Sonoma County General Plan 2020

AIR TRANSPORTATION ELEMENT

Sonoma County Permit and Resource Management Department 2550 Ventura Avenue Santa Rosa, CA 95403

> Adopted by Resolution No. 08-0808 of the Sonoma County Board of Supervisors September 23, 2008

Amended by Resolution No. 12-0035 on January 24, 2012

AIR TRANSPORTATION ELEMENT TABLE OF CONTENTS

| 1. | INT | RODUCTION | 2 |
|----|-----|----------------------------------------------------------------------|----|
| | .1 | PURPOSE AND AUTHORITY | |
| 1 | .2 | RELATIONSHIP TO OTHER ELEMENTS | 2 |
| 1 | .3 | ORGANIZATION | |
| 2. | BAC | CKGROUND | |
| | .1 | HISTORICAL OVERVIEW | |
| 2 | .2 | EXISTING AIRPORTS AND SERVICE LEVELS | |
| 2 | .3 | INSTITUTIONAL ROLES | |
| 3. | AIR | TRANSPORTATION DEMAND AND THE COUNTY AIRPORT SYSTEM | 9 |
| 3 | .1 | PROJECTED DEMAND FOR AIR TRANSPORTATION SERVICE | 9 |
| 3 | .2 | COUNTY AIRPORT SYSTEM | |
| 4. | CON | MPATIBILITY WITH THE COMMUNITY | 12 |
| 4 | .1 | PROJECTED NOISE EXPOSURE | 12 |
| 4 | .2 | AIRSPACE | 13 |
| 4 | .3 | SAFETY ON THE GROUND | 13 |
| 5. | AIR | TRANSPORTATION POLICIES OF THE COUNTY OF SONOMA | |
| 5 | .1 | LAND USE COMPATIBILITY IN THE VICINITY OF AIRPORTS | 14 |
| 5 | .2 | PROTECTION OF THE AIRSPACE | |
| 5 | .3 | PROTECTION OF ADJACENT COMMUNITY AREAS | 17 |
| 5 | .4 | GENERAL AVIATION | 19 |
| 5 | .5 | SCHEDULED AIR CARRIER SERVICES | 20 |
| 5 | .6 | NON-AVIATION AND ACCESSORY USES AT CHARLES M. SCHULZ - SONOMA COUNTY | |
| A | | RT | |
| 6. | AIR | TRANSPORTATION IMPLEMENTATION PROGRAMS | 23 |
| | | | |

FIGURES

| Figure AT- 1 Historical Record of Aircraft Operations at the Charles M. Schulz Ai Figure AT- 2 Historical Record of Air Passenger Activity at the Charles M. Schulz | • |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Airport | 26 |
| · • | er Text |
| Cloverdale Municipal AirportAf | ter Text |
| Figure AT-5: Projected Noise Contours and ALUC Referral Area: | |
| Healdsburg Municipal AirportAf | ter Text |
| Figure AT-6: Projected Noise Contours and ALUC Referral Area: | |
| Petaluma Municipal AirportAf | ter Text |
| Figure AT-7: Projected Noise Contours and ALUC Referral Area: | |
| Sonoma Skypark AirportAf | ter Text |
| Figure AT-8: Projected Noise Contours and ALUC Referral Area: | |
| Sonoma Valley AirportAf | ter Text |
| Figure AT-9: Projected Noise Contours and ALUC Referral Area: | |
| Charles M. Schulz - Sonoma County AirportAf | ter Lext |
| Figure AT-10: Approach Protection Plan Area: | |
| Charles M. Schulz - Sonoma County AirportAf | ter Lext |
| | |
| TABLES | |
| IABLES | |
| Table AT- 1 Aviation Activity Levels at Sonoma County Public Use Airports (From Master Records | FAA 5 |
| Table AT- 2 Existing Facilities at Public Use Airports in Sonoma County | 6 |
| Table AT- 2 Projected Aviation Activity Levels at Sonoma County Public Use Air by the General Plan ATE 2020 and the Comprehensive Airport Land Use Plan 201 | ports |

AIR TRANSPORTATION ELEMENT

1. INTRODUCTION

1.1 PURPOSE AND AUTHORITY

The purpose of the Air Transportation Element of the Sonoma County General Plan is to establish policies that will guide future growth and development of aviation activity and airport facilities in the County through the year 2020 in a manner consistent with the goals and policies established in other elements of the General Plan.

State of California law requires that acquisition or disposal of real property and capital improvements such as construction projects be consistent with and conform to the adopted General Plan. The Air Transportation Element will serve to establish direction and standards for judging consistency of proposed actions involving airports with the General Plan, including the Airport Master Plans. The Air Transportation Element also includes an implementation program.

Inclusion of the Air Transportation Element in the General Plan is optional as defined by Section 65303 of the Government Code. Air transportation has many community benefits such as reducing ground transportation congestion, providing locations for emergency aircraft operations, and promoting the local economy and tourism. The Element has the same legal status as mandatory elements of the plan, including requirements for internal plan consistency and consistency of public and private development projects.

1.2 RELATIONSHIP TO OTHER ELEMENTS

California Government Code Section 65300.5 requires that the elements of a General Plan comprise an integrated, internally consistent, compatible statement of policies for the adopting agency. The Air Transportation Element's policies complement policies expressed in other elements and comply with the requirement for internal consistency in the following manner:

- 1. The economic and demographic projections and assumptions used in other elements, notably the Land Use, Circulation and Transit, and Noise Elements, are used in the Air Transportation Element.
- 2. The policies expressed herein are designed to complement and reinforce the policies stated in other elements of the General Plan, in particular those in the Land Use, Circulation and Transit and Noise Elements.
- 3. The goals and objectives reflect the goals and objectives expressed in other elements of the General Plan.

