Chapter Six:
CAPITAL IMPROVEMENT PROGRAM

The recommended master plan concept presented in the previous chapter outlined airside and landside improvements for Scottsdale Airport (SDL) that provide a plan to preserve and develop the airport to meet future aviation demands. Using the recommended concept (Exhibit 5A) as a guide, this chapter provides a description and overall cost for each project identified in the 20-year capital improvement program (CIP) and development schedule. The program has been evaluated from a variety of perspectives and represents a comparative analysis of basic budget factors, demand, and priority assignments.

The presentation of the capital program is organized into two sections. First, the airport's CIP and associated cost estimates are presented in narrative and graphic form. The CIP has been developed following Federal Aviation Administration (FAA) guidelines for master plans and primarily identifies those projects that are likely eligible for FAA and Arizona Department of Transportation (ADOT) Aeronautics Group grant funding. Second, capital improvement funding sources on the federal, state, and local levels are identified and discussed.

AIRPORT CAPITAL IMPROVEMENT PROGRAM

With the recommended concept and specific needs and improvements for the airport established, the next step is to determine a realistic schedule for project implementation and the associated costs for the plan. The capital program considers the interrelationships among the projects to determine an appropriate sequence of projects while remaining within reasonable fiscal constraints.

The CIP is programmed by planning horizons and has been developed to cover the short- (years 0–5), intermediate- (years 6–10), and long-term (years 11–20+) planning horizons. By using planning horizons instead of specific years, the City of Scottsdale will have greater flexibility to adjust capital needs as demand dictates. **Table 6A** summarizes the key aviation demand milestones projected at SDL for each of the three planning horizons.

A key aspect of this master plan is the use of demand-based planning milestones. The short-term planning horizon contains items of highest need and/or priority, many of which have been previously defined by airport management. As short-term horizon activity levels are reached, it will be time to program for the intermediate term based on the next activity milestones. Similarly, when the intermediate-term milestones are reached, it will be time to program for the long-term activity milestones. A demand-based master plan does not specifically require the implementation of any of the demand-based improvements. Instead, it is envisioned that implementation of any improvements would be examined against the demand levels prior to implementation. As such, the master plan establishes a plan for the use of airport facilities consistent with the potential aviation needs and capital needs required to support each use. Individual projects in the plan are not implemented until the need is demonstrated and the projects are approved for funding.

TABLE 6A: Aviation Demand Planning Horizons

Aviation Demand Category	Parameter	Base Year (2024)	Short-Term Forecast (Years 1–5)	Intermediate-Term Forecast (Years 6–10)	Long-Term Forecast (Years 11–20)
Annual Operations	Commercial Operations: Air Taxi	66,178	80,903	98,906	147,818
Annual Operations	**Total Commercial Operations:**	**66,178**	**80,903**	**98,906**	**147,818**
Annual Operations	General Aviation Operations: Itinerant	64,608	70,812	77,019	89,636
Annual Operations	General Aviation Operations: Local	35,478	39,267	43,460	53,238
Annual Operations	**Total General Aviation Operations:**	**100,086**	**110,079**	**120,479**	**142,874**
Annual Operations	Military Operations: Itinerant	320	365	365	365
Annual Operations	Military Operations: Local	4	2	2	2
Annual Operations	**Total Military Operations:**	**324**	**367**	**367**	**367**
Annual Operations	**Total Itinerant Operations:**	**131,106**	**152,080**	**176,290**	**237,819**
Annual Operations	**Total Local Operations:**	**35,482**	**39,269**	**43,462**	**53,240**
Annual Operations	**Total Annual Operations:**	**166,588**	**191,349**	**219,752**	**291,059**
Enplanements	Charter Enplanements	43,765	92,243	140,072	236,870
Based Aircraft	Single-Engine Piston	115	125	142	167
Based Aircraft	Multi-Engine Piston	10	10	10	10
Based Aircraft	Turboprop	11	18	24	35
Based Aircraft	Jet	157	177	191	225
Based Aircraft	Helicopter	40	35	30	25
Based Aircraft	**Total Based Aircraft:**	**333**	**365**	**397**	**462**

Table Source: Coffman Associates Analysis

Because a master plan is a conceptual document, implementation of the capital projects should only be undertaken after further refinement of their design and costs through architectural or engineering analyses. Moreover, a project may require additional infrastructure improvements (e.g., drainage improvements, extension of utilities, etc.) that may increase the estimated cost of the project or increase the timeline for completion.

Once a list of necessary projects was identified and refined, project-specific cost estimates were prepared. These estimates include design, construction administration, and contingency costs that may arise on each project. **Capital costs presented here should be viewed only as order-of-magnitude estimates that are subject to further refinement during engineering/architectural design**; nevertheless, they are considered sufficient for planning purposes. Cost estimates for each development project in the CIP are based on present-day construction, design, and administration costs. Adjustments will need to be applied over time to account for inflation and changes in construction and capital equipment costs. Cost estimates for these projects were provided by Mead & Hunt, which is providing engineering support for the master plan and is familiar with SDL, having been involved with the design and construction of capital projects on the airfield. Cost estimates for the development projects in the CIP are in current U.S. dollars.

