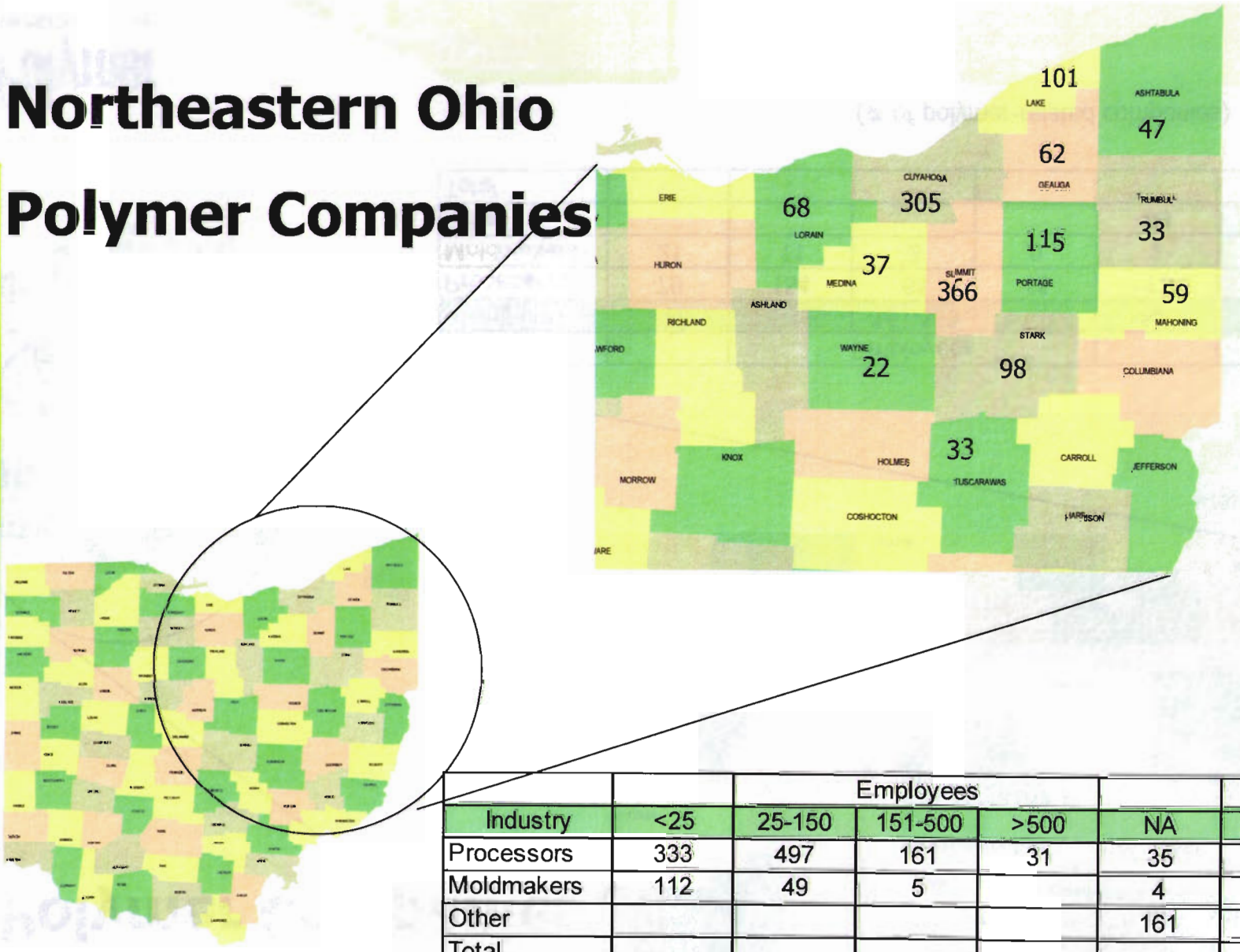
Northeastern Ohio Polymer Companies

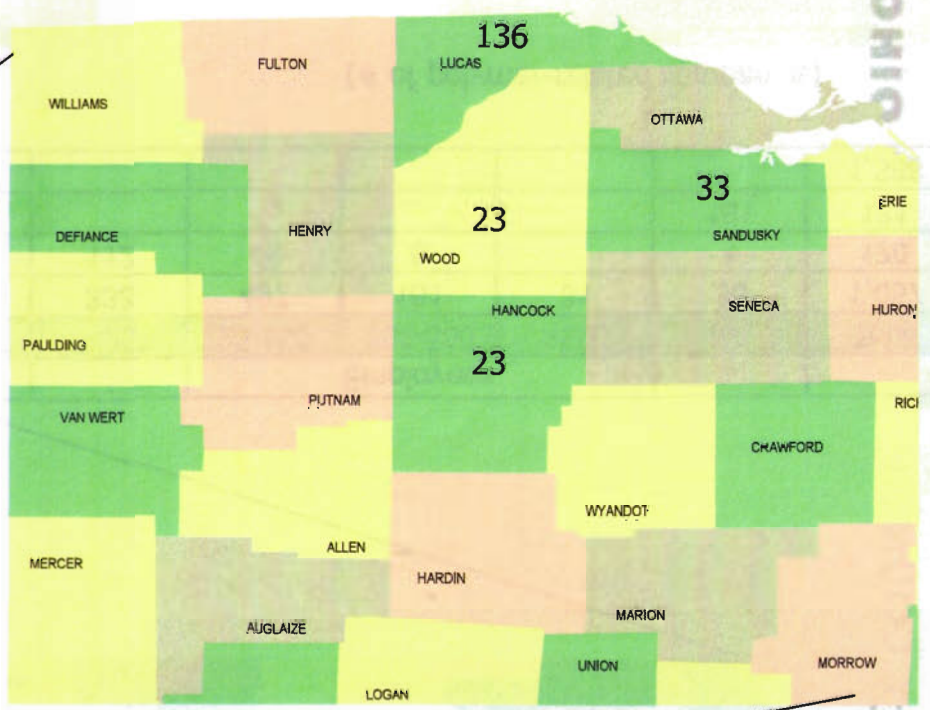


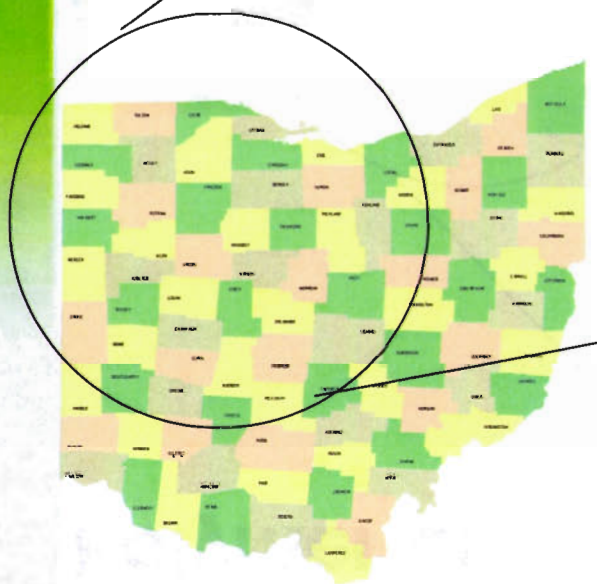
		Employees				
Industry	<25	25-150	151-500	>500	NA	Total
Processors	333	497	161	31	35	1,057
Moldmakers	112	49	5		4	170
Other					161	161
Total						1,388

(# of polymer-related companies)

OH!Polymer
PolymerOhio, Inc.

