Westchester County Airport

Airport Environmental Issues

Westchester County Airport (HPN) is located in the watershed of the Kensico Reservoir, which supplies over 9 million people with drinking water - 90% of New York City and 85% of Westchester. Additionally, HPN is surrounded by residential neighbors who are adversely impacted by air and noise pollution caused by the airport.

Fortunately, the airport has ample funds for projects that will help mitigate its environmental impacts. The airport has $22 million in its fund balance and can apply for FAA Airport Improvement Program grants that can and have been used to fund environmental projects. Additionally, airport funds may be used for determining airport policy, including hiring outside counsel.

Water pollution

The county should reinstate the airport's groundwater monitoring program. There are two variants of this program: the full program that ran from 2001-2011 that tested 57 wells, and a limited program with reduced cost developed in 2016. Neither of these programs include tests for PFOA or PFOS, which were found at levels above EPA guidelines in a private well near the airport in July 2016. The groundwater monitoring program should be expanded to include all harmful pollutants that might reasonably be found at airports, including PFOA & PFOS.

Stormwater runoff should be better controlled. The county was fined in 2017 for exceeding the allowed discharge of deicing fluid into Blind Brook. The county should immediately commence construction on improvements to the deicing fluid collection system and stormwater retention basins to minimize the amount and rate of deicing fluid flowing into Blind Brook. Reportedly, work on the stormwater retention basins has been delayed by the Army Corps of Engineers because the basins have become considered protected wetlands. The county should research ways to streamline the continued maintenance of the stormwater retention basins. Additionally, the county should consider the feasibility of connecting the airport to existing sewer systems to avoid the current practice of hauling collected deicing fluid by truck for processing.

Noise pollution

Noise pollution from HPN is a highly conspicuous environmental harm. Anecdotal evidence from some communities report reductions in property values because of the prevalence of aircraft noise. The noise impact of the airport runs counter to the suburban and exurban character of its neighbors. Noise pollution may also have negative health and learning effects.
Purchase College is located immediately adjacent to HPN, while Purchase Elementary and Manhattanville College are located under the departure path for runway 16.

The FAA's 65 DNL (Day-Night Level) standard for “significant” noise impact was selected with flawed methodology from a 1978 study and reflects the FAA's mission to maximize airport capacity.\textsuperscript{15} DNL is an average of noise over a 24 hour period and is inadequate to capture the disruption caused by particularly noisy aircraft or periods of intense air traffic. Furthermore, the 65 DNL level is far too high to be considered a threshold for significant impact. As a case in point, consider the small area around LaGuardia Airport that was deemed subject to significant noise in its 2016 noise study.\textsuperscript{16}

While the county's ability to address aircraft noise is limited by federal law (primarily the Airport Noise and Capacity Act), there are numerous steps the county can take to mitigate noise pollution:

- Include SENEL (Single Event Noise Exposure Level) in airport noise statistics. This metric is used effectively by airports like SNA (John Wayne Orange County) to capture the impact of particularly noisy aircraft. HPN should aspire to put in place a noise abatement program as comprehensive as SNA's.
- Fund maintenance and replacement of noise monitors that have reached end of life.
- The existing noise abatement procedures and the VRFF “curfew” are regularly ignored. The county should promote these policies by:
  - Prominent signs describing noise abatement procedures and the VRFF at each runway end.
  - Prominent signs describing noise abatement procedures and the VRFF at access points to the airport, such as key-code protected gates and FBO doors.
  - Prominently display pamphlets at FBOs describing noise abatement procedures and the VRFF, and enlist FBOs in promoting the procedures to transient pilots.
  - Require based pilots to acknowledge & understand noise abatement procedures and the VRFF prior to issuing them security passes. This could take the form of a short written quiz to verify knowledge.
  - Coordinating with the FAA to the maximum extent possible to include noise abatement procedures and policies in the ATIS, the A/FD, and other publications.


- Work with ATC to ensure aircraft strictly adhere to departure and approach procedures, including speed and minimum altitude restrictions. This will promote both safety and noise abatement.

- Consider advocating for a steeper glidepath to increase the altitude of landing aircraft over populated areas. The approaches to runways 16 & 34 are currently set at 3 degrees. Increasing this to 3.5 or 4 degrees could reduce noise and would be within reasonable limits (many major airports have glide slopes between 3.5 and 4 degrees, and London City operates safely with a 5.5 degree glide slope). However, the increased drag necessary for large jets to fly a steeper approach may obviate any noise benefit from the increased altitude.

- Publicly post identities of noise and curfew violators. Today, the airport sends the owners of aircraft who violate restrictions or cause noise complaints a polite letter which is easily ignored. Combining this with a program to publicly “name and shame” violators may help promote compliance.

