



The Economic Impact of ProvPort's Terminal Services

Prepared for ProvPort– January 19, 2015



ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™

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EXECUTIVE SUMMARY

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™



Economic Impact Analysis

ProvPort has clearly benefited the City of Providence, contributing to employment and increased economic *output* (i.e., the total value of all goods and services produced) within the City. Throughout its life, ProvPort has not relied upon the City for direct monetary subsidy to attract or retain tenants at the port, in addition to making a significant amount of direct payments to the City over the last twenty years. These characteristics, along with the direct contribution of the port's tenants, make ProvPort's presence a decisive boon for the City. In order to adequately detail and evaluate the economic impacts of terminal services activities at ProvPort, 4ward Planning calculated the direct, indirect, and induced economic impacts associated with lease incentives (added benefits used to attract tenants, such as low-interest loans and rent-free periods), capital investments, and revenues generated to the City of Providence (referred to hereafter as terminal services activities). According to our analysis, these three activities have contributed to nearly 1,200 jobs within the City and over **1,700 jobs within the State of Rhode Island**, since 1994. Furthermore, the terminal services activities resulted in approximately \$164 and \$211 million in economic output within Providence and Rhode Island, respectively, and approximately \$6.7 and \$10.9 million in local and state tax contributions, respectively.

Summary of Total Economic Impacts of Terminal Services Activities, 1994-2014

| | <u>City of Providence</u> | | | <u>State of Rhode Island</u> | | |
|--------------------|---------------------------|-------------------|----------------------------------|------------------------------|-------------------|----------------------------------|
| | Employment | Output (millions) | State and Local Taxes (millions) | Employment | Output (millions) | State and Local Taxes (millions) |
| Lease Incentives | 315 | \$49.1 | \$2.2 | 524 | \$61.4 | \$3.3 |
| Capital Investment | 294 | \$60.8 | \$2.5 | 495 | \$85.7 | \$4.5 |
| City Revenues | 582 | \$54.4 | \$2.0 | 703 | \$64.4 | \$3.1 |
| Total | 1,191 | \$164.3 | \$6.7 | 1,722 | \$211.5 | \$10.9 |

Tenant Summary and Regional Effects

ProvPort contributes jobs and economic output to Providence and Rhode Island through the shipping, importing, and exporting of a variety of commercial and industrial products including cars, salt, cement, and chemicals. The contributions to the local and state economy by ProvPort's tenants, including Morton Salt, Washington Mills, New England Petroleum, and others, are substantial. For example, from 1994 to 2014, ProvPort created over 13,200 jobs in Rhode Island through indirect and induced economic activities (e.g., supplier-supported jobs and related spending); 7,440 of these jobs were within the City of Providence. During this 20-year period, over \$3 billion in economic activity was created as a result of ProvPort's direct and related activities (the indirect and induced effects of these activities). ProvPort generated approximately \$2.8 billion in economic output over the 20-year period within the State, with an estimated \$1 billion occurring within the City of Providence.

Summary of Indirect and Induced Economic Impacts of ProvPort within Surrounding Counties 1994-2014, IMPLAN derived

| | Employment | Output (millions) |
|-------------------|---------------|-------------------|
| Bristol County | 1,611 | \$326.8 |
| Kent County | 1,656 | \$438.0 |
| Newport County | 1,797 | \$707.7 |
| Providence County | 7,440 | \$1,009.0 |
| Washington County | 770 | \$326.8 |
| Total | 13,274 | \$2,808.3 |

Counterfactual Analysis

A counterfactual analysis offers understanding of one or more hypothetical changes to a local or regional economy (a “what if?” analysis). Using IMPLAN modeling techniques, based on a widely used economic impact assessment software system (further detailed on page 36 of this report), this counterfactual analysis identifies the likely change in Rhode Island’s economy (e.g., change in economic output and jobs), by 2020, if ProvPort were to expand its operations at the rate of job hires and additional capital expenses detailed in the Tenant Summary section of this report. ProvPort’s current tenants foresee hiring approximately 100 additional workers and spending \$33 to \$50 million in capital expenses between now and 2020. The table, below, identifies likely impacts to the five largest growth industries in Providence and Rhode Island (computing services, management consulting, home health services, family care services, and medical and diagnostic services), as projected by the Bureau of Labor Statistics for 2020.

ProvPort’s Contributions to Employment within Rhode Island and Providence by 2020: Based on Expanded Operations

| | <u>Computer Systems</u> | <u>Home Healthcare</u> | <u>Family Services</u> | <u>Management Consulting</u> | <u>Medical and Diagnostic Services</u> |
|---|-----------------------------|----------------------------|----------------------------|----------------------------------|--|
| Providence, by 2020 | 2,695 | 3,877 | 4,630 | 1,443 | 4,589 |
| ProvPort Indirect and Induced Jobs | 49 | 76 | 82 | 72 | 82 |
| Percent of Jobs Contributed by ProvPort | 1.8% | 1.9% | 1.8% | 5.0% | 1.8% |
| Rhode Island, by 2020 | 7,137 | 6,281 | 6,345 | 2,987 | 6,714 |
| ProvPort Indirect and Induced Jobs | 65 | 92 | 99 | 89 | 101 |
| Percent of Jobs Contributed by ProvPort | 0.9% | 1.5% | 1.6% | 3.0% | 1.5% |

Source: IMPLAN 3.0; U.S. Bureau of Labor Statistics, 2014

ECONOMIC IMPACT ANALYSIS

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™



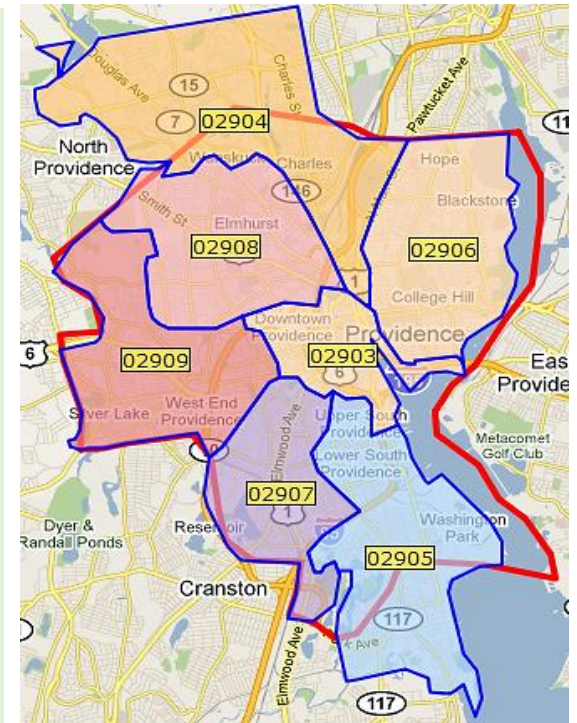
Background

Retained by ProvPort, 4ward Planning completed an economic impact analysis of the terminal service activities of ProvPort, including lease incentives provided to tenants, capital improvements made, and fee revenues generated to the City of Providence. It should be noted that this analysis includes only the lease incentives, capital improvements, and payments to the City of Providence, and does not include the total economic contributions of ProvPort or its tenants.

In order to isolate economic impacts for the City of Providence, 4ward Planning identified and used the ZIP Code areas which most closely matched the City's geographic boundaries. The seven identified ZIP codes are as follows: 02903, 02904, 02905, 02906, 02907, 02908, 02909.

The following inputs underpin the economic impact modeling exercise:

- Lease incentives provided by ProvPort to current tenants between 1994 and 2013 (equivalent in monetary terms to nearly \$1.6 million annually)
- Capital improvements by ProvPort totaling \$24.7 million as of 2014
- Capital improvements by tenants totaling \$38.9 million as of 2014, and including 119 direct jobs
- Payments to the City of Providence totaling \$35.95 million as a result of the original purchase, 2004 tax treaty, and contributions to the Neighborhood Improvement Fund (\$2,000 per month since October 1994)



Key Findings: City of Providence Impacts

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™



City of Providence Impacts Summary

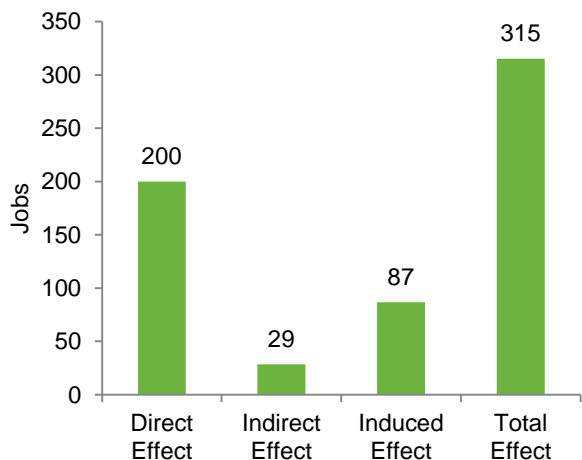
An analysis of the impacts of ProvPort's terminal services activities to the City of Providence reveals the following:

- An estimated total of 1,191 jobs and \$164.3 million in economic output were created between 1994 and 2014, as a result of ProvPort's lease incentives, payments to the City, and capital improvements.
- The industries with the highest number of indirect and induced jobs include: food services and drinking places; private hospitals; offices of physicians, dentists, and other health practitioners; and real estate establishments.
- In addition to ProvPort's direct payments to the City of Providence, all three activities generated an estimated \$6.7 million in state and local tax revenue between 1994 and 2014.

