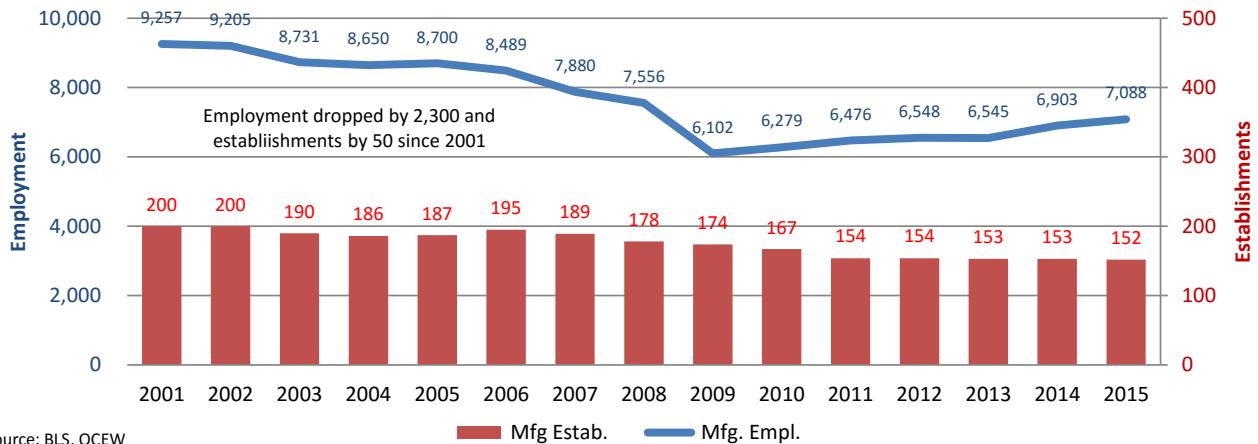


Summary

In 2015, Ashtabula County had 7,100 manufacturing employees working in over 150 establishments with 38% of all employees working in Rubber & Plastics and Chemical Manufacturing. The average manufacturing establishment employed 45 workers and the average job paid \$48,600. Manufacturing employment contracted by over 3,000 from 2001 to 2009, but rebounded by 1,000 since that time. The number of manufacturing establishments also contracted by 25% from 2001 until the end of the recent recession, but has remained stable since 2011. The loss has been mainly the result of the contraction in durable goods production which lost over 30% of employment and establishments. Ashtabula County's losses were similar to Ohio's, but were especially significant because the county's economy was heavily oriented toward manufacturing.

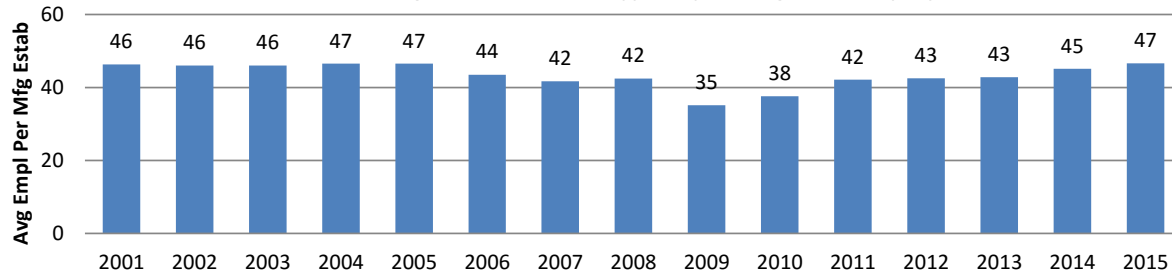
Manufacturing Employment & Establishments

