

**THE ECONOMIC OUTLOOK FOR
WASHTENAW COUNTY
IN 2012-14**

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The Economic Outlook for Washtenaw County in 2012–14

By GEORGE A. FULTON, research professor, and DONALD R. GRIMES, senior research area specialist, Institute for Research on Labor, Employment, and the Economy, University of Michigan

Introduction

Recently, Ann Arbor was recognized by a national media outlet as being the fifth happiest city in America, based on health data and the local economy. While we cannot vouch for the overall validity of this finding, we can attest to the strength of the local area's economic scorecard.

Consult the current data on the county's labor market. Washtenaw exited the recent debilitating recession by the end of 2009, and not timidly: job creation sizzled in 2010, with the county recording its second-best year of growth in the past twenty. That pace could not be sustained, of course, but job growth did continue at a healthy, above-par pace in 2011. Indeed, over the past two years Washtenaw recovered, in number, nine of the ten jobs lost during the recession years of 2008 and 2009. And the recovery is now diffusing throughout the industry divisions of the economy. We appear to be on the cusp of several more years of solid economic growth, but that view remains to be assessed more carefully in the forecast that is the thrust of this report.

Of course, not everyone is happy—a review of the newspaper blogs readily confirms that. And this is understandable; the county unemployment rate has come down from 8.3 percent in 2009 to 6.6 percent in 2011, but it's still too high, in fact three percentage points above its norm prior to 2008. So, for a number of residents, the dissatisfaction with economic conditions will continue, as they are not vested in the recovery.

Still, we have a sense that we might be in the early stages of something special. In this report, we present our view of where we see the Washtenaw County economy heading from now through 2014. If the recovery is sustained, how strong will it be and what will be the lead sectors? What are the prospects of returning to the peak job levels of mid-2002 in the foreseeable future? And how much will we be able to bring down the stubbornly high unemployment rate over the next three years? These are all compelling questions, and we address each of them in this report.

There is one other question that we found sufficiently compelling to research and report on here: the so-called quality of the recovery. Some residents have offered the opinion that the recovery is being built predominately on low-wage jobs, which, if true, has implications for the structural health of the local economy. To bring some data-driven assessment to this question, we dissect the current recovery into three wage categories—high, middle, and low—in order to examine relative performance across these categories. We then extend our analysis into the forecast period.

The local forecast is generated from a regional model constructed specifically for this study at the University of Michigan's Institute for Research on Labor, Employment, and the Economy. The regional model uses as inputs national economic indicators from the University's Research Seminar in Quantitative Economics. Before considering our perspective on how the Washtenaw County economy will evolve over the next three years, we first take a look at 2011, to learn more about how good a year it was and to gauge how well we anticipated developments as that year began.

Review of the Forecast for 2011: A Report Card

A year ago (March 10, 2011), we presented our twenty-sixth annual economic outlook for Washtenaw County (coterminous with the Ann Arbor metropolitan area). Last year's forecast of employment, unemployment, and inflation for 2011 can now be compared with estimates of the outcome for that year, to see how accurate our forecast was.

In last year's presentation, we forecast that 2011 would feature another year of solid job growth following the robust growth that transpired in 2010, but that the pace of job creation would throttle down a bit. On both of these counts, we were proven correct. The job count in the county increased by an estimated 1.8 percent in 2011, following a gain of 2.9 percent in 2010.

Although we anticipated correctly that job growth in the county would slow somewhat in 2011, we forecast more deceleration than what actually occurred. Our forecast for overall job growth was too low by 0.6 percent, or 6 workers per 1,000. This was a little smaller miss than our average error over the past twenty-six years of 0.7 percent, as reported in table 1. So, we foresaw meaningful improvement in the Washtenaw economy in 2011, but we were a little too bearish on its extent.

Where did the local economy show more strength than we anticipated? Much of the explanation is found in the manufacturing sector, where we saw continued growth but not the surge that materialized. For the motor vehicle part of manufacturing, our undershoot was in part the consequence of not anticipating a boost in the Detroit Three's market share in 2011. Much of that boost was due to repercussions triggered by the Japanese crisis, which was unknown at the time of our forecast. In last year's forecast

report, we assigned an upside risk to our outlook for the auto industry, and in that regard, we were correct.

We were also too light on our projection of the growth of nonvehicle manufacturing, where some of the affected industries are related to vehicle production and others are not. Two of our bigger misses on the low side involved the plastics and machinery industries.

We also came in too low on job growth in some sectors outside of manufacturing. The two biggest shortfalls were in the health care sector and in the leisure and hospitality sector, the latter benefiting from a more robust local economic environment than we foresaw in last year's forecast. Another upside risk we flagged in last year's forecast was activities related to the knowledge economy, and as it turned out, we weren't bold enough in our outlook for professional, technical, and scientific services.

The observed and forecast numbers for the change in the unemployment and local consumer price inflation rates in 2011 are reported at the bottom of table 1. We were virtually spot-on with unemployment, where we forecast a drop of 1.4 percentage points in the rate compared with the decline of 1.5 percentage points now recorded. We had a large miss on the inflation rate, though, as our forecast was made prior to both the large spike in oil prices and the rising prices for motor vehicles due to supply disruptions following the Japanese crisis, neither of which got factored into our numbers.

This review gives us a glimpse of the strengthening Washtenaw County economy in 2011. We need to take a more detailed look at the current state of the economy, however, before we anticipate developments beyond 2011.

Table 1
Report Card:
Track Record over the Years

Year of forecast	Percentage forecast error for total jobs
1986	-1.4
1987	-0.8
1988	-1.2
1989	-0.6
1990	+0.8
1991	+1.4
1992	+0.5
1993	+1.3
1994	n.a.
1995	+0.2
1996	+0.3
1997	+0.4
1998	-0.5
1999	0
2000	0
2001	+0.3
2002	+0.3
2003	+1.0
2004	+0.2
2005	+0.4 (estimate)
2006	+0.7
2007	0
2008	+0.6
2009	+1.0
2010	-2.3
2011	-0.6

(Positive numbers indicate that the forecast was too high;
negative, too low.)

Average absolute forecast error 1986-2011: 0.7%

Change in:	Forecast 2011	Actual 2011
Unemployment rate	-1.4%	-1.5%
Consumer inflation rate	0.2%	2.3%

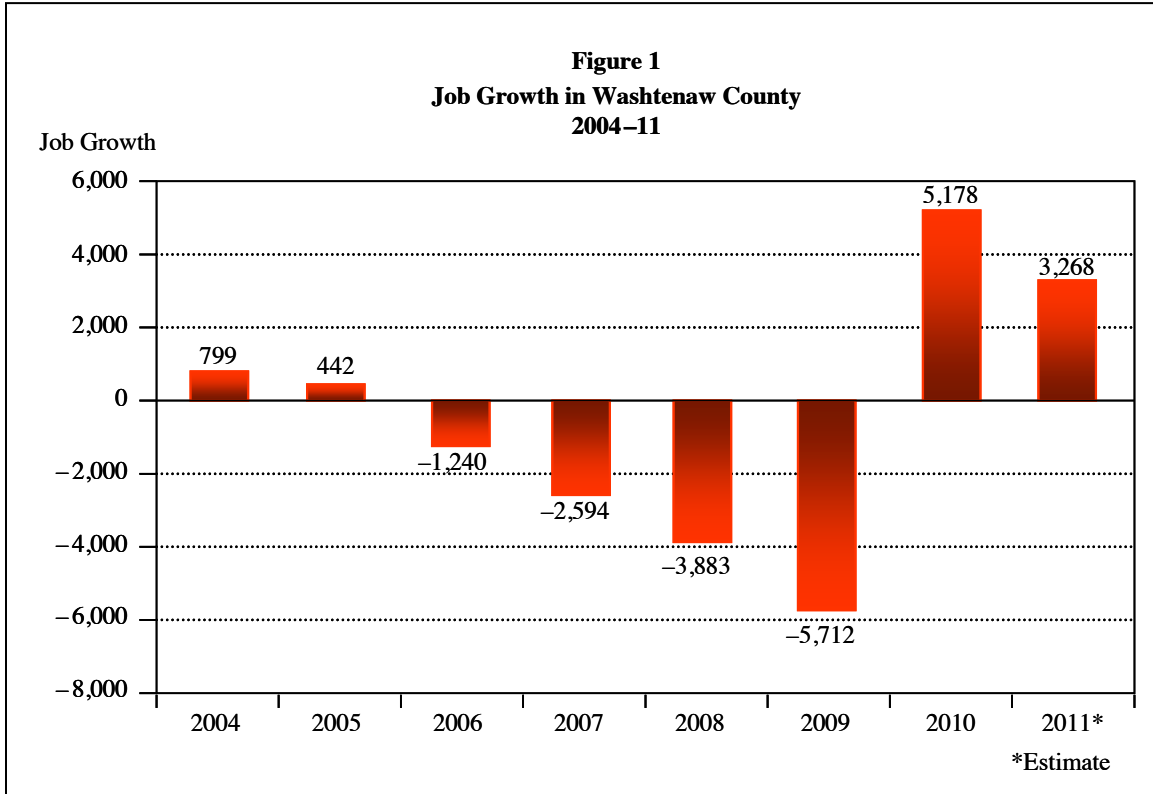
Forecast date: March 2011

The Current State of Washtenaw County's Economy

It is apparent that 2011 has been one of continued economic revival for the Washtenaw economy. As measured by establishment employment, the county's economy bottomed out in 2009 and to date has been in recovery for two years. Now the nagging question of when the recovery will arrive has been supplanted by questions on the architecture of the now-arrived recovery—in particular, what types of jobs are we creating? To gain a better understanding of the composition of the recent recovery, and to establish the launching point for our forecast, in this section we decompose the current private-sector job recovery by wage category. First, to lay the groundwork, we look at how the county economy has performed since 2004 by examining both its path for total job growth and its path for unemployment.

Employment Path of the Washtenaw County Economy

Washtenaw County's performance in job creation since 2004, measured by the net annual change in jobs, is shown in figure 1. The county did post some modest job gains in 2004 and 2005 during the difficult decade of the 2000s, but it was all downhill after that: four years of accelerating job loss from 2006 through 2009, when the local economy hit bottom with a record annual loss of 5,712 jobs. The lowlights of 2009 were the national Great Recession, bankruptcy proceedings for both General Motors and Chrysler, and the repercussions locally of Pfizer's departure. But the economy emerged from the recession, General Motors and Chrysler exited bankruptcy with a lower cost structure and less debt, and by the final quarter of 2009, Washtenaw turned the corner to return to positive net job growth.

