

comparison of an earlier (pre-9/11) FAA activity forecast to a recent (post-9/11) forecast, see the below table. We request comment on the effect that September

11, 2001, and the subsequent economic downturn have had on the projected growth of commercial aircraft emissions. Your comments will be most

useful if you include appropriate and detailed supporting data and analysis.)

TABLE III–1.—FAA TERMINAL AREA FORECAST SUMMARY REPORT OF NATIONWIDE AIR CARRIER OPERATIONS ²¹

Year	Air carrier operations 12/14/00 forecast (pre-9/11)	Percent change 12/14/00 forecast between years listed	Air carrier operations 5/1/03 forecast (post-9/11)	Percent change 5/1/03 forecast between years listed
1999	15,127,419	14,776,055
2000	15,476,135	2.3	15,265,682	3.3
2001	15,819,505	2.2	14,807,303	–3.0
2002 ^a	16,210,777	2.5	13,255,837	–10
2005	17,455,705	7.6	13,918,058	5.0
2010	19,664,128	14	15,608,349	13
2015	22,004,067	12	17,372,200	11
2020	N/A ^b	—	19,249,778	11

^a The change in operations from 2000 to 2002 was +4.7% for the 12/14/00 forecast, and it was –13% for the 5/1/03 forecast.

^b N/A = Not available.

Air pollutants resulting from airport operations are emitted from several types of sources: aircraft main engines and auxiliary power units (APUs); ground support equipment (GSE), which include vehicles such as aircraft tugs, baggage tugs, fuel trucks, maintenance vehicles, and other miscellaneous vehicles used to support aircraft operations; ground access vehicles (GAV), which include vehicles from off-site used by passengers, employees, freight operators, and other persons utilizing an airport. EPA's previous estimates show aircraft engines comprise approximately 45 percent of total air pollutant emissions from airport operations; GAV account for another 45 percent, and APUs and GSE combined make up the remaining 10

percent.²² Since EPA has established stringent emission standards for GAVs and other motor vehicles that will be manufactured and introduced into commerce in future years, overall emissions from these vehicles will continue to decline for many years.

The emissions from aircraft engines that are being directly controlled by the standards proposed in this rulemaking are NO_x. As discussed later in this section, NO_x emissions at low altitude also react in the atmosphere to form secondary particulate matter (PM_{2.5}),²³ which is namely ammonium nitrate, and thus, secondary PM would be effected as a consequence of the proposed standards. Adopting standards equivalent to the latest ICAO NO_x emission standards and the related

ICAO test procedures would help in achieving and/or maintaining compliance with the NAAQS for ozone (O₃) and PM.

There are about 111 million people living in counties with monitored concentrations exceeding the 8-hour ozone NAAQS, and over 65 million people living in counties with monitored PM_{2.5} levels exceeding the PM_{2.5} NAAQS. Figure III.–1 illustrates the widespread nature of these problems. Shown in this figure are counties exceeding either or both of the two NAAQS plus mandatory Federal Class I areas, which have particular needs for reductions in atmospheric haze. A discussion of the adverse effects on public health and welfare associated with these pollutants is provided below.

these projections did not fully reflect the ongoing structural changes occurring within the aviation industry. A copy of the May 1, 2003 forecast summary report for air carrier activity can be found in Docket No. OAR–2002–0030.

²¹ A copy of FAA's 12/14/00 forecast summary report (from TAFS) for air carrier activity can be found in Docket No. OAR–2002–0030.

²² The California FIP, signed by the Administrator 2/14/95, is located in EPA Air Docket A–94–09,

item number V–A–1. The FIP was vacated by an act of Congress before it became effective.

In addition, the 1997 EPA Draft Final Report entitled, "Analysis of Techniques to Reduce Air Emission at Airports" (prepared by Energy and Environmental Analysis, Inc), it was estimated that for the four airports studied (which are large air traffic hubs) on average aircraft compromise approximately 35 percent of NO_x emissions from airport operations; GAV account for another 35

percent, and APUs and GSE contribute about 15 percent each for the remaining 30 percent. This document can be found in Docket No. OAR–2002–0030.

²³ As described later in section III.A.2., fine particles refer to those particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (also known as PM_{2.5}).