



A Look at Michigan's Emerging New Economy

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Executive Summary

This report examines recent and longer-term changes, identifies major factors in recent changes, and discusses significant growth in what we call the emerging new economy.

These emerging new economy jobs generally require higher education and skills, and many provide higher pay as well. We find that over the period from December 2002 to August 2006, the top 25 growing sectors of the Michigan economy have added 122,500 jobs. Of those, 55,100 are in sectors that are emblematic of the new economy. Still others would be considered part of the expanding service sector, but we have excluded those from our definition of the emerging new economy because of our interpretation that many of the jobs in this broader service sector require less skill and are less well paying.

The top 25 declining sectors accounted for 206,300 lost jobs. The bulk of these were very clearly in manufacturing and specifically motor vehicle manufacturing. Only 16,500 of the job reductions fit our emerging new economy definition, and arguably, even some of those may be due to the inverse multiplier effects of the auto losses.

The study also addresses what we believe to be the root cause of Michigan's economic difficulties: the continuing loss of market share by the manufacturers concentrated here. Just as good times for the domestic Big 3 have driven Michigan's past periods of economic prosperity, the current bad times for these companies account for a significant portion of the current economic weakness.

The study also reviews major employment changes over several time periods.

Part I: Overview of Employment Changes by Supersector

This analysis identifies and contrasts growth patterns of the “old” economy and what some observers call the “new” or “knowledge” economy. The latter will be identified by industry sectors that generally require higher education levels. For ease of terminology in this essay, we will term this the emerging new economy.¹ The analysis begins with a look at where we’ve been as a state and where we are today.

Table 1: Employment Recession and Recovery, January 2000 - August 2006

Supersector	Low Month	Jobs Recovery #*	Recovery %
Natural resources	July 2003	800	10.3%
Construction	April 2003	5,400	2.9%
Manufacturing	Still declining	Still declining	NA
Trade, trans, utilities	July 2006	300	0.0%
Information	June 2006	300	0.4%
Financial Activities	March 2000	11,600	5.6%
Prof & business services	March 2004	22,500	3.9%
Education & health services	January 2000	79,400	16.0%
Leisure & hospitality	December 2001	14,700	3.7%
Other services	January 2000	11,900	7.1%
Government*	January 2000	500	0.1%

Measured by change from lowest monthly total employment since January 2000 to August 2006.

Source: United States Bureau of Labor Statistics, Seasonally Adjusted Data.

*Government employment peaked at 690,700 in October 2003, and has now declined to the current August 2006 level of 673,600, for a loss of 17,100 jobs, or -2.5%.

Not all of these categories reached their recession low at the same time, reflecting the differential impact of the recession across industries. Only one sector has yet to hit a low point.

