TO:

**Mayor and City Commissioners** 

**DATE:** May 6, 2009

Members of the Development Review Board

FROM:

City Attorney

SUBJECT:

Application of the Airport Noise Zone Regulations to the proposed "Hatchet

Creek" subdivision design plat (Petition No. PZ-09-19SUB)

#### INTRODUCTION

At its May 14, 2009 meeting, the Development Review Board is scheduled to hear Petition No. PZ-09-19SUB for conditional review of a design plat for the proposed Hatchet Creek residential subdivision. Thereafter, in accordance with City Code, the design plat will be forwarded to the City Commission for final review. This Office has received nine letters from attorneys for the Petitioner (dated April 29, 2009 from Attorney Shelley; dated April 29, 2009 from Attorney Reimer; and dated April 14, 2009 from Attorney Shelley with the following six letters attached: April 10, 2009 from Attorney Reimer, February 17, 2009 from Attorney Reimer, January 22, 2009 from Attorney Shelley, January 22, 2009 from Attorney Weaver, January 22, 2009 from Attorney Carpenter and January 21, 2009 from Attorney Reimer) concerning the application of the City's Airport Noise Zone Regulations to the Hatchet Creek property and in particular, whether residential use is permitted in the Airport Noise Zone.

Given the length and complexity of arguments presented in the letters, this Office is providing a framework for your analysis of this issue in the context of the design plat. The review of a design plat is a quasi-judicial matter and this memorandum is issued in connection with this Petition. Additionally, this memorandum is intended to address the issues and questions raised in these nine letters and no further response will be provided. This memorandum does not address any other matter and it should be noted that the proposed design plat must comply with all other relevant provisions of the Comprehensive Plan and Land Development Code.

#### **BACKGROUND**

On February 11, 2008, East Gainesville Development Partners, LLC (the "Petitioner") filed an application for a plat from the City Planning and Development Services Department. application, as subsequently revised, requests an environmental cluster subdivision consisting of approximately 734 residential lots on 291 acres, more or less (the "Property"). The Property adjoins and surrounds the Ironwood Golf Course and lies north of NE 39th Avenue, south of NE 53<sup>rd</sup> Avenue, east of NE 15<sup>th</sup> Street and west of Waldo Road and the Gainesville Regional

Due to the specific allegations contained in the April 29, 2009 letter from Attorney Shelley, a separate letter was issued on May 4, 2009.

Airport. We note that the Property is, in part, the same property that is the subject of Petition No. 23LUC-07PB (Large Scale Land Use Change for Hatchet Creek PUD) that is scheduled to be heard on adoption hearing by the City Commission in the 2009 second cycle of large scale Comprehensive Plan amendments. Because the design plat as submitted (which proposes residential use within the airport noise zones) is inconsistent with the land use ordinance that was adopted on first reading on June 16, 2008 (which would prohibit residential use within the airport noise zone), City staff requested that the Petitioner advise the City of its intended course of action with regard to reconciling the inconsistencies in the event both are approved.

In the context of the land use change, this Office was asked for, and provided by memorandum to the City Commission dated September 19, 2007, legal guidance on "whether residential development is allowed within the airport noise contours" and other matters. The matters and opinions expressed in that memorandum relating to the application of the "City's Comprehensive Plan", "Land Development Code", "Noise Contours" and "FAA Issues" are relevant to both petitions because we address the interplay of what may appear to be competing and complex regulations. We would refer the Commission to the September 19, 2007 memorandum and will provide members of the Development Review Board with a copy since they were not involved in the land use petition and subsequent ordinance that was adopted on first reading on June 16, 2008. This memorandum provides further guidance in the specific context of a design plat.

#### **LEGAL ISSUES**

The Property is currently zoned RSF-1 and RSF-4 and these zoning districts allow single-family residential dwellings as a permitted use by right; however, Section 30-347 of the Land Development Code of the City of Gainesville" states that "all development must comply with the airport hazard zoning regulations adopted by the city commission and set out in an appendix to this chapter." Section 30-23 defines "development" to include "(4) Subdividing land into two or more parcels." Copies of the cited Code sections are attached as **Exhibit "1."** Therefore, the subdivision design plat must comply with the City's Airport Hazard Zoning Regulations. The Airport Hazard Zoning Regulations comprise an additional layer of regulation that overlays the underlying zoning district regulations. Florida Statutes Section 333.04(2), attached as **Exhibit "2"**, states that "in the event of conflict between any airport zoning regulations . . . and other regulations applicable to the same area, whether the conflict be with respect to the height of structures or trees, the use of land, or any other matter . . . the more stringent limitation or requirement shall govern and prevail."

The Airport Hazard Zoning Regulations establish three "airport zones of influence" to regulate land development in relation to the Gainesville Regional Airport: the (1) Airport Height Notification Zone, (2) Airport Runway Clear Zone, and (3) the Airport Noise Zone. The issues presented with this design plat concern residential uses within the Airport Noise Zone.

The Airport Noise Zone consists of three noise subzones: Subzone A comprised of property within the 75 and higher Ldn (the "75Ldn"), Subzone B comprised of property within the 70-74Ldn (the "70Ldn") and Subzone C comprised of property within the 65-69Ldn (the "65Ldn"). The subzones are depicted on a map that was adopted on May 10, 1999 as Attachment 3 to the Airport Hazard Zoning Regulations; this map is attached as **Exhibit "3."** The Property is located, in large part, within the subzones, as depicted on the map prepared by the Petitioner and attached as **Exhibit "4."** 

Within the Airport Noise Zone, the Code specifies "Permitted Uses", "Restricted Uses and Criteria" and "Prohibited Uses." This excerpt of the Code is attached as **Exhibit "5."** Residential uses are listed under "Restricted Uses and Criteria." The Code states in subsection e that Restricted Uses are permitted in the Airport Noise Zone only if: (1) the criteria are met, and (2) the development "is compatible with the Official 14 CFR Part 150 study."

The first condition, the criteria, consists of the developer's commitment to utilize certain insulation or construction methods to reduce the level of airport noise that will be audible inside of a closed structure by at least 25 decibels, or to provide avigation easements that are intended to allow the airport to operate at its then current level of operations over the affected property. To satisfy this condition, any approval of this design plat must be contingent upon the developer providing either noise level reduction or an avigation easement, as set forth in the Code.

The second condition, compatibility, requires the decision-making body to determine whether the residential use is compatible with the Official 14 CFR Part 150 Study. The 14 CFR Part 150 Study dated March 1986 is the "Official Study." In order to make a determination regarding compatibility, the decision-making body must review the Official Study and consider the competent, substantial evidence offered by City staff and its agents, the Petitioner and its agents and perhaps by affected parties and the public at large.

As this Office has advised quasi-judicial boards, legal argument by attorneys does not constitute competent, substantial evidence for purposes of a quasi-judicial hearing, unless the attorney qualifies as an expert on the subject matter at issue. Citizen and layperson comments may be considered competent, substantial evidence, provided the presenter has some relevant technical training, education or expertise in the area or a supporting factual basis for the comments.

"Compatibility" in the context of uses of land in the vicinity of airports is discussed in both state and federal law. "Airport land use compatibility zoning" is defined in Florida Statues, Chapter 333, Airport Zoning, as:... "airport zoning regulations restricting the use of land adjacent to or in the immediate vicinity of airports in the manner enumerated in s. 333.03(2) to activities and purposes compatible with the continuation of normal airport operations including landing and takeoff of aircraft in order to promote public health, safety and general welfare." Section 333.02(1) states in pertinent part "It is further found that certain activities and uses of land in the immediate vicinity of airports as enumerated in s. 333.03(2) are not compatible with normal airport operations, and may, if not regulated, also endanger the lives of the participants, adversely affect their health, or otherwise limit the accomplishment of normal activities." Incompatible uses enumerated in Section 333.03(2) include residential uses or educational facilities within the outer noise contour that is considered incompatible by 14 C.F.R. part 150,

<sup>&</sup>lt;sup>2</sup> The Gainesville Alachua County Regional Airport Authority (GACRAA) is currently working on an updated Part 150 Study. On April 20, 2009, the FAA determined that certain maps prepared on behalf of GACRAA entitled "Existing (2007) Noise Contour Map" and "Future (2012) Noise Contour Map" are in compliance with applicable requirements of 14 CFR Part 150. It is anticipated that the City will update its Airport Hazard Zoning Regulations; however, until that process is completed the 1986 Study and the adopted Airport Noise Zone Map remains the "Official" Study and Map for regulatory purposes. We note that updating the Airport Hazard Zoning Regulations is a legislative process, not a mere ministerial act, which requires holding public hearings and adopting one or more ordinance(s). See Sec. 333.05, F.S., attached as Exhibit 6.

Appendix A and sanitary landfills within certain distances from the airport runways. These statutory sections are attached as **Exhibit** "6."

"Noncompatible land use" is defined in the Part 150 federal regulations as follows: "the use of land that is identified under this part as normally not compatible with the outdoor noise environment (or an adequately attenuated noise level reduction for any indoor activities involved) at the location because the yearly day-night average sound level is above that identified for that or similar use under appendix A (Table 1) of this part." Table 1 from the federal regulations is included in the Official Study as "Table 10" and is attached as Exhibit "7." Table 10 lists residential uses as noncompatible in the 65Ldn and above noise zones and states these uses should be prohibited. However, this is not a definitive answer for the Development Review Board or City Commission, as there are two notes in Table 10 (collectively, the "Notes") that should be considered, as well as the remaining text of the Official Study.

The first note is identified with an \* (the "Asterisk Note.") It states that "the designations contained in this table do not constitute a Federal determination that any use of land . . . . is acceptable or unacceptable under Federal, State or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses." In short, the Asterisk Note makes clear that determining compatibility of uses within a noise zone is a local decision.

The other note ("Note 1") gives further guidance where a local community "determines that residential or school uses must be allowed...." In this event, the Note recommends that certain noise level reduction (NLR) measures be incorporated into codes and approvals. The Note concludes that "the use of NLR criteria will not eliminate outdoor noise problems." A further discussion of the Notes follows.

