

Contents

<i>Contents</i>	<i>iii</i>
<i>Tables</i>	<i>v</i>
<i>Illustrations</i>	<i>vi</i>
A. Inventory of Existing Conditions	
Airport Role	A.2
Airport Facilities Inventory	A.5
Airspace System and NAVAIDS	A.10
Airport Drainage System Planning	A.14
Airport Infrastructure Planning	A.14
Airport Environs	A.15
Summary	A.18
B. Forecasts of Aviation Activity	
Historical Airport Activity Summary	B.5
Historical Based Aircraft Summary	B.7
Passenger Enplanements Forecast	B.8
Commercial Service Operations Forecast	B.10
General Aviation Operations Forecast	B.12
Military Operations Forecast	B.15
Operations Forecast by Aircraft Type	B.16
Local and Itinerant Operations Forecast	B.17
Peak Period Forecast	B.18
General Aviation Based Aircraft Forecast	B.18
Airport Reference Code (ARC) Analysis	B.20
Summary	B.22
C. Capacity Analysis and Facility Requirements	
Airfield Capacity Methodology	C.1
Airfield Capacity Analysis	C.9
Ground Access Capacity	C.10
Airfield Facility Requirements	C.12
Landside Facility Requirements	C.22
Summary	C.27
D. Development Concepts and Alternatives Analysis	
Goals and Objectives for Development	D.2
Airsides Development Concepts and Alternatives	D.3
Landside Development Concepts	D.16
Conceptual Airport Development Plan	D.21
Airport Traffic Control Tower Location Analysis	D.21

E. Environmental Review

Existing Conditions	E.1
Future Conditions	E.2
Summary	E.14

F. Airport Plans

Airport Layout Plan	F.1
Airspace Plan	F.6
Inner Portion of the Approach Surface Drawings	F.14
Departure Surface Drawings	F.23
Terminal Area Plans	F.26
Airport Land Use Plan	F.26
Airport Property Map	F.26

G. Development Program

Implementation Schedule and Project List	G.2
Cost Estimates	G.2
Capital Improvement Program (CIP)	G.6
Phasing Plan	G.6
Financial Plan and Implementation Strategy	G.6
Summary – Master Plan Capital Improvement Program	G.10

H. Financial Implementation Plan

Overall Approach	H.1
Sources of Capital Funding	H.2
Financial Analysis and Implementation Plan for the Master Plan	
Capital Improvement Program	H.5
Financial Plan Tables	H.15

