

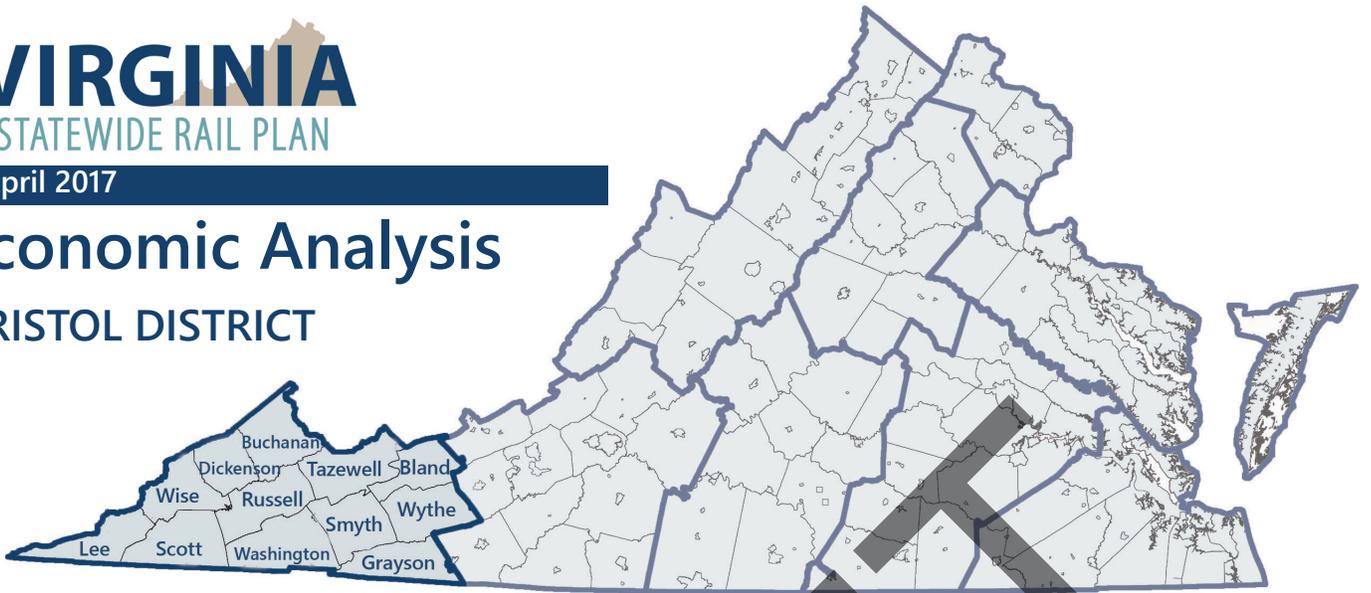
VIRGINIA

STATEWIDE RAIL PLAN

April 2017

Economic Analysis

BRISTOL DISTRICT



Socioeconomics Breakdown and Business Facts

Population
348,739

Unemployment Rate
6.6%

Highest: **10.5%**
 Buchanan County
 Lowest: **4.4%**
 Washington County

Household Median Income
\$37,033

Highest: **\$45,294**
 Bland County
 Lowest: **\$27,731**
 Norton City

The top three sources of employment are:

47%
 Coal Mining and Shipping

8%
 Non-Coal Mining

15%
 Fiber and Fiber Products

Sales volume is primarily driven by:

