JLARC
JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION

June 7, 2021

Trade and Transportation Incentives

JLARC Commission Briefing

JLARC evaluation of economic development incentives

- Appropriation Act directs JLARC to evaluate economic development incentives on an ongoing basis
  - Spending and business activity
  - Economic benefits
  - Effectiveness
- JLARC contracts with Weldon Cooper Center to assist with evaluations

2021 Appropriation Act, Item 32(F).

In-depth incentive reports presented through 2021

Date	Incentives covered
November 2017	Film incentives (3)
June 2018	Workforce and small business incentives (9)
June 2019	Data center and manufacturing incentives (11)
September 2020	Infrastructure and regional incentives (10)
June 2021	Trade and transportation incentives (11)

11 trade and transportation incentives evaluated in this report

Incentive	Incentive type	Amount spent FY19
Common carrier sales tax exemptions (railroads, airlines, ships and vessels)	Exemptions	$37.3M
Aircraft repair parts exemption	Exemption	5.4
Railroad rolling stock exemption	Exemption	2.5
Port-related incentives (4)	Grant, tax credits	2.8
VALET and Trade Show Assistance programs	Grants*	1.2

*Not technically considered grants but are similar to grants.

In brief

Common carrier exemptions meet certain objectives, but primary benefit of exemption for airline common carrier exemption could be met with other existing exemption.

Railroad rolling stock exemption has not expanded rolling stock industry; aircraft repair parts exemption is new but unlikely to significantly increase aircraft repair activity.

Port-related incentives have had mixed success in achieving goals but have higher economic benefits than many incentives.

VALET and Trade Show Assistance programs have high economic benefits and returns in state revenue.

In this presentation

Common carrier exemptions

Aircraft repair parts exemption

Railroad rolling stock exemption

Port-related incentives

VALET and Trade Show Assistance programs

State offers three sales tax exemptions for common carriers

- Common carriers transport goods or people according to published routes and schedules and make their services available to the general public

Railroads

Airlines

Ships and vessels

Exemptions reduce cost of supplies and repairs for common carriers and promote industries

Exemption	Purpose	Tax savings FY19
Railroad common carrier	Promotes maintenance and expansion of state railroad system	$20.3M
Airline	Encourages (i) commercial air service to and from Virginia airports and (ii) airline maintenance activities	10.0
Ships and vessels	Promotes shipping industries, and commercial shipbuilding and repair	7.0

Airline common carrier and ships and vessels exemptions adopted in 1966. Railroad common carrier exemption adopted in 1978.

Common carrier exemptions among some of the oldest economic development incentives

- Adopted to reduce costs for transportation industries, which were regulated at the time
- Nearly all states have similar exemptions

Common carrier exemptions intended to promote objectives in addition to economic development

- Reduce costs for rail, air, and shipping industries in support of their role to transport passengers/cargo safely and their importance to interstate and foreign commerce
- Improve tax system by providing similar tax treatment to rail, air, and maritime transportation providers
- Railroad exemption supports transportation mode that can reduce congestion and pollution

Stakeholders indicated all three common carrier exemptions are important

- **Railroad:** supports capital investment in rail network and maintains viability of short line railroads
- **Airline:** maintains and expands airline base maintenance facilities in Virginia
- **Ships and vessels:** maintains future competitiveness in commercial shipping if Navy moves to smaller ships that can be built outside of Hampton Roads or if offshore wind industry in Virginia grows

Finding

Other factors have greater influence on rail, airline, and shipping activity in the state than the common carrier exemptions.

Presence of rail-dependent industries is key factor influencing rail activity

- Virginia has lower level of rail-dependent industries, such as chemical manufacturers and mining companies, compared with other states
- Virginia has lower concentration of rail employment than the national average
- Virginia's rail employment has declined faster than the nation's because of decline in coal industry

