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16. Abstract

In the previous five reports in this series, I examined recent changes in the number of registered light-duty vehicles (cars, SUVs, pickups, and vans), and the corresponding changes in distance driven and fuel consumed. The units of the analyses were both the absolute numbers and the rates per person, per driver, per household, and (where appropriate) per vehicle. The main finding of those reports was that the respective rates all reached their maxima around 2004. I argued that, because the onsets of the reductions in these rates preceded the onset of the recession (in 2008), the reductions in these rates likely reflect fundamental, noneconomic changes in society. Therefore, these maxima have a reasonable chance of being long-term peaks as well.

The present report examines the relationship between road transportation and economic activity since the end of the Second World War. The two measures of interest were *distance driven by all vehicles per inflation-adjusted GDP* and *fuel consumed by all vehicles per inflation-adjusted GDP*.

The main finding is that distance driven per GDP reached its highest values in a broad plateau from the early 1970s through the early 1990s, and then decreased steadily. By 2012, the value of this measure decreased by 22% from its absolute maximum, which was reached in 1977. Some of the factors that likely contributed to the recent decline in the value of this measure are the decreased amount of personal transportation, decreased contribution to GDP of truck transportation, and the increased contribution to GDP of data services, information processing, and e-commerce.

The amount of fuel consumed per GDP peaked in the early 1970s, and then decreased by 47% by 2012. The relatively steep decline in the value of this measure reflects the added contribution of the improvement in vehicle fuel economy from the 1970s on.

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