MICHIGAN'S TRANSITION TO A KNOWLEDGE-BASED ECONOMY: THIRD ANNUAL PROGRESS REPORT

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This is Michigan Future's third annual report on Michigan's transition to a knowledge-based economy. How well Michigan does in this transition will, in large part, determine whether we get more prosperous or poorer. As we detailed in our A New Agenda for a New Michigan report, making this transition is now the most reliable path to prosperity.

(This complete report and appendices, the New Agenda report and the related A New Path to Prosperity? reports are available at www.michiganfuture.org)

This report covers the period from 2001-2008. It provides a picture of the national and state economy from the trough in 2001 through the first year of the most severe downturn since the Great Depression. When the next expansion begins, two of the most important drivers of this expansion almost certainly will not be repeated: the housing bubble and highly leveraged financial services.

Ideally we would present detailed data through 2009. But it isn't available. So to get a sense of what has happened to the economy in this downturn we looked at less-precise national data from the Bureau of Labor Statistics. What we found is stunning.

The trends that we have written about in our previous reports have accelerated in the downturn. From when the recession began in December 2007 through February 2010, low-education attainment industries (primarily manufacturing, construction, retail, hospitality and temporary services) have suffered job losses of 7,900,000, while high-education attainment industries have lost 400,000 jobs.

The low-education attainment industries nationally have had employment losses of more than 10 percent since the recession began compared to less than 1 percent in the high-education attainment industries.

Using the same database, we looked at the long-term trend. From January 1990 (also a recession year) to February 2010 low-education attainment industries employment rose 5 percent compared to 39 percent in the high-education attainment industries. So for two decades – whether the nation's economy is expanding or contracting – the American economy has been going through a profound structural transformation from an industrial to a knowledge-based economy. We are confident that when the current severe downturn ends, knowledge-based industries will continue to be where job growth is the strongest and average wages are the highest.

The inescapable conclusion is that what made Michigan prosperous in the past won't in the future. The knowledge-based economy is now the path to prosperity for Michigan.

There are some hard truths that Michiganians needs to confront:

• Michigan's prosperity last century was built primarily on good-paying, low-skill jobs. Those jobs are gone forever.

• The auto industry will never again be the major engine of prosperity in Michigan. Even if the domestic auto industry survives the current downtown, it will be substantially smaller, employ far fewer and will pay its workers less with fewer benefits.

• The decline in autos is part of an irreversible new reality that manufacturing (work done in factories) is no longer a sustainable source of high-paid jobs. Nor is it a source of future job growth. Manufacturing makes up about 10 percent of the American workforce today and is declining. So whether it's traditional Michigan industries like autos and furniture, or new industries like alternative energy, factory jobs will not be a source of new high-paid jobs for Michiganians.

• The other industries that are widely believed to be drivers of the Michigan economy – farming and tourism – are also not a source of substantial numbers of good-paying jobs. Less than 2 percent of Michiganians work on a farm and, on average, it is not high-paying industry. And tourism, although a likely source of job growth, is also a low-wage industry.

To be clear, we are not advocating that Michigan abandon these industries. They are and will be important parts of the Michigan economy, especially in rural communities, and as such deserve support. But they are not a path to high prosperity or a broad middle class. If the Michigan economy of the future is built on a base of factories, farms and tourism, we will be a low-prosperity state.

The world has changed fundamentally. We either adjust to the changes or we will continue to get poorer compared to the nation. As the data in this report makes clear, the new path to prosperity is the broad knowledge-based economy.

Obviously the Michigan economy has been dreadful this decade, having recorded an unprecedented nine consecutive years of job losses. The state is at the bottom of the national rankings in both employment and per capita income growth. This is largely because the engine that still drives the Michigan economy is the troubled domestic auto industry.

What we are working on at Michigan Future is what comes next. Our focus is on identifying a path to better position Michigan to succeed in the flattening world economy of the future – a path that will return Michigan to high prosperity, measured by per capita income consistently above the national average in both national economic expansions and contractions.

We collected data for states and the 55 metropolitan areas with population of 1 million or more plus Lansing and Madison. We found that almost all states with the highest per capita income:

- Are over-concentrated compared to the nation in the proportion of wages coming from knowledge-based industries;
- Have a high proportion of adults with a four-year degree or more;
- Have a big metropolitan area with even higher per capita income than the state;
- And, in that big metropolitan area, the largest city has a high proportion of its residents with a four-year degree or more.

More specifically we found:

1. Big metros are winning! The pattern is the larger the metropolitan area, the higher the per capita income and the greater the concentration in both knowledge-based industries and college-educated adults. Maybe most surprising is that the largest metropolitan areas not only have the highest proportion of households with incomes of $75,000 or more, but also the smallest proportion of households with incomes under $25,000.