4. The Air Transportation Element addresses projected future noise levels at the various public use airports in the County, with special emphasis placed on the County owned Charles M. Schulz - Sonoma County Airport. Information about noise levels is also contained in the Noise Element so that all noise sources are evaluated within a single context.

1.3 ORGANIZATION

This element is organized into five major sections:

Background

A section that includes information on past air transportation activity in the County, airport activities, the existing airport system and service levels, and a description of the roles and the level of authority of the many jurisdictions involved in aviation.

Air Transportation Demand and the County Airport System

This section includes the projected air transportation demand for Sonoma County. It is based on demographic and economic forecasts in the adopted Charles M. Schulz – Sonoma County Airport Master Plan (AMP), 2012, and the Sonoma County Comprehensive Airport Land Use Plan (CALUP), January 2001 and the Land Use and other elements. A future County airport system (including additional facilities) that can serve some or all of the air travel demand is also identified.

Compatibility with the Community

Community compatibility, an important issue addressed by this element, is specifically defined so airport related activities will be appropriately controlled.

Air Transportation Policies

This section expresses air transportation policies that are detailed enough to allow judgments to be made on airport related actions of the County of Sonoma and its various agencies.

Implementing Programs

This section identifies the specific legislative and administrative actions necessary to effectuate policies and attain conformity of regulations with the plan.

2. BACKGROUND

2.1 HISTORICAL OVERVIEW

Aviation activity of varying types, privately owned aircraft, commercial aircraft and air carrier service, has occurred in Sonoma County for approximately 80 years. Since 1965, the number of annual aircraft operations at various airports throughout the County has ranged from a low of about 120,000 operations to a high of approximately 460,000 operations in the early 1980's, to the current level of approximately 230,000 annual operations (see Table AT-1). As can be seen in Figure AT-1, the maximum peak historical aircraft activity level of approximately 170,000 operations (commercial and non-commercial) at the Charles



M. Schulz - Sonoma County Airport occurred in 1990. The number of based aircraft at the six public use County airports is approximately 800.

Commercial air carrier service has varied since loss of scheduled service by a local carrier in the 1970s, and again in 2002. Service resumed in 2007 at the Charles M. Schulz – Sonoma County Airport and the peak of service occurred in 2008, with approximately 205,000 total annual air passengers (Figure AT-2).

Figure AT-2 indicates the fluctuations that have occurred in air passenger activity at the Charles M. Schulz - Sonoma County Airport.

2.2 EXISTING AIRPORTS AND SERVICE LEVELS

There were six airports in Sonoma County open for public use as of 2011 (See Figure AT-3). Two were privately owned (Sonoma Skypark and Sonoma Valley), three were owned by cities (Cloverdale, Healdsburg and Petaluma airports) and one was owned by the County of Sonoma (Charles M. Schulz - Sonoma County Airport). These airports all have general aviation activity consisting of single engine and twin engine piston powered aircraft. Twin engine turboprop and jet powered aircraft utilize the Charles M.



Schulz - Sonoma County Airport and, to a lesser extent, the Petaluma Airport. Charles M. Schulz - Sonoma County Airport is the only point for commercial airline service. In addition, this airport is a fire base for Cal Fire which uses aerial tankers and helicopters in forest fire

suppression operations and a maintenance base for Redwood Empire Air Care Helicopter (REACH). The current activity levels at the six airports are shown in Table AT-1. A general description of the facilities available at public use airports in the County is noted in Table AT-2.

Table AT- 1 Aviation Activity Levels at Sonoma County Public Use Airports

| | Genera | I Aviation | Commercial Air Carrier | | |
|-----------------------------|-------------------|----------------------|------------------------|----------------------------|--|
| | Based Aircraft | Annual Operations | Annual Operations | Total Annual Passengers | |
| Cloverdale ¹ | 19 | 10,900 | 0 | 0 | |
| Healdsburg ² | 46 | 31,400 | 0 | 0 | |
| Petaluma ³ | 208 | 53,200 | 0 | 0 | |
| Sonoma County | 356 ⁴ | 99,965 ⁴ | 4,380 ⁵ | 185,318 ⁵ | |
| Sonoma Skypark ⁶ | 62 | 15,000 | 0 | 0 | |
| Sonoma Valley ⁷ | 123 ² | 16,000 | 0 | 0 | |
| Total | 772 | 226,465 | 4,380 | 185,318 | |

Sources:

- (1) FAA Master Record (Airport Data Form 5010) May 8, 2009
- (2) FAA Master Record (Airport Data Form 5010) May 31, 2010
- (3) FAA Master Record (Airport Data Form 5010) November 30, 2009
- (4) Sonoma County Airport Airport Master Plan, 2012, Table 2-12, Consolidated Summary of Airport Master Plan Forecasts.
- (5) Sonoma County Airport Master Plan, 2012, Table 2-2, 2010 Baseline Conditions
- (6) FAA Master Record (Airport Data Form 5010) August 31, 2010
- (7) FAA Master Record (Airport Data Form 5010) September 28, 2010

Table AT- 2 Existing (2011) Facilities at Public Use Airports in Sonoma County

| | | | Runways | | | Services | | | |
|-------------------|----------------|-------|---------|-------------|-----------|----------------|------|--------|-------------------------|
| Airport | Owner- ship | Acres | No. | Paved | Lighted | Length | Fuel | Repair | Instrument Procedure |
| Cloverdale | Public | 58 | 1 | Yes | Yes | 3,155 | Yes | Yes | No |
| Healdsburg | Public | 50 | 1 | Yes | Yes | 2,707 | Yes | Yes | No |
| Petaluma | Public | 220 | 1 | Yes | Yes | 3,600 | Yes | Yes | Yes |
| Sonoma County | Public | 1,048 | 2 | Yes | No Yes | 5,002 5,115 | Yes | Yes | Yes |
| Sonoma Skypark | Private | 30 | 1 | Yes | No | 2,480 | Yes | Yes | No |
| Sonoma Valley | Private | 79 | 2 | Yes/ Yes | No No | 2,700 1,500 | Yes | Yes | No |

Source:

- (1) Sonoma County Comprehensive Airport Land Use Plan, 1/01
- (2) FAA Form 5010-1
- (3) Airport Master Record

2.3 INSTITUTIONAL ROLES

The public and private sectors both play significant roles in air transportation. Authority and responsibilities are shared by a number of public agencies and the resulting relationships are important to the implementation of County policies.

