Transport

Morgan Stanley's Numbers on Flying Cars: $2.9 Trillion, 20 Years

By Esha Dey
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A scaled model of Uber Technologies Inc.'s eCRM-003, an electric vertical take-off and landing jet.
Photographer: Tomohiro Ohsumi/Bloomberg

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Flying cars, long a staple of science fiction, may be landing in the real world sooner than you think.

Sleek vehicles floating above their more chaotic, terrestrial siblings are common trope in stories of a more technologically advanced future that now may not be so distant. Intersecting economic and technological factors including better battery efficiency, artificial intelligence and improved satellite communication may provide just the right incubator to supercharge the development of flying cars, analysts at Morgan Stanley said this month.

“If you’re bullish on autonomous cars, it’s time to start looking at autonomous aircraft,” the analysts, including Adam Jonas, Ravi Shanker and Rajeev Lalwani, said in a research note this month. In many ways, an aircraft is “an easier software problem to solve than an autonomous car,” they wrote, pointing out that drones have been used in the military for years and are now being tested for package delivery.

Technology industry titans have long dabbled with the idea. Google co-founder Larry Page has backed Zephyr Airworks, a flying-car startup, while Uber Technologies Inc., Boeing Co. and Airbus SE, have joined a government-led group in Japan to bring airborne vehicles to the country in the next decade. Lockheed Martin Corp. is investing in electric and autonomous VTOLs or vertical takeoff and landing vehicles, the Morgan Stanley analysts noted. Northrop Grumman Corp. is probably involved as well, while Raytheon Co. and Harris Corp. are pushing ahead with air traffic control technology, they said.

Cash has also been flowing to startups. Page has funded several flying-car aspirants, while Sebastian Thrun -- the founder of Google X and Google’s self-driving car team -- has supported Kitty Hawk and its subsidiary companies Cora and Flyer.

But don’t yet expect to tap an app and order an air taxi. While the conditions are right for development to accelerate, an “urban air mobility” ecosystem is far from around the corner. “We would describe the current state of

technology for electric autonomous aircraft as underdeveloped, but rapidly improving in areas of pilot substitution, safety, and efficiency," the Morgan Stanley analysts wrote.

Transporting freight using the technology is a much nearer term possibility than humans, especially with smaller, more lightweight drones. According to the analysts' most bullish calculations, it could become a $2.9 trillion global market by 2040, while the most pessimistic estimates peg the value to about $615 billion.

Some of the companies best exposed to the potential urban air mobility market would include United Parcel Service Inc., FedEx Corp., American Airlines Group Inc., Delta Air Lines Inc., United Continental Holdings, Textron Inc., Boeing, Lockheed, Northrop, Tesla Inc., Lear Corp., Adient Plc., Seagate Technology Plc. and Hewlett Packard Enterprise Co.