

## TOWN OF CONCORD

TOWN HOUSE - P.O. BOX 535 CONCORD, MASSACHUSETTS 01742

OLD NORTH BRIDGE

To: Mr. Alex Strysky, MEPA Analyst

Delivered via email: <u>alexander.strysky@mass.gov</u>

From: Town of Concord Select Board

**Subject:** EEA No. 16654 - L.G. Hanscom Field North Airfield Development, Bedford

April 29, 2024

Dear Mr. Strysky,

We, the Select Board of Concord, wish to comment on the Draft Environmental Impact Report for the proposed North Airfield Expansion at Hanscom Airport. We understand that once built, all resulting operations would be subject to the exclusive jurisdiction of the FAA and beyond local control. Therefore, this is the only opportunity for local jurisdictions to have input, during the planning of the overall capacity of the facility.

As you know, the Town of Concord, as well as neighboring towns, and the Commonwealth of Massachusetts, have all been diligently working, separately and together, to reduce our greenhouse gas emissions. We have been making significant progress toward our 2030 reduction targets.

The North Airfield Expansion proponents claim that their proposed project would not generate any new greenhouse gases. But their analysis only counts emissions from buildings, while disregarding emissions from aircraft. At the same time, the project's expansion of aircraft storage, fueling and maintenance capability, all point to a likely increase in the number of flights.

If these new flights are included in the analysis, the expansion project is likely to significantly increase greenhouse gas emissions. That would directly contradict the climate goals pursued by our towns, the Commonwealth, and the nation. Furthermore, this expansion stands in stark contrast to Massport's own Master Plan of 1978 and the MAPC MetroCommon 2050 plan. It undermines Massport's goal of zero greenhouse gas impacts by 2031, a commitment acknowledged in the project's Environmental Notification Form.

We are disappointed that the DEIR does not include a comprehensive public cost/benefit analysis. We ask for the proponent to revise the DEIR, to include both qualitative and

quantitative information that addresses the incremental, direct, and cumulative impacts to the Concord community, the region, and the Commonwealth of Massachusetts.

For example, the proponent asserts that the proposed development will reduce the number of 'ferry flights' and has implied that the number of overall flights will be reduced, but they have provided no substantiating evidence. Instead, the evidence seems to say that the project will INCREASE the number of flights: Section 2.2.1 states that operations will increase by an estimated 12 flights per day. To support these additional flights, the project calls for 4 new fuel tanks and an additional 15,000 gallons delivered daily.

If the proponent is serious about claiming a reduced number of flights, then guarantees of this reduction should be documented in a revised DEIR, along with well researched analysis addressing noise levels, air quality, vehicle traffic, environmental justice concerns, impacts on rare species, and effects on the local economy.

Concord residents are deeply concerned that the proposed project will increase aviation activity which in turn will cause negative health effects due to increased air pollution and noise. Yet the DEIR does not adequately describe or evaluate these risks. We ask for you to revise the DEIR to contain a full analysis of all scientifically documented health risks associated with the project. For example, the EPA has stated that lead from aviation is a significant health risk. Studies are also underway regarding ultrafine particles. Airborne noise has been found in large public health studies to be a contributor to heart disease and physical stress. None of these health risks are adequately analyzed in the DEIR.

Regarding noise levels, the DEIR claims to include a detailed assessment of the noise generated by the project's increased air traffic. However, it only assesses noise (and GHG and air quality) impacts from localized airport activity, without considering these impacts from airborne planes. Ignoring impacts from airborne planes seriously minimizes the quality of life that the public will be forced to endure if this expansion moves forward. For example, wildlife at Great Meadows is routinely disturbed by jet noise, and overhead jets disrupt important events such as the traditional Patriot's Day ceremony at the North Bridge on April 15, 2024.

Most importantly, the revised DEIR must contain comprehensive well-researched analysis of the project's expected effect on greenhouse gas emissions and the carbon footprint. In its present form, the DEIR only analyzes aircraft CO2 emissions during takeoff and landing at the airport. The revised DEIR should also include analysis of GHG emissions of aircraft in flight.

For more detail, please see Appendix A, which contains the complete list of our original comments, the proponents' response in the DEIR, and the Town's follow-up comments.

