

### **Economic Impacts of Transit (EIT) Study**

In the Commonwealth of Virginia



### **EIT Study Purpose**

- To illustrate how existing public transit services and operations generate economic value for the state
- Summarize these findings in terms of:
  - » Monetized Economic and Social Benefits:
    - **Congestion Relief**
    - Increased/ affordable Mobility
    - Sustainability
    - **Safety**
    - State of Good Repair of the Roadway Infrastructure
  - » Impact on Economic Indicators:











## **Study Methodology**

### **Step 1 – Collect Input Data:**

- » Auto Travel Data: Vehicle Miles Travelled, Vehicle Hours Travelled, Avg. Delay
- » Transit Ridership Data by Agency:
  - Avg. trip distance/ time,
  - Passenger Miles Travelled, Passenger Hours Travelled
  - Vehicle Revenue Miles, Vehicle Revenue Hours

#### **Performance:**

- Transit
- Highway

\* Study based on FY2018 Transit Agency Performance and Funding



## **EIT Study Methodology**

# **Step 2 – Travel Efficiency Analysis**

- » Monetize User Benefits
- » Monetize Social Benefits
- » Estimate Annual Cost Savings, by Category

#### **Quantitative Benefits:**

- Direct User Impacts
- Social Impacts



**Congestion Relief** 



**Increased/ affordable Mobility** 



Sustainability



**Safety** 



**State of Good Repair of the Roadway Infrastructure** 



### **EIT Study Methodology**

### **Step 3: Economic Impact Analysis**

- » Allocation "out-of-pocket" savings across jobs (by industry type) and households
- » Allocation savings across Industry Sectors
- » Run IMPLAN Economic Model

### **Economic Impacts of:**



**Congestion Relief** 



Increased/ affordable Mobility



**Enterprise Effects** 





## Step 1: Transit Ridership in Virginia

Transit Mode	Ridership FY2018	Ridership FY2018 (%)
Bus (Non-WMATA), Paratransit (Non-WMATA), Ferry (HRT), Light Rail (HRT)	60,034,656	34.6%
VRE Commuter Rail	4,631,909	2.7%
Sub-Total	64,666,565	37.3%
WMATA Metrorail (VA Only)	91,116,096	52.5%
WMATA Metrobus (VA Only)	17,293,559	10.0%
WMATA Paratransit (VA Only)	339,196	0.2%
Sub-Total	108,748,851	62.7%
Total	173,415,416	100.0%



### Step 2: Monetized Benefits Findings



Total Monetized
Benefits of
Transit:
\$2.5 Billion



Congestion Relief

Highway Travel Time Savings: \$624 M

Based on **23.5** million hours of travel time saved

Transit Travel Time Savings: \$66 M

Based on time saved using transit instead of driving



**Transportation Cost Savings:** 

\$305 M

Net auto ownership savings due to transit use

Income for Transit Riders:

\$1.5 B

Income foregone if transit was not an option



**Traffic Safety** 

Traffic Crash Cost Savings:

\$60 M

Reduced crashes due to less drivers on roadways



### Step 2: Monetized Benefits Findings





**Sustainability** 

**Emissions Savings:** 

\$12.8 M

Costs savings due to reduced emissions

Fuel Consumption Savings:

\$3.5 M

Reduced demand for fuel leading to lower prices



State of Good Repair of Roadway Infrastructure

Maintenance Savings:

\$0.4 M

Savings due to less wear and tear on roadways



### **Annual Benefit-Cost Ratio**



Benefit-Cost Ratio:

\$2.17

Every dollar of public investment in transit generates \$2.17 dollars in direct benefits statewide.

Total Benefits (Monetized Direct Benefits)	\$2.5 B	
Total Public Costs (Expenses less Other Revenue) \$1.15 B		
Costs (Expenses)	\$1.54 B	
Capital Expenses	\$483 M	
Operating Expenses (non-payroll)	\$486 M	
Operating Expenses (payroll)	\$579 M	
Other Revenues (Fares, Advertising, other)	\$346 M	



### **Total Statewide Economic Impact:**



### **Transit Supports:**

28,940 Jobs Statewide



Those jobs account for:

\$1.9 Billion in labor income

#### **Generating:**



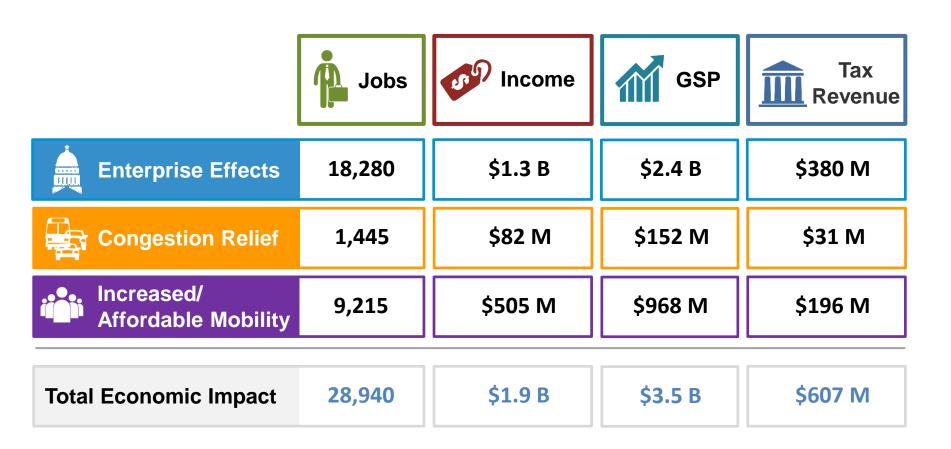
\$3.5 Billion in Gross State

Product

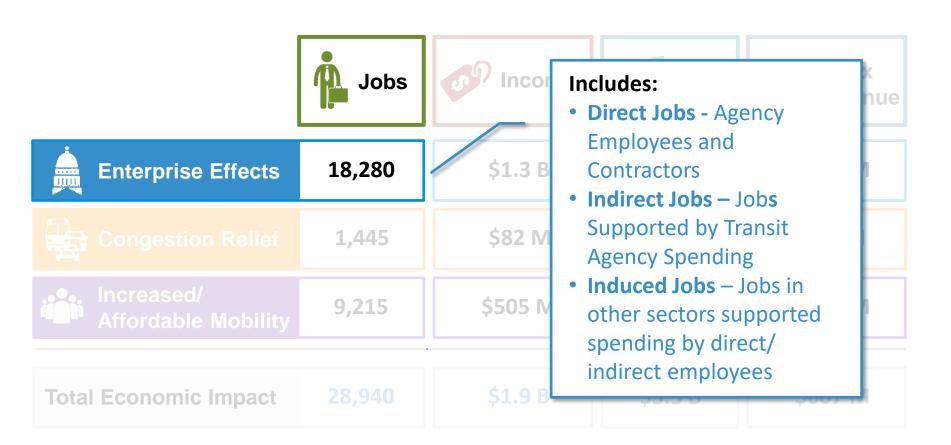


\$607 Million in Tax
Revenue

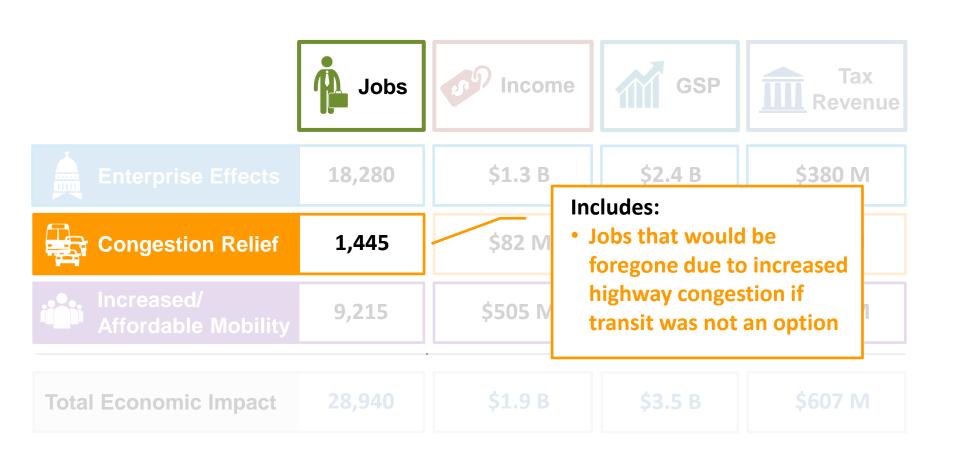




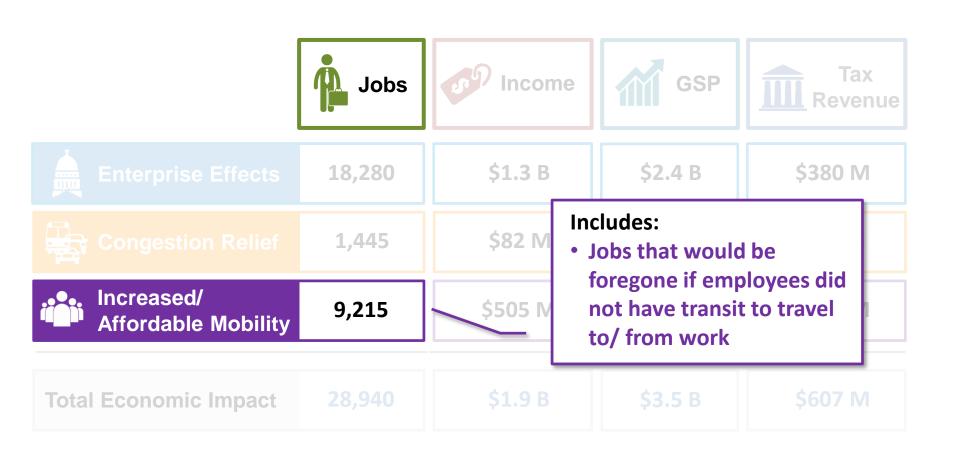














### **Annual Return on Investment**



## Return on Investment:

\$2.91

Every dollar of public investment in transit generates \$2.91 dollars in economic activity statewide.

Total Benefits (Impact on GSP)	\$3.5 B
Total Public Costs (Expenses less Other Revenue)	\$1.15 B
Costs (Expenses)	\$1.54 B
Capital Expenses	\$483 M
Operating Expenses (non-payroll)	\$486 M
Operating Expenses (payroll)	\$579 M
Other Revenues (Fares, Advertising, other)	\$346 M



### **Qualitative Benefits**

- The final report will also include content outlining the qualitative economic benefits associated with continued investment in transit:
  - » Property Value Benefits
  - » Health and Social Service Benefits
  - » Built Environment Benefits
  - » Fiscal Benefits
  - » Economic Development Benefits



### **Next Steps**

- This presentation summarizes the preliminary results of the EIT study, which is still under development
- More quality control checks will be performed over the coming weeks
- Timeline for Deliverables:
  - » One-Page Economic Impacts Sheet: by <u>January 10</u>
  - » Final Report and Executive Summary: by <u>early February</u>