Table 10 and its Notes were raised in the context of the Hatchet Creek PUD land use petition and were discussed in the City Attorney Memorandum dated September 19, 2007. In view of conflicting information provided to the City by GACRAA and the Petitioner, City staff sought guidance from FAA Staff on September 4, 2007 to obtain familiarity with the FAA's general interpretation concerning Table 10, land use compatibility within airport noise zones and the effect such decisions may have on FAA grant funding<sup>3</sup>. FAA staff explained that, as stated in Table 10, residential development in the 65Ldn and 70Ldn noise contours is considered "not compatible and should be prohibited." Additionally, Note 1 is intended to provide the FAA's

<sup>&</sup>lt;sup>3</sup> During the phone conference, the FAA staff stated that while they recognize the City as the local land use and zoning jurisdiction (in accord with the Asterisk Note in Table 10), the City is also the Airport sponsor for purposes of accepting FAA grants for airport development and improvement. As such, Federal law requires that the City make certain assurances in connection with the Airport's receipt of FAA grant funding for airport development, airport planning and noise compatibility. In particular, grant assurance number 21, Compatible Land Use, requires the City to assure the FAA that it will take appropriate action to restrict the use of land near the airport to uses that are compatible with normal airport operations. FAA staff reiterated its position, as expressed in prior correspondence that the FAA may determine that a City land use or zoning decision may be incompatible with the Airport operations thereby affecting the Airport's eligibility for FAA grant funding. (Letters from FAA dated April 9, 2007 and October 22, 2007, attached as Exhibit "8".)

suggested mitigation measures where the community determines that residential or school uses must be allowed within the 65Ldn and 70Ldn noise contours. The example provided by FAA staff is when a noise contour changes over time and affects existing residential structures. Rather than require the purchase and demolition of the now incompatible structures, the FAA suggests implementing noise level reduction measures in those structures in order to attain a reduction of at least 25 to 30 decibels. The FAA staff further noted that the use of noise level reduction measures does not eliminate outdoor noise issues.

A further discussion of Table 10, its Notes and the Official Study are discussed by the city's airport noise consultant, Ted Baldwin, in a memorandum dated April 9, 2009, attached as **Exhibit "9**."

Since the review of a design plat is a quasi-judicial matter, the decision of the Development Review Board and City Commission must be based on the competent, substantial evidence adduced at the hearing. The Board and Commission must weigh the evidence and consider the opinions of properly admitted expert witnesses. Testimony of lay persons may be relevant if based upon their own knowledge or if they have some relevant training in the area for which they are testifying. Argument of legal counsel is not ordinarily considered expert testimony, but may be useful in understanding the issues. It is your own recollection and interpretation of the evidence that controls.

#### CONCLUSION

The Petition is a request for subdivision design plat for approximately 734 residential lots, a large portion of which are within and subject to regulation of the City's Airport Noise Zone. In order to approve the residential use within the Airport Noise Zone, the Code provides that the proposed development must (1) comply with the noise level reduction or avigation easement criteria, and (2) be found to be compatible with the Official Part 150 Study. The Development Review Board, in its advisory role, and the City Commission, as the decision-making body, must interpret and apply the Official Study, the Airport Hazard Zoning Regulations and other relevant planning considerations as supported by competent, substantial evidence presented at the hearing(s) in deciding whether to approve, deny, or approve the design plat with conditions.

Nicolle M. Shalley

Assistant City Attorney II

Marion & Radson

City Attorney

cc:

Ronald Carpenter, Attorney for the Petitioner Linda Shelley, Attorney for the Petitioner Daniel S. Reimer, Attorney for the Petitioner Russ Blackburn, City Manager

Erik Bredfeldt, Planning and Development Services Director

Ralph Hilliard, Planning Manager Scott Wright, Senior Planner

Attachments

- (6) Has been determined by the department of health and rehabilitative services to be presently dangerous to himself/herself or others or to present a clear and present potential to escape;
- (7) Has been determined by a licensed psychiatrist or a licensed clinical psychologist to be presently dangerous to himself herself or others or to present a clear and present potential to escape; or
- (8) Has a history of committing acts of violence or escaping from secured premises.

Day care center means any place, building or location, other than an occupied dwelling, where care is provided for four or more natural persons, not related to the operator. Such care may be rendered day or night. Such term specifically includes a kindergarten (when not part of a school), nursery school, child care center, preschool and adult day care facility.

De minimis development means a development of such low intensity as to have a de minimis effect, if any, on the level of service standards adopted in the comprehensive plan. De minimis development includes one single-family dwelling or one two-family dwelling on a lot of record as of the effective date of adoption of this chapter. It also includes additions to or the erection of structures smaller than 200 square feet. De minimis development shall be eligible for a certificate of concurrency exemption. For the purposes of traffic circulation concurrency only, developments generating fewer than 20 peak hour, peak direction trips shall be considered de minimis and thus exempt from the traffic circulation LOS standards.

Deferral of capacity reservation means that water and wastewater treatment plant capacity is not reserved and plant connection fees are not assessed at the certificate of preliminary or final concurrency stage. An applicant for a deferral must sign a deferral form available from the department of planning and development services. The applicant must still meet water/wastewater concurrency requirements, but these are deferred until an application for a building permit is made. The city makes no guarantees that capacity will be available for the project.

Degrade or degraded is to cause a feature or area to suffer an adverse impact. A degraded feature or area is one which has suffered an adverse impact from which full restoration to historic natural functioning has not yet been attained.

Demolition means the tearing down or razing of 25 percent or more of a structure's existing external walls.

Design manual means a manual prepared and updated by the city manager or designee and on file in the public works department that provides design guidelines and illustrations to be utilized in the design and construction of physical improvements within the city.

Developed area means the area within an imaginary line formed by the outer perimeter of all structures, parking lots, and other paving and manmade alterations to the natural condition of any lot or parcel of land, except for sidewalks in public rights-of-way and driveways, the perimeters to be adjusted to the closest geometric shape for which an area may be reasonably easily calculated.

Developed industrial area includes are under a roof and/or any outside area used for material storage or equipment or industrial activity.

Developer means any person who engages in or proposes to engage in a development activity either as the owner or as the agent of an owner of property.

Development or development activity means any of the following activities:

- Construction, clearing, filling, excavating, grading, paving, dredging, mining, drilling or otherwise significantly disturbing the soil or vegetation of a site.
- (2) Building, installing, enlarging, replacing or substantially restoring a structure, impervious surface or water management system, and including the longterm storage of materials.
- (3) The erection, placement, alteration, remodeling or reconstruction of any build-

ing on any land or the authorization of any improvements on any land to facilitate the use of such land.

- (4) Subdividing land into two or more parcels.
- (5) A tree removal for which authorization is required under this Code of Ordinances.
- (6) Erection of a permanent sign unless expressly exempted by this Code of Ordinances.
- (7) Alteration of a historic property for which authorization is required under this Code of Ordinances.
- (8) Changing the use of a site so that the need for parking is increased.
- (9) Construction, elimination or alteration of a driveway onto a public street.
- (10) For the purpose of vested rights, development has the meaning given to it in F.S. § 380.04, as amended.

Development agreement means an agreement entered into between the city and a developer for the purpose of assuring the city that the developer shall provide required public facility capacity. Development agreements include, but are not limited to, agreements authorized pursuant to F.S. § 163.3220 and F.S. § 380.01 et seq., both as amended from time to time.

Development order means any order granting, denying or granting with conditions an application for approval of a development project or activity.

Development permit means any official city document which authorizes the commencement of construction or land alteration without need for further application and approval. Development permits include: all types of construction permits (plumbing, electrical, foundation, mechanical and so forth, in addition to the building permit itself), grading and clearing permits, tree removal permits, street graphic permits, etc.

Development plan means a plan indicating the permitted design and extent of development of a parcel of land, approved under and pursuant to article VII of this chapter.

Director means the director of the department designated by the city manager to administer these regulations.

District (for the purpose of historic preservation) means a geographically definable area, urban or rural, possessing a significant concentration, linkage or continuity of sites, buildings, structures, objects or areas, which are united by past events or aesthetically by plan or physical development. A district also may be comprised of individual resources which are separated geographically but are linked by association or history.

District or zoning district means an area or areas of the city designated on the zoning map as being subject to the uniform regulations and requirements of a particular zoning category established in this chapter.

Documentation means photographs, slides, drawings, plans, factual written descriptions or legal records.

Dormitory means a dwelling used, or intended to be used, for the furnishing of sleeping accommodations for pay to transient or permanent guests and in which more than 2,500 gross square feet of space is used, or intended to be used, for such purpose. Meals or housekeeping facilities may also be provided such guests or tenants, but no dormitory shall maintain an eating or drinking place, open to the public, in the same building or in any building in connection therewith.

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ction (1), airport ich restrict new ction within runes, or construccompatible with r public health, ingregations of or attraction of construction of ivate school at ned, public-use niles in a direct and which has of the runway. an educational only be granted when the political subdivision administering the zoning regulations makes specific findings detailing how the public policy reasons for allowing the construction outweigh health and safety concerns prohibiting such a location.

- (4) The procedures outlined in subsections (1), (2), and (3) for the adoption of such regulations are supplemental to any existing procedures utilized by political subdivisions in the adoption of such regulations.
- (5) The Department of Transportation shall provide technical assistance to any political subdivision requesting assistance in the preparation of an airport zoning code. A copy of all local airport zoning codes, rules, and regulations, and amendments and proposed and granted variances thereto, shall be filed with the department.
- (6) Nothing in subsection (2) or subsection (3) shall be construed to require the removal, alteration, sound conditioning, or other change, or to interfere with the continued use or adjacent expansion of any educational structure or site in existence on July 1, 1993, or be construed to prohibit the construction of any new structure for which a site has been determined as provided in former s. 235.19, as of July 1, 1993.

History.—s. 3, ch. 23079, 1945; s. 4, ch. 75-16; s. 4, ch. 88-356; s. 72, ch. 90-136; s. 8, ch. 92-152; s. 10, ch. 93-164; s. 1, ch. 94-201; s. 958, ch. 95-148; s. 971, ch. 2002-387.

