U.S. Department
of Transportation

**Federal Aviation
Administration**

Aviation System Indicators

1996 Annual Report

**Assistant Administrator for System Safety
Safety Data Services Division**

March 14, 1997

Dear Reader:

I am pleased to provide you with the 1996 annual edition of the "Aviation System Indicators" report. This report presents graphs and data tables for 36 aviation system and environmental indicators that the Federal Aviation Administration (FAA) has developed to give a broad view of the national aviation system operation and environment.

The 24 system indicators include accident and incident rates, and measures of efficiency, compliance, and inspector activity. The environmental indicators include future-oriented and other information that provide a perspective on the current and future environment in which the system operates.

I hope you find this information to be a useful tool for assessing the safety and other aspects of the aviation system. Publication of this printed report is limited to annual editions. However, quarterly updates of system indicators data can be accessed on the Internet/World Wide Web at the Office of System Safety home page (http://nasdac.faa.gov) and on an FAA bulletin board. The data updates become available about 7 weeks after the end of each calendar quarter. Information on how to access the web site and bulletin board may be found in the appendix of this report.

We welcome your comments and suggestions regarding the report. Please mail or fax these to Dave Briles at:

Federal Aviation Administration
ASY-100, Room 725
800 Independence Avenue, SW
Washington, DC 20591
Fax: 202/267-5234

Sincerely,

Barbara Sada
Manager, Safety Data Services Division

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EXECUTIVE SUMMARY

This report presents Federal Aviation Administration (FAA)-developed aviation system and environmental indicators, which provide a comprehensive view of the national aviation system operation and environment through December 31, 1996. The indicators show trends and valuable information about the current status of system performance and show areas that have improved, remained the same, or may need improvement.

BACKGROUND

This report contains data for 24 aviation system and 12 aviation environmental indicators. One additional system indicator is under development. The aviation system indicators reflect current and past system performance. They are classified as accident indicators, incident indicators, efficiency measures, compliance measures, and inspector activity measures. The aviation environmental indicators provide broadly based, future-oriented information about the environment in which the aviation system operates, and thus illustrate the potential demands on the aviation system.

Accident indicators include accident rates for large air carriers, commuter air carriers, air taxis, general aviation, rotorcraft, and midair collisions. Incident indicators include aircraft incident rates for large air carriers, commuter air carriers, air taxis, general aviation, and rotorcraft. They also include rates of air carrier near midair collisions (NMACs), pilot deviations, operational errors, and runway incursions, in addition to the number of vehicle/pedestrian deviations (VPDs) and NMACs.

Efficiency measures include facility/service reliability, facility/service operational availability, delay rates, and delays due to volume rates. Compliance measures include the aircraft certification system evaluation program, Stage 3 aircraft ratio and airport certification indicator rate.[1] Inspector activity measures consist of national inspector activity rates.

The FAA considers it misleading and inaccurate to treat any one system indicator as an indicator of the status of the system. Because of the many redundancies in the system, a decline in one indicator does not, by itself, represent a degradation in overall system status. Accidents, for example, usually involve a sequence of failures. Safety is maintained unless all of the relevant systems and procedures fail. Movement of one indicator, however, can help FAA management and the aviation community focus resources to further investigate underlying factors, and thereby maintain and improve the wide margin of safety that the system is designed to provide.

[1] This indicator is still under development and is not included in this report.

OBSERVATIONS FOR THIS EDITION

The number of general aviation accidents decreased in 1996 to a 15-year low of 1,907 accidents. The accident rate per 100,000 flight hours for 1996 was 8.06, the lowest for any year since 1991 (7.99). Commuters also had a relatively safe year experiencing 11 total accidents in 1996, the same as in 1995, which was the second lowest in 15 years. The commuter total accident rate per 100,000 flight hours for 1996 was 0.44, the same as in 1995 and the second lowest since 1990. Large air carriers experienced 38 accidents in 1996, of which 6 were major accidents (involving fatalities and/or a destroyed aircraft) and the remaining 32 were either injury accidents (involving at least one serious injury and substantial aircraft damage) or damage accidents (in which no person was killed or seriously injured, but the aircraft was substantially damaged). The large air carrier accident rate for 1996 was 0.28 accidents per 100,000 flight hours. This is not significantly different from 1995's rate of 0.27. The number of air taxi accidents increased in 1996 compared to 1995 (to 87 from 75), which led to a similar increase in the estimated accident rate to 4.57 accidents per 100,000 flight hours. (Note that flight hour estimates for air taxis are imprecise.) The number of rotorcraft accidents rose from 162 in 1995 to 178 in 1996. The rotorcraft accident rate also increased slightly, but the reader is cautioned that the flight hour estimates for rotorcraft are imprecise. The number of midair collisions and the midair collision rate per 100,000 flight hours both increased over 1995 levels to 20 collisions and a rate of 0.048 per 100,000 flight hours in 1996.

Although aircraft incident data is not complete for the last three months of 1996, preliminary data for the first nine months of 1996 indicate the number of large air carrier incidents has increased over the same period of 1995. In contrast, the number of aircraft incidents in the commuter air carrier, air taxi, general aviation, and rotorcraft categories have all decreased by 11% or more for January through September of 1996 compared to the same time period in 1995.

Airspace incident indicators showed mixed results for 1996. The number of total near midair collisions (NMACs), air carrier NMACs, and vehicle/pedestrian deviations (VPDs) all declined in 1996 to their lowest annual totals since the FAA began maintaining data on these events. Indicators that showed negative trends in 1996 include pilot deviations (PDs), which reversed a long-term decline and increased 11% over the number of PDs in 1995, with a similar increase in the PD rate per 100,000 flight hours (10%). The 1996 operational error (OE) rate, 0.535 OEs per 100,000 facility activities, is slightly higher (3%) than that for 1995. Both the total number of runway incursions and the runway incursion (RI) rate for 1996 increased. Comparing the types of RIs reported in 1995 to those in 1996, pilot deviation RIs increased from 127 to 155, VPD RIs increased from 50 to 61, and operational error RIs increased from 65 to 71.

Efficiency indicators show a slight decrease in system efficiency for 1996. Facility service operational availability and reliability both decreased slightly compared to 1995 (although both values for 1996 were the second best values--exceeded only by 1995--since these data were first collected in 1988). The total delay rate and the rate of delays due to volume both increased in 1996 over 1995 levels.

NOTES FOR THIS EDITION

Aircraft incident data for October, November, and December 1996 are incomplete as this report is being prepared. Therefore, no data for these three months or for calendar year 1996 are presented in this report. These data are expected to be available in the System Indicator electronic file INCIDENT.XLS, to be updated around May 30, 1997. This file can be accessed on the Internet or through an FAA electronic bulletin board, as described on pages I-1 through I-3 of this report.

Data for the Forecast of Gross Domestic Product Environmental Indicator are now presented in billions of 1992 dollars and have been calculated using a new method. These data were previously presented in billions of 1987 dollars.

Historical data for the Forecast of Passenger Enplanements and Forecast of IFR Aircraft Handled Environmental Indicators have been revised because a different source within the FAA was used to obtain some of the input data used to prepare these indicators. Specifically, the new data have been extracted from a database that relies primarily on data submitted electronically on a daily basis from FAA air traffic control facilities rather than an alternate database prepared from data submitted monthly in hard copy form.

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1. INTRODUCTION

This report presents Federal Aviation Administration (FAA)-developed aviation system and environmental indicators, which provide a comprehensive view of the national aviation system operation and environment through December 31, 1996. The indicators show trends and valuable information about the current status of system performance and show areas that have improved, remained the same, or that may need improvement.

This chapter discusses the background leading to the development of the aviation system indicators, a brief overview of the indicators, and the organization of the report.

BACKGROUND

The FAA is responsible for monitoring and managing the national aviation system and has developed system indicators to assist with this responsibility. Other government entities are also interested in the ability to view the status of the aviation system. For example, the U.S. Senate Appropriations Committee requested that the FAA develop indicators that would accurately reflect the status of the aviation system. Also, the General Accounting Office, the Office of Technology Assessment, and other organizations have requested the FAA to develop such indicators. The aviation community is also interested in knowing the status of the aviation system to facilitate its contribution to increasing safety.

Responding to these needs, the FAA developed aviation system and environmental indicators. Aviation system indicators are primarily measures of past or current system performance. The FAA also developed aviation environmental indicators to illustrate potential demands on the aviation system. To expedite the development of these indicators, an executive-level Task Force with representatives from all major program areas was formed. The Task Force identified an initial set of system and environmental indicators, which have been modified over time to now include 25 system indicators and 12 environmental indicators.

The FAA considers it misleading and inaccurate to treat any one system indicator as an indicator of the status of the system. Because of the many redundancies in the system, a decline in one indicator does not, by itself, represent a degradation in overall system status. Accidents, for example, usually involve a sequence of failures. Safety is maintained unless all of the relevant systems and procedures fail. Movement of one indicator, however, can help FAA management and the aviation community focus resources to further investigate underlying factors, and thereby maintain and improve the wide margin of safety that the system is designed to provide.

OVERVIEW OF AVIATION SYSTEM AND ENVIRONMENTAL INDICATORS

Currently, 24 of the 25 indicators have been developed; the one compliance measure still under development is airport certification indicator rate. This report provides data for 24 aviation system indicators classified in the broad categories of:

- Accident indicators (6 indicators)
- Incident indicators (11 indicators)
- Efficiency measures (4 measures)
- Compliance measures (2 measures)
- Inspector activity measures (1 measure).

The 12 environmental indicators provide a context for the system indicators. They include measures such as the forecast of annual enplanements, the forecast of annual instrument flight rule (IFR) aircraft handled at en route centers, and the number of aircraft hours flown.

This report is updated annually. New indicators will be added over time as a result of an ongoing review process to assess the status of aviation system performance. Current indicators will be modified and refined, as appropriate, to ensure their continuing adequacy and validity as measures of system performance. For example, inspector activity measures have replaced the surveillance measures first developed by the Task Force. Inspector activities include safety activities such as surveillance, investigation, education and training, as well as general technical functions.

REPORT ORGANIZATION

The remainder of this report is organized into two chapters as follows:

- Chapter 2 shows the aviation system indicator values in graphical and tabular formats by classification categories (accident indicators, incident indicators, efficiency measures, compliance measures, and inspector activity measures).

- Chapter 3 shows the aviation environmental indicator values in graphical and tabular formats.

Three reference sections follow the chapters:

- Acronym List provides a list of acronyms used in this report.

- Glossary provides definitions of terms used.

- Instructions for Accessing Electronic Files for Aviation System Indicators provides instructions for acquiring aviation system indicator data on the Internet and from an FAA electronic bulletin board.

2. AVIATION SYSTEM INDICATORS

Aviation system indicators are classified as accident indicators, incident indicators, efficiency measures, compliance measures, and inspector activity measures. The aviation system indicators presented in this chapter are listed below.

Aviation System Indicators

Accident Indicators	**Inspector Activity Measures**
Large Air Carrier Accident Rates	National Inspector Activity Rates
Commuter Air Carrier Accident Rates	
Air Taxi Accident Rates	**Incident Indicators**
General Aviation (GA) Accident Rates	Large Air Carrier Aircraft Incident Rates
Rotorcraft Accident Rates	Commuter Air Carrier Aircraft Incident Rates
Midair Collision Accident Rates	Air Taxi Aircraft Incident Rates
	General Aviation (GA) Aircraft Incident Rates
Efficiency Measures	Rotorcraft Aircraft Incident Rates
Facility/Service Reliability	Number of Near Midair Collisions (NMACs)
Facility/Service Operational Availability	Air Carrier Near Midair Collision (NMAC) Rates
Delay Rates	Pilot Deviation Rates
Delays Due to Volume Rates	Operational Error Rates
	Runway Incursion Rates
Compliance Measures[1]	Number of Vehicle/Pedestrian Deviations (VPDs)
Aircraft Certification System Evaluation Program	
Stage 3 Aircraft Ratio	

Information presented for each aviation system indicator includes a brief description of the indicator, graphs, a data table, and the formulas used to calculate the indicator values. The data tables and graphs for most aviation system indicators include two methods of calculating monthly values: actual monthly rates and 12-month moving average rates. Actual monthly rates indicate the number of accidents or incidents that occurred during that month divided by the appropriate measure of activity (e.g., flight hours or departures).[2] The 12-month moving average rates indicate the number of accidents or incidents that occurred during the past 12 months divided by the appropriate measure of activity for the past 12 months. The moving average smoothes the data to dampen seasonal or other fluctuations. The indicators are presented both ways so that the reader may see actual values as well as underlying trends.

[1] One compliance measure—airport certification indicator rate—is under development and is not presented in this report.

[2] Two incident indicator values—near midair collisions and vehicle/pedestrian deviations—are based on number of events, not rates.

The formulas show the calculations required to derive indicator values. Shorthand notation is used for some formulas to combine several similar equations into one expression. For example, the formula:

$$\textbf{Monthly/ 12–Mo Moving Avg:} \quad \textit{Accident Rate (per 100,000 flt hrs / deps)} = \frac{\textit{No. of Accidents in Mo / Past 12 Mos}}{\textit{No. of Flt Hrs / Deps in Mo / Past 12 Mos}} \textit{ x 100,000}$$

represents the following four separate equations:

$$\textit{Monthly Accident Rate (per 100,000 flight hours)} = \frac{\textit{No. of Accidents in Month}}{\textit{No. of Flight Hours in Month}} \textit{ x 100,000}$$

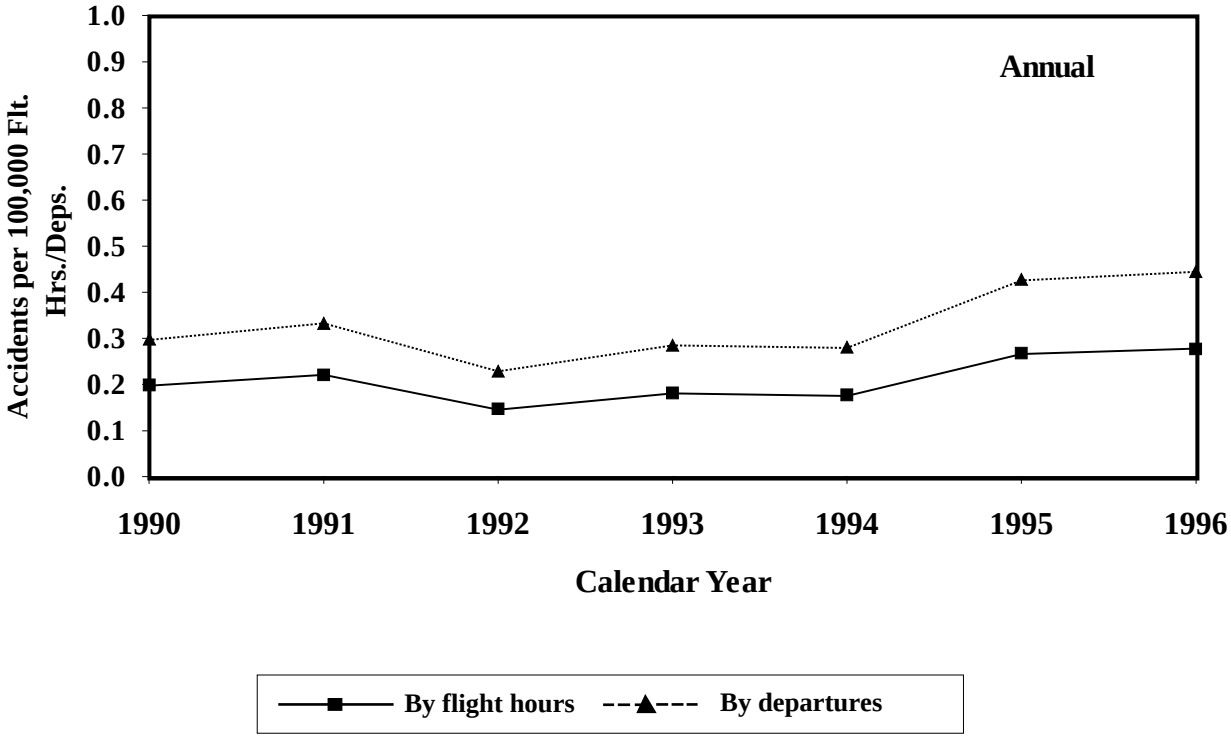
$$\textit{Monthly Accident Rate (per 100,000 departures)} = \frac{\textit{No. of Accidents in Month}}{\textit{No. of Departures in Month}} \textit{ x 100,000}$$

$$\textit{12 - Month Moving Average Accident Rate (per 100,000 flight hours)} = \frac{\textit{No. of Accidents in Past 12 Months}}{\textit{No. of Flight Hours in Past 12 Months}} \textit{ x 100,000}$$

$$\textit{12 - Month Moving Average Accident Rate (per 100,000 departures)} = \frac{\textit{No. of Accidents in Past 12 Months}}{\textit{No. of Departures in Past 12 Months}} \textit{ x 100,000}$$

In some instances data for recent months are preliminary and will change in subsequent editions of the report. This may occur, for example, when accidents are still under investigation. In some instances activity may also be estimated when actual data are not available.

LARGE AIR CARRIER ACCIDENT RATES



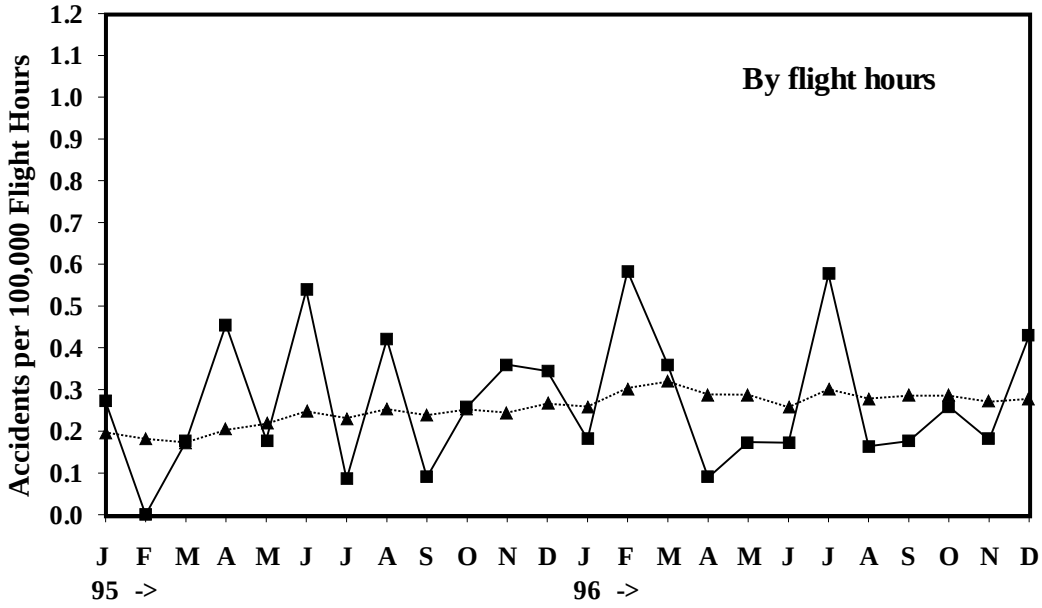
Description: This indicator compares the number of accidents involving all large air carriers (i.e., operating under FAR Parts 121 or 127) to the number of flight hours and departures for these carriers. This indicator is expressed as accidents per 100,000 flight hours and per 100,000 departures. Because most accidents occur during arrival or departure, the number of departures is considered to be the best normalizing variable. However, because departure data are not available for all operator types, rates based on flight hours are also calculated. Accidents involving Part 125 aircraft that were formerly included in this category have been reclassified as general aviation accidents.

LARGE AIR CARRIER ACCIDENT DATA

Calendar Year	No. of Accidents	No. of Flight Hours	Accident Rate (per 100,000 flight hours)		No. of Departures	Accident Rate (per 100,000 departures)	
1990	24	12,150,116	0.20		8,092,306	0.30	
1991	26	11,780,610	0.22		7,814,875	0.33	
1992	18	12,359,715	0.15		7,880,707	0.23	
1993	23	12,706,206	0.18		8,074,393	0.28	
1994	23	13,122,221	0.18		8,242,903	0.28	
1995	36	13,513,219	0.27		8,451,606	0.43	
1996	38	13,683,000	0.28		8,554,000	0.44	
Month			**Monthly**	**12-Mo Mov Avg**		**Monthly**	**12-Mo Mov Avg**
JAN 95	3	1,108,901	0.27	0.20	682,934	0.44	0.31
FEB 95	0	1,013,990	0.00	0.18	629,689	0.00	0.29
MAR 95	2	1,141,531	0.18	0.17	708,351	0.28	0.28
APR 95	5	1,097,918	0.46	0.20	678,526	0.74	0.32
MAY 95	2	1,115,275	0.18	0.22	693,623	0.29	0.35
JUN 95	6	1,116,562	0.54	0.25	690,275	0.87	0.40
JUL 95	1	1,173,842	0.09	0.23	740,586	0.14	0.37
AUG 95	5	1,191,291	0.42	0.25	758,425	0.66	0.41
SEP 95	1	1,117,392	0.09	0.24	709,405	0.14	0.38
OCT 95	3	1,160,630	0.26	0.25	738,020	0.41	0.40
NOV 95	4	1,112,549	0.36	0.24	700,924	0.57	0.39
DEC 95	4	1,163,339	0.34	0.27	720,848	0.55	0.43
JAN 96	2	1,103,632	0.18	0.26	689,941	0.29	0.41
FEB 96	6	1,028,361	0.58	0.30	642,885	0.93	0.48
MAR 96	4	1,115,838	0.36	0.32	697,572	0.57	0.51
APR 96	1	1,121,941	0.09	0.29	701,387	0.14	0.46
MAY 96	2	1,150,422	0.17	0.29	719,192	0.28	0.46
JUN 96	2	1,159,576	0.17	0.26	724,915	0.28	0.41
JUL 96	7	1,215,521	0.58	0.30	759,889	0.92	0.48
AUG 96	2	1,219,589	0.16	0.28	762,433	0.26	0.44
SEP 96	2	1,131,095	0.18	0.29	707,110	0.28	0.46
OCT 96	3	1,157,542	0.26	0.29	723,643	0.41	0.46
NOV 96	2	1,112,786	0.18	0.27	695,664	0.29	0.43
DEC 96	5	1,166,696	0.43	0.28	729,366	0.69	0.44

Data sources: NTSB - Accident data; DOT, FAA - Flight hour and departure data

LARGE AIR CARRIER ACCIDENT RATES



Monthly/ 12–Mo Moving Avg: *Accident Rate (per 100,000 flt hrs / deps)* $= \frac{\textit{No. of Accidents in Mo / Past 12 Mos}}{\textit{No. of Flt Hrs / Deps in Mo / Past 12 Mos}} \times 100{,}000$

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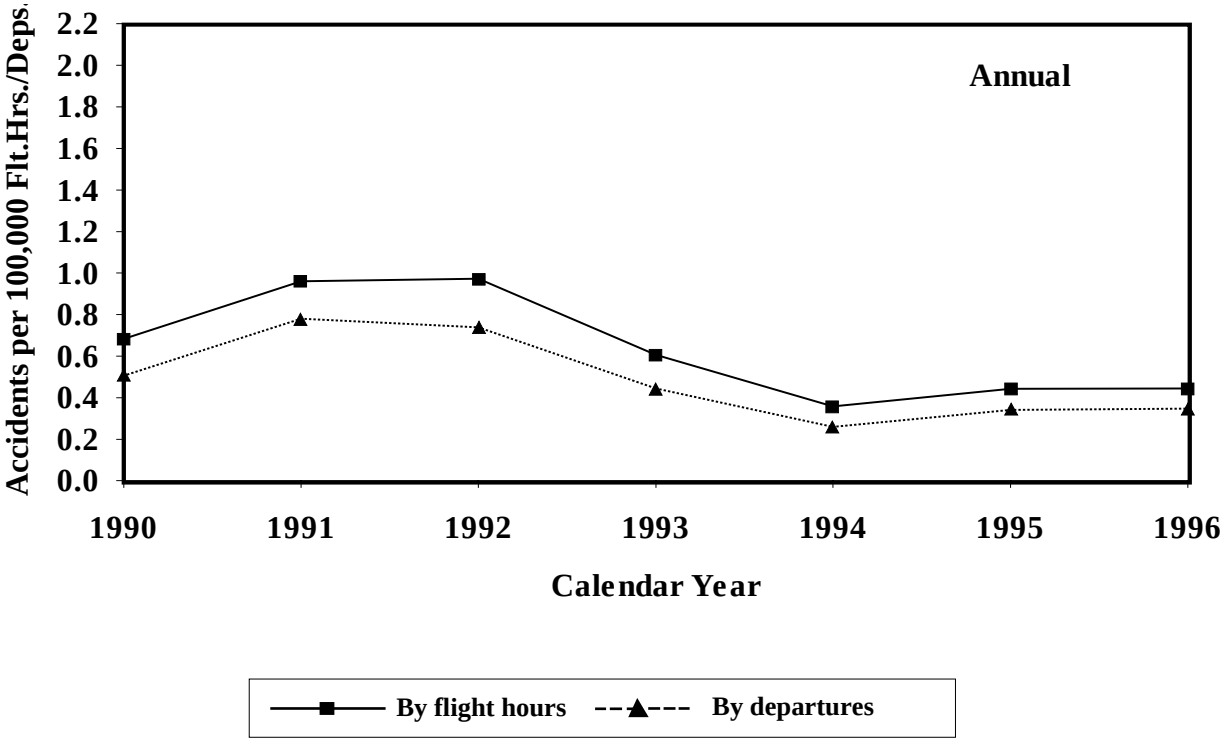
COMMUTER AIR CARRIER ACCIDENT RATES



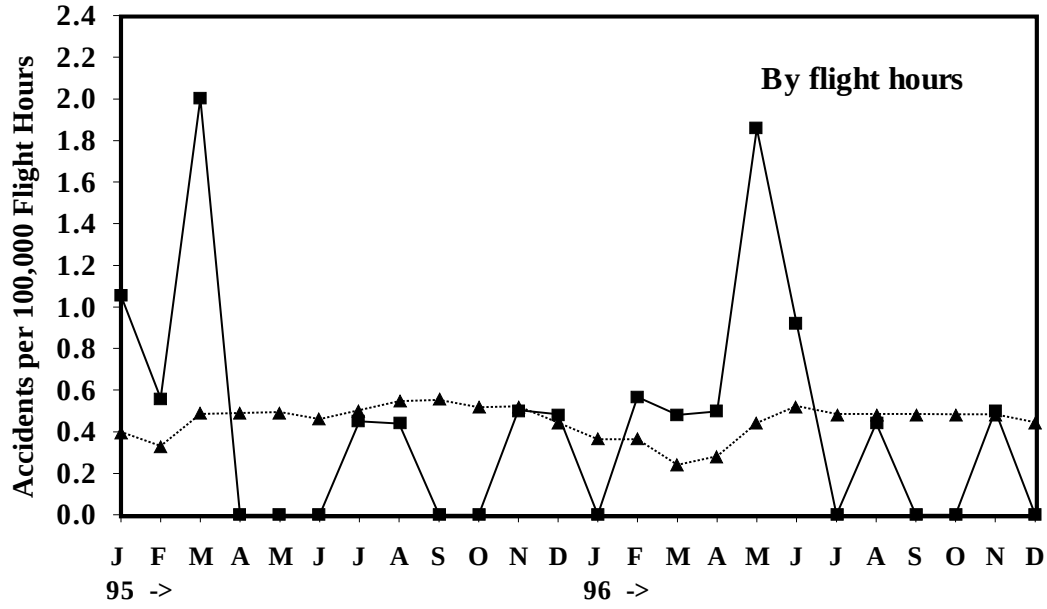
Description: This indicator compares the number of accidents involving all commuter air carriers (i.e., scheduled carriers operating under FAR Part 135) to the number of flight hours and departures for these carriers. This indicator is expressed as accidents per 100,000 flight hours and per 100,000 departures. Because most accidents occur during arrival or departure, the number of departures is considered to be the best normalizing variable. However, because departure data are not available for all operator types, rates based on flight hours are also calculated.