Exhibit 6A presents the proposed 20-year CIP for SDL. It should be noted that the proposed CIP is a point-in-time analysis that will change annually based on actual demand and changing needs. An estimate of grant (FAA and/or ADOT) funding eligibility has been included, although actual funding is not guaranteed. For a project that would be eligible for federal funding, Airport Improvement Program (AIP) reauthorization provides up to 91.06 percent of the total project cost for SDL. The remaining amount (8.94 percent) would be equally shared (4.47 percent each) between ADOT and the City of Scottsdale. This eligibility breakdown is based on the airport's classification, in addition to the amount of public land within the State of Arizona. Other projects, such as the implementation of certain landside facilities

(parking structures), are typically not eligible for AIP grants (outside of non-primary entitlements) or would rank low on the priority scale. As a result, these projects should be planned for airport sponsor funding or funding through specific ADOT programs.

As detailed in the CIP, most projects listed are eligible for federal and state funding. Obviously, demand and justification for these projects must be provided prior to a grant being issued by the FAA and/or ADOT. It should be noted that certain projects listed in the CIP, while eligible for federal and state funding, are designated for state funding assistance only per the airport's current CIP on file with the FAA and ADOT.

The FAA utilizes a national priority rating system to help objectively evaluate potential airport projects. Projects are weighted toward safety, infrastructure preservation, meeting design standards, and capacity enhancement. The FAA may participate in the highest-priority projects before considering lower-priority projects, even if a lower-priority project is considered a more urgent need by the local sponsor; nevertheless, such a project should remain a priority and funding support should continue to be requested in subsequent years.

Some projects identified in the CIP will require environmental documentation. The level of documentation necessary for each project must be determined in consultation with the FAA and ADOT. There are three major levels of environmental review to be considered under the *National Environmental Policy Act* (NEPA): categorical exclusions (CatEx), environmental assessments (EA), and environmental impact statements (EIS). Each level requires more time to complete and more detailed information. Guidance on what level of documentation is required for a specific project is provided in FAA Order 1050.1G, *FAA National Environmental Policy Act (NEPA) Implementing Procedures*. The environmental overview presented in Chapter Five addresses NEPA and provides an evaluation of various environmental categories for SDL.

The following sections will describe in greater detail the projects identified for the airport over the next 20 years. The projects are grouped based on a detailed evaluation of existing and projected demand, safety, rehabilitation needs, and local priority. While the CIP identifies the priority rankings of the projects, the list should be evaluated and revised on a regular basis. It is also important to note that certain projects, while listed separately for purposes of evaluation in this study, could be combined with other projects during the time of construction/implementation.

LEASED LAND AND PRIVATE DEVELOPMENT

Much of the land at the airport is under long-term lease. The preferred development plan (previously shown on Exhibit 5A) shows potential hangar development on both leased and unleased parcels. The hangars shown on the leased land are situated to maximize development land at the airport; however, because the land is already under lease, only the leaseholder has the opportunity to develop hangars. When the leases expire, airport management may wish to modify the leaseholds to reclaim undeveloped land and make it available to other developers. Common airport leases include the hangar footprint, vehicle parking areas, and no more than a 50-foot perimeter, including on the apron side. Organizing leaseholds in this manner would bring apron areas back into public usage, which would also make them eligible for FAA grant funding for rehabilitation.

All future hangar development at the airport is anticipated to be undertaken by the private sector; therefore, the CIP does not include hangar development. At an airport where there is demand for hangars, it is common for the airport to provide a land lease with a stipulation that a hangar must be built within a certain timeframe. Furthermore, the airport will receive monthly revenue for the land lease.

NATIONAL PRIORITY RATING (NPR)

The FAA evaluates each project an airport identifies on its CIP through a combination of quantitative and qualitative methods to establish and justify AIP expenditures. The FAA utilizes the National Priority Rating (NPR) formula to generate a value based on an equation that takes the project and the airport type into consideration. The NPR formula generally categorizes airport development in accordance with FAA goals and objectives. The value returned provides insight regarding the likely eligibility for the project to receive FAA discretionary funding. The ranking system value ranges from 0 to 100. The threshold for eligibility fluctuates from year to year, but values above 55 have generally been eligible for funding. Each project identified in the CIP has an associated NPR value, as developed by the consultant; however, only the FAA can definitively make an eligibility determination.

SHORT-TERM PROGRAM

The short-term projects are those anticipated to be needed during the first five years of the 20-year CIP. The projects listed are subject to change based on federal and state funding priorities. Projects related to safety and maintenance generally have the highest priority. This applies to many of the projects identified in the short-term CIP that are associated with maintaining/rehabilitating existing airfield pavements and improving airfield safety. The short-term program considers 11 projects for the planning period, as presented on **Exhibit 6A** and depicted on **Exhibit 6B**. The following provides a detailed breakdown of each project.

Project #1: Construct Exit Taxiways B9 and B15

- *Description*: This project will construct new exit taxiways from the runway to be designated as Taxiways B9 and B15. Taxiway B9 is planned as an angled taxiway and will mirror Taxiway A9. Taxiway B15 is a 90-degree-angle taxiway that will serve as an exit taxiway, as well as a bypass taxiway for departures. This project includes the design of future Taxiway B2. This project encompasses approximately 5,000 square yards (sy) of pavement area.
- *Cost Estimate*: $2,350,000
- *Funding Breakdown*: FAA – 95.0 percent / ADOT – 2.5 percent / Airport Sponsor – 2.5 percent

Project #2: Construct Taxiway B2

- *Description*: This is the construction phase for Taxiway B2. This project includes taxiway shoulders, medium intensity taxiway lighting (MITL), and guidance signs. This taxiway is at a 90-degree angle to the runway. It will serve as an exit taxiway for arrivals and a bypass taxiway for departures. This project encompasses approximately 2,500 sy of pavement area. This project is planned to be primarily funded through the *Infrastructure Investment and Jobs Act* (IIJA).
- *Cost Estimate*: $960,000
- *Funding Breakdown*: FAA – 95.0 percent / ADOT – 2.5 percent / Airport Sponsor – 2.5 percent

