TABLE OF CONTENTS

Page

1 INTRODUCTION 1-1
1.1 Background 1-1
1.2 Goal Development Process 1-1
1.2.1 Step 1 1-2
1.2.2 Step 2 1-4
1.2.3 Step 3 1-5
1.2.4 Step 4 1-5
1.2.5 Step 5 1-5
1.3 Goals and Objectives 1-5
1.3.1 Guiding Principles 1-5
1.3.2 Vision Statement 1-6
1.3.3 Specific Goals and Objectives 1-6

2 AIRPORT INVENTORY 2-1
2.1 Airport History 2-1
2.2 Airport Role 2-1
2.2.1 Airport Locale 2-2
2.2.2 Land Use 2-4
2.3 Existing Airport facilities 2-8
2.3.1 Airfield Facilities and Airport Operations 2-8
2.3.2 Aircraft Parking, Gates, and Passenger Terminals 2-32
2.3.3 Landside Facilities and Ground Access 2-47
2.3.4 Air Cargo 2-57
2.3.5 General Aviation 2-62
2.3.6 Aircraft Manufacturing and Maintenance 2-67
2.3.7 Airline and Airport Support 2-73
2.3.8 Existing Utilities 2-77
2.4 Environmental Conditions 2-88
2.4.1 Air Quality 2-88
2.4.2 Biotic Communities 2-89
2.4.3 Compatible Land Use and Noise 2-91
2.4.4 Floodplains 2-97
2.4.5 Hazardous Materials and Waste Sites 2-99
2.4.6 Water Quality 2-103

3 AVIATION DEMAND FORECAST 3-1
3.1 Airport Service Region 3-1
3.2 Commercial Service Airports in Texas 3-3
3.3 Economic Basis for Aviation Demand 3-4
3.3.1 Historical Population, Employment, and Per Capita Income 3-4
3.3.2 San Antonio Industry Sectors 3-12
3.3.3 Tourism 3-14
3.3.4 Economic Outlook 3-14
3.3.5 Summary 3-19

TABLE OF CONTENTS *(continued)*

Page

3.4 Historical Aviation Demand 3-19
3.4.1 Airlines Serving the Airport 3-19
3.4.2 Enplaned Passengers 3-20
3.4.3 Monthly Trends in Enplaned Passengers 3-23
3.4.4 Trends in Load Factors and Average Seats per Departure 3-25
3.4.5 Airline Shares of Enplaned Passengers 3-27
3.4.6 Origin-Destination Markets for Domestic Passengers 3-30
3.4.7 Origin-Destination Markets for International Passengers 3-32
3.4.8 Airline Service 3-32
3.4.9 Airline Fares and Yields 3-37
3.4.10 Air Cargo 3-43
3.4.11 Aircraft Operations 3-45
3.5 Key Factors Affecting Future Aviation Demand 3-49
3.5.1 Economic and Political Conditions 3-49
3.5.2 Financial Health of the Airline Industry 3-49
3.5.3 Airline Service and Routes 3-50
3.5.4 Airline Competition and Airfares 3-51
3.5.5 Airline Consolidation and Alliances 3-51
3.5.6 Availability and Price of Aviation Fuel 3-51
3.5.7 Aviation Safety and Security Concerns 3-52
3.5.8 Capacity of the National Air Traffic Control System 3-52
3.6 Forecast Aviation Demand 3-53
3.6.1 Enplaned Passengers 3-53
3.6.2 Air Cargo Forecasts 3-61
3.6.3 Aircraft Operations 3-65
3.6.4 Peak Period Demand Forecasts 3-74
3.6.5 Comparison with FAA Forecasts 3-75

4 DEMAND/CAPACITY AND FACILITY REQUIREMENTS 4-1
4.1 Airfield Requirements 4-1
4.1.1 Critical Aircraft and Airport Reference Code 4-1
4.1.2 Weather and Wind Analysis 4-3
4.1.3 Airfield Geometry 4-8
4.1.4 Airfield Demand / Capacity Analysis 4-16
4.1.5 Summary of Airfield Requirements 4-29
4.2 Passenger Terminal Facility Requirements 4-30
4.2.1 Gate Requirements 4-31
4.2.2 Passenger Flow Analysis 4-34
4.2.3 Terminal Planning Metrics 4-39
4.2.4 Terminal A Requirements 4-44
4.2.5 Terminal B Requirements 4-47
4.2.6 Future Terminal C – Preliminary Requirements 4-50
4.2.7 Remain Overnight Parking Position Requirements 4-52
4.2.8 Summary of Terminal Requirements 4-52