County of Sonoma

County jurisdiction affects aviation in two principal areas, as airport owner and as public agency with zoning authority over private lands adjacent to the airports. As airport owner, the County can develop the Charles M. Schulz - Sonoma County Airport, maintain and operate it and establish operational rules and regulations. Local airport proprietors are limited by provisions of Federal and State laws. Under Federal law an airport proprietor may not interfere with interstate commerce or discriminate among airport users. In addition, the California Public Utilities Code expresses requirements for airport permits, noise regulations and funding grants. An airport owner is also subject to Federal requirements for airport security, crash/fire/rescue, facility maintenance and funding grant conditions.

In its land use role the County is responsible, under the California Public Utilities Code, to act in accordance with recommendations of the County Airport Land Use Commission (ALUC) or the County may overrule their recommendation by a two-thirds vote of the Board of Supervisors if findings are made that the proposed action is consistent with the purposes of Article 3.5 of the State Aeronautics Act.

Airport Land Use Commission

Sections 21670-21678 of the California Public Utilities Code require formation, under certain conditions, of an ALUC and an environs plan to achieve compatible land uses in the areas adjacent to airports within an ALUC's jurisdiction. The Sonoma County ALUC has adopted an Airport Land Use Policy Plan, entitled the "Sonoma County Comprehensive Airport Land Use Plan" (CALUP) that defines compatible land uses as they relate to noise, airspace and safety, using aviation activity levels forecasted for the Year 2010.

Each local agency whose general plan includes areas covered by the ALUC plan must submit those plans to the Commission for its review. The Commission must make a determination of consistency or inconsistency with the CALUP. The Commission's determination may be overruled by a two-thirds vote of the governing body of a city or county. In addition, the following actions must be reviewed by the Commission:

- (1) Amendment to a General Plan or Specific Plan
- (2) Adoption or approval of a Development Code
- (3) Adoption or approval of a building regulation

Proposed changes to an Airport Master Plan must also be submitted to the ALUC for a determination of consistency with the CALUP.

Airport Owners

A city airport owner has the same responsibilities as a county airport owner. In some cases, control of the land uses adjacent to a city owned airport is within the jurisdiction of the County of Sonoma. Privately owned airports are affected by State and Federal regulations to a lesser extent, but they are still required to provide for safe operations. Private airport owners are dependent upon city and county land use actions to protect their compatibility with the community.

Private Sector

Aircraft operated in Sonoma County are, for the most part, privately owned and operated. General aviation and air carrier owners may operate their aircraft at their discretion, but are subject to the Federal Aviation Regulations (FAR's) governing aircraft operations and local airport rules and regulations.

Regional Agencies

The Metropolitan Transportation Commission (MTC) is a regional agency established under State law and charged with the tasks of creating a regional transportation plan and allocating Federal and State funds in accordance with the plan. All aviation funds from State and Federal sources that go to cities and counties must be approved by MTC. MTC prepares aviation forecasts, conducts special planning studies and collects data on airports in the San Francisco Bay Region. The Association of Bay Area Governments (ABAG), in cooperation with MTC, collects demographic and land use planning data and forecasts.

State of California

As previously noted, the State has jurisdiction in areas specified in the Public Utilities Code as noted below:

- (1) Airport Permit: An airport permit, issued by Caltrans' Division of Aeronautics, is required at all airports open for public use. Specified safety conditions must be met.
- (2) Noise Regulations: Noise regulations require that any airport deemed to have a "noise problem" must develop a noise mitigation plan. None of the airports in Sonoma County have been identified as having a noise problem.
- (3) Conditions of Grants: Specific conditions may be imposed if an airport receives grant-in-aid funds under the State program.

Federal Aviation Administration (FAA)

Federal government preemptions cover aircraft in flight, aircraft engaged in interstate and foreign commerce and discrimination among airport users. Because Charles M. Schulz - Sonoma County Airport has air carrier service, Federal Aviation Regulations (FAR) provisions dealing with airport layout, security and crash-fire-rescue apply. Special conditions that were

part of the original quit claim deed which transferred the Airport from the Federal government to the County are a part of each grant-in-aid program accepted by the County.

3. AIR TRANSPORTATION DEMAND AND THE COUNTY AIRPORT SYSTEM

3.1 PROJECTED DEMAND FOR AIR TRANSPORTATION SERVICE

The demand projections used in this element reflect recent trends in the aviation industry as well as forecasted economic and population growth. With respect to general aviation, it is estimated that Airport facilities can be improved so the projected demand can be served.

With respect to commercial air carrier services, demand for only a part of the commercial air carrier passenger travel to and from Sonoma County is projected to be served by regional and mainline air carrier services at the Charles M. Schulz - Sonoma County Airport. The remaining air passengers are expected to use ground transportation to access other airports in the region, principally San Francisco International Airport (SFO) and, to a lesser extent, Oakland International Airport (OAK), Sacramento International Airport (SMF) and San Jose International Airport (SJC).

General Aviation Activity

General Aviation activity forecasts indicate that by the year 2020, there will be approximately 960 based aircraft and approximately 328,000 General Aviation annual operations at the various public use airports in Sonoma County (See Table AT-3).