Project #3: Rehabilitate Main Apron (Atlantic)

- *Description*: This is a rehabilitation project for a portion of the main terminal apron fronting the Atlantic Aviation fixed base operator (FBO). The current pavement condition index (PCI) rating for this portion of the apron is 62, which is an indication of poor condition. This project is planned as a full-depth reconstruction and encompasses approximately 28,715 sy of pavement area.
- *Cost Estimate:* $3,780,000
- *Funding Breakdown:* FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #4: Rehabilitate North Apron (Atlantic)

- *Description*: This is a rehabilitation project for the northern public apron fronting the Atlantic Aviation FBO. The current PCI rating for this portion of the apron is 73, which is an indication of poor condition. This project is planned as a full-depth reconstruction and encompasses approximately 32,400 sy of pavement area.
- *Cost Estimate*: $3,500,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #5: Runway Seal Coat and Remarking

- *Description*: This is a seal-coat project of the runway followed by remarking the runway striping.
- *Cost Estimate*: $1,060,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #6: Replacement ARFF Building

- *Description*: The existing ARFF building at the airport is more than 20 years old and needs replacement. Firefighting services are not eligible for FAA funding at general aviation airports. Therefore, this project is planned as a locally funded project.
- *Cost Estimate*: $14,000,000
- *Funding Breakdown*: Airport Sponsor – 100 percent

Project #7: Airport Drainage Master Plan

- *Description*: This is a planning study of the drainage infrastructure for the entire airport. Information from this study will be used when planning various rehabilitation projects. This project is planned to be an ADOT-funded project at 90 percent with the airport providing a 10 percent match.
- *Cost Estimate*: $425,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #8: Rehabilitate South Apron (Atlantic)

- *Description*: This is a rehabilitation project for the southern public apron fronting the Atlantic Aviation FBO. The current PCI rating for this portion of the apron is 70, which is an indication of poor condition. This project is planned as a full-depth reconstruction and encompasses approximately 32,295 SY of pavement area.
- *Cost Estimate*: $3,990,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #9: Taxiway B Electrical Improvements

- *Description*: This project will upgrade all electrical wiring and lights along Taxiway B and its connectors.
- *Cost Estimate*: $2,100,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #10: Rehabilitate Taxiway A (South Portion) and Connector Taxiways A1–A10

- *Description*: This project is a full-depth reconstruction of Taxiway A extending between Taxiway A1 and A10. It includes the portion of the connecting taxilanes up to the hold lines. This project encompasses approximately 40,675 sy of pavement area.
- *Cost Estimate*: $7,200,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #11: Transient Apron Rehabilitation

- *Description*: This is a rehabilitation project for the public transient apron fronting the Aviation Business Center. The current PCI rating for this portion of the apron is 86, which is an indication of good condition; however, in a few years, the pavement will have deteriorated. This project includes pavement removal, base reconditioning, new asphalt paving, and pavement markings and encompasses approximately 26,225 sy of pavement area.
- *Cost Estimate*: $3,100,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #12: Kilo Apron Reconstruction

- *Description*: This project is for rehabilitation of portions of the Kilo apron, excluding those fronting the box hangars. Portions of the Kilo apron have a PCI as low as 63. This project encompasses approximately 35,800 sy of pavement area.
- *Cost Estimate*: $3,420,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #13: Eastside Perimeter Security Fencing

- *Description*: This project will install approximately 2,700 linear feet of new perimeter fencing on the east side of the airport. This fencing will replace dilapidated chain link fencing. This project is currently planned for local funding only.
- *Cost Estimate*: $560,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #14: Rehabilitate Taxiway B – Mill and Overlay

- *Description*: This project is a full-depth reconstruction of Taxiway B, extending the length of the taxiway. It includes the portion of the connecting taxilanes up to the hold lines. This project encompasses approximately 64,460 sy of pavement area.
- *Cost Estimate*: $13,520,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Short-Term Program Summary

The short-term CIP includes projects that enhance the overall safety, efficiency, and maintenance of the airfield. The total investment necessary for the short-term CIP is approximately $60.0 million, as detailed on **Exhibit 6A**. Of the overall short-term CIP total, approximately $42.0 million is eligible for federal funding and $2.0 million is eligible for state funding assistance. The remaining $16.0 million is to be provided through airport sponsor funding outlets.

INTERMEDIATE/LONG-TERM PROGRAM

The intermediate/long-term projects are those that are anticipated to be necessary in years six through 20 of the master plan. These projects are not tied to specific years for implementation; instead, they have been prioritized so that airport management has the flexibility to determine when they need to be pursued based on current conditions. It is not unusual for certain projects to be delayed or advanced based on changing conditions, such as funding availability or changes in the aviation industry. This planning horizon includes 11 projects for the 15-year timeframe, as listed on **Exhibit 6A** and depicted on **Exhibit 6B**. The following section includes a description of each project.

