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## **Independent Accountant's Report**

The Board of Directors  
Norfolk Southern Corporation

We have reviewed the accompanying Statement of Greenhouse Gas Emissions for the year ended December 31, 2015 of Norfolk Southern Corporation (the Statement of GHG Emissions). Norfolk Southern Corporation management is responsible for the Statement of GHG Emissions.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. A review consists principally of applying analytical procedures and making inquiries of persons responsible for the greenhouse gas emission information. A review is substantially less in scope than an examination, the objective of which is the expression of an opinion on the Statement of GHG Emissions. Accordingly, we do not express such an opinion.

Environmental and energy use data included in the accompanying Statement of GHG Emissions are subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

Based on our review, nothing came to our attention that caused us to believe that the Statement of GHG Emissions for the year ended December 31, 2015 of Norfolk Southern Corporation is not presented, in all material respects, in conformity with the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition and the WRI WBCSD Greenhouse Gas Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard.

**KPMG LLP**

Norfolk, Virginia  
July 1, 2016

**Norfolk Southern Corporation**

**Statement of Greenhouse Gas Emissions**

**For the year ended December 31, 2015**

<b>Operational Boundary</b>	<b>Emissions (in metric tons CO<sub>2</sub>e)</b>
Scope 1	5,266,493
Scope 2	250,526
Scope 3	7,590
<b>Total</b>	<b>5,524,609</b>

See accompanying Independent Accountants' Report and notes to Statement of Greenhouse Gas Emissions.

## **Norfolk Southern Corporation**

### **Notes to the Statement of Greenhouse Gas Emissions**

**For the year ended December 31, 2015**

#### **Note 1: *The Company***

##### **Basis of Presentation**

Norfolk Southern Corporation (the Company) has prepared its 2015 Statement of Greenhouse Gas (GHG) Emissions on a calendar reporting year that is the same as our financial reporting period.

Scope 1 and 3 GHG emissions information has been prepared in accordance with the World Resources Institute/ World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised.

- Scope 2 GHG emissions information has been prepared in accordance with the WRI/WBCSD GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard.
- Collectively, the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition and the GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard are referred to as the “GHG Protocol” in this document.

The Company’s Statement of GHG emissions includes all direct (Scope 1) and indirect (Scope 2) GHG emissions generated from all company-owned locations, which are all located in the United States as defined under the financial control method and indirect GHG emissions from commercial air business travel, rental car usage, personal car use for business purposes, and purchased electricity from leased facilities (Scope 3).

Included in our Scope 1 emissions are 467 metric tons CO<sub>2</sub>e from burning biodiesel in our engines. We have not traded, sold, purchased, transferred or banked any carbon allowances.

Consumption is based on raw data when available. When raw data is unavailable, we estimate consumption based on an extrapolation of the average consumption from the most comparable metrics available.

##### **Estimation Uncertainties**

Environmental and energy use data included in the Statement of GHG Emissions are subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

## **Note 2: GHG Reporting**

### **Recent Accounting Developments**

In January 2015, the WRI/WBCSD issued the GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard (Amended Scope 2 Guidance). The Amended Scope 2 Guidance standardizes how corporations measure emissions from purchased or acquired electricity, steam, heat and cooling and includes:

- New requirements for accounting for emissions from energy contracts and instruments (such as renewable energy credits) in GHG inventories;
- Eight Scope 2 Quality Criteria that all contractual instruments must meet in order to be a reliable data source for the scope 2 market-based method;
- Recommendations for transparently disclosing information about energy purchases; and
- Eleven short case studies to illustrate the benefits of the new requirements.

The Company adopted the Amended Scope 2 Guidance during the year ended December 31, 2015 on a prospective basis. The Company has not entered into any contracts and has not purchased any instruments that meet the criteria to apply the market-based approach defined in the Amended Scope 2 Guidance. Further, the Company operates only in the United States, which currently does not have residual mix factors available, which may result in double counting between electricity consumers. Therefore, the Company notes the Amended Scope 2 Guidance has no impact on our Statement of GHG Emissions in the current year, but expects to calculate Scope 2 emissions under the market-based in future periods.

### **Greenhouse Gases**

GHG emissions include three of the six greenhouse gases covered by the Kyoto Protocol – Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O). Due to the unavailability of comprehensive data, we have excluded fugitive emissions and refrigerants from our GHG Inventory. Therefore we have not reported Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulphur hexafluoride (SF<sub>6</sub>).

### **GHG Emission Factors**

<b>GHG Emission Source</b>	<b>Emission Factor Source</b>
<b>Scope 1 Heating</b>	UK Department for Environment, Food & Rural Affairs (Defra) – 2015
	North American Climate Registry (2014)
<b>Scope 1 Transport Fuel</b>	North American Climate Registry (2014)
<b>Scope 2 Grid Electricity</b>	US Environmental Protection Agency eGRID 2010
<b>Air Travel</b>	UK Department for Environment, Food & Rural Affairs (Defra) – 2015
<b>Rail (International)</b>	UK Department for Environment, Food & Rural Affairs (Defra) – 2015
<b>Rail</b>	Climate Leaders 2015

### **Global Warming Potentials**

The GHG Inventory was calculated using the Global Warming Potentials (GWP) from the International Panel on Climate Change (IPCC) Fourth Assessment Report and the country appropriate emission factors listed above.

### Scope 1, 2 and 3 GHG Inventory by Type

The following tables present the Company's GHG Inventory by scope and GHG type for the year ended December 31, 2015:

<b>GHG Type</b>	<b>Emissions (in metric tons CO<sub>2</sub>e)</b>
<i>Scope 1</i>	
CO <sub>2</sub>	5,217,559
CH <sub>4</sub>	10,051
N <sub>2</sub> O	38,883
<b>Total Scope 1</b>	<b>5,266,493</b>
<i>Scope 2</i>	
CO <sub>2</sub>	249,253
CH <sub>4</sub>	107
N <sub>2</sub> O	1,166
<b>Total Scope 2</b>	<b>250,526</b>
<i>Scope 3</i>	
CO <sub>2</sub>	7,566
CH <sub>4</sub>	3
N <sub>2</sub> O	21
<b>Total Scope 3</b>	<b>7,590</b>