In conclusion, the Draft Environmental Impact Report has serious flaws and omissions that need to be corrected. As proposed, the North Airfield Expansion at Hanscom Airport directly undermines our Town's and State's efforts to reduce greenhouse gases. It would also increase health risk, noise and other environmental concerns, while providing little or no benefit to the general public. We strongly recommend a revised DEIR, followed by careful and complete study, before a decision is made on whether or not to approve this project.

## Sincerely,

Henry J. Dane, Concord Select Board Chair

## Concord Select Board

Henry Dane, Chair Mary Hartman, Clerk Terri Ackerman Linda Escobedo Mark Howell

Cc: The Honorable Governor Maura Healy

Secretary Rebecca Tepper, Executive Office of Energy and Environmental Affairs

Senator Michael Barrett

Representative Simon Cataldo, Representative Carmine Gentile

Concord Town Manager Kerry Lafleur

Concord Deputy Town Manager Megan Zammuto Concord Director of Public Works Alan Cathcart Concord Transportation Advisory Committee

Hanscom Field Advisory Committee Hanscom Area Town Select Boards

## Appendix A

Draft Environmental Impact Report EEA No. 16654 North Airfield Development Town of Concord

#	14-2 Comments and Res Commenter	Comment February 14, 2023	Draft Environmental Impact Report Response March, 2024	Town Response, April 2024
12.1	Concord Select Board and Liaison to Hanscom Area Town Selectmen (HATS)	The Draft Environmental Report (DEIR) should include both qualitative and quantitative information that addresses questions of the incremental, direct, and cumulative impacts to the Concord community.	The Purpose of the DEIR is to analyze and assess potential environmental impacts of the proposed project, and provide details about the project's design, the magnitude of environmental effects, and measures proposed to mitigate these effects.	No comment
12.2		The proponent has offered that the proposed development will reduce the number of 'ferry flights' and has implied that the number of overall flights will be reduced - guarantees of this reduction should be documented and realized.	·	Based on the 'Aviation Activity Levels' section of the DEIR, the project proponents have not offered any guarantees of reductions in either 'ferry flights' or the number of overall flights at Hanscom. A reduction in ferry flights is a keystone argument to the environmental benefits of the project. The proponents state the possibility that the project "may likely reduce annual ferry flights" (Section 1.1.1), and an analysis offered in the report does suggest that the project may result in a reduction of up to 3,500 ferry flights annually. However, the analysis appears to be based on limited assumptions and data regarding what constitutes a ferry flight (i.e., a fairly simple assessment of aircraft that arrived from an airport within 350 miles and stayed at Hanscom for less than 18 hours), without validating the assumptions with any actual data. The proponents claim that it is impossible to get actual data to confirm the current number of ferry flights, so it is unclear how they can argue with confidence their predictions of how that number might change as a result of the project. During the public hearing on 3/4/24, the proponents indicated that the proposed reduction of 3,500 ferry flights annually may be an overestimate and could be significantly less, and they did not appear particularly confident in the ability of their analysis to provide a solid estimate. There also does not seem to be acknowledgement of the possibility that any reduction in the number of current ferry flights (as a result of the creation of new hangar space) could be replaced with new additional ferry flights, which is consistent with the proponent's projected increased demand in private jet use that is offered as a primary reason to justify the need for the project in the first place.  The proponent's assumption is that building the hangars will result in fewer flights than not building them (on the uncertain assertion that all or most potential ferry flights will be eliminated), but that does not appear consistent with (or address) the
12.3		The DEIR should include a comprehensive public cost/benefit analysis, addressing quality of life issues such as Noise and Visual Intrusions - impacts to humans and to wildlife of the air traffic numbers resulting from the proposed development (including the frequency, volume, size of aircraft, and flight paths) and the disruption of biological rhythms, peace of mind, communication, foraging, navigation, and mating.	The DEIR includes a detailed assessment of the noise generated by the increased air traffic resulting from the proposed development. Analysis considers the frequency, volume, and types of aircraft that will be using the facility See Chapter 8 - Noise and Air Quality, Section 8.2.	As described in Chapter 2 - Aviation Activity Levels, the Proponent worked with Massport to analyze existing conditions for ferry flights. This understanding was vital to assess th impact of the Project. Findings revealed that there exists the potential for over 250 monthly ferry flights, a number that could be reduced once the new hanger space becomes operational. However, it's important to empasize that the ability to decrease the number of ferry flights is beyond the Project's control. Nevertheless, the goal is to design and constuct hangar facilities that align with the current demand. This commitment underscores the Proponent's dedication to creating infastructure that optimizes ferry flight operations while acknowledging the external factors influencing their frequency.
12.4	Concord Select Board and Liaison to Hanscom Area Town Selectmen (HATS)	potentially speeds) on Route 62, which ay affect pedestrian and bicylist safety along this road,	Based on the trip generation calculations, it is estimated that the intersection of Hartwell Road at Concord Road would experience an increase of 12 trips during the weekday morning peak hour and 11 trips during the weekday evening peak hour. This is not expected to have a significant impact. Refer to Chapter 6 - Traffic and Transportation.	The trip generation calculation in Chapter 6-2 includes employees, customers, vendors, and all other trips. Table 6-1 notes that the trip generation is based on ITE Land Use Code 022 (General Aviation Airport) for 13 employees. The Appendix D is the ITE trip generation worksheet which is based on a single sample of an airport with 250 employees. It is recommended to have an independent review of the methodology regarding trip generations. The analysis in Chapter 6.2 does not provide any information or assumptions on the number of customers or the trup generation by customers or vendors.

