

**INPUT SUPPLY STUDY
COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES**

Prepared for

**Regional Growth Alliance
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Youngstown Area Chamber of Commerce**

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PURPOSE OF THE STUDY

The purpose of this report is to assess the input supply needs* of manufacturing firms in the Mahoning-Trumbull-Columbiana County area and identify those input supplies not being provided by local firms that could be produced, partially processed, or distributed locally, rather than by out-of-region firms (see the list of Potential New Market/Products found herein). This information will assist the Regional Growth Alliance in attracting new manufacturers to our area or expanding the sales of existing figures, which in turn will create new employment opportunities and expand our local economy.

This report was prepared by the Center for Urban Studies at Youngstown State University for the Regional Growth Alliance of the Youngstown Area Chamber of Commerce. Using the Center for Urban Studies' 1989 Harris Data File, 747 local firms were surveyed. After the initial mailing of the questionnaire in the fall of 1989, follow-up telephone calls were made and an additional mailing was implemented to obtain the minimum required response. A total of 81 firms completed the input supply questionnaire, which represents a response rate of about 11 percent.

*Input supply is defined as natural resources or processed materials, or component parts required for producing a manufactured product.

INPUT SUPPLY QUESTIONNAIRE RESULTS

1. How many years in business?

Years	Percentage
0-20	34.4
21-40	31.8
Over 40	33.8

2. How many firms used natural materials or semi-processed supplies provided by sources within 300-mile radius of Mahoning Valley?

Category	Percentage
All local (300-mile radius)	21.0
Some local	69.1
None local	4.9
Didn't answer	4.9

3. What were the most commonly used semi-processed supplies manufactured by local firms (within 300 miles)?

Steel: coils, forgings, bars, hot and cold rolled bars, plate, alloys, sheet, castings, stampings, tools, stainless

Aluminum: extrusions, ingots

Boxes

Chemicals

Bolts, nuts, screws, rivets, and washers

Bearings

4. What were the supplies used that were not locally manufactured?

Supply List	Item Description	Location of Supplier
Abrasive Products...	Grinding wheel, sanding bolts	OH, PA, IL, SC, NY, CA, Ireland
Absorbents.....	Oil dry dessicants, rags floor dry	OH, KY, CO
Acids.....	Hydro sulfuric, organic, inorganic	OH, PA, AL, MI, Canada
Adhesives.....	Glue, resin bond, molding adhesive	OH, PA, IN, NY, TX, WI, MN
Alloys.....	Steel, forging, casting, auronze	OH, PA, CN MI, IL, Brazil, unknown
Aluminum.....	Extrusion, cast, strip sheet	IL, OH, IN, PA, MD, NY, Canada, unknown
Architectural & Ornamental Metal Work.....	Cast fitting trim	OH, AL
Armature.....	Rewinding	OH
Asphalt.....	Cutback	OH
Automobile Parts....	General	OH

<u>Supply List</u>	<u>Item Description</u>	<u>Location of Supplier</u>
Bags.....	Packaging, shipping, poly	NY, OH, IN, PA
Bearings.....	Roller, machinery	OH, NJ, SC, CT, unknown
Billets.....	Steel	PA
Blowers.....		IN, MI
Bolts, Nuts, Screws, Rivets, and Washers	As listed	OH, IL, NY, FL, unknown
Boxes.....	Shipping, cardboard, triple wall	OH, PA
Brick and Structural Clay Tile.....		OH, MO
Bushing.....	Bronze, electrical	OH
Cable, Electronic...	Wire, S.O. cord	OH, PA
Capacitors.....	Assorted	OH, IL
Cases.....	Plastic	OH, PA
Casting Metal.....		OH, PA, various locations
Cellulose Products..	Foam, insulated, assorted	OH
Chains.....	Lifting	OH, PA, NY, unknown
Chaplets.....		WI
Chemicals.....	Solvents, insolvent, organic, inorganic, phosphate	OH, MI, NY
Clay.....		Out of town/state
Circuits.....	Boards, assorted	OH, unknown
Coatings.....	New products, premask, lacquer, powder, assorted	OH, WI, PA
Coils.....	Aluminum, electrical	OH, PA
Cold and Hot Rolled Steel.....	As listed	OH, PA, NY, NC, SC, unknown
Sheet, Strip and Bar.....		
Compounds.....		OH
Compressors.....	Air	OH
Concrete Products...	Local usage	OH, PA
Condensers.....		OH, IL
Conduit.....	Installation, pipe, emt, and flex, assorted	OH, PA, IL
Connectors.....		OH, IL, unknown
Controllers.....		OH, IN, CN, IL, unknown
Converter, Hydronic.	AB	
Copper.....	Alloys, sheet	OH, NY, PA, general, unknown
Couplings.....	Mech. transmission, metal	OH, NY, TX, WI, unknown
Coverings.....		OH
Current-Carrying Wiring Devices.....	Assorted	OH
Cushions or Pads....	Fabreeka	OH, MA
Cylinders.....	Air hydraulic maintenance	OH, IL, Germany, unknown
Desiccants.....	Low deflection	KY, MI
Elastomers.....	Labels	IL