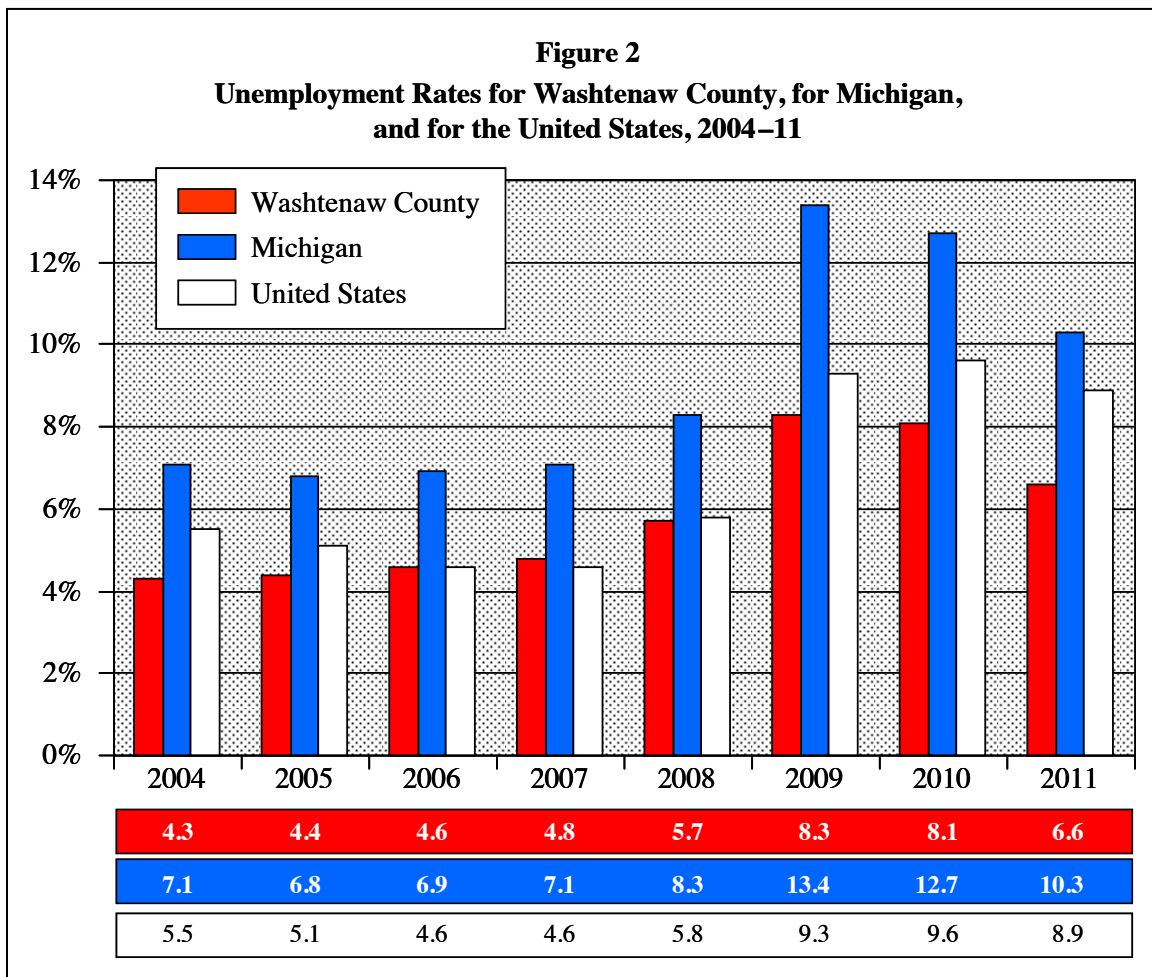


Indeed, the local rebound to date has been remarkably strong. The county posted job gains of 5,178 in 2010, its second-strongest year of growth since 1991 and the strongest since 1999, when the county posted a gain of 6,565 jobs. As indicated in the previous section, growth backed off from this torrid pace in 2011, but still registered a gain of 3,268 jobs—more than the average yearly additions of 2,720 in the prior growth era from 1991 to 2002. The resurgence in the Washtenaw economy is supported by improvements in the U.S. economy, a reborn auto industry, the stabilizing influence of the University of Michigan, and the county’s still-strong economic fundamentals.

So, will job growth be sustained over the next several years; if so, how robust will it be; and what will be the key industry contributors? All of these questions are addressed in the local forecast section of this report.

Unemployment Path of the Washtenaw County Economy

The performance of the economy can also be evaluated with unemployment as the measure. The path of Washtenaw County's yearly unemployment rate since 2004 is shown in figure 2. (Note that the rate is for the county, and should not be confused with the rate for the city of Ann Arbor.) The rates for Michigan and the United States are included for comparison.



The unemployment rate for Washtenaw County increased systematically between 1999, when it hit bottom at 1.6 percent, and 2009, when it peaked at 8.3 percent during that catastrophic year. Since then, the rate has moved down with the recovery in the local

labor market, first marginally in 2010 to 8.1 percent and then more precipitously in 2011 to 6.6 percent. The promise shown by the declining rate is tempered by two observations. First, some of the rate decline reflects discouraged workers leaving the labor force, which officially removes them from the count. And second, the rate is still historically high, exceeding the 5.7 percent rate posted as recently as 2008, and also well above the rate of 3.6 percent averaged between 1990 and 2007.

Washtenaw does compare favorably with both Michigan and the United States, however. The county's unemployment rate was 3.7 percentage points below the rate for Michigan as a whole in 2011, highlighting Washtenaw's favorable economic situation compared with most of the state. More noteworthy, though, is that Washtenaw's jobless rate was 2.3 percentage points lower than the nation's in 2011, after running close to the national rate from 2006 to 2008.

Even though the county is in a more favorable position than either the nation or the state, and even though job growth has been solid recently, for many residents economic recovery has not yet arrived. How much additional improvement can we expect in the unemployment situation, and how soon? That is a topic that is also addressed in the local forecast section of the report.

The Current Job Recovery by Wage Categories

To better understand what types of jobs are being created in Washtenaw during the current economic recovery, we rank-ordered the 112 unique private-sector industries in our data set based on their average annual wage in 2010. Following that, we partitioned the ranked industries into three categories, labeled high-wage industries (over \$57,000), middle-wage industries (\$27,000 to \$57,000, inclusive), and low-wage

industries (under \$27,000), respectively. We then computed the change in employment over the current recovery period (2009–11) for each of the three wage categories and for each of the total private, goods-producing, and private service-providing sectors. The results are shown in table 2.

Table 2
Private-Sector Employment Growth in Washtenaw County by Wage Category
2009 to 2011

	2009	2011	Change 2009–11	% Change 2009–11	Average Wage 2010
Total private	113,216	118,663	5,446	4.8	\$47,215
Goods-producing	16,210	17,551	1,341	8.3	63,044
Service-providing	97,007	101,112	4,105	4.2	44,555
High-wage industries	37,551	40,538	2,988	8.0	78,578
Goods-producing	9,690	11,039	1,349	13.9	75,091
Service-providing	27,861	29,500	1,639	5.9	79,827
Middle-wage industries	43,265	45,179	1,914	4.4	40,277
Goods-producing	6,308	6,286	-22	-0.3	44,461
Service-providing	36,958	38,893	1,936	5.2	39,603
Low-wage industries	32,400	32,945	546	1.7	18,979
Goods-producing	213	227	14	6.6	24,318
Service-providing	32,187	32,719	532	1.7	18,944

Source: BLS Quarterly Census of Employment and Wages. High-wage industries have an average wage in 2010 exceeding \$57,000; low-wage industries, less than \$27,000; and middle-wage industries, between \$27,000 and \$57,000, inclusive.

Based on these wage categories, how can we characterize the current job recovery to date in Washtenaw’s private sector? That can be best gleaned from the second-last column in table 2, which shows the percentage change in jobs over the two years by industry and wage category. It turns out that the strongest job growth in Washtenaw’s private sector between 2009 and 2011 was in the high-wage category, with job growth over the two years of 8 percent. That compares favorably with growth of 4.4 percent in the middle-wage category and 1.7 percent growth among low-wage workers. In fact,

over half of the net jobs created in the county then were in high-wage industries. So, the answer to the question of what types of jobs we are creating to date in Washtenaw's current economic recovery contains a fair amount of very good news: the job gains, in order, are in the high-wage, middle-wage, and low-wage industries, respectively.

The results for the two major components of the private sector, that is, goods-producing and private service-providing, reveal that the stronger growth in total over the period was among the goods-producing industries, which grew at a rate of 8.3 percent compared with 4.2 percent among the service-providing industries. Moreover, the goods-producing sector dominates the gains among the high-wage industries, expanding at an impressive rate of 13.9 percent compared with a still very respectable 5.9 percent among the service-providing industries. Underlying the goods-producing performance among the high-wage industries is, of course, the strong recovery in motor vehicle manufacturing and related manufacturing industries such as plastics products. It is not at all unusual for manufacturing to lead the economy in the initial stages of a recovery, which then diffuses to other sectors.

With manufacturing's momentum already appearing to slow somewhat in the county, the question becomes: what sectors will lead the way over the next few years as we enter the more mature stages of the recovery? We offer our response to that important question in the local forecast section of this report. As we extend our analysis into the future, we start with a summary of the national outlook.

National Outlook: 2012–14

The outlook for the Washtenaw County economy is influenced by what happens in the national economy. Forecasts of economic indicators for the U.S. economy in

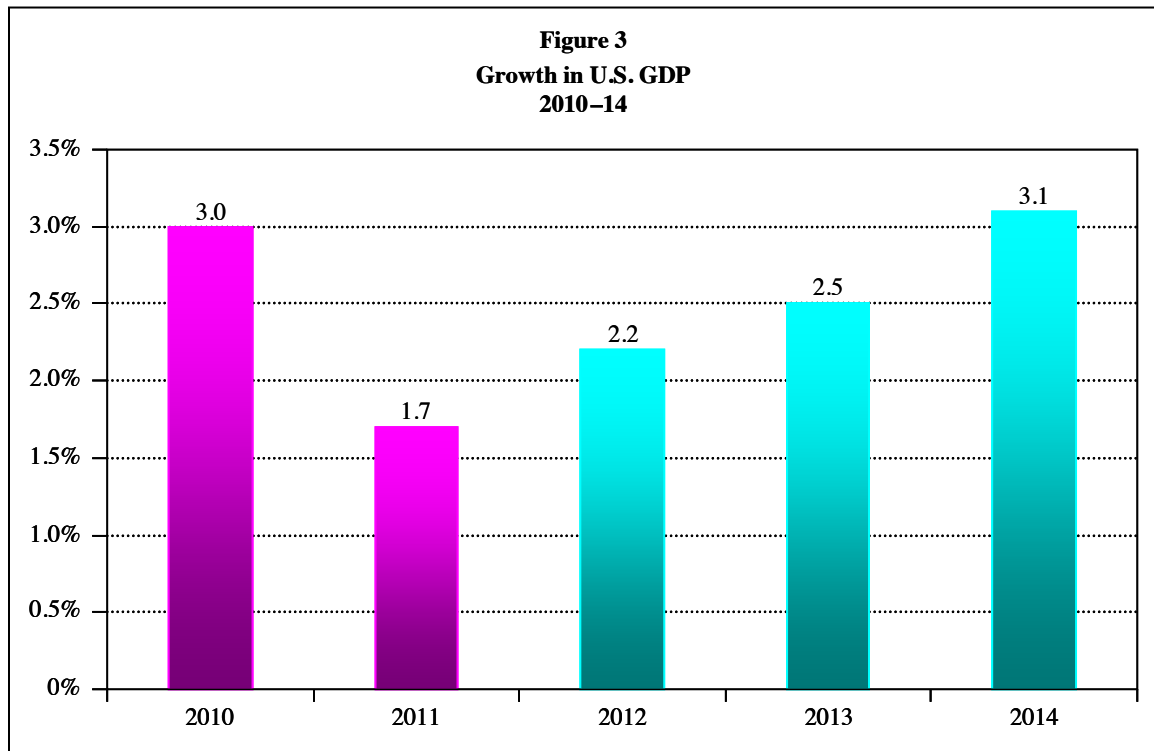
2012–13 are from a release on March 16, 2012, by Joan P. Crary, Daniil Manaenkov, and Matthew G. Hall of the Research Seminar in Quantitative Economics (RSQE) at the University of Michigan, who also provided internally generated extensions of the forecast for 2014. The national outlook is summarized in figures 3–6 by two economic indicators key to the Washtenaw economy.

