

7.0 Financial Implementation

7.0 Introduction

This chapter identifies the 20-year development plan for The Ohio State University Airport (KOSU), incorporating the facility requirements and preferred alternatives depicted on the Airport Layout Plan (ALP) drawings. The ALP development plan provides year-to-year guidance for continued maintenance, upgrade, and expansion of Airport capital facilities and equipment, as demand warrants and as a reasonable expectation based on federal and state funding programs, and local Airport finances.

7.1 ALP Implementation Methodology

The ALP project phasing and cost estimates have been identified for the Short Term (0-5 Years), Intermediate Term (6-20 Years), and Long Term (20+ Years) planning phases. The project cost estimates reflect 2019 dollar amounts and are not adjusted for inflation. Overall, the cost estimates are developed for planning-level purposes, while attempting to take into account administrative, design implementation, construction, and other foreseeable contingencies. It should be noted that the development plan does not represent an obligation of local Airport funds, nor does it commit federal or state funding until demonstrating proper project justification and environmental clearance. In addition, projects may require other state and local pre-construction coordination.

7.2 ALP Capital Development Programs

The following describes the Airport development plans associated with the KOSU Airport Playout Plan and the FAA's Airport Improvement Program:

- **FAA Airport Capital Improvement Program (ACIP):** The FAA Airport Capital Improvement Program (ACIP) is a 6-year improvement schedule, submitted annually to FAA in January/February for federal and state programming consideration, and includes only eligible projects allowable under the grant programs. The CIP includes a year-by-year project phasing schedule, including project descriptions, cost estimates, and anticipated funding break-down. In addition, the ACIP separately accounts for the project planning, design and construction phases, as a reasonable implementation sequence necessary to fund and build multi-year projects.
- **ALP Development Plan:** The ALP Development Plan is a 20-year improvement schedule, more inclusive than the FAA ACIP, with both eligible and non-eligible projects. This plan focuses largely on the capital projects necessary to implement ALP Update facility recommendations, which does not capture all of the routine operating and preventative maintenance projects. It should be noted that all the Airport's FAA ACIP projects have been included in the ALP Development Plan.

Exhibit 7.3-1 at the end of this chapter lists the 20-year ALP Development Plan projects, including phased timeframe, project description, project source, and the estimated total project costs. Overall, the ALP Development Plan projects are phased to facilitate systematic development over the course of the next 20 years determined as a matter of: 1) airport safety and standard requirements, 2) facility conditions and deficiencies, 3) upgrades and expansion to meet user demand, and 4) consistency with funding resources and local programming schedules. Also, the assignment of projects has been developed in close coordination with the Airport Sponsor, Federal Aviation Administration (FAA), and ODOT-Office of Aviation.

7.3 ALP Capital Development Funding Sources

7.3.1 Federal Aviation Administration (FAA)

Federal Aviation Administration (FAA) grants are funded through the Aviation Trust Fund as collected through user-generated taxes (airline passenger tax, aircraft parts and fuel) and distributed in accordance with the FAA Airport Improvement Program (AIP) by entitlement formula or discretionary provisions. FAA Order 5100.38D, "Airport Improvement Program Handbook" provides guidance and sets forth policies and procedures for the administration of the Airport Improvement Program (AIP) by the Federal Aviation Administration (FAA). Statutory provisions require that AIP funds be apportioned by formula each year to specific airports or types of airports. While the AIP has been reauthorized multiple times since established by the Airport and Airway Improvement Act of 1982, including the funding adjustments and appropriation formulas to reflect national priorities, the basic AIP program has essentially remained the same.

Described below are three FAA funding sources available to KOSU:

- **FAA Entitlement** – General aviation airports (and commercial service airports with fewer than 10,000 commercial enplanements) receive non-primary entitlements (NPE) up to \$150,000 per year. FAA entitlement funds provide for 90 percent of the cost of eligible projects with a 5 percent local and 5 percent state match required. These funds can be dedicated for AIP-eligible projects and can be carried over and accumulate up to four years. Future non-primary entitlements are anticipated to continue at the current levels for general aviation airports under future aviation FAA re-authorization acts.
- **FAA Discretionary** – Any remaining AIP funds at the national level not mandated by set-asides or assigned to entitlements are designated as discretionary funds and may be used for funding eligible FAA projects. Discretionary funds are airport and project specific and based on the national priority system. Eligible discretionary projects are typically those that enhance airport capacity, address noise, enhance safety and security, or are directed to certain national project priorities. The more expensive projects in the Airport Development Program and ACIP, such as airfield pavement rehabilitation, are expected to be funded from FAA discretionary funds, which vary from year-to-year.
- **FAA Apportionment** – FAA funds made are available to states under various conditions, as apportioned based on an area/population formula within the 50 states. FAA uses the National Priority Rating system for the distribution of AIP grant funds, which is a value generated equation that takes into consideration the airport and project role in accordance with FAA goals and objectives. The following is the FAA AIP point system assigned for project purpose categories:
 1. Safety/Security = 10 points
 2. Statutory Emphasis Programs = 9 points
 3. Planning = 8 points
 4. Reconstruction = 8 points
 5. Environment = 8 points
 6. Capacity = 7 points
 7. Standards = 6 points
 8. Other = 4 points

7.3.2 State of Ohio (ODOT)

Ohio has two airport grant programs administered by the ODOT Office of Aviation, which are briefly described below.