Scheduled Air Carrier Services

For the purposes of this element, scheduled air carrier services are those that engage in regularly scheduled commercial air carrier passenger service, and are broken down into two types of carriers, which are:

Regional Carriers: Regional carriers engage in regularly scheduled air carrier passenger service between mainly small and medium sized communities and the nation's large airports, using turbo-prop aircraft with seating between 10 to 78 seats and small jets with 99 or fewer seats. Commuter carriers engaging in regularly scheduled air carrier passenger service to the public are treated as regional carriers for purposes of applying the scheduled air carrier service departure allocations established in the ATE.

<u>Mainline Carriers</u>: Mainline carriers engage in regularly scheduled air carrier passenger service using jet aircraft with approximately 100 to 150 seats.

These factors result in a projection that scheduled airline service levels of 459,259 total annual passengers (about 1,260 per day) would occur by the year 2020 at the Charles M. Schulz - Sonoma County Airport 1

¹ This compares with a projection of 599,479 total annual passengers (about 1,640 per day) by 2030 (Source: Sonoma County Airport Master Plan, Table 2-12).

3.2 COUNTY AIRPORT SYSTEM

In the year 2020, the County airport system will be comprised of publicly and privately owned airports open to public use. Private airport facilities that serve specific aircraft owners or special uses, such as ultralight and light sport aircraft, will continue to function.

Table AT- 3 Projected Aviation Activity Levels at Sonoma County Public Use Airports by the General Plan ATE 2020 and the Comprehensive Airport Land Use Plan 2010

| Airport | ATE 2020 Based Aircraft ¹ | CALUP 2010 Annual Operations ² | ATE 2020 Annual Operations |
|--------------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Cloverdale | 50 ¹ | 27,000 | 27,000 ² |
| Healdsburg | 100 ¹ | 50,000 | 50,000 ² |
| Petaluma | 250 ¹ | 95,000 | 95,000 ² |
| Sonoma Skypark | 75 | 16,000 | 16,000 ² |
| Sonoma Valley | 100 ¹ | 17,000 | 17,000 ² |
| Charles M. Schulz - Sonoma County | 387 ³ | 225,000 (consisting of ~209,800 General Aviation, ~15,200 commercial air carrier operations) | 154,406 ³ (consisting of 3,925 Mainline Air Carrier, 2,920 Regional Air Carrier, and 147,561 all other operations ³) |
| Subtotal Commercial Aviation | NA | 15,200 | 6,845 ³ |
| Subtotal General Aviation | NA | 414,800 | 328,261 |
| Total | 962 | 430,000 | 335,106 |

Source:

- (1) Source: Walter Gillfillan and Associates
- (2) Sonoma County Comprehensive Airport Land Use Plan, 1/01
- (3) Charles M. Schulz Sonoma County Airport (Sonoma County Airport Master Plan Table 2-12 Consolidated Summary of Airport Master Plan Forecasts 2005-2030). AMP Table 2-12 forecasts 418 based aircraft, and 173,785 total operations in the Year 2030.

Likely Service Levels

The forecasted demand for general aviation in the County is contemplated to be accommodated through the year 2020 at the six public use airports as shown in Table AT-3.

Facility Requirements

Airport improvements at the four non County owned airports needed to accommodate future aircraft activity will be modest and consist mostly of aircraft parking and storage. Individual airport master plans will denote specific requirements.

Facility requirements at Charles M. Schulz - Sonoma County Airport will be more comprehensive and are detailed and updated as needed in the Airport Master Plan adopted in January 2012. Planned facility requirements include two runways (one to be extended to approximately 6,000 feet), a larger terminal building and parking lot, and improved taxiways, relocated air traffic control tower, expanded commercial cargo freight facilities, and new aircraft rescue and firefighting facilities.

4. COMPATIBILITY WITH THE COMMUNITY

Airports provide county residents with the benefits of air transportation. At the same time, it is important that aircraft operations be compatible with adjacent community areas. Noise, safe airspace and safety to those on the ground are issues of particular interest and importance. The issue of noise is a major concern for residents near airports, particularly where large aircraft are operating.

4.1 PROJECTED NOISE EXPOSURE

Most of the aircraft noise in Sonoma County is generated by general aviation aircraft. Noise contours at each airport are established by large numbers of relatively quiet single engine aircraft. Some jet aircraft generate a high single event noise, but jet operations are infrequent so they do not significantly contribute to the annualized cumulative noise impact measured on the CNEL index. The future noise exposure map for the Charles M. Schulz - Sonoma County Airport is shown in Figure AT-9. This diagram represents the projected noise exposure based upon the 2012 adopted AMP projections of 154,406 operations per year for the year 2020. ²

The Sonoma County ALUC has established a noise/land use compatibility matrix which identifies the acceptable range of noise levels for various types of land uses. Generally, under ALUC policies, new residential land uses are acceptable if exterior noise levels are at or below 55 dB CNEL (this is at least 10 dB more restrictive than California's Airport Noise Regulations) and between 55 and 65 dB CNEL are considered "conditionally" acceptable. The lower limit is based on the quiet rural environment found in Sonoma County. The projected future contours for the airports in the County are taken from the ALUC's CALUP and are shown in Figures AT-4

² The adopted September 2012 AMP projection (Tables 2-12) for the year 2030 is 173,785 operations per year.

through AT-9 and are based upon projected operations that are typically less than full operational levels accommodated in the Air Transportation Element.

The ALUC has also established noise level reductions for residential land uses to ensure that homes built near airports in areas with "conditionally" acceptable exterior noise levels are adequately designed to protect interior spaces from high noise levels. The limits were established to prevent speech interference during the day and sleep interference at night.

Development of airport noise policy by the County has included consideration of Federal preemptions including the Federal Aviation Regulations(FAR's), the Airline Deregulation Act, the Airport Noise and Capacity Act of 1990 (ANCA), prohibitions against interference with interstate commerce, and prohibitions against discriminating among Airport users, and any provisions that were established before the 1990 ANCA which can be retained.