# 333.04 Comprehensive zoning regulations; most stringent to prevail where conflicts occur.—

- (1) INCORPORATION.—In the event that a political subdivision has adopted, or hereafter adopts, a comprehensive zoning ordinance regulating, among other things, the height of buildings, structures, and natural objects, and uses of property, any airport zoning regulations applicable to the same area or portion thereof may be incorporated in and made a part of such comprehensive zoning regulations, and be administered and enforced in connection therewith.
- (2) CONFLICT.—In the event of conflict between any airport zoning regulations adopted under this chapter and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or trees, the use of land, or any other matter, and whether such regulations were adopted by the political subdivision which adopted the airport zoning regulations or by some other political subdivision, the more stringent limitation or requirement shall govern and prevail.

History.-s. 4, ch. 23079, 1945.

# 333.05 Procedure for adoption of zoning regulations.—

(1) NOTICE AND HEARING.—No airport zoning regulations shall be adopted, amended, or changed under this chapter except by action of the legislative body of the political subdivision in question, or the joint board provided in s. 333.03(1)(b) by the bodies therein provided and set forth, after a public hearing in relation thereto, at which parties in interest and citizens shall

have an opportunity to be heard. Notice of the hearing shall be published at least once a week for 2 consecutive weeks in an official paper, or a paper of general circulation, in the political subdivision or subdivisions in which are located the airport areas to be zoned.

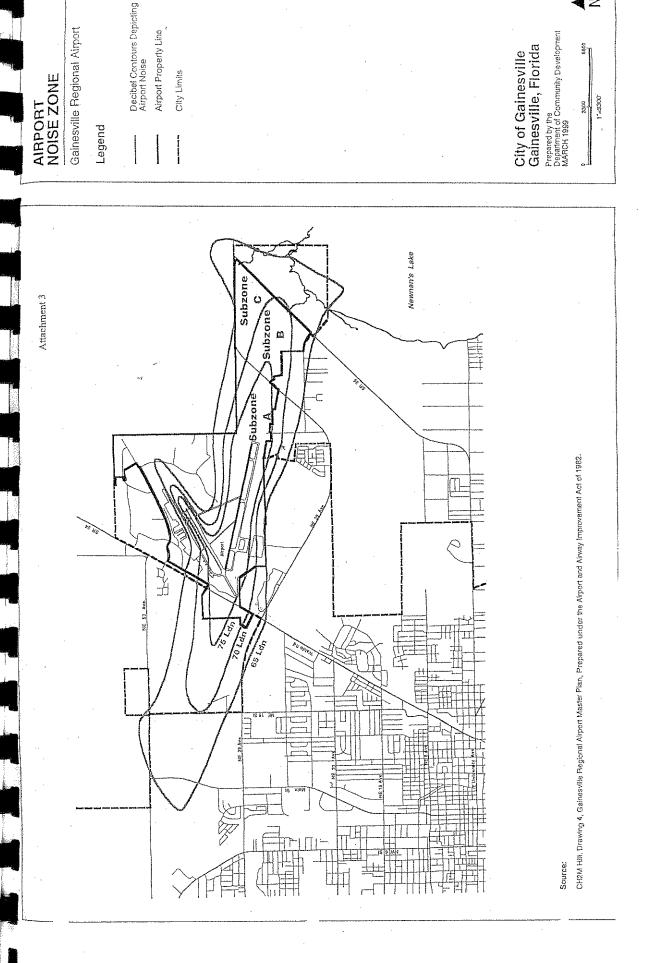
(2) AIRPORT ZONING COMMISSION.—Prior to the initial zoning of any airport area under this chapter the political subdivision or joint airport zoning board which is to adopt the regulations shall appoint a commission, to be known as the airport zoning commission, to recommend the boundaries of the various zones to be established and the regulations to be adopted therefor. Such commission shall make a preliminary report and hold public hearings thereon before submitting its final report, and the legislative body of the political subdivision or the joint airport zoning board shall not hold its public hearings or take any action until it has received the final report of such commission, and at least 15 days shall elapse between the receipt of the final report of the commission and the hearing to be held by the latter board. Where a city plan commission or comprehensive zoning commission already exists, it may be appointed as the airport zoning commission. History.-s. 5, ch. 23079, 1945; s. 74, ch. 90-136; s. 23, ch. 90-279; s. 39, ch.

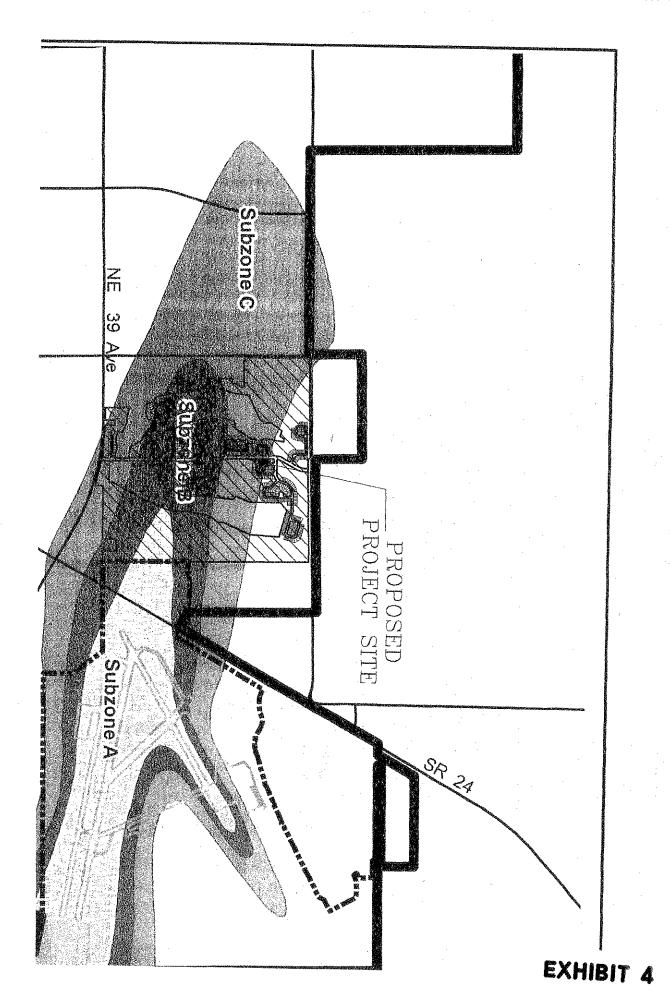
333.06 Airport zoning requirements.—

(1) REASONABLENESS.—All airport zoning regulations adopted under this chapter shall be reasonable and none shall impose any requirement or restriction which is not reasonably necessary to effectuate the purposes of this chapter. In determining what regulations it may adopt, each political subdivision and joint airport zoning board shall consider, among other things, the character of the flying operations expected to be conducted at the airport, the nature of the terrain within the airport hazard area and runway clear zones, the character of the neighborhood, the uses to which the property to be zoned is put and adaptable, and the impact of any new use, activity, or construction on the airport's operating capability and capacity.

(2) INDEPENDENT JUSTIFICATION.—The purpose of all airport zoning regulations adopted under this chapter is to provide both airspace protection and land use compatible with airport operations. Each aspect of this purpose requires independent justification in order to promote the public interest in safety, health, and general welfare. Specifically, construction in a runway clear zone which does not exceed airspace height restrictions is not evidence per se that such use, activity, or construction is compatible with airport operations.

(3) NONCONFORMING USES.—No airport zoning regulations adopted under this chapter shall require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations when adopted or amended, or otherwise interfere with the continuance of any nonconforming use, except as provided in s. 333.07(1) and (3).





Zone defined by these regulations. Said structures include those that exist within any Airport Noise Zone as of May 10, 1999, those which are thereafter moved into or within any Airport Noise Zone, and those proposed to be constructed within any Airport Noise Zone.

a. Existing Structures. Structures located within any Airport Noise Zone at the time of the adoption of these regulations to which additions, expansions, alterations, repairs, replacement, and changes of use or occupancy are made shall comply with the requirements of these regulations, with the following exceptions:

Structures for which the cost of such additions, alterations, or repairs made within any five year period does not exceed 50 percent of the value of such structures:

Nonstructural alterations or repairs of such structures for which the cost of such alterations or repairs does not exceed 50 percent of the value of such structures may be made with the materials of which such structures are constructed, if otherwise allowed; or

Structures for which no more than 50 percent of the roof covering of such structures is replaced within any three-year period.

- b. Moved Structures. Structures moved into or within any Airport Noise Zone defined by these regulations shall comply with requirements of these regulations before permanent occupancy is permitted.
- c. New Structures. New structures proposed within any Airport Noise Zone defined by these regulations shall comply with the requirements of these regulations before permanent occupancy is permitted.
- d. *Permitted Uses.* The following uses shall be permitted within the established noise overlay zone, unless prohibited by Airport Runway Clear Zone or zoning district regulations:

Governmental Services

Transportation

Off-Street Parking

Offices, business and professional

Wholesale and retail building materials, hardware and farm equipment

Retail trade - general

Utilities, Heavy or Limited

Communications

Manufacturing - general

Photographic and optical services

Mining and fishing, resource production and extraction

Nature exhibits and zoos

Amusement parks, resorts and camps

Golf courses, riding stables and water recreation

Agricultural operations

Similar uses, as determined by the city manager or designee

- e. Restricted Uses and Criteria. The following uses shall be permitted within the established noise overlay zone, (unless prohibited by Airport Runway Clear Zone or zoning district regulations) only if the proposed development complies with the applicable criteria described below and is compatible with the Official 14 CFR Part 150 study:
  - i. Child Care, Transient Lodgings, Educational Centers, Residential (other than mobile homes), and similar uses. Developers of proposed child care facilities, transient lodgings, educational centers and residential uses (other than mobile homes) shall verify to the city in writing that proposed buildings are designed to achieve an outdoor to indoor noise level reduction (NLR) of at least 25 decibels. (Normal residential construction can be expected to provide an NLR of 20-25 decibels).
  - ii. Hospitals, Homes for the Aged, Places of Religious Assembly, Auditoriums, Concert Halls and similar uses. Hospitals, homes for the aged, places of religious assembly, auditoriums and concert halls shall verify to the city in writing that proposed buildings are designed to achieve an outdoor to indoor noise level reduction (NLR) of at least 25 decibels.
  - iii. Outdoor Sports Arenas, Spectator Sports and similar uses. Outdoor sports arenas and spectator sports facilities must be constructed with special sound reinforcement systems consistent with building code regulations.

