

Air Quality Conformity Analysis

Introduction

This report documents the air quality conformity determination for the 2019-2022 Statewide Transportation Improvement Program (STIP). The report was prepared by the Maine Department of Transportation (MaineDOT) in coordination with the Maine Department of Environmental Protection (DEP), Portland Area Comprehensive Transportation Committee (PACTS) Metropolitan Planning Organization (MPO) and Kittery Area Comprehensive Transportation System (KACTS) Metropolitan Planning Organization.

Transportation conformity is required under the Clean Air Act (CAA) and the Clean Air Act Amendments of 1990 (CAAA). The purpose of the transportation conformity process is to ensure that federally funded or approved transportation projects, programs and plans are reviewed and evaluated for their impacts on air quality. Specifically, the projects and other federally funded activities contained in the Long-Range Transportation Plan (LRTP) or STIP may not cause or contribute to new violations, exacerbate existing violations, or interfere with the timely attainment of air quality standards. The transportation conformity process requires the active participation of all agencies (federal, state, and local) that implement federally funded transportation projects and programs within the Portland and Midcoast areas.

This report demonstrates transportation conformity to the 8-hour ozone National Ambient Air Quality Standards (NAAQS) for Maine's two ozone maintenance areas. This analysis has been prepared in accordance with U.S. Environmental Protection Agency's (EPA) final conformity rule. The following sections of this report briefly discuss Maine's air quality designations, identify the applicable transportation plans/program in the conformity analysis, describe the interagency consultation process, highlight the methodology used to perform the current analysis, and present the final conformity determination.

Maine's Air Quality Designations

The CAA requires EPA to set NAAQS for pollutants considered harmful to public health and the environment. The CAA established two types of national air quality standards. Primary air quality standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary air quality standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set NAAQS for six principal pollutants, which are called "criteria" pollutants. The six criteria pollutants are carbon monoxide, lead, nitrogen oxides, particulate matter, ozone, and sulfur dioxides. Areas that do not meet the NAAQS are designated as nonattainment areas and, as a result, are subject to transportation conformity. Maintenance areas are geographic regions that were previously designated as nonattainment, but are now consistently meeting the NAAQS. Transportation conformity requires nonattainment and maintenance areas to

demonstrate that all future transportation projects will not hinder the area from reaching and maintaining its attainment goals.

Maine previously had two regions (Portland and Midcoast) designated as maintenance areas for the 8-hour ozone standard and one small area (downtown Presque Isle) was designated as a maintenance area for PM₁₀. The 20-year maintenance period for the Presque Isle PM₁₀ maintenance area expired on October 30, 2015. Therefore, Maine is no longer required to demonstrate transportation conformity for the Presque Isle PM₁₀ maintenance area. No carbon monoxide, lead, nitrogen oxides, or sulfur dioxide nonattainment areas have been identified in Maine.

On February 16, 2018, the U.S. Court of Appeals for the District of Columbia vacated major portions of the 2015 rule that established procedures for transitioning from the 1997 ozone NAAQS to the 2008 ozone NAAQS. As a result of this decision, the State of Maine is once again subject to transportation conformity requirements for the Portland and Midcoast 8-hour ozone maintenance areas established under the 1997 ozone NAAQS. Orphan maintenance areas were defined in the court decision as areas that were maintenance areas for the 1997 ozone NAAQS at the time of its revocation and were designated attainment for the 2008 ozone NAAQS in EPA's original designations. The Portland and Midcoast areas of Maine fall into the category of orphan areas.

Figure 1 shows the boundaries of Maine's two 8-hour ozone maintenance areas and their relationship to the two metropolitan planning areas. The Portland 8-hour ozone maintenance area encompasses portions of four counties, and includes 55 municipalities. The Portland ozone maintenance area also encompasses the transportation planning jurisdictions of the KACTS and PACTS MPOs. The Midcoast 8-hour ozone maintenance area encompasses portions of four counties and includes 54 municipalities. Table 1 describes each ozone maintenance area by county and municipality.

