

# Lancaster County's Labor Needs: High Demand Occupations in Health Care & Manufacturing

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Prepared for the Employer Demand Committee of *Career Ready Lancaster!*

April 29, 2021



# Summary

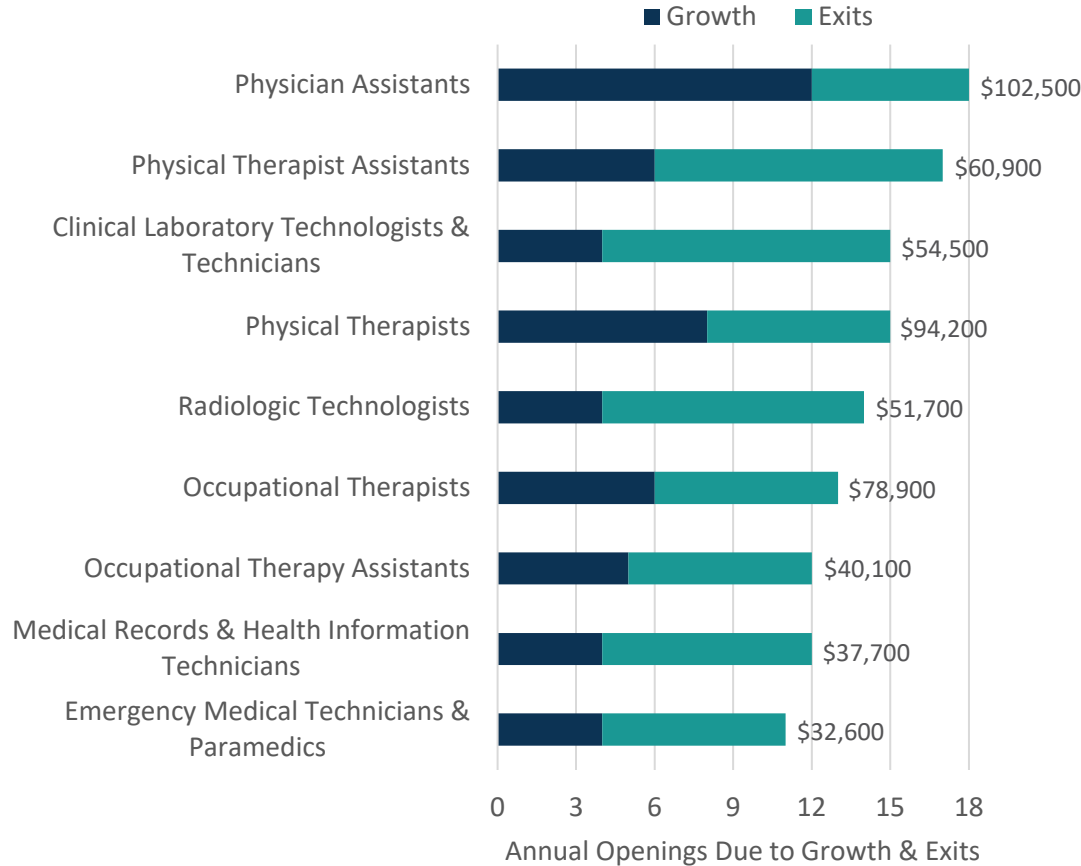
- Collectively, the health care and manufacturing sectors account for 28% of Lancaster County's employment. While both are anticipated to remain important sectors, their relative importance will change over the next 10 years.
  - The health care and social assistance sector employed 38,700 person in 2018. This employment base is forecasted to increase by 17%, adding 6,600 jobs over the next decade.
  - Manufacturing is anticipated to maintain its current employment base of 37,800 (expanding by 0.2% over the next 10 years). Notably, this trend runs counter for manufacturing in Pennsylvania or the US, where employment is projected to contract (albeit slowly) over the coming decade.
  - These growth trends suggest health care will account for 16% of the County's jobs, while manufacturing falls to 13% of the employment base.
- Both sectors have a substantial share of its workforce (60%) in occupations directly delivering services or production. The remaining 40% provide other services, such as management, accounting, sales, etc.
- Employment is concentrated in a handful of occupations
  - Just over half of all production workers are found in 9 occupations.
  - 70% of health care practitioners are concentrated into 10 occupations.

# Summary

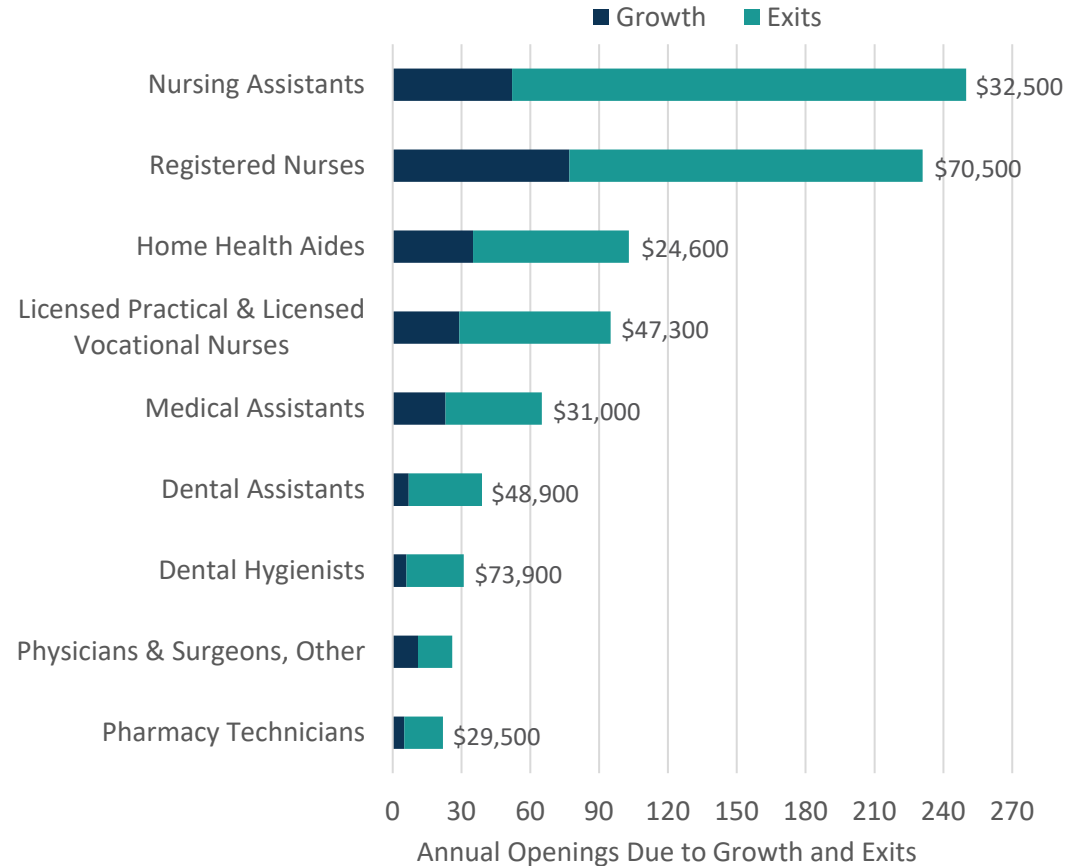
- Occupations that directly deliver services or production include skilled and unskilled positions.
- Declining demand for low skilled workers and rising demand for skilled occupations.
  - Declining demand for unskilled workers but still largest portion of workforce and with high demand due to retirements.
  - Growing demand for skilled occupations, driven by organic modest to strong industry growth and retirements.
- Key aspects of skilled occupations
  - Offer career pathways to family sustaining wages
  - Tend to be technology-dependent
  - Do not typically require college education, rather CTC + some post-secondary training/certification

# Summary Health Care in Lancaster County

## HEALTH CARE TECHNOLOGIST – ANNUAL DEMAND & MEDIAN WAGE

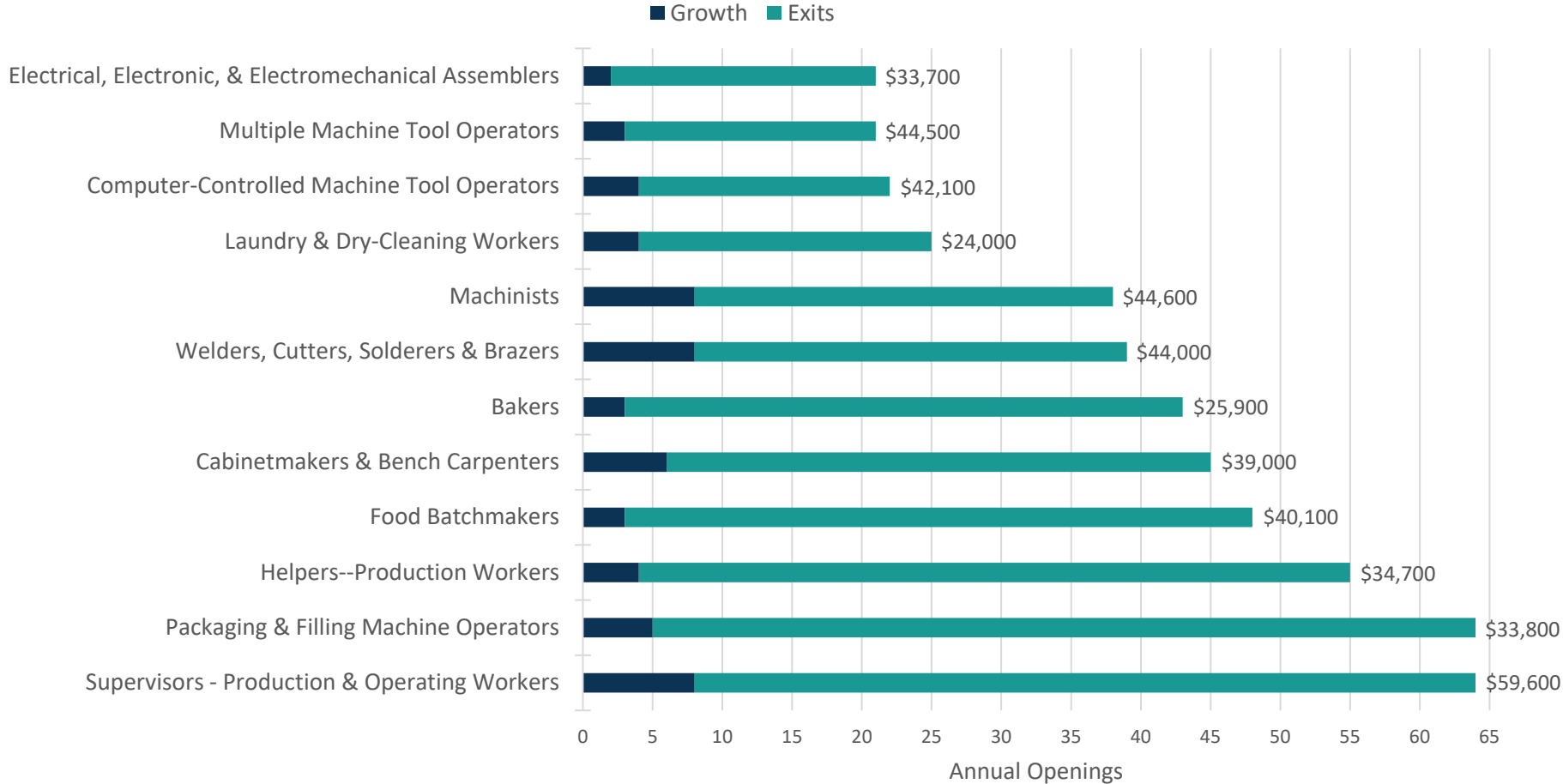


## HEALTH CARE PRACTITIONER – ANNUAL DEMAND & MEDIAN WAGE



# Summary Manufacturing in Lancaster County

## PRODUCTION OCCUPATIONS – ANNUAL DEMAND & MEDIAN WAGE



# Health Care

# Data Snapshot Health Care

- The Health Care Sector employed nearly 38,700 workers in 2018, representing 14% of Lancaster County's jobs.
- It is projected to grow over the next 10 years, generating additional demand for workers.
  - The projected growth outpaces forecasts for the Pennsylvania and the US.
- 60% of the sector's workers fill occupations that directly deliver healthcare services. The other 40% provide other services, such as administration, accounting, facilities maintenance.
- Annual demand for workers is driven by supply and demand side factors. Subsector growth fuels expansion of the sector's employment base. Retirements drive the need for additional, replacement workers.
- Retirements are responsible for a larger share of the total demand each year.
- 70% of the workers in direct healthcare delivery are concentrated into 10 occupations.