TABLE OF CONTENTS *(continued)*

Page

4.3 Landside Facility And Ground Access Requirements 4-53
4.3.1 Roadways 4-53
4.3.2 Curbs 4-66
4.3.3 Parking 4-70
4.3.4 Rental Car Facilities 4-70
4.3.5 Public Transportation 4-71
4.4 Air Cargo Facility Requirements 4-72
4.4.1 Processing and Warehouse Space 4-72
4.4.2 Ramp Area 4-73
4.4.3 Landside Areas 4-74
4.4.4 Cargo Land Area Summary 4-74
4.5 General Aviation Facility Requirements 4-75
4.5.1 Background 4-75
4.5.2 Aircraft Parking Apron 4-76
4.5.3 Aircraft Storage Facilities 4-77
4.6 Airline and Airport Support Facility Requirements 4-78
4.6.1 Airline Support 4-78
4.6.2 Airport Support 4-83

5 ALTERNATIVES DEVELOPMENT AND EVALUATION 5-1
5.1 Alternatives Evaluation 5-1
5.1.1 Evaluation Methodology 5-1
5.1.2 Evaluation Criteria 5-2
5.2 Development Constraints 5-3
5.2.1 Infrastructure and Facilities Constraints 5-3
5.2.2 Environmental Constraints 5-3
5.3 Airfield Development Alternatives 5-5
5.3.1 Development Alternatives 5-5
5.3.2 Alternatives Evaluation 5-23
5.3.3 Recommendation 5-25
5.3.4 Airfield Capacity 5-29
5.4 Commercial Passenger Terminal Development Alternatives 5-31
5.4.1 Short-term Terminal A Improvements 5-31
5.4.2 Long-term Terminal Development 5-48
5.4.3 Recommendation 5-67
5.4.4 Remain Overnight Aircraft Parking Apron 5-73
5.4.5 Ultra-Low-Cost Carrier Facility 5-73
5.5 Landside Development Alternatives 5-78
5.5.1 Parking Alternatives Analysis 5-78
5.5.2 Alternatives Evaluation 5-83
5.5.3 Recommendation 5-83
5.5.4 Rail Service Alternatives Analysis 5-83

TABLE OF CONTENTS *(continued)*

Page

5.6 Air Cargo Development Alternatives 5-86
5.6.1 Background 5-86
5.6.2 Site Selection 5-86
5.6.3 Development Alternatives and Evaluation 5-87
5.6.4 Recommendation 5-93
5.7 General Aviation Development Alternatives 5-94
5.7.1 Background 5-94
5.7.2 Site Selection 5-94
5.7.3 Recommendation 5-96
5.8 Airline and Airport Support Alternatives 5-97
5.8.1 Airline Support 5-97
5.8.2 Airport Support 5-100
5.9 Aircraft Maintenance and Manufacturing Facilities Development Alternatives 5-109
5.10 Preferred Development Plan 5-111

6 ENVIRONMENTAL ANALYSIS 6-1
6.1 Introduction 6-1
6.2 Air Quality 6-1
6.2.1 Regulatory Status 6-1
6.2.2 Emerging Issues 6-1
6.2.3 Recommendations 6-2
6.3 Biotic Communities 6-3
6.3.1 Recommendations 6-3
6.4 Coastal Resources 6-3
6.5 Construction 6-4
6.6 Compatible Land Use 6-4
6.6.1 Land Use Compatibility and Noise 6-4
6.6.2 Consistency with Local Land Use Planning 6-4
6.6.3 Land Uses in the Airport Area 6-5
6.6.4 Wildlife Attractants Near the Airport 6-5
6.6.5 Recommendations 6-5
6.7 Floodplains 6-6
6.7.1 Added Impervious Surface 6-6
6.7.2 Recommendations 6-7
6.8 Hazardous Materials and Waste 6-9
6.8.1 Project-Related Disturbances 6-9
6.8.2 Recommendations 6-10
6.9 Light Emissions/Visual Effects 6-10
6.10 Noise 6-10
6.10.1 Background 6-11
6.10.2 Noise Assessment Process 6-11
6.10.3 INM Input Data and Assumptions 6-12
6.10.4 2009 and 2030 Noise Compatibility 6-12
6.10.5 Recommendations 6-13

