

# Aircraft Noise Considerations Related to Proposed Hatchet Creek Development

Ted Baldwin

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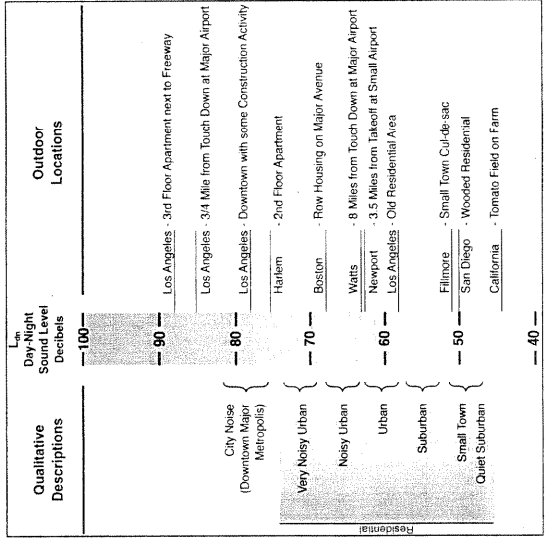
## Background

- **HMMH – Environmental noise and vibration consulting**
  - Assistance to 200+ airports worldwide, 35+ in Florida
  - Part 150 studies and implementation at 70+ airports (out of 268)
- **Ted Baldwin**
  - Master of City and Regional Planning
  - 30 years' experience in aviation noise - land use compatibility
  - Assistance to 75+ airports, including 20+ in Florida
- **Opinion based on:**
  - City-provided materials related to proposed development and application for comprehensive plan amendment
  - Available noise contours for Gainesville Regional Airport
  - Professional experience

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## “Airport Noise 101” Day-Night Average Sound Level (“DNL” or “Ldn”)

- Measures cumulative noise
- Equal to steady level that contains same energy as the actual time-varying sound
- Increases sounds from 10 pm to 7 am 10-fold
- Used by all federal agencies that deal with aviation noise
- EPA: 55 DNL protects health and welfare with adequate safety margin
- 65 DNL is not quiet

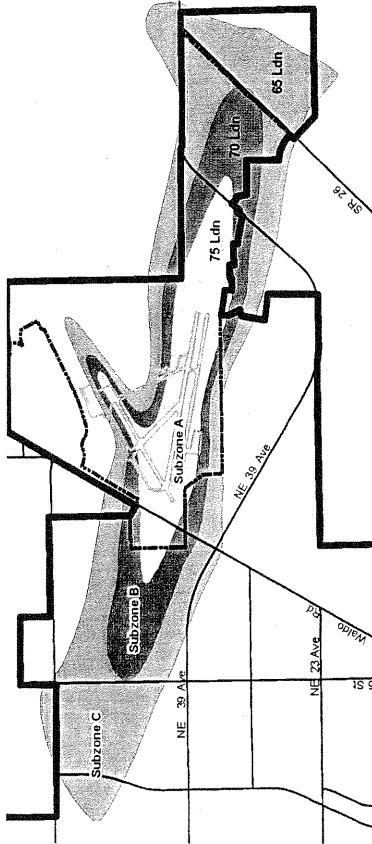


- **Voluntary program sets compatibility planning standards**
  - Provides access to funding for studies and implementation
- **Noise Exposure Maps describe noise-land use “problem”**
  - *FAA guideline:* All land uses are compatible outside 65 DNL, unless local governments adopt and enforce a lower threshold
  - FAA is moving toward a lower standard (e.g., 60 DNL)
- **Noise Compatibility Program proposes solutions:**
  - Noise abatement measures (e.g., runway or flight track use)
  - Corrective land use measures (e.g., sound insulation)
  - Preventive land use measures (e.g., zoning, easements, notices)
- **Gainesville Regional conducted Part 150 in early 1980s**
  - 1985 and 1990 “Maps;” adopted FAA’s 65 DNL guideline
  - Recommended several land use compatibility measures

## Primary Conclusions / Opinions

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- Gainesville's Airport Hazard Zoning Regulations implement the Part 150 recommendations in an unusually conscientious manner.



## Primary Conclusions / Opinions

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- Easements do not make residential use "compatible."
- Sound insulation does nothing for outdoor living and is ineffective when windows are open.
- Many residents of the development would be likely to find the exposure unacceptable and highly annoying.
- At some point, residents would be likely to take actions that would affect the utility of the airport.
- Other Florida airports have experienced significant pressure from residents of new developments even well outside the 65 DNL contour.

## Primary Conclusions / Opinions

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- Residential use in the area currently zoned "Industrial" and increased density residential use in the area zoned for single family would be a significant backward step.