## Data Sources

### PA Center for Workforce Information and Analysis (CWIA)

- Long-Term Occupational Employment Projections for Metropolitan Statistical Area
  - 2018-2028 projections by Standard Occupational Code (SOC)
- Long-Term Occupational Employment Projections for Pennsylvania
  - 2018-2028 projections by SOC
  - 2018-2028 projections of total workers by industry

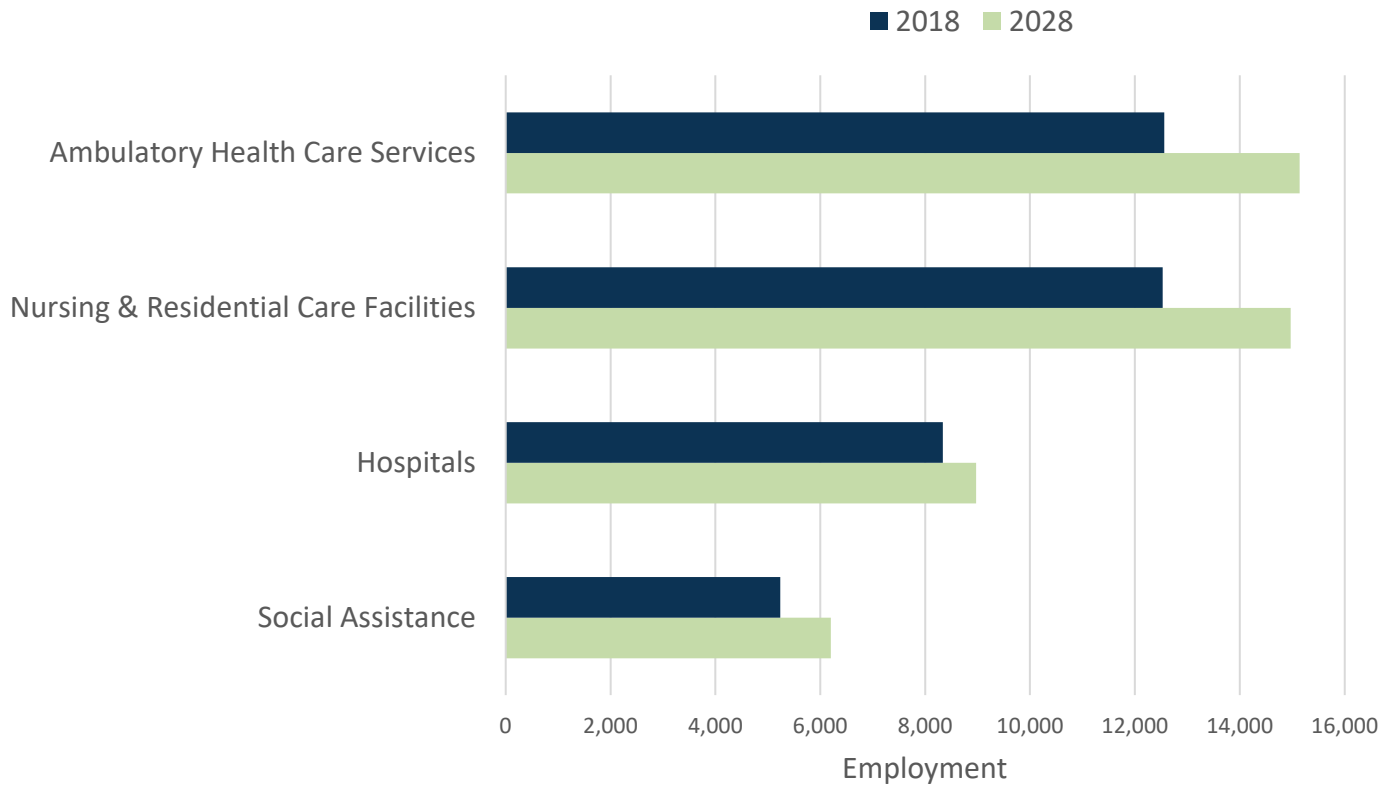
### US Bureau of Labor Statistics

- Occupational projections and worker characteristics, 2019-2029
  - Projections by SOC & industry
  - Education and on-the-job training
- Median wages for 2019
- Historical employment by SOC for MSAs

# Health Care

## Employment by Subsector in Lancaster County

EMPLOYMENT BY SUBSECTOR IN LANCASTER COUNTY

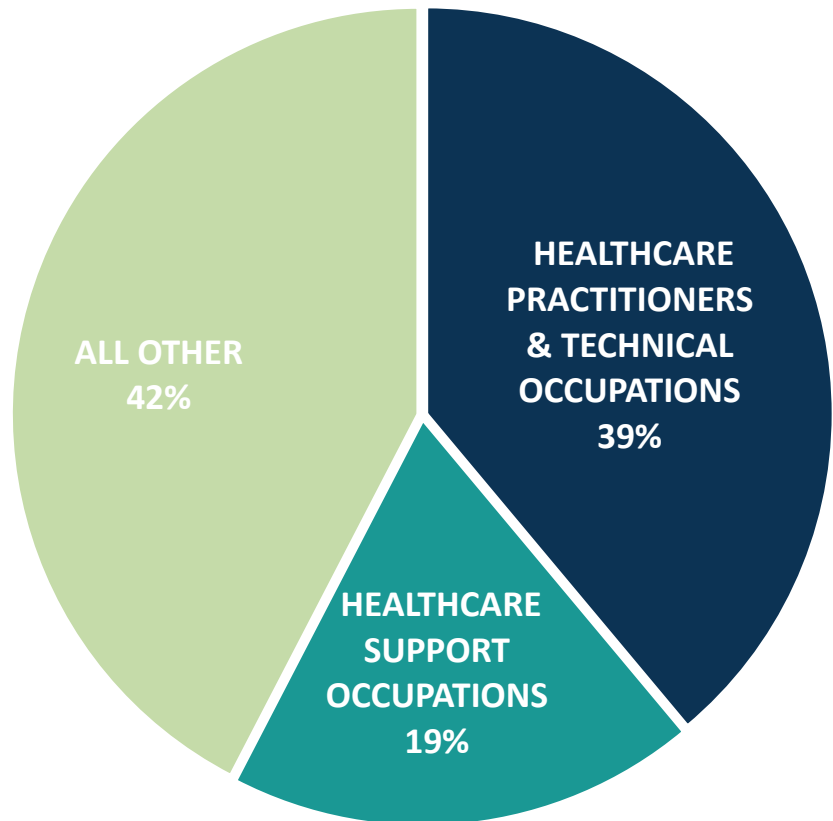


- In 2018, the health care and social services industry employed **38,670** workers, representing **14%** of the County's jobs.
- Health care is divided into four main subsectors: ambulatory services (eg, physician offices, dentist office, & outpatient centers); nursing and residential facilities; hospitals, and social assistance.
  - Ambulatory services and nursing facilities generate over half of the employment demand (65%).
- Over the next 10 years, employment is projected to grow across all subsectors.



# Health Care

SOC 29 & 31 in Lancaster County

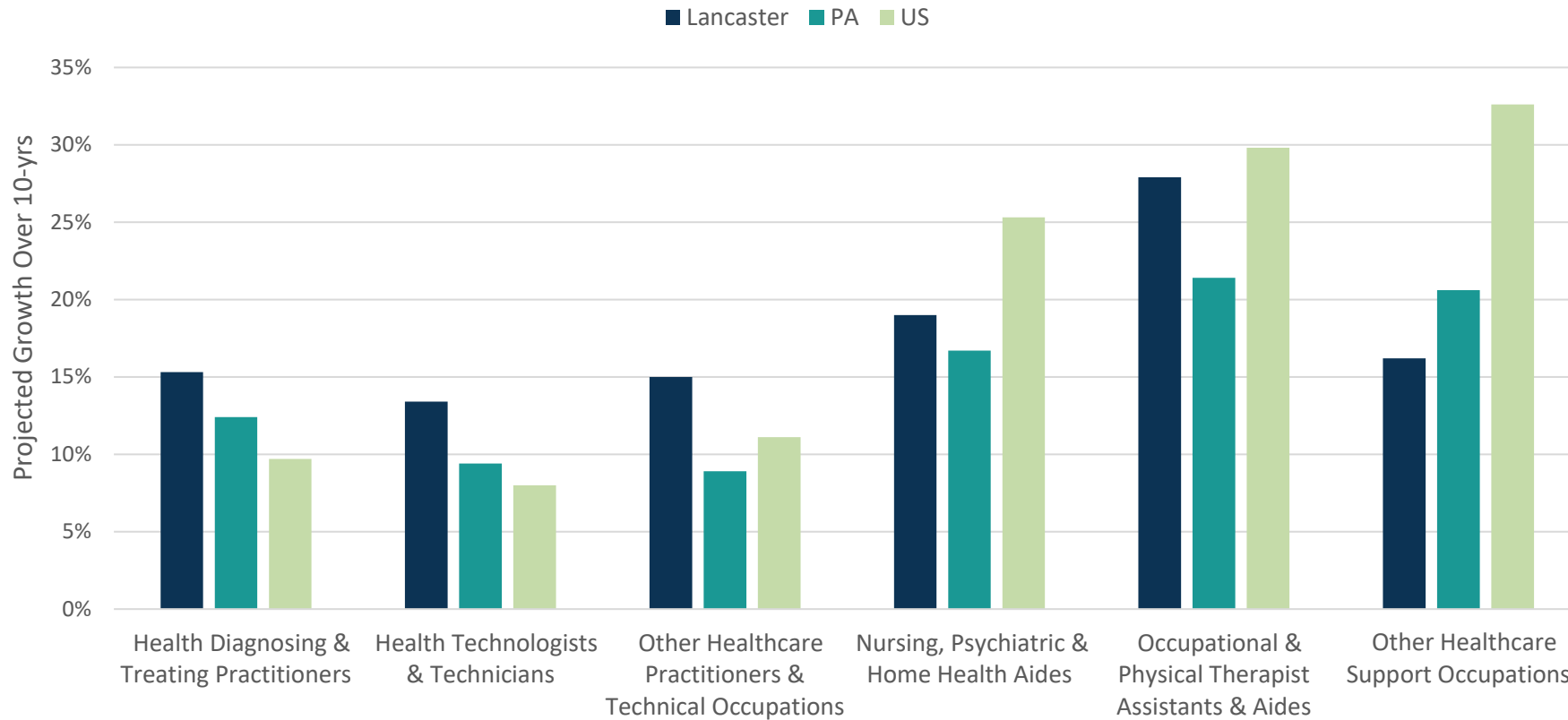


- Two broad categories capture occupations directly delivering health services:
  - *SOC 29 - Healthcare Practitioners & Technical Occupations* includes doctors, nurses, health technologists and technicians, dentists, physical therapists, pharmacists, etc.
  - *SOC 31 – Healthcare Support Occupations* includes health aides, nursing assistants, medical and dental assistants, pharmacy aids, etc.
- These occupations represent just under **60%** of the health care sector’s jobs.
  - “*All Other*” captures the remaining 40%, including administration, accounting, facilities maintenance, etc.
- The mix of labor across the three categories is projected to remain unchanged over the next 10 years.