TABLE OF CONTENTS *(continued)*

Page

6.11 Social Impacts 6-15
6.11.1 Land Acquisition/Business Relocation 6-15
6.11.2 Other Considerations 6-16
6.11.3 Recommendations 6-16
6.12 Water Resources 6-22
6.12.1 Non-Point Source Pollution 6-22
6.12.2 Stream Encroachment 6-23
6.12.3 Aquifer Protection 6-24
6.12.4 Recommendations 6-24
6.13 Wetlands 6-24
6.14 Wild and Scenic Rivers 6-25
6.15 Sustainability 6-25
6.15.1 Sustainability Management 6-25
6.15.2 Adopting Sustainability 6-26

7 IMPLEMENTATION PLAN 7-1
7.1 Introduction 7-1
7.2 Factors Affecting Implementation And Phasing 7-1
7.2.1 Activity Volume and Operational Characteristics at the Airport 7-1
7.2.2 Implementation Triggers 7-2
7.3 Preferred Development Plan Phasing 7-4
7.3.1 Short-Term Implementation Plan (1-5 Years) 7-4
7.3.2 Intermediate-Term Implementation Plan (6-10 Years) 7-7
7.3.3 Long-Term Implementation Plan (11-20 Years) 7-10
7.3.4 Post-2030 Implementation Plan 7-13
7.3.5 Planning Activity Levels 7-15
7.4 Implementation Schedule 7-16
7.5 Cost Estimates 7-18

APPENDICES

A COMMITTEE ROSTERS
B BACKGROUND RESEARCH
C GATE MODEL AND PASSENGER FLOWS ASSUMPTIONS
D ROADWAY SIMULATION MODELING
E ARFF STATION LOCATION AND RESPONSE TIMES
F TERMINAL C DESIGN CONCERNS
G RUNWAY HIGH SPEED EXIT ANALYSIS
H TERMINAL A PROPOSED SECURE CONNECTOR
I TERMINAL C SPACE REQUIREMENTS COMPARISON
J FAA PLANNING SURFACES AND SAFETY AREAS
K TERMINAL AREA SHADOW STUDY
L DETAILED IMPLEMENTATION SCHEDULE
M DETAILED COST ESTIMATE
N COMMERCIAL DEVELOPMENT ANALYSIS
O FINANCIAL PLAN

