

The Pennsylvania Licensed Practical Nurse Workforce In Health Care

Updated - New SHIP Survey Data & Projections

| High Estimate LPN Model (Table A) | | | | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|
| LICENSED PRACTICAL NURSE SUPPLY | | | | | | | | | | |
| Variable | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Employment In Health Care in PA (A) | 37,600 | 36,400 | 35,400 | 34,500 | 33,600 | 32,700 | 31,800 | 30,900 | 30,000 | 29,100 |
| Unemployed Seeking Emp in HC in PA (B) | 1,800 | 1,700 | 1,600 | 1,500 | 1,400 | 1,300 | 1,200 | 1,100 | 1,000 | 900 |
| New Entries (C) | 1,700 | 1,900 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| Replacements (D) 1.67% to 3.95% + Career Develop. | 2,900 | 2,900 | 2,900 | 2,900 | 2,900 | 2,900 | 2,900 | 2,900 | 2,900 | 2,900 |
| NET SUPPLY = A+B+C-D | 38,200 | 37,100 | 36,100 | 35,100 | 34,100 | 33,100 | 32,100 | 31,100 | 30,100 | 29,100 |
| LICENSED PRACTICAL NURSE DEMAND (projected employment) | | | | | | | | | | |
| Variable | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Employment In Health Care in PA (A) | 37,600 | 38,000 | 38,400 | 38,800 | 39,200 | 39,600 | 40,000 | 40,400 | 40,800 | 41,200 |
| Unfilled at 6.7 (B) | 2,400 | 2,400 | 2,400 | 2,500 | 2,500 | 2,500 | 2,500 | 2,600 | 2,600 | 2,600 |
| Growth (C) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| NET DEMAND (ND) = A + B + C | 40,400 | 40,800 | 41,200 | 41,700 | 42,100 | 42,500 | 42,900 | 43,400 | 43,800 | 44,200 |
| SHORTAGE (NS - ND) | -2,200 | -3,700 | -5,100 | -6,600 | -8,000 | -9,400 | -10,800 | -12,300 | -13,700 | -15,100 |
| PROJECTED SHORTAGE | -5% | -9% | -12% | -16% | -19% | -22% | -25% | -28% | -31% | -34% |

Notes:

-The shortage of LPNs is projected to be higher in 2010 when compared to the previous LPN Workforce Report (Summer 2005). This shortage is expected to increase steadily through 2016.

-If you compare this model to the one in the previous LPN Workforce Report, the slight decrease of new entries coupled with an increase of LPNs in career development programs, and an increase of growth openings increased the LPN shortage.

-For comparison, 2010 Employment (A) in the last model was 33,200 compared to 34,500 in this model. Overall, the 2010 Shortage was -4,100 in the last model compared to -6,600 in this model.

-The annual growth openings increased from 300 in the last model to 400 per year in this model.

-In this model, the vacancy rate was kept the same as the previous model. However, the historic percent of LPN's that passed the licensing exam, and the percent that will seek health care employment were updated in this model.

| Low Estimate LPN Model (Table B) | | | | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| LICENSED PRACTICAL NURSE SUPPLY | | | | | | | | | | |
| Variable | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Employment In Health Care in PA (A) | 37,600 | 37,000 | 36,600 | 36,300 | 35,900 | 35,500 | 35,000 | 34,500 | 34,000 | 33,400 |
| Unemployed Seeking Emp in HC in PA (B) | 1,800 | 1,700 | 1,600 | 1,500 | 1,400 | 1,300 | 1,200 | 1,100 | 1,100 | 1,000 |
| New Entries (C) | 1,700 | 1,900 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| Replacements (D) 1.35% to 3.09% + Career Develop. | 2,300 | 2,300 | 2,300 | 2,400 | 2,400 | 2,500 | 2,500 | 2,500 | 2,600 | 2,600 |
| NET SUPPLY = A+B+C-D | 38,800 | 38,300 | 37,900 | 37,400 | 36,900 | 36,300 | 35,700 | 35,100 | 34,500 | 33,800 |
| LICENSED PRACTICAL NURSE DEMAND (projected employment) | | | | | | | | | | |
| Variable | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Employment In Health Care in PA (A) | 37,600 | 38,000 | 38,400 | 38,800 | 39,200 | 39,600 | 40,000 | 40,400 | 40,800 | 41,200 |
| Unfilled at 6.7 (B) | 2,400 | 2,400 | 2,400 | 2,500 | 2,500 | 2,500 | 2,500 | 2,600 | 2,600 | 2,600 |
| Growth (C) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| NET DEMAND (ND) = A + B + C | 40,400 | 40,800 | 41,200 | 41,700 | 42,100 | 42,500 | 42,900 | 43,400 | 43,800 | 44,200 |
| SHORTAGE (NS - ND) | -1,600 | -2,500 | -3,300 | -4,300 | -5,200 | -6,200 | -7,200 | -8,300 | -9,300 | -10,400 |
| PROJECTED SHORTAGE | -4% | -6% | -8% | -10% | -12% | -15% | -17% | -19% | -21% | -24% |

