

Update on SoNA and PBN

Heathrow Community Noise Group (CNG)
Stephen Clark & David Gilbert

Recap of issues with SoNA previously identified

SoNA is used to set UK aviation policy and therefore needs to be a robust study and correctly analysed but the following issues have been identified;

- Major sampling issues;
 - did not plan <51dB L_{Aeq} ,
 - clustering 'choices' did not cover key routes with high annoyance levels such as the Easterly Detling route
 - compared to other SoNA surveys had high levels of social housing and flats
 - was surveyed in less annoying winter period but compared to summer noise modelling
 - surveyed those habituated to noise and avoided those experiencing increased noise from 2014 trials
- Subsequent choice of LOAEL (Lowest Observable Adverse Effect Level) based purely on L_{Aeq} with no apparent appreciation of numbers of highly annoyed people impacted below this level which would be ~50% of those highly annoyed
- Approach to identify most appropriate metrics to describe annoyance flawed (and seemingly more influenced to maintain existing policy from comments on draft reports)
- Was a static survey, ignoring potentially 6-9dB L_{Aeq} of airspace change impacts

A response from Heathrow was received on Monday – we will study if any satisfactory answers have been provided or whether substantial differences of data interpretation remain

Further SoNA Data Analysis

The full SoNA data set was recently identified from FOI requests

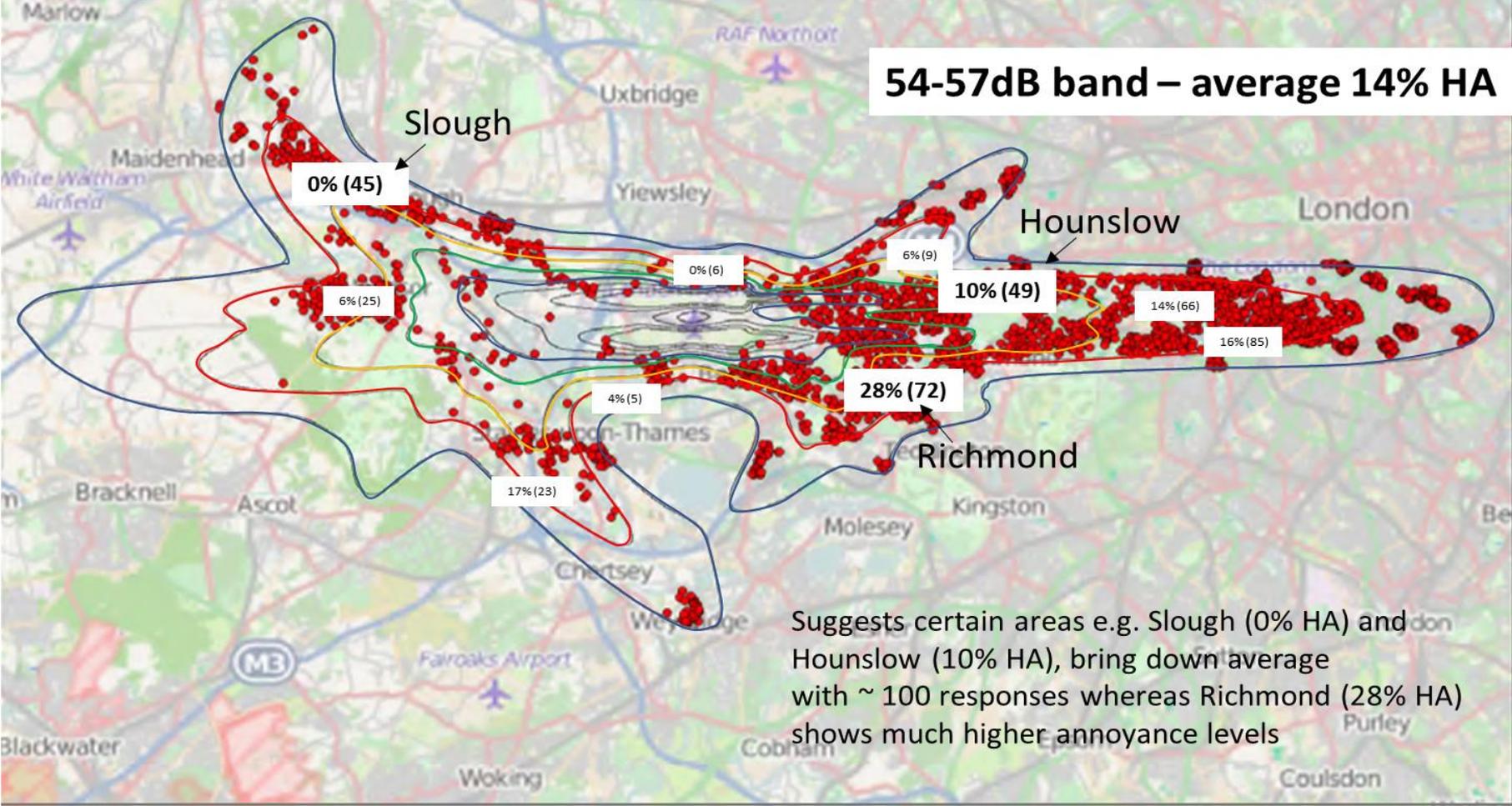
This is a 6MB data set with ~2000 lines each with the multiple survey questions responses, noise metrics and area/post code detail