In lieu of providing written verification that a proposed building is designed for an NLR of 25 decibels (as stated in i and ii above), a developer may execute and record an avigation easement as provided in subsection i. below.

- f. Prohibited Uses. Uses that are not specified in this subsection as permitted or restricted are prohibited within the Airport Noise Zone.
- g. Appeals. Determinations by the community development director, relating to use interpretations involving sections "d." or "e." or "f." above, may be appealed to the Board of Adjustment by an applicant or any aggrieved person, taxpayer affected, governing body of a political subdivision, or FDOT. All such appeals to the Board of Adjustment shall be filed, reviewed, and heard in a manner consistent with sections 333.08 and 333.10 of the Florida Statutes.
- h. Avigation Easements. An avigation easement is a legal document that grants to the owner/operator of a nearby airport a right to continue to operate the airport in a manner similar to current operations, despite potential nuisance effects upon uses that are being established in close proximity to the airport. Applicants choosing to provide an avigation easement shall execute said easement to the Gainesville-Alachua County Regional Airport Authority. The easement shall be in a form acceptable to the city attorney and airport authority and shall be executed in a recordable form by the property owner:

prior to release of a development site plan, prior to or via recording of a final plat, or

prior to issuance of a building permit, as applicable.

The property owner shall record the easement and provide a copy of it to the city and to the airport authority.

(Ord. No. 981149, § 2, 5-10-99)

#### **CHAPTER 333**

#### **AIRPORT ZONING**

333.01	Definitions.
333.02	Airport hazards and uses of land in airport vicinities contrary to public interest.
333.025	Permit required for structures exceeding federal obstruction standards.
333.03	Power to adopt airport zoning regulations.
333.04	Comprehensive zoning regulations; most stringent to prevail where conflicts occur.
333.05	Procedure for adoption of zoning regulations.
333.06	Airport zoning requirements.
333.065	Guidelines regarding land use near airports.
333.07	Permits and variances.
333.08	Appeals.
333.09	Administration of airport zoning regulations.
333.10	Board of adjustment.
333.11	Judicial review.
333.12	Acquisition of air rights.
333.13	Enforcement and remedies.
333.14	Short title.

333.01 Definitions.—For the purpose of this chapter, the following words, terms, and phrases shall have the meanings herein given, unless otherwise specifically defined, or unless another intention clearly appears, or the context otherwise requires:

(1) "Aeronautics" means transportation by aircraft; the operation, construction, repair, or maintenance of aircraft, aircraft power plants and accessories, including the repair, packing, and maintenance of parachutes; the design, establishment, construction, extension, operation, improvement, repair, or maintenance of airports, restricted landing areas, or other air navigation facilities, and air instruction.

(2) "Airport" means any area of land or water designed and set aside for the landing and taking off of aircraft and utilized or to be utilized in the interest of the public for such purpose.

(3) "Airport hazard" means any structure or tree or use of land which would exceed the federal obstruction standards as contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, and 77.29 and which obstructs the airspace required for the flight of aircraft in taking off, maneuvering, or landing or is otherwise hazardous to such taking off, maneuvering, or landing of aircraft and for which no person has previously obtained a permit or variance pursuant to s. 333.025 or s. 333.07.

(4) "Airport hazard area" means any area of land or water upon which an airport hazard might be established if not prevented as provided in this chapter.

(5) "Airport land use compatibility zoning" means airport zoning regulations restricting the use of land adjacent to or in the immediate vicinity of airports in the manner enumerated in s. 333.03(2) to activities and purposes compatible with the continuation of normal airport operations including landing and takeoff of aircraft in order to promote public health, safety, and general welfare.

(6) "Airport layout plan" means a detailed, scale engineering drawing, including pertinent dimensions, of an airport's current and planned facilities, their locations, and runway usage.

(7) "Obstruction" means any existing or proposed manmade object or object of natural growth or terrain that violates the standards contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, and 77.29.

(8) "Person" means any individual, firm, copartnership, corporation, company, association, joint-stock association, or body politic, and includes any trustee, receiver, assignee, or other similar representative thereof.

(9) "Political subdivision" means any county, city, town, village, or other subdivision or agency thereof, or any district, port commission, port authority, or other such agency authorized to establish or operate airports in the state.

(10) "Runway clear zone" means a runway clear zone as defined in 14 C.F.R. part 151.9(b).

(11) "Structure" means any object, constructed or installed by humans, including, but without limitation thereof, buildings, towers, smokestacks, utility poles, and overhead transmission lines.

(12) "Tree" includes any plant of the vegetable kingdom.

**History.**—s. 1, ch. 23079, 1945; s. 2, ch. 75-16; s. 1, ch. 88-356; s. 70, ch. 90-136; s. 84, ch. 91-221; s. 482, ch. 95-148.

# 333.02 Airport hazards and uses of land in airport vicinities contrary to public interest.—

(1) It is hereby found that an airport hazard endangers the lives and property of users of the airport and of occupants of land in its vicinity and also, if of the obstruction type, in effect reduces the size of the area available for the taking off, maneuvering, or landing of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein. It is further found that certain activities and uses of land in the immediate vicinity of airports as enumerated in s. 333.03(2) are not compatible with normal airport operations, and may, if not regulated, also endanger the lives of the participants, adversely affect their health, or otherwise limit the accomplishment of normal activities. Accordingly, it is hereby declared:

(a) That the creation or establishment of an airport hazard and the incompatible use of land in airport vicinities are public nuisances and injure the community served by the airport in question:

(b) That it is therefore necessary in the interest of the public health, public safety, and general welfare that the creation or establishment of airport hazards and incompatible land uses be prevented; and (2) It is further declared that the limitation of land uses incompatible with normal airport operations, the prevention of the creation or establishment of airport hazards, and the elimination, removal, alteration, mitigation, or marking and lighting of existing airport hazards are public purposes for which political subdivisions may raise and expend public funds and acquire land or property interests therein, or air rights thereover.

History.-s. 2, ch. 23079, 1945; s. 2, ch. 88-356; s. 71, ch. 90-136.

## 333.025 Permit required for structures exceeding federal obstruction standards.—

- (1) In order to prevent the erection of structures dangerous to air navigation, subject to the provisions of subsections (2), (3), and (4), each person shall secure from the Department of Transportation a permit for the erection, alteration, or modification of any structure the result of which would exceed the federal obstruction standards as contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, and 77.29. However, permits from the Department of Transportation will be required only within an airport hazard area where federal standards are exceeded and if the proposed construction is within a 10-nautical-mile radius of the geographical center of a publicly owned or operated airport, a military airport, or an airport licensed by the state for public use.
- (2) Affected airports will be considered as having those facilities which are shown on the airport master plan, or an airport layout plan submitted to the Federal Aviation Administration Airport District Office or comparable military documents, and will be so protected. Planned or proposed public-use airports which are the subject of a notice or proposal submitted to the Federal Aviation Administration or to the Department of Transportation shall also be protected.
- (3) Permit requirements of subsection (1) shall not apply to projects which received construction permits from the Federal Communications Commission for structures exceeding federal obstruction standards prior to May 20, 1975, provided such structures now exist; nor shall it apply to previously approved structures now existing, or any necessary replacement or repairs to such existing structures, so long as the height and location is unchanged.
- (4) When political subdivisions have adopted adequate airspace protection in compliance with s. 333.03, and such regulations are on file with the Department of Transportation, a permit for such structure shall not be required from the Department of Transportation.
- (5) The Department of Transportation shall, within 30 days of the receipt of an application for a permit, issue or deny a permit for the erection, alteration, or modification of any structure the result of which would exceed federal obstruction standards as contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, and 77.29.

- (6) In determining whether to issue or deny a permit, the department shall consider:
- (a) The nature of the terrain and height of existing structures.
  - (b) Public and private interests and investments.
- (c) The character of flying operations and planned developments of airports.
- (d) Federal airways as designated by the Federal Aviation Administration.
- (e) Whether the construction of the proposed structure would cause an increase in the minimum descent altitude or the decision height at the affected airport.
  - (f) Technological advances.
- (g) The safety of persons on the ground and in the air.
  - (h) Land use density.
- (i) The safe and efficient use of navigable airspace.
- (j) The cumulative effects on navigable airspace of all existing structures, proposed structures identified in the applicable jurisdictions' comprehensive plans, and all other known proposed structures in the area.
- (7) When issuing a permit under this section, the Department of Transportation shall, as a specific condition of such permit, require the obstruction marking and lighting of the permitted structure as provided in s. 333.07(3)(b).
- (8) The Department of Transportation shall not approve a permit for the erection of a structure unless the applicant submits both documentation showing compliance with the federal requirement for notification of proposed construction and a valid aeronautical evaluation, and no permit shall be approved solely on the basis that such proposed structure will not exceed federal obstruction standards as contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, or 77.29, or any other federal aviation regulation.

History.—s. 3, ch. 75-16; s. 3, ch. 88-356; s. 7, ch. 92-152.

