

3

Grundy County

LABOR MARKET ANALYSIS

Contents

3	GRUNDY COUNTY LABOR MARKET ANALYSIS
	Wages by Industry / 4
	Occupations / 5
11	COMMUTING PATTERNS
12	LABOR AVAILABILITY
14	LABOR SHED ANALYSIS
18	INDUSTRY CLUSTER ANALYSIS
	Location Quotients / 19
	Industry Cluster Description / 20
	Labor Market Analysis / 21
	Supply Chain Analysis / 21
23	MANUFACTURING
	Labor Market Analysis / 26
	Supply Chain Analysis / 27
31	TRANSPORTATION, WAREHOUSING, DISTRIBUTION, AND LOGISTICS
	Labor Market Analysis / 34
	Supply Chain Analysis / 35





















Grundy County Labor Market Analysis

TABLE 1. Regional Overview, Grundy County (2016)

GRUNDY COUNTY	
Population	50,800
Jobs	20,100
Available Workforce	29,600
Earnings	\$65,700
COL Adjusted Average Earnings	\$66,800
Unemployed (10/2016)	1,500
GRP	\$2.9B
Exports	\$4.3B
Imports	\$4.6B

WAGES BY INDUSTRY

TABLE 2. Average Annual Wage by Industry, Grundy County (2016)

NAICS	INDUSTRY	AVG. EARNINGS (2016)	
11	Crop and Animal Production	\$32,411	
21	Mining, Quarrying, and Oil and Gas Extraction	\$110,992	
22	Utilities	\$202,746	
23	Construction	\$87,637	
31	Manufacturing	\$97,297	
42	Wholesale Trade	\$71,959	
44	Retail Trade	\$41,257	
48	Transportation and Warehousing	\$56,606	
51	Information	\$64,399	
52	Finance and Insurance	\$64,189	
53	Real Estate and Rental and Leasing	\$45,737	
54	Professional, Scientific, and Technical Services	\$56,582	
55	Management of Companies and Enterprises	\$177,369	
56	Admin. & Support and Waste Mgmt. & Remediation Services	\$46,112	
61	Educational Services	\$33,102	
62	Health Care and Social Assistance	\$57,727	
71	Arts, Entertainment, and Recreation	\$15,874	
72	Accommodation and Food Services	\$14,353	
81	Other Services (except Public Administration)	\$29,866	
90	Government	\$57,748	

OCCUPATIONS

The highest-ranking occupations in Grundy County are highlighted below. Of the top 20 largest occupations, ten have a higher wage than \$15 per hour. Over the five-year period from 2011 to 2016, the largest employing occupations in Grundy County accounted for nearly 1,300 new jobs with retail salespersons, cashiers, laborers and freight stock workers, and stock clerks the fastest growing of all occupations.

FIGURE 1. Highest Ranked Occupations, Grundy County

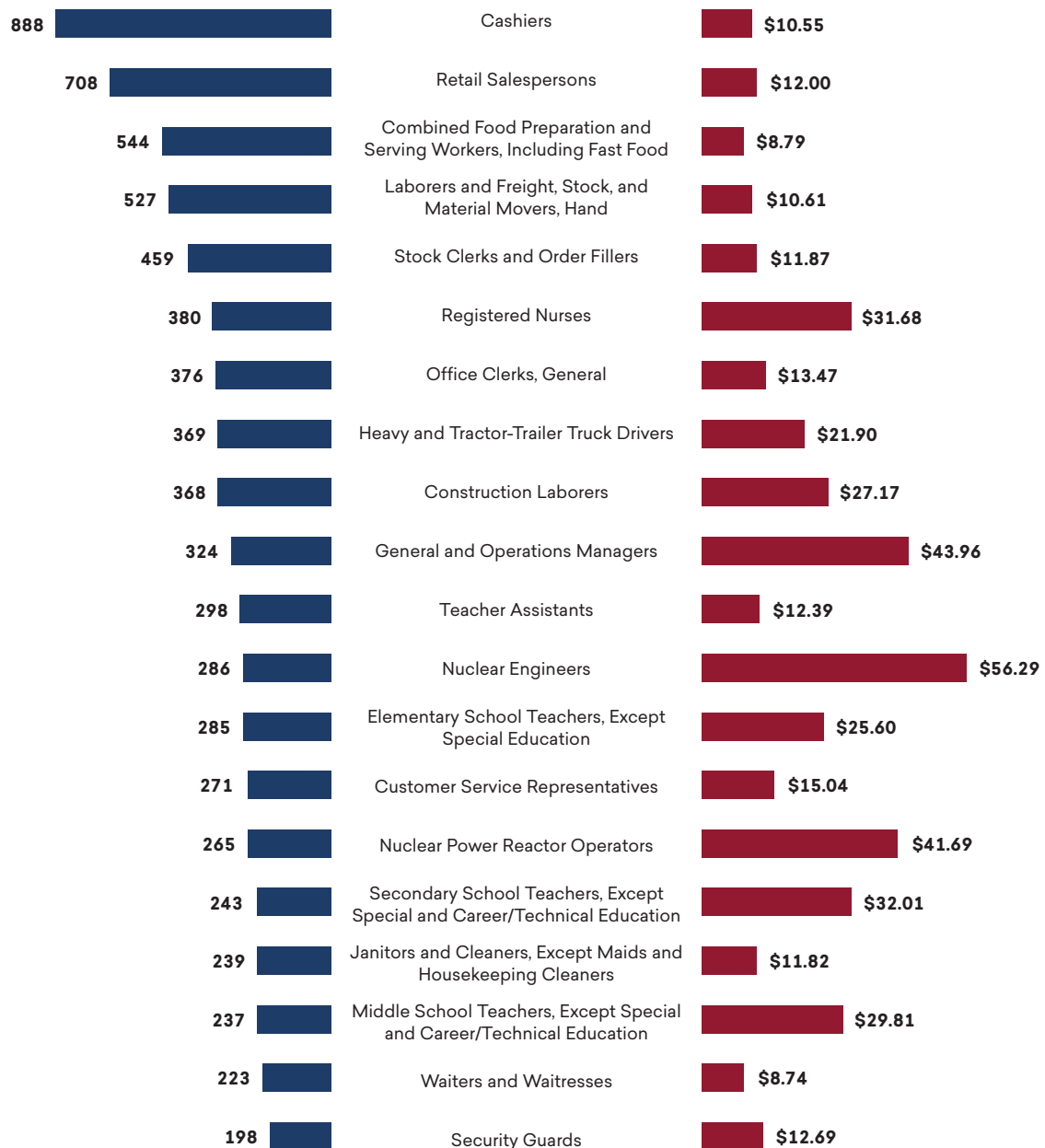


TABLE 3. Top 20 Occupations in Grundy County, Ranked by 2016 Employment

OCCUPATION	2011 JOBS	2016 JOBS	CHANGE IN JOBS (2011-2016)	% CHANGE	2015 MEDIAN HOURLY EARNINGS
Cashiers	704	888	184	26%	\$10.55
Retail Salespersons	401	708	307	77%	\$12.00
Combined Food Preparation and Serving Workers, Including Fast Food	447	544	98	22%	\$8.79
Laborers and Freight, Stock, and Material Movers, Hand	374	527	153	41%	\$10.61
Stock Clerks and Order Fillers	320	459	139	43%	\$11.87
Registered Nurses	344	380	36	10%	\$31.68
Office Clerks, General	308	376	68	22%	\$13.47
Heavy and Tractor-Trailer Truck Drivers	313	369	56	18%	\$21.90
Construction Laborers	350	368	18	5%	\$27.17
General and Operations Managers	253	324	70	28%	\$43.96
Teacher Assistants	281	298	16	6%	\$12.39
Nuclear Engineers	297	286	-11	-4%	\$56.29
Elementary School Teachers, Except Special Education	276	285	9	3%	\$25.60
Customer Service Representatives	193	271	78	40%	\$15.04
Nuclear Power Reactor Operators	263	265	1	0%	\$41.69
Secondary School Teachers, Except Special and Career/Technical Education	236	243	7	3%	\$32.01
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	201	239	38	19%	\$11.82
Middle School Teachers, Except Special and Career/Technical Education	225	237	12	5%	\$29.81
Waiters and Waitresses	209	223	15	7%	\$8.74
Security Guards	193	198	5	3%	\$12.69

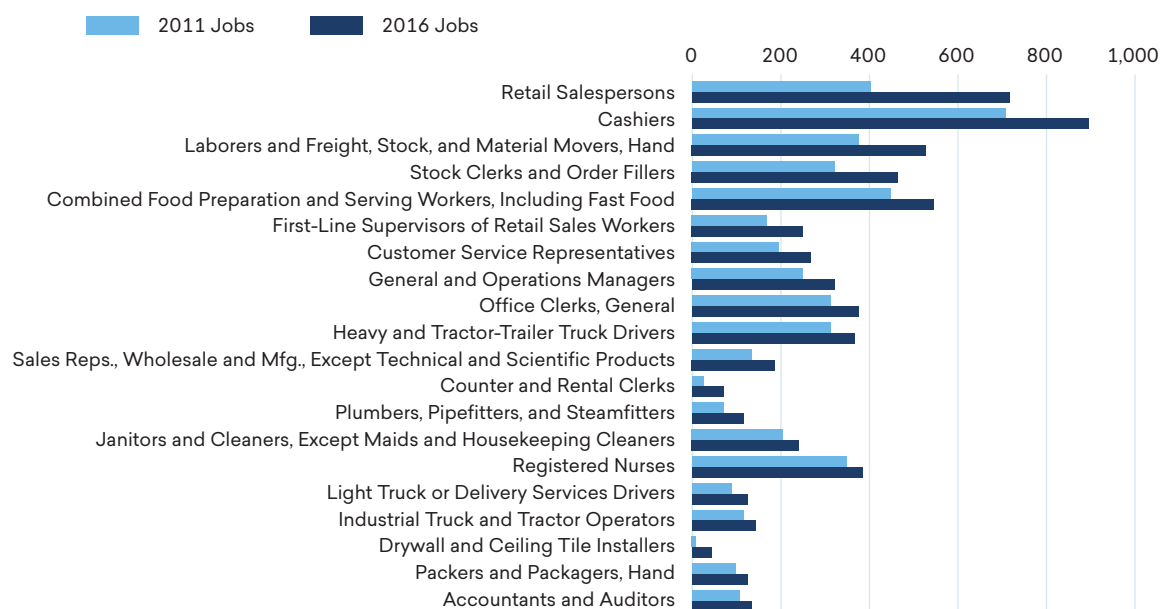
FIGURE 2. Fastest Growing Occupations, Grundy County (2011-2016)

TABLE 4. Top 20 Fastest Growing Occupations in Grundy County, Ranked by Job Growth

OCCUPATION	2011 JOBS	2016 JOBS	CHANGE IN JOBS (2011- 2016)	% CHANGE	2015 MEDIAN HOURLY EARNINGS
Retail Salespersons	401	708	307	77%	\$12.00
Cashiers	704	888	184	26%	\$10.55
Laborers and Freight, Stock, and Material Movers, Hand	374	527	153	41%	\$10.61
Stock Clerks and Order Fillers	320	459	139	43%	\$11.87
Combined Food Preparation and Serving Workers, Including Fast Food	447	544	98	22%	\$8.79
First-Line Supervisors of Retail Sales Workers	169	251	82	49%	\$20.87
Customer Service Representatives	193	271	78	40%	\$15.04
General and Operations Managers	253	324	70	28%	\$43.96
Office Clerks, General	308	376	68	22%	\$13.47
Heavy and Tractor-Trailer Truck Drivers	313	369	56	18%	\$21.90
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	131	183	53	40%	\$27.55
Counter and Rental Clerks	28	75	47	166%	\$10.21
Plumbers, Pipefitters, and Steamfitters	70	114	45	64%	\$35.80
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	201	239	38	19%	\$11.82
Registered Nurses	344	380	36	10%	\$31.68
Light Truck or Delivery Services Drivers	89	123	34	39%	\$14.10
Industrial Truck and Tractor Operators	113	146	33	29%	\$14.39
Drywall and Ceiling Tile Installers	12	41	29	240%	\$24.67
Packers and Packagers, Hand	101	129	28	27%	\$10.02
Accountants and Auditors	108	135	27	24%	\$28.40

The table below provides a breakdown of number of residents by educational attainment level within each zip code in Grundy County for the population age 25 years and over. The communities of Minooka and Morris have the largest share of this population earning a bachelor's degree or higher, 27% and 23%, respectively.