Additionally, the county should coordinate with other communities around the country that are affected by aircraft noise to lobby the federal government to allow local noise and operating restrictions. Such restrictions are already in place at privately owned airports and at grandfathered airports like SNA and Teterboro. These restrictions have not adversely affected safety or the economic vitality of the subject airports. They are also not a burden on pilots as pilots are already expected to research and comply with local procedures, temporary flight restrictions, and weather conditions on each flight. The current regime where no limitations are allowed has left closure of entire airports as the only recourse available to communities that refuse to tolerate unlimited airport noise. Movement towards closures like this are progressing around the country, particularly at busy airports serving private jets like SMO and HTO. A compromise solution with reasonable standards approved by the community will preserve the long-term feasibility of the airport as a good neighbor to the benefit of both residents and aircraft operators.

**Expand noise monitoring and implement air pollution study**

To our knowledge there has never been a study of the airport's effect on air pollution. This is especially relevant in the wake of a 2014 study – the most comprehensive of its type - showing adverse medical effects caused by aircraft exhaust in communities up to 10 miles away from LAX.\(^\text{17}\) Flight paths from HPN take aircraft over densely populated areas, including Purchase Elementary School, and the county should evaluate the health effects of aircraft using HPN.

The county should consider expanding and/or updating the airport’s remote monitoring network to reflect changes in land use since the last update in 2000. The noise monitoring system should report data that better reflects the perceived noise impact by including metrics like SENEL and average noise over short periods of time (such as the peak 5, 15, and 30 minute DNL/CNEL). The study should also evaluate the noise impact of the airport relative to ambient noise. This captures the impact of airport noise on different communities better than a uniform standard that equates urban and suburban areas. Placement of the noise monitors should also be guided by residents' noise complaints to investigate the cause of those complaints, rather than assuming that noise levels below 60 DNL / CNEL are insignificant. The county should promote the noise complaint webpage and hotline both directly (i.e. through legislators' mailing lists) and through local governments to get an accurate picture of areas bothered by airport noise.

The county should consider developing an FAA approved runway use program. A runway use program would designate a minimum noise impact runway for use in calm or light winds and could include noise abatement procedures. If the runway use program is approved as a “formal” program by the FAA, participation is mandatory for airport users. Even an “informal” program would be useful, however, as air traffic control at HPN is currently ignorant of and indifferent to the airport’s noise abatement procedures.18

**Greenhouse gas mitigation**

The county is required to keep runway approaches clear of obstructions, including trees. Past practice has been to trim any trees that grow too tall. However, the county should consider alternatives to tree trimming, like creating a displaced runway threshold. This alternative would satisfy FAA requirements while preserving the suburban and exurban character of the airport’s neighborhood and preserving a vital sink for carbon dioxide.

The airport is a tremendous resource for solar PV electric generation. Conditions for solar PV are nearly ideal because the airport must be kept clear of trees and occupies a large amount of flat land. In addition to the roofs of buildings at the airport, the airport grounds should be evaluated for solar PV potential. Such an installation would need to be approved by the FAA, but airport solar projects are increasingly common. Solar panels can even be installed in close alignment with runways, like at Chattanooga, TN. The area between runway 11/29 and taxiways C, L, and F, for example, would support 4 to 5 MW of installed capacity generating 6 to 8 GWh of electricity per year. Solar PV could also be a source of operating revenue to the county if the county owns & operates the solar panels and earns more from the produced electricity than it pays the airport to lease the land (at fair market value).

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18 Westchester Aviation Association ATC/Pilot Quarterly Meeting, September 18, 2017
Airport capacity

Current federal law prevents the county from limiting air traffic at HPN. Once the county makes any capacity improvements or leases airport facilities, it loses nearly all control over the volume, type, and timing of traffic at HPN. Therefore, the county must carefully evaluate all new leases, lease modifications, lease renewals, and construction projects, including maintenance projects, for their long-term impact on capacity and volume, type, and timing of airport traffic.

For example, a project to repave runway 16/34 is scheduled for the summer of 2018. Before proceeding with this project, the county should carefully evaluate whether it is necessary, as well as its effect on aircraft using HPN now and in the future. Under current federal law, the county may not explicitly limit the size, noise, times, or frequency of aircraft using HPN. However, the condition of the airport and the available facilities serve as a natural limit on air traffic. If the county is committed to keeping HPN small, it must view construction and maintenance of airport facilities with a skeptical eye.

The county should consider ways to fund airport capital projects through airport revenues instead of by accepting FAA grants. FAA grant assurances severely restrict the county's ability to make policy at the airport. If the airport can be made self-sufficient without relying on a stream of FAA grants, the county will have additional flexibility to achieve its goals once existing FAA grant assurances expire.