The best single measure of the U.S. economy is inflation-adjusted, or real, Gross Domestic Product (GDP): all of the goods, services, and structures produced in the economy. Based on this measure, the U.S. economy is growing at a subpar rate to begin 2012, but the economic news moving forward has been more upbeat. The pace of economic activity is expected to accelerate over the next three years as the economic headwinds that have plagued the recovery begin to abate. Residential building finally begins to show some life; the drag from declining government purchases lessens; and consumer spending improves, reflecting pent-up demand for durable goods, but it is held in check by modest gains in disposable income. Real GDP growth picks up from a 1.7 percent pace in 2011 to 2.2 percent in 2012, accelerating further to average 2.5 percent in 2013 and 3.1 percent in 2014, as shown in figure 3.

The pace of economic activity supports moderate job gains, but the unemployment rate is only slowly reduced as discouraged workers reenter the labor force. Cumulative job growth finally exceeds the jobs lost during the recession in the second quarter of 2014.

It might be too soon to bring out the punch bowl. According to several measures, housing prices are still falling and there is potential for further decline as the backlog of foreclosed properties comes on the market. Other economic headwinds still persist: the

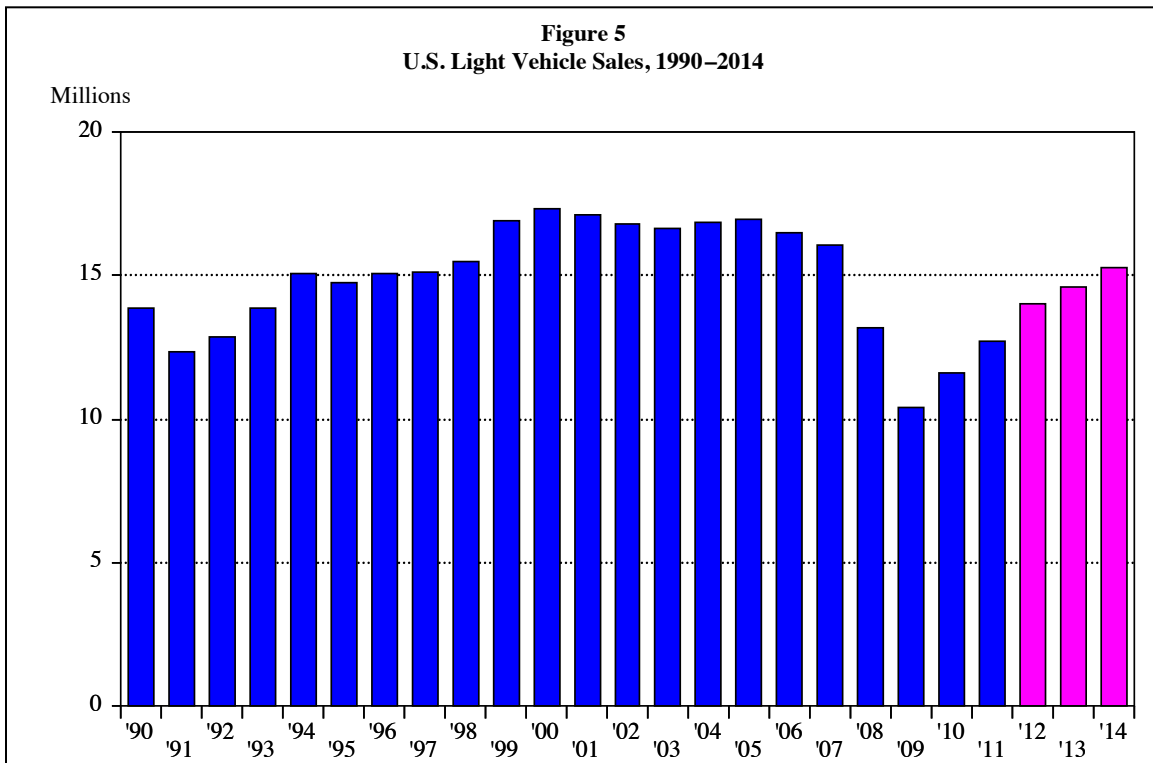
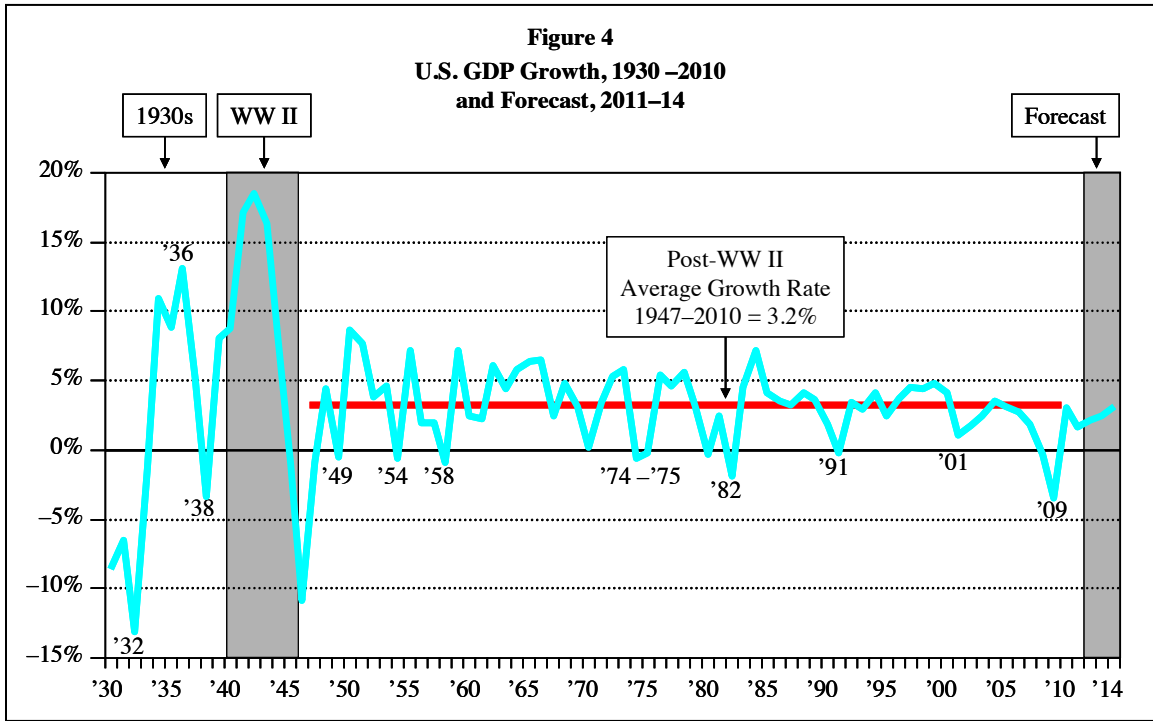
impact of underwater mortgages on household spending; the need for state and local governments to align spending with weaker-than-desired revenue growth; another round of rising oil prices due to geopolitical risks (this time in Iran); and the potential for serious repercussions from the European debt crisis.

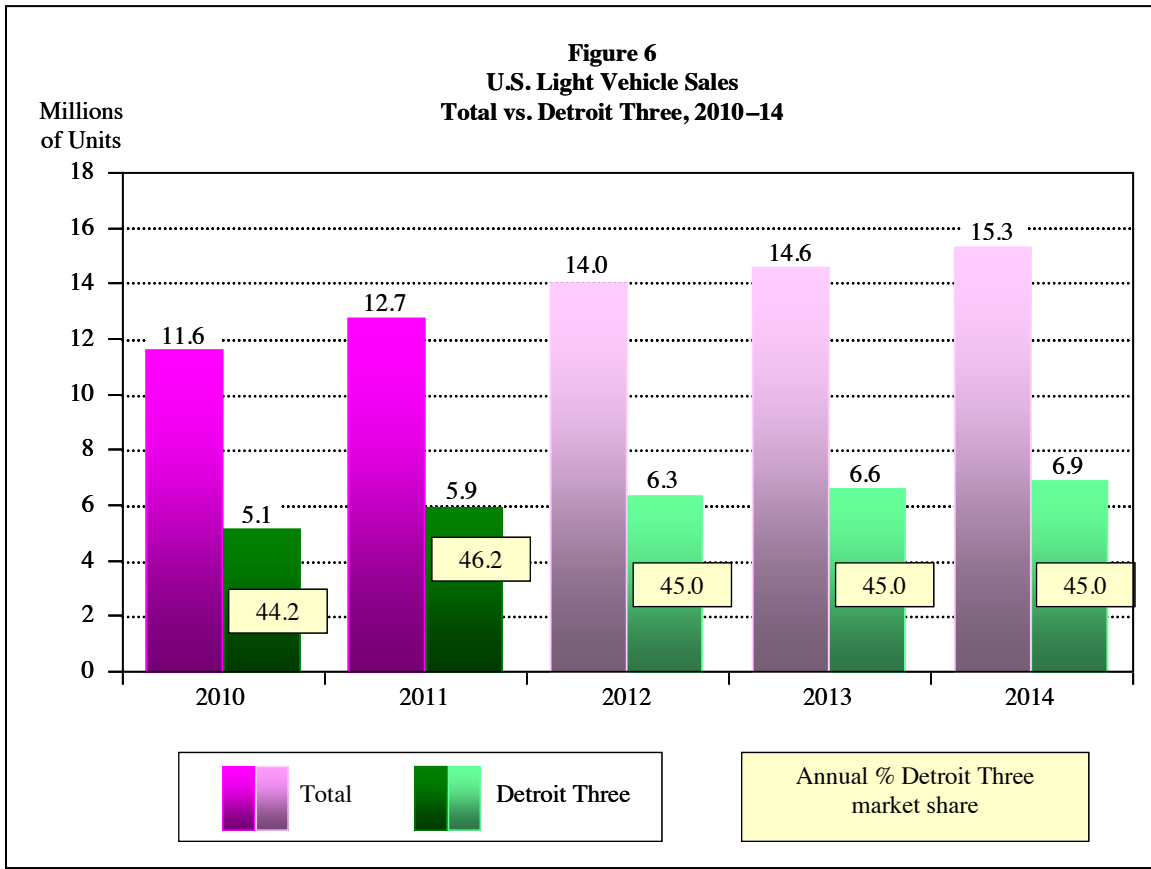


Although output growth is forecast to accelerate over the next three years, it remains subpar relative to its historical path, as shown in figure 4. The average growth rate for real GDP post-World War II, from 1947 to 2010, was 3.2 percent, a yearly rate that the economy falls short of through 2014, according to our forecast. It seems likely that the path of the U.S. recovery will continue to be a marathon, not a sprint.