Project #15: Apron Rehabilitation (Jet Aviation)

- *Description*: This is a rehabilitation project for the southern public apron fronting the Jet Aviation FBO. This project is planned as a full-depth reconstruction and encompasses approximately 46,700 sy of pavement area.
- *Cost Estimate*: $4,330,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #16: Relocate Main Apron Connectors

- *Description*: This project will relocate three taxilanes connecting Taxiway A to the main terminal apron. The purpose of relocating these connectors is to eliminate the existing direct access from an apron to the runway geometry. This project encompasses approximately 1,800 sy of new pavement and includes the removal of the three existing connectors.
- *Cost Estimate*: $1,950,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #17: Remove Taxiway A7/Construct Taxiway A6

- *Description*: This project will relocate existing Taxiway A7 between Taxiway A and the runway approximately 100 feet to the south. The purpose of relocating this taxiway is to eliminate the existing direct access from an apron to the runway geometry. It was decided to relocate this taxiway portion, rather than the taxilane between Taxiway A and the apron, due to movement efficiencies on the apron. This project encompasses approximately 1,350 sy of new pavement and the removal of existing Taxiway A7.
- *Cost Estimate*: $2,380,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #18: Rehabilitate Runway and Update Weight-Bearing Capacity

- *Description*: This project will reconstruct Runway 3-21 and update the weight-bearing capacity to accommodate the current critical aircraft. The runway footprint will remain the same as it is today and this project is intended to better accommodate the types of aircraft currently operating at the airport. This project encompasses approximately 91,700 sy of new pavement.
- *Cost Estimate*: $21,000,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #19: Rehabilitate Kilo Box Hangar Apron

- *Description*: This project will rehabilitate that portion of the Kilo apron that fronts the general aviation box hangars. This project encompasses approximately 4,650 sy of pavement.
- *Cost Estimate*: $1,510,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #20: Construct Parking Structure

- *Description*: This project would construct a multi-level public parking garage to be located at the location of the existing public parking surface lot across the street from the Aviation Business Center. As shown, this project would encompass 200 vehicle parking spaces. It is anticipated that a portion of the available parking spaces would be available for tenant lease.
- *Cost Estimate*: $17,250,000
- *Funding Breakdown*: FAA – 0.0 percent / ADOT – 0.0 percent / Airport Sponsor – 100.0 percent

Project #21: Rehabilitate Taxiway A (North Portion)

- *Description*: This project is the reconstruction of Taxiway A from Taxiway 10 to Taxiway A16. This project encompasses approximately 25,600 sy of pavement.
- *Cost Estimate*: $5,850,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #22: Rehabilitate Perimeter Service Road

- *Description*: This project is the rehabilitation of the perimeter service road, which is approximately 14,000 linear feet of roadway.
- *Cost Estimate*: $1,500,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #23: Rehabilitate Taxilanes Leading to the Airpark

- *Description*: This project will reconstruct the taxilanes that lead to the west side airpark parcels. This project covers the taxilanes on airport property leading up to the gates.
- *Cost Estimate*: $840,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #24: Upgrade to PAPI-4

- *Description*: The runway is currently outfitted with PAPI-4L visual approach aids. Given the level of activity by business jets and turboprops, it is more appropriate to have the more sophisticated PAPI-4 system. This project will upgrade the PAPI-2s to PAPI-4s.
- *Cost Estimate*: $400,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Project #25: Airport Master Plan Update

- *Description*: Airport planning should be an on-going and continuous process. Periodically, the primary planning document, the master plan, should be updated based on conditions at the airport and in the industry. FAA recommends updating the master plan at least every 7-10 years.
- *Cost Estimate*: $1,500,000
- *Funding Breakdown*: FAA – 91.06 percent / ADOT – 4.47 percent / Airport Sponsor – 4.47 percent

Intermediate/Long-Term Program Summary

The total costs associated with the intermediate/long-term program are estimated at $58.5 million, as presented on **Exhibit 6A**. Of this total, approximately $37.6 million is eligible for federal funding and $1.8 million is eligible for state funding. The airport sponsor share is projected at $19.1 million.

CAPITAL IMPROVEMENT PROGRAM SUMMARY

The CIP is intended as a road map of improvements to help guide the City of Scottsdale, the FAA, and ADOT. The plan as presented will help accommodate increases in forecasted demand at SDL over the next 20 years and beyond. The sequence of projects may change due to availability of funds or changing priorities based on an annual review by airport management, the FAA, and ADOT; nevertheless, this is a comprehensive list of capital projects the airport should consider in the next 20+ years.

The total CIP proposes approximately $118.5 million in airport development needs. Of this total, approximately $79.6 million could be eligible for federal funding assistance and $3.8 million could be eligible for state funding. The local funding estimate for the proposed CIP is $35.1 million.

CAPITAL IMPROVEMENT FUNDING SOURCES

There are generally four sources of funds used to finance airport development:

- Airport cash flow
- Revenue and general obligation bonds
- Federal/state/local grants
- Passenger facility charges (PFCs), which are reserved for commercial service airports

Access to these sources of financing varies widely among airports. Some large airports maintain substantial cash reserves and the smaller commercial service and general aviation airports often require subsidies from local governments to fund operating expenses and finance modest improvements.

Financing capital improvements at SDL will not rely solely on the financial resources of the City of Scottsdale. Capital improvement funding is available through various grant-in-aid programs on both the federal and state levels. Historically, the airport has received federal and state grants. While more funds could be available some years, the CIP was developed with project phasing to remain realistic and within the range of anticipated grant assistance. The following discussion outlines key sources of funding potentially available for capital improvements at the airport.

FEDERAL GRANTS

Through federal legislation over the years, various grant-in-aid programs have been established to develop and maintain a system of public-use airports across the United States. The purposes of this system and its federally based funding programs are to maintain national defense and promote interstate commerce. The most recent legislation that affects federal funding is the *FAA Reauthorization Act of 2024*, which expires after four years (September 30, 2028), and U.S. Congress must pass appropriations annually. The FAA's Airport Improvement Program (AIP) expires periodically and federal reauthorization is required for it to continue providing financial assistance to airports.

