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Virginia Governor's Commission
on Climate Change

Dear Commissioners:

I wish to submit to Virginia's Commission on Climate Change this letter and the following documents:

- 1) Railroads: Building a Cleaner Environment, AAR (Association of American Railroads), May, 2008.
- 2) Description of Norfolk Southern's Green Machine online carbon footprint calculator.
- 3) Virginia's 2004-2025 State Rail Plan, Virginia Department of Rail and Public Transportation (DRPT), June, 2004.

Descriptions of the attached documents:

- 1) The AAR's Policy and Economics Department's May, 2008 report, Railroads: Building a Cleaner Environment, explains how, "by relieving highway gridlock and reducing pollution, fuel consumption, and greenhouse gas emissions, railroads are the environmentally-friendly way to move freight". The report describes several of the environmental and economic benefits of moving freight by rail, including:
 - a) "Railroads are the most fuel-efficient form of ground transport." According to the report, railroads, which are "three or more times more fuel efficient than trucks," have increased their fuel efficiency by "85 percent since 1980."
 - b) "Freight railroads help reduce greenhouse gas emissions." The AAR report notes that "every ton-mile of freight that moves by rail instead of truck reduces greenhouse gas emissions by two-thirds or more." On a ton-mile basis for intercity freight movement, the freight railroads have well over a 40% market share, yet account for just 2 percent of total U.S. greenhouse gas emissions from transportation and mobile sources (and well under 1 percent of total greenhouse gas emissions from all sources).

- c) Because a typical freight train takes the equivalent of several hundred trucks off our highways, freight railroads significantly reduce highway congestion. Shifting freight from trucks to rail helps reduce the costs of maintaining existing roads and the pressure to build costly new roads.
- 2) Norfolk Southern's "Green Machine," an online carbon footprint analyzer found on our NS website (www.nscorp.com), puts the environmental benefits of rail transportation into an easy-to-visualize perspective by estimating the reductions in greenhouse gas emissions that occur when rail transportation becomes a larger component in shipper supply chains.

The Green Machine was developed in-house and is a component of Norfolk Southern's broad-based sustainability initiative that includes developing public-private partnerships to improve use of the nation's rail transportation network while supporting the economy; focusing on safety to benefit employees and communities; minimizing use of natural resources; and reducing, reusing and finding alternatives for commonly-used railroad materials.

The Green Machine, accessible through Norfolk Southern's environmental Web site at <http://www.nscorp.com/footprints>, is founded on equations fully consistent with EPA standards.

- 3) Virginia's 2004-2025 State Rail Plan, prepared by the Virginia Department of Rail and Public Transportation (DRPT) in June of 2004 under the direction of then-Secretary of Transportation Whittington W. Clement discusses rail's role in moving Virginia's freight, especially in the highly congested I-81 corridor. The State Rail Plan cites freight rail's "significant public benefits," including:
 - a) Improved air quality and reduced use of fossil fuels.
 - b) Reduced congestion on Virginia's highways. The DRPT estimates that freight rail has eliminated the need for roughly 840 freeway lane-miles in Virginia by removing trucks from the highways.
 - c) Improved safety. By alleviating highway congestion, freight rail helps to reduce the number of highway accidents. Furthermore, rail is the safest way to transport hazardous materials.
 - d) Lower costs and better choices for Virginia's freight shippers and receivers.

The rail plan states "Today, rail provides a variety of public benefits. It reduces congestion and accidents on our highways, and delays the need for additional highway capacity; it provides a lower cost transportation alternative on which many Virginia residents and businesses depend; it reduces fuel consumption, air pollution, and dependence on imported oil; and it provides critical connections between Virginia's seaports and inland markets.

"Tomorrow, rail could provide even greater benefits. If we provide the right types of services in the right locations, we can expect to move more people and goods by rail, and take even more cars and trucks off Virginia's highways. In many cases, investments in rail can provide more transportation, economic, and environmental benefits than equivalent investments in the highway system."

The DRPT, under the direction of the Virginia General Assembly to study the future of the I-81 corridor (over which Norfolk Southern operates), has found that rail investments in the corridor area will bring public benefits such as safety, security, speed, reliability, reduced highway congestion and user costs, and improved fuel efficiency and reduced emissions. The rail plan further references studies seeking to produce similar public benefits in the I-95 corridor area, over which CSX operates.

A program initially enacted during the Administration of Governor Mark Warner, with the full support and active engagement of Speaker William Howell, and which is supported by Governor Kaine, is the Virginia Rail Enhancement Fund. This program has already helped propel Virginia into the forefront of state models for public/private partnerships that help foster rail projects that could not otherwise occur. The Fund is only very modestly funded (at roughly \$25 million annually) but is reaping solid returns and should continue to be supported.

Thank you for your consideration of this submittal.

Sincerely,



Robert E. Martínez

cc: Mr. F. Blair Wimbush
Vice President Real Estate
& Corporate Sustainability Officer
Norfolk Southern Corporation