Total sales of U.S. light vehicles—cars, minivans, sport utility vehicles, crossovers, and pickup trucks—were in the range of 16 to 17+ million units sold annually from 1999 to 2007, as shown in figure 5, and then retreated to 10.4 million units by 2009.

Vehicle sales turned around in 2010 and 2011, and are forecast to continue climbing through 2014. Detail on the vehicle forecast is provided in figure 6.





Light vehicle sales were constrained by tight supply due to the Japanese crisis throughout much of the spring and summer of 2011, averaging a bit under a 12-million-unit annualized pace from May to August. By fall, as shortages were easing, sales picked up to average 13.3 million for the balance of the year. Sales in early 2012 have been surprisingly strong, averaging a 14.6-million-unit pace. This likely reflects continuing make-up sales from last spring and summer along with pull-ahead sales during the mild winter, but it may also reflect some pent-up demand following the recession.

Accumulated pent-up demand is expected to keep pushing vehicle sales higher, particularly since the average age of a light vehicle on the road today is now approaching eleven years, a record. Total unit sales continue to improve from now through 2014, from 12.7 million in 2011 to 15.3 million in 2014—still below the annual sales recorded

between 1999 and 2007, but also with lower break-even sales levels for the auto companies.

The Detroit Three's share of the light vehicle market moved up two percentage points in 2011, to 46.2 percent from 44.2 percent a year earlier. The increase was due in part to a temporary boost resulting from the crisis in Japan. We see their share backing off a little, settling into a position around 45 percent for the next few years. The projections for total sales and the Detroit Three's share of that market, taken together, yield our outlook for Detroit Three sales, which move up progressively from 5.9 million units in 2011 to 6.9 million in 2014.

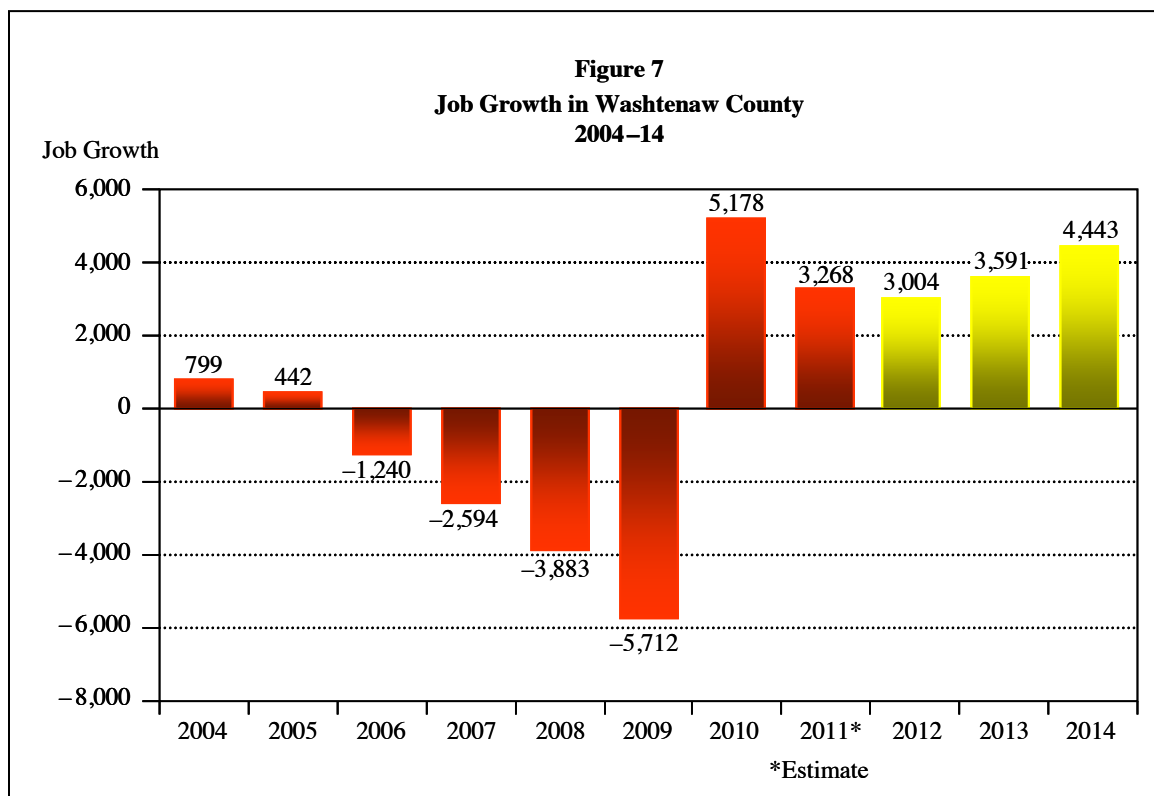
One caution: If the tensions with Iran escalate, oil prices could climb a lot higher, endangering the recovery in vehicle sales. We believe such an event is feasible, but at this time we view this as a less likely scenario.

We now turn to our view of the prospects for the local economy through 2014.

Washtenaw County Outlook: 2012–14

The economic outlook for Washtenaw County through 2014 is measured using information on employment and unemployment. First, we evaluate the county's prospects for total job growth, putting that in context with recent job market developments. Second, we consider the quarterly path of job movements through the end of 2014. Third, we extend into the forecast period our analysis of private-sector job growth by wage category. Fourth, we break out the industry detail underlying the forecast. Finally, we present forecasts of the county unemployment rate and price inflation in the Detroit region.

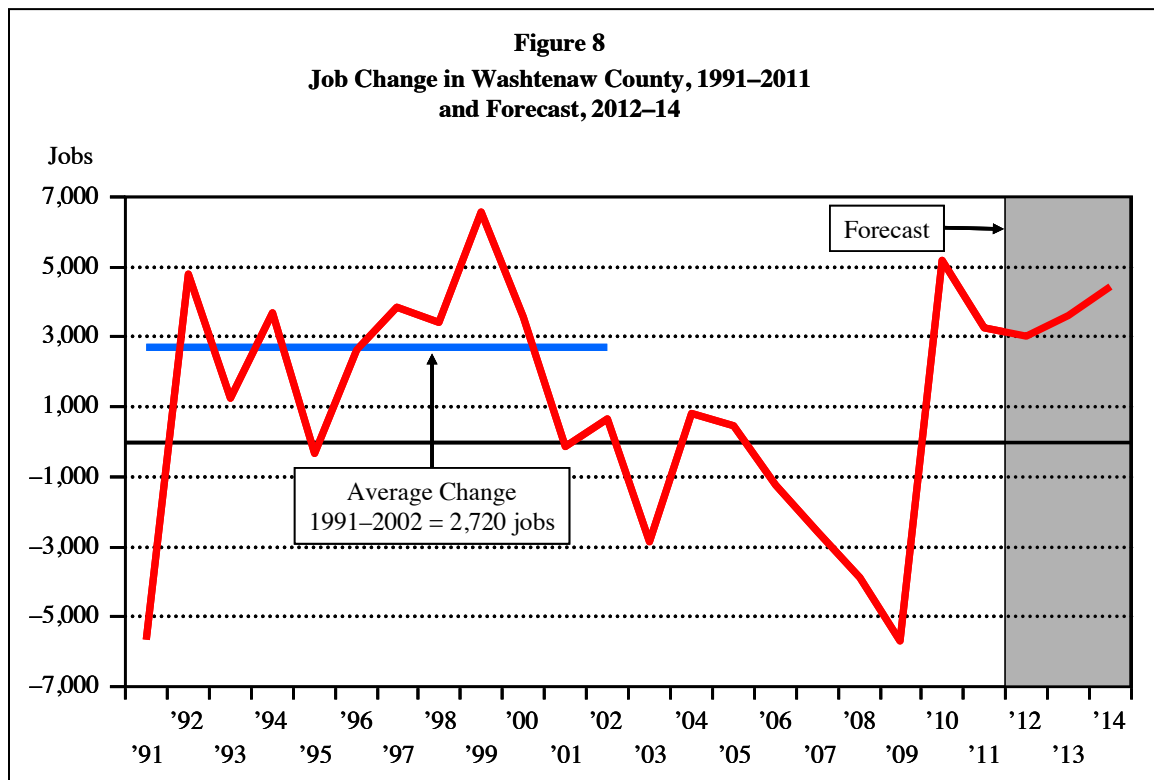
As mentioned in our discussion of the current state of the Washtenaw economy, employment turned the corner to positive growth in 2010, and did so at a vigorous pace. As shown in figure 7, the county added an impressive 5,178 jobs in 2010 (2.9 percent), almost offsetting the jobs lost in the dismal year of 2009. That was the second-largest single year of job gain in the past two decades—remarkable considering that the job market was in virtual free-fall shortly before then.