COMMUTER AIR CARRIER ACCIDENT DATA

Calendar Year	No. of Accidents	No. of Flight Hours	Accident Rate (per 100,000 flight hours)		No. of Departures	Accident Rate (per 100,000 departures)	
1990	16	2,341,760	0.68		3,160,089	0.51	
1991	22	2,291,693	0.96		2,820,440	0.78	
1992	23	2,363,745	0.97		3,114,932	0.74	
1993	16	2,641,268	0.61		3,601,902	0.44	
1994	10	2,787,904	0.36		3,850,372	0.26	
1995	11	2,478,872	0.44		3,216,900	0.34	
1996	11	2,474,000	0.44		3,171,000	0.35	
Month			**Monthly**	**12-Mo Mov Avg**		**Monthly**	**12-Mo Mov Avg**
JAN 95	2	189,554	1.06	0.40	245,990	0.81	0.29
FEB 95	1	178,271	0.56	0.33	231,347	0.43	0.24
MAR 95	4	199,709	2.00	0.49	259,168	1.54	0.36
APR 95	0	206,479	0.00	0.49	267,953	0.00	0.36
MAY 95	0	210,992	0.00	0.49	273,810	0.00	0.37
JUN 95	0	214,377	0.00	0.46	278,203	0.00	0.34
JUL 95	1	222,275	0.45	0.50	288,452	0.35	0.38
AUG 95	1	227,916	0.44	0.55	295,773	0.34	0.41
SEP 95	0	213,248	0.00	0.55	276,738	0.00	0.42
OCT 95	0	210,992	0.00	0.52	273,810	0.00	0.40
NOV 95	1	198,581	0.50	0.52	257,703	0.39	0.40
DEC 95	1	206,479	0.48	0.44	267,953	0.37	0.34
JAN 96	0	186,936	0.00	0.36	239,601	0.00	0.28
FEB 96	1	176,622	0.57	0.36	226,382	0.44	0.28
MAR 96	1	207,563	0.48	0.24	266,040	0.38	0.19
APR 96	1	201,117	0.50	0.28	257,778	0.39	0.22
MAY 96	4	215,299	1.86	0.44	275,955	1.45	0.34
JUN 96	2	216,588	0.92	0.52	277,607	0.72	0.41
JUL 96	0	215,299	0.00	0.48	275,955	0.00	0.38
AUG 96	1	226,902	0.44	0.48	290,826	0.34	0.38
SEP 96	0	214,009	0.00	0.48	274,302	0.00	0.38
OCT 96	0	215,299	0.00	0.48	275,955	0.00	0.38
NOV 96	1	199,828	0.50	0.48	256,126	0.39	0.38
DEC 96	0	198,539	0.00	0.44	254,473	0.00	0.35

Data sources: NTSB - Accident data; DOT, FAA - Flight hour and departure data

COMMUTER AIR CARRIER ACCIDENT RATES



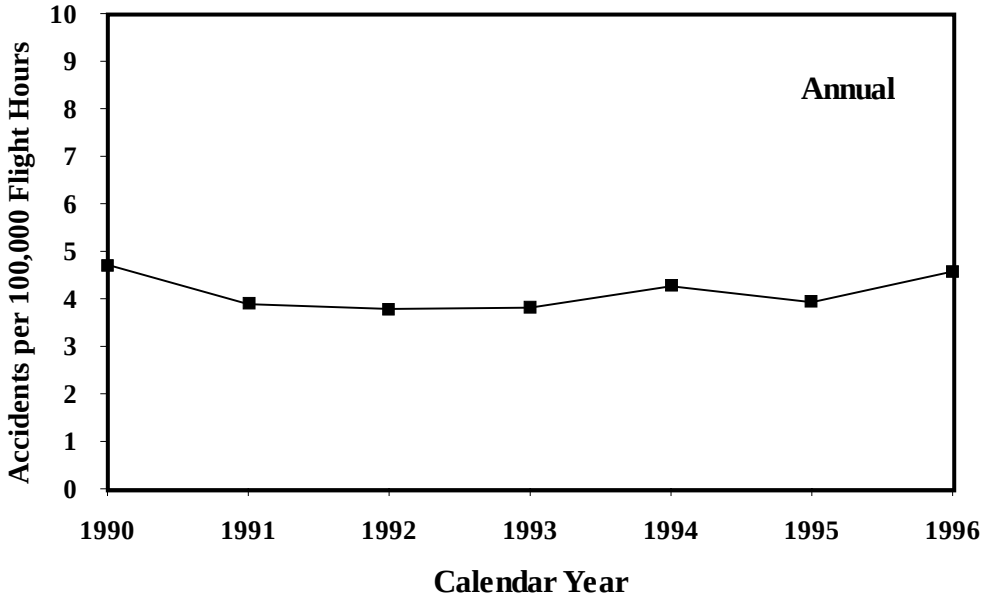
Monthly/ 12–Mo Moving Avg: *Accident Rate (per 100,000 flt hrs/deps)* $= \frac{\text{No. of Accidents in Mo / Past 12 Mos}}{\text{No. of Flt Hrs / Deps in Mo / Past 12 Mos}} \times 100{,}000$

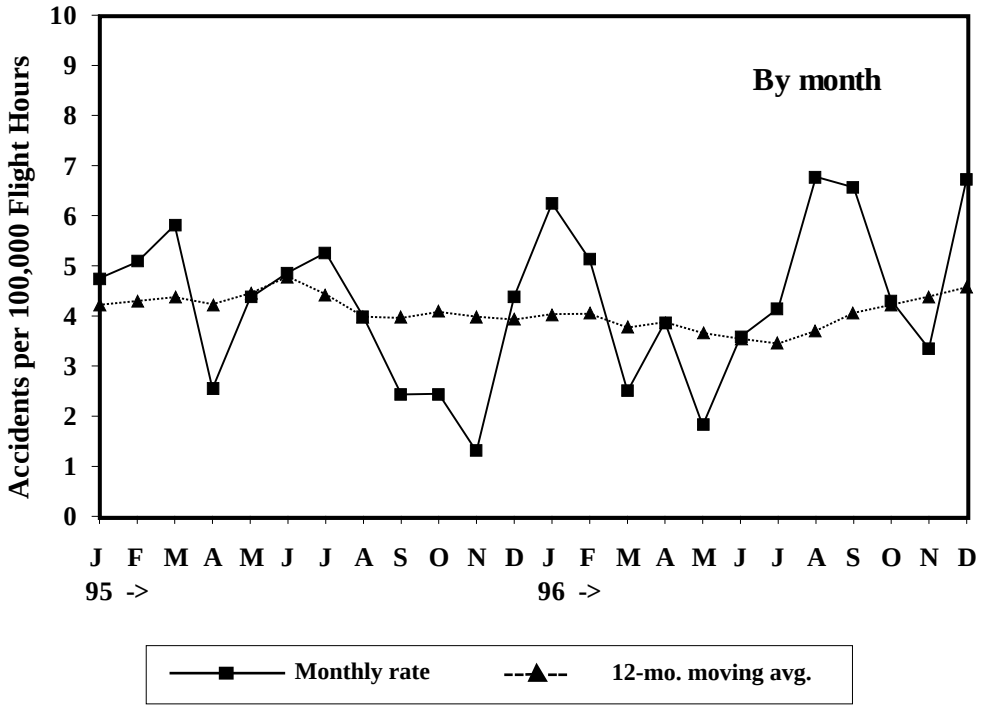
AIR TAXI ACCIDENT DATA

Calendar Year	No. of Accidents	No. of Flight Hours	Accident Rate (per 100,000 flight hours)	
1990	106	2,249,000	4.71	
1991	87	2,241,000	3.88	
1992	76	2,009,000	3.78	
1993	69	1,809,000	3.81	
1994	85	1,993,000	4.26	
1995	75	1,910,000	3.93	
1996	87	1,902,000	4.57	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	7	147,289	4.75	4.22
FEB 95	7	137,786	5.08	4.30
MAR 95	9	154,891	5.81	4.37
APR 95	4	156,791	2.55	4.23
MAY 95	7	160,592	4.36	4.45
JUN 95	8	164,393	4.87	4.78
JUL 95	9	171,045	5.26	4.43
AUG 95	7	175,796	3.98	3.99
SEP 95	4	164,393	2.43	3.96
OCT 95	4	163,443	2.45	4.08
NOV 95	2	153,940	1.30	3.98
DEC 95	7	159,642	4.38	3.93
JAN 96	9	144,091	6.25	4.04
FEB 96	7	136,620	5.12	4.04
MAR 96	4	160,101	2.50	3.77
APR 96	6	154,764	3.88	3.88
MAY 96	3	165,438	1.81	3.66
JUN 96	6	167,572	3.58	3.55
JUL 96	7	168,640	4.15	3.45
AUG 96	12	177,178	6.77	3.71
SEP 96	11	167,572	6.56	4.06
OCT 96	7	162,236	4.31	4.22
NOV 96	5	149,428	3.35	4.39
DEC 96	10	148,360	6.74	4.57

Data sources: NTSB - Accident data; FAA - Flight hour estimates

AIR TAXI ACCIDENT RATES





Monthly/ 12–Mo Moving Avg: *Accident Rate (per 100,000 flt hrs)* $= \frac{\text{No. of Accidents in Mo / Past 12 Mos}}{\text{No. of Flt Hrs in Mo / Past 12 Mos}} \times 100{,}000$

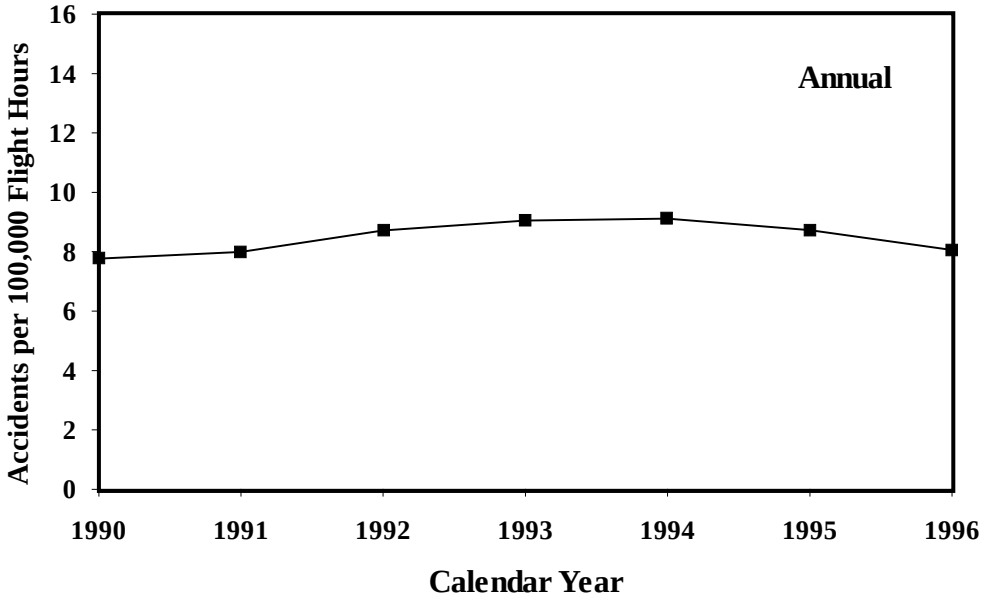
Description: This indicator compares the number of accidents involving all air taxis (i.e., unscheduled carriers operating under FAR Part 135) to the number of air taxi flight hours. Air taxi flight hour values are imprecise.

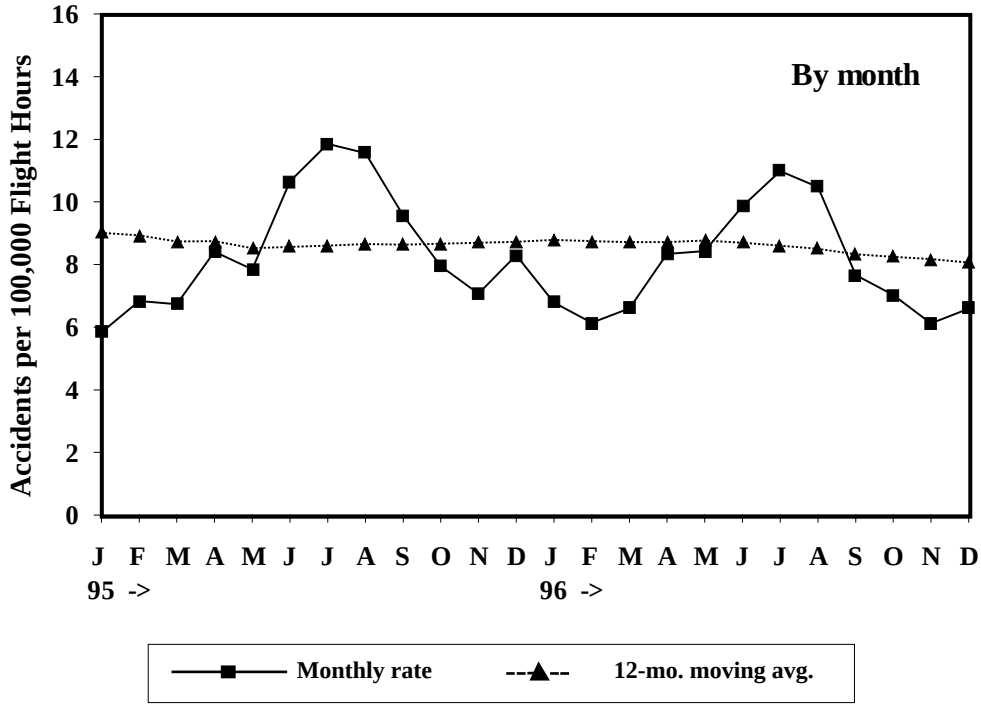
GENERAL AVIATION ACCIDENT DATA

Calendar Year	No. of Accidents	No. of Flight Hours	Accident Rate (per 100,000 flight hours)	
1990	2,215	28,510,000	7.77	
1991	2,175	27,226,000	7.99	
1992	2,073	23,792,000	8.71	
1993	2,039	22,531,000	9.05	
1994	1,994	21,873,000	9.12	
1995	2,054	23,538,000	8.73	
1996	1,907	23,650,000	8.06	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	90	1,541,333	5.84	9.02
FEB 95	115	1,681,072	6.84	8.93
MAR 95	134	1,989,642	6.73	8.74
APR 95	171	2,034,305	8.41	8.74
MAY 95	164	2,090,243	7.85	8.52
JUN 95	228	2,139,064	10.66	8.56
JUL 95	265	2,235,512	11.85	8.61
AUG 95	261	2,258,430	11.56	8.66
SEP 95	206	2,154,099	9.56	8.63
OCT 95	165	2,075,061	7.95	8.67
NOV 95	127	1,796,934	7.07	8.70
DEC 95	128	1,542,304	8.30	8.73
JAN 96	103	1,518,291	6.78	8.79
FEB 96	103	1,677,297	6.14	8.74
MAR 96	138	2,090,272	6.60	8.72
APR 96	169	2,027,332	8.34	8.71
MAY 96	187	2,218,361	8.43	8.76
JUN 96	212	2,149,900	9.86	8.69
JUL 96	240	2,185,234	10.98	8.61
AUG 96	232	2,213,944	10.48	8.50
SEP 96	163	2,125,607	7.67	8.33
OCT 96	148	2,104,627	7.03	8.25
NOV 96	106	1,731,403	6.12	8.18
DEC 96	106	1,607,732	6.59	8.06

Data sources: NTSB - Accident data; FAA - Flight hour estimates

GENERAL AVIATION ACCIDENT RATES





Monthly/ 12–Mo Moving Avg: *Accident Rate (per 100,000 flt hrs)* $= \frac{\text{No. of Accidents in Mo / Past 12 Mos}}{\text{No. of Flt Hrs in Mo / Past 12 Mos}} \times 100{,}000$

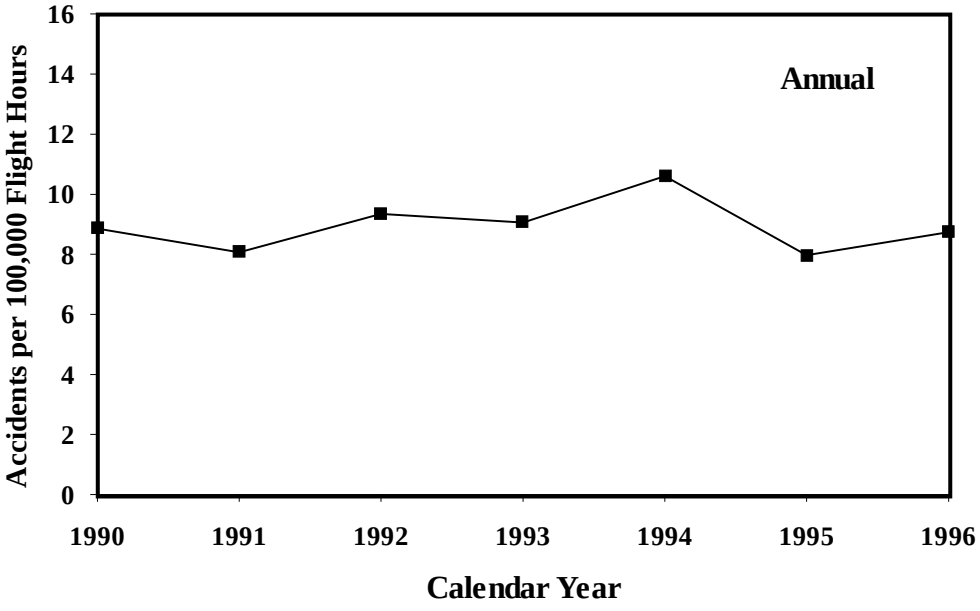
Description: This indicator compares the number of accidents involving all general aviation aircraft to the number of general aviation flight hours.

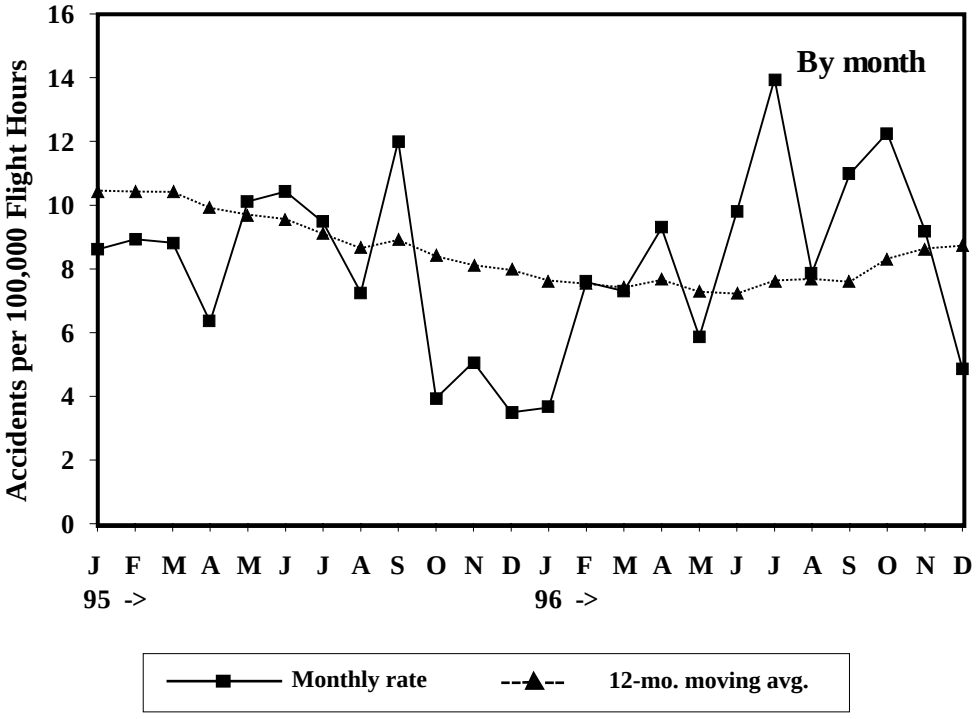
ROTORCRAFT ACCIDENT DATA

Calendar Year	No. of Accidents	No. of Flight Hours	Accident Rate (per 100,000 flight hours)	
1990	216	2,440,150	8.85	
1991	190	2,356,172	8.06	
1992	194	2,075,191	9.35	
1993	176	1,942,166	9.06	
1994	207	1,951,782	10.61	
1995	162	2,032,688	7.97	
1996	178	2,037,570	8.74	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	12	139,369	8.61	10.46
FEB 95	13	145,558	8.93	10.42
MAR 95	15	169,960	8.83	10.42
APR 95	11	173,358	6.35	9.92
MAY 95	18	177,978	10.11	9.71
JUN 95	19	182,139	10.43	9.57
JUL 95	18	190,131	9.47	9.10
AUG 95	14	192,923	7.26	8.65
SEP 95	22	183,085	12.02	8.91
OCT 95	7	177,796	3.94	8.40
NOV 95	8	157,466	5.08	8.12
DEC 95	5	142,924	3.50	7.97
JAN 96	5	137,014	3.65	7.63
FEB 96	11	144,988	7.59	7.54
MAR 96	13	177,823	7.31	7.41
APR 96	16	172,326	9.28	7.66
MAY 96	11	187,462	5.87	7.28
JUN 96	18	183,711	9.80	7.23
JUL 96	26	186,237	13.96	7.63
AUG 96	15	190,473	7.88	7.69
SEP 96	20	182,154	10.98	7.60
OCT 96	22	179,368	12.27	8.33
NOV 96	14	152,080	9.21	8.64
DEC 96	7	143,933	4.86	8.74

Data sources: NTSB - Accident data; FAA - Flight hour estimates

ROTORCRAFT ACCIDENT RATES





Monthly/ 12–Mo Moving Avg: $\text{Accident Rate (per 100,000 flt hrs)} = \frac{\text{No. of Accidents in Mo/ Past 12 Mos}}{\text{No. of Flt Hrs in Mo / Past 12 Mos}} \times 100{,}000$

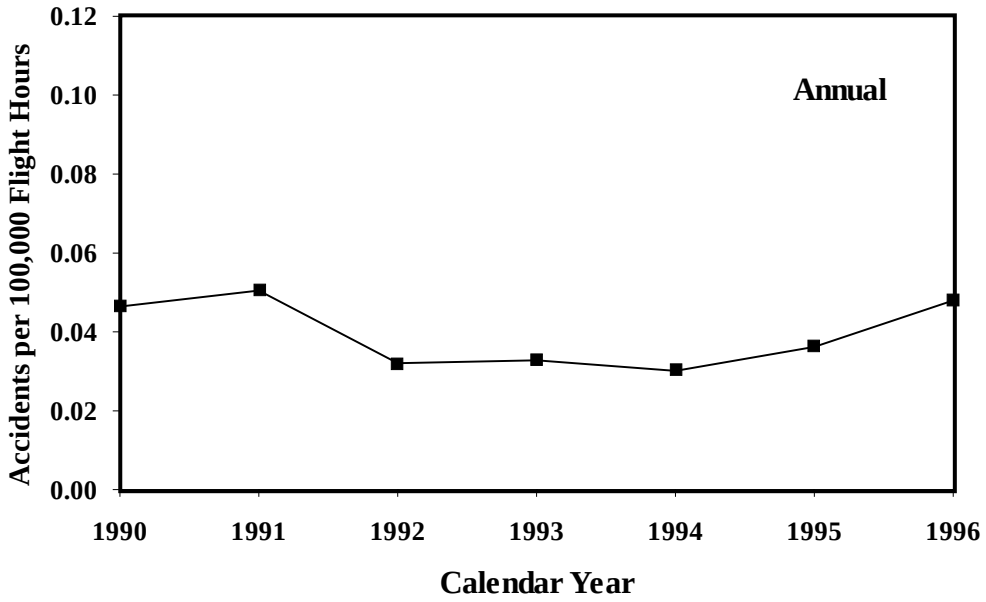
Description: This indicator compares the number of accidents involving all rotorcraft (including helicopters and gyroplanes) to the number of rotorcraft flight hours. Rotorcraft flight hour values are imprecise.

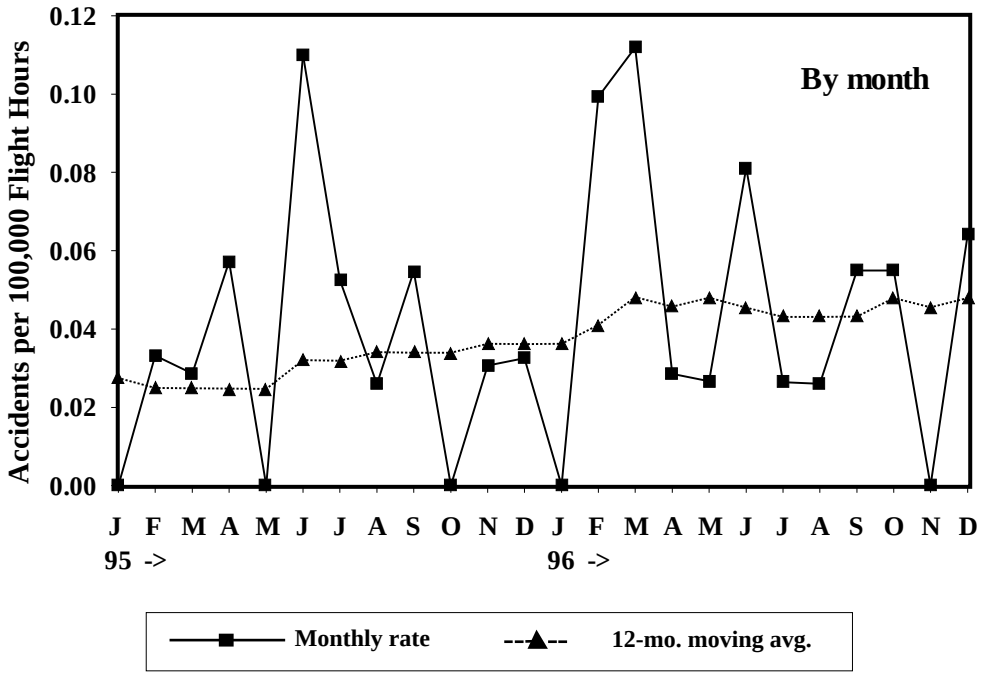
MIDAIR COLLISION ACCIDENT DATA

Calendar Year	No. of Accidents	Total System Flight Hours	Accident Rate (per 100,000 flight hours)	
1990	21	45,250,876	0.046	
1991	22	43,539,303	0.051	
1992	13	40,524,460	0.032	
1993	13	39,687,474	0.033	
1994	12	39,776,125	0.030	
1995	15	41,440,091	0.036	
1996	20	41,709,000	0.048	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	0	2,987,077	0.000	0.028
FEB 95	1	3,011,119	0.033	0.025
MAR 95	1	3,485,772	0.029	0.025
APR 95	2	3,495,492	0.057	0.025
MAY 95	0	3,577,102	0.000	0.025
JUN 95	4	3,634,396	0.110	0.032
JUL 95	2	3,802,674	0.053	0.032
AUG 95	1	3,853,433	0.026	0.034
SEP 95	2	3,649,132	0.055	0.034
OCT 95	0	3,610,125	0.000	0.034
NOV 95	1	3,262,004	0.031	0.036
DEC 95	1	3,071,764	0.033	0.036
JAN 96	0	2,952,949	0.000	0.036
FEB 96	3	3,018,900	0.099	0.041
MAR 96	4	3,573,774	0.112	0.048
APR 96	1	3,505,155	0.029	0.046
MAY 96	1	3,749,519	0.027	0.048
JUN 96	3	3,693,636	0.081	0.046
JUL 96	1	3,784,693	0.026	0.043
AUG 96	1	3,837,613	0.026	0.043
SEP 96	2	3,638,284	0.055	0.043
OCT 96	2	3,639,703	0.055	0.048
NOV 96	0	3,193,445	0.000	0.046
DEC 96	2	3,121,327	0.064	0.048

Data sources: NTSB - Accident data; DOT, FAA - Flight hour estimates

MIDAIR COLLISION ACCIDENT RATES





Monthly/ 12–Mo Moving Avg: $\textit{Accident Rate (per 100,000 flt hrs)} = \frac{\textit{No. of Accidents in Mo / Past 12 Mos}}{\textit{Total System Flight Hours in Mo / Past 12 Mos}} \times 100{,}000$

Description: This indicator compares the number of midair collisions involving all operator types to the number of flight hours for all operators, i.e., large air carrier flight hours + commuter flight hours + air taxi flight hours + general aviation flight hours.

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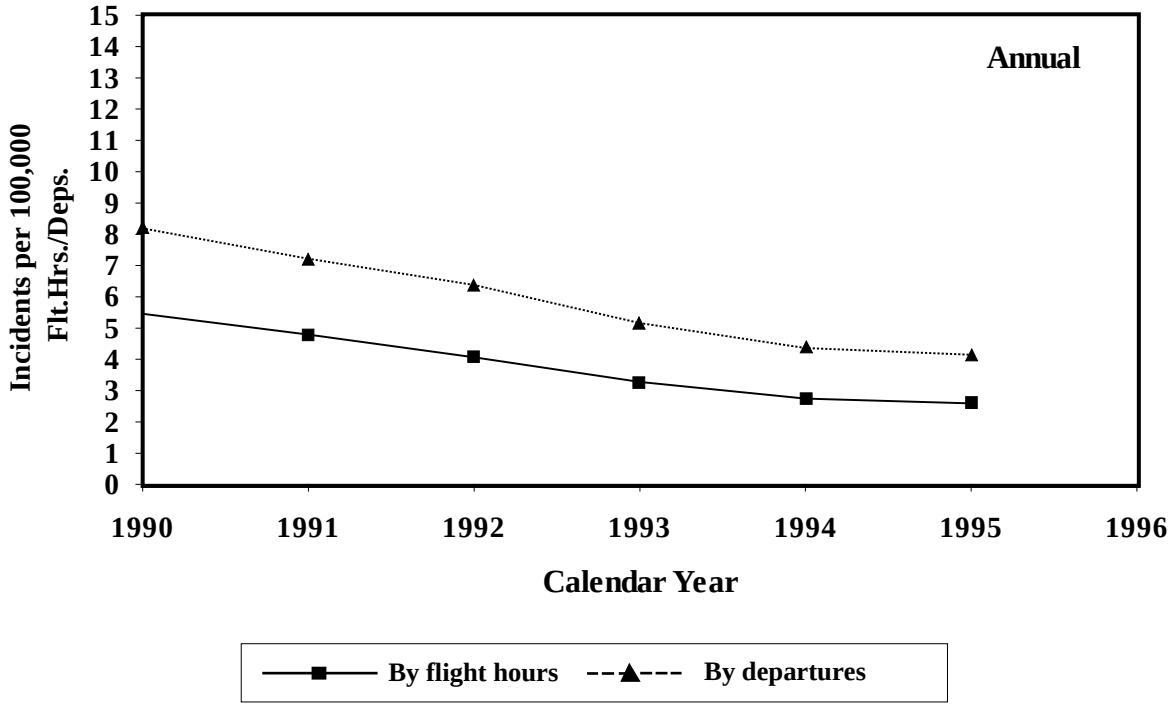
LARGE AIR CARRIER AIRCRAFT INCIDENT RATES



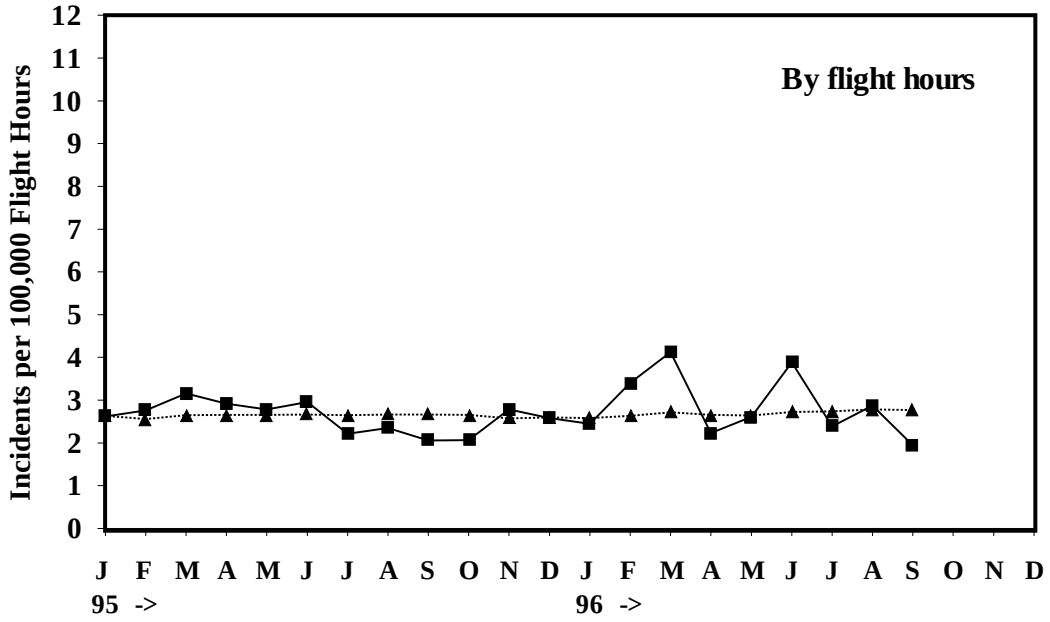
Description: This indicator compares the number of aircraft incidents involving all large air carriers (i.e., operating under FAR Parts 121 or 127) to the number of flight hours and departures for these carriers. This indicator is expressed as incidents per 100,000 flight hours and per 100,000 departures. The number of departures is generally considered to be the best normalizing variable. However, because departure data are not available for all operator types, rates based on flight hours are also calculated. Incidents involving Part 125 aircraft that were formerly included in this category have been reclassified as general aviation accidents.

