

The Potential Impact of Transportation Trends on U.S. 69 Expansion Needs

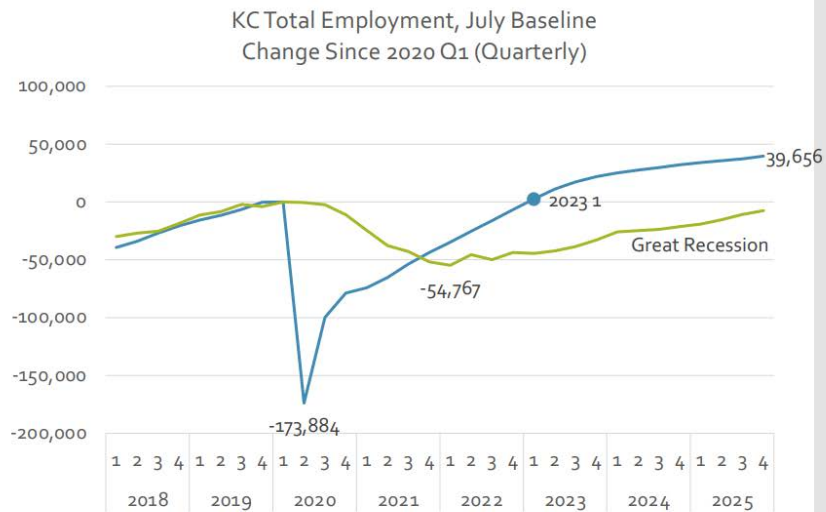
In this pandemic era, with many people working from home and drivers limiting their auto travel, it's easy to imagine that the days of traffic jams and travel delays on U.S. 69 are permanently gone. However, the lasting impact – or lack thereof – on future U.S. 69 traffic volumes from COVID-19, workplace changes and transportation technology trends warrants deeper examination as expansion is being studied.



COVID-19 Impacts on Travel

COVID-19 had an immediate and significant impact on Johnson County traffic. In 2020, total weekly traffic volume declined about 30% at the lowest point year over year, according to data compiled by [Replica](#). As of January 2021, traffic is growing again and is up 4.6% from 2019 (but still down 5.5% from 2020). Traffic should continue increasing as the local economy returns to pre-pandemic levels by the first quarter of 2023, about a year faster than the U.S. as a whole, according to the [Mid-America Regional Council](#) and its projections regarding regional employment trends.

“Slightly better” pushes the recovery of our employment to pre-recession levels ahead of the nation by about a year. While much deeper job losses occurred than during the Great Recession, the recovery time this pandemic-induced recession is expected to be twice as fast, thanks largely to the initial aggressive federal policy response.



Source: MARC, using REMI model and Moody's national forecast

MARC expects the local economy's gross domestic product ([GDP to increase 12.8 percent from the end of 2019 to the end of 2025](#)).

In fairness, no one is sure exactly what the long-range impact will be. But even if there is some reduction in the short term, it is likely that U.S. 69 volume will continue growing over time regardless as [Overland Park is expected to grow to 236,000 people by 2036](#), a [23.2% increase over its 2018 population](#). And with the return of a growing economy, it is not illogical to assume the area will see additional work trips as the workforce grows, more personal trips as disposable income grows, and [increasing freight and delivery trips to accommodate boosts in economic activity and related disposable income growth](#). This conclusion is supported by an analysis compiled by [Fitch Ratings, Inc.](#), which projects that [traffic volumes will fully recover by 2022](#). And it was echoed in [a recent survey of residents in the U.S. 69 area who believe the roadway already is in need of improvement to handle just existing volumes](#).



Workplace Changes

There's a presumption traffic increases could be smaller or non-existent if Johnson County residents continue working from home. According to the [U.S. Census Bureau Household Pulse Survey](#), almost 40 percent of Kansans work from home some portion of their working hours, a number likely [somewhat higher in Johnson County based on its workforce make-up](#). However, the [Jan. 12, 2021 PWC Remote Work Survey](#) found that 68% of employers say they need employees in the office three or more days a week to maintain efficiency. And 75% of executives surveyed expect at least half of their office workforce will be back on site this year.