Appendix

One	Master Drainage Report
Two	Master Utility Report
Three	Study Committee Notes

Tables

Table A1	INSTRUMENT APPROACH PROCEDURES	A.14
Table B1	HISTORICAL AVIATION ACTIVITY, 1997-2007	B.5
Table B2	HISTORICAL BASED AIRCRAFT, 2003-2007	B.7
Table B3	PASSENGER ENPLANEMENTS FORECAST, 2007-2027	B.9
Table B4	2007 COMMERCIAL SERVICE CARRIERS	B.10
Table B5	2008 COMMERCIAL SERVICE CARRIERS	B.11
Table B6	COMMERCIAL SERVICE OPERATIONS FORECAST, 2007-2027	B.12
Table B7	GENERAL AVIATION AIRCRAFT OPERATIONS FORECAST SCENARIOS, 2007-2027	B.14
Table B8	MILITARY OPERATIONS FORECAST, 2007-2027	B.15
Table B9	SUMMARY OF OPERATIONS BY AIRCRAFT TYPE, 2007-2027	B.16
Table B10	SUMMARY OF LOCAL AND ITINERANT OPERATIONS, 2007-2027	B.17
Table B11	PEAK PERIOD AIRCRAFT OPERATIONS, 2007-2027	B.18
Table B12	GENERAL AVIATION BASED AIRCRAFT FORECAST SCENARIOS, 2007-2027	B.19
Table B13	GENERAL AVIATION BASED AIRCRAFT FLEET MIX, 2007-2027	B.20
Table B14	SUMMARY OF AVIATION ACTIVITY FORECASTS, 2007-2027	B.22
Table B15	COMPARISON OF AVIATION ACTIVITY FORECASTS AND TAF FORECASTS, 2007-2022 (FAA FORMAT)	B.23
Table B16	SUMMARY OF AIRPORT PLANNING FORECASTS, 2007-2022 (FAA FORMAT)	B.24
Table C1	ALL WEATHER WIND COVERAGE SUMMARY	C.5
Table C2	IFR WIND COVERAGE SUMMARY	C.6
Table C3	AIRCRAFT CLASS MIX FORECAST, 2007-2027	C.7
Table C4	GROUND ACCESS FACILITY VOLUME	C.10
Table C5	ARC D-III AND D-IV RUNWAY DIMENSIONAL STANDARDS, RUNWAY 11/29 (in feet)	C.15
Table C6	ARC B-II AND C-III RUNWAY DIMENSIONAL STANDARDS, RUNWAY 4/22 (in feet)	C.16
Table C7	MODIFICATIONS TO STANDARDS	C.18
Table C8	RUNWAY LENGTH REQUIREMENTS	C.20
Table C9	REQUIRED RUNWAY PROTECTION ZONE DIMENSIONS	C.22
Table C10	GENERAL AVIATION FACILITY REQUIREMENTS, 2007-2027	C.25
Table C11	REPRESENTATIVE AIR CARRIER/COMMUTER AIRCRAFT LENGTHS	C.26
Table C12	FACILITY REQUIREMENTS SUMMARY	C.28
Table E1	MESA COUNTY THREATENED, ENDANGERED, AND CANDIDATE SPECIES	E.11
Table G1	PHASE I (0-5 YEARS) DEVELOPMENT PROGRAM PROJECT COSTS	G.3
Table G2	PHASE II AND III (6-20 YEARS) DEVELOPMENT PROGRAM PROJECT COSTS	G.5
Exhibit H1	SUMMARY OF BASE YEAR AND ESCALATED COSTS FOR THE CAPITAL PROGRAM	H.6
Exhibit H2	SUMMARY OF SOURCES AND USES OF CAPITAL FUNDING	H.7
Table H1	ESTIMATED PROJECT COSTS AND DEVELOPMENT SCHEDULE	H.16
Table H2	PROJECTED CAPITAL FUNDING SOURCES	H.17
Table H3	ACTUAL, ESTIMATED, BUDGETED, AND PROJECTED OPERATIONS AND MAINTENANCE EXPENSES	H.18
Table H4	ACTUAL, ESTIMATED, BUDGETED, AND PROJECTED OPERATING REVENUES	H.19
Table H5	BUDGETED AND PROJECTED CASH FLOW, CAPITAL FUNDING, AND CAPITAL EXPENDITURES	H.20