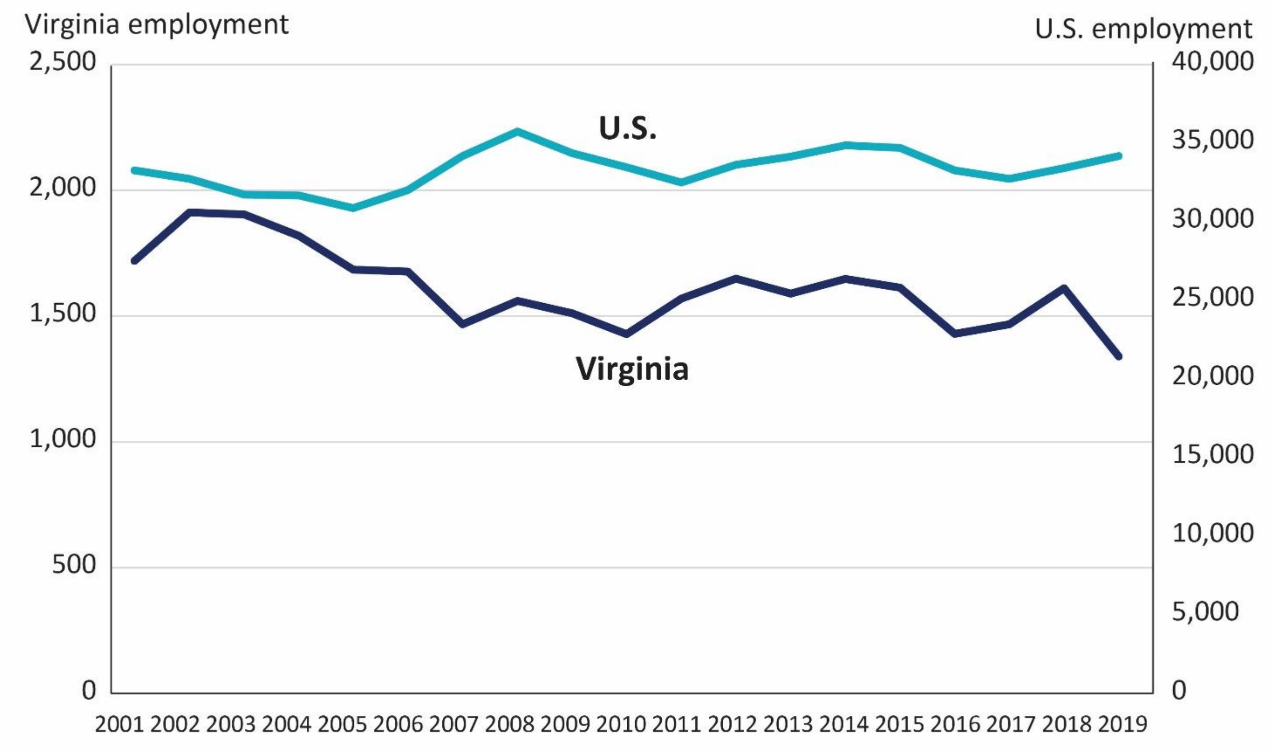
Airline maintenance activity influenced by airline and aircraft industry presence

- Areas with higher concentrations of airline and aircraft repair employment tend to be near
  - major airline hubs (Georgia and Texas)
  - large aircraft manufacturers (Washington, Arizona, Connecticut)
- Virginia is not a major hub and has smaller presence of aircraft manufacturers

Most shipbuilding and repair activity in Virginia is for the Navy

- Virginia has the largest shipbuilding and repair industry in the U.S.
- 95% of shipbuilding and repair in Virginia is for the Navy and only 5% is commercial
  - Newport News Shipbuilding is largest shipbuilder in U.S. and is sole provider of Navy aircraft carriers
  - Naval Station Norfolk is largest Navy base in U.S.

Virginia commercial ship repair employment is estimated to have declined over the past 20 years



Findings

Common carrier exemptions are estimated to have low to negligible economic benefits per $1 million in spending and low to negligible returns in revenue compared with other incentives.

Common carrier exemptions have low to negligible economic benefits (FY10–FY19)

●●●● High
●●●○ Moderate
●●○○ Low
●○○○ Negligible

	Economic benefit per $1M spent	**Return in revenue** per $1 spent
Railroad common carrier exemption	●●○○ 32 jobs, $4.2M in state GDP, and $3.1M in personal income	●●○○ 23¢
Airline common carrier exemption	●○○○ 8 jobs, $0.5M in state GDP, and $0.9M in personal income	●○○○ 4¢
Ships and vessels exemption	●○○○ 6 jobs, $0.7M in state GDP, and $0.7M in personal income	●○○○ 4¢

Reasonable to maintain railroad common carrier and ships and vessels exemptions

- Meet some of their objectives even if they have little influence over rail or shipping activity
- Eliminating them could make Virginia seem less competitive because nearly all states have similar exemptions
- Eliminating railroad common carrier exemption could lead to legal challenges

Airline common carrier exemption could be eliminated

- Airline repair and maintenance would still be exempt under the aircraft repair parts exemption*
  - stakeholders indicated this is critical component of exemption
- Virginia would still be consistent with other states
  - 20 states offer only aircraft parts exemption, which applies to airlines
- Purchases of ground equipment, baggage equipment, etc. would no longer be tax exempt

*Aircraft repair parts exemption expires July 1, 2022 unless extended by the General Assembly.

Policy Option

The General Assembly could consider eliminating the airline common carrier exemption.

