



APPENDIX H

AIR QUALITY ANALYSIS





I-26 IMPROVEMENTS

MM 145 - 172:

AIR QUALITY ANALYSIS

Prepared for:



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AIR QUALITY

1.0 Introduction and Regulatory Framework

The South Carolina Department of Transportation (SCDOT) and Federal Highway Administration (FHWA) propose to improve Interstate 26 (I-26) from mile marker (MM) 145 to MM 172 in Orangeburg and Dorchester Counties to improve capacity, mobility, and operations. The I-26 project study area (PSA) is approximately 27 miles long, beginning at Exit 145 to Exit 172.

The 1990 Clean Air Act Amendments (CAAA) require the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for atmospheric concentrations of pollutants that are considered harmful to the environment and public health. In South Carolina, the agency responsible for regulating and ensuring compliance with the CAA is the South Carolina Department of Environmental Services (SCDES). The criteria air pollutants with concentration standards established under NAAQS include carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide, as shown in **Table 1-1**. Criteria pollutant emissions from transportation projects contribute to concentrations of four of the six criteria air pollutants: ozone, carbon monoxide, particulate matter, and nitrogen dioxide.

1.1 Transportation Conformity

Geographic regions that do not meet the NAAQS for one or more criteria pollutants are designated by the EPA as non-attainment areas. Areas designated as non-attainment, as well as those subsequently re-designated to attainment because they no longer violate the NAAQS, are designated as maintenance areas. SCDES, with support from local air quality management agencies located in these areas, are required to submit maintenance plans as part of their state's State Implementation Plan (SIP). These maintenance plans aim to improve air quality and ensure that attainment standards are maintained.

If an area or region is classified as non-attainment or maintenance for any of the NAAQS, then projects in that region are subject to the conformity requirements of the CAA (40 CFR Part 93, Section 176(c)(4)). Air quality conformity is a process that evaluates plans, programs, and projects to ensure they meet the requirements of the CAA and any applicable state implementation plans. This project is in Orangeburg and Dorchester Counties. The EPA's *Nonattainment Areas for Criteria Pollutants (Green Book)* was reviewed in June 2025 to determine the region's current attainment status. According to the EPA Green Book, Orangeburg and Dorchester Counties are in attainment for all criteria pollutants and thus are not subject to federal transportation or general conformity regulations (40 CFR 51, 40 CFR 93)¹.

There are two Council of Governments (COG) associated with these counties; however, there are no Metropolitan Planning Organizations (MPO). Dorchester is part of the Berkeley Charleston Dorchester (BCD) Council of Governments (BCDCOG), and Orangeburg County is part of the Lower Savannah Council of Governments (LSCOG).² Working with transportation policy committees, COG Boards recommend and prioritize transportation projects in coordination with the SC Department of Transportation (SCDOT).

¹ EPA. *Nonattainment Areas for Criteria Pollutants (Green Book)*. Accessed June 30, 2025, https://www3.epa.gov/airquality/greenbook/anayo_sc.html.

² SCDOT. *Statewide Transportation Improvement Program*. <https://www.scdot.org/content/dam/scdot-legacy/inside/pdf/planning/STIP-DDR-FY21-FY27.pdf>.

Table 1-1. National Ambient Air Quality Standards

Pollutant [links to historical tables of NAAQS reviews]		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO)		primary	8 hours	9 ppm	Not to be exceeded more than once per year
			1 hour	35 ppm	
Lead (Pb)		primary and secondary	Rolling 3-month average	0.15 $\mu\text{g}/\text{m}^3$ ⁽¹⁾	Not to be exceeded
Nitrogen Dioxide (NO₂)		primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		primary and secondary	1 year	53 ppb ⁽²⁾	Annual Mean
Ozone (O₃)		primary and secondary	8 hours	0.070 ppm ⁽³⁾	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution (PM)	PM _{2.5}	primary	1 year	9.0 $\mu\text{g}/\text{m}^3$	annual mean, averaged over 3 years
		secondary	1 year	15.0 $\mu\text{g}/\text{m}^3$	annual mean, averaged over 3 years
	PM ₁₀	primary and secondary	24 hours	35 $\mu\text{g}/\text{m}^3$	98th percentile, averaged over 3 years
	PM ₁₀	primary and secondary	24 hours	150 $\mu\text{g}/\text{m}^3$	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO₂)		primary	1 hour	75 ppb ⁽⁴⁾	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		secondary	3 hours	10 ppb	annual mean, averaged over 3 years

