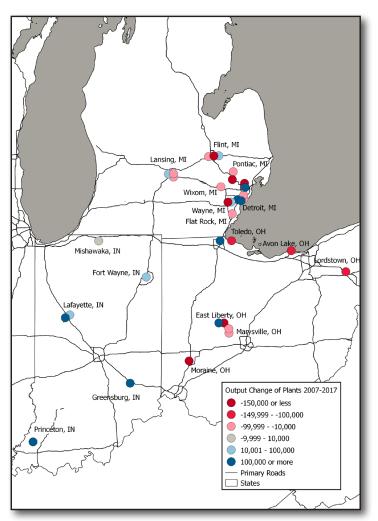
## AUTO INDUSTRY UPDATE

The Great Recession had a big impact on the automobile industry, but the industry's restructuring started at the beginning of the century and had shed almost as many workers before the recession began as were laid off during the recession. With federal help for General Motors after the recession, the U.S. auto industry has emerged stronger today than even 17 years ago. More vehicles are coming off the assembly line today than did right before the recession hit in 2007, even as the types of vehicles Americans are purchasing switch from cars to pickups, sport utility vehicles (SUVs), and crossover vehicles (CUVs).



SOURCE: W.E. Upjohn Institute and Automotive News.

Last year, North American production of light vehicles totaled an estimated 17.4 million units, according to *Automotive News*, compared to 15.5 million units in 2007. It also represents quite a comeback from 2009, when total production dropped to 8.8 million units.

There have been two main changes to the industry over the past decade: 1) where vehicles are made and 2) the distribution of types of vehicles. Let's take the second one first. Shares of production by type of vehicle are noticeably different from 2007. That year, 43.2 percent of North American production was in cars; the rest in light trucks or SUVs/CUVs. By 2017, only 34.5 percent of production was in cars, and 65.5 in trucks. This change holds true for Michigan as well, where the percentages of cars and light trucks produced in 2007 and 2017 were almost identical to the national shares.

Moreover, less of the light-truck production is happening in this country. In 2007, the United States accounted for 78 percent of trucks produced. By 2017, that percentage had dropped to 71. The change was less drastic in the U.S. share of production of cars, which fell only slightly, from 57.0 percent to 55.7.

This reflects the second big change: production shifting to Mexico. In 2007, 69.9 percent of all North American vehicle production was based in the United States; the rest was split between Canada (16.6 percent) and Mexico (13.5 percent). But by

2017, the share for both the United States and Canada had dropped by more than 4 percentage points, to 65.7 and 12.2, respectively. The beneficiary, of course, was Mexico, whose share had grown to 22.1 percent.

Regionally, too, production has moved southward, as Michigan has lost share to Indiana since 2007 (see map). Michigan declined from 14 percent of North American production (or 2.14 million units) in 2007 to 12.24 percent in 2017.

The great unknown that could affect future investment decisions would be changes coming out of the current round of renegotiations on the North American Free Trade Agreement (NAFTA). The University of Michigan's Research Seminar for Quantitative Economics (RSQE) has suggested that if significant trade barriers were put in place, production in Mexico, which is often exported to the rest of the world, may move out of Mexico and into the Pacific Rim.