



November 30, 2020

King County Airport
7277 Perimeter Rd. S.
Seattle, WA 98108-3844
KCIACommunityOutreach@kingcounty.gov
via e-mail

Re: Comments on KCIA Airport Master Plan Update

Dear King County International Airport Staff,

We are writing to provide comments on the King County International Airport (“KCIA”) Master Plan Update currently in progress.¹

As “one of the busiest primary non-hub airports” in the country, KCIA is a major source of climate, air, and noise pollution in our region.² In the last five years, as traffic at the airport has steadily increased, so has the pollution generated by KCIA.³ You are now proposing to spend over \$250,000,000 on various projects that would, in large part, further increase the amount of climate, air, and noise pollution generated by KCIA.⁴ This, in turn, would further destabilize our climate and harm neighboring communities, and is in conflict with King County’s stated climate goals and commitments to equity and environmental justice. As outlined below, we urge you to make significant amendments to the Master Plan Update and accompanying workpapers before they are given further consideration. In addition, we also support the demands of the representatives of impacted communities previously presented to KCIA.

¹ Founded in 2013, 350 Seattle is a grassroots group working for climate justice by organizing people to make deep system change: resisting fossil fuels; building momentum for healthy alternatives; and fostering resilient, just, and welcoming communities. 350 Seattle has a mailing list of over 13,000 people, the great majority of whom are in the Seattle metropolitan area. 350 Seattle has been a key leader in successful fights like the #ShellNo campaign against Arctic drilling, the campaign to defeat the (proposed) world’s largest oil-by-rail terminal in Vancouver, and the campaign against the Anacortes Shell oil-by-rail spur. With Got Green, 350 Seattle launched the Seattle for a Green New Deal campaign.

The Climate Reality Project: Seattle-King County Chapter leverages the unique strengths and optimistic leadership of Al Gore and the global Climate Reality Project. The Chapter’s mission is to help grow and develop the climate movement in the Seattle area, and create a diverse group of local climate leaders to take needed climate action.

² Master Plan Update, “Executive Summary,” p. xxxii.

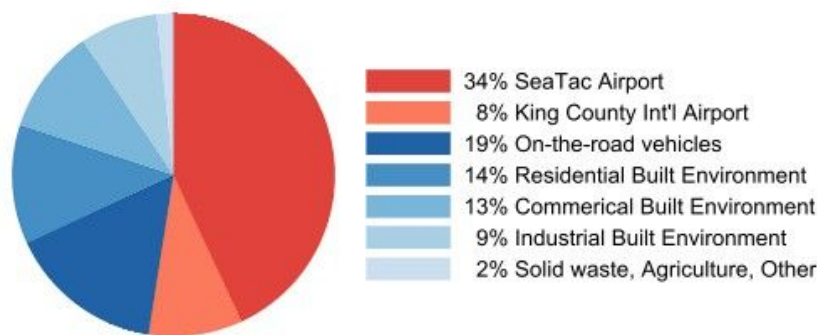
³ See generally Master Plan Update, “Forecasts of Aviation Activity.”

⁴ Master Plan Update, “Executive Summary,” p. xxxiii.

THE MASTER PLAN UPDATE LAYS THE GROUNDWORK FOR AN UNTENABLE INCREASE IN GHG EMISSIONS AND CLIMATE WARMING FROM NEW AVIATION ACTIVITY.

As King County has recognized, “[c]limate change is one of the paramount environmental and economic challenges for our generation.”⁵ And as “global GHG emissions continue to accelerate and climate impacts grow, the urgency to act on climate change increases.”⁶ We are no longer awaiting the onset of the climate crisis, we are living it. Temperatures continue to skyrocket, and extreme fires, flooding, and storms are the new norm.⁷ We must cut emissions by at least half in the next nine years to avoid even more catastrophic, and semi-permanent, impacts of climate change.⁸

In King County, aviation is a major contributor—if not *the* major contributor—to climate change. One reason for this is that aviation emissions have a three-fold greater warming impact on the climate than on-the-ground emissions.⁹ The pie chart below reflects this phenomenon, and demonstrates why reducing total emissions from KCIA is critical to meeting our climate goals.¹⁰



The Master Plan Update states that a goal “intended to guide the preparation of the Master Plan Update, and direct the future development” of KCIA is to “[a]lign KCIA programs and

⁵ 2015 Strategic Climate Action Plan, Executive Summary, p. 3 *available at* https://your.kingcounty.gov/dnrp/climate/documents/2015_King_County_SCAP-Executive_Summary.pdf.