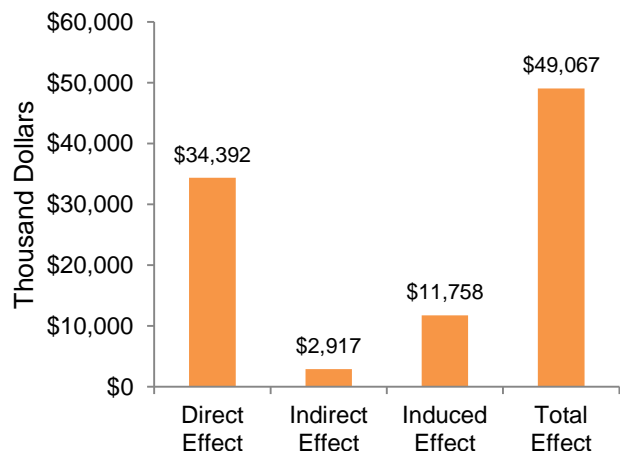


Lease Incentive Impacts to Providence, 1994 - 2014

Employment Impacts of Lease Incentives



Output Impacts of Lease Incentives



Economic Impacts of Lease Incentives

| | Employment | Output |
|---------------------|------------|---------------------|
| Direct Effect | 200 | \$34,392,013 |
| Indirect Effect | 29 | \$2,916,520 |
| Induced Effect | 87 | \$11,758,223 |
| Total Effect | 315 | \$49,066,757 |

Top Industries by Indirect and Induced Employment

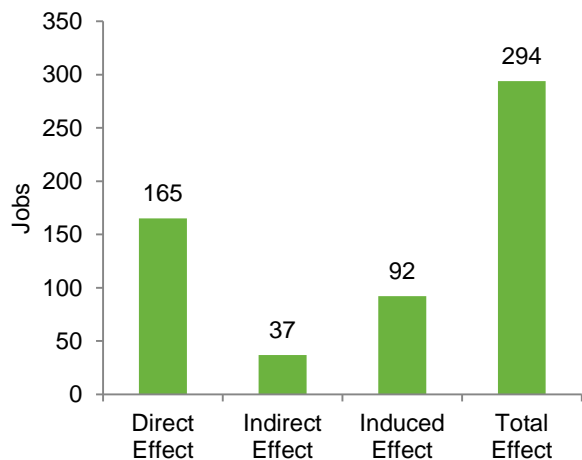
| | Indirect and Induced Employment |
|---|---------------------------------|
| Food services and drinking places | 13 |
| Private hospitals | 8 |
| Offices of physicians, dentists, and other health practitioners | 6 |
| Couriers and messengers | 5 |
| Real estate establishments | 5 |

Top Industries by Indirect and Induced Output

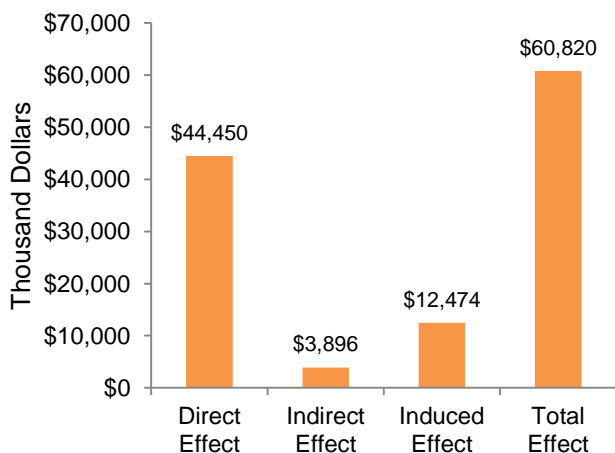
| | Indirect and Induced Output |
|---|-----------------------------|
| Private hospitals | \$1,119,413 |
| Real estate establishments | \$935,809 |
| Offices of physicians, dentists, and other health practitioners | \$849,919 |
| Food services and drinking places | \$769,894 |
| Insurance carriers | \$717,131 |

Capital Investment Impacts to Providence, 1994 - 2014

Employment Impacts of Capital Investment



Output Impacts of Capital Investment



| Economic Impacts of Capital Investment | | |
|--|------------|---------------------|
| | Employment | Output |
| Direct Effect | 165 | \$44,450,174 |
| Indirect Effect | 37 | \$3,896,216 |
| Induced Effect | 92 | \$12,473,726 |
| Total Effect | 294 | \$60,820,116 |

Top Industries by Indirect and Induced Employment

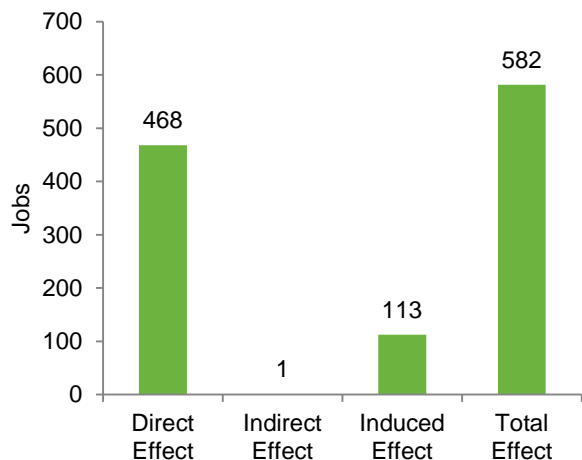
| | Indirect and Induced Employment |
|---|---------------------------------|
| Food services and drinking places | 14 |
| Private hospitals | 8 |
| Offices of physicians, dentists, and other health practitioners | 7 |
| Couriers and messengers | 6 |
| Real estate establishments | 5 |

Top Industries by Indirect and Induced Output

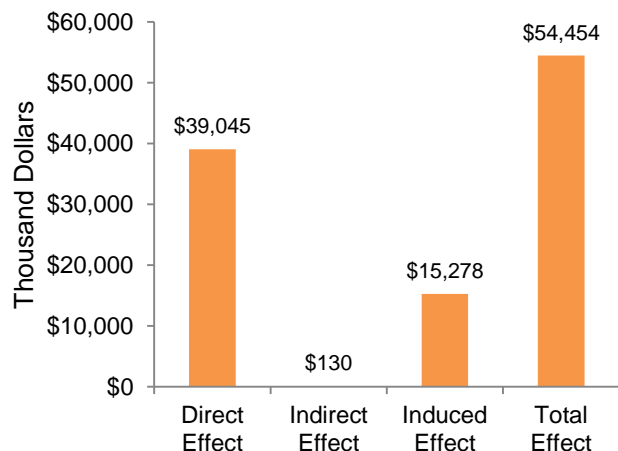
| | Indirect and Induced Output |
|---|-----------------------------|
| Private hospitals | \$1,187,050 |
| Real estate establishments | \$1,031,181 |
| Offices of physicians, dentists, and other health practitioners | \$901,272 |
| Food services and drinking places | \$831,223 |
| Insurance carriers | \$779,149 |

City Revenue Impacts to Providence, 1994 - 2014

Employment Impacts of City Revenue



Output Impacts of City Revenue



Economic Impacts of City Revenue

| | Employment | Output |
|------------------------|------------|--------------|
| Direct Effect | 468 | \$39,045,407 |
| Indirect Effect | 1 | \$130,037 |
| Induced Effect | 113 | \$15,278,189 |
| Total Effect | 582 | \$54,453,633 |

