 jobs	+4 jobs	+4 jobs	+4 jobs	+4 jobs	+4 jobs
Anchor Companies: Cohort 2							69 jobs	+3 jobs	+3 jobs	+3 jobs
Startups: Cohort 1	31 jobs	+15 jobs	+15 jobs	+46 jobs	+46 jobs	+46 jobs	+46 jobs	+46 jobs	+46 jobs	+46 jobs
Startups: Cohort 2				31 jobs	+15 jobs	+15 jobs	+46 jobs	+46 jobs	+46 jobs	+46 jobs
Startups: Cohort 3							31 jobs	+15 jobs	+15 jobs	+46 jobs
Startups: Cohort 4										31 jobs
Academic Users	20 jobs	-	-	-	-	-	-	-	-	-
Facility Management	2 jobs	-	-	-	-	-	-	-	-	-

Growth at Innovation Terminal
 Post-Innovation Terminal Growth in Detroit Region

Source: HR&A Analysis of Ramboll data. Dwell times were provided directly by Ramboll. Job counts are rounded to the nearest integer.

*Anticipated growth rates are estimated based on average year-over-year industry growth in Detroit from 2021-2026. Data was sourced from Lightcast EMSIf for the 11-county Detroit region.

+Anticipated growth rates for startups are based on average hiring rates for startups shared by NewLab.

Note that academic research and facility management roles are expected to remain constant.

The Innovation Terminal will ultimately create 805 jobs over 10 years – including jobs created within the Terminal and jobs created after anchor companies and startups leave the facility but remain in the region.

Program	Total New Jobs at Innovation Terminal Y1	Total New Jobs at Innovation Terminal Y2-Y10	Total New Jobs Post-Innovation Terminal in Detroit Y2-Y10	Total New Jobs Y1-10
Anchor Companies	69	26	16	111
Startups	31	88	552	672
Academic Research	20	-	-	20
Facility Management	2	-	-	2
Total	122	114	568	805

Source: HR&A Analysis of Ramboll data. Dwell times were provided directly by Ramboll. Job counts are rounded to the nearest integer.

*Anticipated growth rates are estimated based on average year-over-year industry growth in Detroit from 2021-2026. Data was sourced from Lightcast EMSIf for the 11-county Detroit region.

+Anticipated growth rates for startups are based on average hiring rates for startups shared by NewLab.

Note that academic research and facility management roles are expected to remain constant.

The Innovation Terminal’s 805 direct, well-paid jobs attracted over 10 years will generate \$384M in annual economic activity across the region.

10-YEAR INNOVATION TERMINAL DIRECT IMPACTS



805 DIRECT JOBS

Generated by the Innovation Terminal over 10 years



**\$384M
ECONOMIC OUTPUT**

Generated by the Innovation Terminal over 10 years



**\$133,000
AVERAGE WAGE**

At the Innovation Terminal over 10 years, compared to \$77,000 across the metro area

Source: HR&A Analysis of Ramboll data. HR&A distributed estimated jobs based on square feet to the three key industry clusters of innovation described on slide 37. For a complete list of industries in each cluster, see the Appendix. HR&A then ran estimated jobs through Lightcast EMSI, utilizing Lightcast’s multipliers by industry, to calculate multiplier impacts in the 11-county region.

Including multiplier impacts, the Innovation Terminal will support over 2,360 well-paid jobs and generate nearly \$727M in annual economic activity over 10 years.

10-YEAR INNOVATION TERMINAL TOTAL IMPACTS



2,362 TOTAL JOBS

Supported by the Innovation Terminal, including **805 direct jobs** and **1,557 multiplier jobs**



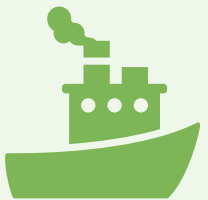
\$95,000

AVERAGE WAGE

At the Innovation Terminal, compared to \$77,000 across the metro area



For every **1 job at the Innovation terminal**, **1.9 jobs are created** throughout the Detroit region.

