

STB

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A

180274V6B

6/10

- State Route 1&9 - approximately 57,080 vehicles per day
- State Route 7 - approximately 20,510 vehicles per day
- Central Avenue - not available
- Fish House Road - not available

The traffic counts reported are for 1996 for State Route 7 and 1993 for State Route 1&9 and represent the average count for both directions.

Post-Acquisition, the South Kearny intermodal facility is expected to realize an increase of 78 trucks per day. The additional truck traffic was assumed to be distributed throughout a 24-hour day. The total daily increase of 156 truck trips represents about a 0.8 percent increase in ADT on State Route 7, and about a 0.3 percent increase in ADT on State Route 1&9. Thus, these increases would have a minor impact on the local and regional transportation network.

Elizabeth

NS has two intermodal facilities in close proximity to each other in Elizabeth, NJ. E-Rail is a traditional trailer on flat car/container on flat car intermodal facility. Portside is a TCS facility. Because the two facilities are located so close to each other, the effects of the activity changes on local roads would be cumulative. Therefore, the activity changes for these two facilities were combined for this analysis.

The NS intermodal facilities are located on Formosa Street at Newark Bay. Truck transportation to the facilities is via North Avenue (NJ-439), I-95, and I-78. Annual Daily Traffic (ADT) for the vicinity of the Elizabeth facilities, obtained from New Jersey Planning Data Services, is as follows:

- North Avenue (NJ-439) - approximately 25,250 vehicles per day
- I-95 - approximately 194,300 vehicles per day
- I-78 - approximately 129,800 vehicles per day

Traffic counts reported are for 1995 and represent the average count for both directions.

Post-Acquisition, the Elizabeth intermodal facilities are expected to realize an increase of 385 more trucks per day. The additional truck traffic was assumed to be distributed throughout a 24-hour day. The total daily increase of 770 truck trips represents about a 3.1 percent increase in ADT on North Avenue, about a 0.4 percent increase in ADT on I-95 and a 0.6 percent increase on I-78. Thus, these increases would have a minor impact on the local and regional transportation network.

15.4 SAFETY

Impacts on safety may occur as a result of increased traffic on rail line segments. Safety impacts are primarily related to changes in vehicle delays at grade crossings and the potential for train-vehicle accidents at grade crossings. Other safety impacts include potential train accidents and hazardous materials incidents.

No significant adverse safety impacts would result from the proposed Acquisition. Overall, a net safety benefit is expected due to truck-to-rail diversions. Safety issues and methodology are discussed in Section 1.2.4 of Part 2 and in Appendix D of Part 1 of this ER.

15.4.1 Grade Crossing Safety

Grade crossings along analyzed CSX, NS and NEC/Shared Area rail line segments do not have an ADT of 5,000 or greater.

15.4.2 Hazardous Materials Transportation

The proposed Acquisition would not affect CSX's and NS's policies or operating procedures governing the transport of hazardous materials. Although the quantities of materials transported may increase, the Acquisition would not affect the type of materials handled or the methods used to ensure the safe movement of these shipments. Additional information on CSX's and NS's transportation of hazardous materials is provided in Section 1.2.4.3 of this Part.

15.4.3 Hazardous Waste Sites/Spill Sites on the Right-of-Way

Information on CSX and NS hazardous waste sites and spill sites is provided in Section 1.2.4.4 of this Part. A summary of CSX's, NS's and Conrail's hazardous materials reportable incidents from 1991 through 1995 is provided in Appendix F to Part 1.

**CSX RAIL LINE SEGMENTS, RAIL YARDS AND INTERMODAL FACILITIES
REQUIRING ENVIRONMENTAL ANALYSIS IN NEW JERSEY**



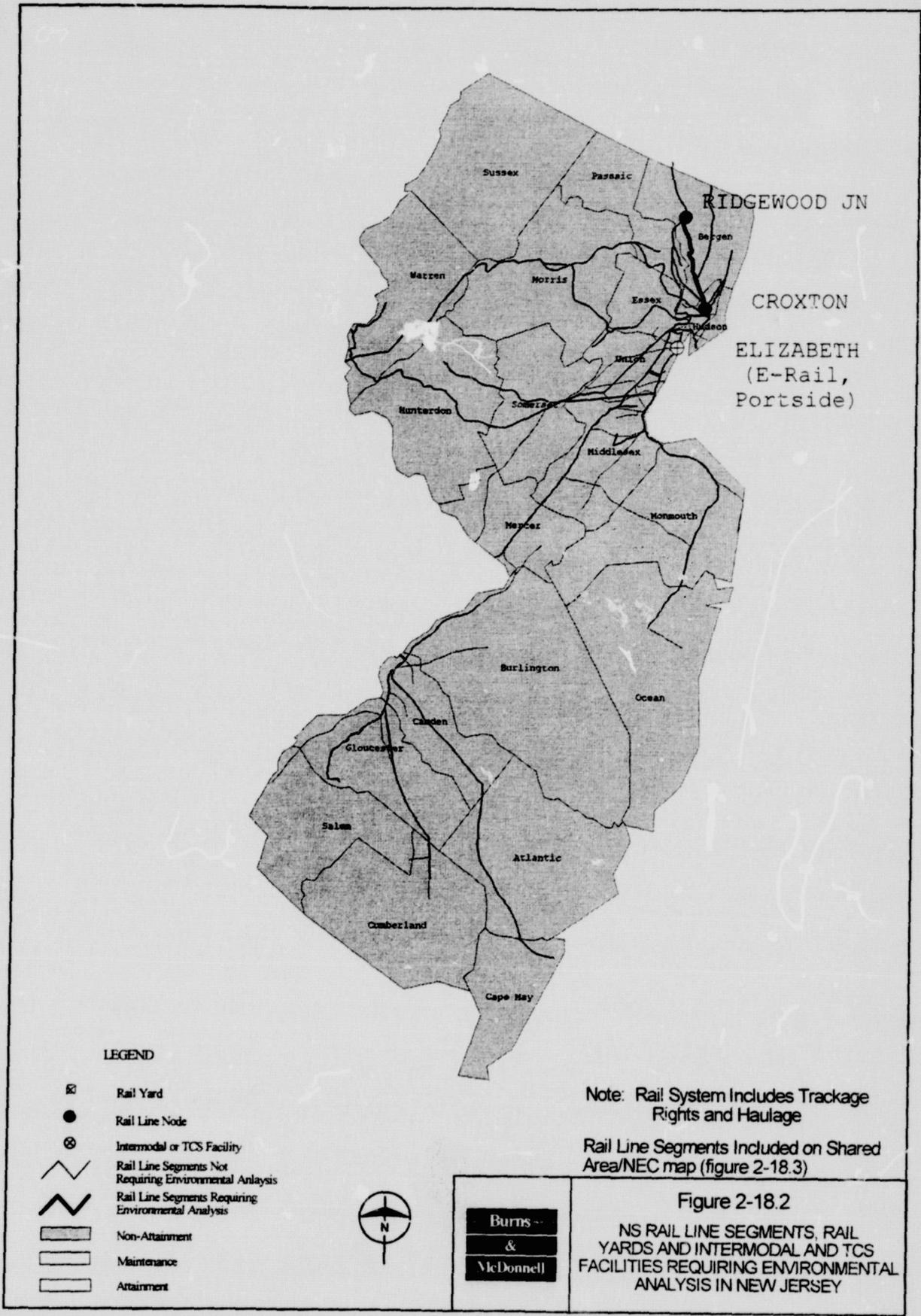
LEGEND

- | | | | | | |
|--|---|--|---------------------|--|----------------|
| | Rail Line Segments
Requiring
Environmental Analysis | | Nodes | | Non-Attainment |
| | Rail Line Segments
Not Requiring
Environmental Analysis | | Rail Yard | | Maintenance |
| | | | Intermodal Facility | | Attainment |

FIGURE 2-18.1

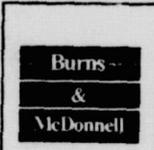


Note: Rail System Includes Trackage Rights and Haulage



LEGEND

- Rail Yard
- Rail Line Node
- Intermodal or TCS Facility
- Rail Line Segments Not Requiring Environmental Analysis
- Rail Line Segments Requiring Environmental Analysis
- Non-Attainment
- Maintenance
- Attainment



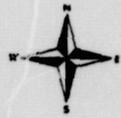
Note: Rail System Includes Trackage Rights and Haulage

Rail Line Segments Included on Shared Area/NEC map (figure 2-18.3)

Figure 2-18.2

NS RAIL LINE SEGMENTS, RAIL YARDS AND INTERMODAL AND TCS FACILITIES REQUIRING ENVIRONMENTAL ANALYSIS IN NEW JERSEY

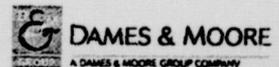
SHARED AREA AND NEC RAIL LINE SEGMENTS, RAIL YARDS, AND INTERMODAL FACILITIES
REQUIRING ENVIRONMENTAL ANALYSIS IN NEW JERSEY



LEGEND

- | | | | | | |
|--|---|--|---------------------|--|----------------|
| | Rail Line Segments
Requiring
Environmental Analysis | | Nodes | | Non-Attainment |
| | Rail Line Segments
Not Requiring
Environmental Analysis | | Rail Yard | | Maintenance |
| | | | Intermodal Facility | | Attainment |

FIGURE 2-18.3



16.0 NEW YORK

16.0 NEW YORK

RAIL LINE SEGMENTS, RAIL YARDS AND INTERMODAL FACILITY IMPACTS

This section provides an analysis of the potential environmental impacts in New York resulting from increases in activity on rail line segments, at rail yards and at intermodal facilities related to the proposed Acquisition. Consistent with the Surface Transportation Board's (STB) environmental rules at 49 CFR Part 1105.7(e), the analysis specifically considered impacts to: (1) air quality, (2) noise, (3) local and regional transportation systems and (4) safety. This analysis indicates that the proposed Acquisition will have some environmental impacts in the state of New York. Before assessing the environmental impacts, a brief description of the key elements of the Acquisition as it relates to New York immediately follows.

The Acquisition of Conrail by CSX and NS will restore competitive rail transportation to significant portions of New York for the first time in more than 20 years. Conrail dominates rail transportation in New York today, with more than 90% of the Class I mileage in the state.

While the major U.S. East Coast ports south of New York are served by two competing major railroads today, the Port of New York and New Jersey, the largest East Coast container port, is fundamentally only served by Conrail. This Acquisition changes that situation and opens the Port to true competition and its benefits.

CSX will operate the Conrail route through Syracuse and Albany, and the West Shore Line into the Newark, NJ area. CSX will also operate the Conrail line into New York City and into New England. CSX will operate service to Montreal via Syracuse.

NS would operate the Conrail line from metropolitan New York to Buffalo through Binghamton, known as the Southern Tier, and would restore the old Erie Lackawanna Line as a main line. NS intends to develop business aggressively along the line and will integrate the Southern Tier into its east-west routes connecting New York/Northern New Jersey with the

West. NS also will operate and upgrade the Buffalo Line between Buffalo and Harrisburg, PA, which connects the important Buffalo-Canadian gateway with the Southeast.

No abandonments are proposed in New York by either railroad

16.1 AIR QUALITY IMPACTS

Of the 62 counties in New York, 22 have nonattainment and/or maintenance areas for air quality. The nonattainment areas are near Buffalo, New York and Albany.

Seven counties with nonattainment areas for PM-10, ozone and carbon monoxide and six counties in attainment have CSX and NS rail line segment and rail yards that would experience increases in traffic or activity that would meet STB thresholds (See Table 1-1). These are listed below and shown in Figures 2-19.1 and 2-19.2. Line segments with Amtrak or commuter trains operating on them are in bold.

CSX Rail Line Segments

Rail Line Segment				County	Air Quality Status	Trains per Day		Increase in GTM (%)
From	To	Pre-Acquisition	Post-Acquisition					
Buffalo NY	CP Sycamore NY	Erie	N	13.5	18.5	49		
Chili NY	Frontier NY	Erie	N	47.7	53.0	16		
CP Sycamore NY	Black Rock NY	Erie	N	21.5	26.5	34		
Hoffmans NY	Utica NY	Montgomery Schenectady	N	45.7	52.2	17		
Selkirk NY	Hoffmans NY	Albany Rensselaer Schenectady	N N N	38.7	45.2	13		

• N = Nonattainment.

NS Rail Line Segments

Rail Line Segment		County	Air Quality Status	Trains per Day		Increase in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	
Corning, NY	Geneva, NY	Chemung	A	0.2	1.6	775
		Schuyler	A			
		Seneca	A			
		Steuben	A			
		Yates	A			
Ebenezer Jct, NY	Buffalo, NY	Erie	N	0.0	3.6	> 1000 *
Suffern, NY	Port Jervis, NY	Orange	N	21.7	25.8	58
		Rockland	N			
Ashtabula, OH	Buffalo, NY	Chautauqua	A	13.0	25.2	121
		Erie	N			

• N = Nonattainment, A = Attainment.
 • GTM = Gross Ton Miles
 • * Since there is little to no pre-Acquisition traffic the percent increase is not meaningful.

NS Rail Yard

Rail Yard	County	Air Quality Status	Rail Cars Handled per Day	
			Pre-Acquisition	Post-Acquisition
Buffalo Jct, NY	Erie	N	389	672

• N = Nonattainment.

The increases in air emissions resulting from the increases in traffic or activity are estimated in the Impact Analysis by County section. Even though air emissions would be increased in the immediate vicinity of these rail facilities, other rail facilities in New York (and in other states served by CSX and NS) would experience decreases in traffic or activity, with consequent decreases in localized air emissions. These decreases would be a result of rerouting freight on the expanded CSX and NS systems to shorter, more direct routes.

In addition, the diversion of freight from trucks to rail would result in reduced air emissions in the vicinity of major highways. Moreover, because trains emit a lower level of air pollutants per unit of freight moved than trucks, the diversion of freight from trucks to rail would also result in reduced air emissions systemwide.

16.1.1 Impact Analysis by County

This section analyzes the impacts to air quality in each county where a rail line segment, rail yard or intermodal facility meets the STB thresholds for analysis of air emissions. Counties that are nonattainment or were deemed nonattainment are discussed first, followed by counties that are attainment or were deemed attainment areas.

16.1.1.1 Nonattainment Area

In New York, seven counties classified as nonattainment areas have rail line segments and a rail yard that would experience increases in traffic that would meet STB thresholds.

16.1.1.1.1 *Albany County, NY*

Albany County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Albany County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Selkirk, NY	Hoffmans, NY	25.4	13.0	38.7	45.2	6.5	13

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Albany County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Selkirk, NY	Hoffmans, NY	50.0	5.5	1.9	3.2	1.3	0.00011
• NO _x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide, PM = particulate matter, Pb = lead							

Discussion of Impacts in Albany County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Albany County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.1.2 Erie County, NY

Erie County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Erie County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Buffalo, NY	CP Sycamore, NY	1.2	1.2	13.5	18.5	5.0	49
Chili, NY	Frontier, NY	50.5	16.4	47.7	53.0	5.3	16
CP Sycamore, NY	Black Rock, NY	6	6	26.5	26.5	5.0	34

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of CSX Rail Line Segments in Erie County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Buffalo, NY	CP Sycamore, NY	3.6	0.4	0.1	0.2	0.1	0.000077
Chili, NY	Frontier, NY	80.1	8.9	3.0	5.2	2.0	0.00017
CP Sycamore, NY	Black Rock, NY	25.2	2.8	0.9	1.6	0.6	0.00053
Total		108.9	12.1	4.0	7.0	2.7	0.00023

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Ashtabula, OH	Buffalo, NY	127.00	27.59	13.0	25.2	12.2	121
Ebenezer Jct, NY	Buffalo, NY	5.00	5.00	0.0	3.6	3.6	>1000 *

• GTM = Gross Ton Miles
 • * Since there is little to no pre-Acquisition traffic the percent increase is not meaningful.

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segments in Erie County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Ashtabula, OH	Buffalo, NY	234.84	26.08	8.71	15.22	5.93	0.00050
Ebenezer Jct, NY	Buffalo, NY	14.19	1.61	0.54	0.94	0.37	0.000031
Total		249.03	27.69	9.25	16.16	6.30	0.000531

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Estimated Increases in Emissions for NS Rail Yard

Rail Yard	Estimated Increases in Emissions (tons per year)					
	NO _x	CO	VOC	SO ₂	PM	Pb
Buffalo Jct, NY	13.24	1.60	0.74	0.58	0.27	0.000019

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Erie County

Rail line segments and rail yards are considered mobile (not stationary) sources under EPA's air pollution regulations. As discussed in Section 1.2.1, emissions from activities at rail yards in nonattainment areas were compared to the New Source Review benchmark for marginal nonattainment areas (i.e., 100 tons per year). None of the facilities' emissions increases would exceed the New Source Review Criteria.

The increased rail segment activity in Erie County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.1.3 *Montgomery County, NY*

Montgomery County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Montgomery County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Hoffmans, NY	Utica, NY	66.4	40.2	45.7	52.2	6.5	17

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Montgomery County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Hoffmans, NY	Utica, NY	198.8	22.1	7.4	12.9	5.0	0.00042

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Montgomery County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Montgomery County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.1.4 Orange County, NY

Part of Orange County is classified as nonattainment (severe) for ozone and part is classified as nonattainment (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Orange County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Suffern, NY	Port Jervis, NY	65.00	58.73	21.7	25.8	4.1	58

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Orange County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Suffern, NY	Port Jervis, NY	177.73	19.74	6.59	11.52	4.49	0.00038

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Orange County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Orange County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.1.5 Rensselaer County, NY

Rensselaer County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Rensselaer County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Selkirk, NY	Hoffmans, NY	25.4	2.6	38.7	45.2	6.5	13

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Rensselaer County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Selkirk, NY	Hoffmans, NY	10.0	1.1	0.4	0.6	0.3	0.000021

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Rensselaer County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Rensselaer County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.1.6 Rockland County, NY

Rockland County is classified as nonattainment (severe) for ozone. Increases in emissions have been estimated for each of the rail facilities in Rockland County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Suffern, NY	Port Jervis, NY	65.00	6.27	21.7	25.8	4.1	58

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Rockland County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Suffern, NY	Port Jervis, NY	18.97	2.11	0.70	1.23	0.48	0.000042

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Rockland County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Rockland County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.1.7 Schenectady County, NY

Schenectady County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Schenectady County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Hoffmans, NY	Utica, NY	66.4	0.5	45.7	52.2	6.5	17
Selkirk, NY	Hoffmans, NY	25.4	7.7	38.7	45.2	6.5	13

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segments in Schenectady County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Hoffmans, NY	Utica, NY	2.6	0.3	0.1	0.2	0.1	0.000055
Selkirk, NY	Hoffmans, NY	29.6	3.3	1.1	1.9	0.7	0.000063
Total		32.2	3.6	1.2	2.1	0.8	0.000069
• NO _x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide, PM = particulate matter, Pb = lead							

Discussion of Impacts in Schenectady County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Schenectady County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.2 Attainment Areas

In New York, six counties classified as attainment areas have rail line segments that would experience increases in traffic that would meet STB thresholds.

16.1.1.2.1 Chautauqua County, NY

Chautauqua County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Chautauqua County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Ashtabula, OH	Buffalo, NY	127.00	40.60	13.0	25.2	12.2	121

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segment in Chautauqua County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Ashtabula, OH	Buffalo, NY	346.78	38.51	12.86	22.47	8.76	0.00074

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Chautauqua County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail activities in Chautauqua County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.2.2 Chemung County, NY

Chemung County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Chemung County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Corning, NY	Geneva, NY	57.00	4.96	0.2	1.6	1.4	775

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segment in Chemung County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Corning, NY	Geneva, NY	1.76	0.20	0.07	0.11	0.04	0.0000037

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Chemung County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail activities in Chemung County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.2.3 Schuyler County, NY

Schuyler County is classified as attainment. Increases in emissions have been estimated for each of the rail facilities in Schuyler County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Corning, NY	Geneva, NY	57.00	14.81	0.2	1.6	1.4	775

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Schuyler County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Corning, NY	Geneva, NY	5.27	0.58	0.20	0.34	0.13	0.000011

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Schuyler County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail activities in Schuyler County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.2.4 Seneca County, NY

Seneca County is classified as an attainment. Increases in emissions have been estimated for each of the rail facilities in Seneca County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Corning, NY	Geneva, NY	57.00	7.70	0.2	1.6	1.4	775

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segment in Seneca County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Corning, NY	Geneva, NY	2.74	0.30	0.10	0.18	0.07	0.0000058

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Seneca County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail activities in Seneca County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.2.5 Steuben County, NY

Steuben County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Steuben County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Corning, NY	Geneva, NY	57.00	6.80	0.2	1.6	1.4	775

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segment in Steuben County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Corning, NY	Geneva, NY	2.42	0.27	0.09	0.16	0.06	0.0000051

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Steuben County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail activities in Steuben County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.1.1.2.6 Yates County, NY

Yates County is classified as an attainment area. Increases in emissions have been estimated for each of the rail facilities in Yates County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Corning, NY	Geneva, NY	57.00	22.74	0.2	1.6	1.4	775

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segment in Yates County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Corning, NY	Geneva, NY	8.09	0.90	0.30	0.52	0.20	0.000017

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Yates County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail activities in Yates County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

16.2 NOISE IMPACTS

The NS rail line segments that would experience increases in traffic or activity meeting the STB thresholds for noise analysis (see Table 1-2) are listed below. Traffic increases on one rail yard facility in New York would also meet STB's thresholds for noise analysis. Analyses were performed to identify where the noise level would increase by 2 dBA or greater and be above 65

dBA. In areas that would experience such an increase, noise-sensitive receptors within the pre-Acquisition and post-Acquisition 65 dBA Ldn contour were counted. The number of noise-sensitive receptors (residences, schools, churches, hospitals) is provided. If a rail line segment crosses state boundaries, the portion of the segment in each state is analyzed under the same segment name in the noise section of that state.

NS Line Segments

Segment		Trains Per Day			Change in dBA	Distance to Ldn Contour	
From	To	Pre-Acquisition	Post-Acquisition	Difference		Line Segment	Grade Crossing
Ashtabula, OH	Buffalo, NY	13.0	25.2	12.2	2.8	200	550
Corning, NY	Geneva, NY	0.2	1.6	1.4	5.9-8.0	50	100
Ebenezer Jct, NY	Buffalo, NY	--	3.6	3.6	11.4-18.3	50	200
Suffern, NY	Port Jervis, NY	21.7	25.8	4.1	<2.0	200	550

Ashtabula, OH to Buffalo, NY

This rail segment currently has 13.00 trains per day. This segment would experience an increase of 12.18 trains per day and an increase of 121.33 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 2.8 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 176 grade crossings are on this segment. The current 65 dBA Ldn contour of 150 feet (200 feet at grade crossings) would extend to approximately 350 feet (550 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Ripley

The track trending northeast in the south part of this small community. Residences, businesses, school and churches are located in the community.

East Ripley

The track trending north east along the south edge of this extremely small community. Only a few residences are located in the community.

Forsythe

This is an extremely small community with only a few residences north of the northeast-trending track.

Westfield

This is an extremely small community with only a few residences south of the northeast-trending track.

Skinner Switch

This is an extremely small community with only a few residences north of the northeast-trending track.

Brocton

This is a small community with only a few residences north of the northeast-trending track.

Dunkirk

This is a mid-sized community where the northeast-trending track trends along the southeast edge of the city. Numerous residences, businesses and industries occur near the rail. Schools are also located in the community.

Silver Creek

This is a mid-sized community where the northeast-trending track trends along the north edge of the city. Numerous residences, businesses and industries are on the south side of the rail. Schools and churches are also located in the community.

Hamford Bay

This is a small community with only a few residences and businesses along the northeast-trending track on the southeastern side of the community.

Sunset Bay

This is a small community with the track trending northeast in the southeastern part of the community. There are only a few residences and businesses along the track.

Irving

The track trends northeast on the southeastern part of this small community. Residences and churches are located in the community.

Farnham

This is a small community with only a few residences on the west side of the northeast-trending track.

Angola

This is a mid-sized community where the northeast-trending track is on the southeast edge of the city. Numerous residences and businesses occur on both sides of the rail. Schools and churches are also located in the community.

Derby

This is a small community with only a few residences surrounding the southwest to northeast-trending track.

Lake View

This is a small community with a southwest to northeast-trending track along the northwest side of the city. Residences, businesses, schools and churches are in the vicinity of the track.

Weyer

This is an extremely small community with only a few residences near the northeast-trending track.

Clifton Heights

This is a small community with only a few residences and businesses near the southeast to northwest-trending track.

Greater Buffalo Metropolitan Area

This is a large metropolitan area where the southwest to northeast-trending track trends along the city's north to east side. The track is surrounded by numerous residences, industries and businesses and industries. Schools and churches are also located in the community.

**Number of Sensitive Receptors
Ashtabula, OH to Buffalo, NY Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
1,641	1	4	0	2,400	8	8	0
• only represent noise-sensitive receptors in New York							

Corning NY to Geneva, NY

This rail segment currently has 0.21 trains per day, would experience an increase of 1.42 trains per day and an increase of 774.83 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 5.9-8.0 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 83 grade crossings are on this segment. The current 65 dBA Ldn contour of 50 feet (50 feet at grade crossings) would extend to approximately 100 feet (100 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Corning

This is a mid-sized community where the south to north-trending track is near the center of the city. Numerous residences, businesses, schools and churches are located in the community.