Northwestern Ohio Polymer Companies



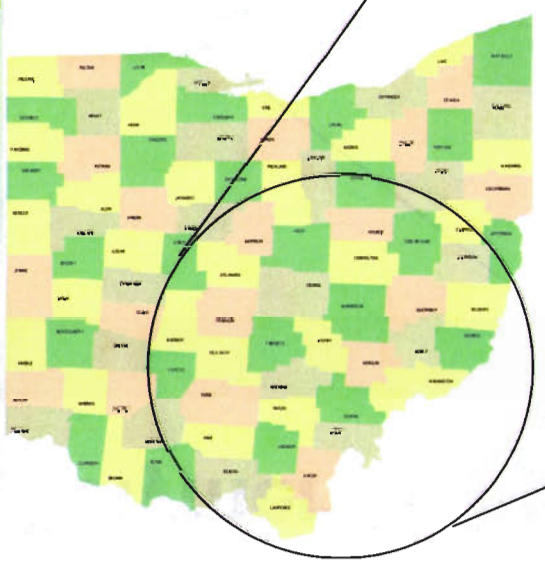


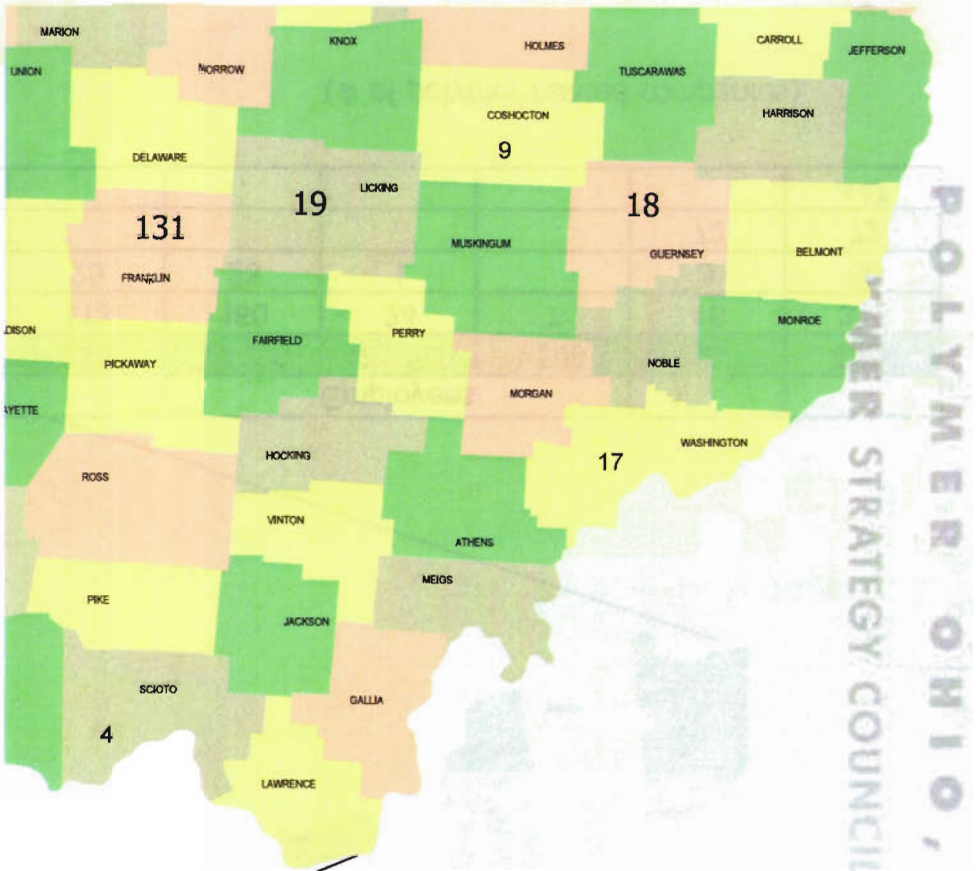
		Employees				
Industry	<25	25-150	151-500	>500	NA	Total
Processors	79	154	61	15	17	326
Moldmakers	21	11	3	0	2	37
Other					89	89
Total						452

(# of polymer-related companies)

OH!Polymer
PolymerOhio, Inc.