In this presentation

Common carrier exemptions

Aircraft repair parts exemption

Railroad rolling stock exemption

Port-related incentives

VALET and Trade Show Assistance programs

Aircraft repair parts exemption recently adopted to promote aircraft repair industry in Virginia

- Exempt purchases: parts, engines, and supplies used for maintaining, repairing, or reconditioning aircraft
- Beneficiaries: Charter or unscheduled airlines, private or corporate owners of planes
- Tax savings: $5.4M in FY19
  - Beneficiaries with highest savings: owners of turboprop and turbojet airplanes (likely corporate owners)
  - Largest group of beneficiaries: owners of recreational and sport planes

Adopted in 2017. Expires July 1, 2022. Tax savings is a maximum estimate. It assumes Virginia-based owners are obtaining repairs in-state or are paying the use tax.

Finding

Aircraft repair parts exemption likely will have limited effect on aircraft maintenance and repair industry.

Aircraft repair parts exemption will likely have limited impact on aircraft repair industry in state

- Stakeholders report increase in aircraft repair activity, but data is not yet available to verify this
- Repair facilities (MROs) benefit *indirectly* from exemption because they can offer tax exempt repair work
- Virginia has very low levels of MRO employment* – less than 1% of national employment
  - Most MRO facilities have fewer than 40 employees

MRO = maintenance, repair, and overhaul
*Excludes maintenance employees at airline facilities.

Findings

Aircraft repair parts exemption has negligible economic benefits per $1 million spent on the incentive and negligible return in state revenue relative to other incentives.

Airline repair parts exemption has negligible economic benefits and return in state revenue (FY19)

●●●● High
●●●○ Moderate
●●○○ Low
●○○○ Negligible

Economic benefit
per $1M spent

●○○○

4 jobs, $0.4M loss in state GDP, and $0.4M in personal income

Return in revenue
per $1 spent

●○○○

2¢ for every $1 spent

Aircraft repair parts exemption could be extended and improved

- Extending exemption would allow for
  - thorough evaluation of its impact on aircraft repair activity in Virginia as more years of data become available
  - Virginia to remain on par with most other states, which have aircraft repair exemptions, particularly those with larger MRO presences
- Improve exemption by better targeting it to business purposes and not to leisure and recreation purposes

*Aircraft repair parts exemption expires July 1, 2022 unless extended by the General Assembly.

Policy Option and Recommendation

Policy Option

- The General Assembly could consider extending the expiration date of the aircraft repair parts exemption to July 1, 2025 to allow for more thorough evaluation.

Recommendation (if expiration date extended)

- The General Assembly may wish to consider better targeting exemption to federally certified* repair facilities and to business aircraft

*Certified by the Federal Aviation Administration.

In this presentation

Common carrier exemptions

Aircraft repair parts exemption

Railroad rolling stock exemption

Port-related incentives

VALET and Trade Show Assistance programs

Railroad rolling stock exemption established to support railroad rolling stock manufacturing

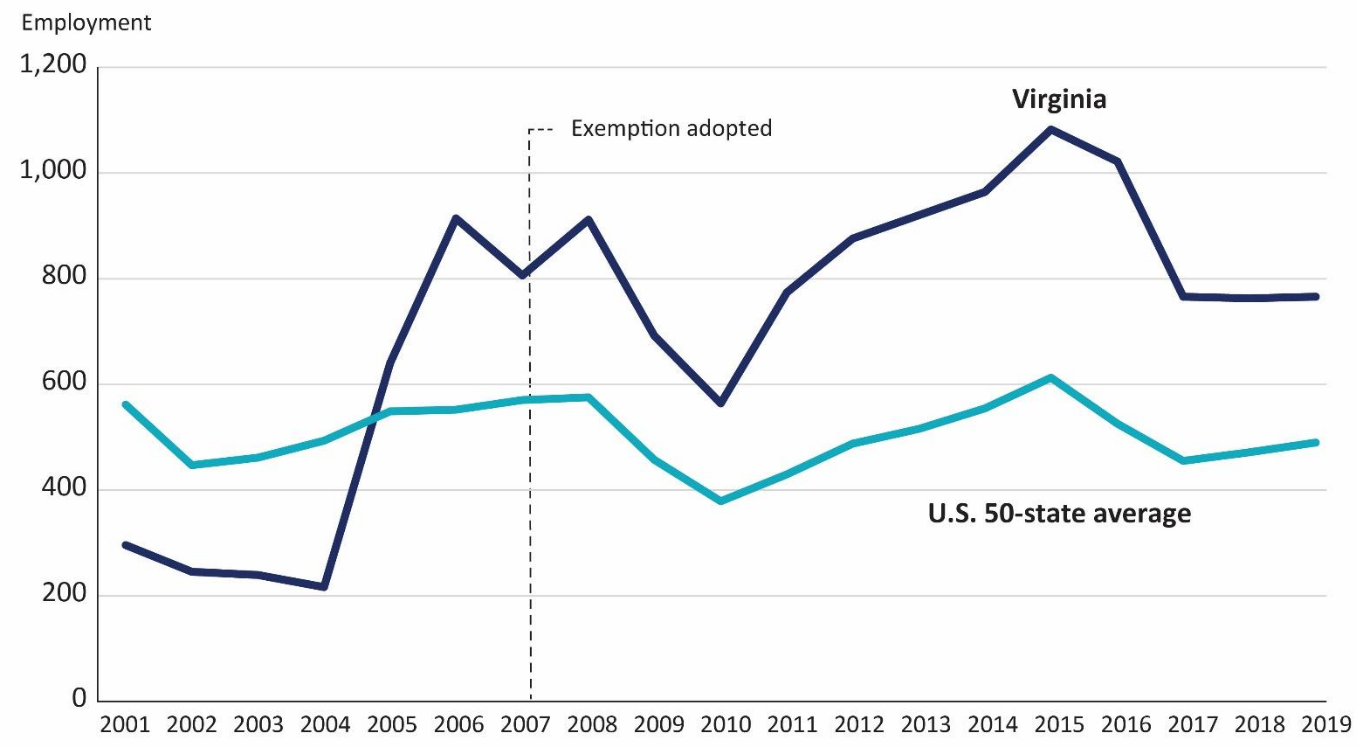
- Extends exemption of rolling stock for railroad common carriers to other industries that use rail
- Exempt purchases: locomotives, rail cars
- Beneficiaries: companies that purchase or lease their own rolling stock*
- Tax savings: $23M between FY10 and FY19, or $2M per year