12.5	Concord Select Board and Liaison to Hanscom Area Town Selectmen (HATS)	Air Quality - increased aviation uses at Hanscom may result in reduced air quality, particularly given changes in wind patterns resulting from climate changes. Also, the health impacts of lead added to the environment resulting from the use of leaded (aircraft) fuel should be quantified. What is the general direction of wind patterns in relation to sensitive receptors such as child-care facilities, affordable housing developments and similar sites?	The Project team eva the 2030 No-Build an ESPR for evaluating p detailed in Chapter 8
12.6	Concord Select Board and Liaison to Hanscom Area Town Selectmen (HATS)	Climate Change - the increase in impervious pavement and the resultant loss of the woodland and grassland areas in the area proposed for development will create a "heat-island" effect that may impact surrounding neighborhoods and businesses without mitigation measures taken. Additionally, what is the condition of the existing soils in the area and what will be the effect of recharging groundwater resources by retaining stormwater on site? How will groundwater be protected in the event of a fuel spill or similar occurrence.	Stormwater Manager proposed stormwater

and 2030 Build Conditions by utilizing the Handsom predominant wind directions. The air quality analysis is 8 - Noise and Air Quality, Section 8.3.

aluated lead emissions for aircraft using AVGAS for both A significant assumption in the mitigation of noise and air concerns centers around the assumptions made in section 2 of the same documentthat the hangers will result in a net reduction of air traffic thus making the impact on noise and air pollution minimal if not less than the current. There is no clear indication presented that indicate the current "ferry flights" will be the end users of the hangers. The assumption that the hangers will reduce flights by creating less "ferry flights" is not considering possible new users of this service. An independent peer review of the impact is recommended prior to approval. In addition, the anticipated addition of 730 fuel delivery trucks per year (2 trucks per day) contradicts the argument that there is a reduction in flights. If flights were reduced, there should be fewer fuel deliveries. The emissions and air quality calculations do not seem to include the anticipated addition of 3650 trucks per year. Table 8-6 on the net operational emission changes include only changes associated with aircraft operational emissions, heating/cooling, employee trips and parking. (page 8-12)

Climate Change for descriptions of the proposed ways the heat island effect. Refer to Chapter 5 - Land and ement for an explanation of the existing soils and er management system. Refer to Chapter 7 - Water and explanation of the Project's spill prevention plan.

The proponents have included language and measures into the DEIR to address heat island effects associated with impervious surface and increasing air temperatures as a result of climate change, "... by incorporating approximately 1.1 acres of high albedo concrete in airside areas and a 0.75 acres of permeable pavement systems such as grass block pavers", and "Hangar roofs will be constructed from materials with a higher albedo (e.g., white roofs), allowing sunlight to be reflected instead of absorbed, which reduces the urban heat island effect." (Section 9.2) Although the use of these measures can help to mitigate thermal absorption and emission of heat to the surrounding air, it is unclear what percentage of the overall impervious surface these measures represent.

It should also be noted that the proposed reconfiguration of the hangars, resulting in reducing the number from 26 to 17, also resulted in a modest reduction of overall impervious surface for the project, which would also support a reduction in a heat island effect. Stormwater management is addressed in Section 5 of the DEIR, but I would defer to Public Works to assess the viability of any proposed measures, and I would defer to Natural Resources and/or Public Health and/or the Fire Department to review measures to protect groundwater in the event of a hazardous materials spill as found in Section 7.