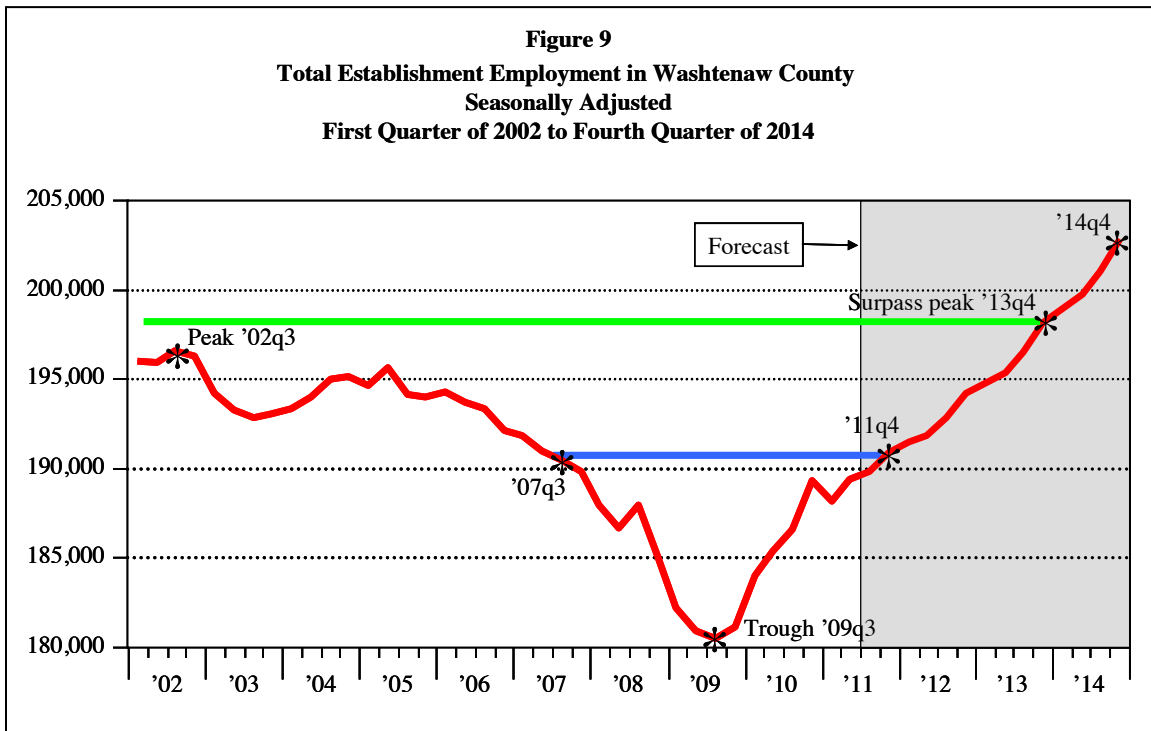
We estimate that the county added 3,268 jobs in 2011 (this number includes two quarters of preliminary data and two forecast quarters). The slowdown in 2011 reflects job losses in local government, newspapers and book publishers, motor vehicle dealers, appliance and electronics stores, and clothing stores. It also includes losses in book

stores and corporate headquarters due to the closure of Borders Group Incorporated, and substantially smaller job gains at temporary help and other employment services.

We are forecasting that job gains slow a bit more in 2012 to 3,004, before economic conditions improve and job growth accelerates to 3,591 in 2013 and 4,443 in 2014. Our calendar-year forecast of job growth is put in context in figure 8, which shows the annual change in jobs going back to 1991. The job growth in each of the next three years will be higher than the average number of jobs gained in the county between 1991 and 2002 (2,720), prior to the extended weakness of the 2000s. In our forecast, the five-year period 2009–14 only slightly trails the robust 1995–2000 period in total jobs created (19,484 compared with 20,008).



Annual comparisons mask some of the detail behind movements in the economy over time. Shown in figure 9, the quarterly path of county employment from the start of 2002 to the end of 2014, adjusted for seasonal variations, adds some information and reinforces findings gleaned from the annual data. Indeed, this elongated V-shaped graph neatly summarizes Washtenaw County's recent economic history and our view of its near-term future. The dramatic decline in jobs from the beginning of 2006 through the summer of 2009 stands out, as does the strong rebound recorded for 2010, and the more moderate but healthy recovery we are forecasting thereafter. From the end of 2011 to the end of 2014, we are projecting that the county will add 11,918 jobs, a growth rate averaging 2 percent per year.¹



¹Since employment generally does not grow or decline evenly over the quarters of a year, employment changes measured from the end of one year to the end of the following year will usually differ from the more commonly cited employment changes based on calendar-year averages. Both calculations are correct; the discrepancies simply reflect differences in timing, and thus take on a different perspective.

As highlighted in figure 9, employment at the end of 2011 is estimated to have returned to levels last seen in the summer of 2007. We are projecting that total employment in the county will reach a milestone by the end of 2013, exceeding the previous peak that occurred in the summer of 2002. The unemployment rate will remain elevated, however, because of the growth in the labor force since 2002.

We now extend to the forecast period our earlier analysis (in table 2) of the types of jobs, measured by wages, that are being created in Washtenaw County. In the first two years of the current economic recovery (2009–11), over half of the net jobs created in the county were in high-wage industries, a disproportionately large share of them occurring in the goods-producing sector, especially motor vehicle and related manufacturing.

The decomposition of private-sector employment growth over the next three years by wage category is shown in table 3. Job growth in the high-wage industries remains vigorous over this period, growing by 7.7 percent, but job growth in the middle- and low-wage industries is also solid, with middle-wage industries growing by 5.9 percent and low-wage industries by 4.4 percent. While the variance among wage categories is not as wide as it was in the 2009–11 period, growth in the high-wage industry sectors remains much stronger than in the lower wage categories. Also, there is a shift within the high-wage industry category. In the initial stages of the recovery, the strongest growth in that category was in the goods-producing sector, but over the next three years the service-providing industries will pull ahead. This diffusion of employment gains bodes well for the long-run prosperity of Washtenaw County.

Table 3
Private-Sector Employment Growth in Washtenaw County by Wage Category
2011 to 2014

	2011	2014	Change 2011–14	% Change 2011–14	% Change 2009–11	Average Wage 2010
Total private	118,663	125,882	7,219	6.1	4.8	\$47,215
Goods-producing	17,551	18,700	1,149	6.5	8.3	63,044
Service-providing	101,112	107,182	6,071	6.0	4.2	44,555
High-wage industries	40,538	43,660	3,122	7.7	8.0	78,578
Goods-producing	11,039	11,793	754	6.8	13.9	75,091
Service-providing	29,500	31,868	2,368	8.0	5.9	79,827
Middle-wage industries	45,179	47,828	2,648	5.9	4.4	40,277
Goods-producing	6,286	6,661	375	6.0	-0.3	44,461
Service-providing	38,893	41,167	2,274	5.8	5.2	39,603
Low-wage industries	32,945	34,394	1,449	4.4	1.7	18,979
Goods-producing	227	247	20	8.9	6.6	24,318
Service-providing	32,719	34,148	1,429	4.4	1.7	18,944

Source: BLS Quarterly Census of Employment and Wages. High-wage industries have an average wage in 2010 exceeding \$57,000; low-wage industries, less than \$27,000; and middle-wage industries, between \$27,000 and \$57,000, inclusive.

The detail of the employment forecast presented in table 4 includes, for twenty-three major industry categories, the level of employment in 2011 (including two quarters of preliminary data); the forecast change for 2012, 2013, and 2014; and the cumulative change over the three-year period 2011–14. The table also includes the average annual wage for each industry in 2010.² Greater detail on the employment forecast can be found in the appendix, which covers 171 industries.

²The average annual wage includes both full- and part-time workers, weighted equally. Consequently, the average wages for industries that employ a disproportionately large number of part-time workers, such as retail trade and leisure and hospitality, are much lower than they would be if the wages were calculated only for full-time workers.

Table 4
Forecast of Employment in Washtenaw County by Major Industry Division*
2012–14

	Employment Change					Average Annual Wage 2010
	Estimate 2011	'11-'12	Forecast			
		'12-'13	'13-'14	'11-'14		
TOTAL JOBS (Number of persons)	189,617	3,004	3,591	4,443	11,038	\$49,509
(Annual percentage change)	(1.8)	(1.6)	(1.9)	(2.3)		
TOTAL PRIVATE	118,663	1,907	2,375	2,937	7,219	47,215
GOODS-PRODUCING	17,551	427	304	418	1,149	63,044
Natural resources, mining, construction	3,370	54	123	196	373	49,292
Manufacturing	14,182	372	182	221	775	66,509
Motor vehicles	5,046	125	40	55	220	83,496
Other manufacturing	9,136	247	142	166	555	57,282
PRIVATE SERVICE-PROVIDING	101,112	1,480	2,070	2,520	6,070	44,555
Trade, transportation, and utilities	24,377	337	464	551	1,352	39,777
Wholesale trade	4,504	75	120	156	351	65,192
Retail trade	16,355	100	180	228	508	26,625
Transportation, warehousing, and utilities	3,518	163	163	166	492	72,157
Information	3,751	29	42	63	134	69,070
Financial activities	5,659	70	101	118	289	53,432
Professional and business services	24,403	561	829	900	2,290	62,441
Professional, scientific, and technical	13,178	467	455	533	1,455	79,562
Management of companies and enterprises	1,045	-216	38	57	-121	87,770
Administrative support and waste management	10,180	310	336	310	956	36,936
Private education and health services	24,029	254	381	558	1,193	44,904
Leisure and hospitality	14,315	209	210	265	684	15,945
Other services	4,578	19	44	66	129	28,726
GOVERNMENT	70,954	1,097	1,217	1,505	3,819	53,300
State government	55,039	1,203	1,129	1,301	3,633	54,034

*Some subtotals do not add to totals due to rounding of annual average computations.

On a calendar-year basis, Washtenaw County is forecast to add 11,038 jobs over the next three years. The private sector contributes 7,219 jobs, or about 65 percent of all jobs created in the county. In 2011, the private sector accounted for 63 percent of all jobs in the county, so the job gains are fairly evenly balanced between the government and private sectors, with a slight tilt toward the private sector.

The goods-producing sector is projected to add 1,149 jobs over the next three years, 10 percent of all of the gains in the county. In the table, the goods-producing sector comprises two categories: the natural resources, mining, and construction industry grouping; and manufacturing.

The natural resources and mining component of the first category has only about 200 workers (mostly wage and salary farm workers) and shows small employment gains over the forecast period. The construction industry has been hit hard by the plunge in the building market. From 2005 to 2011, the local industry work force was cut almost in half, and unlike the rest of the private sector, it did not recover in 2010 and 2011. With the improving local economy and some pickup in residential building, construction employment begins to grow in 2012, and adds jobs at an accelerating rate over the three-year forecast horizon. Despite these gains, by 2014 employment in the construction industry barely exceeds 2009 levels, and remains 44 percent below 2005 peak levels.

The most encouraging development in the Washtenaw economy over the past two years is the recovery of the manufacturing sector, whose local work force had been severely reduced in prior years. Over the ten-year period from 1999 to 2009, manufacturing lost almost 60 percent of its work force, amounting to 17,814 jobs. In 2010, the manufacturing sector added 779 jobs (6.2 percent) and in 2011 it is estimated to

have gained another 839 jobs (6.3 percent). We see manufacturing continuing to add jobs over the forecast period, cumulating to 775 from 2011 to 2014. While these are relatively modest numbers compared with the number of jobs lost between 1999 and 2009, they stand in striking (and welcome) contrast with that decade.

At the core of manufacturing's improvement is the bounce-back in the domestic auto industry, which is now in the black. The local motor vehicle industry³ led manufacturing's decline over the 1999–2009 period, jettisoning an astounding 73 percent of its work force (11,186 jobs). Employment gains in this industry in 2010 (535 jobs, or 12.9 percent) and 2011 (350 jobs, or 7.5 percent) also led the local economic recovery. We are forecasting that job gains in motor vehicle manufacturing will continue, but at a much slower pace during the forecast period (a cumulative gain of 220 jobs over the three-year period). This slowing is consistent with the dampened rate of increase in Detroit Three sales we are forecasting: a gain of one million units from 2011 to 2014 after growing by nearly that much (800,000 units) in the single year of 2011 (see figure 6). Even after five years of anticipated employment gains, the industry's employment locally remains substantially below 2008 levels.