Figure 1: Maine's Ozone Maintenance Areas

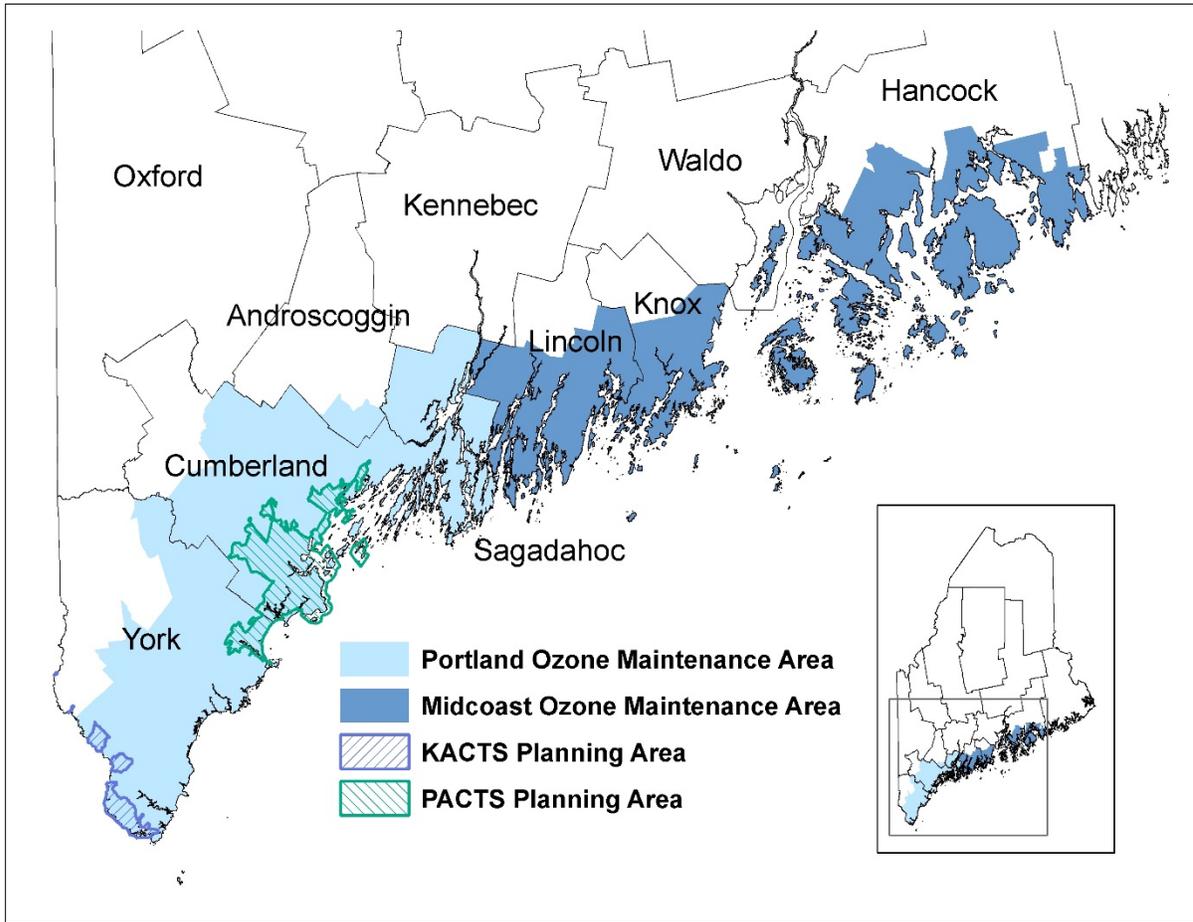


Table 1: Maine's Ozone Maintenance Areas by County and Municipality

Area	County	Towns
Portland	York	Alfred, Arundel, Berwick, Biddeford, Buxton, Dayton, Eliot, Hollis, Kennebunk, Kennebunkport, Kittery, Limington, Lyman, North Berwick, Ogunquit, Old Orchard Beach, Saco, Sanford, South Berwick, Wells, and York
Portland	Cumberland	Brunswick, Cape Elizabeth, Casco, Cumberland, Falmouth, Freeport, Frye Island, Gorham, Gray, Harpswell, Long Island, New Gloucester, North Yarmouth, Portland, Pownal, Raymond, Scarborough, South Portland, Standish, Westbrook, Windham, and Yarmouth
Portland	Androscoggin	Durham
Portland	Sagadahoc	Arrowsic, Bath, Bowdoin, Bowdoinham, Georgetown, Perkins Twp, Phippsburg, Richmond, Topsham, West Bath, and Woolwich.
Midcoast	Lincoln	Alna, Boothbay, Boothbay Harbor, Bremen, Bristol, Damariscotta, Dresden, Edgecomb, Monhegan Island Plt, Newcastle, Nobleboro, South Bristol, Southport, Waldoboro, Westport, and Wiscasset
Midcoast	Knox	Camden, Cushing, Criehaven Twp, Friendship, Isle Au Haut, Matinicus Isle Plt, Muscle Ridge Shoals Twp, North Haven, Owls Head, Rockland, Rockport, South Thomaston, St. George, Thomaston, Vinalhaven, and Warren
Midcoast	Waldo	Isleboro
Midcoast	Hancock	Bar Harbor, Blue Hill, Brooklin, Brooksville, Cranberry Isles, Deer Isle, Frenchboro, Gouldsboro, Hancock, Lamoine, Mt. Desert, Sedgwick, Sorrento, Southwest Harbor, Stonington, Sullivan, Surry, Swans Island, Tremont, Trenton, and Winter Harbor

Conformity Analysis

Based on EPA's "Transportation Conformity Guidance for the *South Coast II* Court Decision" (EPA-420-B-18-050, November 2018), transportation conformity for the 1997 ozone NAAQS can be demonstrated for a non-exempt FHWA/FTA project in an orphan area by showing that the following criteria have been met:

- **Use of the latest planning assumptions.**

Use of the latest planning assumptions, per 40 CFR 93.110. These criteria generally apply to regional emissions analyses. In orphan areas, ensuring the latest planning assumptions are used applies to information about TCMs in an approved State Implementation Plan (SIP) (40 CFR 93.113); at this time, no TCMs are specifically identified in Maine's SIP. Therefore, this condition is met and will not be addressed further.

