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# **HAS MOTORIZATION IN THE U.S. PEAKED? PART 9: VEHICLE OWNERSHIP AND DISTANCE DRIVEN, 1984 TO 2015**

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HAS MOTORIZATION IN THE U.S. PEAKED?  
PART 9: VEHICLE OWNERSHIP AND  
DISTANCE DRIVEN, 1984 TO 2015

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16. Abstract  This study analyzed recent changes in the United States in both the ownership of light-duty vehicles (cars, pickup trucks, SUVs, and vans) and the corresponding distance driven. Of interest were changes in the rates per person and per household. The period examined was 1984 to 2015.  The main findings are as follows:  (1) <i>The vehicle-ownership rates</i> per person and per household both reached their maxima in 2006. The two rates for 2015 are down, on average, 4.4% from their maxima, although they have rebounded, on average, 1.4% from the post-maximum minima reached in 2012 and 2013.  (2) <i>The distance-driven rates</i> per person and per household both reached their maxima in 2004. The two rates for 2015 are down, on average, 7.8% from their maxima, although they have rebounded, on average, 2.1% from the post-maximum minima reached in 2013.					
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## **Introduction**

This report is the ninth in a series examining recent changes in various aspects of motorization in the United States. For example, Part 8 examined recent changes in travel times (Sivak, 2015b), and Part 7 included an analysis of changes in vehicle ownership and distance driven (Sivak, 2015a).

The primary focus in Part 7 (Sivak, 2015a) was vehicle-ownership and distance-driven rates per person and per household, as opposed to the absolute numbers (which depend, in part, on the continuously increasing size of the U.S. population). The period covered was from 1984 to 2013. The main findings of that study were that the rates of vehicle ownership reached their maxima in 2006, and the rates of distance driven reached their maxima in 2004. The present study extends the data in Sivak (2015a) through 2015.

## **Method**

The number of light-duty vehicles (cars, pickup trucks, SUVs, and vans) was obtained or calculated from the information in FHWA (2017). For 1984 through 2006, this number was the sum of cars and other two-axle, four-tire vehicles. For 2007 through 2015, this number was the sum of short-wheel-base and long-wheel-base, light-duty vehicles.

The sources of other relevant data were as follows:

- Distances driven by light-duty vehicles: FHWA (2017)
- Resident population: ProQuest (2017)
- Households: U.S. Census Bureau (2017)

Some of the underlying data were recently revised, and this analysis incorporates those revisions.

## **Results**

Table 1 and Figure 1 present the rates of vehicle ownership per person and per household. Table 2 and Figure 2 present the analogous rates of distance driven.

Table 1  
Registered light-duty vehicles per person and  
per household, 1984-2015. (The maxima are in **red**.)

Year	Vehicles per person	Vehicles per household
1984	0.665	1.835
1985	0.697	1.910
1986	0.709	1.925
1987	0.714	1.934
1988	0.729	1.958
1989	0.733	1.949
1990	0.730	1.953
1991	0.718	1.926
1992	0.716	1.921
1993	0.721	1.943
1994	0.726	1.968
1995	0.729	1.961
1996	0.738	1.996
1997	0.733	1.980
1998	0.737	1.982
1999	0.745	2.000
2000	0.754	2.031
2001	0.778	2.050*
2002	0.768	2.021
2003	0.768	2.003
2004	0.780	2.038
2005	0.785	2.046
2006	<b>0.786</b>	<b>2.050</b>
2007	0.782	2.032
2008	0.778	2.025
2009	0.764	2.001
2010	0.745	1.961
2011	0.750	1.950
2012	0.744	1.931
2013	0.746	1.927
2014	0.753	1.949
2015	0.756	1.950

\*At the fourth decimal point, the rate for 2001 was less than the rate for 2006.