Airport Master Plan

The update to the airport master plan remains pending. The only substantive public hearing on the plan was held on July 27, 2017, where 28 of 29 speakers expressed major concerns or outright opposition to the draft master plan. By the Astorino administration's own admission, no input from the general public was collected prior to this hearing, which was held after the plan was deemed “substantially complete.”

The draft airport master plan runs counter to longstanding county policy. Board of Legislators Resolution 245-2003 states that “the policy of the Westchester County Board of Legislators is and continues to be one of supporting no increase in the total capacity of the Airport's runways, taxiways, ramps, gates, hangars, terminal, motor vehicle parking areas, or access roads, in order that we may protect our fragile environment, including the drinking water for almost nine million people.”

The airport master plan is recommended but not required by the FAA. It is worth noting that FAA grants for the airport have continued at a steady pace despite the age of the current 1986 master plan.
DY Consulting ("DY"), the contractor responsible for the master plan, has done a highly suspect job. The draft contains numerous falsehoods regarding constraints on airport development.\textsuperscript{19} The draft also contains numerous internal contradictions\textsuperscript{20} and ignores the Terminal Use Regulations ("TUR") in county law. Portions of the master plan's chapter 2 on environmental protections are copied from other sources. Their evaluation of greenhouse gas emissions and impacts to surface water rest entirely on naked assertions.\textsuperscript{21, 22}

For these reasons, the county should halt work on the current draft master plan. While the master plan is an opportunity to determine the county's vision for the future of the airport, the current recommendations should be discarded and the process restarted with real public input.

If the county chooses to pursue a master plan update, it should do so with the understanding that capacity expansion is a dangerous choice given federal laws limiting local control of air traffic. A master plan with no capacity expansion that is oriented towards protecting the environment would be equally valid and could be more in line with the public's vision for the airport.

**Increase accountability and transparency**

Increasing the transparency of the airport would make the airport a better neighbor. The county should:

- Make historic “Airport Monitor” reports available on the website. Currently only the

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\textsuperscript{19}Westchester County Airport Draft Master Plan, Chapter 3, page 3-22  
\textsuperscript{20}See Rye Brook's comments on the Airport Draft Master Plan, http://www.ryebrook.org/cit-e-access/webpage.cfm?TID=31&TPID=16217  
\textsuperscript{21}Westchester County Airport Draft Master Plan, Chapter 5, page B-3  
\textsuperscript{22}Westchester County Airport Draft Master Plan, Chapter 5, page B-10
latest report is published and there is no automated way to be sent each month's report as it becomes available.

- Make current & historic AEMS documents available on the website. These documents include groundwater monitoring reports, environmental goals & objectives, and progress on those goals.

- Improve response times to noise complaints and make the noise and flight track database accessible to the public. Highlight existing public outreach tools and reports on the website instead of burying them behind menus and links in large amounts of text.

- Publish the Quarterly Available Capacity Report used in the auction for terminal ramp allocations in accordance with §712.462 (5) (b) (ii). Publish the results of auctions so residents know when to expect additional commercial air traffic.

Audit conformance with leases, laws, and policies

Leases

The county should enforce the terms of each of its leases at the airport. These terms include:

- commitments to comply with the airport's environmental controls, including effluent and noise restrictions

- allowable activities, including whether aircraft maintenance is allowed, the types of services provided, and what types of aircraft operations and operators (i.e. charter or management of non-owned or non-based aircraft).

- maximum ramp weights and restrictions on the size of aircraft that may be based at the tenant's facility

- commitments to serve “Light GA” users (generally understood to mean aircraft below 12,500 lbs)

- restrictions on the ability to sell particular types of fuel

- promises to pay local property taxes

Many of the leases include provisions that allow certain uses with the consent of the county and the airport manager. The county should review all consents that have been granted and weigh future consent carefully to ensure that the expanded uses are concordant with the county's vision for the airport.
Terminal Use Regulations

The Terminal Use Regulations (TUR) in §712.462 are an important element in limiting the size and frequency of airline operations at HPN. However, they may be subject to legal challenges in the future. Airport manager Peter Scherrerer said that the current agreement with the airlines is slated to end in 2024. It is unclear what agreement was struck, given that the TUR is county law. The county must determine when, and if, the TUR are subject to legal challenges. If the TUR needs to be defended, the county should retain Peter J. Kirsch, who has successfully defended the TUR in the past. The county should strive to make the TUR permanent to avoid having to repeat this process in 10 or 20 years. Additionally, the county should secure guarantees from airlines that they will not challenge the TUR and should require any new airlines serving HPN to give the same assurances.