Nonetheless, it is clear that the hybrid workplace – office and home – is here to stay, even if at a reduced level. That doesn't necessarily mean a reduction in U.S. 69 corridor traffic, however. More likely to occur, is a shift in when congestion occurs. [A new study conducted by the analytics firm StreetLight Data](#) finds that America's new normal is traffic shifting towards sustained higher afternoon volumes. As the firm noted, "millions of commuters no longer head to a distant office in the morning, so they have new flexibility for mid-day grocery shopping and other in-person errands as more businesses gradually reopen."



Automotive Innovations

Connected and automated vehicles (CAVs) hold real promise for improved operational safety and efficiency for American highways, including U.S. 69. Technology will make it easier someday to operate more vehicles at higher speeds along roadways without increasing accidents.

It will be some time before the positive effects of CAVs are broadly felt, however. According to the [Victoria Transport Policy Institute](#), the evolution of automated vehicles is likely to unfold over decades:

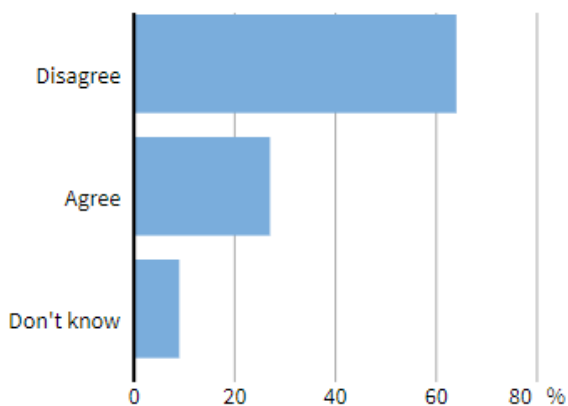
- Some kinds of autonomous vehicles, able to operate without a driver, may be commercially available, legal to use in some jurisdictions and operate in simple, highly controlled environments by the late 2020s;
- Autonomous vehicles providing independent mobility for affluent non-drivers, may begin in the 2030s or 2040s;
- Commonly available and affordable autonomous vehicles become common and affordable, probably in the 2050s to 2060s.

[Several factors contribute to this timeline](#) or [even potentially delay it further](#). CAVs are ill-equipped to deal with the inconsistencies of human driving and behavior. Current technology just isn't up to the challenges of a highway filled with a mix of manually and autonomously driven vehicles. And that mix of vehicles is likely to persist long after CAVs become available. [Americans typically retain their vehicles for nearly 12 years](#). [And it takes about 15 years for the entire American car fleet to turn over](#).

Consequently, it still may be decades before the full benefit CAVs has an impact on U.S. 69.

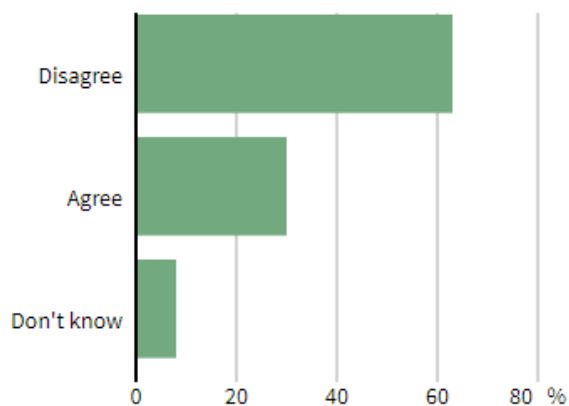
BUYING

I would buy a self-driving car



SPENDING

I would spend more for self-driving features



[A 2019 Reuters/Ipsos survey of 2,222 U.S. residents](#) found that most Americans would not buy an automated car or spend more money for self-driving features. The survey has a credibility interval, a measure of precision, of 2%.



Being flexible for what the future brings

The changes outlined here, and others, may present a long-term evolution in the requirements placed on U.S. 69. But the culmination of those factors has a time horizon that may extend out 50 years or more, well beyond the design life of a modernized, expanded highway corridor. And the addition of extra lanes in the form of express toll lanes adds great flexibility to how U.S. 69 could adapt to those and other emerging trends. For example, as CAVs become more prevalent, the express toll lanes can evolve into automated vehicle-only lanes to ensure there is a safe, consistent environment which the CAVs can safely and efficiently operate.

These kinds of changes, and the uncertainty around them, are one reason why 69Express is looking at a wide range of potential solutions for U.S. 69's congestion today and in the future – solutions that range from using existing travel demand management strategies (such as ramp metering) to adding additional general-purpose lane to exploring the potential use of express toll lanes.

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