TABLE 5. Educational Attainment Level by Zip Code for the Population age 25 years and over

	HIGH SCHOOL DIPLOMA, EQUIVALENT, OR LOWER	SOME COLLEGE OR ASSOCIATE'S DEGREE	BACHELOR'S DEGREE OR HIGHER	TOTAL
Grundy County	14,829	11,477	7,128	33,434
Braceville	662	377	134	1,172
Coal City	2,949	2,134	946	6,028
Gardner	1,129	630	229	1,988
Kinsman	66	57	26	148
Mazon	543	465	216	1,224
Minooka	2,980	3,079	2,288	8,346
Morris	6,288	4,555	3,201	14,044
South Wilmington	13	7	3	23
Verona	200	172	87	459

As shown in Table 6 on the next page, the entry-level requirement for many positions is a high school diploma or equivalent. (Note that these educational requirements reflect national averages and may differ from specific requirements of Grundy County employers.) The top occupations requiring a bachelor's degree include managers, teachers, and nuclear engineers.

The following table and subsequent graphs shows the average annual openings for the top occupations within Grundy County at each education level required for entry-level employment.

TABLE 6. Openings by Typical Level of Education, Grundy County (2016)

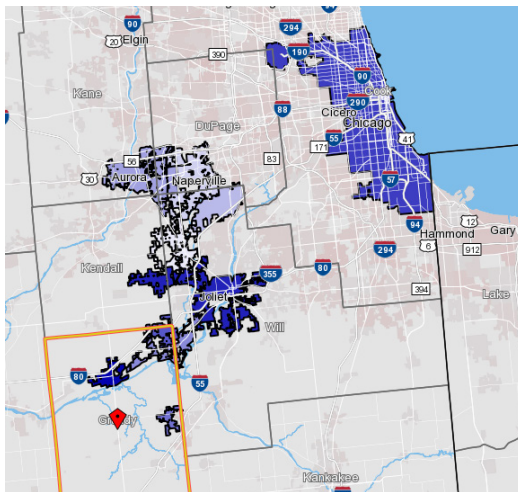
SOC	OCCUPATION DESCRIPTION	AVERAGE ANNUAL OPENINGS			EMPLOYMENT 2016		
		REPLACEMENT JOBS	NEW JOBS	TOTAL OPENINGS	TOTAL JOBS	% OF TOTAL JOBS	MEDIAN HOURLY WAGE
LESS THAN HIGH SCHOOL							
41-2031	Retail Salespersons	25	45	69	708	3.5%	\$12.00
41-2011	Cashiers	38	28	66	888	4.4%	\$10.55
53-7062	Laborers & Freight, Stock, & Material Movers, H&	16	22	38	527	2.6%	\$10.61
35-3021	Combined Food Preparation & Serving Workers, Including Fast Food	18	16	33	544	2.7%	\$8.79
43-5081	Stock Clerks & Order Fillers	15	18	33	459	2.3%	\$11.87
HIGH SCHOOL DIPLOMA OR EQUIVALENT							
43-9061	Office Clerks, General	8	11	19	376	1.9%	\$13.47
43-4051	Customer Service Representatives	7	12	18	271	1.4%	\$15.04
41-1011	First-Line Supervisors of Retail Sales Workers	6	11	17	251	1.3%	\$20.87
41-4012	Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	4	9	13	183	0.9%	\$27.55
51-8011	Nuclear Power Reactor Operators	9	4	13	265	1.3%	\$41.69
SOME COLLEGE, NO DEGREE							
25-9041	Teacher Assistants	7	5	12	298	1.5%	\$12.39
15-1151	Computer User Support Specialists	1	1	2	41	0.2%	\$22.58
49-2011	Computer, Automated Teller, & Office Machine Repairers	0	0	0	8	0.0%	\$15.74
49-9081	Wind Turbine Service Technicians	0	0	0	1	0.0%	\$20.88
27-2011	Actors	0	0	0	3	0.0%	\$16.54
POSTSECONDARY NON-DEGREE AWARD							
53-3032	Heavy & Tractor-Trailer Truck Drivers	6	15	22	369	1.8%	\$21.90
31-1014	Nursing Assistants	4	4	8	172	0.9%	\$11.04
39-5012	Hairdressers, Hairstylists, & Cosmetologists	3	1	4	97	0.5%	\$10.28
51-1011	First-Line Supervisors of Production & Operating Workers	2	2	4	113	0.6%	\$27.42

SOC	OCCUPATION DESCRIPTION	AVERAGE ANNUAL OPENINGS			EMPLOYMENT 2016		
		REPLACEMENT JOBS	NEW JOBS	TOTAL OPENINGS	TOTAL JOBS	% OF TOTAL JOBS	MEDIAN HOURLY WAGE
49-9021	Heating, Air Conditioning, & Refrigeration Mechanics & Installers	1	3	3	46	0.2%	\$22.68
ASSOCIATE'S DEGREE							
29-1141	Registered Nurses	9	6	15	380	1.9%	\$31.68
19-4051	Nuclear Technicians	5	1	6	123	0.6%	\$33.98
25-2011	Preschool Teachers, Except Special Education	3	2	5	87	0.4%	\$12.60
31-2021	Physical Therapist Assistants	0	1	1	11	0.1%	\$24.48
39-4031	Morticians, Undertakers, & Funeral Directors	0	1	1	9	0.0%	\$24.92
BACHELOR'S DEGREE							
11-1021	General & Operations Managers	8	12	20	324	1.6%	\$43.96
25-2021	Elementary School Teachers, Except Special Education	6	5	11	285	1.4%	\$25.60
25-2031	Secondary School Teachers, Except Special & Career/Technical Education	6	4	10	243	1.2%	\$32.01
17-2161	Nuclear Engineers	7	1	9	286	1.4%	\$56.29
25-2022	Middle School Teachers, Except Special & Career/Technical Education	5	4	9	237	1.2%	\$29.81
MASTER'S DEGREE							
11-9032	Education Administrators, Elementary & Secondary School	2	1	3	65	0.3%	\$47.41
21-1012	Educational, Guidance, School, & Vocational Counselors	1	1	1	35	0.2%	\$24.19
29-1127	Speech-Language Pathologists	1	1	1	26	0.1%	\$33.36
29-1122	Occupational Therapists	0	0	1	15	0.1%	\$34.70
29-1171	Nurse Practitioners	0	0	1	13	0.1%	\$42.45
DOCTORAL OR PROFESSIONAL DEGREE							
29-1069	Physicians & Surgeons, All Other	2	1	2	59	0.3%	\$76.88
29-1123	Physical Therapists	1	1	2	30	0.2%	\$37.86
23-1011	Lawyers	1	1	2	58	0.3%	\$43.19
29-1051	Pharmacists	1	0	1	39	0.2%	\$52.02
29-1041	Optometrists	1	0	1	19	0.1%	\$49.18

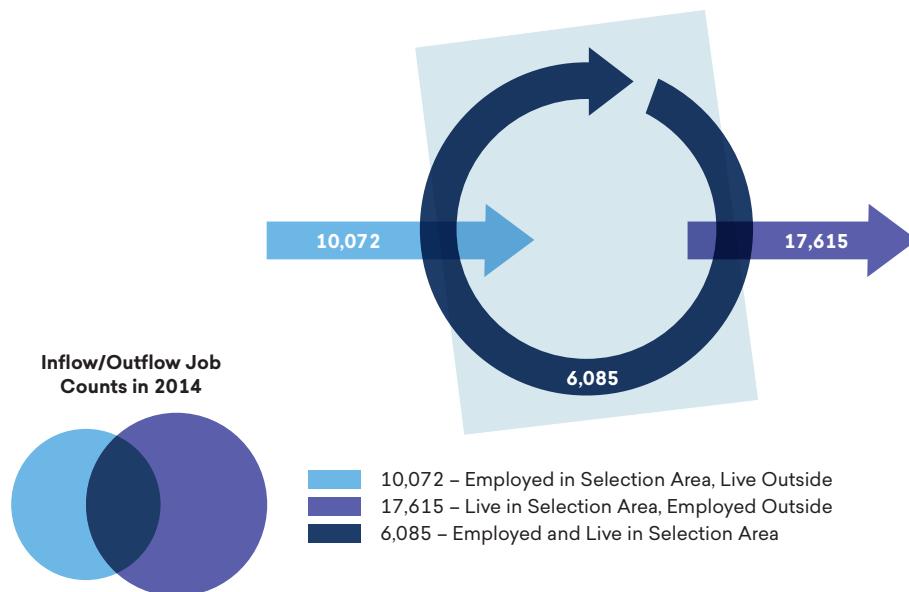
Commuting Patterns

Commuting data show a powerful view of the workforce and where labor supply is located. Near three-quarters of Grundy County residents commute outside the county for work. The map below shows the cities where Grundy County residents work and are listed in Table 7 below.

TABLE 7. Where Grundy County Residents Work (2014)



	2014	
	COUNT	SHARE
Morris city, IL	2,956	12.50%
Joliet city, IL	2,222	9.40%
Chicago city, IL	1,931	8.10%
Minooka village, IL	802	3.40%
Coal City village, IL	743	3.10%
Channahon village, IL	522	2.20%
Aurora city, IL	403	1.70%
Bolingbrook village, IL	391	1.60%
Naperville city, IL	390	1.60%
Plainfield village, IL	292	1.20%
All Other Locations	13,048	55.10%



Labor Availability

TABLE 8. Top 25 Occupations held by Residents of Grundy County, 2016

SOC	DESCRIPTION	JOBS	AVAILABLE WORKFORCE	NET COMMUTERS	ANNUAL OPENINGS	MEDIAN HOURLY EARNINGS
41-2031	Retail Salespersons	708	923	(215)	48	\$12.00
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	527	816	(289)	34	\$10.61
41-2011	Cashiers	888	761	127	57	\$10.55
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	544	676	(132)	42	\$8.79
43-9061	Office Clerks, General	376	669	(293)	15	\$13.47
43-5081	Stock Clerks and Order Fillers	459	532	(73)	28	\$11.87
29-1141	Registered Nurses	380	530	(150)	25	\$31.68
53-3032	Heavy and Tractor-Trailer Truck Drivers	369	523	(154)	17	\$21.90
11-1021	General and Operations Managers	324	518	(194)	16	\$43.96
43-4051	Customer Service Representatives	271	485	(214)	13	\$15.04
47-2061	Construction Laborers	368	425	(57)	27	\$27.17
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	239	401	(162)	9	\$11.82
35-3031	Waiters and Waitresses	223	389	(166)	17	\$8.74
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	202	386	(184)	6	\$15.43
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	183	339	(156)	12	\$27.55
25-9041	Teacher Assistants	298	305	(7)	16	\$12.39
25-2021	Elementary School Teachers, Except Special Education	285	293	(8)	17	\$25.60
31-1014	Nursing Assistants	172	286	(114)	12	\$11.04
43-3031	Bookkeeping, Accounting, and Auditing Clerks	161	272	(111)	4	\$17.46
49-9071	Maintenance and Repair Workers, General	160	272	(112)	8	\$18.35
41-1011	First-Line Supervisors of Retail Sales Workers	251	247	4	14	\$20.87
33-9032	Security Guards	198	242	(44)	15	\$12.69
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	243	237	6	15	\$32.01
47-2031	Carpenters	156	232	(76)	7	\$28.70
13-1199	Business Operations Specialists, All Other	123	225	(102)	4	\$26.83

To analyze the current skills and occupations of the people residing within an area, we used data from the Census LEHD program coupled with Census' new Longitudinal Origin-Destination Employment Statistics (LODES) program and is then matched with occupational data using staffing patterns.

Available workforce data is based on where workers live in comparison to where they work. Table 8 provides a breakdown of occupations filled by residents of Grundy County. Using O*Net's standardized scale, Table 9 provides a list of the top skills of Grundy County residents based on the top 25 occupations.

TABLE 9. Top Skills of Residents, Grundy County

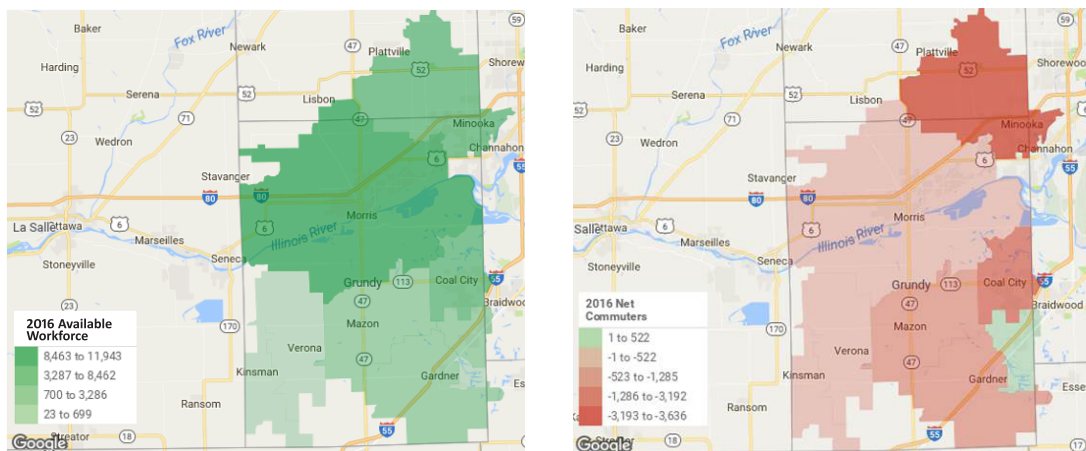
SKILL	SCALED VALUE AVERAGE*
Clerical	72
Building and Construction	66
Education and Training	64
Personnel and Human Resources	63
Therapy and Counseling	63
Administration and Management	63
Psychology	60
Customer and Personal Service	60
Design	60
Computers and Electronics	59
Geography	57
Mechanical	55
Sales and Marketing	54
Economics and Accounting	54
Mathematics	48
Public Safety and Security	48
Transportation	47
English Language	46
Food Production	44

Labor Shed Analysis

Available workforce data is based on where workers live in comparison to where they work. Net commuters are the minimum number of workers who commute in or out of the region to satisfy the regional numbers of jobs held. A positive number (shown in GREEN in the figure below) describes commuters entering a region, while a negative number (shown in RED) describes commuters leaving a region.