# Health Care

## SOC 29 & 31 in Lancaster County

CHANGE OVER 10-YEARS IN LANCASTER MSA

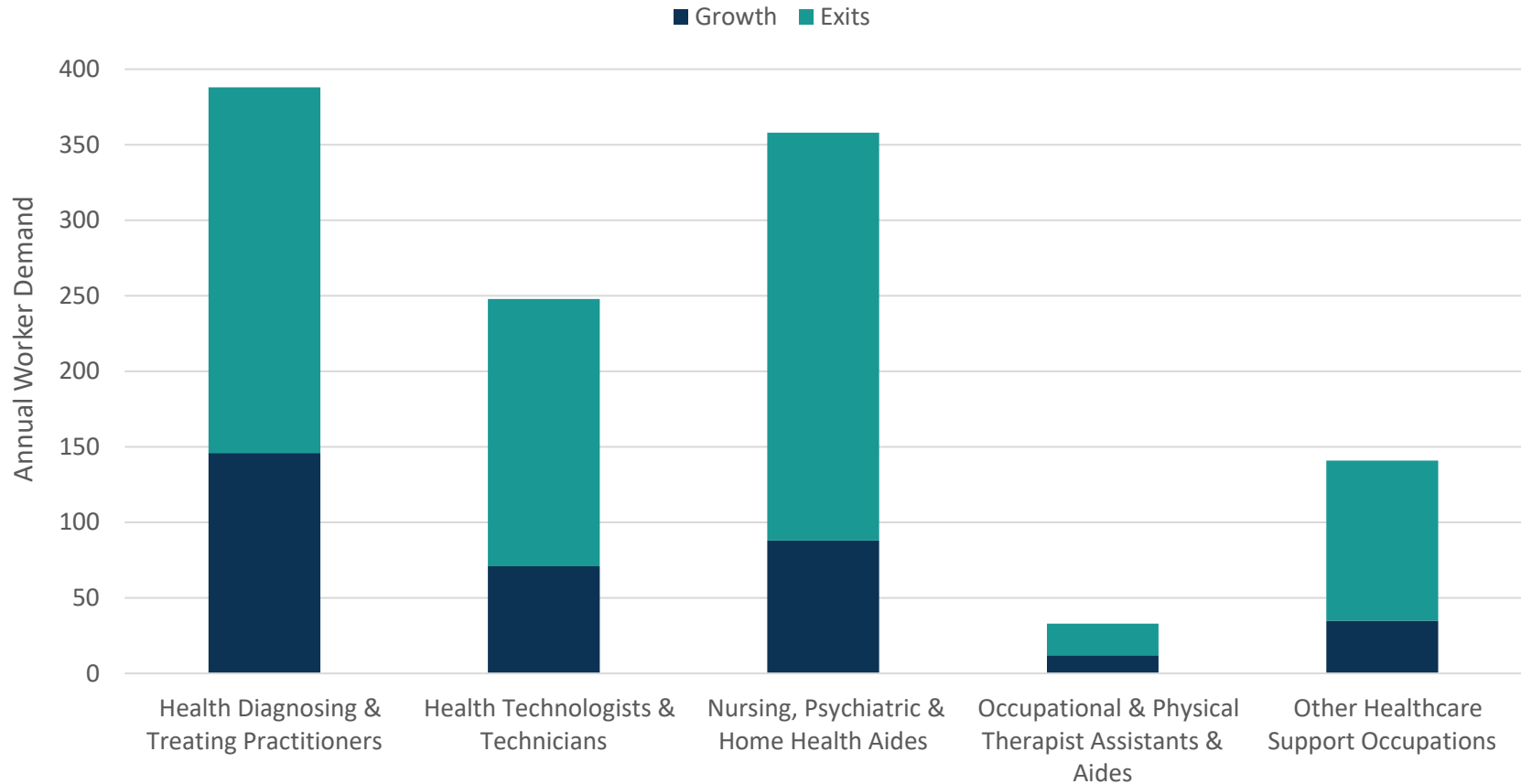


- The two broad categories of health care services can be divided into six smaller classes of occupations.
- Lancaster is forecasted to outpace PA and the US for many of its healthcare occupations.

# Health Care

SOC 29 & 31 in Lancaster County

ANNUAL DEMAND FOR WORKERS - GROWTH AND EXITS

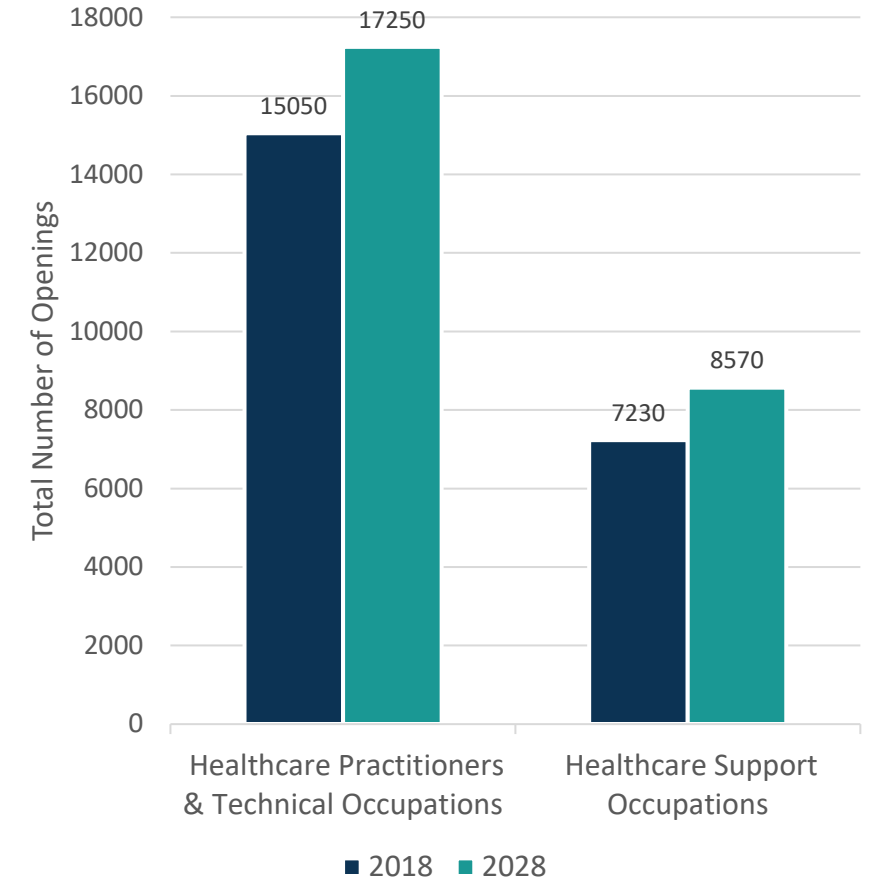


- Need for more workers is driven by demand and supply side dynamics – subsector growth demands more worker, and replacement talent is required as current workers exit (largely due to retirement).
- Retirement plays a larger role in need for future workers.

# Health Care

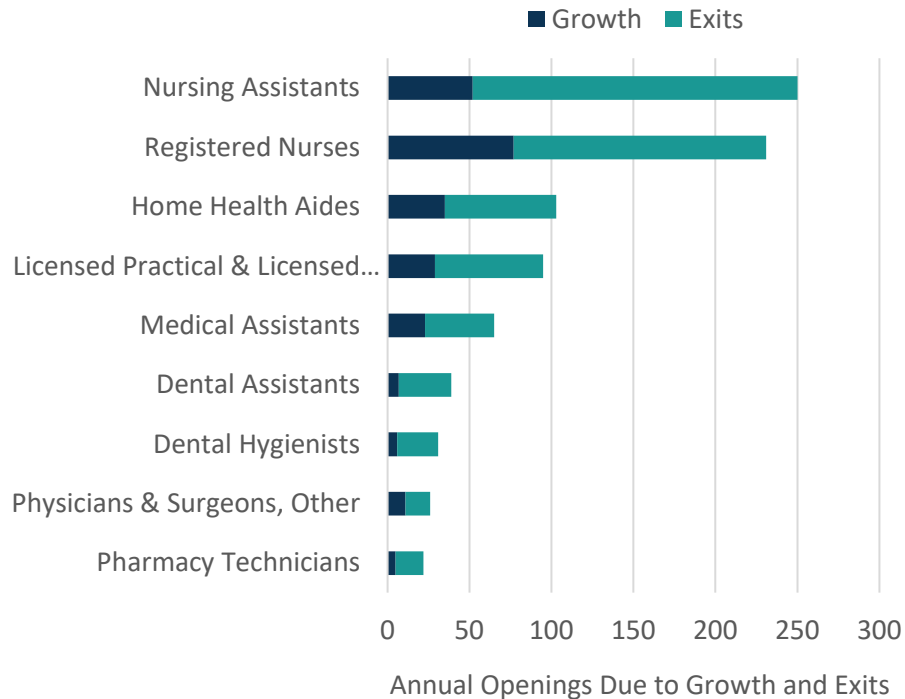
## Top 10 Occupations

- The two families of healthcare occupations had 22,280 openings in 2018.
  - Healthcare practitioners and technical occupations make up a greater share of the work force but are anticipated to grow at a slightly slower pace.
- CWIA projections identify:
  - 28 specific SOCs that make up Healthcare practitioners and technical occupations;
  - 10 SOCs that make up Healthcare support occupations.
- Across the 38 SOCs,
  - 70% of the workers fill 10 occupations.
  - Of these, five occupations are forecasted to have at least 1,000 opening by 2028.



# Health Care Top 10 Occupations

“Top 10 occupations” are the ones with the greatest numbers of workers.