Noise annoyance ‘% Highly Annoyed (HA)’ has been analysed for ‘local areas’ around Heathrow

Analysis shows;

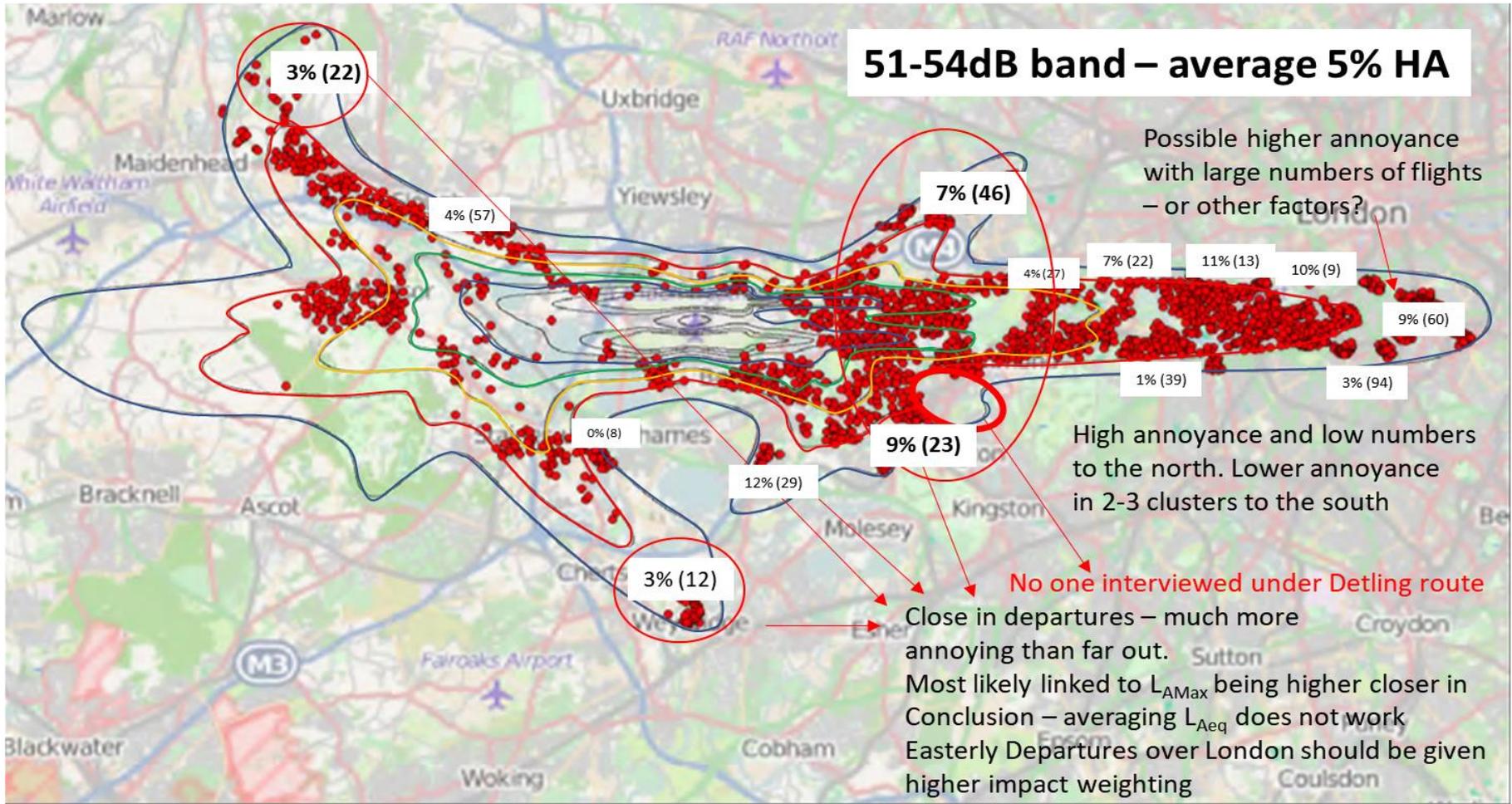
- An averaging approach too simplistic – there are wide variations between areas
- Annoyance from Departures cannot be described by simple L_{Aeq} metrics, at Heathrow people are more annoyed during easterly take offs, single mode metrics are likely to be more representative
- As different communities have different responses to noise annoyance – a ‘local’ approach should consider local area characteristics