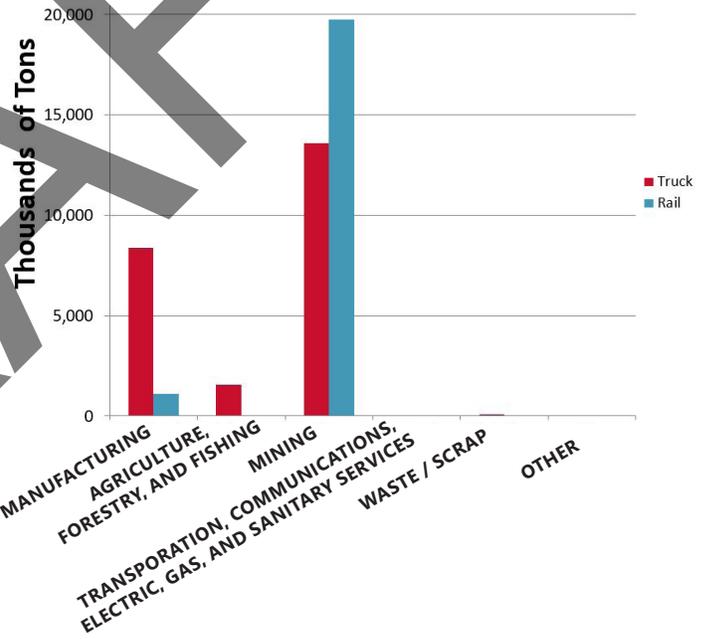
33%
 Coal Mining and Shipping

37%
 Bottle Manufacturing

Source: U.S. Census Bureau, Bureau of Labor Statistics, and InfoUSA

Tonnage Facts

TONNAGE BY INDUSTRY



Network Facts

Bristol has **831** total miles of rail

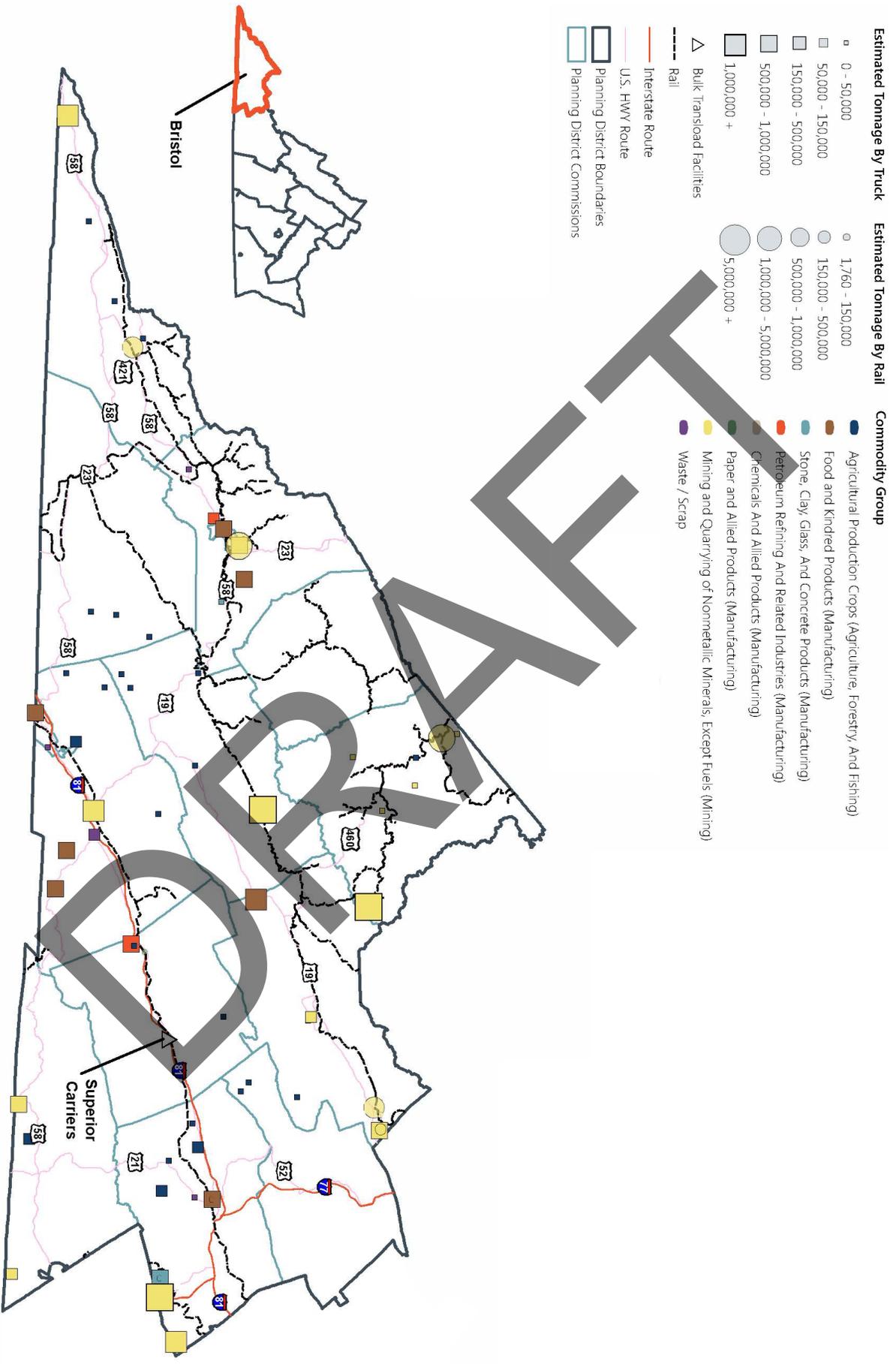
1006 AND total miles of highway

Interstates: 81 and 77

Highways: 58, 421, 23, 19, 460, 52 and 21.

