Chapter 1 – Introduction & Project Overview

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Kittitas County in cooperation with the Federal Aviation Administration (FAA) updated the Airport Master Plan for Bowers Field Airport (FAA airport identifier – ELN) to address the airport's needs for the next twenty years. The Airport Master Plan provides specific guidance in making the improvements necessary to maintain a safe and efficient airport that is economically, environmentally, and socially sustainable.

Study Purpose

The purpose of the Bowers Field (Airport) Airport Master Plan is to define the current, short-term, and long-term needs of the airport through a comprehensive evaluation of facilities, conditions, and FAA airport planning and design standards. The study also addresses elements of local planning (land use, transportation, environmental, economic development, etc.) that have the potential of affecting the planning, development, and operation of the airport. FAA Advisory Circular 150/5070-6B "Airport Master Plans" defines the specific requirements and evaluation methods established by FAA for the study. This project updates and replaces two existing FAA-funded airport plans for Bowers Field: the Bowers Field Airfield Needs Assessment (2012) and the Bowers Field Airport Master Plan Update (2004).

Project Need

Bowers Field is included in the federal airport system—the National Plan of Integrated Airport Systems (NPIAS). NPIAS airports are eligible for federal funding of eligible improvements through FAA programs such as the Airport Improvement Program (AIP). However, to maintain funding eligibility, the FAA requires airports to maintain current planning that is consistent with applicable FAA technical standards, policies, and regulations, including periodically updating their Airport Layout Plans (ALP) as conditions change.

This project updates the 2012 Bowers Field Airfield Needs Assessment Study and the 2004 Airport Master Plan. Since the previous planning studies were completed, the FAA has identified several areas of emphasis for airports that affect airport planning. These include land use compatibility in runway protection zones (RPZ) and complex airfield geometry (collocated thresholds, intersecting runways, runway or taxiway hot spots, etc.). Some of these elements were analyzed and reviewed by FAA in the Airfield Needs Assessment. However, FAA requested that these issues be addressed in the master plan based on current FAA standards and policies.

Project Eligibility and Funding

Participation in the NPIAS is limited to public use airports that meet specific FAA activity and geographic criteria. There are currently 3,331 existing NPIAS facilities including airports, heliports, and seaplane bases.[1] The FAA recognizes that NPIAS airports are vital to serving the air transportation needs of the public and that access to the nation's air transportation system is not limited to commercial air service. Bowers Field and Cle Elum Municipal Airport are the only NPIAS airports in Kittitas County.

The primary division for NPIAS airports is "Primary" and "Nonprimary." The 389 Primary airports account for about 12 percent of the overall NPIAS system, but provide the majority of commercial air service throughout the system. The 2,942 Nonprimary airports include General Aviation, Reliever, and Nonprimary Commercial Service airports (2,500 to 10,000 annual passenger enplanements). Additional designations reflect the airport's functional (asset) role (e.g., national, regional, local, basic) and service level (e.g., commercial, reliever, general aviation).

Bowers Field Airport has the following NPIAS classification/designation in the current (2015-2019) NPIAS report:

- Category: **Non-Primary**
- Asset Role: **Local**
- Service Level: **General Aviation**

Funding for the Airport Master Plan Update is provided through an FAA Airport Improvement Program (AIP) grant (90%) with a local match (10%) provided by Kittitas County. The AIP is a dedicated fund administered by FAA with the specific purpose of maintaining and improving the nation's public use airports. The AIP is funded exclusively through general aviation and commercial aviation users' fees and the funds can only be used for eligible projects.

[1] 2015-2019 National Plan of Integrated Airport Systems

Airport Ownership

Kittitas County is the owner and operator of Bowers Field Airport (ELN). As the airport owner (sponsor) of record, Kittitas County is responsible for conforming to all applicable FAA regulations, design standards, and grant assurances.

History of Airport and Development

According to local sources, civilian aviation first appeared in the Ellensburg area in 1926, with aircraft initially operating from a privately-owned golf course that served as a landing strip. In 1930, a graded runway was constructed at the current airport site by Kittitas County and aviation enthusiasts. A crosswind runway (7-25) was constructed in 1936 with Civil Aeronautics Administration (CAA) funds and Work Progress Administration (WPA) labor. The airport was sold to the City of Ellensburg in 1938. Additional airfield improvements were made as flight training programs and other airport activity increased in response to wartime aviation needs.

