

# Safe Skies Clean Water Wisconsin

508 Elmside Boulevard, Madison, WI 53704

[www.safeskiescleanwaterwi.org](http://www.safeskiescleanwaterwi.org)

December 9, 2022

Ms. Kimberly Jones, Airport Director  
Mr. Joseph Parisi, County Executive  
Dane County Regional Airport  
4000 International Lane, Madison, WI 53704  
<mailto:part150study@msnairport.com>

Subject: Submission of Comments  
Draft Noise Exposure Map  
Dane County Regional Airport

Dear Ms. Jones and County Executive Parisi:

On behalf of the residents of Madison, Wisconsin that comprise Safe Skies Clean Water Wisconsin, we are submitting comments on the draft November 2022 *Noise Exposure Map Update, Pursuant to Title 14 of the Code of Federal Regulations Part 150, Dane County Regional Airport*, prepared by HMMH of Burlington, Massachusetts.

Since 2018, Safe Skies has organized residents of Madison and other organizations concerned about the Air Force decision to deploy a squadron of F-35A fighter jets to the Wisconsin Air National Guard at Truax Field adjacent to the Dane County Regional Airport (DCRA).

In 2020, the Air Force and Wisconsin Air National Guard completed their Environmental Impact Statement (EIS) and finalized their irresponsible and racist decision to beddown the F-35 fighter jets in Madison. Based on environmental impacts and overwhelming public opposition, Madison was the worse choice for these jets. Of the 6,419 comments submitted on the draft EIS for five potential sites, 89% were submitted regarding Truax. Numerous local organizations, including the Madison Common Council and School Board, opposed the beddown. Ms. Jones was an outspoken supporter of the deployment to Truax Field and Mr. Parisi kept a very low profile and didn't clearly express support or opposition. The EIS concluded that Truax was one of two sites where "there will be disproportionate impacts to low income and minority populations, as well as children", yet you continue to support the construction of low-income housing near DCRA. It is sad that in their decision to bring the F-35 fighter

jets to Madison, the Air Force and Wisconsin Air National Guard never considered the collateral damage to city residents.

Despite a \$1.7 billion price tag for these nuclear-capable jets, no funds will be provided for noise abatement. Instead, the Air Force and the Wisconsin Air National Guard are relying on the DCRA to update its Noise Exposure Map and develop a Noise Compatibility Program to minimize the noise impacts.

DCRA recently released its draft Noise Exposure Map for public comments. There are two significant problems with the draft noise study and map: 1) lack of public participation, and 2) use of outdated noise standards.

The lack of public outreach conducted by DCRA for this noise study has thus far has been disappointing. DCRA and Truax Field are surrounded by low-income and families of color that experience the highest noise exposure. There are 60,000 people living within 3 miles of DCRA, the distance in which DCRA regulates construction. The study area for the new map extended 6.5 miles from DCRA. There has been little effort to involve residents actually impacted by aircraft noise. Two open houses held at the airport were inaccessible to many people. The open house format did not allow residents to learn about the questions and comments of their neighbors. There was no outreach to neighborhood associations, community centers, schools, day care centers, and other sensitive receptors in the study area. Ignoring environmental justice policies, no effort was made to involve the low-income and families of color that would be most impacted by the noise of the incoming fighter jets. As DCRA director and county executive, you've failed to reach out to public to learn how they are impacted by the operations of the airport. We hope for the remainder of Part 150 process DCRA takes public involvement seriously to inform the residents of Madison and other nearby communities.

The draft Noise Exposure Map shows areas in Madison predicted to exceed the 65 decibel DNL noise level. This is an outdated 50-year-old federal noise standard which uses daily average noise levels, not the peak, ear-shattering noise residents and their children actually hear. Even the FAA recently concluded in its Neighborhood Environmental Survey that the 65-decibel standard is no longer accurate or useful and 50 decibels would be more accurate. The draft NEM ignored requests from the Madison teacher's union and neighborhood associations to estimate peak noise levels and include all schools on the east and north sides of Madison. The draft NEM ignores modern scientific studies showing that aircraft noise reduces school performance, impairs physical and mental health and increases neighborhood violence. Even the Air Force in its EIS estimated peak noise levels at sensitive locations. We see the obvious lack of public health experts on the Technical Advisory Committee. The draft noise study and map do not clearly inform Madison residents about the impacts of noise exposure due to the aircraft operations of DCRA and the incoming F-35 fighter jets. DCRA and Dane County have the funds and authority to request that its consultant HMMH predict lower daily noise

levels than the 65 dB DNL, and provide instantaneous noise levels at sensitive locations. We hope DRCA and Dane County will update the noise study to accurately assess its impacts on area residents, our children and our neighborhoods.

For your consideration, we have prepared the enclosed detailed comments and recommendations for improving the noise study, exposure map, and development of noise abatement options.

Should you or other DCRA staff have questions, please contact me at (608) 213-4473 or [steven.klafka@gmail.com](mailto:steven.klafka@gmail.com)

Sincerely,

On behalf of Safe Skies Clean Water Wisconsin

Steven Klafka, P.E., BCEE, Environmental Engineer

Allen Ruff, Harry Richardson, Kären (Minnie) Miskimen, Tom Boswell, Vicki Berenson, Steve Klafka, Trish Haza, Lance Green, Tom Berman, Oona Mackesey-Green, Jodi Wortsman, Barbara Smith, Hannah Lee, Ed Blume, Steve Books, Carolyn Gantner, Jane Hammatt Kavaloski, Kristen Billings, Ken Sabroff, Diane Morris, Anne Tigan, Carolyn Gantner and Celeste Robins.

**Safe Skies Clean Water Wisconsin  
Comments on Draft Noise Exposure Map  
Dane County Regional Airport  
December 9, 2022**

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## **1. Lack of Public Participation**

*The Part 150 process should be improved to reach out to residents, especially low-income and families of color, living within 3 miles of the DCRA.*

The lack of public outreach conducted by DCRA for this noise study has thus far has been disappointing. DCRA and Truax Field are surrounded by low-income and families of color that experience the highest noise exposure. There are 60,000 people living within 3 miles of DCRA. The study area for the new map extended 6.5 miles from DCRA. There has been little effort to involve residents actually impacted by aircraft noise. Two open houses held at the airport were inaccessible to many people. The open house format did not allow residents to learn about the questions and comments of their neighbors. There was no outreach to neighborhood associations, community centers, schools, day care centers, and other sensitive receptors in the study area. Ignoring environmental justice policies, no effort was made to involve the low-income and families of color that would be most impacted by the noise of the incoming fighter jets.

Here are a few suggestions for improving public participation:

- Contact impacted institutions including schools, churches, day care centers and businesses within 3 miles of DCRA.
- Hold public meetings in impacted neighborhoods within 3 miles of DCRA.
- Improve the open house format by including time for a public presentation by the DCRA staff and a question/answer session so attendees can hear comments.
- Reach out to the low-income and families of color within 3 miles of DCRA.

We hope for the remainder of Part 150 process DCRA takes public involvement seriously to inform the residents of Madison and other nearby communities.

