

Air taxis could reduce fuel consumption, alleviate traffic congestion

2 December 2020, by Jennifer J Burke



air taxis, you would create a win-win-win outcome for commuters, the economy and the environment."

More information: Zhenhong Lin et al. Modeling the External Effects of Air Taxis in Reducing the Energy Consumption of Road Traffic, *Transportation Research Record: Journal of the Transportation Research Board* (2020). [DOI: 10.1177/0361198120952791](https://doi.org/10.1177/0361198120952791)

Provided by Oak Ridge National Laboratory

An ORNL model using air taxis on the heavily traveled route between downtown Los Angeles and Los Angeles International Airport revealed that fuel consumption is significantly reduced if even a small percentage of commuters switched to air taxis. Credit: Andy Sproles/ORNL, U.S. Dept. of Energy

If air taxis become a viable mode of transportation, Oak Ridge National Laboratory researchers have estimated they could reduce fuel consumption significantly while alleviating traffic congestion.

Air taxis, small aerial vehicles that provide point-to-point, on-demand travel, have proven to save time, but their impact on fuel use remains largely unquantified.

An ORNL study focused on the energy used by [air taxis](#) between downtown Los Angeles and Los Angeles International Airport, a route in which congestion is severe during peak hours.

"Our modeling, which can be applied to any congested route, showed that diverting 3-20% of traffic on this route could reduce the traffic and vehicle fuel use from 15-74%," ORNL's Zhenhong Lin said. "The key insight is that if only a small share of travelers in congested areas switched to

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