



RIDE-HAILING PART 2: Its Effect on Vehicle Miles Traveled

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Introduction

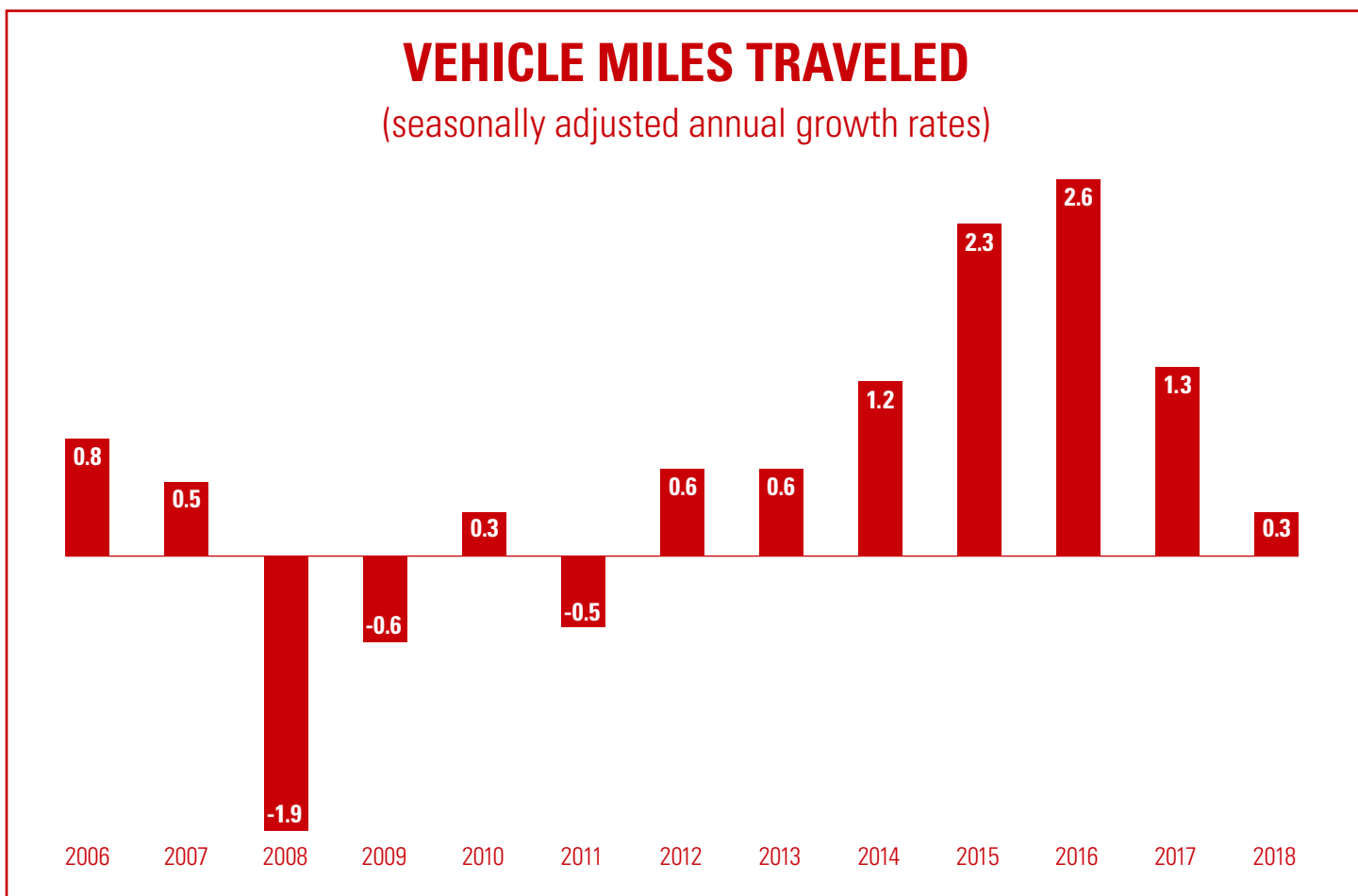
As mentioned in our last article on ride-hailing and vehicle sales, the rapid growth of ride-hailing in the past few years is poised to impact the automotive and salvage auto industries in many different ways. In addition to vehicle sales effects, the rise of the shareable mobility services sector is also poised to impact the total vehicle miles traveled (VMT). This, of course, is an important resource question surrounding gasoline usage, road usage, and traffic congestion along with the subsequent effect on ride-hailing fleet depreciation and vehicle turnover. All this matters for the salvage auto industry as generally increases in VMT would suggest greater wear-and-tear on vehicles effectively shortening their lifespans leading more vehicles coming to the auction and salvage markets. Additionally, if ride-hailing services are leading to more VMT, a natural link could also be more traffic congestion and a greater likelihood of collisions, which also could be a positive for the salvage auto industry. So, this begs the question, what is the effect of the rising ride-hailing industry on VMT?



