

New Jersey's Transportation, Logistics & Distribution Industry Cluster

New Jersey Department of Labor & Workforce
Development
Office of Research and Information
Bureau of Labor Market Information
Spring 2014

Transportation, Logistics & Distribution Cluster

Overview

- Defining the Transportation, Logistics and Industry Cluster
- Industry Trends
- Detailed Industry Analysis
- Occupational Analysis
- Outlook

The Transportation, Logistics & Distribution cluster consists of two major components

Transportation

- Air Transportation
- Rail Transportation
- Water Transportation
- Truck Transportation
- Transit and Ground Passenger Transportation
- Pipeline Transportation
- Scenic & Sightseeing Transportation
- Support Activities for Transportation
- Couriers & Messengers

Distribution

- Durable Goods Merchant Wholesalers
- Nondurable Goods Merchant Wholesalers
- Agents, Brokers & Wholesale Electronic Markets
- Warehousing & Storage

The transportation, logistics and distribution industry cluster consists of industries within the **wholesale trade** and **transportation and warehousing** sectors. These industries can be further grouped by those related to **transportation** and those related to **distribution**.

Transportation and distribution are important to the state's economy

In 2012, transportation, logistics & distribution employed 357,997 workers in New Jersey. The cluster employed 11.2 percent of the state's private sector workers. Nationally, TLD accounts for just 8.9 percent of private sector employment.

The annual average private sector wage for TLD in 2012 was \$68,294. Total wages for the TLD cluster accounted for 11.2 percent of private sector wages statewide.

TLD contributed \$47.7 billion to the state's Real Gross Domestic Product (GDP) in 2012, the sixth highest dollar amount nationwide. New Jersey accounted for 4.1 percent of the nation's GDP generated from TLD.

INFRASTRUCTURE: SEA

According to 2011 figures (latest available) from the U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, New Jersey's shipping activity accounts for 6.7 percent of the nation's tonnage of total cargo volume.

□Port of New York and New Jersey

- ■Managed by the Port Authority of New York and New Jersey, the Port includes the following facilities: Port Newark, the Elizabeth-Port Authority Marine Terminal, the Howland Hook Marine Terminal, the Brooklyn-Port Authority Marine Terminal, the Red Hook Container Terminal and the Port Jersey Port Authority Marine Terminal.
- □Supports 279,000 jobs and \$11.6 billion in personal income in the New York-New Jersey region according to an economic impact study conducted for the New York Shipping Association
- ■Ranked third in the U.S. behind South Louisiana, LA and Houston, TX for total tonnage of trade (U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center)
- □ Processes 17 percent or \$166.5 billion of U.S. global cargo trade revenue (New York Shipping Association)
- □The World Shipping Council ranks the Port of New York and New Jersey 24th worldwide for container volume in 2012 (latest data available)
- □Port productivity data from the Journal of Commerce ranks APM Terminals Port Elizabeth as the most productive shipping terminal in the Americas.

INFRASTRUCTURE: SEA

□Port of Camden-Gloucester

Cocoa is a major commodity for the Port. Thanks to improved efficiencies in the offloading process developed at the Port, Camden-Gloucester handles roughly 40 percent of all U.S. cocoa imports. According to the South Jersey Port Corporation, cocoa distribution is responsible for hundreds of area jobs. Source: South Jersey Port Corporation

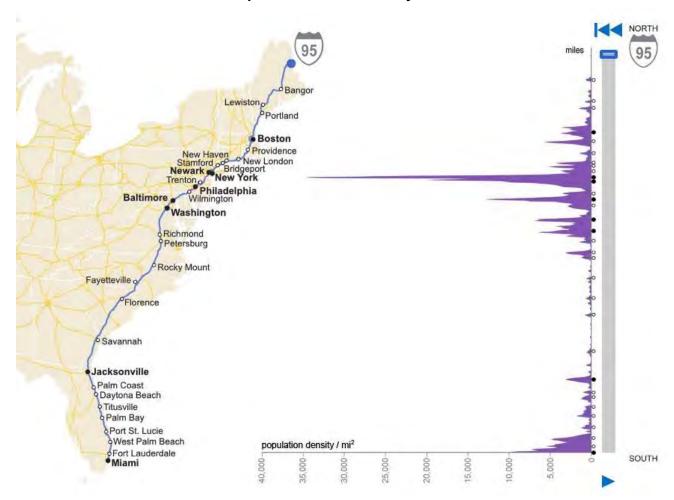
INFRASTRUCTURE: LAND

New Jersey has an excellent land transportation network, including 36,000 miles of highways which carry 500,000 truckloads of freight each day. In addition, the state offers access to the nationwide freight rail network. The state's passenger rail network carriers over 830,000 passengers each weekday.

Located between New York City and Philadelphia, New Jersey is within a day's drive of 40 percent of the US population.

Industry experts state that roughly 80 percent of all trucking is estimated to be routes of 400 miles or less. A 400-mile radius of the Newark and Elizabeth waterfront area includes most of the northeastern U.S. and also the major Canadian metropolitan areas of Montreal, Ottawa and Toronto.

I-95 Population Density Profile, 2010



Source: U.S. Census Bureau http://www.census.gov/dataviz/visualizations/012/

This population density tool from the U.S. Census Bureau shows the population within a 5-mile radius of Route 95. New Jersey lies in the middle of the most densely populated portion.

INFRASTRUCTURE: AIR

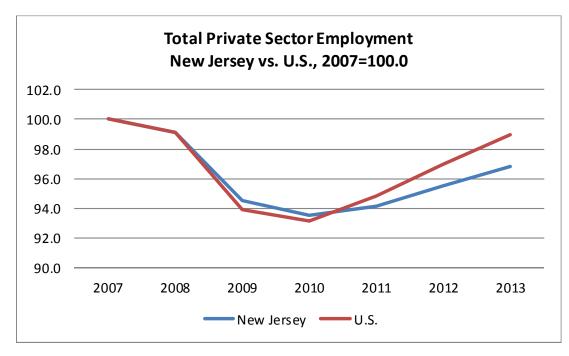
- ■Newark Liberty International Airport served 34.0 million total passengers in 2012 and ranks as the 15th busiest airport in the U.S. and 38th busiest worldwide. The airport contributes about \$20.7 billion in economic activity in the New Jersey-New York metropolitan region. Airport operations are managed by the Port Authority of New York and New Jersey.
- Newark Liberty is also a major cargo hub. In 2012, the airport handled 741,277 tons of air cargo and 79,393 tons of air mail.
- □ The first commercial airline terminal in the U.S. was established at the airport in 1935.

