Urban Mobility: As more of the world's cities become congested and polluted, new business models and technologies are emerging to solve the mobility challenge.

Cities move. People hurry from corner to corner; cars and trucks roll along the roads, while bicycles and scooters jostle for space.

By 2030, 60 percent of the world's population will live in cities, up from about 50 percent today.1 Over the same period, more than two billion people are likely to enter the middle class, with the majority of them living in cities in emerging markets, particularly China. The number of megacities with more than ten million people will continue to grow.

Solving the mobility challenge will require bold, coordinated actions from the private and public sectors. Technological advances and commercialization, funding, intelligent policies, and business-model innovation will be needed to realize productivity improvements while creating more sustainable environments in our cities. We are optimistic that this will help the world avoid a future of global gridlock. Already, there is discernible movement toward new "multimodal" services—those that facilitate journeys combining walking, cars, buses, bikes, and trains—as well as shared transportation services.

Mark my words. A combination of airplane and motorcar is coming. You may smile. But it will come. ***- Henry Ford, 1940***

What's currently in the air?

- China's Ehang has already tested its self-flying passenger drone, named 184, which was showcased at the Consumer Electronics Show in 2016. This quadcopter has already been tested in Dubai and operational in 2018.

- Aurora Flight Sciences, acquired by Boeing in October 2017, unveiled the eVTOL, with the prototype tested in the beginning of 2017. The company also announced a partnership with Uber, which is working on on-demand flying cars. Aurora aims to deliver 50 aircraft to UberAir by **2020**.

- The final commercial design of Flying Car by AeroMobil was revealed in April 2017. The vehicle is designed to be both driven and flown, unlike those of other companies, which are mostly manufacturing VTOL aircraft. AeroMobil has started taking pre-orders, with deliveries anticipated to commence in **2020**.

- Airbus's Project Vahana, an electric autonomous helicopter, and CityAirbus, an air taxi, are also in the advanced development stage. Project Vahana is designed for both passenger and cargo transport, and Airbus plans to conduct flight tests of the prototype by the end of 2017. CityAirbus is a design for an air taxi, with multiple propellers and the appearance of a small drone. Customers would be able to book a seat on CityAirbus as they book an Uber ride.

- Volvo's parent company, Geely, acquired a flying car start-up, Terrafugia, in November 2017. Terrafugia's first flying car, Transition, is in its testing phase, with deliveries anticipated in 2019. The company is also working on a VTOL flying car, which is expected to debut in **2023**.

Delivery drones could pave the way for vertical takeoff and landing VTOL aircraft operations.

Over the past year, there have been various pilot programs featuring drones completing a successful delivery. In June 2017, Amazon patented a beehive-structured tower to serve as a multilevel fulfillment center from which its delivery drones can take off and land. Most of the drones for such programs are designed to take off and land vertically to transport even fragile goods with care, with a payload capacity of anywhere from 4 to 19 pounds.

A decade ago, driverless cars seemed a little more than a futurist's vision. Today, nearly every automaker and many major technology companies are investing billions in their development, with many predicting their widespread availability near the turn of the decade. Likewise, flying cars may today seem like science fiction.