

SB658_Kittleman_Support.pdf

Uploaded by: Allan Kittleman

Position: FAV

Allan H. Kittleman
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SB 658 – Transportation – Maryland Aviation Infrastructure Impacts Commission

Senate Finance Committee

March 9, 2022

Madam Chairwoman and Members of the Committee,

First, as a former member of the Senate Finance Committee, I want to thank you for your service to the state of Maryland, and for allowing me the opportunity to provide testimony on SB 658. To that end, while aviation is a critical part of the Maryland economy, it must be managed in a way so that we can all benefit from it. The Baltimore-Washington International Thurgood Marshall Airport in particular has served as an important economic engine to the region in recent years, but unfortunately it has come at a cost to its neighbors.

In 2016, the United States Federal Aviation Administration implemented an effort to change the paths of flights all across the country through a program called NextGen. Unfortunately, with the focus on streamlining flight paths and reducing the use of jet fuel, the FAA lost sight of those who lived below, particularly in the area surrounding BWI. To improve efficiency and predictability, NextGen navigates air traffic through a very narrow band during take off and landing, causing planes to fly over the same houses and neighborhoods over and over again. Prior to NextGen, planes flew higher and over a wider area, reducing and diffusing the noise impact.

Many folks have heard me say this, but it has never been more true than in this instance: “If you aren’t at the table, you’re on the menu.” The FAA put our residents on the menu when they left them out of the discussion. In my former role as Howard County Executive, I heard from many residents whose quality of life was dramatically altered by the incessant sound of planes taking off or landing, to which they had not been subjected before the implementation of NextGen. A common phrase I heard was “life changing”, and I believe this was not just hyperbole. As a result, I took action, trying to engage the FAA in a review of this program and even pursued legal options to help the community. Unfortunately, they have been unsuccessful to date and our residents have been left to suffer the consequences.

I appreciate those who have moved this legislation forward, as I believe our residents deserve a forum to understand the impacts of changes at our growing airports and communicate their perspectives with the appropriate decision makers. That is the only way we can continue to improve and prevent the unintended consequences of NextGen from ever happening again.

It is for these reasons that I support this legislation, and **I respectfully request a favorable report.**

Sincerely,

Allan H. Kittleman

SB0658_Favorable_MCQSC.pdf

Uploaded by: Anne Hollander

Position: FAV

Montgomery County

→ Quiet Skies Coalition

SB 0658
FAVORABLE

We are writing to support legislation that would create a **Maryland Aviation Infrastructure Impacts Commission**: [SB 0658](#).

The Montgomery County Quiet Skies Coalition (MCQSC) was formed in 2016 to work with Maryland residents, elected officials, the Federal Aviation Administration, and aviation experts to resolve and mitigate the dangerous levels of noise, air pollution, and health and safety risks imposed on our communities by aircraft operations at Reagan National Airport (DCA). Our coalition represents Maryland neighborhoods with approximately 7,500 homes, 20,000 residents, and numerous K-12 schools. Flight paths and procedures into and out of Reagan National Airport (DCA) send over 400 disruptively loud, low-altitude flights over our homes, schools, parks, and businesses each day.

The Maryland Aviation Infrastructure Impacts Commission would conduct research and issue reports about the public health and environmental impacts of aviation on Maryland residents. **This information is urgently needed and sorely lacking.** It would give the General Assembly the information it needs in order to balance the needs of communities – including a healthy environment, peaceful enjoyment of property, and protection of property values – with the needs of the commercial aviation industry and its stakeholders.

Although the proposed Commission pertains to Maryland-owned aviation facilities and to Baltimore-Washington International (BWI) Airport in particular, it would benefit Marylanders who live in Montgomery County as well. Better understanding of the impacts of aviation on underlying communities is urgently needed. We very much hope you will support this legislation.

Anne Hollander, President
Janelle Wright, Vice President
Gretchen Gaston, Vice President
The Montgomery County Quiet Skies Coalition, Ltd.

SB658_Bronzaft_FAVORABLE.pdf

Uploaded by: Arline Bronzaft

Position: FAV

SB658_Dr. Arline L. Bronzaft_FAVORABLE

Arline L. Bronzaft, Ph.D., Professor Emerita, City University of New York. I conduct research, write and lecture on the adverse effects of noise on mental and physical health. I have written broadly on noise including chapters in environmental books and encyclopedias, articles in academic journals and writings for the popular press. My research on the effects of noise on children's learning are considered the landmark studies in the field. In New York City I serve on the Board of GrowNYC (appointed by five NYC Mayors), overseeing its activities to reduce noise pollution.

I am here today to offer testimony in support of the Maryland Aviation Infrastructure Impacts Commission bills. I do not believe I need to elaborate on the literature linking noise, including aircraft noise, to adverse mental and physical health effects. Research is plentiful, as indicated in one of my writings, but the policies that should flow from this research are still sadly lacking (<https://www.scirp.org/journal/PaperInformation.aspx?PaperID=76120>). The Maryland Aviation Infrastructure Impacts Commission will undoubtedly familiarize itself with the research and apply this knowledge to set up policies that will indeed lessen the deleterious impacts of aircraft noise on health.

In April 1976, former EPA Administrator Russell E. Train delivered a talk entitled "Aviation Noise: Let's get on with the job" to the Inter-Noise '76 Conference in Washington. He said the following: "It is time for all to come together, and to come to grips with the problem of aviation noise, and to build, at long last, an air transportation system that is safe, healthy and quieter. We have simply lacked the will to do it. Let's get on with the job."

Administrator Train spoke in 1976. It is now 2022. The research linking noise to deleterious health effects is stronger and the ways to lessen aircraft noise are more plentiful. However, unfortunately the will is still lacking. Passing the proposed legislation will say loud and clear – we have the will to "get on with the job."

bill testimony march 9, 2022 PDF.pdf

Uploaded by: Barbara Deckert

Position: FAV

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March 9, 2022

Testimony in Support of SB0658: University of Maryland, Baltimore: Study on the Health Effects of Air Traffic Noise

Please vote to fund this bill.

Many other scientific studies that focused on other geographic areas have established that sudden noise from aircraft causes and exacerbates health problems, including poor sleep, stress and anxiety, cardiovascular and metabolic disease, and that this unwanted noise leads to poor learning and impaired job performance. This study will document these effects in the neighborhoods surrounding BWI.

Since the full implementation of the FAA's NextGen program in September 2015, noise bombs have been falling from aircraft flying in straight, concentrated lines at low altitudes, often in neighborhoods previously unaffected by BWI airport noise. The constant barrage of noise has changed our lives for the worse.

At an airport that used to receive only about 300 noise complaints a year, BWI in 2019 received 551,000 noise complaints from citizens living under these new flightpaths, in an over twenty mile radius around BWI. That is an astronomical 183,567% increase. (Q1-112,000. Q2-127,000. Q3-152,000. Q4-160,000.) See <https://marylandaviation.com/environmental/environmental-compliance-sustainability/quarterly-noise-reports/>

These noise complaints document that the FAA's NextGen program has made our lives less healthy and happy, whether or not we are aware of it. I have often talked with neighbors who claim that the noise doesn't bother them, as if that were some badge of strength. However, my good neighbors don't understand that the noise from aircraft does affect their health, whether or not they know it. We can't feel our physiological stress responses, such as our rising blood pressure every two to three minutes when a plane booms and roars overhead. We can't feel the excess cortisol coursing through our bodies and wearing out our organs. We can't correlate our increasing fatigue, short tempers, and lack of concentration with our exposure to noise, but tend to blame other factors in our lives that we think we can better understand.

So this study by Dr. Zafari will document these physiological effects of our exposure to NextGen-caused noise from BWI, but more importantly, it will document its monetary cost.

Let's face it. The FAA and the MAA do not care about human suffering.

They don't care about our noise complaints, except to lament them as bad PR for the airport. The MAA cannot be troubled to distribute their Quarterly Noise Reports to anyone, merely posting them on their website to hide in plain sight. They seem to think that BWI exists to serve the travelers who pass through it, most of whom do not live in Maryland, and to generate corporate profits for the airlines that do not pay for the human suffering that they cause.

The MAA brags about revenues produced by BWI that line the state's coffers. Many citizens worry, irrationally, that any criticism of BWI or any hold on its unbridled expansion will result in lost jobs and lost money for the state. They worry that if we mess with the airport, suddenly they won't be able to catch a cheap flight to Vegas for the weekend to gamble or to attend some distant sports event. However, the dispersion of flightpaths and raising the altitudes of planes as we had before NextGen will have no negative effects on Maryland. Safety has nothing to do with this issue, either. Our airways were safe before NextGen, with no mid-air collision in this country involving a commercial passenger jet since 1978, and our airways will be safe when we revert to previous flight procedures.

Don't be distracted by the complexity of this issue. This proposed study on the health effects of air traffic noise will help document the monetary cost of this noise pollution on our citizens. Money is a language and a value that even the FAA, the MAA, and the airlines understand.

On a personal note: I have lived in my home in Elkridge for 38 years. Before NextGen, I and my family seldom heard or saw a plane. On September 1 of 2015, BWI's runway construction coincided with the full implementation of NextGen, not by coincidence. For 91 consecutive days, I suffered nineteen and a half hours of aircraft noise a day, every two to three minutes, from 5:30 AM to 12:30 AM the next day, with more cargo flights around 3 AM. I could only get five and a half hours of interrupted sleep a day. I would bet dollars to doughnuts that in the affected areas there were citizens who had strokes or heart attacks and died due to stress and sleep deprivation. As documented by the MAA, dB levels reached up to 107, which is nearly loud enough to split one's eardrum. As a result, I now need hearing aids; two audiologists confirmed that I have permanent auditory nerve damage due to exposure to loud noise. Despite this hearing loss, I can no longer open my home's windows. Even though they are triple glazed, I still hear constant aircraft noise inside my well-insulated home. I can no longer

enjoy gardening or the simple pleasure of sitting on my porch and chatting with my neighbors. I do not want to move, and nearly all of Howard County is similarly affected. I want to live close to my children and my grandchildren, so we can help one another.

I have been active in the fight against NextGen-caused aircraft noise from BWI since that noise bombardment of my home, and of hundreds of thousands of other homes, in September 2015. I have been interviewed dozens of times by the Washington Post, the Baltimore Sun, and by local news stations WMAR, FOX, WBJC, and WBAL. I was one of the people who helped bring airnoise.io to our area to make filing noise complaints easy and fast. I uncovered the MAA's failure to maintain its noise monitoring system, which is required by MD law. For many years, starting in 2012 when planning for NextGen began, the MAA published its Quarterly Noise Reports with no noise data whatsoever. I have written hundreds of letters to county, state, and federal officials on this issue. I was an alternate for District 12 on the BWI Roundtable. Fighting for my right to the ordinary use of my home, for my right to health and happiness and on behalf of my community for the last seven years is not how I thought I would be spending my retirement.

As I wrote in an Op-Ed in the Baltimore Sun, "Ragtag resisters fight for peace and quiet near BWI" <https://www.baltimoresun.com/opinion/op-ed/bs-ed-op-0812-air-noise-20190812-d5sf3qsbh5c3jk7q3jp4lr7sgu-story.html>

"Let's let the babies sleep. Let's shield our combat vets who have PTSD triggered from NextGen noise. Let's let our first responders on the night shift get a good day's rest. We need peace."

With the passage of SB0658, let's also document the consequences of the FAA's disastrous NextGen program on the health of the hundreds of thousands of people living around BWI, and the cost of those health consequences in almighty dollars.

SB 658 Slideshow .pdf

Uploaded by: Clarence Lam

Position: FAV



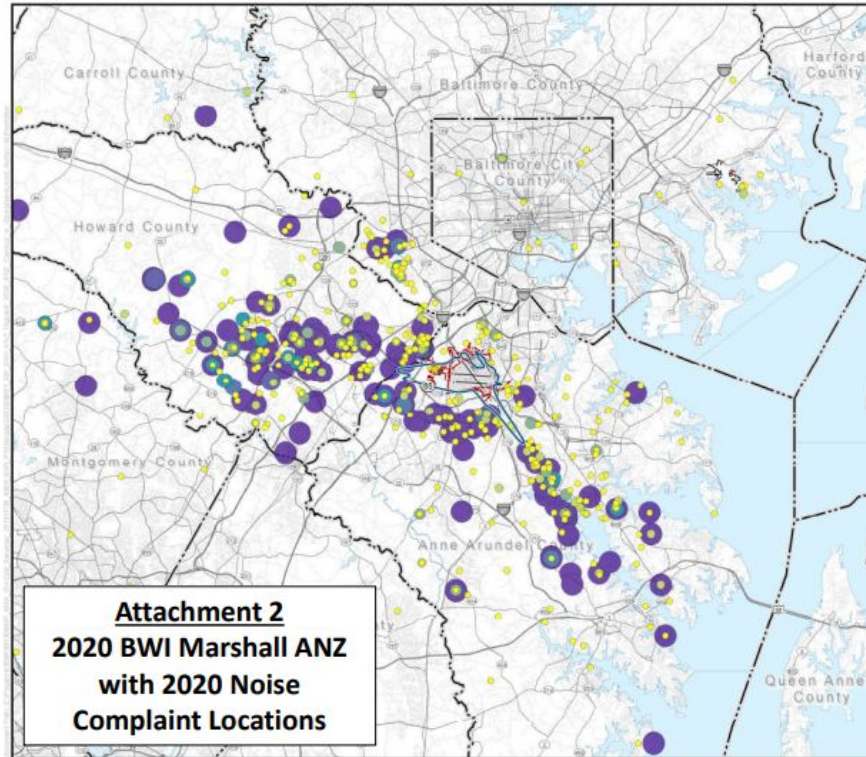
SB 658

Transportation -

Maryland Aviation Infrastructure Impacts Commission

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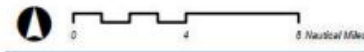
Noise complaints submitted in 2020



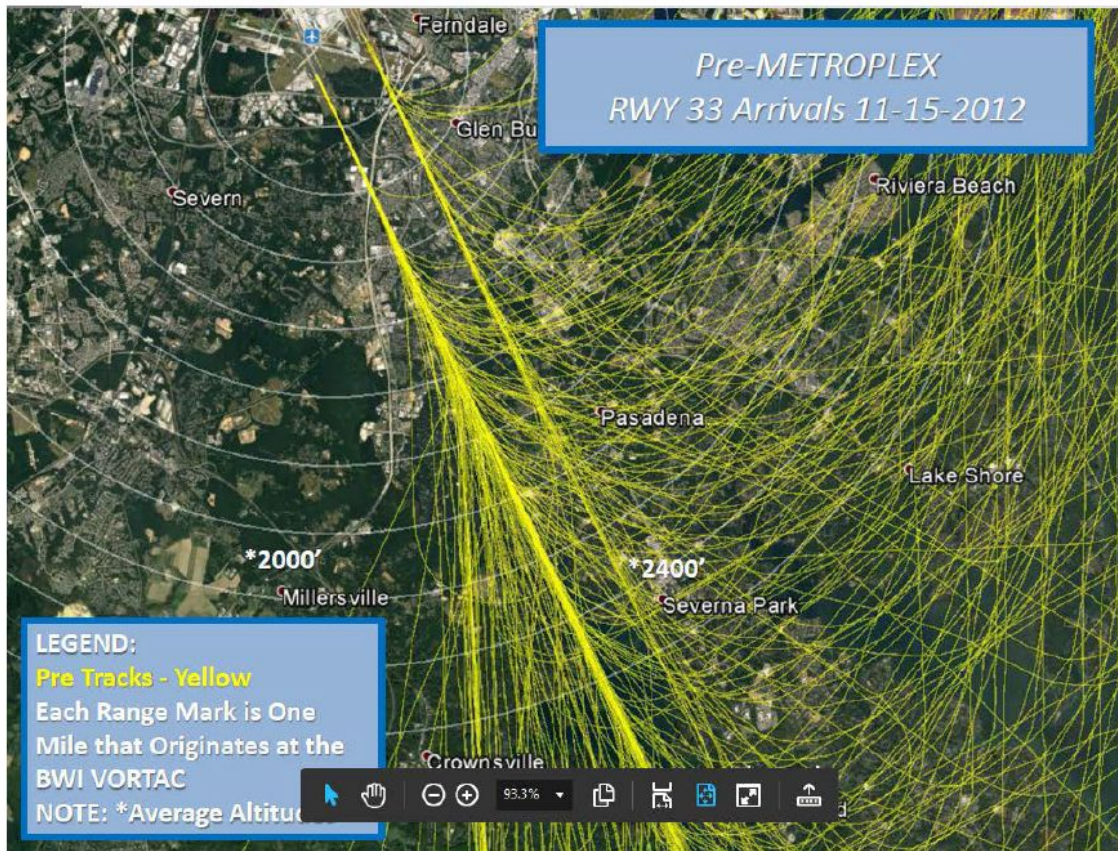
Attachment 2:
2020 Noise Complaints and 2020 BWI Marshall ANZ