In the early 1940s, the airport was expanded through the CAA's DLAND program (Development of Landing Areas for National Defense) as a leased military airfield (Ellensburg Army Airfield). Available information indicates that in 1943 the airport became an Army Air Force flight training based and support facility operated by the Air Technical Service Command.[2] During this period the airfield received extensive improvements through government and military funding programs, including paving and expansion of the runways, construction of a control tower, and support buildings, personnel housing, and aircraft hangars. In 1947, the airfield was declared military surplus and deeded to Kittitas County, which resulted in the deactivation, closure and further abandonment of military airfield facilities and landside infrastructure. The airfield was subsequently named after Ensign Robert Keith Bowers, an Ellensburg native son killed in action at Pearl Harbor in 1941. Scheduled airline service was briefly established at Bowers Field in the late 1940s by Empire Airlines, a locally owned regional carrier.

The City of Ellensburg assumed ownership of Bowers Field from 1957 to 1961, at which time it reverted to County control. A newly formed Port District assumed operation of Bowers Field in 1965, but the Port District was dissolved in 1973, after which time airport control reverted back to Kittitas County.

Central Washington University (CWU) began a Flight Technology program in 1975 that resulted in the construction of a classroom space. Subsequently, Kittitas County constructed the large FBO hangar and upgraded the above ground fuel storage tanks. Airport facilities were upgraded during the 1990s, including reconstruction of the primary runway (11/29), installation of the on-site weather observation system, and extension of utilities to the south industrial area. Several privately-owned hangars and the DNR regional office and helicopter support facilities were also constructed at the airport during this period.

[2] http://www.historylink.org/File/10110

An Airport Master Plan Update[3] was initiated in the early 2000s and an airport overlay zone was jointly adopted by Kittitas County and the City of Ellensburg in 2001.

HISTORY OF AIRPORT PLANNING

Planning for Bowers Field Airport has been updated on a regular basis with the cooperation and funding support of FAA and WSDOT Aviation. The County's commitment to long-term planning is focused on maintaining a safe and functional facility that meets user needs and FAA standards.

The previous airport master plan was completed in 2004. The ALP drawing was most recently updated in 2013 as part of the Airfield Needs Assessment.[4] These documents served as the primary data sources for this Master Plan Update, in addition to design drawings, aerial photography, available mapping and survey data, and local planning studies.

Several facility and operational issues arose during the master plan that were addressed in real time and incorporated as required, into the planning process. These included the long-deferred decision to close Runway 7/25 (summer 2017) due to its age and deteriorated pavement condition, numerous changes involving the CWU flight training program, and changes in the airport's Fixed Base Operator (FBO) services. These issues are noted in relevant sections of the master plan.

Study Organization

Work in progress on the Airport Master Plan Update was documented in a series of technical memoranda (presented as draft chapters). The chapters were prepared to document progress in the study, facilitate the review of preliminary results, and obtain input throughout the master planning process. During the evaluation of development alternatives, several refinements to the preliminary concepts were created and presented that ultimately were incorporated into the preferred alternative, the ALP, and the final development alternatives chapter. At the end of the study, the draft chapters were updated and incorporated into the Airport Master Plan technical report.

The draft chapters and supporting documents were prepared over a period of approximately 18 months. Each draft chapter was reviewed locally and by the FAA and Washington State Department of Transportation – Aviation Division (WSDOT) for consistency with federal and state regulations, policies, and standards.

[3] Bowers Field Airport Master Plan Update (Bucher, Wills & Ratliff, 2004)

[4] Bowers Field – ALP Update and Airfield Needs Assessment (Century West Engineering, 2013)

The Bowers Field Airport Master Plan will include the following chapters:

- *Chapter 1 – Introduction and Project Overview*
- *Chapter 2 – Inventory of Facilities*
- *Chapter 3 – Aviation Activity Forecasts*
- *Chapter 4 – Demand-Capacity & Facility Requirements Analyses*
- *Chapter 5– Environmental Review*
- *Chapter 6 – Airport Development Alternatives*
- *Chapter 7 – Airport Layout Plan and Terminal Area Plans*
- *Chapter 8 – Land Use Planning*
- *Chapter 9 – Airport Financial Plan/CIP*
- *Chapter 10 – FAA Compliance Review*
- *Appendix – AGIS Survey*

Local Citizen Participation

At the project outset, Kittitas County committed to an inclusive, transparent planning process to make all project work products available for public review. The public involvement element of the Airport Master Plan Update provided opportunities for all interested individuals, organizations, or groups to participate in the project.