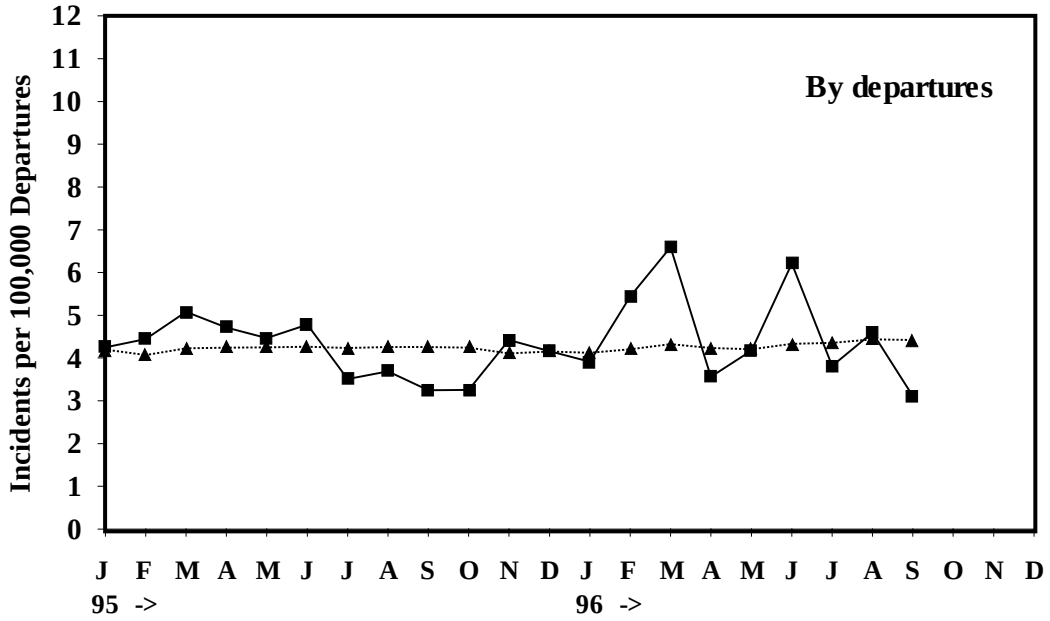
LARGE AIR CARRIER AIRCRAFT INCIDENT DATA

Calendar Year	No. of Incidents	No. of Flight Hours	Incident Rate (per 100,000 flight hours)		No. of Departures	Incident Rate (per 100,000 departures)	
1990	663	12,150,116	5.46		8,092,306	8.19	
1991	564	11,780,610	4.79		7,814,875	7.22	
1992	503	12,359,715	4.07		7,880,707	6.38	
1993	417	12,706,206	3.28		8,074,393	5.16	
1994	360	13,122,221	2.74		8,242,903	4.37	
1995	351	13,513,219	2.60		8,451,606	4.15	
1996	Not complete	13,683,000			8,554,000		
Month			**Monthly**	**12-Mo Mov Avg**		**Monthly**	**12-Mo Mov Avg**
JAN 95	29	1,108,901	2.62	2.63	682,934	4.25	4.19
FEB 95	28	1,013,990	2.76	2.56	629,689	4.45	4.07
MAR 95	36	1,141,531	3.15	2.65	708,351	5.08	4.22
APR 95	32	1,097,918	2.91	2.66	678,526	4.72	4.24
MAY 95	31	1,115,275	2.78	2.66	693,623	4.47	4.25
JUN 95	33	1,116,562	2.96	2.66	690,275	4.78	4.26
JUL 95	26	1,173,842	2.21	2.65	740,586	3.51	4.24
AUG 95	28	1,191,291	2.35	2.66	758,425	3.69	4.25
SEP 95	23	1,117,392	2.06	2.66	709,405	3.24	4.26
OCT 95	24	1,160,630	2.07	2.66	738,020	3.25	4.25
NOV 95	31	1,112,549	2.79	2.57	700,924	4.42	4.11
DEC 95	30	1,163,339	2.58	2.60	720,848	4.16	4.15
JAN 96	27	1,103,632	2.45	2.58	689,941	3.91	4.13
FEB 96	35	1,028,361	3.40	2.63	642,885	5.44	4.20
MAR 96	46	1,115,838	4.12	2.71	697,572	6.59	4.33
APR 96	25	1,121,941	2.23	2.66	701,387	3.56	4.23
MAY 96	30	1,150,422	2.61	2.64	719,192	4.17	4.21
JUN 96	45	1,159,576	3.88	2.72	724,915	6.21	4.33
JUL 96	29	1,215,521	2.39	2.73	759,889	3.82	4.36
AUG 96	35	1,219,589	2.87	2.78	762,433	4.59	4.44
SEP 96	22	1,131,095	1.95	2.77	707,110	3.11	4.42
OCT 96	Not complete	1,157,542			723,643		
NOV 96	Not complete	1,112,786			695,664		
DEC 96	Not complete	1,166,696			729,366		

Data sources: FAA - Incident data; DOT, FAA - Flight hour and departure data

LARGE AIR CARRIER AIRCRAFT INCIDENT RATES





Monthly/ 12–Mo Moving Avg: *Incident Rate (per 100,000 flt hrs/deps)* $= \frac{No.\ of\ Incidents\ in\ Mo\ /\ Past\ 12\ Mos}{No.\ of\ Flt\ Hrs\ /\ Deps\ in\ Mo\ /\ Past\ 12\ Mos} x\,100,000$

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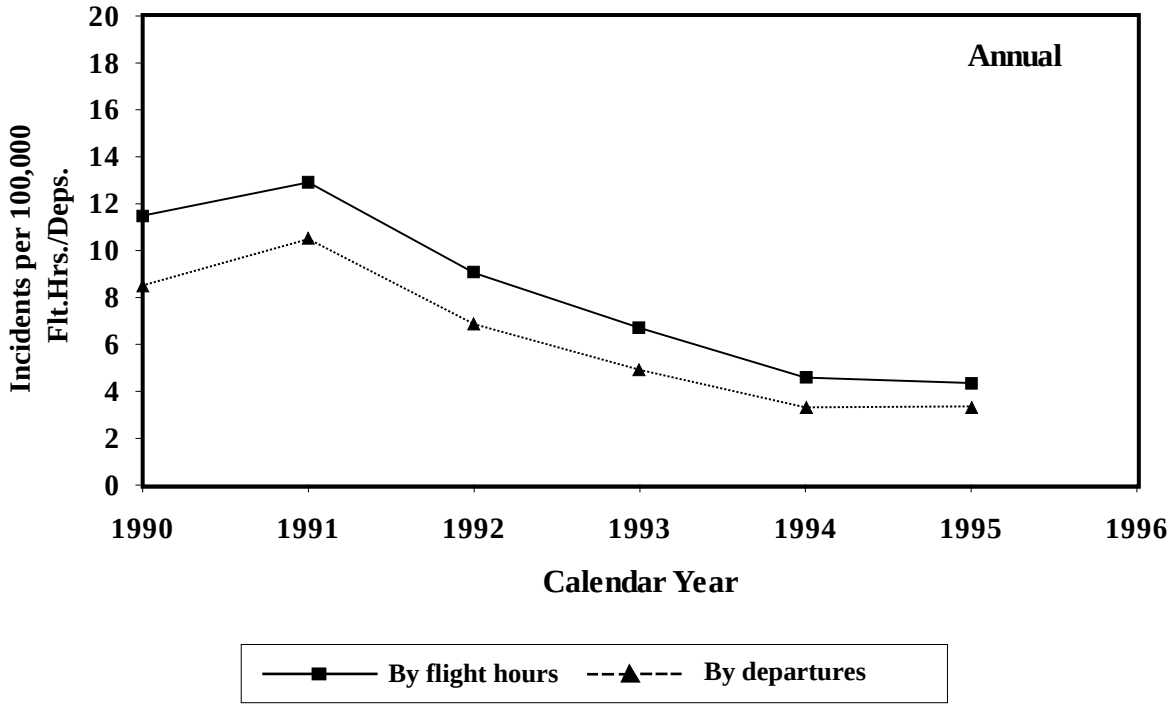
COMMUTER AIR CARRIER AIRCRAFT INCIDENT RATES



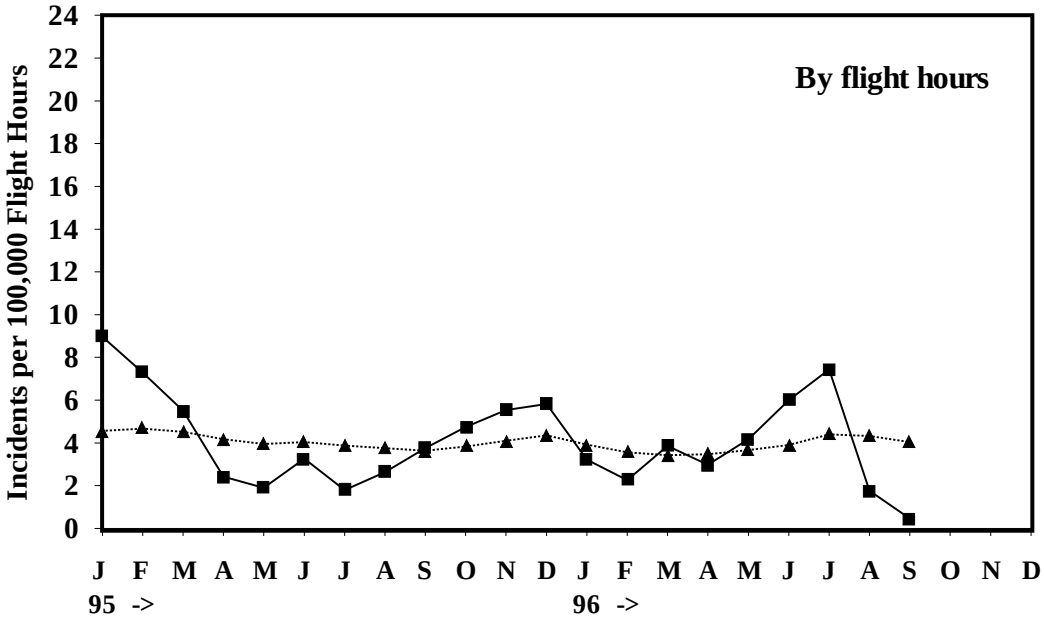
Description: This indicator compares the number of aircraft incidents involving all commuter air carriers (i.e., scheduled carriers operating under FAR Part 135) to the number of flight hours and departures for these carriers. This indicator is expressed as incidents per 100,000 flight hours and per 100,000 departures. The number of departures is generally considered to be the best normalizing variable. However, because departure data are not available for all operator types, rates based on flight hours are also calculated.

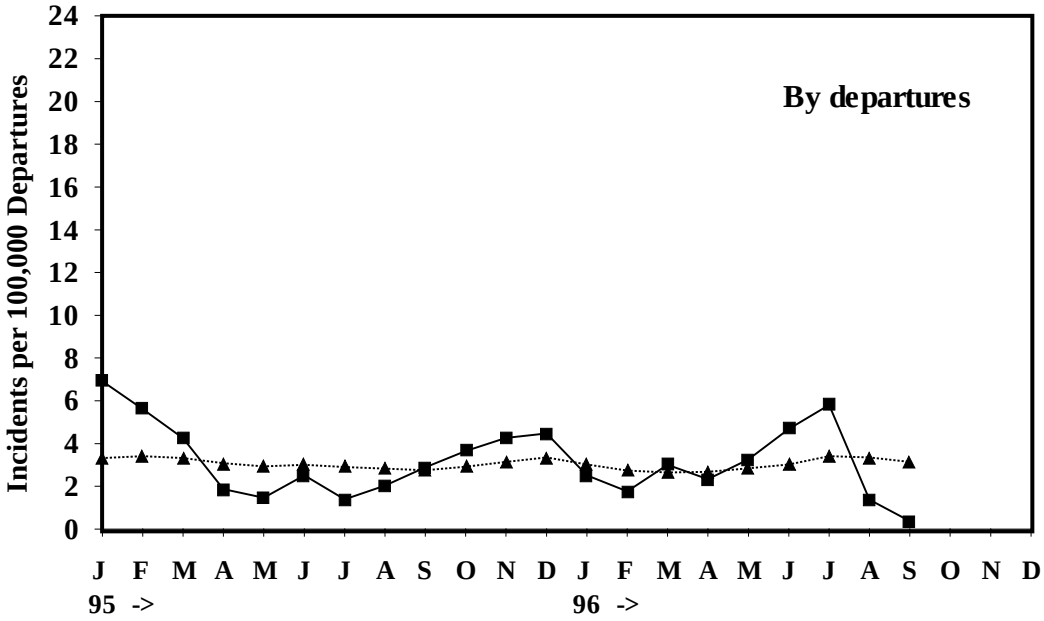
COMMUTER AIR CARRIER AIRCRAFT INCIDENT DATA

Calendar Year	No. of Incidents	No. of Flight Hours	Incident Rate (per 100,000 flight hours)		No. of Departures	Incident Rate (per 100,000 departures)	
1990	269	2,341,760	11.49		3,160,089	8.51	
1991	296	2,291,693	12.92		2,820,440	10.49	
1992	214	2,363,745	9.05		3,114,932	6.87	
1993	177	2,641,268	6.70		3,601,902	4.91	
1994	128	2,787,904	4.59		3,850,372	3.32	
1995	108	2,478,872	4.36		3,216,900	3.36	
1996	Not complete	2,474,000			3,171,000		
Month			**Monthly**	**12-Mo Mov Avg**		**Monthly**	**12-Mo Mov Avg**
JAN 95	17	189,554	8.97	4.57	245,990	6.91	3.32
FEB 95	13	178,271	7.29	4.67	231,347	5.62	3.41
MAR 95	11	199,709	5.51	4.52	259,168	4.24	3.32
APR 95	5	206,479	2.42	4.18	267,953	1.87	3.08
MAY 95	4	210,992	1.90	3.95	273,810	1.46	2.93
JUN 95	7	214,377	3.27	4.03	278,203	2.52	3.00
JUL 95	4	222,275	1.80	3.87	288,452	1.39	2.90
AUG 95	6	227,916	2.63	3.75	295,773	2.03	2.83
SEP 95	8	213,248	3.75	3.63	276,738	2.89	2.75
OCT 95	10	210,992	4.74	3.83	273,810	3.65	2.92
NOV 95	11	198,581	5.54	4.10	257,703	4.27	3.14
DEC 95	12	206,479	5.81	4.36	267,953	4.48	3.36
JAN 96	6	186,936	3.21	3.92	239,601	2.50	3.02
FEB 96	4	176,622	2.26	3.56	226,382	1.77	2.75
MAR 96	8	207,563	3.85	3.42	266,040	3.01	2.65
APR 96	6	201,117	2.98	3.47	257,778	2.33	2.69
MAY 96	9	215,299	4.18	3.67	275,955	3.26	2.84
JUN 96	13	216,588	6.00	3.91	277,607	4.68	3.03
JUL 96	16	215,299	7.43	4.40	275,955	5.80	3.42
AUG 96	4	226,902	1.76	4.32	290,826	1.38	3.36
SEP 96	1	214,009	0.47	4.04	274,302	0.36	3.14
OCT 96	Not complete	215,299			275,955		
NOV 96	Not complete	199,828			256,126		
DEC 96	Not complete	198,539			254,473		

Data sources: FAA - Incident data; DOT, FAA - Flight hour and departure data

COMMUTER AIR CARRIER AIRCRAFT INCIDENT RATES





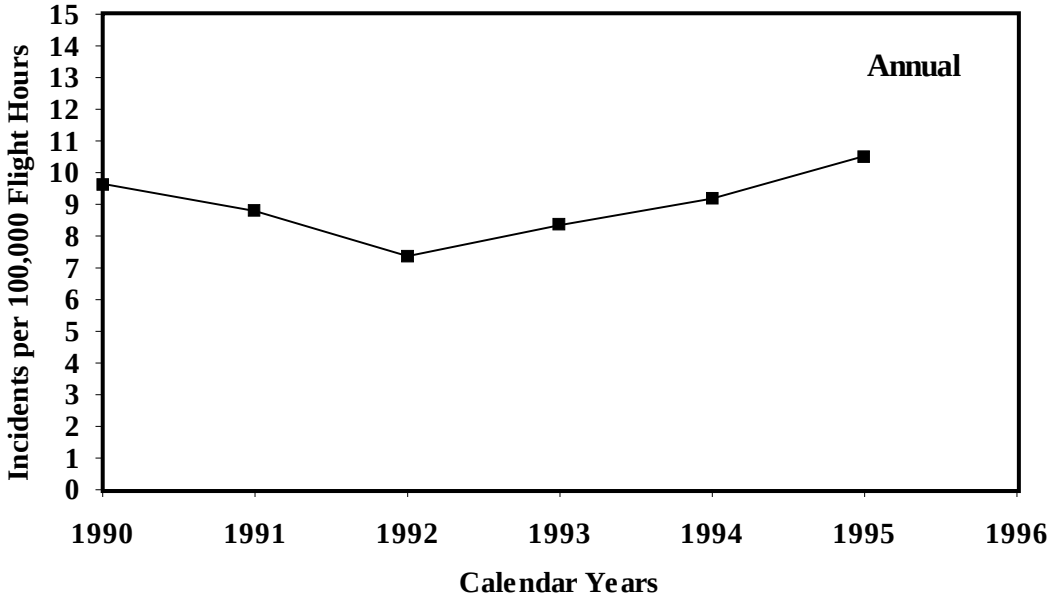
Monthly/ 12–Mo Moving Avg: *Accident Rate (per 100,000 flt hrs)* $= \frac{\text{No. of Accidents in Mo / Past 12 Mos}}{\text{No. of Flt Hrs in Mo / Past 12 Mos}} \times 100{,}000$

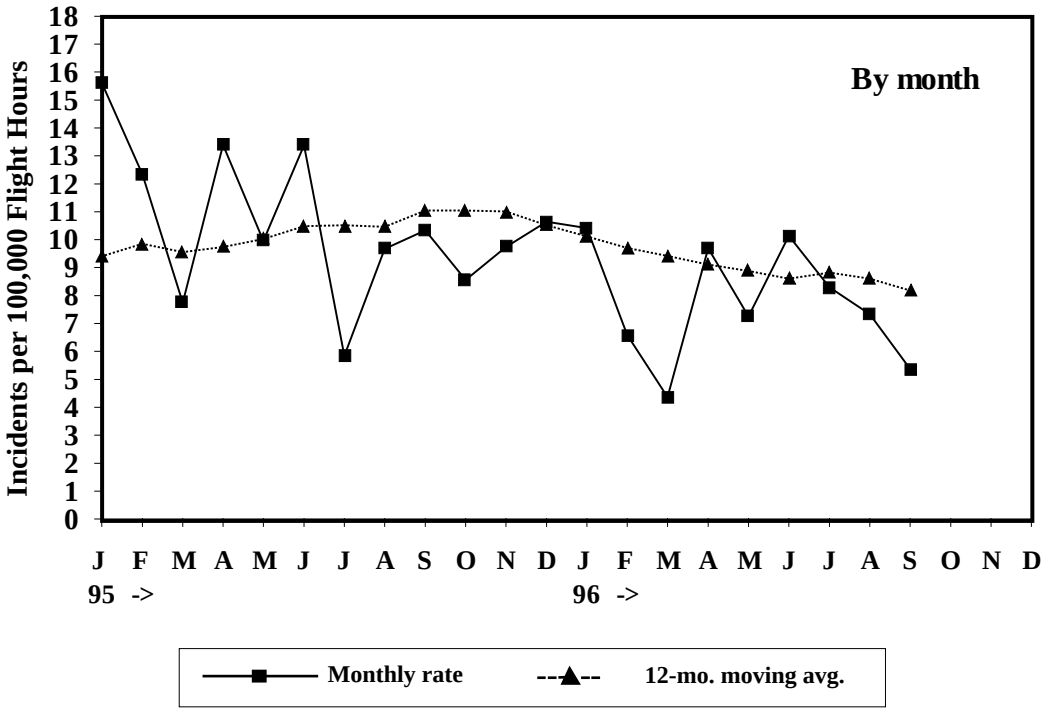
AIR TAXI AIRCRAFT INCIDENT DATA

Calendar Year	No. of Incidents	No. of Flight Hours	Incident Rate (per 100,000 flight hours)	
1990	217	2,249,000	9.65	
1991	197	2,241,000	8.79	
1992	148	2,009,000	7.37	
1993	151	1,809,000	8.35	
1994	183	1,993,000	9.18	
1995	201	1,910,000	10.52	
1996	Not complete	1,902,000		
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	23	147,289	15.62	9.40
FEB 95	17	137,786	12.34	9.86
MAR 95	12	154,891	7.75	9.56
APR 95	21	156,791	13.39	9.74
MAY 95	16	160,592	9.96	10.03
JUN 95	22	164,393	13.38	10.49
JUL 95	10	171,045	5.85	10.52
AUG 95	17	175,796	9.67	10.46
SEP 95	17	164,393	10.34	11.05
OCT 95	14	163,443	8.57	11.05
NOV 95	15	153,940	9.74	11.01
DEC 95	17	159,642	10.65	10.52
JAN 96	15	144,091	10.41	10.12
FEB 96	9	136,620	6.59	9.71
MAR 96	7	160,101	4.37	9.42
APR 96	15	154,764	9.69	9.12
MAY 96	12	165,438	7.25	8.88
JUN 96	17	167,572	10.14	8.61
JUL 96	14	168,640	8.30	8.83
AUG 96	13	177,178	7.34	8.61
SEP 96	9	167,572	5.37	8.18
OCT 96	Not complete	162,236		
NOV 96	Not complete	149,428		
DEC 96	Not complete	148,360		

Data source: FAA

AIR TAXI AIRCRAFT INCIDENT RATES





Monthly/ 12–Mo Moving Avg: *Incident Rate (per 100,000 flt hrs)* $= \frac{\textit{No. of Incidents in Mo / Past 12 Mos}}{\textit{No. of Flt Hrs in Mo / Past 12 Mos}} \textit{x 100,000}$

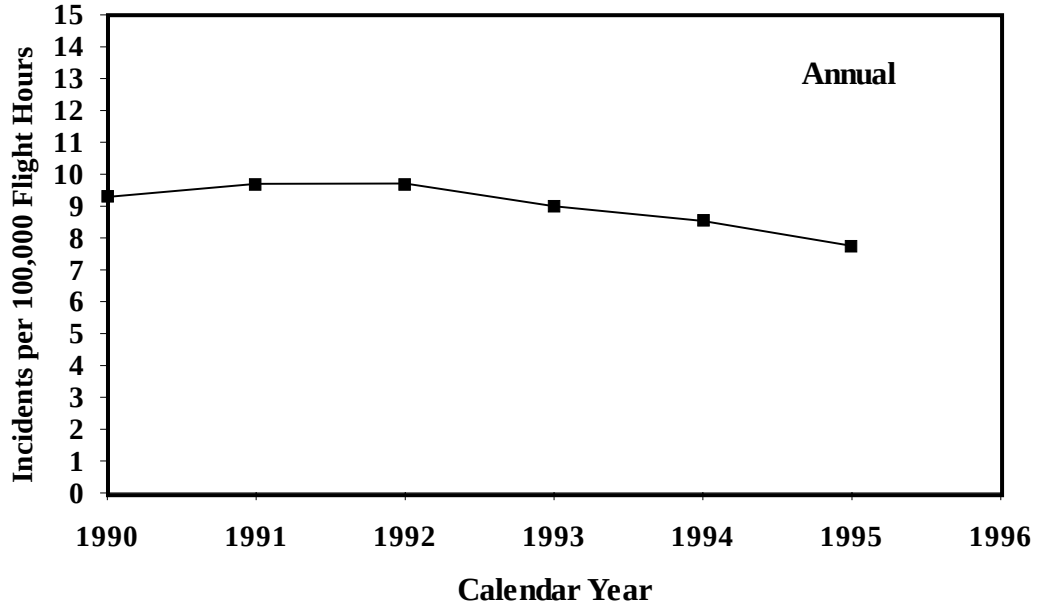
Description: This indicator compares the number of aircraft incidents involving all air taxis (i.e., unscheduled carriers operating under FAR Part 135) to the number of air taxi flight hours. Air taxi flight hour values are imprecise.

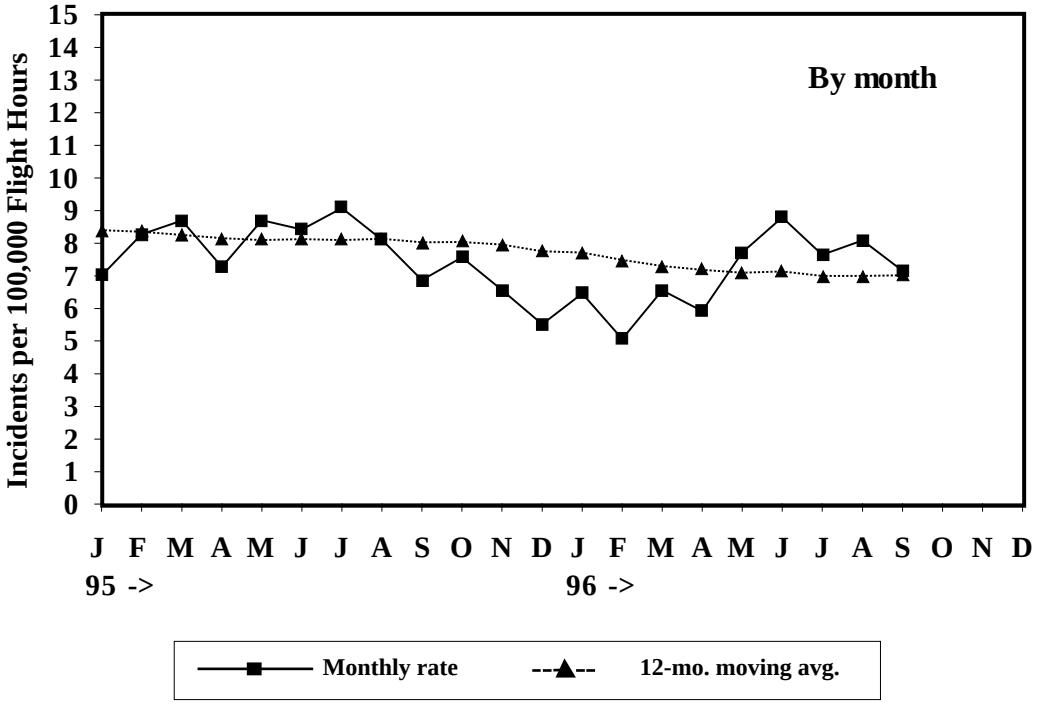
GENERAL AVIATION AIRCRAFT INCIDENT DATA

Calendar Year	No. of Incidents	No. of Flight Hours	Incident Rate (per 100,000 flight hours)	
1990	2,648	28,510,000	9.29	
1991	2,640	27,226,000	9.70	
1992	2,309	23,792,000	9.70	
1993	2,028	22,531,000	9.00	
1994	1,866	21,873,000	8.53	
1995	1,824	23,538,000	7.75	
1996	Not complete	23,650,000		
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	108	1,541,333	7.01	8.39
FEB 95	139	1,681,072	8.27	8.35
MAR 95	173	1,989,642	8.70	8.25
APR 95	148	2,034,305	7.28	8.15
MAY 95	182	2,090,243	8.71	8.10
JUN 95	180	2,139,064	8.41	8.13
JUL 95	203	2,235,512	9.08	8.10
AUG 95	183	2,258,430	8.10	8.14
SEP 95	148	2,154,099	6.87	8.03
OCT 95	157	2,075,061	7.57	8.04
NOV 95	118	1,796,934	6.57	7.96
DEC 95	85	1,542,304	5.51	7.75
JAN 96	98	1,518,291	6.45	7.71
FEB 96	85	1,677,297	5.07	7.49
MAR 96	137	2,090,272	6.55	7.30
APR 96	120	2,027,332	5.92	7.18
MAY 96	171	2,218,361	7.71	7.10
JUN 96	189	2,149,900	8.79	7.13
JUL 96	167	2,185,234	7.64	7.00
AUG 96	179	2,213,944	8.09	6.99
SEP 96	152	2,125,607	7.15	7.02
OCT 96	Not complete	2,104,627		
NOV 96	Not complete	1,731,403		
DEC 96	Not complete	1,607,732		

Data source: FAA

GENERAL AVIATION AIRCRAFT INCIDENT RATES





Monthly/ 12–Mo Moving Avg:

$$\textit{Incident Rate (per 100,000 flt hrs)} = \frac{\textit{No. of Incidents in Mo / Past 12 Mos}}{\textit{No. of Flt Hrs in Mo / Past 12 Mos}} \times 100{,}000$$

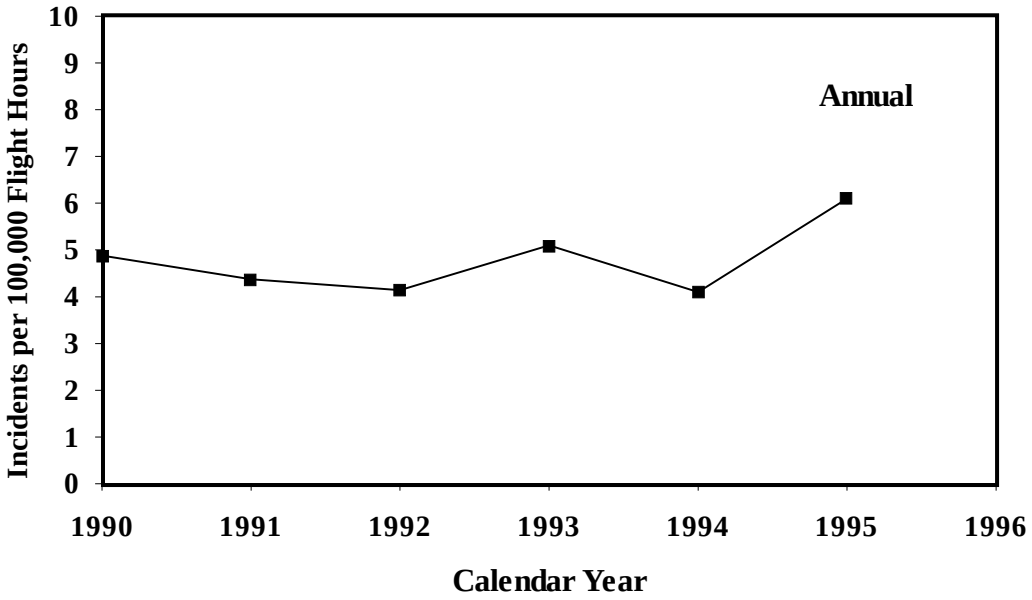
Description: This indicator compares the number of aircraft incidents involving all general aviation aircraft to the number of general aviation flight hours.

