

4. Who Are the Displaced Workers?

The auto industry has been under tremendous pressure in recent years, in terms of both structural and cyclical change. The tri-state region of Indiana, Michigan and Ohio lost more than 46 percent of its total auto industry employment between June 2006 and June 2009. This chapter aims to identify the workers most affected by these changes.

The primary “take-away” from this chapter is that the auto workforce has become slightly older and more male. Policymakers and workforce development

officials should also be concerned that a large majority of the workforce that have been out of work for a long time have only a high school diploma. This will likely present a significant challenge for implementing education and retraining programs targeted to help displaced workers transition to new jobs.

4.1 Job Change by Occupation

Table 8 presents the top 20 occupations that lost auto sector jobs in the tri-state region from 2006 to 2009. The top two occupations with the greatest job reductions were team assemblers and assemblers

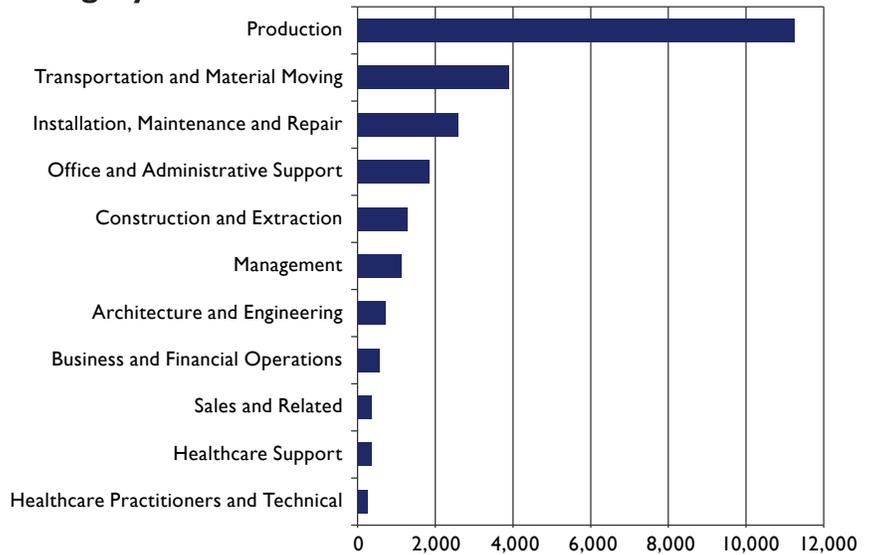
Table 8: Tri-State Occupational Employment Loss in Transportation Equipment Manufacturing, 2006 to 2009

Occupation Code	Title	Loss	Industry Loss Rank	Percent of Auto-Related Loss
00-0000	Total, All Occupations	-232,335		100%
51-2092	Team Assemblers	-32,876	1	14%
51-2099	Assemblers and Fabricators, All Other	-24,527	2	11%
51-9199	Production Workers, All Other	-9,676	3	4%
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	-8,146	4	4%
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	-7,432	5	3%
51-1011	First-Line Supervisors/Managers of Production and Operating Workers	-6,940	6	3%
51-4041	Machinists	-6,823	7	3%
51-4111	Tool and Die Makers	-6,728	8	3%
17-2199	Engineers, All Other	-6,585	9	3%
17-2112	Industrial Engineers	-5,224	10	2%
53-7051	Industrial Truck and Tractor Operators	-5,019	11	2%
49-9042	Maintenance and Repair Workers, General	-3,531	12	2%
49-9041	Industrial Machinery Mechanics	-3,401	13	1%
17-2141	Mechanical Engineers	-3,362	14	1%
51-4121	Welders, Cutters, Solderers, and Brazers	-3,277	15	1%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	-3,150	16	1%
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	-3,106	17	1%
13-1199	Business Operations Specialists, All Other	-3,097	18	1%
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	-2,830	19	1%
47-2111	Electricians	-2,792	20	1%

Note: Shaded rows indicate occupations where workers have experienced extended unemployment.
Source: Indiana Department of Workforce Development, using QCEW and OES data

and fabricators (all other), accounting for 25 percent of the observed job losses. Given the ambiguity of the “all other” category, along with some evidence of jobs shifting from one of these categories to the other for the same employer, one may reasonably argue that a single occupation accounted for a quarter of the industry job loss from 2006 to 2009. This consolidated job classification represents more than 57,000 dislocated workers in the three states. If O*NET occupational survey demographics for team assemblers also applies to assemblers and fabricators, more than 60 percent have only a high school education—a troubling statistic.

Figure 3: Long-Term Claimants by Broad Occupational Category



Source: Indiana Department of Workforce Development, using Indiana unemployment claims data

The shaded rows in **Table 8** indicate that autoworkers in these occupations have experienced long-term unemployment.¹⁹ The fact that these are long-term claimants also implies that autoworkers in these occupations are having difficulty finding work in other industries. Either demand for labor in these occupations in other industries is also low—a plausible hypothesis given the massive economic downturn—or there are other structural obstacles that hinder a worker’s transition from one industry to another. Appropriate policy responses might thus aim to increase inter-industry labor flexibility by concentrating retooling and retraining resources on those 12 occupations.