When an airport accepts an FAA grant, the airport sponsor agrees to comply with 39 grant assurances. Grant assurances require the recipient to maintain and operate its airport safely and efficiently and in accordance with specified conditions. The duration of the grant assurances obligation depends on the type of recipient (i.e., airport sponsor, planning agency, noise compatibility project, block grant state, etc.), the useful life of the facility being developed, and other conditions stipulated in the assurances.

Several projects identified in the CIP are eligible for FAA funding through the AIP, which provides entitlement funds to airports partially based on their annual enplaned passengers and pounds of landed cargo weight. Additional AIP funds, designated as discretionary, may also be used for eligible projects based on the FAA's national priority system. Although the AIP has been reauthorized several times and the funding formulas have been periodically revised to reflect changing national priorities, the program has remained essentially the same. Public-use airports that serve civil aviation, like SDL, may receive AIP funding for eligible projects, as described in the FAA's *Airport Improvement Program Handbook.* The airport must fund the remaining project costs using a combination of other funding sources, as discussed in the following sections.

AIRPORT IMPROVEMENT PROGRAM

The *FAA Reauthorization Act of 2024* authorizes the AIP at $4.0 billion for fiscal years 2025 through 2028. Eligible airports, which include those in the *National Plan of Integrated Airport Systems* (NPIAS), such as SDL, can apply for airport improvement grants. Nonprimary general aviation airports, such as SDL, are eligible for $150,000 annually through the AIP.

Funding for AIP-eligible projects is undertaken through a cost-sharing arrangement in which the FAA provides up to 91.06 percent of the cost and the airport sponsor invests the remaining 8.94 percent. (Note that 50 percent of the local match may be eligible for funding from the ADOT Aeronautics Group.) In exchange for this level of funding, the airport sponsor is required to meet various grant assurances, including maintaining the grant-funded improvement for its useful life (usually 20 years). The bill increases the federal share to 95 percent for fiscal years 2025 and 2026 for nonprimary airports, such as SDL.

The source for AIP funds is the Aviation Trust Fund, which was established in 1970 to provide funding for aviation capital investment programs (aviation development, facilities and equipment, and research and development). The Aviation Trust Fund also finances the operation of the FAA. It is funded by user fees, including taxes on airline tickets, aviation fuel, and various aircraft parts.

Apportionment (Entitlement) Funds

The AIP provides funding for eligible projects at airports through an apportionment (entitlement) program. Primary commercial service airports receive a guaranteed minimum level of federal assistance each year based on their enplaned passenger levels and congressional appropriation levels. A primary airport is defined as any commercial service airport enplaning at least 10,000 passengers annually. If the threshold is met, the airport receives $1.3 million annually in entitlement funds. Other entitlement funds are distributed to cargo service airports, states and insular areas (state apportionment), and Alaska airports.

General aviation airports included in the NPIAS can receive up to $150,000 each year in nonprimary entitlement (NPE) funds. These funds can be carried over and combined for up to four years, thereby allowing for completion of more expensive projects.

While SDL is a reliever general aviation airport, not a primary commercial airport, it is experiencing more than 10,000 annual enplanements through charter passengers. In 2024, there were 43,765 charter passenger enplanements.

The FAA Memorandum, Reauthorizing Program Guidance Letter (R-PGL) 25-05, *Funding and Formula Changes*, notes that certain general aviation airports are eligible for full passenger entitlement funding when the airport meets both of the following conditions:

- Received scheduled or unscheduled air service from a large certificated air carrier
- Had more than 10,000 passenger boardings

SDL is eligible for the passenger entitlement funding in lieu of the lower nonprimary entitlement funding. For calendar year 2024, the passenger entitlement funding is $1.3 million to be used on eligible capital projects. **Table 6B** summarizes the future year entitlement funding available based on the enplanement forecast presented in Chapter Two.

The FAA also provides a state apportionment based on a federal formula that takes into account the service area and population. The FAA distributes these funds for projects at various airports throughout the state.

TABLE 6B: Projected Passenger Entitlement Funding

Timeframe	Enplanements	Estimated Funding Available
2024	43,765	$1,300,000
2029	92,243	$1,300,000
2034	140,072	$1,508,374
2044	236,870	$2,011,724

Table Source: FAA Memo R-PGL 2505: Funding and Formula Changes, dated May 12, 2025

Small Airport Fund

If a large-hub or medium-hub commercial service airport chooses to institute a PFC, which is a fee of up to $4.50 on each airline ticket for funding of capital improvement projects, the airport's apportionment is reduced. A portion of the reduced apportionment goes to the small airport fund. The small airport

fund is reserved for small-hub primary commercial service airports, nonhub commercial service airports, reliever airports, and general aviation airports. As a reliever general aviation airport, SDL is eligible for funds from this source.

Discretionary Funds

When airports face major projects that will require funds in excess of the airport's annual entitlements, they may be eligible for additional funds from discretionary apportionments under the AIP. The primary feature of discretionary funds is that they are distributed on a priority basis. The priorities are established by the FAA, utilizing the National Priority Rating system. Under this system, projects are ranked by purpose. Projects ensuring airport safety and security are ranked as the most important priorities, followed by maintaining current infrastructure development, mitigating noise and other environmental impacts, meeting standards, and increasing system capacity.

It is important to note that competition for discretionary funding is not limited to airports in the State of Arizona or those within the FAA Western-Pacific Region. The funds are distributed to all airports in the country and, as such, are more difficult to obtain. High-priority projects often fare favorably, while lower-priority projects may not receive discretionary grants.