4.2 AIRSPACE

Criteria used by the FAA to determine which structures are or could be a hazard to air navigation, due to penetrations of protected airspace around public use airports, are contained in FAR, Part 77 and FAA Order 8260.3B – United States Standard for Terminal Instrument Procedures (TERPS). These standards have been adopted by the Sonoma County ALUC to prevent obstructions of protected airspace. Currently there are no obstructions that restricted the use of any of the airports in Sonoma County.

4.3 SAFETY ON THE GROUND

The FAA provides for runway protection zones off of the ends of each runway to protect aircraft in flight and people on the ground from aircraft accidents. Runway protection zones are identified by the FAA as the highest risk areas. For five of the general aviation airports in the County, the trapezoidal runway protection zone extends outward 1,200 feet from the end of the runway. At the Charles M. Schulz - Sonoma County Airport, one of the runways has protection zones which extend 1,700 feet and 2,500 feet out from the end of the runway because of the Instrument Landing System (ILS). For facilities like Charles M. Schulz - Sonoma County Airport, the FAA will fund property acquisitions in an area up to 5,000 feet to achieve overall compatibility with the community.

In Sonoma County, the ALUC has increased the safety provisions by setting building coverage and height restrictions, land use and residential density restrictions, and requirements limiting the intensity of building occupancy in runway approach areas.

5. AIR TRANSPORTATION POLICIES OF THE COUNTY OF SONOMA

Sonoma County's air transportation policies are designed to support existing air transportation services and provide for a level of growth commensurate with projected population and economic change in the County and its nine cities. There is a specific concern for compatibility of airports with adjacent community areas and for the safety of air travelers and people and property on the ground. Compatible aircraft operations is another major issue addressed by these policies.



The Charles M. Schulz - Sonoma County Airport has an annual service volume (calculation of an airfield's capacity) of 230,000 operations (Source: Sonoma County Airport Master Plan, Chapter 2, Airfield Capacity Section). This number is not anticipated to change with planned runway and other improvements in the Airport Master Plan. This number is based upon calculations derived using FAA's "Airport Capacity and Delay Model" and FAA Advisory Circular 150/5060-5 "Airport Capacity and Delay". These calculations take into account various physical and operational factors such as airfield layout, meteorological conditions, and fleet mix.

5.1 LAND USE COMPATIBILITY IN THE VICINITY OF AIRPORTS

A key issue in the provision of existing and future air transportation services is the maintenance of compatible land uses adjacent to existing airports in the County.

GOAL AT-1: Assure that land use types and densities in areas adjacent to public use airports are compatible with airport activity so existing and future capabilities of the airports can be preserved.

Objective AT-1.1: Land use plans, regulations and other actions adhere, to the extent reasonable or practicable, to the land use compatibility criteria of the Sonoma County Airport Land Use Commission, unless it is determined that an override is appropriate.

Objective AT-1.2: The ALUC's airport noise land use compatibility policies and criteria should be the principal determinant of the compatibility and acceptability of proposed land use projects with respect to the activities, noise, and other impacts of a nearby airport, but that any special circumstances also be taken into account in making such determinations.

Objective AT-1.3: The maximum noise exposure that shall be considered acceptable is the 55 dB CNEL, and conditionally acceptable between the 55 and 65 dB

CNEL for development of new residential uses in areas surrounding a public-use airport as shown in Figures AT-4 through AT-9.*

The following policies shall be used to achieve these objectives:

Policy AT-1a: Proposed development within a noise environment in excess of 55 dBA CNEL, shall comply with the Sonoma County Comprehensive Airport Land Use Plan. For all public use airports, the CALUP forecast of future noise exposures shown in Figures AT-4 through AT-9 shall be used for this purpose.*

Policy AT-1b: No object, tree,or structure shall be permitted to be erected or maintained which, because of height or other factors, would result in an increase in the minimum ceiling or visibility criteria for an existing or proposed instrument approach procedure.

Policy AT-1c: An object, tree or structure which would penetrate a horizontal or conical surface as defined by the ALUC, and would be 35 feet or less in height above the ground (i.e. is within the height limits prescribed for most Sonoma County zoning districts) shall be considered conditionally acceptable even if it exceeds the prescribed height limit. Appropriate marking and lighting may be conditions for acceptability.

Policy AT-1d: Prepare or revise any applicable Specific Plans in a manner which will conform to the ALUC's CALUP, except where the Board of Supervisors determines that special circumstances justify overruling the Commission and finds that the proposed action is consistent with the purposes expressed in Section 21670 of the Public Utilities Code (State Aeronautics Act).

Policy AT-1e: Refer proposed projects which include requests for General or Specific Plan amendment, changes to the Development Code, and changes to local building regulations to the ALUC for determination of consistency with the CALUP prior to review by the appropriate County decision making body.

Policy AT-1f: Use the Airport Property Map contained in the Sonoma County Airport Master Plan and Airport Layout Plan and any future amendments thereof, for identification of parcels planned for acquisition to protect approach zones at the Charles M. Schulz - Sonoma County Airport. Figure AT-10 shows parcels to be acquired for Airport approach protection. The appropriate method of protection shall be consistent with the level of protection needed based upon the impact of future operations and regulations associated with the Airport's annual service volume of 230,000 operations as reported in the Airport Master Plan.

Policy AT-1g: When allowed by law, avigation easements may be required on publicly owned airports as a condition of approval of discretionary planning permits for parcels within an ALUC referral area. Avigation easements may not be required for privately owned public use airports.

Policy AT-1h: The County of Sonoma may acquire any interest in real property in order to protect the approach zones at the Charles M. Schulz - Sonoma County Airport in any manner allowed by law, including eminent domain, as authorized by the Board of Supervisors.

Policy AT-1i: Prior to initiation of commuter service to Petaluma Airport, a detailed noise study shall be conducted.