Manufacturing Employment & Establishments Declined by 25% Since 2001



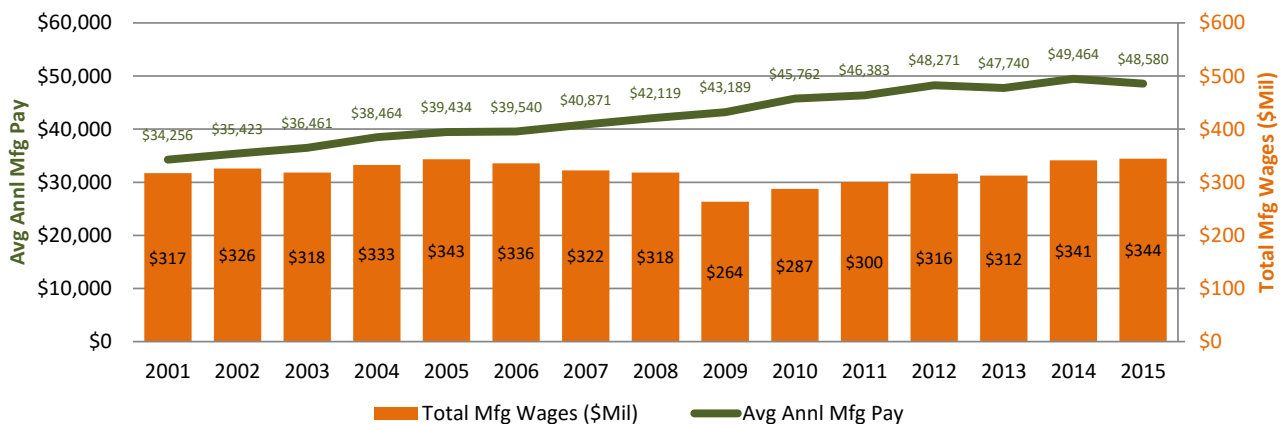
Average Employment Per Manufacturing Establishment

Manufacturing Establishments Typically Averaged 47 Employees

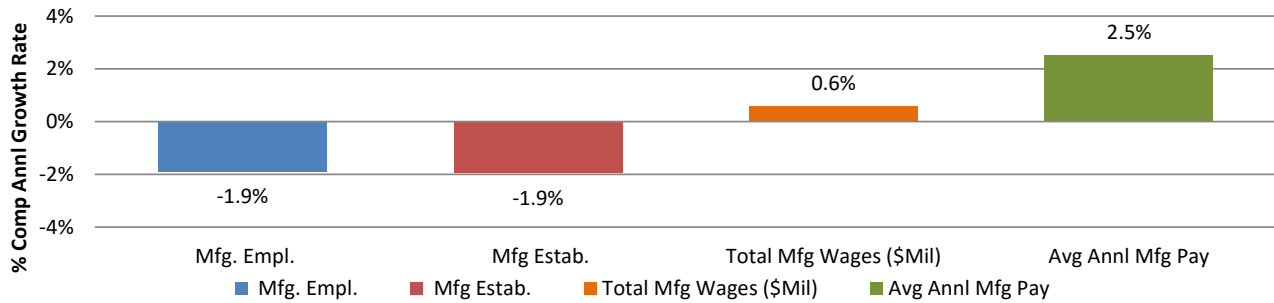


Manufacturing Total Wages & Annual Pay

Average Annual Pay Steadily Increased But Total Wage Growth Was Inconsistent

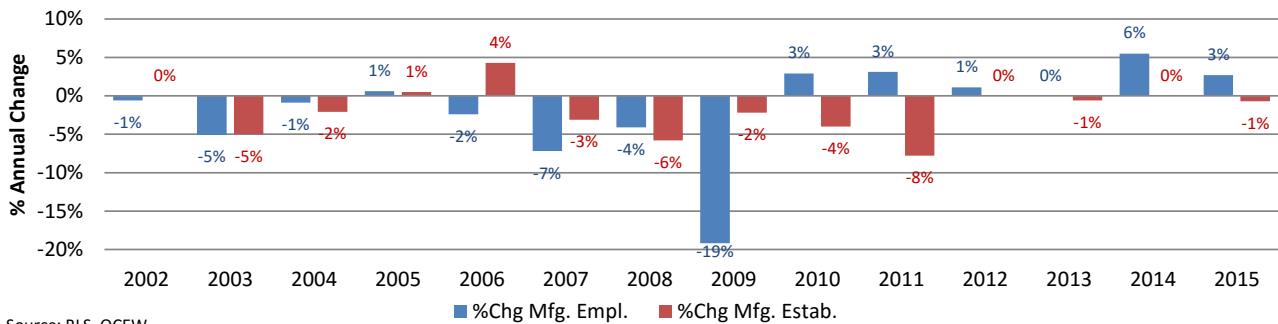


Compound Annual Growth Rate for Manufacturing Employment & Establishments Contracted At a -2% Annual Rate Since 2001



Source: BLS, QCEW

Annual Changes in Manufacturing Short-Term Changes In Employment Often Differed From Establishment Changes