Source: Newark Liberty International Airport and The Port Authority of New York and New Jersey

INFRASTRUCTURE: AIR

- Passenger volume at Atlantic City International Airport reached 1.4 million in 2011. In the Summer of 2013, the Port Authority of New York-New Jersey began managing airport operations for the South Jersey Transportation Authority. This agreement was made in order to help the facility expand to its full potential. Source: Atlantic City International Airport
- As home to the Federal Aviation Administration William J. Hughes Technical Center, the Atlantic City International Airport is a vital part of the nation's air transit system. The Technical Center, which is a premier aviation research, development, test and evaluation center, is at the forefront of development for NextGen, the Federal Aviation Administration's new National Airspace System.
- Trenton-Mercer Airport has roughly 100,000 takeoffs and landings yearly and is an important asset to Central Jersey's business community. Service at the airport is expanding as commercial carrier Frontier Airlines moved their operations hub from Philadelphia International Airport to Trenton-Mercer in the Fall of 2012. Source: Trenton-Mercer Airport

Long-Term Industry Trends

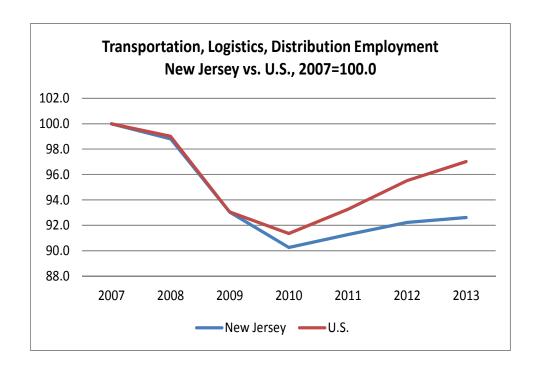


Source: N.J. Department of Labor, Division of Labor Market and Demographic Research and U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics Program, Annual Averages

- •Private sector payrolls peaked in 2007 in the U.S. and New Jersey. December of that year also marks the start of the most recent national recession which officially ended in June 2009.
- •Jobholding faced three years of decline due to the recession, with the most severe declines occurring in 2008. New Jersey's payrolls fared slightly better than the U.S. during the 2007-2010 period (-6.4% vs. -6.9%, respectively).

•New Jersey and the U.S each added private sector jobs in 2011, 2012 and 2013. However, with an increase of 3.5 percent, the state's job growth lagged that of the nation (+6.2%).

Long-Term Industry Trends



Source: N.J. Department of Labor, Division of Labor Market and Demographic Research and U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics Program, Annual Averages

TLD payrolls followed the same general trend as the private sector over the 2007-2013 period.

New Jersey's jobholding in TLD declined by 9.7 percent from 2007 to 2010 while nationally employment was down by 8.7 percent. The Garden State suffered steeper declines than the U.S. in both the wholesale trade (-10.2% vs. 9.4%) and transportation and warehousing (-9.2% vs. -7.7%) components.

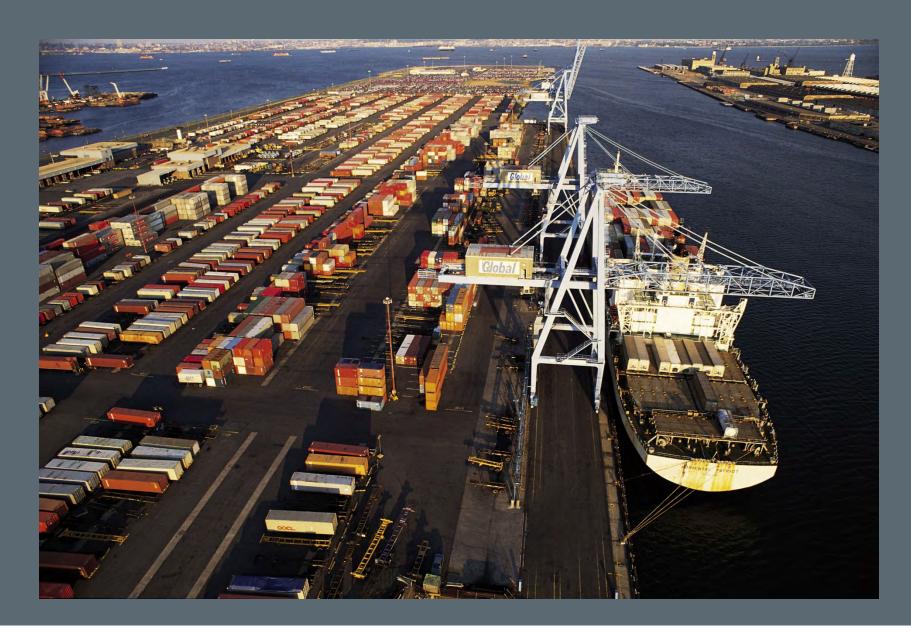
The state's employment loss in TLD represents 17.4 percent of the private sector jobs lost in the state over the three-year span. Nationally, TLD accounts for 11.5 percent of jobs lost.

Employment in TLD rose at a higher rate in the U.S. than in the state during the 2010-2013 period (+6.2% vs. +2.6%, respectively).

New Jersey's gain in TLD accounts for 8.4 percent of the private sector jobs added since 2010.

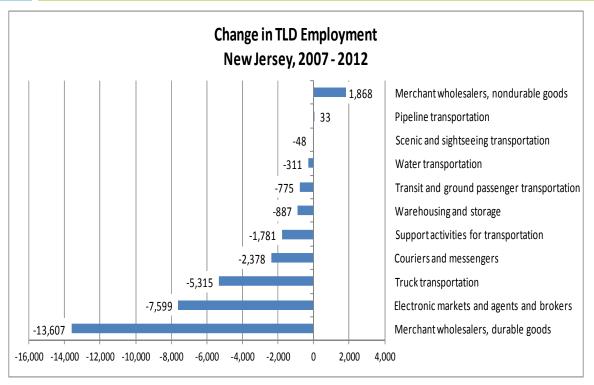
Where did the jobs go?

- National Recession: high unemployment and job uncertainty caused decreased consumer spending which leads to less demand for goods
- Retail/Restaurant Closings: a number of big box retailers and restaurants closed/restructured leading to decreased demand for goods which in turn led to closings and cutbacks in their distribution chains
- Pharmaceutical Mergers: any reduction in staffing at locations whose primary business function is wholesale trade can negatively impact the TLD cluster



DETAILED INDUSTRY ANALYSIS

Despite overall employment loss of 31,527 or 8.1 percent for the cluster from 2007 to 2012, nondurable goods wholesalers showed a moderate employment gain.



Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment &

Wages, Annual Averages

Note: Excludes data for suppressed industries

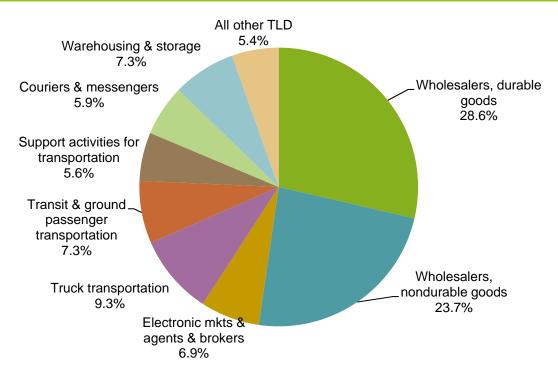
Private sector jobholding in TLD was a at high of 389,524 in 2007.

Jobholding trended down for three years to a low of 354,618 in 2010.

The cluster improved in 2011 adding a total of 3,379 jobs through 2012.

Job gains in nondurable goods occurred primarily in druggists goods & merchant wholesalers and chemical merchant wholesalers.

In 2012, TLD's three top-ranking industry subsectors account for 61.6 percent of total jobs



Source: New Jersey Department of Labor & Workforce Development, Quarterly Census of Employment & Wages, 2012 Annual Average

Wholesalers of Durable Goods and Wholesalers of Nondurable Goods are TLD's largest industries. Combined, they account for 52.3 percent of TLD employment.

The third largest industry is truck transportation which accounts for 9.3 percent of New Jersey's TLD employment.

The largest industry groupings within the TLD cluster are primarily found in the distribution segment.

Transportation, Logistics and Distribution Industry Cluster Largest Industries within the Distribution Segment, 2012			
NAICS	Industry	Employment	
4244	Grocery and Related Product Wholesalers	28,912	
4234	Commercial equip. merchant wholesalers	28,296	
4931	Warehousing and storage	26,170	
4251	Electronic markets and agents and brokers	24,580	
4238	Machinery and supply merchant wholesalers	15,584	
4236	Electric goods merchant wholesalers	14,096	

Transportation, Logistics and Distribution Industry Cluster				
Lar	Largest Industries within the Transportation Segment, 2012			
NAICS	Industry	Employment		
4841	General freight trucking	24,855		
4854	School and employee bus transportation	12,685		
4842	Specialized freight trucking	8,372		
4853	Taxi and limousine service	5,164		
4883	Support activities for water transportation	4,632		
4881	Support activities for air transportation	3,113		

The vast majority (66.1%) of jobs in the TLD cluster are in the **distribution** segment.

The top-ranking industries in the **distribution** segment account for 38.4 percent of TLD private sector employment.

General freight trucking accounts for 22.5 percent of the jobs in the **transportation** segment.

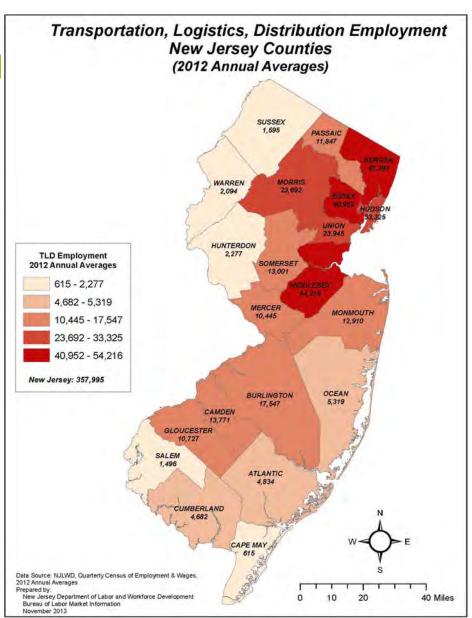
Most of the state's TLD employment is located near the ports of Newark, Elizabeth and Camden as well as the

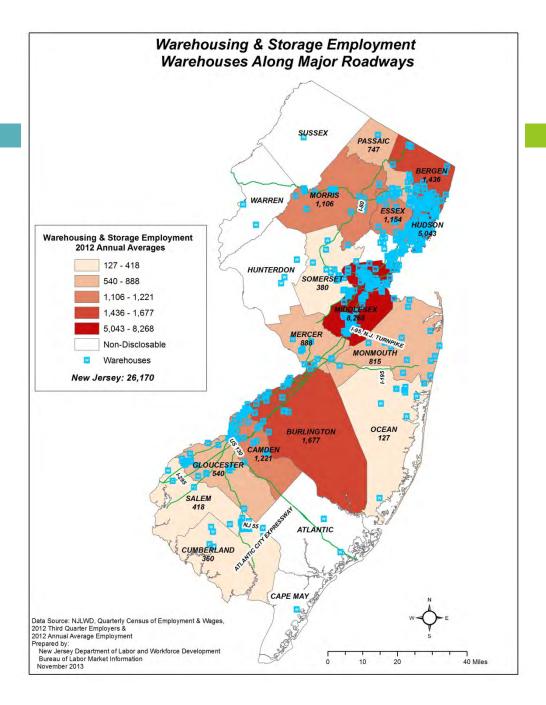
New Jersey Turnpike

Middlesex, Bergen, Essex, Hudson, Union and Morris counties account for 62.4 percent of New Jersey's TLD jobs. These counties are situated near the ports of Newark and Elizabeth and are located along the New Jersey Turnpike.

Other areas in the state that have substantial concentrations of TLD businesses include Burlington, Camden and Gloucester counties which are located along the New Jersey Turnpike and I-295 and are near the Port of Camden and the City of Philadelphia. Combined, they comprise 11.7 percent of the state's TLD employment.

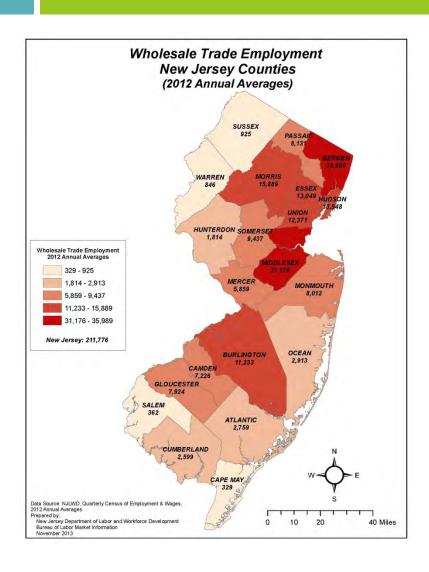
Mercer County is becoming more prominent as a center of TLD employment. Jobholding rose by 16.4 percent since 2007. Developments such as the new Amazon warehouse under construction in Robbinsville are contributing to this trend. Amazon's warehouse is expected to open in 2014.