Nonvehicle manufacturing also participated in the early stages of the economic recovery, albeit at a slower pace than motor vehicle manufacturing, adding 244 jobs (2.9 percent) in 2010 and 489 jobs (5.7 percent) in 2011. Over the next three years, employment in nonvehicle manufacturing is forecast to grow at a faster pace than vehicle manufacturing, cumulatively adding 555 jobs. Almost all of the nonvehicle manufacturing industries see job gains, except for book printing. The largest job gains

³Officially this industry is the transportation equipment manufacturing industry, but since virtually all of the jobs in this aggregate category in Washtenaw County are in motor vehicle parts manufacturing, we refer to it as motor vehicle manufacturing.

over the next three years occur in plastics (155), chemicals (106), and medical equipment and supplies (87).

The large trade, transportation, and utilities industry grouping (TTU) has also shrunk recently, losing jobs in each of the three years 2007, 2008, and 2009—a sizable 7.1 percent drop in 2009. But as in manufacturing, declines turned into gains in 2010 and 2011 for this industry grouping as well, with the addition of 407 jobs and 328 jobs, respectively. The growth is expected to be sustained, moving up at an accelerating pace. Wholesale trade has ties to the resurgent manufacturing sector, and contributes 351 of the 1,352 job additions in the TTU grouping from 2011 to 2014.

Retail trade, the largest component of the TTU category, added 252 jobs in 2010, but then unexpectedly lost 59 jobs in 2011. Retail industries that lost jobs in 2011 include motor vehicle dealers, appliance and electronics stores, clothing stores, and book stores. We expect employment growth to resume in 2012, and to continue at a very modest pace through 2014, resulting in a cumulative gain of 508 jobs. While we are anticipating job gains in most of the individual retail industries, except for book stores and nonstore retailers, the gains are small. Much of this weakness reflects technological innovation, such as the Internet and self-service checkout.

The transportation, warehousing, and utilities component of TTU contributes 492 jobs from 2011 to 2014. The strength in this sector reflects increased trucking and warehousing activity and the expansion of air transportation services at Willow Run and Ann Arbor airports.

Like many industries in the local area, the information industry lost jobs for much of the decade of the 2000s. Unlike most other industries, however, it turned around to

show job growth in 2008 and 2009. Job growth accelerated in 2010, but then slipped back to a very modest gain in 2011. We see this modest growth continuing over the forecast horizon, with a net gain of 134 jobs expected in the 2011–14 period. We stress a “net” gain, because the industry has components that are growing, such as software publishers (which includes Google) and those that are in decline, such as newspaper, book, and directory publishers. It’s old meets new, as information delivery moves increasingly from hard copy to electronic media.

The financial activities industry, which includes banking, insurance, and real estate, is another one that grew, albeit modestly, in 2008 and 2009. Job growth accelerated in 2010 as local banks and credit unions added 206 jobs. But that expansion proved fleeting, as job gains in finance tapered off in 2011 to only 42. We expect the modest job growth to continue, albeit at an accelerating pace. Over the three-year forecast horizon (2011–14), the financial activities industry adds a total of 289 jobs.

Among the major private-sector industry divisions, the largest job gains through 2014 are in the large professional and business services grouping. This industry grouping was a mainstay of the county economy in the 1990s, but similar to most other sectors, it faltered during the 2000s, losing 6,670 jobs from 2000 to 2009, 22.6 percent of its work force. Professional and business services added jobs again in 2010 to the tune of 1,218 workers, benefiting from an improved environment for both commercial activity and the employment services industry (which includes temporary help services). Employment gains then fell back to only 312 in 2011. Much of this slowdown stems from the difficulties at Borders. Employment growth picks up some in 2012, and then accelerates in 2013 and 2014 as the impact of the job losses due to the Borders bankruptcy fades.

Over the entire three-year forecast horizon, professional and business services adds a total of 2,290 jobs.

Employment at corporate headquarters is projected to decline in 2012. This reflects the timing of the job losses at Borders, which mostly occurred in the second half of 2011 and will affect the calendar-year average data for 2012. We see this industry returning to small job gains in 2013 and 2014, but over the entire three years of the forecast horizon the industry loses 121 jobs. This is the only major industry to suffer net job losses over that period.

Almost two-thirds of the jobs gained in professional and business services from 2011 to 2014 are forecast to come from the professional, scientific, and technical component. After three years of job loss in 2007–09, growth in this component resumed in 2010, strengthened further in 2011, and is forecast to grow at a very healthy average rate of 3.6 percent per year between 2011 and 2014. The largest job gains between 2011 and 2014 are in computer systems design (368), testing laboratories (300), scientific research and development (235), and engineering services (164).

The administrative support and waste management services category adds 956 jobs between 2011 and 2014. Most of these job gains (757) are in employment services, which includes temporary help services, but a significant number of jobs (126) also come from services to buildings and dwellings.

Private education and health services is the one major industry division in Washtenaw County to have bucked the trend of economic weakness over the past decade, adding to employment every year starting in 1999. Ironically, when many of the other industries boomed in 2010, employment growth in this industry division was modest.

Growth picked up a bit in 2011 with the addition of 456 jobs, but it falls back a bit in 2012 to a job gain of only 254. Over the entire forecast period, 2011–14, this sector adds a total of 1,193 jobs, growing at a moderate pace of 1.6 percent per year.

Within the private education and health services division, the private education component adds 307 jobs and private health care and social assistance adds 885 jobs. Within private health care services, the largest job gains are in nursing and residential care facilities (405), and offices of physicians (218). The private hospitals, emergency relief, and vocational rehabilitation services category is forecast to lose 129 jobs over the next three years.

Leisure and hospitality services resumed adding jobs in 2010, and then turned up sharply in 2011. We project that employment in this industry will continue to grow over the next three years, but at a more subdued pace, cumulating to a total of 684 jobs. We would not be surprised, however, if this industry did better than we are forecasting.

The miscellaneous industry category labeled “other services” in table 4 includes repair and maintenance services, personal and laundry services, membership associations and organizations, and private households. This sector continued to lose jobs in 2010 and 2011, and while we see it adding jobs in 2012, the anticipated gains are modest, totaling only 129 jobs over the entire three-year forecast period. The largest job gains occur in personal care and private household services.

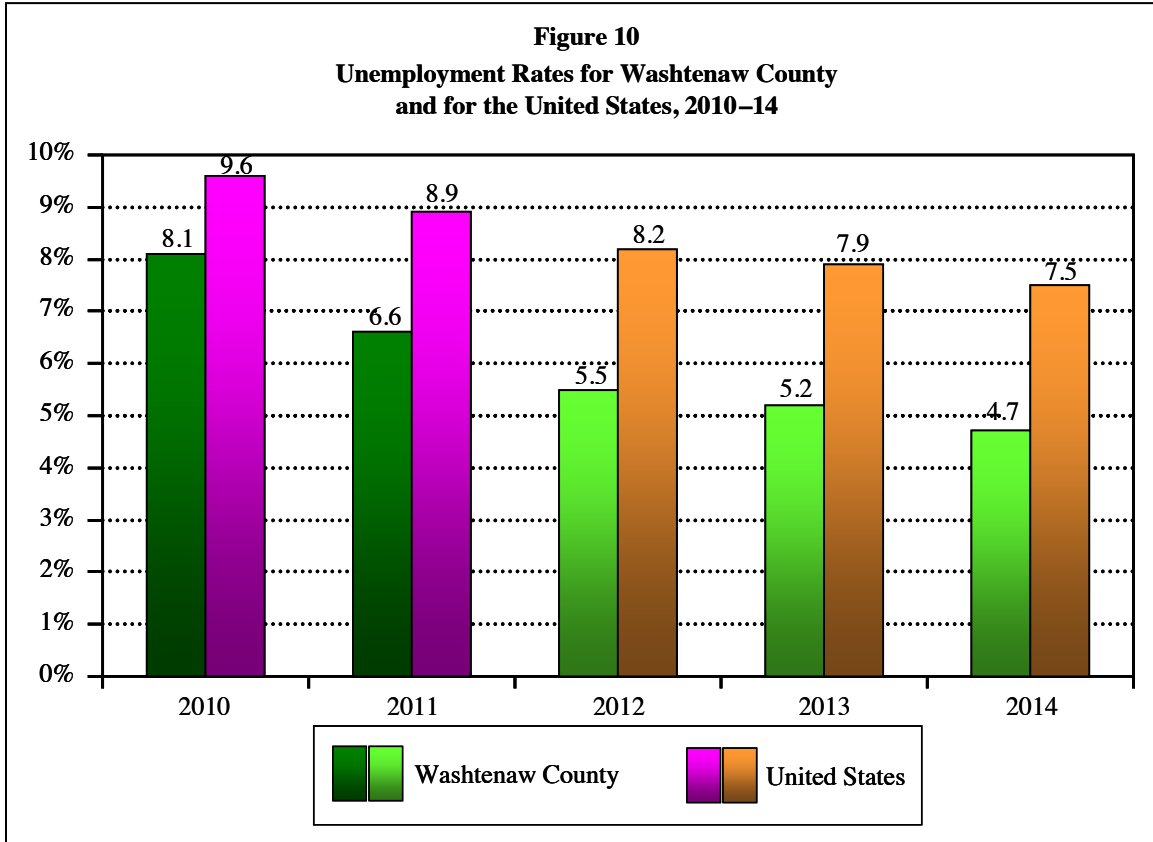
The government sector added 2,307 jobs in 2010, but then slowed to add only 693 jobs in 2011. A major reason for the large job gains in 2010 was the expansion of Veterans Hospital in Ann Arbor. The federal hospital category added 738 jobs in 2010, but only 70 jobs in 2011. Job gains in state government, which in Washtenaw is

dominated by the institutions of higher education, including both the University of Michigan campus and the University's Health System, slipped from 1,526 in 2010 to 1,122 in 2011. In local government, job losses increased from 34 in 2010 to 348 in 2011.

Job gains in the government sector increase slowly over the next three years, from 1,097 in 2012 to 1,505 in 2014. All of this increase reflects an improving outlook for the local government sector, which shifts from a loss of 108 jobs in 2012 to a gain of 203 jobs in 2014, as the finances of local governments and K-12 school districts slowly improve. Federal government employment remains flat over the forecast period as job losses in the postal service offset gains elsewhere. State government adds a relatively steady 1,200 jobs a year over the forecast period.

