



KPMG LLP
Suite 1900
440 Monticello Avenue
Norfolk, VA 23510

Independent Accountants' Review Report

The Board of Directors
Norfolk Southern Corporation:

We have reviewed the accompanying Statement of Greenhouse Gas Emissions of Norfolk Southern Corporation for the year ended December 31, 2017 (the Statement of GHG Emissions). Norfolk Southern Corporation's management is responsible for presenting the Statement of GHG Emissions in accordance with the criteria set forth in note 1 (the Criteria). Our responsibility is to express a conclusion on the Statement of GHG Emissions based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the review to obtain limited assurance about whether any material modifications should be made to the Statement of GHG Emissions in order for it to be in accordance with the Criteria. A review is substantially less in scope than an examination, the objective of which is to obtain reasonable assurance about whether the Statement of GHG Emissions is in accordance with the Criteria, in all material respects, in order to express an opinion. Accordingly, we do not express such an opinion. We believe that our review provides a reasonable basis for our conclusion.

As described in note 1, environmental and energy use data 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, we are not aware of any material modifications that should be made to the Statement of GHG Emissions of Norfolk Southern Corporation for the year ended December 31, 2017 in order for it to be presented 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 Edition and the WRI/WBCSD Greenhouse Gas Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard.

KPMG LLP

Norfolk, Virginia
August 14, 2018

Norfolk Southern Corporation

Statement of Greenhouse Gas Emissions

Year ended December 31, 2017

Operational Boundary	Emissions (in metric tons CO₂e)
Scope 1	4,872,474
Scope 2	228,814
Scope 3	5,354
Total	5,106,642

The above Scope 1 emissions exclude 85,476 tons of direct CO₂ emissions from the use of biofuels.

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

Norfolk Southern Corporation

Notes to the Statement of Greenhouse Gas Emissions

Year ended December 31, 2017

Note 1: The Company

Basis of Presentation

Norfolk Southern Corporation (the Company) has prepared its 2017 Statement of Greenhouse Gas Emissions (GHG) 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 purpose, and purchased electricity from leased facilities (Scope 3).

We have not traded, sold, purchased or transferred or banked any carbon allowances.

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 measurements techniques may also vary.

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.

Norfolk Southern Corporation

Notes to the Statement of Greenhouse Gas Emissions

Year ended December 31, 2017

Note 2: GHG Reporting

Greenhouse Gases

The GHG Protocol covers the accounting and reporting of seven greenhouse gases covered by the Kyoto Protocol – Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PCFs), Sulphur Hexafluoride (SF₆) and Nitrogen Trifluoride (NF₃). Hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs) emissions have been omitted from our reporting as they are not material sources of greenhouse gases for the Company. Sulfur Hexafluoride (SF₆) and Nitrogen Trifluoride (NF₃) emissions are also excluded from our reporting since they do not apply to the Company's operation. Fugitive emissions and refrigerants are also excluded from the reporting as they are not material sources of greenhouse gases for the Company.

GHG Emission Factors

GHG Emission Source	Emmision Factor Source
Scope 1 Heating	US EPA Center for Corporate Climate Leadership and UK Department for Environment, Food & Rural Affairs (Defra) - 2015
Scope 1 Transport Fuel	US EPA Center for Corporate Climate Leadership and UK Department for Environment, Food & Rural Affairs (Defra) - 2015
Scope 2 Grid Electricity	US Environmental Protection Agency eGRID 2014
Air Travel	UK Department for Environment, Food & Rural Affairs (Defra) - 2015
Scope 3 Transport Fuel	US EPA Center for Corporate Climate Leadership and UK Department for Environment, Food & Rural Affairs (Defra) - 2015

Global Warming Potentials

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

Norfolk Southern Corporation

Notes to the Statement of Greenhouse Gas Emissions

Year ended December 31, 2017

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, 2017.

GHG Type	Emissions (in metric tons CO ₂ e) (Location Based)	Emissions (in metric tons CO ₂ e) (Market Based) **
Scope 1		
CO ₂	4,826,780	N/A
CH ₄	11,497	
N ₂ O	34,197	
Total Scope 1	4,872,474	
Scope 2		
CO ₂	227,740	227,740
CH ₄	107	107
N ₂ O	967	967
Total Scope 2	228,814	228,814
Scope 3		
CO ₂	5,337	N/A
CH ₄	4	
N ₂ O	13	
Total Scope 3	5,354	

** The emissions factors were not adjusted due to the fact that residual mix facilities in the United States are not available, which may result in double counting between electricity consumers. Due to this lack of information of the residual mix factors in the United States, there is no difference in Scope 2 emissions using the Location and Market-based methods.