

---

**ECONOMIC VALUES FOR  
FAA INVESTMENT AND REGULATORY DECISIONS, A  
GUIDE: 2024 Update**

---

**FAA Office of Aviation Policy and Plans, U.S. Federal Aviation  
Administration Washington, DC 20591**

**November 2024**

# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY.....</b>	<b>0-0</b>
<b>SECTION 1: TREATMENT OF TIME.....</b>	<b>1-1</b>
1.1 APPROACH.....	1-1
1.1.1 RECOMMENDED VALUES.....	1-2
1.2 APPLICATION.....	1-3
<b>SECTION 2: TREATMENT OF THE VALUES OF LIFE AND INJURY IN ECONOMIC ANALYSIS.....</b>	<b>2-1</b>
2.1 APPROACH.....	2-1
2.2 VALUE OF LIFE.....	2-1
2.3 VALUE OF INJURIES.....	2-2
2.4 ICAO INJURY CLASSIFICATIONS .....	2-3
<b>SECTION 3: AIRCRAFT CAPACITY AND UTILIZATION FACTORS.....</b>	<b>3-1</b>
3.1 INTRODUCTION.....	3-1
3.1.1 Regulatory Structure .....	3-1
3.1.2 User Group Concept and Definitions.....	3-2
3.1.3 Aircraft Categories.....	3-3
3.2 AIR CARRIER AIRCRAFT.....	3-4
3.2.1 Aircraft Categories.....	3-4
3.2.2 Users Sub-Groups.....	3-5
3.2.3 Air Carrier Capacity and Utilization Factors .....	3-6
3.3 GENERAL AVIATION AIRCRAFT.....	3-12
3.3.1 Aircraft Categories.....	3-12
3.3.2 Flight Hours by Activity Type and Aircraft Age .....	3-13
3.3.3 GA Capacity and Utilization.....	3-19
3.3.4 Alternate Estimate of Air Taxi Hours.....	3-20
3.4 UNMANNED AIRCRAFT SYSTEMS (UAS).....	3-22
3.5 MILITARY AIRCRAFT.....	3-23
3.6 APPENDIX.....	3-25
<b>SECTION 4: AIRCRAFT OPERATING COSTS.....</b>	<b>4-1</b>
4.1 INTRODUCTION.....	4-1
4.1.1 Average versus Incremental Cost .....	4-1
4.1.2 Change in Industry Structure and Implications for Airline Operating Cost Trends..	4-1
4.1.3 Direct and Indirect Costs .....	4-2
4.2 AIR CARRIER AIRCRAFT OPERATING COST DATA.....	4-4
4.2.1 Part 121 Passenger and All Cargo Air Carriers Filling Cost per Block Hours.....	4-7
4.2.2 Part 135 Commuter Passenger and All-Cargo Air Carriers Costs Per Block Hour...	4-9
4.3 GENERAL AVIATION OPERATING COSTS.....	4-11
4.3.1 Data Sources for Operating Costs.....	4-11
4.3.2 Depreciation.....	4-12

4.3.3 Fractional Ownership Operating Costs .....	4-17
4.4 UNMANNED AIRCRAFT SYSTEMS OPERATIONS COSTS.....	4-18
4.4 MILITARY OPERATING COSTS .....	4-19
4.6 APPENDIX.....	4-21

<b>SECTION 5: UNIT REPLACEMENT AND RESTORATION COSTS OF DAMAGED AIRCRAFT.....</b>	<b>5-1</b>
5.1 INTRODUCTION.....	5-1
5.1.1 Replacement.....	5-1
5.1.2 Restoration .....	5-1
5.2 AIR CARRIER AIRCRAFT.....	5-2
5.2.1 Replacement.....	5-2
5.2.2 Restoration .....	5-4
5.3 GENERAL AVIATION AIRCRAFT.....	5-7
5.3.1 Replacement.....	5-6
5.3.2 Restoration .....	5-12
5.4 UNMANNED AIRCRAFT SYSTEMS.....	5-16

<b>SECTION 6: ECONOMIC VALUES RELATED TO AIRCRAFT PERFORMANCE FACTORS.....</b>	<b>6-1</b>
6.1 INTRODUCTION.....	6-1
6.2 APPROACH.....	6-2
6.2.1 Air Carrier Aircraft .....	6-2
6.2.2 General Aviation Aircraft .....	6-2
6.2.3 Aircraft Performance Data.....	6-2
6.2.3.1 General Assumptions.....	6-3
6.2.3.2 Aircraft Parameters.....	6-3
6.2.3.3 Flight Profile.....	6-4
6.3 AIR CARRIER AIRCRAFT.....	6-7
6.3.1 Incremental Fuel Burn.....	6-6
6.3.2 Flight Profiles.....	6-9
6.4 GENERAL AVIATION.....	6-11
6.5 FUEL COSTS.....	6-14

<b>SECTION 7: LABOR COST FACTORS.....</b>	<b>7-1</b>
7.1 INTRODUCTION.....	7-1
7.2 Labor Costs in Aircraft Manufacturing Industries.....	7-2
7.3 Salaries, Benefits Training Costs for GA Pilots.....	7-4
7.4 Air Carrier Flight Crew Training Costs.....	7-5
7.5 Other Aviation Related Labor Cost Data.....	7-11

**SECTION 8: AVIATION ACCIDENT INVESTIGATION COSTS..... Reserved**

**SECTION 9: ADJUSTMENT METHODOLOGY TO UPDATE ECONOMIC  
VALUES..... Reserved**

**SECTION 10: Other Economic Values..... 10-1**  
10.1 Delay Propagation Multipliers..... 10-1