Top Industries by Indirect and Induced Employment

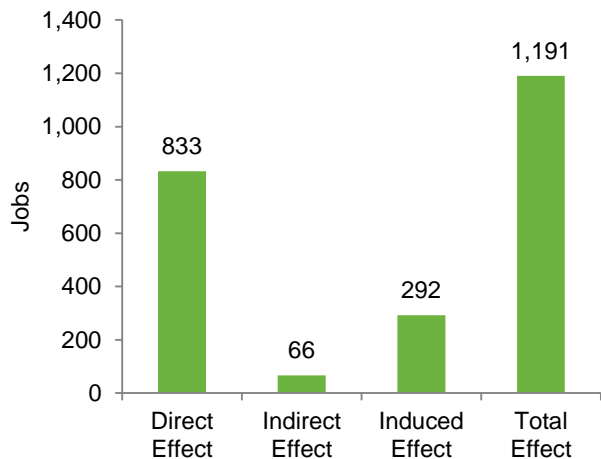
| | Indirect and Induced Employment |
|---|---------------------------------|
| Food services and drinking places | 16 |
| Private hospitals | 10 |
| Offices of physicians, dentists, and other health practitioners | 8 |
| Retail Stores - Food and beverage | 5 |
| Real estate establishments | 5 |

Top Industries by Indirect and Induced Output

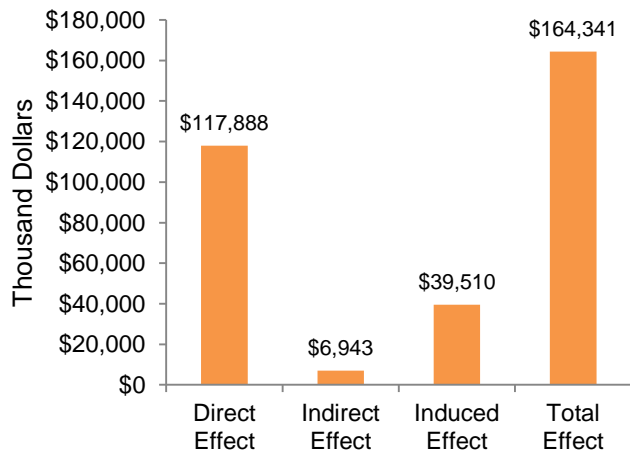
| | Indirect and Induced Output |
|---|-----------------------------|
| Private hospitals | \$1,456,729 |
| Offices of physicians, dentists, and other health practitioners | \$1,106,023 |
| Food services and drinking places | \$942,698 |
| Real estate establishments | \$920,534 |
| Insurance carriers | \$686,111 |

Providence Total Impacts, 1994 - 2014

Total Employment Impacts



Total Output Impacts



Economic Impacts of Lease Incentives, Capital Investment, and City Revenues

| | Employment | Output |
|------------------------|--------------|----------------------|
| Direct Effect | 833 | \$117,887,594 |
| Indirect Effect | 66 | \$6,942,774 |
| Induced Effect | 292 | \$39,510,138 |
| Total Effect | 1,191 | \$164,340,506 |

Top Industries by Indirect and Induced Employment

| | Indirect and Induced Employment |
|---|---------------------------------|
| Food services and drinking places | 42 |
| Private hospitals | 25 |
| Offices of physicians, dentists, and other health practitioners | 21 |
| Real estate establishments | 15 |
| Retail Stores - Food and beverage | 14 |

Top Industries by Indirect and Induced Output

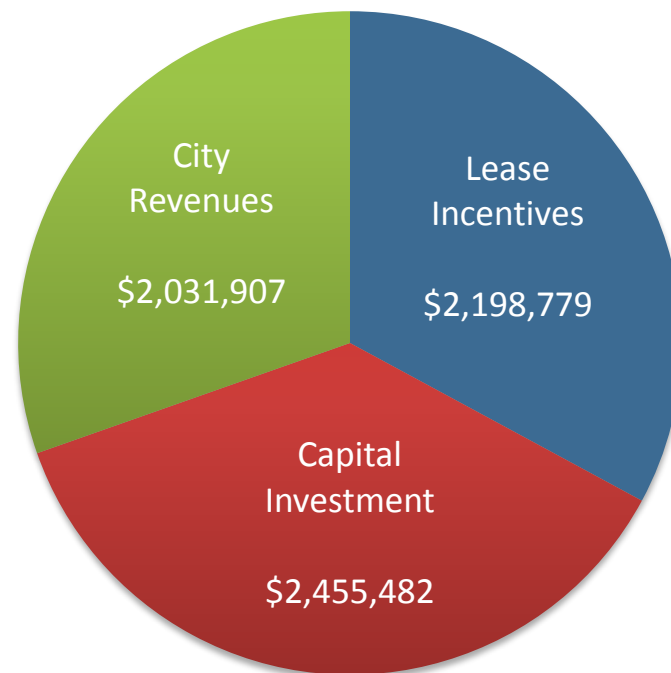
| | Indirect and Induced Output |
|---|-----------------------------|
| Private hospitals | \$3,763,192 |
| Real estate establishments | \$2,887,524 |
| Offices of physicians, dentists, and other health practitioners | \$2,857,213 |
| Food services and drinking places | \$2,543,814 |
| Insurance carriers | \$2,182,391 |

State and Local Tax Impacts, 1994 - 2014

Tax Impacts of Lease Incentives, Improvements, and City of Providence Revenues, 1994-2014

| | |
|---------------------------------------|--------------------|
| Dividends | \$6,452 |
| Social Ins Tax- Employee Contribution | \$63,896 |
| Social Ins Tax- Employer Contribution | \$113,270 |
| Indirect Bus Tax: Sales Tax | \$1,395,956 |
| Indirect Bus Tax: Property Tax | \$2,139,883 |
| Indirect Bus Tax: Motor Vehicle Lic | \$18,764 |
| Indirect Bus Tax: Severance Tax | \$0 |
| Indirect Bus Tax: Other Taxes | \$93,626 |
| Indirect Bus Tax: S/L NonTaxes | \$59,604 |
| Corporate Profits Tax | \$139,180 |
| Personal Tax: Income Tax | \$1,420,785 |
| Personal Tax: NonTaxes (Fines- Fees | \$1,112,278 |
| Personal Tax: Motor Vehicle License | \$51,443 |
| Personal Tax: Property Taxes | \$56,039 |
| Personal Tax: Other Tax (Fish/Hunt) | \$14,990 |
| Total State and Local Tax | \$6,686,168 |

Total Tax Impact by Activity



Key Findings: Rhode Island Impacts

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™



Rhode Island Impacts Summary

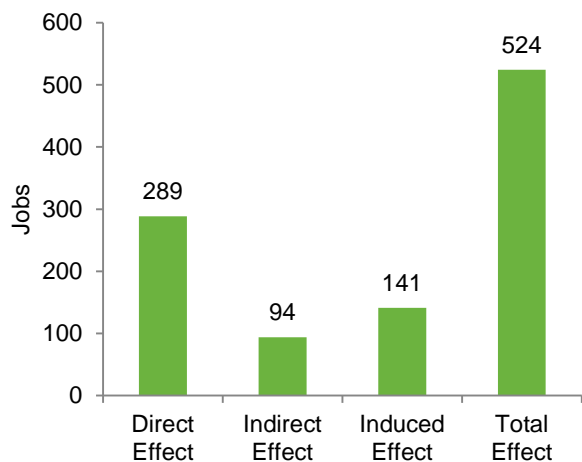
An analysis of the impacts of ProvPort's terminal services activities to the State of Rhode Island reveals the following:

- An estimated total of over 1,300 jobs and \$176 million in economic output were created between 1994 and 2014, as a result of ProvPort's lease incentives, payments to the City, and capital improvements.
- The industries with the highest number of indirect and induced jobs include: food services and drinking places; couriers and messengers; employment services; real estate establishments; and private hospitals.
- In addition to ProvPort's direct payments to the City of Providence, all three activities generated an estimated \$9.1 million in state and local tax revenue between 1994 and 2014.