Ohio Airport Direct Grant Program: Grants issued under this program may generally be used by sponsors of publicly owned public use airports that do not receive FAA Air Carrier Enplanement Funds or Air Cargo Entitlements. Eligible projects include:

1. Obstruction removal
2. Pavement resurfacing/rehab – runways, taxiways and aprons
3. Runway and taxiway marking
4. Lighting rehab, including: Runway and taxiway lighting, Approach Lighting Systems, Runway End Identifier Lights, airport beacons, PAPI's/VASI's, and AWOS

Projects other than those mentioned above are considered on a case-by-case basis. ODOT will provide up to 95 percent of the eligible costs for construction and engineering. The Airport Sponsor is responsible for 100 percent of non-eligible construction costs and also for all costs associated with preliminary engineering, environmental studies, permits and documents, right of way and utilities. The local match for construction is required to be cash. In-kind contributions cannot be accepted as part of the local share.

Matching Grant Program: The Matching Grant Program pays half of the non-federal share of all FAA funded projects at publicly owned airports in the State that do not receive FAA passenger or air cargo entitlements. Final cost breakout for eligible projects is 90% FAA, 5% State and 5% local.

7.3.3 Airport Local Funding

Financial resources regularly available to the Airport Sponsor include revenue-generating enterprises from the landing field, terminal building, hangars and ramps, commercial leased properties, public parking, and on-Airport farmed properties. Other possible sources of local funding include:

- Third party private financing/leasing
- Bank lending/borrowing
- Bonding
- Special interest funding/grant programs
- Special district and real estate tax financing programs (TIF)
- Taxation

The Airport's operating revenues are predominantly generated by tenant rents and user fees, which in turn, is the principle source of the Airport Sponsor's funds used to operate the airport and finance or match improvement grants. Borrowing may also occur, but ultimately it must be repaid with operating earnings. The Airport Sponsor currently has no outstanding bond issues or loans.

Airport projects associated with the airfield and terminal areas are typically eligible for funding with FAA and ODOT grants, as supported by local matching funds as described in the section above. Local funding of non-eligible projects typically requires a 100 percent commitment of local Airport Sponsor dollars and can become a significant portion of total development costs. Non-eligible projects may also involve funding or financial participation from other government entities or private sources.

7.4 Future Development Considerations

Regular coordination with the FAA and ODOT is important to facilitate project formulation and coordinate funding in a timely manner. It is also important that the development plan receive favorable community support, and agreement amongst Airport tenants and major users. While the figures contained 20-year Airport Development Plan present a reasonable initiative to implement the ALP Update recommendations, they should only be used as a planning and programming tool. All projects should be re-assessed and updated annually to include necessary justification, adjustments in project sequencing, multi-year phasing considerations, cost opinions, enabling requirements, and funding participation.

The short-term 0 to 5-year projects should be reviewed, in particular, for phasing and engineering-level cost estimates as each project becomes more defined. The longer-term 6 to 20-year projects should be re-examined for proper project sequencing, as these projects may change based on demand or unpredictable events. The Airport Sponsor should monitor and evaluate which long-term projects are best to accommodate tenant demands, accommodate growth, and meet federal and state requirements. In addition, it is essential that improvements be scheduled and sequenced in a manner which does not unnecessarily burden or prevent Airport operations and phased in a manner which allows runway and navigational aid improvements to be implemented in a coordinated fashion.

The following are typical Airport Sponsor responsibilities for capital project improvements, particularly when FAA Airport Improvement Program (AIP) funding or environmental National Environmental Protection Agency (NEPA) documentation is required:

- Update the FAA Airport Capital Improvement Program (ACIP) and financial documentation on a continual basis. In addition to the typical project procurement and execution responsibilities that most Airports address on a wide variety of non-airport projects, additional consideration of FAA requirements is needed for the projects listed in the ACIP.
- Verify justification supporting the project, and request FAA/State participation for projects using AIP funding. Project implementation must be demand driven to support justification for federal and state funding.
- Assure completion of the necessary environmental processing through agency coordination
- Prepare and submit grant applications
- Prepare and issue a Request for Qualification and selecting the consultant/engineer for the project planning, design, or environmental analysis, as applicable
- Prepare and issue a Request for Proposals and selection for project construction, management, and related construction services; these services may be provided or assisted by the design engineer
- Provide project administration including FAA grant maintenance and close out