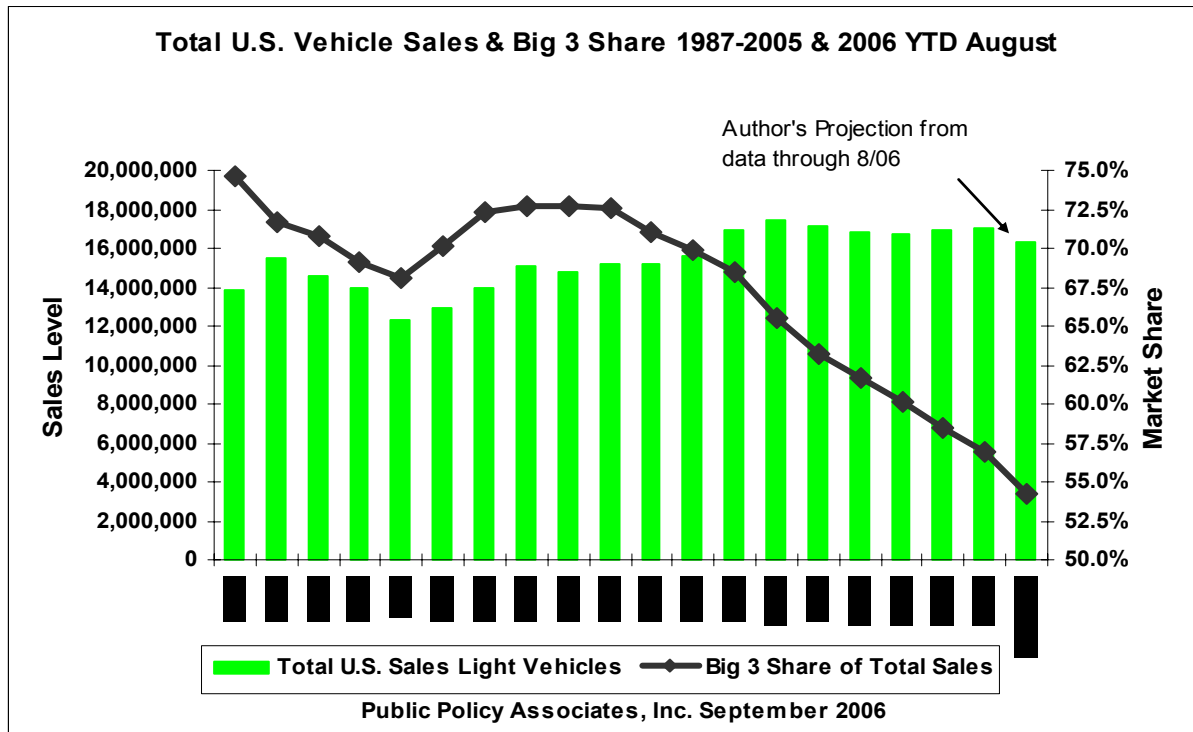
Manufacturing, driven by the crisis of the domestic automobile industry has yet to reach its low point, and that point may be months away, if not years. Another, Government has declined from a previous recovery (see note to Table 1), reflective of the ongoing pressure on public budgets at all levels.

¹ As yet, there is no universally agreed-upon definition of what is a new economy industry. The distinctions made here represent a suggested working definition that includes sectors where relatively high education and high pay are common, if not predominant. This does not include all sectors of the broader service economy, since many of those jobs are relatively low-skill, low-pay jobs.

It is important to remember the critical scale and importance of the motor vehicle industry to the Michigan economy. It has provided a century of prosperity, with occasional wild rides in periods of economic weakness. The domestic manufacturer presence in Michigan, despite decades of downsizing, still makes Michigan far and away the most concentrated automobile manufacturing state by a factor of roughly 8 versus the national average, and by several multiples compared to our nearest competitor states. That reality remains despite the massive changes in the domestic industry in the last decade.

Automobiles and light trucks manufactured by Ford, GM, and the Chrysler division of Daimler-Chrysler are critical to Michigan's economy, and Ford and GM, in particular, have been losing market share for years. Figure 1, below, dramatically illustrates the scope of that market share loss. Note that each 1.00% of a 16.5-million unit market means 165,000 vehicles, just slightly less than full two-shift production for most assembly plants. This isn't a question of public policy in Michigan. Rather, it is a question of a fiercely competitive international struggle for sales and profitability. Unlike past auto downturns, which were often followed by booms for the domestic industry and good times for Michigan, the prospect of a turnaround hinges most significantly on the question of halting the slide in market share, and then reversing it. The direction of the slope of the market share line does not inspire confidence in a quick turnaround.

Figure 1



The other sector not yet recovered is government, broadly inclusive of federal, state, and local governments in Michigan, including K-12 education and public two- and four-year colleges (including their part-time student employees). This does not change the overall story, however. The continuing decline in the manufacturing sector has pinched many public budgets in Michigan, with one result being reduced hiring and public sector layoffs.

Part II: Changes since December 2002 by Supersector

Table 2, below, measures employment changes from December 2002 to August 2006. As noted above, some of this is due to the lack of seasonal adjustment on this data, so it must be taken with a grain of salt, especially in the construction and government sectors. What is clear, however, is that the ongoing reduction in manufacturing has certainly had major impacts on hiring beyond the manufacturing category itself.