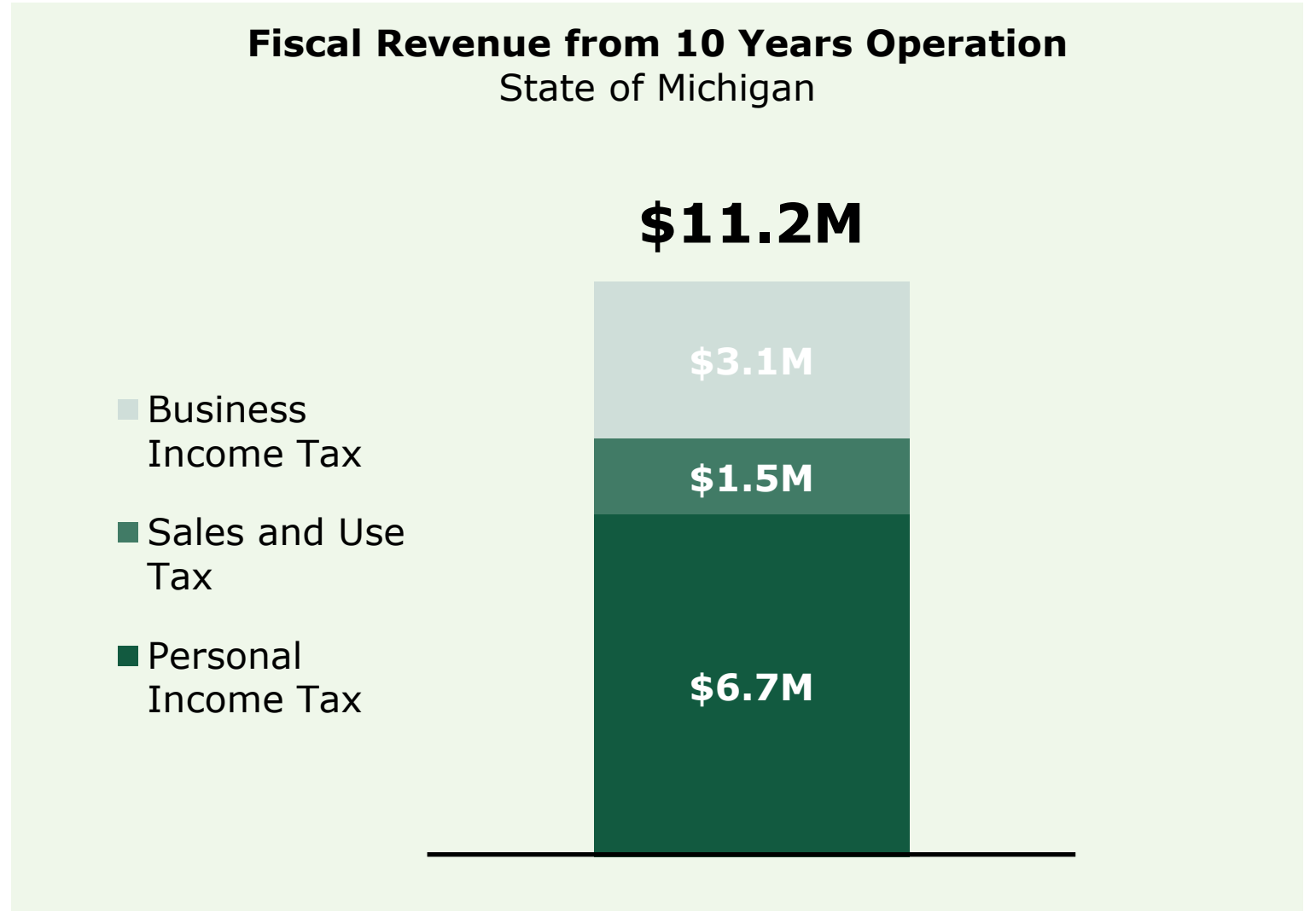


\$727M ECONOMIC OUTPUT

Generated by the Innovation Terminal, including **\$384M direct output** and **\$343M multiplier output**

Source: HR&A Analysis of Ramboll data utilizing Lightcast multipliers. HR&A distributed estimated jobs based on square feet to the three key industry clusters of innovation described on slide 37. For a complete list of industries in each cluster, see the Appendix. HR&A then ran estimated jobs through Lightcast EMSI, utilizing Lightcast's multipliers by industry, to calculate multiplier impacts in the 11-county region (Genesee, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Shiawassee, Washtenaw, and Wayne Counties).

