Clark County
Airport Environs Report

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Clark County Department of Comprehensive Planning
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BACKGROUND

Authority
In accordance with Nevada State Law, Clark County is required to prepare a master plan “for the physical development of the city, county or region” (Nevada Revised Statutes (NRS) 278.150). NRS 278.160 identifies safety as a subject matter that may be addressed in the master plan. Under that auspice, Clark County as part of its master plan, the Clark County Comprehensive Plan, has developed an airport environs component.

Objective of this report
The objective of this report is to characterize the context and history of the land use planning strategies in the airport environs, outline current strategies, update policy and outline upcoming work program recommendations. To do this the Department assembled an interagency team that included participation from Nellis Air Force Base, Clark County’s Department of Aviation and Clark County’s Department of Comprehensive Planning.

A Special Note about the Role of Local Governments
Authority over civilian airports and aircraft operations is divided between federal, state, and local government. Generally, the federal government establishes the operational rules of aircraft and pilots, is responsible for maintaining optimal operation of the national aviation system and homeland security issues. The airport proprietor is responsible for management of airport facilities. State and local governments’ greatest authority within an airport’s environs is in their land use planning powers.

Overview
As remotely as an airport is initially located in a community, an airport can be a center of economic activity and, if land availability permits, naturally attracts commercial and industrial development to support and benefit from this economic engine. Across the country, as communities grow, it has not been uncommon for an airport once remotely sited to become enveloped by all types of development patterns and uses, including residential development. Airports by their very nature are noise generators and contain elements of accident potential that may pose public health and safety challenges.

The following maps illustrate fifty years of development in the Las Vegas Valley in relation to Henderson Executive Airport, McCarran International Airport, Nellis Air Force Base and North Las Vegas Airport.

The map on the left, Map 1, depicts land developed\textsuperscript{1} in 1950 or earlier. The map on the right, Map 2, depicts land developed in 2000 or earlier.

\textsuperscript{1} Developed land is defined as a parcel of land with a construction date less than or equal to the stated year according to the Clark County Assessor’s Office.
Airports, though, play a valuable role in a community. This is especially true of a community such as Clark County where one airport, McCarran International Airport, supports a significant component of the local economy and another airport, Nellis Air Force Base, plays a significant role in our national defense strategy. In particular, McCarran is the principal gateway for the majority of visitors and therefore is essential to tourism and other sectors of the local economy.

There are land use planning strategies that local and state entities can implement to meet these challenges for the benefit of the community as a whole; strategies which protect both the public health and safety and an airport’s mission. The purpose of the Airport Environs Element of the Clark County Comprehensive Plan is to promote compatible land uses around airports.

An update of the Airport Environs Element was undertaken by the Department of Comprehensive Planning for two primary reasons. The first reason was to follow Board of County Commissioners’ direction to transition the Comprehensive Plan to a policy document. The second reason was that it had been some time since the Element and some of its underpinnings were last critically evaluated.

**Federal Efforts**

Federal efforts to promote compatible land use around airports arose in the early 1970’s. The General Services Administration (GSA) in studying the issue found that the general increase of development surrounding federal airfields had not always considered the noise levels and safety factors of flight operations. In order to increase the level of consideration given to noise and safety by at least the federal agencies whose decisions affected land use around federal airfields, the GSA in 1975 issued a Federal Management Circular (FMC 75-2: Compatible Land Uses at Federal Airfields). This Circular specifically directed all federal agencies to make sure that their actions were compatible with the land use recommendations prepared by the operating agencies for federally owned airports and airfields.
Even prior to the issuance of FMC 75-2, the U.S. Department of Housing and Urban Development (HUD) had a noise policy in place. However, for many years HUD assumed that its noise policy, in combination with its guidance on unusual hazards contained in housing valuation handbooks, was adequate to prevent HUD funds from being used to promote development in high accident potential areas. Since these areas were so close to the ends of the runways, it was assumed that they would also be exposed to high noise levels. However, HUD discovered that there were some instances where portions of Runway Clear Zones, Clear Zones, and Accident Potential Zones were not in the highest noise level areas and that HUD funds were inadvertently being used to assist in the development of incompatible uses.