Plotting warehouse and storage employers along major roadways illustrates the significance of the state's highway system to the TLD industry cluster.

New Jersey's concentration of pharmaceutical firms help Bergen, Middlesex and Morris counties lead the state in employment in wholesale trade.

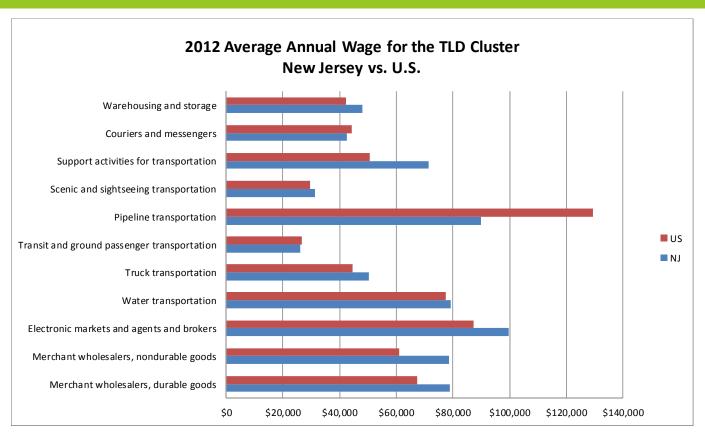


New Jersey's top-ranking counties for wholesale trade employment are Bergen, Middlesex and Morris due in part to the state's high concentration of pharmaceutical firms. Combined, these three counties account for 39.2 percent of employment in wholesale trade and 43.2 percent of jobholding within the druggist goods merchant wholesalers and chemical merchant wholesalers industries.

Combined, private sector jobholding within the druggist goods merchant wholesalers and chemical merchant wholesalers industries account for 9.8 percent of employment within wholesale trade.

The state's top industries by employment within wholesale trade are grocery and related products wholesalers (28,912 jobs or 13.7%) and commercial equipment merchant wholesalers (28,296 jobs or 13.4%).

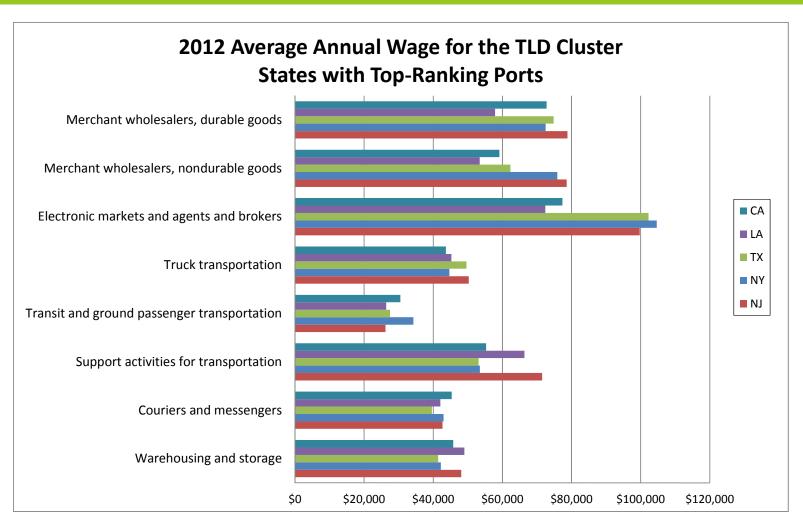
In 2012, New Jersey's annual average wage was higher than the U.S. average in all but three industry subsectors within the TLD cluster



Source: New Jersey Department of Labor and Workforce Development, Quarterly Census of Employment and Wages , 2012 Annual Average Note: Excludes suppressed industries

New Jersey's average annual wage for the TLD cluster ranged from a high of \$99,734 in electronic agents and markets and brokers to a low of \$26,154 in transit and ground passenger transportation.

The high wages in NJ's TLD cluster are reflective of the state's industry mix and strong distribution network. NJ's average annual wages by industry subsector compare favorably to other states with top-ranking ports



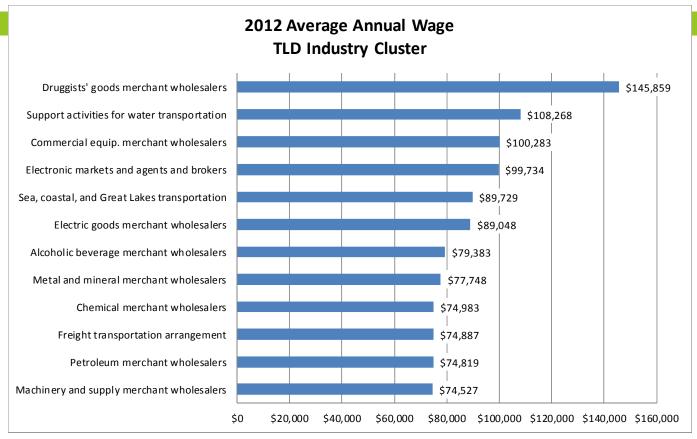
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2012 Annual Averages

The annual average wage rose the most in electronic markets and agents and brokers (+\$17,486 or +21.3%) and pipeline transportation (+\$10,902 or +13.8%)



Source: New Jersey Department of Labor and Workforce Development, Quarterly Census of Employment and Wages, Annual Averages Note: Excludes suppressed industries

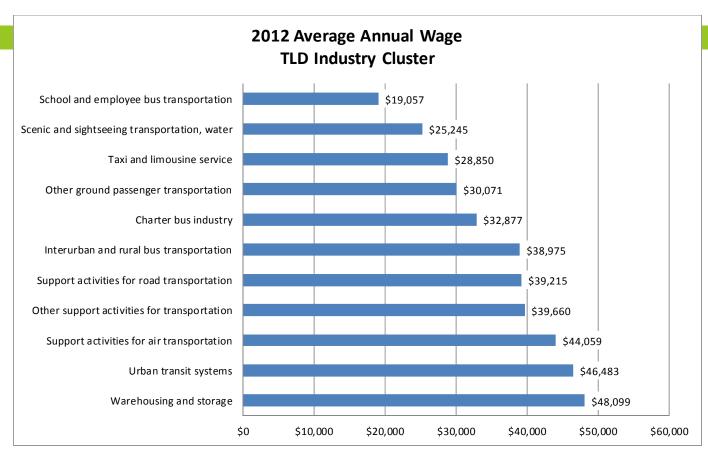
TLD industry subsectors which are among those that paid the highest annual average wages in 2012



Source: New Jersey Department of Labor and Workforce Development, Quarterly Census of Employment and Wages, 2012 Annual Average Note: Excludes suppressed industries

Analysis of average annual wage data by detailed industry reveals that 34.0 percent of TLD industries had an average annual wage above \$70,000 in 2012. Those industries account for 36.0 percent of total TLD employment.