TABLES

Page

2-1 Existing Airport Land Use 2-4
2-2 Runway Data Summary 2-15
2-3 Runway/Taxiway Separations 2-16
2-4 Instrument Approaches 2-17
2-5 Summary of Passenger Gates 2-33
2-6 Summary of Remain Overnight Parking Positions 2-34
2-7 Terminal Space Inventory 2-40
2-8 Terminal Curbside Length 2-51
2-9 Air Cargo Facilities 2-60
2-10 Fixed Base Operator Facilities 2-66
2-11 Corporate User Facilities 2-67
2-12 Aircraft Maintenance and Manufacturing Facilities 2-72
2-13 2009 and 2014 Noise Exposure Contour Impacts 2-95
2-14 Landfills and Other Solid Waste Facilities 2-101
3-1 Population Distribution in the San Antonio MSA 3-1
3-2 Scheduled Airline Service at Commercial Service Airports Near San Antonio—Daily Departures for June 2009 3-3
3-3 Enplaned Passengers at Selected Commercial Service Airports in Texas 3-4
3-4 Historical Socioeconomic Data—San Antonio MSA, State of Texas, and United States 1980-2008 3-6
3-5 Percent Change In Nonagricultural Employment During Selected National Economic Recessions 3-8
3-6 Comparative Unemployment Rates 3-10
3-7 Top 20 Largest Nonmilitary Employers in the San Antonio MSA 2008 3-11
3-8 Economic Projections/Forecasts for the U.S. Economy 2008-2015 3-17
3-9 Comparison of Socioeconomic Projections for the San Antonio MSA and Texas 3-18
3-10 Passenger Airlines Serving San Antonio—June 2009 3-20
3-11 Historical Enplaned Passengers—San Antonio International Airport 3-21
3-12 Average Annual Growth in Enplaned Passengers— San Antonio International Airport and the United States 3-22
3-13 Monthly Enplaned Passengers as a Percent of Total 3-24
3-14 Average Daily Enplaned Passengers, Flight Schedule Characteristics and Metrics 3-25
3-15 Airline Market Shares of Enplaned Passenger 3-29
3-16 Top 25 Domestic Origin-Destination Markets 3-31
3-17 Top 25 International Origin-Destination Markets—2008 3-34
3-18 Historical Domestic and International Enplaned Passengers 3-36
3-19 Scheduled Departing Seats by Airline Group at Selected Airports 3-37
3-20 Average Domestic One-Way Airline Fares and Yield—San Antonio International Airport and United States 3-39
3-21 Airfares and Daily Nonstop Departures for Top 10 San Antonio Domestic Markets 3-41

TABLES *(continued)*

Page

3-22 Domestic Departing Seats by City Markets and Airline Type, and Average Fares, Top 25 O&D Markets at San Antonio and Austin-Bergstrom International Airports ... 3-42
3-23 Historical Air Cargo Tonnage ... 3-44
3-24 Historical Aircraft Operations ... 3-46
3-25 Historical Itinerant and Local General Aviation and Military Operations ... 3-48
3-26 Enplaned Passenger Forecasts ... 3-58
3-27 Independent Air Cargo Growth Forecasts—U.S. Domestic Growth Rates ... 3-62
3-28 Cargo Tonnage Forecasts ... 3-64
3-29 Aircraft Operations Forecasts ... 3-67
3-30 Projected Aircraft Fleet Mix ... 3-72
3-31 Peak Period Activity - Baseline Forecast ... 3-75
3-32 Comparative Forecasts ... 3-77
3-33 Comparison of Master Plan and FAA TAF Forecasts ... 3-78
4-1 Components of the FAA Airport Reference Code ... 4-2
4-2 Air Carrier Aircraft Operations by Airport Reference Code ... 4-3
4-3 Runway Wind Coverage ... 4-4
4-4 Airport Planning and Design Standards for Airport Reference Codes B-III and D-V ... 4-9
4-5 FAA Recommended Runway Lengths ... 4-10
4-6 General Aviation Taxiway Data ... 4-15
4-7 Runway Use Configurations ... 4-19
4-8 Aircraft Classes ... 4-22
4-9 Projected Peak Hour Aircraft Fleet Mix ... 4-23
4-10 FAA Airport Capacity Model Input Data ... 4-23
4-11 Weighted Peak Hour Capacity (numbers of operations) ... 4-24
4-12 Maximum Hourly Capacity ... 4-24
4-13 Average Day Peak Month Aircraft Operations ... 4-24
4-14 Peak Hour Operations Summary ... 4-25
4-15 Annual Service Volume ... 4-25
4-16 Gate Requirements Summary ... 4-33
4-17 Summary of Passenger Activity at Terminal A ... 4-35
4-18 Summary of Passenger Activity at Terminal B ... 4-36
4-19 Summary of Passenger Activity at Future Terminal C ... 4-37
4-20 Summary of Passenger Activity at All Terminals ... 4-38
4-21 Terminal A – Facility Requirements, Domestic and International Airlines ... 4-46
4-22 Terminal B – Facility Requirements ... 4-49
4-23 Future Terminal C Space Program Requirements ... 4-51
4-24 Remain Overnight Parking Position Requirements ... 4-52
4-25 Curb Requirements Analysis, 2015 ... 4-67
4-26 Curb Requirements Analysis, 2020 ... 4-68
4-27 Curb Requirements Analysis - 2030 ... 4-69
4-28 Public Parking Requirements ... 4-70
4-29 Cargo Processing and Warehouse Space Requirements ... 4-73
4-30 Cargo Apron Requirements ... 4-74