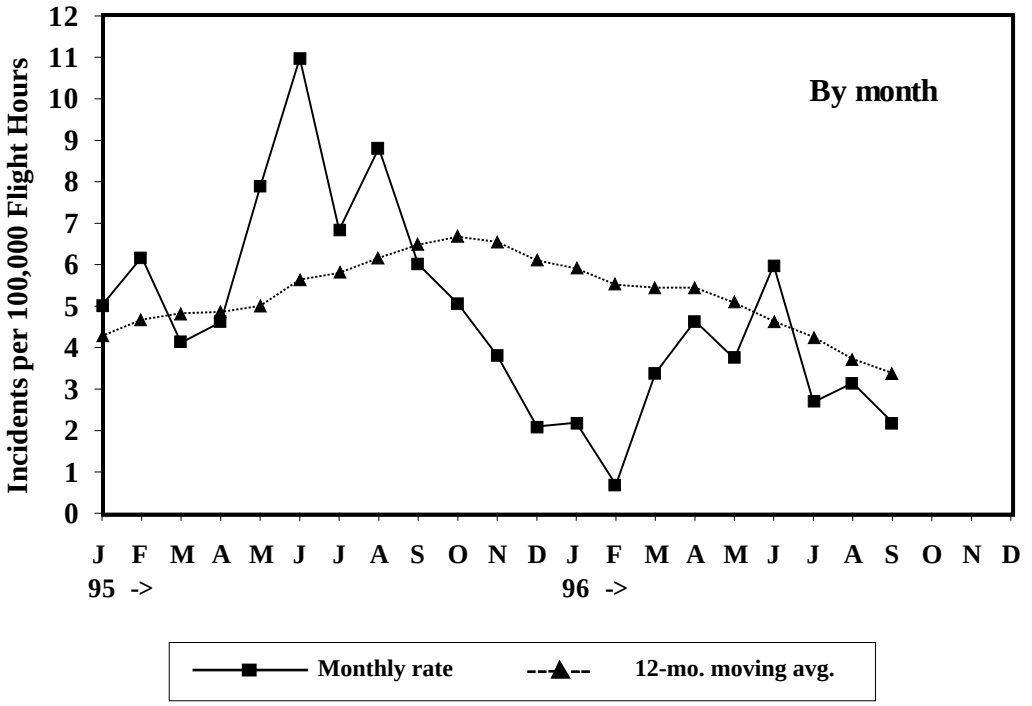
ROTORCRAFT AIRCRAFT INCIDENT DATA

Calendar Year	No. of Incidents	No. of Flight Hours	Incident Rate (per 100,000 flight hours)	
1990	119	2,440,150	4.88	
1991	103	2,356,172	4.37	
1992	86	2,075,191	4.14	
1993	99	1,942,166	5.10	
1994	80	1,951,782	4.10	
1995	124	2,032,688	6.10	
1996	Not complete	2,037,570		
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	7	139,369	5.02	4.29
FEB 95	9	145,558	6.18	4.68
MAR 95	7	169,960	4.12	4.83
APR 95	8	173,358	4.61	4.86
MAY 95	14	177,978	7.87	5.00
JUN 95	20	182,139	10.98	5.64
JUL 95	13	190,131	6.84	5.80
AUG 95	17	192,923	8.81	6.16
SEP 95	11	183,085	6.01	6.48
OCT 95	9	177,796	5.06	6.67
NOV 95	6	157,466	3.81	6.55
DEC 95	3	142,924	2.10	6.10
JAN 96	3	137,014	2.19	5.91
FEB 96	1	144,988	0.69	5.52
MAR 96	6	177,823	3.37	5.45
APR 96	8	172,326	4.64	5.45
MAY 96	7	187,462	3.73	5.08
JUN 96	11	183,711	5.99	4.64
JUL 96	5	186,237	2.68	4.26
AUG 96	6	190,473	3.15	3.72
SEP 96	4	182,154	2.20	3.38
OCT 96	Not complete	179,368		
NOV 96	Not complete	152,080		
DEC 96	Not complete	143,933		

Data source: FAA

ROTORCRAFT AIRCRAFT INCIDENT RATES





Monthly/ 12–Mo Moving Avg: $\textit{Incident Rate (per 100,000 flt hrs)} = \frac{\textit{No. of Incidents in Mo / Past 12 Mos}}{\textit{No. of Flt Hrs in Mo / Past 12 Mos}} \times 100{,}000$

Description: This indicator compares the number of aircraft incidents involving all rotorcraft (including helicopters and gyroplanes) to the number of rotorcraft flight hours. Rotorcraft flight hour values are imprecise.

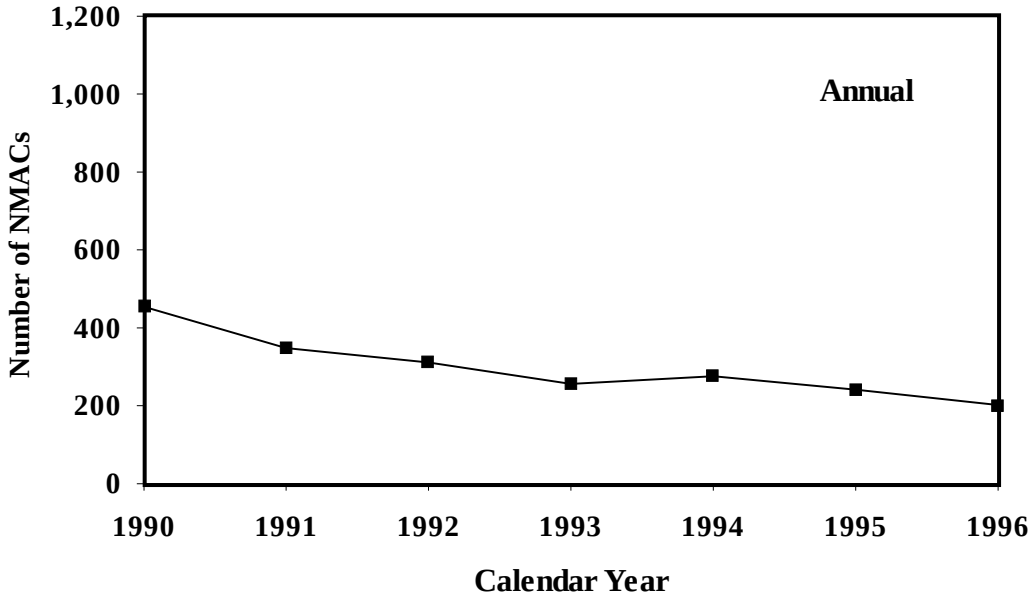
NEAR MIDAIR COLLISION (NMAC) DATA

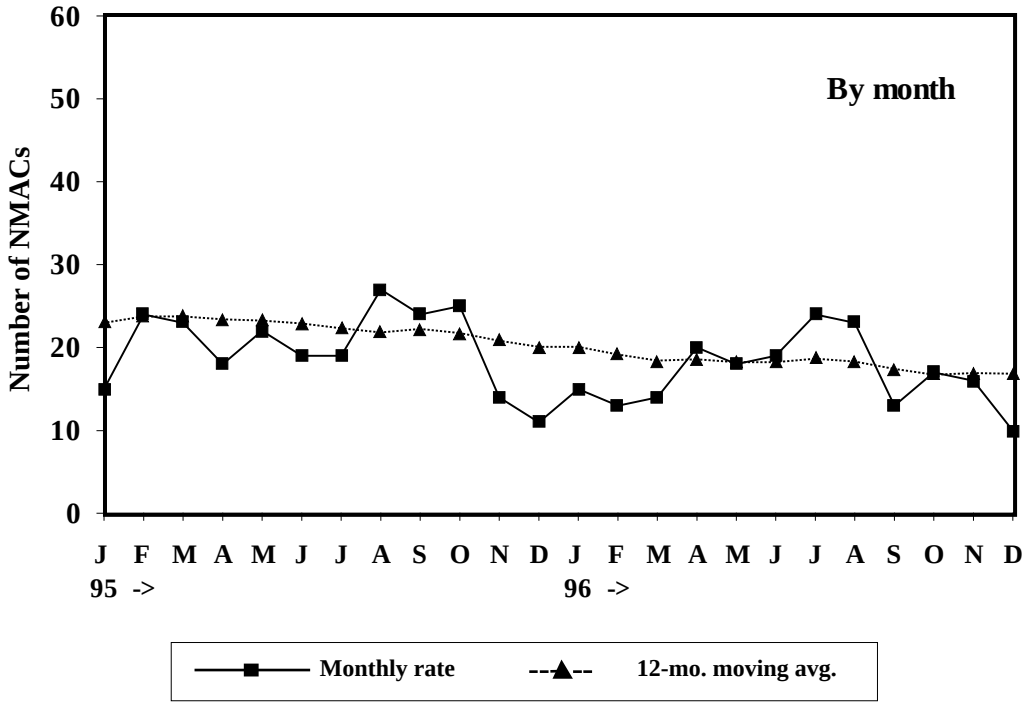
Calendar Year	No. of NMACs
1990	454
1991	348
1992	311
1993	256
1994	276
1995	241
1996	202

Month	Monthly	12-Mo Mov Avg
JAN 95	15	23.0
FEB 95	24	23.8
MAR 95	23	23.8
APR 95	18	23.4
MAY 95	22	23.3
JUN 95	19	22.9
JUL 95	19	22.3
AUG 95	27	21.8
SEP 95	24	22.3
OCT 95	25	21.8
NOV 95	14	20.8
DEC 95	11	20.1
JAN 96	15	20.1
FEB 96	13	19.2
MAR 96	14	18.4
APR 96	20	18.6
MAY 96	18	18.3
JUN 96	19	18.3
JUL 96	24	18.7
AUG 96	23	18.3
SEP 96	13	17.4
OCT 96	17	16.8
NOV 96	16	16.9
DEC 96	10	16.8

Data source: FAA

NEAR MIDAIR COLLISIONS (NMACs)





Monthly: ***No. of NMACs in Month*** **12-Mo Moving Avg:** $\frac{\textit{No. of NMACs in Past 12 Mos}}{12}$

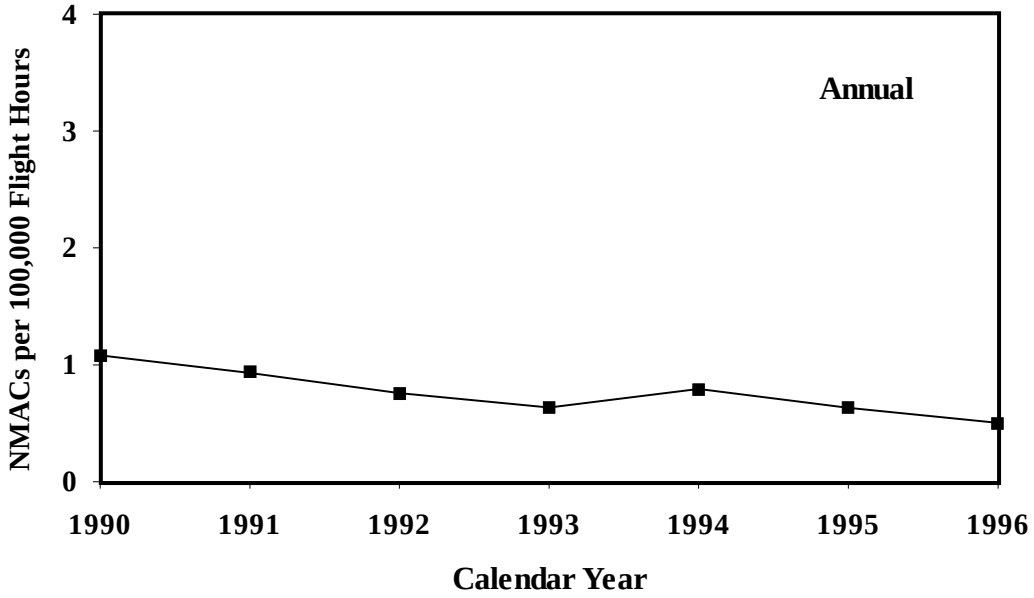
Description: This indicator presents the total number of system NMACs. These data depend on judgment and voluntary reporting of events. The data, therefore, are subjective in nature.

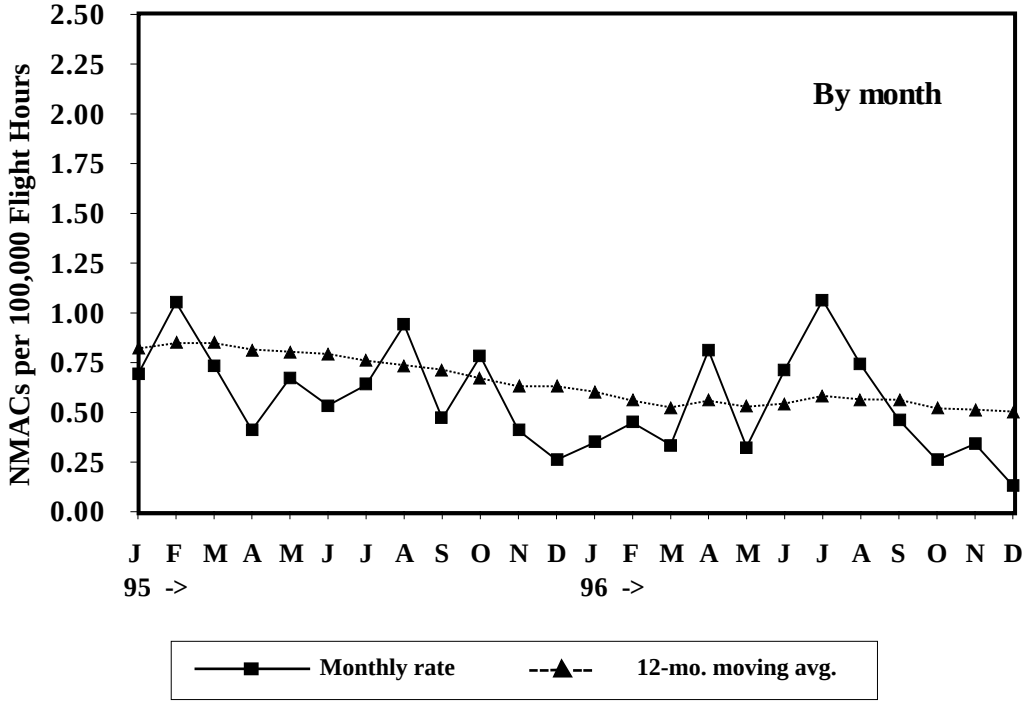
AIR CARRIER NEAR MIDAIR COLLISION (NMAC) DATA

Calendar Year	No. of NMACs	No. of Flight Hours	NMAC Rate (per 100,000 flight hours)	
1990	181	16,740,876	1.08	
1991	152	16,313,303	0.93	
1992	127	16,732,460	0.76	
1993	109	17,156,474	0.64	
1994	142	17,903,125	0.79	
1995	113	17,902,091	0.63	
1996	91	18,059,000	0.50	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	10	1,445,744	0.69	0.82
FEB 95	14	1,330,047	1.05	0.85
MAR 95	11	1,496,130	0.74	0.85
APR 95	6	1,461,187	0.41	0.82
MAY 95	10	1,486,858	0.67	0.80
JUN 95	8	1,495,332	0.53	0.79
JUL 95	10	1,567,161	0.64	0.76
AUG 95	15	1,595,003	0.94	0.74
SEP 95	7	1,495,034	0.47	0.72
OCT 95	12	1,535,064	0.78	0.67
NOV 95	6	1,465,070	0.41	0.63
DEC 95	4	1,529,460	0.26	0.63
JAN 96	5	1,434,659	0.35	0.60
FEB 96	6	1,341,603	0.45	0.56
MAR 96	5	1,483,502	0.34	0.53
APR 96	12	1,477,822	0.81	0.56
MAY 96	5	1,531,158	0.33	0.53
JUN 96	11	1,543,736	0.71	0.54
JUL 96	17	1,599,459	1.06	0.58
AUG 96	12	1,623,669	0.74	0.56
SEP 96	7	1,512,677	0.46	0.56
OCT 96	4	1,535,076	0.26	0.52
NOV 96	5	1,462,042	0.34	0.51
DEC 96	2	1,513,596	0.13	0.50

Data sources: FAA - NMAC data; DOT, FAA - Flight hour data

AIR CARRIER NEAR MIDAIR COLLISION (NMAC) RATES





Monthly/ 12–Mo Moving Avg:

$$\textit{NMAC Rate (per 100,000 flt hrs)} = \frac{\textit{No. of NMACs in Mo / Past 12 Mos}}{\textit{No. of Flt Hrs in Mo / Past 12 Mos}} \times 100{,}000$$

Description: This indicator compares the number of NMACs involving all air carriers (i.e., those operating under FAR Parts 121, 127, 129, and 135) to the number of air carrier flight hours. The

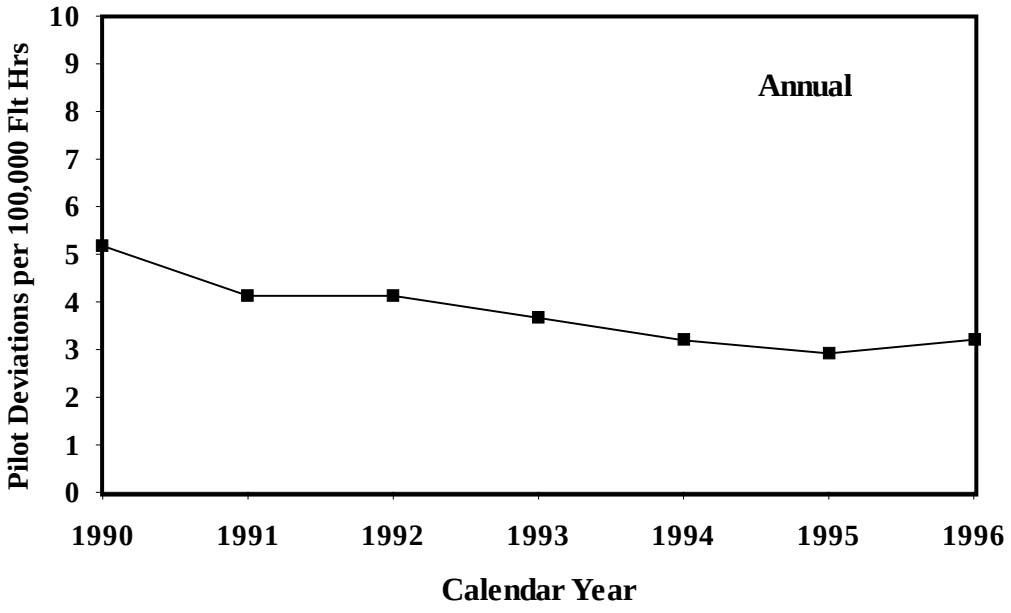
NMAC data depend on judgment and voluntary reporting of events. These data, therefore, are subjective in nature.

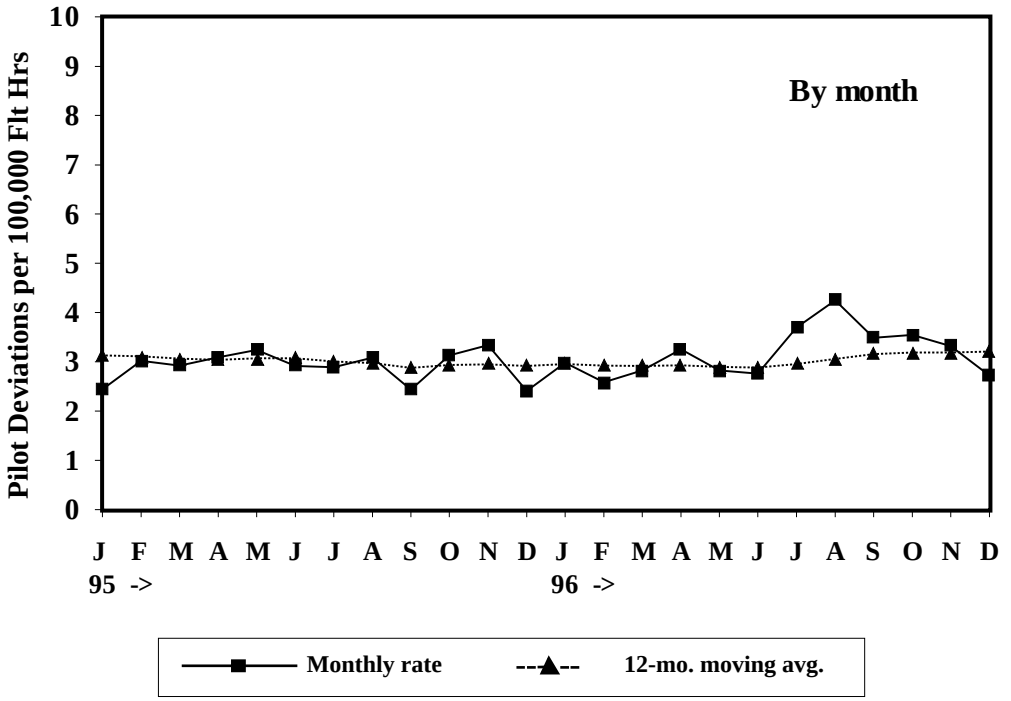
PILOT DEVIATION DATA

Calendar Year	No. of Pilot Deviations	Total System Flight Hours	Pilot Deviation Rate (per 100,000 flight hours)	
1990	2,343	45,250,876	5.18	
1991	1,797	43,539,303	4.13	
1992	1,673	40,524,460	4.13	
1993	1,455	39,687,474	3.67	
1994	1,272	39,776,125	3.20	
1995	1,210	41,440,091	2.92	
1996	1,339	41,709,000	3.21	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	73	2,987,077	2.44	3.13
FEB 95	91	3,011,119	3.02	3.11
MAR 95	102	3,485,772	2.93	3.07
APR 95	108	3,495,492	3.09	3.04
MAY 95	116	3,577,102	3.24	3.07
JUN 95	106	3,634,396	2.92	3.07
JUL 95	110	3,802,674	2.89	3.01
AUG 95	119	3,853,433	3.09	2.98
SEP 95	89	3,649,132	2.44	2.88
OCT 95	113	3,610,125	3.13	2.94
NOV 95	109	3,262,004	3.34	2.95
DEC 95	74	3,071,764	2.41	2.92
JAN 96	88	2,952,949	2.98	2.96
FEB 96	78	3,018,900	2.58	2.93
MAR 96	101	3,573,774	2.83	2.92
APR 96	114	3,505,155	3.25	2.93
MAY 96	106	3,749,519	2.83	2.90
JUN 96	102	3,693,636	2.76	2.88
JUL 96	140	3,784,693	3.70	2.96
AUG 96	163	3,837,613	4.25	3.06
SEP 96	127	3,638,284	3.49	3.15
OCT 96	129	3,639,703	3.54	3.19
NOV 96	106	3,193,445	3.32	3.19
DEC 96	85	3,121,327	2.72	3.21

Data sources: FAA - Pilot deviation data; DOT, FAA - Flight hour data

PILOT DEVIATION RATES





Monthly/ 12–Mo Moving Avg:

$$\textit{Pilot Deviation Rate (per 100,000 flt hrs)} = \frac{\textit{No. of Pilot Deviations in Mo / Past 12 Mos}}{\textit{Total System Flight Hours in Mo / Past 12 Mos}} \times 100{,}000$$

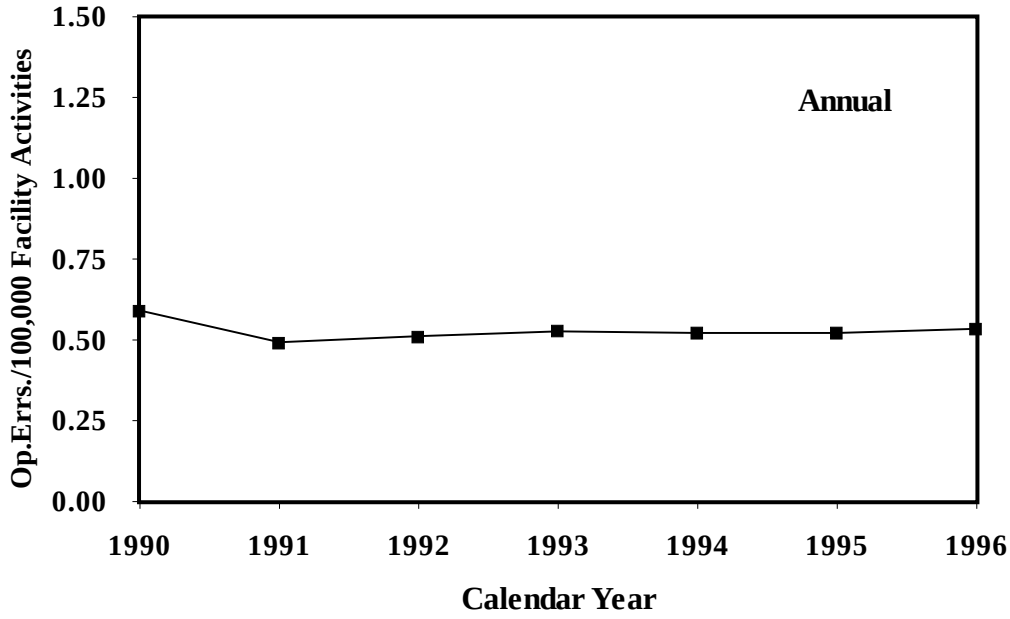
Description: This indicator compares the total number of pilot deviations to total system flight hours.

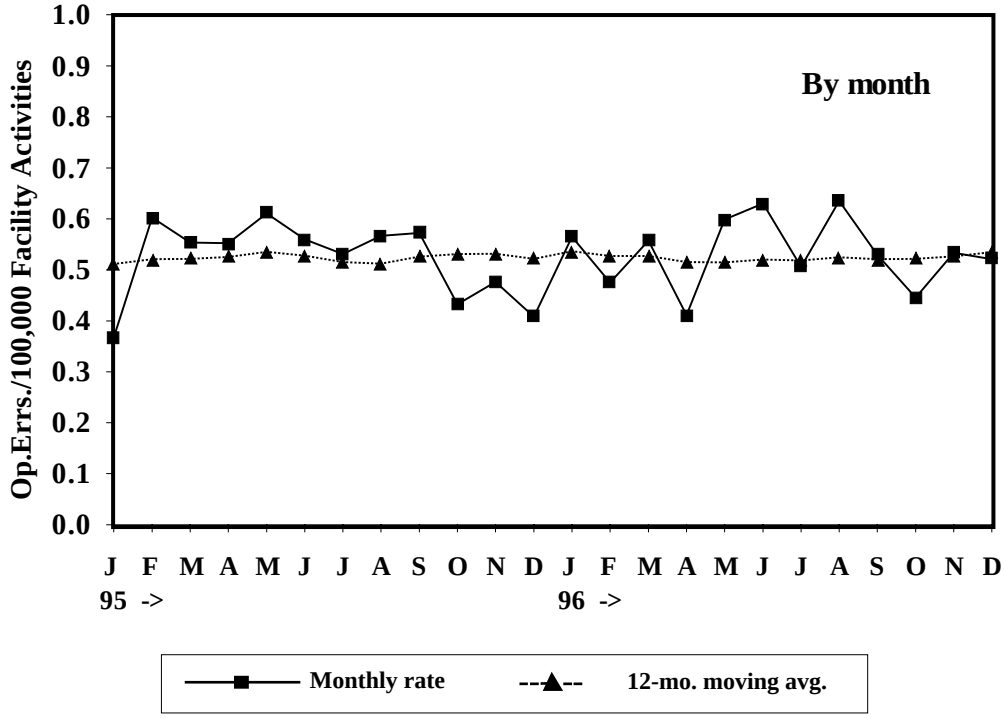
OPERATIONAL ERROR DATA

Calendar Year	No. of Operational Errors	No. of Facility Activities	Operational Error Rate (per 100,000 facility actvities)	
1990	868	146,998,276	0.59	
1991	696	141,256,609	0.49	
1992	737	144,167,634	0.51	
1993	761	144,427,234	0.53	
1994	767	147,019,869	0.52	
1995	769	147,482,376	0.52	
1996	794	148,464,962	0.53	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	41	11,174,517	0.37	0.51
FEB 95	66	10,957,517	0.60	0.52
MAR 95	70	12,649,495	0.55	0.52
APR 95	68	12,316,807	0.55	0.53
MAY 95	78	12,767,531	0.61	0.54
JUN 95	72	12,863,029	0.56	0.53
JUL 95	69	13,001,142	0.53	0.52
AUG 95	76	13,407,035	0.57	0.51
SEP 95	72	12,586,988	0.57	0.53
OCT 95	55	12,729,689	0.43	0.53
NOV 95	56	11,757,309	0.48	0.53
DEC 95	46	11,271,317	0.41	0.52
JAN 96	62	10,982,689	0.56	0.54
FEB 96	53	11,152,596	0.48	0.53
MAR 96	69	12,387,829	0.56	0.53
APR 96	51	12,401,198	0.41	0.52
MAY 96	77	12,860,203	0.60	0.51
JUN 96	80	12,698,378	0.63	0.52
JUL 96	66	13,043,510	0.51	0.52
AUG 96	85	13,382,063	0.64	0.52
SEP 96	66	12,462,414	0.53	0.52
OCT 96	58	13,010,870	0.45	0.52
NOV 96	65	12,183,364	0.53	0.53
DEC 96	62	11,899,848	0.52	0.53

Data source: FAA

OPERATIONAL ERROR RATES





Monthly/ 12–Mo Moving Avg: *Operational Error Rate (per 100,000 facility activities)* $= \frac{\text{No. of Operational Errors in Mo / Past 12 Mos}}{\text{No. of Facility Activities in Mo / Past 12 Mos}} \times 100{,}000$

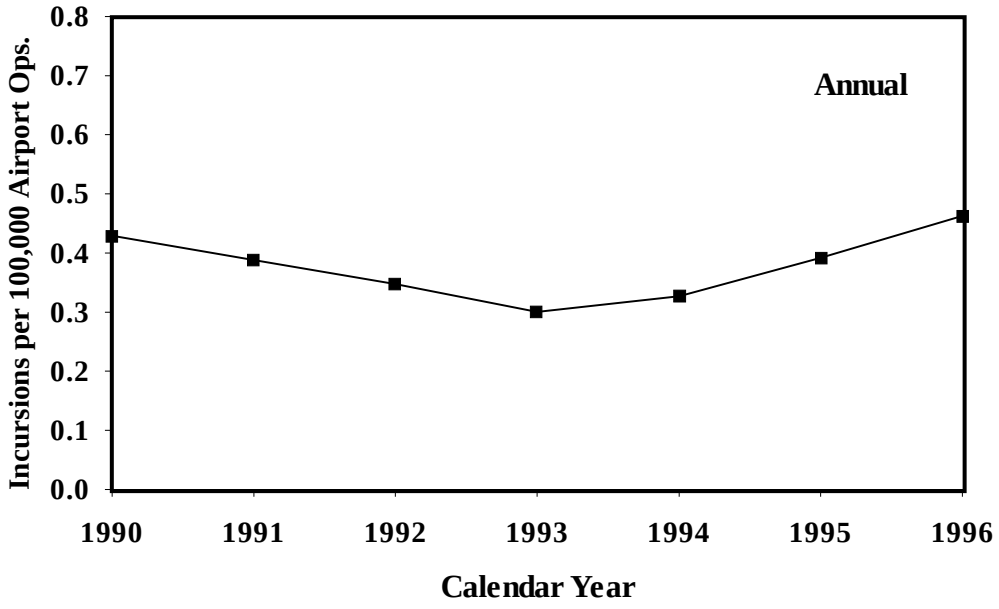
Description: This indicator compares the total number of operational errors to the total number of facility activities. Facility activity data for the most recent two months are estimated values. All other data for this indicator are actual counts.