2. The pattern that we found in our previous reports that high-prosperity states have big metropolitan areas with even higher per capita income holds true. Except for Wyoming and Alaska, each of the top 10 states in per capita income includes at least one of the top 10 metropolitan areas.

So metropolitan Detroit and metropolitan Grand Rapids and, to a far lesser degree, metropolitan Lansing are the main drivers of a prosperous Michigan. In fact, it is hard to imagine a high-prosperity Michigan without an even higher-prosperity metropolitan Detroit.

3. It is the broad-based knowledge economy where most of the good-paying job growth is occurring in the American economy. High-education attainment industries in 2008 were 44 percent of national employment and 58 percent of the wages earned by American workers. The average wage in these industries is nearly $60,000 as compared to nearly $34,000 in all other industries. Most importantly, high-education attainment industries accounted for 82 percent of the job growth in America from 2001-2008.

4. Employment nationally in the high-education attainment industries is highly diversified across the economy. These industries are not narrowly focused in industries commercializing new technologies. They are concentrated in, but not limited to, five broad sectors of the economy: information; finance and insurance; professional and technical services (including management of companies); health care and education. In fact, health care and education, which dominated job growth from 2001 to 2008, account for about 40 of the employment in high-education attainment industries.

5. Our basic conclusion: What most distinguishes successful areas from Michigan is their concentrations of talent, where talent is defined as a combination of knowledge, creativity and entrepreneurship. Quite simply, in a flattening world, the places with the greatest concentrations of talent win. States and regions without concentrations of talent will have great difficulty retaining or attracting knowledge-based enterprises. They are not likely to be the place where new knowledge-based enterprises are created.

6. Michigan and its largest metropolitan areas are lagging in the transition to a knowledge-based economy. In 2008 Michigan ranked 36 in per capita income, an unprecedented drop of 18 places in a relatively short eight-year period. It ranked 32nd in the share of wages from knowledge-based industries and 34th in proportion of adults with a bachelor's degree or more.

In 2008, metro Detroit ranked 36th in per capita income of the 55 metropolitan areas with populations of 1 million or more. It ranked 33rd in knowledge-based industries concentration and 37th in college attainment. Metro Grand Rapids lagged even more. It ranked 53rd in per capita income, 54th in knowledge-based industries concentration and 45th in college attainment. The story is basically the same for the Lansing region, which substantially trails metropolitan Madison, Wisconsin on most of our metrics.

Our best guess is that unless we substantially increase the proportion of college-educated adults – particularly in our biggest metropolitan areas – Michigan will continue to trend downward in the per capita income rankings towards the bottom 10.

7. Behind the headlines of continuous job loss, the national pattern holds true in Michigan: high-education attainment industries doing much better than low-education attainment industries. From 2001-2008 Michigan's low-education attainment industries experienced employment losses of a nearly 14 percent. The high-education attainment industries experienced employment declines of far less, just under 2 percent. Michigan's high-education attainment industries decline is attributable to the job losses in the knowledge-based portion of the automotive industry.

8. Metropolitan Pittsburgh provides evidence that there is a way back to prosperity after the loss of a high-wage manufacturing industry. Since the collapse of steel more than 25 years ago, metro Pittsburgh has regained prosperity. In 2008 it returned to its previous peak in per capita income, at 104 percent of the national average. That is despite employment earnings from primary metals (the industry that includes steel) falling from 14 percent to under 2 percent of the region's income.

To us, the message from the data is that the key to economic growth is talent. Quite simply, in a flattening world, economic development priority one is to prepare, retain and attract talent.

Michigan has lagged in its support of the assets necessary to develop the knowledge-based economy at the needed scale. Building that economy is going to take a long time and require fundamental change. But we believe it is the only reliable path to regain high prosperity. The choice we face is do we do what is required to build those assets or do we accept being a low prosperity state**?**

There are no quick fixes. The Michigan economy is going to continue to lag the nation for the foreseeable future. But there is a path back to high prosperity. As laid out in the New Agenda report our framework for action is:

• Build a culture aligned with (rather than resisting) the realities of a flattening world. We need to place a much higher value on learning, an entrepreneurial spirit and being welcoming to all.

• Creating places where talent – particularly mobile young talent – wants to live. This means expanded public investments in quality of place with an emphasis on vibrant central city neighborhoods.

• Ensuring the long-term success of a vibrant and agile higher-education system. This requires expanded public investments in higher education – particularly the major research universities.

• Transforming teaching and learning so that it is aligned with the realities of a flattening world.

• Developing new private and public sector leadership that has moved beyond both a desire to recreate the old economy as well as the old fights. Michigan needs leadership that is clearly focused, at both the state and regional level, on preparing, retaining and attracting talent.