

A regional employment forecast highlights changes in economic growth patterns, which, in turn, impact the demand for transportation and infrastructure within the region. The results of an employment forecast within the Lehigh Valley appear to suggest an increasing demand for infrastructure improvements and freight accommodation within the region. The data utilized for analysis were derived from a REMI PI+ model generated by the LVPC in June 2012. Additional details of the REMI analysis have been published in the *Lehigh Valley Employment Forecast...2040* and on the LVPC website.

Based on LVPC data, the number of jobs has grown 8% in the region as compared to about 5% in the nation from 2001 to 2010. It is important to note that between 2008 and 2010, there was a 2% decrease in jobs; however, nationally there was an 8% decrease. About 41% of manufacturing jobs were lost in the region from 2001 to 2010, but there was significant increase in other sectors such as arts, healthcare and management of companies.

According to the *Lehigh Valley Employment Forecast...2040*, the labor force in the region is expected to increase 30% between 2010 and 2040, with a total of 436,889 workers projected in 2040. Though the labor force will continue to increase, the REMI model projects that the growth per decade will be lower than the decade before due to changing demographics. Because of this, the regional businesses may rely more heavily on commuters from surrounding regions.

Based on an LVPC dataset entitled "History and Forecast of Employment, Lehigh Valley, 2001-2040", the following trends are projected between the year 2010 and the year 2040:

- Employment was projected to increase in the following sectors:
  - Healthcare and Social Assistance
  - Professional and Technical Services
  - Construction
  - State and Local Government
  - Administrative and Waste Services
  - Accommodation and Food Services
  - Other Services, except Public Administration
  - Transportation and Warehousing
  - Educational Services
  - Retail Trade
  - Real Estate and Rental and Leasing
- Arts, Entertainment and Recreation
- Finance and Insurance
- Management of Companies and Enterprises
- Wholesale Trade
- Forestry, Fishing, Related Activities
- Employment was projected to decrease in the following sectors:
  - Mining
  - Utilities
  - Federal Military
  - Farm
- Employment was projected to remain relatively constant in the following sectors, with only minor changes of less than 10% for the following:
  - Manufacturing
  - Wholesale Trade
  - Information
  - Federal Civilian

However, it should be noted that the *Lehigh Valley Employment Forecast...2040* publication identified a continuing decline of employment in the manufacturing and goods-producing industries.

- The greatest increase in jobs is expected to occur in the Healthcare, Professional and Technical Services, and Construction industries.
- Overall, the number of jobs in the Lehigh Valley is expected to increase by approximately 38% between the years 2010 and 2040.

The employment totals by sector for the top sectors are shown in **Table 1** for 2010 and 2040.

Table 1
2010 and 2040 Employment Projections by Sector

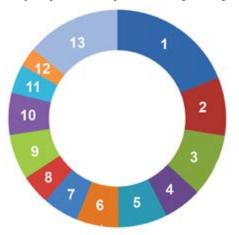
			%
Industry Classification	2010	2040	Change
Healthcare and Social Assistance	51,631	90,448	75.2
Retail Trade	37,855	41,705	10.2
State and Local Government	31,523	44,376	40.8
Manufacturing	28,229	27,525	-2.5
Administrative and Waste Services	24,582	34,918	42
Accommodation and Food Services	22,039	29,911	35.7
Other Services, except Public Administration	18,357	25,677	39.9
Finance and Insurance	18,207	21,120	16
Professional and Technical Services	17,412	32,246	85.2
Construction	16,138	30,004	85.9
Transportation and Warehousing	14,057	20,572	46.3
Wholesale Trade	13,095	13,792	5.3
Other	54,993	67,238	22.3
Total	348,118	479,532	37.7
Source: Labiah Vallay Employment Ford	2010		

Source: Lehigh Valley Employment Forecast...2040

24

**Figure 3** also shows the distribution of employment by industry within the region for 2040. The figure shows that Healthcare and Social Assistance is the largest employment sector within the region, followed by State and Local Government, Retail, and Administrative and Waste Services.

Figure 3
Lehigh Valley Region
Employment by Sector (2040)



- . 19% Healthcare + Social Assistance
- 2. 9% Retail Trade
- 3. 9% State + Local Government
- 4. 6% Manufacturing
- 5. 7% Administrative + Waste Services
- 6. 6% Accommodation + Food Services
- 7. 5% Other Services except Public Administration
- 8. 5% Finance + Insurance
- 9. 7% Professional + Technical Services
- 10. 6% Construction
- 11. 4% Transportation + Warehousing
- 12. 3% Wholesale Trade
- 13. 14% Other

The results of this analysis show the ongoing importance of freight movement in the local economy. Of the classifications provided, it is likely that Manufacturing, Transportation and Warehousing, Wholesale and Retail Trade would require the greatest amount of freight movement to support daily operations within each industry. The employment data for these named sectors reveals the following:

- 104,076 total jobs in these sectors by 2040, representing nearly 22% of all jobs.
- The Transportation and Warehousing industry alone is projected to support a total of 20,572 jobs in 2040. This represents 4% of the jobs within the Lehigh Valley.
- **Table 2** lists the largest non-governmental employers in the region with employment numbers from 2013. As is evident from the table and supporting the information presented, many of the largest employers in the region are healthcare-related businesses.