Southeastern Ohio Polymer Companies



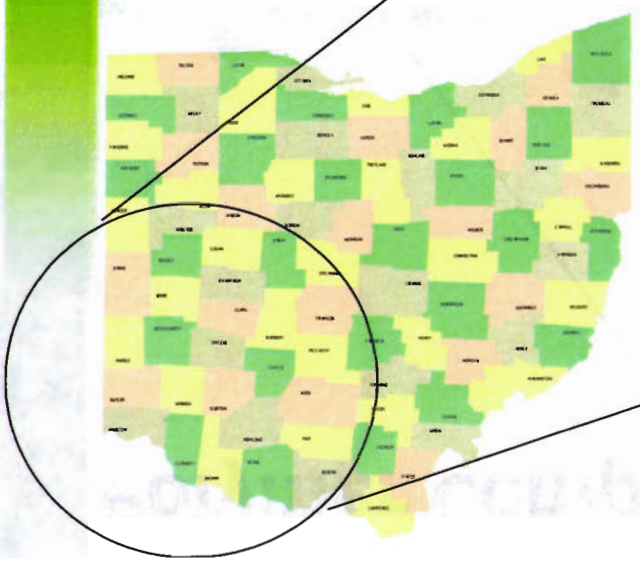


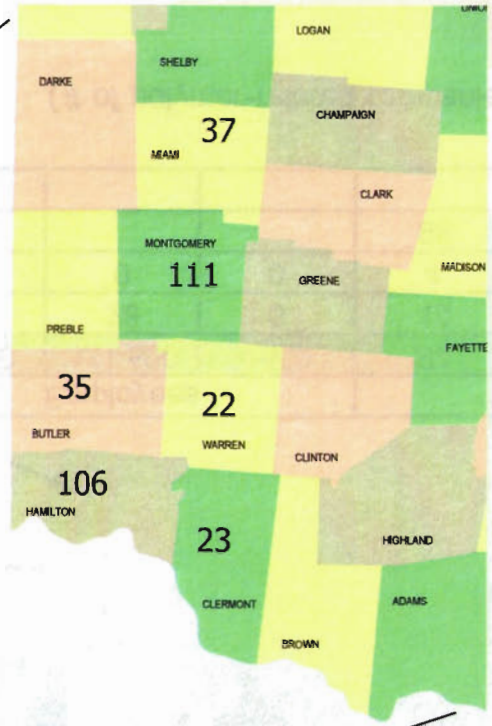
		Employees				
Industry	<25	25-150	151-500	>500	NA	Total
Processors	71	90	28	6	10	205
Moldmakers	7	2	0	0	4	13
Other					98	98
Total						316

(# of polymer-related companies)

OH!Polymer
PolymerOhio, Inc.

Southwestern Ohio Polymer Companies





		Employees				
Industry	<25	25-150	151-500	>500	NA	Total
Processors	113	160	24	7	15	319
Moldmakers	29	23	1		3	56
Other					72	72
Total						447

(# of polymer-related companies)

OH!Polymer
PolymerOhio, Inc.

Defining the Industry

The broadly defined private sector polymer industry consists of 10 subsector groupings—each consisting of one or more NAICS code industries.

Subsectors of the Polymer Industry

NAICS	Lubricants, Coatings, Paints, Colorants, & Adhesives	NAICS	Plastic Shapes, Plates, & Laminated Sheet Manufacturing
324122	Asphalt Shingle and Coating Materials Manufacturing	326121	Unlaminated Plastics Profile Shape Manufacturing
324191	Petroleum Lubricating Oil and Grease Manufacturing	326130	Laminated Plastics Plate, Sheet (ex. Pack.), and Shape Manufacturing
325131	Inorganic Dye and Pigment Manufacturing		**Other Plastic Products Manufacturing**
325132	Synthetic Organic Dye and Pigment Manufacturing	326122	Plastics Pipe and Pipe Fitting Manufacturing
325510	Paint and Coating Manufacturing	326160	Plastics Bottle Manufacturing
325520	Adhesive Manufacturing	326191	Plastics Plumbing Fixture Manufacturing
	Resins, Synthetic Rubbers, & Synthetic Fibers	326192	Resilient Floor Covering Manufacturing
325211	Plastics Material and Resin Manufacturing	326199	All Other Plastics Product Manufacturing
325212	Synthetic Rubber Manufacturing		**Tire Manufacturing & Retreading**
325221	Cellulosic Organic Fiber Manufacturing	326211	Tire Manufacturing
325222	Noncellulosic Organic Fiber Manufacturing	326212	Tire Retreading
	Custom Compounding of Purchased Resins		**Rubber Product Manufacturing**
325991	Custom Compounding of Purchased Resin	316211	Rubber & Plastic Footwear Manufacturing
	Plastic Bag, Film & Unlaminated Sheet Manufacturing	326220	Rubber and Plastics Hoses and Belting Manufacturing
326111	Plastics Bag Manufacturing	326291	Rubber Product Manufacturing for Mechanical Use
326112	Plastics Packaging Film and Sheet (incl. Lam.) Manufacturing	326299	All Other Rubber Product Manufacturing
326113	Unlaminated Plastics Film and Sheet Manufacturing		**Plastics and Rubber Machinery & Molds**
	Plastic Foam Products Manufacturing	333220	Plastics and Rubber Industry Machinery Manufacturing
326140	Polystyrene Foam Product Manufacturing	333511	Industrial Mold Manufacturing
326150	Urethane and Other Foam Product (ex. PS) Manufacturing		