The TUR are in place only because the county successfully argued that they originated from the early 1980s, despite not being codified until 2004, and were thus grandfathered under the 1990 Airport Noise and Capacity Act. It is unclear whether changes to the TUR will render them invalid by losing their grandfathered status. It would be prudent to definitively answer this question. The standards in the TUR conflict with some aspects of airline operations. If the TUR could be safely amended, the county can undertake a truly collaborative process to bring the airlines and airport neighbors together to create win-win improvements in the TUR. For example, the TUR could be amended to directly regulate noise, maintain restrictions on frequency of flights, and ease restrictions on passenger volumes. On the other hand, if the TUR cannot be changed, the County Legislature’s position on non-expansion will be bolstered and a strong case is made for federal lobbying towards change in ANCA conducted jointly by government and airline representatives. Either result will bring traditional adversaries together to work towards a better approach for managing airline traffic.

A review of slots and scheduled flight times suggest that airlines may be violating §712.462 (5) (j) (iii) requiring that “the scheduled arrival and departure times must allow for the aircraft’s passengers to be enplaned and/or deplaned within the half hour for which the Qualified Airline holds a Ramp Allocation and Passenger Allocations.” For example, we note the following discrepancies in May 2017 based on the results of the April 14 lottery:

- DL3988 from DTW to HPN is scheduled to arrive at 11:55a but the operating airline held a 12:00-12:29 slot, not a 11:30-11:59 slot.
- JetBlue held 1 spot for about 100 passengers in each of the 5 slots from 13:00-15:29. During these 5 slots, they had 5 scheduled flights: B6 1494 arriving at 13:26, B6 1258 arriving at 13:59, B6 495 departing at 14:02, B6 1447 departing at 14:59, and B6 1168 arriving at 15:00. Based on this schedule, JetBlue was not in compliance with §712.462 (5) (j) (iii) because the scheduled times of B6 1494, B6 1258, and B6 495 do not allow enough time for the enplaning and deplaning of passengers within the assigned slot.
If the TUR is vulnerable to legal challenges, the county should consider being lenient with compliance with the TUR to discourage challenges, provided that the violations are not egregious, like in the discrepancies above.

**Terminal improvements**

A member of the public commented that the county should strive to renovate the terminal to make it a showpiece. If the county chooses to make improvements, it should use the opportunity to extract commitments from airlines to obey and refrain from challenging policies such as the TUR, the VRFF, noise abatement procedures including restrictions on reverse thrust, and/or a formal runway use program. The county will need to consult aviation counsel to determine what is possible under current federal law.

It is worth noting that the airline terminal is subject to spikes in activity during the 67 days per year that the TUR does not apply. Sizing the terminal based on peak utilization is an expensive and inefficient use of resources. Some crowding during peak travel periods is inevitable at any airport and should be accepted. Furthermore, crowding at other times of the year is exacerbated by airlines failing to obey the TUR, because part of the TUR’s function is to limit the rate of passengers using the airline terminal.

**Airport privatization**

Privatization of the airport runs counter to the public’s interest in minimizing the environmental impact and maximizing the accountability and transparency of HPN. Introducing a profit motive – whether for the county or for a private operator – will likely subordinate environmental concerns. Additionally, small actions have major consequences because the county is unable to control usage of the airport once facilities are built or leases are signed. Thus we recommend against any privatization of the airport.

That said, evaluating former CE Astorino’s plan to lease the airport to Macquarie Infrastructure Corporation (“MIC”) reveals numerous serious flaws. While we do not have access to the text of the proposed lease, a review of the press release and the criteria used for selecting the bid shows the following:

- The proposal is actually worth about $224 million, not $1.1 billion. $550 million of the deal is capital expenditures, which the FAA generally pays 90% of the cost of. Of the remainder, about 70% is payments for police that the airport already pays out of its revenues today.

- Environmental considerations were a tiny portion of the selection process. They were not specifically called out in the quantitative scoring system. Instead, bidders’ “commitment to the environment and to robust community relations” was a small portion of the “general considerations” score, which was itself less than 17% of the final score. It seems safe to say that environmental considerations were less than 8%
of the final score, which is simply ludicrous given the airport's location and environmental sensitivity.

- The pollution insurance required is wholly insufficient: $5 million per incident and $10 million total. This is not enough to buy one bottle of water for each person served by the Kensico Reservoir, much less remediate any pollution of the reservoir or nearby wells. The state's Environmental Protection Bureau has written that a filtration plant for the Kensico would cost over $10 billion to build and over $100 million per year to operate.\(^{23}\)