TLD industry subsectors which are among those that paid the lowest annual average wage in 2012



Source: New Jersey Department of Labor and Workforce Development, Quarterly Census of Employment and Wages, 2012 Annual Average Note: Excludes suppressed industries

Analysis of average annual wage data by detailed industry reveals that 31.9 percent of TLD industries had an average annual wage below \$50,000 in 2012. Those industries account for 22.4 percent of total TLD employment.



OCCUPATIONAL ANALYSIS

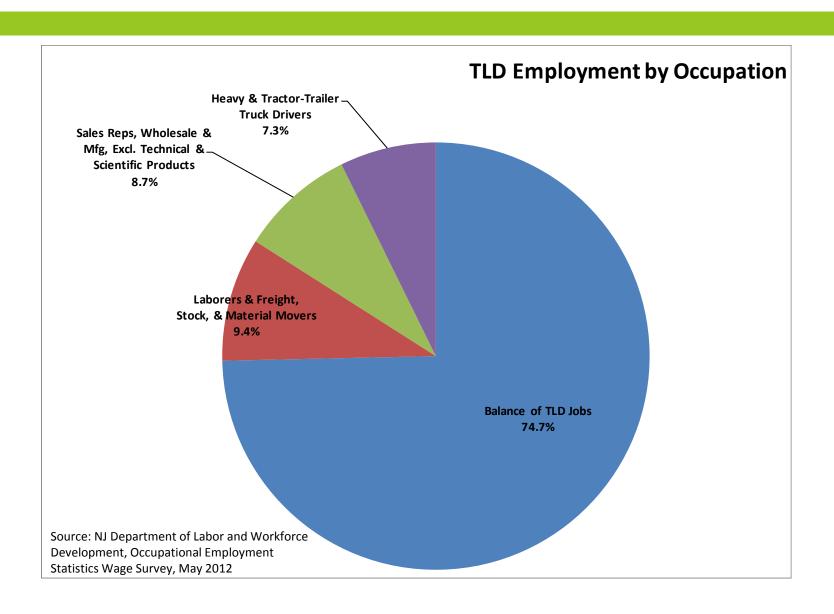
Employment by Occupational Group

Transportation, Logistics snd Distribution Industry Cluster			
Employment by Occupation			
		Percent of	
Occupational Group	Employment	Cluster	
53 Transportation and Material Moving Occupations	132,783	37.1%	
43 Office and Administrative Support Occupations	79,544	22.2%	
41 Sales and Related Occupations	51,036	14.2%	
11 Management Occupations	24,093	6.7%	
13 Business and Financial Operations Occupations	18,904	5.3%	
49 Installation, Maintenace and Repair Occupations	18,392	5.1%	
51 Production Occupations	11,300	3.2%	
15 Computer and Mathmatical Occupations	9,419	2.6%	

Source: NJ Department of Labor and Workforce Development, Occupational Employment Statistics Wage Survey, May 2012

The transportation and material moving occupational group accounts for the greatest proportion of jobs in the TLD industry cluster.

The three largest occupations in the TLD cluster account for one in every four jobs

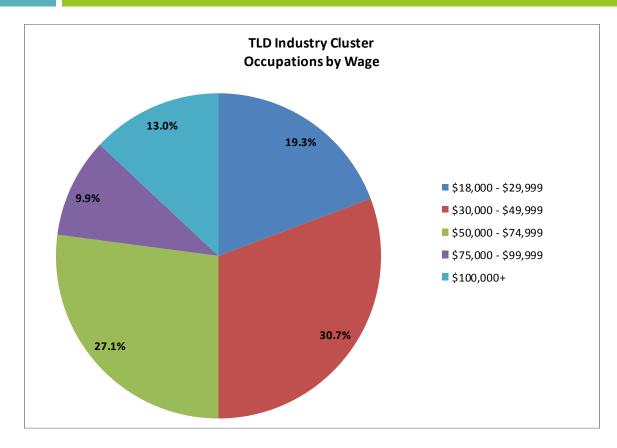


TLD Top Occupations Ranked by Employment

			Percent of TLD
Occupation	Employment	Salary	Jobholding
Laborers & Freight, Stock, and Material Movers, Hand	34,153	\$26,820	9.4%
Sales Reps, Wholesale & Mfg, Excl. Technical & Scientific Products	31,652	\$76,680	8.7%
Heavy and Tractor-Trailer Truck Drivers	26,540	\$44,450	7.3%
Bus Drivers, School or Special Client	12,332	\$32,400	3.4%
Light Truck or Delivery Services Drivers	11,824	\$36,910	3.2%
Office Clerks, General	11,417	\$32,430	3.1%
Customer Service Representatives	11,344	\$36,760	3.1%
Shipping, Receiving, and Traffic Clerks	10,467	\$33,040	2.9%
General and Operations Managers	8,752	\$161,160	2.4%
Packers and Packagers, Hand	8,404	\$22,220	2.3%
Stock Clerks and Order Fillers	7,958	\$25,220	2.2%
Bookkeeping, Accounting, and Auditing Clerks	7,027	\$41,290	1.9%
Industrial Truck and Tractor Operators	6,198	\$32,640	1.7%
Sales Reps, Wholesale & Mfg, Technical and Scientific Products	6,132	\$96,130	1.7%
Business Operations Specialists, All Other	5,670	\$70,370	1.6%
First-Line Supervisors of Office & Administrative Support Workers	5,663	\$56,970	1.6%
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	4,580	\$53,150	1.3%
Taxi Drivers and Chauffeurs	4,559	\$28,820	1.3%
Aircraft Mechanics and Service Technicians	4,114	\$62,000	1.1%
Bus Drivers, Transit and Intercity	4,036	\$41,910	1.1%
Sales Managers	3,835	\$138,200	1.1%
Driver/Sales Workers	3,790	\$30,950	1.0%
Sales Representatives, Services, All Other	3,706	\$72,350	1.0%
Secretaries and Admin Assistants, Excl. Legal, Medical, and Executive	3,610	\$39,300	1.0%
Supervisors of Transportation & Material-Moving Machine & Vehicle Operators	3,525	\$56,860	1.0%