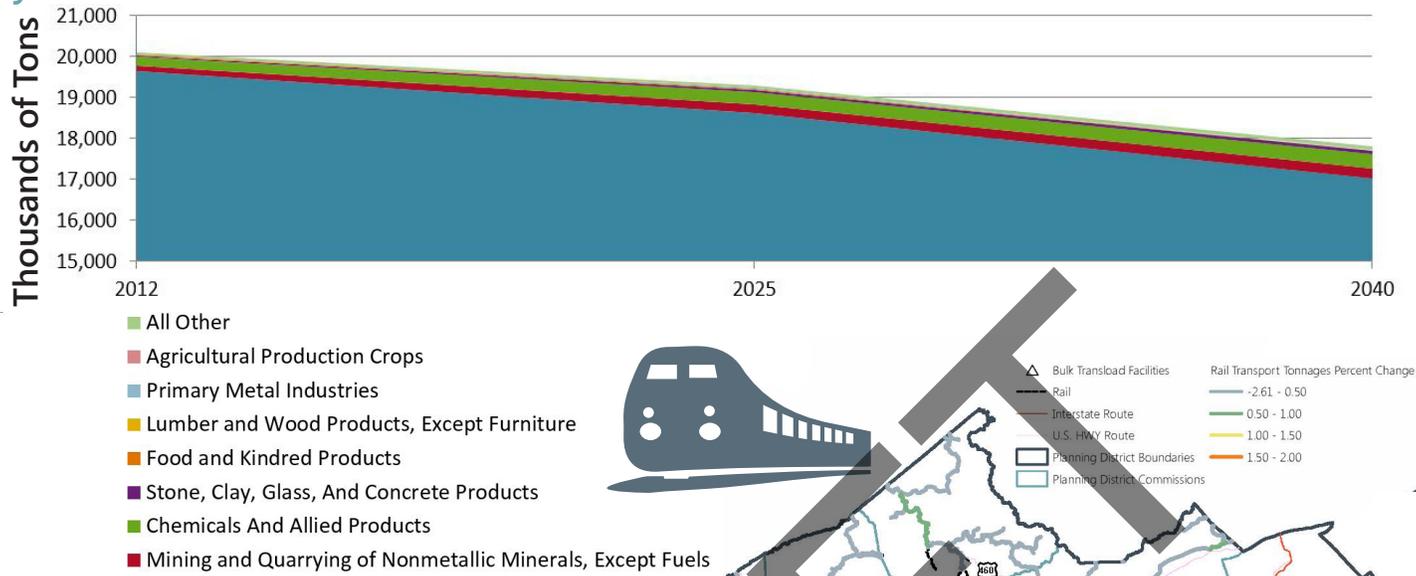
Railroad systems: Norfolk Southern and CSX