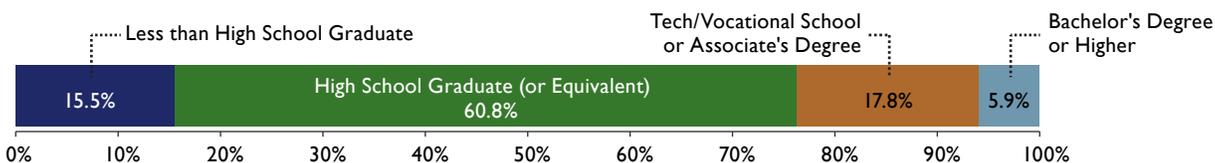
4.2 Demographics and Education for Affected Workers

Demographic data for the tri-state region were unavailable, so the research team analyzed Indiana’s long-term unemployment claimant data as a proxy to gain insights on the dislocated workforce. Sixty-seven percent of the dislocated workforce is male. This is not surprising, given that the overall workforce for this industry is roughly 75 percent male. Self-reported occupations for these workers are concentrated in production and transportation and material moving occupations, but span a wide gamut of broad occupational groups, as shown in **Figure 3**.

Seventy-five percent of these displaced workers have a high-school education or less (see **Figure 4**).

¹⁹ Long-term claimants are those who have been unemployed long enough to exhaust the “normal” unemployment insurance benefits and have continued to draw unemployment benefits via the Federal Emergency Unemployment Compensation program. Analysts selected an unduplicated cadre of claimants from Indiana’s TEM-plus sector (transportation equipment manufacturing plus engine, turbine and power transmission equipment manufacturing), who received unemployment benefits between July 1, 2009 and June 30, 2010.

Figure 4: Long-Term Claimants by Educational Attainment



Source: Indiana Department of Workforce Development, using Indiana unemployment claims data

Table 9: Auto Sector[§] Employment Change by Sex and Selected Age Brackets for the Tri-State Region, 2006 to 2009

Category	Age Group	Second Quarter 2006		Second Quarter 2009		2006-2009 Change		
		Employment	Percent of Employment	Employment	Percent of Employment	Employment Loss	Percent Loss	Employment Share Point Change
Total	14-99	499,200	100.0%	315,400	100.0%	-183,800	-36.8%	
Male	14-99	368,900	73.9%	236,200	74.9%	-132,700	-36.0%	1.0
	25-34	68,800	13.8%	38,500	12.2%	-30,300	-44.0%	-1.6
	35-44	99,400	19.9%	68,100	21.6%	-31,300	-31.5%	1.7
	45-54	112,200	22.5%	77,600	24.6%	-34,600	-30.8%	2.1
	55-64	61,500	12.3%	38,800	12.3%	-22,700	-36.9%	0.0
Female	14-99	130,300	26.1%	79,200	25.1%	-51,100	-39.2%	-1.0
	25-34	25,600	5.1%	13,000	4.1%	-12,600	-49.2%	-1.0
	35-44	37,500	7.5%	23,100	7.3%	-14,400	-38.4%	-0.2
	45-54	41,000	8.2%	27,100	8.6%	-13,900	-33.9%	0.4
	55-64	18,200	3.6%	12,200	3.9%	-6,000	-33.0%	0.2

[§] Auto sector defined as TEM-plus.
Source: U.S. Census Bureau, Local Employment Dynamics

In addition, more than 47 percent are over the age of 45, as shown in **Figure 5**. Since many of these workers have not been inside a classroom for decades, retraining for an alternate career may pose a daunting challenge.

All told, job losses were not proportional across age and sex in the tri-state region (see **Table 9**). In terms of sheer numbers, male workers bore the brunt of the absolute job loss and men in their prime

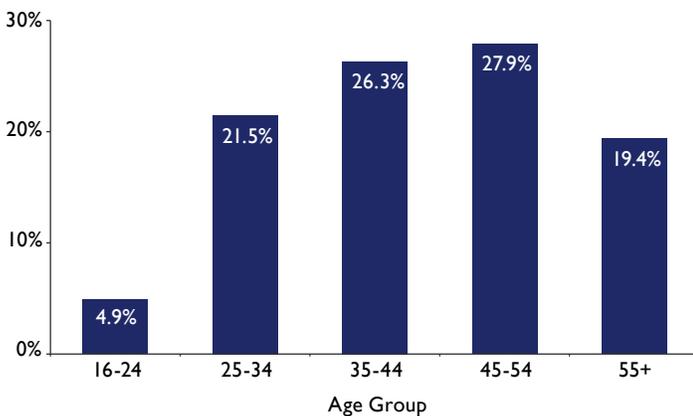
earning period of 45-54 years of age were hardest hit. However, on a percentage basis, both men and women in the 25-34 year old age bracket experienced the largest job losses. The remaining auto sector workforce has become, on average, older and more male, a phenomena partially explained by seniority and union rules.

4.3 Finding Work

As a result of the Great Recession and industry restructuring, the employment picture in the automobile sector, as with manufacturing and construction in general, is grim. Over a third of the auto workforce lost their jobs from 2006 to 2009.

The auto sector is hiring again and has recalled some workers, but at a relative trickle. The rate uptake is not yet at levels sufficient to rehire all those that lost their jobs because of the economic whirlwinds of the last several years. Where will a majority of the unemployed find jobs given that being re-hired may not be a realistic option? The next chapters plot a path to viable occupational alternatives. 

Figure 5: Long-Term Claimants by Age Group



Source: Indiana Department of Workforce Development, using Indiana unemployment claims data