Adopted in 2007.
*Estimated to own 50% to 60% of railroad rolling stock in Virginia.

Finding

Railroad rolling stock industry has not expanded since exemption was established.

Rolling stock exemption has not led to expansion of rolling stock manufacturing industry in Virginia



Exemption adopted to benefit one company that has since closed

- Exemption adopted in 2007 reportedly to support FreightCar America, which located in Roanoke in 2005 but closed in 2019
- Virginia no longer has a railroad rolling stock manufacturer

Findings

Railroad rolling stock exemption is estimated to have negligible economic benefits per $1 million in spending and a negligible return in state revenue relative to other incentives.

Railroad rolling stock has negligible economic benefits and return in state revenue (FY10–FY19)

Economic benefit
per $1M spent

●○○○

10 jobs, $1M in state GDP, and $1M in personal income

Return in revenue
per $1 spent

●○○○

4¢ for every $1 spent

●●●● High
●●●○ Moderate
●●○○ Low
●○○○ Negligible

Recommendation

The General Assembly may wish to consider eliminating the railroad rolling stock exemption.

In this presentation

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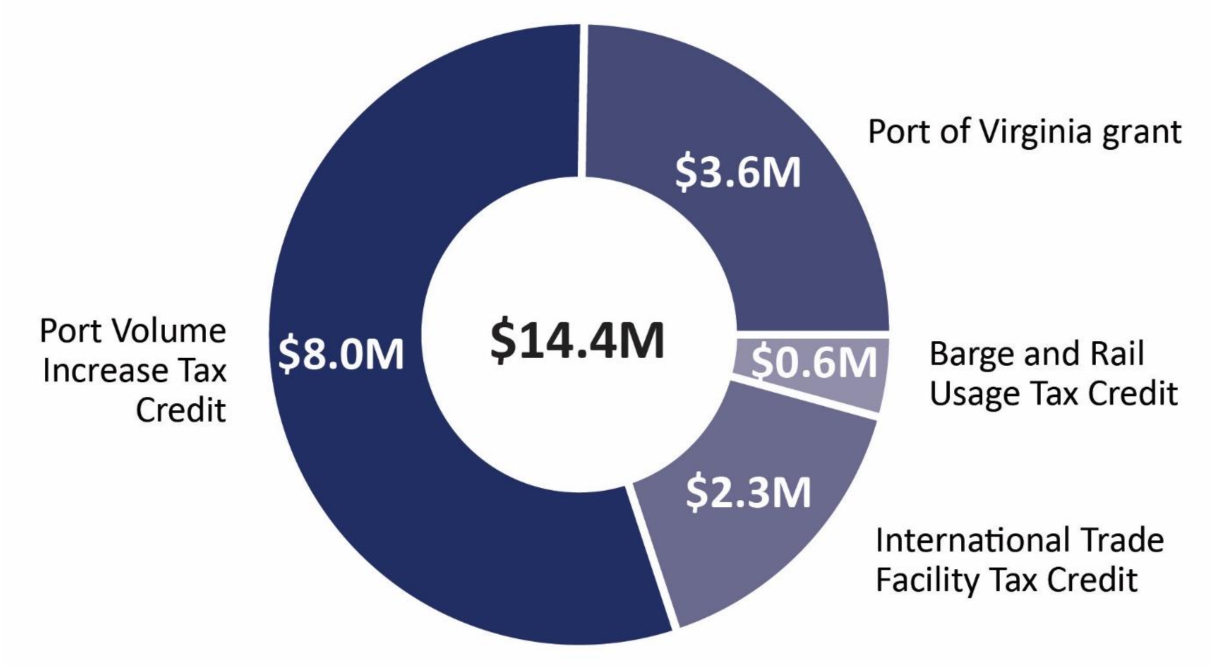
Virginia provides four port-related incentives to promote use of Virginia port facilities