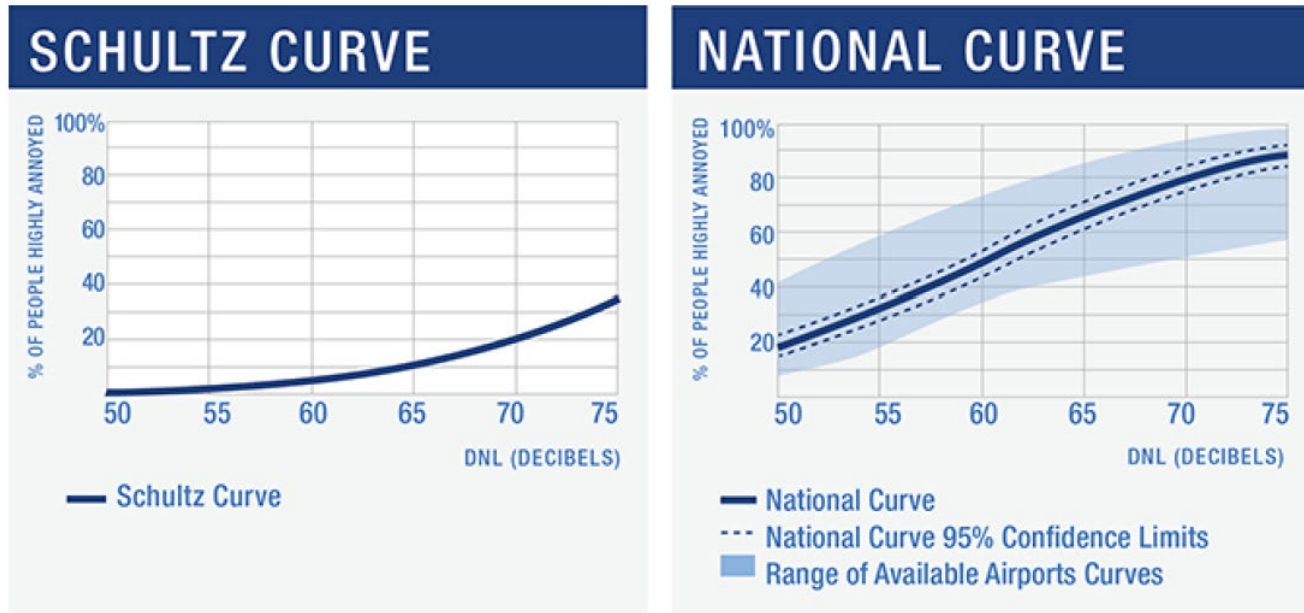
## **2. FAA has shown the 65 dB DNL is Outdated**

*The NEM should be updated to account for the results of the FAA Neighborhood Environmental Survey which shows the annoyance-based noise standard should be reduced from 65 to 50 dB DNL.*

Noise levels below the 65 dB DNL should be estimated. The FAA recently concluded in its Neighborhood Environmental Survey that the 65-decibel standard is no longer accurate or useful. Below are figures from the Survey comparing the basis for the original 65 dB DNL and current survey results.<sup>1</sup> If 10% public annoyance is unacceptable, then the noise modeling should extend to 50 dB DNL or lower.

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<sup>1</sup> [https://www.faa.gov/regulations\\_policies/policy\\_guidance/noise/survey](https://www.faa.gov/regulations_policies/policy_guidance/noise/survey)



### 3. Existing Environmental Justice Should be Addressed

*The NEM should be updated to incorporate federal environmental justice policies unless it is the policy of DCRA and Dane County to promote environmental justice and racism.*

Executive Order 12898 states that:

*“To the greatest extent practicable and permitted by law...each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations”.<sup>2</sup>*

In its final EIS for the F-35A fighter jets, the Air Force acknowledged that “there will be disproportionate impacts to low income and minority populations, as well as children.” In its comments on the draft EIS, the Mayor of Madison warned the Air Force of environmental justice impacts of the F-35A fighter jets. She noted the presence of low-income and families of color both within the predicted 65 dB DNL, but also immediately outside this noise contour.

<sup>2</sup> <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>

Figures 1 and 2 taken from the City of Madison staff analysis of the draft EIS show the poverty rate and percent persons of color within and just outside the EIS noise contours associated with the proposed F-35A squadron.<sup>3</sup>

Madison's Community Development Authority (CDA) governs the city's 857 public and multifamily housing units. The focus of this housing is to "provide decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities". There are multiple CDA properties, as well as many low-income housing units, within or very near to the 65 dB DNL contour presented in the draft EIS. In particular, the Truax Park Apartments and the Webb-Rethke townhomes are located on the border of the 65 dB DNL contour. Head of household demographics at Truax and Webb-Rethke are 70% persons of color, 100% low income, 45% disabled and 14% elderly. While the draft EIS states that 551 people will be impacted by the 65-70 dB DNL contour. The population at these two properties alone is 600 residents. The CDA has commented on the draft EIS and asked that it consider CDA properties, particularly the Truax Park apartments and the Webb-Rethke townhomes.<sup>4</sup>

Despite the obvious environmental justice impacts of the incoming F-35 fighter jets, there is no mention of low-income and minority populations in the draft NEM.

#### **4. Future Environmental Justice Should be Addressed**

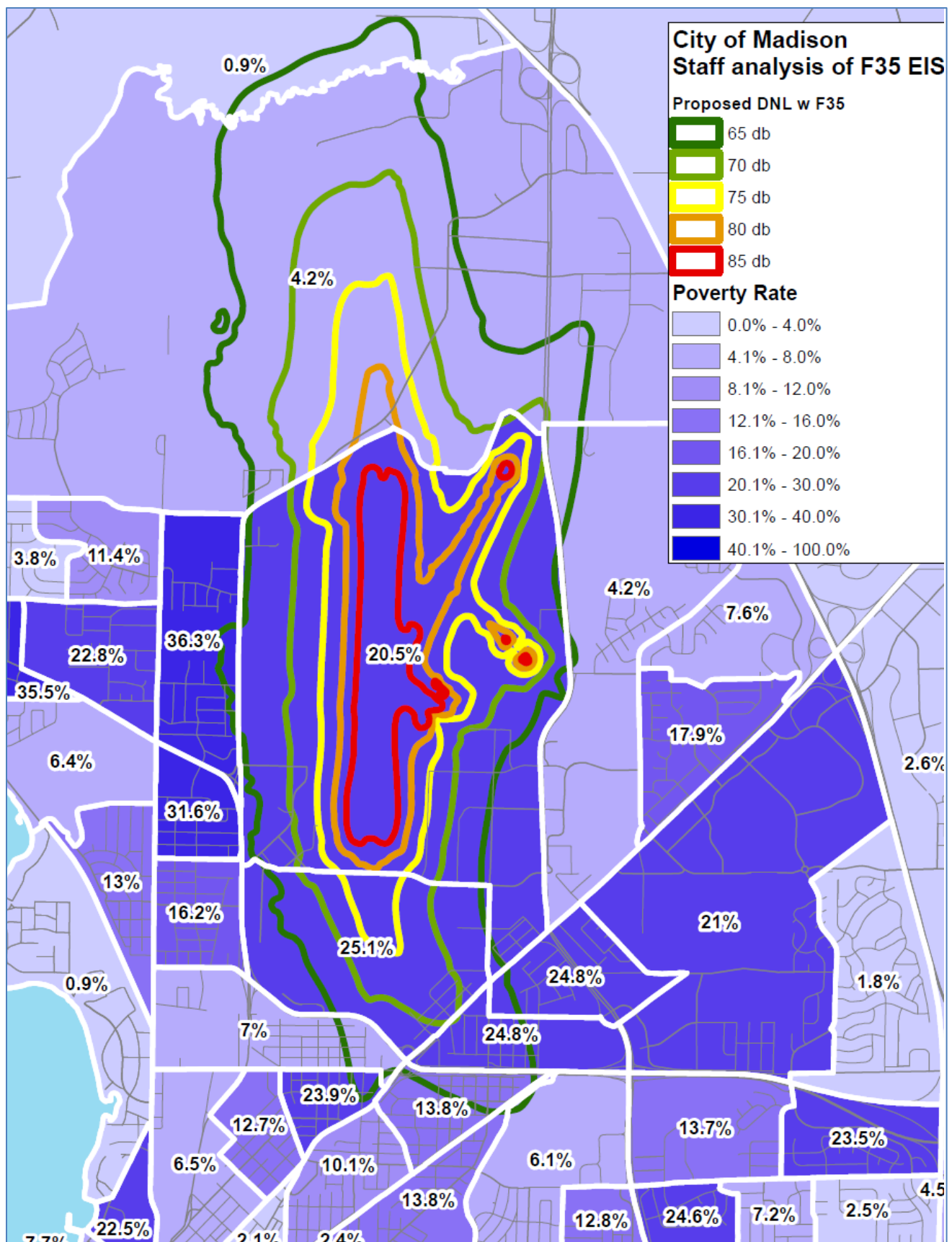
*When DCRA begins development of its Noise Compatibility Program to minimize the noise impacts it should establish a policy to oppose the development of low-income housing near DCRA.*

While Madison warned the Air Force of environmental justice impacts, the city continues to propose the construction of additional low-income housing near DCRA. There has been no opposition from DCRA and Dane County of this promotion of environmental injustice and racism.