⁶ 2020 Strategic Climate Action Plan, Executive Summary, p. 13, *available at* <https://your.kingcounty.gov/dnrp/climate/documents/2020-SCAP-Executive-Summary.pdf>.

⁷ <https://www.kingcounty.gov/~media/depts/health/environmental-health/documents/publications/blueprint-climate-change-and-health.ashx?la=en>; “State of the Climate: 2020 on course to be the warmest year on record,” Carbon Brief (Oct. 23, 2020), *available at* <https://www.carbonbrief.org/state-of-the-climate-2020-on-course-to-be-warmest-year-on-record>.

⁸ “We have 12 years to limit climate change catastrophe, warns UN,” *The Guardian*, Oct. 8, 2018, *available at* <https://www.theguardian.com/environment/2018/oct/08/global-warming-must-not-exceed-15c-warns-landmark-unreport>.

⁹ D.S. Lee, *et al.*, “The contribution of global aviation to anthropogenic climate forcing for 2000 to 2018,” *available at* <https://www.sciencedirect.com/science/article/pii/S1352231020305689?via%3Dihub>.

¹⁰ Amounts taken from King County’s 2017 GHG emission inventory, *available at* <https://www.kingcounty.gov/services/environment/data-and-trends/indicators-and-performance/kingstat/2017/indicators/climate-change/ghg-emissions.aspx>, including all emissions from fuel pumped and a radiative forcing factor of 3.

services with County climate change goals.”¹¹ KCIA’s Strategic Plan 2014-2020 reiterates this.¹² King County’s major shared climate goal is to reduce countywide GHG emissions by 50 percent by 2030 (compared to 2007).¹³ However, this GHG emission reduction goal is not mentioned once in the Master Plan Update. To the contrary, the Master Plan Update lays the groundwork for a substantial increase in emissions. As shown in Table E2, **GHG emissions from aircraft operation in and out of KCIA is forecasted to increase by nearly 30 percent by 2035.**¹⁴

KCIA staff has confirmed that they have completed no analysis of how, if at all, KCIA operations align with King County’s climate goals, stating: “Any analysis of the Airport’s future role in meeting GHG emission reduction targets set by the City of Seattle, King County, and Washington State would need to be based on a more comprehensive evaluation of the greenhouse gas emissions for the overall operation of the Airport.”¹⁵ Staff also confirmed that only a small fraction of emissions from fuel pumped at KCIA is reflected in the Master Plan Update.¹⁶ (Emissions from fuel pumped make up 99 percent of KCIA’s emissions.¹⁷) Staff also confirmed that the fact that aviation emissions have a three-times greater warming impact than on-the-ground emissions was not considered in the Master Plan Update.¹⁸

King County is well known as a leader in the fight against climate change, which gives us a unique opportunity to set an example for other cities around the country and world. KCIA’s current emissions reduction efforts are insufficient—**we can and must do better**. The Master Plan Update should not go forward without a comprehensive GHG emission inventory of KCIA, including total emissions from all fuel pumped and factoring in the greater warming impact of aviation emissions. Following that, KCIA should develop a detailed, concrete plan to reduce total emissions from KCIA by 50 percent (compared to 2007) no later than 2030.

THE MASTER PLAN UPDATE CLEARS A PATH FOR GREATER HARM TO NEIGHBORING COMMUNITIES.

The areas impacted by KCIA include some of the most vibrant and diverse residential neighborhoods in Seattle. Within a two-mile radius of the KCIA, there are five playgrounds,

¹¹ Master Plan Update, “Alternatives Analysis and Development Concepts,” pp. D.2-D.3.

¹² Available at <https://www.kingcounty.gov/~media/depts/transportation/airport/planning/kbfi-airport-strategic-plan-2014-2020.ashx?la=en>.

¹³ 2020 Strategic Climate Action Plan, available at <https://your.kingcounty.gov/dnrp/climate/documents/2020-SCAP-Executive-Summary.pdf>.

¹⁴ Indeed, while the Master Plan Update only forecasts a three percent increase in operations over the coming years, it is notable that prior forecasts have substantially underestimated increases. See Table B6. In recognition of the likely inaccuracy of growth forecasts, the Master Plan Update states that “accelerated growth or consistently higher ... levels of activity may occur.” “Capacity & Facility Requirements,” p. C.1.

¹⁵ E-mail from Matthew Sykora to Sarah Shifley dated November 19, 2020.