Source: US Environmental Protection Agency NAAQS Table: <https://www.epa.gov/criteria-air-pollutants/naaqs-table>,
accessed June 2025.

(1) In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 $\mu\text{g}/\text{m}^3$ as a calendar quarter average) also remain in effect.

(2) The level of the annual NO₂ standard is 0.053 ppm. It is shown here in terms of ppb for the purposes of clearer comparison to the 1-hour standard level.

(3) Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O₃ standards are not revoked and remain in effect for designated areas. Additionally, some areas may have certain continuing implementation obligations under the prior revoked 1-hour (1979) and 8-hour (1997) O₃ standards.

(4) The previous SO₂ standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

1.2 Mobile Source Air Toxics

Controlling air toxic emissions became a national priority with the passage of the 1990 CAAA, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA assessed this expansive list in its rule on the Control of Hazardous Air Pollutants from Mobile Sources and identified a group of 93 compounds emitted from mobile sources that are part of USEPA's Integrated Risk Information System (IRIS)³. These compounds are referred to by the EPA as Mobile Source Air Toxics (MSAT). In addition, the EPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors from the 2011 National Air Toxics Assessment (NATA)⁴. These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While the Federal Highway Administration (FHWA) considers these the priority MSAT, the list is subject to change and may be adjusted in consideration of future EPA rules.

2.0 Methodology

Since this part of South Carolina is in attainment for all criteria pollutants, a hot-spot analysis for carbon monoxide (CO) and particulate matter (PM) is not necessary. A review of mobile source air toxics (MSATs) follows.

2.1 Mobile Source Air Toxics

A qualitative analysis was developed to provide a basis for identifying and comparing the potential differences among MSAT emissions, if any, from the alternatives. Available technical tools do not enable FHWA to predict project-specific health impacts of the emission changes associated with the alternatives in this analysis. Because of these limitations, this discussion follows regulations 23 CFR 771.105(c) regarding reasonably foreseeable impacts and FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents⁵.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI).

A lack of available technical tools and techniques for measuring project-specific impacts of air toxins leaves many questions unanswered. This is due to various limitations such as difficulties associated with coming to a national consensus on an acceptable level of risk and uncertainties associated with the existing estimates of toxicity of the various MSAT.

³ EPA. *Integrated Risk Information System*. Accessed June 30, 2025, <https://www.epa.gov/iris>

⁴ EPA. *Summary of Results for the 2011 National-Scale Assessment*. Accessed June 30, 2025, <https://www.epa.gov/national-air-toxics-assessment/2011-nata-summary-results>

⁵ FHWA Memorandum. INFORMATION: Updated Interim Guidance on Mobile Source Air Toxics in NEPA Documents, dated January 18, 2023. Accessed June 30, 2025.

https://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/

The FHWA developed a tiered approach with three categories for analyzing MSAT in NEPA documents, depending on specific project circumstances:

1. No analysis for projects with no potential for meaningful MSAT effects,
2. Qualitative analysis for projects with low potential MSAT effects, or
3. Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

FHWA anticipates that most highway projects that need an MSAT assessment will fall into the qualitative analysis that should compare, in narrative form, the expected effect of the project on traffic volumes, vehicle mix, or routing of traffic and the associated changes in MSAT for the project alternatives, including no-build, based on vehicle miles traveled, vehicle mix, and speed. Also, national trends have shown overall reductions in emissions due to stricter engine and fuel regulations issued by the EPA.