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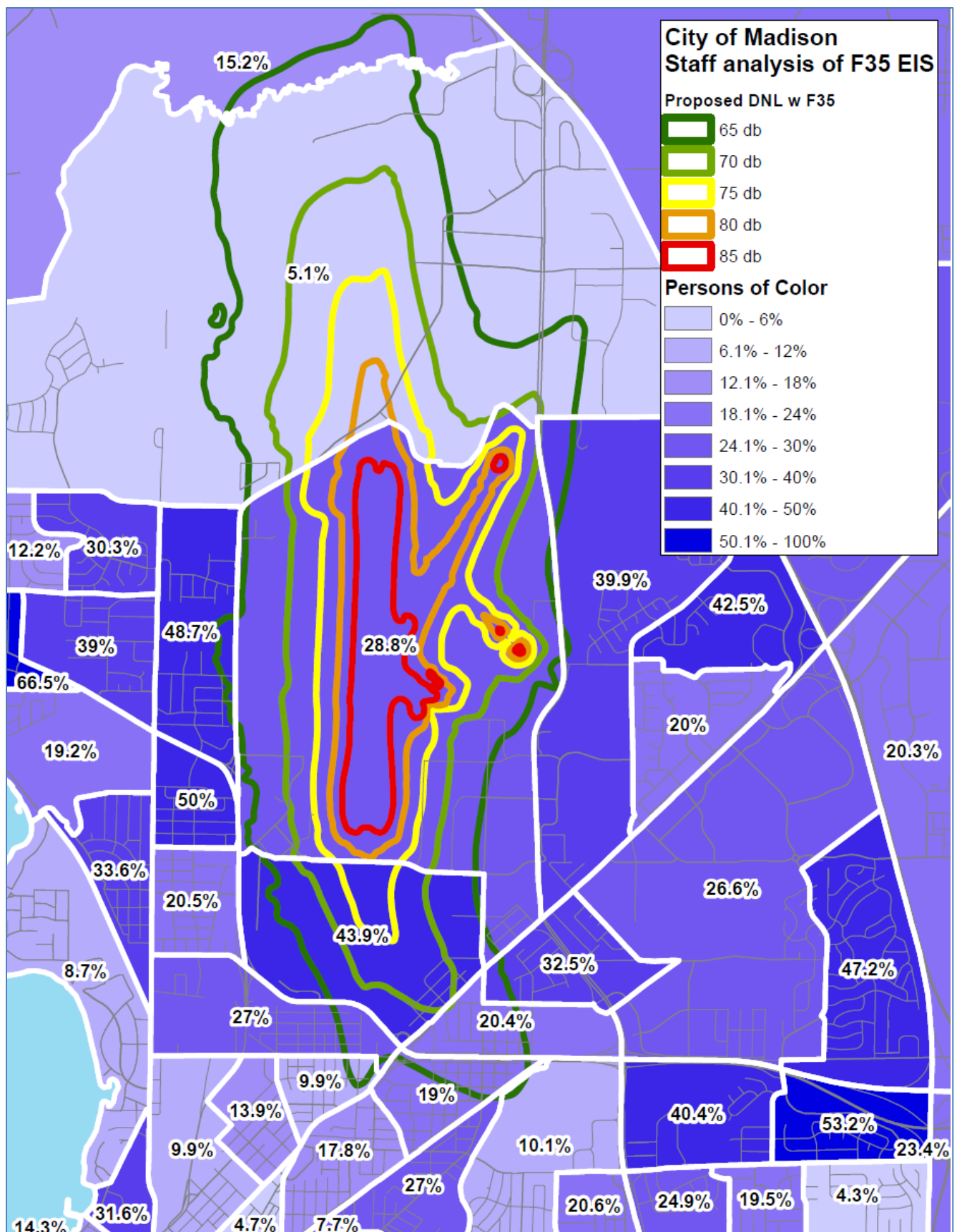
<sup>3</sup> City of Madison, Department of Planning & Community & Economic Development, F35 EIS Staff Analysis, September 10, 2019.

<sup>4</sup> Draft CDA Statement on proposed Air National Guard F-35A Operational Beddown, October 16, 2019, <https://madison.legistar.com/View.ashx?M=F&ID=7764631&GUID=DBDB1205-3D82-413E-ADDD-43F0EFA767FA>



**Figure 1 - City of Madison Staff Analysis of Poverty Rate and F-35 Noise Contours**





**Figure 2 - City of Madison Staff Analysis of Persons of Color and F-35 Noise Contours**

## **5. Expand the Area Evaluated by the NEM**

*To better evaluate noise impacts within the urban areas, the NEM should be updated to show the number of households, people, schools, day care centers, and other sensitive receptors within 3 miles.*

DRCA and Truax Field are unique since they are located in an urban area. Dane County and Madison are the fastest growing areas in Wisconsin. While DRCA is over 80 years old, the population has grown so there are 60,000 people living within 3 miles of Truax Field, all who will be impacted by the proposed F-35A squadron.

The NEM does not adequately identify all the children and elderly that would be impacted by the F-35A jets, or does it evaluate the many potential health risks. To more accurately evaluate the impacts of Truax Field, the NEM should expand the analysis to include current and anticipated noise levels at all public and private pre-schools, schools, daycare facilities, nursing homes and community centers on the east and north-sides of Madison. These will include, but not be limited to, the following:

- Lake View Elementary School
- Gompers Elementary School
- Lindberg Elementary School
- Mendota Elementary School
- Emerson Elementary School
- Lowell Elementary School
- Kennedy Elementary School
- Marquette Elementary School
- Lapham Elementary School
- Black Hawk Middle School
- Sherman Middle School
- Whitehorse Middle School
- O’Keeffe Middle School
- Shabazz High School
- East High School
- Isthmus Montessori Academy

## **6. Expand DNL Noise Levels Evaluated by Noise Modeling**

*Since the 65 dB DNL noise standard is over 50 years old, the NEM should be updated to reflect standards used by other airports and organizations and better inform surrounding residents of the noise impacts.*

The 65 dB DNL noise standard used for the noise modeling in the EIS is over 50 years old.<sup>5</sup> Earlier comments have cited the recent FAA Neighborhood Environmental Survey which shows the annoyance-based noise standard should be reduced from 65 to 50 dB DNL.