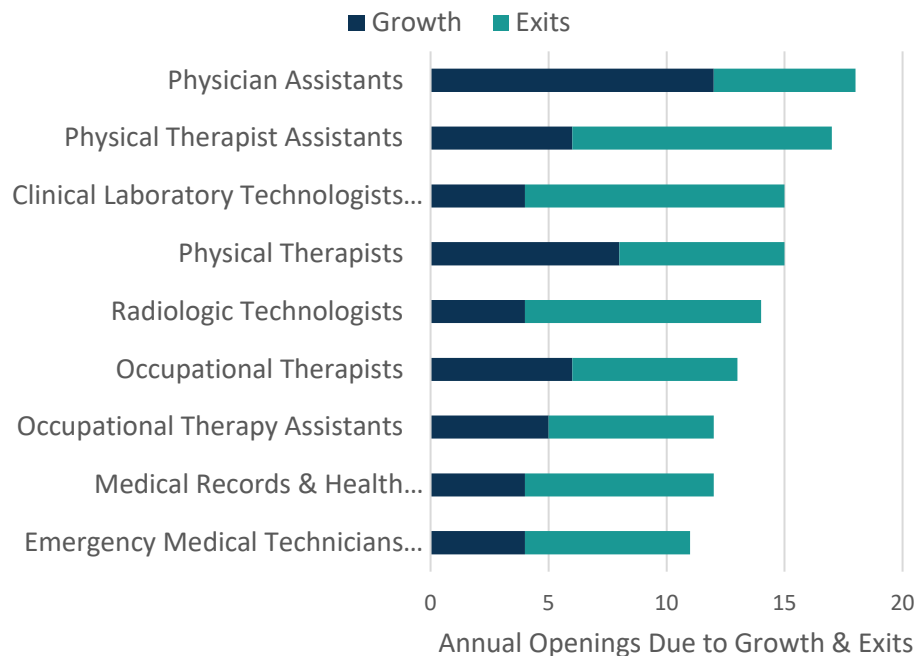


TOP 10 OCCUPATIONS	Employment Level			CAGR	
	2010	2018	2028	2010-2018	2018-2028
Registered Nurses	3,710	5,150	5,930	4.2%	1.4%
Nursing Assistants		3,430	3,950		1.4%
Licensed Practical & Licensed Vocational Nurses	2,040	1,790	2,090	-1.6%	1.6%
Home Health Aides	1,700	1,100	1,440	-5.3%	2.7%
Medical Assistants	800	970	1,200	2.4%	2.2%
Physicians & Surgeons, Other	660	880	990	3.7%	1.2%
Dental Assistants	450	660	740	4.9%	1.2%
Dental Hygienists	430	560	620	3.4%	1.0%
Pharmacy Technicians	440	560	620	3.1%	1.0%
Pharmacists	260	480	490	8.0%	0.2%
<b>Top 10 Total</b>	<b>10,490</b>	<b>15,580</b>	<b>18,070</b>	<b>5.1%</b>	<b>1.5%</b>
All Other Occs	8,980	6,700	7,750	-3.6%	1.5%
<b>All Occs (29 &amp; 31)</b>	<b>19,470</b>	<b>22,280</b>	<b>25,820</b>	<b>1.7%</b>	<b>1.5%</b>
<b>Top 10 Share</b>	<b>54%</b>	<b>70%</b>	<b>70%</b>		

# Health Care

## Occupations with Strong Future Demand

- These occupations are largely made up of assistants, therapists, and technologists.
- They are a smaller share of the employment base (14% in 2018) but are projected to grow slightly faster than the “Top 10”



OCCUPATIONS WITH STRONG DEMAND OVER THE NEXT 10 YEARS	Employment Level			CAGR	
	2010	2018	2028	2010-2018	2018-2028
Physician Assistants	160	330	450	9.5%	3.2%
Radiologic Technologists	290	410	450	4.4%	0.9%
Emergency Medical Technicians & Paramedics	400	400	440	0.0%	1.0%
Physical Therapists	370	340	420	-1.1%	2.1%
Clinical Laboratory Technologists & Technicians	80	380	420	21.5%	1.0%
Occupational Therapists	190	300	360	5.9%	1.8%
Medical Records & Health Information Technicians	280	250	290	-1.4%	1.5%
Physical Therapist Assistants	140	230	290	6.4%	2.3%
Speech-Language Pathologists	180	200	250	1.3%	2.3%
Health Technologists & Technicians, Other	110	160	190	4.8%	1.7%
Occupational Therapy Assistants	50	140	180	13.7%	2.5%
<b>Total</b>	<b>2,250</b>	<b>3,140</b>	<b>3,740</b>	<b>4.3%</b>	<b>1.8%</b>
<b>All Occupations (SOC 29 &amp; 31)</b>	<b>19,470</b>	<b>22,280</b>	<b>25,820</b>	<b>1.7%</b>	<b>1.5%</b>

# Health Care Summary Tables

SOC Code	Occupation	Number of Jobs		Level Change (2018-2028)	Annual Change Due to...		% Change over 10 years			Median Annual Wage in 2019	
		2018	2028		Growth	Exits	Lancaster	PA	US	US	Lancaster
00-0000	Total, All Occupations	267,160	284,820	17,660	1,766	12,425	6.6%	5.0%	3.7%	\$ 39,810	\$37,330
29-0000	Healthcare Practitioners & Technical Occupations	15,050	17,250	2,200	219	424	14.6%	11.3%	9.1%	\$ 68,190	\$67,380
31-1000	Nursing, Psychiatric & Home Health Aides	4,580	5,450	870	88	270	19.0%	16.7%	25.3%	\$ 26,380	
29-1141	Registered Nurses	5,150	5,930	780	77	154	15.1%	12.5%	7.2%	\$ 73,300	\$70,450
31-1014	Nursing Assistants	3,430	3,950	520	52	198	15.2%	10.3%	7.6%	\$ 29,660	\$32,530
29-2061	Licensed Practical & Licensed Vocational Nurses	1,790	2,090	300	29	66	16.8%	12.3%	9.1%	\$ 47,480	\$47,310
31-1011	Home Health Aides	1,100	1,440	340	35	68	30.9%	28.8%	33.7%	\$ 25,280	\$24,590
31-9092	Medical Assistants	970	1,200	230	23	42	23.7%	8.3%	6.6%	\$ 40,080	\$31,010
29-1069	Physicians & Surgeons, Other	880	990	110	11	15	12.5%	7.8%	0.0%	\$ -	
31-9091	Dental Assistants	660	740	80	7	32	12.1%	14.0%	13.8%	\$ 35,860	\$48,850
29-2021	Dental Hygienists	560	620	60	6	25	10.7%	7.5%	5.9%	\$ 76,220	\$73,860
29-2052	Pharmacy Technicians	560	620	60	5	17	10.7%	6.6%	3.6%	\$ 33,950	\$29,490
29-1051	Pharmacists	480	490	10	1	12	2.1%	-0.3%	-3.3%	\$ 128,090	\$119,410

# Health Care Summary Tables

SOC Code	Occupation	Number of Jobs		Level Change (2018-2028)	Annual Change Due to...		% Change over 10 years			Median Annual Wage in 2019	
		2018	2028		Growth	Exits	Lancaster	PA	US	US	Lancaster
29-1071	Physician Assistants	330	450	120	12	6	36.4%	30.9%	31.3	\$ 112,260	\$102,470
29-2034	Radiologic Technologists	410	450	40	4	10	9.8%	6.8%	6.7	\$ 60,510	\$51,670
29-2041	Emergency Medical Technicians & Paramedics	400	440	40	4	7	10.0%	4.9%	6.4	\$ 35,400	\$32,630
29-1123	Physical Therapists	340	420	80	8	7	23.5%	20.6%	18.2	\$ 89,440	\$94,170
29-2010	Clinical Laboratory Technologists & Technicians	380	420	40	4	11	10.5%	7.6%	7.3	\$ 53,120	\$54,540
29-1122	Occupational Therapists	300	360	60	6	7	20.0%	17.4%	15.9	\$ 84,950	\$78,910
29-2071	Medical Records & Health Information Technicians	250	290	40	4	8	16.0%	11.5%			\$37,670
31-2021	Physical Therapist Assistants	230	290	60	6	11	26.1%	13.3%	19.9	\$ 29,230	\$60,860
29-1127	Speech-Language Pathologists	200	250	50	5	4	25.0%	16.5%	24.9	\$ 79,120	\$80,440
29-2099	Health Technologists & Technicians, Other	160	190	30	3	5	18.8%	15.2%	8.5	\$ 42,630	



# Manufacturing

# Data Snapshot Manufacturing

- The manufacturing sector employed nearly 37,790 workers in 2018, representing 14% of Lancaster County's jobs.
- Its employment base is projected to grow by 0.2% over the next 10 years. Manufacturing has the slowest projected growth among the goods producing sectors. Projected growth for goods producing sectors, as a whole, is 2.6%.
- The trend in Lancaster County is better than the State. CWIA projects manufacturing's employment base for Pennsylvania will contract by 1.5% over the next 10 years.
- It is estimated that almost 55% of the sector's workers in Lancaster County fill production occupations and additional 5% fill maintenance roles. The remaining 40% provide other services, such as management, accounting, sales, and engineering and design.
- Annual demand for workers is predominantly driven by retirements, with little demand-side growth.
- Just over half of all production workers are found in 9 occupations.

# Data Snapshot

## Manufacturing and Production Occupations

- Lancaster County has just over 24,000 jobs in production occupations. These production roles can be found across a wide range of industry sectors.
  - It is estimated that at least 85% of these positions are in the manufacturing sector.
- With such strong concentration, the analysis of production occupations assumes that trends over the next 10 years if largely attributed to the manufacturing sector.