2.2 Existing Conditions

Because the project area is in attainment, there are no mandated requirements to develop an air State Implementation Plan (SIP) for the region. SCDES Air Monitoring Sites and EPA's AirData Air Quality Monitors Application were used to determine air quality monitor locations and other monitor-specific information in the study area⁶. As there are no monitors in the direct vicinity of the I-26 project, nearby monitors were included for attainment information. The closest monitors are approximately 18 & 29 miles away. The Congaree Bluff (ID 450790021) monitor is in the Congaree National Park, while the Moncks Corner National Guard (ID 450151002) monitor is near Berkeley County Airport. Both monitors only collect ozone data. Over the last three years, the monitoring data (**Table 2-1**) shows that both monitors meet the ozone NAAQS and are in attainment.

Monitors for other pollutants (NOx, PM, SO2) are approximately 40 miles or more away from the project area, located within the cities of Columbia and Charleston, SC and although they were not included in this report, the data was reviewed and shows being in attainment.

Table 1-2. Closest Monitors to the Project – 4th High Ozone Concentrations 2022-2024

Site ID / Name	Pollutant(s) measured	Distance from Project (mi)	2022	2023	2024
Moncks Corner Natl. Guard (450151002)	Ozone	29 mi from south end	62 ppb	62 ppb	60 ppb
Congaree Bluff (450790021)	Ozone	18 mi from north end	58 ppb	57 ppb	57 ppb

Resource: https://aqs.epa.gov/aqsweb/airdata/download_files.html

Projects with Low Potential MSAT Effects

The types of projects included in this category are those that serve to improve operations of highway, transit, or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase MSAT emissions.

⁶ EPA. Air Data. Accessed July 23, 2025, <https://www.epa.gov/outdoor-air-quality-data> and https://aqs.epa.gov/aqsweb/airdata/download_files.html

Most highway projects that need an MSAT assessment will fall into this category. Examples of these types of projects are minor widening projects; new interchanges; replacing a signalized intersection on a surface street; and projects where design year traffic is projected to be less than 140,000 to 150,000 annual average daily traffic (AADT). Based on 2050 Build traffic data received from JMT on August 5, 2025, the AADT for this project is 128,467 (64,033 EB + 64,433 WB) vehicles. A table showing I-26 project traffic data is provided in Appendix A.

2.3 Environmental Consequences

The purpose of this project is to improve capacity, mobility, and operations by constructing additional lanes. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxic (MSAT) concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the no-build alternative. Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades.

2.3.1 No-Build Alternative

Transportation Conformity

As discussed in Section 1.1, the project areas are currently designated as attainment for all criteria pollutants. Although the No-Build Alternative would increase regional vehicle miles traveled (VMT) in the study area relative to the existing conditions, a decrease in regional air pollutant emissions associated with this activity would be expected in comparison to the existing conditions. This would be due to improvements in engine efficiency and emission standards, which would occur irrespective of the project. This would be expected to maintain Orangeburg and Dorchester Counties' attainment of the NAAQS under the No-Build Alternative.

Mobile Source Air Toxics

As was previously discussed, improvements in engine efficiency and emission standards would be expected to offset emission increases associated with regional VMT growth compared to the existing conditions.

2.3.2. Build Alternative

Interstate 26 (I-26) is a highway in the southeastern United States that runs from Kingsport, Tennessee to Charleston, South Carolina. It's part of the US Interstate highway system. The focus of this analysis is the South Carolina I-26 project from Mile Marker (MM) 145 to MM 172 and was divided into two phases:

- Phase 1 (SCDOT Project ID P041967) includes I-26 from the eastern limits of the interchange with US 601 (Exit 145) through the interchange with US 301 (Exit 154).
- Phase 2 (SCDOT Project ID P042454) includes I-26 from the eastern limits of the interchange with US 301 (Exit 154) to the western limits of the interchange with US 15 (Exit 172).