Notes:

-The shortage of LPNs is projected to be higher in 2010 when compared to the previous LPN Workforce Report (Summer 2005). This shortage is expected to increase steadily through 2016.

-If you compare this model to the one in the previous LPN Workforce Report, the slight decrease of new entries coupled with an increase of LPNs in career development programs, and an increase of growth openings increased the LPN shortage.

-For comparison, 2010 Employment (A) in the last model was 34,300 compared to 36,300 in this model. Overall, the 2010 Shortage was -2,800 in the last model compared to -4,300 in this model.

-The annual growth openings increased from 300 in the last model to 400 per year in this model.

-In this model, the vacancy rate was kept the same as the previous model. However, the historic percent of LPN's that passed the licensing exam, and the percent that will seek health care employment were updated in this model.

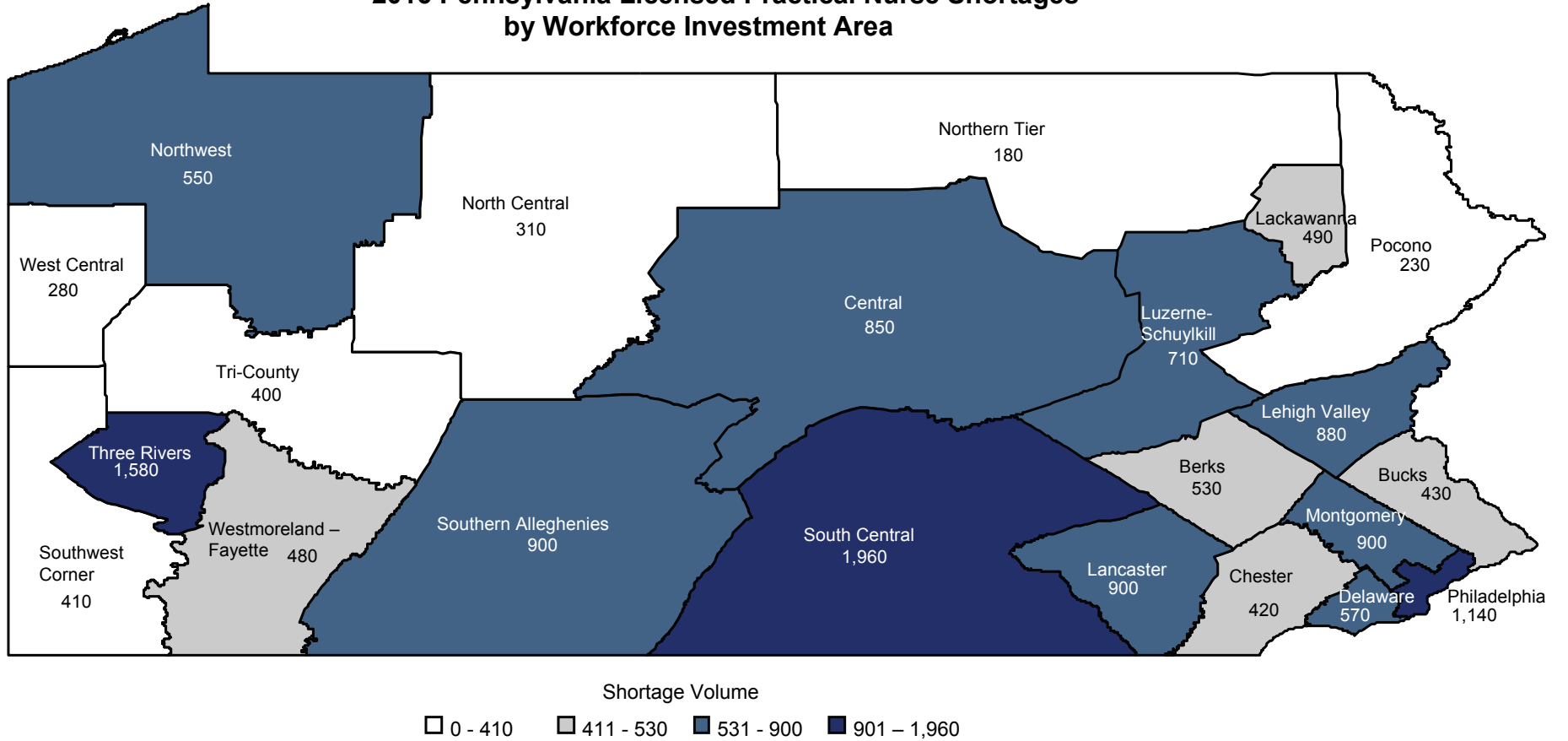
Licensed Practical Nurse Model Shortage Comparison