Set-Aside Funds

Portions of AIP funds are set-asides designed to achieve specific funding minimums for noise compatibility planning and implementation, select former military airfields (Military Airports Program), and select reliever airports. SDL may qualify as a reliever airport for set-aside funding.

FAA Facilities and Equipment (F&E) Program

The Airway Facilities Division of the FAA administers the Facilities and Equipment (F&E) program. This program provides funding for the installation and maintenance of various navigational aids and equipment of the national airspace system. Under the F&E program, funding is provided for FAA airport traffic control towers (ATCTs), en-route navigational aids, on-airport navigational aids, and approach lighting systems.

While the F&E program still installs and maintains some navigational aids, on-airport facilities at general aviation airports have not been a priority; therefore, airports often request funding assistance for navigational aids through the AIP and maintain the equipment on their own. (Guidance on the eligibility of a project for federal AIP grant funding can be found in FAA Order 5100.38D, *Airport Improvement Program Handbook*.)

INFRASTRUCTURE INVESTMENT AND JOBS ACT (IIJA)

In 2021, the federal *Infrastructure Investment and Jobs Act* was passed. This act provides approximately $20 billion in grants for infrastructure development at U.S. airports for 2022 through 2026. This funding is comprised of three elements:

- $15 billion allotted for airport infrastructure via Airport Infrastructure Grants (AIG)
- $5 billion allotted for airport terminal development via the Airport Terminal Program (ATP)
- $5 billion allotted for air traffic facilities, including sponsor-owned control towers participating in the FAA Contract Tower program, via competitive infrastructure funds (FCT Competitive Grant Program)

SDL is eligible for funding through the IIJA program in the AIG and ATP categories. SDL is not eligible for funding through the FTC Competitive Grand Program because its airport traffic control tower is owned and staffed by the FAA. An additional $5 billion was made available to the FAA's Air Traffic Organization (ATO) for improvements to FAA-owned facilities and equipment.

The federal share for AIG is the same as an AIP grant (91.06 percent with an 8.94 percent local match), while the federal share for ATP grants is 95 percent for nonprimary airports. The same grant assurances that apply to AIP grants also apply to BIL grants. IIJA and AIP grants cannot be combined into a single grant. In total, SDL has had $3,820,000 available for qualifying capital projects through the IIJA.

Table 6C outlines the funding availability for IIJA grants, the deadlines associated with these grants, the amounts allocated to SDL for use on eligible infrastructure projects, and what projects were funded. The airport has capitalized on this funding source each year of eligibility and has a total of $1,136,513 still available to obligate toward capital projects by the end of September 2029.

TABLE 6C: AIG Funding Availability

Fiscal year (FY) funds are first made available:	AIG funds available to SDL	Funds must be obligated (under grant) by:*	Any unobligated funds must be obligated (under grant) in FY:	Project
2022	$759,988**	09/30/2025	2026	Shift or Reconfigure Taxiway
2023	$794,102**	09/30/2026	2027	Reconstruct Apron Lighting, Rehabilitate Taxiway
2024	$698,839**	09/30/2027	2028	Rehabilitate Apron
2025	$430,558**	09/30/2028	2029	Construct Perimeter Fencing
2026	$1,136,513	09/30/2029	2030	To be Determined

*Applications for grants should be submitted by June to meet the September 30 obligation date.
**Actual grant amount

STATE AID TO AIRPORTS

ADOT recognizes the valuable contribution to the state's transportation economy that airports make; therefore, it administers several programs to aid in maintaining airports in the state. The source for state airport improvement funds is the Arizona State Aviation Fund. Taxes levied by the state on aviation fuel, flight property, aircraft registration tax, and registration fees (as well as interest on these funds) are deposited in the Arizona State Aviation Fund. The Arizona State Transportation Board establishes the policies for distribution of these state funds.

AIP Grant Match and Standalone State Grants

Under the State of Arizona's grant program, an airport can receive funding for one half (4.47 percent of the total project cost) of the local share of projects receiving federal AIP funding. The AIP grant match program for an individual airport sponsor is limited to no more than 10 percent of the average revenue in the Arizona State Aviation Fund for a three-year period. The current maximum AIP matching grant is estimated at $3.0 million. SDL is eligible for matching funds from this source.

The state also provides 90 percent funding for certain projects that are typically not eligible for federal AIP funding or have not received federal funding. The highest amount available for a single project fluctuates but is approximately $3.0 million. SDL is eligible for this funding source.

The total amount available from the combination of these programs is no more than the $3.0 million annual maximum.

Pavement Maintenance Program

The airport system in Arizona is a multimillion-dollar investment of public and private funds that must be protected and preserved. State aviation fund dollars are limited and the Arizona State Transportation Board recognizes the need to protect and extend the maximum useful life of the airport system's pavement. The Arizona Pavement Management System (APMS) has been established to assist in the preservation of Arizona airports' system infrastructure.

Public Law 103-305 requires that airports requesting federal AIP funding for pavement rehabilitation or reconstruction have an effective pavement maintenance program system. To this end, the ADOT Aeronautics Group maintains the APMS.

The Arizona APMS uses the U.S. Army Corps of Engineers' Micropaver program as a basis for generating a five-year Arizona Pavement Preservation Program (APPP). The APPP consists of visual inspections of all airport pavements. Evaluations are made of the types and severities of pavement deterioration observed and then entered into a computer program database. PCI values are determined through the visual assessment of pavement conditions in accordance with the most recent FAA AC 150/5380-7, *Pavement Management System*, and range from 0 (failed) to 100 (excellent). Every three years, a complete database update with new visual observations is conducted. Individual airport reports from the update are shared with all participating system airports. ADOT ensures the APMS database is kept current in compliance with FAA requirements.