Denmark

This is a small community of a few residences that are east of the south to north-trending track.

Forenbaugh

This is an extremely small community with only a few residences near the southwest to northeast trending track trending along the southeast edge of the community.

Post Creek

This is an extremely small community with only a few residences west of the south to north-trending track.

Chambers

The track trends south to north along the west edge of this small community. Only residences and businesses are located in the community.

Beaver Dams

The track trends south to north along the east edge of this extremely small community.

Wedgewood

This is an extremely small community with only a few residences around the south to north-trending track.

Irelandville

This is an extremely small community of residences where the track trends south to north along the west edge of this community.

Dundee

This is a small community with where the south to north trending track is in the east part of the city. Residences, businesses and churches can be found in this community.

Himrod

This is a small community with only a few residences and businesses surrounding the south to north-trending track.

Randall Crossing

This is an extremely small community with only a few residences around the north-trending track.

Dresden

This is a small community of residences and businesses where the track trends north to south along the west side of this community.

Angus

This is a small community of residences and businesses where the track trends south to north along the west side of this community.

Billsboro

This is a small community of residences and businesses where the track trends south to north along the east edge of this community.

Geneva

This is a mid-sized community where the north-trending track is near the east edge of the city. Numerous residences, businesses and industries occur on both sides of the rail. Schools and churches are also located in the community.

**Number of Sensitive Receptors
Corning, NY to Geneva, NY Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
0	0	0	0	252	0	0	0

Ebenezer Junction, NY to Buffalo, NY

This rail segment currently has zero trains per day. The segment would experience an increase of 3.57 trains per day and an increase of greater than 1,000 percent in gross ton-miles per year as a result of the proposed Acquisition. Since there is little to no pre-Acquisition traffic, the percent increase is not meaningful. The change in train volume would result in an Ldn increase of 11.4-18.3 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; no grade crossings are on this segment. The current 65 dBA Ldn contour of 0 feet (50 feet at grade crossings) would extend to approximately 50 feet (200 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Greater Buffalo Metropolitan Area

This is a large metropolitan area. However, the southeast to northwest-trending track passes through an undeveloped area with scattered residences, businesses, industries, schools and churches.

**Number of Sensitive Receptors
Ebenezer Junction, NY to Buffalo, NY Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
0	0	0	0	0	0	0	0

Suffern, NY to Port Jervis, NY

This rail segment currently has 21.72 trains per day. The segment would experience an increase of 4.05 trains per day (a 57.88 percent change in gross ton-miles per year) as a result of the proposed Acquisition. The projected increases in train volume and gross ton-miles on this segment would cause less than a 2 dBA increase in the Ldn. No adverse noise impacts are expected.

16.3 TRANSPORTATION

There are no intermodal facilities in New York that would experience an increase of 50 trucks or more per day or an increase in 10 percent of the ADT on local roads.

16.4 SAFETY

Impacts on safety may occur as a result of increased traffic on rail line segments. Safety impacts are primarily related to changes in vehicle delays at grade crossings and the potential for train-vehicle accidents at grade crossings. Other safety impacts include potential train accidents and hazardous materials incidents.

No significant adverse safety impacts would result from the proposed Conrail Acquisition. Overall, a net safety benefit is expected due to truck-to-rail diversions. Safety issues and methodology are discussed in Section 1.2.4 of Part 2 and in Appendix D of Part 1 of this ER.

16.4.1 Grade Crossing Safety

The grade crossings in the State of New York with an ADT of 5,000 or greater along analyzed lines are listed below. The estimated change in frequency of accidents for a specific crossing can be determined by identifying the number of trains per day pre- and post-Acquisition on the specified line segment (Section 8.1), identifying the ADT of the road crossed by the line segment listed below and, based on the identified information, finding the appropriate cells in Table 1-5 in Section 1.2.4.1.

CSX Analyzed Grade Crossings with an ADT of 5,000 or Greater

County	City	Rail Line Segment		Road Crossed	ADT	
		To	From		5,000-10,000	>10,000
Erie	Lancaster	Frontier, NY	Chili, NY	Sheldon Ave	X	-
Albany	New Scotland	Hoffmans, NY	Selkirk, NY	Cooks Crossing	X	-

NS Analyzed Grade Crossings with an ADT of 5,000 or greater

County	City	Rail Line Segment		Road Crossed	ADT	
		To	From		5,000 - 10,000	> 10,000
Chautauqua	Dunkirk	Buffalo, NY	Ashtabula, OH	Newell Road		X
Chautauqua	Dunkirk	Buffalo, NY	Ashtabula, OH	Lamphere Road	X	
Erie	Blasdell	Buffalo, NY	Ashtabula, OH	Lake Avenue	X	

Although the potential for accidents at grade crossings would increase for crossings with increased train traffic, the potential for accidents on interstate highways would decrease because the number of long-haul trucks would decrease. Systemwide, the Acquisition is expected to have a beneficial effect on safety.

Information on vehicle delays is provided in Section 1.2.4.1.2.

16.4.2 Hazardous Materials Transportation

The proposed Acquisition would not affect CSX's and NS's policies or operating procedures governing the transport of hazardous materials. Although the quantities of materials transported may increase, the Acquisition would not affect the type of materials handled or the methods used to ensure the safe movement of these shipments. Additional information on CSX's and NS's transportation of hazardous materials is provided in Section 1.2.4.3 of this Part.

16.4.3 Hazardous Waste Sites/Spill Sites on the Right-of-Way

Information on CSX and NS hazardous waste sites and spill sites is provided in Section 1.2.4.4 of this Part. A summary of CSX's, NS's and Conrail's hazardous materials reportable incidents from 1991 through 1995 is provided in Appendix F to Part 1.

**CSX RAIL LINE SEGMENTS, RAIL YARDS, AND INTERMODAL FACILITIES
REQUIRING ENVIRONMENTAL ANALYSIS IN NEW YORK**



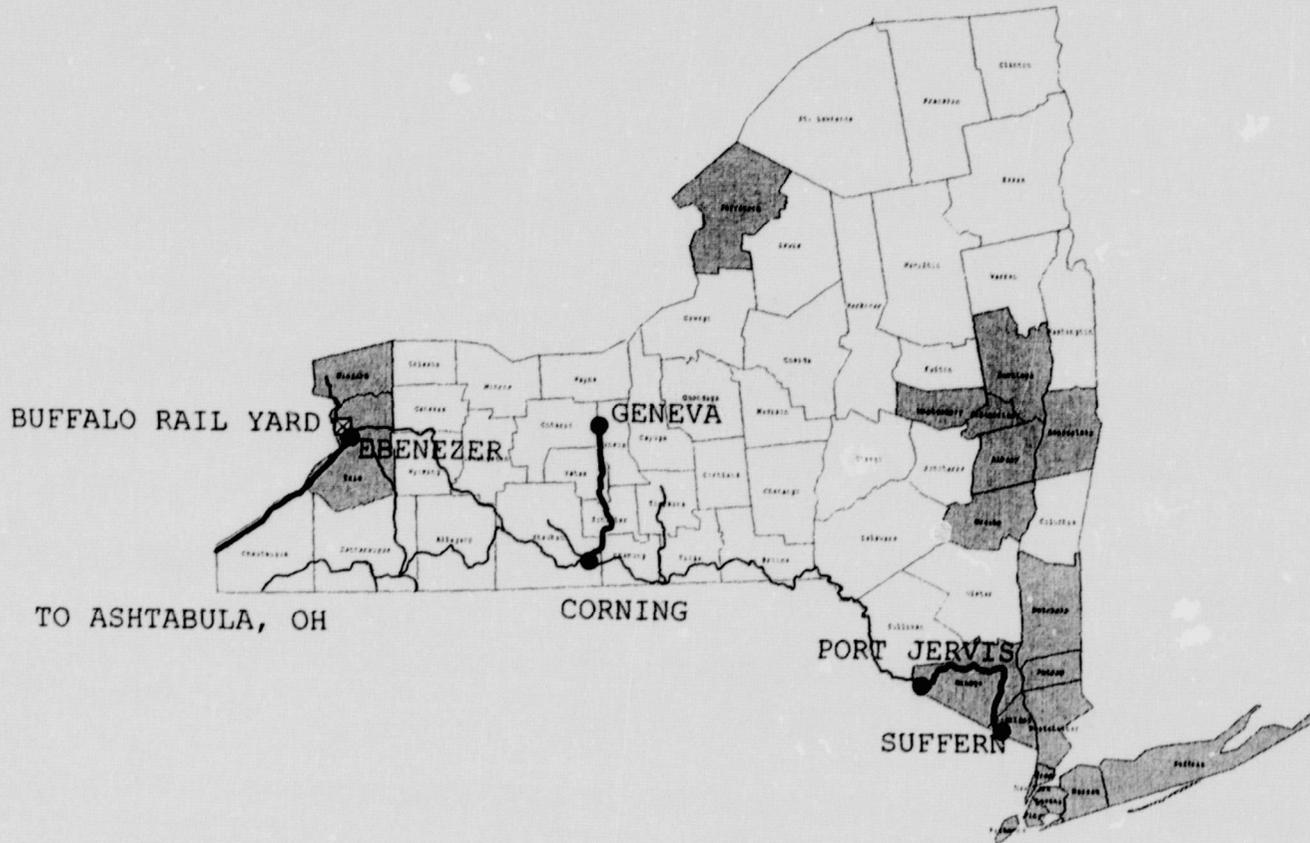
LEGEND

- | | | | | | |
|--|---|--|---------------------|--|----------------|
| | Rail Line Segments Requiring Environmental Analysis | | Nodes | | Non-Attainment |
| | Rail Line Segments Not Requiring Environmental Analysis | | Rail Yard | | Maintenance |
| | | | Intermodal Facility | | Attainment |

Note: Rail System Includes Trackage Rights and Haulage

FIGURE 2-19.1





LEGEND

- ⊗ Rail Yard
- Rail Line Node
- ⊗ Intermodal or TCS Facility
- ∩ Rail Line Segments Not Requiring Environmental Analysis
- ∩ Rail Line Segments Requiring Environmental Analysis
- Non-Attainment
- Maintenance
- Attainment



Note: Rail System Includes Trackage Rights and Haulage

<p>Burns & McDonnell</p>	<p>Figure 2-19.2 NS RAIL LINE SEGMENTS, RAIL YARDS AND INTERMODAL AND TCS FACILITIES REQUIRING ENVIRONMENTAL ANALYSIS IN NEW YORK</p>
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17.0 NORTH CAROLINA

17.0 NORTH CAROLINA

RAIL LINE SEGMENTS, RAIL YARDS AND INTERMODAL FACILITIES IMPACTS

No CSX or NS rail line segments, rail yards or intermodal facilities in North Carolina would experience increased traffic or activity that would meet STB thresholds. Therefore no adverse impacts would occur in North Carolina as a result of the proposed Acquisition. CSX and NS anticipate that due to predicted truck to rail diversions, North Carolina will experience a benefit in the areas of air emissions, noise and safety.

18.0 OHIO

18.0 OHIO

RAIL LINE SEGMENTS, RAIL YARDS AND INTERMODAL FACILITY IMPACTS

This section provides an analysis of the potential environmental impacts in Ohio resulting from increases in activity on rail line segments, at rail yards and at intermodal facilities related to the proposed Acquisition. Consistent with the Surface Transportation Board's (STB) environmental rules at 49 CFR Part 1105.7(e), the analysis specifically considered impacts to: (1) air quality, (2) noise, (3) local and regional transportation systems and (4) safety. This analysis indicates that the proposed Acquisition will have some environmental impacts in Ohio. Before assessing the environmental impacts, a brief description of the key elements of the Acquisition as it relates to Georgia immediately follows.

Ohio shippers and communities will benefit from the service and efficiency that will be produced by the proposed Acquisition and resulting formation of two comparably sized, financially strong Eastern rail systems. Ohio's traditional stature as a transportation hub will be strengthened.

CSX plans major route upgrades in northern Ohio that will create a new high-capacity freight corridor between Chicago and the East Coast. CSX's Willard Yard is set to become a key terminal in the expanded CSX system, while Cleveland and Cincinnati will be leading regional hubs for auto and intermodal traffic.

CSX will operate eight route combinations serving Ohio including the Northeast Gateway Service Route linking Cleveland to Chicago, Boston and New York, and the Memphis Gateway Service Route linking Memphis and eastern points via Cincinnati and Canton. CSX will provide two high-capacity rail lines running through Ohio between the East and Midwest. The St. Louis route is over 100 miles shorter than existing CSX lines. The new system design also will alleviate rail congestion in the Cincinnati area.

CSX's Collinwood Yard in Cleveland and Queensgate Yard in Cincinnati will become regional hubs for automotive industry traffic. Under the Acquisition agreement, CSX will gain direct

access to vehicle assembly plants at East Liberty and Marysville. Collinwood Yard in Cleveland also will be a major Midwestern rail hub for intermodal freight. An \$8 million expansion will include additional tracks and lift capacity.

NS will operate at least seven route combinations in Ohio, including the Conrail lines between Cleveland and Chicago, Toledo and Detroit, Cleveland and Pittsburgh, and the Toledo - Bellevue - Columbus - Cincinnati route. NS will offer improved automotive service through Bellevue Yard. NS will extend the best features of its east-west routes with a new connection near Vermilion, located west of Cleveland.

NS plans to relocate the Crestline, OH Triple Crown Service's (TCS) facility to currently owned railroad property in Bellevue, OH. The Toledo, Cincinnati and Columbus intermodal facilities will be expanded. Through intermodal capacity improvements and routing efficiencies resulting from the Acquisition, NS predicts substantial truck to rail diversions which will have a favorable impact upon highway congestion and air quality conditions.

NS proposes to abandon 7.5 miles of rail line through Toledo and the 0.2 mile NS pivot bridge over the Maumee River in Toledo. The proposed abandonments would eliminate 18 grade crossings.

18.1 AIR QUALITY IMPACTS

Of the 88 counties in Ohio, 32 counties have nonattainment areas and/or maintenance areas for air quality. The nonattainment areas encompass the large cities of Columbus, Cincinnati, Cleveland and Toledo and the small cities of Coshocton, Steubenville and Gallipolis. These areas are nonattainment for SO₂ (sulfur dioxide), ozone and/or PM-10 (particulate matter less than 10 microns in diameter).

Seven of the counties with nonattainment areas, seven of the counties with maintenance areas and fifteen of the counties in attainment areas have rail line segments, rail yards or intermodal facilities that would experience increases in traffic or activity that would meet STB thresholds

(See Table 1-1). These are listed below and shown in Figures 2-21.1 and 2-21.2. These areas are nonattainment for SO₂ (sulfur dioxide), ozone and/or PM-10 (particulate matter less than 10 microns in diameter). Line segments with Amtrak or commuter trains operating on them are in bold.

CSX Rail Line Segments

Rail Line Segment				County	Air Quality Status	Trains per Day		Increases in GTM (%)
From	OH	To	OH			Pre-Acquisition	Post-Acquisition	
Ashtabula	OH	Quaker	OH	Cuyahoga Lake	N D-NA	50.3	56.2	5
Berea	OH	Greenwich	OH	Cuyahoga Huron Lorain	N A D-NA	14.5	54.2	250
Bucyrus	OH	Adams	IN	Allen Crawford Hardin Van Wert Wvandong	A A A A A	5.9	13.9	412
Cincinnati	OH	Hamilton	OH	Butler Hamilton	N N	29.2	32.2	16
Crestline	OH	Bucyrus	OH	Crawford	A	6.5	14.5	417
Deshler	OH	Toledo	OH	Henry Wood	A M	0.6	14.2	>1000*
Deshler	OH	Willow Creek	IN	Defiance Henry	A A	23.4	49.7	111
Greenwich	OH	Crestline	OH	Crawford Huron Richland	A A A	14.5	31.3	88
Greenwich	OH	Willard	OH	Huron	A	34.5	57.2	96
Marcy	OH	Short	OH	Cuyahoga	N	16.4	45.8	267
Marion	OH	Fostoria	OH	Delaware Franklin Hancock Marion Seneca Wood Wvandong	M M A A A M A	17.8	27.4	56
Marion	OH	Ridgeway	OH	Hardin Marion	A A	16.1	31.8	31
Mayfield	OH	Marcy	OH	Cuyahoga	N	3.4	43.8	933
Quaker	OH	Mayfield	OH	Cuyahoga	N	6.8	43.8	933
Short	OH	Berea	OH	Cuyahoga	N	13.4	47.3	578
Willard	OH	Fostoria	OH	Huron Seneca	A A	34.5	56.0	97

CSX Rail Line Segments

Rail Line Segment				County	Air Quality Status	Trains per Day		Increases in GTM (%)
From	To		Pre-Acquisition			Post-Acquisition		
Carleton	MI	Toledo	OH	Lucas Wood	D-NA M	21.9	33.1	61

• M = Maintenance, A = Attainment, N = Nonattainment, D-NA = Deemed Nonattainment.
 • *Because of the low pre-Acquisition activity, the change in GTM is not meaningful.

CSX Rail Yards

Rail Yard	County	Air Quality Status	Rail Cars Handled per Day	
			Pre-Acquisition	Post-Acquisition
Stanley	Lucas	D-NA	876	1282

• D-NA= Deemed Nonattainment.

NS Rail Line Segments

Rail Line Segment		County	Air Quality Status	Trains per Day		Increases in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	
Ashtabula, OH	Buffalo, NY	Ashtabula	M	13.0	25.2	121
Bellevue, OH	Bucyrus, OH	Huron	A	26.0	34.6	40
		Sandusky	A			
		Seneca	A			
		Crawford	A			
Bellevue, OH	Vermilion, OH	Erie	A	15.5	31.8	79
		Huron	A			
Bucyrus, OH	Fairgrounds Col, OH	Crawford	A	26.0	34.3	41
		Delaware	M			
		Franklin	M			
		Marion	A			
Cleveland, OH	Ashtabula, OH	Ashtabula	M	13.0	35.5	259
		Cuyahoga	N			
		Lake	D-N			

NS Rail Line Segments

Rail Line Segment		County	Air Quality Status	Trains per Day		Increases in GTM (%)
From	To			Pre-	Post-	
				Acquisition		
Cleveland, OH	Shortline Jct. OH	Cuyahoga	N	2.0	2.0	>1,000
Ivorydale, OH	Cincinnati RH, OH	Hamilton	N	33.9	38.6	30
Martin, OH	Miami, OH	Lucas	D-N	51.0	60.7	9
		Wood	M			
Mill, OH	Dayton, OH	Butler	N	11.0	19.0	47
		Hamilton	N			
		Montgomery	M			
		Warren	N			
Oak Harbor, OH	Bellevue, OH	Huron	A	7.7	27.2	179
		Ottawa	A			
		Sandusky	A			
Vermilion, OH	Cleveland, OH	Cuyahoga	N	13.5	37.8	183
		Erie	A			
		Lorain	D-N			
White, OH	Cleveland, OH	Cuyahoga	N	12.5	26.8	91
Youngstown, OH	Ashtabula, OH	Ashtabula	M	11.7	22.9	91
		Mahoning	M			
		Trumbull	M			

• N = Nonattainment, M = Maintenance, A = Attainment, D-N= Deemed Nonattainment.
 • GTM = Gross Ton Miles

NS Rail Yards

Rail Yard	County	Air Quality Status	Rail Cars Handled per Day	
			Pre-	Post-
			Acquisition	
Airline	Lucas	D-N	0	520
Conneaut	Ashtabula	M	30	74
Homestead	Lucas	D-N	326	469

• N = Nonattainment, M = Maintenance, A = Attainment, D-N= Deemed Nonattainment.

NS Intermodal Facilities

Intermodal Facility	County	Air Quality Status	Trucks per Day		Change in ADT on local roads (%)
			Pre-Acquisition	Post-Acquisition	
Bellevue	Erie	A	0	65	0.7-1.5
Columbus-Discovery Park	Franklin	M	131	184	0.2-8.8
Toledo	Lucas	D-N	104	141	0.2-1.0

• N = Nonattainment, M = Maintenance, A = Attainment, D-N = Deemed Nonattainment.

The increases in air emissions resulting from the increases in traffic or activity are estimated in the Impact Analysis by County section. Even though air emissions would be increased in the immediate vicinity of these rail facilities, however, other rail facilities in Ohio (and in other states served by CSX and NS) would experience decreases in traffic or activity and decreases in localized air emissions.

The required analysis, presented in this section, quantifies the increased emissions in each county for line segments with increases in traffic that meet STB thresholds. These counties will also experience offsets in emissions from traffic reductions on other rail lines and on highways. These emissions offsets within counties have not been quantified.

In Ohio, numerous trains will be rerouted from rail lines on which they currently operate to other nearby lines. In the Cleveland area in particular, many trains will be rerouted from lines traversing Cuyahoga, Lorain, and other counties to other lines traversing the same counties. The offsetting emissions reductions in Ohio and particularly in Cuyahoga and Lorain counties associated with such rerouting are expected to be substantial. Accordingly, the emissions analysis in this section significantly overstates local impacts. CSX and NS will work with the STB's environmental staff to more fully analyze the offsetting impacts.

In addition, the diversion of freight from trucks to rail would result in reduced air emissions in the vicinity of major highways. Moreover, because trains emit a lower level of air pollutants per

unit of freight moved than trucks, the diversion of freight from trucks to rail would also result in reduced air emissions systemwide.

18.1.1 Impact Analysis by County

This section analyzes the impacts to air quality in each county where a rail line segment, rail yard or intermodal facility meets the STB thresholds for analysis of air emissions. If a rail line segment crosses the county boundary, only the emissions from that portion of the segment within the county are estimated. Counties that are only partially nonattainment were evaluated to determine if any CSX, NS or Conrail rail facilities are in the nonattainment portion of the county. If any CSX, NS or Conrail rail facilities are in the nonattainment portion, the county was deemed nonattainment. If no CSX, NS or Conrail rail facilities are in the nonattainment portion, the county was deemed attainment. Counties that are nonattainment or were deemed nonattainment are discussed first, followed by counties that are maintenance or have maintenance areas and then counties that are attainment or were deemed attainment areas.

18.1.1.1 Nonattainment Areas

In Ohio, seven counties classified as nonattainment areas have rail line segments, rail yard and intermodal facility that would experience increases in traffic or activity that would meet STB thresholds.

18.1.1.1.1 *Butler County, OH*

Butler County is classified as nonattainment (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Butler County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Cincinnati, OH	Hamilton, OH	21	4.5	29.2	32.2	3.0	16

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Butler County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Cincinnati, OH	Hamilton, OH	15.5	1.7	0.6	1.0	0.4	0.000033

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Mill, OH	Dayton, OH	42.00	19.31	11.0	19.0	8.0	47

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Butler County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Mill, OH	Dayton, OH	79.40	8.82	2.94	5.14	2.00	0.00017

• Nox = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Butler County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Butler County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.1.2 Cuyahoga County, OH

Cuyahoga County is classified as nonattainment (moderate) for PM-10, maintenance (moderate) for ozone and maintenance for CO. Part of Cuyahoga County is also nonattainment for SO₂. Some of the rail line segments associated with the proposed Acquisition pass through the part of the county that is nonattainment for SO₂. Increases in emissions have been estimated for each of the rail facilities in Cuyahoga County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Ashtabula, OH	Quaker, OH	46.5	7.2	50.3	56.2	11.9	5
Berea, OH	Greenwich, OH	42	3.4	14.5	54.2	39.7	250
Marcy, OH	Short, OH	8.8	8.8	16.4	45.8	29.4	267
Mayfield, OH	Marcy, OH	3.3	3.3	3.4	43.8	40.4	933
Quaker, OH	Mayfield, OH	5.8	5.8	6.8	43.8	37.0	933
Short, OH	Berea, OH	4	4.0	13.4	47.3	33.9	578

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of CSX Rail Line Segments in Cuyahoga County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Ashtabula, OH	Quaker, OH	14.1	1.6	0.5	0.9	0.4	0.00003
Berea, OH	Greenwich, OH	102.4	11.4	3.8	6.6	2.6	0.00022
Marcy, OH	Short, OH	238.1	26.4	8.8	15.4	6.0	0.0005
Mayfield, OH	Marcy, OH	108.0	12.0	4.0	7.0	2.7	0.00023
Quaker, OH	Mayfield, OH	189.8	21.1	7.0	12.3	4.8	0.0004
Short, OH	Berea, OH	135.0	15.0	5.0	8.8	3.4	0.00029
Total		787.4	87.5	29.1	51.0	19.9	0.0017

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Cleveland, OH	Ashtabula, OH	57.00	14.77	13.0	35.5	22.5	259
Cleveland, OH	Shortline Jct, OH	7.00	7.00	2.0	2.0	-	>1,000
Vermilion, OH	Cleveland, OH	37.10	13.37	13.5	37.8	24.3	183
White OH	Cleveland OH	11.00	11.00	14.5	28.8	14.3	91

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segments in Cuyahoga County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Cleveland, OH	Ashtabula, OH	277.70	30.84	10.30	17.99	7.01	0.00059
Cleveland, OH	Shortline Jct, OH	87.70	9.68	3.23	5.65	2.20	0.0000028
Vermilion, OH	Cleveland, OH	254.36	28.25	9.43	16.48	6.42	0.00054
White OH	Cleveland OH	98.53	10.94	3.65	6.38	2.49	0.00021
Total		717.79	79.71	26.61	46.5	18.12	0.0013

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide
PM = particulate matter, Pb = lead

Discussion of Impacts in Cuyahoga County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Cuyahoga County would result in increased levels of all pollutants, with the greatest increase in NOx.

