

Airport Noise Pollution in College Park, GA

Amber Bullard,
B.S. Health Promotion



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PURSUE UNDERSTANDING. TAKE ACTION.

AGENDA

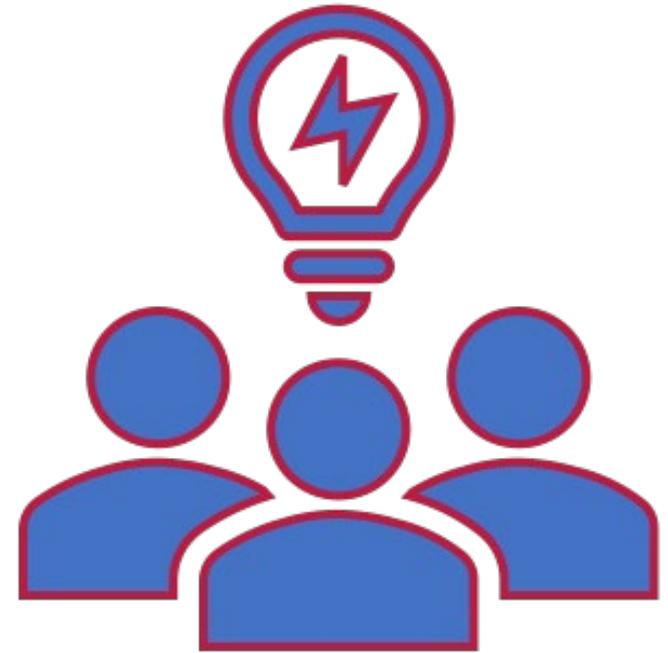
- Impacts of aircraft noise annoyance
- Research Efforts
- FAA Webinar
- FAA Request for Comments
- Interview with College Park's Mayor
Motley-Broom
- Interview with College Park's Councilman
Ambrose Clay



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The goal of this fellowship is to collect previous research and combine it with my own research efforts to craft recommendations to address aircraft noise pollution.



Goal of Research



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Methods

- Existing Data (FAA Research etc.)
- New Data (Interviews with city officials)
- Analysis of all data
- Creation of Recommendations



What is Noise Annoyance?

"...summary measure of the general adverse reaction of people to noise that causes interference with speech, sleep, the desire for a tranquil environment, and the ability to use the telephone, radio, or television satisfactorily"

Federal Agency Review of Selected Airport Noise Analysis Issues (FICON), 1992



HOW DOES AIRPORT NOISE AFFECT COLLEGE PARK?

- Due to Hartsfield-Jackson Atlanta International Airport (ATL) location in College Park noise from airplane landing and take-offs has caused noise disturbance to citizens
 - Complexity due to many factors:
 - Hartsfield-Jackson Atlanta International Airport brings -> \$\$\$, employment of +/- 65,000
 - Citizens of College Park -negatively affected by aircraft noise
 - College Park City Officials - desire to please constituents while also abiding by government agency regulations.



Those Impacted ...Children



Health Impacts

- Speech Interference
- Reading Comprehension
- Learning Motivation

Those Impacted ...Adults

- Cardiovascular Disease
- Sleep Disturbance
- Economics



Basner, M., Witte, M., & McGuire, S. (2019). Aircraft Noise Effects on Sleep-Results of a Pilot Study Near Philadelphia International Airport. *International journal of environmental research and public health*, 16(17), 3178. <https://doi.org/10.3390/ijerph16173178>

Federal Aviation Administration (FAA)

- Focused primarily on guidelines for new structures close to the airport:
 - The height & structure of building must be reviewed to ensure it does not interfere with airport operations.
 - Reflective surfaces of solar panels are prohibited due to potential glare they may cause.
 - Water features should be avoided to prevent attracting wildlife (especially birds) to the area.
 - Avigation easements & restrictive covenants



FAA SPONSORED RESEARCH EFFORTS

- Neighborhood Environmental Survey (NES)
- (ATL) Noise Exposure Map
- Noise Metrics
- Reduction, Abatement, & Mitigation Program Sponsored by (ATL) airport
(ATL has spent over \$65 million in noise mitigation for airport area structures)



THE FAA NATIONAL ENVIRONMENTAL SURVEY (NES)

- The FAA partnered with Federal agencies to conduct a survey asking citizens about aviation noise exposure and annoyance to communities.
 - Annoyance was plotted as "dose-response curves"
 - "Schultz Curve"
- The NES aimed to propose a new dose-response curve to examine if communities' response to aircraft noise had changed any.



NEIGHBORHOOD ENVIRONMENTAL SURVEY (NES) CONTINUED...