<u>Supply List</u>	<u>Item Description</u>	<u>Location of Supplier</u>
Electric Wiring Harness.....	Assorted	OH
Electric Wire Moulding.....	Assorted	OH
Electronic Components.....	Tubes, assorted, general	OH, IL, MD, GA, TX, various locations, unknown
Expanded Metal.....	Sheets	OH
Fabricated Pipe and Pipe Fittings.....	Pump stations, pipe, as listed, assorted	OH, unknown
Fabricated Plate Work.....	Molds, steel plates, assorted	OH, PA
Fans.....	Assorted	OH, MN
Fasteners.....	Screws, anchorings, construction hardware, coher pins, assorted	OH, NJ, MN, AL, various, unknown
Filter-Driers.....		OH
Filters.....	Paint liner, air, assorted	OH, TN
Fittings.....	Pipe, air	OH, TX
Flanges.....	Welding, pipe	OH, PA
Fluid Power Equipment	Paint guns	OH, various, unknown
Foaming Agents.....	ETAFC, anti-foam, celogen	OH, NJ, MI
Galvanizing Solution	Metal sheets, zinc	PA, Canada, Mexico
Gases.....	Propane, calibrated, air, oxygen, chlorine	OH, PA, NJ
Gaskets.....	Rubber	OH, unknown
Glass Products.....	Auto, mirror, HA, sheets	OH, PA, TN, CA, NY, MI
Graphite Articles...		KY
Gravel.....	Limestone	OH
Gray Iron.....	Castings	OH, AL, Self-mfg.
Ground Rods.....	Electrical	OH
Guards.....	Tool link	OH
Hangers or Brackets.		OH
Heaters.....	Propane	OH
Heavy Metals.....	Mold work, stainless	OH, PA
Hoses.....	Repair work, air, hydraulic	OH
Insulation.....	Fiberglass, cellular plastic	OH, SC, IL
Industrial Gases....		Local, various locations
Integrated Circuits.	Assorted	OH
Iron and Steel Forging.....	Castings, rough machined	OH, IL, unknown
Joints, Pipe.....		OH
Locks.....	Door, pad	CA
Louvers.....		CT
Lumber Items.....	Trim and Dunnorrf, skid, hardwood	OH, PA, OR, NY, Western U.S., Canada, local

<u>Supply List</u>	<u>Item Description</u>	<u>Location of Supplier</u>
Magnets.....	Strips, alnicox	OH, PA, IN
Malleable Iron.....		Own, unknown
Manifold.....	Nitrogen, methane	OH, MI
Metal Cans.....	5-8 gal., shipping drums	OH, PA, IL, AL
Metal Casting.....	Zinc, grates, frames	PA
Metal Foil and Leaf.	Assorted	OH, IL
Metalworking Fluids and Fuels.....	Saw operations, oil gasoline, tapping fluid, assorted	OH, PA, IL, MD OH, unknown
Metric Bolts.....		
Molded, Extruded and Lathe-Cut Rubber...	Assorted	OH
Motors.....	Repair and drive	OH, AZ, IN, unknown
Nails and Tacks.....	Staples	OH, CO
Noncurrent-Carrying Wire Device.....	Assorted	OH
Nipple Pipe.....	Plastic	OH, unknown
Oils.....	Lubricants, hydraulic, assorted	OH, PA, unknown
Packaging Materials.	Shipping, pelstan, boxes, metal strapping, card- board, foam, drums	OH, NY, MI, PA, general, various locations
Paints.....	Duranner polycrom, metal primer, latex, asphalt	
Paper Products.....	Crepe, tissue, wipes	NY
Petroleum Products..	Gas, oil, assorted	OH, local
Pipes.....		OH
Pumps.....	New installation	OH, unknown
Plastic Products....	Contact lenses, blanks, window parts	OH, IN, TX, NC, CT, MS, KY, various locations
Power Transmissions.		OH, unknown
Precious Metal Alloys	Iconnel, CB3, Monel, nickels	OH, PA, various locations
Regulators.....		OH, CO, unknown
Relays.....	Assorted	OH, TX
Rivets.....	Tool	IL, various
Rolling, Drawing- Non-ferrous Metals..	Sheets	PA
Rubber Products.....	Hose, gasket	OH
Sand.....	Glass beads	OH, PA, IL, WI
Scrap Metals.....		OH, NY, IN, general
Sealants.....	Caulking for concrete products, tube type	OH, NY, MN, unknown
Semiconductors.....	Assorted	OH
Skids (iron or steel).....		Unknown
Spacers.....	Aluminum rolled	IN NJ
Spark Coils.....		
Solenoids and Coil		
Solenoids.....	Assorted	OH, NJ, unknown
Stamping Metals.....	Sheets, stainless steel	OH, MI, CO, PA