Ride-Hailing and Vehicle Miles Traveled

The direct impact ride-hailing has or will have on VMT depends on how individuals pick their transportation options. Every time a person chooses not to walk, bike, take the subway or bus and elects to hail a driver to pick them up, VMT will increase. Individuals who sell their cars in favor of ride-hailing as its replacement would yield no change in VMT for the passenger, but VMT would increase as result of for-hire drivers “deadheading,” or the excess driving needed to commute to their passenger’s pick up locations. On the flip side, shared-ride services like UberPool and Lyft Shared Rides offer more efficient alternatives to solo driving in personal vehicles, putting downward pressure on VMT. Additionally, for-hire alternatives may act as a direct substitute to traditional taxicabs, thus likely yielding no substantive change to VMT. Finally, ride-hailing may induce latent demand. That is, the convenience of these services may make people more likely to get out of the house more, further increasing VMT.

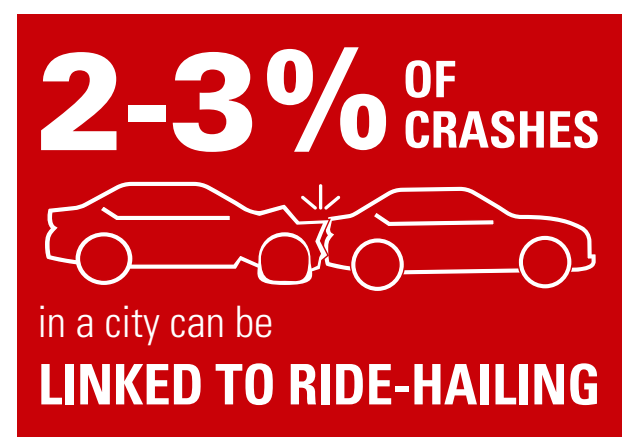
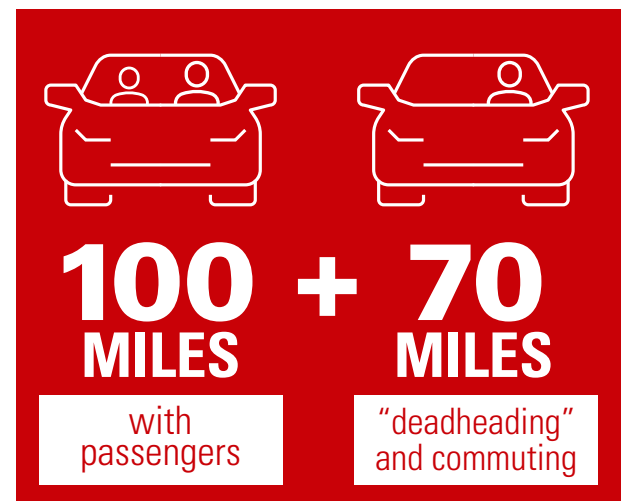
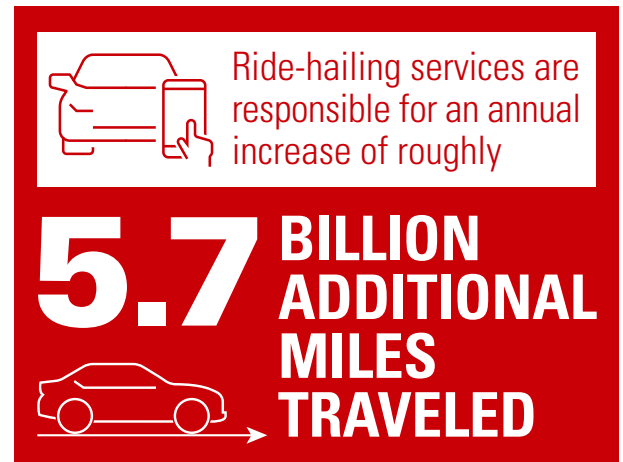
So how does this theory play out in the real world? Overall, annual VMT has increased each year since 2012, peaking at 2.6% year-over-year growth in 2016, with that growth decelerating in the two years since. As the popularity of ride-hailing services has grown over the same time frame, it is tricky to estimate the contribution/reduction ride-hailing has had on VMT, as VMT is driven by many factors such as general economic growth and gas prices, to name a few.¹