The Build Alternative, approximately 27 miles in length, proposes to widen SC I-26 in Orangeburg and Dorchester Counties. The project includes the following elements: adding a travel lane in each direction of I-26 toward the existing median, median clearing, barrier walls and cable guardrail installation,

addressing all structures, and improving the interchanges and ramps at Exits 149, 154, 159, and 165. The interchange at I-26 and I-95 is excluded from this project and is being improved via a separate project.

The proposed improvements will seek to reduce congestion and improve traffic operations along this stretch of the interstate.

Transportation Conformity

While study area VMT would differ between the No-Build Alternative and the Build Alternative, these VMT changes would be minor, and the evaluated Build Alternative would have little effect on air quality for the region. Since Orangeburg and Dorchester Counties are in attainment with the NAAQS, they are not subject to federal transportation conformity regulations (40 CFR 51, 40 CFR 93) and no further action is required.

Figure 1-1. I-26 Project Study Area



Source: SCDOT. I-26

Mobile Source Air Toxics

For this evaluation, it has been determined that this project will have low potential MSAT impacts. The amount of MSATs emitted would be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. Both the No-Build and Build Alternatives have similar truck percentages, approximately 22% in 2030 and 28% in 2050.

The VMT estimated for the Build Alternative is slightly less than that for the No-Build Alternative, because the changes in the roadway design increase the efficiency of the roadway thereby reducing total mileage. Annual study area VMT under the Selected Build and No-Build Alternatives are presented in **Table 1-3**. This decrease in VMT would lead to lower MSAT emissions for the build alternative along the highway corridor, along with a corresponding decrease in MSAT emissions along the parallel routes. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project. Also, any emissions increase in parts of the project is offset somewhat by lower MSAT emission rates due to increased speeds, due to less congestion. According to the Environmental Protection Agency's (EPA) MOVES model, emissions of all the priority MSAT decrease as speed increases. Emissions will likely be lower than present levels in the design year because of EPA's national control programs that are projected to reduce annual MSAT emissions by over 76 percent between 2020 and 2060 (**Figure 1-2**). Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures.