<u>Supply List</u>	<u>Item Description</u>	<u>Location of Supplier</u>
Steel.....	Structural shapes, plates, strapping for forging	OH, IN, PA, MD
Stone.....	Lime for concrete	OH, PA
Switches.....	Electric, assorted	OH, WI, unknown
Thermocouples.....	Assorted	OH, IL, CO, unknown
Thermoplastic Products.....	Assorted	Unknown
Tires and Inner Tubes.....	Repairs, truck, 12"	OH, AL, local
Transformers.....	Power supply, electric, neon, assorted	OH, MI, IL, IN, local
Tubing.....	Mold fabrication, assorted	OH, TN, unknown
Unions.....	Galvanize	OH, unknown
Valves.....	Brass ball, paint lines	OH, CO, unknown
Wheels.....	12 Zinc	IN, MI
Wire Clamps.....	Assorted	OH
Wire Connectors.....	Nuts, connectors, crimp-on connectors	OH, NJ, CA
Wood Preserving and Finishing.....	Lynseed oil, plywood, lumber, paint	PA, NJ, Western U.S. Canada

5. Supplies not listed above, not locally manufactured

Fused silica clays
Wire, strapping, pallets
Minerals
Aluminum sheet, plate
High press plastic lube
Zinc alloy strips
Anhydrous ammonia, cryogenics
Wood, plywood, fiberboard
Cable
Bulbs, video equipment
Pneumatic staples, nails
Resin thermoplastic
Flex material, awning
Casters, plugs - silkscreen
Moldwashes, lab supplies
Raw materials
Acrylic, plastic

6a. Would you purchase from local suppliers: Yes 73.7; No 5.0;
Didn't answer 21.2

b. Why would you not purchase from local suppliers: Competitive price, quality specifications

MANUFACTURING-RELATED INDUSTRIES

<u>SIC Code</u>	<u>Short Title</u>
2421	Sawmills and planing mills, general
2431	Millwork
2448	Wood pallets and skids
2452	Prefabricated wood buildings
2599	Furniture, fixtures, nec*
2621	Paper mills
2813	Industrial gases
2819	Industrial inorganic chemicals, nec*
2851	Paints and allied products
2875	Fertilizers, mixing only
2899	Chemical preparations, nec*
3069	Fabricated rubber products, nec*
3089	Plastic products, nec*
3211	Flat glass
3231	Glass containers
3253	Ceramic tile
3269	Pottery products, nec*
3272	Concrete products, nec*
3273	Ready-mixed concrete
3295	Minerals, ground or treated
3297	Non-clay refractories
3312	Blast furnaces and steel mills
3321	Gray iron foundries
3322	Malleable iron foundries
3339	Primary Non-ferrous metals, nec*
3354	Aluminum extruded products
3429	Hardware, nec*
3441	Fabricated structural metal
3442	Metal doors, sash, and trim
3444	Sheet metal work
3446	Architectural metal work
3448	Miscellaneous metal work
3452	Bolts, nuts, screws, rivets, and washers
3462	Iron and steel forgings
3465	Automotive stampings
3469	Metal stampings, nec*
3471	Plating and polishing
3479	Metal coating and allied services
3541	Machine tools, metal cutting types
3544	Special dies, tools, jigs, and fixtures
3549	Metalworking machinery, nec*
3559	Special industry machinery, nec*
3565	Packaging machinery
3569	General industrial machinery, nec*
3599	Industrial machinery, nec*
3669	Communications equipment, nec*
3679	Electronic components, nec*
3714	Motor vehicle parts and accessories
3822	Automatic temperature controls
3827	Optical instruments
3829	Measuring and controlling devices
3861	Photographic equipment and supplies
3993	Signs and advertising specialties

POTENTIAL NEW MARKETS/PRODUCTS

The list of input supplies, found below, were indicated by two or more firms as being purchased outside the local area. The number in the parentheses to the right of the item in the Input Supply column represents the number of local firms that manufacture that particular product in the three-county area. Thus, there is a potential for increasing sales of local firms to local firms.

<u>Input Supply</u>	<u>Item Description</u>	<u>Frequency</u>
Abrasives (4)	Grinding wheels, sanding belts	4, 3
Absorbents (1)	Oil-dry	2
Acids	Hydro-sulfuric	2
Adhesives	3M	2
Aluminum (16)	Extrusions	2
Bags	Packaging, trash	2
Bearings (1), bolts, nuts, screws (1)	Assorted	3
Boxes (5)	Cardboard, cardboard cartons	3, 2
Cable, electronic (1)	Assorted	2
Capacitors	Assorted	2
Chains (1)	Lifting	2
Cold rolled steel sheet (2)		2
Cushions or pads	Fabreeka	2
Electronic components	Tubes, assorted	2, 3
Fitting (2)	Pipe	2
Glass products (5)	Sheet glass	3
Gray iron	Casting	2
Hoses (2)	Air hoses	2
Nails and tacks (1)	Nails, staples	3, 2
Sealants	Caulking	2
Solenoids	Assorted	2
Switches	Electric	2