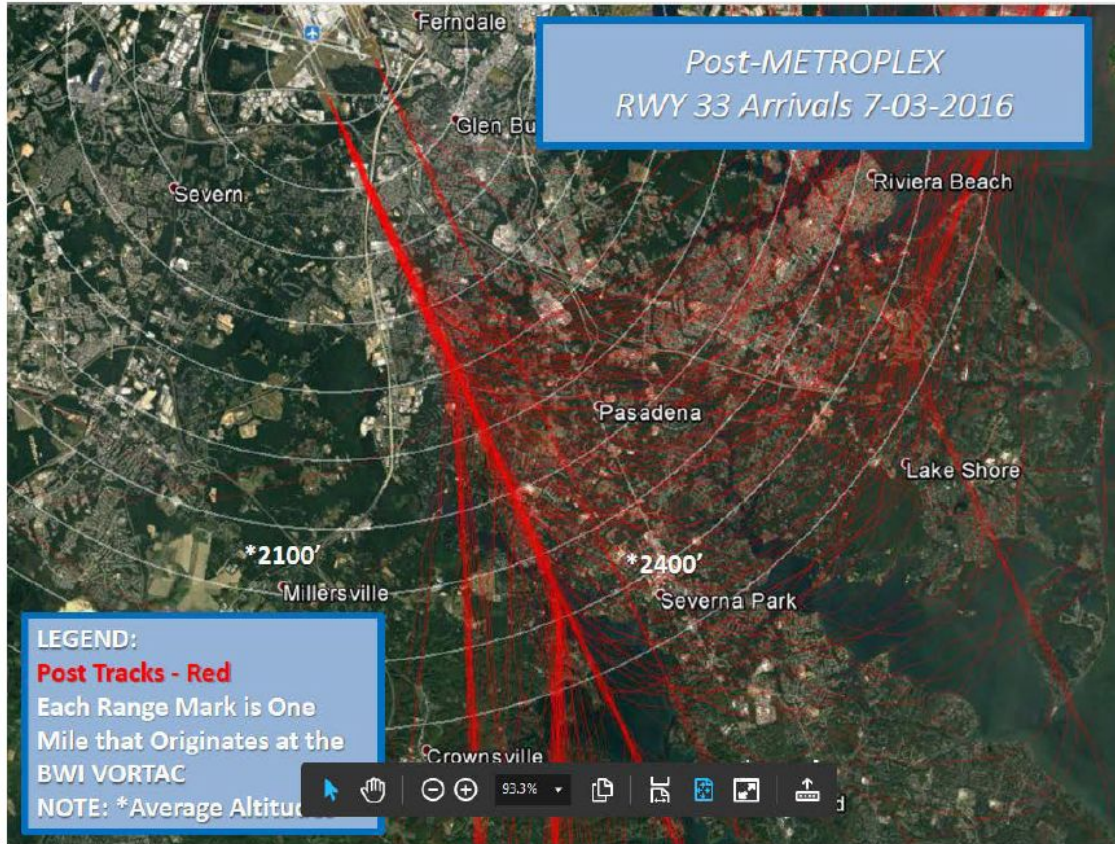
Data Sources: MDOT MAA; Anne Arundel County; Howard County; Baltimore County Government Open Data Portal; National Register of Historic Places (NRHP); Environmental Systems Research Institute (ESRI); AirNav.com; HMMH



Arrivals into RWY 33L (Pre)



Arrivals into RWY 33L (Post)



Modeled DNL Contours - 2012

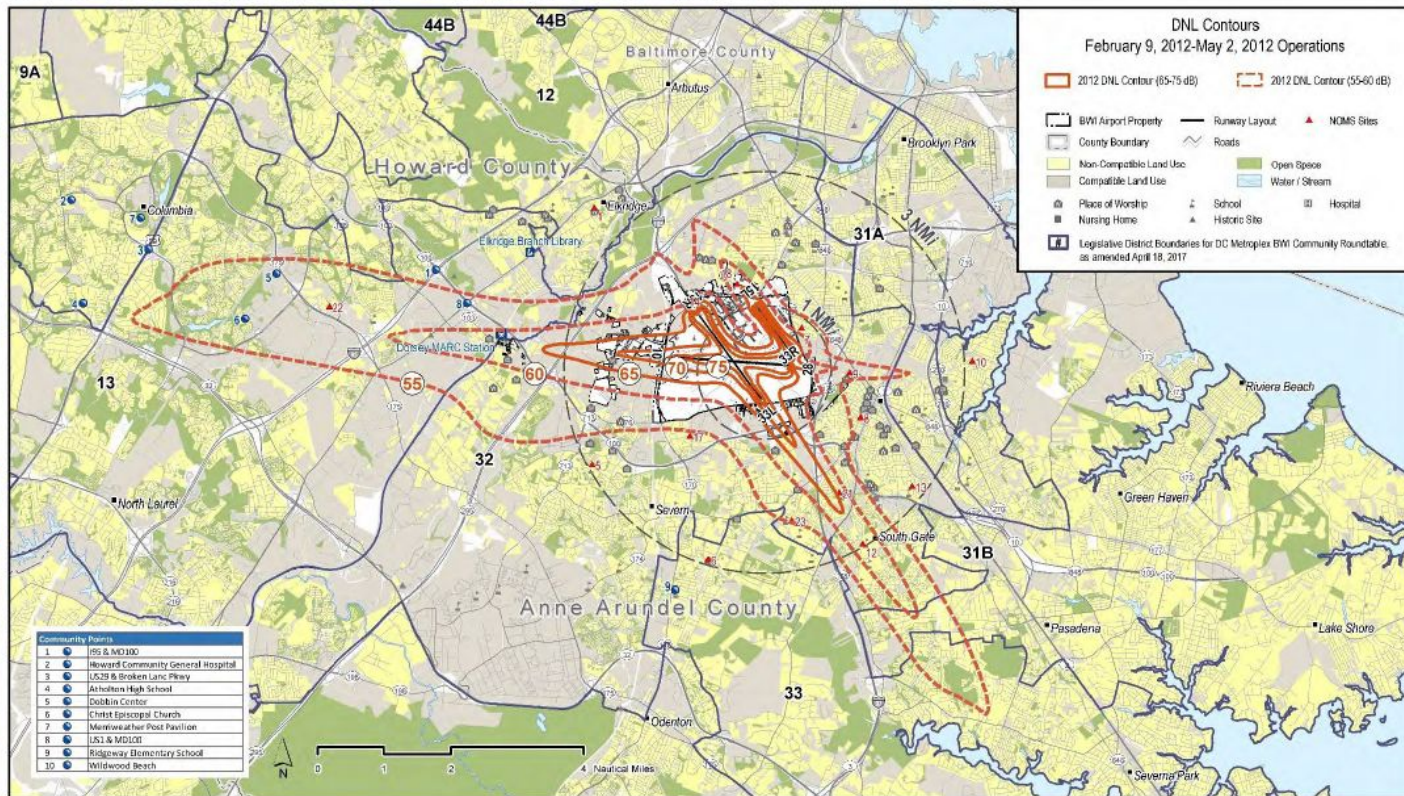
2010 US Census

Contour Range	Population	Households
55-60 dB	48,189	19,200
60-65 dB	8,143	3,282
65-70 dB	611	246
70-75 dB	12	5
75+ dB	0	0
Total	56,955	22,733

2016 ACS

5-Year Estimates

Contour Range	Population	Households
55-60 dB	54,466	21,558
60-65 dB	8,955	3,838
65-70 dB	1,527	561
70-75 dB	122	47
75+ dB	3	1
Total	65,073	26,005



Note: For informational purposes only

Modeled DNL Contours - 2017

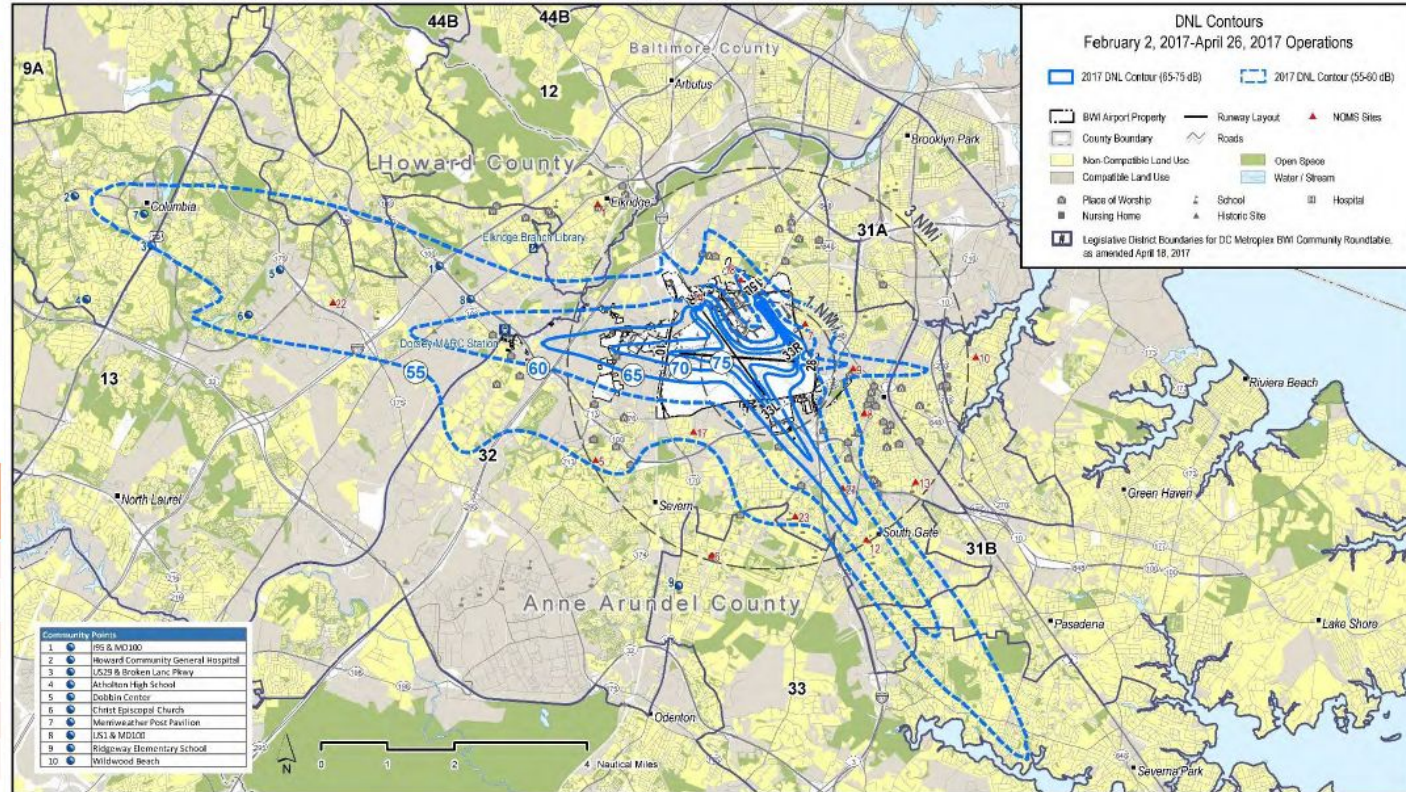
2010 US Census

Contour Range	Population	Households
55-60 dB	75,460	30,589
60-65 dB	10,472	4,239
65-70 dB	1,051	420
70-75 dB	35	14
75+ dB	0	0
Total	87,018	35,262

2016 ACS

5-Year Estimates

Contour Range	Population	Households
55-60 dB	83,249	33,160
60-65 dB	11,163	4,726
65-70 dB	2,091	806
70-75 dB	232	90
75+ dB	10	4
Total	96,745	38,786



Note: For informational purposes only



SB658_LAM_FAV.pdf

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Position: FAV

CLARENCE K. LAM, M.D., M.P.H.
Legislative District 12
Baltimore and Howard Counties

Education, Health, and Environmental Affairs
Committee
Chair, Environment Subcommittee

Executive Nominations Committee

Joint Committee on Ending Homelessness

Senate Chair

Joint Audit and Evaluation Committee

Joint Committee on Fair Practices and
State Personnel Oversight

Vice Chair

Baltimore County Senate Delegation

Chair

Howard County Senate Delegation

Chair

Asian-American & Pacific-Islander Caucus



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Support: SB 658 - Transportation - Maryland Aviation Infrastructure Impacts Commission

Background:

- NextGen is a series of interlinked programs and policies implemented by the Federal Aviation Administration (FAA) to improve the efficiency of the country's National Airspace System.¹
- The intent of NextGen is to enhance the safety, efficiency, and predictability of our nation's aviation systems, however, the implementation of these policies has had dramatic consequences for Maryland communities since it was phased in beginning in 2015.
- NextGen altered flight paths around BWI Airport which causes planes to enter and exit the airport at low altitudes and on concentrated flight paths that bombard residents with dangerously high noise levels in addition to generating environmental concerns that have yet to be appropriately studied.
- The Maryland Aviation Administration (MAA) established the DC Metroplex BWI Community Roundtable Working Group (BWI Roundtable) at the request of the FAA in 2016 to make recommendations to the FAA following the result of concerns raised by the communities.
- Despite years of dialogue between the FAA and the BWI Roundtable, there has been no substantive relief for the concerns that are plaguing neighborhoods in Baltimore, Howard, Anne Arundel, and Montgomery Counties.

Why SB 658 is Needed:

- The BWI Roundtable is limited in its authority to conduct the substantive research required to understand and create solutions comparable to the severity of the issues that are being inflicted on our communities.

¹ [FAA: This is NextGen](#)

- There is an increased need for research to understand the entire range of health and environmental impacts that may result from the growth of modern aviation infrastructure.
- By establishing the Maryland Aviation Infrastructure Impacts Commission, Maryland communities will have gained increased authority to develop policy solutions to alleviate noise and environmental consequences relating to the operations at the BWI Airport.

What SB 658 Does:

- SB 658 will appoint 13 members for five-year positions in the Maryland Aviation Infrastructure Impacts Commission that would be tasked with advising the General Assembly to address aviation-related issues.
- The Commission will be guided by community advocates and will consult with health and environment experts, as well as the Maryland Office of the Attorney General, the Maryland Department of Transportation (MDOT), the Maryland Aviation Administration, citizen advisory groups, the air carrier industry, the airport concessionaire industry, and the airline support services industry.
- Members of the Commission will be tasked to study and consider the research on the health and environmental impacts of commercial aviation in certain communities surrounding State-owned airports.
- SB 658 will require the Commission to create reports and recommendations related to health and environmental impacts on communities surrounding new and existing commercial aviation infrastructure.
- MDOT and the FAA will be required to inform the Commission

What SB 658 Accomplishes:

- SB 658 will create a commission to effectively evaluate all issues related to the commercial aviation growth and highly concentrated flight paths over communities through a legislative mandate, governance, staffing, and funding to bring reports and recommendations to legislators.
- By creating the Maryland Aviation Infrastructure Impacts Commission, legislators can be better apprised of the appropriate policy solutions that serve the State's dual imperatives of economic growth and that of protecting the health of its citizens and the environment.
- The statutory requirements proposed in SB 658 will strengthen the communities' relationship with the airport to ensure that all can benefit from the economic benefits from the airport's operations without sacrificing the wellbeing of Maryland communities.
- The insights gained from this Commission will have national implications that can aid communities in other states that are experiencing similar challenges.

SB658_DanielFink_FAV

Uploaded by: Daniel Fink MD MBA

Position: FAV

AIRCRAFT NOISE IS A PUBLIC HEALTH PROBLEM, NOT JUST AN ANNOYANCE: Testimony submitted to the Maryland General Assembly in support of HB1103 and SB658 March 8, 2022

Daniel Fink MD MBA

"The overwhelming majority of noise effect researchers today accept that there is a causal relationship between environmental noise exposure and increased cardiovascular risk." Mathias Basner, MD PhD MSc, Professor, University of Pennsylvania School of Medicine, Philadelphia PA ¹

Transportation noise is the second worst environmental stressor affecting human health, exceeded only by air pollution.² Transportation noise and air pollution are inextricably intertwined; transportation noise is the unwanted, harmful soundtrack to gaseous and particulate matter air pollution from engines.

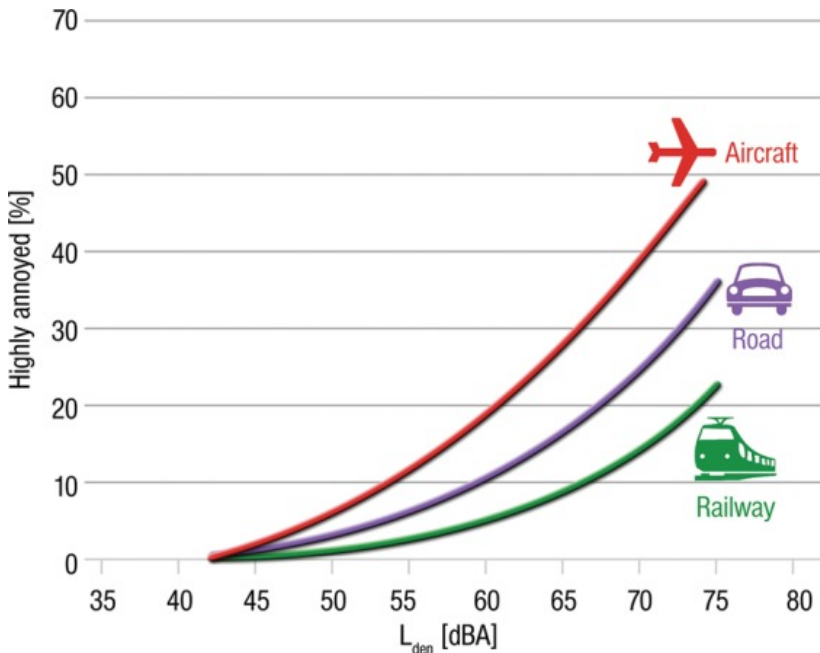


Figure 1. Transportation noise annoyance From Munzel et al.²

Transportation noise is a health problem for individuals and a public health problem for exposed populations. Much has been learned about these health effects from studies of how railway noise, road traffic noise, and aircraft noise affect humans. The adverse impacts

appear to be similar for all types of transportation noise, but aircraft noise is particularly annoying to humans. (See Figure 1) The effects of air pollution and noise pollution are additive, but the individual effects of each type of pollution can be teased out by sophisticated epidemiologic and statistical techniques.