TABLES *(continued)*

Page

4-31 Cargo Landside Requirements 4-74
4-32 Cargo Land Area Requirements 4-75
4-33 General Aviation Activity Forecast 4-76
4-34 General Aviation Facility Requirements 4-77
4-35 Ground Support Equipment Facility Requirements 4-79
4-36 2008 Fuel Flowage and Aircraft Operations Data 4-80
4-37 Projected ADPM Airline Jet Fuel Demand and Storage Required to Provide 3-, 5-, 7-, or 10-Day Reserve Supply 4-81
4-38 Projected Fuel Farm Storage Requirements 4-83
4-39 ARFF Index Classifications 4-84
4-40 ARFF Index Determination 4-84
5-1 Evaluation of Airfield Alternatives 5-23
5-2 Estimated IFR Hourly Capacity using Projected 2030 Fleet Mix 5-30
5-3 Evaluation of Terminal Site Alternatives 5-51
5-4 Evaluation of Terminal Development Alternatives 5-69
5-5 All-Cargo Facility Requirements 5-86
5-6 General Aviation Facility Requirements 5-94
5-7 Terminal A – Revised Facility Requirements Domestic and International Airlines 5-114
5-8 Terminal B – Revised Facility Requirements 5-115
5-9 Future Terminal C – Revised Facility Requirements 5-116
6-1 2009 and 2030 Noise Impact Area 6-13
6-2 Property Acquisition 6-17
7-1 Short-term Implementation Plan Cost Estimate 7-19
7-2 Intermediate-term Implementation Plan Cost Estimate 7-20
7-3 Long-term Implementation Plan Cost Estimate 7-21

FIGURES

Page

1-1 Process Diagram 1-2
1-2 Committee Structure 1-3
1-3 Vision, Goals & Objectives Organizational Structure 1-6
2-1 Airport Location Map 2-3
2-2 On-Airport Land Uses 2-5
2-3 Existing Off-Airport Land Uses 2-7
2-4 Existing Airport Facilities 2-9
2-5 Existing Airport Facilities – South Complex 2-10
2-6 Existing Airport Facilities – West Complex 2-11
2-7 Existing Airport Facilities – North Complex 2-12
2-8 Existing Airport Facilities – East Complex 2-13
2-9 Existing Airfield Facilities 2-14
2-10 Existing Navigational Aids 2-18
2-11 San Antonio Regional Airspace 2-20
2-12 Class C Airspace 2-22
2-13 Class D Airspace 2-23
2-14 Military Operations Areas 2-24
2-15 Military Alert Areas 2-25
2-16 Military Training Routes 2-26
2-17 Preferred Vectored Landing Route – Runway 3 2-28
2-18 Preferred Vectored Landing Route – Runway 21 2-29
2-19 Preferred Vectored Landing Route – Runway 12R 2-30
2-20 Preferred Vectored Landing Route – Runway 30L 2-31
2-21 Existing Terminal Area 2-35
2-22 Remote Aircraft Parking 2-36
2-23 Existing Terminal 1 2-38
2-24 Existing Terminal 2 2-39
2-25 Terminals A and B Service Level 2-41
2-26 Terminals A and B Arrivals Level 2-42
2-27 Terminals A and B Departures Level 2-43
2-28 Terminals A and B Upper Level 2-44
2-29 Terminal 2 Departures and Arrivals Levels 2-45
2-30 Terminal 2 Upper Level 2-46
2-31 Airport Roadway Access 2-48
2-32 Terminal Roadway Access 2-49
2-33 Ground Transportation Facilities 2-53
2-34 West Cargo Complex 2-58
2-35 East Cargo Complex 2-61
2-36 West General Aviation Facilities 2-63
2-37 East General Aviation Facilities 2-64
2-38 West Aircraft Maintenance Facilities 2-70
2-39 North Aircraft Maintenance Facilities 2-71
2-40 Support Facilities 2-74
2-41 Existing Utilities – Water Service 2-78