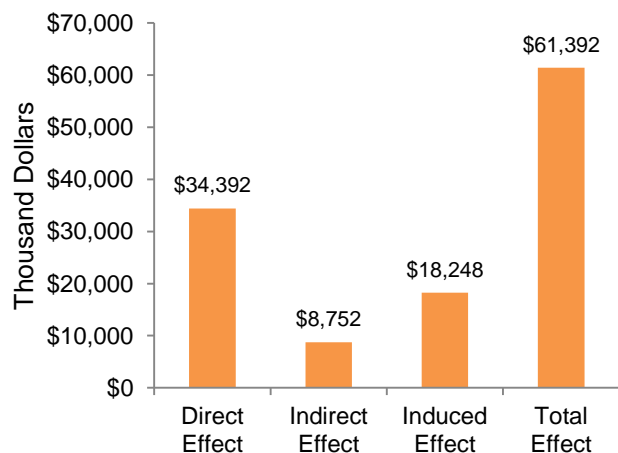


Lease Incentive Impacts to Rhode Island, 1994 - 2014

Employment Impacts of Lease Incentives



Output Impacts of Lease Incentives



Economic Impacts of Lease Incentives

| | Employment | Output |
|------------------------|------------|---------------------|
| Direct Effect | 289 | \$34,392,013 |
| Indirect Effect | 94 | \$8,751,579 |
| Induced Effect | 141 | \$18,248,413 |
| Total Effect | 524 | \$61,392,006 |

Top Industries by Indirect and Induced Employment

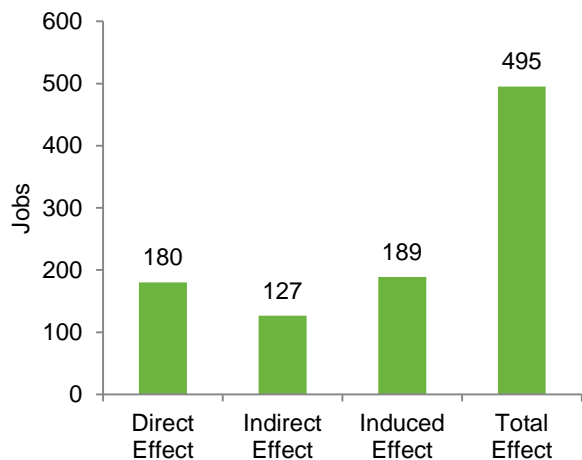
| | Indirect and Induced Employment |
|-----------------------------------|---------------------------------|
| Couriers and messengers | 21 |
| Food services and drinking places | 20 |
| Employment services | 17 |
| Real estate establishments | 11 |
| Private hospitals | 9 |

Top Industries by Indirect and Induced Output

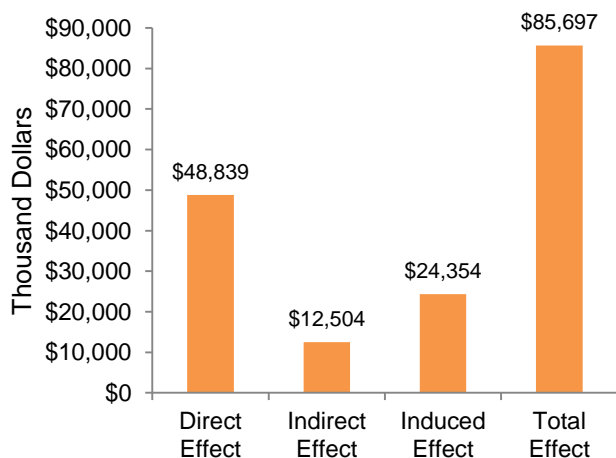
| | Indirect and Induced Output |
|---|-----------------------------|
| Real estate establishments | \$1,999,547 |
| Private hospitals | \$1,366,592 |
| Monetary authorities and depository credit intermediation | \$1,325,005 |
| Food services and drinking places | \$1,186,711 |
| Offices of physicians, dentists, and other health practitioners | \$1,068,681 |

Capital Investment Impacts to Rhode Island, 1994 - 2014

Employment Impacts of Capital Investment



Output Impacts of Capital Investment



Economic Impacts of Capital Investment

| | Employment | Output |
|------------------------|------------|---------------------|
| Direct Effect | 180 | \$48,838,704 |
| Indirect Effect | 127 | \$12,503,518 |
| Induced Effect | 189 | \$24,354,282 |
| Total Effect | 495 | \$85,696,504 |

Top Industries by Indirect and Induced Employment

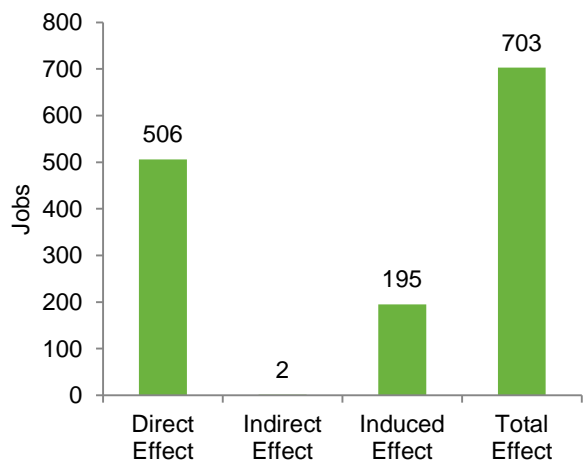
| | Indirect and Induced Employment |
|-----------------------------------|---------------------------------|
| Food services and drinking places | 26 |
| Couriers and messengers | 25 |
| Employment services | 20 |
| Real estate establishments | 15 |
| Private hospitals | 12 |

Top Industries by Indirect and Induced Output

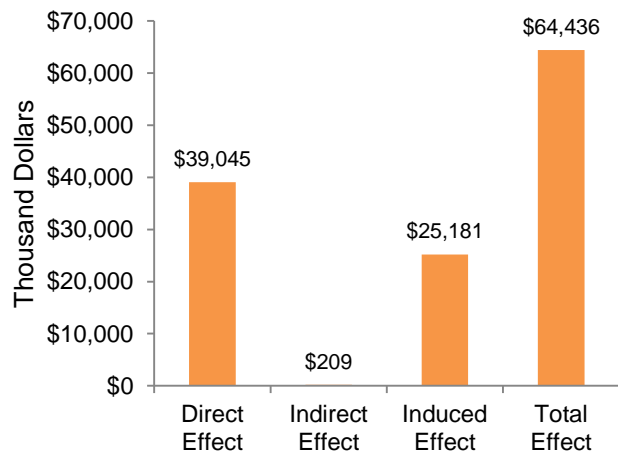
| | Indirect and Induced Output |
|---|-----------------------------|
| Real estate establishments | \$2,802,556 |
| Private hospitals | \$1,823,829 |
| Monetary authorities and depository credit intermediation | \$1,821,093 |
| Food services and drinking places | \$1,590,177 |
| Offices of physicians, dentists, and other health practitioners | \$1,426,243 |

City Revenue Impacts to Rhode Island, 1994 - 2014

Employment Impacts of City Revenue



Output Impacts of City Revenue



Economic Impacts of City Revenue

| | Employment | Output |
|---------------------|------------|---------------------|
| Direct Effect | 506 | \$39,045,407 |
| Indirect Effect | 2 | \$209,454 |
| Induced Effect | 195 | \$25,180,989 |
| Total Effect | 703 | \$64,435,850 |

Top Industries by Indirect and Induced Employment

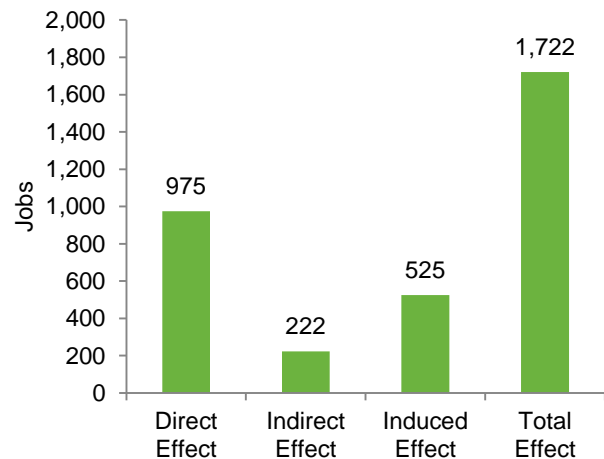
| | Indirect and Induced Employment |
|---|---------------------------------|
| Food services and drinking places | 25 |
| Private hospitals | 13 |
| Offices of physicians, dentists, and other health practitioners | 12 |
| Real estate establishments | 10 |
| Retail Stores - Food and beverage | 8 |

Top Industries by Indirect and Induced Output

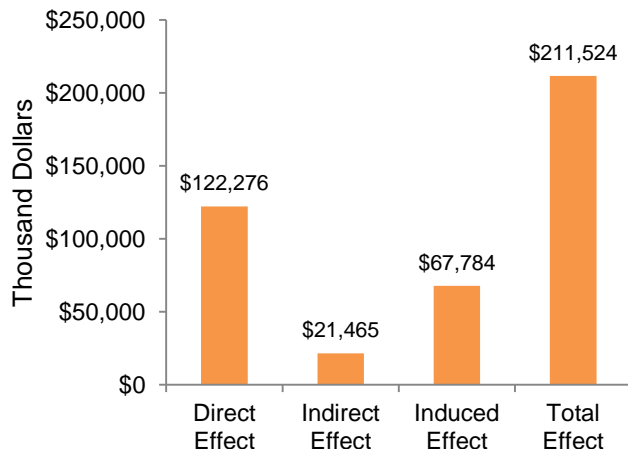
| | Indirect and Induced Output |
|---|-----------------------------|
| Real estate establishments | \$1,939,428 |
| Private hospitals | \$1,886,970 |
| Food services and drinking places | \$1,485,860 |
| Offices of physicians, dentists, and other health practitioners | \$1,475,618 |
| Monetary authorities and depository credit intermediation | \$1,377,791 |