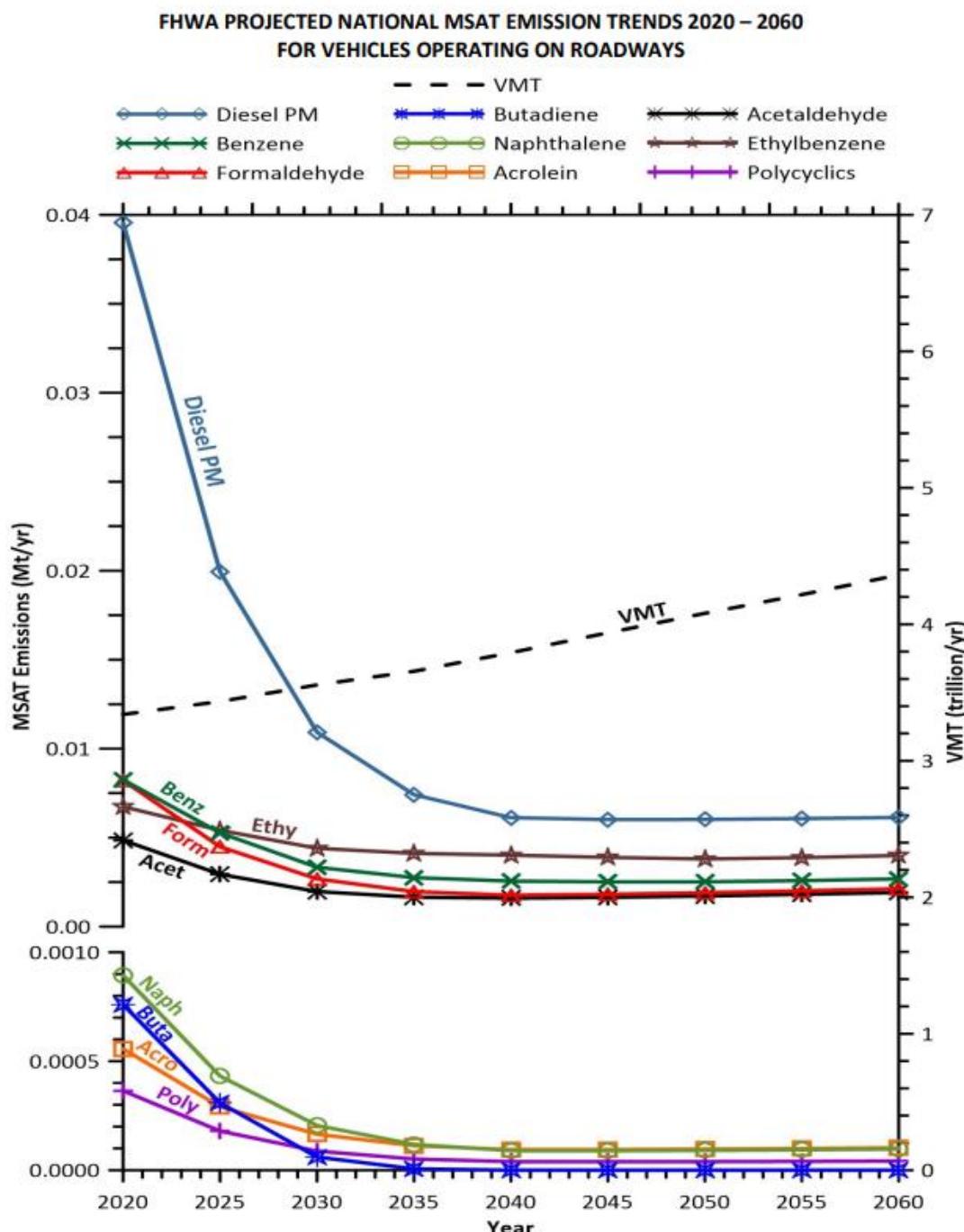
Table 1-3: Change in Regional VMT from the Build Alternative

Scenario	No-Build	Build	VMT Change vs No-Build
2030 Annual VMT	848,584,883	830,578,488	-2.1%
2050 Annual VMT	1,530,962,802	1,498,851,695	-2.1%

Source: Traffic data from JMT received via email on August 5, 2025. See Appendix A.

The new travel lanes as part of the Build Alternative may have the effect of moving some traffic closer to residences, schools, and businesses. As a result, there may be localized areas where ambient concentrations of MSAT could be higher under the Build Alternative than the No-Build Alternative. However, the magnitude and the duration of these potential increases compared to the No-Build Alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No-Build Alternative, but this would be offset due to increases in speeds and reductions in congestion on the local road network (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, USEPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Figure 1-2. National Mobile Source Air Toxics Trends 2020 – 2060



Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors.

Source: EPA MOVES3 model runs conducted by FHWA, March 2021.

Source: FHWA. Updated Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, January 18, 2023.

