The Economic Impact of the Proposed Long Bridge Expansion and Associated Corridor Projects and the Role of Rail Commuting in the Economy

The Stephen S. Fuller Institute
The Schar School of Policy and Government
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Study Background

- Independent study conducted at the request of DRPT
- Analysis of the economic impact of an expanded Long Bridge and anticipated additional passenger rail service, including potential for MARC/VRE run-through
- Fuller Institute familiar with Washington Metro region economy and has conducted similar economic impact analyses
- At DRPT's suggestion, a traditional economic impact analysis was expanded to include:
 - The role of rail commuting in the economy
 - Commuting by cyclists and pedestrians between Virginia and the District



Key Points

- Expanded Long Bridge corridor results in:
- Nearly \$3 billion in direct construction impacts to Virginia
- Over \$200 million in impacts annually by 2040 to Virginia from additional O&M expenditures
- An additional \$6 billion contribution annually to the Washington Region by 2040 from rail commuters
- Over \$50 million in reduced employee turnover costs for employers in the Washington Region by 2040
- \$17 million in time savings for rail users and between \$24-\$59 million for road users annually by 2040



Study Assumptions

- Corridor Infrastructure Analyzed:
 - New 2-track span across the Potomac, 5 additional smaller bridges and bike/ped bridge, associated track & improvements (Long Bridge Project)
 - VRE L'Enfant Station improvements, including 4th track
 - VRE Crystal City Station Improvements
 - Alexandria 4th Track Project
- Rationale for corridor approach- projects work in concert to fully realize expanded passenger rail service over the Potomac
- The Washington Region includes the District, Northern Virginia, and Suburban Maryland
- Impacts are expressed in gross regional product (GRP) or gross state product (GSP)



Impact Metrics

- <u>Direct Outlay</u>- the total expenditure associated with the component being analyzed. Includes development (planning, design and engineering) and construction costs and annual operational expenditures
- <u>Total Output</u>- the outlay's overall contribution to the economy of the jurisdiction of analysis- includes direct outlays and secondary impacts
- <u>Personal Earnings</u>- the income that accrues to residents living in the jurisdiction of analysis as the result of wages and other earnings associated with both the direct outlays and their secondary effects



Direct Project Construction Impacts

- \$1.9 billion in total costs- includes Long Bridge, Alexandria 4th Track,
 L'Enfant & Crystal City Station improvements
- \$1.8 billion in direct outlays in the Washington Region, and \$1.5 billion in Virginia
- These expenditures result in the following direct construction benefits:
 - \$2.9 billion in total output in Virginia
 - \$871 million in personal earnings to residents in Virginia
 - \$2.8 billion in total output in the Washington Region
 - \$787 million in personal earnings in the Washington Region



Impact of Existing Operations in Virginia

- Amtrak & VRE spend \$177 million annually in direct outlays (maintenance & operations expenditures) in the Commonwealth and \$110 million in the Washington Region
- These expenditures result in:
 - \$306 million annually in total output in Virginia (overall contribution to economy, gross state product)
 - \$74 million in personal earnings (income to residents in Virginia)
 - \$166 million annually in total output in the Washington Region (overall contribution to economy, gross regional product)
 - \$40 million in personal earnings (income to residents in Washington Region)



Impact of Expanded Rail Operations, 2040

- Annual O&M expenditures increase by \$119 million in Virginia and \$100 million in the Washington Region
- These additional O&M expenditures result in:
 - \$206 million additional annually in total output in Virginia
 - \$50 million additional annually in personal earnings in Virginia
 - \$151 million additional annually in total output for the Washington Region
 - \$36 million additional annually in personal earnings for the Washington Region



Impact of Rail Commuting

- Rail commuters in the Washington Region currently contribute \$6.25 billion annually in GRP (2018 dollars)
- In 2040, rail commuters will contribute an additional \$6 billion to the Washington Region with an expanded Long Bridge, resulting in a total contribution of over \$12 billion.



Bicycle/Pedestrian Commuting

- Roughly 5800 daily current bike/ped commuters between DC and Virginia with an annual GRP value of \$970 million
- By 2040, it is estimated that daily bike/ped commuters will rise by 1300, contributing an additional \$590 million annually in GRP.
- The bike/ped bridge proposed to accompany the expanded Long Bridge will help facilitate this anticipated growth



Additional Benefits of Rail Capacity Expansion

- Reduced employee turnover
 - Reduction in turnover costs of between \$48 million and \$97 million annually in 2040 for businesses in the Washington Region
- Time Savings
 - \$17 million in annual rail passenger time savings in 2040 due to on time performance improvements resulting from expanded rail capacity
 - Between \$24-\$59 million annually in time savings for road users due to VRE service expansion facilitated by expanded rail capacity
- Increased rail network redundancy



Questions?

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