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Driving Change

Driverless Cars' Off-Road Impact Will Be Big

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San Diego — Major business players in the automotive sector are now placing multimillion-dollar bets on a future where self-driving cars take people wherever they want to go.

But how will this technology — where the consumer is just along for the ride and may not even own the vehicle — play out in the planning of real estate developments? For instance, if vehicles are constantly circulating —– via the current ride-hailing model — can project planners devote less space to parking and more to revenue-generating amenities like apartments, offices and retail spaces?

Local real estate experts say the answers to those and other questions could be coming in the not-too-distant future, perhaps within the next five to 10 years. While there are currently no specific examples of San Diego County projects being shaped by the latest driverless technologies, autonomous vehicles are widely seen as an effective response to what has long plagued urban car culture, including congestion, pollution and wasting of scarce energy and land resources.

The long-term challenges include getting consumers on board, addressing issues like safety and control, while also overcoming century-old habits and many consumers' natural love of driving.

'Not a Matter of If'

"It's not a matter of 'if,' " said Gary London, president of The London Group Realty Advisors in San Diego. "It's a matter of when and a matter of how."

London said he's been advising his developer clients to begin thinking of projects in terms of how they will fit into the driverless-car future. While all major technologies take time to become adopted, the changes could prove swift once a critical mass of consumers is on board.

The longtime consultant noted that parking structures or related accommodations for vehicles often account for 20 percent of the total cost of a typical apartment or commercial construction project. Wide acceptance of driverless vehicles, when it happens, will mean significant changes in the cost structure, feasibility and design of many projects, especially in urban areas.

"They will be profound and fairly immediate," London said. "Think five years, not 20. This will be a fast transition. And it will be transformational."

Movers and Shakers

Despite obstacles that could take decades to fully address, tech and transportation players such as Tesla, Google and Uber are well along in their testing and spending. And major established automakers — led by General Motors and Ford — are now investing billions of dollars in tech company acquisitions and partnerships with the current ride-hailing companies.

For Uber and Lyft, said London, the dream is a future where their autonomous vehicles could be parked in one central area of a city — perhaps far away from where people live and work — but kept constantly in motion as they're being hailed by customers. That scenario would mean significant reductions in labor and related costs associated with employing drivers.

But experts said there are several matters that would intervene in coming years while consumers and developers are getting used to the idea of self-driving cars. Foremost is the issue of vehicle ownership.

Elaine Worzala, director of the Corky McMillin Center for Real Estate at San Diego State University, noted that if people decide to own their autonomous vehicles, they will still need a place to park them at home, work or wherever they drive. Similar issues could be faced by Uber, Lyft and other ride-hailing firms, even if they are able to convert their fleets entirely to self-driving vehicles.

"They're going to have to be parked somewhere at least part of the time," Worzala said.

It could take several years before driverless vehicles solve problems at existing apartment complexes, for instance, that deal with chronic tenant parking space shortages in San Diego and many other cities. Developers of many types of projects, she said, may need to see a lot of data on usage patterns before deciding whether to alter their plans for current or future buildings.

Sharing the Road?

There is also the issue of how driverless and traditional vehicles will interact. Worzala said that at least initially, cities will need to create highway lanes where autonomous vehicles run separately from traditional vehicles, similar to what is already done for trains, trolleys and other mass transit in many regions.

Once there is wide acceptance of driverless cars, experts agreed that roadways could become more efficient, handling more traffic as vehicles are able to drive closer together in a safe manner. Consumers could also make more effective use of their time, conducting work in the car while the vehicle is handling the commute to the job and other destinations.

But there could also be some negative unintended consequences. London noted that once consumers are comfortable and productive during commutes in self-driving cars, they won't necessarily mind the length of those drives.

That potentially means there could be less incentive to build communities in pedestrian-friendly configurations, as consumers accept current geographical realities in local housing — including long-distance drives by many who work in San Diego County but own homes in more affordable neighboring counties.

London said the current local mismatch between where people live and where the jobs are — demonstrated in places like downtown San Diego, where most residents commute northward to work — will likely encourage more usage of autonomous vehicle options where multitasking is optimized. The trajectory could be altered, however, if places like downtown are able to create more high-paying jobs.

Changing Layouts of Cities

Norm Miller, professor of real estate finance at the University of San Diego's Burnham-Moores Center for Real Estate, noted that wide acceptance of driverless vehicles could have an extensive impact on projects such as large office buildings. If an office high-rise can have two floors devoted to parking instead of 10, there is an opportunity to add value to the project by making more productive use of space.

When it becomes commonly used, the technology has the potential to alter not only the interior configuration of cars, but the layout of entire cities.

“Eventually, we will have the ability to work or sleep or watch movies,” Miller said during an interview with London, taped in advance of a local Urban Land Institute forum on the subject earlier this year. “It will dramatically lower the time and cost of commuting, which means cities can spread out more.”

$6,000 Saving for Household

In a July report by Terence O’Connell and Wes Guckert, the Washington, D.C.-based Urban Land Institute noted that American households spend an average of $9,000 annually on expenses for personal vehicles — such as car payments, gas and insurance — amounting to 17 percent of average household spending.

Yet on average, cars are used for only 5 percent of their lifetimes and sit idle the other 95 percent of the time, ULI reported. Citing projections from research firm ARK Invest, it said service providers using shared autonomous vehicles could deliver mobility to consumers at 15 to 30 cents per mile, shaving $6,000 off households’ annual spending on their cars.

Once the self-driving technology gains wide usage nationwide, one shared vehicle could replace more than five private vehicles.

There are currently more than 800 million parking spaces in the U.S. — nearly four parking spaces per vehicle. If autonomous vehicles are able to reduce parking space demand by 5 percent annually, the ULI report noted, it could free up 40 million spaces annually for other land uses.