	JOBS	AVAILABLE WORKFORCE	NET COMMUTERS
Kankakee	45,972	51,971	-5,999
Grundy	20,076	29,587	-9,511
Livingston	14,950	17,346	-2,396

FIGURE 3. Net Commuters for all Occupations Residing in Grundy County, by Zip Code (2016)



Net commuter data allow economic development professionals to understand which occupations and skills are leaving the area or vice versa. The top 25 largest occupations in Grundy County are still losing about 2,300 residents to businesses outside the area.

The top occupations leaving the area for work elsewhere are office clerks, laborers and freight workers, retail salespersons, customer service representatives, and general and operations managers. Businesses in the area may have difficulty recruiting the more highly skilled workers amongst this group, such as managers.

The jobs most people are commuting into the area for are nuclear engineers, cashiers, nuclear power reactor operators, and nuclear technicians.

FIGURE 4. Top 25 Largest Occupations in Grundy County, Net Commuters (2016)

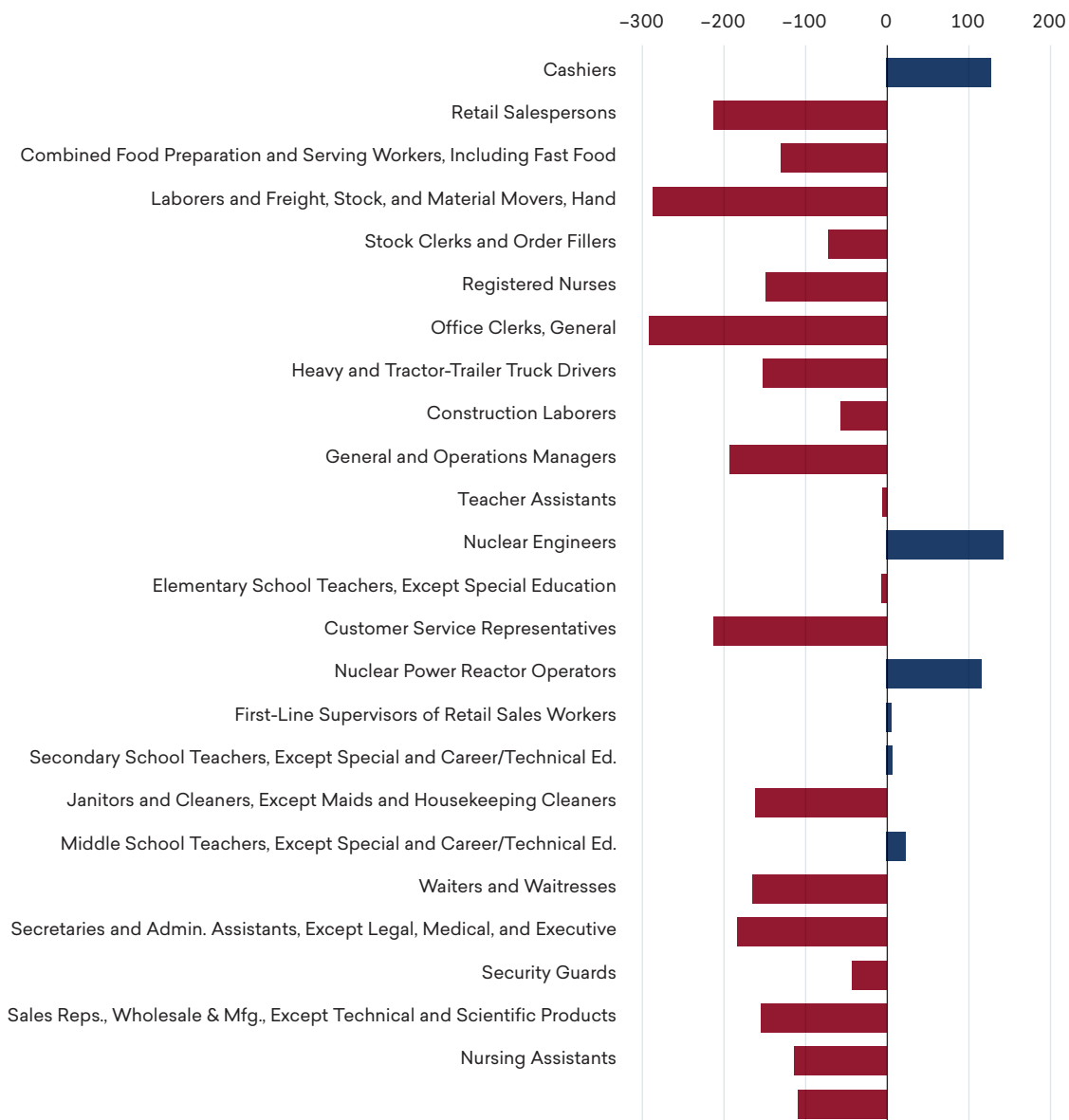


TABLE 10. Net commuters by Occupation, Grundy County (2016)

SOC	DESCRIPTION	2016 JOBS	2016 AVAILABLE WORKFORCE	2016 NET COMMUTERS	ANNUAL OPENINGS	MEDIAN HOURLY EARNINGS	2016 - 2026 CHANGE
	All Occupations	20,076	29,587	(9,542)	1,042	\$21.69	4,470
43-9061	Office Clerks, General	376	669	(293)	19	\$13.47	95
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	527	816	(289)	39	\$10.61	192
41-2031	Retail Salespersons	708	923	(215)	71	\$12.00	379
43-4051	Customer Service Representatives	271	485	(214)	18	\$15.04	101
11-1021	General and Operations Managers	324	518	(194)	20	\$43.96	103
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	202	386	(184)	7	\$15.43	46
35-3031	Waiters and Waitresses	223	389	(166)	13	\$8.74	16
25-1099	Postsecondary Teachers	<10	172	(163)	n/a	n/a	n/a
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	239	401	(162)	8	\$11.82	30
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	183	339	(156)	13	\$27.55	85
53-3032	Heavy and Tractor-Trailer Truck Drivers	369	523	(154)	22	\$21.90	137
29-1141	Registered Nurses	380	530	(150)	15	\$31.68	55
39-9021	Personal Care Aides	62	206	(144)	4	\$10.31	33
47-2111	Electricians	77	215	(138)	1	\$33.62	(1)
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	544	676	(132)	34	\$8.79	134
31-1014	Nursing Assistants	172	286	(114)	8	\$11.04	37
49-9071	Maintenance and Repair Workers, General	160	272	(112)	9	\$18.35	42
43-3031	Bookkeeping, Accounting, and Auditing Clerks	161	272	(111)	5	\$17.46	30
13-1199	Business Operations Specialists, All Other	123	225	(102)	4	\$26.83	28
51-9199	Production Workers, All Other	66	159	(93)	2	\$12.79	9
51-9111	Packaging and Filling Machine Operators and Tenders	46	136	(90)	3	\$11.28	14

SOC	DESCRIPTION	2016 JOBS	2016 AVAILABLE WORKFORCE	2016 NET COMMUTERS	ANNUAL OPENINGS	MEDIAN HOURLY EARNINGS	2016 - 2026 CHANGE
51-2092	Team Assemblers	77	163	(86)	4	\$12.16	17
37-2012	Maids and Housekeeping Cleaners	82	167	(85)	3	\$10.32	3
31-1011	Home Health Aides	59	143	(84)	5	\$9.78	34
53-3033	Light Truck or Delivery Services Drivers	123	204	(81)	7	\$14.10	46
13-2011	Accountants and Auditors	135	215	(80)	9	\$28.40	44
51-9011	Chemical Equipment Operators and Tenders	42	31	11	1	\$21.92	(2)
47-2081	Drywall and Ceiling Tile Installers	41	28	13	3	\$24.67	27
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	39	21	18	2	\$13.60	8
25-2022	Middle School Teachers, Except Special and Career/Technical Education	237	215	22	9	\$29.81	33
19-4051	Nuclear Technicians	123	84	39	6	\$33.98	8
51-8011	Nuclear Power Reactor Operators	265	150	115	13	\$41.69	30
41-2011	Cashiers	888	761	127	67	\$10.55	229
17-2161	Nuclear Engineers	286	143	143	9	\$56.29	12
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	280	244	36	5	\$11.39	(146)
25-1099	Postsecondary Teachers	679	636	43	21	\$27.27	81
29-1141	Registered Nurses	1,324	1,278	46	48	\$30.61	149
29-2041	Emergency Medical Technicians and Paramedics	287	239	48	9	\$13.31	34
29-2011	Medical and Clinical Laboratory Technologists	183	135	48	5	\$28.87	3
31-1014	Nursing Assistants	983	926	57	22	\$11.95	(28)
29-2034	Radiologic Technologists	221	164	57	4	\$25.81	(3)
21-1093	Social and Human Service Assistants	293	232	61	7	\$22.49	13
29-2053	Psychiatric Technicians	235	164	71	4	\$18.31	17
51-9199	Production Workers, All Other	730	642	88	20	\$14.87	43
25-3098	Substitute Teachers	431	325	106	10	\$13.12	18
53-3032	Heavy and Tractor-Trailer Truck Drivers	1,125	954	171	54	\$17.56	300

Industry Cluster Analysis

The LWA 11 region can achieve economic success and growth by capitalizing on economic strengths, here categorized into similar industries called clusters. Industry cluster analysis highlights the strengths and weaknesses of each of those industries and shows where focus needs to be placed to encourage growth.

Each industry cluster is comprised of key industries that have a high level of economic integration and interdependency. When analyzing these clusters, it is important to compare their regional concentration with the national average. This comparison reveals the industry cluster's [relative] concentration in the region, measured by location quotient (LQ; shows the industry's share of an area's employment relative to the national average—see more in the following section). Industries with high concentration (or LQ) are said to be specialized in a region.

In the LWA 11 region particularly, unique factors within the local economy allow each of the following private-sector clusters to have a strong concentration:

- Manufacturing
- Transportation, Warehousing, Distribution and Logistics

These clusters were chosen by partners in the LWA 11 region. Each cluster represents areas for growth and diversification for the LWA 11 economy as well as opportunities for regional businesses to diversify their market base. Table 11 summarizes projected employment growth for each cluster specific to Grundy County and corresponding concentration (measured by location quotient, LQ).