#### 333.03 Power to adopt airport zoning regulations.

- (1)(a) In order to prevent the creation or establishment of airport hazards, every political subdivision having an airport hazard area within its territorial limits shall, by October 1, 1977, adopt, administer, and enforce, under the police power and in the manner and upon the conditions hereinafter prescribed, airport zoning regulations for such airport hazard area.
- (b) Where an airport is owned or controlled by a political subdivision and any airport hazard area appertaining to such airport is located wholly or partly outside the territorial limits of said political subdivision, the political subdivision owning or controlling the airport and the political subdivision within which the airport hazard area is located, shall either:
- By interlocal agreement, in accordance with the provisions of chapter 163, adopt, administer, and enforce airport zoning regulations applicable to the airport hazard area in question; or

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- 2. By ordinance or resolution duly adopted, create a joint airport zoning board, which board shall have the same power to adopt, administer, and enforce airport zoning regulations applicable to the airport hazard area in question as that vested in paragraph (a) in the political subdivision within which such area is located. Each such joint board shall have as members two representatives appointed by each political subdivision participating in its creation and in addition a chair elected by a majority of the members so appointed. However, the airport manager or managers of the affected political subdivisions shall serve on the board in a nonvoting capacity.
- (c) Airport zoning regulations adopted under paragraph (a) shall, as a minimum, require:
- 1. A variance for the erection, alteration, or modification of any structure which would cause the structure to exceed the federal obstruction standards as contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, and 77.29:
- 2. Obstruction marking and lighting for structures as specified in s. 333.07(3);
- 3. Documentation showing compliance with the federal requirement for notification of proposed construction and a valid aeronautical evaluation submitted by each person applying for a variance;
- 4. Consideration of the criteria in s. 333.025(6), when determining whether to issue or deny a variance; and
- 5. That no variance shall be approved solely on the basis that such proposed structure will not exceed federal obstruction standards as contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, or 77.29, or any other federal aviation regulation.
- (d) The department shall issue copies of the federal obstruction standards as contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, and 77.29 to each political subdivision having airport hazard areas and, in cooperation with political subdivisions, shall issue appropriate airport zoning maps depicting within each county the maximum allowable height of any structure or tree. Material distributed pursuant to this subsection shall be at no cost to authorized recipients.
- (2) In the manner provided in subsection (1), interim airport land use compatibility zoning regulations shall be adopted. When political subdivisions have adopted land development regulations in accordance with the provisions of chapter 163 which address the use of land in the manner consistent with the provisions herein, adoption of airport land use compatibility regulations pursuant to this subsection shall not be required. Interim airport land use compatibility zoning regulations shall consider the following:
- (a) Whether sanitary landfills are located within the following areas:
- 1. Within 10,000 feet from the nearest point of any runway used or planned to be used by turbojet or turboprop aircraft.

- 2. Within 5,000 feet from the nearest point of any runway used only by piston-type aircraft.
- 3. Outside the perimeters defined in subparagraphs 1. and 2., but still within the lateral limits of the civil airport imaginary surfaces defined in 14 C.F.R. part 77.25. Case-by-case review of such landfills is advised.
- (b) Whether any landfill is located and constructed so that it attracts or sustains hazardous bird movements from feeding, water, or roosting areas into, or across, the runways or approach and departure patterns of aircraft. The political subdivision shall request from the airport authority or other governing body operating the airport a report on such bird feeding or roosting areas that at the time of the request are known to the airport. In preparing its report, the authority, or other governing body, shall consider whether the landfill will incorporate bird management techniques or other practices to minimize bird hazards to airborne aircraft. The airport authority or other governing body shall respond to the political subdivision no later than 30 days after receipt of such request.
- (c) Where an airport authority or other governing body operating a publicly owned, public-use airport has conducted a noise study in accordance with the provisions of 14 C.F.R. part 150, neither residential construction nor any educational facility as defined in chapter 1013, with the exception of aviation school facilities, shall be permitted within the area contiguous to the airport defined by an outer noise contour that is considered incompatible with that type of construction by 14 C.F.R. part 150, Appendix A or an equivalent noise level as established by other types of noise studies.
- (d) Where an airport authority or other governing body operating a publicly owned, public-use airport has not conducted a noise study, neither residential construction nor any educational facility as defined in chapter 1013, with the exception of aviation school facilities, shall be permitted within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline.
- (3) In the manner provided in subsection (1), airport zoning regulations shall be adopted which restrict new incompatible uses, activities, or construction within runway clear zones, including uses, activities, or construction in runway clear zones which are incompatible with normal airport operations or endanger public health, safety, and welfare by resulting in congregations of people, emissions of light or smoke, or attraction of birds. Such regulations shall prohibit the construction of an educational facility of a public or private school at either end of a runway of a publicly owned, public-use airport within an area which extends 5 miles in a direct line along the centerline of the runway, and which has a width measuring one-half the length of the runway. Exceptions approving construction of an educational facility within the delineated area shall only be granted

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when the political subdivision administering the zoning regulations makes specific findings detailing how the public policy reasons for allowing the construction outweigh health and safety concerns prohibiting such a location.

- (4) The procedures outlined in subsections (1), (2), and (3) for the adoption of such regulations are supplemental to any existing procedures utilized by political subdivisions in the adoption of such regulations.
- (5) The Department of Transportation shall provide technical assistance to any political subdivision requesting assistance in the preparation of an airport zoning code. A copy of all local airport zoning codes, rules, and regulations, and amendments and proposed and granted variances thereto, shall be filed with the department.
- (6) Nothing in subsection (2) or subsection (3) shall be construed to require the removal, alteration, sound conditioning, or other change, or to interfere with the continued use or adjacent expansion of any educational structure or site in existence on July 1, 1993, or be construed to prohibit the construction of any new structure for which a site has been determined as provided in former s. 235.19, as of July 1, 1993.

**History.**—s. 3, ch. 23079, 1945; s. 4, ch. 75-16; s. 4, ch. 88-356; s. 72, ch. 90-136; s. 8, ch. 92-152; s. 10, ch. 93-164; s. 1, ch. 94-201; s. 958, ch. 95-148; s. 971, ch. 2002-387.

# 333.04 Comprehensive zoning regulations; most stringent to prevail where conflicts occur.—

- (1) INCORPORATION.—In the event that a political subdivision has adopted, or hereafter adopts, a comprehensive zoning ordinance regulating, among other things, the height of buildings, structures, and natural objects, and uses of property, any airport zoning regulations applicable to the same area or portion thereof may be incorporated in and made a part of such comprehensive zoning regulations, and be administered and enforced in connection therewith.
- (2) CONFLICT.—In the event of conflict between any airport zoning regulations adopted under this chapter and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or trees, the use of land, or any other matter, and whether such regulations were adopted by the political subdivision which adopted the airport zoning regulations or by some other political subdivision, the more stringent limitation or requirement shall govern and prevail.

## 333.05 Procedure for adoption of zoning regula-

History.--s. 4, ch. 23079, 1945.

(1) NOTICE AND HEARING.—No airport zoning regulations shall be adopted, amended, or changed under this chapter except by action of the legislative body of the political subdivision in question, or the joint board provided in s. 333.03(1)(b) by the bodies therein provided and set forth, after a public hearing in relation thereto, at which parties in interest and citizens shall

have an opportunity to be heard. Notice of the hearing shall be published at least once a week for 2 consecutive weeks in an official paper, or a paper of general circulation, in the political subdivision or subdivisions in which are located the airport areas to be zoned.

(2) AIRPORT ZONING COMMISSION .-- Prior to the initial zoning of any airport area under this chapter the political subdivision or joint airport zoning board which is to adopt the regulations shall appoint a commission, to be known as the airport zoning commission, to recommend the boundaries of the various zones to be established and the regulations to be adopted therefor. Such commission shall make a preliminary report and hold public hearings thereon before submitting its final report, and the legislative body of the political subdivision or the joint airport zoning board shall not hold its public hearings or take any action until it has received the final report of such commission, and at least 15 days shall elapse between the receipt of the final report of the commission and the hearing to be held by the latter board. Where a city plan commission or comprehensive zoning commission already exists, it may be appointed as the airport zoning commission. History.-s. 5, ch. 23079, 1945; s. 74, ch. 90-136; s. 23, ch. 90-279; s. 39, ch.

#### 333.06 Airport zoning requirements.—

- (1) REASONABLENESS.—All airport zoning regulations adopted under this chapter shall be reasonable and none shall impose any requirement or restriction which is not reasonably necessary to effectuate the purposes of this chapter. In determining what regulations it may adopt, each political subdivision and joint airport zoning board shall consider, among other things, the character of the flying operations expected to be conducted at the airport, the nature of the terrain within the airport hazard area and runway clear zones, the character of the neighborhood, the uses to which the property to be zoned is put and adaptable, and the impact of any new use, activity, or construction on the airport's operating capability and capacity.
- (2) INDEPENDENT JUSTIFICATION.—The purpose of all airport zoning regulations adopted under this chapter is to provide both airspace protection and land use compatible with airport operations. Each aspect of this purpose requires independent justification in order to promote the public interest in safety, health, and general welfare. Specifically, construction in a runway clear zone which does not exceed airspace height restrictions is not evidence per se that such use, activity, or construction is compatible with airport operations.
- (3) NONCONFORMING USES.—No airport zoning regulations adopted under this chapter shall require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations when adopted or amended, or otherwise interfere with the continuance of any nonconforming use, except as provided in s. 333.07(1) and (3).

Table 10

LAND USE COMPATIBILITY WITH YEARLY DAY-NIGHT AVERAGE SOUND LEVELS

	Yearly Day-Night Average Sound Level ( $L_{dn}$ ) in Decibels					
Land Use	Below 65	65-70	70-75	75-80	80-85	Over 85
Residential						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	<sub>@</sub> N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
Public Use						
Schools	Y	N1)1	N(1)	N	N	N
Hospitals and nursing homes	Y	<b>2</b> 5	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	<b>3</b> 0	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
Commercial Use						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware and	_					
farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Ÿ	Y	25	30	N	N
Utilities	Ÿ	Y	Y(2)	Y(3)	Y(4)	N
Communication .	Ÿ	Ÿ	25	30	N	N
Manufacturing And Production		-				
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Ý	Ŷ	25	30	N.	N
	Ŷ	Ŷ(6)	Y(7)	Y(8)	Y(8)	Y(8
Agriculture (except livestock) and forestry	Ŷ	Y(6)	Y(7)	N	N	N
Livestock farming and breeding Mining and fishing, resource production and extraction	Ŷ	Y	Ϋ́	Ÿ	Y	Y
Recreational						
Outdoor sports arenas and spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Ÿ	N	N	N	N	N
Nature exhibits and zoos	Ϋ́	Y	N	N	N	N
Amusements, parks, resorts and camps	Ÿ	Ÿ	Y	N	N	N
Golf courses, riding stables and water recreation	Ŷ	Ÿ	25	30	N	N

Numbers in parentheses refer to notes.

\* The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

#### KEY

SLUCM	Standard Land Use Coding Manual.	3~
Y (Yes)	Land Use and related structures compatible without restrictions.	
N (No)	Land Use and related structures are not compatible and should be prohibited.	
NLR	Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of n the design and construction of the structure.	oise attenuation into
25, 30, or 35	Land used and related structures generally compatible; measures to achieve NLR or 2 be incorporated into design and construction of structure.	25, 30, or 35 dB must

#### NOTES

- (1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- (2) Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (3) Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (4) Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (5) Land use compatible provided special sound reinforcement systems are installed."
- (6) Residential buildings require an NLR of 25.
- (7) Residential buildings require an NLR of 30.
- (8) Residential buildings not permitted.