Aircraft noise disrupts human activities, impairs learning, disturbs sleep, and causes increased cardiovascular disease and death among those exposed to it.^{3,4} As reported in the media from multiple metropolitan areas across the country, the FAA's NextGen area navigation system, introduced to promote air traffic safety and efficiency, has exacerbated the problem of aircraft noise by concentrating flight paths over certain communities, including communities near BWI.⁵ A few flights a day may not be a major problem, but 650+ flight operations a day at BWI, concentrated over specific communities, is. Many experts also question whether DNL (Day-Night Noise Level), which is the metric the FAA is using to determine harm from aircraft noise, is the appropriate measure for disruption of human activities and harm to public health. The scientific literature suggests that the total number of aircraft noise events above a certain threshold would be a better indicator.⁶ Additionally, aircraft noise and transportation noise have disproportionate impacts on children, seniors, racial minorities, and the poor, although other groups living near some airports have also been greatly impacted.^{7,8} A full discussion of these topics is beyond the scope of this testimony.

The non-auditory health impacts of noise have long been known,^{9,10} but research done in the last several years has added to our understanding of the mechanisms by which noise, especially aircraft noise, causes adverse health effects. Noise isn't just unwanted sound; it has been redefined as unwanted and/or harmful sound.¹¹ Unwanted sound is annoying, and being annoyed has now been shown to be harmful to health.

Why does annoyance matter? For decades, the Federal Aviation Administration (FAA) has relied on the Schultz Curve^{12,13} to document aircraft noise annoyance, but the recent FAA-funded Neighborhood Environmental Survey found that a much greater proportion of people

are highly annoyed by aircraft noise across all day-night noise levels (DNL) than was previously acknowledged.¹⁴ Previous studies had found that only 12.5% of respondents were highly annoyed by aircraft noise, but the new study found that 42% of respondents were highly annoyed.

Annoyance isn't just a human emotion; being annoyed is stressful. In 2017, Tawakol et al. reported that stress causes vascular inflammation, which in turn is associated with cardiovascular disease and death.¹⁵ Further work by Tawakol's group found that people exposed to aircraft noise had increased risk of heart attack and stroke regardless of other cardiac risk factors.¹⁶

Even before the precise mechanisms by which stress from aircraft noise caused cardiovascular disease were understood, causality had been established. The multiplicity of studies, in human and animal subjects, using a wide variety of techniques, meets the Bradford-Hill criteria for epidemiologic causality.¹⁷ As Babisch wrote in 2014,¹⁸

“Environmental noise is a psycho-social stressor that affects subjective well-being and physical health. [Emphasis added] Noise disturbs communication, concentration, relaxation and sleep. Chronic long-term exposure to transportation noise has been shown to be associated with the prevalence and incidence of cardiovascular diseases, including hypertension, ischemic heart diseases and stroke. Figure 1 [Figure 2 in this written testimony] shows an update of an earlier noise reactions scheme from 2002. The evidence of the association is based on experimental work carried out in the laboratory regarding the biological plausibility (coherence), the consistency amongst study results (different study designs, different populations, different noise sources), the presence of an exposure-response relationship and the magnitude of the effect. The question is no longer whether noise causes cardiovascular diseases; it is rather to what extent. [Emphasis added] This has to do with the slope of the exposure-response relationship and the empirical onset of the risk increase (intercept of the exposure response curve). Risk assessment and risk management relies on established exposure-response relationships.”

When Babisch wrote his paper almost a decade ago, the understanding of noise-induced cardiovascular disease was limited, as shown in his noise-effects reaction scheme. (see Figure 2)

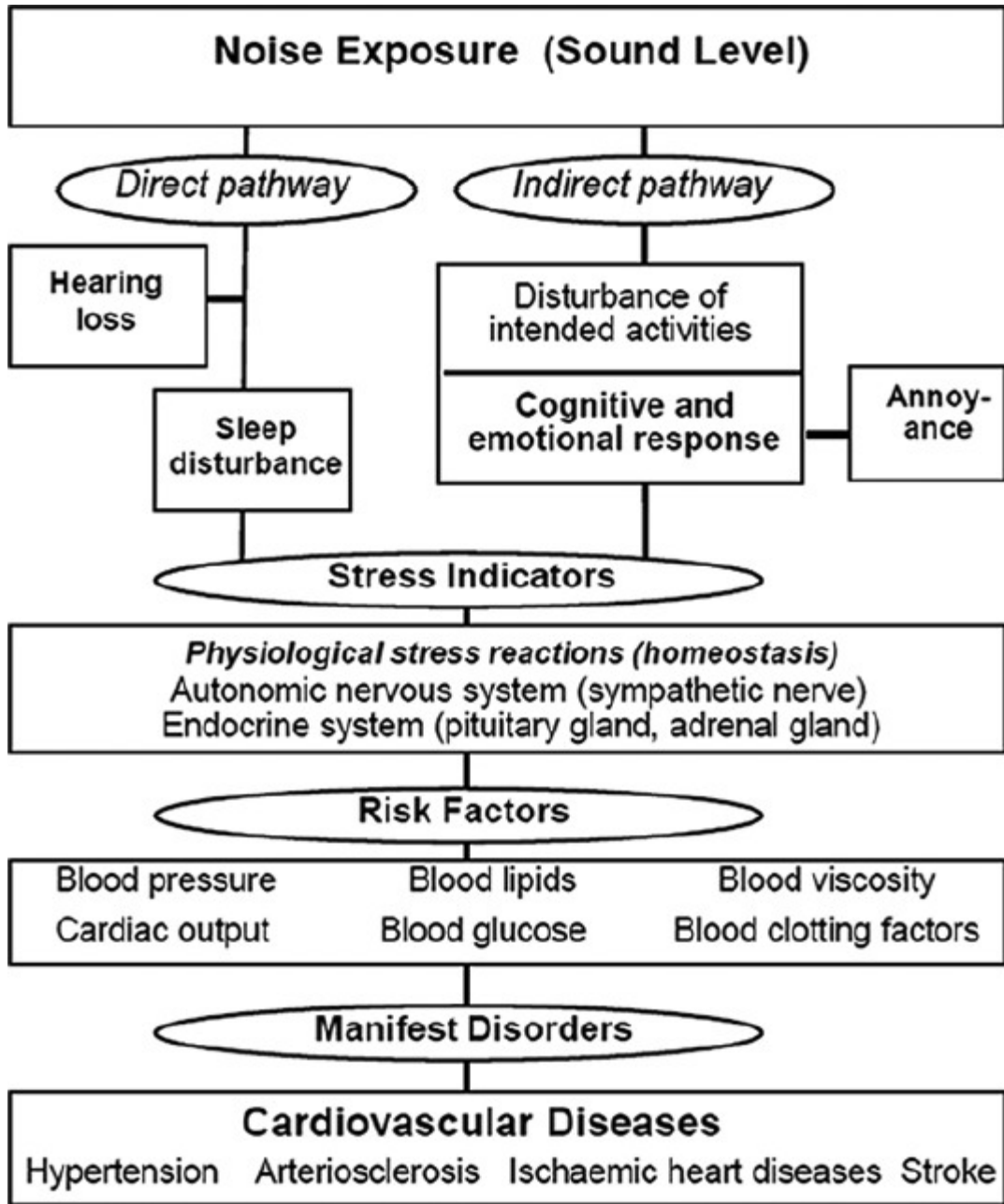


Figure 2. Noise effects reaction scheme. From Babisch¹⁸

Subsequent research^{17, 19-29} has proven that aircraft noise causes cardiovascular disease, with the causal mechanisms now understood down to the hormonal, autonomic, cellular, subcellular, and molecular

levels. These effects and interrelationships are perhaps best illustrated in the Central Illustration (see Figure 3) from Munzel’s 2018 article in the *Journal of the American College of Cardiology*.¹⁹

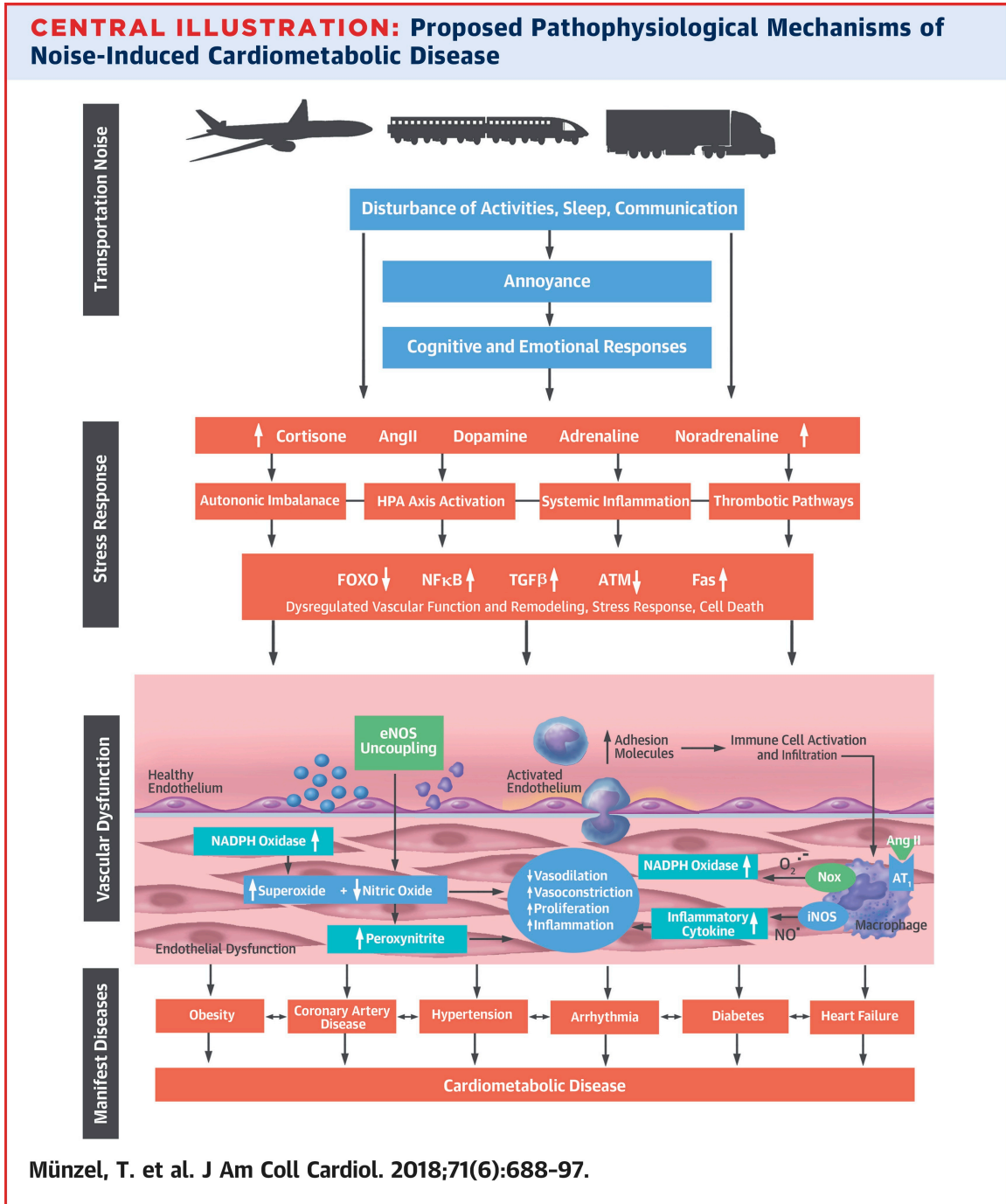


Figure 3. Proposed pathophysiological mechanisms of noise-induced cardiometabolic diseases. From Munzel T., et al.¹⁹

Generally, aircraft noise has direct involuntary physiological effects on stress hormones, heart rate, and blood pressure, and also causes sleep disturbance and interferes with activities and communication, causing annoyance, leading to an indirect stress response, causing vascular dysfunction. Both in turn cause cardiovascular disease and death. Multiple studies have confirmed these relationships.

Nighttime aircraft noise has more serious adverse cardiovascular health effects than daytime noise. This appears to be related to the evolutionary role of hearing as necessary for survival, with noise indicating danger and causing a physiologic stress response, and also to sleep deprivation. In fact, nighttime aircraft noise exposure has been shown to trigger heart attacks.²⁰ (See Figure 4)

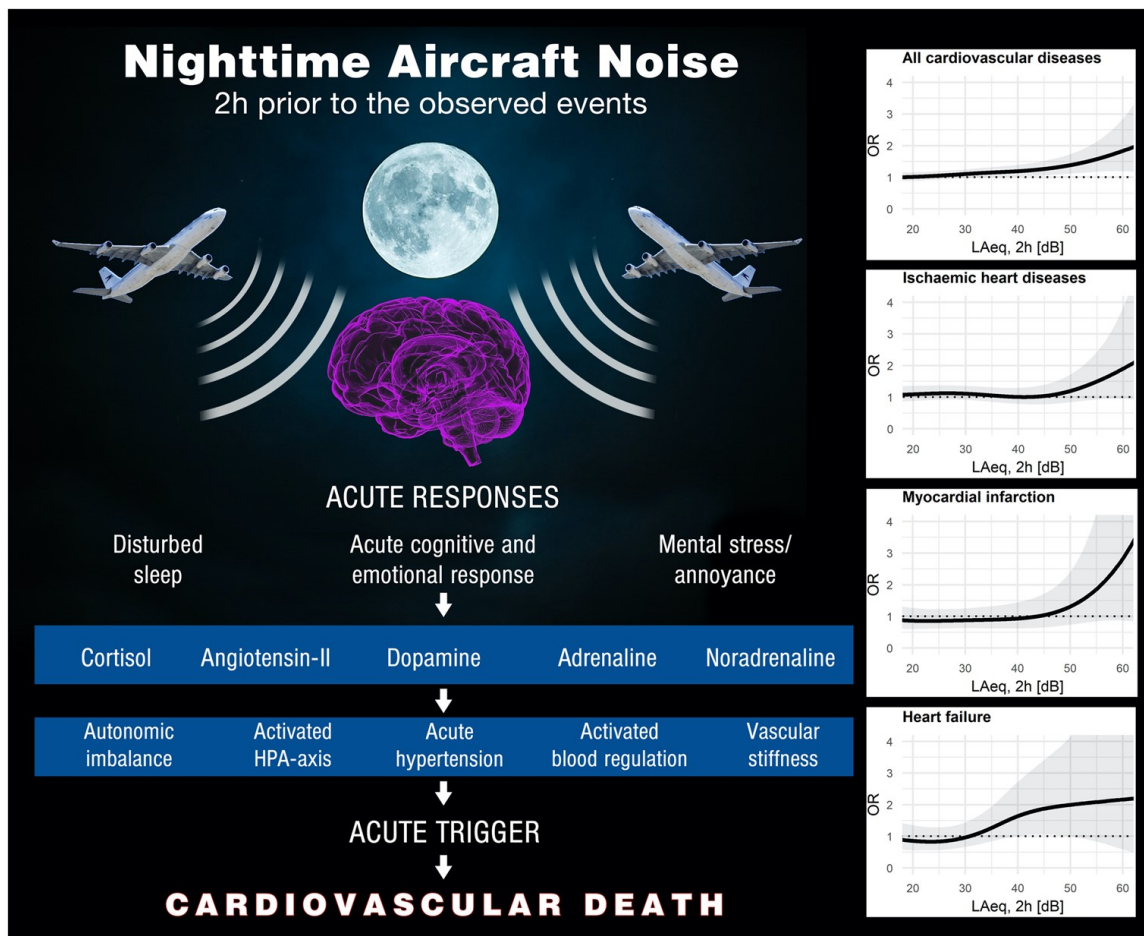


Figure 4. Nighttime aircraft noise causes heart attacks and death. From Munzel et al.²¹

Furthermore, research shows that humans do not habituate to aircraft noise, especially at night. In fact, there seems to be a priming effect, whereby prior noise exposure amplifies the negative effects of noise on the lining of blood vessels (endothelial function).^{22,23}

There is more than enough science¹⁷⁻²⁹ to support immediate action to reduce aircraft noise, solely on the basis of its adverse health impacts on Americans living near airports and under aircraft flight paths. A recent “natural experiment”- a situation that allowed research to be done that could not otherwise be done due to economic or practical considerations- was the COVID-19 lockdown that reduced aircraft traffic and noise pollution from aircraft. A study published by the American Heart Association showed improvement in cardiovascular risk factors in populations exposed to aircraft noise when the noise decreased.^{28,29}

The problem of aircraft noise is well recognized elsewhere in the world. For example, in 2018, the World Health Organization’s (WHO) Environmental Noise Guidelines for the European Region⁴ recommended much lower aircraft noise levels than those currently required by the FAA. Specifically, WHO recommended reducing average aircraft noise exposure below 45 decibels (dB) L_{den} (average day-evening-night noise level) and nighttime aircraft noise exposure below 40 dB L_{night} (average nighttime noise level). (see Appendix) Since the decibel scale is logarithmic, indicating mathematically that a 3 dB increase in sound pressure measurement denotes a doubling of sound energy, these are much lower sound energy levels than the 65 dBA standard used by the FAA.

Six general comments below anticipate testimony from representatives of the airline industry, airports, the FAA, and perhaps the aircraft and jet-engine manufacturing industries:

First, the Maryland General Assembly must be wary of statements that “more research is needed.” This is a classic delay tactic. More research is always good, but no more research is needed to know that aircraft noise causes cardiovascular disease and increased mortality. The only research that needs to be done here and now is

to study the noise and air pollution from aircraft and airports in Maryland, especially Baltimore-Washington International Airport, and its effects on the health and welfare of people living in communities in Maryland. That is the task of the proposed Maryland Aviation Infrastructure Impacts Commission.

Second, research done in Europe does not need to be replicated by American researchers on American populations. Many of the articles cited in this testimony have appeared in American medical or scientific journals, and others have appeared in well-respected peer-reviewed European journals. The populations of Western Europe and those in the United States descended from European immigrants are genetically and physiologically similar. As far as is known, the enzymes and chemical reactions in human cells are the same the world over. The research not done in the United States has been done by reputable scientists at respected European universities and government agencies, using accepted research methodologies and standards. Assertions that research done in Europe must be replicated and validated in the U.S. are merely a delaying tactic that has no scientific merit.