Source: BLS, QCEW

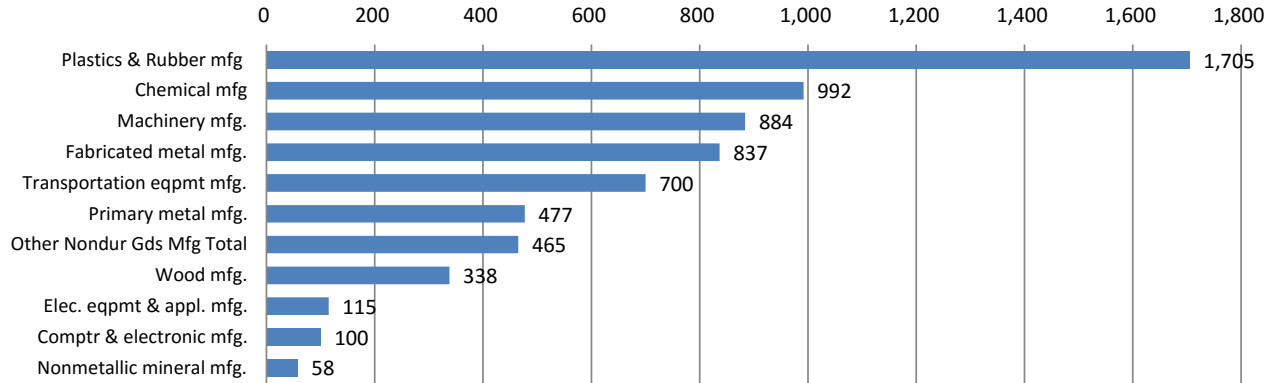
Ashtabula County Manufacturing (2001-15)					
	Mfg. Empl.	Mfg Estab.	Total Mfg Wages (\$Mil)	Avg Annl Mfg Pay	Avg Empl/ Mfg Estab
2001	9,257	200	\$317	\$34,256	46
2002	9,205	200	\$326	\$35,423	46
2003	8,731	190	\$318	\$36,461	46
2004	8,650	186	\$333	\$38,464	47
2005	8,700	187	\$343	\$39,434	47
2006	8,489	195	\$336	\$39,540	44
2007	7,880	189	\$322	\$40,871	42
2008	7,556	178	\$318	\$42,119	42
2009	6,102	174	\$264	\$43,189	35
2010	6,279	167	\$287	\$45,762	38
2011	6,476	154	\$300	\$46,383	42
2012	6,548	154	\$316	\$48,271	43
2013	6,545	153	\$312	\$47,740	43
2014	6,903	153	\$341	\$49,464	45
2015	7,088	152	\$344	\$48,580	47
2001-15 Chg	(2,169)	(48)	\$27	\$14,324	
2001-15 % Chg	-23%	-24%	9%	42%	
01-14 CAGR	-1.9%	-1.9%	0.6%	2.5%	

Source: Bureau of Labor Statistics (BLS), Quarterly Census of Employment and Wages (QCEW)

Manufacturing Industry Profile

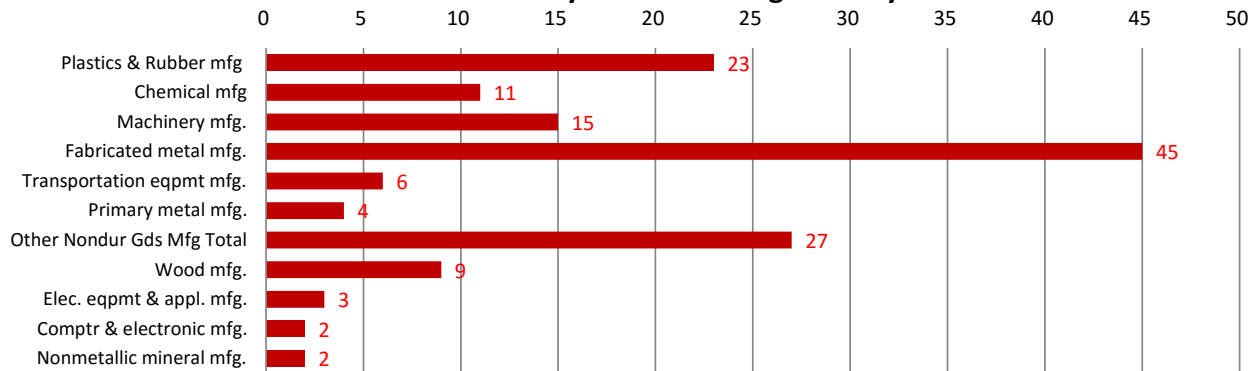
With over 1,700 employees, rubber and nearly a quarter of all manufacturing employees, Rubber and Plastics Manufacturing was the most important industry to Ashtabula County. Fabricated metals manufacturing represented about 30% of all manufacturing establishments.