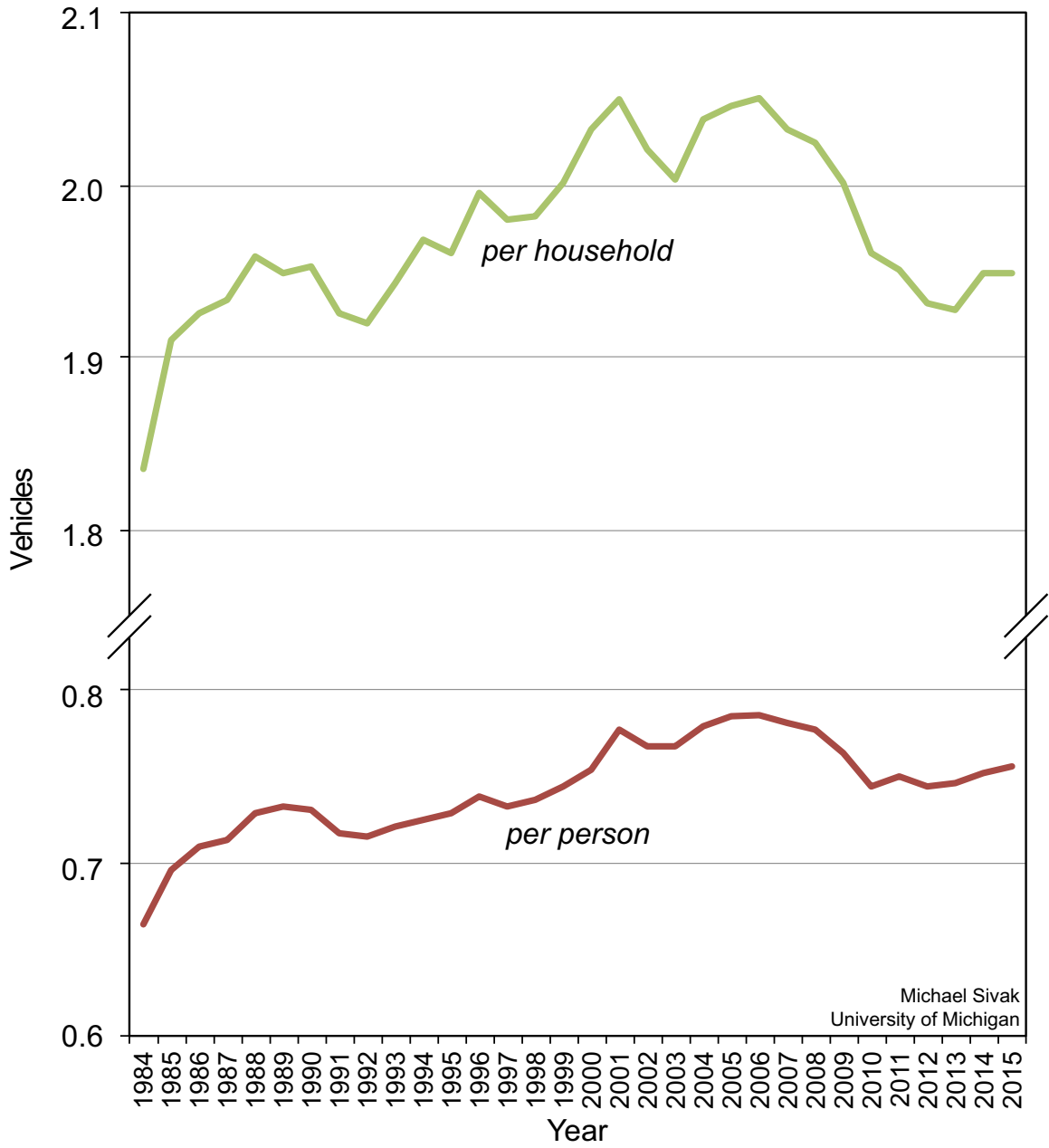


Figure 1. Registered light-duty vehicles per person and per household, 1984-2015.

