



A range of ‘business as usual’ projections
for KY Vehicle Miles Traveled to 2030

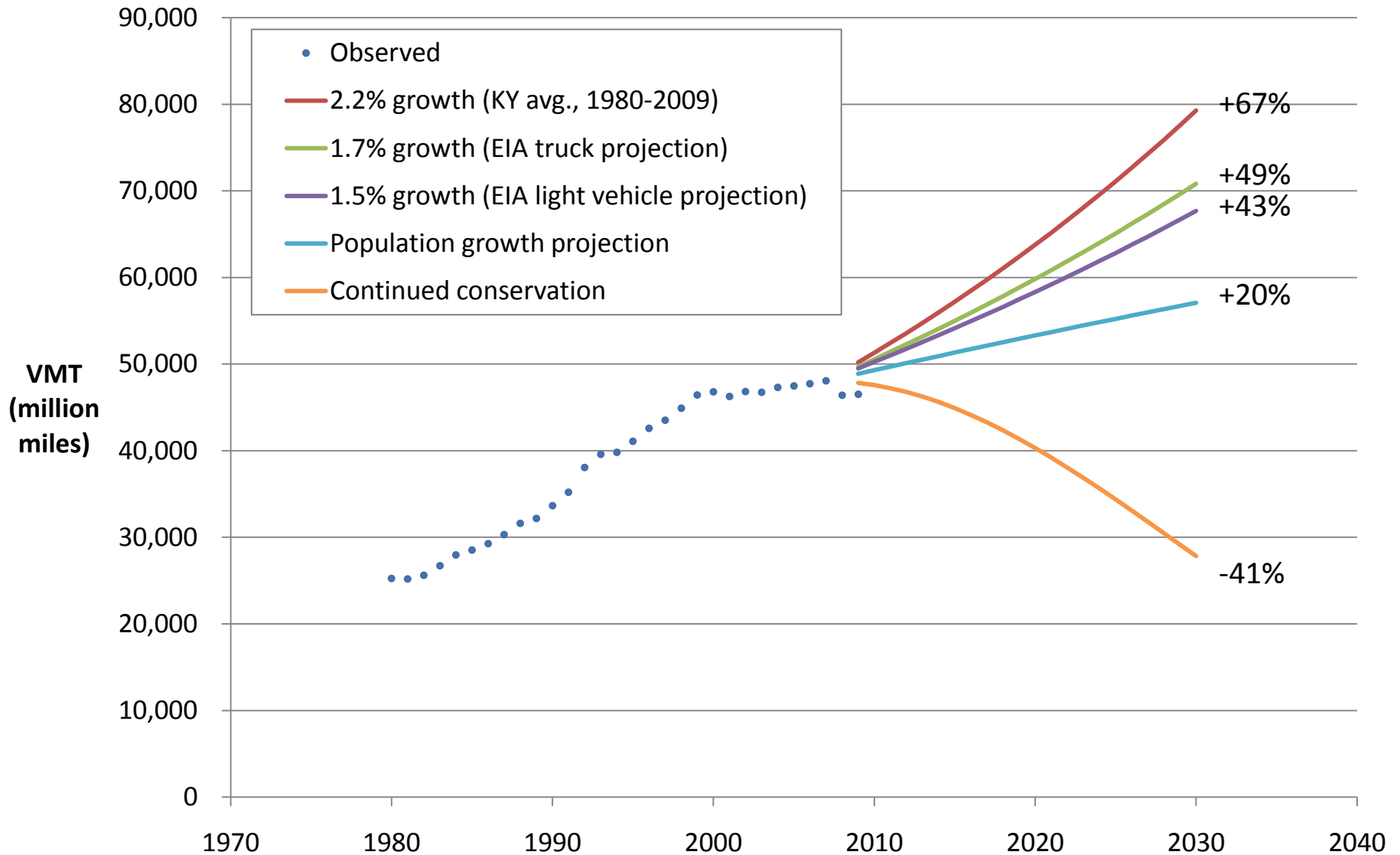


WALK/BIKE
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A range of 'business as usual' projections for KY VMT to 2030