FIGURES *(continued)*

Page

2-42 Existing Utilities – Storm Drainage 2-81
2-43 Existing Utilities – Sanitary Sewer 2-82
2-44 Existing Utilities – FAA Ductbank 2-85
2-45 Existing Utilities – Natural Gas 2-86
2-46 Existing Utilities – Electrical Service 2-87
2-47 Existing Conditions (2009) Noise Exposure Map 2-94
2-48 Future Conditions (2014) Noise Exposure Map 2-96
2-49 Flood Hazard Areas 2-98
2-50 Municipal Solid Waste Facilities 2-102
2-51 Watersheds and Streams 2-104
2-52 Aquifer Transition/Artesian Zones 2-106
3-1 Airport Service Region 3-2
3-2 Trends in Nonagricultural Employment—San Antonio MSA, State of Texas, United States 3-7
3-3 Nonagricultural Employment by Industry Sector 3-9
3-4 Monthly Unemployment Rates 3-10
3-5 Historical Enplaned Passengers 3-22
3-6 Year-Over-Year Changes in Enplaned Passengers 3-23
3-7 Monthly Trends in Enplaned Passengers 3-24
3-8 Domestic Origin-Destination Pattern—CY 2008 3-32
3-9 Historical Enplaned Passengers by Mainline Airlines and Their Regional Affiliates 3-35
3-10 Enplaned Passenger Forecast Scenarios 3-61
3-11 Aircraft Operations Forecast Scenarios 3-70
4-1 All Weather Wind Coverage – Runways 12L/R and 30L/R 4-5
4-2 All Weather Wind Coverage - Runway 3-21 4-6
4-3 All Weather Wind Coverage - All Runways 4-7
4-4 Runway Takeoff Length Requirements - Aircraft Performance Characteristics 4-11
4-5 Existing Airfield 4-18
4-6 Runway Use Diagram, Runway Configurations 1 and 2 4-20
4-7 Runway Use Diagram, Runway Configuration 3 4-21
4-8 2030 Scheduled Operation Forecast (60 minute rolling average) 4-27
4-9 2030 Scheduled Operation Forecast (60 minute rolling average) 4-28
4-10 Baseline Model Results Peak Hour Demand 4-54
4-11 Baseline Model Peak Hour Results Demand to Capacity Ratio 4-55
4-12 Baseline Model Peak Hour Results Level of Service Assessment 4-56
4-13 Projected 2015 Model Results Peak Hour Demand 4-57
4-14 Projected 2015 Model Peak Hour Results Demand to Capacity Ratio 4-58
4-15 Projected 2015 Model Peak Hour Results Level of Service Assessment 4-59
4-16 Projected 2020 Model Results Peak Hour Demand 4-60
4-17 Projected 2020 Model Peak Hour Results Demand to Capacity Ratio 4-61
4-18 Projected 2020 Model Peak Hour Results Level of Service Assessment 4-62
4-19 Projected 2030 Model Results Peak Hour Demand 4-63
4-20 Projected 2030 Model Peak Hour Results Demand to Capacity Ratio 4-64
4-21 Projected 2030 Model Peak Hour Results Level of Service Assessment 4-65