Supersector	Number	Percentage
Natural resources	No change	NA
Construction	900	0.5%
Manufacturing	-104,300	-14.0%
Trade, trans, utilities	-31,600	-3.8%
Information	-5,000	-7.0%
Financial activities	3,000	1.4%
Prof & business services	6,500	1.1%
Education & health services	36,300	6.7%
Leisure & hospitality	8,000	2.0%
Other services	5,100	2.9%
Government	-15,800	-2.3%

Source: United States Bureau of Labor Statistics, seasonally adjusted data.

The decline in the manufacturing sector merits further discussion. It is clearly principally related to the automotive manufacturing sector and related suppliers, and driven by the loss of market share outlined in Figure 1. Economic multipliers for each of the many types of automotive jobs lost vary from 4.0 to 12.0, with the bulk of the multipliers in the 6.0 to 8.0 range. Many economic-development directors seek auto plants because they contribute to significant job growth far beyond the large totals for the plant itself. It is important to remember that there is also a downside when these plants go away, although its impact is often spread over a much longer period of time.

Unfortunately, those positive multipliers also can have negative impacts when a job loss, instead of a job gain, is the impact. While the downside of lost jobs may take longer to ripple through the economy than an increase in jobs, the net result will ultimately be similar. Table 3

summarizes what those potential negative multipliers may have meant to the health of the Michigan economy over the last four years.

**Table 3: Estimated Ranges of Auto Job Gain and Loss Multipliers
With a Hypothetical Job Loss**

Economic Multiplier				Total Job Loss Potential
4.0		Auto Job Change 100,000		400,000
5.0				500,000
6.0				600,000
7.0				700,000
8.0				800,000
9.0				900,000
10.0				1,000,000

Given this range of potential impacts throughout the economy, it is a surprising positive that Michigan has seen as much growth as has occurred in other sectors of its economy. A significant amount of the growth seems to be concentrated in many of the economic sectors associated with the new or knowledge economy, as will be discussed in Part IV, and that bodes well for Michigan's future.

Part III: Longer-Term Changes in the Michigan Economy

Total non-farm employment in Michigan reached a seasonally adjusted low of 3,872,800 in March 1991 for the early 1990's recession. It then grew continuously to its recent peak of 4,687,500 in June 2000. From that point, employment dropped by 228,800, or 4.88%, over 30 months, to end December 2002 at 4,458,700. From that date, employment generally continued to decline, with some positive months, and through the 40 months ending August 2006, the economy shed another 69,900 jobs in total to leave the level of employment at 4,361,800.

Table 4: Employment Changes by Sector, December 2000 to August 2006
(Numbers in thousands)

	Dec. 00	Dec. 02	Change From 00	Dec. 04	Change From 02	Aug. 06	Change From 04
Total	4,664.2	4,458.7	-205.5	4,396.6	-62.1	4,361.8	-34.8
Nat res	9.6	8.6	-1.0	8.0	-0.6	8.6	+0.6
Construction	204.7	191.9	-12.8	192.4	+0.5	192.8	+0.4
Manufacturing	885.0	747.7	-137.3	691.0	-56.7	643.4	-47.6
Trade, trans, ut	889.3	825.0	-64.3	806.4	-18.6	793.4	-13.0
Information	76.7	71.9	-4.8	68.2	-3.7	66.9	-1.3
Fin activities	210.9	216.7	+5.8	218.1	+1.4	219.7	+1.6
Pro & bus serv	629.8	595.2	-34.6	589.3	-5.9	601.7	+12.4
Ed & hlth serv	506.7	538.7	+32.0	566.0	+27.3	575.0	+9.0
Leisure & hosp	400.0	400.1	+0.1	401.3	+1.2	408.1	+6.8
Other serv	168.3	173.5	+5.2	177.7	+4.2	178.6	+0.9
Government	683.2	684.4	+1.2	678.2	-6.2	673.6	-4.6

Totals may not be exact due to rounding.

Source: United States Bureau of Labor Statistics

Bold formatting indicates growth from previous low.

Table 4, indicates that much of the growth is definitely in the new economy sectors, while job losses are still being experienced in what could be labeled the old economy (see, for example, manufacturing and trade, transportation & utilities).