Incentive	Basic description
Port of Virginia grant	Grant of $1,000 to $3,000 per job for locating/expanding port-using facility in Virginia
Port Volume Increase Tax Credit	Tax credit of $50 per TEU of new cargo over prior year cargo amount
International Trade Facility Tax Credit	Tax credit of 2% of capital investment or $3,500 per new job at port-using facility in Virginia
Barge and Rail Usage Tax Credit	Tax credit of $25 per TEU of new cargo shipped by rail or barge over prior year's amount

Tax credits adopted in 2011; grant adopted in 2012. TEU = twenty-foot equivalent unit, which is how shipping containers are measured. The standard shipping container is 40 feet or 2 TEUs.

Port Volume Increase Tax Credit is the largest port incentive in terms of spending FY13–FY19



Port-related incentives mostly used by manufacturers

- Eligible beneficiaries vary by program but generally include manufacturers (72%) and companies in transportation and warehousing (12%)
- Incentives apply to both import and export cargo

Percentages are for all port incentives.

Finding

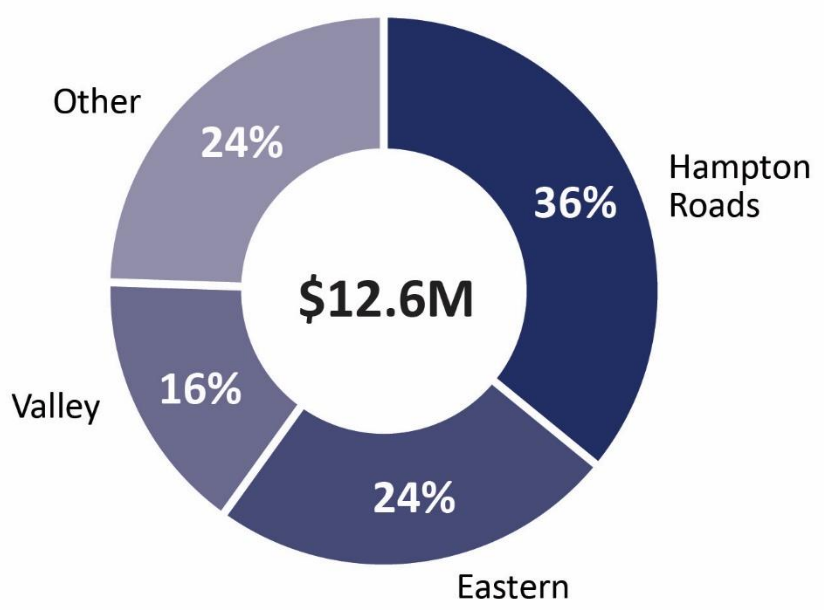
Port-related incentives have mixed success in promoting port activity because many other factors influence port selection.

Geographic location and port infrastructure likely have more influence than incentives

- Virginia's ports have several geographic advantages
  - close to open ocean
  - distant from rival ports
  - naturally deep harbor to accommodate larger ships
- VPA and state have made significant improvements to port and infrastructure in recent years to improve cargo flow