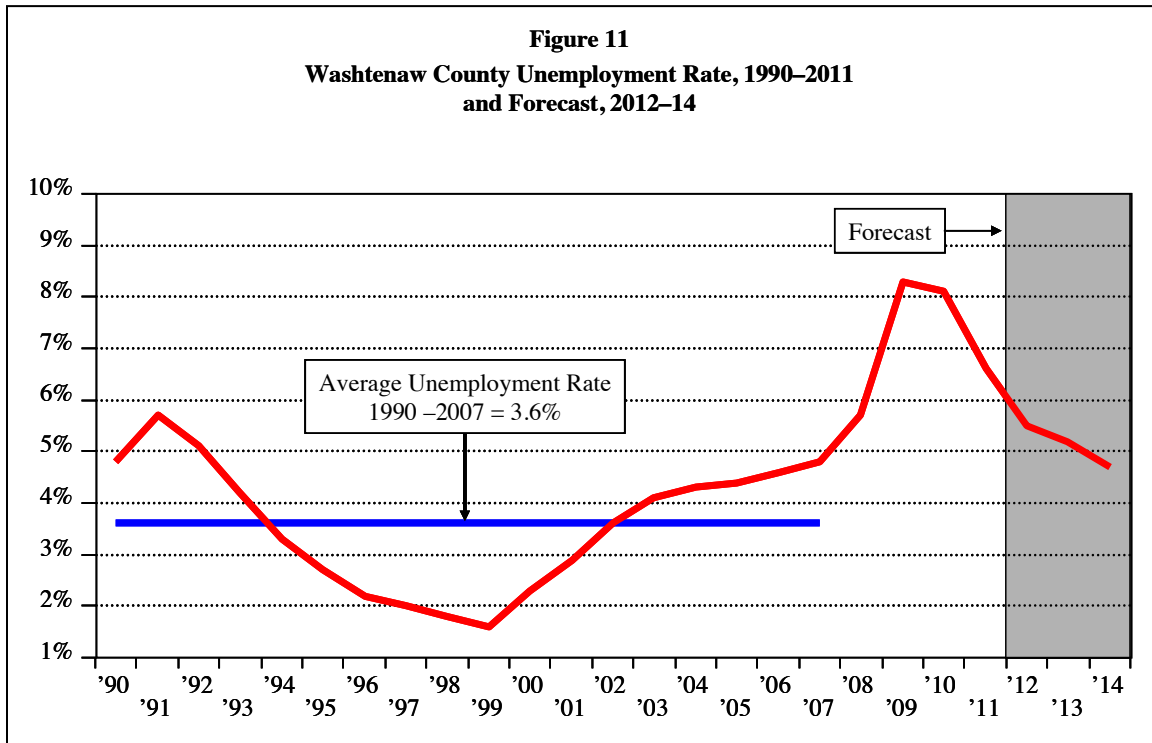
The unemployment rate in Washtenaw County fell by 1.5 percentage points between 2010 and 2011 (from 8.1 percent to 6.6 percent), as shown in figure 10. This is twice the decline seen in the United States, where the unemployment rate fell by only half that much, 0.7 percentage points. While most of the improvement in the unemployment rate reflected job gains (3,268 according to our estimate of establishment employment), part of the decline in the rate resulted from a decline in the labor force (1,190). Thus, our unemployment rate has been improving not only because we are adding jobs, but also because people have stopped looking for work.

The local unemployment rate continues to decline in our forecast to 5.5 percent in 2012, 5.2 percent in 2013, and 4.7 percent in 2014. The rate of decline in the local unemployment rate exceeds the national rate of decline, so by 2014 the gap between the U.S. rate and the county rate widens to 2.8 percentage points, compared with 2.3 percentage points in 2011.

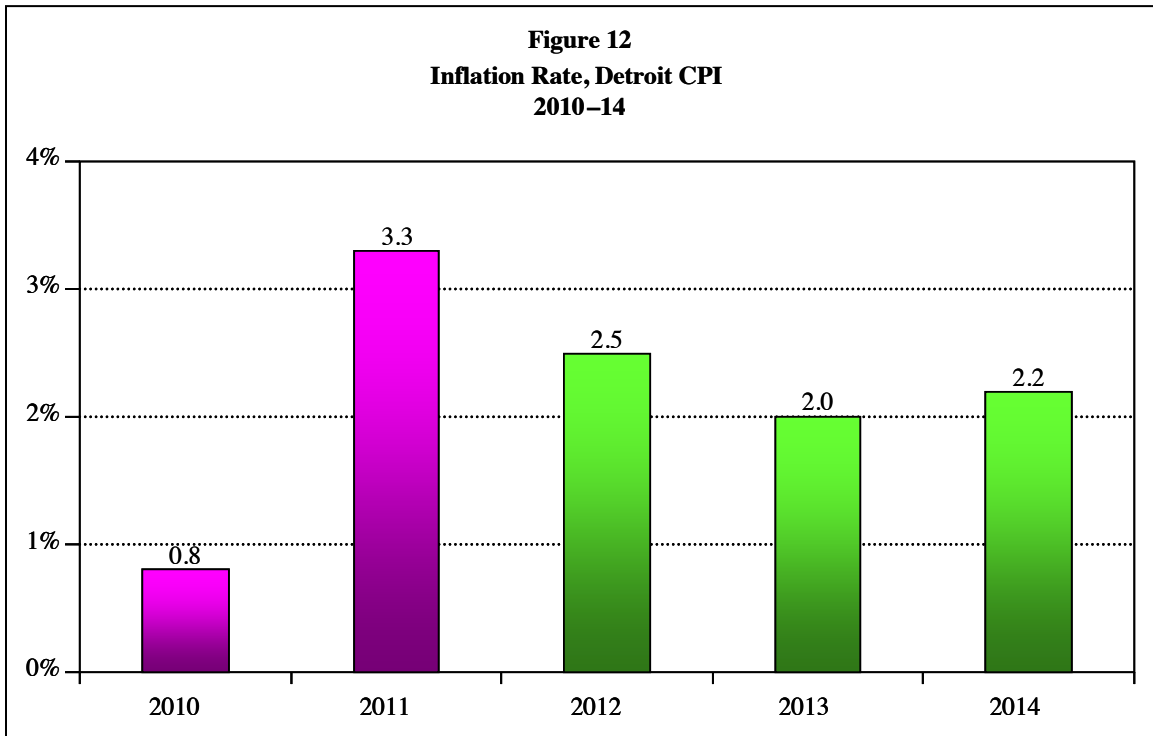


As shown in figure 11, despite the sharp decline in the local unemployment rate over the past couple of years, and as we are forecasting over the next three years, the jobless rate in 2014 remains well above the 3.6 percent level that the county averaged between 1990 and 2007.

We are forecasting that the labor force will begin growing again in 2013 at a fairly healthy rate of 1.5 percent in 2013 and 1.9 percent in 2014, but this might be too optimistic given recent history. If the labor force does not begin growing again at such rates, then the local unemployment rate in 2013 and 2014 will be even lower than we expect, in the context of our job growth forecast. It may seem incongruous now, but local employers could be facing a labor shortage in 2013 and 2014, particularly of qualified workers, if the labor force does not begin growing again.



Our forecast of local inflation, measured by the growth rate of the Detroit Consumer Price Index (CPI), is shown in figure 12. (Consumer price data are not compiled for the county in isolation.) In 2011, a large increase in oil and food prices, as well as rising prices for motor vehicles due to the supply disruptions following the Japanese disasters, led to a spike in local consumer inflation, to 3.3 percent. Similarly high prices so far this year constitute a smaller percentage increase and have a correspondingly smaller effect on the overall inflation rate, predicted to come in at 2.5 percent for 2012. Inflation moderates to the 2.0–2.2 percent range in 2013 and 2014, as we expect smaller increases in food and energy prices. There remains a significant risk of higher near-term inflation depending on the behavior of oil prices in response to the currently volatile political environment in the Middle East.



Conclusion

This year's economic outlook for Washtenaw County is brimming with good news. First, we see sustained, healthy job growth over the next three years, cumulating to job additions of 11,038 from 2011 to 2014, with gains in each of the three years—3,004 in 2012, 3,591 in 2013, and 4,443 in 2014—exceeding the average yearly additions of 2,720 posted in the prior growth era from 1991 to 2002. This is remarkable considering that the county job market was in virtual free-fall a few years ago.

Still on the good news beat, our second finding is that the most vigorous job growth in the county during the recovery of the past two years (2009–11) occurred in high-wage industries, not all in low-wage industries as is sometimes asserted. Indeed, the second-strongest growth among our three wage categories was in the middle-wage industry grouping. And extending this analysis through our three-year forecast period

(2011–14), we find that the profile holds: the high-wage industries continue to outpace the rest of the economy in job growth, and the middle-wage industries continue to run second. A fundamental difference between the earlier period of the recovery (2009–11) and the later period (2011–14) is that within the high-wage category, the recovery was led initially by the goods-producing sector, specifically the manufacturing industries, while in the later period the service-providing industries take the lead in the high-wage category. This diffusion of job gains bodes well for Washtenaw’s prosperity.

We have yet more good news to deliver. Third, we are projecting that employment in the county will reach a milestone by the end of 2013, when it exceeds the previous peak that occurred in the summer of 2002. The anticipated recovery is as remarkable as the decline that preceded it, considering how much ground the county economy had to make up as recently as 2009.

We also see the county unemployment rate coming down systematically over the forecast period, from the 6.6 percent posted for 2011 to 4.7 percent in 2014. Still, the rate for 2014 remains well above the rate of 3.6 percent averaged between 1990 and 2007. But despite elevated unemployment, a looming problem for local employers is a shortage of qualified workers.

Having delivered the good news forecast, we also need to acknowledge that there are risks to any forecast, that is, certain outcomes that could diverge from our expectations and affect the accuracy of the forecast. On downside risks—that is, risks that the forecast is too optimistic—the primary ones nationally and internationally are the domestic housing sector (although once declining prices are no longer an incentive to delay purchases, pent-up demand could produce a stronger building sector than

anticipated); an accelerated climb in oil prices if tensions with Iran escalate; and the evolution of financial and fiscal stress in the Eurozone. Upside risks—that is, risks that the forecast is too pessimistic—include more purchases than anticipated of vehicles and housing.

Locally, the downside risk of most concern is one associated with movements in the labor force. The county labor force has declined every year since 2007. We see this turning around in 2013, but if that does not happen, local employers could have difficulty finding workers with the skills they need—a problem that is already emerging in some areas of the local economy. An upside risk locally relates to the knowledge economy, particularly that part of it centered on research activities at the University of Michigan. Our model predicts growing momentum in this area, but we could easily see growth ratcheting up even more than expected.

Ann Arbor has been recognized in recent media releases as having several things going for it: the best city in America for singles, the smartest city, the healthiest hometown for retirees, and most recently, the fifth happiest city in the nation. It's hard to vouch for the validity of these findings, but certainly its highly educated populace and its attractiveness both to the young and to retirees all bode well for the area's economic prospects.