To date, most of the evidence points to VMT increases as a result of the growth in ride-hailing options. A 2018 study by the former Deputy Commissioner of Traffic and Planning at the New York City Department of Transportation, Bruce Schaller, suggests the rise of these services has a substantial impact on VMT in urban areas. In fact, using 2017 data, Schaller estimates that these ride-hailing services are responsible for an annual increase of roughly 5.7 billion additional miles traveled across the nine largest metros in the U.S. Moreover, this study estimates that for every mile of personal driving that is decreased due to ride-hailing, 2.6 new vehicle miles are added. This suggests an increase of nearly 160 percent in city VMT as a result of these services.²

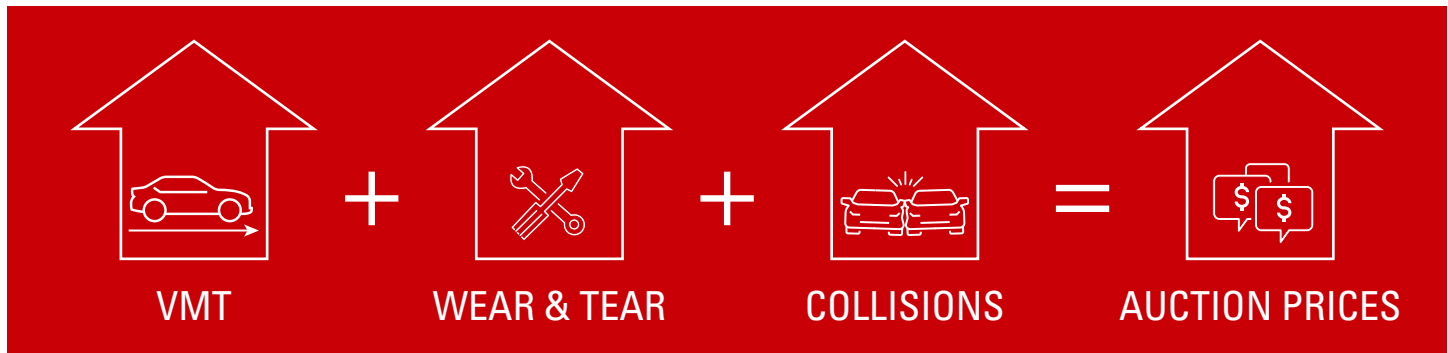
These findings are supported by a University of Colorado - Denver analysis that found that for every 100 miles with passengers, Uber and Lyft drivers traveled an additional 70 miles without a passenger in “deadheading” and commuting to their service area.³ Moreover, by surveying passengers, the authors determined that 34% of passengers chose to ride-hail as a substitute for some other lower-VMT mode of transportation.⁴ This further perpetuates the notion that ride-hailing has, thus far, increased VMT.

As VMT increases and ride-hailing companies become more ingrained in high-density cities, studies are also finding that congestion is increasing in these cities, likely due to ride-hailing services such as Lyft and Uber.⁵ A recent study by researchers at the University of Chicago Booth School of Business estimated that 2 to 3 percent of crashes in a city can be linked to ride-hailing. This would suggest that as ride-hailing and VMT increase creating more congestion, there is a higher likelihood for collisions.⁶ Alternatively, FiveThirtyEight looked at New York City data before and after Uber made a hard push for their services in the city. They found that in Manhattan, total pickups among cab rides and Uber shifted little over time, as the share of pickups mostly just shifted toward Uber and away from cab rides. While the authors don't provide an estimate for the impact this shift may have had on VMT, the relatively small change in pickups suggests that VMT was also likely relatively unchanged as a result of the increased pool of ride-hailing drivers.⁷



Ride-hailing & the Salvage Auto Industry

While the ride-hailing industry is, in many ways, still in its early stages of development, the salvage auto industry needs to pay close attention to the developments in the ride-hailing space. The link between ride-hailing and the salvage space is relatively straight forward: its capacity to increase VMT and thus wear-and-tear on vehicles as well as the number of collisions could increase the supply, severity, and price of vehicles at auction.



With increased traffic congestion, due in part to the increase in VMT from ride-hailing, accident collision rates are likely to increase. Depending on the accident severity, this could lead to one of two effects on the auto salvage market. First, if the uptick in collision rates is associated with high levels of severity, this could lead to more cars being totaled and increase the supply of vehicles coming to the auto salvage market. This increase in supply may apply downward pressure to prices. On the flip side, the higher VMT can be associated with more traffic and more collisions. However these could occur at potentially slower speeds, meaning there may not be an increase in the number of totaled cars, but there would be an increase in the demand for replacement parts and vehicle repair. This demand side shock could apply upward pressure on the prices. The overall impact on prices in this market will thus depend on which effect dominates.⁸

As the ride-hailing industry continues to grow its effect on the automotive industry and the salvage auto industry needs to be closely monitored. While we discussed many of the potential impacts of the ride-hailing industry, it is still too early to tell with any certainty how the market will react.

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