APPENDIX A

I-26 TRAFFIC DATA

2024 - 2030 - 2050 Eastbound No-Build Traffic Data

EASTBOUND I-26	Length (mi)	2024 EXISTING		2030 NB		2050 NB	
		EX	Existing	2030 NB	VMT	2050 NB	VMT
Segment Description		AADT	VMT	AADT	VMT	AADT	VMT
Between US 601 Off-Ramp and Loop On Ramp	0.14	26,200	1,338,800	31,300	1,599,450	56,500	2,887,150
Between US 601 Loop On-Ramp and On-Ramp	0.21	28,700	2,199,850	34,300	2,629,100	61,900	4,744,650
Between US 601 and SC-33 Interchanges	2.91	32,700	34,732,300	39,100	41,530,050	70,600	74,987,800
Between SC-33 Off-Ramp and Loop On-Ramp	0.17	31,700	1,967,000	37,900	2,351,700	68,400	4,244,200
Between SC-33 and US 301 Interchanges	5.35	32,500	63,464,400	38,900	75,962,000	70,200	137,083,050
Between US 301 Off-Ramp and Loop On-Ramp	0.14	31,100	1,589,200	37,200	1,900,900	67,100	3,428,800
Between US 301 Loop On- and Off-Ramps	0.1	31,200	1,138,800	37,400	1,365,100	67,400	2,460,100
Between US 301 Loop Off-Ramp and On-Ramp	0.13	29,600	1,404,500	35,400	1,679,750	63,900	3,032,050
Between US 301 and Homestead Road Int.	4.35	32,400	51,443,100	38,800	61,604,700	70,000	111,142,500
Between Homestead Road Off- and On-Ramps	0.44	30,900	4,962,550	37,000	5,942,200	66,700	10,712,000
Between Homestead Road and SC-210 Int.	5.35	32,300	63,073,850	38,700	75,571,450	69,800	136,301,950
Between SC-210 Off- and On-Ramps	0.42	31,700	4,859,600	37,900	5,810,050	68,500	10,501,050
Between SC-210 and I-95 Interchanges	3.18	32,600	37,838,800	39,000	45,267,300	70,500	81,829,350
Between I-95 Off-Ramp and Loop On-Ramp	0.35	23,900	3,053,250	28,600	3,653,650	51,700	6,604,700
Between I-95 Loop On- and Off-Ramps	0.14	28,700	1,466,550	34,400	1,757,850	62,100	3,173,300
Between I-95 Loop Off-Ramp and On-Ramp	0.35	28,400	3,628,100	34,000	4,343,500	61,400	7,843,850
Between I-95 and US 15 Interchanges	2.36	29,400	25,325,150	35,200	30,321,300	63,600	54,785,050
Between US 15 Off-Ramp and Loop On-Ramp	0.16	28,800	1,681,900	34,400	2,008,950	62,300	3,638,300
Between US 15 Loop On-and Off-Ramps	0.09	29,000	952,650	34,700	1,139,900	62,800	2,063,000
Between US 15 Loop Off-Ramp and On-Ramp	0.15	28,700	1,571,350	34,300	1,877,950	62,100	3,400,000
Between US 15 and SC-453 Interchanges	5.14	29,400	55,157,350	35,200	66,038,700	63,700	119,507,550
Between SC-453 Off- and On-Ramps	0.32	28,000	3,270,400	33,500	3,912,800	60,600	7,078,100
Grand Total	31.95		366,119,450		438,268,350		791,448,500
Average AADT of I-26 Segments (Eastbound)	31.95	29,905	348,739,333	35,782	417,278,618	64,627	753,667,098

Note: Total miles used with average AADT to obtain average VMT.

Source: 2024 - 2030 - 2050 No-Build Traffic Data provided by JMT, rec'd August 5, 2025. File: 2030 and 2050 No Build AADT VMT Calc - 07292025.xlsx