Appendix

Forecast of Employment in Washtenaw County by Detailed Industry Division

	Estimated 2011	2012	Forecast 2013	2014	Average Wage 2010
Total wage and salary employment	189,617	192,621	196,212	200,655	\$49,509
Total government	70,954	72,051	73,268	74,773	53,300
Federal government	3,640	3,642	3,638	3,640	68,401
Post Office	529	510	496	488	54,196
Hospital	2,193	2,211	2,214	2,218	66,559
Other federal government	918	922	928	934	80,216
State government	55,039	56,242	57,371	58,672	54,034
Local government	12,275	12,167	12,259	12,462	45,713
Education and health services	7,928	7,855	7,945	8,111	44,886
Other local government	4,347	4,312	4,314	4,351	47,179
Total private	118,663	120,570	122,945	125,882	47,215
Goods-producing	17,551	17,978	18,282	18,700	63,044
Natural resources and mining	227	235	241	247	24,318
Construction	3,143	3,189	3,306	3,496	50,971
Buildings	715	726	756	797	50,254
Residential	378	396	426	463	35,263
Nonresidential	337	330	330	335	69,441
Heavy and civil engineering construction	338	329	357	431	52,039
Specialty trade contractors	2,090	2,135	2,192	2,267	50,963
Building foundation and exterior	273	290	300	310	37,291
Building equipment	1,058	1,078	1,098	1,134	58,721
Building finishing	449	471	496	519	42,271
Other specialty trade	309	295	298	304	49,821
Manufacturing	14,182	14,554	14,736	14,957	66,509
Food	708	722	734	746	40,466
Printing and related support activities	1,989	1,954	1,928	1,913	42,092
Books	1,405	1,351	1,309	1,279	42,805
Other printing and related	584	603	619	634	40,034
Chemicals	616	656	690	722	77,206
Plastics and rubber products	1,213	1,294	1,330	1,368	71,196
Fabricated metal products	1,005	1,026	1,040	1,057	52,228
Machine shops and threaded products	539	549	554	561	54,549
Other fabricated metal products	466	477	486	496	49,702
Machinery	1,001	1,036	1,047	1,060	66,220
Commercial and service industry	377	388	391	395	63,959
Metalworking	291	300	301	304	61,399
Other machinery	333	349	355	361	73,345
Computer and electronic products	908	935	947	963	65,906
Computer and peripheral products	62	56	52	48	74,066
Semiconductor and electronic components	388	406	424	445	74,007
Electronic instruments	408	427	430	433	57,880
Other computer and electronic products	50	45	41	38	58,148
Transportation equipment	5,046	5,171	5,211	5,266	83,496
Miscellaneous manufacturing	1,242	1,281	1,310	1,340	63,918
Medical equipment and supplies	858	894	920	945	72,565
Other miscellaneous manufacturing	384	387	391	395	45,235
Other manufacturing	453	479	498	521	46,743

Appendix (continued)

Forecast of Employment in Washtenaw County by Detailed Industry Division

	Estimated 2011	2012	Forecast 2013	2014	Average Wage 2010
Private service-providing	101,112	102,592	104,662	107,182	\$44,555
Trade, transportation, and utilities	24,377	24,714	25,178	25,729	39,777
Wholesale trade	4,504	4,579	4,699	4,855	65,192
Merchant wholesalers, durable goods	2,151	2,193	2,240	2,296	65,883
Merchant wholesalers, nondurable goods	1,498	1,530	1,595	1,682	65,969
Electronic markets and agents and brokers	854	856	865	878	61,782
Retail trade	16,355	16,455	16,635	16,863	26,625
Motor vehicles	1,471	1,493	1,508	1,522	52,628
Automobiles	1,171	1,185	1,195	1,205	55,183
Other motor vehicles	300	308	312	318	42,351
Furniture and home furnishings	455	459	470	485	31,615
Electronics and appliances	790	845	888	927	36,905
Building materials and garden supplies	1,117	1,111	1,118	1,137	32,817
Food and beverages	4,323	4,338	4,372	4,429	23,141
Grocery stores	3,886	3,888	3,910	3,957	23,531
Specialty food stores	305	316	326	336	19,245
Beer, wine, and liquor stores	133	134	135	137	19,498
Health and personal care stores	1,080	1,102	1,117	1,132	33,228
Pharmacies and drug stores	841	858	870	881	34,544
Other health and personal care stores	240	244	247	251	29,715
Gasoline stations	547	564	580	595	16,979
Clothing and accessories	1,353	1,393	1,426	1,458	16,661
Sporting goods, hobby, book, music stores	850	778	775	770	18,088
Sporting goods and musical instruments	554	583	601	619	16,310
Books, periodicals, and music	296	195	174	151	20,293
General merchandise	3,194	3,199	3,214	3,233	20,221
Department stores	1,945	1,943	1,947	1,955	19,307
Other general merchandise stores	1,249	1,256	1,267	1,278	21,555
Miscellaneous store retailers	726	734	734	734	19,059
Nonstore retailers	447	439	436	441	32,354
Transportation and warehousing	3,021	3,181	3,341	3,503	57,783
Truck transportation	839	874	913	954	55,389
Other transportation and warehousing	2,182	2,306	2,428	2,549	58,771
Utilities	497	500	503	507	149,024
Information	3,751	3,780	3,822	3,885	69,070
Publishing industries, except Internet	1,960	1,950	1,961	1,987	73,111
Newspaper, book, and directory publishers	577	563	554	550	51,999
Software publishers	1,384	1,387	1,407	1,437	83,809
Telecommunications	452	446	440	435	64,327
Data processing, hosting, and related services	298	303	302	302	57,324
Other information	1,041	1,081	1,119	1,162	65,774
Financial activities	5,659	5,729	5,830	5,948	53,432
Finance and insurance	3,336	3,399	3,473	3,549	62,945
Credit intermediation and related activities	1,876	1,932	1,991	2,049	54,322
Depository credit intermediation	1,595	1,648	1,708	1,767	52,409
Other credit intermediation and related	281	283	283	283	65,315
Insurance carriers and related activities	896	900	909	921	64,528
Insurance carriers	419	429	438	446	65,422
Insurance agencies and brokerages	477	471	472	475	63,808
Other finance	564	568	573	578	89,940

Appendix (continued)

Forecast of Employment in Washtenaw County by Detailed Industry Division

	Estimated 2011	2012	Forecast		Average Wage 2010
	2013	2014			
Financial activities (continued)					
Real estate and rental and leasing	2,323	2,330	2,357	2,399	\$39,967
Real estate	2,000	2,006	2,032	2,070	38,683
Lessors of real estate	957	963	975	991	37,968
Offices of real estate agents and brokers	446	440	446	459	38,108
Activities related to real estate	597	603	611	620	40,360
Rental and leasing services	188	182	175	170	26,578
Lessors of nonfinancial intangible assets	135	142	150	160	79,747
Professional and business services	24,403	24,964	25,793	26,693	62,441
Professional and technical services	13,178	13,645	14,100	14,633	79,562
Legal services	1,000	1,006	1,015	1,027	75,004
Accounting and bookkeeping	660	677	695	714	47,122
Architectural and engineering	3,433	3,618	3,797	3,981	88,655
Engineering	1,286	1,344	1,396	1,450	87,136
Testing laboratories	1,831	1,930	2,028	2,131	95,018
Other architectural and engineering	317	344	373	400	65,899
Specialized design	209	202	203	205	64,320
Computer systems design and related services	1,959	2,078	2,188	2,327	78,648
Management and technical consulting	1,952	1,984	2,022	2,075	86,502
Scientific research and development	2,816	2,907	2,972	3,051	89,303
Physical, engineering, and bio. research	2,580	2,650	2,700	2,763	92,047
Social science and humanities research	236	257	272	288	54,447
Advertising, PR, and related services	201	198	196	194	52,621
Other professional and technical services	948	976	1,012	1,058	42,674
Management of companies and enterprises	1,045	829	867	924	87,770
Administrative and waste services	10,180	10,490	10,826	11,136	36,936
Administrative and support services	9,906	10,214	10,545	10,849	36,410
Office administrative services	814	807	812	826	84,291
Employment services	5,782	6,038	6,308	6,539	29,089
Business support	862	882	901	918	62,496
Services to buildings and dwellings	2,077	2,118	2,158	2,203	26,997
Other administrative and support services	373	369	365	363	36,135
Waste management and remediation services	274	276	281	288	55,095
Private education and health services	24,029	24,283	24,664	25,222	44,904
Private educational services	2,529	2,576	2,675	2,836	31,106
Private elementary and secondary schools	963	993	1,030	1,077	32,897
Other private educational services	1,566	1,583	1,645	1,759	29,985
Private health care and social assistance	21,501	21,706	21,989	22,386	46,450
Ambulatory health care services	8,271	8,434	8,590	8,801	62,075
Offices of physicians	3,414	3,483	3,540	3,632	92,590
Offices of dentists	1,189	1,186	1,190	1,200	46,117
Offices of other health practitioners	554	601	642	685	31,848
Home health care services	1,703	1,708	1,714	1,728	35,013
Other ambulatory health care services	1,410	1,457	1,504	1,555	52,761
Nursing and residential care facilities	3,994	4,104	4,244	4,399	26,423
Community care facilities for the elderly	1,799	1,825	1,856	1,894	30,454
Other nursing and residential care facilities	2,195	2,279	2,388	2,505	23,063
Individual and family services	588	598	614	629	20,984
Child day care services	993	998	1,011	1,032	18,715

Appendix (continued)

Forecast of Employment in Washtenaw County by Detailed Industry Division

	Estimated 2011	2012	Forecast 2013	2014	Average Wage 2010
Private health care and social assistance (cont.)					
Hospitals, emergency relief, and vocational rehabilitation services	7,654	7,571	7,531	7,525	\$45,855
Leisure and hospitality	14,315	14,524	14,734	14,999	15,945
Arts, entertainment, and recreation	2,016	2,060	2,093	2,161	18,368
Amusements, gambling, and recreation	1,710	1,749	1,776	1,833	15,189
Golf courses and country clubs	621	715	750	794	15,502
Fitness and recreational sports centers	810	758	752	763	15,740
Other amusements, gambling, recreation	279	276	274	276	13,181
Performing arts, spectator sports, museums, and parks	306	311	317	328	35,266
Accommodation and food services	12,299	12,464	12,640	12,838	15,558
Accommodation	1,212	1,207	1,218	1,230	18,941
Food services and drinking places	11,086	11,257	11,422	11,608	15,175
Full- and limited-service eating places	10,065	10,253	10,421	10,598	14,790
Special food services	393	388	385	382	24,933
Drinking places, alcoholic beverages	628	616	617	629	14,760
Other services	4,578	4,597	4,641	4,707	28,726
Repair and maintenance	876	876	875	876	36,238
Automotive repair and maintenance	762	765	767	772	35,131
Other repair and maintenance	115	112	108	104	43,418
Personal laundry services	1,419	1,425	1,446	1,475	28,437
Personal care services	911	915	933	956	32,811
Other personal and laundry services	509	510	514	519	20,768
Membership associations and organizations	1,698	1,705	1,718	1,736	29,215
Civic and social organizations	582	584	581	580	22,052
Labor unions and similar labor organizations	150	155	162	168	27,860
Other membership associations and org.	966	966	974	988	34,125
Private households	583	591	602	619	16,224
Unallocated private services	0	0	0	0	N.A.
<u>Addendum</u>					
Unemployment rate	6.6	5.5	5.2	4.7	N.A.