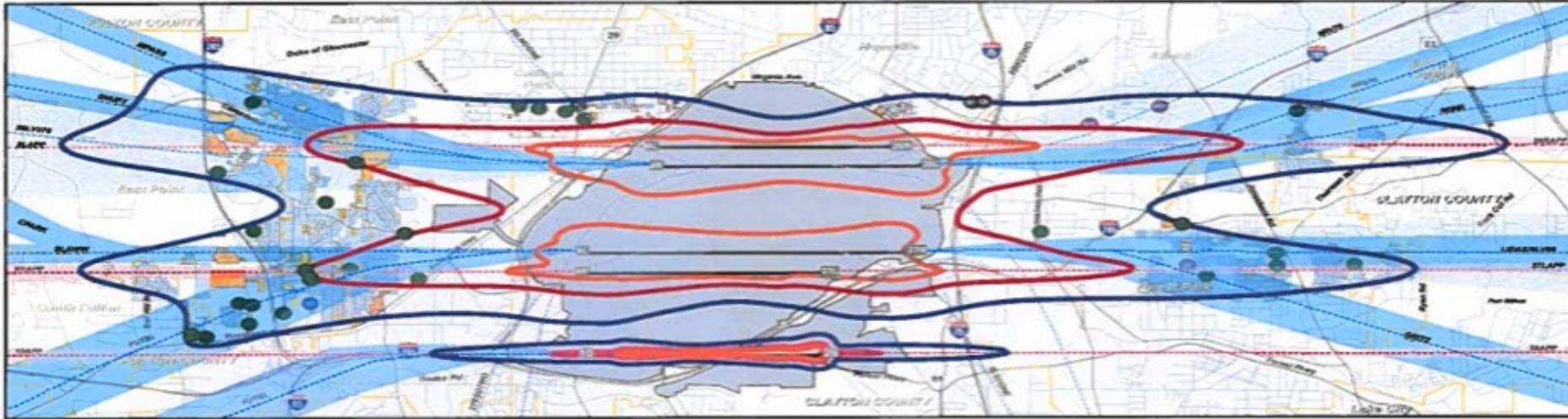
- **Results:**
 - 1992 curve VS. Current NES
 - At 65 DNL: 12.3% VS. 70.9%
 - At 60 DNL: 6.5% VS. 53.7%
 - At 55 DNL: 3.3% VS. 36.8%
 - At 50 DNL: 1.7% VS. 23.4%



WHY DO WE SEE SUCH A GREAT INCREASE IN ANNOYANCE LEVELS?

- Greater migration to urban areas
- Lifestyle (teleworking, more time outdoors vs. Indoors)
- Increased Social media use
- Combination of these facts causes greater societal response.





- Airport Property
- Major Road
- Street
- Jurisdictional Boundary
- AEDT Backbone Arrival Track/Corridor
- AEDT Backbone Jet Departure Track/Corridor
- AEDT Backbone Jet Departure Track/Corridor - Nighttime Only
- AEDT Backbone Turboprop/Prop Departure Track/Corridor

- Form AEDT Track ID
- Single-Family Residential
- Multi-Family Residential
- Sound Insulated Single-Family Residential
- Non-Residential Noise Sensitive Site
- Non-Residential Sound Insulated Noise Sensitive Site
- Historic Site

- Aircraft Noise Contour
- 65 YDNL 65 dBA
- 70 YDNL 70 dBA
- 75 YDNL 75 dBA

Number of Properties Within Noise Contour	
Year	Number of Properties
2017	1,234
2020	1,567
2025	1,890
2030	2,123
2035	2,456
2040	2,789
2045	3,123
2050	3,456



This Noise Exposure Map (NEM) was prepared following consultation with the U.S. Chapter 150 Committee, Part 150 of the Code of Federal Regulations (15 CFR 150.101) and the Federal Aviation Administration (FAA). The NEM contains only affected adjacent properties to which the noise data and contours apply. The contours and data of this NEM are not intended to be used for purposes other than those intended. The FAA and the report that describes the methodology used to prepare this NEM are prepared pursuant to 15 CFR 150.101, Section 150.101 of the CFR Code.

Date: November 15, 2017

By: Thomas G. Johnson, P.E.
 Director of Operations and Environmental Services
 Atlanta International Airport

Notes:
 1. Non-residential noise sensitive sites include places of worship, schools, senior living facilities, and libraries. The sites are identified on the map and address in Table D-2 and Section C-3 of the report entitled "Noise Exposure Map - 2017" and 2017 Annual Report, 2017.
 2. The number of properties within each aircraft noise contour shall be based on the noise contours that were in effect at the time of the noise contours. The properties identified on this NEM are not necessarily adjacent to a particular aircraft noise contour.
 3. The noise contours shown on this NEM are not intended to be used for purposes other than those intended. The FAA and the report that describes the methodology used to prepare this NEM are prepared pursuant to 15 CFR 150.101, Section 150.101 of the CFR Code.
 Report prepared September 8, 2017.