Rhode Island Total Impacts, 1994 - 2014

Total Employment Impacts



Total Output Impacts



Economic Impacts of Lease Incentives, Capital Investment, and City Revenues

| | Employment | Output |
|---------------------|--------------|----------------------|
| Direct Effect | 975 | \$122,276,124 |
| Indirect Effect | 222 | \$21,464,551 |
| Induced Effect | 525 | \$67,783,685 |
| Total Effect | 1,722 | \$211,524,360 |

Top Industries by Indirect and Induced Employment

| | Indirect and Induced Employment |
|-----------------------------------|---------------------------------|
| Food services and drinking places | 71 |
| Couriers and messengers | 47 |
| Employment services | 40 |
| Real estate establishments | 36 |
| Private hospitals | 34 |

Top Industries by Indirect and Induced Output

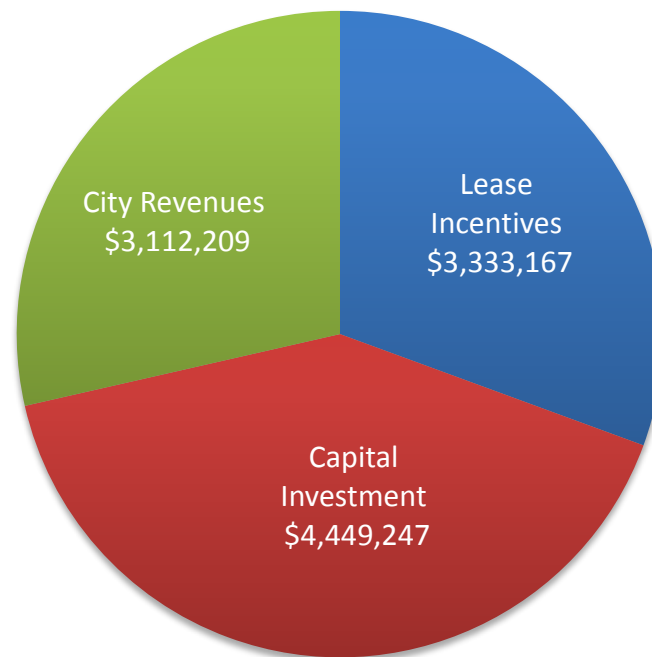
| | Indirect and Induced Output |
|---|-----------------------------|
| Real estate establishments | \$6,741,531 |
| Private hospitals | \$5,077,389 |
| Monetary authorities and depository credit intermediation | \$4,523,888 |
| Food services and drinking places | \$4,262,748 |
| Offices of physicians, dentists, and other health practitioners | \$3,970,543 |

State and Local Tax Impacts, 1994 - 2014

Tax Impacts of Lease Incentives, Improvements, and City of Providence Revenues, 1994-2014

| | |
|---------------------------------------|---------------------|
| Dividends | \$9,495 |
| Social Ins Tax- Employee Contribution | \$72,720 |
| Social Ins Tax- Employer Contribution | \$128,913 |
| Indirect Bus Tax: Sales Tax | \$2,472,245 |
| Indirect Bus Tax: Property Tax | \$3,789,743 |
| Indirect Bus Tax: Motor Vehicle Lic | \$33,231 |
| Indirect Bus Tax: Severance Tax | \$0 |
| Indirect Bus Tax: Other Taxes | \$165,811 |
| Indirect Bus Tax: S/L NonTaxes | \$105,559 |
| Corporate Profits Tax | \$204,828 |
| Personal Tax: Income Tax | \$2,093,069 |
| Personal Tax: NonTaxes (Fines- Fees | \$1,638,584 |
| Personal Tax: Motor Vehicle License | \$75,785 |
| Personal Tax: Property Taxes | \$82,556 |
| Personal Tax: Other Tax (Fish/Hunt) | \$22,083 |
| Total State and Local Tax | \$10,894,622 |

Total Tax Impact by Activity



Takeaway: Economic Impact Analysis

- Terminal lease incentives, capital improvements, and fee revenues generated for the City have contributed to an estimated 1,191 jobs within the City of Providence, and over 1,700 jobs within the State of Rhode Island since 1994.
- The terminal services activities resulted in approximately \$164 and \$211.5 million in economic output within Providence and Rhode Island, respectively, and approximately \$6.7 and \$10.9 million in additional state and local tax contributions, respectively.
- On net, the foregoing analysis finds that ProvPort's terminal service activities contribute positively (jobs, economic output, and taxes) to the local, regional, and state economy.

Summary of Economic Impacts of Terminal Service Activities, 1994-2014

| | City of Providence | | | State of Rhode Island | | |
|--------------------|--------------------|-------------------|----------------------------------|-----------------------|-------------------|----------------------------------|
| | Employment | Output (millions) | State and Local Taxes (millions) | Employment | Output (millions) | State and Local Taxes (millions) |
| Lease Incentives | 315 | \$49.1 | \$2.2 | 524 | \$61.4 | \$3.3 |
| Capital Investment | 294 | \$60.8 | \$2.5 | 495 | \$85.7 | \$4.5 |
| City Revenues | 582 | \$54.4 | \$2.0 | 703 | \$64.4 | \$3.1 |
| Total | 1,191 | \$164.3 | \$6.7 | 1,722 | \$211.5 | \$10.9 |

Tenant Summary and Regional Effects

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™



Tenant Summary

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™



Tenant Summary and Regional Effects

ProvPort's eight current tenants provide valuable assets to Providence and Rhode Island as a whole, in the form of jobs, economic output, and, by extension, tax revenues to the City, County, and State. The table, below, summarizes current economic output and job creation contributions from existing ProvPort tenants. It also measures and illustrates job and economic output growth from ProvPort within the State of Rhode Island, and where these spillover effects are located at the county level. Using IMPLAN, we determined the indirect and induced effects of ProvPort's economic activity on the State of Rhode Island, by county. Every county in Rhode Island benefits from ProvPort. While the majority of additional economic output and jobs created due to the port's activities are focused in Providence, millions of dollars of indirect and induced output and thousands of jobs have resulted in Bristol, Kent, Newport, and Washington Counties.

Within Providence, over 7,000 jobs and \$1 billion in economic output are the direct, indirect, or induced result of ProvPort's sustained activities over the past 20 years.

| Summary of Indirect and Induced Economic Impacts of ProvPort within Surrounding Counties 1994-2014, IMPLAN derived | | |
|--|---------------|-------------------|
| | Employment | Output (millions) |
| Bristol County | 1,611 | \$326.8 |
| Kent County | 1,656 | \$438.0 |
| Newport County | 1,797 | \$707.7 |
| Providence County | 7,440 | \$1,009.0 |
| Washington County | 770 | \$326.8 |
| Total | 13,274 | \$2,808.3 |

Tenant Summary

Eight tenants currently lease space at ProvPort, exporting, importing, and supplying Rhode Island, the greater northeast, and three other continents with a diverse array of products, including cars, salt, cement, and chemicals.

Over 5,000 part- or full-time employees work in ProvPort, either at the port, directly, or assisting with operations (trucking, etc).



| | | |
|-----------------------------------|------------------|--|
| EUKOR Auto Carriers | Used Autos | <ul style="list-style-type: none"> • 1,500 autos exported monthly to West Africa |
| UNIVAR Terminal | Caustic | <ul style="list-style-type: none"> • Annual throughput of 50,000 tons • Chlorine manufacturer and waste water treatment services |
| Enterprise Products and Terminals | LPG | <ul style="list-style-type: none"> • Annual throughput of 180,000 tons • State of the art vapor recovery system installed • Doubled discharge rate and increased efficiency |
| Lehigh Terminal | Cement | <ul style="list-style-type: none"> • 50,000 ton dome • 180,000 ton annual throughput bulk cement • Customer base in RI, CT, MA, NH |
| Schnitzer Northeast | Scrap Steel | <ul style="list-style-type: none"> • 570,000 tons exported last year • Cargo shipped to Turkey, China, and South Korea |
| Washington Mills | Aluminum Oxide | <ul style="list-style-type: none"> • 80,000 tons annual throughput • Used for making sandpaper and grinding wheels • Oldest abrasives company in the US (1868) |
| New England Petroleum | Heating Oil/ULSD | <ul style="list-style-type: none"> • Partnership between Hudson and Global • 55.8 M gallons annual throughput • New 16.5 M gallon tank farm under construction |
| Morton Salt | Road Salt | <ul style="list-style-type: none"> • 300,000 ton annual throughput • Exclusive providers to RI |

Source: ProvPort Website

Tenants: Projected Employment and Economic Output

Seven out of eight of ProvPort's tenants expect to expand operations in the next six years. Surveys of ProvPort tenants were conducted to identify expansion plans, job creation, and capital expenditures. Each of the seven tenants who responded to the survey plan to grow their businesses, investing millions in capital and hiring over 100 additional workers over the next six years – all of which will further accrue to the benefit of the City of Providence and the State of Rhode Island. Additionally, Waterson Terminal Services, while not a tenant, currently has 16 full-time employees and plans to invest \$2 million in expanding the port over the coming years. Lastly, ProvPort is involved in a \$10.5 million US Maritime Administration grant for the purchase of a new crane, to be matched by ProvPort's \$10.7 million purchase of barges on which the cranes will operate. These trends suggest further economic impacts to the City of Providence and State of Rhode Island.