Table 4 also shows more job losses from December 2000 to December 2002 (205,500) than in the three and one-half years since (96,900 or 62.1 plus 34.8). The continuing effects of the national recession and the related and ongoing loss of market share by the automobile companies headquartered and concentrated in Michigan are clearly the primary cause. Manufacturing, and especially auto manufacturing, was the key downside driver in the changes from December 2000 to 2002, and it remained so for the most recent period measured here (104,300).

This is not the “fault” of any public official, but it is the flip side of the benefits of auto industry location that Michigan has enjoyed over the years. The old saying, “When the national economy sneezes, Michigan catches a cold” is still true. It is also not productive to think of this issue in terms of blame (blame will focus on the past, not on the future we need to build).

No public policy in Michigan forced GM, or Ford, or Chrysler to guess wrong on products, or to mistime new product launches. No public policy forced them to sign labor contracts that they now cannot afford. No one forced them to concentrate on large, non-fuel-efficient trucks and

SUVs as gasoline prices jumped above \$3.00 per gallon. Michigan, unfortunately, does share in paying the price for those decisions, as we shared the benefits from previous periods of stronger domestic manufacturer performance, and now we need to move forward from here.

Part IV: The Emerging New Economy

At the more detailed level shown in Table 5 (following), it is clear that Michigan still has an ongoing legacy problem, with much of the worst job losses concentrated in old economy sectors and retail as well as other sectors impacted by direct manufacturing losses. We will continue to experience these negatives while the re-alignment of the auto industry is still on-going.

We have shaded sectors in Table 5 that we believe are indicative of what we call the emerging new economy or the knowledge-based economy. These are sectors that, in our judgment, require significantly higher education, generally a two- or four-year college degree or significant technical training, and offer comparably higher pay

Note that we have not included all sectors that are in the so-called service economy. We submit that food service jobs, to give an example of a fast-growing sector, generally are populated by part-time workers, with no advanced educational skills required for most jobs. Similarly, we have not shaded home health care services since many of these jobs are relatively low-wage positions. While the shading indicates that even some new economy sectors lost jobs as well, the growth in new economy sectors is substantially greater. There is still a journey ahead for the Michigan economy, but even if it is a journey of 1,000 steps, the economy already is well into it.

The Current Employment Statistics survey data shows a net decline of 142,400 jobs from December 2002 to August 2006. Table 5 shows us the 25 largest declining sectors and the 25 largest growing sectors, based upon the greatest percentage changes over that same period.

Table 5 also shows 25 declining sectors accounting for a net job loss of 206,300 over this period, offset by a gain of 122,500 in the 25 sectors with the highest percentage of growth.

The two sectors with the largest declines on a percentage basis are motor vehicle parts manufacturing and motor vehicle manufacturing. This is clearly the crux of the problem for the Michigan economy, and it is just as clear that public policy does not have the tools to deal with such a major marketplace shift. Several other manufacturing sub sectors also are in the 25 greatest decliners. This clearly explains what has been and is still going on in the Michigan economy, and why that economy continues to struggle: its major industry not only remains in recession, it is in a fight for its life.

Old-style retail sub sectors make up some of the other decliners, perhaps reflecting a portion of the downside effect of the auto job multipliers discussed above.

Four of these declining sectors are shaded, indicating that they may be covered by our definition of the new economy. Two of these are manufacturing of pharmaceuticals and medical equipment. Even at this level of detail, however, it is unclear how much of this job loss is related to higher-skill positions versus something more like production work, directed by a smaller number of highly skilled workers. A third possible new economy sector—accounting, tax preparation—raises the same issue: how much of the job loss is represented by lower-skill positions versus higher-skill positions, and how much may be related to ramping up with temporary employees in December for income tax preparation work that drops off by spring? The fourth possible new economy sector is private sector colleges and universities, and here, the question focuses on the seasonality of the data, given that the August 2006 numbers may represent student workers who are not working part-time for the school, but working elsewhere for the summer.

The total job loss in possible new economy sectors was 16,500, only 8% of the job losses. As noted above, it is possible that much of this job loss was in lower-skill positions in these sectors.

Gains in apparent new economy sectors, as noted in the top 25, totaled 55,100, or 45% of the total job gains.