Numberous trains in Cuyahoga County are simply being rerouted from one line to another line within the county. For example, CSX's operating plan contemplates shifting 40 trains per day off of a line that is currently one of Conrail's primary routes through Cuyahoga County and that

is within several miles of the line sustaining the bulk of CSX's increase in the county. These and other traffic changes would result in one line segment with traffic increases, which are analyzed, and line segments with traffic decreases, which were not analyzed. The analysis and increases presented above overstate the overall impact within Cuyahoga County. As noted above, CSX and NS will work with the STB's environmental staff to more fully analyze the offsetting impacts.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.1.3 Hamilton County, OH

Hamilton County is classified as nonattainment (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Hamilton County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Cincinnati, OH	Hamilton, OH	21	16.5	29.2	32.2	3.0	16

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Hamilton County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Cincinnati, OH	Hamilton, OH	56.9	6.3	2.1	3.7	1.4	0.00012

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Ivorydale, OH	Cincinnati RH, OH	6.00	6.00	33.9	38.6	4.7	30
Mill, OH	Dayton, OH	42.00	3.50	11.0	19.0	8.0	47

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segments in Hamilton County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Ivorydale, OH	Cincinnati RH, OH	35.70	3.96	1.32	2.31	0.90	0.00005
Mill, OH	Dayton, OH	14.41	1.60	0.53	0.93	0.36	0.00003
Total		50.11	5.56	1.85	3.24	1.26	0.00008

•NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Hamilton County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Hamilton County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.1.4 Lake County, OH

Lake County is deemed nonattainment for SO₂. Lake County is also classified as maintenance (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Lake County that would experience an increase in traffic or activity that meets STE thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Ashtabula, OH	Quaker, OH	46.5	28.0	50.3	56.2	5.9	5

• GTM = Gross Ton Miles

Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Lake County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Ashtabula, OH	Quaker, OH	54.8	6.1	2.0	3.6	1.4	0.00012

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Cleveland, OH	Ashtabula, OH	57.00	29.61	13.0	35.5	22.5	259

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Lake County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Cleveland, OH	Ashtabula, OH	556.55	61.81	20.63	36.06	14.05	0.0018
• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide, PM = particulate matter, Pb = lead							

Discussion of Impacts in Lake County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Lake County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.1.5 Lorain County, OH

Lorain County is deemed nonattainment for SO₂. Lorain County is also classified as maintenance (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Lorain County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Acquisition	Change	
Berea, OH	Greenwich, OH	42	27.1	14.5	54.2	39.7	250
• GTM = Gross Ton Miles							

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Lorain County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Berea, OH	Greenwich, OH	816.6	90.7	30.3	52.9	20.6	0.0017
<ul style="list-style-type: none"> • NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead 							

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Acquisition	Change	
Vermilion, OH	Cleveland, OH	37.10	21.20	13.5	37.8	24.3	183
<ul style="list-style-type: none"> • GTM = Gross Ton Miles 							

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Lorain County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Vermilion, OH	Cleveland, OH	403.12	44.77	14.95	26.12	10.18	0.00086
<ul style="list-style-type: none"> • NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead 							

Discussion of Impacts in Lorain County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Lorain County would result in increased levels of all pollutants, with the greatest increase in NOx.

Numerous trains in Lorain County are simply being rerouted from one line to another line within the county. For example, CSX's operating plan contemplates shifting onto the CSX line segment

between Greenwich and Berea approximately 30 trains per day from one of Conrail's main lines that traverses Lorain County and that will be acquired by NS. These and other traffic changes would result in line segments with traffic increases, which were analyzed, and line segments with traffic decreases, which were not analyzed. The analysis presented above overstates the overall impact within Lorain County. As noted above, CSX and NS will work with the STB's environmental staff to more fully analyze the offsetting impacts.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.1.6 Lucas County, OH

Lucas County is deemed nonattainment for SO₂. Lucas County is also classified as maintenance (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Lucas County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Carleton, MI	Toledo, OH	16.5	4.8	21.9	33.1	11.2	61

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Lucas County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Carleton, MI	Toledo, OH	45.7	5.1	1.7	3.0	1.2	0.000097
<ul style="list-style-type: none"> • NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead 							

Estimated Increases in Emissions for CSX Rail Yard

Rail Yard	Estimated Increases in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Stanley	22.8	2.8	1.3	1.0	0.5	0.000033
<ul style="list-style-type: none"> • NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead 						

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Acquisition	Change	
Martin, OH	Miami, OH	11.00	6.31	51.0	60.7	9.7	9
<ul style="list-style-type: none"> • GTM = Gross Ton Miles 							

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Lucas County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Martin, OH	Miami, OH	22.32	2.48	0.83	1.45	0.56	0.000047
<ul style="list-style-type: none"> • NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead 							

Estimated Increases in Emissions for NS Rail Yards

Rail Yard	Estimated Increases in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Airline	24.32	2.95	1.35	1.07	0.50	0.000035
Homestead	6.69	0.81	0.37	0.30	0.14	0.0000097
Total	31.01	3.76	1.72	1.37	0.64	0.000045

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Estimated Increases in Emissions for NS Intermodal Facility

Intermodal Facility	Estimated Increases in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Toledo	0.95	1.69	0.23	0.23	0.44	0.000018

• Nox = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Lucas County

Rail line segments, rail yards and intermodal facilities are considered mobile (not stationary) sources under EPA's air pollution regulations. As discussed in Section 1.2.1, emissions from activities at rail yards and intermodal facilities in maintenance areas were compared to the New Source Review benchmark for maintenance areas (i.e., 100 tons per year). None of the facilities' emissions increases would exceed the New Source Review Criteria.

The increased rail segment activity in Lucas County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.1.7 Warren County, OH

Warren County is classified as nonattainment (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Warren County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Mill, OH	Dayton, OH	42.00	3.68	11.0	19.0	8.0	47

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Warren County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Mill, OH	Dayton, OH	15.14	1.68	0.56	0.98	0.38	0.00003

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Warren County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Warren County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.2 Maintenance Areas

In Ohio, seven counties that have rail line segments, rail yard and intermodal facility that would experience increases in traffic or activity that would meet STB thresholds are solely classified as maintenance areas. They are discussed in this section. Four counties in Ohio are classified as both nonattainment and maintenance, these counties were discussed under section 18.1.1.1.

18.1.1.2.1 Ashtabula County, OH

Ashtabula County is classified as maintenance (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Ashtabula County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Ashtabula, OH	Buffalo, NY	127.00	14.99	13.0	25.2	12.2	121
Cleveland, OH	Ashtabula, OH	57.00	12.62	13.0	35.5	22.5	259
Youngstown, OH	Ashtabula, OH	59.00	29.27	11.7	22.9	11.2	91

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segments in Ashtabula County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Ashtabula, OH	Buffalo, NY	128.00	14.22	4.75	8.29	3.23	0.00027
Cleveland, OH	Ashtabula, OH	237.15	26.34	8.79	15.37	5.99	0.00050
Youngstown, OH	Ashtabula, OH	322.85	35.85	11.97	20.92	8.15	0.00068
Total		688.0	76.41	25.51	44.58	17.37	0.0015

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Estimated Increases in Emissions for NS Rail Yard

Rail Yard	Estimated Increases in Emissions (tons per year)					
	NO _x	CO	VOC	SO ₂	PM	Pb
Conneaut	2.06	0.25	0.11	0.09	0.04	0.000003
• NO _x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide, PM = particulate matter, Pb = lead						

Discussion of Impacts in Ashtabula County

Rail line segments, rail yards and intermodal facilities are considered mobile (not stationary) sources under EPA's air pollution regulations. As discussed in Section 1.2.1, emissions from activities at rail yards in maintenance areas were compared to the New Source Review benchmark for maintenance areas (i.e., 100 tons per year). None of the facilities' emissions increases would exceed the New Source Review Criteria.

The increased rail segment activity in Ashtabula County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.2.2 Delaware County, OH

Delaware is classified as maintenance (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Delaware County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Marion, OH	Fostoria, OH	40	9.8	17.8	27.4	9.6	56

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of CSX Rail Line Segment in Delaware County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Marion, OH	Fostoria, OH	85.9	9.5	3.2	5.6	2.2	0.00018

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Bucyrus, OH	Fairgrounds Col, OH	61.00	22.89	26.0	34.3	8.3	41

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segment in Delaware County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bucyrus, OH	Fairgrounds Col, OH	199.39	22.14	7.39	12.92	5.03	0.00042

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

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Discussion of Impacts in Delaware County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Delaware County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.2.3 Franklin County, OH

Franklin County is classified as maintenance (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Franklin County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Marion, OH	Fostoria, OH	40	5.4	17.8	27.4	9.6	56

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Franklin County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Marion, OH	Fostoria, OH	47.4	5.3	1.8	3.1	1.2	0.0001

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Bucyrus, OH	Fairgrounds Col, OH	61.00	8.86	26.0	34.3	8.3	41

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segment in Franklin County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bucyrus, OH	Fairgrounds Col, OH	77.21	8.57	2.86	5.00	1.95	0.00016

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Estimated Increases in Emissions for NS Intermodal Facility

Intermodal Facility	Estimated Increases in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Columbus-Discovery Park	1.34	2.43	0.33	0.34	0.63	0.000026

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Franklin County

Rail line segments, rail yards and intermodal facilities are considered mobile (not stationary) sources under EPA's air pollution regulations. As discussed in Section 1.2.1, emissions from activities at intermodal facilities in maintenance areas were compared to the New Source Review benchmark for maintenance areas (i.e., 100 tons per year). None of the facilities' emissions increases would exceed the New Source Review Criteria.

The increased rail segment activity in Franklin County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.2.4 Mahoning County, OH

Mahoning County is classified as maintenance (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Mahoning County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Youngstown, OH	Ashtabula, OH	59.00	3.43	11.7	22.9	11.2	91

•GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Mahoning County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Youngstown, OH	Ashtabula, OH	37.79	4.20	1.40	2.45	0.95	0.00008

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide
PM = particulate matter, Pb = lead

Discussion of Impacts in Mahoning County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution

regulations. The increased rail segment activity in Mahoning County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.2.5 *Montgomery County, OH*

Montgomery County is classified as maintenance (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Montgomery County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Mill, OH	Dayton, OH	42.00	15.50	11.0	19.0	8.0	47

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Montgomery County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Mill, OH	Dayton, OH	63.75	7.08	2.36	4.13	1.61	0.00003

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Montgomery County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution

regulations. The increased rail segment activity in Montgomery County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.2.6 Trumbull County, Ohio

Trumbull County is classified as maintenance (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Trumbull County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Youngstown, OH	Ashtabula, OH	59.00	26.31	11.7	22.9	11.2	91

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segment in Trumbull County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Youngstown, OH	Ashtabula, OH	290.19	32.23	10.76	18.80	7.33	0.00061

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Trumbull County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution

regulations. The increased rail segment activity in Trumbull County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.2.7 Wood County, OH

Wood County is classified as maintenance (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Wood County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Deshler, OH	Toledo, OH	36	29.9	0.6	14.2	13.6	1000*
Carleton, MI	Toledo, OH	16.5	0.04	21.9	33.1	11.2	61
Marion, OH	Fostoria, OH	40	1.6	17.8	27.4	9.6	56

• GTM = Gross Ton Miles
 • *Because of the low pre-Acquisition activity, the change in GTM is not meaningful.

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segments in Wood County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Deshler, OH	Toledo, OH	575.4	63.9	21.3	37.2	14.5	0.0012
Carleton, MI	Toledo, OH	0.4	0.04	0.01	0.02	0.01	0.00000079
Marion, OH	Fostoria, OH	13.9	1.5	0.5	0.9	0.3	0.000029
Total		589.7	65.4	21.8	38.2	14.8	0.0012

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Change	Change	
Martin, OH	Miami, OH	11.00	4.69	51.0	60.7	9.7	9

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Wood County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Martin, OH	Miami, OH	16.60	1.84	0.52	1.08	0.42	0.000035

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Wood County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Wood County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3 Attainment Areas

In Ohio, fifteen counties classified as attainment areas have rail line segments and an intermodal facility that would experience increases in traffic or activity that meet STB thresholds.

18.1.1.3.1 Allen County, OH

Allen County is classified as attainment for all pollutants. Increases in emissions have been estimated for each of the rail facilities in Allen County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Bucyrus, OH	Adams, IN	113.5	25.7	5.9	13.9	8.0	412

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion CSX of Rail Line Segment in Allen County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bucyrus, OH	Adams, IN	151.7	16.8	5.6	9.8	3.8	0.00032

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Allen County

The increased rail activities in Allen County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.2 Crawford County, OH

Crawford County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Crawford County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Bucyrus, OH	Adams, IN	113.5	7.2	5.9	13.9	8.0	412
Crestline, OH	Bucyrus, OH	11.9	11.9	6.5	14.5	8.0	417
Greenwich, OH	Crestline, OH	21.2	1.8	14.5	31.3	16.8	88

• GTM = Gross Ton Miles
 • * Because of the low pre-Acquisition activity, the change in GTM is not meaningful.

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segments in Crawford County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bucyrus, OH	Adams, IN	42.5	4.7	1.6	2.8	1.1	0.00009
Crestline, OH	Bucyrus, OH	70.9	7.9	2.6	4.6	1.8	0.00015
Greenwich, OH	Crestline, OH	19.3	2.1	0.7	1.3	0.5	0.000041
Total		132.7	14.7	4.9	8.7	3.4	0.00028

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Change	Change	
Bellevue, OH	Bucyrus, OH	34.00	13.25	26.0	34.6	8.6	40
Bucyrus, OH	Fairgrounds Col, OH	61.00	8.68	26.0	34.3	8.3	41

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segments in Crawford County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bellevue, OH	Bucyrus, OH	112.57	12.50	4.17	7.29	2.84	0.00024
Bucyrus, OH	Fairgrounds Col, OH	75.60	8.40	2.80	4.90	1.91	0.00016
Total		188.17	20.9	6.97	12.19	4.75	0.0004

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Crawford County

The increased rail activities in Crawford County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.3 Defiance County, OH

Defiance County is classified as attainment for all pollutants. Increases in emissions have been estimated for each of the rail facilities in Defiance County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Deshler, OH	Willow Creek, IN	174	30.6	23.4	49.7	26.3	111

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Defiance County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Deshler, OH	Willow Creek, IN	588.7	65.4	21.8	38.1	14.9	0.0012

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Defiance County

The increased rail activities in Defiance County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.4 Erie County, OH

Erie County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Erie County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Bellevue, OH	Vermilion, OH	26.00	24.29	15.5	31.8	16.3	79
Vermilion, OH	Cleveland, OH	37.10	2.53	13.5	37.8	24.3	183

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segments in Erie County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Bellevue, OH	Vermilion, OH	216.16	24.01	8.01	14.01	5.46	0.00046
Vermilion, OH	Cleveland, OH	48.11	5.34	1.78	3.12	1.21	0.00010
Total		264.27	29.35	9.79	17.13	6.57	0.00056

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide
PM = particulate matter, Pb = lead

Estimated Increases in Emissions for NS Intermodal Facility

Intermodal Facility	Estimated Increases in Emissions (tons per year)					
	NO _x	CO	VOC	SO ₂	PM	Pb
Bellevue	0.80	1.43	0.19	0.08	0.30	0.000015

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide,
PM = particulate matter, Pb = lead

Discussion of Impacts in Erie County

The increased rail activities in Erie County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.5 Hancock County, OH

Hancock County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Hancock County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Marion, OH	Fostoria, OH	40	0.1	17.8	27.4	9.6	56

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of CSX Rail Line Segment in Hancock County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Marion, OH	Fostoria, OH	0.9	0.1	0.03	0.1	0.02	0.0000019

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter. Pb = lead

Discussion of Impacts in Hancock County

The increased rail activities in Hancock County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.6 Hardin County, OH

Hardin County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Hardin County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Bucyrus, OH	Adams, IN	113.5	20.4	5.9	13.9	8.0	412
Marion, OH	Ridgeway, OH	23.2	8.8	16.1	31.8	15.7	31

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of CSX Rail Line Segments in Hardin County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bucyrus, OH	Adams, IN	120.1	13.3	4.5	7.8	3.0	0.00025
Marion, OH	Ridgeway, OH	41.7	4.6	1.5	2.7	1.1	0.000088
Total		161.8	17.9	6.0	10.5	4.1	0.00034

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Hardin County

The increased rail activities in Hardin County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.7 Henry County, OH

Henry County is classified as attainment for all pollutants. Increases in emissions have been estimated for each of the rail facilities in Henry County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Deshler, OH	Toledo, OH	36	6.1	0.6	14.2	13.6	>1000*
Deshler, OH	Willow Creek, IN	174	18.6	23.4	49.7	26.3	111

• GTM = Gross Ton Miles
 • *Because of the low pre-Acquisition activity, the change in GTM is not meaningful.

Estimated Increases in Emissions for the Portion of CSX Rail Line Segments in Henry County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Deshler, OH	Toledo, OH	116.6	12.9	4.3	7.6	2.9	0.00025
Deshler, OH	Willow Creek, IN	357.7	39.7	13.3	23.2	9.0	0.00076
Total		474.3	52.6	17.6	30.8	11.9	0.001

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Henry County

The increased rail activities in Henry County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.8 Huron County, OH

Huron County is an attainment area. Increases in emissions have been estimated for each of the

rail facilities in Huron County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Berea, OH	Greenwich, OH	42	11.6	14.5	54.2	39.7	250
Greenwich, OH	Crestline, OH	21.2	4.0	14.5	31.3	16.8	88
Greenwich, OH	Willard, OH	11.6	11.6	34.5	57.2	22.7	96
Willard, OH	Fostoria, OH	36.8	5.2	34.5	56.0	21.5	97

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of CSX Rail Line Segments in Huron County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Berea, OH	Greenwich, OH	348.7	38.7	12.9	22.6	8.8	0.00074
Greenwich, OH	Crestline, OH	42.9	4.8	1.6	2.8	1.1	0.000091
Greenwich, OH	Willard, OH	242.4	26.9	9.0	15.7	6.1	0.00051
Willard, OH	Fostoria, OH	123.0	13.7	4.6	8.0	3.1	0.00026
Total		757.0	84.1	28.1	49.1	19.1	0.0016

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Bellevue, OH	Bucyrus, OH	34.00	0.59	26.0	34.6	8.6	40
Bellevue, OH	Vermilion, OH	26.00	1.71	15.5	31.8	16.3	79
Oak Harbor, OH	Bellevue, OH	27.00	0.10	7.7	27.2	19.5	179

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of NS Rail Line Segments in Huron County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bellevue, OH	Bucyrus, OH	5.04	0.56	0.19	0.33	0.13	0.00001
Bellevue, OH	Vermilion, OH	15.19	1.69	0.56	0.98	0.38	0.000032
Oak Harbor, OH	Bellevue, OH	1.11	0.12	0.04	0.07	0.03	0.0000024
Total		21.34	2.37	0.79	1.38	0.54	0.000044

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide
PM = particulate matter, Pb = lead

Discussion of Impacts in Huron County

The increased rail activities in Huron County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.9 Marion County, OH

Marion County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Marion County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Marion, OH	Fostoria, OH	40	8.2	17.8	27.4	9.6	56
Marion, OH	Ridgeway, OH	23.2	14.4	16.1	31.8	15.7	31

• GTM = Gross Ton Miles

Estimated Increases in Emissions for the Portion of CSX Rail Line Segments in Marion County

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Marion, OH	Fostoria, OH	72.3	8.0	2.7	4.7	1.8	0.00015
Marion, OH	Ridgeway, OH	68.8	7.6	2.6	4.5	1.7	0.00015
Total		141.1	15.6	5.3	9.2	3.5	0.0003

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Bucyrus, OH	Fairgrounds, Col OH	61.00	20.56	26.0	34.3	8.3	41

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Marion County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Bucyrus, OH	Fairgrounds Col, OH	179.10	19.89	6.64	11.61	4.52	0.00038
• NO _x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compound, SO ₂ = sulfur dioxide PM = particulate matter, Pb = lead							

Discussion of Impacts in Marion County

The increased rail activities in Marion County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.10 Ottawa County, OH

Ottawa County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Ottawa County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Change	Change	
Oak Harbor, OH	Bellevue, OH	12.00	4.29	7.7	27.2	19.5	179
• GTM = Gross Ton Miles							

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segments in Ottawa County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Oak Harbor, OH	Bellevue, OH	49.42	5.49	1.83	3.20	1.25	0.00011
• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide PM = particulate matter, Pb = lead							

Discussion of Impacts in Ottawa County

The increased rail activities in Ottawa County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.11 Richland County, OH

Richland County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Richland County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Change	Change	
Greenwich, OH	Crestline, OH	21.2	15.4	14.5	31.3	16.8	88
• GTM = Gross Ton Miles							

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Richland County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Greenwich, OH	Crestline, OH	163.6	18.2	6.1	10.6	4.1	0.00035
• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide, PM = particulate matter. Pb = lead							

Discussion of Impacts in Richland County

The increased rail activities in Richland County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.12 Sandusky County, OH

Sandusky County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Sandusky County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Bellevue, OH	Bucyrus, OH	34.00	0.79	26.0	34.6	8.6	40
Oak Harbor, OH	Bellevue, OH	27.00	22.61	7.7	27.2	19.5	179
• GTM = Gross Ton Miles							

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segments in Sandusky County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bellevue, OH	Bucyrus, OH	6.75	0.75	0.25	0.44	0.17	0.000014
Oak Harbor, OH	Bellevue, OH	260.32	28.91	9.65	16.87	6.57	0.00055
Total		267.07	29.66	9.9	17.31	6.74	0.00056

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide
PM = particulate matter. Pb = lead

Discussion of Impacts in Sandusky County

The increased rail activities in Sandusky County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.13 Seneca County, OH

Seneca County is an attainment area. Increases in emissions have been estimated for each of the rail facilities in Seneca County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Willard, OH	Fostoria, OH	36.8	31.0	34.5	56.0	21.5	97
Marion, OH	Fostoria, OH	40.0	5.3	17.8	27.4	9.6	56

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segments in Seneca County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Willard, OH	Fostoria, OH	651.9	72.4	24.2	42.2	16.5	0.0014
Marion, OH	Fostoria, OH	46.2	5.1	1.7	3.0	1.2	0.000098
Total		698.1	77.5	25.9	45.2	17.7	0.0015

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Acquisition	Change	
Bellevue, OH	Bucyrus, OH	34.00	19.36	26.0	34.6	8.6	40

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of NS Rail Line Segment in Seneca County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NO _x	CO	VOC	SO ₂	PM	Pb
Bellevue, OH	Bucyrus, OH	164.54	18.27	6.10	10.66	4.15	0.00035

• NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Seneca County

The increased rail activities in Seneca County would result in increased levels of all pollutants, with the greatest increase in NO_x.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.14 Van Wert County, OH

Van Wert County is classified as attainment. Increases in emissions have been estimated for each of the rail facilities in Van Wert County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Bucyrus, OH	Adams, IN	113.5	25.4	5.9	13.9	8.0	412

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segment in Van Wert County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bucyrus, OH	Adams, IN	149.8	16.6	5.6	9.7	3.8	0.00032

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Van Wert County

The increased rail activities in Van Wert County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.1.1.3.15 Wyandot County, OH

Wyandot County is classified attainment. Increases in emissions have been estimated for each of the rail facilities in Wyandot County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Bucyrus, OH	Adams, IN	113.5	20.1	5.9	13.9	8.0	412
Marion, OH	Fostoria, OH	40	9.6	17.8	27.4	9.6	56

• GTM = Gross Ton Miles

**Estimated Increases in Emissions
for the Portion of CSX Rail Line Segments in Wyandot County**

Rail Line Segment		Estimated Increases in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Bucyrus, OH	Adams, IN	118.4	13.2	4.4	7.7	3.0	0.00025
Marion, OH	Fostoria, OH	84.5	9.4	3.1	5.5	2.1	0.00018
Total		202.9	22.6	7.5	13.2	5.1	0.00043

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Wyandot County

The increased rail activities in Wyandot County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

18.2 NOISE IMPACTS

The CSX and NS rail line segments, rail yards and/or intermodal facilities that would experience increases in traffic or activity meeting the STB thresholds for noise analysis (see Table 1-2) are listed below. Traffic increases on some rail facilities in Ohio would meet STB's thresholds for noise analysis. Analyses were performed to identify where the noise level would increase by 2 dBA or greater and be above 65 dBA. In areas that would experience such an increase, noise-sensitive receptors within the pre-Acquisition and post-Acquisition 65 dBA Ldn contour were counted. The number of noise-sensitive receptors (residences, schools, churches, hospitals) is provided. If a rail line segment crosses state boundaries, the portion of the segment in each state is analyzed under the same segment name in the noise section of that state.