Table 2  
 Distances driven per person and per household, 1984-2015.  
 (The maxima are in **red**.)

Year	Miles driven per person	Miles driven per household
1984	6,612	18,256
1985	6,866	18,823
1986	7,039	19,108
1987	7,309	19,790
1988	7,645	20,524
1989	7,828	20,813
1990	7,929	21,203
1991	7,931	21,274
1992	8,105	21,732
1993	8,159	22,002
1994	8,250	22,354
1995	8,368	22,511
1996	8,487	22,950
1997	8,631	23,296
1998	8,765	23,582
1999	8,853	23,783
2000	8,943	24,100
2001	9,018	23,750
2002	9,125	24,013
2003	9,155	23,868
2004	<b>9,314</b>	<b>24,349</b>
2005	9,304	24,258
2006	9,294	24,243
2007	8,933	23,196
2008	8,649	22,522
2009	8,584	22,472
2010	8,561	22,533
2011	8,503	22,101
2012	8,481	22,002
2013	8,462	21,866
2014	8,500	21,996
2015	8,648	22,311



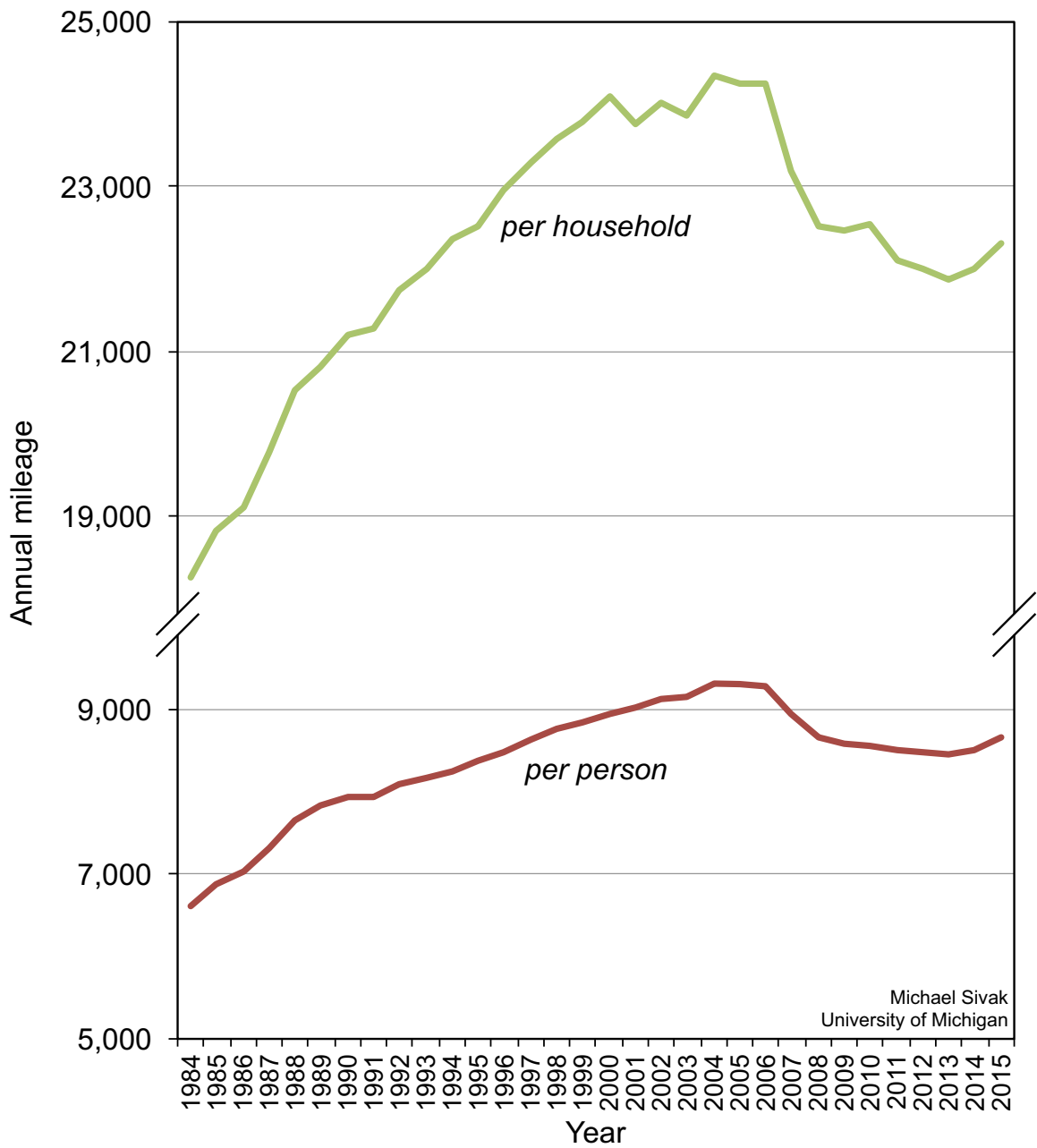


Figure 2. Distances driven per person and per household, 1984-2015.

The main aspects of the data in Tables 1 and 2 (and Figures 1 and 2) are summarized in Table 3.

Table 3  
The main aspects of the data in Tables 1 and 2 (and Figures 1 and 2).

Measure	Maximum year	Change from the maximum to 2015	Post-maximum minimum year	Change from the post-maximum minimum to 2015
<i>Vehicles</i>				
per person	2006	-3.8%	2012	+1.6%
per household	2006	-4.9%	2013	+1.2%
<i>Distance driven</i>				
per person	2004	-7.2%	2013	+2.2%
per household	2004	-8.4%	2013	+2.0%

## **Discussion**

### **Vehicle ownership**

- The rates per person and per household both reached their maxima in 2006.
- The rate per person decreased from 2006 to 2012, and the rate per household decreased from 2006 to 2013.
- The two rates for 2015 are down, on average, 4.4% from their maxima, although they have rebounded, on average, 1.4% from the post-maximum minima reached in 2012 and 2013.
- The rate per person for 2015 is at about the same level as the rate for 2000, while the rate per household for 2015 is at about the same level as the rate for 1993.