¹⁶ *Id.*

¹⁷ KCIA, Greenhouse Gas Emissions Inventory 1990, 2007 & 2020 (June 24, 2011), provided via e-mail by Matthew Sykora on November 25, 2020.

¹⁸ E-mail from Matthew Sykora to Sarah Shifley dated November 19, 2020.

seven playfields, 21 parks, 31 schools, and 63 places of worship.¹⁹ Unlike King County as a whole, most of the people living in the neighborhoods bordering the KCIA—Georgetown South Park, Allentown, New Holly, and Beacon Hill—are Black, Indigenous, or people of color. Each of these neighborhoods has a rich history and unique community, and each has been contaminated for years by increasing pollution from KCIA.

The Master Plan Update references King County’s “commitment to equity and social justice” when discussing outreach, but **no actions in the Master Plan Update reflect this commitment**. The Master Plan Update also states that KCIA has a goal to “[a]ct as a partner to neighboring residents,” but nothing in the Master Plan Update explains how KCIA can “partner” with residents while subjecting them to increasing amounts of life-threatening pollution.²⁰ The reality is that the Master Plan Update stands in contrast to King County’s equity and social justice commitments and ensures greater harm for neighboring communities.²¹ This is an environmental justice issue: the communities closest to KCIA that take the brunt of this pollution are more diverse and lower-income than King County as a whole.²² They also have higher exposure to pollution from other nearby sources, including industrial trucking routes, I-5, and Sea-Tac.

The Master Plan Update fails to acknowledge ultra-fine particulate (“UFP”) pollution from airplanes, and the fact that the Plan will cause impacted communities to face even higher rates of UFP pollution. The full impacts of sustained exposure to UFPs are still unknown, but current studies show that it leads to adverse health outcomes including negative effects on the brain, nervous system, and respiratory system, and higher rates of preterm births.²³ The Master Plan Update also fails to acknowledge potential harms caused by leaded fuel pumped at KCIA and burned by planes leaving the airport. General aviation piston-driven aircraft are now the largest source of lead emitted to the atmosphere. Lead from burned aviation fuels can be inhaled, ingested, and absorbed through the skin. It then accumulates in bones, blood, and soft tissue, and leads to a variety of negative health impacts, affecting neurological, renal, reproductive, and physical development systems.²⁴ Even low levels of blood lead in children are associated with lower IQ and cognitive and behavioral effects such as attention-deficit behavior, conduct problems, memory loss, and poor language performance.²⁵

¹⁹ See data at <https://gis-kingcounty.opendata.arcgis.com/> and <https://data.seattle.gov/>. These numbers differ slightly from those presented in the Master Plan Update. However, a direct comparison is not possible because the workpapers do not define “vicinity” or “study area.” A recent study showed that UFP pollution travels up to 10 miles from a flight path. See <https://pubs.acs.org/doi/full/10.1021/es5001566>.

²⁰ Master Plan Update, “Alternatives Analysis and Development Concepts,” pp. D.2 and D.3.

²¹ King County’s equity and social justice commitments are laid out in various documents, including the current (2016-2022) Equity and Social Justice Strategic Plan *available at* <https://aqua.kingcounty.gov/dnrp/library/dnrp-directors-office/equity-social-justice/201609-ESJ-SP-FULL.pdf>.

²² Detailed data available at <https://ejscreen.epa.gov/mapper/>.

²³ See Washington State Department of Health, “Summary of Health Research on Ultrafine Particulates,” DOH 334-454, November 2019; Lindsey Konkel, “Move Over, Traffic: Aircraft Emissions and Preterm Birth,” July 2020, *available at* <https://ehp.niehs.nih.gov/doi/10.1289/EHP7161>.

²⁴ Fact Sheet – Leaded Aviation Fuel and the Environment, *available at* <https://www.faa.gov/search/?omni=MainSearch&q=fact+sheet+-+leaded>.

²⁵ Philip A. Wolfe et al., “Costs of IQ Loss from Leaded Aviation Gasoline Emissions” *available at* <https://pubs.acs.org/doi/10.1021/acs.est.6b02910>.

We also can't ignore the fact that increased KCIA traffic means increased noise pollution for impacted communities. Noise is not, as the Master Plan Update purports, simply an "unwanted sound that can disturb routine activities and... cause annoyance."²⁶ In fact, studies have shown that noise pollution causes a wide array of life-threatening health conditions, higher rates of depression, anxiety, and dementia, and lower learning outcomes.²⁷ Accordingly, the World Health Organization has strongly recommended reducing aircraft noise levels given the health risks associated with exposure to aviation noise pollution.²⁸

The Master Plan Update must directly address the disparate impacts current and future KCIA pollution has, and will have, on neighboring communities. While individual environmental review may be completed for each project in the Master Plan Update, the cumulative impacts on neighboring communities will not be acknowledged and addressed under the Update as currently drafted.