Policy AT-1j: Consider the adoption of an "Airport Protection Combining District" for incorporation into the Development Code and applying to lands within the CALUP Referral Area Boundaries as shown on Figures AT-4, AT-5, AT-6, AT-7, AT-8, and AT-9. The purpose of this district is to provide an additional means to inform property owners of and apply the requirements of the ALUC's CALUP to land uses surrounding the public use airports in Sonoma County.

5.2 PROTECTION OF THE AIRSPACE

Safety of aircraft in flight is a major concern and control of tall structures, trees and buildings is a means of protecting aircraft operations as well as people and property on the ground.

GOAL AT-2: Provide appropriate conditions which will permit the safe passage of aircraft operating to and from airports in the County.

Objective AT-2.1: The height and type of structures adjacent to airports should be restricted or marked so they will not constitute hazards to air navigation as per FAR Part 77 and FAA Order FAA Order 8260.3B – United States Standard for Terminal Instrument Procedures (TERPS).

The following policy shall be used to achieve this objective:

Policy AT-2a: Comply with ALUC policies regarding height, location, marking and lighting of structures, unless it is determined that an override by appropriate government body is appropriate.

5.3 PROTECTION OF ADJACENT COMMUNITY AREAS

Airport activity can, through changes in types of aircraft and/or increased activity, adversely impact surrounding communities. The following directives express policies regarding environmental considerations for Airport operations at the Charles M. Schulz - Sonoma County Airport which are intended to either prevent or otherwise mitigate these adverse effects.



GOAL AT-3: Maintain compatibility

of Airport operations with preservation of environmental quality in areas adjacent to Charles M. Schulz - Sonoma County Airport.

Objective AT-3.1: Utilize the CALUP noise contours for protection of adjacent community

areas.

Objective AT-3.2: Utilize the maximum noise level as defined in the FAR Part 36 Advisory

Circular for take off as the metric for single event noise impacts and to limit such events at the Charles M. Schulz - Sonoma County Airport to 83.2 dBA (Lmax) during daytime hours and to 72 dBA (Lmax) during nighttime hours. Exemptions shall be provided for aircraft operating on emergency missions and their departure from the Airport, including their support functions, and for aircraft of the United States Government and its various agencies and for daytime operations by existing aircraft based

at Charles M. Schulz - Sonoma County Airport.

Objective AT-3.3: Move toward use of guieter aircraft at Charles M. Schulz - Sonoma

County Airport that meet Stage 3 technology according to the most recently published FAR Part 36 Advisory Circular (currently AC 36-3H) take-off chart. To implement this objective, the 83.2 dBA limit established by this element is the noise level established in the FAR Part 36 Advisory Circular for the loudest Stage 3, new technology aircraft.

The following policies shall be used to achieve these objectives:

Policy AT-3a: Regulate operations at the Charles M. Schulz - Sonoma County Airport in conformance with the CALUP noise policies and contours as shown in Figures AT-4 to 9.

Policy AT-3b: Restrict daytime aircraft operations at Charles M. Schulz - Sonoma County Airport by general aviation users and by commercial air carriers to those types of aircraft that have a departure single event noise level of 83.2 dBA (Lmax) or less, as specified in the most recently published FAR Part 36 Advisory Circular (currently AC 36-3H) take-off chart. Nighttime

operations shall be similarly limited to aircraft not exceeding 72 dBA (Lmax) according to the most recently published FAR Part 36 Advisory Circular (currently AC 36-3H) take-off chart. Daytime hours shall be defined at 6:00 a.m. to 10:00 p.m., and night time hours as 10:00 p.m. to 6:00 a.m.

This policy exempts aircraft operating on emergency service missions and their departure from the Airport, including their support functions; for aircraft of the United States government and its various agencies; and for daytime operations performed in conjunction with a County-sanctioned air show event which is open to the public.

Policy AT-3c: Move towards a quieter single event noise standard in the future as the aircraft fleet shifts to newer, quieter aircraft. The Airport Manager shall provide an annual report to the Board of Supervisors on noise complaints received at the Charles M. Schulz - Sonoma County Airport. If the Board determines that a noise problem exists, the County may establish a more sophisticated monitoring system for single noise events which shall be capable of measuring noise produced by any aircraft arriving or departing the Charles M. Schulz -Sonoma County Airport.*

Policy AT-3d: Require that, prior to initiation or expansion at Charles M. Schulz - Sonoma County Airport of any regularly scheduled commercial air carrier passenger service, the applicable air carrier shall enter into an appropriate lease or operating agreement with the County. Such leases or agreements shall conform to all applicable policy directives of the Air Transportation Element, including those pertaining to restrictions on permissible aircraft noise levels. In negotiating leases or agreements, encourage those aircraft types with quieter noise levels be utilized. To the extent allowed by law, require that new leases or other operating agreements with commercial air carriers be limited solely to quieter "Stage 3" aircraft. Prior to its execution, any proposed lease or operating agreement shall be reviewed for consistency with the Air Transportation Element and shall be reviewed pursuant to the California Environmental Quality Act and the implementing ordinance of the County of Sonoma to determine whether the project is exempt from CEQA, is covered by the EIR accompanying this element, or requires the adoption or certification of an additional environmental document.*

Policy AT-3e: Continue to implement a noise complaint and reporting program for the Charles M. Schulz - Sonoma County Airport. The program shall include a 24 hour directory listing and answering machine for receiving complaints. Complaints shall be recorded, investigated, and where possible correlated with aircraft operations. Reports summarizing the findings and any recommendations for improvements of noise policies and/or standards shall continue to be submitted annually to the Board of Supervisors by the Airport Manager.*

Policy AT-3f: Standards for interior noise levels for existing residences shall be established as part of the Approach Protection Plan. The Approach Protection Plan shall identify appropriate mitigations to be undertaken in the event noise standards are exceeded. These mitigations may include purchase assurance, acoustical treatment, and purchase of easements.*

5.4 GENERAL AVIATION

Continuation of existing general aviation³ activity and provision for future growth are an important part of air transportation in the County.