### **Distance driven**

- The rates per person and per household both reached their maxima in 2004.
- The rates decreased from 2004 to 2013.
- The two rates for 2015 are down, on average, 7.8% from their maxima, although they have rebounded, on average, 2.1% from the post-maximum minima reached in 2013.
- The rate per person for 2015 is at about the same level as the rate for 1997, while the rate per household for 2015 is at about the same level as the rate for 1994.

### **Vehicle ownership vs. distance driven**

- The decreases in the distance-driven rates from their respective maxima to 2015 (averaging 7.8%) were greater than the decreases in the vehicle-ownership rates (averaging 4.4%).
- The rebounds in the distance-driven rates from their post-maximum minima to 2015 (averaging 2.1%) were greater than the rebounds in the vehicle-ownership rates (averaging 1.4%).

## Conclusions

This study analyzed recent changes in the United States in both the ownership of light-duty vehicles (cars, pickup trucks, SUVs, and vans) and the corresponding distance driven. Of interest were changes in the rates per person and per household. The period examined was 1984 to 2015.

The main findings are as follows:

- (1) *The vehicle-ownership rates* per person and per household both reached their maxima in 2006. The two rates for 2015 are down, on average, 4.4% from their maxima, although they have rebounded, on average, 1.4% from the post-maximum minima reached in 2012 and 2013.
- (2) *The distance-driven rates* per person and per household both reached their maxima in 2004. The two rates for 2015 are down, on average, 7.8% from their maxima, although they have rebounded, on average, 2.1% from the post-maximum minima reached in 2013.

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