CSX Rail Line Segments

Segment		Trains Per Day			Change in dBA	Distance to Ldn Contour	
From	To	Pre-Acquisition	Post-Acquisition	Difference		Line Segment	Grade Crossing
Greenwich, OH	Willard, OH	34.5*	57.2*	22.7	2.3	530	1500
Willard, OH	Fostoria, OH	34.5*	56.0*	21.5	2.2	520	1450
Deshler, OH	Willow Creek, IN	23.4*	49.7*	26.3	3.5	480	1340
Deshler, OH	Toledo, OH	0.6	14.2	13.6	13.7	220	600
Marion, OH	Fostoria, OH	17.8	27.4	9.6	< 2 dBA	--	---
Marion, OH	Ridgeway, OH	16.1	31.8	15.7	3.0	370	1000
Quaker, OH	Mayfield, OH	6.8	43.8	37.0	8.1	480	1240

CSX Rail Line Segments

Segment		Trains Per Day			Change in dBA	Distance to Ldn Contour	
From	To	Pre-Acquisition	Post-Acquisition	Difference		Line Segment	Grade Crossing
Mayfield, OH	Marcy, OH	3.4	43.8	40.4	11.1	450	1240
Marcy, OH	Short, OH	16.4	45.8	29.4	4.5	460	1300
Short, OH	Berea, OH	13.4	47.3	33.9	5.5	470	1300
Berea, OH	Greenwich, OH	14.5	54.2	39.7	5.7	500	1400
Greenwich, OH	Crestline, OH	14.5	31.3	16.8	3.3	360	1000
Crestline, OH	Bucyrus, OH	6.5	14.5	8.0	3.5	220	600
Bucyrus, OH	Adams, IN	5.9	13.9	8.0	3.7	220	600

* Includes 2.0 passenger trains per day. -- = Not applicable

Greenwich, OH to Willard, OH

This line segment begins to the northeast of Greenwich and runs west for approximately 11.6 miles to a connection in Willard. The line currently has an average volume of 32.5 freight and 2.0 passenger trains per day. The post-Acquisition projections are an increase of 22.7 freight trains per day on this line, which would result in an Ldn increase of 2.3 dBA. The majority of the noise impacts would occur at or near grade crossings where train horns are sounded approximately 1/4 mile before each crossing. The Ldn 65 contour would increase from 380 feet to 530 feet along track segments away from grade crossings and would increase from 1050 feet to 1500 feet near grade crossings.

Greenwich

The line begins to the northwest of the city and runs west along the northern edge of Greenwich. The land use is a mix of single family residences and a couple of large industrial parks. There is one school in the community. There are a series of grade crossings within the city limits.

Boughtonville

The line continues west, passing to the north of this lightly populated community. There is one grade crossing and the majority of the population is shielded by two large grain elevators that about the line.

Willard

Willard is the terminus of this line segment. It runs through the center of a well populated portion of the city to the northeast of the central business district. There are three successive grade crossings within the city limits. The line ends at a large rail yard that lies to the northwest of the city.

Number of Sensitive Receptors: Greenwich, OH to Willard, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hosp.	Resid.	School	Church	Hosp.
285	0	0	0	391	1	0	0

Willard, OH to Fostoria

This line segment starts to the north and west of the city of Willard. It runs west for approximately 36.8 miles through a series of small to medium sized cities and towns to the terminus in Fostoria. The line currently has an average volume of 32.5 freight and 2.0 passenger trains per day. After the Acquisition, the volume of freight trains is projected to increase by 21.5 trains per day, which would result in an Ldn increase of 2.2 dBA. The majority of the noise impacts would occur at or near grade crossings where train horns are sounded approximately 1/4 mile before each crossing. The Ldn 65 contour would increase from 380 feet to 520 feet along track segments away from grade crossings and would increase from 1050 feet to 1450 feet near grade crossings.

Willard

This line segment begins in the Willard rail yard and heads west. As it travels west, there are several residential areas south of the line.

Attica Junction/Siam

The next population center along this line segment are the two communities of Attica Junction and Siam. Attica Junction lies to the immediate north of the line while Siam is to the immediate south. There is one grade crossing and some single family residences located in the community.

Republic

The track approaches Republic from the southeast and passes through the south side of the central business district. The land use near the tracks is primarily single family residential. There is one grade crossing within the city limits. A large grain elevator that is north side of the tracks provides partial acoustic shielding for many of the residences.

Tiffin

The line runs through the center of the Tiffin, over the Sandusky River and out to the west. There are four schools in the vicinity of the line segment. There are four grade crossings within the city limits. There is light manufacturing on both the west and east sides of town. The majority of the land use between these two areas is residential.

Bascom

Bascom is a lightly populated small town with one grade crossing. The land use abutting the track on the western side of town is commercial with a series of grain silos providing partial acoustic shielding.

Fostoria

The line segment ends in Fostoria. The land use is a mix of light manufacturing facilities, commercial establishments and residential. There are a series of grade crossings as the line goes through the center of the town. There are two schools in the community.

Number of Sensitive Receptors: Willard, OH to Fostoria, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hosp.	Resid.	School	Church	Hosp.
1136	6	3	0	1458	8	3	0

Deshler, OH to Willow Creek, IN

This rail segment starts at the Willow Creek junction in Portage, IN and runs to Deshler, OH. Only the Ohio portion of this line segment is discussed here. The remainder of the segment is

discussed in the chapter on Indiana. The line runs east from the Indiana-Ohio border through a number of small towns to the junction in Deshler. This line currently has an average of 21.4 freight and 2.0 passenger trains per day. As a result of the Acquisition, this segment would experience an increase of 26.3 trains per day. The change in train volume would result in an Ldn increase of approximately 3.5 dBA. The majority of the noise impacts would occur at or near grade crossings where train horns are sounded approximately 1/4 mile before each crossing. The 65 dBA Ldn contour would increase from 300 feet to 480 feet along track segments away from grade crossings and would increase from 800 feet to 1340 feet near grade crossings.

Hicksville

The tracks pass through the northern part of Hicksville, the first town on the Ohio section of this line segment. This town is primarily single family residential with a large commercial/industrial area adjacent to the tracks in the central to eastern part of the town. The rest of the town is residential. There is one church in the community and no schools. The tracks are elevated through the entire town with no at-grade crossings.

Mark Center

Mark Center is a small residential community to the east of Hicksville centered around a single grade crossing. The tracks run through the northern part of the community. There is a small commercial area to the north of the tracks, the rest of the town is residential. There is one church in the community.

Sherwood

Sherwood is a small residential community centered around a single grade crossing. The tracks run through the center of the town. There is a small commercial area to the north of the tracks, the rest of the town is residential with two churches.

The Bend

This is a very small residential community just to the east of Sherwood. There are scattered single family residences and no commercial area. There is one church near the tracks. There is

one grade crossing in The Bend.

Defiance

This is the largest town along this section of the track. The tracks run east to west through the south-central part of the town. There are five grade crossings in Defiance. There are large industrial areas to the east and west of the town, the area on the eastern end of town is dominated by a General Motors facility. There are some large commercial and industrial areas in the center of town. The remainder of the town is single family residential. There are two churches and one school in the section of the town that the tracks pass through.

Standley

Standley is the next town along the alignment. This is a small group of residences clustered around a single grade crossing. There are a couple of grain elevators in the town, but no other buildings aside from the single family residences.

Holgate

The next town along the line segment is Holgate. The tracks pass through the center of the town where there are three grade crossings. The community is primarily single family residential, with a small commercial area to the north of the tracks. There are two churches and no schools in the area surrounding the tracks.

Hamler

The tracks go through the northern part Hamler with three grade crossings. There are commercial areas to the north and south of the tracks in the center of the town. The rest of the town is single family residential with one school and two churches near the tracks.

Deshler

Deshler is the final community along this line segment. The tracks come into the town from the west and the segment ends at the connection to the north-south line that also runs through the town. The area to the north of the tracks is mainly commercial, but the rest of the town in this

area is single family residential. There are two churches near the tracks and only one grade crossing before the connection with the north-south line.

Number of Sensitive Receptors: Willow Creek, IN to Deshler, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hosp.	Resid.	School	Church	Hosp.
661	1	6	0	1137	2	13	0

Deshler, OH to Toledo, OH

This rail segment starts at the junction in Deshler, OH and runs north to the yard just to the south of Toledo. This line currently carries an average of 0.6 trains per day. As a result of the Acquisition, this segment would experience an increase of 13.6 trains per day, which would result in an Ldn increase of 13.7 dBA. The majority of the noise impacts would occur at or near grade crossings where train horns are sounded approximately 1/4 mile before each crossing. The Ldn 65 contour would increase from 30 feet to 220 feet along track segments near grade crossings and would increase from 70 feet to 600 feet near grade crossings.

Deshler

The line segment starts at the junction in south Deshler and runs to the north. This part of the town is primarily residential, with a small commercial area on the northern edge of town. There are four grade crossings in this section of town. There are four churches in the area surrounding the tracks.

Custar

Custar is a small residential community to the north of Deshler with only scattered residences and a few commercial buildings to the west of the tracks. The tracks run south to north through the center of town. There are two grade crossings in Custar and only one church near the tracks.

Milton Center

Milton Center is similar in size to Custar, but the residences are more widely scattered. There are four grade crossings in Milton Center, and only one church. The town is composed of only

single family residences.

Weston

Weston is a larger town than the previous two, and has a sizable commercial area in the southeastern part of town. The tracks run through the center of town from south to north with two grade crossings. The town is primarily residential and there are two churches near the tracks.

Tontogany

The next community north along the tracks is Tontogany. The tracks run from south to north through the center of town. There are six grade crossings in Tontogany, and one church near the tracks. The town is composed of mainly single family residences. There is a small commercial area west of the tracks in the southern part of town.

Haskins

The line runs from south to north through the eastern edge of the Haskins. The community is mainly single family residential, with a small commercial area near the tracks. There are three grade crossings in Haskins, and one church located near the tracks.

Roachton

Roachton is a small collection of single family residences to the south of I-475. There is one grade crossing in the area. There are no commercial or industrial buildings near the tracks, and there are no schools or churches.

Perrysburg

Perrysburg is a southern suburb of Toledo. The town is located between I-475 and the Ohio Turnpike. The tracks run from south to northeast through the center of town. There are 16 grade crossings in Perrysburg. This is a large town, with many single family residences. There is also a large commercial area to the southeast of the tracks in the center of the town. Both ends of the town consist of scattered residences, and there are three churches located near the tracks.

Rossford

Rossford, the final town along the alignment, is located south of Toledo just north of the Ohio Turnpike. The line segment ends at the Harris Yard next to the Maumee River. There are five grade crossings as the tracks pass through the middle of Rossford. The southern part of the town is mainly scattered residences, many of which are near the river. Toward the northern end of the town, and the end of the alignment, the residences are much closer together. To the north of the tracks, there are a number of two story apartment buildings. There are no churches or schools located near the tracks in Rossford.

Number of Sensitive Receptors: Deshler, OH to Toledo, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hosp.	Resid.	School	Church	Hosp.
128	0	0	0	1409	0	14	0

Marion, OH to Fostoria, OH

This rail segment, which currently has a volume of 17.8 trains per day, would experience an increase of 9.6 trains per day as a result of the proposed Acquisition. The projected increase in train volume on this segment would cause less than a 2 dBA increase in the Ldn. No adverse noise impacts are expected.

Marion, OH to Ridgeway, OH

This line segment starts at the connection in west Marion. It runs west through several small towns to a connection just to the east of Ridgeway. This line currently has 16.1 trains per day. As a result of the Acquisition, the segment is projected to experience an average increase of 15.7 trains per day. The change in train volume would result in an Ldn increase of 3.0 dBA. The majority of the noise impacts would occur at or near grade crossings where train horns are sounded approximately 1/4 mile before each crossing. The Ldn 65 contour would increase from 250 feet to 370 feet along track segments away from grade crossings and would increase from 640 feet to 1000 feet near grade crossings.

Marion

The line runs through west Marion heading to the west. There are many single family residences north of the tracks around the beginning of the line segment. The land use north of the tracks is more industrial after this, and there is a residential area to the south of the tracks. There is one church, two schools, and two grade crossings in Marion. Some of the residences to the south of the tracks are partially shielded from train noise by industrial buildings.

New Bloomington

The first town to the west of Marion is New Bloomington. The alignment runs east-west through the center of town. There is a trailer park to the south of the tracks at the eastern edge of the town. Most of the remainder of the town to the west of that is residential, with a small business area to the south of the tracks. Other noise sensitive land use includes one church and one school. There are three grade crossings in New Bloomington.

La Rue

La Rue is a small community with the tracks passing through the center of town. There are two grade crossings in La Rue, along with four churches and two schools near the tracks. There are some small businesses to the south of the tracks, but the remainder of the town is single family residences.

Mount Victory

Mount Victory is similar to La Rue. There are five grade crossings, one church, and one school in the town. There is a business area on both sides of the tracks in the center of the town, and the rest of the community is single family residences.

Ridgeway

Ridgeway is the final community along this line segment. The tracks run to the north of the town. There is one grade crossing with three schools and three churches. There is a small business area near the tracks at the north end of Ridgeway, the rest of the town is residential. The rail segment ends just east of Ridgeway.

Number of Sensitive Receptors: Marion, OH to Ridgeway, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hosp.	Resid.	School	Church	Hosp.
299	0	2	0	509	2	6	0

Quaker, OH to Mayfield, OH

The Quaker, OH to Mayfield, OH line segment runs west through Cleveland beginning at the Collinwood Yard and continuing to the Mayfield connection. This line segment currently runs 6.8 trains per day. The line is projected to experience an average increase of 37.0 trains per day as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 8.1 dBA. The Ldn 65 contour would increase from 140 feet to 360 feet along track segments away from grade crossings and would increase from 450 feet to 1240 feet near grade crossings.

Cleveland

The Quaker-Mayfield line runs west starting at the Collinwood Yard. The area surrounding the yard is mainly industrial with some single family homes. After Collinwood Yard, the line turns to the south. Some commercial and industrial land use is located near the line, however, heavily populated residential land use dominates the area. There are also two churches and one school are located in the community. Since the rail line is elevated when crossing roads, there are no grade crossings.

Number of Sensitive Receptors: Quaker, OH to Mayfield, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hospital	Resid.	School	Church	Hospital
169	0	0	0	420	1	2	0

Mayfield, OH to Marcy, OH

The Mayfield-Marcy line segment runs south through Cleveland following from the previous Quaker-Mayfield line. The line segment currently runs 3.4 trains per day.. The line would experience an increase of 40.4 trains per day as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 11.1 dBA, exceeding the STB's threshold for

noise analysis. The Ldn 65 contour would increase from 100 feet to 450 feet along track segments away from grade crossings and would increase from 230 feet to 1240 feet near grade crossings.

Cleveland

The Mayfield-Marcy line segment first passes through residential areas before reaching Case Western Reserve University. After passing the university, the line angles west with residential land use on the north and industrial land use on the south. The line then turns to the south passing through industrial land use on the west and residential land use on the east. Finally, the line curves to the west with residential land use dominating as the line meets the Marcy connection. There are a total of two churches, two schools, and no grade crossings in this community.

Number of Sensitive Receptors: Mayfield, OH to Marcy, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hospital	Resid.	School	Church	Hospital
97	1	0	0	313	2	2	0

Marcy, OH to Short, OH

This line runs through the Cleveland communities of Brooklyn Heights, Cuyahoga Heights, and Brooklyn. The current train volume on this line segment currently is an average of 16.4 trains per day. The line is projected to experience an increase of 29.4 trains per day as a result of the proposed Acquisition, which would result in an Ldn increase of 4.5 dBA. The Ldn 65 contour would increase from 250 feet to 460 feet along track segments away from grade crossings and would increase from 650 feet to 1300 feet near grade crossings.

Cleveland

The land use is mainly industrial through Brooklyn Heights and Cuyahoga Heights. In Brooklyn, industrial land use and a trailer park are south of the tracks and residential land use is north of the tracks. The residential land use north of the line is separated from the tracks by I-480 which runs along the rail line from Broadview Road to West 130th Street. There is a noise

barrier along I-480 between Broadview Road and Pearl Road. The highway is the dominant noise source in this area and thus, it and the noise barrier negate the effects of the rail line. There is one church located in the community and no at-grade crossings.

Number of Sensitive Receptors: Marcy, OH to Short, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hospital	Resid.	School	Church	Hospital
10	0	0	0	30	0	1	0

Short, OH to Berea, OH

This line segment begins at the Short connection near Brook Park and runs southwest to the east end of Berea. The current train volume on this line segment is an average of 13.4 trains per day. The line is projected to experience an increase of 33.9 trains per day as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 5.5 dBA. The majority of noise impacts would occur near grade crossings where the horn would be sounded as a warning. The Ldn 65 contour would increase from 200 feet to 470 feet along track segments away from grade crossings and would increase from 550 feet to 1300 feet near grade crossings.

Brook Park

The line segment runs through the northwest corner of Brook Park. The residential community of Brook Park is south of the tracks with commercial and industrial land use north of the tracks. One school, one church, and two grade crossings are in the community.

Berea

The rail line continues southwest of Brook Park until it enters the northeast side of Berea and ends at the Berea connection. The land use northwest of the rail line is industrial, while the land use southwest of the line is both industrial and residential. One church and two grade crossings are located in the community.

Number of Sensitive Receptors: Short, OH to Berea, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hospital	Resid.	School	Church	Hospital
275	0	0	0	814	1	4	0

Berea, OH to Greenwich, OH

This line segment begins at the Berea connection in the northeast corner of Berea. The line runs southwest through the towns of West View, Eaton, Grafton, Lagrange, Wellington, Rochester, and New London, before ending at the Greenwich connection. The current train volume on this line segment is 14.5 trains per day. The line is projected to experience an increase of 39.7 trains per day as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 5.7 dBA. The current 65 dBA Ldn contour of 200 ft would extend to approximately 500 feet. The majority of impacts would occur at or near grade crossings where train horns would be sounded as a warning. Near grade crossings the current 65 dBA Ldn contour of 600 ft would extend to approximately 1400 feet.

Berea

The line segment begins in the northwest corner of Berea and passes through the northern part of the town. This town is mainly residential with some industrial land use. There is one church and one grade crossing in Berea.

West View

The rail line passes through the small town of West View. Residential land use dominates this town. No churches or schools are within the 65 dBA Ldn contour. There are four grade crossings in West View and the surrounding area.

Eaton

Eaton is a very small, mostly residential town. One church and four grade crossings are found in the community.

Grafton

The rail line continues running southwest as it passes through the predominately residential town of Grafton. Two churches, three schools, and four grade crossings are located in Grafton and the surrounding area.

Lagrange

Lagrange is a small residential town. Three churches, one school, and five grade crossings are found in the community.

Wellington

The rail line passes through Wellington and the surrounding areas. Wellington is a larger, mainly residential town. Some commercial land use can be found on both sides of the rail line. There are three churches and six grade crossings in the community.

Rochester

Rochester is a very small, residential town. Three churches and four grade crossings are along the rail line surrounding Rochester.

New London

The line passes through New London before it ends at the Greenwich connection. New London is primarily residential with a few commercial buildings. Two churches and eight grade crossings are along the line between New London and Greenwich.

Number of Sensitive Receptors: Berea, OH to Greenwich, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hospital	Resid.	School	Church	Hospital
705	2	6	0	1713	5	14	0

Greenwich, OH to Crestline, OH

This line segment begins at the Greenwich connection and continues southwest to Crestline. The line also passes through the small towns of Shiloh, Shelby, and Vernon Junction. The line

segment currently runs 14.5 trains per day. The line would experience an increase of 16.8 trains per day as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 3.3 dBA. The current 65 dBA Ldn contour of 250 ft would extend to approximately 400 feet. The majority of impacts would occur at or near grade crossings where train horns would be sounded as a warning. Near grade crossings the current 65 dBA Ldn contour of 600 ft would extend to approximately 1000 feet.

Greenwich

The Greenwich connection starts in the northwest corner of the town of Greenwich. This is a small, residential town with one school and one church. There are five grade crossings in the town of Greenwich and the surrounding areas.

Shiloh

The rail line passes through the small town of Shiloh where three schools and one church are located. Five grade crossings are in Shiloh and the outlying areas. Residential land use dominates in this area.

Shelby

Shelby is a larger town with mostly residential land use. Some commercial and industrial land use is also located in this area. Three churches are within the 65 dBA Ldn contour. There are six grade crossings in and around Shelby.

Vernon Junction

The rail line continues running southwest passing through Vernon Junction. This is a small residential community. No schools or churches are located in this area. There are three grade crossings in and around the town of Vernon Junction.

Crestline

The line ends in the town of Crestline. The land use is primarily residential with some commercial land use near the rail line. One church, no schools, and five grade crossings are in

Crestline and the nearby area.

Number of Sensitive Receptors: Greenwich, OH to Crestline, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hospital	Resid.	School	Church	Hospital
525	2	4	0	841	4	6	0

Crestline, OH to Bucyrus, OH

The Crestline to Bucyrus line segment begins at the Conrail yard in the southern part of Crestline, then runs west to a junction in the town of Bucyrus. Train volume on this line is currently an average of 6.5 trains per day. This is expected to increase to 14.5 trains per day after the Acquisition. The increase of 8 trains per day would result in a 3.5 dBA increase in the Ldn. The majority of the noise impacts would occur at or near grade crossings where train horns are sounded approximately 1/4 mile before each crossing. The Ldn 65 contour would increase from 140 feet to 220 feet along track segments away from grade crossings, and would increase from 350 feet to 600 feet near grade crossings.

Crestline

The line begins at a yard at the southern edge of Crestline. The land use near the segment is mostly residential on the north and south sides of the track, with some commercial land use near the center of town. There is one church located near the segment in Crestline. There are four grade crossings along the segment in Crestline.

North Robinson

The segment next runs through the small community of North Robinson. The segment runs east-west, through the center of town. There are single family homes near the segment, as well as one church. There is one grade crossing in North Robinson, located in the center of town.

Bucyrus

The segment ends in Bucyrus at a junction just east of the center of town. Most of the land use near the segment is residential along both sides of the track, with some industrial land use at the

eastern edge of town. There is one grade crossing along this segment in Bucyrus.

Number of Sensitive Receptors: Crestline, OH to Bucyrus, OH Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hosp.	Resid.	School	Church	Hosp.
96	0	0	0	199	0	2	0

Bucyrus, OH to Adams, IN

This line segment starts at a junction in the center of Bucyrus. The line runs west to Convoy near the Ohio/Indiana border and the line continues into Indiana. Presently there are 5.9 trains per day on this segment, which is projected to increase to 13.9 trains per day with post-acquisition operations. This increase in volume will result in a 3.7 dBA rise in Ldn along the segment. The majority of the noise impacts would occur at or near grade crossings where train horns are sounded approximately 1/4 mile before each crossing. The 65 dBA Ldn contour is currently 130 feet along segments away from grade crossings and 330 feet near crossings. The contour distance will increase to 220 feet away from grade crossings and 600 feet near grade crossings.

Bucyrus

The line begins just east of the center of town in Bucyrus near a railroad junction. The line runs east-west through the town and passes near several residential areas. There are three grade crossings along the line, located on the western part of the town.

Nevada

The segment passes through the center of Nevada. Almost all of the land use along the tracks is residential, except for a few commercial buildings at the very center of town. There are three grade crossings in Nevada.

Upper Sandusky

Land use along the eastern and western edges of Upper Sandusky is mostly commercial. Dense

residential areas are located north and south of the tracks near the center of town. There is also a trailer park and one church north of the tracks near the center of town. There are seven grade crossings in Upper Sandusky.

Kirby

The alignment runs east-west through the small community of Kirby. Nearly all the residences in Kirby are located north of the tracks. A few residences are located south of the track, but are partially shielded by commercial buildings. There is one grade crossing in Kirby at the center of town.

Forest

There are residential areas in Forest along the tracks on the eastern and western parts of town with homes located on both sides of the tracks. There are also residences at the center of town that are shielded by commercial buildings. There are five grade crossings in Forests, as well as one church and one school near the tracks.

Dunkirk

Except for a few commercial buildings at the center of Dunkirk, land use near the track is almost entirely residential on both sides of the tracks. There is one church at the eastern edge of the town. There are five grade crossings in Dunkirk.

Dola

Dola is a small community located about 2 miles west of Dunkirk. The tracks pass through the northern part of the town. Residences are located on both sides of the alignment throughout the community, with some commercial land use near the center of town and two churches south of the tracks. There are two grade crossings on the eastern part of the town.

Liberty

The alignment passes east-west through the town of Liberty. The tracks run near a trailer park located south of the tracks at the eastern edge of town. Most of the land use north of the track is

residential, with the exception of some commercial buildings at the center of town. There are three grade crossing located at the center of town, as well as one church in the community.