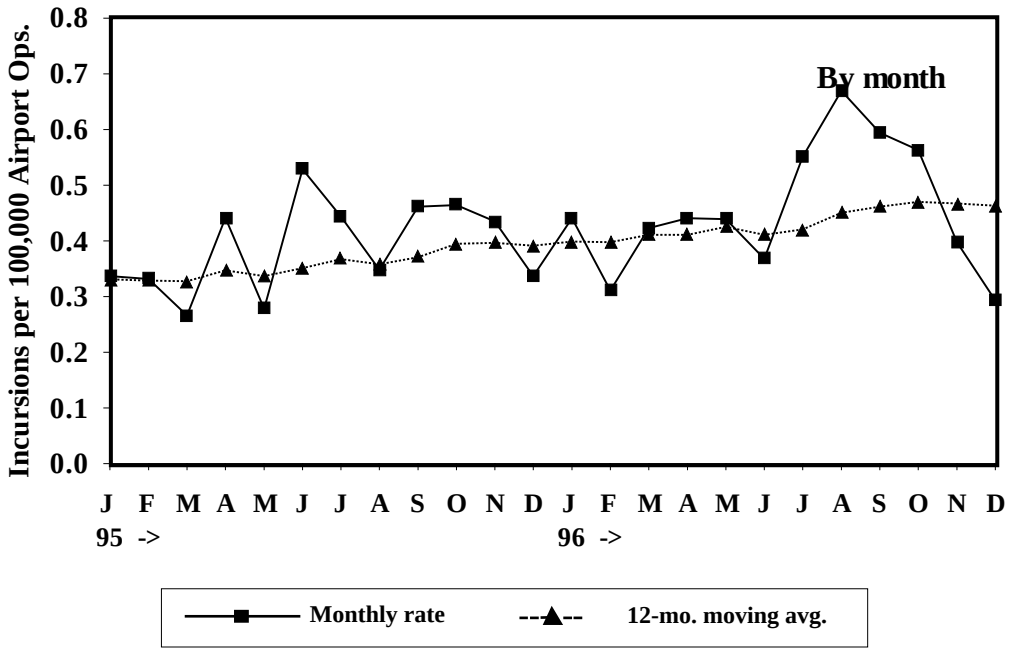
RUNWAY INCURSION DATA

Calendar Year	No. of Runway Incursions	No. of Airport Operations	Runway Incursion Rate (per 100,000 airport operations)	
1990	281	65,476,538	0.43	
1991	242	62,387,597	0.39	
1992	219	63,017,350	0.35	
1993	186	61,980,424	0.30	
1994	204	62,445,120	0.33	
1995	242	61,799,417	0.39	
1996	287	61,988,481	0.46	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	15	4,450,558	0.34	0.33
FEB 95	15	4,523,822	0.33	0.33
MAR 95	14	5,264,618	0.27	0.33
APR 95	23	5,214,809	0.44	0.35
MAY 95	15	5,397,913	0.28	0.34
JUN 95	29	5,484,720	0.53	0.35
JUL 95	25	5,633,232	0.44	0.37
AUG 95	20	5,742,310	0.35	0.36
SEP 95	25	5,420,648	0.46	0.37
OCT 95	25	5,386,437	0.46	0.39
NOV 95	21	4,827,950	0.43	0.40
DEC 95	15	4,452,400	0.34	0.39
JAN 96	19	4,311,586	0.44	0.40
FEB 96	14	4,501,291	0.31	0.40
MAR 96	22	5,204,170	0.42	0.41
APR 96	23	5,221,452	0.44	0.41
MAY 96	24	5,466,658	0.44	0.42
JUN 96	20	5,441,379	0.37	0.41
JUL 96	31	5,627,734	0.55	0.42
AUG 96	38	5,676,728	0.67	0.45
SEP 96	31	5,216,153	0.59	0.46
OCT 96	31	5,508,957	0.56	0.47
NOV 96	20	5,034,061	0.40	0.47
DEC 96	14	4,778,312	0.29	0.46

Data source: FAA

RUNWAY INCURSION RATES





Monthly/ 12–Mo Moving Avg:

$$\textit{Runway Incursion Rate (per 100,000 airport operations)} = \frac{\textit{No. of Runway Incursions in Mo / Past 12 Mos}}{\textit{No. of Airport Operations in Mo / Past 12 Mos}} \times 100{,}000$$

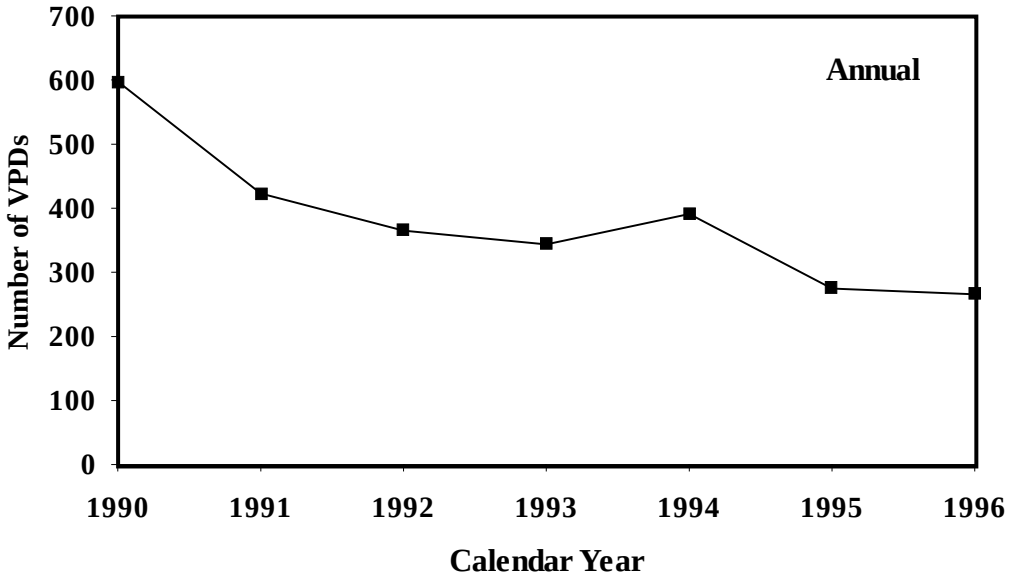
Description: This indicator compares the number of runway incursions that occur at airports to the number of operations at the airports. Runway incursions may result from surface operational errors, surface pilot deviations, or vehicle/pedestrian deviations (VPDs). Airport operations data for the most recent two months are estimated values. All other data for this indicator are actual counts.

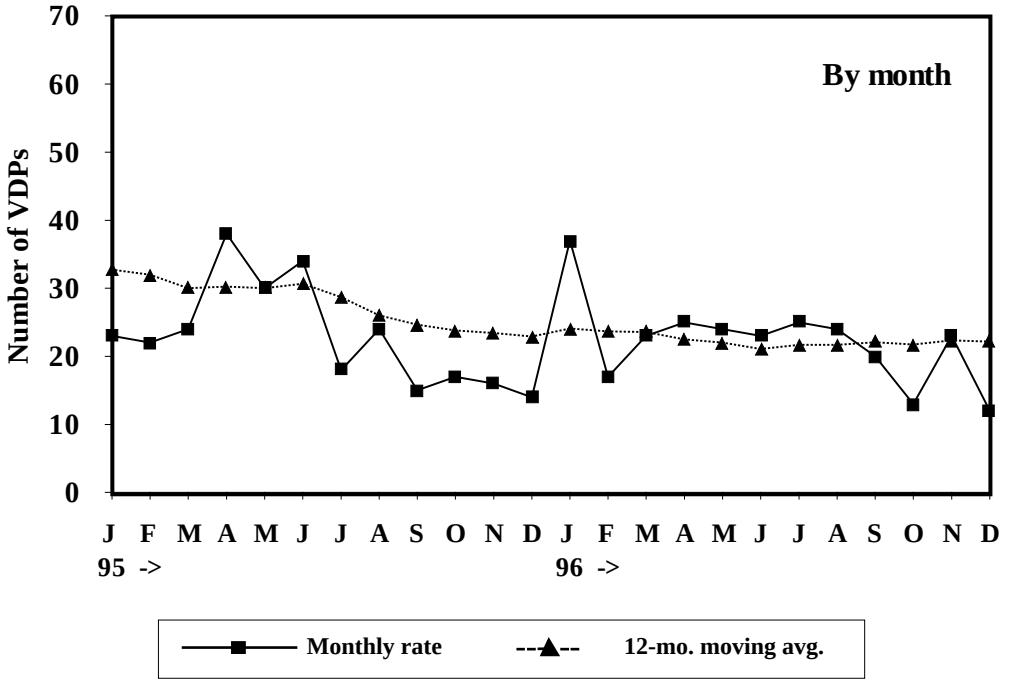
VEHICLE/PEDESTRIAN DEVIATION (VPD) DATA

Calendar Year	No. of Vehicle/Pedestrian Deviations	
1990	598	
1991	423	
1992	365	
1993	344	
1994	391	
1995	275	
1996	266	
Month	**Monthly**	**12-Mo Mov Avg**
JAN 95	23	32.8
FEB 95	22	32.0
MAR 95	24	30.0
APR 95	38	30.3
MAY 95	30	30.0
JUN 95	34	30.7
JUL 95	18	28.7
AUG 95	24	26.0
SEP 95	15	24.7
OCT 95	17	23.8
NOV 95	16	23.4
DEC 95	14	22.9
JAN 96	37	24.1
FEB 96	17	23.7
MAR 96	23	23.6
APR 96	25	22.5
MAY 96	24	22.0
JUN 96	23	21.1
JUL 96	25	21.7
AUG 96	24	21.7
SEP 96	20	22.1
OCT 96	13	21.8
NOV 96	23	22.3
DEC 96	12	22.2

Data source: FAA

VEHICLE/PEDESTRIAN DEVIATIONS (VPDs)





Monthly: ***No. of VPDs in Month*** **12-Mo Moving Avg:** $\frac{\textit{No. of VPDs in Past 12 Mos}}{12}$

Description: This indicator presents the number of VPDs. A VPD is an entry or movement on an airport movement area by a vehicle (including aircraft operated by a non-pilot) or pedestrian that has not been authorized by air traffic control.

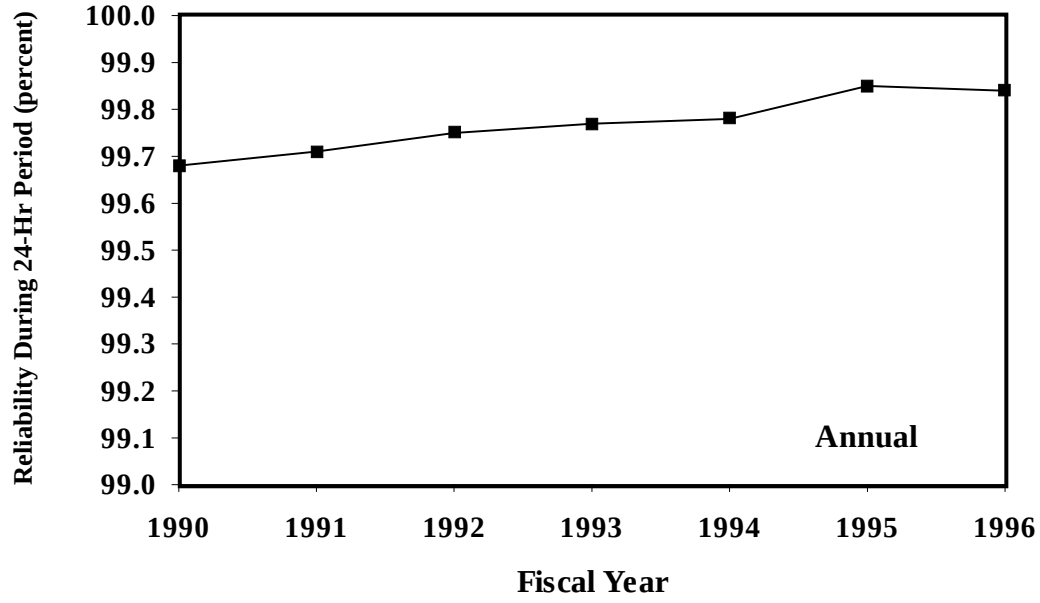
FACILITY/SERVICE RELIABILITY DATA

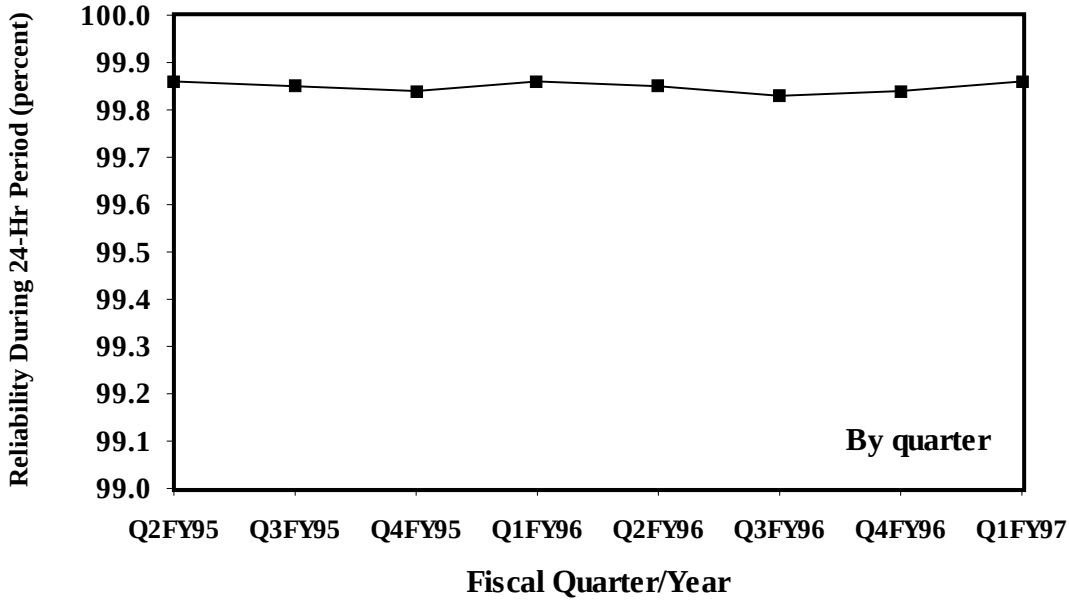
Fiscal Year	Facility/Service Reliability (percent)
1990	99.68
1991	99.71
1992	99.75
1993	99.77
1994	99.78
1995	99.85
1996	99.84
Quarter/Year	
Q2FY95	99.86
Q3FY95	99.85
Q4FY95	99.84
Q1FY96	99.86
Q2FY96	99.85
Q3FY96	99.83
Q4FY96	99.84
Q1FY97	99.86

Data source: FAA

Description: This indicator provides an aggregate estimate of the probability that a typical major facility or service will not fail during mission time (24-hour period). The National Airspace Performance System (NAPRS) sets forth requirements and procedures for reporting interruptions to facilities and services in the National Airspace System (NAS). As of September 30, 1996, there were 120 major facility or service types that were jointly agreed upon by the Directors of Air Traffic and Airway Facilities for interruption reporting. These 120 facility/service types include a total of 25,387 individual facilities and services that presently comprise the NAS. These include automation facilities and services used to process flight data information, en route and terminal radar facilities and services, and instrument landing systems used by air traffic and the flying public. Facilities (e.g., storage buildings, roads, and heating systems) not vital to the control of air traffic nor used by the flying public are not currently reportable.

FACILITY/SERVICE RELIABILITY





$$Facility\ /\ Service\ Reliability\ =\ e^{-\left(\frac{Mission\ Time\ (24\text{-}hour\ period)}{Mean\ Time\ Between\ Outages}\right)}$$

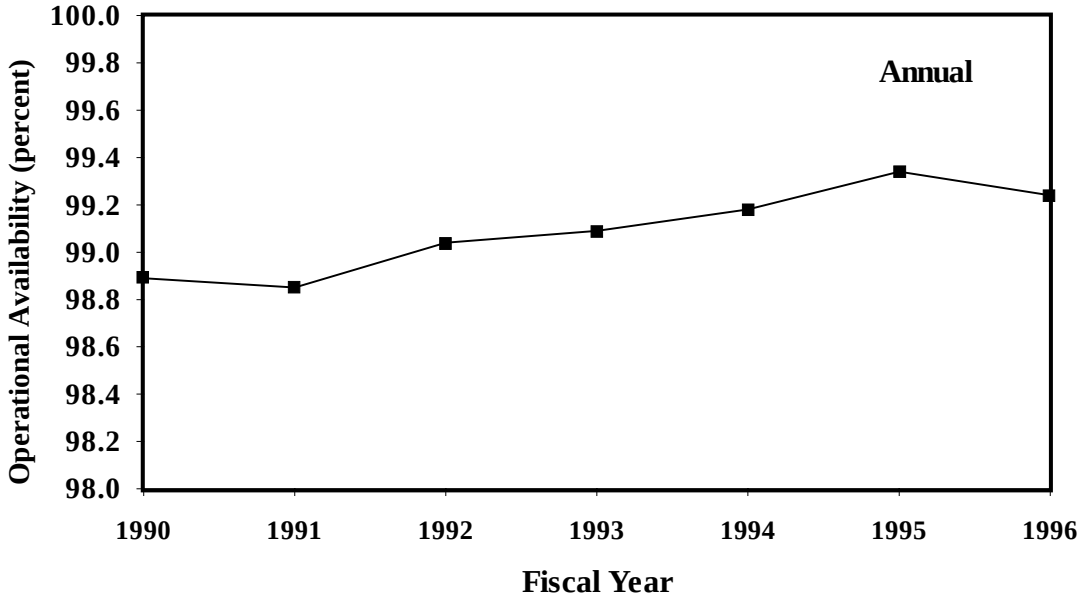
FACILITY/SERVICE OPERATIONAL AVAILABILITY DATA

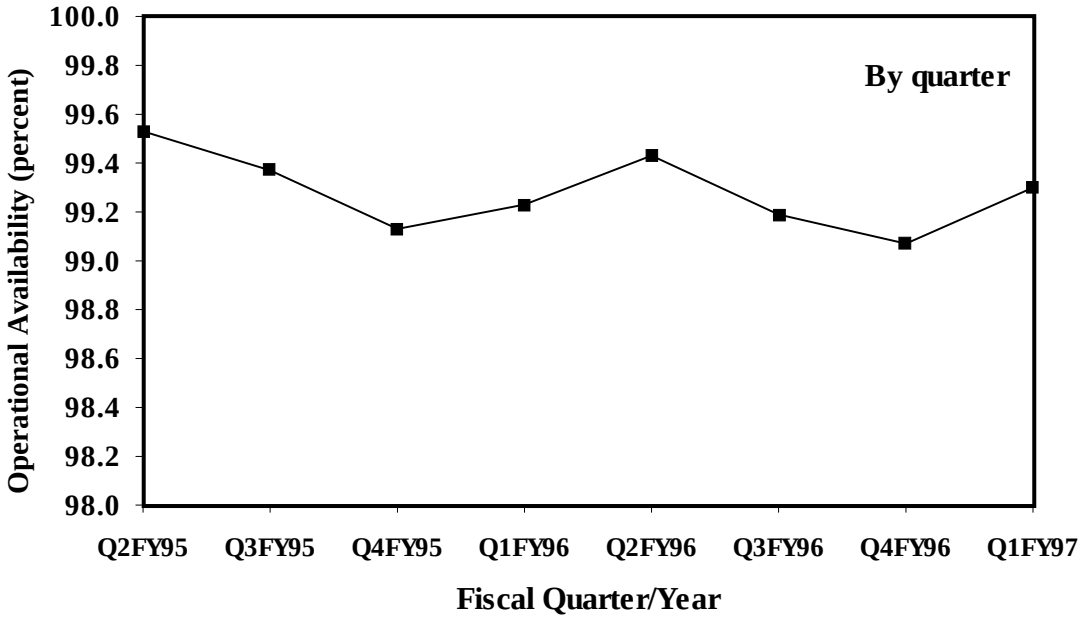
Fiscal Year	Facility/Service Operational Availability (percent)
1990	98.89
1991	98.85
1992	99.04
1993	99.09
1994	99.18
1995	99.34
1996	99.24
Quarter/Year	
Q2FY95	99.53
Q3FY95	99.37
Q4FY95	99.13
Q1FY96	99.23
Q2FY96	99.43
Q3FY96	99.19
Q4FY96	99.07
Q1FY97	99.30

Data source: FAA

Description: This indicator provides an aggregate estimate of the percentage of time a typical major facility or service is available to users of the National Airspace System (NAS). It is the ratio of total operating facility/service hours to maximum facility/service hours, expressed as a percentage. The National Airspace Performance System (NAPRS) sets forth requirements and procedures for reporting interruptions to facilities and services in NAS. As of September 30, 1996, there were 120 major facility or service types that were jointly agreed upon by the Directors of Air Traffic and Airway Facilities for interruption reporting. These 120 facility/service types include a total of 25,387 individual facilities and services that presently comprise the NAS. These include automation facilities and services used to process flight data information, en route and terminal radar facilities and services, and instrument landing systems used by air traffic and the flying public. Facilities (e.g., storage buildings, roads, and heating systems) not vital to the control of air traffic nor used by the flying public are not currently reportable.

FACILITY/SERVICE OPERATIONAL AVAILABILITY





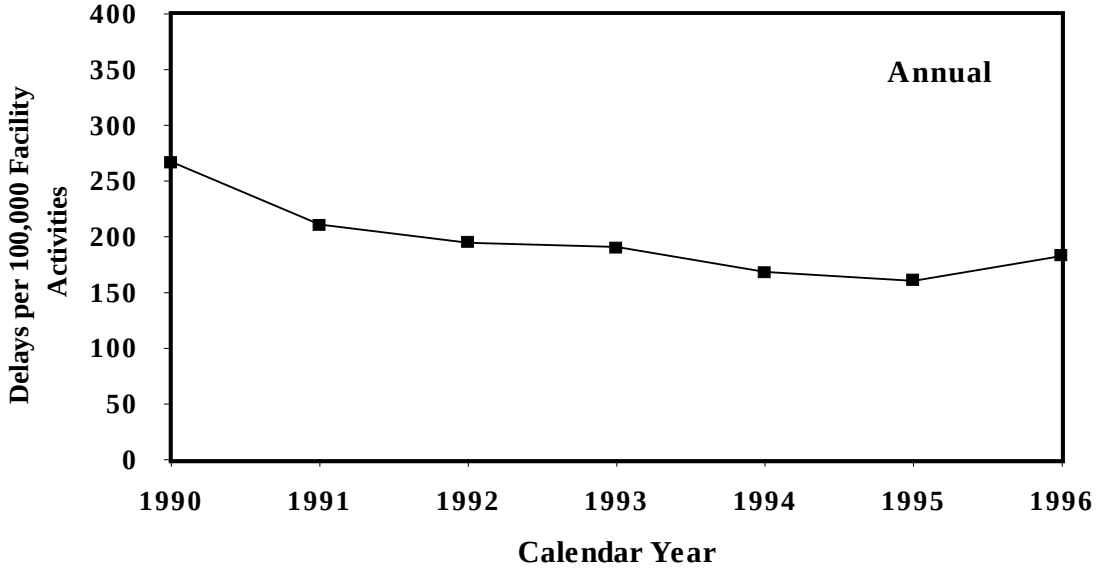
$$\textit{Facility / Service Operational Availability} = \frac{\textit{Maximum Available Time - Total Time Out of Service}}{\textit{Maximum Available Time}} \times 100$$

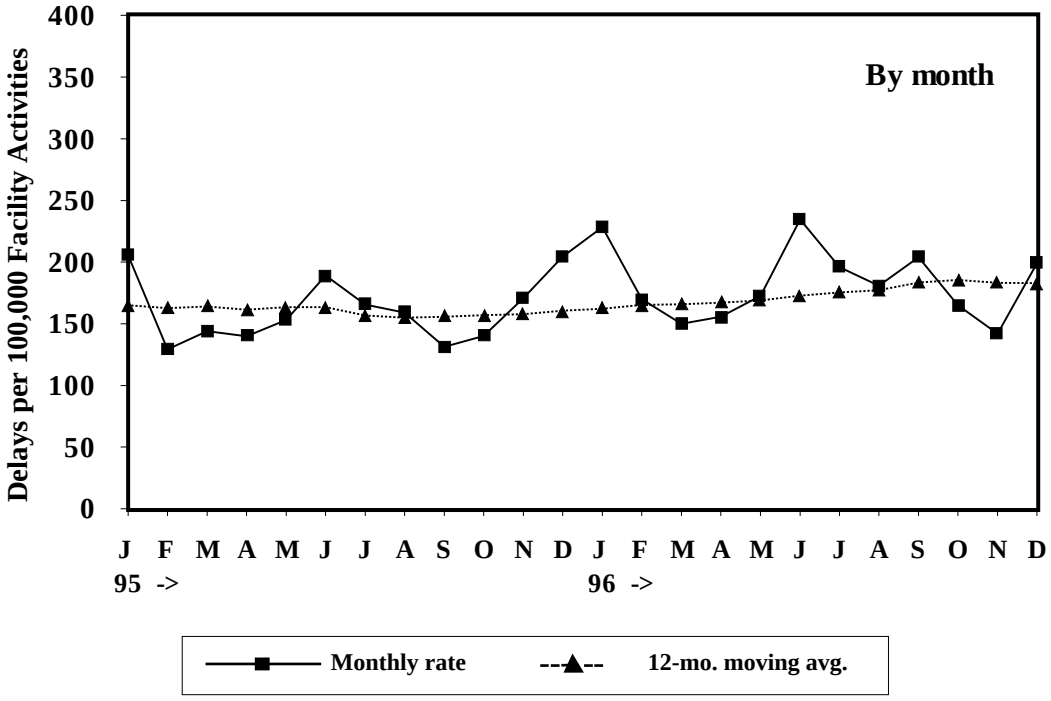
DELAY RATE DATA

Calendar Year	No. of Delays	No. of Facility Activities	Delay Rate (per 100,000 facility activities)	
1990	392,834	146,998,276	267.2	
1991	298,332	141,256,609	211.2	
1992	280,821	144,167,634	194.8	
1993	275,759	144,427,234	190.9	
1994	247,719	147,019,869	168.5	
1995	236,794	147,482,376	160.6	
1996	271,509	148,464,962	182.9	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	22,962	11,174,517	205.5	165.1
FEB 95	14,148	10,957,517	129.1	162.8
MAR 95	18,217	12,649,495	144.0	164.0
APR 95	17,237	12,316,807	139.9	161.4
MAY 95	19,567	12,767,531	153.3	163.4
JUN 95	24,349	12,863,029	189.3	163.3
JUL 95	21,506	13,001,142	165.4	156.8
AUG 95	21,326	13,407,035	159.1	155.0
SEP 95	16,512	12,586,988	131.2	155.8
OCT 95	17,834	12,729,689	140.1	157.0
NOV 95	20,081	11,757,309	170.8	157.7
DEC 95	23,055	11,271,317	204.5	160.6
JAN 96	25,082	10,982,689	228.4	162.2
FEB 96	18,955	11,152,596	170.0	165.3
MAR 96	18,598	12,387,829	150.1	165.8
APR 96	19,305	12,401,198	155.7	167.1
MAY 96	22,200	12,860,203	172.6	168.8
JUN 96	29,776	12,698,378	234.5	172.7
JUL 96	25,544	13,043,510	195.8	175.4
AUG 96	24,203	13,382,063	180.9	177.3
SEP 96	25,422	12,462,414	204.0	183.5
OCT 96	21,452	13,010,870	164.9	185.7
NOV 96	17,294	12,183,364	141.9	183.2
DEC 96	23,678	11,899,848	199.0	182.9

Data source: FAA

DELAY RATES





Monthly/ 12–Mo Moving Avg:

$$\textit{Delay Rate (per 100,000 facility activities)} = \frac{\textit{No. of Delays in Mo / Past 12 Mos}}{\textit{No. of Facility Activities in Mo / Past 12 Mos}} \times 100{,}000$$

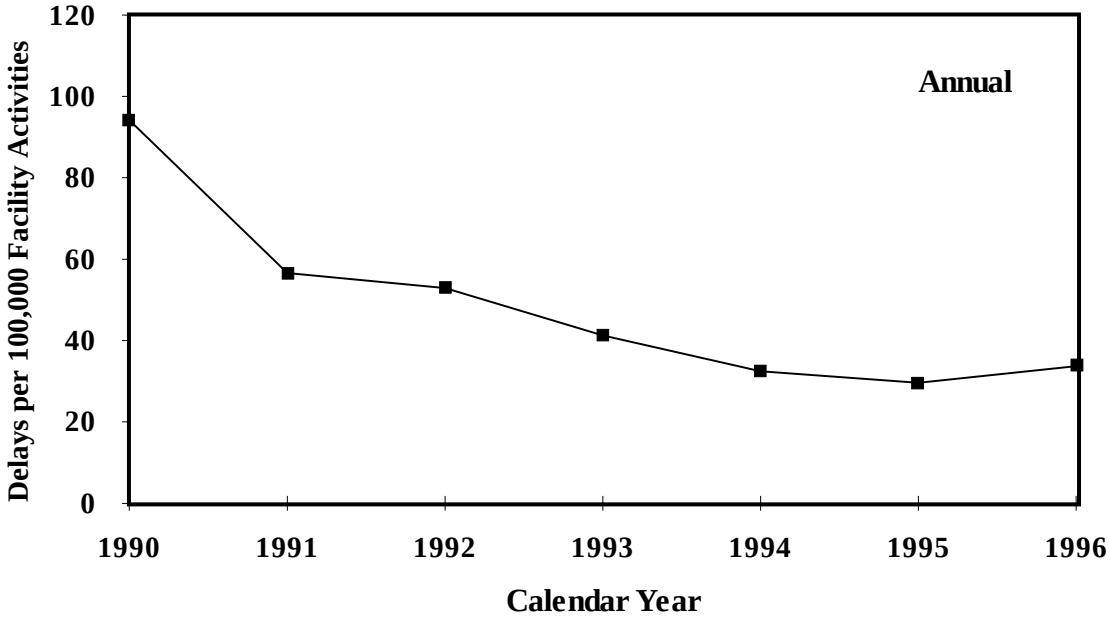
Description: This indicator compares the total number of delays to total facility activity. Delays may result from weather, equipment failures, or excessive volume of traffic. Facility activity data for the most recent two months are estimated values. All other data for this indicator are actual counts.