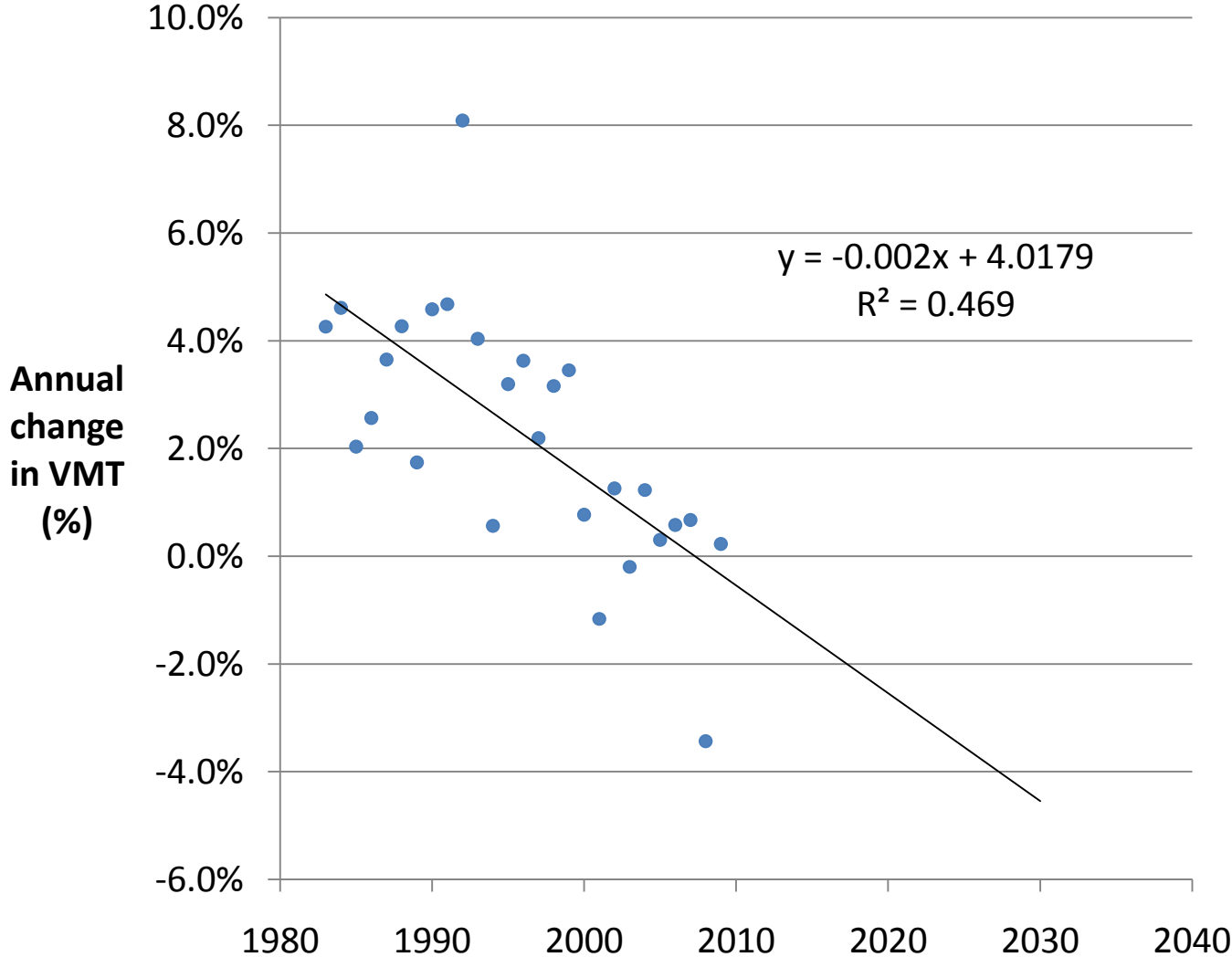
'Business as usual'