12.7 Concord Select Board and Liaison to Hanscom Area Town Selectmen (HATS)

Rare Species Impacts - The proposed areas of Estimated and Priority Habitats, which may negatively impact rare wildlife. In addition, the flight path crosses many other mapped rare species habitats. The DEUR sgiykd evaluate the effects of increased noise and air pollution on resident, migratory, and overwintering wildlife species that occur in Concord (rare and otherwise).

Refer to Chapter 5 - Land and Stormwater Management, Section 5.4 for a development is immediately adjacent to mapped description of how the Project will not negatively impact the protected wildlife and rare species habitat. As shown in Figure 5.10, a limited section of the southern portion of the Project Site contains Priority Habitat of rare species mapped by the NHESP. No buildings or impervious areas are expected to be developed within the habitat; therefore, no direct impacts are anticipated. The work propsoed within Priority Habitat (i.e., relocation of an existing fence and installation of a stormwater management infiltration basin) is not anticipated to negatively impact the Priority Habitat. The Proponent, in coordination with the Massachusetts NHESP, will complete the MESA Project Review Checklist. The NHESP will review the Checklist to determine if it would cause an adverse impact to listed species and, if applicable, identify any mitigation measures that may be necessary.

The Applicant has provided a response that NHESP will review impacts to rare species within the project area (on the ground), but has failed to provide any information on other rare species in the project's flight path. The potential increase in aircraft activity, and associated noise, air quality, and visual impacts, should also consider rare species within the flight paths, including the potential increase in airstrikes. Impacts to common wildlife (migratory, breeding, feeding, communication, overwintering, etc.) should also be assessed, including the potential increase in airstrikes.

12.8 Concord Select
Board and Liaison to
Hanscom Area Town
Selectmen (HATS)

Carbon Footprint - The four communities encircling Hanscom are working to reduce their respective carbon footprints. The carbon footprint of the proposed use should be evaluated, including both direct impacts from new impervious surface, construction materials and heating/cooling required for the new buildings, as well as increased aircraft fuel usage.

The DEIR filing presents a GHG analysis consistent with the requirements of the MEPA GHG Policy and the requirements of the Secretary's Certificate on the ENF Filing in Section 8.3 of Chapter 8 - Noise and Air Quality and Section 9.4 of Chapter 9 - Climate Change.

The DEIR filing presents a GHG analysis consistent with the requirements of the project has proposed investments in sustainable design and energy efficiency measures to reduce fossil fuel use and greenhouse gas the MEPA GHG Policy and the requirements of the Secretary's Certificate on emissions regarding the project buildings and ground operations, including the use of:

- •Energy efficient building designs based on Massachusetts Stretch building codes
- •Beat pump technologies for full or hybrid interior space heating and cooling whenever feasible
- •EV-ready parking plus several EV charging stations
- •Solar PV rooftop systems with battery storage capability for the 18 hangar buildings (Note: the amount of solar production and storage is "... subject to interconnection feasibility with the utility.", and "The final sizes of the solar arrays are subject to change as the design of the Project progresses." (Section 9.3.1.7)

Although these commitments appear promising and the proponents have incorporated recommendations of the MA Dept. of Energy Resources, the potential impacts of these measures intended to reduce building and ground operations emissions will depend on the final project and building designs, which are not necessarily guaranteed. Energy, fuel, and CO2 emissions savings realized by the above actions will ultimately be insignificant in comparison to the emissions generated by current and projected private jet fuel use at the Airfield, as further noted below. The project is presented as a sustainable aviation project that will support Sustainable Aviation Fuels (SAFs), which are biofuels made from crops (e.g., corn) or agricultural waste (e.g., vegetable oil or animal fats) mixed with conventional jet fuel. While SAFs sound like a green solution by preventing the need to extract and burn fossil fuels, they still generate the same amount of carbon dioxide equivalent as regular aviation fuel and their production requires agricultural resources and energy. High costs and low availability currently limit the widespread use of biofuels in aviation – only about .01% of total aviation fuel currently consumed is bio-based, and even if significant use of these fuels is eventually realized it is anticipated to be decades away.