As many Madison residents can attest, the 65 dB DNL used by DCRA is misleading and inadequate to protect the surrounding urban population. To better evaluate the impacts of sites within urban areas, the EIS should expand the noise analysis beyond the 65 dB DNL to show areas included in the 60 and 55 dB DNL. For example, the Minneapolis St. Paul International Airport updates its noise contours annually out to 60 dB DNL and provides noise mitigation to homes within this noise contour.<sup>6</sup> The State of Oregon requires airports to evaluate noise impacts out to the 55 dB DNL and include this area in the Airport Noise Impact Boundary.<sup>7</sup>

A 2001 technical paper on noise standards concluded that the Federal Aviation Administration (FAA) and Department of Defense (DOD) policies are based on the 65 dB DNL was developed in the early 1970's, while most of the agencies and boards, standard setting bodies, and international organizations have established their policies after 1995.<sup>8</sup> The World Health Organization (WHO) recommendations are based on over 25 years more worldwide research into noise effects than the earlier FAA and DOD policies. Nearly all agencies and boards, standards setting bodies, and international organizations with oversight of noise producing sources use a DNL criterion value of 55 dB as the threshold for defining noise impact in urban residential areas. WHO considers DNL 55 dB as causing serious annoyance and creating an unhealthy environment, and DNL 50 dB as creating moderate annoyance.

The 65 dB DNL noise contour excludes numerous low-income and minority populations. These include the CDA Truax housing, CDA Webb-Rethke townhomes and other housing near Worthington Park, and near the intersection of Packers Avenue and Northport Drive.<sup>9</sup> While these areas will experience virtually identical noise exposure as residents who live on the contour line, they will not be eligible for sound mitigation funding. These low-income neighborhoods should be included in the noise analysis to provide a more accurate evaluation of project impacts. Figure 3 taken from the City of Madison staff analysis of the draft EIS shows the assisted low-income housing units just outside the EIS noise contours associated with the proposed F-35A squadron.

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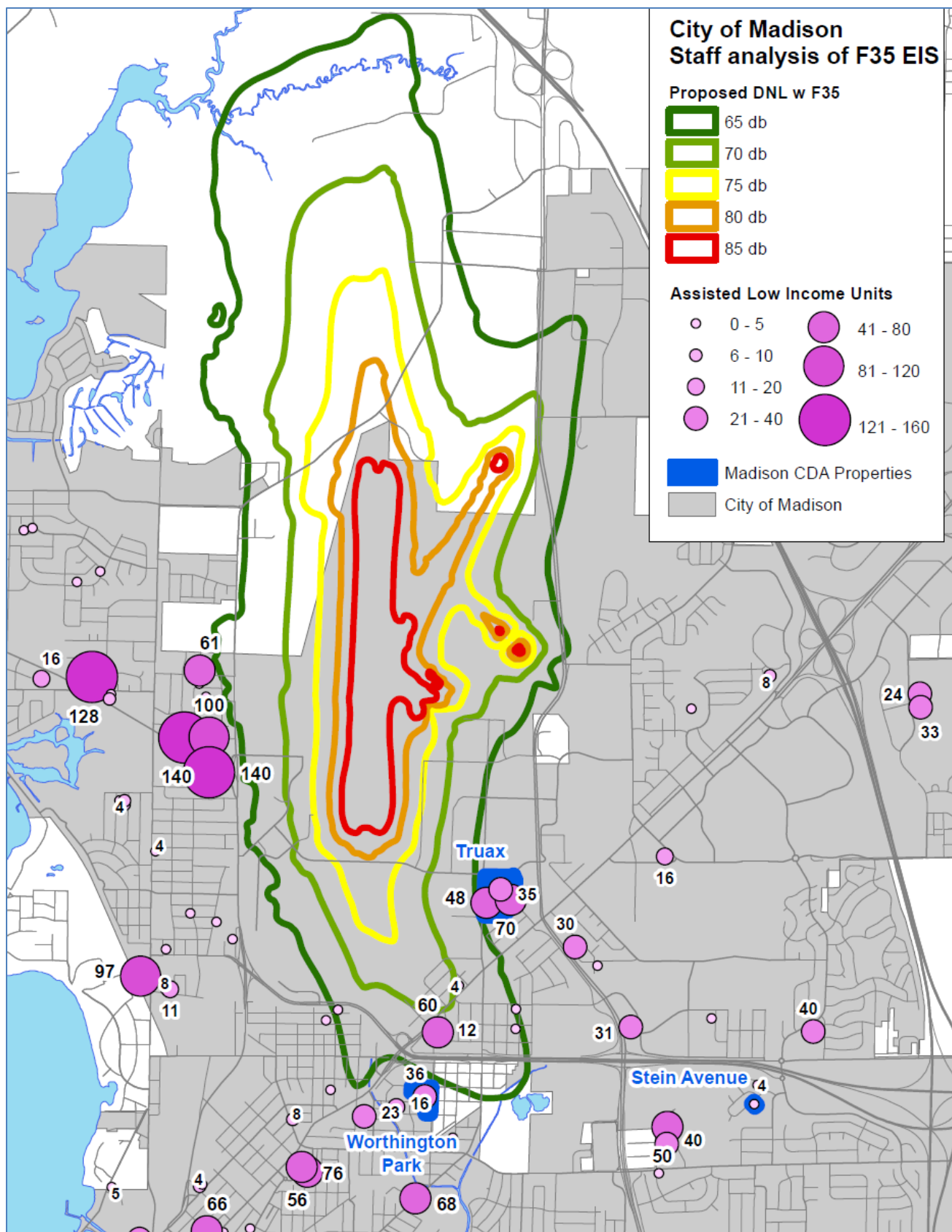
<sup>5</sup> From Whence Came Ldn / DNL 65?, N. Miller, 2010, <https://hmmh.com/resources/news-insights/blog/from-whence-came-ldn-dnl-65/>

<sup>6</sup> Minneapolis St. Paul International Airport (MSP) 2018 Annual Noise Contour Report, <https://www.maconoise.com/noise-mitigation-program/msp-annual-noise-contour-analysis-reports>

<sup>7</sup> Airport Land Use Compatibility Guidebook January, 2003.

<sup>8</sup> Schomer and Associates, A White Paper: Assessment of Noise Annoyance, April 22, 2001

<sup>9</sup> City of Madison, Department of Planning & Community & Economic Development, F35 EIS Staff Analysis, September 10, 2019.



**Figure 3 - City of Madison Staff Analysis of Assisted Low-Income Housing and F-35 Noise Contours**

## **7. Provide Instantaneous Noise Level Contours**

*The NEM should be updated to provide instantaneous noise levels the public can expect to hear, rather than the daily average DNL based on daily average air traffic.*

The use of 24-hour average DNL noise contours does not explain the noise impacts on a short-term basis. Residents are very familiar with the short-term interference with our lives due to passing aircraft including the existing F16 jets. The NEM should provide short-term noise contours which show instantaneous maximum noise levels. This would explain the noise levels exposure by residents on the east and north sides of Madison.

## **8. Noise Modeling Assumptions**

*The assumptions used for the NEM should be verified once the F-35 fighter jets begin operations.*

The predicted noise impacts are dependent on the assumptions concerning flight paths, fighter jet noise levels and afterburner usage. These assumptions need to be verified after the F-35 fighter jets arrive. If there are significant changes to the current assumptions, the NEM should be updated based on accurate assumptions.

## **9. Correction to Fighter Jet Flight Paths**

*The NEM should be updated to provide the correct flight paths for fighter jet training.*

Public comments on the draft NEM suggest the Wisconsin Air National Guard have not provided accurate flight paths for fighter jet training. Area residents and neighborhood association web sites and Facebook pages can be consulted to learn the flight paths that have been previously used.