ESTIMATED TONNAGE IN BRISTOL

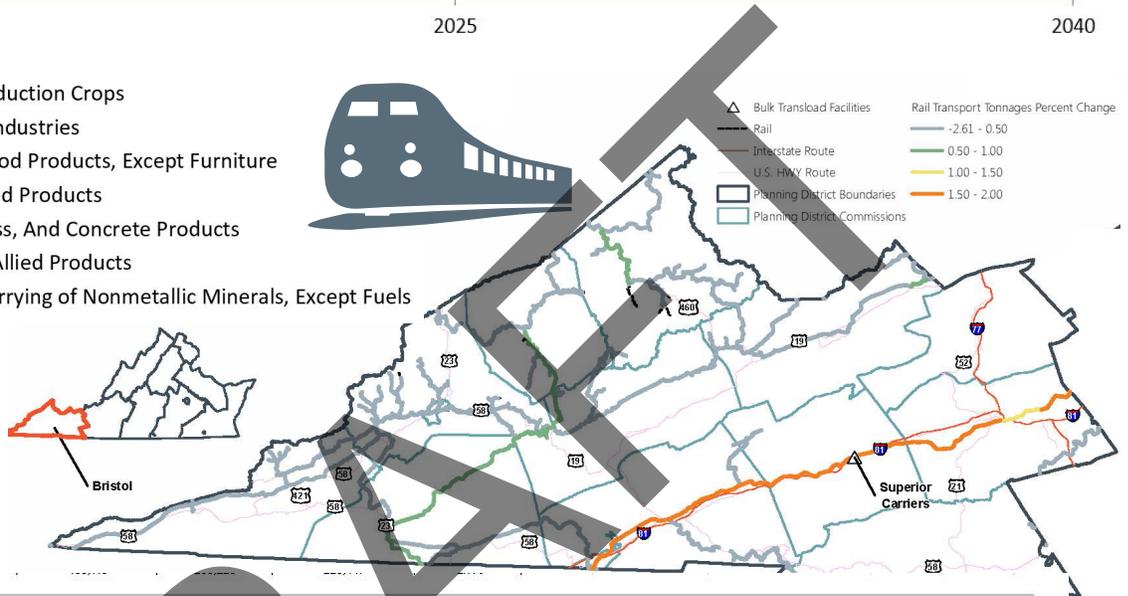


Growth Rate by Commodity

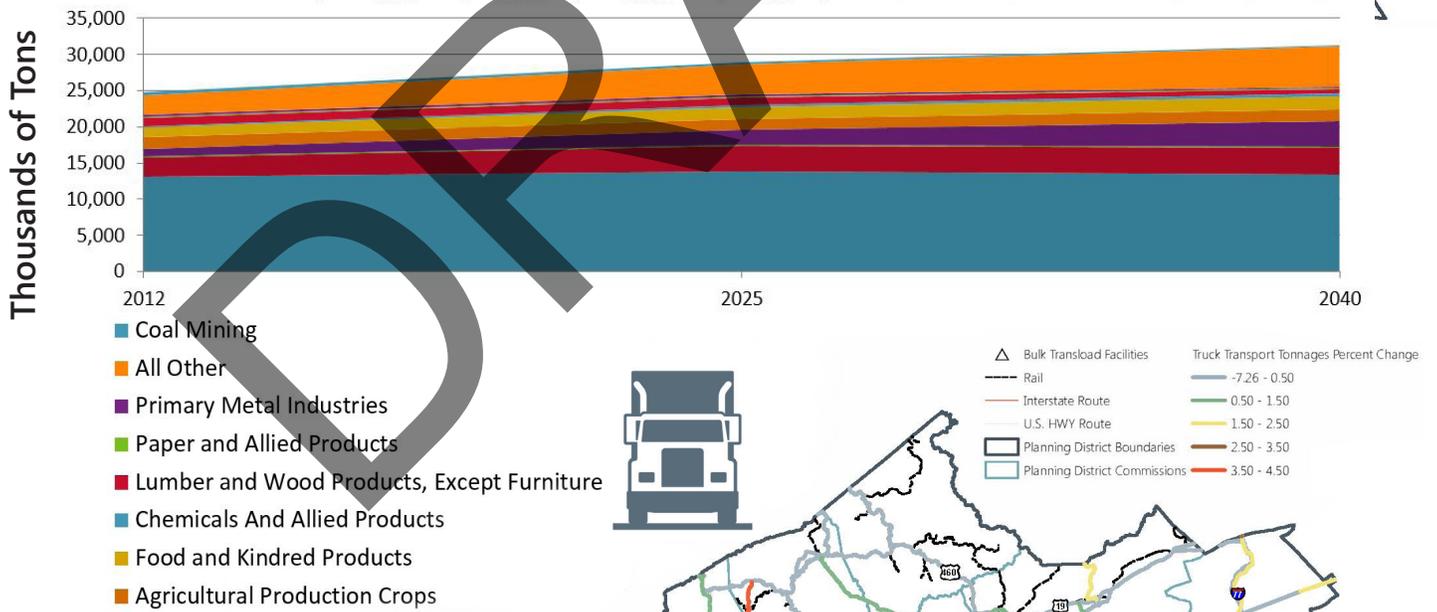
By Rail



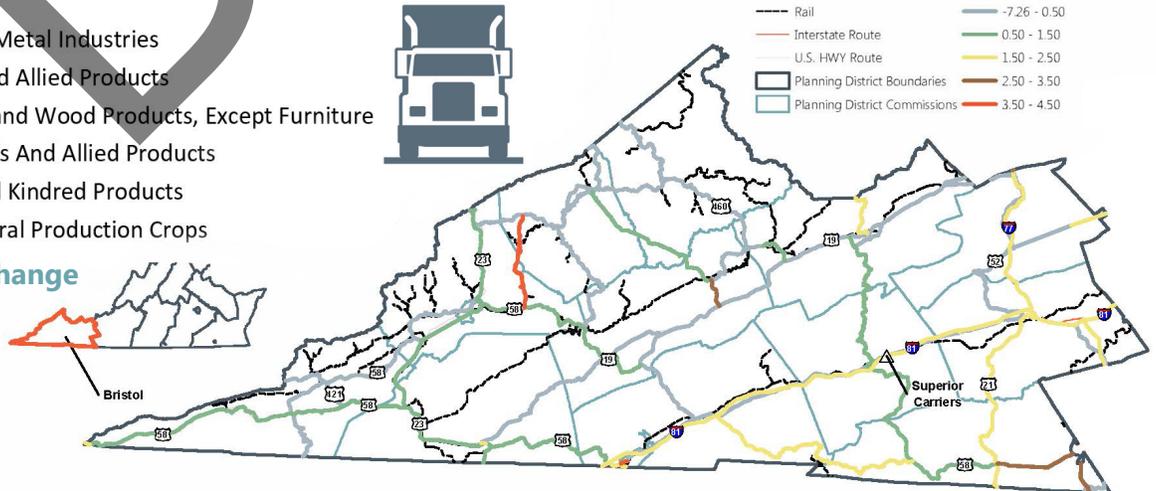
Rail Tonnage Change



By Truck



Truck Tonnage Change



Commodity Growth Explanation

- The products with the largest contribution to Highway truck tonnages in 2012 are: Broken Stone or Riprap (11 million tons), Petroleum Refining Products (2.3 million tons), Gravel or Sand (1.9 million tons), Stemmed or Redried Tobacco (1.2 million tons).
- Truck freight tonnages see an overall increase between 2012 and 2040 of 6.5 million tons leading to a Compound Annual Growth Rate (CAGR) of 0.8%.
- Coal mining dominates rail freight in the Bristol Planning District, accounting for 49% of total freight tons movements either originating or destined for the district.
- Bristol Planning District is forecast to see a fall in rail Coal tonnage of 13% between 2012 and 2040. This is part of a state wide fall in Coal rail tonnage.