WE URGE YOU TO MAKE SIGNIFICANT AMENDMENTS TO THE MASTER PLAN UPDATE TO ALIGN WITH KING COUNTY CLIMATE GOALS AND COMMITMENTS TO EQUITY AND ENVIRONMENTAL JUSTICE.

Before any further consideration is given to the Update, we urge you to revise the Master Plan Update and accompanying technical working papers as follows:

- Remove any projects that are intended to accommodate future aviation demands and are *not* necessary to ensure immediate safety at current levels of use. For instance, it appears that the new fuel farm is being proposed to accommodate larger amounts of fuel storage and "future expansion considerations," rather than immediate safety.²⁹ It also appears that KCIA may be able to remain in compliance with FAA regulations without making any modifications to its primary runway.³⁰
- Complete a comprehensive GHG emission inventory, including emissions from all fuel pumped and factoring in the greater warming impact of aviation emissions (using a factor of three).³¹

²⁶ Master Plan Update, "Environmental Overview," p. E.10.

²⁷ A study of six million older people and 89 airports in the US, including Seattle-Tacoma International Airport and Seattle's King County International Airport, linked aircraft noise with cardiovascular disease and increased hospital admissions. In a study of 46 US airports and surrounding schools, including five Beacon Hill schools, statistically significant associations were established between airport noise and lower reading and math scores as compared to non-impacted schools. Additional studies underway may show that exposure to aircraft noise may also be linked to negative metabolic outcomes and lead to depression. *See* <https://beaconhillseattlenoise.org/noise-health-effects>. *See also* "Community noise may affect dementia risk," Oct. 21, 2020, *available at* <https://www.sciencedaily.com/releases/2020/10/201021085106.htm>.

²⁸ World Health Organization, "Environmental Noise Guidelines for the European Region," *available at* https://www.euro.who.int/_data/assets/pdf_file/0008/383921/noise-guidelines-eng.pdf.

²⁹ Master Plan Update, "Capacity & Facility Requirements," p. C.70.

³⁰ Master Plan Update, "Alternatives Analysis and Development Concepts," p. D.5, and "Alternative One" on p. D.14.

³¹ We are aware of the Airport Carbon Accreditation Program, and understand that the initial GHG emission inventory included as part of this Program may partially fulfill this recommendation, so long as it includes emissions from all fuel pumped and reflects radiative forcing (i.e., non-CO2 climate impacts of emissions).

- Develop a plan with attainable measures to reduce CO2 and other emissions so that total KCIA operations, including emissions from all fuel pumped, independently meets all near- and long-term goals set by Seattle, King County, and Washington State without reliance on biofuels or offsets.
- In conjunction with community representatives, including those on the Roundtable Advisory Board, develop an outreach plan to educate the public about the climate impact of KCIA operations and impacts of air and noise pollution on communities near the airport and under flight paths.
- Immediately fill community representative vacancies on the Roundtable Advisory Board, and compensate Roundtable Advisory Board community representatives in order to increase participation by people (e.g., working parents or those with elderly parents at home) who might not otherwise be able to take the time to be on the Board.
- Increase membership in the Roundtable Advisory Board to include representatives of other impacted neighborhoods and climate and environmental justice organizations. Ensure that the Roundtable Advisory Board has an integral and authoritative role in all decision-making going forward.
- Complete a study of the disparate impact of air and noise pollution on communities near KCIA or under its flight paths, and institute programs to remediate and redress all of them. Fund the study, remedial measures, and redress from airport usage fees, and ensure that impacted communities and the community representatives on the Roundtable Advisory Board play an integral role in developing and reviewing the study, its findings, and remediation and redress programs.

Finally, we also support the demands of the representatives of impacted communities previously presented to KCIA.

Thank you for the opportunity to comment, and we look forward to seeing the revisions listed above incorporated into the Master Plan and accompanying working papers.

Sincerely,

350 Seattle Aviation Team

The Climate Reality Project – Seattle-King County Chapter

cc: King County Councilmember Balducci
 King County Councilmember Dembowski
 King County Councilmember Dunn
 King County Councilmember Kohl-Welles
 King County Councilmember Lambert
 King County Councilmember McDermott
 King County Councilmember Upthegrove
 King County Councilmember von Reichbauer
 King County Councilmember Zahilay