SOURCE: Federal Aviation Regulations Part 150.

Orlando Airports District Office 5950 Hazeltine National Dr., Suite 400

Orlando, FL 32822-5003

Phone: (407) 812-6331

Fax: (407) 812-6978



U.S. Department of Transportation

Federal Aviation Administration

April 9, 2007

Mr. Allan Penksa Interim Chief Executive Officer Gainesville Regional Airport 3880 N.E. 39<sup>th</sup> Ave., Ste A Gainesville, FL 32609

RE:

Proposed Land Use Change Gainesville, Florida

Dear Mr. Penksa:

This letter is in response to your April 3, 2007 correspondence regarding the proposed development of a residential community, Hatchet Creek, adjacent to the Gainesville Regional Airport. We understand that this plan allows for up to 2,900 residential dwelling units to be constructed nearly 2,700 feet from the threshold of Runway 29.

In 1984, the Federal Aviation Administration (FAA) funded a Federal Aviation Regulation (FAR) Part 150 Noise Study through AIP grant number 3-12-0028-02. The results of this study are depicted in the Gainesville Regional Airport Noise Compatibility Plan, approved by FAA October 19, 1987. We have reviewed this document in comparison with the developer's plan, and we note that the proposed development would fall in an area impacted by airport noise. Specifically, the area appears to fall within the 65 DNL contour of the airport's noise exposure map.

We understand to facilitate this development, the City of Gainesville, co-sponsor of the Gainesville Regional Airport, would be required to change the land's existing zoning from industrial to residential. FAA would like to remind the City of Gainesville of their federal obligation to ensure compatible land use. In reference to the sponsor's responsibilities, Grant Assurance 21, Compatible Land Use, states:

It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and taking off of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land



use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.\*

\*Emphasis added

Therefore, if the City of Gainesville, co-sponsor of the Gainesville Regional Airport, elects to make this change in zoning, FAA may find the City's actions to be in conflict with federal grant assurances, and future airport improvement program funding may be in jeopardy. Further, any noise mitigation measures required for residential properties constructed in this rezoned area would be ineligible for FAA funding.

Ultimately, the decision to facilitate this development lies in the hands of Gainesville City leaders. However, FAA strongly advises against such a change in zoning.

If you have any further questions on this matter, please feel free to contact me at (407) 812-6331, ext. 121.

Sincerely,

## Original Signed By

Rebecca R. Henry Program Manager Planning and Compliance

cc:

Roland Luster, FDOT/2 Marion Radson, Gainesville City Attorney Russ Blackburn, Gainesville City Manager



U.S. Department of Tronsportation Federal Aviation Administration Orlando Airports District Office 5950 Hazeltine National Dr., Suite 400 Orlando, FL 32822-5003

Phone: (407) 812-6331 Fax: (407) 812-6978

October 22, 2007

Mr. Scherwin L. Henry Gainesville City Commissioner District 1 City of Gainesville Station 19, P.O. Box 490 Gainesville, FL 32602-0490

Dear Commissioner Henry:

RE: Gainesville Regional Airport (GNV)
Gainesville, Florida

Hatchet Creek Development

Thank you for your recent correspondence regarding the Hatchet Creek Development. The Federal Aviation Administration (FAA) has been working with the management of Gainesville Regional Airport, as well as representatives of the City of Gainesville, for several months to ensure City leaders have accurate information for the decision making process on this issue.

The City of Gainesville, as the co-sponsor of the Gainesville Regional Airport, is obligated to exercise all rights within their power to ensure compatible land use for the Airport. The Hatchet Creek development is proposed on property within the zoning jurisdiction of the City of Gainesville, and most of this property is currently zoned as compatible land uses with the airport. We understand that to facilitate the Hatchet Creek Development, the City of Gainesville would be required to change the property's zoning. The current Gainesville Regional Airport Part 150 Noise Study states that residential development is incompatible within the 65 DNL noise contour, and the proposed development falls within this noise contour. Therefore, a change of zoning to residential to accommodate this development may be in conflict with Grant Assurance 21, Compatible Land Use. In addition, if the City elects to allow this development, FAA would weigh this information heavily when considering any future discretionary funding requests from the Gainesville Regional Airport.

In closing, attached please find answers to the questions presented in your correspondence. These questions were answered to the best of our ability, considering the time constraints at hand. If we can be of further assistance, please feel free to contact us and, with adequate time, we can expand upon these responses.

I trust this information is helpful.

Sincerely,

Rebecca R. Henry Program Manager

Planning and Compliance

Attachment (1)

CC:

City of Gainesville Office of City Commission (w/attachment) Allen Penksa, Gainesville Regional Airport (w/attachment) Rusty Chapman, FAA Southern Region (w/attachment) 1. Question: Is the City of Gainesville considered a "co-sponsor" of GNV?

Answer:

Yes.

2. Question: Is it a requirement for the City of Gainesville to be a "sponsor" of future FAA grant applications for GNV that do not exist today?

Answer: The City is a co-sponsor for the purposes of FAA grants. As it currently stands, the City is required to co-sign grants. It would take some research to determine how the City could remove itself from this status if it requested to give up these rights. In any event, the City would remain obligated for 20 years from the date of the last grant that it was a co-sponsor.

3. Question: If the City of Gainesville is not a "sponsor" of FAA grant applications, are we bound by Grant Assurance 21 referenced in your letter to Mr. Penksa dated April 9, 2007?

Answer: The City is a co-sponsor for the purposes of FAA grants, and is obligated by the terms and conditions attached to each grant (grant assurances). This includes Grant Assurance 21.

4. Question: Does the local governing body have the authority to resolve land use and zoning issues and not the FAA?

Answer: The local governing body has complete zoning authority. It does, however, have certain obligations under the FAA grant assurances that it agreed to in accepting grants.

5. Question: If the answer to question #4 above was "yes", then would it not follow that the City of Gainesville has the authority to approve this PUD application in a form that includes the AIRPORT HAZARD ZONE CONDITIONS outlined above?

Answer: The FAA does not dispute the City's authority or right to approve the subject application.

6. Question: Then does it not follow that the FAA does not have the authority to prevent the approval of this PUD application in a form that includes the AIRPORT HAZARD ZONE CONDITIONS outlined above?

Answer: The FAA cannot prevent the approval of the subject application for development. The FAA is, however, advising the City of Gainesville that changing any zoning surrounding Gainesville Regional Airport to an incompatible land use would likely result in a finding of non-compliance.

7. Question: If the City Commission of the City of Gainesville within its sole discretion were to approve this PUD, other than the risk of losing funding as referenced by Mr. Chapman, whose e-mail stated in its entirety "Based on understanding that the development would be consistent with the approved Part 150 study for the airport, as well as the CFR Table 1 mentioned in your e-mail, the airport would be eligible to receive funds for airport development. Please note that any residential development built inside the 65 Ldn (DNL) after FAA approval of a Part 150 program would not be eligible for federal funding to buy it out. But this would not affect and airport owner's ability to receive federal funding for airport improvements. What specific future FAA grant funding could be at risk to GNV?

Answer: Although all federal funding could be at risk, FAA would be required to issue a Notice of Investigation and hold hearings prior to suspending any passenger enplanement entitlement funds. However, FAA discretionary funds are awarded at the Agency's discretion, and it is likely that FAA would consider the City's actions when making discretionary funding decisions. For your information, GNV has received \$34,423,914 in Airport Improvement Program grants since 1982; with \$9,387,814 of these grant monies coming from discretionary funds. \$6,995,155 in discretionary fund grants has been awarded to GNV in the last five years alone.

8. Question: Please clarify what, if any, other future FAA grant funding is at risk other than what I noted in question #7 and referenced in Mr. Chapman's c-mail to Mr. Schneider, kindly refer me to any written FAA rules, procedures or guidelines that the FAA has promulgated or have been mandated by Congress to guide you in making this determination.

Answer: If FAA felt that the City of Gaincsville may have violated at Grant Assurance, the Agency would be required to issue a Notice of Investigation and hold hearings prior to suspending any passenger enplanement entitlement funds. However, FAA discretionary funding is awarded at the discretion of the Agency. As stated previously, FAA would consider the City's actions when making discretionary funding decisions.

9. Question: By approving residential land with the AIRPORT HAZARD ZONE CONDITIONS outlined in the background and facts on page two above, would GNV lose any existing FAA grant funds for projects other than that outlined in question #7 above?

Answer: Such actions are likely to only impact future FAA funding decisions, not existing (executed) grant awards.

10. Question: By approving residential land use with the AIRPORT HAZARD ZONE CONDITIONS outlined in the background and facts on page two above, would such action violate Grant Assurance 21 cited in your letter to Mr. Penska dated April 9, 2007? If so, kindly refer me to any written FAA rules, procedures or guidelines that the FAA has promulgated or have been mandated by Congress to guide you in making this determination.

Answer: Please note that FAA's concern is not with the City's approval of this application for development, but the change of zoning that is required for the development. In our April 9, 2007 letter, we stated a change of zoning may be a violation of Grant Assurance 21, Incompatible Land Use. As previously mentioned, a violation of a grant assurance may only be determined through a Notice of Investigation and subsequent hearings.

11. Question: If a party constructs new residential units within a 65 DNL noise contour on property not previously subject to any buy back or noise attenuation cost reimbursement provisions by the FAA and complies with 14 CFR Part 150 Appendix A, Table I, Note 1, which has been promulgated by the FAA and subsequently adopted by the City of Gainesville verbatim, by constructing the residential units to a 25 NLR standard, would GNV still be eligible to receive federal funding for such items as airport improvements? If not, why? If your answer is no or you cannot answer this question specifically, kindly provide the basis for your inability to specifically respond and direct me to someone who can.

Answer: Because the development would be in conflict with the approved Part 150 study, FAA considers this development incompatible, and the change of zoning inconsistent with Grant Assurance 21. Again, if FAA felt that the City of Gainesville may have violated at Grant Assurance, the Agency would be required to issue a Notice of Investigation and hold hearings prior to suspending any passenger enplanement entitlement funds. However, FAA discretionary funding is awarded at the discretion of the Agency. As stated previously, FAA would consider the City's actions when making discretionary funding decisions.

