

## **HB1088 Coal Transportation Fee and Fossil Fuel Mitigation Fund (Coal Dust Cleanup and Asthma Remediation Act)**

*House Environment and Transportation Committee*

Chair: Delegate Marc Korman; Vice-Chair: Delegate Regina T. Boyce

### Testimony from:

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Good afternoon, Chair Korman and members of the committee. Thank you for this opportunity to provide informational testimony on SB882. I am speaking on behalf of our research today and not the University.

My colleague Liz Price and I analyzed whether the proposed coal transport fee had the potential to divert coal exports from Baltimore to ports in other states. Specifically, we examined the costs of switching from Baltimore to the Port of Virginia, which has coal terminals in Norfolk and Hampton Roads, and handled some of Baltimore's coal during the port shut down last year due to the Key Bridge collapse.

As background, the majority of coal exported from Baltimore comes from the coal mining region of Northern Appalachia. We also heard from some sources that some coal exports from Baltimore may originate from Central Appalachia, but that the total volume was likely to be low due to higher transport distances.

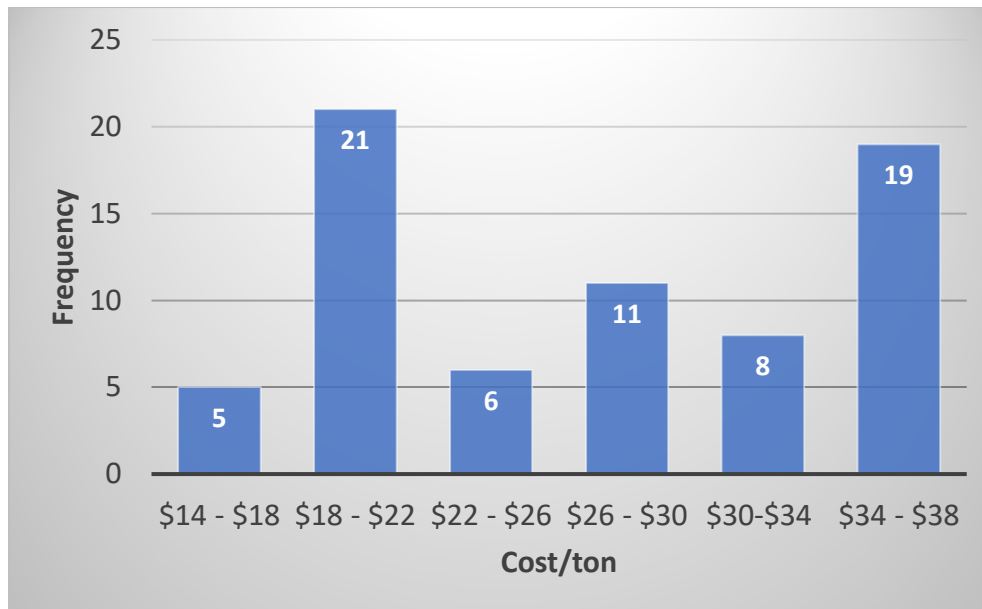
We calculated transportation distances using a spatial network analysis, to generate the shortest distance from mine origin points to port destination points, along rail networks. We compared distances and costs under current conditions and under conditions where rail lines in Maryland were blocked, to mimic travel if shipments were routed to avoid the fee. See Figure 1 for an example.

The key findings from our analysis are the following:

1. **No diversions from the Port of Baltimore are expected for coal from the Northern Appalachian Coal Region**, which supplies most of the coal exported from Baltimore. This region includes Ohio, western Pennsylvania, and northern West Virginia. Maryland mines were excluded since they cannot avoid the fee. Diverting Northern Appalachia coal exports from Baltimore to the Port of Virginia would increase coal transportation distances by an average of almost 600 miles and raise costs by an estimated average of \$27.40 per short ton, which is more than double the proposed fee of \$13. See figure 2 for the distribution of costs per mine. The median increased cost per mine is about \$1 million, and total costs per mine ranged from \$1,600 to \$53 million, after accounting for coal volumes.



**Figure 1. Routes from example Pennsylvania mine to the Port of Baltimore (orange line) and the Port of Virginia avoiding Maryland (blue line) on the CSX network.** In this example, the route that avoids Maryland is 462 miles longer. For a similarly positioned mine that only had access to the Norfolk Southern rail network (not shown), the distance increased by 665 miles.



**Figure 2. Frequency histogram of change in transport costs per ton per mine for Northern Appalachia (n = 70) due to increased distance when the destination port is switched from Baltimore to Virginia.** The number of analyzed mines that would experience the range of costs/short ton shown is labeled in the blue bar.

2. **The small volume of coal coming to Baltimore from the Central Appalachian Coal Region is most likely to be diverted to the Port of Virginia.** This region includes Eastern Kentucky, Virginia, southern West Virginia, and northern Tennessee. Even without the fee, mines in this region have shorter travel distances and lower estimated costs to use the Port of Virginia. Travel savings without the fee range from \$0.66 - \$3.69 per ton delivered, and are \$13.66 - \$16.69, with the fee. Since the distances are greater to Baltimore, compared to the Port of Virginia, only small volumes of coal are expected to be affected by the fee, based on publicly available information.
3. **Increased transportation costs have the potential to reduce coal export volumes from Baltimore, if mines have to increase prices.** We estimate that the fee would raise the average cost of transporting coal to Maryland from about \$25 to \$38 per ton, a roughly 50% increase. Also, the \$13 fee would be about 18% of the estimated \$70 per ton selling price of coal exported from Baltimore. If these mines cannot offer coal on the global marketplace at competitive prices, exports from the Port of Baltimore could decline, depending on market conditions.