GOAL AT-4: Encourage the maintenance of an airport system which is

capable of accommodating projected growth in aviation demand.

Objective AT-4.1: Maintain the functions and level of service at Charles M. Schulz - Sonoma

County Airport to accommodate the projections of aviation activity shown

in Table AT-3.

Objective AT-4.2: Provide adequate runway, taxiway, aircraft parking, aircraft storage and

attendant facilities to meet demand projected at Charles M. Schulz -

Sonoma County Airport.

Objective AT-4.3: The County may accommodate general aviation activity at private

"restricted use" airports when compatible with surrounding land uses.

The following policies shall be used to achieve these objectives:

Policy AT-4a: Revise, update and maintain a current Airport Master Plan for Charles M. Schulz - Sonoma County Airport which conforms to the policy direction established in the Air Transportation Element.*

Policy AT-4b: The Airport Division shall limit proposed projects at the Charles M. Schulz – Sonoma County Airport to those consistent with the policy directives of this element, including construction of permanent facilities and land acquisition.

Policy AT-4c: The Airport Capital Improvement Program and budget for the Charles M. Schulz – Sonoma County Airport shall be prepared and administered in a manner which is consistent with the directives of the Air Transportation Element.

Policy AT-4d: Any airport projects shall be required to be justified based on the need resulting from projected aviation activity or current use levels.

Policy AT-4e: Any dedicated commercial cargo freight service provider at the Charles M. Schulz – Sonoma County Airport initiating or expanding service at the Airport shall be required to enter into a license, lease or operating agreement with the County of Sonoma. Licenses, leases and operation agreements shall implement and be required to conform to the policy directives of the General Plan.

³ General aviation encompasses all facets of aviation except scheduled commercial air carrier and military activity.

5.5 SCHEDULED AIR CARRIER SERVICES

Scheduled air carrier services are defined to consist of two components, regional carriers and mainline carriers. These services are contemplated to be provided exclusively at the Charles M. Schulz - Sonoma County Airport and are forecasted to reach total annual passenger levels of 459,258 by year 2020⁴.



Regional carriers provide Sonoma County

passengers with convenient connections to major air carrier service points using turbo-prop and small jets with seating capacities less than 99 seats. This service is an important component in accommodating the future demand for air travel to and from the County, and provides a time saving alternative to utilization of ground transportation along the Highway 101 corridor to access passenger services at other airports in the region. It is anticipated that the majority of scheduled passengers will be carried by regional carriers.

Mainline carriers provide passenger service to one or more of the major air passenger markets using jet aircraft with approximately 100 to 150 seats.

GOAL AT-5:

Encourage establishment and maintenance of regional and mainline carrier services at the Charles M. Schulz - Sonoma County Airport and to provide for the production of adequate Airport facilities to serve passengers in a manner which is safe, efficient, and compatible with the surrounding community.

Objective AT-5.1:

Provide scheduled air carrier services including regional and mainline carriers at the Charles M. Schulz - Sonoma County Airport not to exceed 573,000 annual passengers or 15,200 annual operations by 2020.

Objective AT-5.2:

Provide a balance of scheduled air carrier services at the Charles M. Schulz - Sonoma County Airport not to exceed a total of 21 departures per day. Each of the 21 departures shall constitute a departure allocation. The 21 departure allocations shall be distributed between regional and mainline air carriers as follows:

- (1) All 21 departures may be used by regional carriers.
- (2) Mainline carriers may use no more than 7 departures.

⁴ Charles M. Schulz – Sonoma County Airport Master Plan, 2012. Table 2-12. The Forecast also projects 599,478 annual passengers by the year 2030.

(3) Regional carriers shall not be required to give up a departure allocation that is already in use by or allocated to a regional carrier for use by a mainline carrier.

At no time shall mainline carriers utilize more than 7 of the 21 departure allocations.

Objective AT-5.3: When the above scheduled air carrier services reach 650 enplaned passengers per day averaged over a one year period (474,500 annual passengers), a review by the Board of Supervisors shall occur prior to any increase in annual passenger or operations levels. The review anticipated by this section and by Policy AT-5e is not intended to require an amendment to the Air Transportation Element nor is it intended to require review of this element in its entirety. Rather it is intended to trigger Board consideration of the environmental and health impacts and infrastructure needs of the Charles M. Schulz - Sonoma County Airport as it relates to its immediate environs.

Objective AT-5.4: Plan terminal, access, parking, other passenger service facilities and Airport facilities consistent with the levels of service in Objective AT-5.1.

The following policies shall be used to achieve these objectives:

Policy AT-5a: Revise, update and maintain the Charles M. Schulz Sonoma County Airport Master Plan to accommodate 15,200 annual operations by regional and mainline carriers by 2020. The Master Plan shall provide for scheduled air carrier services not to exceed a total of 21 departures per day with mainline carriers utilizing no more than 7 of the 21 departures.*

Policy AT-5b: Scheduled air carrier services at the Charles M. Schulz - Sonoma County Airport shall not exceed 21 departures per day. Each of the 21 departures shall constitute a departure allocation. The 21 departure allocations shall be distributed between regional carriers and mainline carriers as follows:

- (1) All 21 departure allocations may be used by regional carriers.
- (2) Mainline carriers may use no more than 7 departure allocations.
- (3) Regional carriers shall not be required to give up a departure allocation that is already in use by or allocated to a regional carrier for a mainline carrier.
- (4) At no time shall mainline carriers utilize more than 7 of the 21 departure allocations.*

Policy AT-5c: Runway length at the Charles M. Schulz - Sonoma County Airport for the existing and any new runway which may be constructed shall be limited to no longer than approximately 6,000 feet. Existing runways will not be substantially strengthened except as needed to perform necessary or routine maintenance. Operations by commercial air carriers shall be limited to those aircraft types that may safely and efficiently operate within this facility limitation. *