12. Question: During your conversation with the City Manager and City Attorney on September 5, 2007, did you advise them with regard to local land use and zoning issues it is "fatally flawed" in that the project cannot be approved by the City Commission until the FAA accepts new noise contour maps and the City's ordinances are updated to reflect the newly adopted noise contour maps? Such a position would be inconsistent with the statements made by Mr. Chapman in his e-mail of August 10, 2007.

Answer: No. FAA recommended that the Airport Sponsor, at a minimum, update their Noise Exposure Map to see where the current 65 DNL contour lies in relation to this proposed development. City representatives were advised that it may be prudent to wait for new noise contour maps to make a decision on this development, as the noise contours may change with current airport operations data. If the FAA-accepted Noise Exposure Map for Gainesville Regional Airport did not illustrate the 65 DNL contour over the proposed development, FAA would have no grounds to formally object to the proposal. However, the City was also advised that even though an updated noise map may illustrate that the proposed development is outside of the 65 DNL contour, citizen complaints regarding airport noise can be generated from any areas surrounding the airport, not just those identified as lying within the 65 DNL contour. Therefore, FAA

would not recommend a residential development in such close proximity of the Gainesville Regional Airport.

CC: COOM C/ATTY C/MCR

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#### MEMORANDUM

To: Erik Bredfeldt, City of Gainesville, Florida

From: Ted Baldwin Date: April 6, 2009

Subject: Airport Noise Regulation Background for April 9, 2009 Development Review Board

Discussion of Hatchet Creek Development Proposal

Reference: HMMH Project 302950

#### 1. INTRODUCTION

In response to your request, this memorandum addresses the following three topics to provide noise-related background for the April 9, 2009 Development Review Board discussion of the revised Hatchet Creek development proposal:

- Overview of Federal Aviation Regulation (FAR) Part 150, "Airport Noise Compatibility Planning" and its implementation at Gainesville Regional Airport (GNV).
- \* Relationship of Part 150 to the City of Gainesville "Airport Hazard Zoning Regulations."
- \* Opinions regarding "best practices" related to addressing noise impacts in the proposed Hatchet Creek development and the City of Gainesville "Airport Hazard Zoning Regulations."

#### 1.1 Project Understanding

A residential development, named "Hatchet Creek," is proposed adjacent to GNV, in an area generally bounded to the west by NE 15<sup>th</sup> Street, to the south by NE 39<sup>th</sup> Avenue, to the north by NE 53<sup>rd</sup> Avenue, and to the east by the Gainesville city limits and the GNV property line.

The developer originally petitioned the City to approve a Planned Use District for the site, and to rezone the eastern portion of the site from "industrial" ("I-1") and the western portion of the site from "single family" ("RSF-1"), to permit higher density residential development, assisted living facility units, and commercial and office uses. These two areas surround the Ironwood Golf Course, which is zoned "recreational."

I understand the developer has revised the proposal to include only single family residential units in the RSF-1 zoned portion of the site, and no development in the I-1 zoned portion.

A majority of the site, including a majority of the RSF-1 zoned area in which residential units are proposed, falls within "Airport Noise Subzones" "A," "B," or "C," defined by the City's Airport Hazard Zoning Regulations. The three subzones correspond to the following Day-Night Average Sound Level ("DNL" or "Ldn")<sup>2</sup> exposure bands (considering aircraft noise only):<sup>3</sup>

\* Subzone A: 75+ decibel (dB) DNL

\* Subzone B: 70 - 75 dB DNL

\* Subzone C: 65 - 70 dB DNL





<sup>&</sup>lt;sup>1</sup> Part 150 is codified under Title 14 of the Code of Federal Regulations, as 14 C.F.R. Part 150.

 $<sup>^2</sup>$  DNL is a measure of cumulative exposure to noise, normally presented for an entire calendar year in airport noise studies. In simple terms, it is the steady-state noise level over the entire year that would contain the same amount of noise energy as the actual time-varying sound, with one important adjustment: noise occurring at night (10 p.m. -7 a.m.) is increased by 10 dB. For aircraft noise, this is equivalent to assuming that every nighttime aircraft operation occurs ten times.

<sup>&</sup>lt;sup>3</sup> I understand the City adopted the noise subzone regulations at least partly in response to recommendations from a Part 150 study that the Gainesville-Alachua County Regional Airport Authority adopted for GNV in March 1986. See Section 2.3.

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Section II.C.2.e of the Airport Hazard Zoning regulations permits residential development in Subzones A, B, or C when two conditions are met:

- 1. The developer verifies to the City in writing that the structures are designed to achieve an outdoor-to-indoor noise level reduction (NLR) of at least 25 dB or executes and records an avigation easement to the Gainesville-Alachua County Regional Airport Authority.
- 2. The proposed development is compatible with the "Official 14 CFR Part 150 study."

#### 2. OVERVIEW OF PART 150 AND ITS IMPLEMENTATION AT GNV

Part 150 sets standards for airport proprietors to follow in documenting noise exposure in the airport environs and establishing programs to minimize noise-related land use incompatibility. A formal Part 150 submission to the Federal Aviation Administration (FAA) includes documentation for two principal elements: (1) Noise Exposure Map (NEM) and (2) Noise Compatibility Program (NCP).



Part 150 is a voluntary process; however, over 250 airports have participated in the Part 150 program. There are many reasons for airports to participate, including, but not limited to:

- \* Conducting a comprehensive noise study under a recognized process, to demonstrate and pursue the airport's interest in addressing noise issues in an affirmative, community-oriented manner.
- Developing noise abatement measures in a manner that is more likely to obtain cooperation from the FAA and other aviation interests.
- Developing compatible land use measures in a manner that is more likely to obtain cooperation from local land use control jurisdictions.
- \* Taking advantage of potential access to FAA funding for conducting the study and, with FAA approval of proposed NCP measures, for their implementation, which can be expensive, particularly when land use measures such as acquisition or sound insulation are involved.

#### 2.1 Noise Exposure Maps

The NEM documentation describes the airport layout and operation, aircraft noise exposure, land uses in the airport environs and the resulting noise / land use compatibility situation. The NEM must address at least two time frames: (1) the year of submission and (2) a forecast year at least five years following the year of submission. Airports often include a third, long-term time frame, to provide a more extended basis for planning. Part 150 requires more than simple "maps" to provide all the necessary information. In addition to graphics, requirements include extensive tabulated information and text discussion, including description of data collection and analysis, and of consultation with all interested stakeholders, in particular local land use control jurisdictions.

A critical component of a NEM submission to the FAA is identification on the map graphics of noncompatible land uses within the 65 decibel (dB) DNL noise contour using a table of land use compatibility guidelines presented in Part 150,<sup>4</sup> or a "substitute" table if the local land use control jurisdictions have adopted one.

#### 2.2 Noise Compatibility Program

The NCP is essentially a list of the actions the airport proprietor proposes to undertake to minimize existing and future noise/land use incompatibilities. NCP documentation must recount the development of the program, including a description of all measures considered, the reasons that individual measures were accepted or rejected, how measures will be implemented and funded, and the predicted effectiveness of individual measures and the overall program. Typically, an NCP includes noise abatement measures designed to reduce aircraft noise or shift it away from noncompatible areas, and compatible land use measures designed to prevent new noncompatible development and mitigate existing noncompatible uses.

<sup>&</sup>lt;sup>4</sup> Part 150 §A150.101(b), Table 1, "Land Use Compatibility with Yearly Day-Night Average Sound Levels."

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Official FAA acceptance of the Part 150 submission and approval of the NCP does not eliminate requirements for formal environmental assessment of any proposed actions pursuant to requirements of the National Environmental Policy Act (NEPA). However, acceptance of the submission is a prerequisite to application for FAA funding of implementation actions.

#### 2.3 Part 150 Implementation at GNV

The Gainesville Alachua County Regional Airport Authority (the "Airport Authority") completed a Part 150 study for GNV in March 1986. The Authority is in the process of conducting a Part 150 update. Until the update is complete and accepted by the FAA, the 1986 study remains the "official study." The noise contour figures from the 1986 study designate residential land within the 65 dB DNL contours as "noncompatible."



Chapter IV ("Noise Compatibility Program") of the 1986 report includes a section titled "Evaluation of Surrounding Jurisdiction Options," which notes that "Alachua County is the sole surrounding jurisdiction which controls land use and development in the area surrounding the Airport which is adversely impacted by aircraft noise." That section observes that current County zoning regulations and policies permit residential development within the 65-70 dB DNL contour interval with "an additional 5 dB of [exterior-to-interior sound level] attenuation above that resulting [from] normal construction practices with open windows for ventilation." It notes that most local building codes and practices in the Gainesville region provide this additional attenuation because they require air conditioning systems for ventilation. The section observes that the County regulations and policies permit residential use within the 70-75 dB DNL contour interval, with 30 dB of attenuation.

The section comments about these regulations and policies as follows:

The noise attenuation requirements may serve residential land owners well during times of the year when continued use of air condition or heating systems are in operation and doors and windows are closed. However, the Gainesville regional climate is also conducive to open window conditions during several months of the year. Further these policies have no influence on reducing noise impacts outside of the building residence, where family and other activities occur which can require that noise levels be the same as those found in an interior environment. Moreover, because for the most part these land areas are (1) not yet developed for residential land use, (2) located in areas with are not planned to be provided with infrastructure development (water, sewer, etc.) and (3) have terrain features (wetlands) which limit future development, it would be prudent to adopt a more controlled land use management program. Specifically, it is recommended that the County not permit any residential use within the 65 Ldn contour.

The Airport Authority is in the process of conducting a Part 150 update study at GNV. The City of Gainesville has a representative on the Part 150 Study's "Technical Advisory Committee." The Authority has submitted a revised NEM to the FAA for review. <sup>10</sup> To my knowledge, the FAA is still in the process of reviewing the document for acceptability. The NEM includes noise contours for calendar years 2007, 2012, and 2027, all of which are smaller than the contours for 1985 and 1990 presented in the 1986 NEM. The overall reduction is approximately 10 decibels. <sup>11</sup> The updated 65

<sup>&</sup>lt;sup>5</sup> "Gainesville Regional Airport FAR Part 150 Study," prepared by CH2MHill, March 1986.