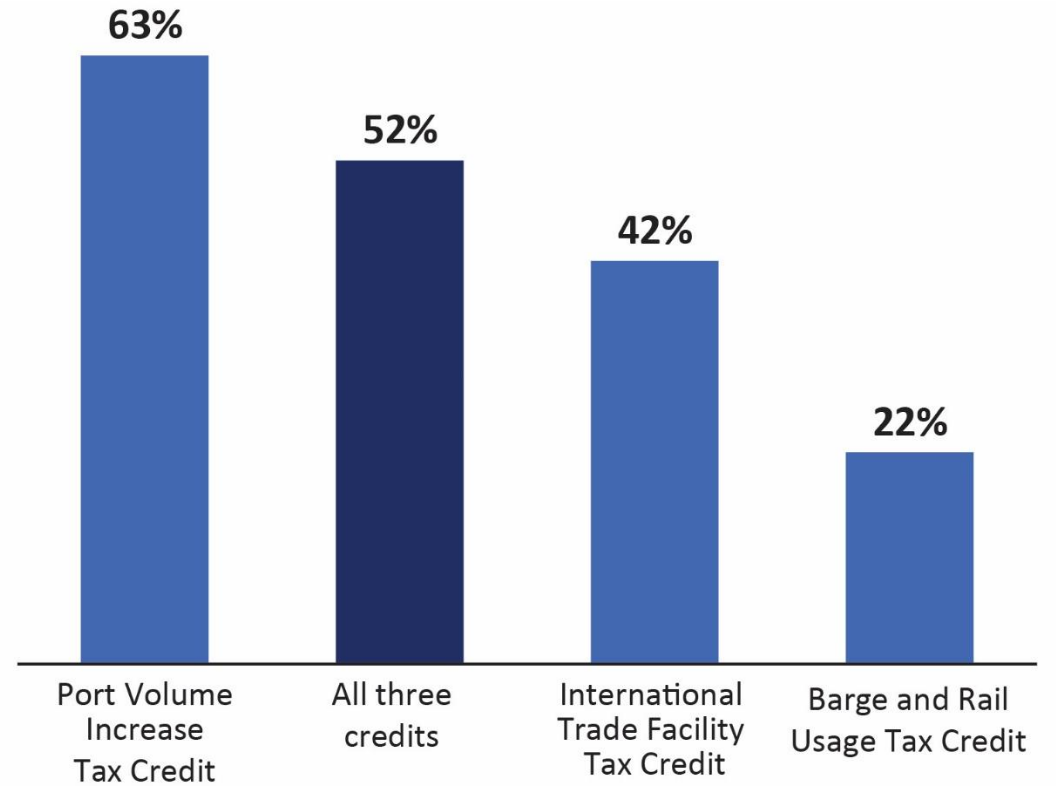
VPA = Virginia Port Authority.

Many port incentives users are in Port of Virginia's captive market and would likely use port anyway



Captive market = Tidewater, which includes Hampton Roads and Eastern Virginia, and Central Virginia (8%), which is included in "Other"

Only 52% of maximum award amount of port tax credits has been awarded

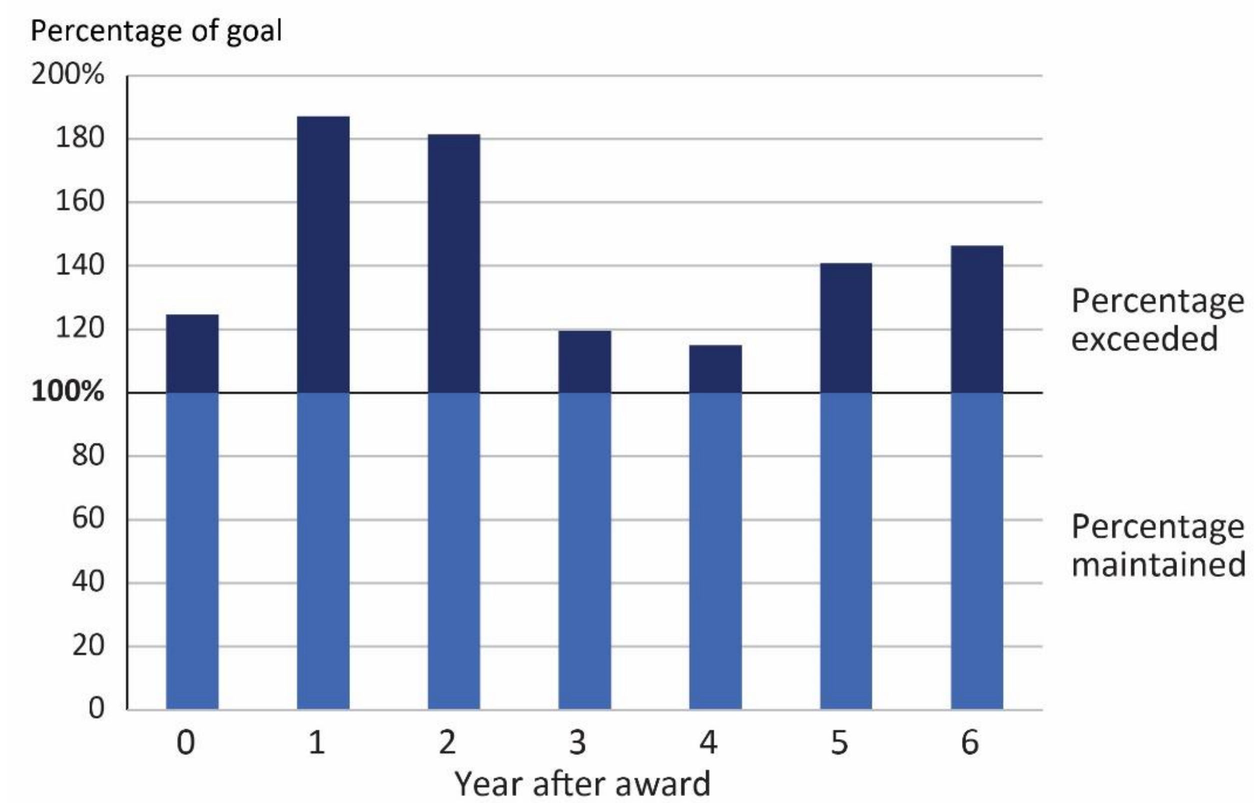


Total amount that could have been awarded between FY11 and FY19 is $44.5 million, based on annual caps for each credit.