2024 - 2030 - 2050 Westbound No-Build Traffic Data

WESTBOUND I-26	Length (mi)	2024 EXISTING		2030 NB		2050 NB	
		EX AADT	Total EX VMT	2030 NB AADT	2030 NB VMT	2050 NB AADT	2050 NB VMT
Segment Description							
Between SC-453 Off- and On-Ramps	0.32	27,800	3,247,050	33,200	3,877,750	59,900	6,996,300
Between SC-453 and US 15 Interchanges	5.14	9,200	54,782,100	34,900	65,475,900	63,000	118,194,300
Between US 15 Off-Ramp and Loop On-Ramp	0.15	29,000	1,587,750	34,600	1,894,350	62,500	3,421,900
Between US 15 Loop On-and Off-Ramps	0.09	29,600	972,350	35,400	1,162,900	63,800	2,095,850
Between US 15 Loop Off-Ramp and On-Ramp	0.16	29,000	1,693,600	34,600	2,020,650	62,500	3,650,000
Between US 15 and I-95 Interchanges	2.36	29,200	25,152,900	34,900	30,062,850	63,000	54,268,200
Between I-95 Off-Ramp and Loop On-Ramp	0.35	24,700	3,155,450	29,500	3,768,650	53,200	6,796,300
Between I-95 Loop On- and Off-Ramps	0.14	33,400	1,706,750	39,900	2,038,900	72,000	3,679,200
Between I-95 Loop Off-Ramp and On-Ramp	0.35	32,600	4,164,650	38,900	4,969,500	70,200	8,968,050
Between I-95 and SC-210 Interchanges	3.18	32,700	37,954,900	39,100	45,383,350	70,500	81,829,350
Between SC-210 Off- and On-Ramps	0.42	31,900	4,890,250	38,100	5,840,750	68,700	10,531,700
Between SC-210 and Homestead Road Int.	5.35	32,500	63,464,400	38,900	75,962,000	70,000	136,692,500
Between Homestead Road Off- and On-Ramps	0.44	29,900	4,801,950	35,700	5,733,400	64,300	10,326,600
Between Homestead Road and US 301 Int.	4.35	32,500	51,601,900	38,900	61,763,500	70,000	111,142,500
Between US 301 Off-Ramp and Loop On-Ramp	0.14	32,100	1,640,300	38,400	1,962,250	69,100	3,531,000
Between US 301 Loop On- and Off-Ramps	0.1	33,400	1,219,100	40,000	1,460,000	72,000	2,628,000
Between US 301 Loop Off-Ramp and On-Ramp	0.13	30,700	1,456,700	36,700	1,741,400	66,100	3,136,450
Between US 301 and SC-33 Interchanges	5.35	32,600	63,659,650	39,000	76,157,250	70,200	137,083,050
Between SC-33 Loop Off-Ramp and On-Ramp	0.17	31,700	1,967,000	37,900	2,351,700	68,200	4,231,800
Between SC-33 and US 601 Interchanges	2.91	32,700	34,732,300	39,100	41,530,050	70,400	74,775,350
Between US 601 Off-Ramp and Loop On Ramp	0.14	30,200	1,543,200	36,100	1,844,700	65,000	3,321,500
Between US 601 Loop On-Ramp and On-Ramp	0.24	32,700	2,864,500	39,100	3,425,150	70,400	6,167,050
	31.98		368,258,750		440,426,950		793,466,950
Average AADT of I-26 Segments (Westbound)	31.98	30,914	360,845,603	36,950	431,306,265	66,591	777,295,705

Source: 2024 - 2030 – 2050 No-Build Traffic Data provided by JMT, August 5, 2025. File: 2030 and 2050 No Build AADT VMT Calc – 07292025.xlsx

2030 – 2050 Eastbound Build Traffic Data

EASTBOUND I-26		2030 BUILD		2050 BUILD	
Segment Description	Length (mi)	AADT	VMT	AADT	VMT
Between US 601 Off-Ramp and On Ramp	0.35	31,300	3,998,600	56,500	7,217,900
Between US 601 and SC-33 Interchanges	2.91	39,100	41,530,050	70,600	74,987,800
Between SC-33 Off-Ramp and Loop On-Ramp	0.17	37,900	2,351,700	68,400	4,244,200
Between SC-33 and US 301 Interchanges	5.35	38,900	75,962,000	70,200	137,083,050
Between US 301 Off-Ramp and On Ramp	0.37	35,200	4,753,750	63,600	8,589,200
Between US 301 and Homestead Road Int.	4.35	38,800	61,604,700	70,000	111,142,500
Between Homestead Road Off- and On-Ramps	0.44	37,000	5,942,200	66,700	10,712,000
Between Homestead Road and SC-210 Int.	5.35	38,700	75,571,450	69,800	136,301,950
Between SC-210 Off- and On-Ramps	0.42	37,900	5,810,050	68,500	10,501,050
Between SC-210 and I-95 Interchanges	3.18	39,000	45,267,300	70,500	81,829,350
Between I-95 Off-Ramp and Loop Off-Ramp	0.49	28,600	5,115,100	51,700	9,246,550
Between I-95 Loop Off-Ramp and On-Ramp	0.35	28,200	3,602,550	51,000	6,515,250
Between I-95 and US 15 Interchanges	2.36	35,200	30,321,300	63,600	54,785,050
Between US 15 Off-Ramp and Loop On-Ramp	0.16	34,400	2,008,950	62,300	3,638,300
Between US 15 Loop On-and Off-Ramps	0.09	34,700	1,139,900	62,800	2,063,000
Between US 15 Loop Off-Ramp and On-Ramp	0.15	34,300	1,877,950	62,100	3,400,000
Between US 15 and SC-453 Interchanges	5.14	35,200	66,038,700	63,700	119,507,550
Between SC-453 Off- and On-Ramps	0.32	33,500	3,912,800	60,600	7,078,100
Grand Total	31.95		436,809,050		788,842,800
Average AADT of I-26 Segments (Eastbound)	31.95	35,439	413,279,463	64,033*	746,740,725