### Data Sources

#### PA Center for Workforce Information and Analysis (CWIA)

- Long-Term Occupational Employment Projections for Metropolitan Statistical Area
  - 2018-2028 projections by Standard Occupational Code (SOC)
- Long-Term Occupational Employment Projections for Pennsylvania
  - 2018-2028 projections by SOC
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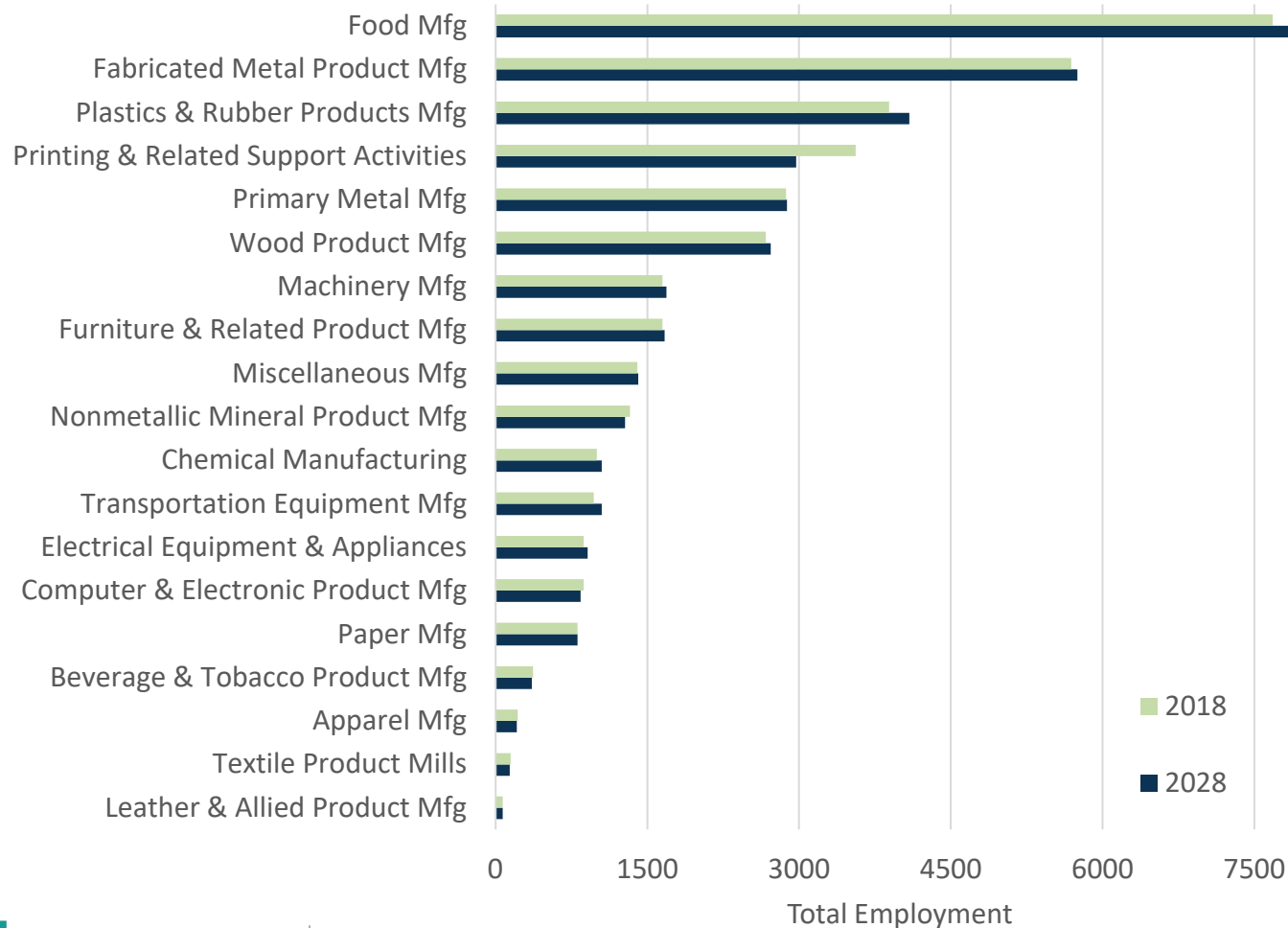
#### US Bureau of Labor Statistics

- Occupational projections and worker characteristics, 2019-2029
  - Projections by SOC & industry
  - Education and on-the-job training
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# Manufacturing

## Employment by Subsector in Lancaster County

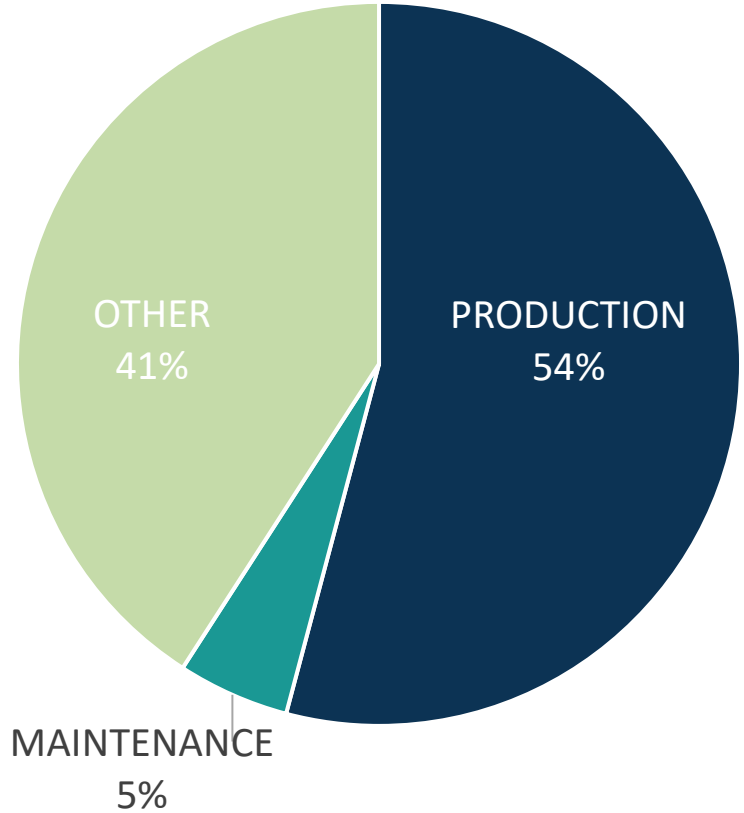
EMPLOYMENT BY SUBSECTOR IN LANCASTER COUNTY



- The sector is highly diversified. 12 of 19 subsectors are projected to have at least 1000 employees.
  - Manufacture of food, fabricated metal products, and plastics and rubber products account for almost half (46%) of the sector’s jobs. All three are forecasted to grow their employment base.
- Over the next 10 years, employment in manufacturing is projected to grow.
  - 13 of the 19 subsectors are projected to grow their employment base.
  - The subsectors forecasted to contract are generally small (except for Printing and Related Activities). They represented 15% of manufacturing’s employment base. This share falls to 13% by 2028.

# Manufacturing

SOC 51 in Lancaster County



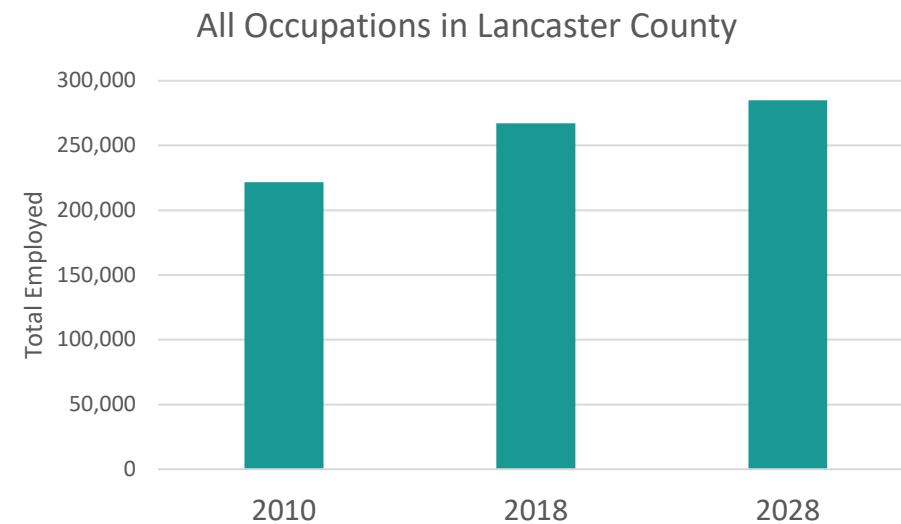
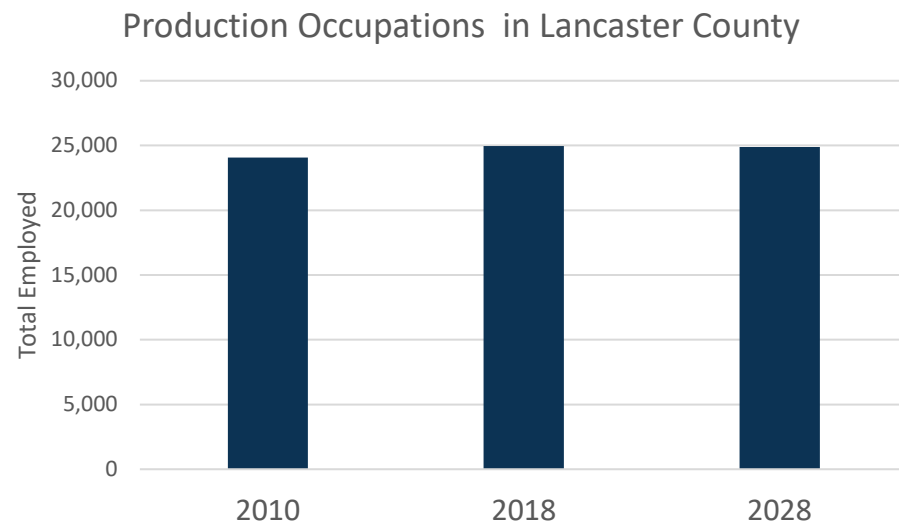
- Production is the largest component of labor in manufacturing.
  - *SOC 51 – Production Occupations* includes machinist, CNC operators, assembly workers, machine operators, foodbatch preparers.
- These occupations represent **55%** of the sector’s jobs.
  - “*All Other*” captures the remaining 40%, including management, sales, and engineering, etc.
- The mix of labor across the three categories is projected to remain unchanged over the next 10 years.

# Manufacturing

## Occupations with the Greatest Share of Production Workers in Lancaster County

The two charts below show how historical and projected employment in Lancaster County for three points in time: 2010, 2018, 2028. The side-by-side comparison of production occupations to total employment illustrates their different growth paths.

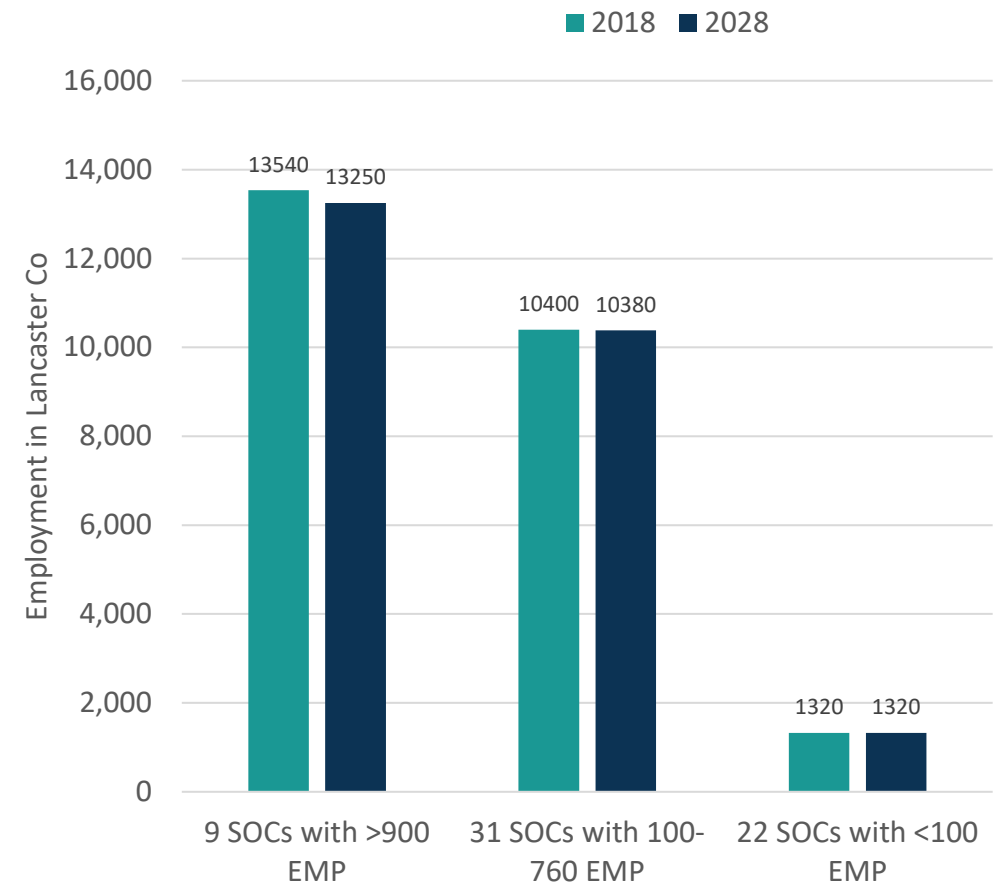
- Employment in production increased from 2010 to 2018 but is projected to slightly decrease by 2028.
- Total employment for the County (all occupations in all sectors) is projected to grow.
- Despite total employment in production forecasted to contract, Lancaster County still has strong demand for new talent to fill these roles. This demand comes from the industry's need to replace workers anticipated to retire.