TABLE 11. Grundy County Industry Cluster Performance Trends

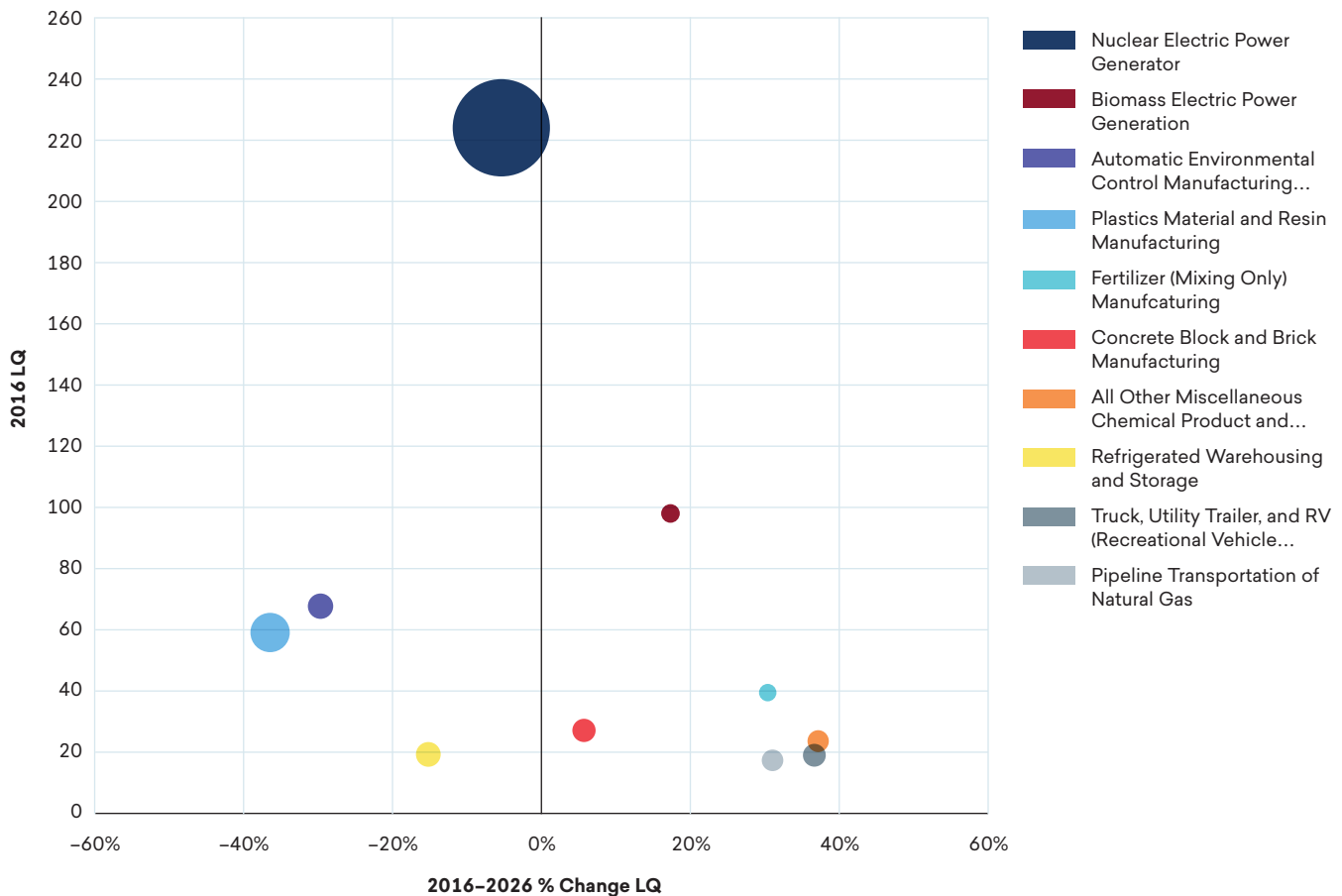
INDUSTRY CLUSTER	EMPLOYMENT		GROWTH		LOCATION QUOTIENT		CURRENT AVERAGE EARNINGS
	2011	2016	2011-2016 CHANGE	2011-2016 % CHANGE	2011	2016	
Manufacturing	1,370	1,365	(5)	(0%)	0.96	0.85	\$97,297
Transportation, Warehousing, Distribution, and Logistics	1,422	1,863	441	31%	1.21	1.32	\$64,282

LOCATION QUOTIENTS

Location Quotients are useful for studying the composition of jobs in an area relative to the national concentration. In other words, a location quotient shows the industry's share of an area's employment relative to the national average. For example, a location quotient of 2.0 indicates that an industry accounts for twice the share of employment in the area than it does nationally, and a location quotient of 0.5 indicates that the area's share of employment in the industry is only half the national share. As illustrated in Figure 5, nuclear electric power generation has an extremely high concentration—224.4 LQ. This means that for the size of the economy of Grundy County, nuclear electric power generation is more than 224 times more concentrated than would be expected in another economy of similar size.

Figure 5 shows the location quotient for the top 10 highest ranked industries in Grundy County, graphed by 2016 LQ and projected LQ growth. The industries located in the upper right quadrant are emerging and can be seen as an economic development opportunity for this area.

FIGURE 5. Top 10 Highest Industry Location Quotient*



* Bubble size represents 2016 jobs in each region

INDUSTRY CLUSTER DESCRIPTION

The following sections profile the Manufacturing and Transportation, Warehousing, Distribution, and Logistics clusters in Grundy County. Each profile has a description of the industry cluster, including revenues and employment. The profiles each also have a labor and a supply chain analysis. The labor gap analysis examines the supply (the availability of qualified applicants) and the demand (jobs needed to be filled by employers) for labor by using labor market information to analyze recent employment trends, the occupational composition by industry, and the education pipeline of the available workforce. The supply chain analysis shows the demand for an industry cluster's goods and services coupled with information on the cluster supply chain (the purchases made by companies in the cluster).

The first figure shown in each cluster description is a map of the county's region that shows cluster jobs by zip code. The next graphic is a table that highlights employment trends for the cluster, illustrating which cluster sectors have been hiring, which sectors have been shedding jobs, and generally where cluster employment is located in the area. The last figure in each cluster description is a chart showing year-over-year cluster employment changes compared with state and national trends.

Data is used to provide a descriptive component of what has happened, what is currently happening, and what is projected to happen within any given industry cluster, industry sector, or occupation. This data can also be evaluated from varying perspectives to provide a larger context of economic understanding. For example, geographically specific data can better displace regional effects when compared with a larger geography (e.g., state or nation) and indicate whether a region may have a comparative advantage in any particular sector.

Each of the following metrics provided for the labor market gap analysis or supply chain analysis offers a different perspective of industry performance, the regional fit, or the economic ripple effects of cluster activity.

The tables for each industry cluster contain the following data:

- Historical job growth and current size
- Future job growth projection
- Industry concentration (location quotient)
- Job multiplier effects
- Industry average wage
- Establishments

Historical Job Growth and Current Size measures the current employment and past employment by industry sector. It also measures whether an industry has been growing or declining.

Future Job Growth Projection incorporates the historical growth and performance of an industry and as well as factoring in the growth expectations of an industry at a larger geographic scale (i.e., state, nation, or even global expectations). Industry projection rates are based on past trends carried forward and published projections from state and federal sources.

Industry Concentration (Location Quotient) compares the concentration of employment an industry in a region with employment in the same industry for similar regions across the nation. The national average is set to 1.0. As explained in the Location Quotient section above, any industry with a concentration greater than 1.0 is considered to have high concentration.

Job Multiplier Effects indicates the importance of a job to the regional economy. For example, if a single job has a multiplier of 3, then this one job supports two other jobs in the regional economy due to an indirect or induced effect.

Industry Average Wage is based on industry staffing patterns and the average occupational wage associated with that staffing pattern. The average wage indicates the quality of jobs in a region.

Establishments provides the current and historic number of establishments in the region. A change in establishments can be a factor in determining the stage of an industry. For example, if the number of establishments declined while job numbers themselves remained strong, the industry might be consolidating.

LABOR MARKET ANALYSIS

One table is provided for each labor market analysis section for each cluster. It lists the top 25 occupations for the sector, the wages, the number of people employed in each occupation within the cluster, and the total number employed in each occupation in all industries within the county. This provides an understanding of the share of employment the cluster has within the county and LWA 11 region, and an assessment of the competition the cluster faces from other companies within the region for finding qualified employees.

SUPPLY CHAIN ANALYSIS

Three distinct topics (quantified in three tables) are discussed for each supply chain analysis. These analyses evaluate each cluster's economic performance in the county to provide insights into regional strengths, weaknesses, and opportunities for growth.

The first table shows the total demand for each industry sector within a given cluster. This is the demand by Grundy County residents and businesses for the products and/or services produced by that industry sector—regardless of whether the products or services are actually produced within the county. Furthermore, the table shows how much of local demand is met by companies within the region and how much of local demand is met by importing from other regions. This comparison helps determine opportunities to expand local businesses' shares of local demand. For example, if only 10% of regional demand for a product is being met by regional companies, this table will quantify the value of the remaining 90% of demand that could be met by regional companies. (Note that the data for goods or services imported into the region does not include foreign imports.)

The second table shows the supply chain for each industry cluster. This table shows the purchases made by Grundy County companies in the industry cluster according to product or service. These purchases are used to run a company and include everything from services to consumable supplies to capital investment in manufacturing equipment. The table also shows how much of the cluster's supply chain need is met by the companies inside the county and how much is imported.

The final table shows total cluster sales, both inside and outside the county. This is useful for understanding how much revenue a cluster is bringing into the area through its sales of goods or services outside of the region. Industries that predominately export their products bring new money into the economy, which in turn drives other regional businesses.

Manufacturing

Manufacturing industries typically offer competitive wages, contribute handsomely to a region's gross regional product (GRP), and offer career pathways for workers with a wide variety of education and skills, including many middle-skill jobs.

Figure 6 shows the 2016 job distribution for the manufacturing cluster throughout Grundy County with the minimum number of manufacturing workers who commute in or out of the region to satisfy manufacturing jobs held. A positive number (shown in GREEN in the figure below) describes commuters entering a region, while a negative number (shown in RED) describes commuters leaving a region.

The City of Morris had the largest number of manufacturing jobs in 2016 (1,000), followed by the City of Minooka at 200. Most of the residents working in production occupations live in Morris, Minooka, and Coal City. There are approximately 6,700 classified production occupations jobs in Grundy County (although there are only 1,365 manufacturing jobs) and 9,900 Grundy County residents who are classified under a production occupation. This means that roughly 3,200 Grundy County residents commute elsewhere to find work because there are not enough jobs in their field within the county.

FIGURE 6. Manufacturing Cluster Job Distribution and Net Commuters for Grundy County Residents working in Manufacturing Occupations (2016)

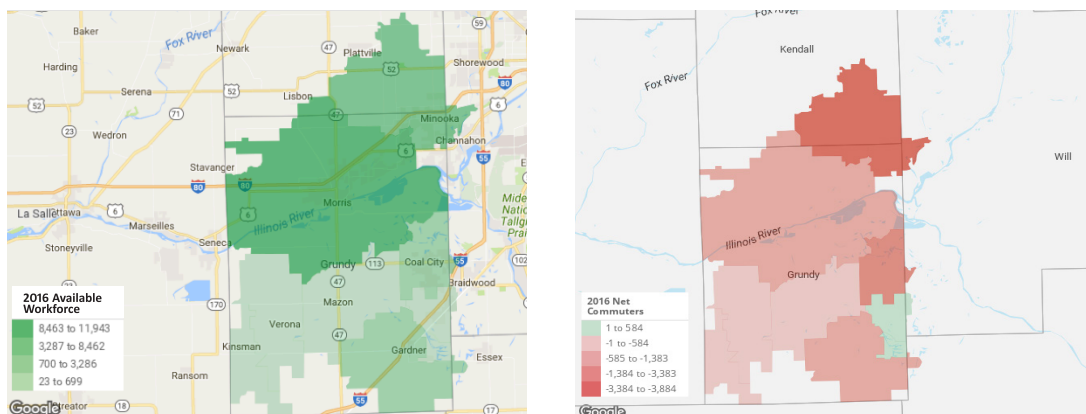


Table 12 below provides an overview for each of the individual industry sectors that comprise the manufacturing cluster in Grundy County. Included are historic, current, and projected employment; historic and projected compound annual growth rate; historic and current employment concentration (LQ); average earnings; total sales; gross regional product (GRP); historic and current payroll establishments (businesses); and jobs multipliers (multiplier effect). The table is sorted largest to smallest by 2016 employment.

TABLE 12. Manufacturing Sector, Grundy County

NAICS	INDUSTRY SECTOR	EMPLOYMENT			COMPOUND ANNUAL GROWTH RATE		CONCENTRATION (LQ)		AVERAGE EARNINGS	TOTAL SALES	GROSS REGIONAL PRODUCT (GRP)	PAYROLLED ESTABLISHMENTS		JOBS MULTIPLIER
		2011	2016	2021	2011-2016	2016-2021	2011	2016	2016	2016	2016	2011	2016	2016
325211	Plastics Material and Resin Manufacturing	483	441	373	-1.8%	-3.3%	74.59	59.96	\$149,931	\$930,058,796	\$205,302,987	3	4	1.80
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	137	162	145	3.4%	-2.1%	63.23	68.57	\$71,912	\$21,626,743	\$14,187,911	2	2	1.08
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	48	117	169	19.2%	7.8%	11.23	24.62	\$74,084	\$47,973,842	\$16,578,776	1	1	1.21
327320	Ready-Mix Concrete Manufacturing	44	93	118	16.0%	5.0%	4.48	7.73	\$55,425	\$23,694,249	\$6,399,881	2	1	1.14
327390	Other Concrete Product Manufacturing	22	83	114	31.1%	6.5%	3.89	11.94	\$95,241	\$27,559,606	\$10,817,356	1	1	1.23
332996	Fabricated Pipe and Pipe Fitting Manufacturing	42	74	97	11.9%	5.5%	11.61	16.22	\$106,977	\$30,986,331	\$11,375,910	1	1	1.27
327331	Concrete Block and Brick Manufacturing	90	70	88	-4.7%	4.5%	45.87	28.34	\$94,515	\$27,918,068	\$11,720,417	1	1	1.25
325314	Fertilizer (Mixing Only) Manufacturing	0	42	63	---	8.1%	0.00	40.65	\$50,024	\$21,056,776	\$6,308,856	0	1	1.26
326299	All Other Rubber Product Manufacturing	29	41	31	6.9%	-5.4%	9.89	12.60	\$46,884	\$9,079,876	\$2,820,436	1	1	1.15
332710	Machine Shops	17	36	51	16.2%	6.8%	0.52	1.00	\$66,644	\$6,125,944	\$2,834,529	3	3	1.11
336390	Other Motor Vehicle Parts Manufacturing	<10	33	49	---	7.9%	0.02	1.69	\$93,459	\$22,503,597	\$4,440,916	1	1	1.33
334419	Other Electronic Component Manufacturing	50	17	<10	-19.3%	---	6.03	2.07	\$48,234	\$1,966,499	\$1,232,689	1	1	1.07
332216	Saw Blade and Handtool Manufacturing	<10	15	21	---	7.7%	1.31	3.98	\$53,378	\$2,559,284	\$1,083,516	1	1	1.11
323113	Commercial Screen Printing	<10	13	18	---	7.0%	0.93	1.27	\$28,027	\$1,151,190	\$473,348	2	1	1.07
327992	Ground or Treated Mineral and Earth Manufacturing	<10	10	14	---	6.7%	3.64	11.99	\$101,153	\$7,555,664	\$2,844,030	1	1	1.52
	Totals for Manufacturing in Grundy County	1,370	1,365	1,475	-0.1%	1.6%	0.96	0.85	\$97,297	\$1,232,229,809	\$313,092,494	60	58	N/A
	Totals for Manufacturing in LWA 11 Region	8,414	9,352	10,215	2.1%	1.8%	1.34	1.45	\$81,069	\$5,883,073,964	\$1,745,760,440	238	236	N/A
	Totals for All Grundy County Industries	17,443	20,076	22,841	2.9%	2.6%	1.92	1.83	\$65,723	\$5,292,932,778	\$2,658,835,517	1,240	1,249	N/A