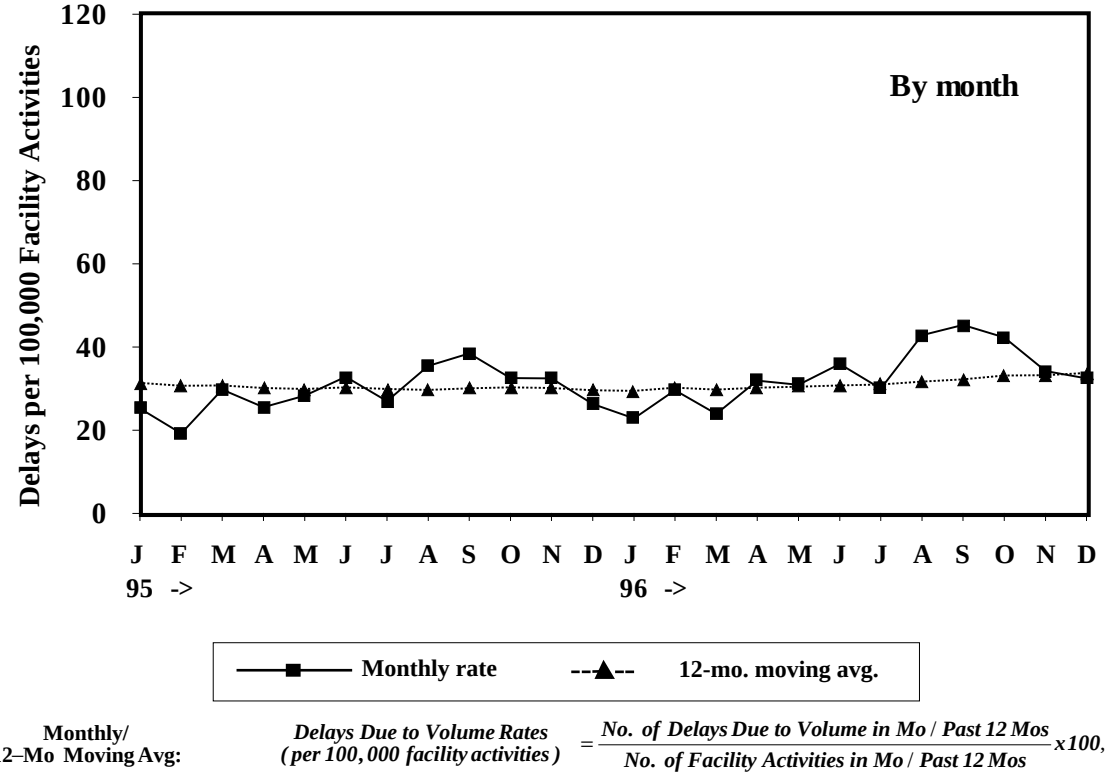
DELAYS DUE TO VOLUME DATA

Calendar Year	No. of Delays	No. of Facility Activities	Delay Rate (per 100,000 facility activities)	
1990	138,513	146,998,276	94.2	
1991	79,951	141,256,609	56.6	
1992	76,298	144,167,634	52.9	
1993	59,591	144,427,234	41.3	
1994	47,744	147,019,869	32.5	
1995	43,717	147,482,376	29.6	
1996	50,110	148,464,962	33.8	
Month			**Monthly**	**12-Mo Mov Avg**
JAN 95	2,825	11,174,517	25.3	31.4
FEB 95	2,110	10,957,517	19.3	30.7
MAR 95	3,763	12,649,495	29.7	30.8
APR 95	3,152	12,316,807	25.6	30.2
MAY 95	3,615	12,767,531	28.3	29.9
JUN 95	4,223	12,863,029	32.8	30.3
JUL 95	3,511	13,001,142	27.0	30.0
AUG 95	4,750	13,407,035	35.4	29.7
SEP 95	4,845	12,586,988	38.5	30.1
OCT 95	4,143	12,729,689	32.5	30.3
NOV 95	3,814	11,757,309	32.4	30.2
DEC 95	2,966	11,271,317	26.3	29.6
JAN 96	2,512	10,982,689	22.9	29.5
FEB 96	3,300	11,152,596	29.6	30.2
MAR 96	2,959	12,387,829	23.9	29.7
APR 96	3,960	12,401,198	31.9	30.3
MAY 96	3,984	12,860,203	31.0	30.5
JUN 96	4,559	12,698,378	35.9	30.8
JUL 96	3,913	13,043,510	30.0	31.0
AUG 96	5,734	13,382,063	42.8	31.7
SEP 96	5,645	12,462,414	45.3	32.3
OCT 96	5,507	13,010,870	42.3	33.1
NOV 96	4,168	12,183,364	34.2	33.3
DEC 96	3,869	11,899,848	32.5	33.8

Data source: FAA

DELAYS DUE TO VOLUME RATES





Monthly/ 12–Mo Moving Avg:

$$\textit{Delays Due to Volume Rates (per 100,000 facility activities)} = \frac{\textit{No. of Delays Due to Volume in Mo / Past 12 Mos}}{\textit{No. of Facility Activities in Mo / Past 12 Mos}} \times 100{,}000$$

Description: This indicator compares the number of delays due to volume to total facility activity. These delays occur when an aircraft is delayed more than 15 minutes due to the volume of aircraft being worked by the air traffic control system. Facility activity data for the most recent two months are estimated values. All other data for this indicator are actual counts.

AIRCRAFT CERTIFICATION SYSTEM EVALUATION PROGRAM

Percent of Planned Evaluations Actually Accomplished by Responsible Directorate

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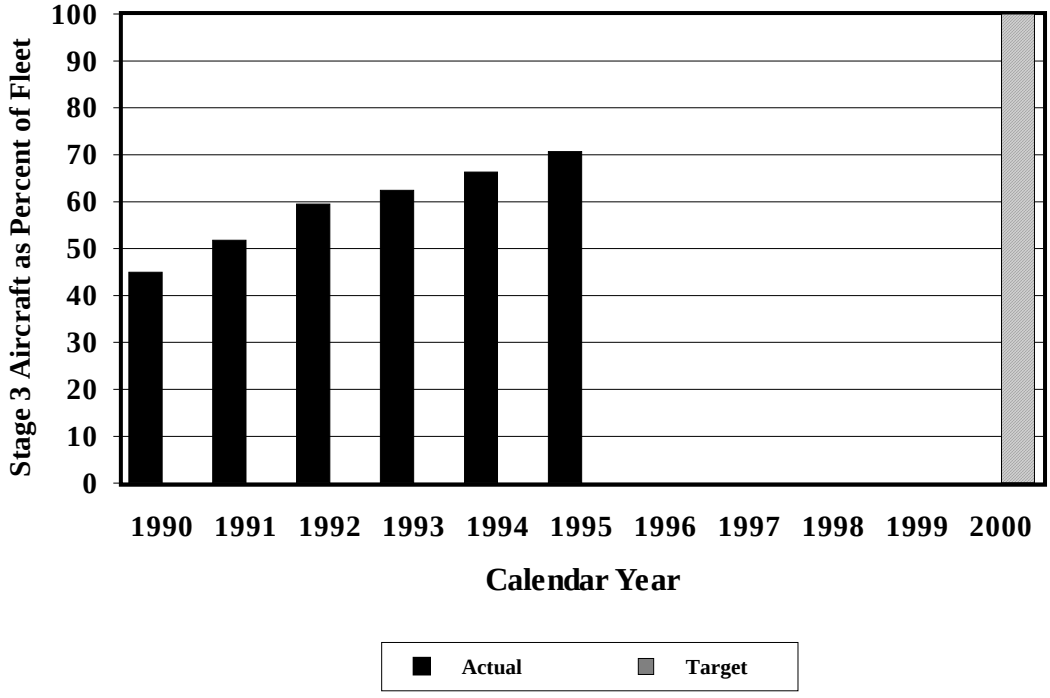
AIRCRAFT CERTIFICATION SYSTEM EVALUATION PROGRAM DATA

Error! No topic specified. Data source: FAA. NOTE: The Aircraft Certification Management Team determined in September 1993 that the number of scheduled ACSEP evaluations for FY 94 would cause a significant drain on existing resources. Accordingly, the criteria for ACSEP evaluations for FY 94 was formally modified to limit ACSEP evaluations to production approval holders and selected suppliers producing priority parts.

Description: The Aircraft Certification System Evaluation Program (ACSEP) is a comprehensive evaluation program utilizing a team of manufacturing inspection, engineering, and flight test resources to ascertain whether design and production approval holders and their priority parts suppliers are meeting the requirements of the Federal Aviation Regulations (FARs) and complying with procedures established to meet the requirements of the FARs. A schedule for evaluations is developed at the beginning of each fiscal year. This indicator shows the percentage of planned evaluations that are actually completed by the end of each fiscal year.

STAGE 3 AIRCRAFT RATIO



$$\textit{Stage 3 Aircraft Ratio} = \frac{\textit{No. of Stage 3 Aircraft (> 75,000 lbs.)}}{\textit{No. of Stage 2 Aircraft (> 75,000 lbs.) + No. of Stage 3 Aircraft (> 75,000 lbs.)}}$$

Stage 3 Aircraft Data

Calendar Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Stage 3 Aircraft (percent of fleet)	45.0	51.8	59.5	62.4	66.3	70.7					100.0

Data source: FAA

Description: This indicator shows overall aircraft operators' progress toward a 100-percent Stage 3 fleet by the year 2000. The ratio includes domestic and foreign aircraft operated in the U.S. The Airport Noise and Capacity Act of 1990 states that after December 31, 1999, no person may operate a civil subsonic turbojet aircraft certified at more than 75,000 pounds in the contiguous United States unless that aircraft meets Stage 3 noise levels. A schedule of phased-in compliance was established under FAR Part 91. Under the rules, aircraft operators can either decrease the number of their Stage 2 aircraft from a base level by specified percentages at the interim milestones (phased-out), or they can operate a fleet that consists of at least the minimum required percentage of Stage 3 aircraft specified at the interim milestones (phased-in). This indicator measures the overall progress of the rule.

NATIONAL INSPECTOR ACTIVITY DATA

Type of Activity	No. of Activities by Fiscal Year					
	1991	1992	1993	1994	1995	1996
Tech. Staff Admin.	33,520	36,721	32,361	30,252	40,831	46,289
Org. Tech. Admin.	60,669	72,351	71,208	87,657	91,420	82,959
Gen. Tech. Funct.	8,721	12,760	14,067	12,484	12,753	13,667
Aircraft & Equipment	92,873	103,259	94,168	90,759	92,204	90,950
Investigations	30,347	36,001	31,537	27,836	28,107	29,433
Org. Certification	6,545	8,852	9,386	8,110	7,351	7,492
Airmen Certification	217,254	263,119	243,610	223,625	222,179	208,876
Education & Safety	17,210	29,960	67,416	72,240	67,231	56,447
Surveillance	333,226	387,575	376,872	326,708	308,367	302,857
Total	800,365	950,598	940,625	879,671	870,443	838,970

Type of Activity	Inspector Activity Rate by Fiscal Year					
	1991	1992	1993	1994	1995	1996
Tech. Staff Admin.	13.88	15.75	14.29	13.95	17.13	17.55
Org. Tech. Admin.	25.12	31.03	31.45	40.41	38.35	31.46
Gen. Tech. Funct.	3.61	5.47	6.21	5.76	5.35	5.18
Aircraft & Equipment	38.46	44.28	41.59	41.84	38.68	34.49
Investigations	12.57	15.44	13.93	12.83	11.79	11.16
Org. Certification	2.71	3.80	4.15	3.74	3.08	2.84
Airmen Certification	89.96	112.83	107.60	103.10	93.20	79.21
Education & Safety	7.13	12.85	29.78	33.31	28.20	21.41
Surveillance	137.98	166.20	166.46	150.63	129.35	114.85
Total	331.41	407.63	415.47	405.57	365.12	318.15

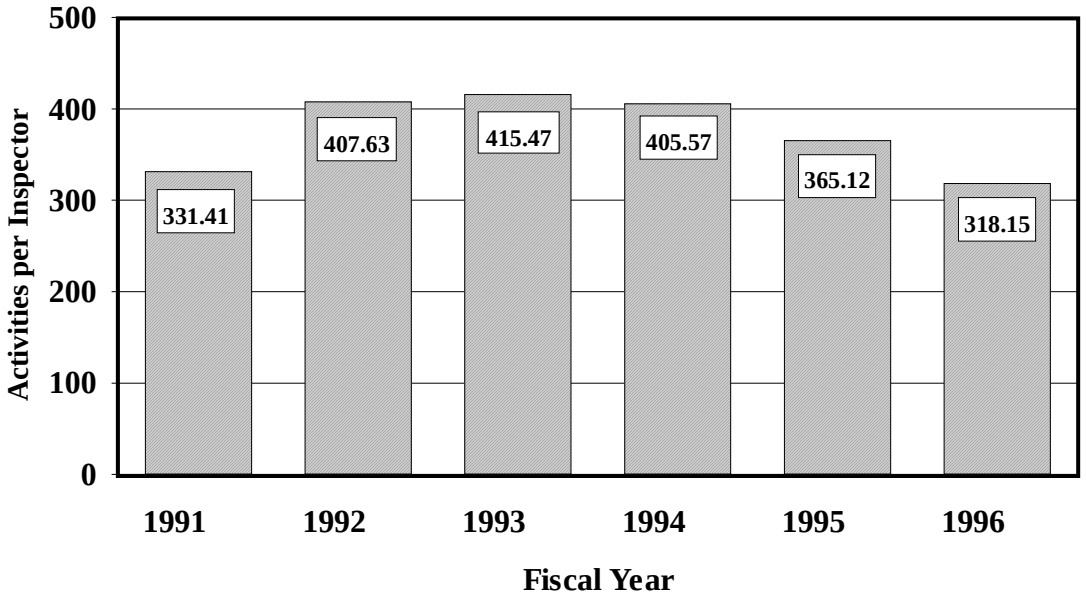
Data source: FAA

$$\textit{Inspector Activity Rate} = \frac{\textit{Number of Inspector Activities}}{\textit{Number of Inspectors}},$$ where

Number of Inspector Activities =
- *Number of Technical Staff Administrative Responsibilities*
- \+ *Number of Organization Technical Administration Activities*
- \+ *Number of General Technical Function Activities*
- \+ *Number of Aircraft & Equipment Activities*
- \+ *Number of Investigations*
- \+ *Number of Organization Certification Activities*
- \+ *Number of Airmen Certification Activities*
- \+ *Number of Education & Safety Activities*
- \+ *Number of Surveillance Activities*

and the ***Number of Inspectors*** is the count at the end of the fiscal year.

NATIONAL INSPECTOR ACTIVITY RATES



Description: This indicator displays the national inspector activity rates by fiscal year. Inspectors have a wide range of duties as listed on the previous page. **Technical staff administrative responsibilities** include inspector training, special projects, telephone standby, and proficiency flying. **Organization technical administration activities** refer to additional certification activities requested by an air operator or an air agency. **General technical function activities** are used to record activities associated with exemptions, aircraft evaluation group (AEG) activities, outside request/audits (GAO, Office of Inspector General [OIG], Freedom of Information Act [FOIA], and Congress), responses to Administrator's hotline, special events and activities at airports, and data collection. **Aircraft and equipment activities** are associated with certificating aircraft or aircraft equipment. **Investigations** cover all events that an inspector might investigate, such as accidents, incidents, complaints, enforcements, near midair collisions, flight assists, legal support, and technical support (e.g., NTSB investigations). **Organization certification activities** are associated with the original issuance of a certificate to an air carrier or to an air agency. **Airmen certification activities** are associated with issuing pilot certificates. These functions include issuing original certificates, adding ratings to current certificates, reviewing designated examiners, and supporting special safety programs. **Education and safety activities** are associated with FAA programs to promote safety. **Surveillance** refers to the actual review by FAA inspectors of activities performed by airmen, air carriers, and air agencies to ensure compliance with the FARs.

NATIONAL INSPECTOR ACTIVITY DATA

Type of Activity	No. of Activities by Fiscal Quarter							
	Q2FY95	Q3FY95	Q4FY95	Q1FY96	Q2FY96	Q3FY96	Q4FY96	Q1FY97
Tech. Staff Admin.	9,537	10,957	12,148	11,179	13,485	11,580	10,045	7,944
Org. Tech. Admin.	28,659	22,772	18,848	20,790	24,032	19,675	18,462	15,440
Gen. Tech. Funct.	4,211	2,942	3,098	2,799	4,070	3,456	3,342	2,128
Aircraft & Equipment	22,928	25,635	22,532	18,250	22,948	26,250	23,502	18,591
Investigations	7,139	7,239	7,965	5,243	7,269	7,936	8,985	5,223
Org. Certification	1,678	2,453	2,037	1,141	1,692	2,577	2,082	937
Airmen Certification	60,372	59,360	51,991	45,930	59,120	55,549	48,277	39,831
Education & Safety	18,073	18,124	13,123	15,644	16,336	14,464	10,003	9,265
Surveillance	88,187	77,656	58,709	75,873	89,801	77,903	59,280	60,022
Total	240,784	227,138	190,451	196,849	238,753	219,390	183,978	159,381

Type of Activity	Inspector Activity Rate by Fiscal Quarter							
	Q2FY95	Q3FY95	Q4FY95	Q1FY96	Q2FY96	Q3FY96	Q4FY96	Q1FY97
Tech. Staff Admin.	4.23	4.64	5.10	4.71	5.66	4.59	3.81	3.00
Org. Tech. Admin.	12.70	9.65	7.91	8.76	10.09	7.80	7.00	5.83
Gen. Tech. Funct.	1.87	1.25	1.30	1.18	1.71	1.37	1.27	0.80
Aircraft & Equipment	10.16	10.86	9.45	7.69	9.64	10.41	8.91	7.02
Investigations	3.16	3.07	3.34	2.21	3.05	3.15	3.41	1.97
Org. Certification	0.74	1.04	0.85	0.48	0.71	1.02	0.79	0.35
Airmen Certification	26.76	25.15	21.81	19.36	24.83	22.03	18.31	15.03
Education & Safety	8.01	7.68	5.50	6.59	6.86	5.74	3.79	3.50
Surveillance	39.09	32.91	24.63	31.97	37.72	30.89	22.48	22.65
Total	106.73	96.24	79.89	82.95	100.27	86.99	69.77	60.14

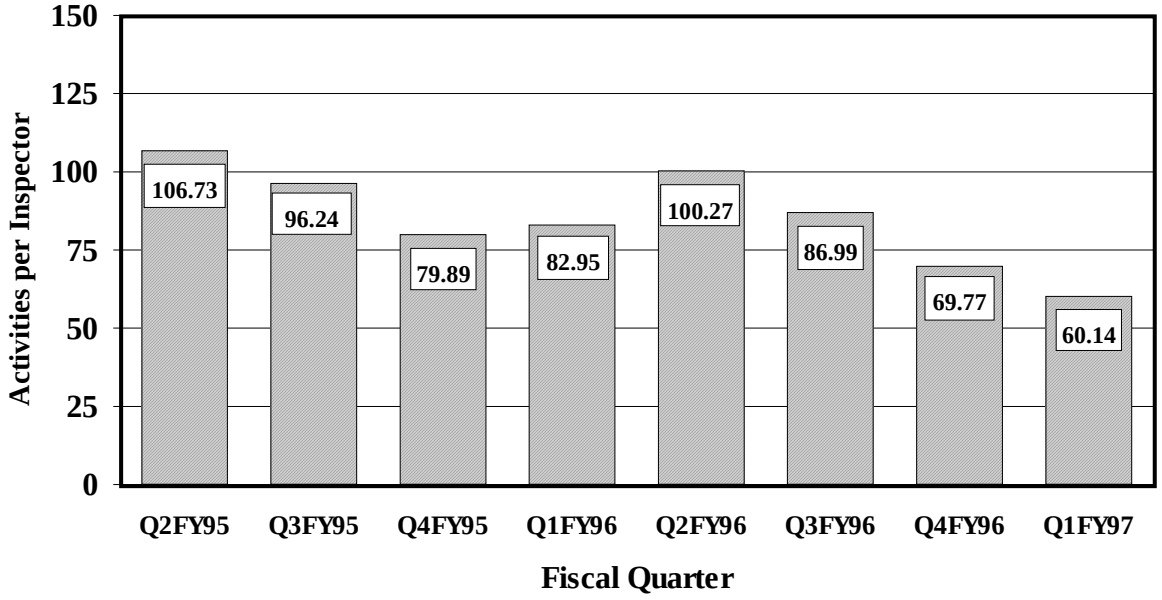
Data source: FAA

$$\textit{Inspector Activity Rate} = \frac{\textit{Number of Inspector Activities}}{\textit{Number of Inspectors}},$$ where

Number of Inspector Activities = ***Number of Technical Staff Administrative Responsibilities***
+ ***Number of Organization Technical Administration Activities***
+ ***Number of General Technical Function Activities***
+ ***Number of Aircraft & Equipment Activities***
+ ***Number of Investigations***
+ ***Number of Organization Certification Activities***
+ ***Number of Airmen Certification Activities***
+ ***Number of Education & Safety Activities***
+ ***Number of Surveillance Activities***

and the ***Number of Inspectors*** is the count at the end of the fiscal year.

NATIONAL INSPECTOR ACTIVITY RATES



Description: This indicator displays the national inspector activity rates by fiscal year. Inspectors have a wide range of duties as listed on the previous page. **Technical staff administrative responsibilities** include inspector training, special projects, telephone standby, and proficiency flying. **Organization technical administration activities** refer to additional certification activities requested by an air operator or an air agency. **General technical function activities** are used to record activities associated with exemptions, aircraft evaluation group (AEG) activities, outside request/audits (GAO, Office of Inspector General [OIG], Freedom of Information Act [FOIA], and Congress), responses to Administrator's hotline, special events and activities at airports, and data collection. **Aircraft and equipment activities** are associated with certificating aircraft or aircraft equipment. **Investigations** cover all events that an inspector might investigate, such as accidents, incidents, complaints, enforcements, near midair collisions, flight assists, legal support, and technical support (e.g., NTSB investigations). **Organization certification activities** are associated with the original issuance of a certificate to an air carrier or to an air agency. **Airmen certification activities** are associated with issuing pilot certificates. These functions include issuing original certificates, adding ratings to current certificates, reviewing designated examiners, and supporting special safety programs. **Education and safety activities** are associated with FAA programs to promote safety. **Surveillance** refers to the actual review by FAA inspectors of activities performed by airmen, air carriers, and air agencies to ensure compliance with the FARs.

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3. AVIATION ENVIRONMENTAL INDICATORS

Aviation environmental indicators provide a context for aviation system indicatiors. These forward-looking indicators are broad in scope and illustrate the trends in the overall operating environment. The aviation environmental indicators presented in this chapter are listed below.

Aviation Environmental Indicators

Forecast of annual gross domestic product (GDP) and growth rate
Forcast of annual enplanements and growth rate
Total facility activity
Forecast of annual IFR aircraft handled at en route centers and growth rate
Forecast of general aviation aircraft flight hours
Number of certificated airports
Number of certificated airmen
Number of certificate holders
Number of registered aircraft
Total system flight hours
Number of production approval holders
Operating profit or loss for all Form 41 reporting carriers

Information presented for each aviation environmental indicator includes a brief description of the indicator, graphs, a data table, and the formulas used to calculate the indicator values.

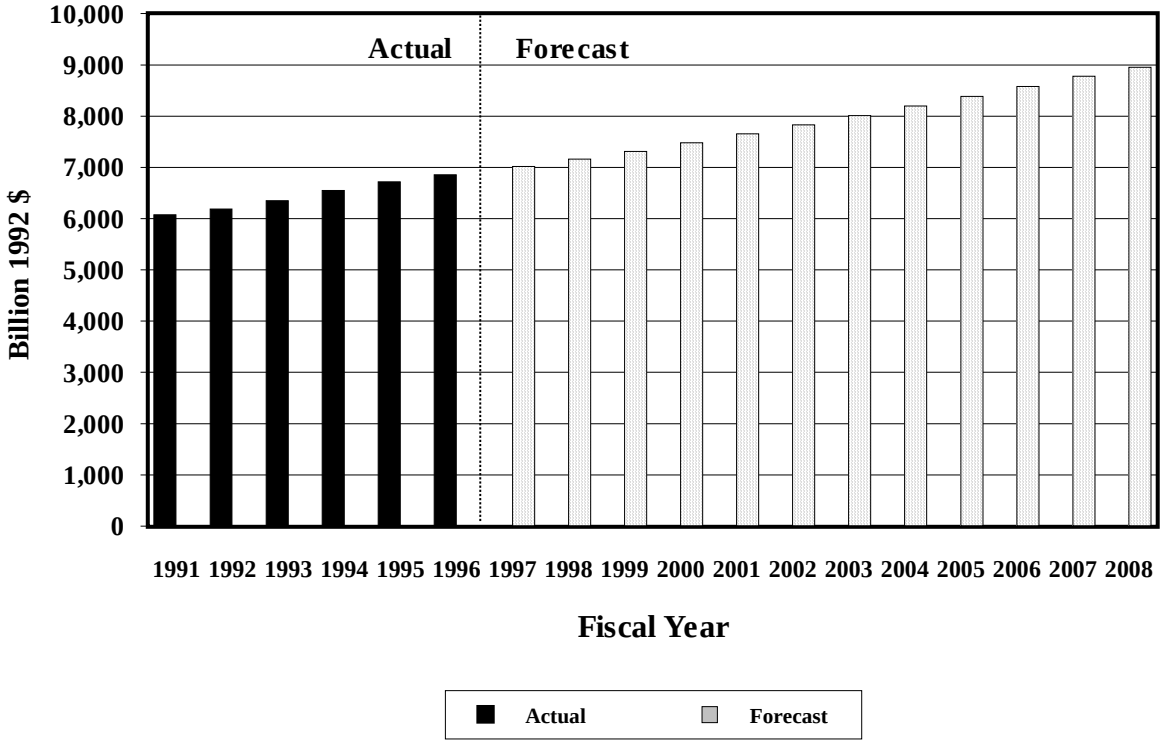
FORECAST OF ANNUAL GROSS DOMESTIC PRODUCT (GDP) DATA

	Fiscal Year	GDP (billion 1992 $)	Rate of Growth (percent)
Actual	1991	6,073.3	-1.10
	1992	6,188.7	1.90
	1993	6,350.9	2.62
	1994	6,552.5	3.17
	1995	6,721.2	2.57
Estimated	1996	6,854.3	1.98
Forecast	1997	7,020.9	2.43
	1998	7,160.9	1.99
	1999	7,312.8	2.12
	2000	7,481.6	2.31
	2001	7,655.4	2.32
	2002	7,831.9	2.31
	2003	8,012.8	2.31
	2004	8,198.0	2.31
	2005	8,385.6	2.29
	2006	8,579.3	2.31
	2007	8,777.8	2.31
	2008	8,956.4	2.03

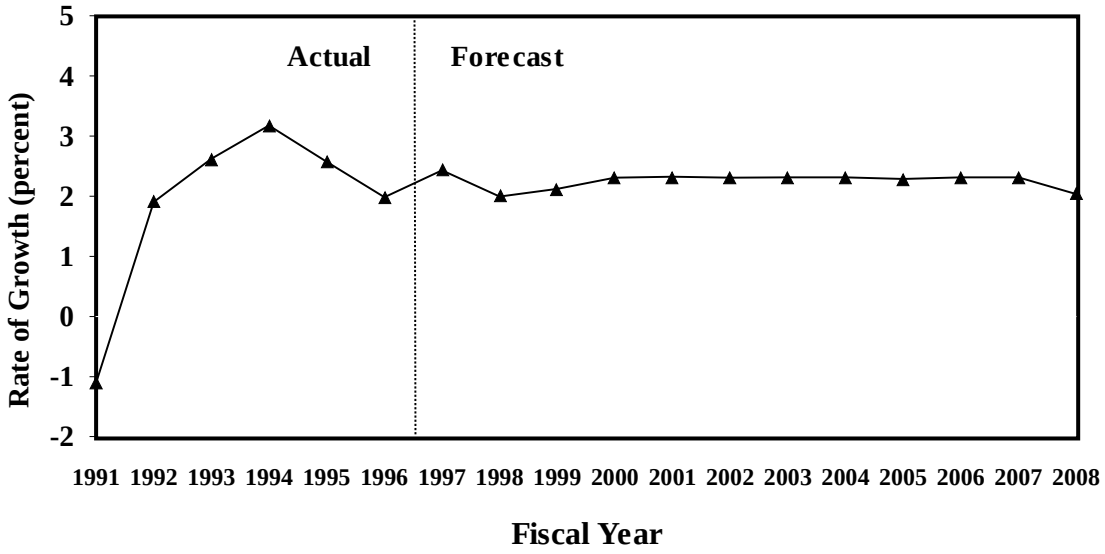
Data sources: OMB, The WEFA Group, DRI/McGraw Hill, and Evans Econometrics

Description: The primary economic variable affecting the growth of air transportation that FAA and most other aviation forecasters use in their models is the U.S. gross domestic product (GDP). The GDP is a measure of the total output of goods and services of the economy and excludes foreign earnings of U.S. corporations. Note: The GDP series was revised for this edition based on a new calculation method and a new base year (1992--previous was 1987).

FORECAST OF ANNUAL GROSS DOMESTIC PRODUCT (GDP)



FORECAST GROWTH RATE OF GROSS DOMESTIC PRODUCT



Note: 1996 data are estimated.