# Manufacturing

## Diversity in Occupations

- In 2018, Lancaster County had an estimated 25,000 workers filling roughly 60 different production occupations.
- Unlike healthcare, production occupations are varied and limited in concentration.
- CWIA projections identify:
  - 9 SOC's with at least 900 workers by 2028. This set of occupations will account for over half of all production workers.
  - Another 31 SOC's are projected to have between 100 and 760 workers by 2028 (representing 42% of production workers).
- Across the production occupations, half of the SOC's are projected to have some positive growth in demand (ie, due to expanded economic activity or changes in production processes).

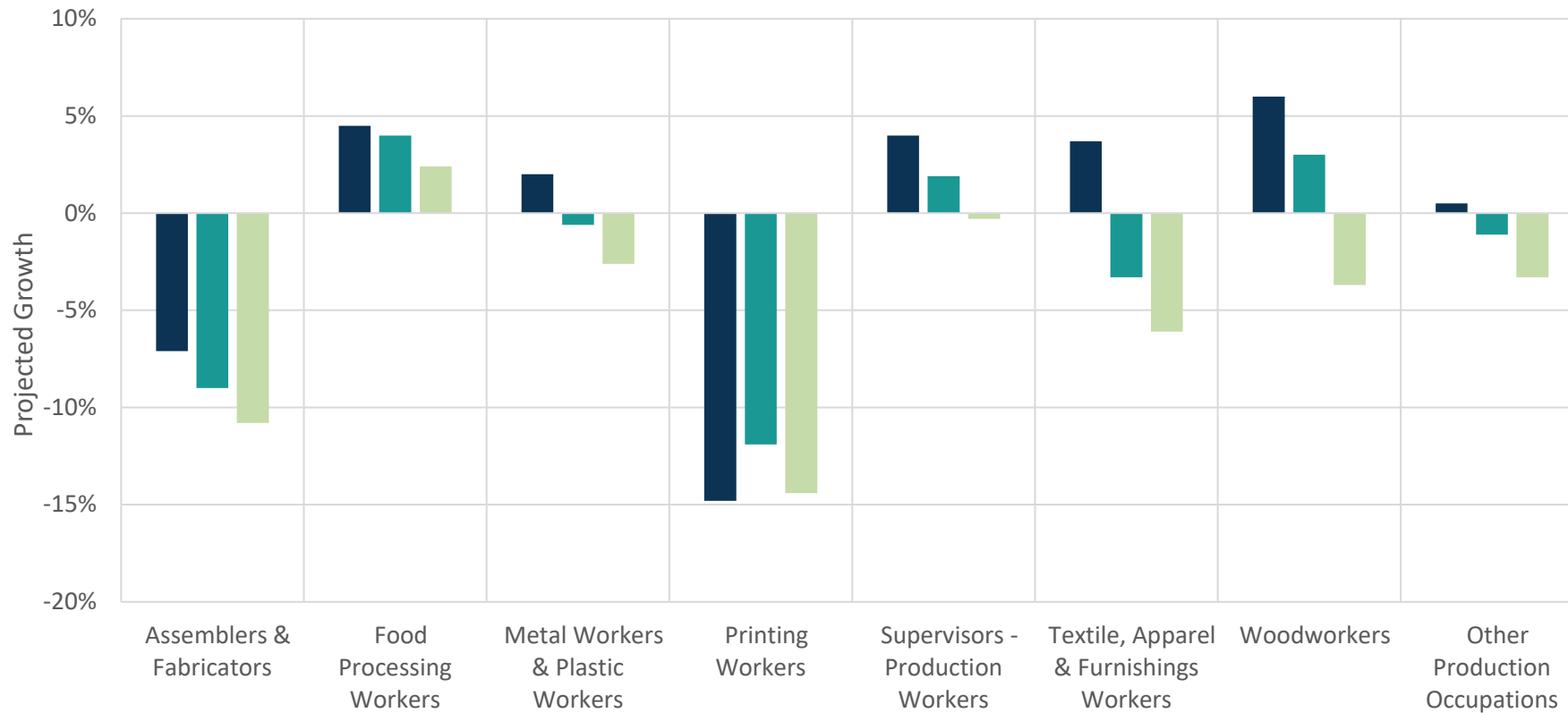


# Manufacturing

## SOC 51 in Lancaster County

CHANGE IN TOTAL EMPLOYMENT OVER NEXT TEN YEARS

■ Lancaster ■ PA ■ US



- Production occupations fall into eight large categories.
- CWIA forecasts Lancaster County to outpace PA and the US for many of its production occupations.



# Manufacturing

## Occupations with the Greatest Share of Production Workers in Lancaster County

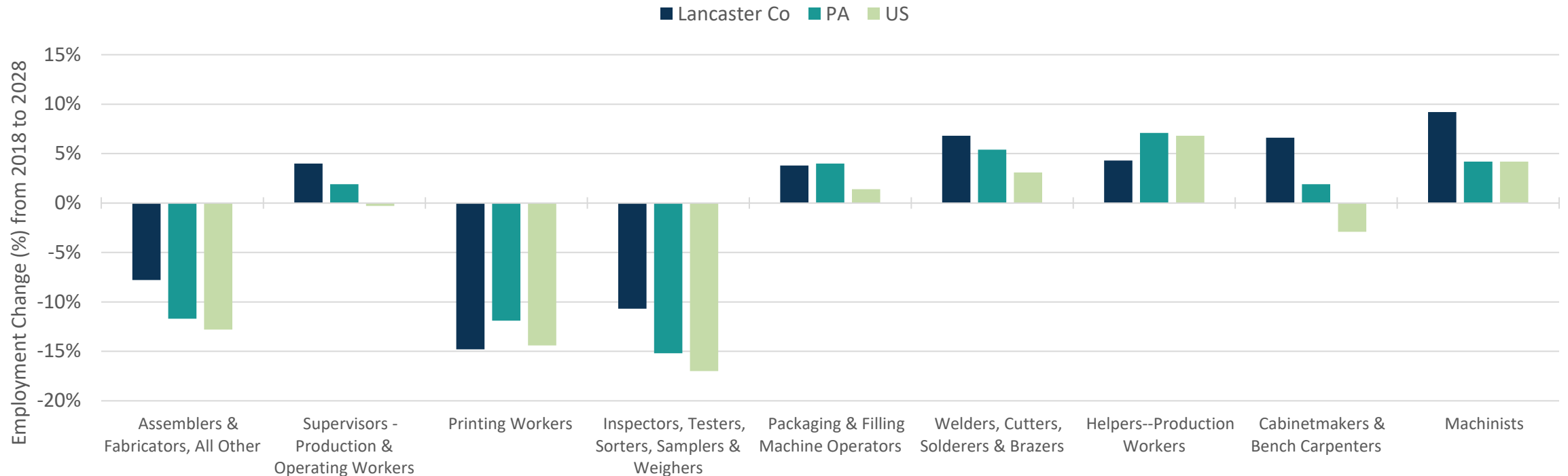
Ten specific production occupations are forecasted to employ at least 900 people in Lancaster County by 2028. The chart compares how employment in each occupation has changed through time.



# Manufacturing

## Occupations with the Greatest Share of Production Workers in Lancaster County

- Ten production occupations are forecasted to employ at least 900 people in Lancaster County by 2028. The chart compares the forecasted change to PA and the US.
- It illustrates how some occupations, while remaining significant, are contracting, such as assemblers and fabricators, printing workers and inspectors and testers. These are all occupations that are susceptible to automation.

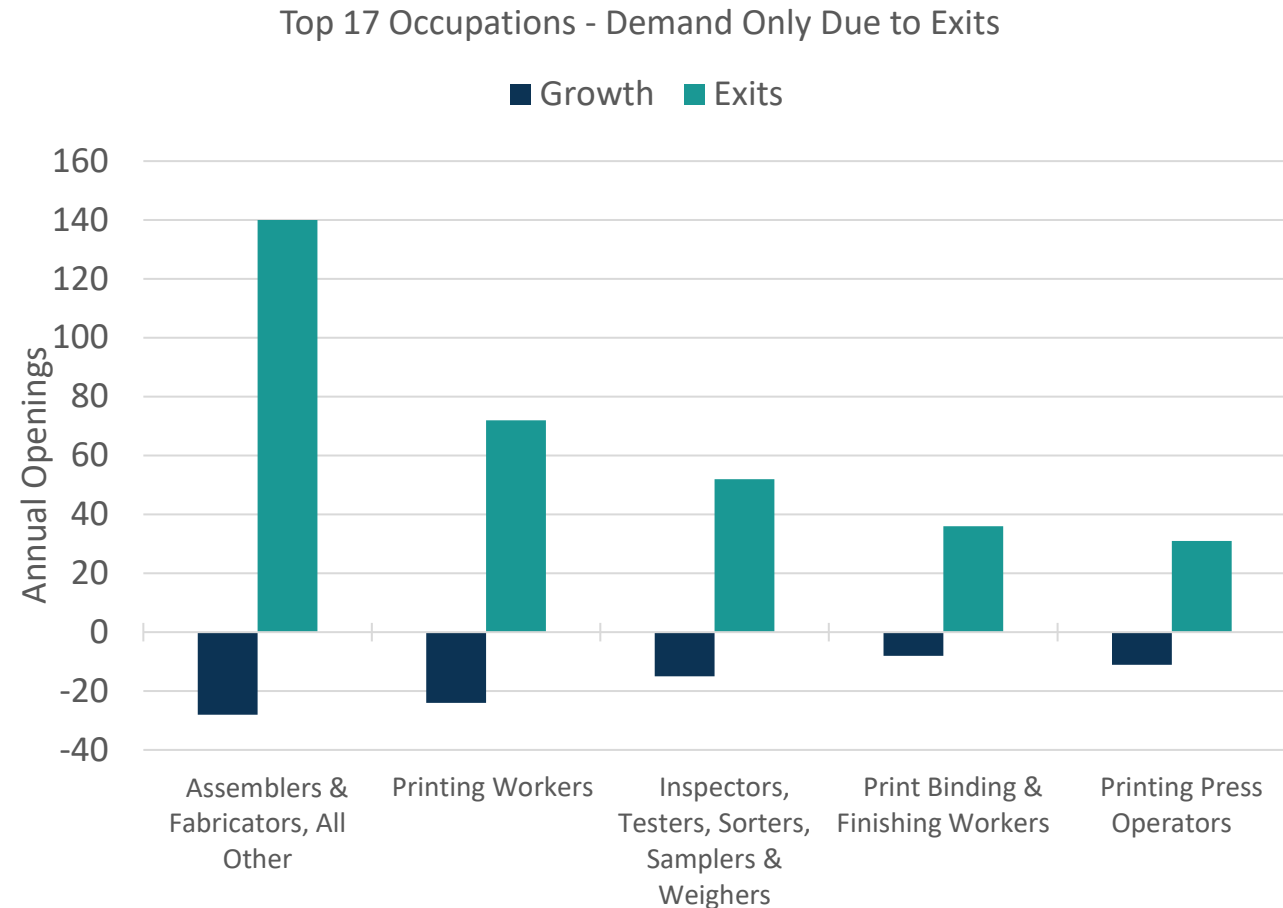


# Manufacturing

## Occupations with Strongest Future Demand

Out of 62 production occupations, CWIA forecasts 17 will have an average annual demand of at least 20 opening. 73% of production workers fill these 17 occupations.