Other employment data within the Lehigh Valley provides further insight into the composition of the region and potential for growth:

Median household income is \$54,645 in Lehigh County and \$59,551 in Northampton County. Both are higher than the statewide median household income of \$52,267, but it should be noted that, in major population centers such as Allentown and Bethlehem, the median income tends to be lower, which holds true in the Lehigh Valley region. The median household income in Allentown is \$35,549. The median household income in Easton is \$40,076. Figure 4 illustrates these median household income figures.

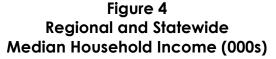
## Table 2 Lehigh Valley Largest Non-Governmental Employers

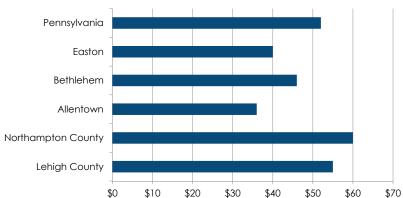
1         Lehigh Valley Hospital and Health Network         11,659           2         St. Luke's Hospital and Health Network         8,900           3         Air Products         3,500           4         Giant Food Stores         2,449           5         PPL         2,413           6         Sands Casino Resort Bethlehem         2,200           7         Sodexo         2,170           8         B. Braun         1,942           9         Amazon.com         1,937           10         Mack Trucks         1,900           11         Lehigh University         1,884           12         Wegmans         1,803           13         Guardian Life Insurance Company of America         1,574           14         Weis Markets, Inc.         1,400           15         Northampton Community College         1,355           16         HCR Manorcare         1,298           17         Easton Hospital         1,289           18         Good Shepherd Rehabilitation Network         1,248           19         Sacred Heart Healthcare System         1,219           20         KidsPeace         1,187           21         Lutron Electronics C	Rank	Employer	Employment
2         Network         3,900           3         Air Products         3,500           4         Giant Food Stores         2,449           5         PPL         2,413           6         Sands Casino Resort Bethlehem         2,200           7         Sodexo         2,170           8         B. Braun         1,942           9         Amazon.com         1,937           10         Mack Trucks         1,900           11         Lehigh University         1,884           12         Wegmans         1,803           13         Guardian Life Insurance Company of America         1,574           14         Weis Markets, Inc.         1,400           15         Northampton Community College         1,355           16         HCR Manorcare         1,298           17         Easton Hospital         1,289           18         Good Shepherd Rehabilitation Network         1,248           19         Sacred Heart Healthcare System         1,219           20         KidsPeace         1,187           21         Lutron Electronics Co., Inc.         1,100           22         Crayola         1,057           <	1		11,659
4         Giant Food Stores         2,449           5         PPL         2,413           6         Sands Casino Resort Bethlehem         2,200           7         Sodexo         2,170           8         B. Braun         1,942           9         Amazon.com         1,937           10         Mack Trucks         1,900           11         Lehigh University         1,884           12         Wegmans         1,803           13         Guardian Life Insurance Company of America         1,574           14         Weis Markets, Inc.         1,400           15         Northampton Community College         1,355           16         HCR Manorcare         1,298           17         Easton Hospital         1,289           18         Good Shepherd Rehabilitation Network         1,248           19         Sacred Heart Healthcare System         1,219           20         KidsPeace         1,187           21         Lutron Electronics Co., Inc.         1,100           22         Crayola         1,057           24         Walmart         1,000		Network	8,900
5         PPL         2,413           6         Sands Casino Resort Bethlehem         2,200           7         Sodexo         2,170           8         B. Braun         1,942           9         Amazon.com         1,937           10         Mack Trucks         1,900           11         Lehigh University         1,884           12         Wegmans         1,803           13         Guardian Life Insurance Company of America         1,574           14         Weis Markets, Inc.         1,400           15         Northampton Community College         1,355           16         HCR Manorcare         1,298           17         Easton Hospital         1,289           18         Good Shepherd Rehabilitation Network         1,248           19         Sacred Heart Healthcare System         1,219           20         KidsPeace         1,187           21         Lutron Electronics Co., Inc.         1,100           22         Crayola         1,057           24         Walmart         1,000		Air Products	3,500
6         Sands Casino Resort Bethlehem         2,200           7         Sodexo         2,170           8         B. Braun         1,942           9         Amazon.com         1,937           10         Mack Trucks         1,900           11         Lehigh University         1,884           12         Wegmans         1,803           13         Guardian Life Insurance Company of America         1,574           14         Weis Markets, Inc.         1,400           15         Northampton Community College         1,355           16         HCR Manorcare         1,298           17         Easton Hospital         1,289           18         Good Shepherd Rehabilitation Network         1,248           19         Sacred Heart Healthcare System         1,219           20         KidsPeace         1,187           21         Lutron Electronics Co., Inc.         1,100           22         Crayola         1,100           23         Wells Fargo         1,057           24         Walmart         1,000		Giant Food Stores	2,449