Source: NJ Department of Labor & Workforce Development, Occupational & Employment Statistics Wage Survey, May 2012

Over half of the major occupations in the TLD industry cluster pay between \$30,000 - \$74,999

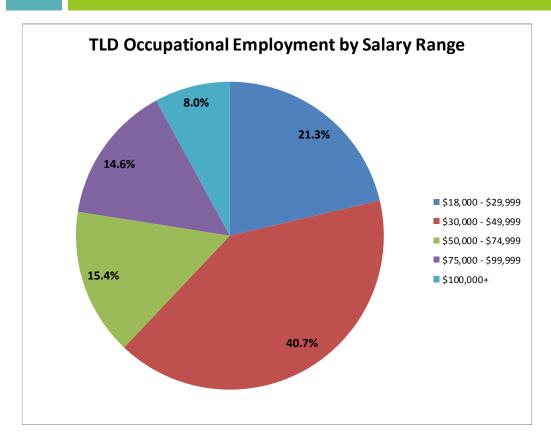


Of the 192 major occupations found in the TLD industry cluster, the majority have an average salary in the \$30,000 - \$49,000 range or the \$50,000 - \$74,000 range.

Half of the occupations have an average salary of less than \$50,000

Source: NJ Department of Labor and Workforce Development Occupational Employment Statistics Wage Survey, May 2012

The vast majority of New Jersey's TLD workers earn a salary of \$30,000-\$49,999



Analysis of occupational employment by salary range shows that 60.0 percent of workers have an average salary of less than \$50,000

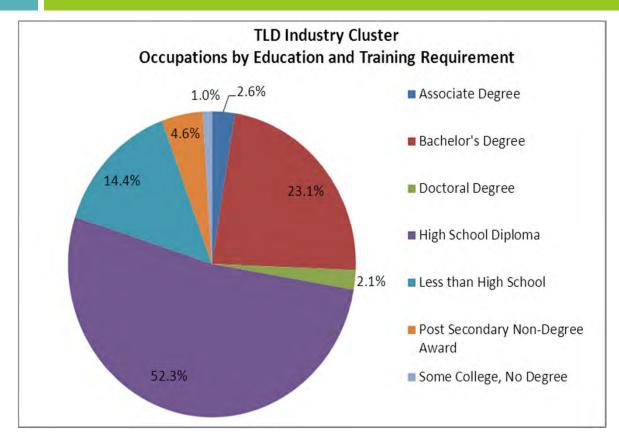
While 27.1 percent of the occupations present in the cluster have an average salary of \$50,000 - \$74,999, only 15.4 percent of workers are employed in those occupations

Source: NJ Department of Labor and Workforce Development Occupational Employment Statistics Wage Survey, May 2012

Occupations by Average Salary

Occupations with the Highest Annual Salary				
	Companions with the Highest Ammual			Percent of TLD
Occupati	ion	Employment	Salary	Jobholding
11-1011	Chief Executives	187	192,160	0.1%
11-9121	Natural Sciences Managers	371	168,460	0.1%
11-1021	General and Operations Managers	8,752	161,160	2.4%
11-2021	Marketing Managers	1,391	150,000	0.4%
11-3031	Financial Managers	1,971	145,530	0.5%
11-3021	Computer and Information Systems Managers	1,061	144,990	0.3%
11-2022	Sales Managers	3,835	138,200	1.1%
11-9041	Architectural and Engineering Managers	318	138,100	0.1%
11-3121	Human Resources Managers	330	137,850	0.1%
23-1011	Lawyers	256	128,860	0.1%
	Occupations with the Lowest Annua	l Salary		
				Percent of TLD
Occupati	on	Employment	Salary	Jobholding
39-6011	Baggage Porters and Bellhops	628	20,960	0.2%
41-2011	Cashiers	518	21,080	0.1%
53-6061	Transportation Attendants, Except Flight Attendants	1,860	21,130	0.5%
53-7064	Packers and Packagers, Hand	8,404	22,220	2.3%
39-9011	Childcare Workers	1,159	22,880	0.3%
51-9198	HelpersProduction Workers	850	22,990	0.2%
51-6031	Sewing Machine Operators	110	23,210	0.0%
53-7061	Cleaners of Vehicles and Equipment	1,345	23,800	0.4%
39-9099	Personal Care and Service Workers, All Other	315	24,300	0.1%
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	605	24,370	0.2%
Source: NJ Department of Labor & Workforce Development, Occupational & Employment Statistics Wage Survey, May 2012				

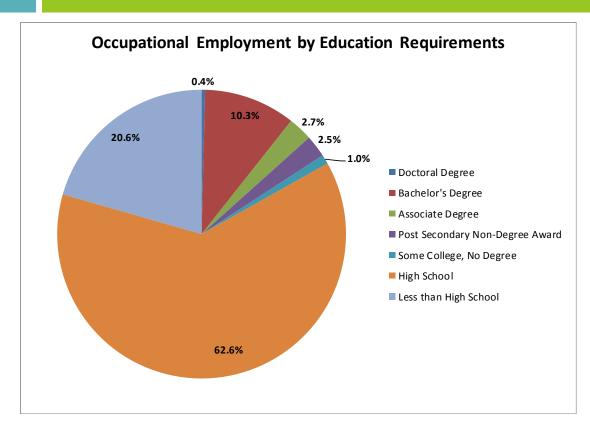
Education Requirements by Occupation



Source: NJ Department of Labor and Workforce Development, Occupational Employment Statistics Wage Survey, May 2012 While a majority of the occupations within the TLD industry cluster require no further education beyond high school, many occupations such as truck drivers and forklift operators have licensing requirements.