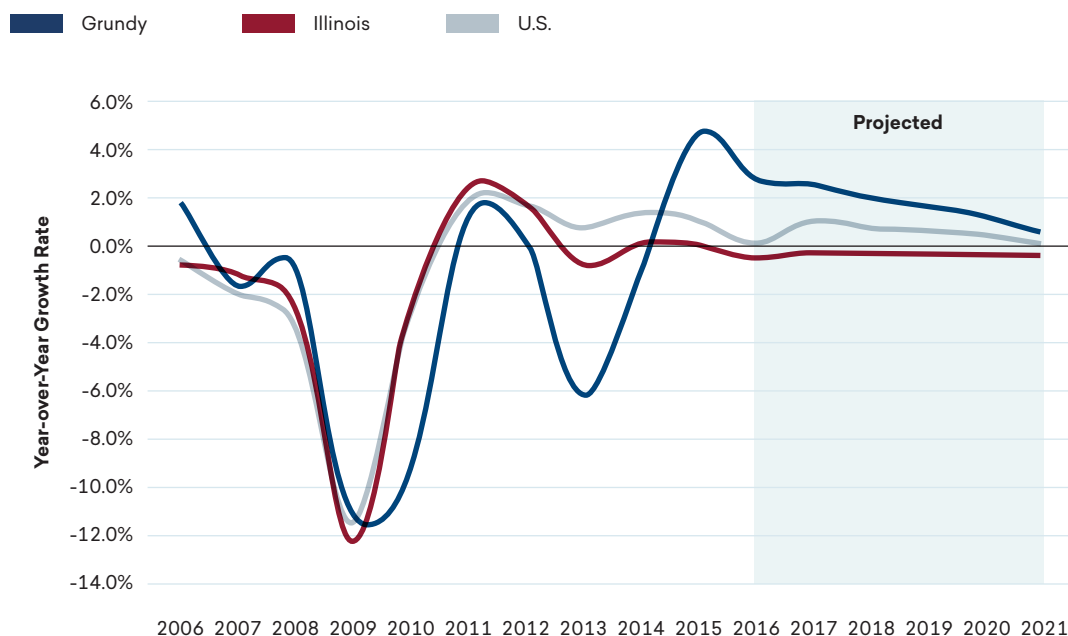
The manufacturing cluster accounted for 1,365 jobs and 58 establishments in 2016, barely 7% of the total employment and less than 5% of total establishments in Grundy County. Employment in Grundy County's manufacturing cluster accounts for 15% of the total LWA 11 region. Overall employment for this cluster is less concentrated in Grundy County than would be expected based on national employment averages. As a whole, the cluster experienced little to no job growth over the last five years, however, is projected to pick up at an annual average rate of 1.6% over the next five years.

Total sales for all companies in this cluster were over \$1.2 billion (23% of total industry sales in the county) and contributed more than \$313 million to the region's gross regional product (about 12% of total GRP) in 2016.

A significant contributor to the value of this cluster is plastics material and resin manufacturing, generating 65% of the industry's gross regional product for the manufacturing sector in the county. However, it has been an industry in decline whereas miscellaneous chemical product and preparation manufacturing has been adding the jobs but is not as much of an economic driver to the region as the plastics material and resin manufacturing industry.

Over the past decade, the manufacturing cluster in Grundy County has seen some peaks and valleys and deeper than the state and nation. However, the employment trend is projected to smooth out over the next five years. See Figure 7 below for manufacturing employment trends.

FIGURE 7. Manufacturing Employment Trends and Projections, Year-over-Year Employment Growth



LABOR MARKET ANALYSIS

Table 13 lists the top 25 occupations in Grundy County's manufacturing cluster. These occupations account for 60% of all cluster employment. The table provides the number of people employed by occupation in the cluster, and the number of people employed in that occupation in all industries in the region. This indicates the level of competition employers may face from industries outside the cluster when hiring for key occupations.

The occupation with the most jobs in the manufacturing cluster is heavy and tractor-trailer truck drivers at 71 jobs. This occupation comprises roughly 5% of the cluster's total jobs given that there are approximately 369 total heavy and tractor-trailer truck drivers employed in the county—meaning the cluster only employs a small fraction of these workers, at a median wage of \$21.90 per hour.

TABLE 13. Largest Occupations in Manufacturing, Grundy County

SOC	DESCRIPTION	EMPLOYED IN INDUSTRY		CHANGE	% OF INDUSTRY CLUSTER TOTAL JOBS	EMPLOYED IN ALL INDUSTRIES IN COUNTY	INDUSTRY CLUSTERS % OF ALL INDUSTRY JOBS	MEDIAN HOURLY EARNINGS
		2011	2016	2011-2016	2016	2016	2016	
53-3032	Heavy and Tractor-Trailer Truck Drivers	46	71	25	5.2%	369	19.2%	\$21.90
51-2092	Team Assemblers	61	61	0	4.5%	77	78.7%	\$12.16
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	49	54	5	4.0%	59	93.1%	\$16.56
51-1011	First-Line Supervisors of Production and Operating Workers	49	48	(1)	3.5%	113	42.4%	\$27.42
51-9199	Production Workers, All Other	37	41	4	3.0%	66	62.2%	\$12.79
51-9011	Chemical Equipment Operators and Tenders	43	41	(2)	3.0%	42	98.4%	\$21.92
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	36	40	4	2.9%	527	7.5%	\$10.61
51-4041	Machinists	35	39	4	2.9%	53	74.7%	\$18.20
11-1021	General and Operations Managers	32	34	2	2.5%	324	10.5%	\$43.96
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	35	33	(2)	2.4%	57	57.7%	\$15.20
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	31	31	0	2.2%	183	16.7%	\$27.55
51-9111	Packaging and Filling Machine Operators and Tenders	23	28	5	2.0%	46	59.9%	\$11.28
51-6091	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	24	24	0	1.7%	24	100.0%	\$20.69
17-2112	Industrial Engineers	23	23	0	1.7%	38	60.6%	\$36.57
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	27	22	(5)	1.6%	23	94.1%	\$17.31
51-8091	Chemical Plant and System Operators	19	21	2	1.6%	22	99.7%	\$28.42
49-9071	Maintenance and Repair Workers, General	22	21	(1)	1.6%	160	13.4%	\$18.35
43-5071	Shipping, Receiving, and Traffic Clerks	23	21	(2)	1.5%	104	20.4%	\$13.98
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	12	20	8	1.4%	20	96.6%	\$17.40
11-3051	Industrial Production Managers	19	19	0	1.4%	33	57.6%	\$45.17
53-7051	Industrial Truck and Tractor Operators	19	17	(2)	1.3%	146	11.8%	\$14.39
43-9061	Office Clerks, General	15	16	1	1.2%	376	4.4%	\$13.47
49-9041	Industrial Machinery Mechanics	16	15	(1)	1.1%	48	31.9%	\$26.19
51-2022	Electrical and Electronic Equipment Assemblers	17	15	(2)	1.1%	17	91.0%	\$12.58
43-4051	Customer Service Representatives	16	15	(1)	1.1%	271	5.4%	\$15.04

SUPPLY CHAIN ANALYSIS

Table 14 provides a picture about the total demand in Grundy County by all Grundy County residents and businesses for products made by companies in the manufacturing cluster—worth a total of \$1.2 billion in the area. In Table 14, we see that the companies in these sectors meet only 8% of regional demand for their products, while the region imports 92% of regional needs for these products. This would seem to indicate potential markets for local suppliers. Particularly, those industries generating large demand and importing most of their product, including (but not limited to):

- Petrochemical and Chemical Manufacturing
- Light Truck and Utility Vehicle Manufacturing
- Engineering Services
- Pharmaceutical Preparation Manufacturing

TABLE 14. Manufacturing Regional Demand Met by Grundy County Companies (2016)

NAICS	INDUSTRY SECTOR	2016 DEMAND					
		SATISFIED IN-REGION	% SATISFIED IN-REGION	SATISFIED OUT-OF REGION (IMPORTS)	% SATISFIED OUT-OF- REGION (IMPORTS)	TOTAL DEMAND	% OF TOTAL DEMAND
324110	Petroleum Refineries	\$0	0.0%	\$125,623,283	100.0%	\$125,623,283	10.6%
325110	Petrochemical Manufacturing	\$0	0.0%	\$113,819,830	100.0%	\$113,819,830	9.6%
325199	All Other Basic Organic Chemical Manufacturing	\$0	0.0%	\$109,866,266	100.0%	\$109,866,266	9.3%
325211	Plastics Material and Resin Manufacturing	\$43,854,350	93.3%	\$3,172,206	6.7%	\$47,026,556	4.0%
336112	Light Truck and Utility Vehicle Manufacturing	\$0	0.0%	\$36,628,917	100.0%	\$36,628,917	3.1%
541330	Engineering Services	\$1,283,178	4.8%	\$25,580,065	95.2%	\$26,863,243	2.3%
325412	Pharmaceutical Preparation Manufacturing	\$0	0.0%	\$25,783,781	100.0%	\$25,783,781	2.2%
325193	Ethyl Alcohol Manufacturing	\$0	0.0%	\$25,635,867	100.0%	\$25,635,867	2.2%
533110	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	\$2,169,811	10.0%	\$19,438,178	90.0%	\$21,607,989	1.8%
336111	Automobile Manufacturing	\$0	0.0%	\$17,961,080	100.0%	\$17,961,080	1.5%
326199	All Other Plastics Product Manufacturing	\$369,702	2.5%	\$14,454,375	97.5%	\$14,824,077	1.3%
325180	Other Basic Inorganic Chemical Manufacturing	\$0	0.0%	\$13,639,976	100.0%	\$13,639,976	1.2%
327320	Ready-Mix Concrete Manufacturing	\$2,508,465	25.1%	\$7,498,330	74.9%	\$10,006,795	0.8%
311221	Wet Corn Milling	\$0	0.0%	\$9,105,750	100.0%	\$9,105,750	0.8%
333611	Turbine and Turbine Generator Set Units Manufacturing	\$70,043	0.8%	\$8,318,227	99.2%	\$8,388,270	0.7%
334111	Electronic Computer Manufacturing	\$0	0.0%	\$8,297,458	100.0%	\$8,297,458	0.7%
336411	Aircraft Manufacturing	\$0	0.0%	\$8,158,356	100.0%	\$8,158,356	0.7%
331110	Iron and Steel Mills and Ferroalloy Manufacturing	\$0	0.0%	\$7,419,502	100.0%	\$7,419,502	0.6%
325194	Cyclic Crude, Intermediate, and Gum and Wood Chemical Manufacturing	\$0	0.0%	\$7,408,161	100.0%	\$7,408,161	0.6%
312120	Breweries	\$0	0.0%	\$7,387,483	100.0%	\$7,387,483	0.6%
311615	Poultry Processing	\$0	0.0%	\$7,152,485	100.0%	\$7,152,485	0.6%
327310	Cement Manufacturing	\$0	0.0%	\$6,883,140	100.0%	\$6,883,140	0.6%
325620	Toilet Preparation Manufacturing	\$1,447,609	21.2%	\$5,384,377	78.8%	\$6,831,986	0.6%
311611	Animal (except Poultry) Slaughtering	\$0	0.0%	\$6,685,037	100.0%	\$6,685,037	0.6%
311612	Meat Processed from Carcasses	\$0	0.0%	\$6,624,952	100.0%	\$6,624,952	0.6%
	Totals for Manufacturing in Grundy County	\$92,608,765	7.8%	\$1,090,362,912	92.2%	\$1,182,971,677	100.0%
	Totals for Manufacturing in LWA 11 Region	\$528,049,791	15.5%	\$2,885,872,355	84.5%	\$3,413,922,146	100.0%
	Totals for All Grundy County Industries	\$967,611,337	17.3%	\$4,618,490,998	82.7%	\$5,586,102,335	100.0%

Table 15 shows the economic development opportunity to build up the region's supply chain supporting manufacturing companies. This table shows the goods and services that companies within the manufacturing cluster buy to use in making their products.