Ohio is the #1 State and NE Ohio the #10 "State" in Polymers

Building from Position of Strength: Ohio's Leadership in the National Polymer Industry

Rank by Employment		Establishments, 2002	Employment, 2002	Average Establishment Size	Average Wage, 2002	Location Quotient
Ohio	**1**	**1,853**	**105,766**	**57**	**$39,881**	**2.14**
California	2	2,584	82,377	32	$36,863	0.61
Texas	3	1,466	72,166	49	$44,265	0.87
Illinois	4	1,631	71,895	44	$42,791	1.34
Michigan	5	1,528	65,486	43	$43,425	1.62
Pennsylvania	6	1,200	64,736	54	$42,456	1.25
Indiana	7	877	55,097	63	$36,785	2.09
North Carolina	8	747	49,543	66	$41,082	1.46
Tennessee	9	557	47,181	85	$43,759	1.98
Northeast Ohio		***899***	***43,562***	***48***	***$39,742***	***2.52***
Wisconsin	10	752	39,968	53	$37,017	1.60

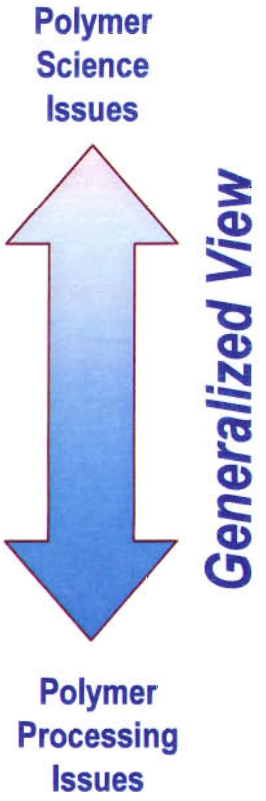
Source: Bureau of Labor Statistics, ES-202 Data as provided by Implan. Calculations by Battelle.

- **These direct polymer industry employment totals do not include those Ohio-based "embedded" or "captive" polymer companies that are classified in other NAICS codes/industries (e.g., Delphi in the automotive industry, Procter & Gamble in consumer products).**
  - **These "embedded" or "captive" firms may add an additional 13,000 Northeast Ohio and 30,500 State of Ohio polymer jobs.**
- **These numbers also do not include polymer-related employment within universities, research institutions, federal laboratories, and other organizations. Including this employment may bring the total "*polymer-related*" employment to over 140,000 statewide.**

Northeast Ohio's Polymer Industry Has Significant Employment Concentrations Throughout the Value-Chain

Polymer Industry Subsectors	Estabs. 2002	Employ. 2002	Employment Concentrations 2002*	Avg. Wage 2002
Resins, Synthetic Rubbers, & Synthetic Fibers	50	2,374	1.40	$63,608
Tire Manufacturing & Retreading	16	1,470	1.32	$52,988
Lubricants, Coatings, Paints, Colorants, & Adhesives	109	6,159	3.56	$51,615
Custom Compounding of Purchased Resins	28	1,420	4.06	$44,085
Plastic Bag, Film & Unlaminated Sheet Mfg.	25	1,301	0.97	$41,366
Plastic Foam Products Mfg.	32	943	1.05	$38,879
Rubber Product Manufacturing	119	6,916	4.24	$35,059
Plastic Shapes, Plates, & Laminated Sheet Mfg.	53	2,974	3.78	$33,510
Other Plastic Products Mfg.	247	16,090	2.35	$32,164
Plastics and Rubber Machinery & Molds**	220	3,915	4.42	$43,855