In addition, it was found that the guidance on unusual hazards contained in HUD’s Housing Handbooks, was not specific enough to cover Runway Clear Zones, Clear Zones and Accident Potential Zones. Further, HUD noise regulations only covered what were considered to be noise sensitive activities. There are many other HUD programs that sponsor activities that are not sensitive to high noise levels but which would be incompatible with a Runway Clear Zone, Clear Zone or Accident Potential Zone. For these reasons, HUD in 1984 issued standards for the siting of HUD assisted projects in Runway Clear Zones at civil airports and Clear Zones and Accident Potential Zones at military airfields.

In establishing these standards HUD relied almost exclusively on the recommendations of the Department of Defense (DOD) and the Federal Aviation Administration (FAA) as the two responsible agencies with the best understanding of the issue.

The DOD has had an aggressive program, the Air Installation Compatible Use Zone (AICUZ) program, to promote the protection of the public safety and health; as well as to promote the protection of the Air Force’s national defense mission, since the early 1970s. The AICUZ is a composite study of a multitude of factors including average noise levels, accident potential, and aircraft flight paths and altitudes.

The FAA has been working towards a quieter aviation environment for years as well. The focus of much of their work towards aircraft noise reduction was through their Federal Aviation Regulation Part 36 and Part 91 standards for engine and airframe noise. The FAA considers land use planning as another approach to reducing conflicts between aircraft noise and development. In 1984, Federal Aviation Regulation Part 150 (FAR Part 150) provided guidelines for airport noise compatibility planning and funds for implementation of program
measures through an approved FAR Part 150 Noise Compatibility Program. Similarly, the Environmental Protection Agency (EPA) has also been a major force in noise source reduction and setting public health standards.

**Clark County Efforts**

Clark County has a long history in promoting compatible land use in its airport environs. Highlights include:

- 1981 Airport Noise Control and Land Use Compatibility Study (supplemented in 1983)
- 1983 Residential Building Requirements and Costs in High Noise Areas Planning Study
- 1986 Public Health and Safety Programs: Airport Environs Element
- 1986 Airport Environs Zoning Overlay District Established
- 1989 FAR Part 150 Study
- 1990 Airport Environs Zoning Overlay District Updated
- 1994 FAR Part 150 Study Update
- 1998 Addendum to the 1986 Public Health and Safety Programs: Airport Environs Element
- 2004 Airport Environs Zoning Overlay District Updates
- 2006 FAR Part 150 Study Update
- Participation in numerous AICUZ Studies and Updates

**Strategies for Compatibility for Future Development**

The following are the primary strategies Clark County has in place for promoting compatible land use. Development and update of these strategies and future strategies are guided by policies within the Clark County Comprehensive Plan.

**Development Code**

Within its development code (Title 30), Clark County has adopted an Airport Environs Overlay District. The purpose of this zoning overlay district is to ensure compatible land use within airport accident hazard and noise exposure areas by providing for a range of compatible uses and by prohibiting development of incompatible uses.

The overlay district currently identifies airport environs for McCarran International Airport, Nellis Air Force Base and Creech Air Force Base (Map 3). Similar overlay districts have been adopted by the City of North Las Vegas for the North Las Vegas Airport and the City of Henderson for the Henderson Executive Airport.
The overlay district is composed of twelve subdistricts for noise, accident potential, runway protection and live ordnance loading areas. Updates to this overlay district generally occur through recommendations that come from a FAR Part 150 or an AICUZ study.

Land Use Plans
The County’s land use plans are another mechanism in which land use compatibility within the airport environs is achieved. Airport environs are significant considerations that are acknowledged in the development of land use plans. As planned land use designations are determined, only planned land uses compatible with the airport environs overlay district are considered.

Sound Attenuation in New Construction
Clark County’s building code contains construction standards for noise level reduction to reduce the level of noise audible within the interior of buildings. With the recent growth of mid to high-rise development throughout the Valley, higher noise level reduction standards have been incorporated into the development process to address this new phenomenon. The County’s development code specifies what level of noise attenuation is required for individual uses. In the airport environs, interior noise reduction construction is required for most construction.

Sound Insulation Programs for Existing Residences
Residences, schools and other noise sensitive development built before noise attenuation standards were adopted may be disproportionately impacted by significant noise levels. In certain areas, it may be appropriate to provide sound insulation for these existing properties to ensure that all buildings within a particular area have equivalent levels of protection from aircraft noise.