New Heathrow local Analysis (1) 54-57dB L_{Aeq} Noise band



Key: %HA (numbers in borough in 54-57dB noise contour)

New Heathrow local Analysis (2) 51-54dB L_{Aeq} Noise band



Key: %HA (numbers in borough in 51-54dB noise contour)

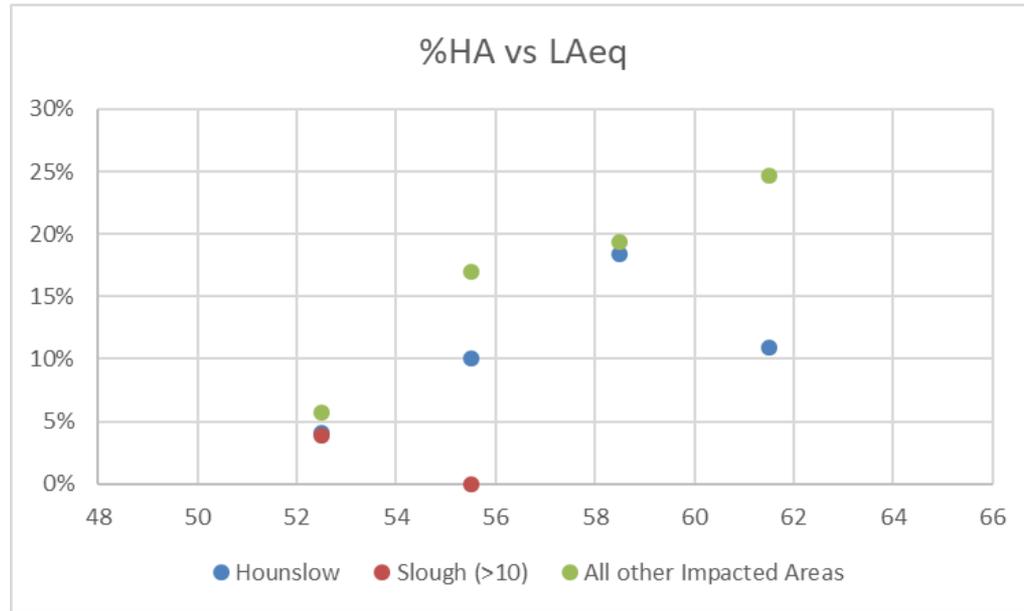
CNG Jan 2020

Update on SoNA and PBN. Stephen Clark and Dave Gilbert (Teddington Action Group). Heathrow Community Noise Forum 22/01/2020.

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Impact of different Areas on Heathrow results?