Illustrations

Figure A1	AIRPORT LOCATION MAP	A.3
Figure A2	AIRPORT VICINITY MAP	A.4
Figure A3	EXISTING AIRPORT LAYOUT	A.6
Figure A4	AIRSPACE/NAVAIDS SUMMARY	A.13
Figure A5	GENERALIZED EXISTING ZONING	A.19
Figure A6	GENERALIZED FUTURE LAND USE	A.20
Figure A7	AIRPORT ENVIRONS OVERLAY ZONING DISTRICT	A.21
Figure C1	ALL WEATHER WIND ROSE: 10.5-, 13-, 16-, AND 20-KNOT CROSSWIND COMPONENTS	C.5
Figure C2	IFR WEATHER WIND ROSE: 10.5-, 13-, 16-, AND 20-KNOT CROSSWIND COMPONENTS	C.6
Figure C3	REPRESENTATIVE AIRCRAFT BY AIRPORT REFERENCE CODE (ARC) DESIGNATION	C.14
Figure C4	EXISTING ARC D-III AND B-II DIMENSIONAL CRITERIA	C.17
Figure D1	AIRSIDE ALTERNATIVE ONE	D.7
Figure D2	AIRSIDE ALTERNATIVE TWO	D.11
Figure D3	AIRSIDE ALTERNATIVE THREE	D.15
Figure D4	LANDSIDE FACILITIES CONCEPTUAL LAYOUT WEST	D.17
Figure D5	LANDSIDE FACILITIES CONCEPTUAL LAYOUT EAST	D.18
Figure D6	CONCEPTUAL GENERAL AVIATION FACILITIES LAYOUT	D.20
Figure D7	CONCEPTUAL DEVELOPMENT PLAN	D.22
Figure E1	BASELINE (2007) NOISE CONTOURS w/GENERALIZED FUTURE LAND USE	E.5
Figure E2	FUTURE (2027) NOISE CONTOURS w/GENERALIZED FUTURE LAND USE	E.6
Figure E3	LAND USE COMPATIBILITY MATRIX	E.8
Figure F1	AIRPORT LAYOUT PLAN EXISTING	F.4
Figure F2	AIRPORT LAYOUT PLAN FUTURE	F.5
Figure F3	AIRPORT AIRSPACE PLAN – CONICAL SURFACE	F.8
Figure F4	AIRPORT AIRSPACE PLAN – SOUTHEAST EXTENDED APPROACH	F.9
Figure F5	AIRPORT AIRSPACE PLAN – NORTHWEST EXTENDED APPROACH	F.10
Figure F6	AIRPORT AIRSPACE PLAN – FUTURE RUNWAY 11/29 EXTENDED APPROACH PROFILES	F.11
Figure F7	AIRPORT AIRSPACE PLAN – POST-PLANNING RUNWAY 11L/29R EXTENDED APPROACH PROFILES	F.12
Figure F8	AIRPORT AIRSPACE PLAN – EXISTING AND FUTURE RUNWAY 4/22 EXTENDED APPROACH PROFILES	F.13
Figure F9	INNER PORTION OF THE APPROACH SURFACE DRAWING – EXISTING RUNWAY 11 (PLAN AND PROFILE VIEWS)	F.15
Figure F10	INNER PORTION OF THE APPROACH SURFACE DRAWING – EXISTING RUNWAY 29 (PLAN AND PROFILE VIEWS)	F.16
Figure F11	INNER PORTION OF THE APPROACH SURFACE DRAWING – EXISTING AND FUTURE RUNWAY 4 (PLAN AND PROFILE VIEWS)	F.17
Figure F12	INNER PORTION OF THE APPROACH SURFACE DRAWING – EXISTING AND FUTURE RUNWAY 22 (PLAN AND PROFILE VIEWS)	F.18
Figure F13	INNER PORTION OF THE APPROACH SURFACE DRAWING – FUTURE RUNWAY 11 (PLAN AND PROFILE VIEWS)	F.19

Figure F14	INNER PORTION OF THE APPROACH SURFACE DRAWING – FUTURE RUNWAY 29 (PLAN AND PROFILE VIEWS)	F.20
Figure F15	INNER PORTION OF THE APPROACH SURFACE DRAWING – POST PLANNING RUNWAY 11L (PLAN AND PROFILE VIEWS)	F.21
Figure F16	INNER PORTION OF THE APPROACH SURFACE DRAWING – POST PLANNING RUNWAY 29R (PLAN AND PROFILE VIEWS)	F.22
Figure F17	DEPARTURE SURFACE DRAWING – EXISTING AND FUTURE RUNWAY 11/29	F.24
Figure F18	DEPARTURE SURFACE DRAWING – POST PLANNING RUNWAY 11L/29R	F.25
Figure F19	TERMINAL AREA PLAN 1	F.27
Figure F20	TERMINAL AREA PLAN 2	F.28
Figure F21	TERMINAL AREA PLAN 3	F.29
Figure F22	LAND USE PLAN	F.30
Figure F23	AIRPORT PROPERTY MAP	F.31
Figure G1	PHASE I	G.7
Figure G2	PHASE II	G.8
Figure G3	PHASE III	G.9