<sup>&</sup>lt;sup>6</sup> Ibid., p. IV-11.

<sup>&</sup>lt;sup>7</sup> In 1986, the area west of the airport encompassing the proposed Hatchet Creek development, was outside the Gainesville municipal boundary.

<sup>&</sup>lt;sup>8</sup> Ibid., p. IV-11.

<sup>&</sup>lt;sup>9</sup> Ibid., p. IV-12.

<sup>&</sup>lt;sup>10</sup> "GNV Part 150 Noise Study, Phase 1 - Noise Exposure Maps," RS&H and ESA Airports, October 2008.

A ten-decibel reduction represents a 90% reduction in noise energy. While the reduction from 1985 and 1990 is due to complex changes in activity levels and the types of aircraft operating at the airport, it is equivalent to

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dB DNL contours only leave the airport property immediately west of the airport. This off-airport area extends into the Hatchet Creek development site, but only over the industrial zoned area. 12

Table 7.2 of the revised NEM<sup>13</sup> presents a modified version of the Part 150 land use compatibility table discussed in Section 2.1 which proposes more stringent guidelines, including indicating that residential use be considered noncompatible with aircraft noise exposure as low as 60 dB DNL<sup>14</sup> and discouraged as low as 55 dB DNL.<sup>15</sup> I understand that the Airport Authority has recommended that the City adopt these revised guidelines and apply them using the 2027 NEM contours. A majority of the Hatchet Creek development site, including a majority of the RSF-1 zoned area in which residential units are proposed, falls within the 2027 55 dB DNL contour; on the order of half the area in which residential units are proposed falls within the 2027 60 dB DNL contour.

## 3. RELATIONSHIP OF PART 150 TO THE AIRPORT HAZARD ZONING REGULATIONS

Part 150 relates to the Gainesville Airport Hazard Zoning Regulations in at least two ways:

The GNV NEM contours provide the basis for establishing the Airport Noise Zones.

Section C.1. ("Airport Noise Zone and Regulations") states in part:

The boundary of any Airport Noise Zone shall be amended as necessary to reflect any changes in the documentation of forecast day/night average sound levels on which said zone is based. Notwithstanding other provisions of this section, should the Gainesville Regional Airport amend its official 14 CFR Part 150 study, the boundaries of the Airport Noise Zones shall be modified to comply with the amended official noise study.

Until the FAA determines that the updated NEM submission is in compliance with applicable requirements of Part 150, the 1986 NEM contours continue to be the basis for defining the Airport Noise Zone boundaries. When the FAA finds the updated NEM submission in compliance, then it is the appropriate basis for establishing the noise zone boundaries and, as I recommend in Section 4, the City should update the Airport Hazard Zoning Regulations accordingly.

Section II.C.2.e. "Restricted Uses and Criteria" states that residential use is one of several land uses that are permitted within the noise overlay zone "only if the proposed development is compatible with the "Official 14 CFR Part 150 study."

As discussed in Section 2.3 of this memorandum, Chapter IV the 1986 NCP "recommended that the County not permit any residential use within the 65 Ldn contour." Until the FAA has found the updated NEM in compliance and approved the updated NCP, residential development within the 65 dB DNL contours from the 1986 report is not "compatible" with at least this recommendation of the "official 14 CFR Part 150 Study."

Furthermore, as discussed in Section 2.3, the 2008 Part 150 NEM update recommends that residential use be considered noncompatible with aircraft noise as low as 60 dB DNL and discouraged as low as 55 dB DNL. Since these updated NEM contours cover major portions of the RSF-1 zoned area in which residential units are proposed in the Hatchet Creek site, that residential development would not be "compatible" with this recommendation of the Part 150 update when it becomes the "official" study.

cutting operations at the airport by a factor of 10. It should be noted that some of the reduction might be the result of improvements in the noise model and its embedded aircraft noise and performance data.

<sup>14</sup> With the exception of transient lodging with 25 dB of sound attenuation.



<sup>12</sup> The 2027 contour extends slightly further to the west over the eastern golf course area.

<sup>&</sup>lt;sup>13</sup> Ibid., p.7-7.

<sup>&</sup>lt;sup>15</sup> Where the local jurisdiction determines residential use must be allowed, the suggested guidelines recommend noise attenuation minimums. Transient lodgings are considered outright compatible and mobile homes outright noncompatible.

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#### 4. OPINIONS AND RECOMMENDATIONS

In earlier assistance to the City related to the Hatchet Creek development proposal, I noted "[t]he City has adopted airport noise zone regulations that reflect relatively high levels of sensitivity to airport noise compatibility in general, and to recommendations from the GNV Part 150." Unfortunately for residents neighboring most airports in the U.S., few land use control jurisdictions have adopted such comprehensive and responsive airport zoning regulations. This section recommends actions the City could take to maintain this positive situation.

#### 4.1 Opinion Regarding Land Compatibility Best Practices

As discussed in Section 2.1, Part 150 includes a table of land use compatibility guidelines. Several observations about that table are relevant to defining current best practices.

First, the table includes an important footnote, which states:



The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and perishable land uses and the relationship between specific properties and specific noise contours rests with the local land use authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses. <sup>16</sup>

As discussed in preceding sections of this memorandum, both the original GNV Part 150 and the update that is underway recommend compatible land use criteria that are more stringent than the FAA guidelines, to take into account local climate, building types, life styles, citizen expectations, etc. As this Part 150 footnote makes clear, it is the City's responsibility to take these local conditions into account when adopting and applying land use controls; Part 150 guidelines reflect "national average" conditions that differ significantly from those in Florida, where the climate leads to citizen life styles focused on, and expectations related to, greater outdoor access and activity. Sound attenuation is not as affective in Gainesville as it is in colder climates, where outdoor interests are more limited.

Second, it should be noted that prior to FAA adoption of Part 150 in 1981, the Environmental Protection Agency published a report (in response to Congressional direction in the "Noise Control Act of 1972") titled "Noise Levels Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety." The report identified 55 dB DNL as the outdoor "level of environmental noise requisite to protect public health and welfare" with a five decibel margin of safety. Even without the margin of safety, the EPA concluded that 60 dB DNL was the upper limit of acceptable exposure "outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places where quiet is a basis for use." The 65 dB DNL compatibility guideline in Part 150, which defines the outer limit of the Gainesville's existing airport noise zones, is five decibels higher than the EPA protective level without a margin of safety and 10 dB higher than the EPA recommendation with that margin.

Third, it should be noted that FAA guidelines were based on technological and economic feasibility at that time they were adopted. Aircraft were generally much noisier in the 1980s when FAA published the Part 150 guidelines and when GNV conducted its first Part 150 study. Since that time, aircraft technology improvements have significantly reduced aircraft source noise levels and noise contours at most airports (as observed at GNV between 1986 and 2008), despite increases in activity. <sup>18</sup> These

<sup>&</sup>lt;sup>16</sup> Ibid., Appendix A, Table 1, "Land Use Compatibility Planning with Yearly Day-Night Average Sound Levels."

<sup>&</sup>lt;sup>17</sup> U.S. Environmental Protection Agency, "Noise Levels Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," Washington, D.C., March 1974, Table 1, p.3.

<sup>&</sup>lt;sup>18</sup> Federal regulations have forced manufacturers to implement the noise-reducing improvements and forced aircraft operators to purchase the quieter aircraft, accelerating the rate at which the benefits have been achieved.

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improvements have significantly reduced the cost of noise mitigation, such as sound insulation or acquisition. As a result, it is technologically and economically feasible to adopt compatibility criteria that provide a higher level of protection to residents and are consistent with the 1974 EPA recommendations for protective levels.

### 4.2 Recommended Amendment to the Airport Noise Zone Regulations

When the FAA finds the 2008 GNV NEM in compliance with Part 150, I recommend the City amend the Airport Noise Zone Regulations to make them more stringent than the current version, including:

- Prohibit any new residential development within the 65 dB DNL contour.
- Prohibit any new residential development within the 60-65 dB DNL contour interval, with the exception of case-by-case approval of development on isolated lots within largely developed neighborhoods; i.e., "infill" development. Require any new construction that is permitted to provide a minimum of 25 dB of exterior-to-interior noise level reduction and require the property owner to provide Airport Authority with a permanent noise and avigation easement.
- Require any new residential development within the 55-60 dB DNL contour to provide a minimum of 25 dB of exterior-to-interior noise level reduction.
- Base the noise zone definition on the 2027 Noise Exposure Map.

This action would be consistent with evolving "best practices" in the aircraft noise compatibility. As a relevant example, the City of Naples and Collier County, Florida are the local entities that regulate land use in the environs of Naples Municipal Airport. These two jurisdictions have formally adopted land use compatibility criteria that reflect locally determined needs and values, to prevent residential development within the 65 dB DNL contour and to approve residential use within the 60 to 65 dB DNL contour interval only on a case-by-case basis with conditions such as additional sound attenuation and avigation easements. For all intents and purposes, these regulations represent controls hat are five decibels more stringent than the current Gainesville regulations.

## 4.3 Opinion and Recommendation Regarding the Hatchet Creek Development Proposal

The City should consider these best practices and likely revisions to the Airport Noise Zone regulations in reviewing the Hatchet Creek proposal, to ensure the project is consistent with current local and industry conditions, and not with 23-year-old information, guidelines, and practices.

In my opinion, many future Hatchet Creek residents will find the aircraft operations and noise exposure that the 2008 NEM forecasts over the site to be intrusive and annoying. They are likely to complain to the airport, the City, and the developer. I do not believe the 25 dB noise level reduction option for obtaining development approval will adequately address this situation, because that requirement is not significantly higher than the level of sound attenuation typically provided by current building construction techniques in Florida, and because the treatment will provide little or no benefit when windows are open and no benefit for outdoor activities.

In my opinion, the avigation easement option for obtaining conditional approval for development in the Airport Noise Zones is preferable to the 25 dB NLR option, because it ensures that potential residents are notified in advance of closing on the property; at a minimum, the title search will reveal the easement, although it would be preferable if the purchaser was notified no later than during the purchase and sale process. Advance notice will permit potential residents purchasers to make informed purchasing decisions and avoid being surprised by the presence of aircraft overflights and noise after moving in to the development. Informed purchasers are less likely to find the overflights and noise annoying.