First, all draft work products were available for public review and comment. Links to the documents were posted on the project webpage to allow for convenient access, review, and comment. Copies of the draft work products were also made available for public review and comment at the Kittitas County Public Works Department office throughout the course of the study. Comment forms were available for both electronic and printed versions of the draft work products. Numerous printed copies of chapters were also provided to interested members of the public upon request.

Second, a series of public meetings was held during the project to facilitate public participation. The public meetings included study sessions and briefings with Kittitas County Commissioners and staff, periodic updates to the Bowers Field Airport Advisory Committee, and open houses. The project team presented information, provided updates on study progress, and identified upcoming decision points during these meetings.

Third, a local twelve-member planning advisory committee (PAC) was formed by Kittitas County to assist the project team in reviewing draft technical working papers and to provide input into the planning process.

Three members of the PAC were selected from the Bowers Field Airport Advisory Committee and one member was a sitting county commissioner. These individuals were responsible for serving as liaisons to their respective groups.

The PAC included one representative from the Central Washington University (CWU) aviation program. The CWU representative was responsible for coordinating all internal CWU review and input into the planning process. In addition to the official CWU representative, the PAC included two CWU aviation faculty members (representing different stakeholder groups) and two current/former CWU flight instruction contractors. In total, 5 of the 12 PAC members had active or recent employment or business interests related to the CWU flight program. This level of representation was critical to ensure that the university's flight program requirements were reflected in the master plan.

The composition of the 12-member PAC was intended to provide an effective blend of community members:

- Board of County Commissioners (BOCC) (1);
- Airport Advisory Committee representatives (3);
- Central Washington University (CWU) aviation program (1*);
- CWU flight instruction contractor (IASCO) (1);
- Washington Department of Natural Resources (DNR) (1);
- Fixed Base Operator/former CWU flight instruction contractor (Midstate Aviation) (1);
- City and County Planning Departments (2);
- Airport tenants, neighbors, local business (2); and
- Representatives from the FAA Seattle Airports District Office and the Washington State Department of Transportation - Aviation Division (WSDOT) served as ex officio members.

** The PAC included a total of 3 CWU Aviation Department faculty members - one official representative of CWU and two faculty CWU aviation department faculty members representing other interest groups (tenant, etc.).*

The PAC met throughout the project, reviewed and commented on draft work products, discussed key project issues and provided local knowledge and expertise to the planning process. The PAC meetings were open to the public and public comment was encouraged. A project open house coincided with the first PAC meeting to provide interested stakeholders an opportunity to participate in the project.

Summary

The FAA-defined airport master planning process requires a sequential, systematic approach, which leads to selection of a preferred development option for the airport that is integrated into the ALP and Airport Capital Improvement Program (ACIP). To meet this goal, the Airport Master Plan Update:

- *Provides an updated assessment of existing facilities and activity;*
- *Forecasts airport activity measures (design aircraft, based aircraft, aircraft operations, etc.) for the current 20-year planning period;*
- *Examines previous planning recommendations (2004 Airport Master Plan and 2012 Facility Needs Assessment) as appropriate, to meet the current and projected airport facility needs, consistent with FAA airport design standards;*
- *Determines current and future facility requirements for both demand-driven development and conformance with FAA design standards:*
- *Provides consistency between airport planning and land use planning to promote maximum compatibility between the airport and surrounding areas:*
- *Provides an updated Airport Layout Plan (ALP) drawing set to accurately reflect current conditions and master plan facility recommendations:*
- *Develops an Airport Capital Improvement Program (ACIP) that prioritizes improvements and estimates project development costs and funding eligibility for the 20-year planning period:*
- *Evaluates airport sponsor compliance with FAA Airport Improvement Program (AIP) grant assurances.*

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