- **Interagency consultation requirements.**

Transportation conformity is a collaborative process among federal, state, and local agencies. Every three months, MaineDOT convenes an interagency consultation committee meeting with representatives from the following agencies:

- MaineDOT
- Maine DEP
- Maine Turnpike Authority (MTA)
- PACTS
- KACTS
- Androscoggin Transportation Resource Center (ATRC)
- Greater Portland Council of Governments (GPCOG)
- Southern Maine Regional Planning Commission (SMRPC)
- FHWA
- FTA
- EPA

The meetings are generally well attended by all parties and are conducted by teleconference. The consultation meetings have been held regularly since 1992. The general purposes of the interagency consultation meetings are to:

- Provide a forum for discussion and decision making regarding all areas of transportation conformity including, but not limited to, the development of the SIP, MVEBs, transportation plans, STIPS/TIPs and associated conformity documents
- Evaluate events that will trigger new conformity determinations
- Determine latest planning assumptions and emission models
- Identify projects requiring a regional emissions or hot-spot analysis
- Develop a format for presenting the transportation conformity determination
- Establish a public participation process for the conformity determination

The conformity analysis is prepared by MaineDOT with assistance from DEP under the guidance of the interagency consultation committee. The decisions made by the consultation committee serve as the basis for the conformity analysis and the ultimate conformity determination. The conformity analysis and the applicable transportation plans and programs are made available for public review and comment.

The specific purposes of the interagency consultation meetings and the roles and responsibilities for the agencies (DEP, MaineDOT, PACTS, and KACTS) responsible for performing the conformity analysis are established in Section 4 of Maine's transportation conformity regulation. As part of the SIP, the interagency consultation procedures contained in Maine's transportation conformity regulation are federally enforceable.