Some jobs, especially those in secure areas such as shipping terminals or at airports, may also require additional screening or background checks

Occupational Employment by Educational Requirement



Analysis of occupational employment data by education requirement reveals that 83.2 percent of the jobs in the TLD cluster require no further education beyond high school

Source: NJ Department of Labor and Workforce Development, Occupational Employment Statistics Wage Survey, May 2012

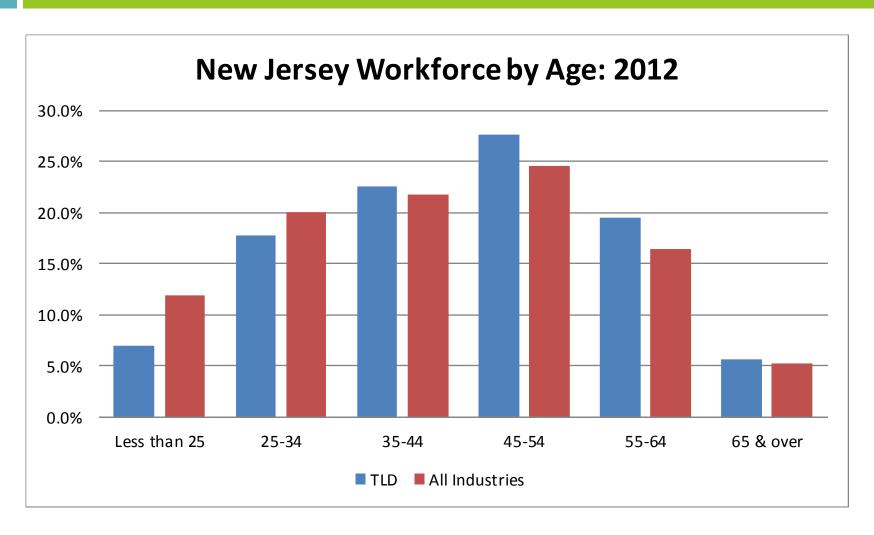


WHO ARE THE WORKERS?

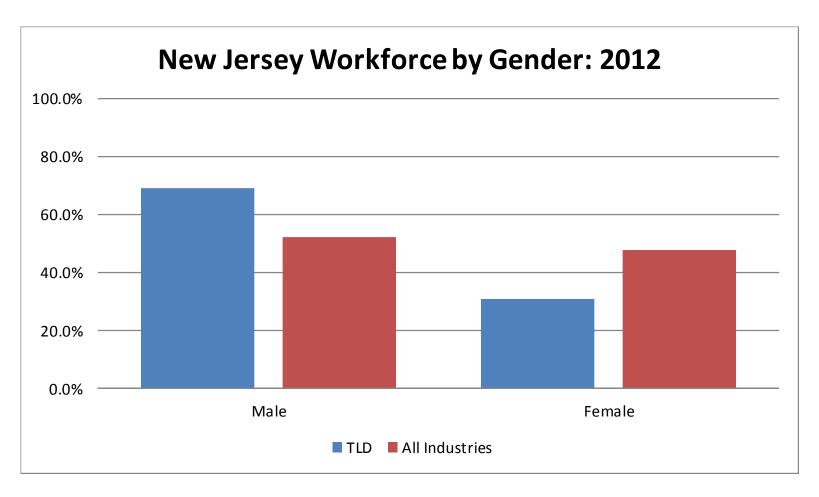
Characteristics of New Jersey's TLD resident workforce

- The American Community Survey (ACS), a product of the U.S. Census Bureau gives insight to the characteristics of New Jersey residents who are employed in the TLD cluster.
- As the ACS is resident-based, it illustrates the characteristics of people who live in New Jersey and the industries that those residents work in rather than the characteristics of the workers who are employed in the Garden State.

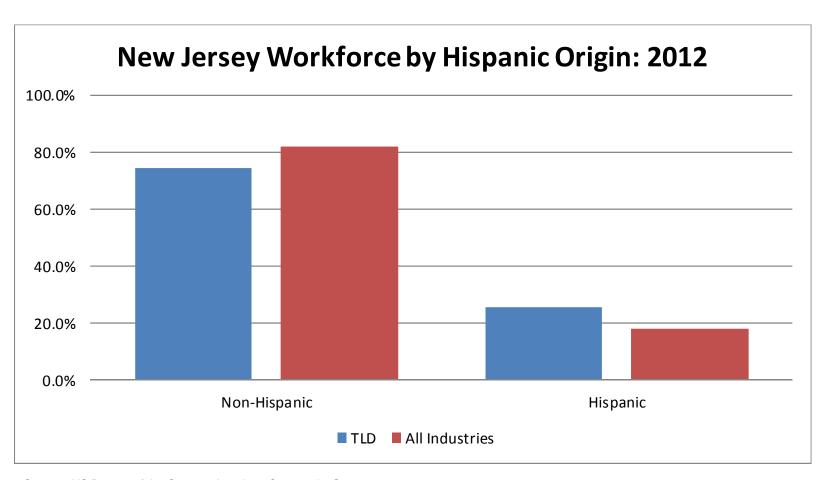
The TLD cluster's New Jersey resident workforce is older than for the state as a whole



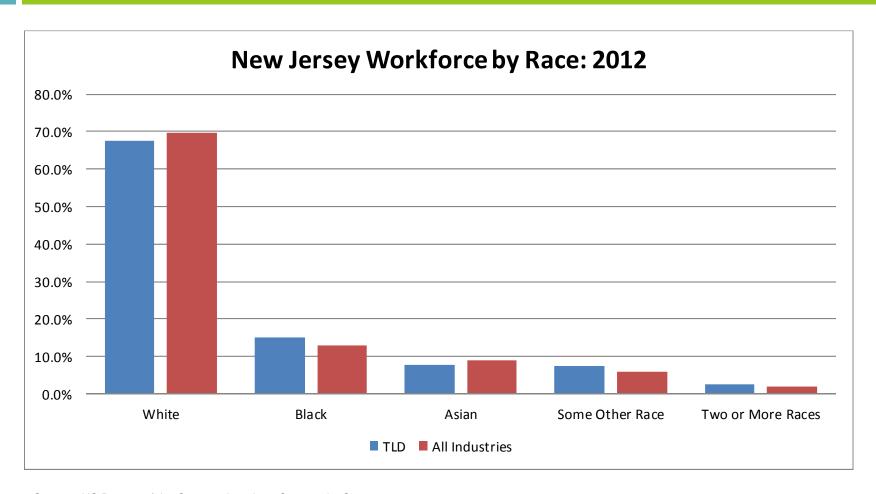
TLD's New Jersey resident workforce is predominately male