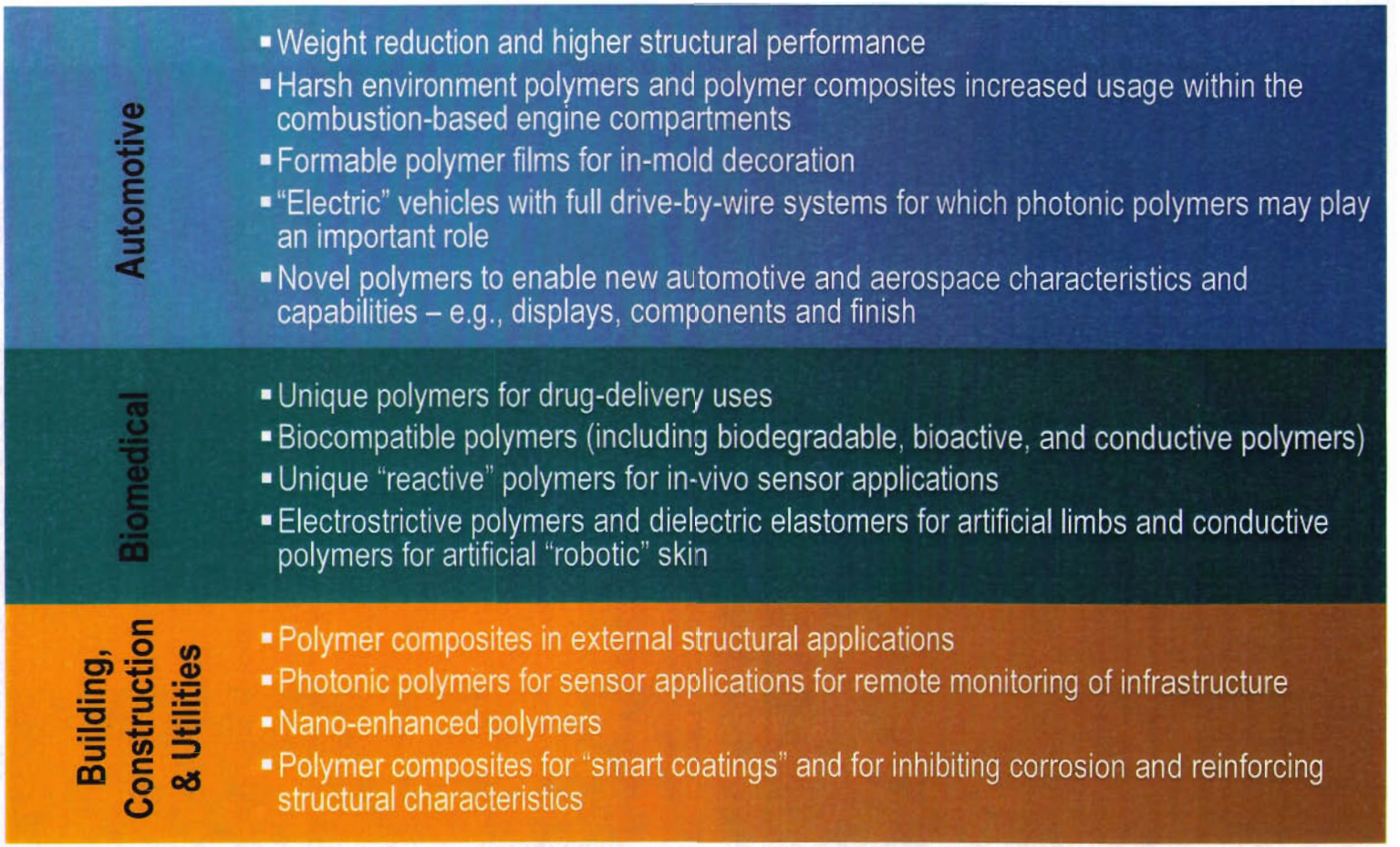
Source: Bureau of Labor Statistics, ES-202 Data as provided by Implan. Calculations by Battelle.



* Measures above 1.20 are significant employment concentrations

** Plastics and Rubber Machinery & Molds subsector falls outside of the direct Chemical to Plastics value-chain, but is typically most connected with polymer processing and engineering issues.

Significant Polymer Markets and Key Application Areas



Significant Polymer Markets and Key Application Areas...Continued