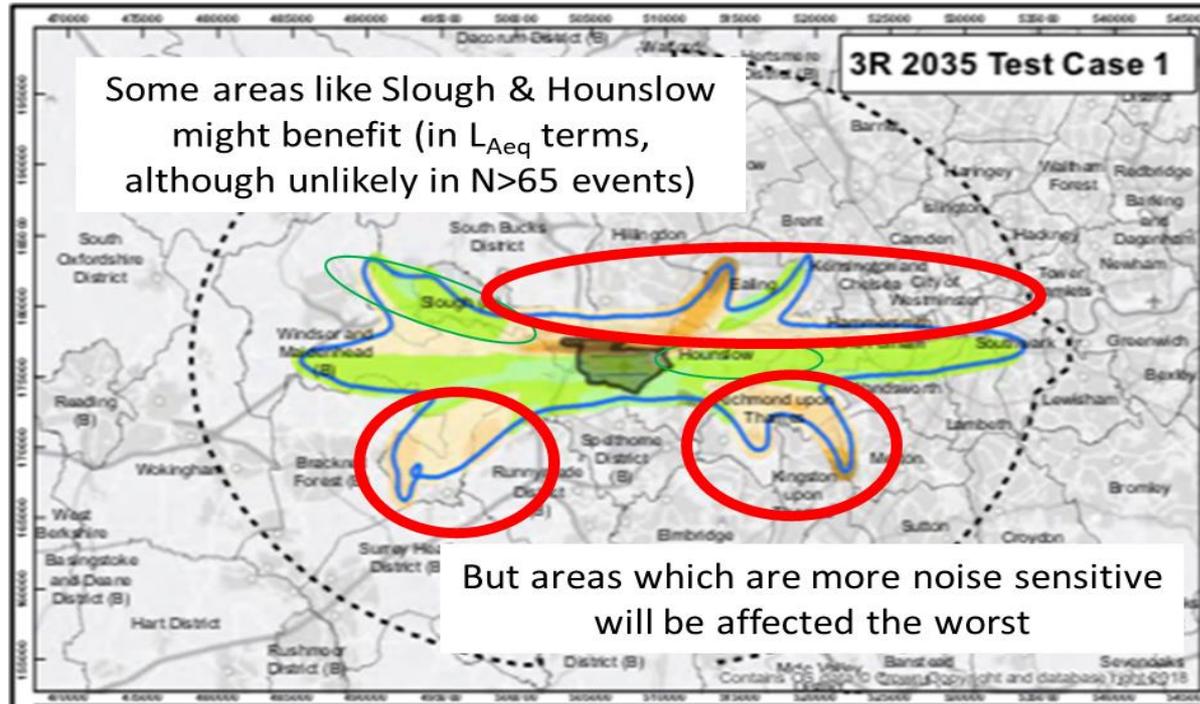
Hounslow & Slough
vs All Other Areas



- Is it reasonable that Slough and Hounslow with 400 responses - 25-30% of total SoNA weighted responses - have a potentially disproportionate weight on the UK's aviation metrics?

Different area impacts if Heathrow Expansion were to go ahead?

Base graphic from Heathrow consultation materials assumes significant improvements in fleet mix and unclear flight path usage



Key:
Blue line 51dB L_{Aeq} contour (note ~50% of people 'Highly Annoyed' live outside of this contour today and assumes annoyance does not increase with time – our view annoyance area is much bigger)
Green lower L_{Aeq}
Brown more L_{Aeq} vs base case

- Simplistic averaging approach to noise annoyance is not appropriate around Heathrow and London – areas show high divergence and local characteristics
- SoNA is not a local study it is an average of areas with a bias to those habituated to noise
- **Heathrow are proposing to increase Noise in areas where SoNA shows the greatest noise sensitivity**

CNG Jan 2020

PBN – update, January 2020

What Heathrow said in 2016 about PBN;

- The social impact of PBN trials in the UK has been enormous
- No environmental assessment of noise impacts has been undertaken

103 comment by: *Heathrow Airport Limited*

Whilst Heathrow Airport Limited fully supports airspace modernisation, this document does not support current UK CAA guidance and is not in line with current UK airspace projects such as LAMP. The time scale suggested here is unrealistic and could jeopardise these projects. In addition, as subsequent comments highlight, we have the following concerns:

- The Social Impact of PBN trials in the UK has been enormous, therefore this should be considered and not dismissed in one sentence.
- There does not appear to be an environmental assessment of this proposed change in terms of noise.
- The Benefit section takes no account of the cost of airspace consultation which results in an incomplete assessment.
- Mixed conventional and PBN operations are not supported by the UK CAA.

Consequently, this NPA is not supported by Heathrow Airport Limited.

Noted.

easa.europa.eu/sites/default/files/dfu/CRD%202015-01_0.pdf

The local evidence applicable to Heathrow

- Heathrow's PBN trials led to mass protest and opposition
- This led to the early abandonment of the trials
- Communities were in uproar well below the DfT's 51 dB L_{Aeq} LOAEL level
- Change in the noise environment had a massive effect
- Average noise metrics were not able to explain the level of reaction



WESTERLY AND EASTERLY DEPARTURE TRIALS 2014 - NOISE ANALYSIS & COMMUNITY RESPONSE

HEATHROW AIRPORT LTD

JULY 2015

There are no successful precedents over densely populated areas such as Heathrow anywhere in the world

Phoenix Noise



Mayor of Phoenix Greg Stanton and his representatives explain FAA's policy of disregard for United States citizens.