Every year, ADOT (utilizing the APMS) will identify airport pavement maintenance projects eligible for funding for the upcoming five years. These projects will appear in the state's five-year Airport Development Program. Once a project has been identified and approved for funding by the Arizona State Transportation Board, the airport sponsor may elect to accept a state grant for the project and not participate in the APPP, or the sponsor may sign an Inter-Government Agreement (IGA) with ADOT to participate in the APPP. SDL participates in this program.

LOCAL FUNDING

After consideration has been given to grants, the balance of project costs must be funded through local resources. A goal for any airport is to generate enough revenue to cover all operating and capital expenditures, if possible. There are several local financing options to consider when funding future development at airports, including airport revenues, issuance of a variety of bond types, leasehold financing, implementing a customer facility charge (CFC), pursuing non-aviation development potential, and collecting from special events. These strategies could be used to fund the local matching share or complete a project if grant funding cannot be arranged. The following is a brief description of the most common local funding options.

Airport Revenues

An airport's daily operations are conducted through the collection of various rates and charges. These airport revenues are generated specifically by airport operations. There are restrictions on the use of revenues collected by the airport. All receipts, excluding bond proceeds or related grants and interest, are irrevocably pledged to the punctual payment of operating and maintenance expenses, payment of debt service for as long as bonds remain outstanding, or for additions and improvements to airport facilities.

All airports should establish standard basis rates for various leases. All lease rates should be set to adjust to a standard index, such as the consumer price index (CPI), to ensure fair and equitable rates continue to be charged into the future. Many factors will impact what the standard lease rate should be for a particular facility or ground parcel. For example, ground leases for aviation-related facilities should have a different lease rate than for non-aviation leases. When airports own hangars, a separate facility lease rate should be charged. The lease rate for any individual parcel or hangar can vary due to availability of utilities, condition, location, and other factors; nevertheless, standard lease rates should fall within an acceptable range.

Bonding

Bonding is a common method to finance large capital projects at airports. A bond is an instrument of indebtedness of the bond issuer to the bond holders; a bond is a form of loan or IOU. While bond terms are negotiable, the bond issuer is typically obligated to pay the bond holder interest at regular intervals and/or repay the principal at a later date.

Leasehold Financing

Leasehold financing refers to a private developer or tenant financing improvements under a long-term ground lease. The advantage of this arrangement is that it relieves the airport of the responsibility of having to raise capital funds for such improvements. As an example, an FBO might consider constructing hangars and charging fair market lease rates while paying the airport for a ground lease.

Special Events

Another common revenue-generating option is permitted use of airport property for temporary or single events. For example, some airports host open-house or fly-in events that attracts thousands of spectators from around the region. Airports can also permit portions of their facilities to be utilized for non-aviation special events, such as car shows or video production of commercials. This type of revenue generation must be approved by the FAA.

MASTER PLAN IMPLEMENTATION

To implement the master plan recommendations, it is key to recognize that planning is a continuous process and does not end with approval of this document. The airport should implement measures that allow it to track various demand indicators, such as based aircraft, hangar demand, and operations. The issues on which this master plan is based will remain valid for a number of years. The primary goal is for SDL to best serve the air transportation needs of the region, while achieving economic self-sufficiency.

The CIP and the phasing program presented will change over time. An effort has been made to identify and prioritize all major capital projects that would require FAA and ADOT grant funding; nevertheless, the airport and FAA review the five-year CIP on an annual basis.

The value of this study is that it keeps the issues and objectives at the forefronts of the minds of decision-makers. In addition to adjustments in aviation demand, decisions regarding when to undertake the improvements recommended in this master plan will impact how long the plan remains valid. The format of this plan reduces the need for formal and costly updates by simply adjusting the timing of project implementation. Updates can be made by airport management, thereby improving the plan's effectiveness; nevertheless, airports are typically encouraged to update their master plans every seven to 10 years, or sooner if significant changes occur in the interim.

In summary, the planning process requires the City of Scottsdale to consistently monitor the progress of the airport. The information obtained from continually monitoring activity will provide the data necessary to determine if the development schedule should be accelerated or decelerated.