Third, the Maryland General Assembly must learn from the “Tobacco Wars”³⁰, and must be aware of what might be called “Merchants of Doubt” tactics, based on the classic book by Oreskes and Conway.³¹ These authors described how for decades the tobacco industry first denied that cigarette smoking caused lung cancer and then deliberately took steps to create doubt and sow confusion about whether this was true. Of course, there was no rational scientific doubt about a very strong causal relationship between smoking and lung cancer, but the delay allowed the tobacco industry to continue reaping billions of dollars of profits while millions of Americans died of smoking-related cancers and heart disease. Once one has seen the “denialists’ playbook”, it is easy to recognize the tactics: (1) deny that there is a problem, (2) express doubt about landmark scientific studies incontrovertibly documenting the problem, (3) fund research on alternate albeit unlikely possible causes of disease, (4) publicize that research, (5) insist that more research is needed, including replication of studies that do not need to be repeated, and finally, (6)

mount ad hominem attacks against reputable scientists. Since publication of *Merchants of Doubt*, similar strategies have come to light about lead in pipes, paint, and gasoline, asbestos, climate change, and even about COVID-19. In all cases, the result has been unnecessary, entirely preventable sickness, disability, and death for thousands to tens of thousands or even millions of Americans. Meanwhile, the costs of these public health disasters were transferred to and borne by the healthcare sector and American taxpayers.

Fourth, the FAA specifically may be among the purveyors of unnecessary doubt concerning the adverse health effects of aircraft noise and air pollution from aircraft. For example, regarding air pollution the FAA artificially limits study to a 5 mile radius around an airport, but prevailing wind patterns may extend the adverse health effects of particulate matter pollution beyond that radius.³² Further examples of these denialist tactics include: (1) the continued use of the Schultz curve despite decades of criticism including from experts¹³; (2) the use of A-weighted decibels (dBA), used to measure the frequencies in human speech, to measure aircraft noise levels when aircraft noise is largely comprised of low frequencies better measured by C-weighting (dBC); (3) the use of DNL (day-night noise levels) measurements, which average noise levels over 24 hours, rather than counting the number and frequency of nighttime aircraft noise events⁶; and (4) wording in FAA publications and publications based on research funded by the FAA subtly raising unwarranted doubt.

One specific example of the FAA's *Merchants of Doubt* tactics is the paper by Peters et al.³³, funded by the FAA with FAA and Department of Transportation (DOT) employees among its authors. Some of the university-based authors were also funded by the FAA or DOT. Even the title of the paper- *Aviation noise and cardiovascular health in the United States: a review of the evidence and recommendations for research direction*- implies that only research done in the United States on Americans is valid. In this paper, published in 2018, there are mentions of more research being needed, of the fact that 10 of 11 studies reviewed were done in Europe, a confusing discussion of

noise metrics, statements such as “existing research suggests that nighttime noise may disrupt sleep” and “these physiologic changes plausibly underlie the observed associations between chronic sleep disturbances and risk of cardiovascular disease”. The conclusion states [with bolding added to highlight *Merchants of Doubt* language]:

*“As such, there is **an unmet need** and opportunity **to expand and strengthen the evidence base** regarding the potential health impacts of aviation noise. This evidence base would be useful in informing decision-making regarding aviation noise in the USA. With this need in mind, we call on the scientific community to leverage **emerging tools** to estimate **aviation and road traffic noise** to undertake a **broad research agenda** to **estimate** the potential adverse health effects of noise in the USA and more fully understand the causal mechanisms by which these **putative** effects occur as well as capturing the uncertainties in these impacts. The resulting evidence base will allow regulators and airport operators to ensure that continued aviation growth is accompanied by appropriate protections of the public health.” [emphasis added]*

The *Merchants of Doubt* phrases raise or imply doubt when there can be no rational doubt about the voluminous scientific evidence about the adverse effects of aviation or aircraft noise on human health. There is no unmet need. The evidence base consists of thousands of articles in the peer-reviewed medical and scientific literature. There is no need for emerging tools. Aviation and road traffic noise are conflated when the role of aircraft noise can readily be separated from road traffic noise due to its intermittent nature associated with specific flight operations. There is no need for a broad research agenda. The adverse health effects of aircraft noise are not putative but real, and can be measured, not estimated. There are no uncertainties about any of this.

The Peters article was published in 2018, the same year that the WHO, based on its review of the same published peer-reviewed medical and scientific literature available to *anyone* with a computer and internet access, recommended reducing average aircraft noise exposure below 45 decibels (dB) L_{den} (average day-evening-night

noise level) and nighttime aircraft noise exposure below 40 dB L_{night} (average nighttime noise level). (See Appendix) What does the WHO know that the FAA can't seem to find, understand, or accept?

Fifth, another issue that must be raised is the question of “regulatory capture”, defined as follows: "In economics and political science, the term **regulatory capture** is used to refer to a situation in which a regulated entity or industry exerts a strong influence over the government bodies or officials tasked with regulating that entity or industry. A government agency involved in a situation of regulatory capture may be referred to as a **captured agency**."³⁴ Specifically, has the FAA been “captured”? In light of the FAA’s dismal regulatory failures in the Boeing 737MAX approvals³⁵ - as The New Yorker writer John Cassidy bluntly stated, “*Perhaps even more alarmingly, the report shows how the F.A.A., which once had a sterling reputation for independence and integrity, acted as a virtual agent for the company it was supposed to be overseeing.*”³⁶ - and its utter failure for decades to deal effectively with the very real problems of aircraft noise and its health effects, one must question whether the FAA has been captured by the aircraft and jet engine manufacturers, the airlines, and the airport operators, making all decisions in their favor with almost complete disregard for the health and welfare of the public living near airports or below flight paths.

Sixth, anticipating objections that any attempt to restrict aircraft noise and air pollution will damage the economically important aviation sector, it is worth noting that aircraft noise and air pollution have become issues that are *negatively* affecting American competitiveness. Aircraft manufacturing is one of America’s largest export industries, but as noise regulations are implemented internationally, American-made aircraft will not be purchased because they are too noisy and too polluting. Many American-made aircraft already run afoul of European noise regulations, and are subject to fines for exceeding operational noise limits. Incentivizing aircraft manufacturers, U.S.-based airlines, and airport operators to deal with noise pollution and air pollution would protect the health of Americans and help restore American manufacturing competitiveness.

The Maryland General Assembly must address three questions:

1. What are the adverse health effects of noise and air pollution from aircraft and airports on Marylanders?
2. What are the economic impacts, in terms of health care costs, worse educational performance, and lost productivity, from aircraft and airport noise and air pollution?
3. Since regulation of aircraft and airlines is within federal purview³⁷, what can the State of Maryland do to protect its citizens from noise pollution and air pollution from aircraft and airports?

DISCLOSURE

Dr. Fink is an internist and medical management expert. He served on the Board of the American Tinnitus Association and is currently Board Chair of The Quiet Coalition, a program of Quiet Communities, Inc. Dr. Fink is an Expert Consultant to the World Health Organization on its Make Listening Safe program, and is a subject matter expert on noise and the public for the National Center for Environmental Health at the U.S. Centers for Disease Control and Prevention. He has presented papers on this subject at national and international scientific meetings and published articles about noise and health in peer-reviewed scientific journals. He has no financial interests in any relevant organization or company and no conflicts to disclose. A complete list of his publications is available from the author.

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APPENDIX

The recommendations of the World Health Organization for aircraft noise⁴ are copied here for reference.

"For average noise exposure, the GDG [Guidelines Development Group] strongly recommends reducing noise levels produced by aircraft below 45 dB L_{den} , as aircraft noise above this level is associated with adverse health effects. For night noise exposure, the

GDG strongly recommends reducing noise levels produced by aircraft during night time below 40 dB L_{night} , as aircraft noise above this level is associated with adverse effects on sleep. To reduce health effects, the GDG strongly recommends that policy-makers implement suitable measures to reduce noise exposure from aircraft in the population exposed to levels above the guideline values for average and night noise exposure. For specific interventions the GDG recommends implementing suitable changes in infrastructure. “

SB0658_Jung_FAV.pdf

Uploaded by: Deb Jung

Position: FAV



Howard County Council

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Deb Jung
Councilmember

District 4

SB0658

Deb Jung

Howard County Council, BWI Roundtable Representative from the Howard County Council

FAVORABLE

I am writing in support of SB0658, which will create the Maryland Aviation Infrastructure Impacts Commission. The Commission will be tasked with balancing BWI's growth plans against the damaging impacts of the airport's flight patterns and procedures on affected communities. I am a Howard County Councilmember and in my fourth year serving on the DC Metroplex BWI Community Roundtable. I serve on the Roundtable because I am acutely aware of our residents' frustration with loud, frequent, and low-flying airplanes to and from BWI. This proposed Commission will make recommendations to lawmakers about legislative solutions for these communities that are suffering from the physical and mental health consequences of prolonged noise exposure and other environmental impacts while bearing in mind BWI's economic vitality.

Prior to the adoption of the NextGen navigation system, airplanes followed patterns and procedures that dispersed the effect of their noise intensity, duration, and frequency over a wide geographic area. With the introduction of NextGen, air traffic has been funneled into a few narrow corridors stretching for miles away from airports creating a Superhighway in the Sky over neighborhoods in Howard, Anne Arundel, and Baltimore Counties. Planes can now fly at a lower altitude for a longer distance and closer together, resulting in excessive noise exposure, every day, 24/7. These communities have been poisoned by a technology that put efficiency before well-being.

For the past three years, the BWI Roundtable, the Howard County Council, and the Howard County Government along with our neighboring jurisdictions have tried to convince the FAA to adjust BWI's flight patterns and procedures in an effort to mitigate the excessive noise that residents experience. On December 20, 2019, a Bicameral Congressional letter was written to the FAA expressing concerns about the devastating impact on residents' quality of life. Below is an excerpt from that correspondence:

The FAA claims that other operational benefits such as increased safety have also been achieved, but, according to the report, this claim remains unsubstantiated because the "FAA has not established a process to measure or track these additional operational benefits because it states these benefits are difficult to quantify." It is also important to note that the FAA has yet to quantify the harm to health and property that the NextGen program has created for residents and wildlife living beneath concentrated flight paths.

We are concerned that the NextGen program has failed to meet the bare minimum standards for success. Currently, the FAA continues to introduce and implement concentrated flight procedures with Performance Based Navigation throughout the

country. The FAA boasts profits for airlines, shipping companies, and other industry stakeholders¹, but the burden of noise, health risks, and declining property values falls on the backs of hard-working Americans. We urge the FAA to fast-track the development of new flight paths in all Metroplexes and at other airports with NextGen procedures that will significantly disperse air traffic and raise aircraft altitudes.

To date, we have succeeded in initiating a health study of airplane noise on effected communities thanks to SB184 and HB310-2020. The results of the study are expected to be released later this Spring. The Roundtable's legislative committee was also successful in placing language in the FY2022 budget requiring the MAA to continue to provide technical expertise to the Roundtable and submit an annual report on those efforts. This action was necessary because the MAA and the Roundtable have divergent interests. The MAA is charged with growing the airport and the number of flights directed to BWI, while the Roundtable is concerned about balancing this growth with the health and welfare of the people on the ground beneath these flights. The MAA has been critical to establishing a relationship with the FAA that is now considering small changes to flight patterns and procedures, but other changes need to be made if the State is truly concerned about protecting residents' mental and physical health.

The Commission created by these bills will allow independent study, supported by data and science, to address the impact of NextGen on the tens of thousands of residents, including school children, who are living under the Superhighway in the Sky. Serious investigation is needed into the environmental injustice issues related to the Sky Highway and the poorest communities in the affected Counties.

On Monday night, the Howard County Council approved a Resolution supporting this legislation. All five Councilmembers in Howard County have many constituents who have begged us to resolve the misery of living under the Sky Highway. This Commission will help State lawmakers consider next steps in addressing our communities' concerns. The Commission will provide the legislators with data and expertise they can rely upon to fashion solutions to this problem.

Thank you for considering my testimony and the importance of these bills. In my role as the County Council's representative to the BWI Roundtable, I have a unique understanding of NextGen's impact and I hope this testimony will allow you to gain a deeper insight into what our communities are experiencing.

Sincerely,



¹ *"The Trade-off between Optimizing Flight Patterns and Human Health: A Case Study of Aircraft Noise in Queens, NY US"*

SB658_BWI Roundtable_FAVORABLE.pdf

Uploaded by: Debbie MacDonald

Position: FAV

D.C. METROPLEX BWI COMMUNITY ROUNDTABLE
c/o Maryland Department of Transportation Aviation Administration
P.O. Box 8766
Baltimore/Washington International Thurgood Marshall Airport, Maryland 21240-0766

**Resolution in support of SB 658 & HB 1103
to establish the
Maryland Aviation Infrastructure Impacts Commission
PASSED_February 15, 2022**

Insofar as the DC Metroplex BWI Community Roundtable's (the "Roundtable") role by its current charter is limited to monitoring the implementation of flight procedures, identifying alternative routings and procedures, evaluating noise and environmental effects of flight path changes and making recommendations to the FAA, and

Insofar as the Roundtable has identified in its various Annual Reports certain other limitations of the Roundtable structure, including the all-volunteer composition of the voting members and a lack of dedicated funding, administrative and legal support as a medium-term risk to maintaining hard-gained institutional and technical knowledge necessary to addressing the noise and possible environmental pollution resulting from the implementation of NextGen at BWI Marshall airport, and

Insofar as the Roundtable commented on certain changes to COMAR and the ANZ recertification process, identifying possible upgrades reflecting the radically changed noise and possible pollution environment resulting from NextGen that are beyond the capabilities or charter of the Roundtable to fully inform legislators and policy makers about, **THEREFORE IT IS**

RESOLVED, that the DC Metroplex BWI Community Roundtable supports SB 658 & HB 1103 which would establish a community advocate-controlled State Commission designed to provide legislators with the best available science-based information related to the impacts on communities of commercial aviation infrastructure in the State in order to allow them to better balance the needs of communities with the needs of the commercial aviation industry and its traditional stakeholders.

FURTHER RESOLVED, that the Chair and Vice Chair, or any one of their duly elected successors in office (the "officers") are authorized and empowered in the name of the Roundtable to communicate with public officials, the general public, aviation industry stakeholders, and any group or body as they see fit in order to communicate the Roundtable's support for SB658 & HB 1103.

D.C. METROPLEX BWI COMMUNITY ROUNDTABLE
c/o Maryland Department of Transportation Aviation Administration
P.O. Box 8766

Baltimore/Washington International Thurgood Marshall Airport, Maryland 21240-0766

FURTHER RESOLVED, that in the interest of efficiency and effectiveness the officers may work with any of the current committees of the Roundtable to accomplish communications or technical briefings, including public testimony, that the officers deem to serve the interest of the Roundtable in seeking to turn SB 658 & HB 1103 into law, without seeking approval of such communications or technical briefings from the full voting membership of the Roundtable in advance.

FURTHER RESOLVED, that the officers shall report to the Roundtable at each meeting with a summary of their activities, or those of the committees, undertaken during the reporting period in furtherance of the goals of this Resolution.

SB658_Geoff Stagg_FAVORABLE.pdf

Uploaded by: Geoff Stagg

Position: FAV

SB658_Geoff Stagg_FAVORABLE

I am resident of Annapolis and business owner here in. I live in community on the South River and my business has been located in the City of Annapolis for over forty years. I strongly support this legislation because the effect of increased commercial aviation noise on my quality of life and my property investments has been highly detrimental. It's unconscionable that the Federal Aviation Administration made such significant changes to flights here without any consideration of the businesses and communities below. The noise of these flights is very loud because the altitudes are increasingly lower.

I have purchased my home to enjoy fresh air and the environmental surroundings and this aviation noise completely disrupts my ability to peacefully enjoy my property. I believe it has detrimental effects on my health by my physical and mental wellbeing.

I have always enjoyed the proximity of my home and businesses to BWI but now the disruption is unacceptable and simply cannot be allowed to continue if the airport is to stay in its current location. Balance between the airport's interests and our businesses and properties must be restored.

SB658_Jamie Banks-Quiet Communities_Favorable.pdf

Uploaded by: Jamie Banks

Position: FAV

Maryland SB658
Jamie Banks, President
Quiet Communities Inc.
Position: Favorable

My name is Jamie Banks. I am the Founder and President of [Quiet Communities Inc.](#) (QC), an independent non-profit organization of medical, scientific, and legal professionals dedicated to helping communities reduce health and environmental harm from noise and pollution – our Quiet American Skies program focuses on aviation noise and pollution. I am a health care scientist who worked for many years in health outcomes, economics, and policy, before turning to environment. I currently serve as Chair of the Noise and Health Committee of the American Public Health Association (APHA) and was principal author of the APHA’s new policy statement, *Noise as a Public Health Hazard*. Before focusing on environmental health, I worked with consultancies and legal organizations in health outcomes, economics, and policy employing scientific, evidence-based approaches. My master’s degrees are from MIT and Dartmouth Medical School, and my PhD is from the University of Kent in the UK.

This report elaborates on my oral testimony before the Finance Committee of the Maryland state Senate on of March 9, 2022 in favor of SB658 to establish the Maryland Aviation Infrastructure Impacts Commission. If successfully passed, Maryland would lead by example in putting health and environmental quality at the core of aviation policy.

Harmful Noise

Aviation is a source of harmful noise. Of all sources of transportation noise, aviation noise is considered the worst (1).

- It is loud and intermittent and has strong low frequency components that carry loud noise long distances and through walls and windows – much like a boom box.
- It can be unrelenting in its intensity. Tens to hundreds of daily flights may affect neighborhoods day and night. Repeated noise is known to sensitize blood vessels to damage (2).
- Those affected often have no meaningful recourse, leading to frustration, stress, anger, and a sense of powerlessness, hopelessness, or despondency.