- Rail freight tonnages see an overall decrease between 2012 and 2040 of 2.6 million tons leading to a CAGR of -0.4%.

Potential Project Recommendations

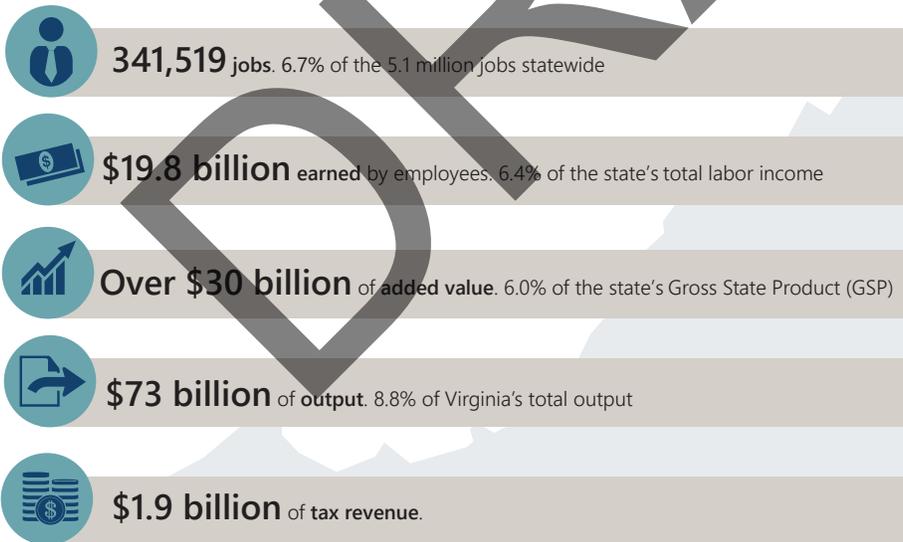
- Develop new uses for underutilized coal rail lines
- Develop rail corridor preservation policies
- Identify new rail shippers based on possible diversion of appropriate commodities from truck to rail



Source: AASHTO

Bristol's Benefits and Economic Impact Results

Benefit Categories	FREIGHT		PASSENGER	
	Total Freight Service Benefits (\$M)	Freight Service Benefits per Thousand Ton Miles (\$/'000 Ton Miles)	Total Passenger Service Benefits (\$M)	Passenger Service Benefits per Thousand Passenger Miles (\$/'000 Passenger Miles)
User Cost Savings	\$1,635.2	\$65.2	\$95.9	\$232.9
Pavement Savings	\$122.8	\$4.9	\$0.5	\$1.2
Congestion Savings	\$251.1	\$10.0	\$60.9	\$147.9
Truck / Auto Emissions	\$158.3	\$6.3	\$4.0	\$9.7
Truck / Auto Crash Reduction	\$71.2	\$2.8	\$28.4	\$68.9
Total	\$2,239.0	\$89.3	\$189.7	\$460.6



Freight-users generate the most significant impact.