Policy AT-5d: Any scheduled air carrier initiating or expanding regional or mainline service at the Charles M. Schulz - Sonoma County Airport shall be required to enter into a license, lease, or operating agreement with the County of Sonoma. Licenses, leases and operating agreements shall implement and be required to conform to the policy directives of the General Plan. Licenses, leases and operation agreements shall include provisions for departure allocation reassignment.*

Policy AT-5e: Any proposed improvement projects to accommodate air carrier passenger services shall be consistent with 15,200 annual operations and 573,000 annual passengers.*

Policy AT-5f: A review by the Board of Supervisors shall occur at such a time that the "review threshold" of 650 enplaned air carrier passengers per day averaged over a one year period (474,500 annual passengers) is reached. The review anticipated by this section is not intended to require an amendment to the Air Transportation Element nor is it intended to require review of this element in its entirety; rather it is intended to trigger Board consideration of the environmental and health impacts and infrastructure needs of the Charles M. Schulz - Sonoma County Airport as it relates to its immediate environs.*

NON-AVIATION AND ACCESSORY USES AT CHARLES M. SCHULZ -5.6 **SONOMA COUNTY AIRPORT**

In addition to the facilities at the Charles M. Schulz - Sonoma County Airport that are required to serve aviation activities directly, the County leases other Airport property for non aviation accessory activities or uses that benefit from an airport location. These leases are an important source of Charles M. Schulz – Sonoma County Airport revenues.

GOAL AT-6: Utilize Airport properties not needed for aviation activity to

enhance Airport revenues and operations and to do so in a

manner compatible with adjacent community areas.

The lands shown on the Airport Master Plan as non aviation lands may be Objective AT-6.1:

used in a manner to enhance revenues and the economic viability of the Airport consistent with this Element, the CALUP, the Airport Master Plan,

and all State and Federal regulations.

The following policies shall be used to achieve these objectives:

Policy AT-6a: The Airport Division shall revise, update and maintain the Airport Master Plan consistent with FAA requirements and this element to indicate those land areas which may be used for non aviation purposes.

Policy AT-6b: Permissible non aviation and accessory uses on County owned lands include commercial and industrial uses, except that transient lodging and similar uses shall not be allowed.

Policy AT-6c: Lands designated or acquired for approach protection purposes shall not be utilized for commercial or industrial purposes and shall not be extensively developed with structures of any type.

Policy AT-6d: Appropriate uses of lands designated and/or acquired for approach protection include agriculture, outdoor recreation, and similar low intensity uses, including spray irrigation with treated effluent, provided that such uses do not result in a significant increase in bird populations at a level which would give rise to a safety problem.

6. AIR TRANSPORTATION IMPLEMENTATION PROGRAMS

Air Transportation Program 1: Charles M. Schulz - Sonoma County Airport Master Plan

Program Description: The Airport Division will be responsible for updating and maintaining the Charles M. Schulz - Sonoma County Airport Master Plan to be consistent with this element (Policy reference: AT-4a).

Air Transportation Program 2: Approach Protection Plan

Program Description: The Airport Division, within twelve (12) months of the Board approval of the Airport Master Plan, will be responsible for review, revision, and maintenance of an Approach Protection Plan based upon that Master Plan to assure that the policies of the Air Transportation Element are reflected. The impact, approach protection methods and recommendations sections will need to be reviewed for consistency with the Air Transportation Element. The plan shall provide for historical or archaeological assessments and resulting site mitigation where appropriate prior to demolition of any structure or construction of permanent Airport facilities (Policy reference: AT-1f).

Air Transportation Program 3: Amendments to the Airport Land Use Policy Plan

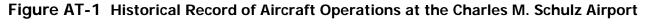
Program Description: The ALUC would be responsible for reviewing its CALUP in light of the Air Transportation Element, Master Plan, and Noise Program. The Planning Agency staff would provide staff support for this effort. Should the number of annual operations at Charles M. Schulz - Sonoma County Airport approach or exceed the projections in the CALUP, the ALUC should be notified that new projections and noise exposure contours may be necessary.

Air Transportation Program 4: Noise Complaint and Reporting Program at Charles M. Schulz - Sonoma County Airport

Program Description: The Airport Division will be responsible for implementing a noise complaint and reporting program that complies with State guidelines, including a 24 hour directory listing and answering machine, recording and investigation of complaints, summary reports, and recommendations to be submitted annually to the Board of Supervisors (Policy reference: AT-3e).

Air Transportation Program 5: Airport Protection Combining District

Program Description: The Permit and Resource Management Department will be responsible for preparing an Airport Protection Combining District for consideration by the Board of Supervisors that would implement the Sonoma County Comprehensive Airport Land Use Plan (CALUP) by identifying lands that are subject to its policies and regulations. The Combining District would encompass the area within the ALUC Primary Referral Area Boundary for the six public use airports, and would provide notification to property owners and developers of possible land use restrictions associated with the CALUP. The work would be done in the short term (Policy reference: AT-1j).



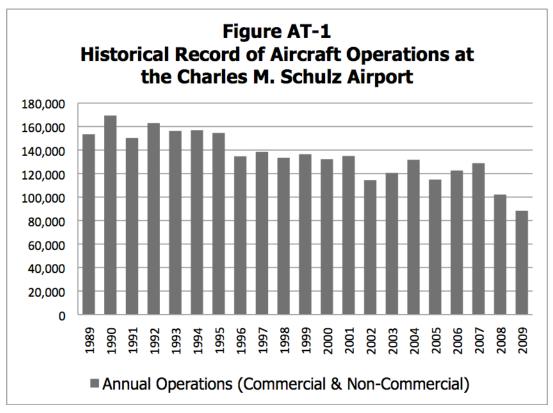


Figure AT- 2 Historical Record of Air Carrier Passenger Activity at the Charles M. Schulz Airport

