



Division of Finance & Management

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TO: South Dakota Aeronautics Commission
FROM: Jack Dokken, Office of Aeronautics
DATE: March 20, 2025
SUBJECT: Airport Improvement Program (AIP)/Bi-Partisan Infrastructure Law (BIL) Grant Applications

Airport sponsors are requesting funding from the State Aeronautics Fund for the following AIP/BIL projects below.

Mitchell 3-46-0030-033-2025

BIL: Design for shift/reconstruction and lighting of runway 18/36.

Federal Share	\$ 299,250.00
State Share	\$ 7,875.00
Local Share	\$ 7,875.00
Total	\$ 315,000.00

Philip 3-46-0027-020-2025

AIP: Master Plan and Airport Layout Plan (ALP)

Federal Share	\$ 118,750.00
State Share	\$ 3,125.00
Local Share	\$ 3,125.00
Total	\$ 125,000.00

Philip 3-46-0043-019-2025

BIL: Master Plan and ALP surveys, property map, title VI plan.

Federal Share	\$ 171,000.00
State Share	\$ 4,500.00
Local Share	\$ 4,500.00
Total	\$ 180,000.00

Webster 3-46-0059-019-2025

AIP: Construction of fuel farm – reimbursement.

Federal Share	\$ 90,250.00
State Share	\$ 0.00
Local Share	\$ 4,750.00
Total	\$ 95,000.00

Project Narrative (Justification)

AIP – Design Runway 18/36 Shift, Reconstruction, and Lighting Improvements project.

Runway Reconstruction:

The Mitchell Municipal recently completed an updated master plan and ALP update for the airport. This master plan update discussed the airport’s two runways in detail. Runway 13/31 is the airport’s primary runway and is constructed to the FAA’s C-III design standards. These include a runway length of 6,700 ft and a runway width of 100 ft. The airport’s existing crosswind runway, Runway 18/36 is approximately 5,500 ft long and 100 feet and meets C-II design standards. However, during the completion of the master plan update, it was determined that the existing crosswind runway exceeds the needs of the airport and should be reduced in size in order to satisfy the requirements for smaller B-II aircraft. This will require reducing both the length and width of the runway to meet these requirements. Additionally, the two existing runways currently intersect near the 31 and 36 ends. This current intersecting configuration is dangerous for airport users and poses an increased risk of runway incursions and collisions.

The condition of Runway 18/36 has began to deteriorated to a point where reconstruction is necessary. The SD DOT completes a Pavement Condition Index (PCI) survey on all airport pavements every three years. The results from this survey give a section a pavement a score from 0 to 100 with 100 being the best. The PCI results for the different section of pavement on Runway 18/36 are provided below. It can be seen by the decreasing PCI values, that the pavement on the runway is reaching the end of its intended lifespan. The runway was originally constructed in 1942 of 7-10 inches of concrete. A 3 inch asphalt overlay was constructed in 1975 and a rubberized friction course was overlaid in 1996. The runway was narrowed to 100 feet and MIRL was installed in 1999. The runway also includes a few small areas of differing pavement sections near the intersection with Runway 13/31. All of these pavement sections are exhibiting signs of distress and failure and should be reconstructed.

Mitchell (MHE)										
Branch ID	Pavement		2015		2018		2021		2024	
	Age	Material	PCI	Condition	PCI	Condition	PCI	Condition	PCI	Condition
Runway 18/36	1996	Asphalt	65	Fair	63	Fair	61	Fair	53	Poor
Runway 18/36	1996	Asphalt	80	Satisfactory	75	Satisfactory	67	Fair	33	Failed
Runway 18/36	1996	Asphalt	74	Satisfactory	75	Satisfactory	66	Fair	53	Poor

Runway Lighting:

The runway is proposed to be reconstructed at 75 feet wide. With the narrowing of the runway, the existing incandescent MIRL will be replaced with new LED MIRL. The new LED units will replace the incandescent units, resulting in less energy usage and long-term savings on replacement parts for the City. Additional lighting improvements will include: replacement of the system control box, installation of new runway Precision Approach Path Indicators (PAPI) and Runway End Identifier Lights (REILs). All of these lighting upgrades will include LED light fixtures and provide greater visibility to pilots and more reliability to the airport.

Runway Shift:

The shifting of Runway 18/36 to decouple it from Runway 13/31 will provide a great enhancement to the safety of the airport. The intersecting of runway has long been an avoidable practice but many times surrounding land restraints force them to occur. With the shortening of the runway the airport will have plenty of land space available to accommodate a shift of the runway to the north. Decoupling the runways will increase the safety of all airport users while also eliminating the confusion that comes along with intersecting runways.

Beacon Replacement

The existing beacon structure is an old water tower constructed in the 1940's and is located southeast of the hangar area. The tower is not in use as a water tower and is only used as the beacon tower now as the beacon was placed there out of convenience in the 1940's. The City recently had the structure evaluated. The results of the study by Alberston Engineering, Inc. showed that a 15' barrier must be constructed around the structure and that it would eventually need to be demolished. The City will handle results of the study themselves. However, a new beacon and beacon structure are required as soon as possible. A new, centrally located beacon is also proposed to be constructed with this project.

Project Narrative (Justification)

Philip Municipal Airport Master Plan and ALP

The project shall include an Airport Layout Plan (ALP)/Master Plan (MP) study update to evaluate the condition and adequacy of the existing facilities, produce activity forecasts, recommended improvements, and prepare an implementation plan for any recommended development for the Philip Municipal Airport.

The Philip Municipal Airport (PHP) desires to complete an airport MP and ALP update to help plan for both the current and future needs of the airport to help meet current FAA standards and identify future growth for the airport. Areas of initial interest include:

1. Accurate depiction of current airport facility
2. Complete Aerial Imagery and Airport Data and Information Portal requirements
3. Develop a plan to meet current FAA standards
4. Forecast potential growth and determine future airport facility needs
5. Layout potential future airport facilities based on forecasted growth

The ALP/MP update will include an airport inventory, activity forecasts, airside and landside facility needs, alternative analysis, environmental overview, and an implementation plan. The recommendations from the MP process will be depicted on an updated ALP.

Project Narrative (Justification)

Phase 4 – Construct new Fuel Farm

The proposed project involves the construction of a new revenue producing fuel system at the Sigurd Anderson Airport in Webster, SD. The airport would like to install a new fuel system that would allow pilots to purchase fuel for their aircraft directly from the airport. The new fuel system would include a new above or below ground storage tank, and will also be equipped with an electronic credit card reader to allow for use of the system at all hours. The new system would provide AvGas to pilots using the airport, with the possibility of expanding to offer Jet A fuel in the future. The location of the proposed fuel system would be near the GA apron. The attached project sketch shows the location of the proposed fuel system. The fuel sales would provide the city with an additional source of income for the airport.

The design of the fuel system was completed with a previous (2022 AIP) grant. A wetland delineation and cultural survey were completed on the entire airport property previously as well. The construction of the fuel system will utilize two sources of federal dollars to fund the project. The project will be broken down into two bid schedules to differentiate the work being completed under each source. The site work (gravel, concrete, fencing etc.) will be one bid schedule. This bid schedule and the construction engineering services will be funded with the airport's 2024 and 2025 Airport Improvement Program (AIP) entitlements. The fuel system (tank, dispenser, electronics, etc) will be the second bid schedule and will be funded by using a portion of the airport's 2022, and full 2023 and 2024 Bipartisan Infrastructure Law (BIL) allotments.