Approximately 12% of manufacturing supply needs are met within the area, while the remaining 88% are purchased from outside. In total, the value of the manufacturing supply chain for Grundy County manufacturers is nearly \$655 million. Most imported supplies are a combination of manufactured goods and services. Like other areas around the region, wholesale trade and transportation and warehousing services have significant levels of demand supplied from outside the region.

TABLE 15. Manufacturing Supply Chain, Grundy County (2016)

NAICS	PURCHASES FROM	2016 PURCHASES					
		IN-REGION PURCHASES	% IN-REGION PURCHASES	IMPORTED PURCHASES	% IMPORTED PURCHASES	TOTAL PURCHASES	% OF TOTAL PURCHASES
31	Manufacturing	\$53,186,236	12.30%	\$377,851,923	87.70%	\$431,038,159	65.8%
55	Management of Companies and Enterprises	\$1,121,378	1.80%	\$59,524,936	98.20%	\$60,646,314	9.3%
42	Wholesale Trade	\$5,381,777	11.30%	\$42,143,150	88.70%	\$47,524,927	7.3%
48	Transportation and Warehousing	\$6,812,851	21.40%	\$25,062,062	78.60%	\$31,874,913	4.9%
21	Mining, Quarrying, and Oil and Gas Extraction	\$978,723	7.50%	\$12,004,356	92.50%	\$12,983,079	2.0%
54	Professional, Scientific, and Technical Services	\$1,230,571	9.70%	\$11,410,358	90.30%	\$12,640,929	1.9%
22	Utilities	\$4,192,458	34.60%	\$7,909,233	65.40%	\$12,101,691	1.8%
53	Real Estate and Rental and Leasing	\$1,693,499	14.10%	\$10,288,651	85.90%	\$11,982,150	1.8%
56	Administrative and Support and Waste Management and Remediation Services	\$1,552,516	17.30%	\$7,433,114	82.70%	\$8,985,630	1.4%
52	Finance and Insurance	\$808,688	11.20%	\$6,404,476	88.80%	\$7,213,164	1.1%
44	Retail Trade	\$1,628,670	34.00%	\$3,166,410	66.00%	\$4,795,081	0.7%
51	Information	\$443,167	10.60%	\$3,737,276	89.40%	\$4,180,443	0.6%
72	Accommodation and Food Services	\$930,942	31.50%	\$2,022,278	68.50%	\$2,953,220	0.5%
81	Other Services (except Public Administration)	\$719,270	28.60%	\$1,800,033	71.40%	\$2,519,304	0.4%
23	Construction	\$557,665	35.20%	\$1,026,859	64.80%	\$1,584,525	0.2%
71	Arts, Entertainment, and Recreation	\$72,662	12.30%	\$517,740	87.70%	\$590,402	0.1%
11	Crop and Animal Production	\$66,982	13.00%	\$448,173	87.00%	\$515,156	0.1%
61	Educational Services	\$16,359	3.60%	\$439,078	96.40%	\$455,437	0.1%
62	Health Care and Social Assistance	\$125,412	37.60%	\$208,212	62.40%	\$333,625	0.1%
90	Government	\$18,088	30.20%	\$41,738	69.80%	\$59,825	0.0%
Totals for Manufacturing in Grundy County		\$81,537,914	12.4%	\$573,440,056	87.6%	\$654,977,974	100.0%
Totals for Manufacturing in LWA 11 Region		\$569,168,444	17.8%	\$2,635,957,909	82.2%	\$3,205,126,354	100.0%
Totals for All Grundy County Industries		\$352,667,146	16.6%	\$1,776,225,003	83.4%	\$2,128,892,150	100.0%

Table 16 shows the types of manufactured products purchased by Grundy County manufacturing companies.

TABLE 16. Manufacturing Manufactured Products Supply Chain, Grundy County (2016)

NAICS	PURCHASES FROM	2016 PURCHASES					
		IN-REGION PURCHASES	% IN-REGION PURCHASES	IMPORTED PURCHASES	% IMPORTED PURCHASES	TOTAL PURCHASES	% OF TOTAL PURCHASES
325	Chemical Manufacturing	\$44,615,530	14.1%	\$271,174,486	85.9%	\$315,790,016	73.3%
332	Fabricated Metal Product Manufacturing	\$3,338,572	17.0%	\$16,301,795	83.0%	\$19,640,367	4.6%
324	Petroleum and Coal Products Manufacturing	\$12,580	0.1%	\$17,813,201	99.9%	\$17,825,781	4.1%
327	Nonmetallic Mineral Product Manufacturing	\$2,145,696	18.3%	\$9,548,377	81.7%	\$11,694,073	2.7%
331	Primary Metal Manufacturing	\$0	0.0%	\$11,520,895	100.0%	\$11,520,895	2.7%
311	Food Manufacturing	\$26,092	0.3%	\$10,059,014	99.7%	\$10,085,106	2.3%
326	Plastics and Rubber Products Manufacturing	\$693,921	7.3%	\$8,835,702	92.7%	\$9,529,623	2.2%
333	Machinery Manufacturing	\$99,210	1.2%	\$8,287,375	98.8%	\$8,386,585	1.9%
336	Transportation Equipment Manufacturing	\$1,545,758	20.0%	\$6,170,884	80.0%	\$7,716,643	1.8%
322	Paper Manufacturing	\$440,348	6.4%	\$6,463,930	93.6%	\$6,904,278	1.6%
334	Computer and Electronic Product Manufacturing	\$142,968	2.8%	\$5,044,989	97.2%	\$5,187,957	1.2%
335	Electrical Equipment, Appliance, and Component Manufacturing	\$0	0.0%	\$1,969,139	100.0%	\$1,969,139	0.5%
339	Miscellaneous Manufacturing	\$11,396	0.7%	\$1,741,444	99.3%	\$1,752,840	0.4%
321	Wood Product Manufacturing	\$60,059	5.6%	\$1,017,189	94.4%	\$1,077,248	0.2%
313	Textile Mills	\$8,885	0.9%	\$1,010,723	99.1%	\$1,019,609	0.2%
337	Furniture and Related Product Manufacturing	\$7,877	2.4%	\$321,579	97.6%	\$329,456	0.1%
323	Printing and Related Support Activities	\$23,079	7.6%	\$281,935	92.4%	\$305,014	0.1%
314	Textile Product Mills	\$12,123	9.1%	\$120,633	90.9%	\$132,756	0.0%
312	Beverage and Tobacco Product Manufacturing	\$0	0.0%	\$107,671	100.0%	\$107,671	0.0%
315	Apparel Manufacturing	\$2,142	4.5%	\$45,203	95.5%	\$47,345	0.0%
316	Leather and Allied Product Manufacturing	\$0	0.0%	\$15,758	100.0%	\$15,758	0.0%
	Totals for Manufacturing Purchases in Grundy County	\$53,186,236	12.3%	\$377,851,923	87.7%	\$431,038,159	100.0%
	Totals for Manufacturing Purchases in LWA 11 Region	\$454,455,262	19.9%	\$1,832,709,214	80.1%	\$2,287,164,476	100.0%
	Totals for All Grundy County Industries	\$847,913,774	20.7%	\$3,241,440,487	79.3%	\$4,089,354,259	100.0%

Table 17 shows the amount of goods sold by Grundy County companies both inside and outside the region. These companies sell over \$1.2 billion of products, of which nearly 91% is sold outside Grundy County, thus bringing substantial revenues into the region.

TABLE 17. Grundy County Manufacturing Companies' Sales in Region and Exported Out of Region

NAICS	PURCHASES FROM	2016 PURCHASES					
		IN-REGION PURCHASES	% IN-REGION PURCHASES	IMPORTED PURCHASES	% IMPORTED PURCHASES	TOTAL PURCHASES	% OF TOTAL PURCHASES
336510	Railroad Rolling Stock Manufacturing	\$2,289,415	18%	\$10,187,599	82%	\$12,477,014	1.0%
326299	All Other Rubber Product Manufacturing	\$989,902	11%	\$8,089,974	89%	\$9,079,876	0.7%
327992	Ground or Treated Mineral and Earth Manufacturing	\$1,408,451	19%	\$6,147,213	81%	\$7,555,664	0.6%
332710	Machine Shops	\$1,348,371	22%	\$4,777,573	78%	\$6,125,944	0.5%
333120	Construction Machinery Manufacturing	\$583,375	12%	\$4,248,520	88%	\$4,831,895	0.4%
325620	Toilet Preparation Manufacturing	\$1,447,609	35%	\$2,721,404	65%	\$4,169,013	0.3%
336211	Motor Vehicle Body Manufacturing	\$585,075	19%	\$2,563,703	81%	\$3,148,778	0.3%
332216	Saw Blade and Handtool Manufacturing	\$694,491	27%	\$1,864,793	73%	\$2,559,284	0.2%
334419	Other Electronic Component Manufacturing	\$347,266	18%	\$1,619,233	82%	\$1,966,499	0.2%
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	\$683,151	37%	\$1,141,586	63%	\$1,824,737	0.1%
311340	Nonchocolate Confectionery Manufacturing	\$214,048	12%	\$1,499,210	88%	\$1,713,258	0.1%
321918	Other Millwork (including Flooring)	\$765,059	45%	\$947,796	55%	\$1,712,855	0.1%
324121	Asphalt Paving Mixture and Block Manufacturing	\$787,095	47%	\$888,388	53%	\$1,675,483	0.1%
325520	Adhesive Manufacturing	\$674,683	40%	\$992,630	60%	\$1,667,313	0.1%
323111	Commercial Printing (except Screen and Books)	\$380,164	23%	\$1,251,541	77%	\$1,631,705	0.1%
333318	Other Commercial and Service Industry Machinery Manufacturing	\$510,588	33%	\$1,034,553	67%	\$1,545,141	0.1%
332313	Plate Work Manufacturing	\$894,335	63%	\$521,409	37%	\$1,415,744	0.1%
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	\$439,360	33%	\$889,261	67%	\$1,328,621	0.1%
321999	All Other Miscellaneous Wood Product Manufacturing	\$493,232	41%	\$705,837	59%	\$1,199,069	0.1%
323113	Commercial Screen Printing	\$234,676	20%	\$916,514	80%	\$1,151,190	0.1%
	Totals for Manufacturing in Grundy County	\$80,513,220	9.3%	\$1,151,716,590	90.7%	\$1,232,229,809	100.0%
	Totals for Manufacturing in LWA 11 Region	\$528,049,793	9.0%	\$5,355,024,174	91.0%	\$5,883,073,964	100.0%
	Totals for All Grundy County Industries	\$967,611,327	18.3%	\$4,325,321,441	81.7%	\$5,292,932,778	100.0%

Transportation, Warehousing, Distribution, and Logistics

The transportation, warehousing, distribution, and logistics (TWDL) cluster is a combination of two industry classes: transportation and warehousing and wholesale trade.

Figure 8 compares the 2016 job distribution for the TWDL cluster throughout Grundy County with the minimum number of TWDL workers who commute in or out of the region to satisfy TWDL jobs held. A positive number (shown in GREEN in the figure below) describes commuters entering a region, while a negative number (shown in RED) describes commuters leaving a region.

The City of Morris has the largest number of TWDL jobs (namely from Akzo Nobel Surfactants and Aux Sable Liquid Products—both chemical and petroleum products wholesalers) at 851 in 2016, followed by Minooka at 643. Most of the residents working in transportation and material moving occupations also live in Morris and Minooka. There are approximately 1,770 classified transportation and material moving occupations jobs in Grundy County (although there are 1,863 TWDL jobs) and roughly 2,670 Grundy County residents who are classified under transportation and material moving occupation. This means that roughly 900 Grundy County residents commute elsewhere to find work because there are not enough jobs in their field within the county.