## **10. Health Effects of Noise Exposure**

*The NEM should be updated to predict the noise impacts on physical and mental health of surrounding residents including their children.*

As previously noted, the 65 dB DNL noise standard used for the noise modeling in the EIS is over 50 years old. It does not account for the impacts of noise including stress, sleep disturbance, and reduction in the educational performance of children. The NEM should describe the effects of noise on physical and mental health, and compare these noise levels to those produced by the proposed F-35A fighter jets. The noise levels which result in the following known noise effects should be identified and compared with those expected from the F-35A fighter jets at Truax Field:

- a) Damage to the eardrum and cochlea hair cells of children
- b) Sleep disturbance
- c) Immune strength
- d) Autonomic reactions including heart rate and blood pressure increases
- e) Release of adrenaline and cortisol
- f) Fight or flight response
- g) Stress

Loud noise is a trigger for people with Post Traumatic Stress Disorder (PTSD) who have experienced or witnessed a traumatic event such as a natural disaster, a serious accident, a terrorist act, war/combat, rape or other violent personal assault.<sup>10</sup> PTSD affects approximately five percent of U.S. adults. The NEM should be updated to identify the noise levels which will trigger PTSD and estimate the number of people likely to be impacted by the F-35A fighter jets at Truax Field. There is a low-income housing complex for homeless veterans, many of whom have PTSD, located near Truax Field.

## **11. Noise Impacts on Learning and Education**

*The NEM should be updated to identify the impacts on educational performance at all schools on the east and north sides of Madison.*

In its report on burdens due to environmental noise, the World Health Organization found that: 1) 50 % of children exposed to 65 decibels will develop noise induced cognitive impairment, 2) over 20 studies have shown negative effects of noise on reading and memory in children, and 3) noise exposure during critical periods of learning at school could potentially impair development and have a lifelong effect on educational attainment.<sup>11</sup> The NEM should be updated to clearly state that the 65 dB DNL noise standard used to evaluate noise impacts will not protect children.

Truax Field is located in an urban area with numerous schools. The noise analysis should be updated to identify the noise levels which have been shown to interfere with short and long-term educational performance. These levels should be compared with those expected from the F-35A fighter jets at each of the schools identified in these comments.

## **12. Noise Impacts on Children with Emotional Disabilities**

*The NEM should be updated to reflect physical and mental health impacts on children with emotional disabilities.*

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<sup>10</sup> American What Is Posttraumatic Stress Disorder?

<sup>11</sup> World Health Organization, Burden of disease from environmental noise - Quantification of healthy life years lost in Europe, 2011, [https://www.who.int/quantifying\\_ehimpacts/publications/e94888/en/](https://www.who.int/quantifying_ehimpacts/publications/e94888/en/)

The Richardson School is on airport property and approximately a half mile west of the main DCRA runway. It is expected to receive the highest noise impacts of any school. It provides alternative education for special needs children with the following disabilities and disorders:

- Autism spectrum disorders
- Intellectual disabilities
- Emotional/behavioral disabilities
- Orthopedic impairments
- Developmental delays
- Learning disabilities
- Traumatic brain injuries

The noise analysis should be updated to identify the noise levels which have been shown to cause mental and physical health effects such as:

- a) Damage to the eardrum and cochlea hair cells of children
- b) Sleep disturbance
- c) Immune strength
- d) Autonomic reactions including heart rate and blood pressure increases
- e) Release of adrenaline and cortisol
- f) Fight or flight response
- g) Stress
- h) Interfere with short and long-term educational performance of children with special needs.

These levels should be compared these with those expected from the F-35A fighter jets.

### **13. Obtain Medical Expertise to Evaluate Noise Impacts**

*The NEM should be updated to incorporate comments from staff trained in the physical and mental health impacts of noise exposure.*

The draft NEM was prepared using the outdated noise standard of 65 dB DNL. There are numerous health effects, especially to children, that will occur at this average noise level and as a result of exposure to short-term high noise levels. None of the NEM preparation staff were medically trained personnel who would have the expertise needed to accurately evaluate the noise impacts.

In her October 31, 2019 letter to the editor of the Capital Times in Madison, Dr. Elizabeth Neary, a pediatrician, stated:

*"I have dedicated my life to caring for children, which is why I am alarmed by the proposal to base F-35 military jets in our community.*

*The Air Force concluded in its draft Environmental Impact Statement that locating the F-35s at the Truax Air National Guard Base would have a disparate negative impact on children, people of color and low-income individuals who live in dense populations in and around the Dane County Regional Airport. Approximately a dozen K-12 schools and 15 child day care centers are in and around the areas where the most intense noise is predicted.*

*From my own experience and research, I believe that many of Madison's children will be harmed by the intense noise generated by these military jets that have no need for placement in a dense residential community. The early years of a child's life are critical for the development of hearing. According to the Office of Disease Prevention at the National Institutes of Health, children's ear canals continue to develop during the early years of life, and loud noises during this stage of development can permanently damage their hearing.*

*The noise created by the F-35s is an impulse sound — a brief, very loud noise. Impulse noise causes more severe hearing loss than steady state noise. The body has a reflex mechanism which protects the ear when exposed to loud, continuous noise. The reflex is slow, and thus does not provide protection to the ear against sudden impulsive sounds. Hence, the average day-night noise exposure (DNL) measured over a 24-hour period in the draft EIS does not measure the true impact of noise on children.*

*Health impacts of noise pollution include overproduction of stress hormones, interruption of sleep, ringing in the ear, negative effects on mental health, increased blood pressure and impacts on cardiovascular disease.*

*For children, the impacts are far greater. Heightened noise interruptions can lead to delayed speech development, reduced attention, impaired concentration, long-term memory issues and decreased math and reading comprehension. The EIS includes a section on the impact of noise on children, citing studies that have found a linear relation between chronic aircraft noise exposure and impaired reading comprehension and recognition memory.*

*With about a dozen K-12 schools and approximately 15 day care facilities surrounding Truax Field, this proposal poses potential long-lasting damaging impacts on the children that live within our community. According to the City of Madison's 2018 Neighborhood Indicators Project, the kids who live in the Truax neighborhood are struggling even before they enter school, with only 48% of them considered to be "kindergarten ready."*



*One of the schools closest to the predicted intense noise is Hawthorne Elementary, where most children are low-income and of color. In a city struggling to overcome persistent racial disparities, flying an intensely noisy aircraft over their elementary school more frequently will only exacerbate these disparities.*

*If we truly care about the children in our community, we should act to protect them by adamantly opposing the placement of F-35 military jets in Madison.”*

The draft NEM should be updated with the assistance of medically trained staff to fully evaluate the anticipated noise impacts on children living near Truax Field.

#### **14. Noise Impacts and Violence**

*The NEM should be updated to estimate the increase in violence and assaults due to increases in noise exposure.*

The neighborhoods surrounding Truax Field already have a disproportionate amount of assaults within Madison.<sup>12</sup> Research suggests that a 1 decibel increase in noise levels increases the assault rate by 2.6%.<sup>13</sup> The draft NEM should be updated to:

- a) provide a summary of current crime rates in the neighborhoods surrounding Truax,
- b) estimate how noise from the F-35A squadron will increase crime rates
- c) estimate the cost to victims
- d) estimate the need for additional law enforcement to mitigate this increase in violence

Based on the increase in noise and the associated assault rate, a map should be provided showing the anticipated change in crime in neighborhoods surrounding DRCA and Truax Field due to the incoming F-35A squadron.

#### **15. Noise Impacts on Pets**

*The NEM should be updated to explain the anticipated noise impacts on pets of surrounding residents.*

During public meetings to discuss the draft EIS prepared by the Air Force for the F-35 fighter jets, numerous residents have voiced concerns about pets, primarily dogs, which panic due to the loud noise when the current F-16 fighter jets pass overhead. The draft NEM should be updated to explain how dogs are affected by loud noises. It should be updated to identify current and anticipated

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<sup>12</sup> <https://communitycrimemap.com/?address=Madison,%20WI>

<sup>13</sup> Noise Pollution and Violence, Timo Heer, <http://www.lse.ac.uk/GranthamInstitute/event/noise-pollution-and-violence-timo-heer/>

frequency in which noise from fighter jets will cause dogs to panic within a 3-miles area around Truax Field.