* AADT used to determine less than 140,000 threshold.

Source: 2030 – 2050 Build Traffic Data provided by JMT, August 5, 2025. File: 2030 and 2050 Build AADT VMT Calc – 07292025.xlsx

2030 – 2050 Westbound Build Traffic Data

WESTBOUND I-26		2030 BUILD		2050 BUILD	
Segment Description	Length (mi)	2030 BUILD AADT	2030 BUILD VMT	2050 BUILD AADT	2050 BUILD VMT
Between SC-453 Off- and On-Ramps	0.32	33,200	3,877,750	59,900	6,996,300
Between SC-453 and US 15 Interchanges	5.14	34,900	65,475,900	63,000	118,194,300
Between US 15 Off-Ramp and Loop On-Ramp	0.15	34,600	1,894,350	62,500	3,421,900
Between US 15 Loop On-and Off-Ramps	0.09	35,400	1,162,900	63,800	2,095,850
Between US 15 Loop Off-Ramp and On-Ramp	0.16	34,600	2,020,650	62,500	3,650,000
Between US 15 and I-95 Interchanges	2.36	34,900	30,062,850	63,000	54,268,200
Between I-95 Off-Ramp and Loop Off-Ramp	0.49	29,500	5,276,100	53,200	9,514,800
Between I-95 Loop Off-Ramp and On-Ramp	0.35	28,500	3,640,900	51,400	6,566,350
Between I-95 and SC-210 Interchanges	3.18	39,100	45,383,350	70,500	81,829,350
Between SC-210 Off- and On-Ramps	0.42	38,100	5,840,750	68,700	10,531,700
Between SC-210 and Homestead Road Interchange	5.35	38,900	75,962,000	70,000	136,692,500
Between Homestead Road Off- and On-Ramps	0.44	35,700	5,733,400	64,300	10,326,600
Between Homestead Road and US 301 Int.	4.35	38,900	61,763,500	70,000	111,142,500
Between US 301 Off-Ramp and On-Ramp	0.37	35,100	4,740,250	63,200	8,535,150
Between US 301 and SC-33 Interchanges	5.35	39,000	76,157,250	70,200	137,083,050
Between SC-33 Loop Off-Ramp and On-Ramp	0.17	37,900	2,351,700	68,200	4,231,800
Between SC-33 and US 601 Interchanges	2.91	39,100	41,530,050	70,400	74,775,350
Between US 601 Off-Ramp and On Ramp	0.38	36,100	5,007,050	65,000	9,015,500
Grand Total	31.98		437,880,700		788,871,200
Average AADT of I-26 Segments (Westbound)	31.98	35,750	417,299,025	64,433*	752,110,970

* AADT used to determine less than 140,000 threshold.

Source: 2030 – 2050 Build Traffic Data provided by JMT, rec'd August 5, 2025. File: 2030 and 2050 Build AADT VMT Calc – 07292025.xlsx

* AADT EB 64,033 + WB 64,433 = 128,467 < 140,000 AADT threshold.