

BENEFITS OF RAIL IN VIRGINIA

VIRGINIA'S RAIL SYSTEMS

Virginia's rail network is a valuable asset for the Commonwealth. It provides an efficient means of moving freight and passengers both within and through the state. The Commonwealth recognizes the privately owned rail network as part of a multimodal system with public benefits and growing economic impacts. Since the 2000s, significant state investments

have leveraged private and federal funds to improve freight and passenger rail transportation and support the overall transportation system.

Rail economic impacts to Virginia are estimated using multipliers from the IMPLAN® economic model with input data and assumptions from freight movement data, passenger rail operations, and visitor characteristics. Impacts

of rail service-related spending in Virginia emanate from firms providing freight and passenger transport services, industries using such services to trade goods (shippers/receivers), and expenditures from visitors who reach Virginia via rail. Of these activities, freight-users generate the most significant impact.



\$73 billion of output. 8.8% of Virginia's total output



\$19.8 billion earned by employees. 6.4% of the state's total income



Over \$30 billion of added value. 6.0% of the state's Gross State Product (GSP)



341,519 jobs, 6.7% of the 5.1 million jobs statewide



\$1.9 billion of tax revenue

Output – In terms of total revenue, the rail industry generated about \$72.9 billion in output, which is 8.8 percent of Virginia's total output.

Income – \$19.8 billion earned by these total employees represent 6.4 percent of Virginia's total labor income. Labor income includes employee compensation and proprietary income. Employee compensation, in turn, consists of wage and salary payments as well as benefits (health, retirement, etc.) and employer paid payroll taxes (employer side of social security, unemployment taxes, etc.). Proprietary income

consists of payments received by self-employed individuals and unincorporated business owners.

Value Added – The combined value added impact of rail services is over \$30 billion and represents 6.0 percent of the state's Gross State Product (GSP).

Employment – Economic impacts of rail extend beyond the 6,762 directly employed in the provision of rail transport (both passenger and freight). When the freight and visitor impact activities and multiplier impacts are included, rail-related employment in Virginia amounts

to 341,519 jobs, which represent 6.7 percent of the 5.1 million jobs statewide.

Tax Revenue – Federal, state and local tax revenues generated by the rail industry totaled \$1.9 billion.

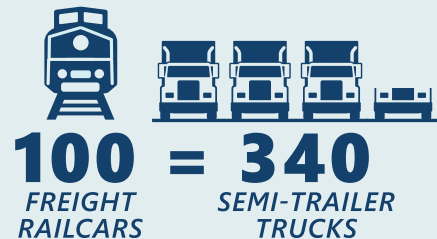
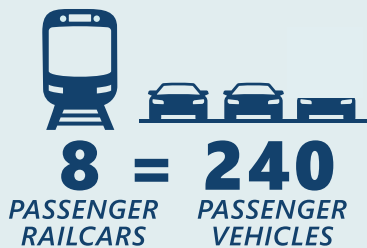
Investment in the rail network also has a direct benefit to Virginia's highway system.

By diverting freight and passenger traffic from road to rail, Virginia's rail network helps by growing the economy, relieving congestion, saving lives, improving air quality, saving money, and complementing the Virginia highway network while reducing capital and maintenance expenditures.

RELIEVE CONGESTION

\$312M ANNUAL IN CONGESTION SAVINGS

\$123M ANNUAL PAVEMENT MAINTENANCE SAVINGS (6% OF VDOT MAINTENANCE BUDGET)



TRAVEL SAFE

18 LIVES SAVED AND 3,000 CRASHES AVOIDED EACH YEAR



Shipping by rail avoids about **1.7 billion miles** of truck travel in Virginia



Passenger travel by rail avoids about **271 million miles** of personal driving in Virginia

BREATHE EASIER

3M TONS OF CO2 EMISSIONS AVOIDED
(6.4% OF TOTAL IN VIRGINIA PER YEAR)



On average, railroads are **four times** more fuel efficient than trucks



Moving freight by rail instead of truck generates **75% less** greenhouse gas emissions



The total estimated level of rail service in Virginia in 2015 was about **25 billion ton-miles**

SAVE MONEY

RAIL SERVICES DRIVE 6% OF VIRGINIA'S TOTAL ECONOMY.
MORE THAN 6,000 JOBS CREATED DIRECTLY BY RAIL NETWORK



\$2.2 BILLION
in cost avoidance



about 9 cents per ton-mile of rail use



\$190 MILLION
in cost avoidance



about 46 cents per passenger-mile of rail use