## **16. Vibrations Impacts on People and Structures**

*The NEM should be updated to explain the predicted vibration impacts of noise on people and structures.*

Besides the noise that people hear, there are the vibrations and shaking of their bodies and homes. While there are already vibration impacts from the current F-16 fighter jets and helicopters, the vibration impacts are expected to worsen with the incoming F-35 fighter jets.

In 2021, Safe Skies reported the results of its F-16 Noise Survey and received the following comments from local residents concerning the vibrations from current F-16 fighter jets:<sup>14</sup>

- *I have been having a peaceful afternoon in the garden when the jets fly over and shake the ground.*
- *My home is not within the noise zone area that authorities claim are and will be most affected by the military jets, yet many times my house shakes and I cannot hold a conversation outside OR INSIDE MY HOME due to the aircraft noise.*
- *Our windows rattle and there have been several occasions where the entire house shakes and once when I worried the large window in the front of my house was going to break when the jets were flying low.*
- *The current fighter jets often shake the walls of my home, and I have to wait for them if I am on the phone or in a meeting because of the noise.*
- *The jets sometimes shake my dining room chandelier and the glasses in the cupboards. My kids cover their ears and my dog runs for cover.*
- *Sometimes it's so loud the walls seem to shake and it hurts my ears.*
- *There are times when pictures on my walls shake and the windows rattle when military planes fly over my home.*

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<sup>14</sup> <https://www.safeskiescleanwaterwi.org/f-16-noise-survey-results/>

Regarding the vibration impacts of the incoming F-35 fighter jets, here is the experience of residents in Vermont as documented by a reporter for the Madison newspaper Isthmus: <sup>15</sup>

*Jean Saysani lives in Winooski, just north of the Burlington airport, and on one of the F-35 flight paths. More than 7,000 people live within Winooski's 1.5 square miles and 40 percent of the city is in the F-35 noise exposure zone, an area deemed incompatible for residential use by the federal government and eligible for mitigation.*

*Saysani first heard an F-35 when four flew into Burlington in June for an unscheduled landing. "It feels like a buzz in your soul. It's not just your ears. It shakes your organs," says Saysani. "You can read about decibels and afterburners. But it's all pretty worthless until you feel it for yourself."*

also:

*Gary Deforge, who has lived within sight of the Burlington runway for 20 years, says noise from the military jets is disruptive.*

*"Especially when they take off three, four in a row. Whole house shakes," says Deforge, who was burning wood in a fire pit when Isthmus stopped by his home. "Can't hear anything if you're on the phone until they're gone."*

## **17. Property Value Reduction due to Noise Levels**

*The NEM should be updated to predict the reduction in property values due to the increase in noise.*

There is a documented reduction in property values due to an increase in aircraft noise. Research suggests a 0.6 to 2.3 percent decrease in property value per decibel increase of cumulative noise exposure." <sup>16</sup> The NEM should be updated to determine the current property values within 3 miles of Truax Field and estimate the reduction in values due to the increase in noise levels from the proposed F-35A fighter jets.

## **18. DRCA History Providing Noise Mitigation**

*The NEM should be updated to explain the history of noise mitigation strategies implemented by DCRA.*

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<sup>15</sup> <https://isthmus.com/news/cover-story/burlington-opposed-f-35s-but-got-them-anyway/>

<sup>16</sup> <http://socnw.org/pdf/Effects%20of%20noise%20on%20property%20values%20summary.pdf>

The last noise evaluation conducted by the county airport was in 1996.<sup>17</sup> At that time, over 2,000 households were found to be living within the 65 dB DNL but received little if any noise mitigation.<sup>18</sup> There are hundreds of homes that have received “avigation easements” which provided no relief from noise. The NEM and Noise Compatibility Program should provide a history of the noise abatement strategies of DCRA so we can compare with options available to residents today.

## **19. Noise Monitoring**

*The NEM and Noise Compatibility Program should provide noise monitoring to determine the actual noise exposure of residents.*

The EIS noise analysis is based on modeling and is speculative. Noise monitoring would provide accurate measurements to assess short and long-term noise exposure. Examples of noise monitoring systems in use at other airports should be provided.

## **20. Address the F-16 Fighter Jet Impacts Described by Madison Residents**

*The NEM and Noise Compatibility Program should explain how they will resolve the noise complaints they were submitted by Madison area residents in response to Fighter Jet Noise Survey conducted by Safe Skies in 2020 and 2021.*

In 2021, Safe Skies Clean Water Wisconsin released the results of its Fighter Jet Noise Survey.<sup>19</sup> At that time, over 500 Madison residents responded to the on-line survey to explain how their lives and businesses are affected by noise from current Air National Guard F-16 fighter jet training flights based at Truax Field.

The loud, shaking roar of the fighter jets passing over the rooftops of city neighborhoods generated heartfelt responses from a wide variety of people living and working beneath the flight paths. Responses were submitted by grandparents, teachers, therapists, musicians and many people who now working at home during the COVID-19 pandemic.

Here are excerpts from their responses:

*“kids cover their ears, everything I’m doing comes to a halt, I have to stop conversations, have to stop teaching, scares the little kids, detrimental to my health, my entire body tenses up and my heart starts racing, feel afraid of the jets, dog went crazy barking, my house shakes, windows rattle, utterly jarring, I*

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<sup>17</sup> Federal Aviation Administration, Record of Decision, Dane County Regional Airport, Madison, Wisconsin, June 1996, [http://www.faa.gov/airports/environmental/records\\_decision/media/rod\\_madison.pdf](http://www.faa.gov/airports/environmental/records_decision/media/rod_madison.pdf)

<sup>18</sup> <https://sasyna.org/wp-content/uploads/attachments/letter-to-joe-parisi-with-airport-noise-control-recommendations-8-oct-12.pdf>

<sup>19</sup> <https://www.safeskiescleanwaterwi.org/fighter-jet-noise-disrupts-lives-children-and-working-from-home/>

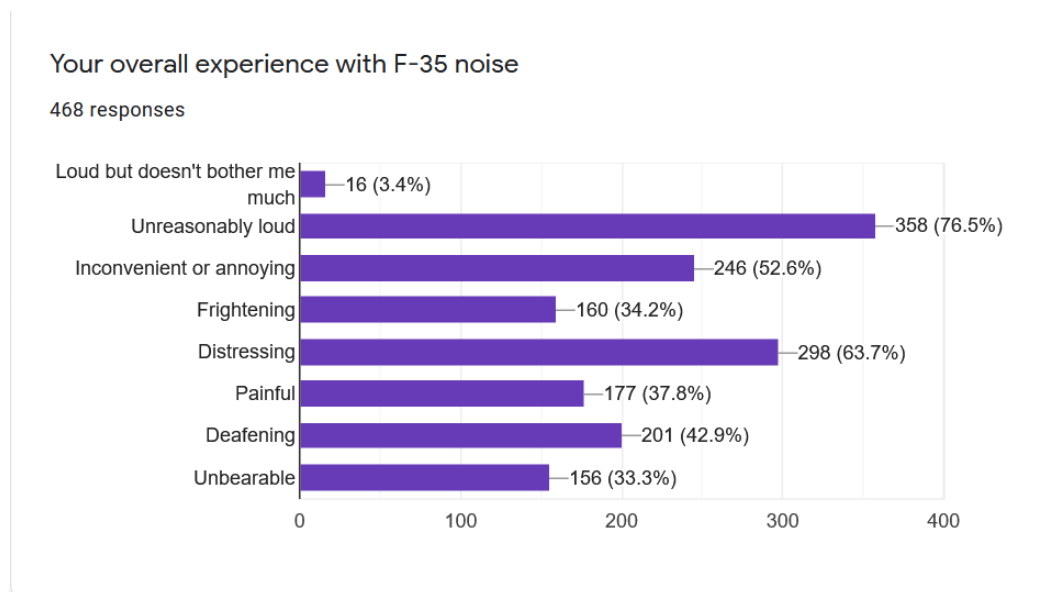
*can't even hear with my noise-canceling headphones, mute out of meetings, negative impact on my income and career, have to stop talking and pause conversations, wakes me up and disturbs my sleep, people comment on how loud they are, impossible to make out dialog, suffers from PTSD, always startled and distressed, "You learn to live with this?", impossible to just continue any activity, reminds me of every innocent soul killed in a bombing in my home country, should be at least 25 miles away from any residential area, pausing conversation awkwardly for at least 20 seconds sometimes longer, set off the baby monitor, stop in the middle of important recording sessions, plug my ears to prevent hearing damage, grandchild holds her hands over her ears, shake my dining room chandelier and the glasses in the cupboards, causing broken windows and items falling off shelves, annoyed, not some patriotic presence, part of the terror of war"*