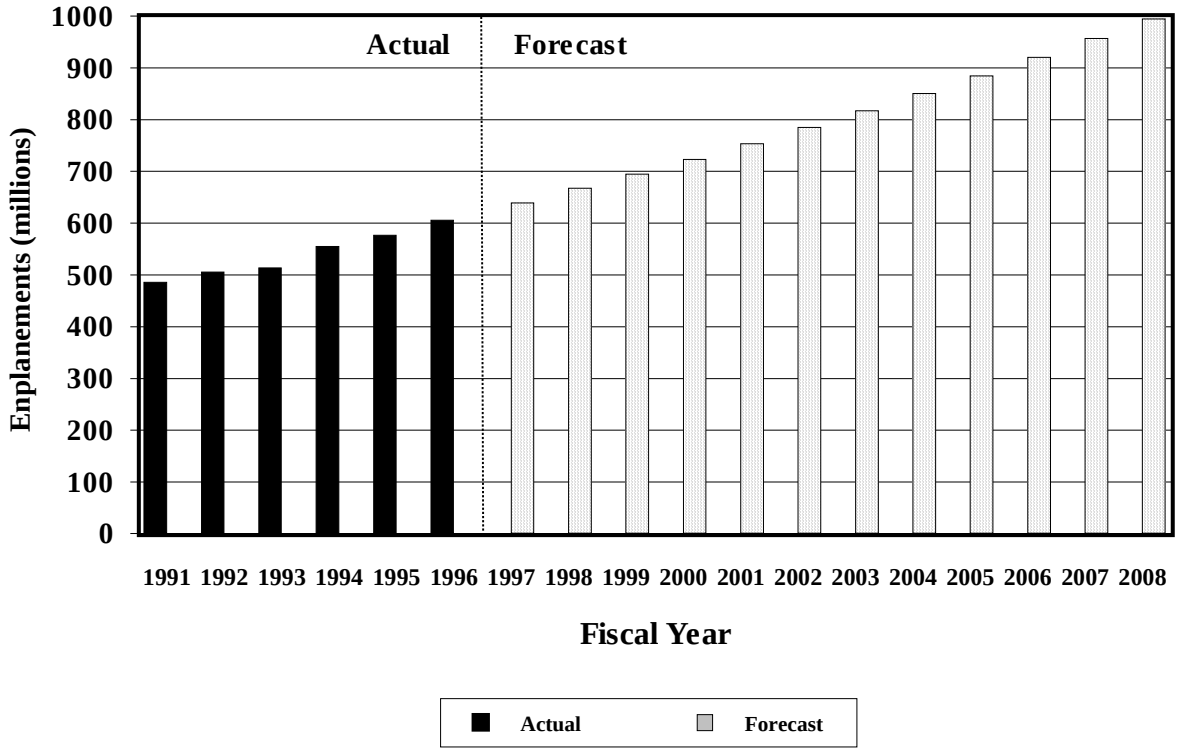
FORECAST OF ANNUAL ENPLANEMENT DATA

Fiscal Year	No. of Enplanements (millions)	Rate of Growth (percent)
Actual 1991	485.6	-2.47
1992	505.8	4.16
1993	513.7	1.56
1994	555.3	8.10
1995	576.4	3.80
Estimated 1996	605.9	5.12
Forecast 1997	639.1	5.48
1998	667.5	4.44
1999	694.8	4.09
2000	723.5	4.13
2001	753.4	4.13
2002	784.8	4.17
2003	817.2	4.13
2004	850.3	4.05
2005	884.5	4.02
2006	920.2	4.04
2007	956.9	3.99
2008	994.9	3.97

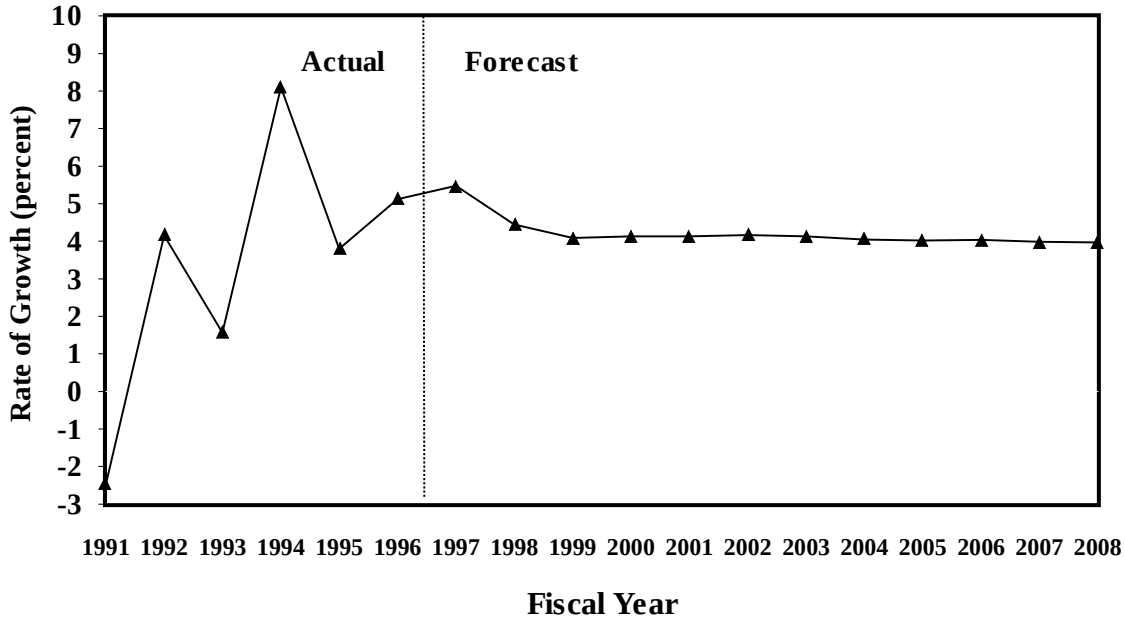
Data sources: DOT - Actual enplanements, FAA - Forecast enplanements

Description: The number of enplanements is the number of passengers boarding aircraft on scheduled domestic and scheduled international operations of U.S. large and commuter air carriers. The forecast of annual enplanements is generated using measures of general economic trends, including gross domestic product (GDP), consumer price index (CPI), and fuel prices, with consideration of current industry trends.

FORECAST OF ANNUAL ENPLANEMENTS



FORECAST GROWTH RATE OF ANNUAL ENPLANEMENTS



Note: 1996 data are estimated.

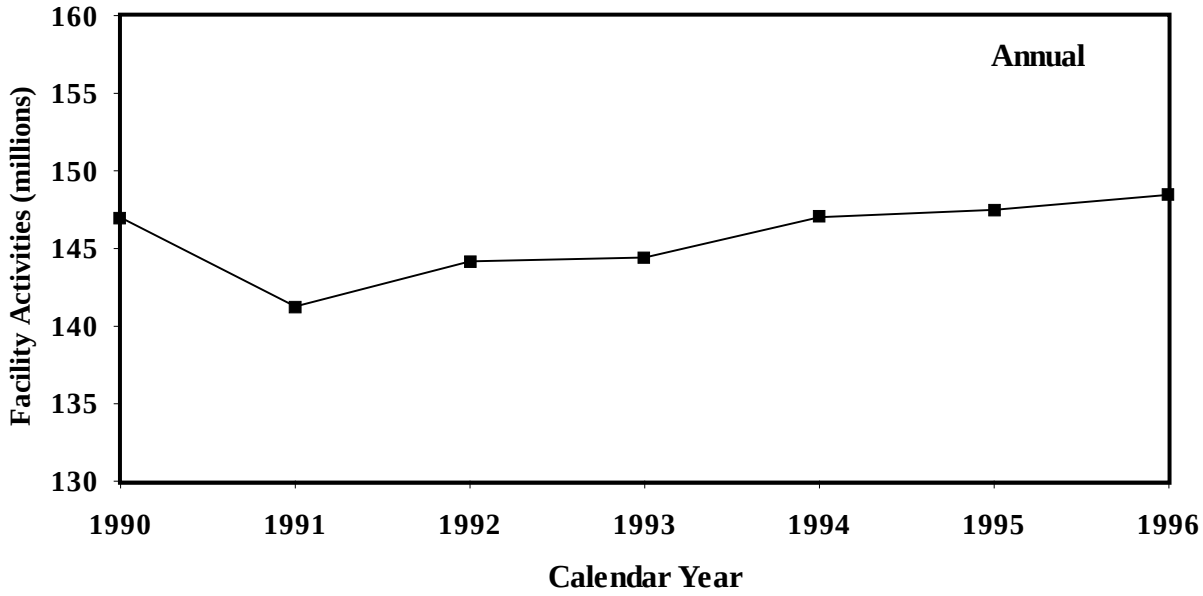
TOTAL FACILITY ACTIVITY DATA

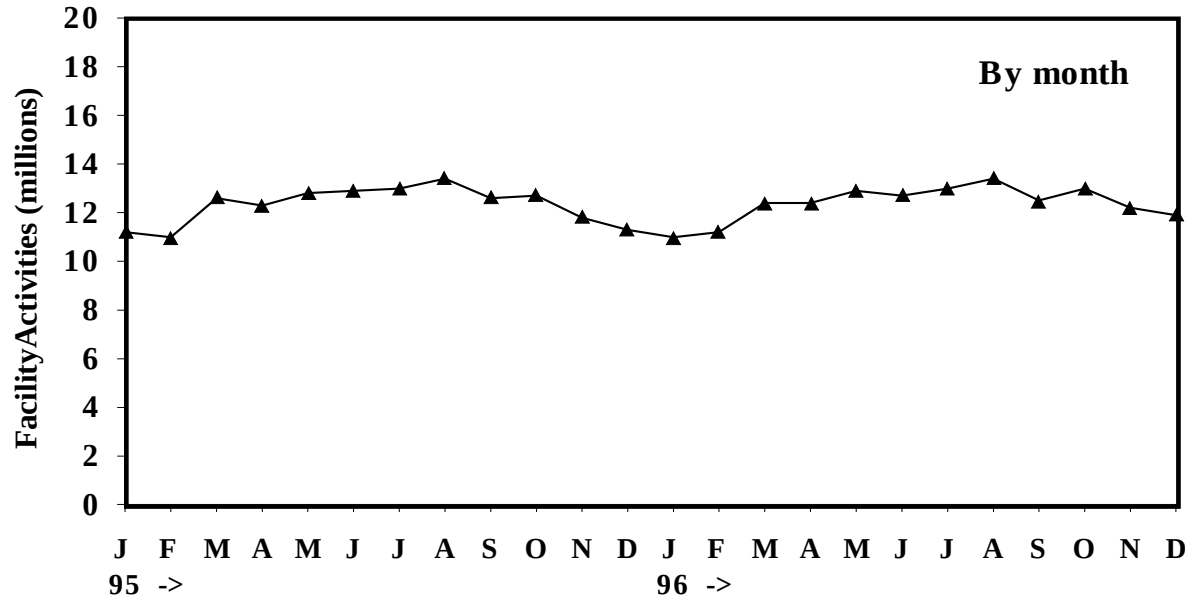
Calendar Year	Total No. of Facility Activities
1990	146,998,276
1991	141,256,609
1992	144,167,634
1993	144,427,234
1994	147,019,869
1995	147,482,376
1996	148,464,962
Month	
JAN 95	11,174,517
FEB 95	10,957,517
MAR 95	12,649,495
APR 95	12,316,807
MAY 95	12,767,531
JUN 95	12,863,029
JUL 95	13,001,142
AUG 95	13,407,035
SEP 95	12,586,988
OCT 95	12,729,689
NOV 95	11,757,309
DEC 95	11,271,317
JAN 96	10,982,689
FEB 96	11,152,596
MAR 96	12,387,829
APR 96	12,401,198
MAY 96	12,860,203
JUN 96	12,698,378
JUL 96	13,043,510
AUG 96	13,382,063
SEP 96	12,462,414
OCT 96	13,010,870
NOV 96	12,183,364
DEC 96	11,899,848

Data Source: FAA

Description: Facility activity includes en route and terminal facility activities. En route facility activities are the number of IFR aircraft handled. Terminal facility activities are the number of airport operations and the number of instrument operations. Facility activity data for the most recent two months are estimated values. All other data for this indicator are actual counts.

TOTAL FACILITY ACTIVITY





Total Facility Activity = En Route Facility Activity + Terminal Facility Activity
En Route Facility Activity = Total IFR Aircraft Handled
Terminal Facility Activity = Total Airport Operations + Total Instrument Operations

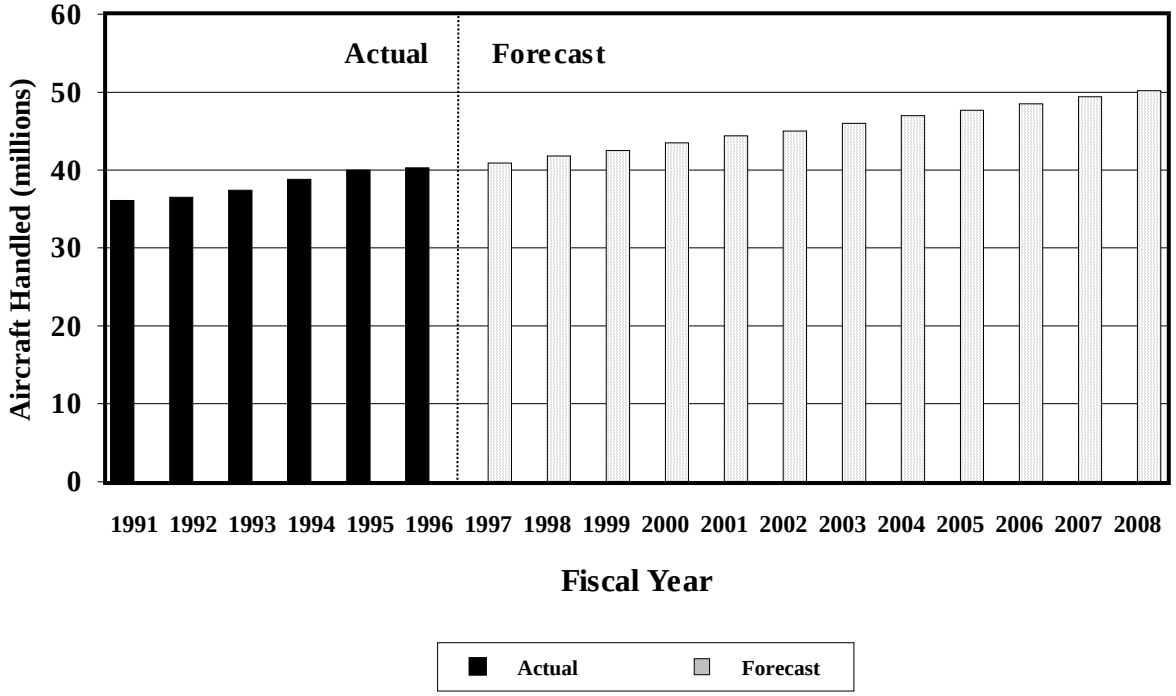
FORECAST OF ANNUAL IFR AIRCRAFT HANDLED AT EN ROUTE CENTERS DATA

Fiscal Year	No. of Aircraft Handled (millions)	Rate of Growth (percent)
Actual 1991	36.1	-2.96
1992	36.5	1.11
1993	37.4	2.47
1994	38.8	3.74
1995	40.0	3.09
Estimated 1996	40.3	0.75
Forecast 1997	40.9	1.49
1998	41.8	2.20
1999	42.5	1.67
2000	43.5	2.35
2001	44.4	2.07
2002	45.0	1.35
2003	46.0	2.22
2004	47.0	2.17
2005	47.7	1.49
2006	48.5	1.68
2007	49.4	1.86
2008	50.2	1.62

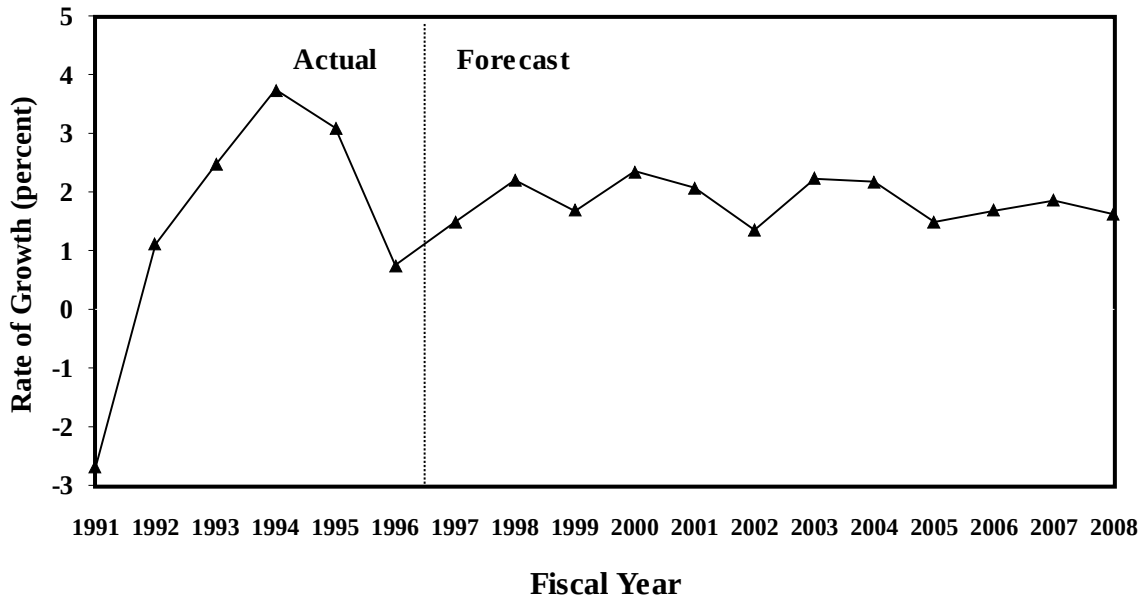
Data source: FAA

Description: The number of IFR aircraft handled at en route centers is equal to two times the number of departures plus the number of IFR overflights handled by all FAA Air Route Traffic Control Centers (ARTCCs). The forecast of IFR aircraft handled is based primarily on the FAA forecasts of the level of commercial aviation activity and the level of business-related general aviation activity.

FORECAST OF ANNUAL IFR AIRCRAFT HANDLED AT EN ROUTE CENTERS



FORECAST GROWTH RATE OF ANNUAL IFR AIRCRAFT HANDLED AT EN ROUTE CENTERS



Note: 1996 data are estimated.

FORECAST OF GENERAL AVIATION AIRCRAFT FLIGHT HOUR[1] DATA

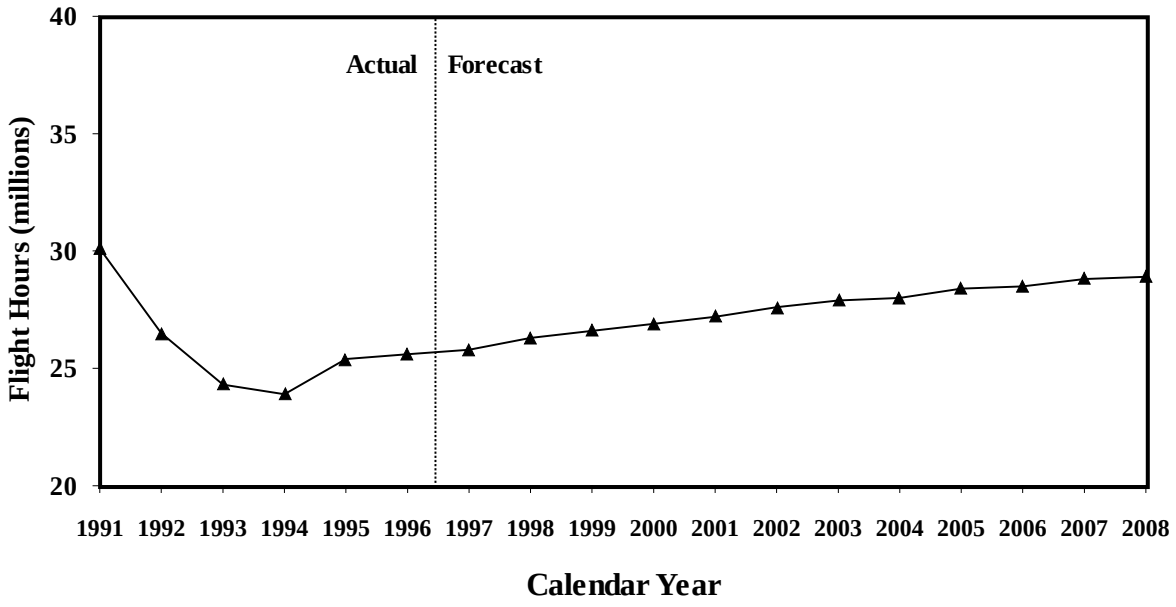
	Calendar Year	Number of General Aviation Flight Hours (1) (millions)
Actual	1991	30.1
	1992	26.5
	1993	24.3
	1994	23.9
	1995	25.4
Estimated	1996	25.6
Forecast	1997	25.8
	1998	26.3
	1999	26.6
	2000	26.9
	2001	27.2
	2002	27.6
	2003	27.9
	2004	28.0
	2005	28.4
	2006	28.5
	2007	28.8
	2008	28.9

Data source: FAA

1 Includes general aviation and air taxi activity.

Description: General aviation aircraft flight hours are forecast on the basis of general aviation fleet composition, economic growth, and trends in prices, including prices for petroleum. The forecast of general aviation flight hours reflects aircraft activity captured by the General Aviation and Air Taxi Activity Survey. The general aviation aircraft activity displayed in this table includes operations defined in other sections of this report as general aviation and air taxi. Therefore, the values presented in this table and in the graph on the facing page will be greater than general aviation flight hour data cited in other sections of this report.

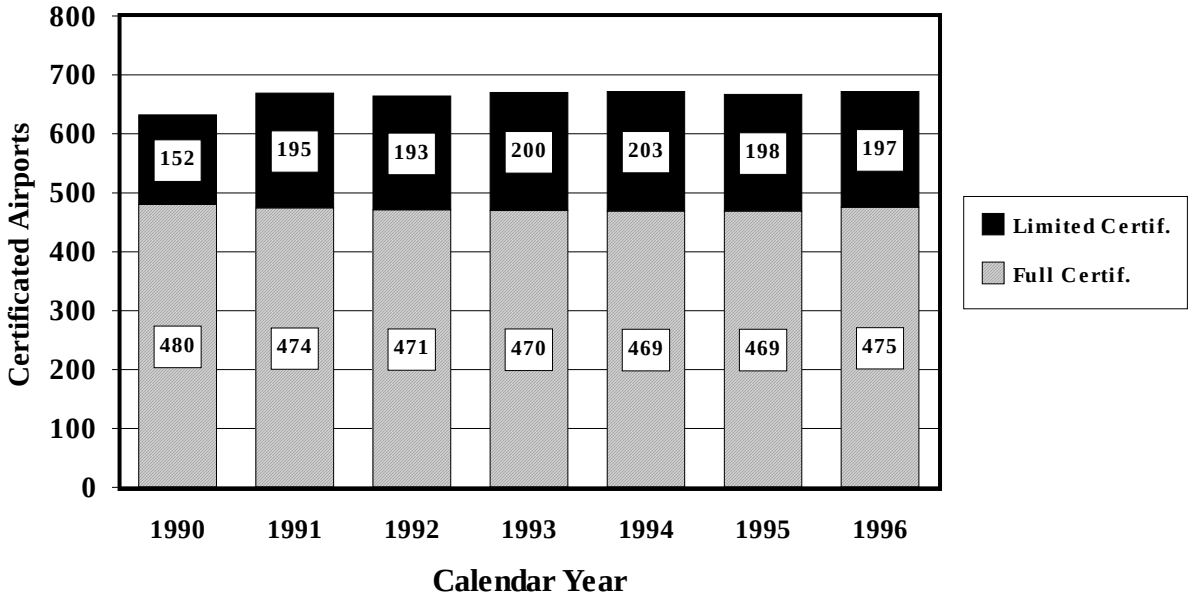
FORECAST OF GENERAL AVIATION AIRCRAFT FLIGHT HOURS[1]



[1] Includes general aviation and air taxi activity.

Note: 1996 data are estimated.

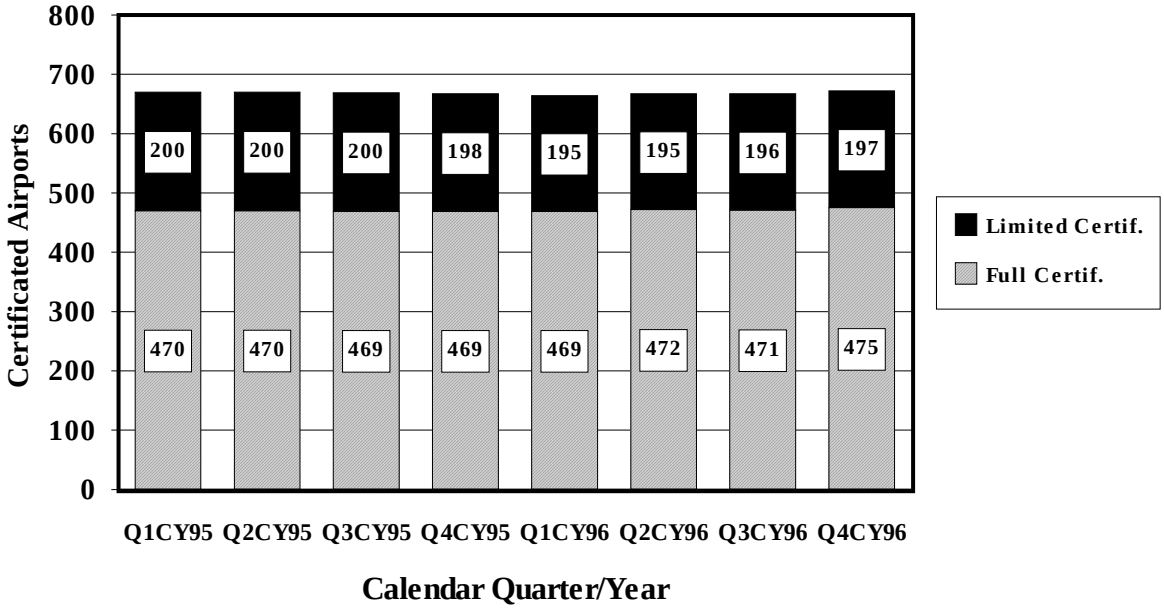
NUMBER OF CERTIFICATED AIRPORTS



CERTIFICATED AIRPORTS DATA

Calendar Year	No. of Full Certificate Airports	No. of Limited Certificate Airports	Total No. of Certificated Airports
1990	480	152	632
1991	474	195	669
1992	471	193	664
1993	470	200	670
1994	469	203	672
1995	469	198	667
1996	475	197	672

NUMBER OF CERTIFICATED AIRPORTS



CERTIFICATED AIRPORTS DATA

Calendar Quarter/Year	No. of Full Certificate Airports	No. of Limited Certificate Airports	Total No. of Certificated Airports
Q1CY95	470	200	670
Q2CY95	470	200	670
Q3CY95	469	200	669
Q4CY95	469	198	667
Q1CY96	469	195	664
Q2CY96	472	195	667
Q3CY96	471	196	667
Q4CY96	475	197	672

Data source: FAA

Description: FAA issues airport operating certificates to all airports serving scheduled or unscheduled air carrier aircraft designed for more than 30 passenger seats. Certificated airports must meet minimum safety standards in accordance with FAR Part 139.

CERTIFICATED AIRMEN DATA

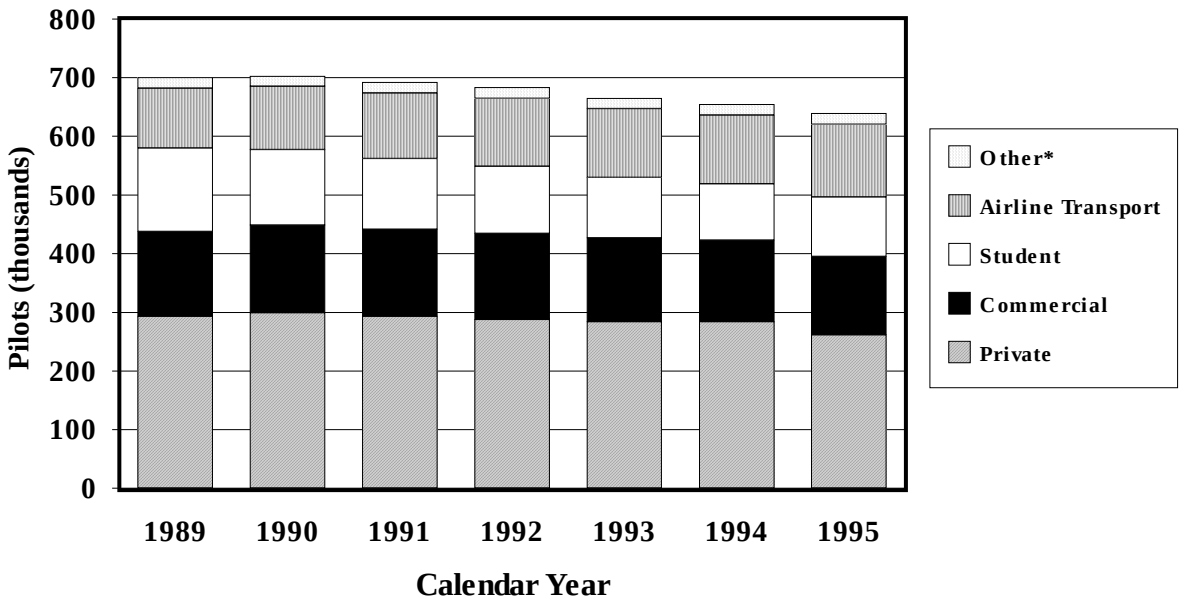
Type of Certificate	Number of Airmen by Calendar Year						
	1989	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**
Private (1)	293,179	299,111	293,306	288,078	283,700	284,236	261,399
Commercial (1)	144,540	149,666	148,365	146,385	143,014	138,728	133,980
Student	142,544	128,663	120,203	114,597	103,583	96,254	101,279
Airline Transport (1)	102,087	107,732	112,167	115,855	117,070	117,434	123,877
Helicopter (only)	8,863	9,567	9,860	9,652	9,168	8,719	7,183
Glider (only)	7,708	7,833	8,033	8,205	8,328	8,476	11,234
Lighter-than-Air (2)	1,089	N/A	N/A	N/A	N/A	N/A	N/A
Recreational (3)	N/A	87	161	187	206	241	232
Pilot Total	**700,010**	**702,659**	**692,095**	**682,959**	**665,069**	**654,088**	**639,184**
Mechanic	326,243	344,282	366,392	384,669	401,060	411,071	405,294
Ground Instructor	64,503	66,882	70,086	73,276	76,050	77,789	96,165
Flight Engineer	55,968	58,687	60,236	61,022	60,277	59,467	60,267
Parachute Rigger	9,879	10,094	7,916	8,163	8,417	8,631	11,824
Dispatcher	10,455	11,002	11,607	12,264	12,883	13,410	15,642
Flight Navigator	1,357	1,290	1,225	1,154	1,039	990	916
Repairman (4)	N/A	N/A	N/A	N/A	N/A	N/A	61,223
Nonpilot Total (5)	**468,405**	**492,237**	**517,462**	**540,548**	**559,726**	**571,358**	**651,331**

Data source: FAA

1 Includes pilots with an airplane-only certificate. Also includes those with an airplane and a helicopter and/or glider certificate.
2 As of 1990, lighter-than-air type certificates were no longer issued.
3 Recreational certificates were not issued prior to 1990.
4 Data for repairman certificates were not available as a separate category prior to 1995.
5 Beginning in 1995, includes those nonpilots with incomplete addresses and those who requested that their names be withheld from mailing lists. These individuals were excluded prior to 1995.

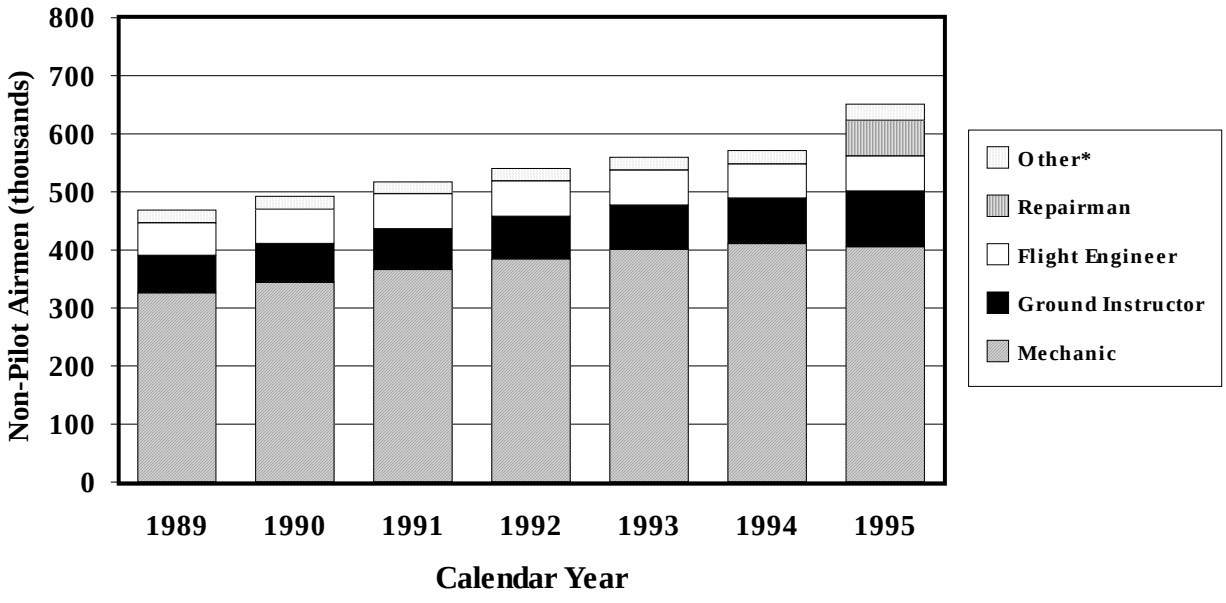
Description: This indicator shows the number of pilots and nonpilot airmen holding FAA certificates.