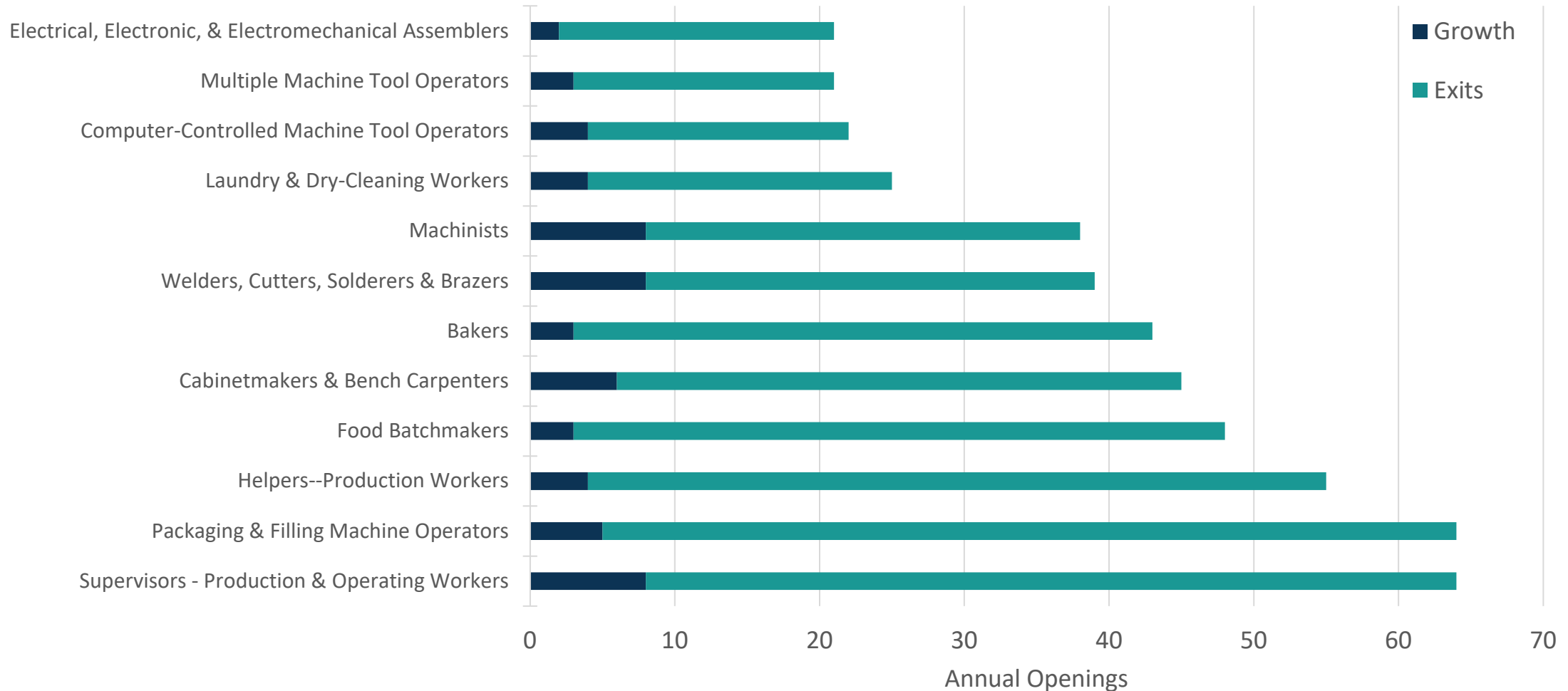
- 5 occupations have growth solely due to exits, with industry demand driven by growth contracting.
- 12 occupations are anticipated to have future demand reflecting both industry growth and retirements.



# Manufacturing

## Occupations with Strongest Future Demand

Top 17 Occupations - Demand Due to Growth and Exits



# Manufacturing

## Occupations with Strongest Future Demand

Occupation (SOC)	Total Employment			Avg Annual Demand from 2018-2028			Median Annual Wage in 2019
	2010	2018	2028	Due to Growth	Due to Exits	Total Demand	
Assemblers & Fabricators, All Other (51-2098)	--	3570	3290	-28	140	112	--
Supervisors - Production & Operating Workers (51-1011)	1540	1740	1810	8	56	64	\$59,640
Packaging & Filling Machine Operators (51-9111)	280	1310	1360	5	59	64	\$33,760
Helpers--Production Workers (51-9198)	40	940	980	4	51	55	\$34,720
Printing Workers (51-5100)	--	1620	1380	-24	72	48	--
Food Batchmakers (51-3092)	830	730	760	3	45	48	\$40,130
Cabinetmakers & Bench Carpenters (51-7011)	100	910	970	6	39	45	\$39,020
Bakers (51-3011)	610	680	710	3	40	39	\$25,870
Welders, Cutters, Solderers & Brazers (51-4121)	820	1180	1260	8	31	38	\$44,010
Machinists (51-4041)	710	870	950	8	30	37	\$44,570

# Manufacturing

## Occupations with Strongest Future Demand

Occupation (SOC)	Total Employment			Avg Annual Demand from 2018-2028			Median Annual Wage in 2019
	2010	2018	2028	Due to Growth	Due to Exits	Total Demand	
Inspectors, Testers, Sorters, Samplers & Weighers (51-9061)	**	1400	1250	-15	52	37	\$36,920
Print Binding & Finishing Workers (51-5113)	380	590	500	-8	36	28	\$36,910
Laundry & Dry-Cleaning Workers (51-6011)	250	310	350	4	21	25	\$23,970
Computer-Controlled Machine Tool Operators (51-4011)	180	590	640	4	18	22	\$42,110
Multiple Machine Tool Operators (51-4081)	210	520	540	3	18	21	\$44,470
Electrical, Electronic, & Electromechanical Assemblers (51-2028)	0	430	440	2	19	21	\$33,720
Printing Press Operators (51-5112)	700	870	760	-11	31	20	\$44,510

# Tables & Data

# Health Care

## Employment by Subsector in Lancaster County

NAICS	Health Care Subsector	Employment 2018	Employment 2028	Level Change (2018-2028)	Percent Change (2018-2028)	Average Annual Change
<b>621</b>	<b>Ambulatory Health Care Services</b>	<b>12,560</b>	<b>15,140</b>	<b>2,580</b>	<b>20.5%</b>	<b>258</b>
6211	Offices of Physicians	5,220	6,070	850	16.3%	85
6212	Offices of Dentists	1,740	1,880	140	8.0%	14
6213	Offices of Other Health Practitioners	1,700	2,060	360	21.2%	36
6214	Outpatient Care Centers	1,650	2,090	440	26.7%	44
6215	Medical & Diagnostic Laboratories	150	160	10	6.7%	1
6216	Home Health Care Services	1,600	2,280	680	42.5%	68
6219	Other Ambulatory Health Care Services	520	610	90	17.3%	9
<b>622</b>	<b>Hospitals</b>	<b>8,340</b>	<b>8,970</b>	<b>630</b>	<b>7.6%</b>	<b>63</b>
6221	General Medical & Surgical Hospitals	8,070	8,660	590	7.3%	59
<b>623</b>	<b>Nursing &amp; Residential Care Facilities</b>	<b>12,530</b>	<b>14,970</b>	<b>2,440</b>	<b>19.5%</b>	<b>244</b>
6231	Nursing Care Facilities	2,210	2,290	80	3.6%	8
6232	Residential Mental Health Facilities	1,680	1,930	250	14.9%	25
6233	Community Care Facility for the Elderly	8,430	10,540	2,110	25.0%	211
6239	Other Residential Care Facilities	210	210	0	0.0%	0



# Health Care

## Employment by Subsector in Lancaster County

NAICS	Health Care Subsector	Employment 2018	Employment 2028	Level Change (2018-2028)	Percent Change (2018-2028)	Average Annual Change
<b>624</b>	<b>Social Assistance</b>	<b>5,240</b>	<b>6,200</b>	<b>960</b>	<b>18.3%</b>	<b>96</b>
6241	Individual & Family Services	3,400	4,230	830	24.4%	83
6242	Emergency & Other Relief Services	230	250	20	8.7%	2
6243	Vocational Rehabilitation Services	320	310	-10	-3.1%	-1
6244	Child Day Care Services	1,290	1,420	130	10.1%	13

# Manufacturing

## Employment by Subsector in Lancaster County

NAICS	Manufacturing Subsector	2018 Employment	2028 Employment	Level Change	Percent Change	Average Annual Change
311	Food Manufacturing	7,680	7,900	220	2.9%	22
3113	Sugar/Confectionery Product Manufacture	1,250	1,250	0	0.0%	0
3115	Dairy Product Manufacturing	1,190	1,200	10	0.8%	1
3116	Animal Slaughtering & Processing	1,710	1,840	130	7.6%	13
3118	Bakeries & Tortilla Manufacturing	1,500	1,520	20	1.3%	2
3119	Other Food Manufacturing	900	980	80	8.9%	8
312	Beverage & Tobacco Product Manufacturing	370	360	-10	-2.7%	-1
314	Textile Product Mills	150	140	-10	-6.7%	-1
315	Apparel Manufacturing	220	210	-10	-4.5%	-1
316	Leather & Allied Product Manufacturing	70	70	0	0.0%	0
321	Wood Product Manufacturing	2,670	2,720	50	1.9%	5
3219	Other Wood Product Manufacturing	2,230	2,280	50	2.2%	5
322	Paper Manufacturing	810	810	0	0.0%	0
323	Printing & Related Support Activities	3,560	2,970	-590	-16.6%	-59
325	Chemical Manufacturing	1,000	1,050	50	5.0%	5

