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The implementation of autonomous vehicles (AVs) in the United States will have numerous benefits and drawbacks. A switch from gasoline powered cars to (mostly) electric AVs will drastically reduce pollution and carbon dioxide emissions, helping curb the drastic effects of climate change. Self-driving cars can allow the reduction of lane sizes, letting roads take up less space. Parking and curb spaces will not be as necessary as more people shift into transit options involving AVs. New jobs will be created in technological industries involving the development and improvement of these vehicles. AV implementation will also have plenty of drawbacks. A shift to AVs is predicted to increase an already concerning amount of urban sprawl. Thousands of jobs will be lost in industries that autonomous vehicles took over. The cost of installing the infrastructure needed for AV use itself will cost the nation billions of dollars. An interesting aspect of this question of AV implementation is the stark urban/rural divide. While most municipalities are not prepared for AV usage (as of now), studies find that urban areas are much more prepared for the forthcoming of autonomous vehicles. This may be due to multiple factors, such as an increased reliance upon transit to get to work (transits are some of the first places where AVs are starting to be implemented). Large urban areas are also more likely to be able to afford the cost that comes with adding AV infrastructure while small rural areas may not perceive the benefits of AVs to be great enough to outweigh their massive costs.

The possibility of autonomous vehicles being implemented in large urban areas soon merits a closer inspection. The emergence of AVs would drastically change numerous aspects of big cities. For example, a switch to autonomous vehicles could lead to a smaller physical impact of driving as lane sizes become smaller. On the other hand, a switch to autonomous vehicles is predicted to lead to an increase in the number of cars on the road, worsening traffic and leading to congestion. An increase in urban sprawl would lead to cities expanding at a greater rate than they are already. Transportation would also change, as more people look to autonomous vehicles (in the forms of taxis and shuttles) to chauffeur them around and make deliveries. The rise of Avs would lead to many urban jobs related to car manufacturing to disappear while new careers arise in the technology sector as cities look to continuously increase AV efficiency and safety. Finally, a shift to AVs may require massive policy decisions on how AVs will operate in the cities and who should be held accountable in the case of an emergency. Overall, the potential of autonomous vehicle implementation in urban areas raises the possibility of AVs changing the landscape and workforce of the cities.

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