The impact of aviation noise was recognized 53 years ago by US Surgeon General William Stewart who declared “noise is indeed a public health hazard, a matter of public health concern” noting that “aside from hearing loss, it has been demonstrated that noise from aircraft and other sources causes physiological changes, including cardiovascular, glandular, and respiratory effects reflective of a generalized stress reaction” (3). Decades of research have elaborated the many adverse effects and the mechanisms by which noise causes harm at cellular and molecular levels.

Decades of research show that noise and pollution from transportation in general, and aviation in particular, are harmful to health. Especially vulnerable are airport workers, children, seniors and those with pre-existing conditions (4, 5).

- Aircraft noise disrupts activities and sleep and causes stress responses that increase high blood pressure, and the risks of heart disease, stroke, and mortality (6-8). Seniors affected by aircraft noise are more likely to have heart disease and be hospitalized (9). Low frequency noise and nighttime aviation noise are especially hazardous (10). A recent study showed that quieter skies during the pandemic improved cardiovascular health (11).
- Aircraft noise can contribute to anxiety and depression (12, 13).

- Aircraft noise negatively affects children’s learning and cognitive development (14, 15). A ten-year study of students from 6000 schools near 46 major US airports by the National Academies of Science, Engineering and Medicine found that aircraft noise was responsible for lower standardized test scores. Installing sound insulation in a subset of those schools reversed the effect (16).
- Noise has been associated with the development of dementia (17).
- Noise is an environmental stressor, diminishing environmental quality, damaging fragile ecosystems, and contributing to loss of biodiversity (18).
- All of these impacts come with substantial economic costs. Cardiovascular disease and stroke cost the nation \$350 billion annually in direct medical costs and work productivity losses (19). While not all of these costs can be attributed to noise, lowering environmental noise just 5-decibels generates annual savings of \$4 billion in medical costs by reducing the prevalence of hypertension and coronary artery disease (20).

The FAA’s common reference to noise as “an annoyance” trivializes its serious health impacts. No one affected by aviation noise refers to it as “an annoyance” but rather, uses words like “assault,” and “torture.” The impacts they describe are consistent with what has been reported in the scientific literature and include deteriorating mental and physical health, anxiety, depression, anger, exhaustion, fear; disrupted sleep, work, concentration, and communication.

Harmful Emissions

Aviation operations are a source of harmful emissions and put airport workers and residents of communities in and around flight paths at risk (21, 22), including children and other vulnerable populations.

- Aircraft emissions contain known carcinogens including volatile organic compounds and fine and ultrafine particulate matter. Fine particulate matter also causes diseases ranging from lung and heart disease to cancer, reproductive and developmental disorders, and premature death (23, 24). It has also been linked to a higher risk of dementia (25).
- Air pollution from aircraft and airport operations affects not only outdoor air quality but indoor air quality inside people’s homes (26).
- Aviation emissions are associated with higher rates of cancer, lung, and heart disease and increased hospital admissions for adults and children (21).
- Like noise, air pollution is an environmental stressor, diminishing environmental quality, damaging fragile ecosystems, and contributing to loss of biodiversity (27).

Every airport is different. Understanding how current and future operations at BWI affect the health of its workers, local communities, and schools can help make decisions that support growth and operation while also protecting public health and environment. We look forward to the creation of the Maryland Aviation Infrastructure Impacts Commission.

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SB658_janandjoehejl_FAV.pdf

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Position: FAV

TESTIMONY IN FAVOR of SENATE BILL 658

"Transportation – Maryland Aviation Infrastructure Impacts Commission

3/8/2022

We are writing today in favor of Senate Bill 658 "Transportation – Maryland Aviation Infrastructure Impacts Commission" to underscore the importance of its mission to review the medical and health burdens and the environmental impacts resulting from commercial airline growth and infrastructure changes in Maryland and the BWI airport corridors impacted by NextGen. The costs associated with this Commission – while not insignificant – are an investment in the future of Marylanders.

We have lived in Crownsville for over two decades and have long enjoyed outdoor activities in this waterfront community along the Severn River. The implementation of NextGen-enabled air traffic control has upended the peace of this semi-rural community with inundating and relentless noise – stemming from the concentration and number of flights that swarm in and out of BWI at low altitudes over our homes during the day, night, and early morning hours. We used to enjoy the peace of being outdoors, sharing dinner on the deck with friends, or simply opening a window on a warm spring day. With NextGen, that is no longer possible. Where there used to be almost silence, we now have flights converging from multiple directions on arrival to the airport at altitudes anywhere from 1500 to 2500 feet above our homes and beaches hundreds of times a day. These flights may not seem like a big deal to those who do not live directly under these routes, but it is so much different for those of us who cannot escape it.

NextGen has created a "supercharged overhead railroad in the sky" and a barrage of repetitive routes and noise over select communities that are well outside the regulated airport noise contours zones that the Maryland Aviation Administration (MAA) is required to report. While the MAA continues to grow the airport business and its property to support its business interests, the Administration's willingness to truly understand, empathize and help to resolve the noise issues resulting from this progress is limited. As part of its noise analysis and its work for the citizens of Maryland, the MAA relies on state noise mandates from the 1974 Maryland Noise Abatement law as a basis for its decisions and steadfastly refuses to consider applying something new to problems in the second decade of the 21st Century.

To put that year in perspective, 1974 is the year that:

- Richard Nixon resigned his Presidency.
- Toshiba introduced the first floppy computer storage disks.
- Private college tuition was \$2300 per year; and
- A gallon of milk, a pound of bacon, and a dozen eggs cost around \$3.50.

The impact of these concentrated flights on our environment, sleep, health, and our homes needs to be quantified and understood in the present – not by a law that is nearly a half-century old.

The DC Metroplex BWI Community Roundtable, comprised of volunteer representatives from impacted communities and appointed by members of the General Assembly, has worked tirelessly to educate themselves and others and has put together some sound and thoughtful recommendations for changes to flight patterns and the impacts of airport noise, and other environmental concerns on their communities. It is time for Maryland to support the work of this Roundtable and acknowledge the work they have done to date and will do in the future. If you have not seen an example of their exceptional work, we invite you to read their thoughts and well-reasoned commentary for change to the MAA Airport Noise Zone Study (ANZ) 2020 report https://marylandaviation.com/wp-content/uploads/2021/03/0209_ANZ-Study-Comment.pdf.

We believe the Commission's research and guidance mission is a sound one that will help bring quantitative research and recognition to the problems. As a byproduct of the Commission's work will also help to support public policy changes that can balance the ever-increasing appetite for commercial aviation activities and airport growth with the quality of life needs for Maryland's citizens. It is time to bring noise standards related to aircraft noise and other effects of airport growth into this Century. It is time for a change and we ask that you all support SB 658. Thank you.

Respectfully Submitted,

Jan and Joseph Hejl
1007 Omar Drive
Crownsville, Maryland 21032

Maryland Senate Testimony SB0658 March 9 2022 FINA

Uploaded by: Jesse Chancellor

Position: FAV

SB0658/HB1103 March 9/10, 2022 Hearings FAVORABLE

Jesse Chancellor, District 9, Senator Katie Hester, representing the BWI Community Roundtable.

The Commission that will be formed, if this legislation passes, is necessary to provide:

- Good data, that will lead to
- Better decisions, that will provide
- Transparency for the public, to ensure that there is renewed
- Balance between equally compelling and necessary interests

Complete data are missing around commercial aviation decisions in our State because NextGen was implemented without a full analysis. Individuals and communities are paying the price for this failure.

Public policy decisions related to our airports are therefore necessarily inadequately framed, which cannot lead to the best decisions.

The process for implementing NextGen at BWI Marshall was opaque at best and has undermined public trust in how decisions about commercial aviation improvements are made. These improvements are necessary, but must be made in an open and thorough manner.

NextGen alerted Maryland communities to a sudden imbalance of interests between commercial aviation and citizens' rights. Those rights include the quiet enjoyment of their homes and the protection of their health.

Our airport used to be a "Win-Win" for communities and for aviation-related growth. After NextGen it seems more like a "Winner Take All". Economic growth, tax revenues, jobs, air safety and efficiency are in the public interest, but so too are public health and livable communities. The Maryland Aviation Infrastructure Impacts Commission can start to recreate the balance that used to exist in this State and that allowed for all interests to successfully coexist and thrive.

BaltimoreCounty_FAV_SB0658.pdf

Uploaded by: Joel Beller

Position: FAV



JOHN A. OLSZEWSKI, JR.
County Executive

JOEL N. BELLER
Acting Director of Government Affairs

JOSHUA M. GREENBERG
Associate Director of Government Affairs

MIA R. GOGEL
Associate Director of Government Affairs

BILL NO.: Senate Bill 658

TITLE: Transportation – Maryland Aviation Infrastructure Impacts Commission

SPONSOR: Senator Lam

COMMITTEE: Finance

POSITION: **SUPORRT**

DATE: March 10, 2022

Baltimore County **SUPPORTS** Senate Bill 658 – Transportation – Maryland Aviation Infrastructure Impacts Commission. This legislation establishes the Maryland Aviation Infrastructure Impacts Commission to study the health and environmental impacts of commercial aviation in vulnerable communities in Maryland.

Public health officials have come to understand that health is more strongly influenced by zip code over genetic predisposition. Residents' environment can have drastic impacts on their health including increased risks of diseases such as cancer, heart disease and other life-threatening illnesses. This is especially true for communities that live by industries where products and waste may end up in the air, water and soil. It is crucial that governments hold the industries responsible accountable by closely monitoring the public health consequences of their practices.

SB 658 would establish a commission to study the impacts of commercial aviation on the health of neighboring communities and the environment. The Maryland Aviation Infrastructure Impacts Commission will make recommendations on how to mitigate the impacts on this industry on affected communities. This legislation will ensure that Marylanders understand their exposure to potential illness and reside safely in all parts of the State.

Accordingly, Baltimore County requests a **FAVORABLE** report on SB 658. For more information, please contact Joel Beller, Acting Director of Government Affairs at jbeller@baltimorecountymd.gov.

phillipsSB658 testimony.pdf

Uploaded by: Kenneth Phillips

Position: FAV

03/09/2022

Dear Maryland Senate,

This testimony is to urge you to approve SB658 to establish a Maryland Aviation Infrastructure Impacts Commission. Unless you live directly under an FAA NextGen flight path, you may not understand the full impact of how these flights are destroying our lives and communities. So I ask that you please keep an open mind and listen to the facts that I will share with you today. Our family-including our newborn daughter, 3 year old son and 8 year old daughter-moved to Columbia, MD in 2018, and we have been emotionally and financially devastated by airplane noise ever since. We are 10 nautical miles from BWI and did not expect, nor were given any warning that there are as many as 150 overflights per day as loud as 80-90dB, because the MAA and FAA insist that our neighborhood is “not significantly impacted” by airplane noise. We could not afford the \$100,000+ sound mitigation that is needed on our home, so we did the best that we could- we filled my bedroom windows with rockwool and covered them with foil to keep the insulation from falling out. Even with draconian measures that block natural light and use of our windows for fresh air, we still have to wear noise blocking headphones and play brown noise with the same low frequency spectrum as the jets in order to get any sleep in our home. The MAA/FAA claiming that this noise is “no significant impact” to our community is the same as Flint Michigan telling you “the water is safe to drink”. Our neighborhood school, Stevens Forest Elementary, is about 80% minority students and has one of the highest numbers of students on free lunch. The performance was top 20% in Maryland when FAA started NextGen around 2014, and is now bottom 20% since 2020. Our homes are among the least valuable in Howard County, and some local realtors are now using the BWI noise disclosure so that they won't be sued for lack of disclosure on a sale.

Here is some more information that explains why we need a group funded and commissioned with powerful authority to do this work. The problem with NextGen is that the noise levels are averaged and are arbitrary, and they use class-A noise spectrum which cuts out much of the low frequency noise from the jets relative to other environmental noises. I have personally quantified the noise using full-spectrum class-C measurements and have collected evidence that the overall impact from jets is THREE TIMES the noise from a busy highway (US-29, 90,000 cars/day) that is 1,000 feet away (Figure 1). If someone wanted to build a 270,000 car/day highway next to your home, would you consider it “no significant impact”? The research literature demonstrates very clear jet noise impacts on childrens' performance in school, and I believe that over many years it will result in an epidemic of dementia and other diseases related to increased noise stress, lack of sleep, microbiome and circadian rhythm disruption and ultrafine particle pollution. The BWI flight path TERPZ is one of the worst in the country when it comes to number of flights and noise, needing IMMEDIATE action and not legislative hand waving and delays. Like most of my neighbors suffering from this noise dumping on our community, I don't have the time and ability to make enough of a difference to bring resolution to the current problems—but a Commission recognized by the State and given authority to fight for Maryland citizens, will be dedicated to this purpose and I know that it WILL make a difference.

Before I conclude, I will share one more piece of information that shows why we need a Commission that is specifically for the people of Maryland and not the big industrial interests who make billions from airport traffic. The MAA has put noise monitors in almost every community around the airport, except for our community on Stevens Forest Road. When I requested a portable noise monitor to see if the noise level reached the threshold of 65dB, the day that the monitoring started, jets began to slow down

over our home so that the noise was greatly reduced. I have semi-quantitative evidence of this change in flight patterns by MAA/FAA (Figure 2) showing the difference before monitoring and during monitoring. Even with this effort to reduce their noise when being monitored, the average noise was 64 dB, almost at the 65dB cutoff where noise insulation would be required in zoning- TEN MILES from BWI! We have tens of thousands of citizens living in residences, apartments, an elementary, middle and high school, and parks and community centers. The MAA has concentrated the jet traffic departing and arriving to BWI over our neighborhoods because they can dump this toxic noise on our families from low-flying jets while other communities with noise monitors are spared the impacts of their pollution. My friends three miles up the road don't even know that our lives are being ruined by non-stop jet noise- they just assume that our house is as quiet as theirs at night. We are not fighting an honest and transparent enemy- there is foul play at work and a Commission would have the ability to identify and investigate wrongdoing by those in government and industry who are operating in ways that are unethical and self-serving. If our Federal Congress will not fix this problem, Maryland needs to take it on at the state level to the fullest extent possible in order to protect Marylanders from harms being inflicted by government organizations such as FAA that are not responsible to the American public due to regulatory capture by the industries that they regulate.

In summary, we desperately need a Commission to look into noise impacts, forge solutions, and go after wrongdoers and unethical practices that betray Marylanders in our government and civil agencies. The noise is unbearably loud- it interrupts conversations, keeps us from going to sleep until after midnight, and wakes us up throughout the night and early in the morning around 4-5am every day. There is no rest- every time that we pull into our driveway, as soon as we open the car door we hear loud jet noise overhead. Getting away from home is our only relief. The current methods used to claim that there is "no significant impact" from the noise are outdated, debunked, and have been completely thrown out in other countries such as in Europe where they have much lower thresholds and especially at night, understanding that noise keeps people from sleeping and causes an epidemic of dementia and other diseases. The daytime noise is impacting our children's stress levels and their school performance. We need more than a Commission- we need justice! But let's start with a Commission if that is what it is going to take. And let's get rid of FAA NextGen's systemic discrimination and environmental injustice in Maryland. All Marylanders need to stand up together to protect families and children from the harm caused by FAA NextGen. No matter what your political position, please help to protect the quality of life and American Dream for Marylanders who are suffering from this toxic noise dumping by MAA, FAA and the airline industry. Vote YES for SB658 and give the commission as much funding and power as you can to fight for our communities. Thank you for your time. **(Figures 1-2 on next two pages).**

Sincerely,
Kenneth Phillips, PhD, Regulatory Research Scientist
6034 River Meadows Drive
Columbia, MD 21045

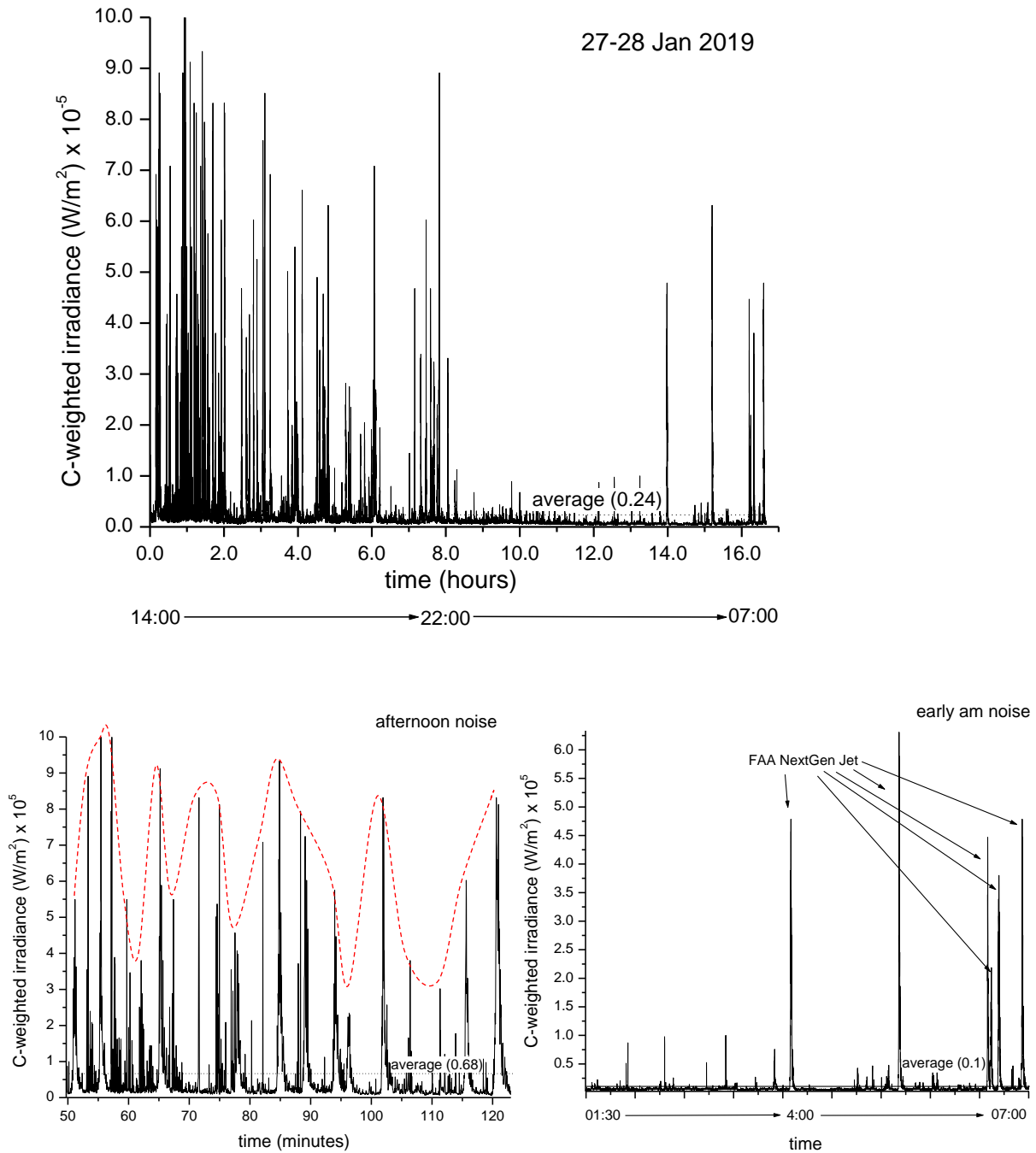


Figure 1. C-weighted outdoor noise data. A) Complete noise data from 27-28 Jan 2019 from 14:00 to 7:00 with average for that time period (black dotted line) and many jet noise events that are far above the average. B) Afternoon noise data from 50 minutes to 120 minutes showing background noise, average for that time period (black dotted line), and effective mental impact of noise based on trajectory from peak jet noise to peak jet noise (red dotted line). C) Early AM noise data showing that jet noise is now extremely out of proportion to any other background noise and the average (black dotted line).