MAP A Existing (Year 2017) Noise Exposure

Hartsfield-Jackson
Atlanta International Airport

(ATL) NOISE EXPOSURE MAP

ATL'S NOISE INSULATION PROGRAM (NIP)

- Eligibility-
 - Location within 65 DNL contour line, must be an eligible property type, must not have participated previously, and constructed before April 10, 1985



FAA WEBINAR: FEBRUARY 22, 2021



2+ hours presentation



Q & A portion



Discussed airport noise pollution, its impacts, and efforts being made to address airport noise etc.



Comments etc.



FAA REQUEST FOR COMMENTS

- As a representative of the University of Georgia's Health Equity Fellows Program, I submitted comments based on my own research.
- My comments discuss the findings of FAA research and how they apply to citizens of College Park, GA who are impacted by aircraft noise.
- <https://www.regulations.gov/document/FAA-2021-0037-0001/comment>



POSTING OF COMMENTS TO THE FAA

FAA Comments:

1. More people are wanting to move closer to their place of employment and larger cities. This means more people will relocate to areas closer to the airport. With more people near the airport, more people will be susceptible to noise pollution. What will the FAA do to ensure that people who do want to move closer to the airport are not discouraged from doing so due to the high levels of noise? What is the benefit of the trade-off of moving closer to work but dealing with noise pollution?
2. The large minority population located near the airport is forced to deal with the noise levels due to aircraft. How will the FAA ensure minority populations do not fall victim to environmental injustices caused by noise? Do community stakeholders within this community have a say?
3. The new flight paths of aircraft entering and leaving the airport allow for more airplanes to enter and leave. While this is better for sending out more flights, this is not helpful for the noise issue that affects citizens nearby.
4. The health effects that noise pollution has on adults and children is very apparent. What is the FAA doing to combat the health effects due to noise pollution? How will the FAA address those already affected by the noise?
5. Noise pollution is not only caused by aircraft from the airport, but as drones grow in popularity, they can become another source of annoyance. What will the FAA do about drone noise as they become used more often?
6. Insulating businesses to combat noise pollution is a great idea. It keeps noise from entering and distracting those who are trying to work or learn. However, the problem arises when the insulation of the buildings begins to deteriorate, and the insulation must be redone. How will the FAA help businesses who need to re-insulate their buildings but can't afford to do so on their own?
7. Noise mitigation strategies have been put to use in the recent years. Since these strategies are meant to lower noise pollution in nearby areas, why is noise still an issue near our area (i.e., College Park)? Are these strategies working effectively? Are there certain instances where one group is protected more by these strategies?

INTERVIEW WITH COLLEGE PARK'S MAYOR BIANCA MOTLEY-BROOM

What are your thoughts on reducing noise in the city?

- 1. Funding for future round of noise mitigation.
- 2. Funding for continuing aircraft technology improvement for quieter flights.
- 3. Making sure new structures are built to meet noise mitigation standards.

What are city official's suggestions to reduce noise pollution?

- Education on noise pollution is a must.
- Encourage citizens' comments on noise to the (ATL).

What do citizens complain about the most?

- Citizens complain about noise interrupting daily activities.

What is the greatest barrier to reducing noise pollution?

- Funding - For quieter aircraft and another round of noise insulation



INTERVIEW WITH COLLEGE PARK'S COUNCILMAN CLAY



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- NextGen
- CLEEN Technologies
- Areas of the city with most noise:
 - Camp Creek Parkway Ward 2 & 4
 - Apartment Buildings
- National Organizations:
 - Aviation Rule-making Committee
 - Airport Improvement Program

INTERVIEW WITH COUNCILMAN CLAY...



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In the future...

- Strive to get the National Noise Standard changed.
- Fly higher, sooner
- Appropriate insulation of new structures
- Lobby Congress for a new round of noise mitigation in structures that have received it before.

ADDRESSING HEALTH DISPARITIES

Black and Brown Communities

Lower Socioeconomic Status

Airport Environmental
Pollution



NEXT STEPS

1. Encourage the FAA, in collaboration with the (ATL) airport, to conduct a needs assessment

- Focus groups, surveys, informal interviews

2. Put together a team of Health Educators

- Assigned to educate citizens on airport noise pollutions, its affects, what the (ATL) airport and the city of College Park are doing, and ways to bring about change.

3. Evaluate next steps



ACKNOWLEDGEMENTS

- DR. CHRISTINA PROCTOR, MENTOR
- MR. GARY YOUNG, DIRECTOR OF AIRPORT AFFAIRS
- MAYOR BIANCA MOTLEY-BROOM, MAYOR OF COLLEGE PARK, GA
- COUNCILMAN AMBROSE CLAY, COLLEGE PARK COUNCILMAN
- DEAN MARSHA DAVIS, CPH DEAN



**THANK
YOU!!**



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QUESTIONS/COMMENTS?

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