Noise Disclosure
Historically, the County has required noise disclosure to inform homebuyers of the fact that they should anticipate airport related noise for many projects that are significantly impacted by high levels of aircraft noise on a case-by-case basis. However, neither local nor state law currently explicitly requires such notification. The Clark County Department of Aviation staff reviews development proposals within the Las Vegas Valley that could be impacted by noise from McCarran International Airport. For those proposed developments potentially impacted by noise it is recommend that approval be subject to the realtor / developer of the development informing prospective buyers of the existing and forecasted noise exposure for the area.
**Avigation Easements**

An avigation easement is a signed, acknowledged recognition of the right of overflight from any airport, including the right to make the noise necessary to operate aircraft operating from such an airport. The County historically required that property owners convey an avigation easement to the County as a condition of certain land use approvals. In late 2006, the County suspended this practice in response to a finding by the Nevada Supreme Court. It is unknown at this time whether or how the County may reinstitute this practice in the future.

**Height Notification**

With respect to structure heights near airports, the FAA determines, pursuant to FAR Part 77, whether a structure would constitute an obstruction or hazard to air navigation. It is the project applicant’s responsibility to request FAA review and comment on the proposed project. The County requires that project applicants notify the FAA as provided in Part 77, thereby ensuring that notification is an obligation of both federal and local law. The County’s authority to restrict the height of structures determined by the FAA to constitute a hazard was called into question by the Nevada Supreme Court. The County’s exercise of such authority thus is subject to change in the future.

**Land Acquisition and Management**

Clark County operates land acquisition programs in which certain lands impacted by noise are purchased, thus eliminating incompatible or potentially incompatible land uses. Residentially developed property has been acquired in the airport environs in some areas exposed to a Day-Night Annual Average Noise Level (DNL) of 60 dB and greater. Development of these programs and funding for them stem primarily from the FAR Part 150 Noise Compatibility Program.

The Department of Defense also operates a program in which it acquires private property in-holdings within the boundary of Nellis Air Force Base. Clark County has worked to support these efforts.

Additionally, because a great deal of land within the airport environs was in federal ownership, the County in 1992 entered into a cooperative management agreement with the United States Department of the Interior’s Bureau of Land Management (BLM) to cooperate in land use planning and management in an area that became known as the Cooperative Management Area (CMA).

The County’s control over the lands within the CMA was further strengthened when as part of the Southern Nevada Public Land Management Act of 1997 transfer of land identified in the 1992 agreement to Clark County from the federal government was made possible. Actual transfer of the lands occurred on March 30, 1999. Over 5,000 acres of federally-controlled land located within the CMA (the projected 1992 60 DNL noise contour) was thus prohibited from being developed with an incompatible use (i.e., residential, motels, hotels, schools, etc.). The CMA exists in portions of the towns of Enterprise, Paradise and Spring Valley and is reflected in the land use plans for these towns.

**ANALYSIS**

As part of the update effort, staff researched and/or reviewed: 1) airport environs planning efforts, 2) recent court cases for legal precedents related to airport environs, 3) recent regulations and guidance from the Federal Aviation Administration and the Department of Defense and 4) the current Airport Environs Element and how it might be updated, particularly within the context of the current effort to update and reformat the overall Comprehensive Plan.
Regulatory Standards and Planning Practices

Research suggested that the regulatory and planning practices environments based on studies for land use has changed very little. Other than the McCarran International Airport v. Sisolak Nevada Supreme Court ruling, no significant court cases that would affect the Department’s practices were identified. There was a 2005 U.S. Court of Appeals case that clarified that the FAA’s land use compatibility guidelines do not prohibit local governments from regulating land use below the DNL 65 dB level and that recognized the right of airport proprietors to take action to address noise at these levels. However, Congress, in the most recent FAA Reauthorization, prohibited the use of federal funds to address noise at levels below DNL 65 dB. Since the County established its Airport Environ Overlay District, no other significant change in the systems, regulations or funding used by the FAA, HUD and DOD was identified. Similarly, research on the general subject of airport environs planning also resulted in no significant new findings.

Specifically researched was whether a change to a different land use classification system from the Standard Land Use Code Manual land use classification system used in the County’s development code was warranted. A determination was made that at this time the current land use classification system is still working well and that developing or switching to a new system is unwarranted.

