

1. SUMMARY

In 1994, the City of Watsonville, California, contracted with Wadell Engineering Corporation to prepare with City staff an update to the City's 1986 general aviation airport master plan utilizing a 90 percent Federal Aviation Administration grant under the Airport Improvement Program. The basic intent of the study was to evaluate existing airport facilities, to assess airport demand, and to prepare an airport master plan to accommodate the demand for a 1990-2010 planning period. However, because of the environmental issues related to implementation of the 1994 master plan, preparation of an Environmental Impact Report (EIR) began but was not completed due to unresolved issues related to endangered plant species and wetlands. Consequently, the corresponding master plan update was not adopted.

Work commenced in March 1998 to complete the master plan and prepare a new environmental impact report. This master plan study consists of information from the 1994 study updated to 2001, and similarly establishes a planning period of 2001-2020. This summary presents the objectives of the master plan, the approach utilized in the master planning process, the results of the analyses performed, and the recommendations for prudent and proper protection and development of the Watsonville Municipal Airport. This report is intended to be a useful technical document to allow elected city officials, city staff, FAA, and Caltrans Aeronautics Division to properly develop and protect the airport while enhancing its usefulness.

MASTER PLAN OBJECTIVES

The purpose of the Watsonville Municipal Airport Master Plan is to facilitate the orderly, flexible, and environmentally sensitive expansion and development of Watsonville Municipal Airport. It is the mission of the City of Watsonville, which manages the Watsonville Municipal Airport, to improve economic vitality, safety and living environment for the culturally rich Watsonville community by providing leadership for the achievement of community goals and high-quality, responsive public service.

The following are the City's planning objectives for the Watsonville Municipal Airport that are addressed in this Master Plan.

- Support the development of an efficient public use airport as set forth in the Airport Plans of Chapter 5. This will be accomplished by:
 - ✓ Remedying existing operational deficiencies by lengthening and improving the primary runway to more fully accommodate turbine-powered aircraft (75 percent fleet with 60 percent load).
 - ✓ Remedying existing operational and safety deficiencies by installing a precision instrument landing system (ILS) to increase the number of hours each day that aircraft may operate in foggy conditions and to increase the overall safety of landings in all conditions.
 - ✓ Remedying existing space deficiencies by providing for the expansion and enhancement of the terminal and hangar facilities, plus providing new and improved access to accommodate new facilities.
 - ✓ Maintaining and enhancing natural resources on the site.
 - ✓ Facilitating the development of complementary light industrial and general commercial uses for affiliates of the airport.
 - ✓ Providing a fiscally responsible financial plan that will provide suitable facilities and generate revenues necessary for proper operation, management and development of the airport.
- Provide for the development of the Watsonville Municipal Airport consistent with the Master Plan while minimizing adverse effects on the natural physical setting. This will be accomplished by:
 - ✓ Providing for development consistent with the resource protection regulations administered by the United States Army Corps of Engineers, United States Fish and Wildlife Service, the California Coastal Commission and other agencies.
 - ✓ Protecting and enhancing wetlands and sensitive habitat areas.
- Provide for the development of the Watsonville Municipal Airport consistent with the Master Plan while minimizing adverse effects on adjacent land uses, the local community and the region. This will be accomplished by:
 - ✓ Providing the basis for creation of a noise mitigation plan that ensures neighboring properties are not significantly affected by airport-generated noise.
 - ✓ Developing ancillary uses on the site that are designed to be compatible with existing and planned development in the area.

MASTER PLAN APPROACH

This Master Plan covers the planning period of 2001-2020 and includes the following major components:

- Inventory of area planning efforts and background data;
- Forecasts of aviation demand, including the number of operations, aircraft types, and aircraft mix;
- Evaluation of basic aviation requirements;
- Airport plans; and
- Implementation plans.

The plan has been designed to accommodate changes in community goals and aviation trends as they develop, imparting flexibility into the planning process. Community participation has been invited during all planning phases by the consultant and by the city. Agencies contacted during the course of the study include representatives of Santa Cruz County, the Santa Cruz County Regional Transportation Commission, Caltrans Aeronautics Program, the Association of Monterey Bay Area Governments (AMBAG), and the Federal Aviation Administration. Valuable points of view regarding the future of aviation in the area were generated through these contacts and are reflected in the master plan.

SUMMARY

The Watsonville Municipal Airport is the only public use airport in Santa Cruz County. It is located on the northwest boundary of the city of Watsonville, three miles from the city center. It is a well-constructed, general aviation facility occupying 291 acres with two runways serving single and twin-engine aircraft and helicopters, as well as turboprops and turbine-powered business jets. The Airport has an additional 53 non-contiguous acres of land for clear-zone protection. Total Airport acreage is approximately 344 acres.

Three non-precision instrument approaches serve the airport. A terminal building with offices and a restaurant is located in the terminal area. The airport has various services including fixed based operators (FBOs) and fueling.