Lafayette

The segment runs through Lafayette with single family residences north and south of the alignment. There are also scattered residences north and south of the tracks just east of the town line. There are three grade crossings in Lafayette near the center of town.

Bath

Bath is a suburb of Lima located east of Lima. All of the residential land use is south of the alignment. There are four grade crossings in Bath.

Lima

The segments enters Lima from the east and passes through the northern part of the city. As the line approaches the Ottawa River, it passes near some single family residences that are south of the tracks. After the line crosses the Ottawa River it runs through a residential area with residences located on both sides of the tracks. About halfway through the city, the segment turns to the northwest and continues to pass close residences located on both sides of the track. As the line passes through the northwest portion of the city, industrial buildings start to separate the residential land uses from the track. There are still single family residences located relatively close to the alignment on the south of the tracks. Three churches are located near the tracks along the eastern part of the alignment. The segment exits the city to the northwest. There are six grade crossings in Lima.

Elida

Elida is a suburb of Lima. The line enters the city from the southeast. A major road parallels the line to the north, and the land use is primarily commercial. To the south of the line, there are a series of new housing developments in the vicinity of the tracks. There is one church in the vicinity of the track.

Scott's Crossing

The line crosses Scott's Crossing from the southeast. The community consists of scattered residences. There are a couple of grade crossings in Scott's Crossing.

Delphos

The line runs through Delphos from the east of the city. The eastern portion of the city is primarily commercial. The land use to the west of the city is primarily residential. There are nine grade crossings along the length of the line as it passes through the city. There is one school located in the community.

Middlepoint

The line runs through Middlepoint from the east. Middlepoint is primarily residential. There are three grade crossings in the city. Some of the residences to the north of the tracks are partially shielded by a row of commercial buildings.

Van Wert

The line runs through Van Wert from the southeast of the city. It goes through the central business district which is primarily zoned commercial. There are a series of grade crossings along the length of the line as it passes through the city. There are five churches in the vicinity of the tracks.

Convoy

The line runs through Convoy from the southeast. There are primarily commercial establishments abutting the line. There are three grade crossings within the city limits. Commercial buildings provide some acoustic shielding near the grade crossings. Land use beyond the center of town is primarily single family residential.

Number of Sensitive Receptors: Bucyrus, OH to Adams, IN Line Segment

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hosp.	Resid.	School	Church	Hosp.
757	0	2	0	1663	2	19	1

NS Rail Line Segments

Segment		Trains Per Day			Change in dBA	Distance to Ldn Contour	
From	To	Pre-Acquisition	Post-Acquisition	Difference		Line Segment	Grade Crossing
Ashtabula, OH	Buffalo, NY	13.0	25.2	12.2	2.8	200	550
Bellevue, OH	Bucyrus, OH	26.0	34.6	8.6	< 2 dBA	250	650
Bellevue, OH	Vermilion, OH	15.5	31.8	16.3	3.1	200	600
Bucyrus, OH	Fairgrounds, OH	26.0	34.3	8.3	< 2 dBA	250	650
Cleveland, OH	Ashtabula, OH	13.0	35.5	22.5	4.3	250	650
Cleveland, OH	Shortline Jct, OH	2.0	2.0	-	< 2 dBA	50	100
Martin, OH	Miami, OH	51.0	60.7	9.7	< 2 dBA	250	750
Mill, OH	Dayton, OH	11.0	19.0	8.0	2.4	150	450
Oak Harbor, OH	Bellevue, OH	7.7	27.2	19.5	5.4	200	550
Vermilion, OH	Cleveland, OH	13.5	37.8	24.3	4.4	250	650
White, OH	Cleveland, OH	14.5	28.8	14.3	2.9	200	600
Youngstown, OH	Ashtabula, OH	11.7	22.9	11.2	2.9	150	500

Ashtabula, OH to Buffalo, NY

This rail segment currently has 13.00 trains per day, would experience an increase of 12.18 trains per day and an increase of 121.33 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 2.8 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 176 grade crossings are on this segment. The current 65 dBA Ldn contour of 150 feet (200 feet at grade crossings) would extend to approximately 350 feet (550 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Ashtabula

This is a mid-sized community where the southwest to northeast-trending track is near the center

of the city. Numerous residences and businesses occur on both sides of the rail. Schools are also located in the community.

Kingsville

This is a small community with residences just south of the southwest to northeast-trending track.

Amboy

This is a small community with residences just south of the southwest to northeast-trending track.

Conneaut

This is a mid-sized community where the west- to east-trending track is in the south part of the city. Numerous residences and businesses occur on both sides of the rail. Schools and churches are also located in the community.

**Number of Sensitive Receptors
Ashtabula, OH to Buffalo, NY Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
1,641	1	4	0	2,400	8	8	0
• represents only noise-sensitive receptors in Ohio							

Bellevue, OH to Bucyrus, OH

This rail segment currently has 25.99 trains per day. The segment would experience an increase of 8.56 trains per day (a 39.85 percent change in gross ton-miles per year) as a result of the proposed Acquisition. The projected increases in train volume and gross ton-miles on this segment would cause less than a 2 dBA increase in the Ldn. No adverse noise impacts are expected.

Bellevue, OH to Vermilion, OH

This rail segment currently has 15.52 trains per day, would experience an increase of 16.31 trains per day and an increase of 79.07 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 3.1 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 47 grade crossings are on this segment. The current 65 dBA Ldn contour of 150 feet (200 feet at grade crossings) would extend to approximately 400 feet (600 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Bellevue

This is a mid-sized community where the southwest to northeast-trending track is near the center of the city. Numerous residences, businesses and industries occur on both sides of the rail. Schools and churches are also located in the community.

Lyme

This is an extremely small community with only a few residences south of the southwest to northeast-trending track.

Kimball

This is a small community of residences where the track trends southwest to northeast along the south edge of this community.

Avery

This is an extremely small community with only a few residences on both sides of the east to west-trending track.

Shinrock

This is an extremely small community with only a few residences on both sides of the east to west-trending track.

Berlin Heights Station

This is a small community with only a few residences on both sides of the east to west-trending track.

Ashmont

This is an extremely small community with only a few residences on both sides of the northeast to southwest-trending track.

Vermilion

This is a mid-sized community where the east to west-trending track is near the south part of the city. Numerous residences, businesses and industries occur on both sides of the rail. Schools and churches are also located in the community.

**Number of Sensitive Receptors
Bellevue, OH to Vermilion, OH Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
59	0	1	0	108	0	1	0

Bucyrus, OH to Fairgrounds, OH

This rail segment currently has 25.99 trains per day. The segment would experience an increase of 8.30 trains per day (a 41.36 percent change in gross ton-miles per year) as a result of the proposed Acquisition. The projected increases in train volume and gross ton-miles on this segment would cause less than a 2 dBA increase in the Ldn. No adverse noise impacts are expected.

Cleveland, OH to Ashtabula, OH

This rail segment currently has 13.00 trains per day, would experience an increase of 22.46 trains per day and an increase of 259.35 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 4.3 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns

would be sounded as a warning; 69 grade crossings are on this segment. The current 65 dBA Ldn contour of 150 feet (250 feet at grade crossings) would extend to approximately 350 feet (650 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Greater Cleveland Metropolitan Area

This is a large metropolitan area where the northeast- to southwest-trending track trends from the north to the south part of the city. The rail is surrounded by numerous residences, businesses and industries. Schools and churches are also located in the community.

Perry

This is a small community where the west to east-trending track trends along the north edge of this community. There are residences and businesses located in the community.

Madison

This is a small community where the west to east-trending track trends along the south edge of this community. There are residences and businesses located in the community.

Ashtabula

This is a mid-sized community where the southwest to northeast-trending track is near the center of the city. Numerous residences and businesses occur on both sides of the rail. Churches are also located in the community.

**Number of Sensitive Receptors
Cleveland, OH to Ashtabula, OH Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
620	1	6	0	1,515	3	1	0

Cleveland, OH to Shortline Junction, OH

This rail segment currently has 2.00 trains per day. It would experience an increase in train

traffic of 10.60 trains per day and would have an increase of greater than 1,000 percent in gross ton-miles per year as a result of the proposed Acquisition. The train volume would not increase. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; no grade crossings are on this segment. The current 65 dBA Ldn contour of 50 feet (50 feet at grade crossings) would extend to approximately 100 feet (100 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Greater Cleveland Metropolitan Area

This is a large metropolitan area where the track is near the center of the city. The track is surrounded by numerous residences, businesses and industries. Schools and churches are also located in the community.

**Number of Sensitive Receptors
Cleveland, OH to Shortline Junction, OH Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
0	0	0	0	21	0	0	0

Martin, OH to Miami, OH

This rail segment currently has 51.00 trains per day. The segment would experience an increase of 9.69 trains per day (a 9.25 percent change in gross ton-miles per year) as a result of the proposed Acquisition. The projected increases in train volume and gross ton-miles on this segment would cause less than a 1 dBA increase in the Ldn. No adverse noise impacts are expected.

Mill, OH to Dayton, OH

This rail segment currently has 10.95 trains per day, would experience an increase of 8.04 trains per day and an increase of 46.80 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 2.4 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns

would be sounded as a warning; 46 grade crossings are on this segment. The current 65 dBA Ldn contour of 100 feet (150 feet at grade crossings) would extend to approximately 300 feet (450 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Greater Cincinnati Metropolitan Area

Numerous residences, businesses and industries are on both sides of the north-trending track. Schools and churches are also located in the community.

Maud

This is a small community with residences and churches. The north-trending track passes through the center of the town.

Hughes

This is a small community with residences and businesses east of the north-trending track. Schools and churches are also located in the community.

Kyles

This is an extremely small community where the north-trending track passes through the center of town. Residences are on both sides of the track.

Middletown

This is a mid-sized community where the north-trending track is on the city's northeast side. Residences, businesses and industries primarily are on the southwest side of the rail. Schools and churches are located in the community.

Carlisle

This is a small community where the northeast-trending track passes along the southeast edge of the town. Most residences, businesses, schools and churches are to the east of the track.

Charlatauqua

This is a small community where the north-trending track is on the west edge of the town. Most residences, businesses, schools and churches are to the east of the track.

Miamisburg

This is a mid-sized community with residences, businesses, industries, schools and churches on both sides of the north-trending track.

West Carrollton

This is a mid-sized community with residences, businesses, industries, schools and churches on both sides of the northeast-trending track.

Greater Dayton Metropolitan Area

This is a large metropolitan area with numerous residences, businesses, industries, schools and churches on both sides of the north/northeast-trending track.

**Number of Sensitive Receptors
Mill, OH to Dayton, OH Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
586	1	0	0	923	2	1	0

Oak Harbor, OH to Bellevue, OH

This rail segment currently has 7.69 trains per day, would experience an increase of 19.51 trains per day and an increase of 179.32 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 5.4 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 73 grade crossings are on this segment. The current 65 dBA Ldn contour of 100 feet (200 feet at grade crossings) would extend to approximately 300 feet (550 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Oak Harbor

This is a mid-sized community where the south to north-trending track is near the center of the city. Numerous residences, businesses and industries occur on both sides of the rail. Schools and churches are located in the community.

Kingsway

This is an extremely small community with only a few residences surrounding the northeast to southwest-trending track.

Fremont

This is a mid-sized community where the north to south-trending track is near the center of the city. Numerous residences, businesses and industries occur on both sides of the rail. Schools and churches are also located in the community.

Clyde

This is a mid-sized community where the west to southeast-trending track is in the north part of the city. Numerous residences and businesses occur on both sides of the rail. Schools and churches are also located in the community.

Bellevue

This is a mid-sized community where the west to southeast-trending track is in the southeast part of the city. Numerous residences and businesses occur on both sides of the rail. Schools and churches are also located in the community.

**Number of Sensitive Receptors
Oak Harbor, OH to Bellevue, OH Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
159	0	0	0	321	2	3	0

Vermilion, OH to Cleveland, OH

This rail segment currently has 13.46 trains per day, would experience an increase of 24.33 trains per day and an increase of 183.45 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 4.4 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 69 grade crossings are on this segment. The current 65 dBA Ldn contour of 150 feet (250 feet at grade crossings) would extend to approximately 350 feet (650 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Vermilion

This is a mid-sized community where the east to west-trending track is in the south part of the city. Numerous residences and businesses occur on both sides of the rail. Schools and churches are also located in the community.

Oak Point

This is an extremely small community with only a few residences on both sides of the east to west-trending track.

Lorain

This is a mid-sized community where the east to west-trending track is near the center of the city. Numerous residences and businesses occur on both sides of the rail. Schools and churches are also located in the community.

Folger

This is an extremely small community with only a few residences on both sides of the east to west-trending track.

Lakewood

This is a mid-sized community where the east to west-trending track is in the north part of the city. Numerous residences and businesses occur on both sides of the rail. Schools and churches

are also located close to the rail.

Greater Cleveland Metropolitan Area

This is a large metropolitan area where the east to west-trending track is near the center of the city and surrounded by numerous residences, businesses and industries. Schools and churches are also located in the community.

**Number of Sensitive Receptors
Vermilion, OH to Cleveland, OH Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
1,387	0	1	0	2,276	0	1	0

White, OH to Cleveland, OH

This rail segment currently has 14.49 trains per day, would experience an increase of 14.26 trains per day and an increase of 90.59 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 2.9 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 1 grade crossing is on this segment. The current 65 dBA Ldn contour of 150 feet (200 feet at grade crossings) would extend to approximately 400 feet (600 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Greater Cleveland Metropolitan Area

This is a large metropolitan area where the east to west-trending track is on the city's southeast side. Numerous residences, businesses, industries, schools and churches are located in the community.

**Number of Sensitive Receptors
White, OH to Cleveland, OH Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
28	1	1	0	59	1	1	0

Youngstown, OH to Ashtabula, OH

This rail segment currently has 11.70 trains per day, would experience an increase of 11.38 trains per day and an increase of 90.87 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 2.9 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 41 grade crossings are on this segment. The current 65 dBA Ldn contour of 100 feet (150 feet at grade crossings) would extend to approximately 350 feet (500 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Youngstown

This is a mid-sized community where the south to north-trending track is near the center of the city. Numerous residences, businesses, schools and churches are located in the community. Several grade crossings are in or near this community.

Doughton

This is an extremely small community with only a few residences on both sides of the southwest to northeast-trending track.

Hubbard

This is a small community where the track trends southwest to northeast along the northwest corner of this city. Only residences are in the vicinity of the track.

Coalburg

This is a small community where the track trends south to north west of the city. Only

residences and churches are located in the community.

Latimer

This is a small community where the track trends south to north east of the city. Only residences are in the vicinity of the track.

York

This is an extremely small community with only a few residences east of the south to north-trending track.

Wick

This is an extremely small community with only a few residences east of the south to north-trending track.

Mann

This is an extremely small community with only a few residences on both sides of the south to north-trending track.

South Denmark

This is a small community with only a few residences on both sides of the southeast to northwest-trending track.

Ashtabula

This is a mid-sized community where the track trends southeast to northwest along the southeast edge of the city. Numerous residences, businesses, schools and churches are located in the community.

**Number of Sensitive Receptors
Youngstown, OH to Ashtabula, OH Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
128	0	1	0	210	1	1	0

NS Rail Yards

Rail Yard Location	Rail Cars Handled per Day			Change in dBA at property line	Distance to 65 Ldn contour (feet)
	Pre-Acquisition	Post-Acquisition	Percent Difference		
Airline (Toledo)	0	520	NA	<2 dBA	--
Conneaut	30	74	145	3.9	500

• -- = Not applicable

Airline

This large auto and intermodal rail yard in Toledo, OH currently switches a negligible number of rail cars per day and would experience an average increase of 520 rail cars per day as a result of the proposed Acquisition. However, because the only adjacent residential areas are located south of the yard along the heavily used railroad mainline, the projected increase in yard activity would cause less than a 2 dBA increase at the property boundary. Therefore, no adverse noise impacts are expected.

Conneaut

The rail yard in Conneaut, OH currently serves 30 rail cars per day. The rail yard would experience an increase of 44 rail cars per day (a 145 percent increase in activity) as a result of the proposed Acquisition. The increase in activity would result in an Ldn increase of 3.9 dBA at the property boundary. The current 65 dBA Ldn contour (290 feet outside the property boundary) would extend to approximately 500 feet outside the property boundary.

There is a rail yard located on the west side of Conneaut, OH, just south of Lake Erie near the Pennsylvania line. The major noise source associated with the yard is switching that occurs at the east end of the yard. The switching operations often extend across the grade crossing at Chestnut Street, accompanied by horn noise. The noise from switching operations primarily affects the residential area at the east end of the yard. The noise levels at these residences were estimated based on measurements of comparable switching noise at a grade crossing, indicating

an Ldn of 73 dBA at 100 feet from the tracks with 30 to 40 cars switched per day; the existing and future levels were estimated by scaling this measured level based on the estimated pre- and post-acquisition rail car activity. The resulting numbers of sensitive receptors within the 65 dBA Ldn contour are provided below.

Number of Sensitive Receptors: Conneaut Yard, Conneaut, OH

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
18	0	0	0	36	1	0	0

NS Intermodal Facilities

Intermodal Facility Location	Trucks per Day		Change in ADT on local roads (%)	Intermodal Yard	
	Pre-Acquisition	Post-Acquisition		Change in dBA	Approx. Dist. To 65 dBA Ldn Contour
Bellevue	0	65	U	U	69'
Columbus-Discovery Park	131	184	0.2-8.8	< 2 dBA	--
Toledo	104	141	0.2-1.0	< 2 dBA	--

• U = Background unknown. -- = Not applicable

Bellevue

NS plans to relocate its TCS facility from Crestline, OH to currently owned railroad property by the NS yard in Bellevue, OH. The new TCS facility will be located on Buckeye Street in Bellevue, OH. Truck transportation to the facility is via US-20 and State Route 18. The land use around the facility is predominantly urban residential.

Post-Acquisition, the Bellevue TCS facility is expected to experience up to 65 trucks per day, a 0.7-1.5 percent increase in the ADT on local roads. The activity at the facility is expected to cause an increase in noise levels at the property boundary; these increases cannot be determined. No noise-sensitive receptors would be within the 65 dBA Ldn contour for either pre- or post-

Acquisition conditions.

On Buckeye Street at Bolton, the additional truck traffic for the intermodal facility is not expected to create an increase in noise level of 2 dBA Ldn.

Columbus-Discovery Park

The Columbus facility is on Watkins Road in southeastern Columbus. Truck transportation to the facility is via US-33, State Road 104, New World Drive, Groveport Road and Watkins Road. The land use surrounding this facility is predominantly urban. A rail yard is west of the facility.

Currently, the Columbus intermodal facility serves 131 trucks per day. Post-Acquisition, this facility is expected to experience an increase of 53 trucks per day, a 40 percent increase in the ADT on local roads. The increased activity at the facility is expected to cause an increase in noise levels of < 2 dBA at the property boundary. Therefore, no adverse noise impacts are projected.

On Watkins Road, the additional truck traffic for the intermodal facility is not expected to create an increase in noise level of 2 dBA Ldn.

Toledo

The Toledo facility is on Hill Avenue in eastern Toledo. Truck transportation to the facility is via State Route 2, State Route 65, Broadway and South St. Clair. The land use surrounding this facility is predominantly urban. A rail yard is south of the facility.

Currently, the Toledo intermodal facility serves 104 trucks per day. Post-Acquisition, this facility is expected to experience an increase of 141 trucks per day, a 0.2-1.0 percent increase in the ADT on local roads. The increased activity at the facility is expected to cause an increase in noise levels of < 2 dBa at the property boundary. Therefore, no adverse noise impacts are projected.

On Broadway, the additional truck traffic for the intermodal facility is not expected to create an increase in noise level of 2 dBA Ldn.

18.3 TRANSPORTATION IMPACTS

The primary transportation impacts of the proposed Acquisition are related to additional truck traffic generated at intermodal facilities where intermodal activity is projected to increase. Impacts near intermodal facilities would result from increased truck traffic using local roadways to enter and exit the intermodal facility. For those facilities with an expected increase of 50 trucks or more per day or an increase of 10 percent of the ADT on local roads, the impacts of this increased traffic on the local roadway system were analyzed. Traffic count data were obtained from local and state transportation agencies. While the offsetting benefits of the proposed Acquisition were not quantified at the local level, the traffic impacts from added truck traffic at intermodal facilities would be partially offset in many localities by the significant number of truck-to-rail diversions.

In Ohio three NS intermodal facilities (Bellevue, Columbus-Discovery Park, and Toledo) are expected to experience additional truck traffic of 50 trucks or more per day. However, the additional truck traffic from the three intermodal facilities would not cause adverse impacts on the local transportation system. The specified intermodal facility is discussed below.

Bellevue

NS plans to relocate its TCS facility from Crestline, OH to Bellevue, OH, located on Buckeye Street on existing railroad property. Truck transportation to the facility is via US-20 and State Route 18. Annual Daily Traffic (ADT) for the vicinity was obtained from the Ohio Department of Transportation as follows:

- US-20 - approximately 18,990 vehicles per day
- SR-18 - approximately 8,570 vehicles per day

Traffic counts reported are from data collected between 1989 and 1994 and represent the average count for both directions.

Post-Acquisition, the Bellevue intermodal facility will serve approximately 65 trucks per day. The trucks were assumed to be distributed throughout a 24-hour day. The total daily increase of 130 truck trips represents about a 0.7 percent increase in ADT on US-20 and a 1.5 percent increase in ADT on SR-18. Such small increases in total traffic would have a minor impact on transportation.

Columbus-Discovery Park

The intermodal facility is located on Watkins Road in southeastern Columbus. Truck transportation to the facility is via US-33, State Road 104, New World Drive, Groveport Road and Watkins Road. Annual Daily Traffic (ADT) for the vicinity was obtained from the Ohio Department of Transportation as follows:

- US-33 - approximately 46,790 vehicles per day
- State Route 104 - approximately 30,290 vehicles per day
- New World Drive - approximately 1,200 vehicles per day
- Groveport Road - approximately 14,100 vehicles per day
- Watkins Road - approximately 3,200 vehicles per day

Traffic counts reported are from data collected between 1989 and 1994 and represent the average count for both directions.

Post-Acquisition, the Discovery Park intermodal facility would serve approximately 53 more trucks per day. The trucks were assumed to be distributed throughout a 24-hour day. The total daily increase of 106 truck trips represents about a 0.2 percent increase in ADT on US-33, a 0.3 percent increase in ADT on State Route 104, an 8.8 percent increase in ADT on New World Drive, a 0.7 percent increase in ADT on Groveport Road and a 3.3 percent increase in ADT on Watkins Road. Such small increases in total traffic would have a minor impact on transportation.

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The truck traffic occurring during the peak periods would have a negligible impact on area traffic.

Toledo

The Toledo facility is located on Morris Street in eastern Toledo. Truck transportation to the facility is via State Road 2, State Road 65, Broadway and South St. Clair. Annual Daily Traffic (ADT) for the vicinity was obtained from the Ohio Department of Transportation as follows:

- State Route 2 - approximately 35,900 vehicles per day
- State Route 65 - approximately 23,000 vehicles per day
- Broadway - approximately 11,400 vehicles per day
- South St. Clair Street - approximately 7,600 vehicles per day

Traffic counts reported are from data collected between 1989 and 1994 and represent the average count for both directions.

Post-Acquisition, the Toledo intermodal facility would serve approximately 37 more trucks per day. The trucks were assumed to be distributed throughout a 24-hour day. The total daily increase of 74 truck trips represents about a 0.2 percent increase in ADT on State Route 2, a 0.3 percent increase in ADT on State Route 65, an 0.6 percent increase in ADT on Broadway, and a 1.0 percent increase in ADT on South St. Clair Street. Such small increases in total traffic would have a minor impact on transportation. The truck traffic occurring during the peak periods would have a negligible impact on area traffic.

18.4 SAFETY

Impacts on safety may occur as a result of increased traffic on rail line segments. Safety impacts are primarily related to changes in vehicle delays at grade crossings, the potential for train-vehicle accidents at grade crossings, and hazardous materials transportation. Other safety impacts include train-train accidents, derailments and incidents (releases of hazardous materials).

No significant adverse safety impacts would result from the proposed Acquisition. Safety issues and methodology are discussed in Section 1.2.4 of Part 2 and in Appendix D of Part 1 of this ER.

18.4.1 Grade Crossing Safety

The NS grade crossings with an ADT of 5,000 or greater along analyzed lines are listed below. The estimated change in frequency of accidents for a specific crossing can be determined by identifying the number of trains per day pre- and post-Acquisition the specified line segment (Section 18.1), identifying the ADT of the road crossed by the line segment listed below and, based on the identified information, finding the appropriate cells in Table 1-5 in Section 1.2.4.1.