Boston Noise



U.S. Rep. Steve Lynch in dogfight with FAA over NextGen aircraft noise and pollution. Calls FAA most unresponsive agency in government.

Santa Cruz Noise



Santa Cruz attorney cites destruction of pristine natural habitat by FAA's dirty NextGen transportation system.

Washington, D.C.



Arizona Senator John McCain sends letter to FAA Administrator Huerta urging changes to noisy flight tracks.

California



California Bay Area Resident files lawsuit against Federal Aviation Administration for unbearable aircraft

Chicago Noise



Chicago political activist Jac Charlier challenges Mayor Emanuel to come out from hiding re: O'Hare jet noise.

San Diego Noise



San Diego taxpayers give FAA hell over NextGen aircraft noise and pollution. FAA sits stone-faced, deaf and mute.

Chicago



Chicago political activist John Kane says meeting with Mayor Rahm Emanuel over aircraft noise a waste of time.

Chicago



Convenient for Chicago Mayor Rahm Emanuel: Air traffic over his home delayed until 2021.

Chicago



Chicago residents sing their

New York Noise



N.Y. Rep. Grace Meng introduces "Quiet Communities Act of 2015" to benefit all communities across U.S.

New York



New York Congressman Steve Israel calls the FAA the "Federal Arrogance Administration."

Brooklyn Noise



Park Slope, Brooklyn resident says FAA and Port are greenwashing filthy NextGen air transportation system.

Air France



Air France sponsors Paris UN climate conference, but who are they really kidding?

Washington, D.C.



Washington, D.C. Congresswoman Eleanor Holmes

Chicago



Congresswoman Schakowski says if you are not at the table then you are baby on the menu re: aircraft noise.

Maryland



Maryland residents in for rude awakening from FAA's NextGen aircraft noise and aircraft pollution strategy.

Toronto



Toronto residents unite to fight for their airspace saying Nav Canada appears accountable to the airline industry.

Germany



German protesters flow into the streets opposition to airport expansion and aircraft noise and pollution.

Germany



Protesters protest against aircraft noise in the busy airport terminal. Loudly, just like the jets disturb their peace and quiet.

Chicago residents protesting living beneath constant air traffic and loss of quiet enjoyment from FAA's NextGen.

Chicago



Chicago residents join forces to reduce property tax due to O'Hare aircraft noise and FAA's NextGen.

Santa Cruz



Santa Cruz Save Our Skies: "An incessant assault... you feel helpless... you can't stop it... you can't go outside"

Chicago



Chicago residents break U.S. record, logging more than 1 million O'Hare noise complaints!

Charlotte, N.C.



Charlotte, North Carolina residents bombarded by FAA NextGen noise and pollution.

is a bad neighbor for Queens' residents.

New York



New York State Senator Tony Avella from Queens to Federal Aviation Administration: "This is not acceptable!"

Washington, D.C.



New York's U.S. Senator Charles Schumer sells out New Yorkers and all of America in his 2012 FAA Reauthorization bill vote.

New York



Queens, NY jet engine sound monitors reveal residents suffer from levels of jet noise considered unhealthy.

New York



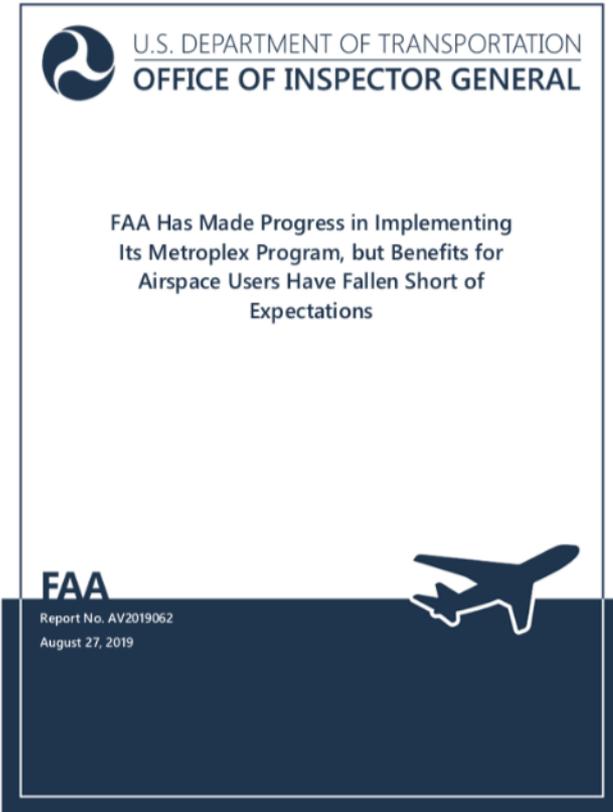
NY Councilman Dromm together with Queens environmental groups, criticize FAA NextGen aircraft noise and misery.