Employment By Manufacturing Industry



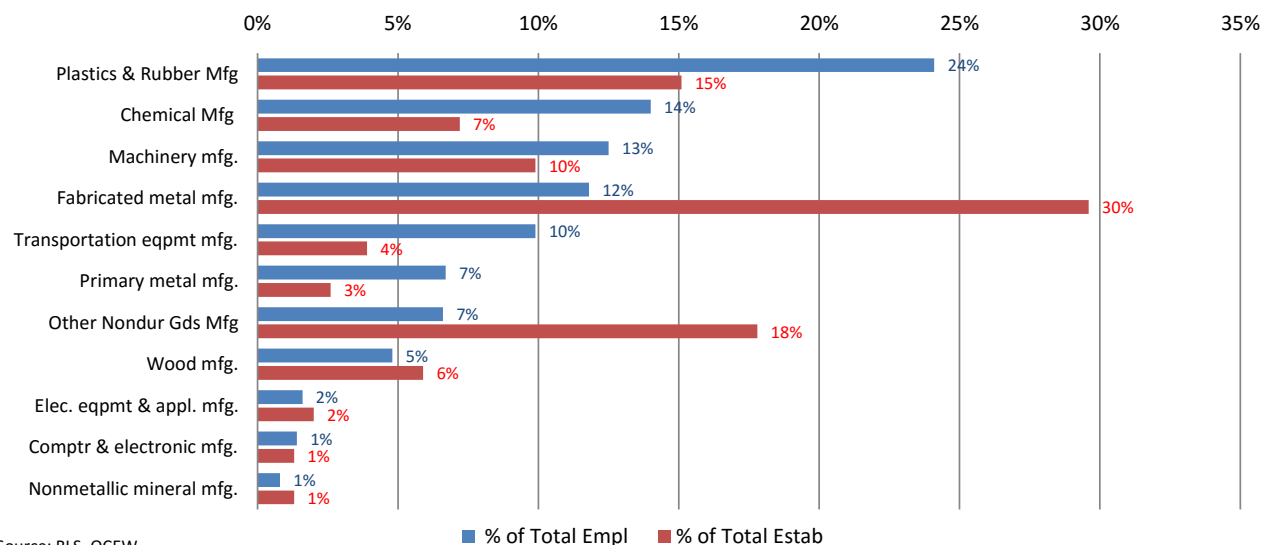
Source: BLS, QCEW

Establishments By Manufacturing Industry



Source: BLS, QCEW

% of Total Manufacturing Employment & Establishments By Industry



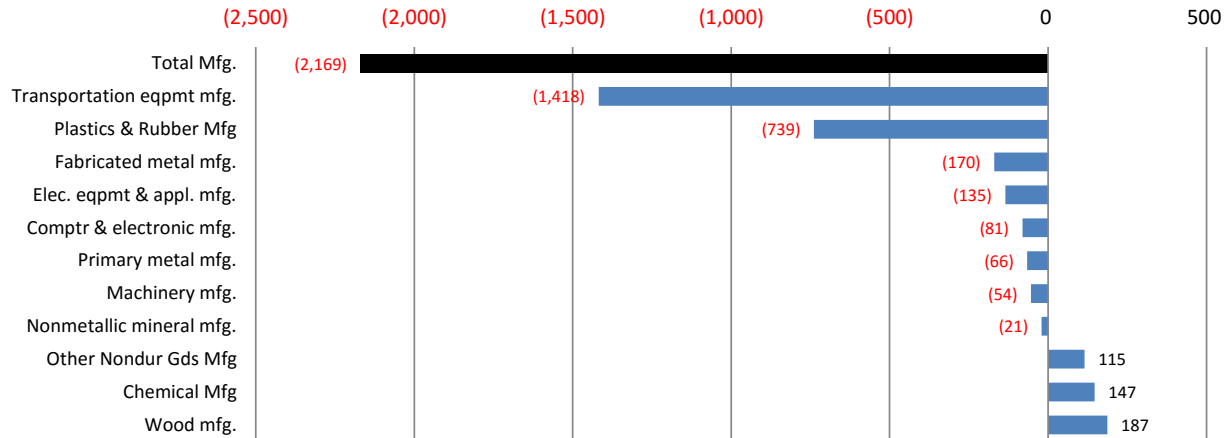
Source: BLS, QCEW

Note: Because Ashtabula County does not have a large number of firms in specific industries, the Bureau of Labor Statistics limits the data disclosed to preserve confidentiality for individual firms. Estimates were developed for "Not Disclosed" 2014 employment data for following mfg. industries: 322 Paper, 327 Nonmetallic mineral, 334 Computer & electronic, 335 Elec. Equipmt, 336 Transp. It was not possible to develop reliable estimates for 316 Leather and 337 Furniture. It was not possible to develop estimates for Total Wages and Average Annual Pay for "Not Disclosed" industries.