Exhibit 7.3-1: Airport Capital Improvement Program

CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2019 to FY-2032
 The Ohio State University Airport - Don Scott Field
 Columbus, Ohio



Short-term (0-5yrs)
Intermed. (6-10yrs)
Long-term (11-20yrs)

Item #	Description	Fiscal Year	Total Cost	FAA AIP	State AIP Match	Local (OSU)	State Non-AIP	Remarks/Item Justification	Implementation Trigger	Predecessor	Estimated FAA Priority Rating
SHORT TERM (0-5 Years)											
1A	RSA RW 9R-27L	2019	\$77,000	-	-	\$7,700	\$69,300	Non-compliance grading	Regulations	N/A	97
1B	Acquire Land Interest - ONG Land/Hangar	2019	\$3,000,000	\$2,715,000	\$142,500	\$142,500	-	Reimbursement - Control airfield access, eliminate through-the-fence	Regulations	N/A	41
2A	Part 139 Equipment - 2020	2020	\$550,000	\$510,000	\$20,000	\$20,000	-	Snow Removal Equipment/Landscaping Equipment	Regulations/End of Life	N/A	48
2B	Environmental Assessment - Runway Extension	2020	\$830,000	\$747,000	\$41,500	\$41,500	-	EA for RW 9L-27R Extension (including Noise Contours for existing and future [both with and without project], wetland and archeological reconnaissance, jurisdictional determination, mitigation, and public involvement program)	Regulations	N/A	68
2C	Building Paint	2020	\$300,000	-	-	\$300,000	-	Hgrs. 4, 7 & 9	Maintenance Need	N/A	
2D	Self-Fueling System	2020	\$320,000	-	-	\$320,000	-	Improve aircraft services	User Need	N/A	20
3A	Island in Front of Taxiway C	2021	\$70,000	\$70,000	-	-	-	Design and install island in front to taxiway C to meet current design standards	Regulations	N/A	47
3B	Rotating Beacon Relocation	2021	\$50,000	\$50,000	-	-	-	Relocate beacon from existing location - new location TBD	Safety	N/A	89
3C	Runway Pavement Removal	2021	\$800,000	\$723,000	\$38,500	\$38,500	-	Runway 14-32 Pavement Removal	Safety	N/A	?
3D	Generator	2021	\$110,000	-	-	\$110,000	-	Airport Maint/Fuel Farm (200 kW)	User Need	N/A	20
4A	Relocate T-Hangar Taxiway	2022	\$500,000	\$465,000	\$17,500	\$17,500	-	Relocate t-hangar taxiway to offset connection to taxiway D	Regulations	N/A	50
4B	Vehicle Parking Terminal Area	2022	\$320,000	\$288,000	\$16,000	\$16,000	-	Additional vehicle parking adjacent to terminal area	Tenant/User Need	N/A	19
4C	Academic Maintenance Hangar	2022	\$8,800,000	-	-	\$8,800,000	-	Design and construct academic maintenance hangar (26,000 SF) and Academic Center (11,400 SF) with vehicle parking (45 spaces)	Student Need	N/A	26
4D	Part 139 Equipment - 2022	2022	\$935,000	\$841,500	\$46,750	\$46,750	-	ARFF Truck	Regulations/End of Life	N/A	50
5A	Deicing Facility - ADG II	2023	\$630,000	\$582,000	\$24,000	\$24,000	-	Design and construct deicing facility adjacent to corporate airpark hangars	Tenant/User Need	N/A	41
5B	Airport SRE Building	2023	\$2,600,000	\$2,340,000	\$130,000	\$130,000	-	New SRE Building (10,000 SF)	Maintenance Need	N/A	41
5C	Vehicle Purchase	2023	\$44,000	-	-	\$44,000	-	Mx SUV	Maintenance Need	N/A	43
6A	Relocate Access Road to ATC Tower	2024	\$120,000	\$120,000	-	-	-	Relocate access road to ATC tower to facilitate space for new T-hangars	Tenant/User Need	N/A	19
6B	Reconstruct Parking Lot Near Control Tower	2024	\$270,000	\$246,000	\$12,000	\$12,000	-	Reconstruct parking lot near control tower to accommodate 44 spaces	Tenant/User Need	6A	19
6C	Design and Construct new T-Hangars and Row Hangar	2024	\$5,000,000	-	-	\$5,000,000	-	Construct 49 new T-hangars (19 relocated units and 30 new units)	Tenant/User Need	N/A	61