New Zealand



Auckland, New Zealand families starting to feel the pain and misery of living under NextGen aircraft noise flight tracks.

Recent developments in US – 27 August 2019



US Government Office of Inspector General published its report on NextGen (PBN)

Key findings;

- After 10 years only 7 out of the 12 Metroplex area programs have been completed
- Delays are largely due increased community concerns about aircraft noise
- The financial benefits are less than half the FAA estimated

Now US Senators and Congressmen are getting involved

Congress of the United States

Washington, DC 20510

December 20, 2019

Hon. Stephen M. Dickson
Administrator
Federal Aviation Administration
800 Independence Avenue SW
Washington, DC 20591-0004

Dear Administrator Dickson:

We are writing on behalf of hundreds of thousands of Americans who continue to suffer the effects of the FAA's NextGen program.

As you know, since its introduction of Metroplexes in 2010, the FAA has concentrated flight paths over neighborhoods, schools, and national monuments in order to make the airspace more efficient. This heavy air traffic produces constant noise and particulate matter that has yet to be deemed safe by the FAA or any other government agency. The noise created by the frequency of flights – in some areas beginning before 6:00 a.m. and continuing every few minutes until midnight or later – has had a devastating impact on residents' quality of life. The FAA has yet to make any significant changes to the disruptive flight paths. In fact, communities, cities and states around the country, including in and around the District of Columbia, Phoenix, Boston, San Francisco, Los Angeles, Seattle, Denver, New York, and the State of Maryland, have taken legal action as a result of the FAA's failure to adequately address community concerns.

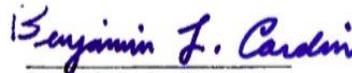
We are concerned that the NextGen program has failed to meet the bare minimum standards for success. Currently, the FAA continues to introduce and implement concentrated flight procedures with Performance Based Navigation throughout the country. The FAA boasts profits for airlines, shipping companies, and other industry stakeholders^[1], 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.

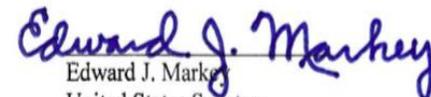
We would appreciate your review of the enclosed report and a detailed timeline of your plan to implement procedures that will mitigate harm to the communities we represent. We look forward to your prompt response.

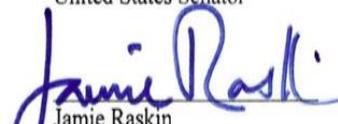
Sincerely,


Chris Van Hollen
United States Senator


Kamala D. Harris
United States Senator


Benjamin L. Cardin
United States Senator


Edward J. Markey
United States Senator


Jamie Raskin
Member of Congress


C.A. Dutch Ruppertsberger
Member of Congress

This is what they are saying;

- Heavy air traffic produces constant noise and particulate matter that has yet to be deemed safe by the FAA or any other government agency
- Noise created by the frequency of flight - beginning before 6.00am and continuing every few minutes until midnight or later - has had a devastating impact on residents' quality of life
- The NextGen program has failed to meet the bare minimum standards for success
- The burden of noise, health risks and declining property values falls on the backs of hard-working Americans
- New flight paths are required to significantly disperse air traffic and raise aircraft altitudes

Key conclusions for Heathrow

- US (and other) experience proves concentrated PBN is unacceptable over residential areas
- Heathrow is situated in one of the most densely populated areas around an airport in the world
- The airport has insufficient air space to make PBN acceptable through respite - there is complete absence of proof that effective respite can be achieved
- It would be negligent to ignore irrefutable international (and local) experience and introduce concentrated PBN flight paths around an expanded Heathrow

- Hardly any UK politicians are aware of the issues raised in this presentation - mainly because they have not been told about them
- Who will be held accountable for imposing unacceptable living conditions on millions – DfT, CAA, NATS or Heathrow?