- **Timely implementation of any approved SIP transportation control measures (TCMs).**

The plan or program must provide for the timely implementation of any transportation control measures (TCM) specifically identified in the State Implementation Plan (SIP) (40 CFR 93.113). At this time no TCMs are specifically identified in Maine's SIP. Therefore, this condition is met and will not be addressed further.

- **Fiscal constraint.**

Transportation plans and TIPs must demonstrate fiscal constraint consistent with DOT's metropolitan planning regulations. For more information on fiscal constraint please see the introduction section of the STIP.

Conclusion

The preceding pages demonstrate that all the required conformity tests were satisfied in the Portland and Midcoast maintenance areas. A regional emissions analysis is not required in the orphan areas so the remaining criteria were evaluated and satisfied. Since a PM₁₀ hot-spot determination is no longer required, the conditions for the Presque Isle PM₁₀ maintenance area have also been satisfied. Therefore, the 2019-2022 STIP, and the 2019-2022 PACTS and KACTS TIPs, conform to the current SIP and satisfy the conformity requirements of the Clean Air Act Amendments of 1990.

Non-Exempt Projects in the 2019-2021 STIP/TIPs

The following projects listed in the 2019-2021 MaineDOT STIP and if applicable, the PACTS or KACTS TIPs, have been determined to be non-exempt based on the criteria set forth in § 93.126 of EPA's document *Transportation Conformity Regulations as of April 2012*:

List of Non-Exempt Projects in 2019-2021 Work Plan						
WIN/PSN	County	Town	Title	Scope	Work Plan Description	MPO
19429.00	York	Eliot	ELIOT, ROUTE 236	Intersection Improvements W/Signal	Located at the intersection of Route 236 and Depot Road.	KACTS
20899.00	York	York	YORK, ROUTE 1	Install or Replace Traffic Signals	Located at the intersection of Route 1 and New Connector Road. KACTS Sponsored.	KACTS
18419.00	Cumberland	Portland	PORTLAND, DANFORTH ST RR XING	Bridge Removal	Danforth Street Crossing Bridge (#3525) over Danforth Street. Located 0.02 of a mile south of Route 1A.	PACTS
18574.00	York	Biddeford	BIDDEFORD, MAIN/HILL/WATER ST	Intersection Improvements W/Signal	Located at the intersections of Main Street, Water Street, Hill Road and Pepperell Mill Campus entrance. Mill and fill beginning at Hill Street and extending east 0.13 of a mile to Hill Street. PACTS Sponsored.	PACTS
18624.00	Cumberland	Portland	PORTLAND, ROUTE 25 ROUNDABOUTS	Roundabout Construction	Beginning at Bedford Street and extending west 0.09 of a mile. PACTS Sponsored.	PACTS
18637.00	Cumberland	Westbrook	WESTBROOK, ROUTE 25B	Intersection Improvements W/Signal	Rotary area intersections of Harnois Street/Main Street/Cumberland Street; Main Street/Warren Avenue; and Main Street/Forest Street. PACTS Sponsored.	PACTS
23274.00	York	Saco	SACO PARK AND RIDE BMP	Multimodal Improvements	Located 0.60 of a mile north of North Street.	PACTS
18766.00	Cumberland	Gray	GRAY, ROUTE 26/N RAYMOND RD	Intersection Improvements W/Signal	Located at the intersection of Route 26 and North Raymond Road.	n/a
20210.00	Cumberland	Standish	STANDISH, RT 25/MANCHESTER/SAC	Roundabout Construction	Located at the intersection of Route 25, Manchester Road and Saco Road.	n/a
22016.00	Knox	Rockland	Rockland, Park and Ride	Multimodal Improvements	Located 0.06 of a mile north of Route 1 on Rockland Street.	n/a
23921.00	Cumberland	Brunswick	BRUNSWICK, INTERMODAL CENTER	Reconstruction	Located 0.07 of a mile east of Spring Street.	n/a