SB882 Coal Transportation Fee and Fossil Fuel Mitigation Fund
(Coal Dust Cleanup and Asthma Remediation Act)

Senate Education, Energy, and the Environment Committee
Chair: Senator Brian Feldman; Vice-Chair: Senator Cheryl Kagan

Testimony from:
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Good afternoon, Chair Feldman and members of the committee. Thank you for this opportunity to provide informational testimony on SB882.

UMCES Professor Lisa Wainger 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 analyzed transportation distances using a spatial network analysis that identified 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.

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 network (not shown), the distance increased by 665 miles.

The key findings from our analysis are the following:

1. **No port diversions expected from the Northern Appalachian Coal Region**. This region includes Ohio, western Pennsylvania, and northern West Virginia. Maryland mines were excluded since they cannot avoid the fee. Most coal exported through Baltimore currently comes from this region. Diverting exports from Northern Appalachia to the Port of Virginia would increase transportation distances by an average of almost 600 miles and raise costs by an estimated $27.40 per short ton (see Figure 2 for the distribution of costs per mine), which is more than double the proposed fee of $13. 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.

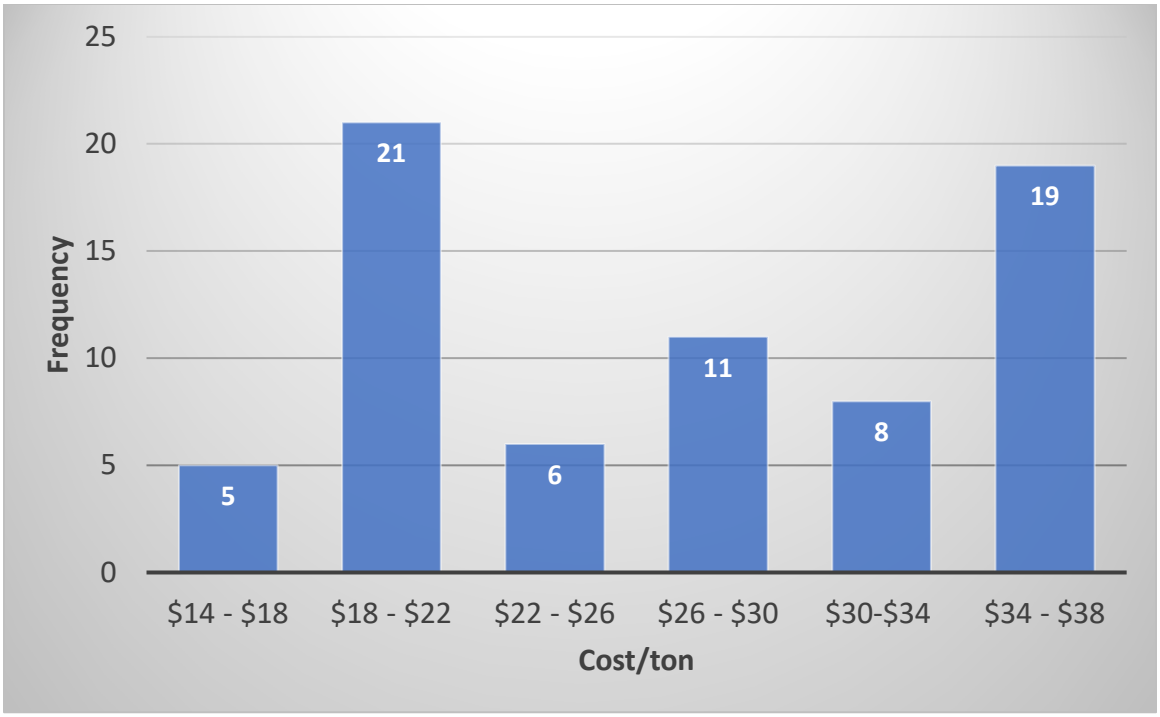

Figure 2. Frequency histogram of change in transport costs per ton per mine for Northern Appalachia (n = 70) due to increased distance when the destination port is switched from Baltimore to Virginia. The number of mines that would experience the range of costs/short ton shown is labeled in the blue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

2. **A 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 to Baltimore 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. **Increasing transportation costs could 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. Given that the $13 fee would be about 18% of the estimated $70 per ton selling price of coal exported from Baltimore, mines could struggle to remain competitive in the global market. If these mines cannot offer coal on the global marketplace at competitive prices, exports from the Port of Baltimore could decline.

Thank you.