Employment Change By Industry

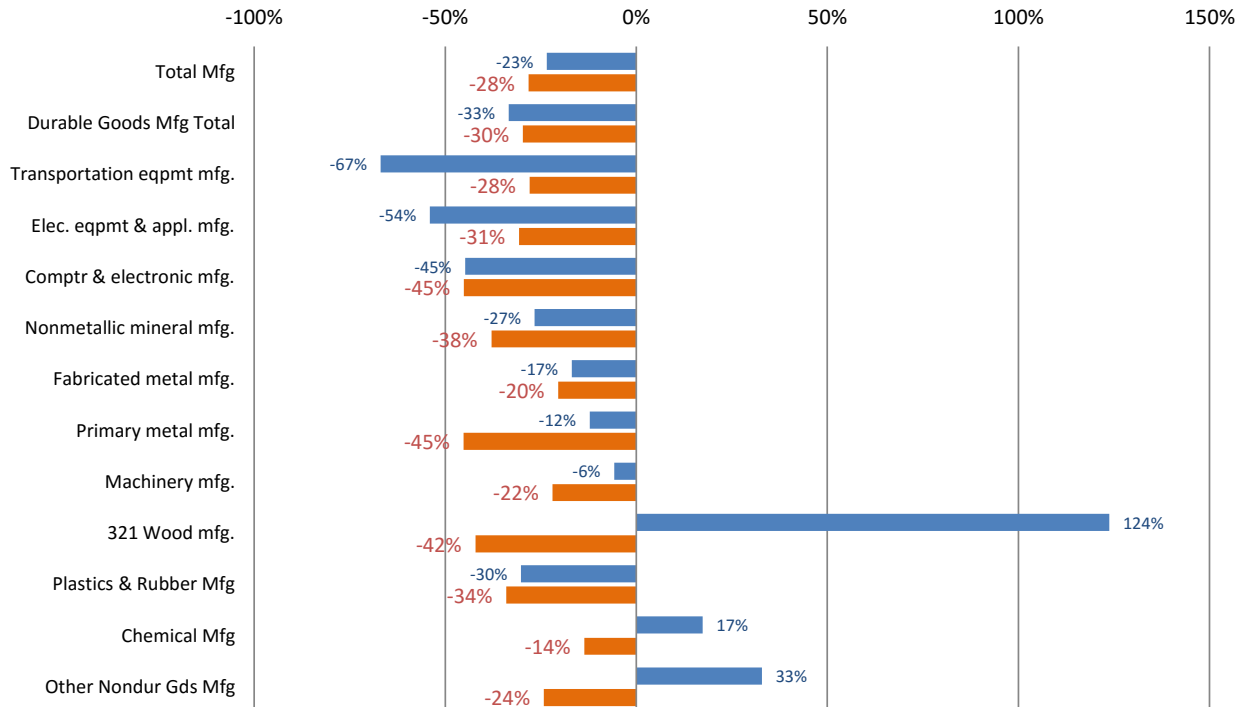
Ashtabula County had 2,300 in manufacturing job losses since 2001. Almost all durable goods industries shared in the losses, but Transportation Equipment industry accounted for 60% of total losses. Plastics & rubber manufacturing also lost 700 employees.

2001-15 Employment Change By Industry Transportation & Plastics Were Major Contributors to County Job Losses



Source: BLS, QCEW

Ashtabula Co. & Ohio Employment Change (2001-15) County's Decline In Durable Goods Employment Has Been Similar to Ohio