VMT projections for KY

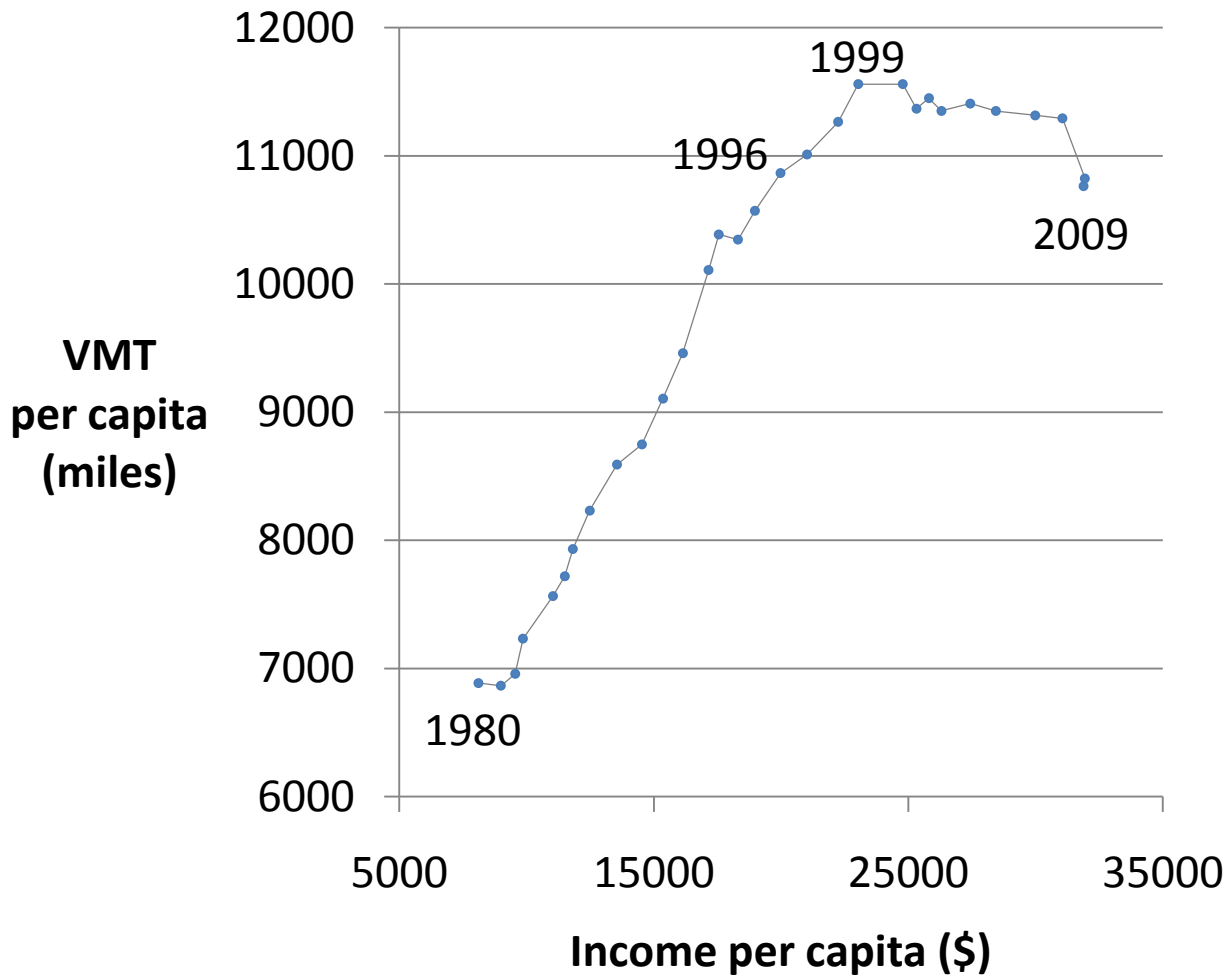
1. KY State Projection: 2.2% annual growth
 - Source: average rate observed between 1980 and 2009
 - Caveat: this growth rate has not been observed since 1999
 - Outcome: VMT increases by 67% between 2005 and 2030
2. Energy Information Administration Projection: 1.5 - 1.7% annual growth
 - Source: [EIA projections](#) for cars and trucks, respectively, based on models incorporating projected energy prices, fuel efficiency, and disposable income
 - Caveat: EIA projections have consistently overestimated observed growth over past decade; KY has not had annual growth in VMT above 1.3% since 1999
 - Outcome: VMT increases by 43-49% between 2005 and 2030
3. Population Projection: Change in VMT mirrors projected population growth
 - Source: [KY State Data Center](#)
 - Caveat: Assumes no change in average individual driving patterns, even though observed annual change in VMT has been less than change in population most years since 2000 (individuals have been driving less each year)
 - Outcome: VMT increases by 20% between 2005 and 2030
4. Continued Conservation: Rate of change continues to fall by 1% every five years, following trend since 1983
 - Source: projection from linear regression of annual change in VMT between 1983 and 2009
 - Caveat: Assumes established trend continuous for another 20 years, moving from era of declining growth rates to era of increasing contraction in driving patterns
 - Outcome: VMT falls by 41% between 2005 and 2030