While the continued net job loss through August is not good news, there is a much more positive message when one looks at the components of job losses and gains. The losses appear to be concentrated among old economy sectors and industries, and the gains appear to be concentrated among new economy sectors and industries, both those which we label the emerging new economy and those in the broader service sector of the economy. This does not mean the difficulties will end soon, but it does indicate that there are some very positive things happening in Michigan that policy makers should be aware of as they consider adopting new policies and modifying existing policies.

Summary and Conclusions

Michigan's economy is clearly troubled—principally because the primary companies in its major industry are struggling. Michigan cannot thrive again until one or both of two events occur: these companies return to prominence and drive our economy as they have for much of the last century, or, until they at least reach a state of equilibrium that halts the loss of market share that has been bleeding them—and Michigan—for nearly a decade. Stabilization may not sound like an enviable goal, but it is the most achievable first goal, and it will allow growth in these emerging new economy sectors to create actual net job growth in the total state economy.

Michigan has long enjoyed a strong and vibrant economy because of the strength of the auto industry, and the industry will continue to be a key factor in our economy for a long time to come. The question confronting Michigan policy makers today is how to respect the past and to prepare for the ongoing future role of the auto industry while focusing change and investment on newer economy industries and sectors.

Despite the enormous impact of the changes affecting the automotive industry, the Michigan economy is also showing positive signs of growth in a number of sectors that many observers would consider to be part of an emerging new economy. This bodes well for Michigan's future.

While an enormous amount of public debate and policy thinking in Lansing has been focused on how to “save” the auto industry that is truly beyond the capacity of any state government. Ultimately, the auto industry needs to save itself, in the marketplace with better products.

On the other hand, steps that might nurture and support the continued emergence of the new economy are well within the scope of state policy.

Some of these steps can be easily identified. For example, Michigan is already the world center of automotive research and design (R & D), and the workers involved in auto R & D are clearly much more highly skilled and educated than production workers. This should not lead to any degree of complacency, however.

To build upon this foundation, and expand on it, Michigan will need to substantially increase its public and private investment in education and infrastructure—and will need to change its collective attitude, and shift to a culture that values education and entrepreneurship much more heavily than we do today.

Michigan can do this. Michigan has started this. Michigan must continue this journey to the future.

[For readers interested in other studies of the changing economy and Michigan’s competitive position, we suggest the following study “A New Agenda for a New Michigan,” available online at www.michiganfuture.org.]

Table 5: The Changing Structure of the Michigan Economy: Employment Changes, December 2002 to August 2006

(Measured By Percentage of Change in Employment)