Findings

Port of Virginia grant has achieved job creation goals and Barge and Rail Usage Tax Credit has other benefits.

Port of Virginia grant projects have collectively exceeded employment goals (FY14–FY19)



Year 0 is year of award.

Barge and Rail Usage Tax Credit appears to have benefits that outweigh its cost

Hypothetical example of credit influencing the diversion of 10,000 TEUs

Estimated benefits	
Reduction in	*Savings*
Accidents	$400K
Congestion	120K
Pavement maintenance	100K
Air pollution	+ 80K
Total benefits	**$700 K**

Costs	
TEUs diverted	10K
Tax credit per TEU	x $25
Total costs	**$250K**

Based on a cost-benefit model created by national transportation consultant for estimating public benefits of the state's Rail Enhancement Fund projects.

Findings

The port-related incentives have moderate or low economic benefits per $1 million spent on the incentives relative to other incentives.

All four port-related incentives have moderate returns in state revenue per $1 million spent.

Port of Virginia grant and Port Volume Increase Tax Credit have moderate economic benefits and return in revenue

●●●● High
●●●○ Moderate
●●○○ Low
●○○○ Negligible

	Economic benefit per $1M spent	Return in revenue per $1 spent
Port of Virginia grant	●●●○ 65 jobs, $11M in state GDP, and $6M in personal income	●●●○ 46¢
Port Volume Increase Tax Credit	●●●○ 86 jobs, $11M in state GDP, and $8M in personal income	●●●○ 40¢

FY13–FY19

International Trade Facility and Barge and Rail Usage credits have low benefits and moderate return in revenue

●●●● High
●●●○ Moderate
●●○○ Low
●○○○ Negligible

	Economic benefit per $1M spent	**Return in revenue** per $1 spent
International Trade Facility Tax Credit	●●○○ 29 jobs, $5M in state GDP, and $3M in personal income	●●●○ 47¢
Barge and Rail Usage Tax Credit	●●○○ 41 jobs, $6M in state GDP, and $7M in personal income	●●●○ 31¢

FY13–FY19

Recommendations

- General Assembly may wish to consider
  - better targeting port incentives to export cargo to improve their economic benefit to the state.
  - converting Port Volume Increase Tax Credit to a grant to increase its usability and better target industries and locations less likely to use Virginia ports.

Recommendations

- VPA, in consultation with VEDP and other stakeholders, should develop proposals to
  - better align Port of Virginia grant program guidelines with incentive best practices such as those used by VEDP to improve economic benefit.
  - combine International Trade Facility Tax Credit and Port of Virginia grant into one robust grant program.

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VALET and Trade Show Assistance programs

VALET and Trade Show Assistance programs designed to increase international exports

- VALET is a 2-year export accelerator program
  - provides in-depth export assistance to companies and up to $30,000 for export-related expenses
- Trade Show Assistance Program established in 2016 and provides up to $10,000 for trade show-related expenses
- Both programs mostly benefit manufacturers and professional, scientific, and technical service industries
- Average annual spending per program: $0.6M per year

VALET = Virginia Leaders in Export Trade; established in 2002. VEDP administers both programs.

Finding

VALET and Trade Show Assistance programs' participants report positive effects.

Participants report VALET and Trade Show Assistance programs have positive impacts

- 81% of VALET participants report increased international sales after program
- 92% of Trade Show Assistance Program participants report program helped achieve international goals
- VALET is regarded nationally as a model program
  - vets small businesses with high export potential
  - structured in-depth technical assistance and training

Findings

VALET and Trade Show Assistance programs are estimated to have high economic benefits per $1 million in spending and high returns in revenue compared with other incentives.