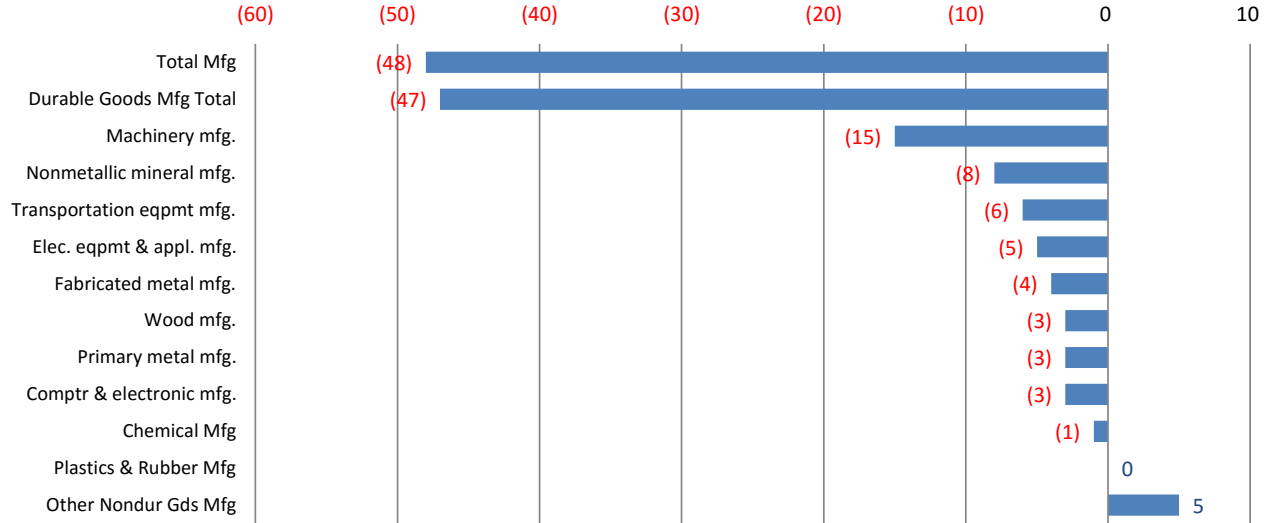
Source: BLS, QCEW

Note: Because Ashtabula County does not have a large number of firms in specific industries, the Bureau of Labor Statistics limits the data disclosed to preserve confidentiality for individual firms. Estimates were developed for "Not Disclosed" 2014 employment data for following mfg. industries: 322 Paper, 327 Nonmetallic mineral, 334 Computer & electronic, 335 Elec. Equipmt, 336 Transp. It was not possible to develop reliable estimates for 316 Leather and 337 Furniture. It was not possible to develop estimates for Total Wages and Average Annual Pay for "Not Disclosed" industries.

Establishment Change By Industry

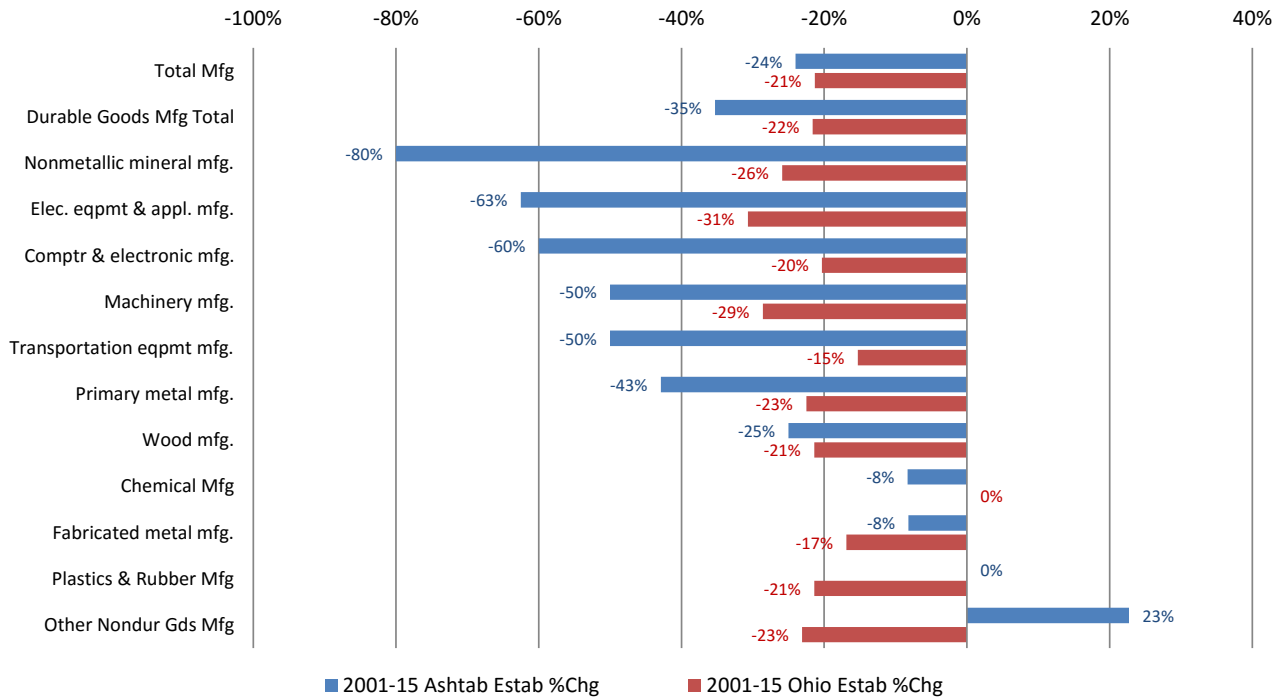
Ashtabula County declined from 200 manufacturing establishments in 2001 to 152 in 2015, a loss of 48 (23%). Durable good manufacturers represented 44 of the 47 establishment losses and almost all industries had losses. Ohio also suffered a comparable -30% loss of establishments.