## 21. Address the F-35 Fighter Jet Impacts Described by Burlington Residents

*The NEM and Noise Compatibility Program should explain how they will resolve the noise complaints they were submitted by Burlington, Vermont area residents describing the effects of the F-35 fighter jets which have already been deployed to the community.*

The Cancel the F-35 web site reviewed complaints submitted in Burlington, Vermont after the F-35 fighter jets had arrived. It said:

*More than 1,650 submissions to four F-35 Report and Complaint Form surveys since March 2020 have gathered the facts showing that the F-35 training flights amidst densely populated cities cause pain, injury, distress, trauma, and suffering on a mass scale. Here is one of the graphs from the Summer 2020 survey:<sup>20</sup>*



<sup>20</sup> <https://cancelf35.substack.com/p/facts-show-pain-injury-and-distress>

In 2020, the VTDigger, a Burlington newspaper, reported about the experience of local residents after one year of F-35 fighter jet operation in its article, *Panic attacks. Ringing ears. Shaking walls. Happy 1-year anniversary to the F-35s.*<sup>21</sup>

Here are impacts reported by area residents:

- *The ringing in Amanda Lavertu's ears didn't exist until the F-35A Lightning II aircraft arrived. "It's been loud. Very loud," Lavertu said, who lives near the Winooski traffic circle. When the jets fly over, they shake the walls of her shower. They petrify her older dog, who she said sinks to his belly and crawls toward cover when the jets roar over. He'll hide under the kitchen table or in a nearby closet.*
- *Megan Brazeil, who lives in Burlington's Old North End, said being outside when the jets fly over has become unbearable for her. "They're so loud, they trigger a physical response. Because I do have a panic disorder, and I have anxiety attacks or panic attacks. And they give me panic attacks," Brazeil said. "The first time, I thought I was going to have a seizure. I was freaking out." "It makes my insides rattle," she said. Brazeil said the other day she tried to go to North Beach to practice meditation and yoga to help ease her anxiety. But the sudden and unpredictable roar of the jets broke her peace. "They're so loud," she said. "And there's no escaping."*
- *Jeanne Keller, who lives on Bilodeau Parkway in Burlington with her husband, said the jets have "seriously degraded the quality of our lives." "The first problem is the sound. When they take off and land, it is qualitatively different than the sound of the F-16. It is a much deeper, more resonant sound," Keller said. Previously, Burlington International Airport housed a fleet of F-16 jets. Keller, who has lived in her home for over 30 years, said the sound difference between the two jets is clearly noticeable.*

The NEM and Noise Compatibility Program should explain how they will resolve these types of complaints from people who are currently experiencing the noise and vibrations of the F-35 fighter jets.

## **22. Noise Abatement Options include New Mission for WANG**

*As a noise abatement option, the NEM and Noise Compatibility Program should evaluate changing the mission of the 115<sup>th</sup> Fighter Wing at Truax Field from training fighter jet pilots to one of the other 44 missions available to Air National Guard bases.*<sup>22</sup>

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<sup>21</sup> <https://vtdigger.org/2020/09/27/panic-attacks-ringing-ears-shaking-walls-happy-1-year-anniversary-to-the-f-35s/>

<sup>22</sup> <https://www.goang.com/discover-ang/missions.html>

Similar to ANG bases in Iowa and Ohio, the mission of the Wisconsin Air National Guard could be changed to one that did not involve training fighter jet pilots so there would be no need for the F-35 fighter jets and the resulting NEM and Noise Compatibility Program.

### **23. Address Comments Submitted on NEM Prior to Public Comment Period**

*Comments that were submitted to DCRA prior to the public comment period on the NEM should be addressed.*

Prior to the official public comment period, DCRA received comments from the Madison teachers union, several neighborhood associations and community associations. The improvements to the NEM requested in these comments were not incorporated in the draft NEM. These comments should be addressed as part of the official public comment period.

[The letter, sent by leaders of Madison Teachers Inc, or MTI](#), was addressed to County Executive Joe Parisi. On top of calling for a larger study on the noise impacts of the F-35s, the letter also calls for noise measuring and abatement measures for area schools. The letter points to several studies that show a link between airport noise and decreased learning in school children. One study, [from a pediatrician in Vermont](#), found that children who live near F-35 jets see decreased reading skills and attention spans, and increased risk for anxiety, depression, and aggressive behaviors. Jeff Knight is the Executive Director of MTI. He said on WORT Radio, “We ended up doing some research, and there is some research that that kind of noise pollution can interfere with learning. (Our) request was that be included in any study on that noise from the jets. There’s another study that has to be done, and they want that study to include, and we agree, our board of directors voted on this as well, some consideration of the schools and how they will be impacted.”<sup>23</sup>

MTI is asking County Executive Parisi and the DCRA to take the many schools that sit within five miles of the Dane County Regional Airport into consideration when they update their Noise Compatibility Plan. These measures include extending the study area from three miles around the airport to five miles, studying the noise impact on all schools on the northeast side of Madison, and studying if low-income families and families of color would be disproportionately subjected to the noise. Their letter asked for noise abatement measures to be included for area schools, a flight tracking system of both commercial and Air National Guard planes so that they can see what planes are flying over schools, and to install noise monitoring systems in the schools near the airport. These noise monitoring systems would allow the schools to accurately monitor noise levels within the schools. MTI also asked for all schools on the northeast side to have noise abatement improvements made at the schools such as having air conditioning systems in place. Knight said: “The part about air conditioning is that, if you

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<sup>23</sup> <https://www.wortfm.org/mti-calls-for-robust-noise-study-of-f-35s/>

don't have schools that can be sealed up when the weather is hot, the noise is going to be louder. That by itself is an abatement measure. We would like to have that considered as part of any plan going forward." Knight said that he just hopes that the county takes their concerns into consideration. "It's that taking a step back and looking to see if there is evidence that this could impact our schools, and if there is evidence that this could impact schools with kids from low-income families and families of color. If that's not taken into consideration, that's just another form of environmental racism,"

## **24. Recognize Public Opposition to the F-35 Fighter Jet Deployment**

*The NEM and Noise Compatibility Program should provide a history of public opposition to the incoming F-35 fighter jets to help explain that the NEM and Noise Compatibility Program would not be necessary if the Air Force did not select DCRA and Truax Field for the squadron of F-35 fighter jets.*

It is important to document the public opposition to these jets in Madison. Of the 6,419 comments submitted on the draft EIS for five potential sites, 89% were submitted regarding Truax.