FIGURE 8. TWDL Cluster in Grundy County, 2016 Job Distribution

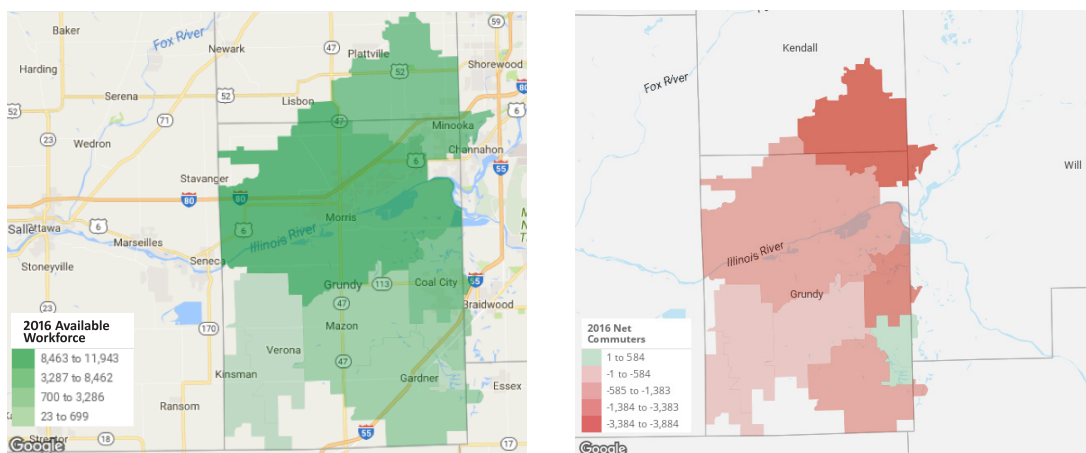


Table 18 below provides an overview for each of the individual industry sectors that comprise the TWDL cluster in Grundy County. Included are historic, current, and projected employment; historic and projected compound annual growth rate; historic and current employment concentration (LQ); average earnings; total sales; gross regional product (GRP); historic and current payroll establishments (businesses); and jobs multipliers (multiplier effect). The table is sorted largest to smallest by 2016 employment.

TABLE 18. TWDL Sector, Grundy County

NAICS	INDUSTRY SECTOR	EMPLOYMENT			COMPOUND ANNUAL GROWTH RATE		CONCENTRATION (LQ)		AVERAGE EARNINGS	TOTAL SALES	GROSS REGIONAL PRODUCT (GRP)	PAYROLLED ESTABLISHMENTS		JOBS MULTIPLIER
		2011	2016	2021	2011-2016	2016-2021	2011	2016	2016	2016	2016	2011	2016	2016
493110	General Warehousing and Storage	296	480	608	10.1%	4.9%	4.53	4.91	\$25,623	\$26,656,311	\$15,574,719	1	2	1.08
493120	Refrigerated Warehousing and Storage	168	149	160	-2.3%	1.4%	28.13	20.56	\$68,376	\$22,257,062	\$12,836,219	2	2	1.19
425120	Wholesale Trade Agents and Brokers	131	146	209	2.2%	7.4%	1.35	1.30	\$78,392	\$61,210,118	\$41,174,036	14	11	1.31
485410	School and Employee Bus Transportation	131	113	56	-2.9%	-13.2%	5.93	4.51	\$19,611	\$4,509,621	\$2,620,410	5	5	1.04
482110	Rail transportation	76	101	122	5.7%	3.9%	2.78	3.18	\$88,160	\$35,417,173	\$17,042,841	0	1	1.25
424510	Grain and Field Bean Merchant Wholesalers	30	85	103	23.3%	4.0%	5.15	13.50	\$64,597	\$16,138,818	\$10,762,630	2	4	1.22
484110	General Freight Trucking, Local	68	85	98	4.5%	3.0%	1.98	2.11	\$59,543	\$20,952,688	\$8,292,484	30	30	1.13
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	0	82	115	---	6.9%	0.00	7.44	\$94,572	\$22,603,280	\$15,154,070	0	3	1.32
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	58	80	105	6.6%	5.5%	4.17	4.51	\$80,377	\$19,587,962	\$7,721,984	2	2	1.20
486210	Pipeline Transportation of Natural Gas	31	71	101	18.2%	7.3%	9.39	18.77	\$184,990	\$30,394,991	\$18,268,214	1	1	1.46
484122	General Freight Trucking, Long-Distance, Less Than Truckload	21	67	96	26.2%	7.4%	0.77	1.99	\$51,874	\$10,884,496	\$4,305,310	2	2	1.12
484220	Specialized Freight (except Used Goods) Trucking, Local	21	47	52	17.6%	1.9%	0.82	1.61	\$107,709	\$14,775,249	\$5,839,245	13	10	1.26
423930	Recyclable Material Merchant Wholesalers	20	42	60	15.6%	7.5%	1.22	2.79	\$50,353	\$6,016,392	\$4,034,002	4	4	1.17
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	17	34	33	14.7%	-0.6%	1.46	2.55	\$103,918	\$10,167,752	\$6,811,655	2	2	1.33
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	20	34	43	11.4%	4.9%	2.59	4.05	\$73,840	\$7,161,096	\$4,796,470	2	2	1.25
424690	Other Chemical and Allied Products Merchant Wholesalers	<10	32	45	---	6.9%	0.48	2.31	\$84,800	\$8,685,098	\$5,830,034	1	1	1.30
424910	Farm Supplies Merchant Wholesalers	16	30	38	13.5%	4.6%	1.23	2.05	\$65,593	\$5,779,535	\$3,873,435	3	3	1.22
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	19	26	13	6.1%	-12.3%	1.12	1.23	\$32,804	\$2,746,987	\$1,844,840	3	2	1.12
488510	Freight Transportation Arrangement	69	22	23	-20.0%	0.3%	2.92	0.76	\$59,958	\$4,100,317	\$1,887,923	1	1	1.14
483211	Inland Water Freight Transportation	<10	22	29	---	5.7%	0.14	7.17	\$93,886	\$14,835,034	\$4,375,000	1	1	1.65
484121	General Freight Trucking, Long-Distance, Truckload	72	18	<10	-24.2%	---	1.03	0.23	\$41,059	\$6,731,958	\$2,666,952	13	12	1.10
423220	Home Furnishing Merchant Wholesalers	<10	15	22	---	8.1%	0.86	1.90	\$38,201	\$2,973,274	\$1,991,525	2	3	1.18
	Totals for TWDL in Grundy County	1,422	1,863	2,225	5.6%	3.6%	1.21	1.32	\$61,445	\$380,620,722	\$213,961,187	125	131	N/A
	Totals for TWDL in LWA 11 Region	6,928	8,087	9,076	3.1%	2.3%	1.29	1.40	\$60,453	\$1,533,126,670	\$871,158,315	505	505	N/A
	Totals for All Grundy County Industries	17,443	20,076	22,841	2.9%	2.6%	1.92	1.83	\$65,723	\$5,292,932,778	\$2,658,835,517	1,240	1,249	N/A

The TWDL cluster accounted for 1,863 jobs and 131 establishments in 2016, more than 9% of the total employment and 10% of total establishments in Grundy County. Employment in Grundy County's TWDL cluster accounts for 23% of the total LWA 11 region. Overall employment for this cluster is 1.3 times more concentrated in Grundy County than would be expected based on national employment averages.

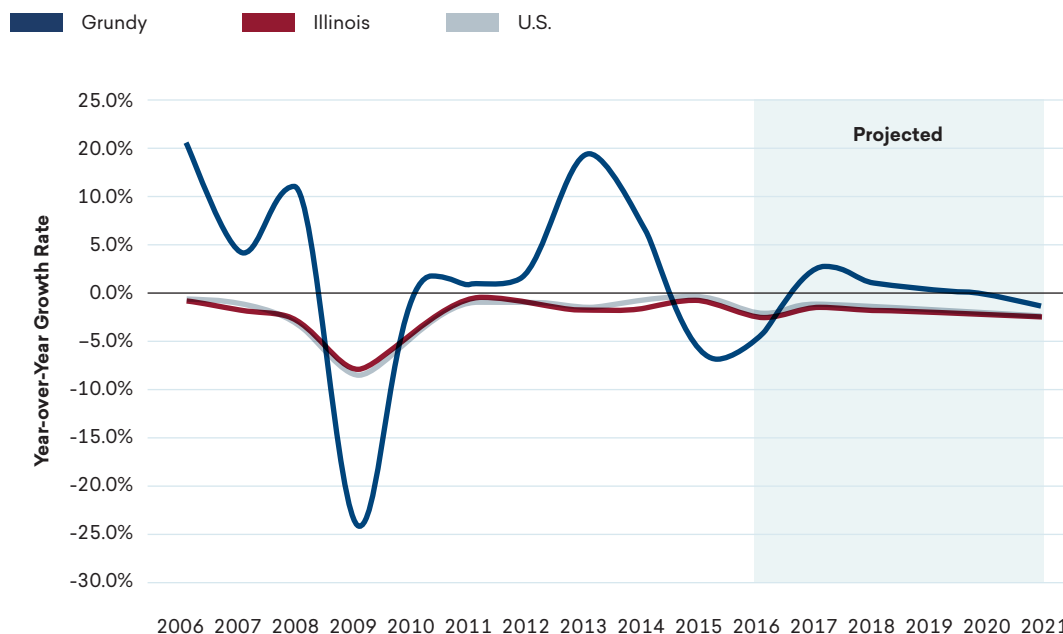
As a whole, the cluster experienced exceptional job growth over the last five years (5.6% annual growth) compared to all industries and is expected to slow by an average of 3.6% each year for the next five years.

Total sales for all companies in this cluster were over \$380 million (7% of total industry sales in the county) and contributed nearly \$214 million to the region's gross regional product (8% of total GRP) in 2016.

A significant contributor to the growth, size, and value of this cluster is general warehousing and storage. The industry added 183 jobs over the last five years—almost half of all TWDL jobs added during that time. However, wholesale trade agents and brokers contribute the most, 19%, to the region's gross product.

The TWDL cluster in Grundy County has outperformed the state and nation over the past five years but was hit hard through the depths of the recession and is projected to smooth out over the next five years. See Figure 9 below for TWDL employment trends.

FIGURE 9. TWDL Employment Trends and Projections, Year-over-Year Employment Growth



LABOR MARKET ANALYSIS

Table 19 lists the top 25 occupations in Grundy County's TWDL cluster. These occupations account for three-quarter of all cluster employment. The table provides the number of people employed by occupation in the cluster, and the number of people employed in that occupation in all industries in the region. This indicates the level of competition employers may face from industries outside the cluster when hiring for key occupations.

The occupation with the most jobs in the TWDL cluster is laborers and freight, stock, and material movers at 296 jobs. This occupation comprises nearly 22% of the cluster's total jobs. However, there are approximately 527 laborers and freight, stock, and material mover workers employed in the county, meaning the cluster employs half of these workers, at a median wage of \$10.61 per hour.

TABLE 19. Largest Occupations in TWDL, Grundy County

SOC	DESCRIPTION	EMPLOYED IN INDUSTRY		CHANGE	% OF INDUSTRY CLUSTER TOTAL JOBS	EMPLOYED IN ALL INDUSTRIES IN COUNTY	INDUSTRY CLUSTERS % OF ALL INDUSTRY JOBS	MEDIAN HOURLY EARNINGS
		2011	2016	2011-2016	2016	2016	2016	
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	208	296	88	15.9%	527	56.2%	\$10.61
53-3032	Heavy and Tractor-Trailer Truck Drivers	169	205	36	11.0%	369	55.6%	\$21.90
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	78	113	35	6.1%	183	61.7%	\$27.55
53-7051	Industrial Truck and Tractor Operators	73	97	24	5.2%	146	66.2%	\$14.39
53-3022	Bus Drivers, School or Special Client	98	85	(13)	4.5%	114	74.0%	\$13.17
43-5081	Stock Clerks and Order Fillers	55	74	19	4.0%	459	16.1%	\$11.87
53-7064	Packers and Packagers, Hand	47	62	15	3.3%	129	48.2%	\$10.02
43-5071	Shipping, Receiving, and Traffic Clerks	35	46	11	2.5%	104	44.7%	\$13.98
11-1021	General and Operations Managers	31	44	13	2.3%	324	13.5%	\$43.96
43-9061	Office Clerks, General	31	41	10	2.2%	376	11.0%	\$13.47
53-3033	Light Truck or Delivery Services Drivers	34	41	7	2.2%	123	33.2%	\$14.10
43-4051	Customer Service Representatives	29	38	9	2.0%	271	13.9%	\$15.04
53-1021	First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	18	25	7	1.3%	37	67.5%	\$21.78
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	13	20	7	1.1%	35	55.7%	\$28.51
11-3071	Transportation, Storage, and Distribution Managers	15	19	4	1.0%	32	60.0%	\$33.93
53-4031	Railroad Conductors and Yardmasters	14	19	5	1.0%	19	97.9%	\$28.01
53-4011	Locomotive Engineers	13	17	4	0.9%	17	99.6%	\$28.27
49-9071	Maintenance and Repair Workers, General	11	16	5	0.9%	160	10.3%	\$18.35
43-3031	Bookkeeping, Accounting, and Auditing Clerks	13	16	3	0.9%	161	10.0%	\$17.46
53-1031	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	12	15	3	0.8%	30	51.3%	\$27.31
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	15	15	0	0.8%	50	29.7%	\$23.34
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	11	14	3	0.8%	202	7.1%	\$15.43
51-8092	Gas Plant Operators	<10	14	8	0.8%	24	58.5%	\$37.28
43-1011	First-Line Supervisors of Office and Administrative Support Workers	12	14	2	0.7%	138	10.1%	\$23.96
43-5032	Dispatchers, Except Police, Fire, and Ambulance	13	14	1	0.7%	30	45.5%	\$19.37