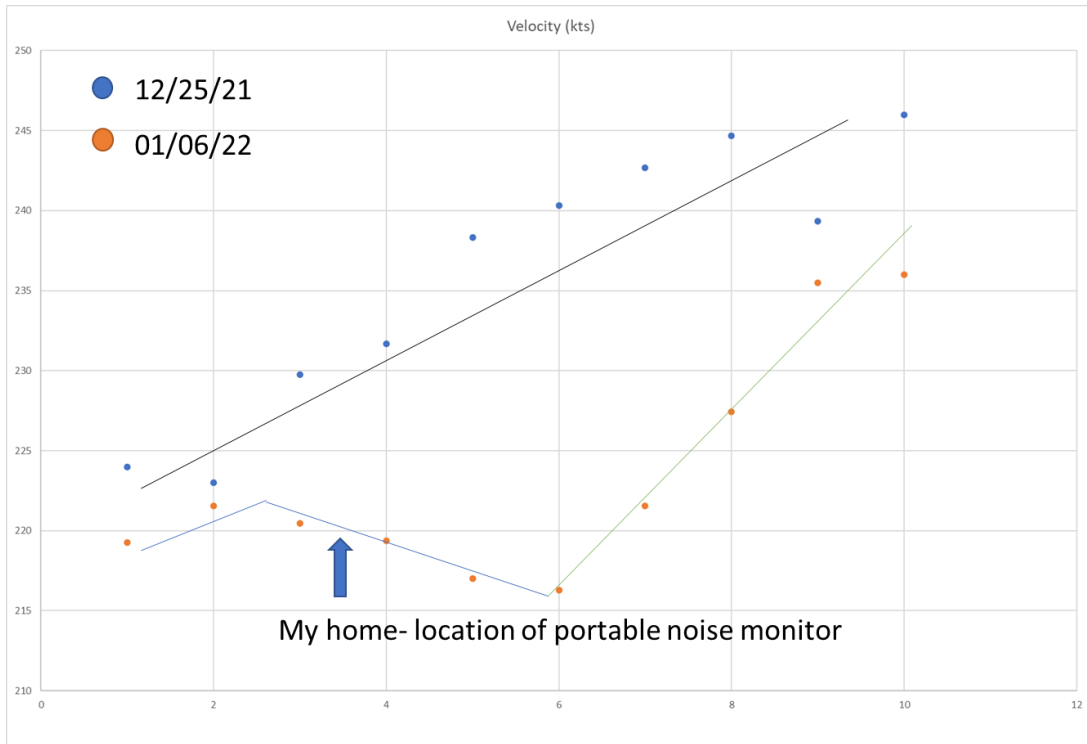


Figure 2. Evidence that MAA/FAA alter jet flight paths during a portable noise monitoring event so that evidence of excessive noise in our unmonitored community will not require changes to FAA routes or subsidies for noise insulation. Data obtained from FlightRadar24.

SB0658_Kremzner_Fav.pdf

Uploaded by: mary kremzner

Position: FAV

Written Testimony

SB0658_Former Resident of Severna Park_Favorable
Dr. Mary Kremzner
March 9, 2022 Testimony

Good afternoon and thank you Senator Lam and members of this Committee for the opportunity to speak to you about the human cost of FAA's NextGen, which created an extremely narrow and low flight path through which commercial planes arrive at BWI.

MAA directs air traffic to fly throughout the day and night over our homes at altitudes as low as 1,000 feet with no federally mandated noise limits.

Because the final approach path to these runways directly passes over our communities, **we cannot open our windows, we cannot enjoy the outdoors and we do not sleep.**

Noise remediation efforts do not work. We built our Severna Park home in 2012 completely unaware of the NextGen implementation plans. In 2015, when NextGen began, we, at our own expense, added extra insulation, bought new triple pane tempered glass windows (designed for commercial buildings) and added thicker dry wall, all the steps offered to soundproof a home. **Yet, you would never know that the windows were closed.** In fact, we cannot open our windows as a result of the intense noise that occurs EVERY 1-2 minutes all day and night.

The MAA has heard from many communities like Severna Park and Millersville about the negative impact of arrivals. The MAA was successful for years discouraging reports and concealing the truth. The MAA's website made it nearly impossible to lodge a complaint with 10 required fields, no AI, and limits on the number of complaints you can make. It takes 4 minutes to complete this online form however, it only takes 3 minutes for 2 flights to fly over at low altitudes. The math speaks for itself.

You simply cannot imagine the reality of low, loud, and frequent air traffic on around the clock, even at night. You cannot build tolerance to this intense and frequent noise.

BWI has also become a large cargo destination frequented by FEDEX, UPS, Prime, and others which are flying at the same low altitudes, yet we heard in

meetings that the step-down altitude approach for arriving flights was designed to improve passenger comfort. Why would the same apply to cargo planes, which are much louder?

For years now the Roundtable has been working to broker a smart and equitable solution. As an observer of the Roundtable, I have watched FAA and MAA stonewall, participants drop off due to frustration, and 6 years later -- **zero change**.

Please understand that I do recognize the importance of BWI to the economy of Maryland for the creation of jobs.

Therefore in 2020 after the FAA and MAA did not address the arriving flight path issue, we decided that it was in our best interest to sell our custom home. We are fortunate enough to have this luxury as many residents do not. We sold our home for less than its value and purchased a home in Crownsville, MD after consulting with MAA to identify an area that is not experiencing NextGen arrival paths. Unfortunately, my marriage did not survive NEXTGen. The damage to my relationship was so intense that we are now seeking a divorce.

I am here today as proof of the human toll of NEXT Gen. My family is forever broken apart. And now my worst fear may materialize -- flight paths changing yet again. To my shock and horror, we recently learned that the arrival paths may change again coming closer to our new home.

In closing I want to thank you for supporting the BWI Roundtable and for supporting the health and welfare of Maryland residents. Please save our communities and families.

CEBall_SB658_Suport_MD Aviation Commission_Final.p

Uploaded by: Maureen Evans Arthurs

Position: FAV



HOWARD COUNTY OFFICE OF COUNTY EXECUTIVE

3430 Courthouse Drive ■ Ellicott City, Maryland 21043 ■ 410-313-2013 Voice/Relay

Calvin Ball
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FAX 410-313-3051

March 9, 2022

Senator Delores Kelley, Chair
Finance Committee
Miller Senate Office Building, 3 East
Annapolis, MD 21401

Re: Testimony **IN SUPPORT** of SB 658 – Transportation – Maryland Aviation Infrastructure Impacts Commission

Dear Chair Kelley, Vice Chair Feldman, and Members of the Committee,

I commend Senator Lam and his co-sponsors for their consistent advocacy working on this pressing aviation issue that has adverse environmental and health impacts on our community.

Senate Bill 658 would establish the Maryland Aviation Infrastructure Impacts Commission, conceived by the leadership of the BWI Community Roundtable. This Commission is needed to address a significant gap in Maryland's transportation and public health policy. Commission members will have the expertise and background to study and make recommendations on the health and environmental impacts of the commercial aviation flight patterns as implemented by the Federal Aviation Administration over five years ago.

We have been working to alleviate the impacts of the NextGen System as a member of the DC Metroplex BWI Community Roundtable since March 2017 when the Roundtable was formed. As a former Councilmember, I sponsored CB7-2017, which authorized taking legal action against the FAA in the U.S. Court of Appeals. In 2019, we filed a second legal petition against the Federal Aviation Administration following the approval of the BWI Thurgood Marshall Airport expansion plan; a plan that lacks consideration of the adverse noise impacts to residents in the area.

We have also engaged a consulting firm to provide us with additional data regarding the level of noise in our communities and how those noise levels may change under revised flight patterns. We look forward to reviewing the results of the MDPT funded study this fall on the health impacts of air traffic, which will hopefully provide even more information for the proposed commission.

As County Executive, I will continue to advocate for our residents who suffer potential health risks and a declining quality of life experienced due to changing aviation patterns. I welcome your support and urge a favorable report on SB 658.

All the Best,

Calvin Ball
Howard County Executive

Howard County Council Resolution 30-2022 In Support

Uploaded by: Michelle Harrod

Position: FAV

County Council of Howard County, Maryland

2022 Legislative Session

Legislative day # 5

RESOLUTION NO. 30 - 2022

Introduced by: Deb Jung

A RESOLUTION expressing the County Council's support for State Senate Bill 658 and House Bill 1103, which would create a Maryland Aviation Infrastructure Impacts Commission.

Introduced and read first time on 3-7-2022, 2022.

By order Michelle Harrod
Michelle Harrod, Administrator to the County Council

Read for a second time and a public hearing held on N/A, 2022.

By order _____
Michelle Harrod, Administrator to the County Council

This Resolution was read the third time and was Adopted , Adopted with amendments ____, Failed ____, Withdrawn ____ by the County Council on 3-7-2022, 2022.

Certified by Michelle Harrod
Michelle Harrod, Administrator to the County Council

NOTE: [[text in brackets]] indicates deletions from existing law; TEXT IN SMALL CAPITALS indicates additions to existing law. ~~Strike-out~~ indicates material deleted by amendment; Underlining indicates material added by amendment.

1 **WHEREAS**, Baltimore–Washington International Thurgood Marshall Airport has a
2 significant impact on both the business and residential sectors in Howard County; and

3
4 **WHEREAS**, it is vital to study information related to the public health, medical, and
5 environmental impacts on individuals residing in communities surrounding airports, including
6 hard infrastructure such as construction projects and soft infrastructure such as flight paths and
7 related procedures, with a primary emphasis on Baltimore–Washington International Thurgood
8 Marshall Airport (BWI); and

9
10 **WHEREAS**, impacted communities and individuals should have a role and a voice in the
11 operations and growth of the Airport to help mitigate any deleterious health and environmental
12 impacts on those individuals and communities; and

13 **WHEREAS**, State Senate Bill 658 and House Bill 1103, propose the creation of a
14 Maryland Aviation Infrastructure Impacts Commission that would provide an opportunity and
15 structure for the impacts of airport flights and procedures on individuals and communities to be
16 studied and addressed; and

17
18 **WHEREAS**, a Maryland Aviation Infrastructure Impacts Commission would make
19 recommendations to the General Assembly based on data so that State lawmakers can balance
20 economic development of BWI with the quality of life for individuals and communities affected
21 by BWI's current and future operations and procedures.

22 **NOW, THEREFORE, BE IT RESOLVED** by the County Council of Howard County,
23 Maryland this 7 day of March, 2022, that the County Council favors the passage
24 of State Senate Bill 658 and House Bill 1103, which would create a Maryland Aviation
25 Infrastructure Impacts Commission; and

26
27 **BE IT FURTHER RESOLVED** that the Administrator of the County Council shall send
28 a copy of this Resolution as written testimony in support of Senate Bill 658 and House Bill 1103,
29 which will have hearings on March 9 in front of the Senate Finance Committee and in front of the

1 House Appropriations Committee on March 10, respectively; and

2

3 **BE IT FURTHER RESOLVED** that the Administrator of the County Council shall send
4 a copy of this Resolution to State Senators Lam, Elfreth, Guzzone, Hester, and Reilly and to
5 Delegates Hill, Ebersole, Feldmark, and Terrasa, requesting that they share the Council's support
6 with the other members of the General Assembly in the way best suited to hasten the passage of
7 Senate Bill 658 and House Bill 1103.

SB658_Neelakshi Hudda_Favorable.pdf

Uploaded by: Neelakshi Hudda

Position: FAV

Maryland SB658
Neelakshi Hudda, PhD, MS
Tufts University
Position: Favorable

Thank you for this opportunity to testify. I - Neelakshi Hudda - am a Research Assistant Professor in Department of Civil and Environmental Engineering at Tufts University. I investigate the air quality and health effects of transportation emissions. In particular, I have nearly a decade of experience in characterizing the impacts of airport-related emissions on air quality in neighboring communities. I draw upon my own research and my knowledge of the field in providing this testimony.

In 2018, 10 million flights carrying one billion passengers flew into or out of airports in the United States (US).¹ Over the next 25 years, flight operations and enplanements in the US are projected to grow. These trends are of significance to the millions of people who live or work near airports and are regularly exposed to noise and air pollution originating from aviation activity.

Adverse effects of elevated noise exposures in near-airport communities are well established. Exposure to airport noise is associated with an increased risk of hypertension²⁻⁶ in a dose-dependent manner^{7,8} — meaning that the more noise people are exposed to, the higher their risk of hypertension. Research has shown that people living in communities around airports are more likely to be taking prescription anti-hypertensive medication^{4,9,10} and have higher rates of cardiovascular disease^{3,11}, cardiovascular-disorder-related hospitalizations^{12,13}, and cardiovascular-disease-associated mortality^{14,15}. There is also evidence for adverse birth outcomes¹⁶, increased rates of hospitalization due to respiratory diseases¹⁷ and learning deficits in children who live near airports.¹⁸⁻²⁰

Adverse effects of airport-related emissions on ground-level air quality are under-recognized and under-estimated.

Starting in 2014, the impacts of aviation emissions on ground-level ambient ultrafine particle concentrations were found to extend over unexpectedly large areas near airports and in particular along flight paths.²¹

Since then many studies have demonstrated that aviation exhaust is the major source of ultrafine particle pollution in downwind communities. For example, elevated ultrafine particle concentrations were reported downwind as far as 4.5 miles of Logan Airport in Boston²², 10 mile of SEATAC Airport in Seattle²³ and 12 miles of Los Angeles International Airport.²⁴

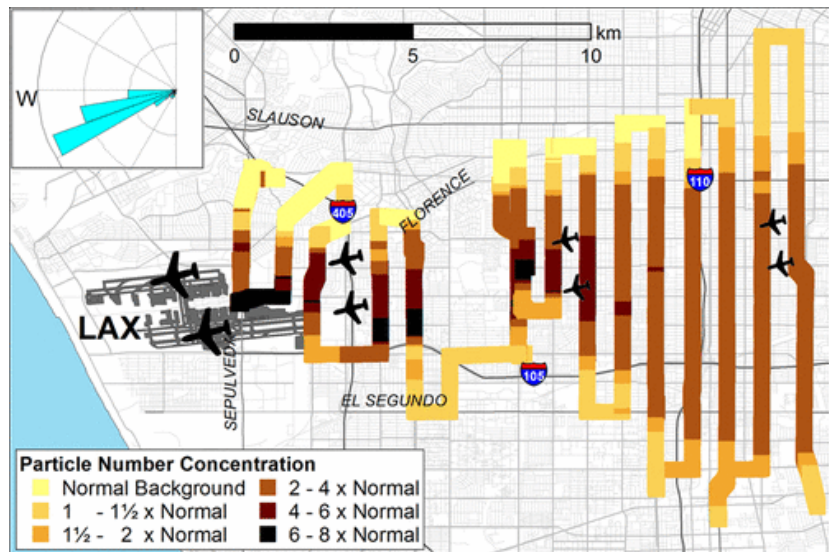


Figure 1: Pattern of elevated concentrations of ultrafine particles near LAX. Elevation in particle number concentrations compared to normal background levels is visualized.

Ultrafine particles that emitted at very high rates by jet aircraft²⁵ and are harmful to human health. Ultrafine particles are defined as particles with diameter <100 nm. They are a 100-times smaller than

regulated PM₁₀. Due to their small size they can penetrate deeper into the lungs and move through the body to other organs including the central nervous system where they may cross the blood–brain barrier. They can also enter the brain through the nose and olfactory pathway. They are associated with increased rates of hypertension and cardiovascular morbidities.^{26,27} Airport-related ultrafine particles may have a unique toxicity profile due to unburned lubrication oil present in jet exhaust.²⁸

Exhaust from aircraft also contains substantial amounts of black carbon and nitrogen oxides,^{25,29–31} that contribute to adverse cardiovascular effects.^{21,24,32} Elevated levels of black carbon (a carcinogen) have been reported near airports²¹.