2001-14 Establishment Change By Industry



Source: BLS QCEW

Ashtabula County & Ohio % Change In Manufacturing Establishments



Source: BLS, QCEW

Appendix

Ashtabula Co. Manufacturing Profile By Industry				
Industry	2015 Ashtab Empl	2015 Ashtab Estab	2015 Ashtab Tot Wages (\$Mil)	2015 Ashtab Avg Annl Pay
Total Mfg	7,088	152	\$344	\$48,580
Durable Goods Mfg Total	3,509	86	\$106	
321 Wood mfg.	338	9	\$13	\$38,151
327 Nonmetallic mineral mfg.	58	2	*	*
331 Primary metal mfg.	477	4	\$13	\$28,227
332 Fabricated metal mfg.	837	45	\$39	\$46,958
333 Machinery mfg.	884	15	\$41	\$46,126
334 Comptr & electronic mfg.	100	2	*	*
335 Elec. eqpmt & appl. mfg.	115	3	*	*
336 Transportation eqpmt mfg.	700	6	*	*
Plastics & Rubber Mfg (326) Total	1,705	23	\$79	\$46,160
Chemical Mfg (325) Total	992	11	\$82	82,801
Other Nondur Gds Mfg Total	465	27	*	
311 Food mfg.	38	8	\$1	\$13,914
312 Bev & tobacco mfg.	130	7	\$2	\$17,458
313 Textile mills	0	0	\$0	\$0
314 Textile product mills	0	0	\$0	\$0
315 Apparel mfg.	0	0	\$0	0
316 Leather & allied mfg.	21	1	*	*
322 Paper mfg.	210	3	*	*
323 Printing & related mfg.	41	3	\$1	\$29,284
324 Petroleum & coal mfg.	0	0	\$0	\$0
337 Furniture & related mfg.	25	5	*	*
Misc Mfg & Not Disclosed Total	417	5		

Source: Bureau of Labor Statistics (BLS), Quarterly Census of Employment and Wages (QCEW)

Note: * Not Disclosed. Estimates used for "Not Disclosed" 2015 employment data for following mfg. industries: 322 Paper, 327 Nonmetallic mineral, 334 Computer & electronic, 335 Elec. Equipmt, 336 Transp.

Ashtabula County Employment & Establishments By Industry				
Industry	2015 Ashtab Empl	2015 Ashtab Estab	% of Total Empl	% of Total Estab
Total Mfg	7,088	152	100%	100%
Durable Goods Mfg Total	3,509	86	50%	57%
321 Wood mfg.	338	9	5%	6%
327 Nonmetallic mineral mfg.	58	2	1%	1%
331 Primary metal mfg.	477	4	7%	3%
332 Fabricated metal mfg.	837	45	12%	30%
333 Machinery mfg.	884	15	13%	10%
334 Comptr & electronic mfg.	100	2	1%	1%
335 Elec. eqpmt & appl. mfg.	115	3	2%	2%
336 Transportation eqpmt mfg.	700	6	10%	4%
Plastics & Rubber Mfg (326) Total	1,705	23	24%	15%
Chemical Mfg (325) Total	992	11	14%	7%
Other Nondur Gds Mfg Total	465	27	7%	18%
311 Food mfg.	38	8	1%	5%
312 Bev & tobacco mfg.	130	7	2%	5%
313 Textile mills	0	0	0%	0%
314 Textile product mills	0	0	0%	0%
315 Apparel mfg.	0	0	*	0%
316 Leather & allied mfg.	21	1	0%	1%
322 Paper mfg.	210	3	3%	2%
323 Printing & related mfg.	41	3	1%	2%
324 Petroleum & coal mfg.	0	0	0%	0%
337 Furniture & related mfg.	25	5	*	3%
Misc Mfg & Not Disclosed Total	417	5	6%	3%

Source: Bureau of Labor Statistics (BLS), Quarterly Census of Employment and Wages (QCEW)

Note: * Not Disclosed. Estimates used for "Not Disclosed" 2014 employment data for following mfg. industries: 322 Paper, 327 Nonmetallic mineral, 334 Computer & electronic, 335 Elec. Equipmt, 336 Transp.