Project No.	Timeframe	Project Descrption	NPR	Total	Federal Share	State Share	Local Share
SHORT-TERM (Years 1-5)							
1	2026	Construct Exit Taxiways B9 and B15 (5,000 sy), including Choulders, MITL, and Guidance Signs/Design of Taxiway B2	61	$2,350,000	$2,232,500	$58,750	$58,750
2	2026	Construct Exit Taxiway B2 (2.500 sy) including Shoulders, MITL, and Guidance Signs	61	$960,000	$912,000	$24,000	$24,000
3	2027	Rehabilitate Atlantic Main Apron (28,715 sy)	66	$3,780,000	$3,442,068	$168,966	$168,966
4	2027	Rehabilitate Atlantic North Apron (32,400 sy)	66	$3,500,000	$3,187,100	$156,450	$156,450
5	2027	Runway Seal Coat and Remarking (92,000 sy)	76	$1,060,000	$965,236	$47,382	$47,382
6	2027	Construct Replacement ARFF Station	NA	$14,000,000	$0	$0	$14,000,000
7	2028	Airport Drainage Master Plan Update	58	$425,000	$387,005	$18,998	$18,998
8	2028	Rehabilitate Atlantic South Apron (32,295 sy)	66	$3,990,000	$3,633,294	$178,353	$178,353
9	2028	Taxiway B Electrical Improvements	68	$2,100,000	$1,912,260	$93,870	$93,870
10	2029	Rehabilitate (Mill & Overlay) Partial Parallel Taxiway A & Connector Taxiways A1-A10 (40,675 sy)	72	$7,200,000	$6,556,320	$321,840	$321,840
11	2029	Transient Apron Rehabilitation (26,225 sy)	66	$3,100,000	$282,286	$13,857	$13,857
12	2030	Kilo Apron Reconstruction (35,800 sy)	66	$3,420,000	$3,114,252	$152,874	$152,874
13	2030	East Perimeter Fencing	83	$560,000	$509,936	$25,032	$25,032
14	2031	Rehabilitate Taxiway B - Mill & Overlay (64,460 sy)	72	$13,520,000	$12,311,312	$604,344	$604,344
		SHORT-TERM TOTAL		**$59,965,000**	**$41,986,143**	**$1,989,429**	**$15,989,429**
INTERMEDIATE/LONG-TERM (Years 6-20)							
15	INTERMEDIATE/LONG-TERM	Rehabilitate Jet Aviation Apron (46,700 sy)	66	$4,330,000	$3,942,898	$193,551	$193,551
16		Relocate Main Apron Connectors (46,700 sy)	66	$1,950,000	$1,775,670	$87,165	$87,165
17		Remove Taxiway A7/Construct Taxiway A6 (1,350 sy)	72	$2,380,000	$2,167,228	$106,386	$106,386
18		Rehabilitate Runway and Update Weight Bearing Capacity (91,700 sy)	76	$21,000,000	$19,122,600	$938,700	$938,700
19		Rehabilitate Kilo Box Hangar Apron (4,650 sy)	66	$1,510,000	$1,375,006	$67,497	$67,497
20		Construct Parking Structure	30	$17,250,000	$0	$0	$17,250,000
21		Rehabilitate Taxiway A (North Portion) (25,600 sy)	66	$5,850,000	$5,327,010	$261,495	$261,495
22		Rehabilitate Perimeter Service Road (14,000 lf)	30	$1,500,000	$1,365,900	$67,050	$67,050
23		Rehabilitate Taxilanes Leading to the Airpark (7,000 sy)	72	$840,000	$764,904	$37,548	$37,548
24		Upgrade to PAPI-4	86	$400,000	$364,240	$17,880	$17,880
25		Airport Master Plan Update	68	$1,500,000	$1,365,900	$67,050	$67,050
		INTERMEDIATE/LONG-TERM TOTAL		**$58,510,000**	**$37,571,356**	**$1,844,322**	**$19,094,322**
		TOTAL		**$118,457,000**	**$79,557,499**	**$3,833,751**	**$35,083,751**

KEY

NPR: National Priority Rating
NA: Not Applicable
sy: Square Yards
lf: Linear Feet
MITL: Medium Intensity Taxiway Lights
IIJA: Infrastructure Investment and Jobs Act

SHORT-TERM (Years 1-5)

ID	Year	Project Name
1	2026	Construct Exit Taxiways B9 and B15 (5,000 sy), including Choulders, MITL, and Guidance Signs/Design of Taxiway B2
2	2026	Construct Exit Taxiway B2 (2.500 sy) including Shoulders, MITL, and Guidance Signs
3	2027	Rehabilitate Atlantic Main Apron (28,715 sy)
4	2027	Rehabilitate Atlantic North Apron (32,400 sy)
5	2027	Runway Seal Coat and Remarking (92,000 sy)
6	2027	Construct Replacement ARFF Station
7	2028	Airport Drainage Master Plan Update
8	2028	Rehabilitate Atlantic South Apron (32,295 sy)
9	2028	Taxiway B Electrical Improvements
10	2029	Rehabilitate (Mill & Overlay) Partial Parallel Taxiway A & Connector Taxiways A1-A10 (40,675 sy)
11	2029	Transient Apron Rehabilitation (26,225 sy)
12	2030	Kilo Apron Reconstruction (35,800 sy)
13	2030	East Perimeter Fencing
14	2031	Rehabilitate Taxiway B - Mill & Overlay (64,460 sy)

INTERMEDIATE/LONG-TERM (Years 6-20)

ID	Project Name
15	Rehabilitate Jet Aviation Apron (46,700 sy)
16	Relocate Main Apron Connectors (46,700 sy)
17	Remove Taxiway A7/Construct Taxiway A6 (1,350 sy)
18	Rehabilitate Runway and Update Weight Bearing Capacity (91,700 sy)
19	Rehabilitate Kilo Box Hangar Apron (4,650 sy)
20	Construct Parking Structure
21	Rehabilitate Taxiway A (North Portion) (25,600 sy)
22	Rehabilitate Perimeter Service Road (14,000 lf)
23	Rehabilitate Taxilanes Leading to the Airpark (7,000 sy)
24	Upgrade to PAPI-4
25	Airport Master Plan Update (NP)

LEGEND

- Airport Property Line
- A — Taxiway Designation
- Short-Term Project
- Intermediate/Long-Term Project
- NP — Not Pictured

Runway 3-21 (8,249' x 100')

Greenway Rd.
Greenway-Hayden Loop
Frank Lloyd Wright Blvd.
Central Arizona Project
75th St.
Airport Dr.
73rd St.
Thunderbird Rd.
McClain Dr.
Beck Ln
80th St.
81st St.
82nd St.
Acoma Dr.
Evans Dr.
Gelding Dr.
78th Way
83rd Pl
83rd Way
84th St.
Hayden Rd.

0 800
SCALE IN FEET

Aerial Photo: Martinez Geospatial 9/22/2024

Exhibit 6B
PROJECT PHASING