# Manufacturing

## Employment by Subsector in Lancaster County

NAICS	Manufacturing Subsector	2018 Employment	2028 Employment	Level Change	Percent Change	Average Annual Change
326	Plastics & Rubber Products Manufacturing	3,890	4,090	200	5.1%	20
327	Nonmetallic Mineral Product Mfg	1,330	1,280	-50	-3.8%	-5
331	Primary Metal Manufacturing	2,870	2,880	10	0.3%	1
3315	Foundries	1,310	1,270	-40	-3.1%	-4
332	Fabricated Metal Product Manufacturing	5,690	5,750	60	1.1%	6
3320A1	Fabricated Metal Product Mfg (3321, 3322, 3325, 3326, & 3329)	1,660	1,630	-30	-1.8%	-3
3320A2	Fabricated Metal Product Mfg (3323 & 3324)	2,440	2,420	-20	-0.8%	-2
3327	Machine Shops & Threaded Products	1,270	1,360	90	7.1%	9
333	Machinery Manufacturing	1,650	1,690	40	2.4%	4
3330A1	Machinery Mfg (3331, 3332, 3334, & 3339)	1,530	1,580	50	3.3%	5
334	Computer & Electronic Product Mfg	870	840	-30	-3.4%	-3
335	Electrical Equipment & Appliances	870	910	40	4.6%	4
336	Transportation Equipment Manufacturing	970	1,050	80	8.2%	8
3362	Motor Vehicle Body & Trailer Mfg	760	810	50	6.6%	5

# Manufacturing

## Employment by Subsector in Lancaster County

NAICS	Manufacturing Subsector	2018 Employment	2028 Employment	Level Change	Percent Change	Average Annual Change
337	Furniture & Related Product Mfg	1,650	1,670	20	1.2%	2
339	Miscellaneous Manufacturing	1,400	1,410	10	0.7%	1
3391	Medical Equipment & Supplies Mfg	330	350	20	6.1%	2
3399	Other Miscellaneous Manufacturing	1,070	1,060	-10	-0.9%	-1
<b>31-33</b>	<b>Manufacturing</b>	<b>37,790</b>	<b>37,880</b>	<b>90</b>	<b>0.2%</b>	<b>9</b>

# Production Occupations Summary Tables

SOC Code	Occupation	Number of Jobs		Level Change (2018-2028)	Annual Change Due to...		Change over 10 years			Median Annual Wage in 2019	
		2018	2028		Growth	Exits	Lancaster	PA	US	US	Lancaster
00-0000	Total, All Occupations	267,160	284,820	17,660	1,766	12,425	6.6%	5.0%	3.7%	\$ 39,810	\$37,330
51-2098	Assemblers & Fabricators, All Other	3570	3290	-280	-28	140	-8%	-12%	-12.8%	\$40,320	--
51-1011	Supervisors - Production & Operating Workers	1740	1810	70	8	56	4%	2%	-0.3%	\$78,830	\$59,640
51-5100	Printing Workers	1620	1380	-240	-24	72	-15%	-12%	-14.4%	\$47,080	--
51-9061	Inspectors, Testers, Sorters, Samplers & Weighers	1400	1250	-150	-15	52	-11%	-15%	-17%	\$51,990	\$36,920
51-9111	Packaging & Filling Machine Operators	1310	1360	50	5	59	4%	4%	1.4%	\$39,250	\$33,760
51-4121	Welders, Cutters, Solderers & Brazers	1180	1260	80	8	31	7%	5%	3.1%	\$52,350	\$44,010
51-9198	Helpers--Production Workers	940	980	40	4	51	4%	7%	6.8%	\$36,030	\$34,720
51-7011	Cabinetmakers & Bench Carpenters	910	970	60	6	39	7%	2%	-2.9%	\$44,950	\$39,020
51-4041	Machinists	870	950	80	8	30	9%	4%	4.2%	\$55,910	\$44,570
51-5112	Printing Press Operators	870	760	-110	-11	31	-13%	-9%	-13.3%	\$47,400	\$44,510
51-3092	Food Batchmakers	730	760	30	3	45	4%	2%	1.3%	\$39,380	\$40,130
51-3011	Bakers	680	710	30	3	40	4%	4%	5.3%	\$34,120	\$25,870

# Production Occupations Summary Tables

SOC Code	Occupation	Number of Jobs		Level Change (2018-2028)	Annual Change Due to...		% Change over 10 years			Median Annual Wage in 2019	
		2018	2028		Growth	Exits	Lancaster	PA	US	US	Lancaster
51-4011	Computer-Controlled Machine Tool Operators	590	640	50	4	18	9%	4%	-7%	\$50,940	\$42,110
51-5113	Print Binding & Finishing Workers	590	500	-90	-8	36	-15%	-16%	-14.8%	\$41,970	\$36,910
51-4031	Cutting, Punching & Press Machine Operators	540	520	-20	-3	20	-4%	-8%	-8.3%	\$44,150	\$40,880
51-4081	Multiple Machine Tool Operators	520	540	20	3	18	4%	3%	2.1%	\$46,150	\$44,470
51-4072	Molding, Coremaking & Casting Machine Operators	500	480	-20	-2	15	-4%	-6%	-9.6%	\$40,490	\$36,840
51-2028	Electrical, Electronic, & Electromechanical Assemblers	430	440	10	2	19	2%	3%	1.4%	\$43,320	\$33,720
51-2041	Structural Metal Fabricators & Fitters	360	310	-50	-4	8	-14%	-14%	-16%	\$50,130	\$46,170
51-3021	Butchers & Meat Cutters	320	340	20	1	14	6%	3%	1.7%	\$40,660	\$30,670
51-4012	Computer Numerically Controlled Machine Tool Programmers	40	50	10	1	1	25%	22%	22%	\$70,750	--
51-6011	Laundry & Dry-Cleaning Workers	310	350	40	4	21	13%	4%	0.2%	\$28,540	\$23,970
51-9121	Coating, Painting & Spraying Machine Operators	300	310	10	1	9	3%	3%	1.5%	\$48,110	--
51-3093	Food Cooking Machine Operators	280	290	10	1	18	4%	4%	0.5%	\$37,750	\$30,320
51-9195	Molders, Shapers & Casters	280	280	0	0	11	0%	5%	-6.1%	\$41,500	\$39,060

# Production Occupations Summary Tables

SOC Code	Occupation	Number of Jobs		Level Change (2018-2028)	Annual Change Due to...		% Change over 10 years			Median Annual Wage in 2019	
		2018	2028		Growth	Exits	Lancaster	PA	US	US	Lancaster
51-7042	Woodworking Machine Operators	270	290		2	15	7%	5%	-2.4%	\$37,780	\$34,320
51-4033	Grinding, Lapping, Polishing & Buffing Machine Tool Operators	250	250		-1	10	0%	-9%	-8.2%	\$44,810	\$38,370
51-8031	Water & Wastewater Treatment Plant & System Operators	250	260		1	8	4%	-5%	-4.2%	\$61,220	\$50,570
51-4023	Rolling Machine Operators	240	230		-1	6	-4%	-13%	-11.3%	\$50,460	\$46,080
51-9023	Mixing & Blending Machine Operators	240	250		1	7	4%	1%	1.2%	\$47,740	\$36,320
51-3022	Meat, Poultry & Fish Cutters & Trimmers	200	220		2	9	10%	7%	1.7%	\$32,910	\$28,870
51-7021	Furniture Finishers	180	200		1	10	11%	3%	-3.7%	\$39,250	\$38,830
51-9012	Separating, Filtering, Clarifying, Precipitating & Still Machine Operators	180	200		2	5	11%	3%	--	--	\$34,570
51-6031	Sewing Machine Operators	200	190		-1	11	-5%	-10%	-9.3%	\$31,750	\$27,380
51-4052	Pourers & Casters, Metal	190	180		-1	7	-5%	-11%	-8.6%	\$48,480	\$37,660
51-4111	Tool & Die Makers	180	180		0	7	0%	-5%	-5.4%	\$65,110	\$49,490
51-9196	Paper Goods Machine Operators	170	160		0	5	-6%	-2%	-5.7%	\$49,460	\$39,640

# Production Occupations Summary Tables

SOC Code	Occupation	Number of Jobs		Level Change (2018-2028)	Annual Change Due to...		% Change over 10 years			Median Annual Wage in 2019	
		2018	2028		Growth	Exits	Lancaster	PA	US	US	Lancaster
51-4021	Extruding & Drawing Machine Operators	150	150	0	0	4	0%	-5%	-8.2%	\$45,350	\$51,840
51-9199	Production Workers, Other	120	140	20	1	5	17%	5%	5.1%	\$39,330	--
51-7041	Sawing Machine Operators, Wood	120	130	10	1	4	8%	3%	-3.8%	\$37,780	\$32,170
51-5111	Prepress Technician & Workers	160	120	-40	-4	5	-25%	-23%	-20.7%	\$51,100	\$45,400
51-4191	Heat Treating Equipment Operators	100	90	-10	-1	3	-10%	-12%	-2.1%	\$47,200	\$48,350
51-3091	Food & Tobacco Roasting, Baking & Drying Machine Operators	90	90	0	0	5	0%	3%	-0.2%	\$39,990	\$39,750
51-4193	Plating & Coating Machine Operators	90	90	0	0	3	0%	-7%	-3.7%	\$41,400	\$29,820
51-9122	Painters, Transportation Equipment	80	90	10	1	3	13%	7%	--	--	--
51-9021	Crushing, Grinding & Polishing Machine Operators	90	80	-10	-1	3	-11%	-5%	-2%	\$47,260	\$48,070
51-4051	Metal-Refining Furnace Operators	80	80	0	1	3	0%	-2%	0%	\$51,770	\$49,710
51-6021	Pressers: Textile, Garment & Related Materials	80	70	-10	-1	4	-13%	-17%	-7.2%	\$27,980	\$23,850
51-9083	Ophthalmic Laboratory Technicians	60	70	10	1	3	17%	14%	2.3%	\$40,060	\$35,030
51-9192	Cleaning, Washing & Metal Pickling Equipment Operators	60	70	10	0	4	17%	3%	--	--	\$34,890
51-9022	Grinding & Polishing Workers, Hand	70	60	-10	-1	2	-14%	-17%	-5.6%	\$38,110	\$32,860



# Production Occupations Summary Tables

SOC Code	Occupation	Number of Jobs		Level Change (2018-2028)	Annual Change Due to...		% Change over 10 years			Median Annual Wage in 2019	
		2018	2028		Growth	Exits	Lancaster	PA	US	US	Lancaster
51-9081	Dental Laboratory Technicians	60	60	0	1	3	0%	12%	3.4	\$53,950	\$33,700
51-6041	Shoe & Leather Workers & Repairers	60	60	0	0	4	0%	-7%	-1.1	\$36,120	\$25,890
51-9193	Cooling & Freezing Equipment Operators	50	60	10	0	2	20%	5%	0.4	\$45,320	\$43,950
51-4034	Lathe & Turning Machine Tool Operators	60	50	-10	0	3	-17%	-12%	-2.9	\$49,630	\$44,800
51-4035	Milling & Planing Machine Operators	50	50	0	-1	2	0%	-18%	-3.6	\$54,090	\$64,730
51-4199	Metal Workers & Plastic Workers, Other	50	50	0	0	2	0%	-5%	-2.1	\$45,420	\$30,230
51-9082	Medical Appliance Technicians	40	50	10	1	2	25%	14%	1.7	\$53,000	--
51-6093	Upholsterers	40	40	0	0	2	0%	1%	-1.4	\$43,110	--
51-4071	Foundry Mold & Coremakers	30	30	0	0	1	0%	-8%	-1	\$44,250	\$35,840
51-4062	Patternmakers	30	20	-10	0	1	-33%	-10%	-0.3	\$59,150	--
51-8091	Chemical Plant & System Operators	10	10	0	0	0	0%	-5%	-0.9	\$78,360	--