NS Analyzed Grade Crossings with an ADT of 5,000 or greater

County	City	Rail Line Segment		Road Crossed	ADT	
		To	From		5,000 - 10,000	> 10,000
Ashtabula	Ashtabula	Ashtabula, OH	Cleveland, OH	West Avenue	X	
Ashtabula	Ashtabula	Buffalo, NY	Ashtabula, OH	Main Avenue	X	
Ashtabula	Geneva	Ashtabula, OH	Cleveland, OH	Broadway Avenue	X	
Ashtabula	Kingsville	Buffalo, NY	Ashtabula, OH	Lake Street	X	
Butler	Maud	Dayton, OH	Mill, OH	Tylersville Road		X
Butler	Middletown	Dayton, OH	Mill, OH	Central Street	X	
Butler	Middletown	Dayton, OH	Mill, OH	First Street	X	
Crawford	Bucyrus	Fairgrounds, OH	Bucyrus, OH	Hopley Avenue	X	
Cuyahoga	Bay Village	Cleveland, OH	Vermilion, OH	Columbia Road		X
Cuyahoga	Bay Village	Cleveland, OH	Vermilion, OH	Dover Center Road	X	
Cuyahoga	Bay Village	Cleveland, OH	Vermilion, OH	Bradley Road	X	
Cuyahoga	Cleveland	Ashtabula, OH	Cleveland, OH	London Road	X	
Cuyahoga	Cleveland	Cleveland, OH	Vermilion, OH	West 110th Street	X	
Cuyahoga	Cleveland	Cleveland, OH	Vermilion, OH	West 117th Street		X

NS Analyzed Grade Crossings with an ADT of 5,000 or greater

County	City	Rail Line Segment		Road Crossed	ADT	
		To	From		5,000 - 10,000	> 10,000
Cuyahoga	Euclid	Ashtabula, OH	Cleveland, OH	Dille Road		X
Cuyahoga	Lakewood	Cleveland, OH	Vermilion, OH	Bunts Road	X	
Erie	Vermillion	Vermillion OH	Bellevue, OH	Water Street	X	
Erie	Vermillion	Vermillion, OH	Bellevue, OH	State Street	X	
Franklin	Columbus	Fairgrounds, OH	Bucyrus, OH	Lincoln Avenue	X	
Franklin	Columbus	Fairgrounds, OH	Bucyrus, OH	Weber Road	X	
Hamilton	Lockland	Dayton, OH	Mill, OH	Smalley Road	X	
Hamilton	St. Bernard	Cincinnati RH, OH	Ivorydale, OH	Vine Street	X	
Hamilton	St. Bernard	Cincinnati RH, OH	Ivorydale, OH	Beech Street		X
Hamilton	Sharonville	Dayton, OH	Mill, OH	Hauck Road	X	
Hamilton	Sharonville	Dayton, OH	Mill, OH	Kemper Road	X	
Hamilton	Sharonville	Dayton, OH	Mill, OH	Reading Road		X
Lake	Madison	Ashtabula, OH	Cleveland, OH	Lake Street	X	
Lake	Mentor	Ashtabula, OH	Cleveland, OH	Heisley Road	X	
Lake	Mentor	Ashtabula, OH	Cleveland, OH	Hopkins Road	X	
Lake	Painesville	Ashtabula, OH	Cleveland, OH	Liberty Street	X	
Lake	Painesville	Ashtabula, OH	Cleveland, OH	Chestnut Street	X	
Lake	Painesville	Ashtabula, OH	Cleveland, OH	Mentor Avenue		X
Lake	Painesville	Ashtabula, OH	Cleveland, OH	Jackson Street	X	
Lake	Wickliffe	Ashtabula, OH	Cleveland, OH	Lloyd Road	X	
Lake	Willoughby	Ashtabula, OH	Cleveland, OH	Erie Street	X	
Lake	Willowick	Ashtabula, OH	Cleveland, OH	E. 305 / Rush Rd.	X	
Lorain	Avon	Cleveland, OH	Vermillion, OH	Avon Center Road	X	
Lorain	Avon	Cleveland, OH	Vermillion, OH	Miller Road	X	

NS Analyzed Grade Crossings with an ADT of 5,000 or greater

County	City	Rail Line Segment		Road Crossed	ADT	
		To	From		5,000 - 10,000	> 10,000
Lorain	Lorain	Cleveland, OH	Vermillion, OH	Colorado Avenue	X	
Lorain	Lorain	Cleveland, OH	Vermillion, OH	Oberlin Avenue		X
Lorain	Lorain	Cleveland, OH	Vermillion, OH	Leavitt Road	X	
Lucas	Toledo	Miami, OH	Martin, OH	Oakdale Avenue	X	
Mahoning	Youngstown	Ashtabula, OH	Youngstown, OH	Hubbard Road	X	
Marion	Marion	Fairgrounds, OH	Bucyrus, OH	Silver Street	X	
Marion	Marion	Fairgrounds, OH	Bucyrus, OH	N. Main (SR 4)	X	
Marion	Marion	Fairgrounds, OH	Bucyrus, OH	Barks Street	X	
Marion	Marion	Fairgrounds, OH	Bucyrus, OH	Prospect Street	X	
Marion	Marion	Fairgrounds, OH	Bucyrus, OH	Bellfontaine St.		X
Marion	Marion	Fairgrounds, OH	Bucyrus, OH	Center St. (SR 309)	X	
Montgomery	Dayton	Dayton, OH	Mill, OH	Washington St.	X	
Montgomery	Dayton	Dayton, OH	Mill, OH	W. Steward Ave.	X	
Montgomery	Moraine	Dayton, OH	Mill, OH	Sellars Street		X
Montgomery	West Carrollton	Dayton, OH	Mill, OH	Alex Bell Road		X
Montgomery	West Carrollton	Dayton, OH	Mill, OH	Alex Road		X
Montgomery	West Carrollton	Dayton, OH	Mill, OH	Elm Street	X	
Montgomery	Miamisburg	Dayton, OH	Mill, OH	Central Street		X
Montgomery	Miamisburg	Dayton, OH	Mill, OH	Linden Avenue	X	
Ottawa	Oak Harbor	Bellevue, OH	Oak Harbor, OH	Water Street	X	
Sandusky	Bellevue	Bellevue, OH	Oak Harbor, OH	Kilbourne Street	X	
Sandusky	Clyde	Bellevue, OH	Oak Harbor, OH	Main Street	X	
Sandusky	Fremont	Bellevue, OH	Oak Harbor, OH	State Street		X

NS Analyzed Grade Crossings with an ADT of 5,000 or greater

County	City	Rail Line Segment		Road Crossed	ADT	
		To	From		5,000 - 10,000	> 10,000
Warren	Carlisle	Dayton, OH	Mill, OH	Carlisle Street	X	
Wood	Vickers	Miami, OH	Martin, OH	Drouillard Street	X	

Although the potential for accidents at grade crossings would increase for crossings with increased train traffic, the potential for accidents on interstate highways would decrease because the number of long-haul trucks would decrease. Overall, the Acquisition is expected to have a beneficial effect on safety.

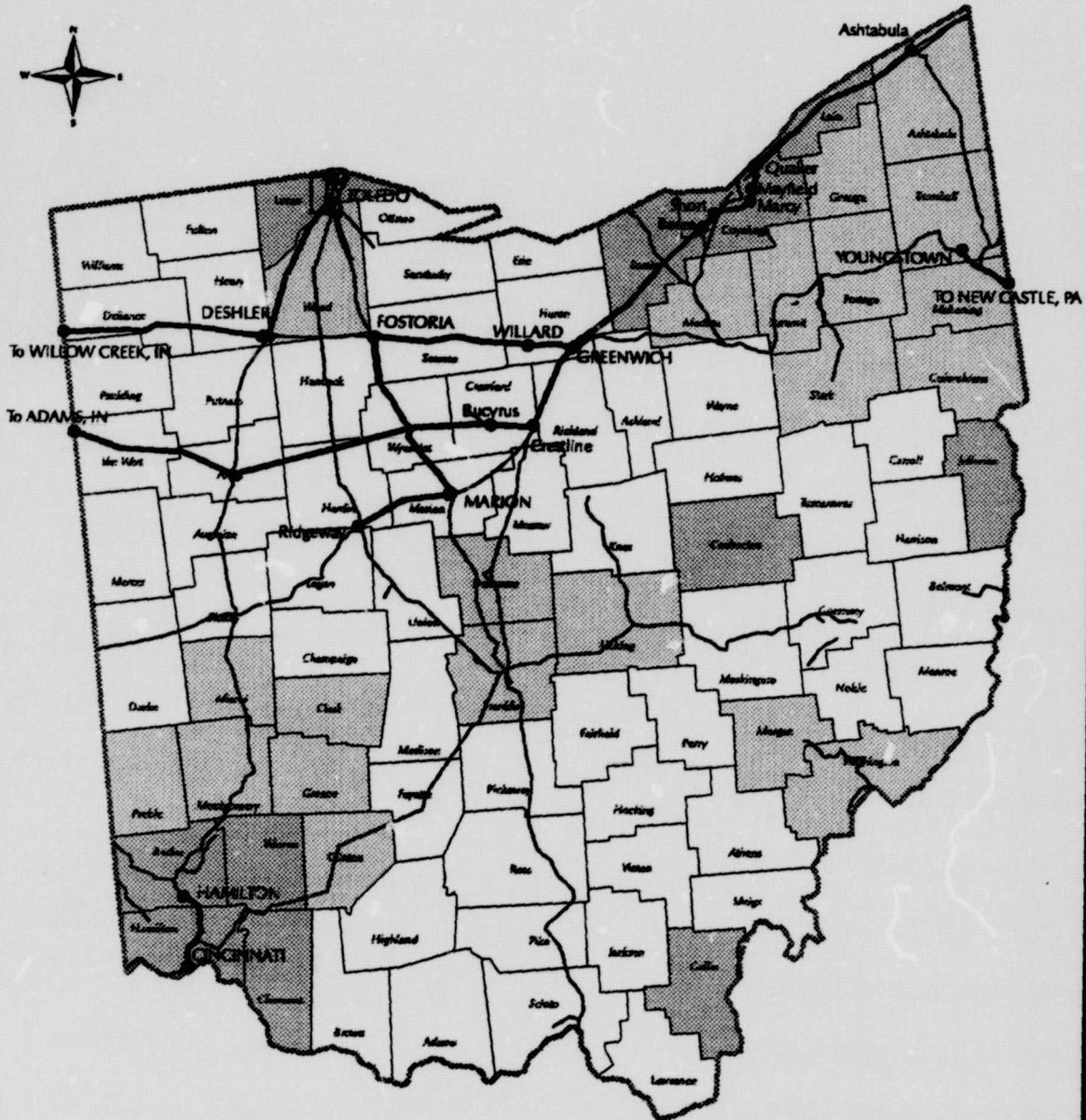
18.4.2 Hazardous Materials Transportation

The proposed Acquisition would not affect the CSX and NS policies or operating procedures governing the transport of hazardous materials. Although the quantities of materials transported may increase, the Acquisition will not affect the type of materials handled or the methods used to ensure the safe movement of these shipments. Additional information on CSX's and NS's transportation of hazardous materials is provided in Section 1.2.4.3 of this Part

18.4.3 Hazardous Waste Sites/Spill Sites on the Right-of-Way

Information on CSX and NS hazardous waste sites and spill sites is provided in Section 1.2.4.4 of this Part. A summary of CSX's, NS's and Conrail's hazardous materials reportable incidents from 1991 through 1995 is provided in Appendix F to Part 1.

CSX RAIL LINE SEGMENTS, RAIL YARDS AND INTERMODAL FACILITIES REQUIRING ENVIRONMENTAL ANALYSIS IN OHIO



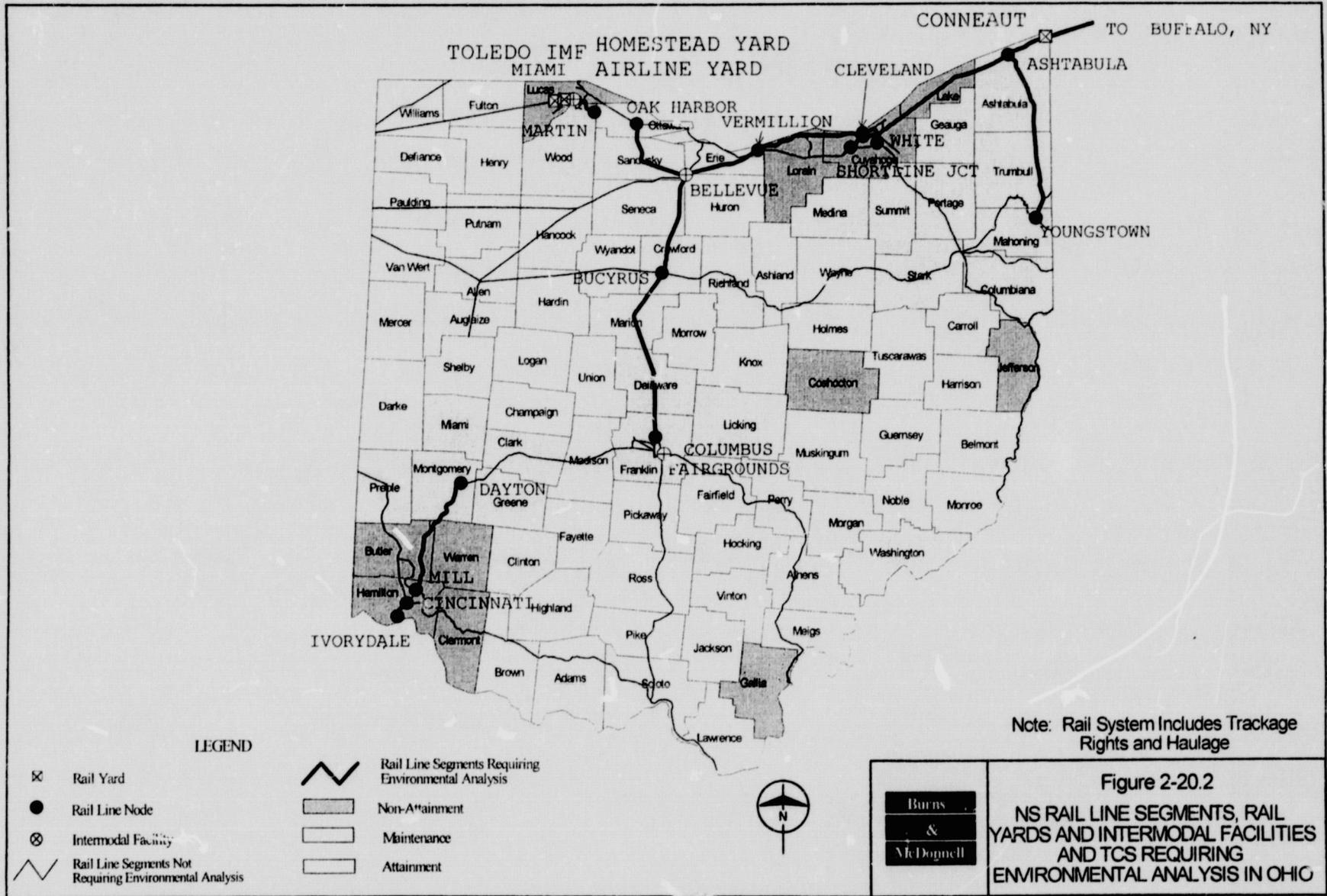
LEGEND

- | | | | | | |
|--|---|--|---------------------|--|----------------|
| | Rail Line Segments Requiring Environmental Analysis | | Nodes | | Non-Attainment |
| | Rail Line Segments Not Requiring Environmental Analysis | | Rail Yard | | Maintenance |
| | | | Intermodal Facility | | Attainment |

Note: Rail System Includes Trackage Rights and Haulage

FIGURE 2-20.1





TOLEDO IMF HOMESTEAD YARD
 MIAMI AIRLINE YARD

CONNEAUT TO BUFFALO, NY

CLEVELAND ASHTABULA

OAK HARBOR VERMILLION

MARTIN WHITE

Bellevue BORTLINE JCT

YOUNGSTOWN

BUCYRUS

COLUMBUS FAIRGROUNDS

DAYTON

MILL CINCINNATI

IVORYDALE

19.0 PENNSYLVANIA

19.0 PENNSYLVANIA

RAIL LINE SEGMENTS, RAIL YARDS AND INTERMODAL FACILITY IMPACTS

This section provides an analysis of the potential environmental impacts in Pennsylvania resulting from increases in activity on rail line segments, at rail yards and at intermodal facilities related to the proposed Acquisition. Consistent with the Surface Transportation Board's (STB) environmental rules at 49 CFR Part 1105.7(e), the analysis specifically considered impacts to: (1) air quality, (2) noise, (3) local and regional transportation systems and (4) safety. This analysis indicates that the proposed Acquisition would have some environmental impacts in Pennsylvania. Before assessing the environmental impacts, a brief description of the key elements of the Acquisition as it relates to Pennsylvania immediately follows.

The Acquisition maintains competition in Pennsylvania. Its two biggest cities, Philadelphia and Pittsburgh, will retain rail freight service by two major competitors. Pennsylvania's historic role as a rail transportation hub will be enhanced.

Philadelphia shippers would be served by six of the new CSX route combinations following the Acquisition, including the Northeastern Gateway Corridor between Chicago and New York via Erie and the Atlantic Coast Corridor between Miami and Boston via Philadelphia. CSX will shift operations from its Snyder Avenue Terminal to Greenwich Yard. Track modernization is scheduled for yard facilities at Newell, PA, to enhance coal train movements.

CSX will provide two high-capacity lines between the Midwest and the Atlantic Seaboard. The new CSX route combinations will cut transit time by as much as one day--even more in certain situations, making rail service more competitive with truck service in Pennsylvania. CSX will build a new intermodal facility at or near Greenwich Yard. CSX will connect the existing B&O main line and the Conrail main line near the Grays Ferry Bridge and 25th Street viaduct to provide a direct route to intermodal operations in South Philadelphia.

CSX will assume all rights and responsibilities for Conrail's Philadelphia headquarters and Philadelphia-area information technology facilities. CSX and NS will share the Customer Service Center at Pittsburg. NS will operate Conrail's Hollidaysburg Car Shop and Juniata Locomotive Shop and will continue employment there.

NS will operate across Pennsylvania on the Conrail "Penn" Line to both Philadelphia and northern New Jersey. NS will also enter Pennsylvania from the Southeast via Hagerstown, MD and Harrisburg, PA. NS will operate into the Buffalo/Canadian gateway via the Susquehanna River Line and south to Baltimore and Washington, D.C. via the Port Road line and Perryville, MD. NS will enter Philadelphia from both the west and from the south. From the west, NS will operate over the Reading main line into Abrams Yard. From the south (and north) NS will enter Philadelphia on the Northeast Corridor (NEC) line of Amtrak.

NS plans to expand existing intermodal facilities in Allentown, Pittsburgh and Morrisville, PA, and build a new Triple Crown Service's (TCS) facility in Morrisville and a new conventional intermodal facility in Harrisburg (at Rutherford Yard). To improve community safety, NS plans to relocate its mainline from the center of 19th Street in Erie, PA to the nearby, grade-separated Conrail right-of-way.

The Monongahela Railway (MGA) will be owned by NS; CSX will have equal access to all current and future facilities on the line. The South Jersey/Philadelphia Shared Assets Area includes 290 route miles extending from Marcus Hook, PA (on the Chester Industrial Track) on the south to Trenton, NJ on the north, and to River Interlocking in the Belmont area of Philadelphia on the west. The South Jersey/Philadelphia Shared Assets Area includes all Conrail Philadelphia stations and industries along key segments of the NEC.

No route abandonments are anticipated in Pennsylvania. Commuter and Amtrak operations in Pennsylvania will not be materially affected by CSX's or NS's proposed operating plans, since the primary passenger routes are multiple-track and have capacity for additional freight business.

19.1 AIR QUALITY IMPACTS

Of the 67 counties in Pennsylvania, 45 counties have nonattainment areas for air quality. The nonattainment areas are near Philadelphia, Pittsburgh and Erie. These areas are nonattainment for ozone.

There are eighteen counties in Pennsylvania that are nonattainment for ozone that have CSX, NS and/or Shared Area/Northeast Corridor (NEC) rail line segments, rail yards, and/or intermodal facilities that would experience increases in activity that meet STB thresholds (See Table 1-1). These are listed below and shown in Figures 2-21.1, 2-21.2 and 2-21.3. Line segments with Amtrak or commuter trains operating on them are in bold.

CSX Rail Line Segments

Rail Line Segment				County	Air Quality Status	Trains per Day		Increase in GTM (%)
From		To				Pre-Acquisition	Post-Acquisition	
Field	PA	Belmont	PA	Philadelphia	N	8.2	15.8	80
New Castle	PA	Youngstown	OH	Lawrence	N	34.6	41.6	46
Rankin Jct	PA	New Castle	PA	Allegheny	N	28.9	38.3	74
				Beaver	N			
				Butler	N			
				Lawrence	N			
RG	PA	Field	PA	Philadelphia	N	0.0	16.0	>1000*
RG	PA	Wilmere	DE	Delaware	N	22.9	26.4	23
				Philadelphia	N			
Sinns	PA	Brownsville	PA	Allegheny	N	1.5	10.8	>1000*
				Fayette	N			
				Washington	N			
				Westmoreland	N			
Sinns	PA	Rankin Jct	PA	Allegheny	N	32.8	42.2	77
Cumberland	MD	Sinns	PA	Allegheny	N	29.7	34.8	32
				Fayette	N			
				Somerset	N			
				Westmoreland	N			

• * Because of the low pre-Acquisition activity, the change in GTM is not meaningful.
 • N = Nonattainment, D-NA= Deemed Nonattainment.

CSX Intermodal Facilities

Intermodal Facilities	County	Air Quality Status	Trucks per Day		Change in ADT on local roads (%)
			Pre-Acquisition	Post-Acquisition	
Philadelphia - Greenwich	Philadelphia	N	0	272	0.7-4.7

• N = Nonattainment.

NS Rail Line Segments

Rail Line Segment		County	Air Quality Status	Trains per Day		Increase in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	
Ashtabula, OH	Buffalo, NY	Erie	N	13.0	25.2	121
Harrisburg, PA	Rutherford, PA	Dauphin	N	44.3	57.9	19
Harrisburg, PA	Rockville, PA	Dauphin	N	45.4	51.7	17
Harrisburg, PA	Riverton Jct., VA	Cumberland	N	11.1	19.6	82
		Dauphin	N			
		Franklin	N			
		York	N			
Steelton, PA	Shocks, PA	Dauphin	N	1.9	5.7	175
		Lancaster	N			

• N = Nonattainment, A = Attainment.
 • GTM = Gross Ton Miles

NS Rail Yard

Rail Yard	County	Air Quality Status	Rail Cars Handled per Day	
			Pre-Acquisition	Post-Acquisition
Harrisburg, PA	Dauphin	N	117	246

• N = Nonattainment, M = Maintenance.

NS Intermodal Facilities

Intermodal Facility	County	Air Quality Status	Trucks per Day		Change in ADT on local roads (%)
			Pre-Acquisition	Post-Acquisition	
Allentown	Northampton	N	39	138	0.5 - 2.5
Morrisville (Philadelphia)	Bucks	N	164	347	3.6
Rutherford (Harrisburg)	Dauphin	N	68	398	2.0-11.9
Pittsburgh-Pitcairn	Allegheny	N	0	114	2.9

• N = Nonattainment, D-NA = Deemed Nonattainment.

Shared Areas/NEC Rail Line Segments

Rail Line Segment		County	Air Quality Status	Trains per Day		Increase in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	
Midway, NJ	Morrisville, PA	Bucks	N	159.4	167.00	46
Morrisville, PA	Zoo, PA	Bucks Delaware Philadelphia	N N N	135.4	139.1	25
Arsenal, PA	Davis, DE	Delaware	N	118.3	126.5	63
South Phil., PA	Field, PA	Philadelphia	N	8.2	21.1	303

• N = Nonattainment.

Shared Areas Rail Yard

Rail Yard	County	Air Quality Status	Rail Cars Handled per Day	
			Pre-Acquisition	Post-Acquisition
Greenwich	Philadelphia	N	265	501

• N = Nonattainment.

The increases in air emissions resulting from the increases in traffic or activity are estimated in the Impact Analysis by County section. Even though air emissions would be increased in the immediate vicinity of these rail facilities, other rail facilities in Pennsylvania (and in other states served by CSX and NS) would experience decreases in traffic or activity, with consequent decreases in localized air emissions. These decreases would be a result of rerouting freight on the expanded CSX and NS systems to shorter, more direct routes as well as projected rail-to-rail diversions from other railroads.

In addition, the diversion of freight from trucks to rail would result in reduced air emissions in the vicinity of major highways. Moreover, because trains emit a lower level of air pollutants per unit of freight moved than trucks, the diversion of freight from trucks to rail would also result in reduced air emissions systemwide.

19.1.1 Impact Analysis by County

This section analyzes the impacts to air quality in each affected county. Only counties where a rail line segment, rail yard or intermodal facility meets the STB thresholds for analysis of air emissions are discussed. If a rail line segment crosses the county boundary, only the emissions from that portion of the segment within the county are estimated. In Pennsylvania, only nonattainment counties would be affected.

19.1.1.1 Nonattainment Areas

In Pennsylvania, 18 counties classified as nonattainment areas have rail line segments, rail yards and intermodal facilities that would experience increases in traffic or activity that would meet STB thresholds.