Ashtabula County & Ohio Employment Change				
Industry	2015 Ashtab Empl	2001-15 Ashtab Empl Chg	2001-15 Ashtab Empl %Chg	2001-15 Ohio Empl %Chg
Total Mfg	7,088	(2,169)	-23%	-28%
Durable Goods Mfg Total	3,509	(1,758)	-33%	-30%
321 Wood mfg.	338	187	124%	-42%
327 Nonmetallic mineral mfg.	58	(21)	-27%	-38%
331 Primary metal mfg.	477	(66)	-12%	-45%
332 Fabricated metal mfg.	837	(170)	-17%	-20%
333 Machinery mfg.	884	(54)	-6%	-22%
334 Compnr & electronic mfg.	100	(81)	-45%	-45%
335 Elec. eqpmt & appl. mfg.	115	(135)	-54%	-31%
336 Transportation eqpmt mfg.	700	(1,418)	-67%	-28%
Plastics & Rubber Mfg (326) Total	1,705	(739)	-30%	-34%
Chemical Mfg (325) Total	992	147	17%	-14%
Other Nondur Gds Mfg Total	465	115	33%	-24%
311 Food mfg.	38	(6)	-14%	1%
312 Bev & tobacco mfg.	130	80	160%	11%
313 Textile mills	0	0	0%	-45%
314 Textile product mills	0	0	0%	-43%
315 Apparel mfg.	0	0	0%	-44%
316 Leather & allied mfg.	21	0	0%	-53%
322 Paper mfg.	210	7	3%	-35%
323 Printing & related mfg.	41	25	156%	-44%
324 Petroleum & coal mfg.	0	0	0%	-5%
337 Furniture & related mfg.	25	\$9.0	1	-41%
Misc Mfg & Not Disclosed Total	417	66	19%	-30%

Source: Bureau of Labor Statistics (BLS), Quarterly Census of Employment and Wages (QCEW)

Note: * Not Disclosed. Estimates used for "Not Disclosed" 2015 employment data for 322 Paper, 327 Nonmetallic mineral, 334 Computer & electronic, 335 Elec. Equipmt, 336 Transp.

Ashtabula County & Ohio Establishment Change				
Industry	2015 Ashtab Estab	2001-15 Ashtab Estab Chg	2001-15 Ashtab Estab %Chg	2001-15 Ohio Estab %Chg
Total Mfg	152	(48)	-24%	-21%
Durable Goods Mfg Total	86	(47)	-35%	-22%
321 Wood mfg.	9	(3)	-25%	-21%
327 Nonmetallic mineral mfg.	2	(8)	-80%	-26%
331 Primary metal mfg.	4	(3)	-43%	-23%
332 Fabricated metal mfg.	45	(4)	-8%	-17%
333 Machinery mfg.	15	(15)	-50%	-29%
334 Compnr & electronic mfg.	2	(3)	-60%	-20%
335 Elec. eqpmt & appl. mfg.	3	(5)	-63%	-31%
336 Transportation eqpmt mfg.	6	(6)	-50%	-15%
Plastics & Rubber Mfg (326) Total	23	0	0%	-21%
Chemical Mfg (325) Total	11	(1)	-8%	0%
Other Nondur Gds Mfg Total	27	5	23%	-23%
311 Food mfg.	8	(2)	-20%	-6%
312 Bev & tobacco mfg.	7	6	600%	121%
313 Textile mills	0	0	0%	-55%
314 Textile product mills	0	0	0%	-26%
315 Apparel mfg.	0	0	0%	-53%
316 Leather & allied mfg.	1	0	0%	0%
322 Paper mfg.	3	0	0%	-23%
323 Printing & related mfg.	3	(1)	-25%	-35%
324 Petroleum & coal mfg.	0	0	0%	-24%
337 Furniture & related mfg.	5	2	67%	-23%
Misc Mfg & Not Disclosed Total	5	(5)	-50%	-25%

Source: Bureau of Labor Statistics (BLS), Quarterly Census of Employment and Wages (QCEW)

Note: * Not Disclosed. Estimates used for "Not Disclosed" 2014 employment data for following mfg. industries: 322 Paper, 327 Nonmetallic mineral, 334 Computer & electronic, 335 Elec. Equipmt, 336 Transp.