Examples of public opposition include the following:

### **Madison Common Council Opposition**

On September 19, 2019, the Madison Common Council adopted a resolution which concluded with the following statement:<sup>24</sup>

*"BE IT FURTHER RESOLVED, that the Madison Common Council requests that the Air National Guard reconsiders the selection of Truax Field as a preferred location until and unless the findings of the EIS are shown to misrepresent the significant environmental impacts to those living, working, and visiting the north and east sides of Madison."*

On April 3, 2020, after the Air Force did not change its evaluation of impacts on residents in the Final EIS, the Madison Common Council adopted a new resolution opposing the deployment of the F-25 fighter jets to Truax Field. This stated:

*Responding to the Final Environmental Impact Statement (EIS) for the Air National Guard F-35A Operational Beddown.*

*WHEREAS, on September 17, 2019 the Madison Common Council adopted RES-19-00588, "Responding to the Draft Environmental Impact Statement (EIS) for the Air National Guard F-35A Operational Beddown"; and,*

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<sup>24</sup> <https://madison.legistar.com/View.ashx?M=F&ID=7719760&GUID=A53F3230-1F25-42E7-93DC-69AB5E12D8E6>



*WHEREAS, in that resolution, the Madison Common Council requested that “the Air National Guard (ANG) reconsiders the selection of Truax Field as a preferred location until and unless the findings of the EIS are shown to misrepresent the significant environmental impacts to those living, working, and visiting the north and east sides of Madison”; and,*

*WHEREAS, the Final EIS released on February 18, 2020, confirms the significant environmental impacts identified in the Draft EIS, including substantially reduced quality and quantity of current affordable housing stock, decreased value of the property tax base, reduced opportunities for Transit-Oriented Development, ongoing soil, ground and surface water PFAS contamination violations by the ANG, significant adverse health effects that disproportionately affect children, residents who are low income and people of color; and,*

*WHEREAS, these impacts are contrary to the City of Madison’s values of equity, sustainability, health and adaptability as codified in our Comprehensive Plan adopted in 2018, the City’s Racial Equity and Social Justice Initiative, and undermine multiple long-term goals of City policy makers,*

*NOW THEREFORE BE IT RESOLVED, that based on the significant adverse impacts identified in the Final EIS to multiple neighborhoods in and around the north and east sides of Madison, the Madison Common Council opposes the selection of Truax Field in Madison, WI as a preferred location for the 5th Operational Beddown and requests that the Secretary of the US Air Force not move forward with a beddown of F-35A jets at Truax Field, and to remove Truax Field from future consideration; and,*

*BE IT FINALLY RESOLVED, that the City of Madison Clerk forwards this resolution to the Secretary of the Air Force, US Senators Tammy Baldwin and Ron Johnson, Congressman Mark Pocan, Wisconsin Governor Tony Evers, Wisconsin Senators Miller, Risser, Erpenbach, Wisconsin Assembly Representatives Sargent, Taylor, Hesselbein, Anderson, Subeck, Stubbs and Hebl, the Dane County Board & County Executive Parisi, and Dane County Airport Commission & Director.*

### **Dane County Board of Supervisors Opposition**

On September 19, 2019, 15 members of the Dane County Board of Supervisors signed a letter for submission to Matthew Donovan, Acting Secretary of the Air Force. It had the following closing statement:<sup>25</sup>

*“Supporting policies and practices that increase inequities is in direct conflict with the Dane County Board’s strong commitment to equity. Therefore, we, the undersigned members of the Dane County Board of Supervisors, oppose the location of the proposed squadron of F-35A fighter jets at Truax Field.”*

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<sup>25</sup> [https://drive.google.com/file/d/1cvGmaky9lpxxD-lcBDfG0pMlANfwo\\_JE/view?usp=sharing](https://drive.google.com/file/d/1cvGmaky9lpxxD-lcBDfG0pMlANfwo_JE/view?usp=sharing)

## **Madison Metropolitan School District Board of Education Opposition**

On September 23, 2019, the Madison Metropolitan School District Board of Education adopted a resolution opposing the F-35A fighter jets at Truax Field. The resolution concluded with the following statements:<sup>26</sup>

*WHEREAS, the draft EIS acknowledges the proposed action will have a disproportionate impact on people of color, and a City of Madison analysis further acknowledges that there are concentrations of poverty and people of color just outside the 65 decibel contour;*

*NOW, THEREFORE BE IT RESOLVED that the MMSD Board of Education concludes that the issues identified in the draft EIS will negatively impact learning in our schools, reduce the property tax base, decrease school enrollment in the affected area, and disproportionately affect children and families of color and people with low incomes; and,*

*BE IT FINALLY RESOLVED that the MMSD Board of Education requests that the Air National Guard reconsider Truax Field as a preferred location for the F-35A Operational Beddown unless the draft EIS is found to significantly misrepresent negative impacts on learning, children and the community.*

## **Northside Planning Council Opposition**

The Northside Planning Council represents neighborhoods on Madison's northside adjacent to Dane County Regional Airport and Truax Field. It adopted a statement opposing the beddown of the F-35A fighter jet squadron at Truax Field.<sup>27</sup> The statement includes the following comments:

*"This proposal is projected to create only 64 jobs, while making 132 homes uninhabitable, gutting property values, disrupting the education and development of our children and leaving thousands of people needing to move or bear what the military calls unlivable noise conditions... We call on our elected leaders to have the moral courage to speak out and join us in protecting the well-being of our local economy, environment and, most importantly, our community."*

## **SASY Neighborhood Association Opposition**

On September 10, 2019, the Schenk-Atwood-Starkweather-Yahara Neighborhood Association sent a letter to city and county officials opposing the beddown of the F-35A fighter jets at Truax Field. SASYNA

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<sup>26</sup> [https://go.boarddocs.com/wi/mmsd/Board.nsf/files/BG7K3Q4FEB29/\\$file/BOE%20resolution%20on%20F-35s%20at%20Truax-Final.pdf](https://go.boarddocs.com/wi/mmsd/Board.nsf/files/BG7K3Q4FEB29/$file/BOE%20resolution%20on%20F-35s%20at%20Truax-Final.pdf)

<sup>27</sup> <https://northsideplanningcouncil.org/f35s/>

represents the neighborhoods south of the Dane County Regional Airport and Truax Field. In its letter, the neighborhood association makes the following statement:

*“Our voice joins a powerful chorus of opposition. Article after article is appearing online and in print in opposition to siting the planes at the Truax base. Many of us have pored through the Environmental Impact Statement (EIS) over the past month. Were the public opinion outcry not enough, the EIS fills in the unsavory details that provide an empirical backing for all that opposition: significant noise impacts, outsized impact on low income and minority populations, and the rendering of some land as “incompatible” with housing. You know the details. It is impossible to read this and not conclude that some of the other proposed locations would be superior in the sense that a base location would negatively impact far fewer people. To welcome the F-35As to Madison is to invite further hardship on more people than ever before.”*

### **Emerson East Neighborhood Opposition**

On October 30, 2019, the Emerson East Neighborhood Association sent comments on the draft EIS. Emerson represents neighborhoods located west of Truax Field. They noted that their association is dedicated to improving our area as a place to live, work and recreate, with an emphasis on social and environmental sustainability.

In their comments they stated:

*“Our neighborhood association recently voted unanimously to oppose the siting of F-35A fighter jets in Madison, Wisconsin. All the available information, including our current experiences with F-16 flights, indicates that the impact of the F-35s on our neighborhood and others on Madison’s northeast side would be significant and negative.”*

Their reasons for opposing the F-35s include: the disproportionate impact on low-income households and communities of color; the disproportionate impact on children; limited, poor or no options for sound mitigation; the disproportionate impact on affordable housing; the likely reduction in home values; and, the need to address PFAS water contamination.

They concluded:

*“Therefore, the Emerson East Neighborhood Association urges the U.S. Air Force to remove Madison from its list of potential host sites for the F-35A fighter jets.”*