7       Sodexo       2,170         8       B. Braun       1,942         9       Amazon.com       1,937         10       Mack Trucks       1,900         11       Lehigh University       1,884         12       Wegmans       1,803         13       Guardian Life Insurance Company of America       1,574         14       Weis Markets, Inc.       1,400         15       Northampton Community College       1,355         16       HCR Manorcare       1,298         17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000		PPL	
8       B. Braun       1,942         9       Amazon.com       1,937         10       Mack Trucks       1,900         11       Lehigh University       1,884         12       Wegmans       1,803         13       Guardian Life Insurance Company of America       1,574         14       Weis Markets, Inc.       1,400         15       Northampton Community College       1,355         16       HCR Manorcare       1,298         17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000	6	Sands Casino Resort Bethlehem	2,200
9       Amazon.com       1,937         10       Mack Trucks       1,900         11       Lehigh University       1,884         12       Wegmans       1,803         13       Guardian Life Insurance Company of America       1,574         14       Weis Markets, Inc.       1,400         15       Northampton Community College       1,355         16       HCR Manorcare       1,298         17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000		Sodexo	2,170
10       Mack Trucks       1,900         11       Lehigh University       1,884         12       Wegmans       1,803         13       Guardian Life Insurance Company of America       1,574         14       Weis Markets, Inc.       1,400         15       Northampton Community College       1,355         16       HCR Manorcare       1,298         17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000		B. Braun	1,942
11       Lehigh University       1,884         12       Wegmans       1,803         13       Guardian Life Insurance Company of America       1,574         14       Weis Markets, Inc.       1,400         15       Northampton Community College       1,355         16       HCR Manorcare       1,298         17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000	9	Amazon.com	1,937
12       Wegmans       1,803         13       Guardian Life Insurance Company of America       1,574         14       Weis Markets, Inc.       1,400         15       Northampton Community College       1,355         16       HCR Manorcare       1,298         17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000	10	Mack Trucks	1,900
13       Guardian Life Insurance Company of America       1,574         14       Weis Markets, Inc.       1,400         15       Northampton Community College       1,355         16       HCR Manorcare       1,298         17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000	11	Lehigh University	1,884
13       of America       1,374         14       Weis Markets, Inc.       1,400         15       Northampton Community College       1,355         16       HCR Manorcare       1,298         17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000	12	Wegmans	1,803
15         Northampton Community College         1,355           16         HCR Manorcare         1,298           17         Easton Hospital         1,289           18         Good Shepherd Rehabilitation Network         1,248           19         Sacred Heart Healthcare System         1,219           20         KidsPeace         1,187           21         Lutron Electronics Co., Inc.         1,100           22         Crayola         1,057           24         Walmart         1,000			1,574
16       HCR Manorcare       1,298         17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000	14	Weis Markets, Inc.	1,400
17       Easton Hospital       1,289         18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,000         23       Wells Fargo       1,057         24       Walmart       1,000	15	Northampton Community College	1,355
18       Good Shepherd Rehabilitation Network       1,248         19       Sacred Heart Healthcare System       1,219         20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,000         23       Wells Fargo       1,057         24       Walmart       1,000	16	HCR Manorcare	1,298
18         Network         1,248           19         Sacred Heart Healthcare System         1,219           20         KidsPeace         1,187           21         Lutron Electronics Co., Inc.         1,100           22         Crayola         1,100           23         Wells Fargo         1,057           24         Walmart         1,000	17	Easton Hospital	1,289
20       KidsPeace       1,187         21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000	18		1,248
21       Lutron Electronics Co., Inc.       1,100         22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000	19	Sacred Heart Healthcare System	1,219
22       Crayola       1,100         23       Wells Fargo       1,057         24       Walmart       1,000	20	KidsPeace	1,187
23         Wells Fargo         1,057           24         Walmart         1,000	21	Lutron Electronics Co., Inc.	1,100
24 Walmart 1,000	22	Crayola	1,100
24 Walmart 1,000	23	Wells Fargo	1,057
	24	Walmart	1,000
	25	Lehigh Carbon Community College	

Source: The Morning Call, Inc., Copyright February 3, 2013

- Unemployment in the Lehigh Valley has improved since 2010 but still exceeds state and national rates by 0.6% and 0.4%, respectively (2012).
- The job market is anticipated to increase at a faster rate than the overall population. The 2010-2040 population growth is projected to be approximately 35%, while the number of jobs is projected to increase by 38% during this time period.

The economic forecast suggests that the region will increasingly rely on freight as the economy is projected to grow. Therefore, it is important that investments in the freight transportation system are made in order to accommodate projected future freight growth.





Source: ACS, 2008-2012, 5-year estimates.