FIGURES *(continued)*

Page

4-22 Projected Jet Fuel Storage Requirements 4-82
5-1 Alternatives Evaluation Methodology 5-1
5-2 Development Constraints 5-4
5-3 Terminal A Area Taxilane Improvements 5-7
5-4 Airfield Alternative 1 5-9
5-5 Airfield Alternative 2 5-10
5-6 Airfield Alternative 3 5-12
5-7 Airfield Alternative 4 5-13
5-8 Airfield Alternative 5 5-14
5-9 Airfield Alternative 6 5-16
5-10 Airfield Alternative 7 5-17
5-11 Airfield Alternative 8 5-18
5-12 Airfield Alternative 9 5-20
5-13 Airfield Alternative 10 5-21
5-14 Airfield Alternative 11 5-22
5-15 Preferred Airfield Alternative 5-28
5-16 Terminal A Departures Level Improvements – North Concourse 5-33
5-17 Terminal A Departures Level Improvements – Mid Concourse 5-34
5-18 Terminal A Departures Level Improvements – South Concourse 5-35
5-19 Terminal A Arrivals Level Improvements – North Concourse 5-37
5-20 Terminal A Arrivals Level Improvements – Mid Concourse 5-38
5-21 Terminal A Arrivals Level Improvements – South Concourse 5-39
5-22 Terminal A Widening - Alternative 1 5-41
5-23 Terminal A Widening - Alternative 2 5-42
5-24 Terminal A Widening - Alternative 3 5-43
5-25 Terminal A Widening - Alternative 4 5-44
5-26 Terminal A - Proposed 17th and 18th Gates 5-46
5-27 Terminal A – Potential Terminal Expansion onto South RON Apron 5-47
5-28 Potential Terminal Sites 5-49
5-29 Potential Long-term Airline Processor and Satellite Concourse Expansion 5-53
5-30 Terminal Alternative 1 5-55
5-31 Terminal Alternative 2 5-56
5-32 Terminal Alternative 3 5-58
5-33 Terminal Alternative 4 5-59
5-34 Terminal Alternative 5 5-60
5-35 Terminal Alternative 6 5-61
5-36 Terminal Alternative 7 5-63
5-37 Terminal Alternative 8 5-64
5-38 Terminal Alternative 9 5-65
5-39 Preliminary Screening of Terminal Alternatives 5-66
5-40 Proposed Terminal C Concept – Mezzanine Level (Level 3) 5-70
5-41 Proposed Terminal C Concept – Departures Level (Level 2) 5-71
5-42 Proposed Terminal C Concept – Arrivals Level (Level 1) 5-72
5-43 RON Aircraft Layout Alternative 1 5-75

FIGURES *(continued)*

Page

5-44 RON Aircraft Layout Alternative 2 5-76
5-45 Potential Ultra Low Cost Carrier Location 5-77
5-46 Preferred Consolidated Rental Car Facility Location, Site 1 Loop Road 5-79
5-47 Landside Alternative 1 5-81
5-48 Landside Alternative 2 5-82
5-49 Recommended Landside Alternative 5-85
5-50 Cargo Development Alternative 1 5-89
5-51 Cargo Development Alternative 2 5-90
5-52 Cargo Development Alternative 3 5-91
5-53 Cargo Development Alternative 4 5-92
5-54 2030 Commercial Aviation Development Areas 5-95
5-55 Potential Fuel Farm Locations 5-99
5-56 Potential Airport Maintenance Facility Locations 5-101
5-57 Potential Airport Traffic Control Tower Locations 5-103
5-58 Potential Locations for Airport Administrative Facilities 5-105
5-59 Potential Centralized Concessions Receiving/Distribution Center Locations 5-108
5-60 Potential Long-term Property Acquisition 5-110
5-61 Preferred Development Plan 5-112
5-62 Existing and Future On-Airport Land Uses 5-119
6-1 Stream Encroachment 6-8
6-2 2009 and 2030 Noise Compatibility 6-14
6-3 Property Acquisition (Areas 1 & 2) 6-18
6-4 Property Acquisition (Area 3) 6-19
6-5 Property Acquisition (Area 4) 6-20
6-6 Property Acquisition (Area 5) 6-21
6-7 Emissions from Activity under Control or Influence of the Airport Operator 6-30
7-1 Short-term Implementation Plan (1-5 Years) 7-6
7-2 Intermediate-term Implementation Plan (6-10 Years) 7-9
7-3 Long-term Implementation Plan (11-20 Years) 7-12
7-4 Post-2030 Implementation Plan 7-14
7-5 Planning Activity Level Chart 7-16
7-6 Implementation Schedule 7-17