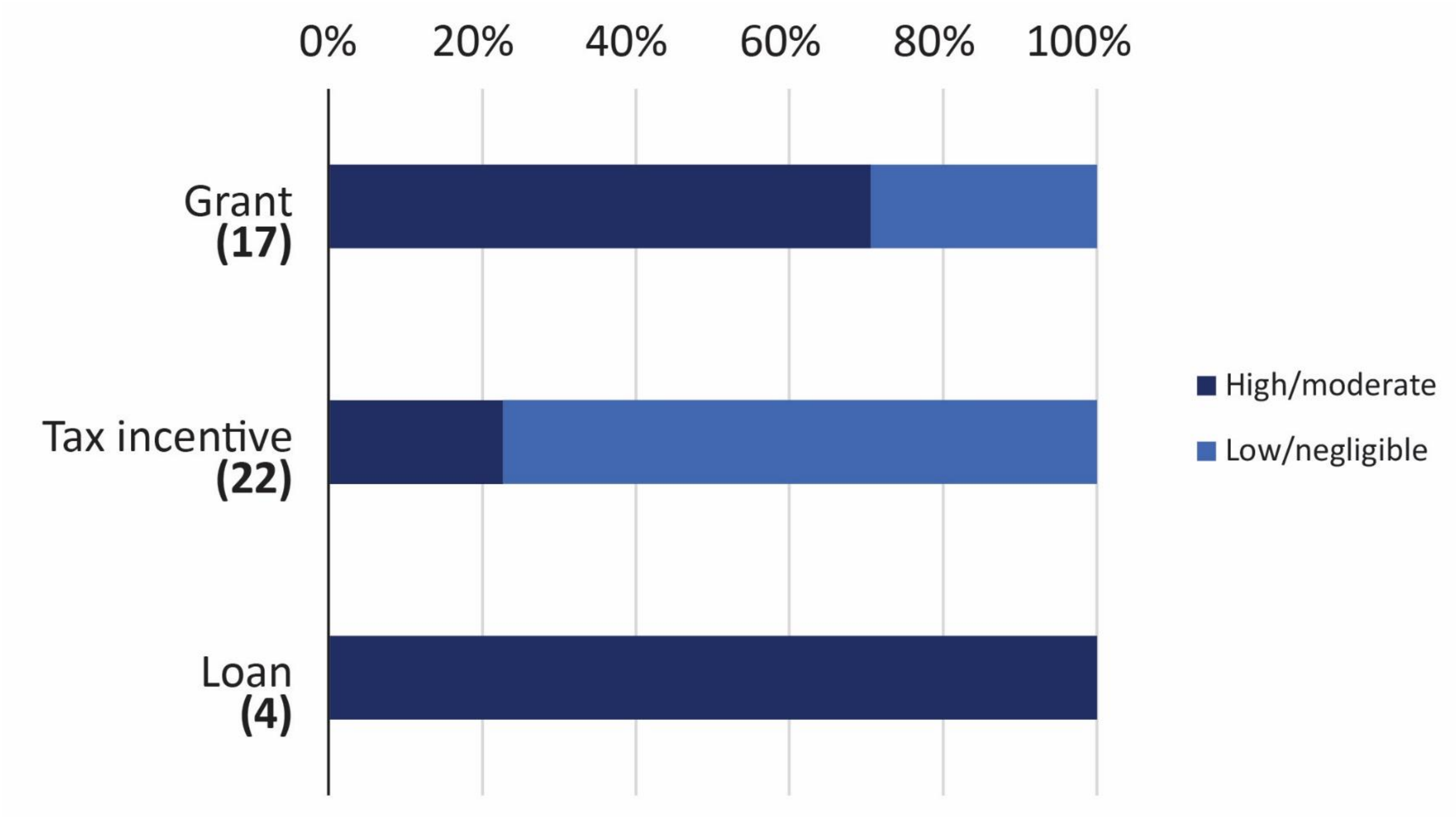
VALET and Trade Show Assistance programs have high economic benefits and return in revenue

●●●● High
●●●○ Moderate
●●○○ Low
●○○○ Negligible

	Economic benefit per $1M spent	**Return in revenue** per $1 spent
VALET	●●●● 343 jobs, $54M in state GDP, and $32M in personal income	●●●● $1.84
Trade Show Assistance Program	●●●● 283 jobs, $52M in state GDP, and $28M in personal income	●●●● $1.67

VALET: FY10–FY19. Trade Show Assistance Program: FY16–FY19.

Grants and loans typically have higher economic benefits than tax incentives*



*Of the 43 incentives evaluated to date.

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Next round of incentives: science and technology

Incentive	Spending FY10–FY19
Research and Development Exemption	$43.3M
Research and Development Expenses Tax Credit	26.4
Qualified Equity and Subordinated Debt Investment Tax Credit	22.5
CIT GAP Fund	18.7
Commonwealth Research Commercialization Fund	11.3
Major Research and Development Tax Credit	10.9
Virginia Spaceport Users Exemption	1.0
Qualified Business Long-Term Capital Gain Subtraction	*unknown*
Venture Capital Income Tax Subtraction	*unknown*
Zero G Zero Tax Act Subtractions (2)	*unknown*