NUMBER OF CERTIFICATED PILOTS



* Includes helicopter, glider, lighter-than-air, and recreational.

NUMBER OF CERTIFICATED NON-PILOT AIRMEN



* Includes parachute rigger, dispatcher, and flight navigator.

NUMBER OF CERTIFICATE HOLDERS DATA

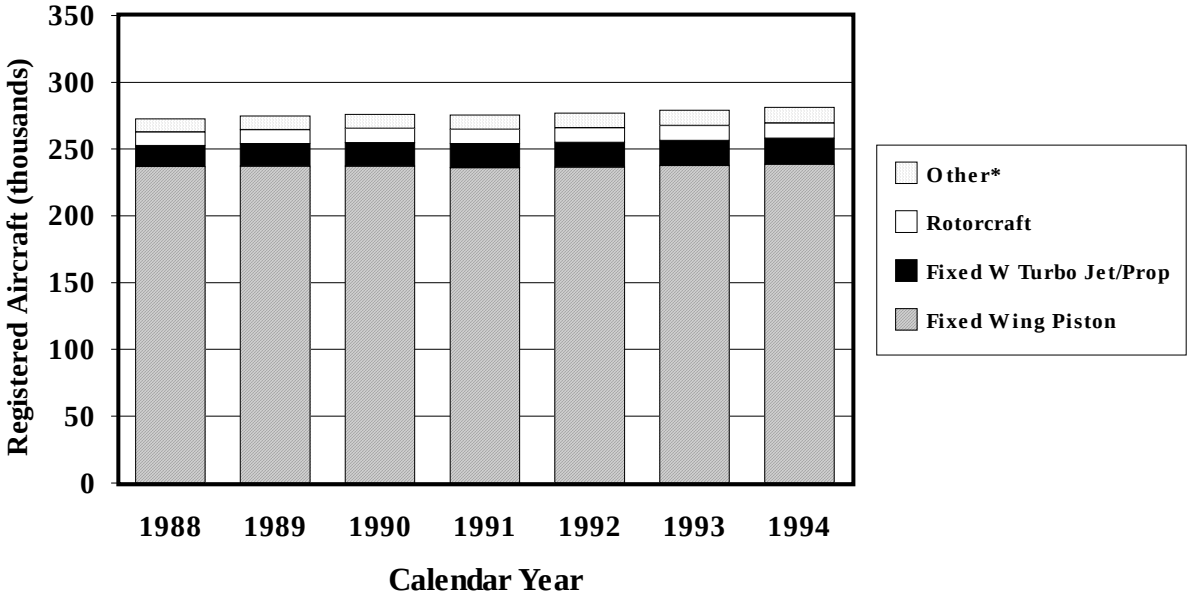
Type of Certificate	Number of Certificates							
	Q1CY95	**Q2CY95**	**Q3CY95**	**Q4CY95**	**Q1CY96**	**Q2CY96**	**Q3CY96**	**Q4CY96**
Air Operator Certificates								
FAR Part 121 Air Carriers	126	126	123	127	155	153	154	153
FAR Part 135 Air Carriers (Total)	3,127	3,215	3,104	3,096	3,062	3,045	3,019	3,024
-- *Commuters*	*110*	*111*	*110*	*108*	*107*	*94*	*89*	*93*
-- *Air Taxis*	*3,017*	*3,104*	*2,994*	*2,988*	*2,955*	*2,951*	*2,930*	*2,931*
FAR Part 125 Large Corp. Aircraft	43	44	41	41	41	43	42	43
FAR Part 129 Foreign Carriers	493	491	503	501	503	503	496	502
FAR Part 133 Rotorcraft External Load	391	399	397	402	403	406	410	414
FAR Part 137 Agricultural Aircraft	3,180	3,203	3,182	3,175	3,173	3,188	3,164	3,186
FAR Part 091 Public Use Aircraft	N/A	199	265	406	464	732	493	491
Air Agency Certificates								
FAR Part 141 Pilot Training Schools	633	629	610	605	598	594	577	575
FAR Part 145 Repair Stations	4,942	4,930	4,933	4,972	4,979	5,001	4,974	4,976
FAR Part 147 Maintenance Schools	193	193	190	189	190	185	186	188
FAR Part 142 Training Centers	N/A	N/A	N/A	N/A	N/A	N/A	1	1

Data source: FAA

Note: No corresponding graph has been developed for this indicator because the types of certificates are too numerous to display clearly in a single graph.

Description: This indicator provides the number of air operator and air agency certificate holders.

NUMBER OF REGISTERED AIRCRAFT



* Includes balloon, glider, and blimp.

REGISTERED AIRCRAFT DATA

Calendar Year	Fixed Wing Piston	Fixed Wing Turbojet	Fixed Wing Turboprop	Rotorcraft Piston	Rotorcraft Turbine	Balloon	Glider	Blimp	Total Number of Aircraft
1988	236,905	8,702	6,947	5,625	4,528	5,507	4,467	15	272,696
1989	237,192	9,234	7,573	5,764	4,681	5,826	4,535	29	274,834
1990	237,108	9,665	7,835	5,918	4,728	6,101	4,549	29	275,933
1991	236,028	9,947	7,806	5,976	4,858	6,292	4,542	33	275,482
1992	236,508	10,318	7,999	6,052	4,900	6,553	4,622	33	276,985
1993	237,556	10,695	8,161	6,174	4,970	6,794	4,669	37	279,056
1994	238,506	11,156	8,328	6,224	5,235	6,993	4,808	38	281,288

Data source: FAA

Description: This indicator shows the number of FAA-registered aircraft. (Note: 1995 and 1996 data not available at press time.)

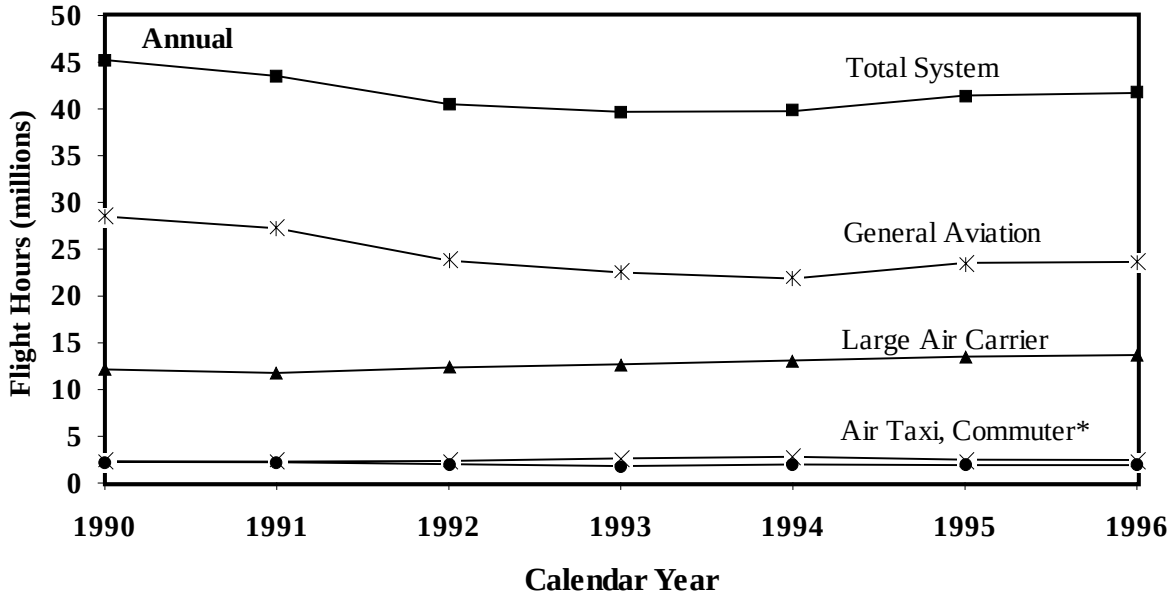
TOTAL SYSTEM FLIGHT HOURS DATA

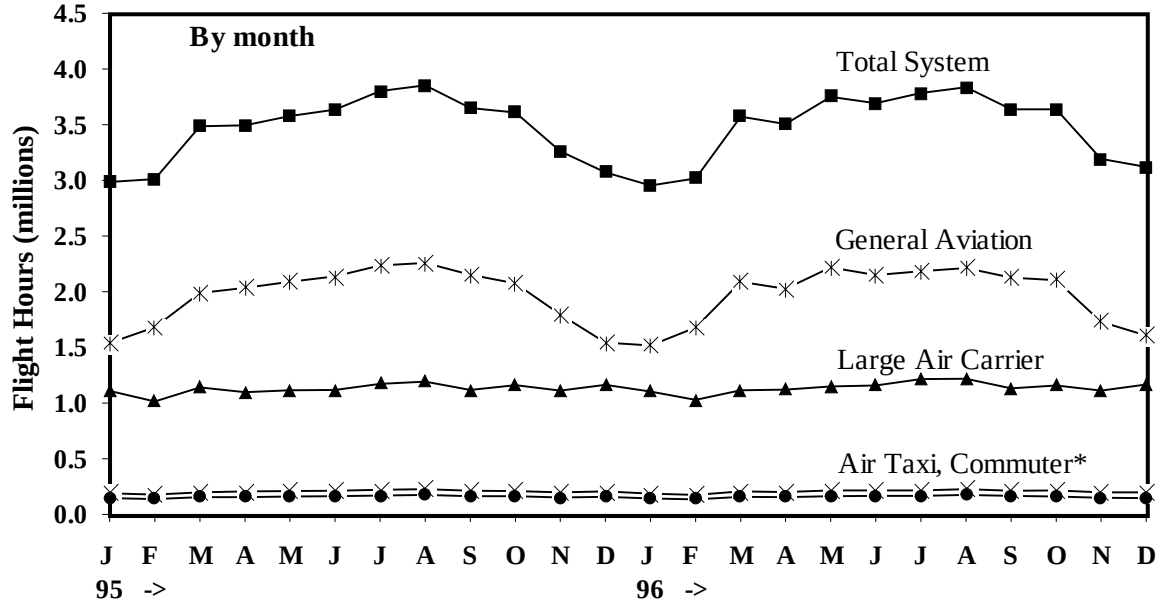
Calendar Year	Large Air Carrier	Commuter	Air Taxi	General Aviation	Total System
1990	12,150,116	2,341,760	2,249,000	28,510,000	45,250,876
1991	11,780,610	2,291,693	2,241,000	27,226,000	43,539,303
1992	12,359,715	2,363,745	2,009,000	23,792,000	40,524,460
1993	12,706,206	2,641,268	1,809,000	22,531,000	39,687,474
1994	13,122,221	2,787,904	1,993,000	21,873,000	39,776,125
1995	13,513,219	2,478,872	1,910,000	23,538,000	41,440,091
1996	13,683,000	2,474,000	1,902,000	23,650,000	41,709,000
Month					
JAN 95	1,108,901	189,554	147,289	1,541,333	2,987,077
FEB 95	1,013,990	178,271	137,786	1,681,072	3,011,119
MAR 95	1,141,531	199,709	154,891	1,989,642	3,485,772
APR 95	1,097,918	206,479	156,791	2,034,305	3,495,492
MAY 95	1,115,275	210,992	160,592	2,090,243	3,577,102
JUN 95	1,116,562	214,377	164,393	2,139,064	3,634,396
JUL 95	1,173,842	222,275	171,045	2,235,512	3,802,674
AUG 95	1,191,291	227,916	175,796	2,258,430	3,853,433
SEP 95	1,117,392	213,248	164,393	2,154,099	3,649,132
OCT 95	1,160,630	210,992	163,443	2,075,061	3,610,125
NOV 95	1,112,549	198,581	153,940	1,796,934	3,262,004
DEC 95	1,163,339	206,479	159,642	1,542,304	3,071,764
JAN 96	1,103,632	186,936	144,091	1,518,291	2,952,949
FEB 96	1,028,361	176,622	136,620	1,677,297	3,018,900
MAR 96	1,115,838	207,563	160,101	2,090,272	3,573,774
APR 96	1,121,941	201,117	154,764	2,027,332	3,505,155
MAY 96	1,150,422	215,299	165,438	2,218,361	3,749,519
JUN 96	1,159,576	216,588	167,572	2,149,900	3,693,636
JUL 96	1,215,521	215,299	168,640	2,185,234	3,784,693
AUG 96	1,219,589	226,902	177,178	2,213,944	3,837,613
SEP 96	1,131,095	214,009	167,572	2,125,607	3,638,284
OCT 96	1,157,542	215,299	162,236	2,104,627	3,639,703
NOV 96	1,112,786	199,828	149,428	1,731,403	3,193,445
DEC 96	1,166,696	198,539	148,360	1,607,732	3,121,327

Data sources: DOT, FAA - Commuter and large air carrier flight hours
FAA - Air taxi and general aviation flight hour estimates

Description: This indicator provides the overall utilization of the national civil aircraft fleet.

TOTAL SYSTEM FLIGHT HOURS

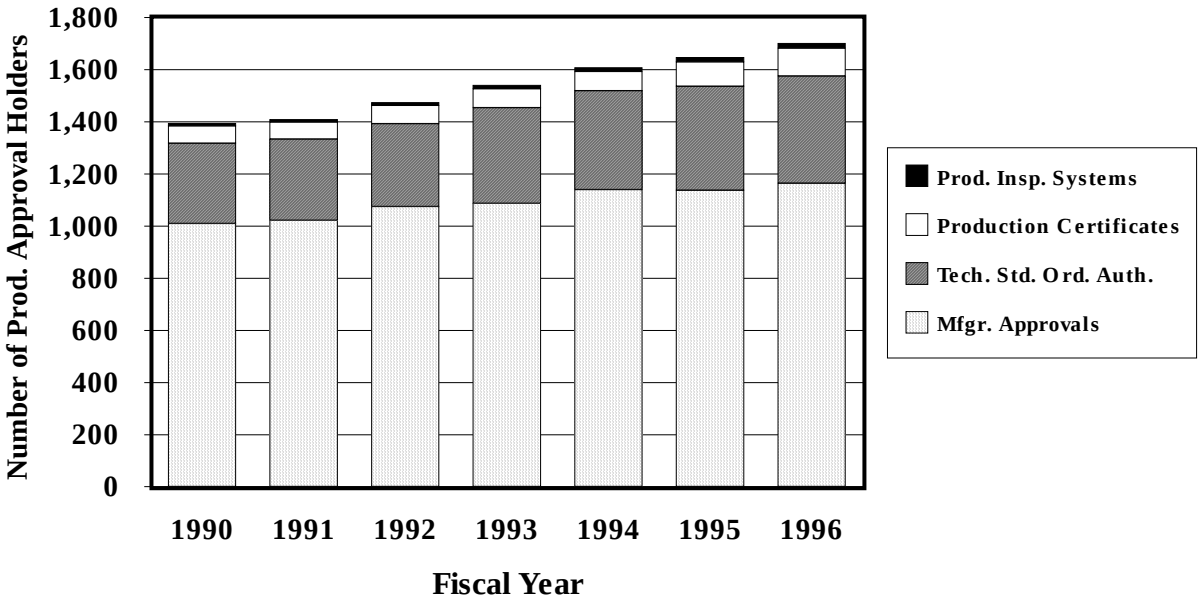




* Because commuter and air taxi flight hours are nearly equal, the lines appear superimposed.

Total System Flight Hours = Large Air Carrier Hours + Commuter Hours + Air Taxi Hours + General Aviation Hours

PRODUCTION APPROVAL HOLDERS



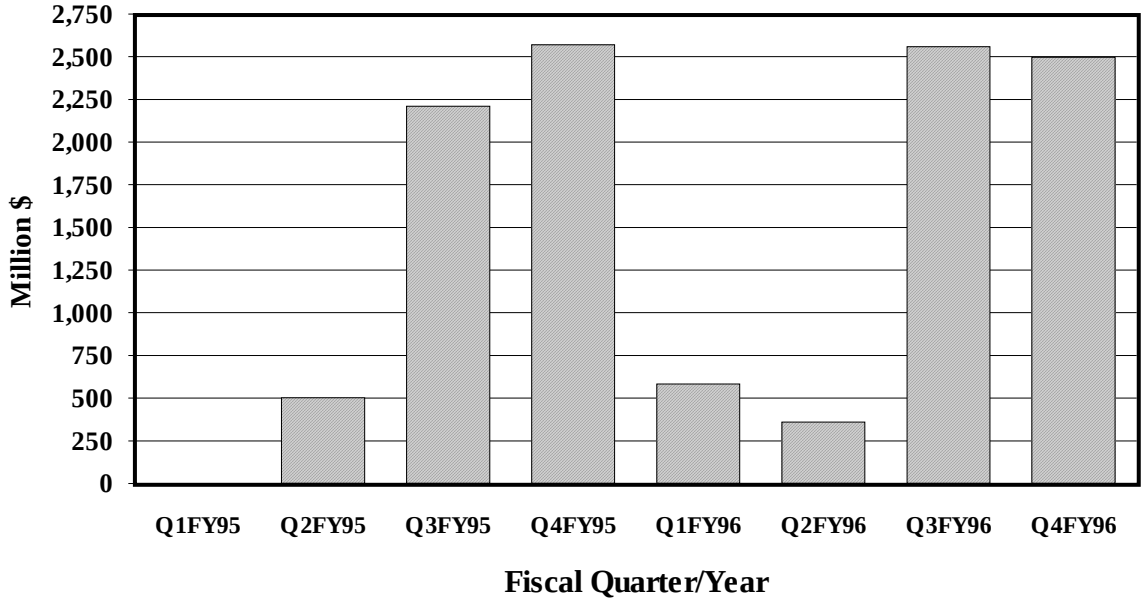
PRODUCTION APPROVAL HOLDERS DATA

Fiscal Year	No. of Part Manufacturer Approvals	No. of Technical Standard Order Authorizations	No. of Production Certificates	No. of Production Inspection Systems	Total No. of Production Approval Holders
1990	1,010	308	66	10	1,394
1991	1,022	311	66	10	1,409
1992	1,075	318	69	12	1,474
1993	1,087	367	73	13	1,540
1994	1,140	379	74	14	1,607
1995	1,138	398	94	17	1,647
1996	1,165	411	106	19	1,701

Data source: FAA

Description: This indicator is the number of production approval holders who manufacture aircraft, engines, propellers, and associated parts and appliances that require FAA surveillance.

OPERATING PROFIT OR LOSS
FOR ALL FORM 41-REPORTING CARRIERS



OPERATING PROFIT OR LOSS DATA
FOR ALL FORM 41-REPORTING CARRIERS

Fiscal Quarter/Year	Million $
Q1FY95	-15.7
Q2FY95	501.3
Q3FY95	2,209.3
Q4FY95	2,569.5
Q1FY96	583.4
Q2FY96	359.5
Q3FY96	2,558.6
Q4FY96	2,496.9

Data source: DOT

Note: Q4FY96 data are preliminary.

Description: This indicator shows the combined profitability of the air transport activities of major and national air carriers and large and medium regional air carriers that report on Form 41.

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ACRONYM LIST

ACSEP	Aircraft Certification System Evaluation Program
ADIZ	Air Defense Identification Zone
AEG	Aircraft Evaluation Group
APO	Office of Aviation Policy, Plans, and Management Analysis
ARTCC	Air Route Traffic Control Center
ASF	Office of the Associate Administrator for Aviation Safety
CPI	Consumer Price Index
DOT	Department of Transportation
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FOIA	Freedom of Information Act
GA	General Aviation
GAO	General Accounting Office
GDP	Gross Domestic Product
IFR	Instrument Flight Rules
NAPRS	National Airspace Performance Reporting System
NAS	National Airspace System
NMAC	Near Midair Collision
NORAD	North American Aerospace Defense Command
NTSB	National Transportation Safety Board
OIG	Office of the Inspector General
OMB	Office of Management and Budget
RSPA	Research and Special Programs Administration
VPD	Vehicle/Pedestrian Deviation
WEFA	Wharton Econometric Forecasting Association

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GLOSSARY

Accident

An "aircraft accident" is defined by the National Transportation Safety Board (NTSB) as "an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage."

Air Agency

A person, group, or organized entity holding a certificate or certificates authorizing the offering of services under Federal Aviation Regulation (FAR) Parts 141, 142, 145, or 147. As of January 1993, FAR Part 149 certificates (parachute lofts) were no longer issued.

Air Carrier

Any air operator operating under FAR Parts 121, 127, or 135.

Air Operator

A person or organization authorized to operate aircraft or aviation facilities under FAR Parts 91, 121, 125, 127, 129, 133, 135, or 137.

Air Route Traffic Control Center (ARTCC)

A facility established to provide air traffic control service to aircraft operating on an IFR flight plan within controlled airspace and principally during the en route phase of flight.

Air Taxi

A class of air carriers, operating pursuant to FAR Part 135, engaged in the nonscheduled air transportation of persons, property, or mail for compensation or hire in aircraft with 30 or fewer passenger seats and a payload capacity of 7,500 pounds or less. Air taxis do not hold certificates of public convenience and necessity and do not hold specific route authority.

Aircraft Incident

An occurrence, other than an accident, associated with the operation of an aircraft that affects or could affect the safety of operations and that is investigated and reported on FAA Form 8020-5. (Note: Incident reports on Form 8020-5 do not include near midair collisions [NMACs], operational errors or deviations, pilot deviations, vehicle/pedestrian deviations, or runway incursions. Guidance on incidents that should be reported on FAA Form 8020-5 is set forth in Paragraph 296 of FAA Order 8020.11A.)

Airport Operations

The number of arrivals and departures from the airport at which the airport traffic control tower is located. There are two types of operations: local and itinerant.

Certificated Airport

An airport operating under FAR Part 139. The FAA issues airport operating certificates to all airports serving scheduled or unscheduled air carrier aircraft designed for more than 30 passenger seats. Certificated airports must meet minimum safety standards in accordance with FAR Part 139.

Commuter Air Carrier

An FAR Part 135 operator that carries passengers on at least five round trips per week or on at least one route between two or more points according to its published flight schedule that specifies the times, days of the week, and places between which those flights are performed.

Delay

Delays are incurred when any action is taken by a controller that prevents an aircraft from proceeding normally to its destination for an interval of 15 minutes or more. This includes actions to delay departing, en route, or arriving aircraft as well as actions taken to delay aircraft at departing airports due to conditions en route or at destination airports.

Enplanement

A revenue passenger boarding an aircraft.

En Route Center

An Air Route Traffic Control Center (ARTCC).

En Route Facility Activity

= Total IFR Aircraft Handled
= (2 x Departures) + Domestic and Oceanic Overflights.

FOIA

The Freedom of Information Act (FOIA) allows all U.S. citizens and residents to request any records in possession of the executive branch of the federal government. The term "records" includes documents, papers, reports, letters, films, photographs, sound recordings, computer tapes and disks. An object that cannot be reproduced is not considered a record in this case. The federal FOIA covers the President's cabinet agencies, independent agencies, regulatory commissions and government-owned corporations. Congress is exempt, as are federal courts and state and local governments. Some states and municipalities have laws modeled after the federal FOIA. The federal act includes nine exemptions that agencies may claim as a basis for withholding information. An administrative appeal can be filed that argues for disclosure based on benefits to the public versus privacy. If a good argument is made, appellate reviewers may waive an exemption.

General Aviation (GA)

That portion of civil aviation that encompasses all facets of aviation except air carriers.

Instrument Operations

= Primary Instrument Operations + Secondary Instrument Operations
+ Instrument Overflights.

Large Air Carrier

Scheduled and nonscheduled aircraft operating under FAR Parts 121 or 127. (Note: Part 129 operations [foreign air carriers] are not included in the NTSB accident data base, nor are hour and departure data available for these air carriers.)

Near Midair Collision (NMAC)

An incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500 feet to another aircraft, or a report is received from a pilot or flight crew member stating that a collision hazard existed between two or more aircraft.

Operational Error

An occurrence attributable to an element of the air traffic control system that results in less than the applicable separation minima between two or more aircraft, or between an aircraft and terrain or obstacles and obstructions as required by Handbook 7110.65 and supplemental instructions. Obstacles include vehicles, equipment, and/or personnel on runways.

Outage

The loss of a facility/service for one minute or more.

Pilot Deviation

The actions of a pilot that result in the violation of an FAR or a North American Aerospace Defense Command (NORAD) Air Defense Identification Zone (ADIZ) tolerance.

Rotorcraft

A heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors.

Runway Incursion

Any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in loss of separation with an aircraft taking off, intending to take off, landing, or intending to land.

Stage 2 Aircraft

An aircraft that has been shown to comply with the Stage 2 noise requirements under FAR Part 36. (Examples include the B-727-200, DC-9, and BAC-111.)

Stage 3 Aircraft

An aircraft that has been shown to comply with the quieter Stage 3 noise requirements under FAR Part 36. (Examples include the B-737-300, B-757, MD-80, and A-310.)

Terminal Facility Activity

= Total Airport Operations + Total Instrument Operations
= Local Operations + Itinerant Operations + Primary Instrument Operations
+ Secondary Instrument Operations + Instrument Overflights.

Total Facility Activity

= En Route Facility Activity + Terminal Facility Activity.

Total IFR Aircraft Handled

= (2 x Departures) + Domestic and Oceanic Overflights.

Vehicle/Pedestrian Deviation (VPD)

An entry or movement on an airport movement area by a vehicle operator or pedestrian that has not been authorized by air traffic control (including aircraft operated by a non-pilot).

INSTRUCTIONS FOR ACCESSING ELECTRONIC FILES FOR AVIATION SYSTEM INDICATORS

ACCESSING SYSTEM INDICATORS DATA on the INTERNET / WORLD WIDE WEB

Aviation System Indicator electronic data files can be accessed on the Internet / World Wide Web at the Office of System Safety home page:

http://nasdac.faa.gov

The setup for this site is likely to be revised in 1997, so the path to finding System Indicator data from this first page may change. However, under the current configuration, the System Indicator section can be accessed by clicking on "Safety Analysis," then on "System Indicators." This page will show the user several options for accessing System Indicator information in two basic forms. The first form consists of electronic versions of this annual System Indicators report (in either Adobe Acrobat format for reading on-screen or in Microsoft Word 6.0 format for downloading). The second form of information consists of Excel spreadsheet files that contain all the indicator data presented in this report, plus historical data by month or by quarter for time periods going back further than what is presented here. These files can be downloaded for statistical analysis, preparing graphs in formats different from what is presented here, and other uses.

Note: The Federal Aviation Administration CORPORATE BULLETIN BOARD, which previously offered access to system indicators data at 800/224-6287 or 202/267-5454, has been taken out of service.

ACCESSING SYSTEM INDICATORS DATA on the FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS SERVICE, AFS-200 BULLETIN BOARD

BULLETIN BOARD SETTINGS

Phone number: (202) 267-5231 **Parity:** None **Stop Bits:** 1
Baud: 14,400 or less **Data Bits:** 8 **Duplex:** Full

INSTRUCTIONS

A. First, be certain you know the name of the default directory into which your communications software downloads files. You probably will also want to create a new system indicators directory into which you will transfer the file after it has been downloaded. [Note: When requested, type Y for YES and N for NO.]

B. Dial into the bulletin board using the above modem settings.

C. The first time you dial in, the bulletin board will ask you questions to set up your account. Most of these are self-explanatory. Press ENTER (i.e., a Carriage Return, <CR>) after each entry, if the system does not do so automatically. The following will help:

For First Name? , Last Name? , and Calling From (City,State)? enter the names and location you wish to use as your USERNAME each time you access the bulletin board.

For # Chars per line on screen, you will normally enter 80 .

For letter of your terminal, enter one of the following:

A VIDTEX	D ATARI	G Televid 925
B TRS-80 1/3	E H19/H89/Z19	H VT-100
C VT-52	F IBM PC	*If your terminal is not listed, enter* F .

Normally, you will not wish to modify the Upper/Lower Case, Line Feeds Needed, or 0 Nulls After Each <CR> settings.

Normally, you will wish to pause after each display page.

Normally, you will wish to view 24 lines per Display page.

You then enter a password per the instructions on your screen.

Write down the First Name, Last Name, and Password that you entered. You will need them the next time you call the bulletin board.

--> If you are uncertain about any answers to the initial setup questions or if you encounter problems, check with your system administrator. As a last resort, call a Sysop (System Operator): Frank Hughes, at 202/267-3460; or Eric Van Opstal at 202/267-3774 <--

You have now completed setting up your account and can access the System Indicators data.

D. To download the System Indicators data:

In the MAIN SYSTEM MENU, choose: [1] Operational Documents

Then, in the Operational Documents Available menu, choose: [8] Accident Prevention.

The files in this category will be listed. System Indicators data can be found in a compressed file called SI_XLS.EXE. This file contains seven spreadsheets with system indicators data in Microsoft Excel format (version 4 for Windows) and a README.TXT file explaining the contents of the spreadsheets.

To download the file:

At the query Selection or <CR> to exit: , type D .

At the query File Name? , type the name of the file you want to download, SI_XLS.EXE, then hit <enter>

[From this point on, your results may differ from what follows, depending on how your communications software has been set. We include, in italics, some notes and suggestions for variations you might encounter.]

A list of transfer protocols will then appear. At the query Choose one (Q to quit): type the letter of the protocol you desire. We suggest that you choose Z - ZMODEM .

[You might not be asked for a transfer protocol--the system may immediately begin downloading the file. If the system does not ask for a protocol but then "hangs," try using CTRL-X *, or* CTRL-X *followed by* ESC*, to abort the download. Then, at the query* Selection or <CR> to exit: *, type* P *to select a protocol.]*

To begin the downloading process, at the query Awaiting Start Signal you should press the key used to start receiving files. (This is typically the PgDn key.) File transfer will then begin and a "Transfer Status Box" will appear on-screen so you can monitor the progress of the transfer.

[You may see a second screen again requesting the selection of a protocol and/or a file name. In this case, enter the same selections as you did the first time.]

At completion of the transfer, you are returned to the previous selection request query. You may now download another file, list files in the Accident Prevention category, etc., or you may press ENTER to return to the Operational Documents Available menu. At this point you may make another selection, return to the main menu, or at the Command: query, enter a G for [G]oodbye to begin your logoff from the system.

If you have chosen to log off the system, a User Signoff Menu will now appear. You can now select [2] Terminate the Session to hang up.

E. After terminating the bulletin board session, move the downloaded System Indicators file from your default directory for downloaded files into the new directory you created for system indicators. At the DOS prompt in this directory, type the file name (SI_XLS.EXE) and press ENTER. The compressed file will be expanded into seven spreadsheet files and a README file in ASCII text describing the contents of the spreadsheets information of interest specific to the latest edition of the data.