

The State of Investment of Autonomous Vehicles

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A recent [panel](#) of specialists hosted by Haynes Boone examined a number of business and legal issues in connection with autonomous vehicle (AV) technology. The issues are plentiful and significant, but the industry and investors are nonetheless pushing forward. Researchers [estimate](#) that by 2025, we could see 8 million autonomous vehicles on the road. Our panelists made the following observations and discussed related industry implications.

Increasing amounts of money have been going into AV technology, mostly at later stages and at higher median amounts, suggesting that valuations are high, and reflecting increased demand for autonomous driving, connected cars, electric vehicles and smart mobility. Overall, the AV industry has been in flux but is still growing. VCs view AV as a high cash-burning business that will not generate revenue in the near future. In 2020, many AV companies laid off employees or shut down completely. Nevertheless, there have been AV startup successes in this large, developing and rapidly growing market.

AV companies are actively raising money in 2021. After a drop in 2019, funding has picked up and is expected to grow in AV and related areas such as alternative fuels, sensing technologies, electric vehicles (EV), connected cars and EV infrastructure. Of those technologies, AV is where most of the investment is happening. Funded companies have also begun to consolidate as the market matures through M&A activity.

Like most new markets, AV technology has its problems to be solved. Development is expensive, and is taking longer than expected. Startups must compete with large well-funded industry players. The legal regulatory environment is uncertain and restrictive. Much of the investment capital has come at later stages, leaving less room for new entrants. However, 2020 was a record year for venture capital investment, and analysts predict that 2021 will be even bigger. Given new sources of capital that have emerged, such as the rise of the SPAC (special purpose acquisition company) and the increase of the crowdfunding limit to \$5 million, there is a lot of money chasing deals.

Finally, there is China. The US leads the world in funding of AV development, but China is catching up. Given its superiority in artificial intelligence, China may be a strong competitive force in AV in the future.

Despite the business and legal challenges, AV is on the rebound and promises to be a growth sector in the future and a developing capability.