

Quantifying and Mitigating Carbon Impact of Student Air Travel

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First Step Towards Understanding Student Air Travel at HBS

Air travel currently accounts for approximately 2.5% of global carbon dioxide emissions and **could take up, by 2050, as much as a quarter of the world's "carbon budget."** Travel is also an important part of **Harvard Business School** (HBS) "social curriculum": students travel to expand their perspectives and form life-long friendships during trips with their classmates. Travel at HBS is so extensive, however, that it has been suspected for a long time to make up a meaningful share of our community's carbon footprint.

At HBS, we often discuss the famous adage, "you cannot change what you cannot measure." We therefore set out to *measure* the extent of student air travel at HBS and better understand its drivers. With that knowledge in hand, we aim to understand what the School and the student body can do to encourage more environmentally-responsible travel in the future.

The Survey and What We Learned

The Survey

After students returned from Spring Break, we launched a 7-minute survey for two weeks and collected ~300 responses. Respondents were asked how many short, medium, long, and ultra-haul (i.e. <3 hours, 3-6 hours, 6-12 hours, and 12+ hours, respectively) roundtrip flights they had taken between summer 2021 and spring 2022, covering a period of 12 months in total. At the end of the survey, respondents were presented their personal calculated emissions along with some elements of contextualization (i.e. a comparison to an average American household and their estimated quartile placement within HBS).

What We Learned

Through the survey, we both confirmed some initial hypotheses and gained new insights. First, the air travel emission of the survey's average respondent is 26 times higher than that of an average American person. While we suspected that most students treat their MBA as a once-in-a-lifetime

opportunity to travel, we were surprised by the length and frequency of this travel for the average respondent. We also learned that while 60-70% of the flights were short- and medium-haul, the majority (i.e. 50-60%) of the emissions were driven by long- and ultra long-haul flights. Many of these long-haul flights were related to student-organized “treks” and international students returning home during school breaks. Lastly, the survey unveiled contrasting student attitudes regarding carbon offsets – from frustration to distrust to enthusiasm. Based on survey comments, there is no consensus among students on the benefits of using carbon offsets for air travel, primarily driven by skepticism regarding the quality of these offsets.

Where To Go From Here?

Through the survey, we learned that many respondents do, in fact, care about their personal environmental impact, but feel social pressure or obligation (e.g., weddings, seeing family) to travel during their MBA and feel confused and conflicted about the best way to manage their carbon footprint. This leaves opportunity for future Student Sustainability Associates and the University to better understand students’ concerns and attitudes about carbon offsets and potentially to roll out programs that can help close the knowledge gap.

We hope that we were able to instill a sense of awareness among HBS students about their personal air travel footprints and seedlings of ideas for better managing them in the future. We thank the Office of Sustainability, Student Sustainability Associates, and the student population for promoting and taking the survey.