ProvPort Tenant Survey Results: Expected Additional Job Creation and Capital Expenses for 2014-2020 Period

| <u>Company</u> | <u>Jobs</u> | <u>Investment</u> | <u>Projected Investment</u> |
|------------------|-------------|-------------------|-----------------------------|
| Washington Mills | 5 | \$400,000 | |
| EPROD | 7 | \$3,500,000 | \$20,000,000 |
| Schnitzer | 10 | \$2,000,000 | |
| Lehigh | 5 | \$15,000,000 | |
| UNIVAR | 77 | \$1,000,000 | |
| NEPT | 15 | \$12,000,000 | |
| EUKOR | 10 | n/a | |
| Morton Salt | 5 | \$200,000 | |

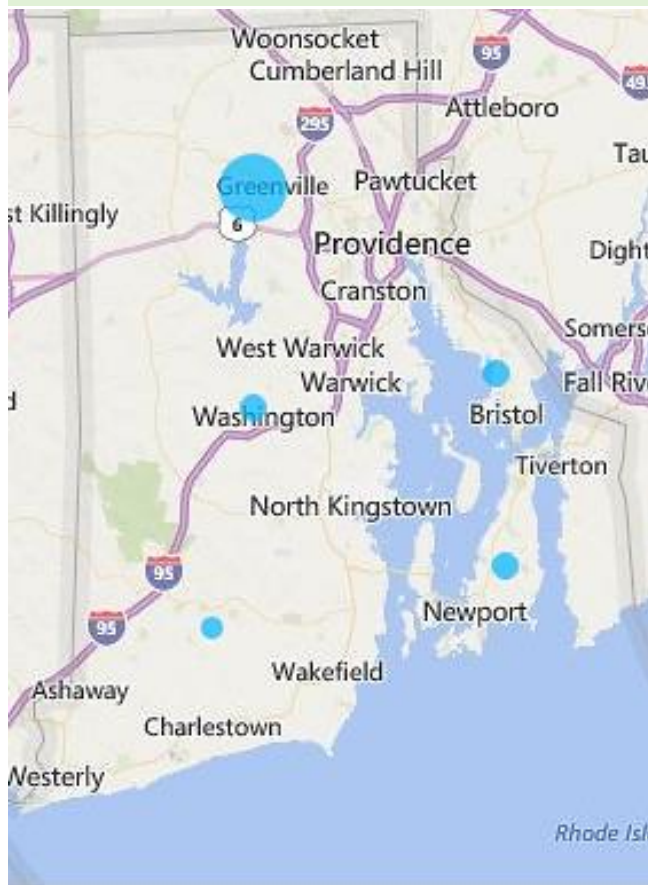
Tenant Effects on the Rhode Island Economy

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™



ProvPort Spillover: Job Effects in Rhode Island Counties

The indirect and induced employment effects of the port are substantial. From 1994 to 2014, nearly 7,500 additional jobs were created in Providence due to the port activities, and more than 5,000 jobs were created in Bristol, Kent, Newport, and Washington Counties.

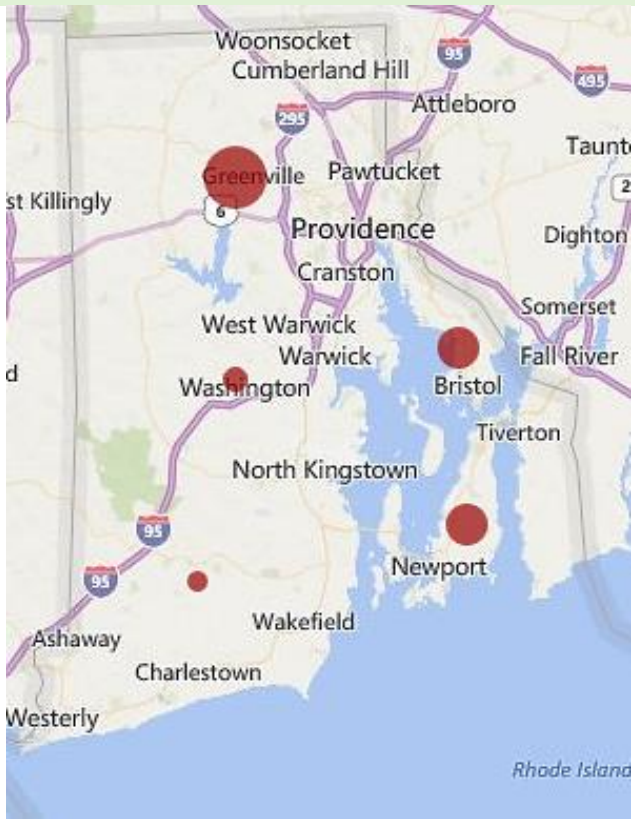


Summary of Indirect and Induced Jobs from ProvPort Activities to Surrounding Counties 1994-2014

| | Employment |
|--------------------------|---------------|
| Bristol County | 1,611 |
| Kent County | 1,656 |
| Newport County | 1,797 |
| Providence County | 7,440 |
| Washington County | 770 |
| Total | 13,274 |

ProvPort Spillover: Output Effects in Rhode Island Counties

Indirect and induced economic output effects, associated with port activities, are substantial. As with jobs, most of the additional economic output is clustered within Providence. From 1994 to 2014, over \$1 billion of Providence's economic output could be attributed to port-related activities. Within Bristol, Kent, Newport, and Washington Counties, the port also created another \$2 billion in indirect and induced effects, during the same period.



| Summary of Indirect and Induced Economic Output of ProvPort Activities to Surrounding Counties 1994-2014 | |
|---|-------------------|
| | Output (millions) |
| Bristol County | \$326.8 |
| Kent County | \$438.0 |
| Newport County | \$707.7 |
| Providence County | \$1,009.0 |
| Washington County | \$326.8 |
| Total | \$2,808.3 |

Takeaways: Tenant Summary and Regional Effects

- ProvPort tenants contribute jobs and economic output to Providence through the shipping, importing, and exporting of a variety of commercial and industrial products. Furthermore, six of the eight tenants who responded to the survey expressed interest in expanding operations in the near term. This is beneficial not only to ProvPort, but to the health of both Providence and the State, through associated indirect and induced employment, economic output, and tax revenues.
- From 1994 to 2004, ProvPort created over 13,200 jobs in Rhode Island through indirect and induced effects, **7,400 of these jobs occurring in Providence.**
- Nearly \$3 billion in statewide economic activity was created as a result of ProvPort-related activities, with approximately **\$1 billion of this occurring within Providence County.**

Summary of Indirect and Induced Economic Impacts of ProvPort within Surrounding Counties 1994-2014, IMPLAN derived

| | Employment | Output (millions) |
|--------------------------|---------------|-------------------|
| Bristol County | 1,611 | \$326.8 |
| Kent County | 1,656 | \$438.0 |
| Newport County | 1,797 | \$707.7 |
| Providence County | 7,440 | \$1,009.0 |
| Washington County | 770 | \$326.8 |
| Total | 13,274 | \$2,808.3 |

COUNTERFACTUAL ANALYSIS

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™



Background

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™



Background

4ward Planning performed a counterfactual analysis of ProvPort expansion activities. 4ward Planning utilized IMPLAN 3.0 software and county data sets to identify the prospective economic impacts to Rhode Island's economy over the next six years, with and without port operation. This means, if the port did not exist, what impact would this have upon the economy within both Providence and Rhode Island as a whole?