LIST OF ACRONYMS

AAC: Aircraft Approach Category
AC: Advisory Circular
ACM: Airport Capacity Model
ADG: Airplane Design Group
ADO: Airports District Office
ADPM: Average Day Peak Month
AGL: Above Ground Level
AOA: Air Operations Area
APM: Automated People Mover
ARC: Airport Reference Code
ARFF: Aircraft Rescue and Fire Fighting
ARTCC: Air Route Traffic Control Center
ASDA: Accelerated stop distance available
ASOS: Automated Surface Observing System
ASR: Airport Surveillance Radar
ASV: Annual Service Volume
ATC: Air Traffic Control
ATCT: Airport Traffic Control Tower
ATO: Airline ticket office
AUS: Austin-Bergstrom International Airport
AWOS: Automated Weather Observing System
BRAC: Base Realignment and Closure Act
CBO: Congressional Budget Office
CBP: Customs and Border Protection
CIP: Capital Improvement Program
CPI-U: Consumer Price Index for all Urban Consumers
DAL: Dallas Love Field
DFW: Dallas/Fort Worth International Airport
DHS: Department of Homeland Security
DOD: Department of Defense
DOT: Department of Transportation
EDS: Explosives Detection System
EPA: Environmental Protection Agency
FAA: Federal Aviation Administration
FAR: Federal Aviation Regulation
FBO: Fixed Base Operator
FFY: Federal Fiscal Year
FIS: Federal Inspection Facilities
FOMC: Federal Open Market Committee
FRB: Federal Reserve Board
GA: General Aviation
GDP: Gross Domestic Product
GHG: Greenhouse Gas
GPS: Global Positioning System
GRE: Ground Runup Enclosure

GSE: Ground Support Equipment
GSP: Gross State Product
GTC: Ground Transportation Center
HIRL: High-Intensity Runway Lights
HOU: William P. Hobby Airport
HVAC: Heating, Ventilation, and Air Conditioning
IAH: Bush Intercontinental Airport/Houston
IFR: Instrument Flight Rules
ILS: Instrument Landing System
IM: Inner Marker
IMC: Instrument Meteorological Conditions
IMF: International Monetary Fund
LAHSO: Land and Hold Short Operation
LCC: Low-Cost Carrier
LDA: Landing Distance Available
LLWAS: Low-Level Windshear Alert System
LPST: Leaking Petroleum Storage Tank
MAST: Mobility Analysis and Simulation Tools
Mgd: million gallons per day
MRO: Maintenance, Repair, and Overhaul
MSA: Metropolitan Statistical Area
MSL: Mean Sea Level
MTOW: Maximum Take-off Weight
MTR: Military Training Route
NAAQS: National Ambient Air Quality Standards
NADP: Noise Abatement Departure Procedure
NAS: National Airspace System
NCP: Noise Compatibility Plan
NEM: Noise Exposure Map
NEPA: National Environmental Policy Act
NextGen: Next Generation Air Transportation System
NFIP: National Flood Insurance Program
NM: Nautical Mile
NOMS: Noise and Operations Monitoring Systems
NPDES: National Pollutant Discharge Elimination System
OFZ: Object-Free Zone
PAPI: Precision Approach Path Indicator
Ppm: part per million
PRT: Personal Rapit Transit
QTA: Quick Turnaroung
RATP: Residential Acoustical Treatment
RNAV: Area Navigation
RND: Randolph Air Force Base
ROFA: Runway Object Free Area
RON: Remain Overnight
RPZ: Runway Protection Zone
RSA: Runway Safety Area
RTR: Remote Transmitters/Receiver
RVR: Runway Visual Range

SAA: San Antonio Aerospace
SARS: Several Acute Respiratory Syndrome
SAT: San Antonio International Airport
SAWS: San Antonio Water System
SIC: Standard Industrial Code
SIP: State Implementation Plan
SKF: Port San Antonio / Kelly Field
SSF: Stinson Municipal Airport
STAR: Standard Terminal Arrival Route
TAF: Terminal Area Forecast
TCEQ: Texas Commission on Environmental Quality
TDZ: Touchdown Zone
TODA: Takeoff Distance Available
TORA: Takeoff Run Available
TPDES: Texas Pollutant Discharge Elimination System
TPWD: Texas Parks and Wildlife Department
TRACON: Terminal Radar Approach Control
TSA: Transportation Security Administration
UPS: United Parcel Service
USAF: United States Air Force
USO: United Service Organizations
USPS: United States Postal Service
VFR: Visual Flight Rules
VMC: Visual Meteorological Conditions