

Background

Uber Elevate is weaving everyday flight onto the Uber platform. Urban air mobility can unlock the future of transportation – one that reduces individual car ownership, expands access to transportation, and helps governments plan future transportation investments.

As part of Elevate’s operational analyses, the Elevate team validated StreetLight Dallas–Fort Worth Origin–Destination data against data from NCTCOG, the North Central Texas Council of Governments. This document summarizes results of this validation.

NCTCOG data aligns well with StreetLight’s Origin–Destination data

The density of StreetLight trip activity matches the density of NCTCOG trip activity, as indicated by the two trip “heatmaps”. Note that hot areas in both the dense central areas of Dallas–Fort Worth and on the outskirts show similar contours, with variance in contour correlation attributed to differences in granularity offered by the NCTCOG’s Traffic Analysis Zones (TAZ) vs. StreetLight’s data on an Uber H3 grid.

The distribution of StreetLight’s trip distances matches the distribution of NCTCOG’s trip distances, as illustrated by the below chart:



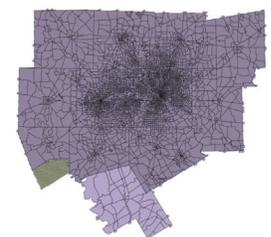
Data application

The Elevate Strategy team utilized Streetlight’s trip data to identify relevant Uber Air trips in the Dallas–Fort Worth market. Modeling was fueled by the transportation metrics detailed in this validation and combined with various other data sources (noise, weather, economics, etc.)

Approach to identifying areas for comparing data

The NCTCOG traffic analysis zones (TAZs) were overlaid on the StreetLight H3 Level 8 area to determine the area for comparison, with overlay areas portrayed in dark purple.

Representative May 2019 StreetLight trips were appropriately aggregated and truncated based on the zones (despite shape differences).



Ian Villa is Uber Elevate’s Head of Strategy. He leads a diverse team of engineers, analysts, and data scientists to develop Elevate’s aviation strategy, product, simulation, infrastructure, economics, weather, noise, and emissions workstreams.



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