The following inputs underpin the counterfactual modeling exercise:

- Estimated 5,180 current full-time and part-time positions within the port, in direct employ or assisting with operations over the course of seven years (extrapolated from local data)
- Estimated 119 additional hires beyond current open positions to the 10 current ProvPort tenants between 2014 and 2020, provided by tenant surveys
- Estimated \$33,540,000 in additional capital expenditures and improvements by ProvPort tenants between 2014 and 2020, provided by tenant surveys
- Estimated fastest growing jobs (and job growth rates) provided by the Bureau of Labor Statistics

Methodology of Economic Impact Analysis and Counterfactual Analysis

4ward Planning utilized IMPLAN Professional 3.0, a widely used economic impact assessment software system. IMPLAN is designed to simplify and expedite the input-output accounting process (e.g., commodity flows from producers to intermediaries to final consumers and all related multipliers associated with output and employment for a given geography).

In order to adequately evaluate the economic effects of ProvPort expansion activities on the five largest growth industries in Rhode Island over the next 10 years (2014 to 2024), 4ward Planning purchased the most recent economic and demographic data files (2011) for the five counties within Rhode Island. These data files, once combined with the IMPLAN Professional 3.0 software system, permit the creation of a detailed Social Accounting Matrix (SAM) and location-specific multipliers for the area.

Direct, indirect, and induced economic impacts were analyzed for the proposed facility. 4ward Planning modeled the current state of ProvPort's employment and economic output in 2014, as well as future expected capital investments and additional net hires by ProvPort tenants through 2020. Using BLS data, the predicted changes to the five fastest growing industries were also calculated. Finally, all dollar figures are presented in 2014 dollars.

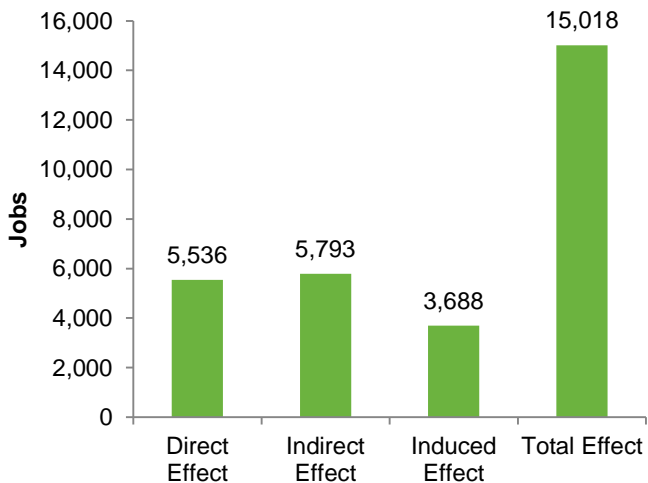
Estimated employment and capital investments were provided by surveys of ProvPort tenants.

Key Findings: Providence and Rhode Island in 2020, ProvPort's Future Impact on Key Industry and Counterfactual

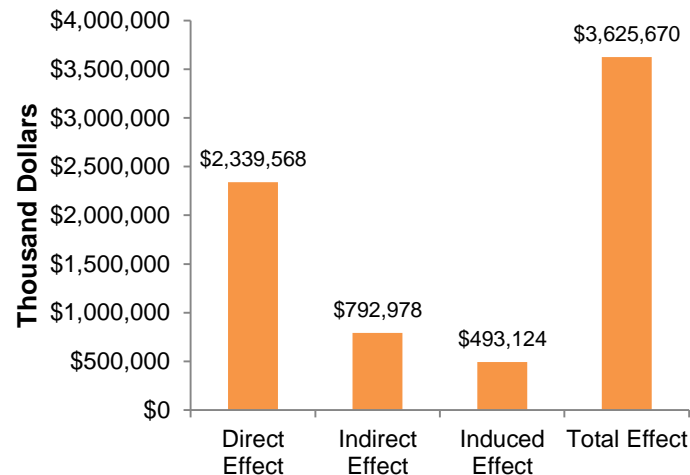
Summary Tables: Impacts on Providence County: 2014 - 2020

Between 2014 and 2020, ProvPort is anticipated to directly contribute over 5,500 jobs and over \$2.3 billion in output within Providence. Including both direct, indirect, and induced impacts, ProvPort is anticipated to contribute over 15,000 full- and part-time jobs and over \$3.6 billion in economic output, over the same period.

Employment Impacts of ProvPort



Output Impacts of ProvPort



Direct, Indirect, and Induced Effects of ProvPort

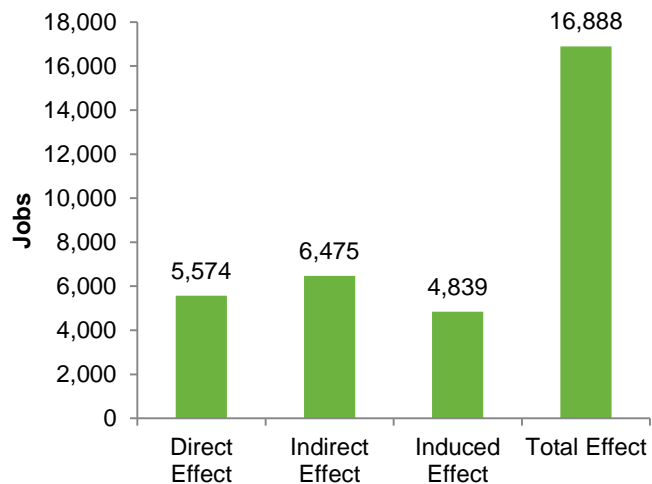
| | <u>Employment</u> | <u>Output</u> |
|---------------------|-------------------|------------------------|
| Direct Effect | 5,536 | \$2,339,568,110 |
| Indirect Effect | 5,793 | \$792,978,238 |
| Induced Effect | 3,688 | \$493,123,933 |
| Total Effect | 15,018 | \$3,625,670,280 |

Summary Tables: Impacts on Rhode Island: 2014 - 2020

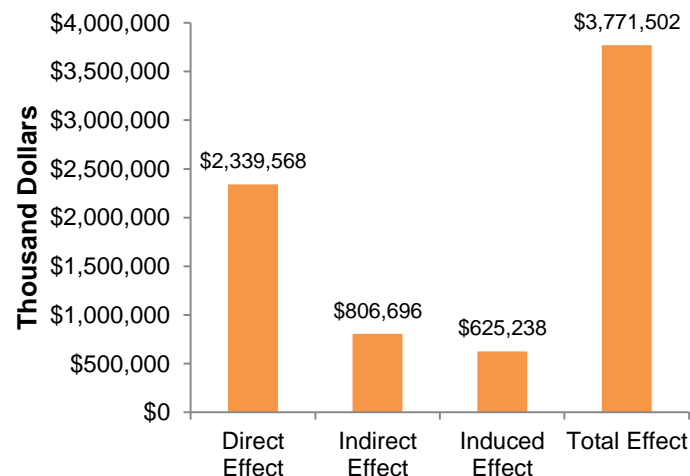
Between 2014 and 2020, ProvPort is anticipated to directly contribute over 5,500 jobs and over \$2.3 billion in output within the State of Rhode Island.

The combined direct, indirect, and induced impacts is anticipated to contribute nearly 16,800 full- and part-time jobs and over \$3.7 billion in economic output, over the same period.

Employment Impacts of ProvPort



Output Impacts of ProvPort



Direct, Indirect, and Induced Effects of ProvPort

| | <u>Employment</u> | <u>Output</u> |
|-----------------|-------------------|-----------------|
| Direct Effect | 5,574 | \$2,339,568,190 |
| Indirect Effect | 6,475 | \$806,695,623 |
| Induced Effect | 4,839 | \$625,238,055 |
| Total Effect | 16,888 | \$3,771,501,868 |

ProvPort Effects on Growth Industries

- According to BLS data, the five fastest growing industries (Computer Systems, Home Healthcare, Family Services, Management Consulting, and Medical and Diagnostic Services) are expected to grow between three and five percent within Rhode Island, from 2014 to 2020. By 2020, one to five percent of all jobs in these five industries within Providence County is expected to be an indirect or an induced result of ProvPort operations and planned expansions. The port is anticipated to be an integral part of local job growth.
- In Rhode Island, by 2020, one to three percent of all jobs in these same industries are estimated to be an indirect or induced impact of ProvPort operations. While the majority of jobs created as a result of ProvPort are within Providence County, all five counties within Rhode Island benefit from continued port operations and activity – a strong justification to continue support of ProvPort activities.