| Health District | 2010 Shortage Original | Pct. | 2010 Shortage Updated | Pct. | Volume Change | 2016 Shortage | Pct. |
|-----------------|---------------------------|------|--------------------------|------|------------------|---------------|------|
| Northwest | -30 | -1% | 460 | 11% | 490 | 1,110 | 25% |
| Southwest | 650 | 9% | 1,500 | 19% | 850 | 3,320 | 40% |
| Northcentral | 310 | 9% | 390 | 11% | 80 | 900 | 25% |
| Southcentral | 870 | 12% | 1,110 | 15% | 240 | 2,500 | 33% |
| Northeast | 880 | 16% | 1,000 | 18% | 120 | 2,200 | 38% |
| Southeast | 1,420 | 12% | 2,150 | 16% | 730 | 5,070 | 35% |
| Total | 4,100 | | 6,600 | | 2,500 | 15,100 | |

| Workforce Investment Area | 2010 Shortage Original | Pct. | 2010 Shortage Updated | Pct. | Volume Change | 2016 Shortage | Pct. |
|---------------------------|---------------------------|------|--------------------------|------|------------------|---------------|------|
| Berks | 190 | 13% | 250 | 17% | 60 | 530 | 34% |
| Bucks | 230 | 16% | 140 | 11% | -90 | 430 | 31% |
| Central | 250 | 8% | 360 | 11% | 110 | 850 | 26% |
| Chester | 190 | 19% | 190 | 17% | 0 | 420 | 35% |
| Delaware | 190 | 17% | 230 | 17% | 40 | 570 | 38% |
| Lackawanna | 20 | 2% | 220 | 17% | 200 | 490 | 36% |
| Lancaster | 520 | 20% | 400 | 16% | -120 | 900 | 33% |
| Lehigh Valley | 610 | 34% | 440 | 24% | -170 | 880 | 45% |
| Luzerne and Schuylkill | 40 | 2% | 290 | 13% | 250 | 710 | 30% |
| Montgomery | 120 | 7% | 390 | 19% | 270 | 900 | 40% |
| Northcentral | -100 | -9% | 120 | 10% | 220 | 310 | 24% |
| Northern Tier | 110 | 17% | 80 | 13% | -30 | 180 | 28% |
| Northwest | 60 | 3% | 240 | 11% | 180 | 550 | 24% |
| Philadelphia | 20 | 1% | 490 | 16% | 470 | 1,140 | 36% |
| Pocono Counties | 140 | 18% | 70 | 10% | -70 | 230 | 31% |
| South Central | 840 | 15% | 860 | 16% | 20 | 1,960 | 33% |
| Southern Alleghenies | 90 | 4% | 400 | 16% | 310 | 900 | 35% |
| Southwest Corner | 70 | 7% | 160 | 16% | 90 | 410 | 38% |
| Three Rivers | 430 | 15% | 770 | 24% | 340 | 1,580 | 45% |
| Tri-County | 30 | 3% | 160 | 15% | 130 | 400 | 35% |
| West Central | 10 | 1% | 110 | 12% | 100 | 280 | 29% |
| Westmoreland and Fayette | 70 | 6% | 210 | 18% | 140 | 480 | 38% |
| Total | 4,100 | | 6,600 | | 2,500 | 15,100 | |

Note: Negative number denotes surplus

2016 Pennsylvania Licensed Practical Nurse Shortages by Workforce Investment Area



2016 Pennsylvania Licensed Practical Nurse Shortages by Health Districts