SUPPLY CHAIN ANALYSIS

Table 20 provides a picture about the total demand in Grundy County by all Grundy County residents and businesses for products made by companies in the TWDL cluster—worth a total of near \$473 million in the county. In Table 20, we see that the companies in these sectors meets only 15% of regional demand for their products, while the region imports 85% of regional needs for these products. This would seem to indicate potential markets for local suppliers. Particularly, those industries generating large demand and importing most of their product, including (but not limited to):

- Wholesale Trade Agents and Brokers
- Rail Transportation
- General Freight Trucking, Long-Distance, Truckload
- Freight Transportation Arrangement

TABLE 20. TWDL Regional Demand Met by Grundy County Companies (2016)

NAICS	INDUSTRY SECTOR	2016 DEMAND				TOTAL DEMAND	% OF TOTAL DEMAND
		SATISFIED IN-REGION	% SATISFIED IN-REGION	SATISFIED OUT-OF-REGION (IMPORTS)	% SATISFIED OUT-OF-REGION (IMPORTS)		
425120	Wholesale Trade Agents and Brokers	\$1,173,717	2%	\$48,183,873	98%	\$49,357,590	10.4%
482110	Rail transportation	\$5,616,273	18%	\$25,892,282	82%	\$31,508,555	6.7%
481111	Scheduled Passenger Air Transportation	\$41,135	0%	\$22,315,332	100%	\$22,356,467	4.7%
484121	General Freight Trucking, Long-Distance, Truckload	\$2,623,889	12%	\$18,459,530	88%	\$21,083,419	4.5%
488510	Freight Transportation Arrangement	\$2,689,079	16%	\$13,889,262	84%	\$16,578,342	3.5%
493110	General Warehousing and Storage	\$7,095,820	43%	\$9,399,034	57%	\$16,494,854	3.5%
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	\$234,980	2%	\$15,217,295	98%	\$15,452,276	3.3%
423830	Industrial Machinery and Equipment Merchant Wholesalers	\$496,750	4%	\$12,146,655	96%	\$12,643,405	2.7%
424210	Drugs and Druggists' Sundries Merchant Wholesalers	\$0	0%	\$12,331,367	100%	\$12,331,367	2.6%
484110	General Freight Trucking, Local	\$1,995,846	18%	\$9,006,101	82%	\$11,001,946	2.3%
492110	Couriers and Express Delivery Services	\$192,362	2%	\$10,516,133	98%	\$10,708,495	2.3%
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	\$1,403,415	13%	\$8,998,703	87%	\$10,402,118	2.2%
484122	General Freight Trucking, Long-Distance, Less Than Truckload	\$2,406,999	25%	\$7,283,521	75%	\$9,690,519	2.0%
424410	General Line Grocery Merchant Wholesalers	\$0	0%	\$7,596,819	100%	\$7,596,819	1.6%
486210	Pipeline Transportation of Natural Gas	\$6,693,387	88%	\$870,860	12%	\$7,564,247	1.6%
423690	Other Electronic Parts and Equipment Merchant Wholesalers	\$194,607	3%	\$7,283,554	97%	\$7,478,161	1.6%
488190	Other Support Activities for Air Transportation	\$0	0%	\$7,376,130	100%	\$7,376,130	1.6%
484220	Specialized Freight (except Used Goods) Trucking, Local	\$3,809,301	52%	\$3,477,945	48%	\$7,287,246	1.5%
424490	Other Grocery and Related Products Merchant Wholesalers	\$722,617	10%	\$6,391,680	90%	\$7,114,297	1.5%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	\$1,355,538	19%	\$5,664,957	81%	\$7,020,495	1.5%
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers	\$814,605	15%	\$4,459,174	85%	\$5,273,779	1.1%
424690	Other Chemical and Allied Products Merchant Wholesalers	\$3,287,411	66%	\$1,697,755	34%	\$4,985,166	1.1%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	\$4,501,911	93%	\$321,290	7%	\$4,823,201	1.0%
423510	Metal Service Centers and Other Metal Merchant Wholesalers	\$0	0%	\$4,549,272	100%	\$4,549,272	1.0%
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	\$710,137	16%	\$3,836,049	84%	\$4,546,186	1.0%
	Totals for TWDL in Grundy County	\$72,196,391	15.3%	\$400,551,824	84.7%	\$472,748,216	100.0%
	Totals for TWDL in LWA 11 Region	\$280,636,932	17.2%	\$1,347,014,436	82.8%	\$1,627,651,369	100.0%
	Totals for All Grundy County Industries	\$967,611,337	17.3%	\$4,618,490,998	82.7%	\$5,586,102,335	100.0%

Table 21 shows the economic development opportunity to build up the region's supply chain supporting TWDL companies. This table shows the goods and services that companies within the TWDL cluster buy to use in making their products or providing their services. Roughly 15% of TWDL supply needs are met within the area, while the remaining 85% are purchased from outside. This demonstrates a strong possibility for Grundy County companies to find new customers within this industry cluster.

In total, the value of the TWDL supply chain for Grundy County is \$153 million. Most imported supplies are a combination of manufactured goods and services. Like other areas around the region, wholesale trade, transportation and warehousing, and professional services have significant levels of demand supplied from outside the region.

TABLE 21. TWDL Supply Chain, Grundy County (2016)

NAICS	PURCHASES FROM	2016 PURCHASES					
		IN-REGION PURCHASES	% IN-REGION PURCHASES	IMPORTED PURCHASES	% IMPORTED PURCHASES	TOTAL PURCHASES	% OF TOTAL PURCHASES
31	Manufacturing	\$1,375,274	5.1%	\$25,732,385	94.9%	\$27,107,659	17.7%
48	Transportation and Warehousing	\$4,472,400	16.8%	\$22,197,320	83.2%	\$26,669,719	17.4%
53	Real Estate and Rental and Leasing	\$6,194,219	32.1%	\$13,107,045	67.9%	\$19,301,264	12.6%
54	Professional, Scientific, and Technical Services	\$1,402,820	10.5%	\$12,009,001	89.5%	\$13,411,822	8.8%
52	Finance and Insurance	\$747,920	6.0%	\$11,737,441	94.0%	\$12,485,361	8.1%
42	Wholesale Trade	\$1,404,558	11.3%	\$10,998,690	88.7%	\$12,403,249	8.1%
56	Administrative and Support and Waste Management and Remediation Services	\$1,928,964	17.3%	\$9,242,266	82.7%	\$11,171,230	7.3%
55	Management of Companies and Enterprises	\$178,785	1.8%	\$9,491,295	98.2%	\$9,670,080	6.3%
51	Information	\$680,538	13.3%	\$4,448,286	86.7%	\$5,128,825	3.3%
23	Construction	\$1,174,559	35.2%	\$2,162,778	64.8%	\$3,337,338	2.2%
90	Government	\$780,274	30.2%	\$1,800,501	69.8%	\$2,580,776	1.7%
81	Other Services (except Public Administration)	\$744,641	29.6%	\$1,768,549	70.4%	\$2,513,190	1.6%
44	Retail Trade	\$658,827	31.7%	\$1,419,660	68.3%	\$2,078,487	1.4%
22	Utilities	\$417,216	24.6%	\$1,280,399	75.4%	\$1,697,615	1.1%
21	Mining, Quarrying, and Oil and Gas Extraction	\$22,419	1.7%	\$1,329,148	98.3%	\$1,351,568	0.9%
72	Accommodation and Food Services	\$310,592	31.3%	\$680,135	68.7%	\$990,726	0.6%
71	Arts, Entertainment, and Recreation	\$46,922	8.2%	\$526,386	91.8%	\$573,308	0.4%
61	Educational Services	\$25,066	6.4%	\$364,387	93.6%	\$389,453	0.3%
62	Health Care and Social Assistance	\$66,141	35.5%	\$119,952	64.5%	\$186,093	0.1%
11	Crop and Animal Production	\$6,478	4.0%	\$153,697	96.0%	\$160,175	0.1%
	Totals for TWDL in Grundy County	\$22,638,614	14.8%	\$130,569,323	85.2%	\$153,207,937	100.0%
	Totals for TWDL in LWA 11 Region	\$90,342,587	14.8%	\$521,058,472	85.2%	\$611,401,059	100.0%
	Totals for All Grundy County Industries	\$847,913,774	20.7%	\$3,241,440,487	79.3%	\$4,089,354,259	100.0%

Table 22 shows the amount of goods and services sold by Grundy County companies both inside and outside the region. These companies sell approximately \$380 million of products and services, of which \$308 million is sold outside Grundy County, thus bringing additional revenues into the region.

TABLE 22. Grundy County TWDL Companies' Sales in Region and Exported Out of Region

NAICS	PURCHASES FROM	2016 PURCHASES					
		IN-REGION PURCHASES	% IN-REGION PURCHASES	IMPORTED PURCHASES	% IMPORTED PURCHASES	TOTAL PURCHASES	% OF TOTAL PURCHASES
484121	General Freight Trucking, Long-Distance, Truckload	\$18,023,819	13%	\$118,533,287	87%	\$136,557,106	35.9%
482110	Rail transportation	\$11,592,619	12%	\$88,045,693	88%	\$99,638,312	26.2%
424490	Other Grocery and Related Products Merchant Wholesalers	\$11,367,563	18%	\$52,057,287	82%	\$63,424,850	16.7%
425120	Wholesale Trade Agents and Brokers	\$1,173,718	2%	\$60,036,400	98%	\$61,210,118	16.1%
482110	Rail transportation	\$5,616,273	16%	\$29,800,900	84%	\$35,417,173	9.3%
486210	Pipeline Transportation of Natural Gas	\$6,693,387	22%	\$23,701,604	78%	\$30,394,991	8.0%
493110	General Warehousing and Storage	\$7,095,820	27%	\$19,560,491	73%	\$26,656,311	7.0%
423810	Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	\$2,931,439	13%	\$19,671,841	87%	\$22,603,280	5.9%
493120	Refrigerated Warehousing and Storage	\$1,331,033	6%	\$20,926,029	94%	\$22,257,062	5.8%
484110	General Freight Trucking, Local	\$1,995,845	10%	\$18,956,843	90%	\$20,952,688	5.5%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	\$4,501,911	23%	\$15,086,051	77%	\$19,587,962	5.1%
424510	Grain and Field Bean Merchant Wholesalers	\$1,335,121	8%	\$14,803,697	92%	\$16,138,818	4.2%
483211	Inland Water Freight Transportation	\$1,592,531	11%	\$13,242,503	89%	\$14,835,034	3.9%
484220	Specialized Freight (except Used Goods) Trucking, Local	\$3,809,301	26%	\$10,965,948	74%	\$14,775,249	3.9%
484122	General Freight Trucking, Long-Distance, Less Than Truckload	\$2,406,999	22%	\$8,477,497	78%	\$10,884,496	2.9%
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	\$1,393,056	14%	\$8,774,696	86%	\$10,167,752	2.7%
424690	Other Chemical and Allied Products Merchant Wholesalers	\$3,287,411	38%	\$5,397,687	62%	\$8,685,098	2.3%
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	\$2,041,465	29%	\$5,119,631	71%	\$7,161,096	1.9%
484121	General Freight Trucking, Long-Distance, Truckload	\$2,623,888	39%	\$4,108,070	61%	\$6,731,958	1.8%
423930	Recyclable Material Merchant Wholesalers	\$1,569,040	26%	\$4,447,352	74%	\$6,016,392	1.6%
424910	Farm Supplies Merchant Wholesalers	\$1,853,336	32%	\$3,926,199	68%	\$5,779,535	1.5%
485410	School and Employee Bus Transportation	\$339,086	8%	\$4,170,535	92%	\$4,509,621	1.2%
488510	Freight Transportation Arrangement	\$2,689,079	66%	\$1,411,238	34%	\$4,100,317	1.1%
423220	Home Furnishing Merchant Wholesalers	\$1,149,468	39%	\$1,823,806	61%	\$2,973,274	0.8%
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	\$1,355,538	49%	\$1,391,449	51%	\$2,746,987	0.7%
Totals for TWDL in Grundy County		\$72,196,387	20%	\$308,424,330	80%	\$380,620,722	100.0%
Totals for TWDL in LWA 11 Region		\$280,636,925	18.3%	\$1,252,489,738	81.7%	\$1,533,126,670	100.0%
Totals for All Grundy County Industries		\$967,611,327	18.3%	\$4,325,321,441	81.7%	\$5,292,932,778	100.0%