Effects on Growth Industries

| | | Computer Systems | Home Healthcare | Family Services | Management Consulting | Medical and Diagnostic Services |
|---------------------|--|------------------|-----------------|-----------------|-----------------------|---------------------------------|
| Within Providence | ProvPort Indirect and Induced Jobs | 49 | 76 | 82 | 72 | 82 |
| | ProvPort Indirect and Induced Economic Output (Millions) | \$3,855 | \$4,221 | \$3,715 | \$8,706 | \$9,963 |
| Within Rhode Island | ProvPort Indirect and Induced Jobs | 65 | 92 | 99 | 89 | 101 |
| | ProvPort Indirect and Induced Economic Output (millions) | \$3,985 | \$5,212 | \$4,415 | \$10,470 | \$12,220 |

Takeaway: Counterfactual Analysis

- By 2020, ProvPort is expected to support over 15,500 direct, indirect, and induced jobs within Providence County and 18,800 throughout Rhode Island.
- One to five percent of all jobs within Rhode Island's fastest growing industries are expected to occur, indirectly, as a result of expanded port operations. Most of this employment growth will be concentrated within the City and County of Providence, but all counties in Rhode Island will see positive employment impacts.
- If ProvPort were not to exist, even Rhode Island's growth industries (mostly business management- and healthcare-related) would experience noticeable employment decreases.

Total Jobs in Fastest Growing Industries within Rhode Island

| | <u>Computer Systems</u> | <u>Home Healthcare</u> | <u>Family Services</u> | <u>Management Consulting</u> | <u>Medical and Diagnostic Services</u> |
|--|-----------------------------|----------------------------|----------------------------|----------------------------------|--|
| Providence, by 2020 | 2,695 | 3,877 | 4,630 | 1,443 | 4,589 |
| <i>ProvPort Indirect and Induced Contributions</i> | 49 | 76 | 82 | 72 | 82 |
| <i>Percent of Jobs Contributed by ProvPort</i> | 1.8% | 1.9% | 1.8% | 5.0% | 1.8% |
| Rhode Island, by 2020 | 7,137 | 6,281 | 6,345 | 2,987 | 6,714 |
| <i>ProvPort Indirect and Induced Contributions</i> | 65 | 92 | 99 | 89 | 101 |
| <i>Percent of Jobs Contributed by ProvPort</i> | 0.9% | 1.5% | 1.6% | 3.0% | 1.5% |

Appendix: Methodology

ECONOMIC AND REAL ESTATE ANALYSIS FOR SUSTAINABLE LAND USE OUTCOMES™

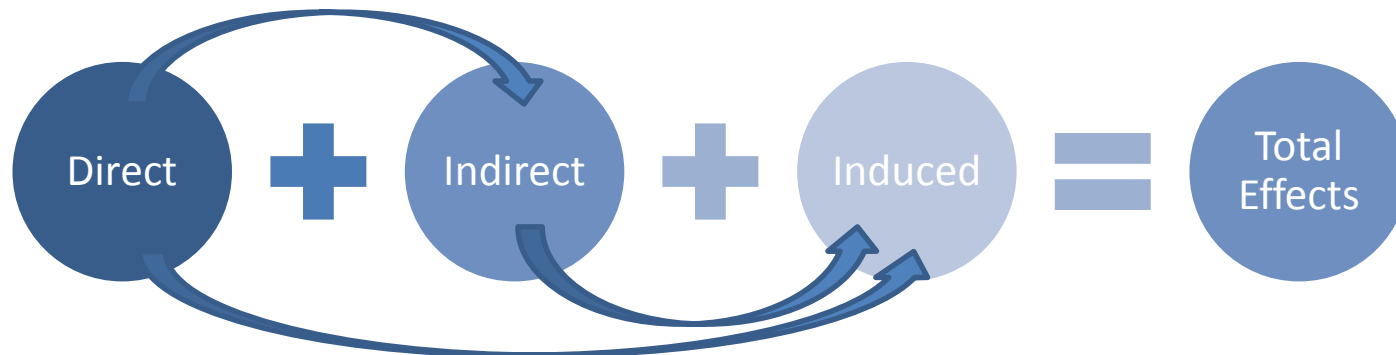


General Input-Output Impact Modeling

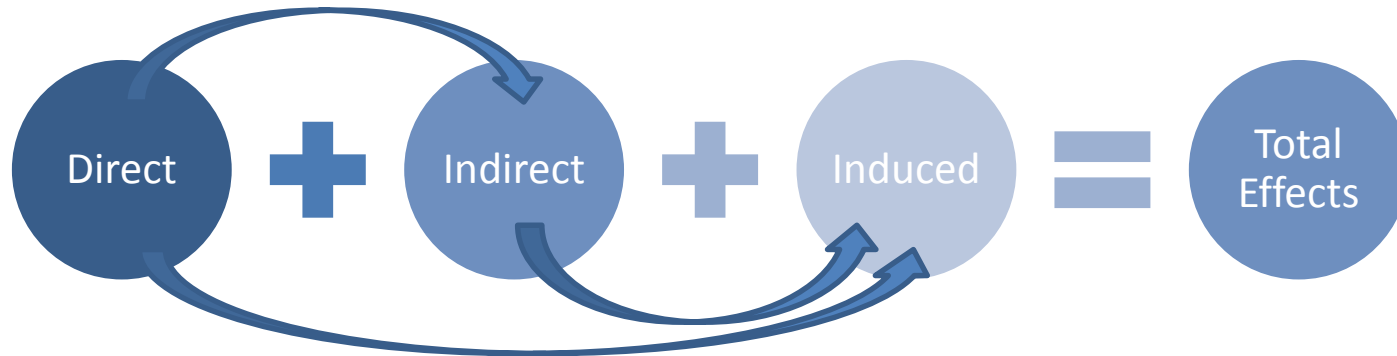
Economic impact analysis involves applying a final demand change to a predictive economic input-output model, and then analyzing the resulting changes in the economy under study.

More concisely, an impact analysis is an assessment of change in overall economic activity as a result of change in one or several specific economic activities.

Economic impacts, whether for employment or output, are typically referenced as **direct**, **indirect**, and **induced**. 4ward Planning has expressed the estimated direct, indirect, and induced impacts for each year in this analysis.



General Input-Output Impact Modeling - Example



Direct impacts are the result of a change in final demand.

For example, if \$10 million is invested in building construction, increasing demand for buildings by \$10 million...

Indirect effects result from changes in demand for factors of production.

...the \$10 million increase in the construction industry sector revenue causes a \$4 million increase in purchase orders to related industries, like lumber and heavy machinery.

Induced effects result from changes in household spending.

Building construction, lumber production, and heavy machinery manufacturing pay their workers wages to deliver various products, enabling workers to spend an additional \$100,000 within the regional economy.

Total effects are the combination of direct, indirect, and induced effects.

The total effect of a \$10 million increase in building construction demand, then, is equal to \$14.1 million (\$10 million + \$4 million + \$100,000).

Methodology

4ward Planning utilized IMPLAN Professional 3.0, a widely used economic impact assessment software system. IMPLAN is designed to simplify and expedite the input-output accounting process (e.g., commodity flows from producers to intermediaries to final consumers, and all related multipliers associated with output and employment for a given geography).

To adequately evaluate the prospective economic impacts of terminal service activities, 4ward Planning purchased the most recent economic and demographic data files for the State of Rhode Island and the seven postal ZIP codes covering the City of Providence. These data files, once combined with the IMPLAN Professional 3.0 software system, permit the creation of a detailed Social Accounting Matrix (SAM) and location-specific multipliers for the area – effectively recreating the local economy, as it might exist, today.

Direct, indirect, and induced economic impacts were analyzed for identified lease incentives, capital investments, and fee revenue generated for the City of Providence. At the request of Waterson Terminal Services, 4ward Planning modeled the lease incentives, city revenues and capital investments as occurring during the years 1994 to 2014. All dollar figures are presented in 2014 dollars. The tax impacts are in addition to the direct payments to the city and include the economic impacts of public services and employment generated.

In modeling the economic impacts of lease incentives, it was assumed that the monetary difference between the tenant's lease rate and the market lease was invested into the tenant's port-based economic activities. All market rates were inflation-adjusted and calculated from 1994 to 2014.

Lease incentive information, historical fee revenues paid to the City of Providence, and estimates for capital improvements were provided by Waterson Terminal Services and are subject to revision.

General & Limiting Conditions

4ward Planning Inc. has endeavored to ensure that the reported data and information contained in this report are complete, accurate, and relevant. All estimates, assumptions, and extrapolations are based on methodological techniques employed by 4ward Planning Inc. and believed to be reliable. 4ward Planning Inc. assumes no responsibility for inaccuracies in reporting by the client, its agents, representatives, or any other third-party data source used in the preparation of this report.

Further, 4ward Planning Inc. makes no warranty or representation concerning the manifestation of the estimated or projected values or results contained in this study. This study may not be used for purposes other than that for which it is prepared or for which prior written consent has first been obtained from 4ward Planning Inc. This study is qualified in its entirety by, and should be considered in light of, the above limitations, conditions, and considerations.



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