Key findings from research near two major airports in the US.

I want to briefly detail what we know about the air quality impacts and health effects from some recent work at two major airports in US: Los Angeles International Airport (LAX) and Logan International Airport (BOS). These findings are of great public health concern because higher levels of ultrafine particle are commonly found downwind of airports, affecting large densely populated residential areas. Before the pandemic, LAX supported ~1900 operations/day and BOS supported ~1000 operations/day. In comparison, Baltimore/Washington International Thurgood Marshall Airport (BWI) supported ~700 operations/day. Key findings are as follows:

1. Airport-origin pollution is the major source of elevated ultrafine particle concentrations in communities downwind of LAX and BOS.

- Ultrafine particle concentrations in the geographic area around LAX were at least 100% higher than typical background as far as 12 miles downwind and were 500% higher within 5 miles of LAX.²⁴ The level of increase in ultrafine particle pollution near LAX is equivalent to that from 25% of all highways/freeways in Los Angeles county.
- Similarly, at locations 2.5 miles and 4.5 miles from BOS, ultrafine particle concentrations were 100% and 33% higher, respectively, when winds were from the direction of the airport compared to other directions.²² Further, ultrafine concentrations were positively correlated with flight activity and increased with increasing wind speed, suggesting that aircraft exhaust plumes were the likely source.

2. Airport-origin ultrafine particle pollution penetrates into residences and impacts (outdoors and indoors) are the particularly large for homes under the flight trajectories.

- In 16 residences located in the greater Boston metropolitan area, the median concentrations of ultrafine particles were 70% higher when homes were downwind of the airport.³³
- At a residence under the flight trajectory of the most utilized runway near BOS, it was found that when the residence was downwind of the airport the concentrations of ultrafine particles, oxides of nitrogen (NO, NO₂ and NO_x), black carbon, and polycyclic aromatic hydrocarbons were 1.1- to 4.8-fold higher. In fact, NO₂ concentrations at the residence exceeded those measured at regulatory monitoring sites in the area including one adjacent to an interstate highways.³⁴
- Further, the impacts were highest during landings: average ultrafine concentration was 7.5-fold higher from landings versus takeoffs on the closest runway.³⁴

- Overall, 70% of ultrafine particle concentrations present outdoors were also present indoors, indicating there is substantial infiltration of aviation-origin emissions and building envelope does not provide protection from this air pollution. Infiltration resulted in indoor concentrations on ultrafine particles that were comparable to ambient concentrations measured locally on roadways and on interstate highways.³⁴
- Similarly, at LAX the highest ultrafine particle concentrations were detected at locations under the landing jets and consisted mainly of ultrafine particles smaller than 40 nanometers.³⁵ The predominance of smaller sized particles in the impacted areas increased lung deposition fractions by 15-40%.³⁵
(The uniquely small size of particles associated with airport-origin air pollution was reconfirmed in Seattle under flight paths up to 10 miles downwind of Seatac.²³)

3. Airport-origin ultrafine particle pollution has adverse health effects, especially for vulnerable populations.

- An increased risk of pre-term birth was reported women who lived near LAX and were exposed during pregnancy to higher concentrations of ultrafine particles from aircraft.³⁶
- An increased risk of malignant brain cancer residents was also found in people who lived near LAX and were exposed to higher levels ultrafine particulates from aircraft activity.³⁷
- In a study of short-term effects, exposure to LAX-related ultrafine particles was associated with increased levels of IL-6 (a blood marker of inflammation) in adult asthmatics following mild walking activity.³⁸

(In study near Schiphol Airport (Amsterdam, The Netherlands), short-term exposures (five hours) to aviation-related ultrafine particles was also associated with decreased lung function in healthy young adults. ³⁹)

(Also, airport apron workers have also been identified as a neglected occupation setting for which health effects are not well understood.⁴⁰)

(Studies that advance understanding of the chemical constituents and toxicity of pollutants ranging from ultrafine particles to the visible combustion or fuel residue commonly reported by near-airport residents are also critically needed.)

There is broad compelling evidence for adverse air quality and health effects in near-airport communities. But the findings from LAX and BOS underscore the importance of understanding the local impacts on air quality and health. ***The Maryland Aviation Infrastructure Impacts Commission to study the health and environmental impacts of commercial aviation can provide critical guidance needed to support aviation operations while protecting the health of local communities.***

If you have any questions about this testimony, or need additional information, please do not hesitate to contact me at 617-627-3522 or via email at Neelakshi.Hudda@tufts.edu. Thank you for your consideration of this critical issue.

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SB658FavorableVerchinskiAviation Commission.pdf

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Position: FAV

SB658
FAVORABLE

The Honorable Dolores G. Kelley Chair
Finance Committee
3 East
Miller Senate Office Building
Annapolis, MD 21401

As introduced, SB658 would establish a Maryland Aviation Impacts Commission (MAIC) to study the health and environmental impacts of commercial aviation on communities in Maryland.

The Howard County Citizens Association (HCCA) is a Howard County wide organization that has two of its board members on the DC Metroplex BWI Roundtable (RT). Our members have been negatively impacted since NextGen concentrated flight paths were begun in 2015 by the Federal Aviation Administration (FAA). The vast majority of departures from BWI fly over Howard County in what citizens refer to as the Interstate Airplane Highway in the Sky. Noise and pollution issues have been concentrated affecting Howard County communities.

The MAIC will do research on health and environmental issues to inform legislators on what might be done to help mitigate negative impact on communities. This research is beyond the charter of the RT. It is needed to assess quality of life issues. It is also an environmental justice issue since these airplane flights affect our disadvantaged communities.

We ask that your committee report out this bill favorably.

Howard County Citizens Association
Authorized by Board
Paul Verchinski, Board Member
5475 Sleeping Dog Lane
Columbia, MD 21045

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Position: FAV

SB658
Richard Neitzel, PhD, CIH, FAIHA
University of Michigan School of Public Health
Favorable

The proposed Maryland Aviation Infrastructure Impacts Commission is a notable and commendable step towards better understanding and addressing the many adverse impacts of noise pollution from air traffic and airports. The additional public health and economic information presented below should be considered in the evaluation of the impact and importance of the proposed Commission.

Health impacts associated with noise

Noise exposures in America are associated with a host of preventable health impacts. The obvious effect, noise-induced hearing loss may only be the tip of the iceberg, as noise has also been linked to high blood pressure, strokes, and heart attacks (Basner et al, 2013; Faulkner and Murphy, 2022; Wojciechowska et al, 2022), sleep disturbance, diabetes (Baiduc and Helzner, 2019), cognitive impacts (Thompson et al, 2022), mental health impacts (Lan et al, 2020; Stansfeld et al, 2003), and other conditions.

Number of people exposed to noise

Pre-pandemic, the FAA estimated that about half a million people in the US were exposed to aircraft deemed significant by the Federal Aviation Administration (65 dBA DNL or greater) (<https://www.bts.gov/content/number-people-residing-areas-significant-noise-exposure-around-us-airports>). However, what this number does not recognize is that exposures substantially lower than that have been linked to the health outcomes described above (Basner et al, 2013). As one example, sleep disturbance has been shown to occur at levels below the FAA limit (Holt et al, 2015). Our own estimates suggest that more than 100 million Americans are exposed to noise sufficient to cause hearing loss, and the number exposed to levels sufficient to cause cardiovascular disease is even larger (Hammer et al, 2014).

Research by my team conducted as part of our ongoing national Apple Hearing Study (<https://sph.umich.edu/applehearingstudy/>) demonstrated a substantial and statistically significant drop in personal noise exposures across four US states (CA, TX, NY, and FL) during the governmental pandemic lockdowns that took place in early 2020 (Smith et al, 2020). While it is not possible to attribute this reduction directly to changes in air traffic during the period evaluated, that reduction likely contributed to this substantial and unprecedented drop. The reduction in noise exposures in 2020 highlights two important points: 1) that meaningful noise reductions are possible across entire

populations given certain circumstances, and 2) that ongoing research monitoring of large sample sizes of people, as is being done over a 5-year period by the Apple Hearing Study, allows for opportunities to evaluate changes in noise exposures that occur over time. An overview of the methods used in the Apple Hearing Study, all of which are directly relevant to the evaluation of noise exposures and health impacts from aircraft noise, has just been published (Neitzel et al, 2022).

Economic burden of noise exposure

The public health burden associated with the preventable impacts of noise is tremendous, but so is the economic burden. Studies from around the world suggest that the costs of the individual outcomes resulting from noise are staggering. Research from my own team suggests that the costs of noise-induced hearing loss in the US may exceed \$100 billion annually (please see attached paper titled “Economic Impact of Hearing Loss and Reduction of Noise-Induced Hearing Loss in the United States” for details on the methods used to arrive at this estimate). Additionally, research from my team estimates that the cost of cardiovascular disease resulting from noise in the US may exceed \$100 billion annually (please see attached paper titled “Valuing Quiet: An Economic Assessment of U.S. Environmental Noise as a Cardiovascular Health Hazard” for details on how this estimate was derived). Using the results of research conducted in Europe (Dzhambov et al, 2015), and scaling the relevant cost estimates from that study to the US population, the economic value of sleep disturbance alone may be more than a third of a billion dollars annually in the US. Similarly, using relevant cost estimates from Europe and scaling them to the US population, the impacts of outcomes like dementia can add several billion more (Harding et al, 2013). The economic impacts extend beyond health to include things like property values, which may decline by approximately 1% with every 1 dB increase in noise level (Getzner and Zak, 2012). The economic impact of lost productivity is not well understood, but could dwarf the other impacts.

Noise reductions are desirable

When consideration is given to reducing noise levels associated with airports and other transportation sources, implementing noise control measures around airports has been shown to have good cost-effectiveness (Jiao et al, 2017). Research also suggests that people are willing to voluntarily bear an additional economic burden to reduce their annoyance from noise (Kim et al, 2019).

Noise is an environmental justice issue

One final and very important point to consider is that economic costs are not equitably distributed. Research indicates that noise exposures, and subsequently health impacts, may be greater in marginalized, minority, and disadvantaged communities (Casey et al, 2017; Batterman et al, 2021; Simon

et al, 2022). Additionally, regardless of their community makeup, communities located more proximately to airports suffer inequitable exposures (Hauptvogel et al, 2021). This represents a tremendous environmental injustice, and the establishment of the Commission could help to address this injustice.

If you have any questions about this testimony, or need additional information, please do not hesitate to contact me at 734-763-2870 or via email at rneitzel@umich.edu. Thank you for your consideration of this very important issue.

About the author

Richard Neitzel, PhD, CIH, FAIHA is a Professor of Environmental Health Sciences and Global Public Health at the University of Michigan (UM) School of Public Health. He has published >120 peer-reviewed manuscripts focused on exposures to, and impacts of, noise and other occupational and environmental hazards. He is particularly interested in incorporating new methodologies and exposure sensing technologies into research and has a strong interest in translating his research findings into occupational and public health practice. He has created a job-exposure matrix for occupational noise exposures in the U.S. and Canada, available at <http://noisejem.sph.umich.edu/>. He is also the Principal Investigator of the national-scale Apple Hearing Study, <https://sph.umich.edu/applehearingstudy/>. Dr. Neitzel is Chair of the ACGIH® Threshold Limit Values for Physical Agents (TLV®-PA) Committee. He is also a Fellow of the American Industrial Hygiene Association, Past President of the National Hearing Conservation Association and has been a Certified Industrial Hygienist since 2003.

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In SUPPORT of SB 658.pdf

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Position: FAV



Oakland Mills Community Association
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March 8, 2022

Testimony IN SUPPORT of Senate Bill 658

FROM: Oakland Mills Community Association
Jonathan Edelson, Board Chair

Oakland Mills Village is just a 15-minute drive from BWI, and more importantly, is in the flight path for the airport. Since implementation of NextGen, Oakland Mills has experienced increased disruptive noise from the flight paths to and from BWI. We have had a representative on the BWI Roundtable and have long held the position that the situation must be resolved.

We support Senate Bill 658 to establish a Maryland Aviation Infrastructure Impacts Commission. As a community directly affected by the air traffic at BWI, we strongly believe that any research efforts that may lead to future recommendations should include community advocates as key stakeholders and decision makers. We also support the bill's effort to ensure that the commission is representative of the demographics of impacted communities, as Oakland Mills has higher proportions of historically underrepresented races, ethnicities, and economic backgrounds than the Howard County average.

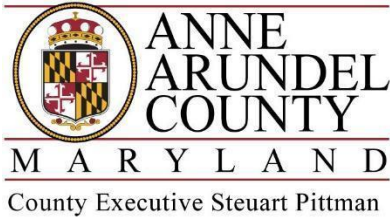
As the bill states, there needs to be an appropriate balance between the aviation infrastructure that supports economic development and the quality of life in the communities impacted by this infrastructure. Establishing this commission is a step in that direction and ensures a formal role for community advocates in the process.

We encourage passage of Senate Bill 658.

Anne Arundel County _FAV_SB 658 (1).pdf

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Position: FAV



March 9, 2022

Senate Bill 658

Transportation - Maryland Aviation Infrastructure Impacts Commission

Senate Finance Committee

Position: FAVORABLE

Anne Arundel County **SUPPORTS** Senate Bill 658 – Transportation - Maryland Aviation Infrastructure Impacts Commission. Senate Bill 658 establishes the Maryland Aviation Infrastructure Impacts Commission to study the health and environmental impacts of commercial aviation, particularly as it relates to communities affected by flight paths associated with the Baltimore-Washington International Thurgood Marshall Airport (BWI).

Noise pollution and bombardment is a significant issue for residents in communities along flight paths, which go directly over schools, parks, wildlife areas, shopping centers, and residential areas. Although the Federal Aviation Administration and airports have taken steps to mitigate some noise associated with flight paths, communities in Anne Arundel, Howard, Montgomery, and Baltimore Counties continue to experience adverse impacts. Data from the Maryland Department of Transportation shows that BWI receives over 1,000 complaints each day.

Residents in these communities experience sleep disruption and difficulty enjoying the outdoors. However, a growing body of evidence suggests that airport noise pollution can be much more than just a nuisance, and can actually have serious health implications. According to the journal *Noise & Health*, aircraft noise can disrupt sleep, adversely affect academic performance in children, and increase the risk of cardiovascular disease for people living in the vicinity of airports. Exposure to high levels of air traffic noise has also been associated with high blood pressure and anxiety.

The Commission created by this bill will have representation from the counties most affected by BWI flight paths, will have support from a school of public health, and will seek advice from state officials, citizen advisory groups, experts, and industry representatives. Senate Bill 658 will ensure that we have the evidence-based data we need to make informed decisions to protect the health of our communities and minimize preventable health-related outcomes.

For all of these reasons, I respectfully request a **FAVORABLE** report on Senate Bill 658.

A handwritten signature in blue ink, appearing to read "Stuart Pittman".

Stuart Pittman
County Executive

Testimony 2022.pdf

Uploaded by: Vic Pascoe

Position: FAV

Bill number SB658 Victor Pascoe 308 Chester Avenue Annapolis MD 21403 FAVORABLE

I have lived at this address since 2000, nearly 22 years. For the last 15 years planes arriving to BWI always flew down the Severn River with few exceptions. This seems like a good way to dissipate the noise and pollution.

Since the change in the airports navigation system, nearly every plane flying into BWI goes directly over my house in Annapolis. The lowest altitude I have measures is 1900 feet. I am 19 miles from the airports. Many times, the planes are so low that there are using their thrust to maintain altitude. They are not gliding.

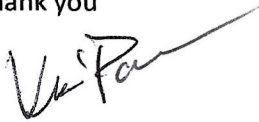
These low flying planes begin at 7:00 am sharp and continue throughout the day and night. One Sunday afternoon, I counted 10 planes in about 10 minutes, one behind the other.

In addition to the noise, I have begun to notice a greasy film covering my flat roof of my house and on my car and boat. It is a substance that has an oil base to it, because it is hard to wipe off without scrubbing or using a cleaner.

I have never had this problem until the planes started flying over, and my room is 3 stories up, there is nothing else that could be causing it. I have attached a picture for your review. The roof is normally light grey in color.

I am hopeful that the Commission will investigate the damage these low flying planes are doing to our environment and to our noise level so far from the airport.

Thank you

A handwritten signature in black ink, appearing to read "Vic Pascoe", with a long, sweeping horizontal line extending to the right.

Letter of Testimony_SB0658_3_9_22.pdf

Uploaded by: Zafar Zafari

Position: FAV

March 9, 2022

The Honorable Delores Kelley
Chair
Senate Finance Committee
3 East
Miller Senate Office Building
Annapolis, Maryland 21401

Re: Bill SB0658-Transportation–Maryland Aviation Infrastructure Impacts Commission

Dear Chairman Delores Kelley and Members of the Senate Finance Committee:

In my current role, I serve as an Assistant Professor of the Pharmaceutical Health Services Research Department at the University of Maryland School of Pharmacy. My main research activity is developing decision-analytic models for risk-benefit quantification of healthcare decisions, economic evaluation of healthcare technologies and policies, and projection of health and economic burden of social and healthcare policies. I herein provide my strong support of the merits of ***SB0658-Transportation–Maryland Aviation Infrastructure Impacts Commission***. This bill aims to establish the Maryland Aviation Infrastructure Impacts Commission for studying the health and environmental effects of commercial aviation in impacted communities of Maryland.

Establishment of a commission to study the public health impacts of aviation noise and air pollution is a priority for health and well-being of Maryland residents, especially those communities that are directly impacted by commercial aviation. On one hand, expansions of the aviation infrastructures and airport runways can help with economic prosperity and create jobs. On the other hand, such expansions create noise and air pollution which will have detrimental public health repercussions and threaten the well-being of the impacted communities. There have been ample studies in recent years that demonstrate the negative impacts of aviation noise and air pollution on physical and mental health.