Selected Detail-Declining Sectors				Selected Detail-Growing Sectors			
	Sector	Chg 12/02 To 8/06	% Chg	Sector	Chg 12/02 To 8/06	% Chg	
1	Motor Vehicle Manufacturing-M	-36.1	-43.65%	Amusement Gambling and Recreation I	17.7	41.07%	1
2	Motor Vehicle Parts Manufacturing-M	-56.0	-29.23%	Services to Buildings and Dwelling	14.1	32.41%	2
3	Department Stores	-20.5	-28.67%	Social Assistance	6.2	12.25%	3
4	Electrical Equipment Appliance and-M	-4.2	-28.00%	Religious Grantmaking Civic Profess	10.4	11.85%	4
5	Pharmaceutical and Medicine Manufacturing-M	-2.9	-24.17%	State Government Hospitals	1.6	11.76%	5
6	Sporting Goods Hobby Book and Music	-6.5	-22.26%	Business Support Services	1.8	11.11%	6
7	Iron and Steel Mills and Ferroallo-M	-1.4	-19.44%	Elementary and Secondary Schools (Private)	2.3	11.06%	7
8	General Merchandise Stores	-24.3	-18.42%	Truck Transportation	3.9	10.89%	8
9	Office Supplies Stationery and Gif	-2.8	-18.18%	Mining	0.6	8.96%	9
10	Colleges Universities and Professi-Private	-6.1	-18.10%	Offices of Physicians	5.4	8.74%	10
11	Medical Equipment and Supplies Man-M	-1.9	-17.76%	Scientific Research and Development	1.9	8.44%	11
12	Other Fabricated Metal Product Man-M	-2.5	-17.24%	Offices of Other Health Practitioners	1.5	8.29%	12
13	Special Food Services	-5.2	-17.05%	Securities Commodity Contracts and	0.9	8.26%	13
14	Accounting Tax Preparation Bookkeeping	-5.6	-16.92%	Home Health Care Services	1.8	7.73%	14
15	Wired Telecommunications Carriers	-2.3	-16.20%	Accommodation and Food Services	23.8	7.13%	15
16	Furniture and Related Product Manufacturing-M	-4.1	-14.14%	Building Material and Garden Equipment	3.3	7.02%	16
17	Printing and Related Support Activities-M	-2.7	-13.43%	Ambulatory Health Care Services	9.9	6.30%	17
18	Metalworking Machinery Manufacturing-M	-5.4	-12.39%	Investigation and Security Service	1.0	5.52%	18
19	Rubber Product Manufacturing-M	-0.7	-12.28%	Architectural and Structural Metal-M	0.6	5.31%	19
20	Gambling Industries	-1.0	-12.05%	Machine Shops; Turned Product; and-M	1.4	5.15%	20
21	Miscellaneous Store Retailers	-3.8	-11.80%	Rail Transportation	0.2	4.26%	21
22	Other General Purpose Machinery Ma-M	-2.1	-11.67%	Performing Arts Spectator Sports an	0.4	4.21%	22
23	Furniture and Home Furnishings Stores	-2.3	-11.56%	Real Estate and Rental and Leasing	2.3	4.15%	23
24	Automotive Repair and Maintenance	-3.8	-11.14%	Credit Intermediation and Related	3.2	3.77%	24
25	Newspaper Periodical Book and Dire	-2.1	-11.11%	Other Services	6.3	3.62%	25

Cumulative Job Loss: Worst 10 -160.8
 Cumulative Job Loss: Worst 20 -192.2
 Cumulative Job Loss: Worst 25 -206.3

Cumulative Job Gain: Best 10 64.0
 Cumulative Job Gain: Best 20 110.1
 Cumulative Job Gain: Best 25 122.5

Subtotal Shaded Areas -16.5
 Percentage of Total 8.00%

Subtotal Shaded Areas 55.1
 Percentage of Total 44.98%

Changes in thousands, i.e., 5.0 = 5,000. Source: Current Employment Statistics, Analysis by Public Policy Associates

Shaded sectors represent our interpretation of probable emerging new economy jobs. Construction sectors are excluded from growing sector list due to possible seasonality comparison issues.

About the Author

Douglas C. Drake is a senior policy consultant at PPA and director of its Health, Human Services, and Philanthropy business group. In this capacity, Mr. Drake oversees numerous PPA projects covering these and a broad range of other topics.

Mr. Drake's career in public service and policy development spans over 30 years and is highlighted by his key policy roles and experience in developing and implementing Proposal A, Michigan's school finance reform legislation, and a variety of Michigan's taxation and education policies. He is widely regarded as one of Michigan's top public finance and public policy experts.

Prior to joining PPA, Mr. Drake served for seven years as associate director of the State Policy Center for Wayne State University, where he coordinated the university's outreach efforts in public policy with state government, particularly with the Legislature. He wrote and edited public policy issue papers and arranged seminars and workshops for legislators and legislative staff. Mr. Drake has also consulted with foundations, school districts, and governmental agencies on policy issues. In addition, Mr. Drake teaches public finance for Western Michigan University's master's degree program in public administration.

Other positions held by Mr. Drake include director of the state's Office of Education and Infrastructure at the Michigan Department of Management and Budget (MDMB), special advisor on economics and revenue to the MDMB director, director of the Office of Revenue and Tax Analysis, where he was responsible for the state's economic and revenue forecasts. He has also worked for the House Taxation Committee and the House's Democratic Research Staff.

Mr. Drake has completed numerous studies of Michigan economic and fiscal issues. Most recently, these have included "Revolution and Evolution: Michigan's Proposal A School Finance Reform, A Retrospective Analysis" with Michael Addonizio and *Michigan at the Millennium, A Benchmark and Analysis of the Fiscal and Economic Structure* (MSU Press, 2003) of which he was coeditor and contributor.