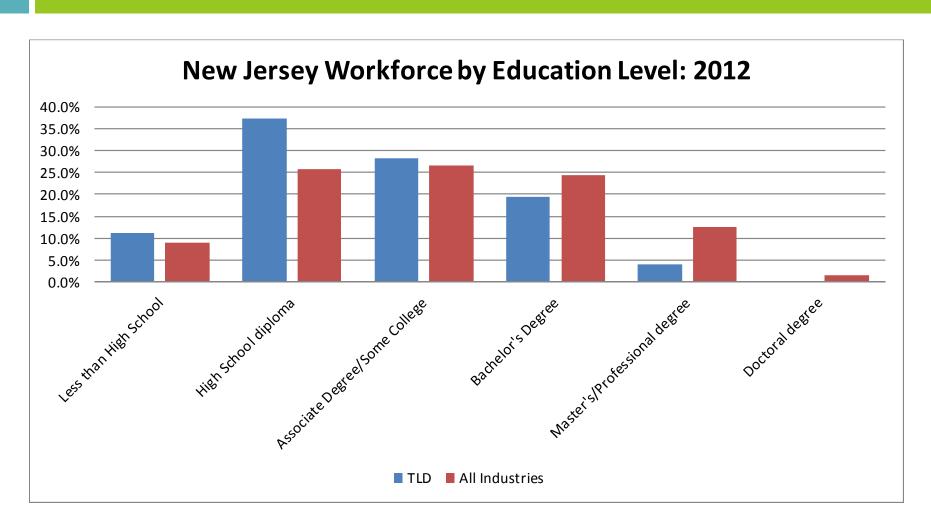
TLD has a larger share of Hispanic resident workforce



TLD also has a larger share of minority resident workforce



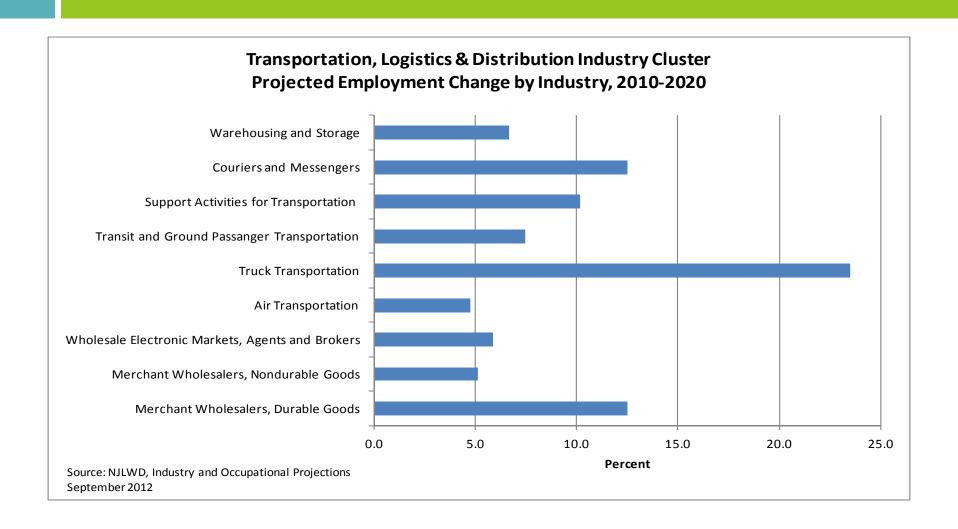
A larger percentage of New Jersey resident TLD workers possess no further education beyond high school.



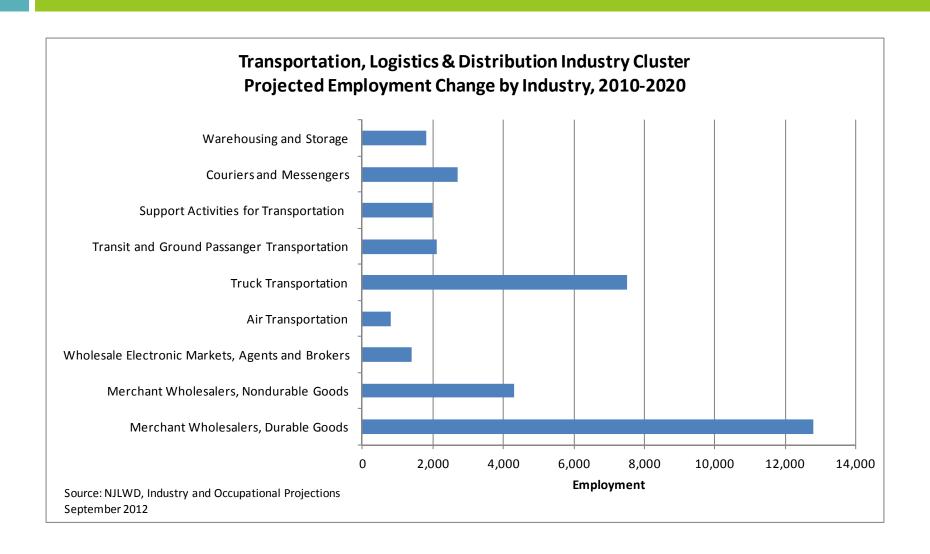


WHERE THE JOBS ARE

With a projected growth rate of 23.5 percent, **truck transportation** is expected to be the TLD cluster's fastest-growing industry by 2020.



The industry in the TLD cluster expected to add the most jobs from 2010 to 2020 is merchant wholesalers, durable goods (+12,800)



Among the major occupations found in the cluster, the top twenty occupations ranked by the projected number of annual openings within TLD account for 61.4 percent of all annual openings in the cluster

Average Annual Job Openings for TLD's Largest Occupations, 2010 - 2020		
	Average Annual	
Occupation	Openings	
Laborers and Freight, Stock, and Material Movers, Hand	1,440	
Heavy and Tractor-Trailer Truck Drivers	1,020	
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	970	
Customer Service Representatives	400	
Light Truck or Delivery Services Drivers	340	
Packers and Packagers, Hand	330	
Office Clerks, General	290	
Bus Drivers, School or Special Client	280	
Shipping, Receiving, and Traffic Clerks	270	
Stock Clerks and Order Fillers	210	
Industrial Truck and Tractor Operators	200	
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	190	
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	170	
General and Operations Managers	160	
Bookkeeping, Accounting, and Auditing Clerks	160	
Business Operations Specialists, All Other	160	
First-Line Supervisors of Non-Retail Sales Workers	160	
Sales Representatives, Services, All Other	150	
Sales Managers	140	
Driver/Sales Workers	130	

Source: NJLWD, Industry and Occupational Projections, September 2012

FOR MORE INFORMATION ON NEW JERSEY'S TRANSPORTATION, LOGISTICS AND DISTRIBUTION INDUSTRY CLUSTER, CONTACT:

JOANNE CARAMELO

EMAIL: JOANNE.CARAMELO@DOL.STATE.NJ.US

PHONE: (609)292-2582