Approximately 92 percent of all aircraft owners at the Watsonville Municipal Airport are from Santa Cruz County. The remaining 8 percent are primarily from Santa Clara County and other California locations. Presently, 326 aircraft are based at the airport. The total is expected to increase to 381 by the year 2020. Growth will occur in all categories of aircraft, especially turboprop and turbine-powered business jets. Runway operations (landings and takeoffs) will increase to 144,503 by the year 2020, most of which will be general aviation.

To meet aviation demand, additional facilities and reconstruction of existing facilities will be necessary throughout the planning period. The existing 4,501-foot runway handles light based and transient business jets. A runway extension to 5,300 feet total length will be needed to safely accommodate turbine powered business jet aircraft with increased fuel and cargo loads, and for safety of landing IFR (Instrument Flight Rules) aircraft in the often foggy conditions. This extended runway will allow for utilization of 75 percent of business jets with 60 percent useful load. Increases in aircraft parking facilities will be necessary; the development of covered parking for the storage of based aircraft will handle the increased need.

This master plan document includes an Airspace Protection Plan (Exhibit 5), Terminal Building Site and Plan Concepts (Exhibits 6 and 7), an Access Plan (Exhibit 8), a Land Use Plan (Exhibit 9), and a Stage Development Plan (Exhibit 14). Also included are an Airport Layout Drawing (Appendix A foldout map) and an Airport Obstruction Map (Appendix B foldout map).

Planned Improvements

Four phases of capital improvements are planned for the Watsonville Municipal Airport. Table 1 lists improvements plans over the next 20 years.

**TABLE 1: PLANNED IMPROVEMENT PROJECTS
Watsonville Municipal Airport**

No.*	Improvement Name/Description
Stage I – 0 to 5 years (2001 to 2006)	
1	Complete instrument landing system (ILS)
2	Runway extension 800' to Runway 2-20 w/ taxiway extensions and lights (RW -1; TW -2)
3	Relocated access road (Aviation Way) and construct main apron for automobile parking lot
4	Construct airport maintenance shelter (east of 2-20 taxiway)
5	Install underground utilities, top trees, and relocate threshold of Runway 2-20
7	Security lighting at existing hangars south of Runway 8-26
8	New airport access road to commercial hangars from Airport Boulevard
10	Terminal expansion
12	Install traffic light (Aviation Way and Airport Boulevard)
14	Construct access road with underground utilities connecting Manfre Rd. on south and Buena Vista/Bradford Road on north to provide access to commercial/industrial area (Industrial Area A; TE-A)
15A	Construct aviation-compatible commercial/industrial development west of Runway 8-26 (Industrial Area A; TE-A)
15B	Construct aviation-compatible commercial/industrial development south of Aviation Way (Industrial Area B)
16	[Reserved]
19	Tarplant mitigation program
Stage II – 6 to 10 years (2007 to 2011)	
6	New airport access (Burchell Ave. northeast of Runway 8-26)
9A	Pave runway blast pads (both ends of Runway 2-20) (SZ-1/SZ-2)
11	Hangar expansion plus taxiways (60 to 70 new hangars and ramp area north of Runway 8-26) (TE-B);
13	Construct north parallel taxiway (north of Runway 8-26) (TW -1)
19	Tarplant mitigation program
Stage III – 11 to 15 years (2012 to 2016)	
9B	Pave runway blast pads (both ends of Runway 8-26) (SZ-3/SZ-4)
15C	Construct aviation-compatible commercial/industrial development north of Runway 8-26 (Industrial Area C; TE-C)
15D	Construct aviation-compatible commercial/industrial development west of Runway 2-20 (Industrial Area D)
19	Tarplant mitigation program
Stage IV – 16 to 20 years (2017 to 2020)	
15E	Construct aviation-compatible commercial/industrial development west of Runway 2-20 (Industrial Area E; TE-A1)
17	New hangars in Area TE-D
18	Construct parallel taxiway west of Runway 2-20 (TW -3)
19	Tarplant mitigation program

Note: *Numbers correspond to projects listed in Land Use Plan (beginning on page 55 of this document)
Source: Watsonville Municipal Airport

The capital improvement program cost summary associated with the four stages of development is shown in Table 2.

TABLE 2: CAPITAL IMPROVEMENT PROGRAM COST SUMMARY
Watsonville Municipal Airport
(In 000's 2000 \$)

Development Stage	Estimated Cost
Stage I (2001-2006)	\$5,670,000
Stage II (2007-2011)	4,410,500
Stage III (2012-2016)	334,500
Stage IV (2017-2020)	3,150,000
Total	\$13,565,000
FAA/State Funds	\$ 5,313,750
Local Funds	8,251,250
Total	\$13,565,000

Source: *Watsonville Airport Capital Improvement Program*, January 2001; Coastplans.com

Note: Stage II development cost assumes a cost of \$2,485,000 for Tee Hangar Expansion plus Taxiways (Item No. 11); this cost is listed as \$652,000 in the *Capital Improvement Program*, which mistakenly covered only the cost of taxiway construction.

The FAA grant program provides 90 percent grant funding for eligible projects with Caltrans picking up five percent of the remainder. The projects that are not eligible are auto parking, and private facilities such as fixed base operators, hangars, and fueling systems.