Annual change in KY VMT (1983-2009), with linear regression projected to 2030

(used to calculate 'business as usual' scenario #4)

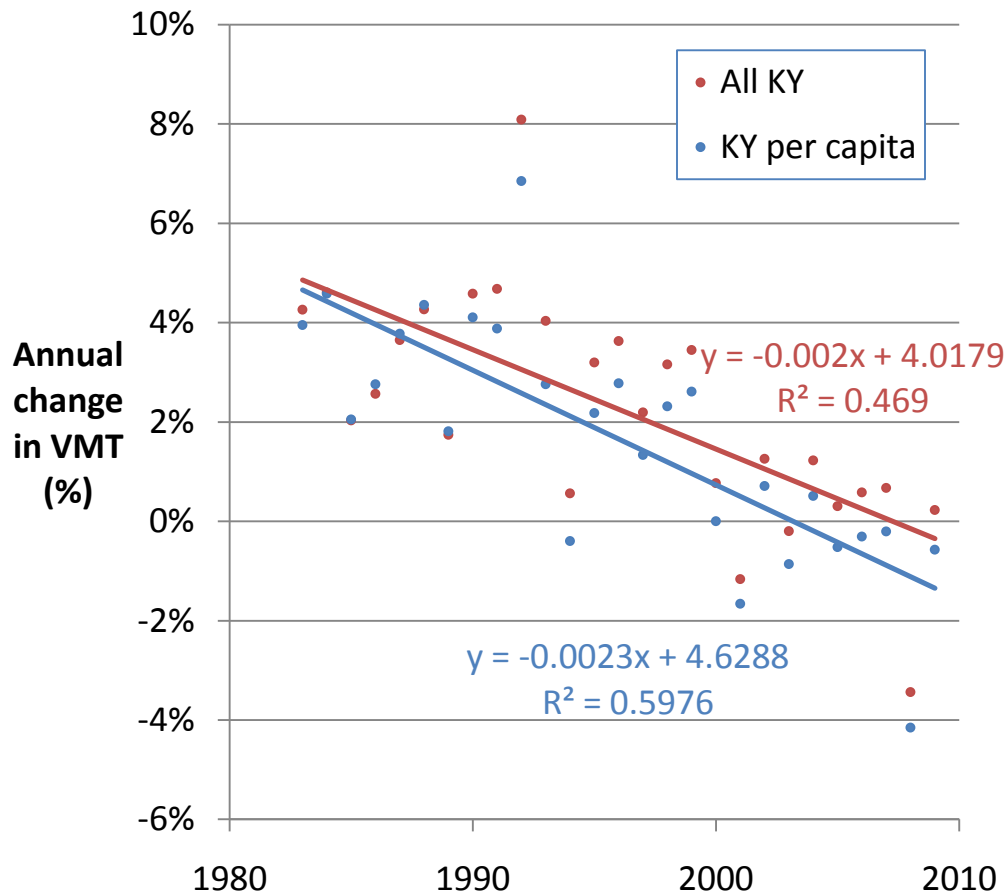


Per capita income and VMT in KY, 1980-2009



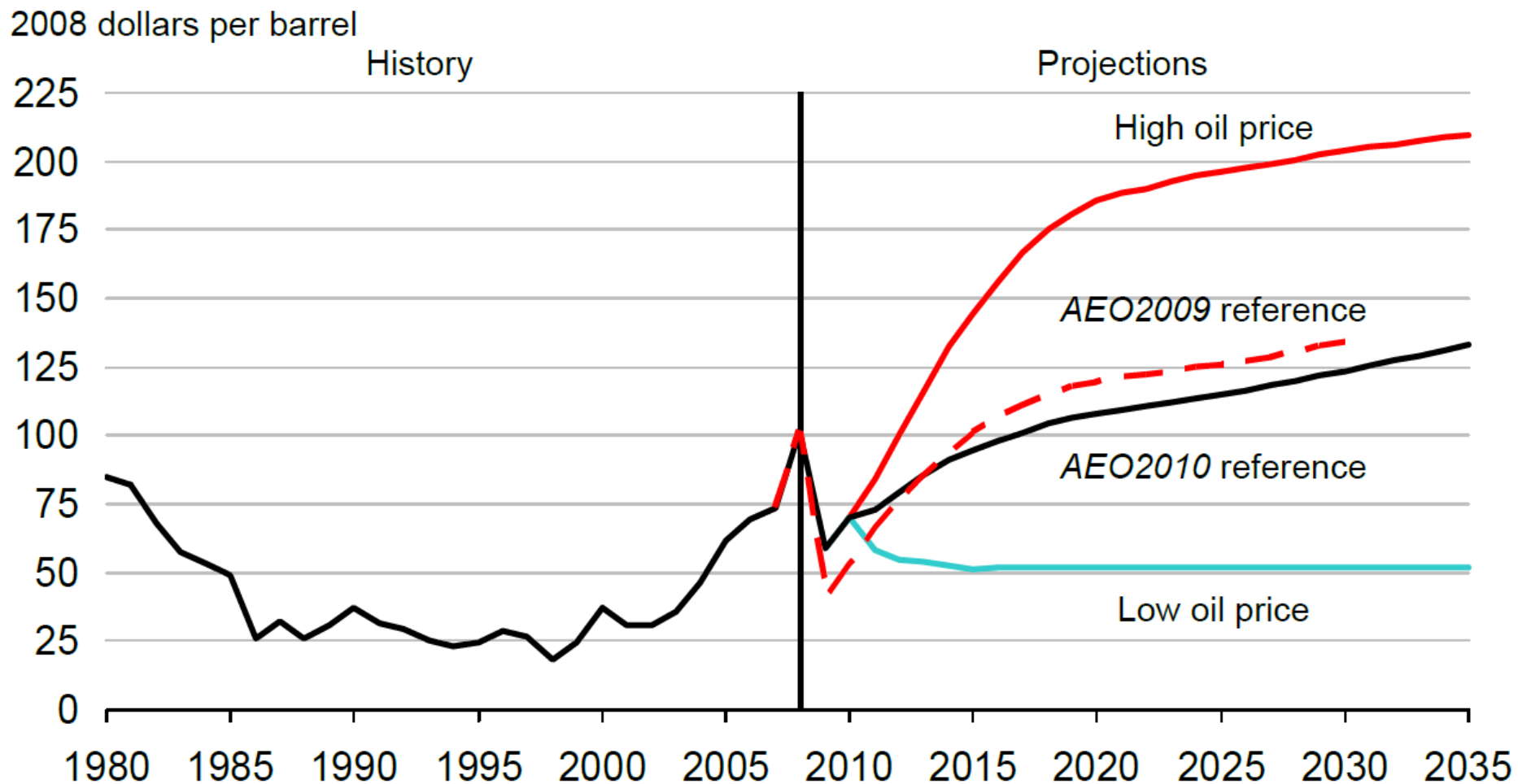
- Correlation between per capita income and per capita VMT ended in 1999
- Since 2000 the average person in KY makes more but drives less
- In 2009 the average person in KY made 60% more than in 1996 but drove slightly less

Annual change in per capita and total VMT for KY, 1983-2009



- Annual change in per capita VMT tends to be lower than change in total VMT since 1990s
- Individuals in KY drove more than the previous year in only two of the past 10 years
- Population growth rate likely overestimates future change in KY VMT

Oil prices in the reference case rise steadily; the full *AEO2010* will include a wide range of prices



Data sources

- KY VMT, 1980-2007
 - US Dept. of Transportation, Federal Highways Administration,
<http://www.fhwa.dot.gov/policyinformation/statistics/vm02.cfm>
- National VMT, 2008 & 2009
 - used to estimate KY VMT for 2008 & 2009
 - US Dept. of Transportation, Federal Highways Administration,
<http://www.fhwa.dot.gov/ohim/tvtw/09dectvt/09dectvt.xls>
- National VMT projections
 - basis of 'business as usual' scenario #2
 - US Dept. of Energy, Energy Information Administration,
Annual Energy Outlook 2010,
<http://www.eia.doe.gov/oiaf/aeo/pdf/appa.pdf>
- KY population and income, 1980-2009
 - US Dept. of Commerce, Bureau of Economic Analysis,
<http://www.bea.gov/regional/spi/default.cfm?selTable=SA30>
- KY population projections, 2010-2030
 - Basis of 'business as usual' scenario #3
 - Kentucky State Data Center, University of Louisville
<http://ksdc.louisville.edu/kpr/pro/projections.htm>
- Oil price projections, 2009-2030
 - US Dept. of Energy, Energy Information Administration,
Annual Energy Outlook 2010,
<http://www.eia.doe.gov/neic/speeches/newell121409.pdf>