19.1.1.1.1 *Allegheny County, PA*

Allegheny County is classified as nonattainment (moderate) for ozone. Allegheny County is also nonattainment for CO. It is also partial nonattainment for SO₂ and PM-10 (moderate). Rail line segments associated with the proposed Acquisition do not pass through the part of the county that is nonattainment for PM-10 or SO₂. Increases in emissions have been estimated for each of the rail facilities in Allegheny County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Rankin Jct, PA	New Castle, PA	51	11.2	28.9	38.3	9.4	74
Sinns, PA	Brownsville, PA	38	25.4	1.5	10.8	9.3	>1000*
Sinns, PA	Rankin Jct, PA	9	9.0	32.8	42.2	9.4	77
Cumberland, MD	Sinns, PA	133	13.2	29.7	34.8	5.1	32

• GTM = Gross Ton Miles
 • *Because of the low pre-Acquisition activity, the change in GTM is not meaningful.

Estimated Increase in Emissions for the Portion of CSX Rail Line Segments in Allegheny County

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Rankin Jct, PA	New Castle, PA	134.5	14.9	5.0	8.7	3.4	0.00029
Sinns, PA	Brownsville, PA	210.9	23.4	7.8	13.7	5.3	0.00045
Sinns, PA	Rankin Jct, PA	109.5	12.2	4.1	7.1	2.8	0.00023
Cumberland, MD	Sinns, PA	68.1	7.6	2.5	4.4	1.7	0.00014
Total		523.0	58.1	19.4	33.9	13.2	0.0011

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Estimated Increases in Emissions for NS Intermodal Facility

Intermodal Facility	Estimated Increase in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Pittsburgh-Pitcairn	2.94	5.24	0.70	0.73	1.37	0.000057

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Allegheny County

Rail line segments and intermodal facilities are considered mobile (not stationary) sources under EPA's air pollution regulations. As discussed in Section 1.2.1, emissions from activities at intermodal facility in nonattainment areas were compared to the New Source Review benchmark for moderate nonattainment areas (i.e., 100 tons per year). None of the facilities emissions increases would exceed the New Source Review Criteria.

The increased rail segment activity in Allegheny County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.2 *Beaver County, PA*

Beaver County is classified as nonattainment (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Beaver County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Rankin Jct, PA	New Castle, PA	51	9.7	28.9	38.3	9.4	74

• GTM = Gross Ton Miles

**Estimated Increase in Emissions
for the Portion of CSX Rail Line Segment in Beaver County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Rankin Jct, PA	New Castle, PA	116.7	13.0	4.3	7.6	2.9	0.00025
• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide, PM = particulate matter, Pb = lead							

Discussion of Impacts in Beaver County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Beaver County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.3 Bucks County, PA

Bucks County is classified as nonattainment (severe) for ozone. Increases in emissions have been estimated for each of the rail facilities in Bucks County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

Estimated Increases in Emissions for NS Intermodal Facility

Intermodal Facility	Estimated Increase in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Morrisville (Philadelphia)	3.40	6.06	0.81	0.84	1.59	0.000066
• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide, PM = particulate matter, Pb = lead						

Shared Areas Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Midway, NJ	Morrisville, PA	17.3	0.5	159.4	167.0	7.6	46
Morrisville, PA	Zoo, PA	28.5	10.5	135.4	139.1	3.7	25

• GTM = Gross Ton Miles

Estimated Increase in Emissions for the Portion of Shared Area/NEC Rail Line Segments in Bucks County

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Midway, NJ	Morrisville, PA	3.3	0.4	0.1	0.2	0.1	0.000007
Morrisville, PA	Zoo, PA	34.5	3.8	1.3	2.2	0.9	0.000073
Total		37.8	4.2	1.4	2.4	1.0	0.000080

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Bucks County

Rail line segments and intermodal facilities are considered mobile (not stationary) sources under EPA's air pollution regulations. As discussed in Section 1.2.1, emissions from activities at intermodal facilities in nonattainment areas were compared to the New Source Review benchmark for severe nonattainment areas (i.e., 25 tons per year). None of the facilities emissions increases would exceed the New Source Review Criteria.

The increased rail segment activity in Bucks County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.4 *Butler County, PA*

Butler County is classified as nonattainment (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Butler County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Rankin Jct, PA	New Castle, PA	51	14.7	28.9	38.3	9.4	74

• GTM = Gross Ton Miles

Estimated Increase in Emissions for the Portion of CSX Rail Line Segment in Butler County

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Rankin Jct, PA	New Castle, PA	176.6	19.6	6.5	11.4	4.5	0.00037

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Butler County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Butler County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.5 Cumberland County, PA

Cumberland County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Cumberland County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Harrisburg, PA	Riverton Jct., VA	133.00	38.18	11.1	19.6	8.5	82

• GTM = Gross Ton Miles

**Estimated Increase in Emissions
for the Portion of NS Rail Line Segment in Cumberland County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Harrisburg, PA	Riverton Jct., VA	234.14	26.00	8.68	15.17	5.91	0.00050

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Cumberland County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Cumberland County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. System wide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.6 Dauphin County, PA

Dauphin County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Dauphin County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Harrisburg, PA	Rutherford, PA	6.00	6.00	44.3	57.9	13.6	19
Harrisburg TV, PA	Rockville, PA	6.00	6.00	45.4	51.7	6.3	17
Harrisburg, PA	Riverton Jct., VA	133.00	2.28	11.0	19.6	8.6	82
Steelton, PA	Shocks, PA	18.00	9.64	1.9	5.7	3.8	175

• GTM = Gross Ton Miles

**Estimated Increase in Emissions
for the Portion of NS Rail Line Segments in Dauphin County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Harrisburg, PA	Rutherford, PA	37.51	4.17	1.39	2.43	0.95	0.000079
Harrisburg TV, PA	Rockville, PA	31.92	3.54	1.18	2.07	0.81	0.000015
Harrisburg, PA	Riverton Jct., VA	13.96	1.55	0.52	0.90	0.35	0.000030
Steelton, PA	Shocks, PA	14.12	1.57	0.52	0.91	0.36	0.000030
Total		97.51	10.83	3.61	6.31	2.47	0.000154

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Estimated Increase in Emissions for NS Rail Yard

Rail Yard	Estimated Increase in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Harrisburg	0.34	0.04	0.02	0.02	0.01	0.000000493

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Estimated Increases in Emissions for NS Intermodal Facility

Intermodal Facility	Estimated Increase in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Rutherford (Harrisburg)	5.75	10.25	1.38	0.61	2.17	0.000108

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Dauphin County

Rail line segments, rail yards and intermodal facilities are considered mobile (not stationary) sources under EPA's air pollution regulations. As discussed in Section 1.2.1, emissions from

activities at rail yards and intermodal facility in the nonattainment area were compared to the New Source Review benchmark for marginal nonattainment areas (i.e., 100 tons per year). None of the facilities' emissions increases would exceed the New Source Review Criteria.

The increased rail segment activity in Dauphin County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.7 Delaware County, PA

Delaware County is classified as nonattainment (severe) for ozone. Increases in emissions have been estimated for each of the rail facilities in Delaware County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
RG, PA	Wilmington, DE	26	11.0	22.9	26.4	3.5	23

• GTM = Gross Ton Miles

**Estimated Increase in Emissions
for the Portion of CSX Rail Line Segment in Delaware County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
RG, PA	Wilmington, DE	39.7	4.4	1.5	2.6	1.0	0.000084

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Shared Areas Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Acquisition	Change	
Arsenal, PA	Davis, DE	25	10.5	118.3	126.5	8.2	63
Morrisville, PA	Zoo, PA	28.5	4.6	135.4	139.1	3.7	25

• GTM = Gross Ton Miles

**Estimated Increase in Emissions
for the Portion of Shared Area Rail Line Segments in Delaware County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Arsenal, PA	Davis, DE	74.8	8.3	2.8	4.8	1.9	0.00016
Morrisville, PA	Zoo, PA	15.0	1.7	0.6	1.0	0.4	0.000032
Total		89.8	10.0	3.4	5.8	2.3	0.000192

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Delaware County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Delaware County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.8 Erie County, PA

Erie County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Erie County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Ashtabula, OH	Buffalo, NY	127.00	44.07	13.0	25.2	12.2	121

• GTM = Gross Ton Miles

**Estimated Increase in Emissions
for the Portion of NS Rail Line Segment in Erie County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Ashtabula, OH	Buffalo, NY	375.16	41.66	13.91	24.31	9.47	0.00080

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Erie County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Erie County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.9 Fayette County, PA

Fayette County is classified as nonattainment (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Fayette County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Sinns, PA	Brownsville, PA	38	5.4	1.5	10.8	9.3	>1000*
Cumberland, MD	Sinns, PA	133	31.8	29.7	34.8	5.1	32

• GTM = Gross Ton Miles
• * Because of the low pre-Acquisition activity, the change in GTM is not meaningful.

**Estimated Increase in Emissions
for the Portion of CSX Rail Line Segments in Fayette County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Sinns, PA	Brownsville, PA	44.6	5.0	1.7	2.9	1.1	0.000095
Cumberland, MD	Sinns, PA	164.1	18.2	6.1	10.6	4.1	0.00035
Total		208.7	23.2	7.8	13.5	5.2	0.00045

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Fayette County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Fayette County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.10 Franklin County, PA

Franklin County is classified as nonattainment for ozone. Increases in emissions have been estimated for each of the rail facilities in Franklin County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Harrisburg, PA	Riverton Jct., VA	133.00	25.90	11.1	19.6	8.5	82

• GTM = Gross Ton Miles

Estimated Increase in Emissions for the Portion of NS Rail Line Segment in Franklin County

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Harrisburg, PA	Riverton Jct., VA	158.83	17.64	5.89	10.29	4.00	0.00034

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Franklin County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Franklin County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.11 Lancaster County, PA

Lancaster County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Lancaster County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Steelton, PA	Shocks, PA	18.00	8.36	1.9	5.7	3.8	175

• GTM = Gross Ton Miles

Estimated Increase in Emissions for the Portion of NS Rail Line Segment in Lancaster County

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Steelton, PA	Shocks, PA	12.24	1.36	0.45	0.79	0.31	0.000026

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Lancaster County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Lancaster County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.12 Lawrence County, PA

Lawrence County is classified as nonattainment for ozone. Increases in emissions have been estimated for each of the rail facilities in Lawrence County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
New Castle, PA	Youngstown, OH	18.3	3.9	34.6	41.6	7.0	46
Rankin Jct, PA	New Castle, PA	51	15.3	28.9	38.3	9.4	74

• GTM = Gross Ton Miles

Estimated Increase in Emissions for the Portion of CSX Rail Line Segments in Lawrence County

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
New Castle, PA	Youngstown, OH	37.4	4.2	1.4	2.4	0.9	0.000079
Rankin Jct, PA	New Castle, PA	182.8	20.3	6.8	11.8	4.6	0.00039
Total		220.2	24.5	8.2	14.2	5.5	0.00047

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Lawrence County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Lawrence County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.13 Northampton County, PA

Northampton County is classified as nonattainment (marginal) for ozone. Increases in emissions

have been estimated for each of the rail facilities in Northampton County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

Estimated Increases in Emissions for NS Intermodal Facility

Intermodal Facility	Estimated Increase in Emissions (tons per year)					
	NO _x	CO	VOC	SO ₂	PM	Pb
Allentown	2.54	4.52	0.61	0.62	1.18	0.000049
• NO _x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide, PM = particulate matter, Pb = lead						

Discussion of Impacts in Northampton County

Intermodal facilities are considered mobile (not stationary) sources under EPA's air pollution regulations. As discussed in Section 1.2.1, emissions from activities at intermodal facilities in nonattainment areas were compared to the New Source Review benchmark for marginal nonattainment areas (i.e., 100 tons per year). None of the facility emissions increases would exceed the New Source Review Criteria.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.1.14 Philadelphia County, PA

Philadelphia County is classified as nonattainment (severe) for ozone and part of Philadelphia County is classified as maintenance for CO. Increases in emissions have been estimated for each of the rail facilities in Philadelphia County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Field, PA	Belmont, PA	4	4	8.2	15.8	7.6	80
RG, PA	Field, PA	2	2	0.0	16.0	16.0	>1000*
RG, PA	Wilmington, DE	26	4.2	22.9	26.4	3.5	23

• GTM = Gross Ton Miles
 • * Because of the low pre-Acquisition activity, the change in GTM is not meaningful.

Estimated Increase in Emissions for the Portion of CSX Rail Line Segments in Philadelphia County

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Field, PA	Belmont, PA	13.9	1.5	0.5	0.9	0.3	0.000029
RG, PA	Field, PA	12.9	1.4	0.5	0.8	0.3	0.000027
RG, PA	Wilmington, DE	15.3	1.7	0.6	1.0	0.4	0.000032
Total:		42.1	4.6	1.6	2.7	1.0	0.000088

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Estimated Increase in Emissions for CSX Intermodal Facility

Intermodal Facilities	Estimated Increase in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Philadelphia - Greenwich	7.2	12.8	1.7	2.4	2.7	0.00014

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Shared Areas Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Morrisville, PA	Zoo, PA	28.5	13.4	135.6	139.1	3.7	25
South Phil., PA	Field, PA	5.0	5.0	8.2	21.1	12.9	303

• GTM = Gross Ton Miles

Estimated Increase in Emissions for the Portion of Shared Area Rail Line Segments in Philadelphia County

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Morrisville, PA	Zoo, PA	43.7	4.9	1.6	2.8	1.1	0.000093
South Phil., PA	Field, PA	37.4	4.1	1.4	2.4	0.9	0.000079
Total		81.1	9.0	3.0	5.2	2.0	0.00017

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Estimated Increase in Emissions for Shared Area Rail Yards

Rail Yard	Estimated Increase in Emissions (tons per year)					
	NOx	CO	VOC	SO ₂	PM	Pb
Greenwich	12.0	1.5	0.7	0.5	0.2	0.000017

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Philadelphia County

Rail line segments, rail yards and intermodal facilities are considered mobile (not stationary) sources under EPA's air pollution regulations. As discussed in Section 1.2.1, emissions from activities at rail yards and intermodal facilities in nonattainment areas were compared to the New

Source Review benchmark for severe nonattainment areas (i.e., 25 tons per year). None of the facilities' emissions increases would exceed the New Source Review Criteria.

The increased rail segment activity in Philadelphia County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.15 Somerset County, PA

Somerset County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in Somerset County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Cumberland, MD	Sinns, PA	133	46.7	29.7	34.8	5.1	32
• GTM = Gross Ton Miles							

**Estimated Increase in Emissions
for the Portion of CSX Rail Line Segment in Somerset County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Cumberland, MD	Sinns, PA	241.0	26.8	8.9	15.6	6.1	0.00051
<ul style="list-style-type: none"> • NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead 							

Discussion of Impacts in Somerset County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Somerset County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.16 Washington County, PA

Washington County is classified as nonattainment (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Washington County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre- Acquisition	Post- Acquisition	Change	
Sinns, PA	Brownsville, PA	38	0.9	1.5	10.8	9.3	>1000*
<ul style="list-style-type: none"> • GTM = Gross Ton Miles • * Because of the low pre-Acquisition activity, the change in GTM is not meaningful. 							

**Estimated Increase in Emissions
for the Portion of CSX Rail Line Segment in Washington County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Sinns, PA	Brownsville, PA	7.2	0.8	0.3	0.5	0.2	0.000015
• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO ₂ = sulfur dioxide, PM = particulate matter, Pb = lead							

Discussion of Impacts in Washington County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Washington County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.17 Westmoreland County, PA

Westmoreland County is classified as nonattainment (moderate) for ozone. Increases in emissions have been estimated for each of the rail facilities in Westmoreland County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

CSX Rail Line Segments

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-Acquisition	Change	
Sinns, PA	Brownsville, PA	38	6.4	1.5	10.8	9.3	>1000*
Cumberland, MD	Sinns, PA	133	16.9	29.7	34.8	5.1	32

• GTM = Gross Ton Miles
 • * Because of the low pre-Acquisition activity, the change in GTM is not meaningful.

Estimated Increase in Emissions for the Portion of CSX Rail Line Segments in Westmoreland County

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Sinns, PA	Brownsville, PA	52.9	5.9	2.0	3.4	1.3	0.00011
Cumberland, MD	Sinns, PA	87.1	9.7	3.2	5.6	2.2	0.00018
Total		140.0	15.6	5.2	9.0	3.5	0.00029

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in Westmoreland County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in Westmoreland County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.1.1.18 York County, PA

York County is classified as nonattainment (marginal) for ozone. Increases in emissions have been estimated for each of the rail facilities in York County that would experience an increase in traffic or activity that meets STB thresholds, as presented below:

NS Rail Line Segment

Rail Line Segment		Total Length (miles)	Length within County (miles)	Trains per Day			Change in GTM (%)
From	To			Pre-Acquisition	Post-	Change	
Harrisburg, PA	Riverton Jct., VA	133.00	2.36	11.1	19.6	8.5	82

• GTM = Gross Ton Miles

**Estimated Increase in Emissions
for the Portion of NS Rail Line Segment in York County**

Rail Line Segment		Estimated Increase in Emissions (tons per year)					
From	To	NOx	CO	VOC	SO ₂	PM	Pb
Harrisburg, PA	Riverton Jct., VA	14.50	1.61	0.54	0.94	0.37	0.000031

• NOx = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO₂ = sulfur dioxide, PM = particulate matter, Pb = lead

Discussion of Impacts in York County

Rail line segments are considered mobile (not stationary) sources under EPA's air pollution regulations. The increased rail segment activity in York County would result in increased levels of all pollutants, with the greatest increase in NOx.

As stated previously, significant systemwide offsetting benefits to air quality would result from truck-to-rail diversions and traffic decreases on certain rail lines. Systemwide, the decrease in emissions from truck-to-rail diversions would outweigh the increased emissions from increased rail activity.

19.2 NOISE IMPACTS

Traffic increases on some rail facilities in Pennsylvania would meet STB's thresholds for noise analysis. The CSX, NS and/or Shared Area rail line segments, rail yards, and intermodal facilities in Pennsylvania that would experience increases in activity that meet STB thresholds are listed below. Analyses were performed to identify where the noise level would increase by 2 dBA or greater and be above 65 dBA. In areas that would experience such an increase, noise-sensitive receptors within the pre-Acquisition and post-Acquisition 65 dBA Ldn contour were counted. The number of noise-sensitive receptors (residences, schools, churches, hospitals) is provided. If a rail line segment crosses state boundaries, the portion of the segment in each state is analyzed.

CSX Rail Line Segments

Segment		Trains Per Day			Change in dBA	Distance to Ldn Contour	
From	To	Pre-Acquisition	Post-Acquisition	Difference		Line Segment	Grade Crossing
Sinns, PA	Rankin Jct, PA	32.8*	42.2*	9.4	< 2 dBA	--	--**
Rankin Jct, PA	New Castle, PA	28.9	38.3	9.4	< 2 dBA	--	--**
Sinns, PA	Brownsville, PA	1.5	10.8	9.3	8.6	190	--**
RG, PA	Field, PA	0.0	16.0	16.0	U	240	--**
S. Philadelphia, PA	Field, PA	8.2	21.1	12.9	3.3	250	--**

*Includes 2 passenger trains per day.
 **No grade crossings on these line segments
 U = Background unknown
 -- = Not applicable

Sinns, PA to Rankin Junction, PA

This rail segment, which currently has a volume of 32.8 trains per day including two passenger trains, is projected to experience an increase of 9.4 freight trains per day as a result of the proposed Acquisition. The projected increase in train volume on this segment would cause less than a 2 dBA increase in the Ldn. No adverse noise impacts are expected.

Rankin Jct, PA to New Castle, PA

This rail segment, which currently has a volume of 28.9 trains per day, would experience an increase of 9.4 trains per day as a result of the proposed Acquisition. The projected increase in train volume on this segment would cause less than a 2 dBA increase in the Ldn. No adverse noise impacts are expected.

Sinns, PA to Brownsville, PA

This rail line starts in McKeesport and extends southwest along the Monongahela River. The line continues to follow the river until ending in the town of Brownsville. The current train volume on this line is an average of 1.5 trains per day. It is projected that this line would experience an increase of 9.3 trains per day as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 8.6 dBA. The current 65 dBA Ldn contour of 60 feet would extend to approximately 190 feet. There are no grade crossings on this segment of track.

McKeesport to Elizabeth

The line segment begins in McKeesport and extends west following the Monongahela River. The line passes through the western part of McKeesport and through the communities of Glassport and Elizabeth. There are mostly single family residences on the south and east side of the tracks. On the north and west side of the tracks, the land between the tracks and the Monongahela River, industrial and commercial land use dominates. There are a total of three schools and five churches in these communities. There are no grade crossings in this area.

Bunola to Webster

The tracks continue through the small towns of Bunola, East Monongahela, Sunnyside, and Webster. There are mostly single family homes in this area with a total of two schools and three churches. There are no grade crossings in this area.

Monessen to Belle Vernon

Still following the Monongahela River, the tracks enter the towns of Monessen and Belle Vernon. In Monessen, the area north of the tracks is industrial, while the land use south of the tracks is a mix of commercial and residential. Two churches are located in this area. The town of Belle Vernon is mainly residential with one affected church. There are no grade crossings in this area.

Fayette City to Brownsville

The line continues through the small communities of Fayette City and Newell, until the junction in Brownsville. These are small, mostly residential towns, with some industrial land use between the tracks and the Monongahela River. Some commercial land use also exists. A total of one school and one church are affected and there are no grade crossings in this area.

**Number of Sensitive Receptors
Sinns, PA to Brownsville, PA Line Segment**

Pre-Acquisition				Post-Acquisition			
Resid.	School	Church	Hospital	Resid.	School	Church	Hospital
540	2	7	0	974	6	14	0

RG, PA to Field, PA

This would be a new line segment located in Philadelphia, PA that would start at the RG Tower near the Schuylkill River. It would cross the Schuylkill to the west, and run north to the Field connection just south of the Convention Hall. There would not be any grade crossings. It is projected that this segment would carry 16 trains per day. The 65 dBA Ldn contour would extend to about 240 feet from the tracks. Because there are no noise sensitive receptors within this distance of the tracks, no adverse noise impacts are projected.

S. Philadelphia, PA to Field, PA

This line segment is located in Philadelphia, PA. It starts just to the west of the Greenwich Yard in South Philadelphia and runs north through the tank farm, to the Schuylkill River and across to

the Field connection just south of Convention Hall. There are no grade crossings on this line segment. This line segment currently has 8.2 trains per day. As a result of the Acquisition, the segment would experience an increase of 12.9 trains per day. The change in train volume would result in an Ldn increase of 3.3 dBA. The 65 dBA Ldn contour would increase from 160 feet to 250 feet. Because there are no noise sensitive receptors within 250 feet of this line segment, no adverse noise impacts are projected.

CSX Intermodal Facility

Intermodal Facilities Location	Trucks per Day		Change in ADT on local roads	Intermodal Yard	
	Pre-Acquisition	Post-Acquisition		Change in dBA	Approx. Dist to 65 dBA Ldn Contour
Greenwich, Philadelphia, PA	0*	272	0.7 to 4.7%	U	250 ft
*The intermodal facility at Greenwich is a proposed new facility, U = Background unknown					

Greenwich Philadelphia, PA

The proposed Greenwich Intermodal Facility would be located on South 11th Street in Philadelphia. The site is located between I-95 and Mustin Field U.S. Naval Station. Truck transportation to the facility would be via Broad Street, Pattison Avenue, and South 11th Street. Land use around the site is predominantly military and industrial with no noise-sensitive land uses near the proposed site.

Post-Acquisition, it is projected that there would be a total of 272 trucks per day making deliveries and pickups at this facility. These truck trips would represent an approximately one percent increase in the ADT on Broad Street, a two percent increase in the ADT on Pattison Avenue, and a less than one percent increase in the ADT on I-95. The increases in truck traffic are all projected to cause less than a 2 dBA increase in noise exposure. Thus no noise impacts are projected.

NS Rail Line Segments

Segment		Trains Per Day			Change in dBA	Distance to Ldn Contour	
From	To	Pre-Acquisition	Post-Acquisition	Difference		Line Segment	Grade Crossing
Ashtabula, OH	Buffalo, NY	13.0	25.2	12.2	2.8	200	550
Harrisburg, PA	Rutherford, PA	44.3	57.9	13.6	< 2 dBA	250	750
Harrisburg TV, PA	Rockville, PA	45.4	51.7	6.3	< 2 dBA	250	750
Harrisburg, PA	Riverton Jct., VA	11.1	19.6	8.5	2.4	150	450
Steelton, PA	Shocks, PA	1.9	5.7	3.8	4.5	50	200

Ashtabula, OH to Buffalo, NY

This rail segment currently has 13 trains per day and would experience an increase of 12.18 trains per day and an increase of 121.33 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 2.8 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 176 grade crossings are on this segment. The current 65 dBA Ldn contour of 150 feet (200 feet at grade crossings) would extend to approximately 350 feet (550 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Crayton

This is an extremely small community with only a few residences just south of the northeast-trending track.

Thorton Junction

This is an extremely small community with only a few residences just north of the northeast-trending track.

Girard

This is a mid-sized community where the northeast-trending track is south of the city. Residences, businesses and schools are found in the community north of the rail.

