

“The Future of Mobility – Scenarios for the United States in 2030”

Background

Mobility: why does it matter? People seldom travel just for the sake of the travel itself; we travel for a host of reasons. Around the world, mobility is associated with increasing economic output, higher standards of living, and personal freedom and expression. While there may be some substitutes for mobility, such as electronic communication that replaces face-to-face interaction, demand for mobility will continue to play a major role in the future. Understanding how these demands may change over time can help policy-makers, businesses, and individuals make more informed choices about their mobility decisions, from whether a state government should rebuild an aging highway to whether a household should buy a hybrid vehicle.

This is a particularly interesting moment to study the future of mobility in the United States. During our lifetimes, the overwhelming choice for personal mobility has been the car; cars account for almost 90 percent of Americans' personal trip miles. Over time, Americans continued to drive more and more; with a few rare exceptions, vehicle miles traveled (VMT) increased every year for 75 years, regardless of the price of gas, the state of the economy, or the size of the workforce.

In 2008, the trend changed. VMT declined thanks to a combination of sharp increases in gas prices and a serious financial crisis, due at least in part to Americans' willingness to trade cheaper housing prices for longer commutes. With a sharp increase in unemployment fewer Americans were driving to work, and discretionary trips followed suit as Americans had less money to spend. Now, a number of trends that would have been unthinkable a decade ago are taking shape. These include:

- The increase in transit ridership.
- The decline in teenagers obtaining drivers licenses.
- The reinvestment in city centers and neighborhoods.
- The rapid adoption, at least in some cities, of car- and bicycle-sharing services.

How might these trends play out through 2030, the timeframe for this study? A number of “influencing areas” might be responsible for a possible shift away from mobility being provided overwhelmingly by cars. On the other hand, these trends might be a temporary response to current conditions, and could possibly reverse themselves if inexpensive fuel remains widely available. And of course, significant but unpredictable events might lead to outcomes that are difficult to anticipate if we are only extrapolating from current trends.

We understand that there may be different views about how current trends play out through 2030 and that the scenario approach can capture these differing perspectives. A scenario is not a forecast of the future but provides an internally consistent story about a plausible future-----logical sequence of events from the past to the future. But scenarios also must take under consideration potential surprises (or events that break with trends) that may disrupt the logical sequence of events. Possible disruptive events include a terrorist attack; financial crisis brought on by failure to raise the debt ceiling or a deficit problem (i.e., China cashes in U.S. debt); or abrupt technological change such as full-scale implementation of autonomous vehicles.

Objectives

ifmo publishes well acknowledged scenarios for the “Future of Mobility” for Germany on a regular five year basis. ifmo is now carrying out a similar scenario study for the US for the year 2030. This study of future mobility in the United States is a companion piece to the existing studies in Germany. While recognizing that Germany and the United States have important differences, to make the American study comparable we start with the same definition mobility: the ability to travel from one point to another.

The envisioned result of this scenario process is a report similar to the German Scenario Study. This does not necessarily involve replication of the methodology applied for Germany. However, the scenario process that is applied needs to be similar to the one for the German context. Comparability of the results of the German and the US study is a central objective of the project.