For aircraft noise, many studies suggest a negative impact on health (1–5), particularly cardiovascular diseases (6–9), including coronary heart disease and hypertensive heart disease. In addition, the sleep disturbance caused by noise is linked with changes in metabolic system and markers of inflammation, further contributing to developments of cardiovascular outcomes (6,10). Such adverse associations between aircraft noise and cardiovascular conditions have been reported consistently in multiple countries and

settings, which can further strengthen the hypothesis of a causal effect of noise on cardiovascular diseases (11).

A recent study in the USA showed that the economic burden associated with 5 dB in environmental noise levels (all-cause noise, including road, rail, and aircraft noise) is \$3.9 billion annually—\$2.4 billion in direct medical costs and \$1.5 billion in indirect costs or productivity losses—that can be attributed to adverse effects of noise on hypertension and coronary heart disease (12).

In addition to cardiovascular diseases, there are other health endpoints that have been linked to aircraft noise, including annoyance (10), sleep disturbance (10), cognitive function development issues in children (10), increases in waist circumference (9), and low birth weight in newborn babies (13,14). In addition, exposure to high levels of aircraft noise has been linked to poorer health-related quality of life, particularly among people that are noise sensitive (15) or are annoyed by noise (16).

In our previous study in New York City, we built a decision-analytic model and evaluated the cost-effectiveness of limiting the year-round use of ‘TNNIS Climb’ that affects Community Boards 7 and 11 of Queens, NY, compared with *status quo* (17). We quantified the effects of noise caused by the year-round use of TNNIS on increased risks of cardiovascular disease and general anxiety disorder. We modeled direct medical costs, indirect costs (i.e., productivity losses) and losses of quality-adjusted life years (QALYs)—QALY captures both longevity and health-related quality of life during life years—associated with aircraft noise. Our findings showed that limiting the use of TNNIS Climb would be cost-effective with an incremental cost-effectiveness ratio (ICER) of \$10,006/QALY, which is below the recommended willingness-to-pay thresholds by US cost-effectiveness guidelines (18,19). Our study published in the *International Journal of Environmental Research and Public Health* has gained significant media attention and appeared on major print media sources such as the **Wall Street Journal**, the **Queens Tribune**, and multiple other media outlets.

Our team is currently working on a project that was originally discussed in the Bill SB184/HB310 from 2020 Legislative Session but later funded by the Maryland Department of Transportation to project the potential health and medical economic burden of the increased aircraft noise after the implementation of the NextGen system at the BWI Thurgood Marshall Airport. In this modeling study, we are using data from multiple earlier published studies reporting on health effects of aircraft noise (2,7–9,20–25) and developing a decision-analytic model to project the long-term potential direct medical costs, indirect costs, losses of QALYs, and likelihood of annoyance associated with increased noise levels for the communities impacted by aircraft noise.

If effectuated, **SB0658** will provide budget and support for assessing the public health and environmental impacts of commercial aviation in Maryland. This will provide an unprecedented opportunity to analyze the trade-offs between economic benefits and

public health and environmental threats of aviation pollution such as aircraft noise and air pollution. While economic growth is a priority for financial well-being of Maryland residents, prior to any economic investment, the public health consequences of such investment should be carefully analyzed. All in all, I as a public health researcher am in strong support and favor of the merits of **SB0658** for its great impacts on improving the health and well-being of Maryland residents.

Sincerely,



Zafar Zafari, M.Sc., PhD

Assistant Professor at University of Maryland School of Pharmacy

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SB658 - SWA in Opposition.pdf

Uploaded by: Caitlin McDonough

Position: UNF

Southwest Airlines Co.

David Richardson
Senior Director, Governmental Affairs
(202) 263-6287
david.richardson@wnco.com



March 9, 2022

The Honorable Delores Kelley
Chair, Senate Finance Committee
Miller Senate Office Building, 3 West
11 Bladen Street
Annapolis, MD 21401

SENATE BILL 658 – TRANSPORTATION – MARYLAND AVIATION INFRASTRUCTURE
IMPACTS COMMISSION - TESTIMONY IN OPPOSITION

Dear Chair Kelley and Members of the Committee:

On behalf of Southwest Airlines, I submit the following comments with respect to Senate Bill 658 (Maryland Aviation Infrastructure Impacts Commission). Respectfully, SB 658 would create an unnecessary and duplicative layer of review, which could undermine the future success of BWI Thurgood Marshall Airport (BWI Marshall), which is presently one of Maryland's greatest economic engines.

State-funded capital projects go through a vigorous review process, including complying with federal National Environmental Policy Act (NEPA) regulations, and vetting and ultimate approval by the democratically-elected General Assembly and the Board of Public Works (BPW). The State of Maryland's senior elected and appointed leaders consider multiple factors concerning whether the state should fund or otherwise support a major capital project. We believe the current structure of checks and balances is sufficient and works well. SB 658, however, would unnecessarily add an additional layer of bureaucracy that could delay important projects that benefit the State of Maryland and its citizens.

Furthermore, concerning aircraft noise specifically, BWI Marshall already has a citizen-led Community Roundtable, which already provides its feedback to the General Assembly, as well as other state, local, and federal policymakers. Having a second advisory body with almost an identical purpose would serve little to no purpose. It is important to note that Southwest has worked with the Community Roundtable, as well as the State of Maryland, to explore proposed flight procedure changes, which we have jointly presented to the FAA for its consideration and we're open to further changes so long as it does not undermine the safety, efficiency, or reliability of the air traffic control system. We believe it was the FAA's changes to arrival and departure procedures at BWI Marshall in 2015 – not any infrastructure projects at BWI Marshall – that led to the increase in community noise concerns.

Importantly, BWI Marshall serves the citizens of every county in Maryland. This includes (1) citizens who work at BWI Marshall, including Southwest's 4,200 Employees; (2) millions of airline consumers from Maryland who rely on BWI Marshall's easy come, easy go conveniences and the affordable travel options provided by Southwest and our competitors; (3) Maryland taxpayers who benefit from the economic activity and tax revenues generated from businesses based at or use the airport; and (4) off-site business – including hotels, restaurants, museums, etc. – that rely on flights carrying passengers and cargo between Maryland and points throughout the United States and beyond.

These citizens of Maryland come from every part of the state, all of whom directly benefit from having a safe, reliable and economically vibrant airport. As currently drafted, the legislation gives these citizens no voice in the proposed commission's activities because membership on the commission is limited to only four jurisdictions. Thus, the proposed commission would not represent all Marylanders (only a relatively few) and fails to give adequate consideration of BWI Marshall's vast economic and consumer benefits.

In closing, Southwest is proud to be Maryland's leading airline for the past 28 years. During that time, leaders across the state have enabled BWI Marshall to become a safe, reliable, efficient, and ultimately successful international airport. On behalf of Southwest, we are truly grateful for the Maryland General Assembly's commitment to helping BWI Marshall remain a world class airport for all those who use it and/or rely on it for their livelihoods.

Thank you in advance for your consideration of Southwest's views concerning SB 658.

Sincerely,



David Richardson

SB0658 - MAA - Aviation Impacts Commission - OPP_F

Uploaded by: Molly O'Hara

Position: UNF

March 9, 2022

The Honorable Dolores G. Kelley
Chair, Senate Finance Committee
3 East Miller Senate Office Building
Annapolis, MD 21401

***Re: Letter of Opposition – Senate Bill 658 – Transportation – Maryland Aviation
Infrastructure Impacts Commission***

Dear Chair Kelley and Committee Members:

The Maryland Department of Transportation (MDOT) respectfully opposes Senate Bill 658 as it is duplicative of current federal and State laws, regulations, and policies.

Senate Bill 658 would create the Maryland Aviation Infrastructure Impacts Commission (the Commission) to study the public health, medical, and environmental impacts of commercial aviation in communities surrounding airports, with a primary focus on the Baltimore/Washington International Thurgood Marshall (BWI Marshall) Airport; this Commission would then provide policy recommendations to the General Assembly.

The Maryland Department of Transportation Maryland Aviation Administration (MDOT MAA) undertakes an environmental review process, under the National Environmental Protection Act (NEPA), whenever a federal action is required, such as changing the Airport Layout Plan, or following regulations and orders published by the White House Council on Environmental Quality (CEQ), the U.S. Department of Transportation, and the Federal Aviation Administration (FAA). The NEPA process provides a consistent criterion and publicly identifies and discloses potential environmental impacts; all project reviews are coordinated with State and local agencies and officials, as well as other interested stakeholders. It is unclear what additional environmental analysis would be provided by the proposed commission that is not already accounted for in the federal NEPA process.

In addition, the proposed Commission would be tasked with offering recommendations on public policy implications of its studies, the content of aviation infrastructure plans and local land-use plans, and the competing needs of aviation infrastructure and the quality of life in communities near airports. These efforts duplicate the work of the Maryland Aviation Commission, which provides direction to the MDOT MAA in developing and implementing airport management policy for all State-owned airports, as well as approval of major capital projects at State-owned airports. The MDOT MAA is also required to coordinate with local jurisdictions, including local zoning boards, on airport projects that might impact their land use plans or requirements.

The proposed Commission is permitted to contract with a vendor to maintain a system of virtual noise monitors; however, the MDOT MAA already employs a robust noise monitoring program for the communities surrounding BWI Marshall which is federally funded and exists as part of a comprehensive FAA-authorized aircraft noise mitigation plan. In September 2019, the MDOT MAA completed the implementation, construction, and deployment of a replacement BWI Marshall Noise and Operations Monitoring System (NOMS), consisting of 24 permanent noise monitors, three portable noise monitors, and advanced analysis software that integrates noise and aircraft operations. The NOMS analyzes and correlates aircraft noise, aircraft flight tracks, and aircraft noise complaint data and provides support to the MDOT MAA's Noise Abatement Program. Information derived from these monitors is readily available to the public online or upon request.

The proposed Commission would be directed to study hard infrastructure, such as construction projects, as well as and soft infrastructure, such as flight procedures. The FAA has exclusive jurisdiction of airspace and is the sole organization in the United States responsible for the development, review, and implementation of flight procedures. An airport owner may identify and advocate for flight procedures that would reduce noise or may challenge the FAA's environmental review, as the State has done previously, but cannot prohibit or require their implementation. No finding or recommendation by the proposed Commission or State policy resulting from the Commission would interfere with the FAA's implementation of new or revised flight procedures.

Lastly, the proposed Commission is required to consult with the DC Metroplex BWI Community Roundtable (Roundtable). The Roundtable was formed by the MDOT MAA at the request of the FAA following a significant increase in community noise complaints about FAA's implementation of revised flight procedures into and out of BWI Marshall. The MDOT MAA, serving as a technical advisor, has invested considerable technical and financial resources in excess of \$1 million in support of the Roundtable. A series of revised procedures were submitted to the FAA by the MDOT MAA on behalf of the Roundtable in December of 2019 and the FAA is actively considering these changes. Senate Bill 658 would require an ongoing role for the Roundtable in the evaluation of nominees for the proposed Commission, which would obligate the State to continue providing resources and advice beyond the intended scope of the Roundtable.

For these reasons, the Maryland Department of Transportation respectfully requests the Committee grant Senate Bill 658 an unfavorable report.

Respectfully Submitted,

Ricky D. Smith, Sr.
Executive Director
Maryland Aviation Administration
859-7060

Pilar Helm
Director of Government Affairs
Maryland Department of Transportation 410-
410-865-1090

SB658_A4A_UNF

Uploaded by: Sean Williams

Position: UNF



March 21, 2022

The Honorable Delores Kelley
Chair, Senate Finance Committee
Miller Senate Office Building, 3 West
11 Bladen Street
Annapolis, MD 21401

Dear Chair Kelley:

On behalf of Airlines for America (A4A)¹, the trade association for the leading U.S. passenger and cargo airlines, I provide the following comments on SB 658. SB 658 would create the “Maryland Aviation Infrastructure Impacts Commission” to study and make recommendations to the Maryland General Assembly regarding public health, medical and environmental impacts of commercial aviation in airport communities, particularly Baltimore/Washington International Thurgood Marshall (BWI Marshall) Airport. A4A and our members have long supported efforts to evaluate and communicate the potential health and environmental impacts associated with aviation activities as essential to the development and implementation of sound public policy. However, because SB 658 would create a regime that would unnecessarily duplicate the comprehensive and robust mechanisms already in place to review and communicate health and environmental impacts related to aviation activities, A4A respectfully opposes the legislation.

Robust mechanisms already exist to comprehensively review and communicate potential impacts of aviation projects, including the “hard infrastructure such as construction projects” and so-called “soft infrastructure projects such as flight paths and related procedures” explicitly mentioned in the bill. BWI Marshall and other Maryland airports, together with the Federal Aviation Administration (FAA), conduct comprehensive evaluations of aviation projects in accordance with the National Environmental Protection Act (NEPA). For example, the FAA – which has **exclusive** authority to develop, approve and implement flight procedures – undertakes necessary NEPA reviews before approving and implementing those procedures. A4A strongly supports efforts to communicate these impacts to the public and has championed and led efforts to improve the FAA’s process for developing new flight procedures to better ensure communities are heard and their views are taken into account as the procedures are developed and implemented. A4A members also have proactively engaged with communities, participating directly in community roundtables dedicated to addressing aircraft noise issues at airports throughout the country, including the citizen-led BWI Community Roundtable. Similarly, all major airport development (e.g., construction) projects requiring FAA approval are studied and the results reported to the public in accordance with NEPA. This is on top of the approval process for major capital projects that is conducted by the Maryland General Assembly, the

¹ A4A’s members are Alaska Airlines, Inc.; American Airlines Group, Inc.; Atlas Air, Inc.; Delta Air Lines, Inc.; Federal Express Corporation; Hawai’ian Airlines, Inc.; JetBlue Airways Corp.; Southwest Airlines Co.; United Airlines Holdings, Inc.; and United Parcel Service Co. Air Canada, Inc. is an associate member.

Maryland Department of Transportation and the Maryland Board of Public Works, all of which provide avenues for public comment.

Regarding health impacts, the FAA has, among other efforts, established a cooperative aviation research organization co-led by Washington State University and the Massachusetts Institute of Technology – the Aviation Sustainability Center (also known as the Center of Excellence for Alternative Jet Fuels and Environment, ASCENT) – which undertakes multiple research projects to understand such health impacts and ensures public policy is based on peer-reviewed science. Currently, the FAA is undertaking a comprehensive review of aviation noise policy which will be informed by such research (see *Overview of FAA Aircraft Noise Policy and Research Efforts: Request for Input on Research Activities to Inform Aircraft Noise Policy*.⁸⁶ Fed. Reg 2722 (January 13, 2021). With respect to noise monitoring, the establishment of a virtual noise monitoring system authorized in the bill is unnecessary given the robust noise monitoring program already in place at BWI and administered by the Maryland Department of Transportation's Maryland Aviation Administration.

We strongly believe that, because of the comprehensive mechanisms already in place, this legislation is unnecessary and would expend resources duplicating the work that is already being done.

Thank you for your time and consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Sean Williams', is positioned above the typed name.

Sean Williams
Vice President, State and Local Government Affairs
swilliams@airlines.org

SB658_GBC_DonFry_UNF

Uploaded by: Teresa Milio Birge

Position: UNF



GREATER BALTIMORE COMMITTEE

Regional business leaders creating a better tomorrow...today.

Calvin G. Butler Jr., Chair
Exelon & Exelon Utilities

Donald C. Fry
President & CEO

March 16, 2022

The Honorable Dolores G. Kelley
Chair, Senate Finance Committee
3 East Miller Senate Office Building
Annapolis MD 21401

Re: Opposition to SB 658 - Transportation - Maryland Aviation Infrastructure Impacts Commission

Dear Chairman Kelley:

The Greater Baltimore Committee (GBC) writes to express our opposition to Senate Bill 658 – Transportation - Maryland Aviation Infrastructure Impacts Commission. As the Greater Baltimore region’s premier organization of business and civic leaders, we are a leading voice for the business community on issues relating to economic growth, job creation, workforce development, transportation, and quality of life. Our members’ success is closely linked to the efficient and convenient transportation benefits provided by BWI Thurgood Marshall Airport.

We respectfully request that you reject any legislative proposals that may have the unintended consequence of threatening or thwarting the economic benefits provided by BWI Thurgood Marshall Airport.

Enactment of Senate Bill 658 would add an additional layer of oversight to the existing process and may delay the completion of safety and capacity projects at the airport, impeding economic opportunity and employment within the State. In addition, the proposed legislation appears to be duplicative of federal and state laws and regulations currently in force, particularly with respect to the federal requirements contained in the National Environmental Policy Act of 1970 (NEPA). BWI Thurgood Marshall Airport complies with the federal NEPA process to publicly identify and disclose potential environmental impacts. In doing so, all project reviews are coordinated with State and local agencies and officials and include multiple opportunities for public comment.

The Maryland Aviation Administration (MAA) has demonstrated a long-standing commitment to environmental protection, proactive planning and reducing and mitigating aircraft noise. When community complaints significantly increased after Federal Aviation Administration (FAA) substantially changed BWI flight patterns, transportation officials submitted a series of revised procedures to the FAA, which is currently considering the changes. The FAA has exclusive jurisdiction of airspace and is the sole organization in the United States responsible for the development, review, and implementation of flight procedures.



GREATER BALTIMORE COMMITTEE

Regional business leaders creating a better tomorrow...today.

Recognizing that this subject area lies solely within the federal government realm of responsibility and authority, the Greater Baltimore Committee is opposed to creating a commission to conduct duplicative reviews.

We respectfully request the committee give an unfavorable report on Senate Bill 658.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Fry'.

Donald C. Fry

cc: Members, Senate Finance Committee