7A	Part 139 Equipment - 2025	2025	\$715,000	\$658,500	\$28,250	\$28,250	-	Snow Removal Equipment - Runway Sweeper	Regulations/End of Life	N/A	48
7B	OSU Flight School Hangar and Apron	2025	\$8,700,000	\$1,375,000	-	\$7,325,000	-	Design and construct 30,000SF hangar with 37 tie downs	Student Need	N/A	34
7C	Transient Corporate Hangar	2025	\$4,000,000	\$4,000,000	-	-	-	Design and construct transient hangar (18,000SF) near terminal core	User Need	N/A	34
8A	Crosswind Runway Closure - Pavement Removal	2026	\$1,100,000	\$1,005,000	\$47,500	\$47,500	-	Runway 5-23 Pavement Removal	Safety	N/A	97
8B	RW 9L-27R Extension Project (Design)	2026	\$484,000	\$435,600	\$24,200	\$24,200	-	R/W 9L-27R extension- 9L extend by 1700 ft and 27R by 1306; T/W E, F, G, H to extend to runway ends	User Need	2B	56
Total			\$40,325,000	\$17,171,600	\$588,700	\$22,495,400	\$69,300				
INTERMEDIATE TERM (6-10 Years)											
9A	RW 9L-27R Extension Project (Construction)	2027	\$16,100,000	\$14,505,000	\$797,500	\$797,500	-	RW 9L-27R extension- 9L extend by 1700 ft and 27R by 1306; T/W E, F, G, H to extend to runway ends	User Need	8B	56
9B	Taxiway F Relocation	2027	\$3,200,000	\$2,880,000	\$160,000	\$160,000	-	Design and construct taxiway F relocation	Regulations	9A	50
9C	Perimeter Road	2027	\$700,000	\$630,000	\$35,000	\$35,000	-	Complete perimeter road around R/W 9L-27R extension	Safety	N/A	19
9D	Compass Calibration Pad	2027	\$210,000	\$189,000	\$10,500	\$10,500	-	Construct compass calibration pad off new taxiway	User Need	9A	25
10A	Apron Expansion	2028	\$2,000,000	\$1,815,000	\$92,500	\$92,500	-	West Apron Expansion	User Need	8A	47
10B	Noise Study	2028	\$300,000	\$270,000	\$15,000	\$15,000	-	Update 2009 Study	Regulations	N/A	63
10C	Corporate Airpark Taxiway Infrastructure	2028	\$22,400,000	\$20,160,000	\$1,120,000	\$1,120,000	-	Design and construct additional taxiway infrastructure to access corporate airpark hangars	Tenant Need	N/A	46
11A	Pavement Removal - Taxiway C	2029	\$630,000	\$630,000	-	-	-	Closure or removal of Taxiway C	Safety	9A	92
11B	Part 139 Equipment - 2029	2029	\$30,000	-	-	\$30,000	-	Pavement Paint Removal System	Maintenance	N/A	47
Total			\$45,570,000	\$41,079,000	\$2,230,500	\$2,260,500	\$0				
LONG TERM (11-20 Years)											
12A	Pavement Overlay	2030	\$2,400,000	\$2,175,000	\$112,500	\$112,500	-	TW A, D; Main Ramp	Maintenance/PCI	N/A	68/46
12B	Pavement Overlay	2030	\$2,100,000	\$2,100,000	-	-	-	R/W 9R-27L	Maintenance/PCI	N/A	72
12C	Vehicle Purchase	2030	\$44,000	-	-	\$44,000	-	Mx Pick-up Truck	Maintenance/End of Life	N/A	47
13A	Academic Research Center	2031	\$19,400,000	-	-	\$19,400,000	-	Design and construct Academic Research Center - 60,000SF	Student Need	8A	58
13B	Indoor Drone Flight Facility	2031	\$3,300,000	\$150,000	-	\$3,150,000	-	Design and construct Indoor Drone Flight Facility - 10,000SF	Student Need	8A	58
13C	Part 139 Equipment - 2031	2031	\$30,000	-	-	\$30,000	-	Pavement Paint Removal System	Maintenance	N/A	47
14A	Research Space and Hangar	2032	\$10,230,000	-	-	\$10,230,000	-	Design and construct Research Space and Hangar - 60,000SF	Student Need	8A	58
14B	Vertical Takeoff Landing Pad	2032	\$200,000	\$195,000	\$2,500	\$2,500	-	Design and construct VTOL - 10,000SF	User Need	8A	50
14C	Part 139 Equipment - 2032	2032	\$30,000	-	-	\$30,000	-	Pavement Paint Removal System	Maintenance	N/A	47
Total			\$37,734,000	\$4,620,000	\$115,000	\$32,999,000	\$0				
TOTAL			\$123,629,000	\$62,870,600	\$2,934,200	\$57,754,900	\$69,300				