The project makes several claims throughout Section 1 that it is designed to be, or will strive to achieve, net-zero emissions in support of Massachusetts decarbonization goals, and will "... serve as a national example of innovative and sustainable aviation practices in line with the Commonwealth's decarbonization goals." (Section 1.1.2) These claims are ultimately misleading because they are based on only accounting for greenhouse gas emissions from the proposed infrastructure (Scope 1 emissions) and the energy sources that are used by the facility (Scope 2 emissions), but does not include the emissions produced by the aircraft using the facility during their entire flight (other than during landings and take offs). The latter are considered Scope 3 emissions, which are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly affects in its value chain and can often represent the majority of an organization's total greenhouse gas (GHG) emissions. Although these emissions may not be required within the scope of the DEIR, they are relevant and should be considered when assessing the overall merits of the project.

The proposed jet fuel use for the project also belies the notion of the project as one that will not generate any new greenhouse gases. The project proposes four new 20,000-gallon tanks for jet fuel, with 20,000 gallons delivered daily on average (Section 1.5.2.4). The proponents estimate 15,000 gallons of fuel dispensed per day, which adds up to over 5.5 million gallons of jet fuel use annually and can be estimated to be over 200,000 tons of new CO2 equivalent emissions per year.

Ultimately, the intent of the project to support a projected increase in private jet use is antithetical to local and State efforts and goals to reduce greenhouse gas emissions and curb climate change. The project assumes that investments should be made to meet projected increases demands – which provides benefits of convenience to very few at high environmental costs to very many – rather than consider the climate-critical alternative that efforts should instead be taken to reduce the use and demand for private jet travel.

12.9	Concord Select	Economic - Adverse effects of the increased air	As described in Chapter 8 - Noise and Air Quality, due to the anticipated	The Proponent lacks the authority to dictate or regulate operators' decision regarding ferry flights, on which this assumption is based on. If the
		traffic diminish the very intrinsic qualities that	reduction in ferry flights, the Project is not expected to result in an increase	aircraft frequency is higher than anticipated, there is no ability to control or limit ongoing ferry flights. The ¼ square mile Study Area for the
	Hanscom Area Town	attract tourists, impacting local economies.	in aircraft emissions; aircrafft air emissions are anticipated to be lower than $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$	impact to Cultural Resources and Open Space (Chapter 11) is artificially small, excluding impacts to the many nationally significant sites in
	Selectmen (HATS)		the 2030 No Build Condition. Air emissions are associated with the Project	Concord. The Concord Historical Commission recently responded to a request from the firm that was preparing a 2022 Hanscom Field
			are not expected to result in significant impacts and will not exceed the	Environmental Status and Planning Report that identified a 45 square mile Study Area and that took into account flight patterns over Concord's
			National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.	historic resources.
			Future aircraft noise levels with the Project Site in place are expected to	
			remain comparable to current and future No-Build operations. Due to	
			factors such as distance from the noise source, shielding provided by the	
			proposed hangar buildings, the presence of large surrounding buildings off-	
			site, and terrain variations between the Project Site and residential areas,	
			aircraft ground noise assocated with the Project would be well within the	
			normal range of everyday sounds in community, meaning the nouse is	
			unliekly to be noticable or bothersome.	
12.10	Concord Select	Public Benefit(s) - The primary private nature of	21 percent of flights in the 2022 NOMS dataset were identified as	See response to Comment 12.3.
	Board and Liaison to	the proposed development beneftis a few users	charter/business flights. Of these charter and business flights, 17 percent	
	Hanscom Area Town	while the adverse impacts will be born by the	(3,456 flights) or three percent, of total Airport flights were characterized as	
	Selectmen (HATS)	public. Statenebts nade during the presentation	ferry flights. Trends indicate variations in ferry flight numbers over time, with	
		indicated that these new hangers would be a	peaks in May, June, and October months. Average daily ferry flights ranged	
		benefit through the reduction in the number of	from 6 to 12 flights, with an average of 9 flights per day. Average monthly	
		"ferry flights"; guarantees of this future	ferry flights ranged from 196 to 365, with an average of 283 ferry flights per	
		performance should be provided. This statement	month. More detail of the ferry flight analysis can be found in Chapter 2 -	
		should be supported witha ccurate numbers	Aviation Activity Levels. Currently there are no firm reservations for the	
		(how many such flights per day/week/month)	hangers due to the timeline of development completion. The Proponent	
		and requests/reservations for the proposed	lacks the authority to dictate or regulate operators' decision regarding ferry	
			flights.	
		stated) should be documented and supporting		
		information provided.		
		-		