Wallace Junction

This is a small community which surrounds a southwest to northeast-trending track.

Fairview

This is a small community with residences, businesses and industries south of the southwest to northeast-trending track.

Greater Erie Metropolitan Area

This is a large metropolitan area where the southwest to northeast-trending track is on the city's north side and surrounded by numerous residences, businesses and industries. Schools and churches are also located in the community.

Harbor Creek

This is a small community with residences, businesses and schools surrounding the northeast-trending track.

Moorhead

This is an extremely small community with only a few residences surrounding the northeast-trending track.

North East

This is an extremely small community with the rail trending southwest to northeast along the southeastern edge of the community. There are only scattered residences, businesses and churches in the area of the rail line.

**Number of Sensitive Receptors
Ashtabula, OH to Buffalo, NY Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
1,641	1	4	0	2,400	8	8	0
• only represents noise-sensitive receptors in Pennsylvania							

Harrisburg, PA to Rutherford, PA

This rail segment currently has 44.28 trains per day. The segment would experience an increase of 13.57 trains per day (a 19.30 percent change in gross ton-miles per year) as a result of the proposed Acquisition. The projected increases in train volume and gross ton-miles on this segment would cause less than a 2 dBA increase in the Ldn. No adverse noise impacts are expected.

Harrisburg, PA to Rockville, PA

This rail segment currently has 45.36 trains per day. The segment would experience an increase of 6.35 trains per day (a 17.04 percent change in gross ton-miles per year) as a result of the proposed Acquisition. The projected increases in train volume and gross ton-miles on this segment would cause less than a 2 dBA increase in the Ldn. No adverse noise impacts are expected.

Harrisburg, PA to Riverton Junction, VA

This rail segment currently has 11.06 trains per day, would experience an increase of 8.5 trains per day and an increase of 82.40 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 2.4 dBA, exceeding the impact criterion. The majority of impacts would occur at or near grade crossings where train horns would be sounded as a warning; 126 grade crossings are on this segment. The current 65 dBA Ldn contour of 100 feet (150 feet at grade crossings) would extend to approximately 300 feet (450 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive

receptors along this segment are described below:

Greater Harrisburg Metropolitan Area

This is a large metropolitan area where the south to southwest-trending track is on the city's southwest side and surrounded by numerous residences and businesses.

Lemoyne

This is a mid-sized community with residences, businesses, a school and churches located on both sides of the track. The track passes through the center of town in a northeast-southwest direction.

Camp Hill

This is a mid-sized community with residences located on both sides of the track. The track passes through the edge of the city in an northeast-southwest direction.

White Hill

This is a small community with residences and a few businesses. The track passes through the city near the center in an northeast-southwest direction.

Rossmoyne

This is a small community with residences, a few businesses and a church. The track passes through the center of the city in an northeast-southwest direction.

Nantilly

This is a small community with residences. The track passes through the edge of Nantilly in an northeast-southwest direction.

Bowmansdale

This is a small community with residences, a few businesses and a church. The track passes through the edge of Bowmansdale in an northeast-southwest direction.

Grantham

This is a small community with residences, a few businesses, a school and a church. The track passes through the edge of town in an northeast-southwest direction.

Rosegarden

This is a small community with residences. The track passes through the edge of town in an northeast-southwest direction.

Brandtsville

This is a small community with residences. The track passes through the edge of town in an northeast-southwest direction.

Boiling Springs

This is a small community with residences, businesses and a church. The track passes through the edge of town in an northeast-southwest direction.

Mount Holy Springs

This is a small community with residences and businesses. The track passes through the edge of town in an east-west direction.

Barntz

This is a small community with residences, a school and a church. The track passes through the edge of town in an east-west direction.

Moors Hill

This is a small community with mainly residences. The track passes through the edge of town in an east-west direction.

Montsera

This is a small community with residences and a school.

Huntsdale

This is a small community with residences, businesses and a church. The track passes through the edge of town in an east-west direction.

Longsdorf

This is a small community with residences and businesses. The track passes through the edge of town in an east-west direction.

Hays Grove

This is a small community with residences near the track. The track passes through the edge of town in an east-west direction.

Walnut Bottom

This is a small community with residences, businesses, a school and a church. The track passes through the center of town in a northeast-southwest direction.

Brookside

This is a small community with residences and businesses. The track passes through the edge of town in a northeast-southwest direction.

New Lancaster

This is a small community with residences, businesses and a school. The track passes through the edge of town in a northeast-southwest direction.

Lees Cress Road

This is a small community with residences, businesses, a school and a church. The track passes through the edge of town in a northeast-southwest direction.

Shippensburg

This is a mid-sized community with residences, businesses, a school and a church. The track passes through the edge of town in a northeast-southwest direction.

Tusculum

This is a small community with residences and a church. The track passes through town in a northeast-southwest direction.

Scotland

This is a small community with residences, businesses, a school and a church. The track passes through town in a northeast-southwest direction.

Chambersburg

This is a mid-sized community with residences, businesses, schools and churches on both sides of the track. The track passes through the edge of town in a northeast-southwest direction.

Guilford Springs

This is a small community with residences, businesses and a school. The track passes through on the edge of town in a northeast-southwest direction.

Marion

This is a small community with residences, businesses, a school and a church. The track passes through the center of town in a northeast-southwest direction.

Kaufman

This is a small community with residences, businesses, a school and a church. The track passes through on the edge of town in a northeast-southwest direction.

Greencastle

This is a mid-sized community with residences, businesses and churches on both sides of the track. The track passes through on the edge town in a northeast-southwest direction.

Milnor

This is an extremely small community with a few residences on both sides of the north to south-trending track.

Mason and Dixon

This is an extremely small community with a few residences on both sides of the north to south-trending track.

**Number of Sensitive Receptors
Harrisburg, PA to Riverton Junction, VA Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
601	3	7	0	987	4	9	0

• only represents noise-sensitive receptors in Pennsylvania

Steelton, PA to Shocks, PA

This rail segment currently has 1.86 trains per day, would experience an increase of 3.85 trains per day and an increase of 174.52 percent in gross ton-miles per year as a result of the proposed Acquisition. The change in train volume would result in an Ldn increase of 4.5 dBA, exceeding the impact criterion. Most impacts would occur at or near grade crossings where train horns would be sounded as a warning; 15 grade crossings are on this segment. The current 65 dBA Ldn contour of 50 feet (50 feet at grade crossings) would extend to approximately 100 feet (200 feet at grade crossings) perpendicular to the tracks. Noise impacts for sensitive receptors along this segment are described below:

Greater Harrisburg Metropolitan Area

This is a large metropolitan area where the south to southwest-trending track is on the city's southwest side and surrounded by numerous residences and businesses.

**Number of Sensitive Receptors
Steelton, PA to Shocks, PA Line Segment**

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
0	0	0	0	26	0	0	0

NS Rail Yard

Rail Yard Location	Rail Cars Handled per Day			Change in dBA at property line	Distance to 65 Ldn contour (feet)
	Pre-Acquisition	Post-	Percent Difference		
Harrisburg	117.4	246.4	110%	0.5 to 1	300 - 700

Harrisburg

This rail yard in Harrisburg, PA currently serves 117.4 rail cars per day and is projected to experience an increase of 129 rail cars per day (a 110 increase in activity) as a result of the

proposed Acquisition. The increase in yard activity would result in an Ldn increase due to yard activities of 3.2 dBA, although the cumulative increase at the property boundary would be 0.5 to 1.0 dBA. The small property boundary increase is due to the through train dominance of the noise environment for both the pre- and post-Acquisition levels of yard activity. The current 65 dBA Ldn contour ranges from 300 to 700 feet from the property boundary depending on the density of intervening structures along the right of way. On average, the 65 dBA contour would extend another 150 feet as a result of the proposed action.

The Harrisburg rail yard is located along the east side of downtown Harrisburg, PA. The active switching area of the yard extends from Maclay Street on the south to I-83 on the north. All grade crossings in the vicinity of the yard are separated, eliminating the need for horn blowing or grade crossing warning bells. Approximately 60 trains per day pass through the yard. Of these, 35 are through trains and 25 are switched at the yard. The major residential area affected by switching operations is on the eastern side of the yard. The closest residences are 100 to 150 from the easterly yard boundary. The tracks nearest this boundary carry through train traffic. Based on an analysis of the rail noise sources, the numbers of receptors within the 65 dBA Ldn contour are provided below.

Number of Sensitive Receptors: Harrisburg Yard, Harrisburg, PA

Pre-Acquisition				Post-Acquisition			
Residences	Schools	Churches	Hospitals	Residences	Schools	Churches	Hospitals
123	0	1	0	159	0	1	0

NS Intermodal Facilities

Intermodal Facilities Location	Trucks per Day		Change in ADT on local roads	Intermodal Yard	
	Pre-Acquisition	Post-Acquisition		Change in dBA	Approx. Dist to 65 dBA Ldn Contour
Allentown	57	128	0.5-2.5	5.5	57
Morrisville (Philadelphia)	190	271	3.6	3.2	209
Pittsburgh-Pitcairn	0	114	2.9	New	100
Rutherford (Harrisburg)	68	398	11.9	U	250

*The intermodal facility at Greenwich is a proposed new facility, U = Background unknown

Allentown

The Allentown facility is on Riverside Drive. Truck transportation to the facility is via US-22, State Route 378, State Route 412, East 4th Street and West 3rd Street. The land use around the facility is predominantly industrial. A rail yard is south of this facility.

Currently, the Allentown intermodal facility serves 57 trucks per day. Post-Acquisition, this facility is expected to experience an increase of 71 trucks per day, a 0.5 to 2.5 percent increase in the ADT on local roads.

The increased activity at the facility is expected to cause an increase in noise levels of 5.5 dBA. No noise-sensitive receptors would be within the 65 dBA Ldn contour for post-Acquisition conditions. Further, the increased truck traffic would cause less than a 2 dBA increase in traffic noise on local roads. Therefore, no adverse noise impacts are projected.

Morrisville

NS plans to build a new TCS facility on currently owned railroad property next to the existing conventional intermodal facility at Morrisville, PA. These facilities, serving the greater Philadelphia metropolitan area and southern New Jersey, are on Delaware Avenue. Truck transportation to the facility is via I-76, I-95 and Delaware Avenue. The land use around the

facility is predominantly industrial. The facilities were analyzed on a cumulative basis.

Currently, the Morrisville intermodal facility serves 190 trucks per day. Post-Acquisition, this facility and the new TCS facility are expected to experience a total increase of 81 trucks per day, a 3.6 percent increase in the ADT on local roads.

The increases in noise levels from the intermodal trucks and cranes at the facilities would not exceed the impact criterion of 2 dBA at the property boundary, therefore no further noise analysis was performed.

The increases in noise levels at the intermodal facility would not exceed the impact criteria of 2 dBA. Further, on Delaware Avenue, the additional truck traffic for the intermodal facility would be less than 2 dBA. Therefore, no adverse noise impacts are projected.

Pittsburgh - Pitcairn

The Pitcairn facility was opened by Conrail in 1996; therefore no 1995 data exists. The site is on State Route 130. Truck transportation to the facility is via US-30, State Route 130 and State Route 48. The land use around the site is predominantly industrial.

The Pitcairn intermodal facility is expected to serve 114 trucks per day, a 2.9 percent increase in the ADT on local roads. The increased activity at the facility is expected to cause an increase in noise levels of > 2 dBA. No noise-sensitive receptors would be within the 65 dBA Ldn contour for post-Acquisition conditions. Further, the increased truck traffic would cause less than a 2 dBA increase in traffic noise on local roads. Therefore, no adverse noise impacts are projected.

Rutherford, PA (Harrisburg)

Currently the Conrail conventional intermodal facility is located near Harrisburg yard. NS proposes to relocate the conventional intermodal facility to railroad property in nearby Rutherford, PA, where the TCS facility is located. The Rutherford site is located just north of

US-322. Truck transportation to the facilities would be via I-83, I-283, US-322 and Grayson Road. Land use around the site is predominantly industrial with no noise-sensitive land uses near Rutherford.

Post-Acquisition, it is projected that there would be a total of 398 truck trips per day making deliveries and pickups at these facilities. These truck trips would represent an approximately two percent increase in the ADT on I-83, a 2.3 percent increase in the ADT on I-283, a 3.3 percent increase in the ADT on US-322, and an 11.9 percent increase in the ADT on Grayson Road. The increases in truck traffic are all projected to cause less than a 2 dBA increase in noise exposure. Thus no noise impacts are projected.

NEC Rail Line Segments

Segment		Trains Per Day				Change in dBA
From	To	Passenger	Freight			
			Pre-Acquisition	Post-Acquisition	Difference	
Arsenal, PA	Davis, DE	116	2.3	10.5	8.2	1.0

Arsenal, PA to Davis, DE

This line segment is part of the NEC. Current train traffic on this segment is an average of 2.3 freight trains per day and 116 passenger trains per day. As a result of the Acquisition, the segment is projected to experience an increase of 8.2 freight trains per day. Because of the large number of passenger trains, the projected increase in freight traffic would have only a minimal impact on the noise environment. The projected change in freight train volume would result in an Ldn increase of less than 1 dBA. No adverse noise impacts are projected for this line segment.

19.3 TRANSPORTATION

The primary transportation impacts of the proposed Acquisition are related to additional truck traffic generated at intermodal facilities where intermodal activity is projected to increase.

Impacts near intermodal facilities would result from increased truck traffic using local roadways to enter and exit the intermodal facility. For those facilities with an expected increase of 50 trucks or more per day or an increase of 10 percent of the ADT on local roads, the impacts of this increased traffic on the local roadway system were analyzed. Traffic count data were obtained from local and state transportation agencies. While the offsetting benefits of the proposed Acquisition were not quantified at the local level, the traffic impacts from added truck traffic at intermodal facilities would be offset partially in many localities by the significant number of truck-to-rail diversions.

One CSX intermodal facility in Pennsylvania, the Greenwich facility in Philadelphia, is expected to experience truck traffic of 50 trucks per day or more. However, the truck traffic is not expected to cause adverse impacts on the local or regional transportation system.

Six NS intermodal facilities in Pennsylvania (Allentown, Rutherford [Harrisburg], Morrisville [Philadelphia], and Pittsburgh-Pitcairn), are expected to experience increased additional truck traffic of 50 trucks or more per day. NS proposes to relocate the Harrisburg conventional intermodal facility to Rutherford where a TCS facility is also located. NS proposes to build a TCS facility in Morrisville next to the conventional intermodal facility on existing railroad property. However, the additional truck traffic from the six intermodal facilities would not cause adverse impacts on the local transportation system. The specified intermodal facilities are discussed below.

Greenwich

The Greenwich intermodal facility, which would be located at Conrail's Greenwich yard, is located at the southern end of South 11th Street, immediately adjacent to Interstate 95 in Philadelphia. Trucks would access the Greenwich facility via Interstate 95, Broad Street, Pattison

Avenue and South 11th Street. The Average Daily Traffic (ADT) for the vicinity of the Greenwich facility was obtained from the Pennsylvania Department of Transportation and the Philadelphia Department of Streets as follows:

- I-95 - approximately 74,435 vehicles per day
- Broad Street - approximately 22,078 vehicles per day
- Pattison Avenue - approximately 11,494 vehicles per day
- South 11th Street - not available

The traffic counts reported are for 1995 and represent the average count for both directions.

Post-Acquisition, the Greenwich intermodal facility is expected to handle 272 trucks per day. The truck traffic was assumed to be distributed throughout a 24-hour day. This is a new facility and the resulting 544 truck trips represents about a 4.7 percent increase in ADT on Pattison Avenue, about a 2.5 percent increase in ADT on Broad Street and about a 0.7 percent increase in ADT on Interstate 95. Thus, these increases would have a minor impact on the local and regional transportation network.

Allentown

The Allentown facility is east of Allentown on Riverside Drive. Truck transportation to the facility is via US-22, State Road 378, State Route 412, W 3rd Street, and 4th Street. The Average Daily Traffic (ADT) for the vicinity of the Allentown facility was obtained from the Pennsylvania Department of Transportation is as follows:

- US-22 - approximately 40,047 vehicles per day
- SR-378 - approximately 35,800 vehicles per day
- 4th Street - approximately 7,900 vehicles per day

Traffic counts reported represent the average count for both directions. Traffic data was not available for State Route 412 and W 3rd Street.

Post-Acquisition, the Allentown intermodal facility is expected to realize an increase of 71 trucks per day. The additional truck traffic was assumed to be distributed throughout a 24-hour day. The total daily increase of 142 truck trips represents about a 0.35 percent increase in ADT on US-22, about a 0.4 percent increase in ADT on State Route 378 and about a 1.8 percent increase in ADT on 4th Street. Thus, these increases would have a minor impact on the local and regional transportation network.

Rutherford

The conventional Harrisburg intermodal facility is proposed to be relocated to north of US-322 on Grayson Road. This is the same location as the existing TCS Rutherford facility. Because the two facilities will be on the same property, the effects of the activity changes on local roads would be cumulative. Therefore, the activity changes were combined for the post-Acquisition portion of this analysis.

Truck transportation to the facilities is via I-83, I-283, US-322 and Grayson Road. Land use around the site is predominantly industrial with no noise-sensitive land uses near the proposed site. The Average Daily Traffic (ADT) for the vicinity of the Rutherford facilities was obtained from the Pennsylvania Department of Transportation is as follows:

- I-83 - approximately 6,587 vehicles per day
- I-283 - approximately 29,115 vehicles per day
- US-322 - approximately 19,912 vehicles per day
- Grayson Road - approximately 5,556 vehicles per day

Traffic counts reported represent the average count for both directions.

Post-Acquisition, the Rutherford intermodal facilities are expected to realize an increase of 660 trucks trips per day. The additional truck traffic was assumed to be distributed throughout a 24-hour day. The total daily increase of 660 truck trips represents about a 2 percent increase in the ADT on I-83, about a 2.3 percent increase in the ADT on I-283, about a 3.3 percent increase in the ADT on US-322, and about a 11.9 percent increase in the ADT on Grayson Road. Thus, these increases would have a minor impact on the local and regional transportation network.

Morrisville

NS proposes building a new TCS facility next to the existing conventional intermodal facility. These facilities serve the greater metropolitan Philadelphia market and southern New Jersey. Because the two facilities are on the same property, the effects of the activity changes on local roads would be cumulative. Therefore, the activity changes were combined for this analysis.

The NS intermodal facility and proposed TCS facility are located on Delaware Avenue in southeastern Morrisville. Truck transportation to the facilities is via I-76, I-95 and Delaware Avenue. Average Daily Traffic (ADT) for the vicinity obtained from the Pennsylvania Department of Transportation is as follows:

- Delaware Avenue - approximately 10,250 vehicles per day

Traffic counts reported represent the average count for both directions. Traffic data was not available for I-76 and I-95.

Post-Acquisition, the Morrisville intermodal facilities would serve approximately 81 more trucks per day than the current conventional intermodal facility serves. The additional truck traffic was

assumed to be distributed throughout a 24-hour day. The total daily increase of 162 truck trips represents about a 1.5 percent increase in ADT on Delaware Avenue. Such small increases in total traffic would have a minor impact on local transportation.

Pittsburgh-Pitcairn (NS)

Conrail opened the Pitcairn facility on State Route 130 in southern Pittsburgh in 1996. Truck transportation to the facility is via State Route 130, State Road 48 and US-30. Average Daily Traffic (ADT) for the vicinity obtained from the Pennsylvania Department of Transportation is as follows:

- State Route 48 - approximately 8,000 vehicles per day.

Traffic counts reported represent the average count for both directions. Traffic data was not available for SR-130 or US-30.

Post-Acquisition the Pitcairn intermodal facility would serve approximately 114 trucks per day. The additional truck traffic was assumed to be distributed throughout a 24-hour day. The total daily increase of 228 truck trips represents about a 2.9 percent increase in ADT on State Route 48. Such small increases in total traffic would have a minor impact on local transportation.

19.4 SAFETY

Impacts on safety may occur as a result of increased traffic on rail line segments. Safety impacts are primarily related to changes in vehicle delays at grade crossings and the potential for train-vehicle accidents at grade crossings. Other safety impacts include potential train accidents and hazardous materials incidents.

NS proposes a nonjurisdictional relocation project in Erie, PA which will significantly improve safety. The NS line through Erie extends down the center of 19th Street. NS proposes relocating

the NS track from the center of 19th Street to the Conrail right-of-way parallel and adjacent to the existing northeast/southwest trending Conrail line through Erie.

The relocated line would branch from the existing NS line just west of the Downing Avenue overpass. It would be relocated within the existing Conrail right-of-way through Erie to a point west of Pittsburgh Avenue where the relocated line would turn south and return to the NS right-of-way and rail line. The design does not require acquisition of new right-of-way. CSX has agreed to allow NS to relocate the line on Conrail right-of-way which CSX would control after the Acquisition.

Two hundred twenty-five residences are within 500 feet of the existing NS line in Erie, with a large number of these being adjacent to the line. Eight schools are located within 1,200 feet of the existing NS line. Traffic on the existing NS line through 19th Street averages 16 trains per day. The existing NS line is crossed at grade by 22 roads. Road traffic travels in both directions along 19th Street even when trains operate over the line.

This proposed relocation would result in significantly improved safety on 19th Street in Erie as an active rail line would no longer be present through a dense, residential area.

No significant adverse safety impacts would result from the proposed Acquisition. Overall, a net safety benefit is expected due to truck-to-rail diversions and the proposed track relocation in Erie. Safety issues and methodology are discussed in Section 1.2.4 of Part 2 and in Appendix D of Part 1 of this ER.

19.4.1 Grade Crossing Safety

The grade crossings in the State of Pennsylvania with an ADT of 5,000 or greater along the analyzed lines are listed below. The estimated change in frequency of accidents for a specific crossing can be determined by identifying the number of trains per day pre- and post-Acquisition

on the specified line segment (Section 19.1), identifying the ADT of the road crossed by the line segment listed below and, based on the identified information, finding the appropriate cells in Table 1-5 in Section 1.2.4.1.

CSX Analyzed Grade Crossings with an ADT of 5,000 or Greater

County	City	Rail Line Segment		Road Crossed	ADT	
		To	From		5,000-10,000	> 10,000
Westmoreland	West Newton	Sinns, PA	Cumberland, MD	Main St	X	-
Delaware	Darby	Elsmere, DE	RG, PA	Main St	X	-
Delaware	Glenolden	Elsmere, DE	RG, PA	Oak Lane	-	X
Delaware	Glenolden	Elsmere, DE	RG, PA	Ashland Ave	X	-
Delaware	Glenolden	Elsmere, DE	RG, PA	South Ave	-	X
Delaware	Holmes	Elsmere, DE	RG, PA	Amosland Ave	-	X
Delaware	Ridley Park	Elsmere, DE	RG, PA	Swarthmore Ave	-	X
Delaware	Eddystone	Elsmere, DE	RG, PA	Fairview Rd	X	-
Delaware	Boothwyn	Elsmere, DE	RG, PA	Meetinghouse Rd	X	-
Delaware	Boothwyn	Elsmere, DE	RG, PA	Naamans Rd	X	-
Allegheny	Etna	New Castle, PA	Rankin Jct, PA	Bridge St	-	X
Allegheny	Etna	New Castle, PA	Rankin Jct, PA	Butler St	-	X
Allegheny	Etna	New Castle, PA	Rankin Jct, PA	SR 8	-	X
Allegheny	Allison Park	New Castle, PA	Rankin Jct, PA	Samples Rd	X	-
Butler	Mars	New Castle, PA	Rankin Jct, PA	Marshall Crossing	X	-

CSX Analyzed Grade Crossings with an ADT of 5,000 or Greater

County	City	Rail Line Segment		Road Crossed	ADT	
		To	From		5,000-10,000	> 10,000
Butler	Evans City	New Castle, PA	Rankin Jct, PA	Main St	-	X
Butler	Zelienpole	New Castle, PA	Rankin Jct, PA	New Castle Rd	X	-

NS Analyzed Grade Crossings with an ADT of 5,000 or greater

County	City	Rail Line Segment		Road Crossed	ADT	
		To	From		5,000 - 10,000	> 10,000
Cumberland	Camp Hill	Riverton Jct., VA	Harrisburg, PA	Slate Hill Street	X	
Cumberland	Lemoine	Riverton Jct., VA	Harrisburg, PA	10th Street	X	
Erie	Erie	Buffalo, NY	Ashtabula, OH	Ash Street	X	
Erie	Erie	Buffalo, NY	Ashtabula, OH	Parade Street		X
Erie	Erie	Buffalo, NY	Ashtabula, OH	Peach Street		X
Erie	Erie	Buffalo, NY	Ashtabula, OH	Sassafras Street		X
Erie	Erie	Buffalo, NY	Ashtabula, OH	Cherry Street	X	
Erie	Erie	Buffalo, NY	Ashtabula, OH	Liberty Street		X
Erie	Erie	Buffalo, NY	Ashtabula, OH	Raspberry Street	X	
Erie	Erie	Buffalo, NY	Ashtabula, OH	Green Garden Road	X	
Erie	Erie	Buffalo, NY	Ashtabula, OH	Pittsburgh Road	X	