The combined earnings and spending activity of businesses and employees supported by the Innovation Terminal will generate \$11.2M in revenues to the State of Michigan over 10 years.



Source: HR&A analysis of Lightcast data and multiplier impacts. HR&A calculated an estimated average wage for employees and applied the State of Michigan's personal income tax rates, sourced from [Tax Foundation](#). HR&A then estimated spending based on the Bureau of Labor Statistics [Consumer Expenditure Survey](#) and applied the State of Michigan's [Sales and Use Tax](#). To estimate business income tax, HR&A estimated the approximate business income tax paid by corporations based on analysis from the [Michigan League for Public Policy](#). Note that an additional \$3.6M in city income tax is paid to the City of Detroit.

Appendix

Appendix: Sector definition NAICS codes

NAICS Code	Title	Sector
513210	Software Publishers	Tech & Innovation
517410	Satellite Telecommunications	
517810	All Other Telecommunications	
518210	Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services	
541330	Engineering Services	
541380	Testing Laboratories and Services	
541511	Custom Computer Programming Services	
541512	Computer Systems Design Services	
541513	Computer Facilities Management Services	
541519	Other Computer Related Services	
541690	Other Scientific and Technical Consulting Services	
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	
541990	All Other Professional, Scientific, and Technical Services	
483111	Deep Sea Freight Transportation	Maritime Operations
483113	Coastal and Great Lakes Freight Transportation	
483211	Inland Water Freight Transportation	
488310	Port and Harbor Operations	
488320	Marine Cargo Handling	
488330	Navigational Services to Shipping	
488390	Other Support Activities for Water Transportation	
488510	Freight Transportation Arrangement	

Segment definitions are as follow: Maritime-supportive manufacturing - Common industries supplying naval shipbuilding. Tech and Innovation- derived from HR&A definition of tech and innovation. Maritime Operations – Academic definition of shipbuilding industry mapping from University of Michigan.

Appendix: Sector definition NAICS codes

NAICS Code	Title	Sector
325211	Plastics Material and Resin Manufacturing	Maritime-Related Manufacturing
325220	Artificial and Synthetic Fibers and Filaments Manufacturing	
325510	Paint and Coating Manufacturing	
325520	Adhesive Manufacturing	
	Rubber Product Manufacturing for Mechanical Use	
326291		
331110	Iron and Steel Mills and Ferroalloy Manufacturing	
331529	Other Nonferrous Metal Foundries (except Die-Casting)	
332312	Fabricated Structural Metal Manufacturing	
332313	Plate Work Manufacturing	
332410	Power Boiler and Heat Exchanger Manufacturing	
332510	Hardware Manufacturing	
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	
333613	Mechanical Power Transmission Equipment Manufacturing	
333618	Other Engine Equipment Manufacturing	
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	
333998	All Other Miscellaneous General Purpose Machinery Manufacturing	
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	
334290	Other Communications Equipment Manufacturing	
334417	Electronic Connector Manufacturing	
334419	Other Electronic Component Manufacturing	
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	
334514	Totalizing Fluid Meter and Counting Device Manufacturing	
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	
334519	Other Measuring and Controlling Device Manufacturing	
335312	Motor and Generator Manufacturing	
335314	Relay and Industrial Control Manufacturing	
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing	
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	
336412	Aircraft Engine and Engine Parts Manufacturing	
336611	Ship Building and Repairing	
336612	Boat Building	

Segment definitions are as follow: Maritime-supportive manufacturing - Common industries supplying naval shipbuilding U.S. Navy Maritime Industrial Base. Tech and Innovation- derived from HR&A definition of tech and innovation. Maritime Operations – Academic definition of shipbuilding industry mapping from University of Michigan.