Southern Nevada Supplemental Airport (Ivanpah Valley Airport)

Passenger and cargo volume at McCarran International Airport continues to rise. In the late 1990s it was forecasted that demand could exceed capacity in the near future. With this in mind, planning began on development of another airport to assist in meeting the forecast demand. Development of the Southern Nevada Supplemental Airport is proposed to take place in Ivanpah Valley, approximately 23 miles south of the Las Vegas Valley. The County’s South County land use plan was amended to address development of this new airport which is expected to open in 2017.

FAR Part 150 Noise Compatibility Study Update

In late 2006 the Clark County Department of Aviation completed, and submitted to the Federal Aviation Administration for approval, an update to the County’s FAR Part 150 Noise Compatibility Study. This study proposes a complement of noise abatement and mitigation programs to lessen the extent and effects of aircraft noise on noise-sensitive land uses in the airport environs of McCarran International Airport.

The Study calls for updating the Airport Environ Overlay District to reflect the new aircraft noise maps developed as part of the Study. Additionally, the Study calls for establishment of a new DNL 60 dB subdistrict for the Airport Environ Overlay District. A new DNL 60 dB subdistrict was originally proposed in the Airport Environ Element Addendum of 1998 when it was recognized that a large proportion of the complaints that the Department of Aviation received was coming from outside the DNL 65 subdistrict. At that time however, a new subdistrict was not established. Since then, the Department of Aviation has used an uncodified AE-60 subdistrict for land use planning purposes and they now feel it is appropriate for this subdistrict to be codified.

Land Use Compatibility

Despite the various programs and planning efforts to eliminate incompatible land uses within the airport environs, incompatible land uses still exist within the airport environs. Continuation of current programs and consideration of other options to eliminate incompatible land uses should be pursued.

The following is a list of issues that have been identified which may warrant further consideration.

- Major flight corridors for Nellis Air Force Base should be examined.
• Ways to address the Nellis Range within airport environs regulations should be examined.

• Long-term incompatible land uses continue in some parts of the airport environs and mitigation and abatement options could be pursued.

• As airports are proposed and established, such as the proposed replacement General Aviation Airport at Mesquite, staff should work to ensure airport environs issues are addressed.

Clark County’s current efforts are generally sufficient with regard to promoting land use compatibility within its airport environs. Staff has identified recommendations and policies for consideration to better reflect how programs and practices have evolved over the past twenty plus years and to reflect the update and reformat the overall Clark County Comprehensive Plan into a policy document.

**RECOMMENDATIONS**

**Policy Recommendations**

• Aircraft noise, accident potential and hazard areas will be considered and effectively planned for in Clark County.

• Clark County will cooperate with the United States Air Force and the Department of Aviation to evaluate land use proposals on and near Air Force Bases and airports to reduce or eliminate development incompatibilities.

• Clark County will support local, state and federal programs promoting land use compatibility for airports within Southern Nevada.

• Clark County will encourage airport owners/operators to acquire land that may conflict with the current or planned operation of that particular airport.

**Work Program Recommendations**

• Staff should work with Nellis Air Force Base to examine the practicality of creating a departure corridor at Nellis Air Force Base, possibly through identifying federal lands that could be considered for withdrawal or otherwise placed in Department of Defense control.

• Staff should work with Nellis Air Force Base to examine ways to address the Nellis Range within airport environs regulations.

• Staff should work with Nellis Air Force Base to examine ways to address the evolution of new missions and aircraft that are now training and/or coming to Nellis to develop appropriate airport environs regulations.

• Staff should work with the Clark County Department of Aviation to ensure airport environs are established for airports in the County, as needed.
Mitigation of existing incompatible uses (generally residential uses) within the airport environs should be examined.

Staff should work with the Clark County Department of Aviation, Nellis Air Force Base, the real estate and development community, and the State of Nevada to enhance current noise disclosure requirements.

Evaluate the possibility of initiating zone changes for vacant residentially zoned property in Accident Potential Zones and Live Ordnance Zones.

Staff should prepare an amendment to Title 30 for the Board of County Commissioners to consider creating a DNL 60 dB subdistrict for the Airport Environ Overlay District.