

**2040 Population Projections  
for Lancaster County  
and Municipalities**

**Description of Methodology**

**Lancaster County Planning Commission**

**June 2012**

## **INTRODUCTION**

### **What are Population Projections?**

*Projections* are estimates of future populations based on statistical models that extrapolate past and present trends into the future. Projections can be created through very simple or very complex calculations. The type of calculations used is based on the available data and desired use of the forecast.

There is always a greater difficulty in and inherent inaccuracies in developing population projections for small geographic areas such as townships, boroughs and small cities. Projections for larger geographic areas are more reliable, since the large population base will be less likely to exhibit short term variations. Likewise, any projection results that extend for periods beyond ten years become statistically less reliable as inputs to the projection are based on calculations rather than actual numbers. In summary, the smaller the area and the longer the period, the less likely it is a projection will be accurate.

With the above in mind, the Lancaster County Planning Commission (LCPC), with previous guidance from an experienced demographer and consultant, selected a multi-step methodology, employing several sources of the most currently available data that is consistent with established demographic practices. The LCPC used that methodology to develop county and municipal projections for the years 2020, 2030, and 2040. The projections can be further refined when LCPC staff work with municipalities to meet their planning needs (see last section).

## **POPULATION PROJECTION METHODOLOGY**

### **General Description**

#### **Lancaster County**

The population projections for Lancaster County as a whole were made using a Cohort-Component Methodology. This methodology first separates the population into five-year age groups by gender, called cohorts. It then applies the various components of population change (births, deaths, and migration) to each cohort in five-year increments over the projection period.

Of the three components of population change, migration is the most variable and, therefore, the most difficult to predict. To help manage migration's variability, two different methods of estimating migration were used. The use of these two methods produced two different population projections as a result.

These two projections were assumed to represent the high and low of a range of population possibilities. By averaging the high and low, a middle projection for the county was created **and used as the official projection**. A comparison of the projections revealed that the high and low vary from the middle by as much as +/-1.6%

#### **Municipalities**

To calculate the municipal populations, four simple projection methods were used to project year 2010 municipal populations to 2020, 2030 and 2040. In each method, the previously determined county projection was kept as the control total. The results of the four methods were averaged to create a final projection.

These calculations were performed three times, one for each of the high, middle, and low county population control totals. For these municipal projections, the high and low varied from the middle by as much as +/- 1.9%

The results of the above described calculations, using the county middle projection as the control total, became the county's municipal projections. They are based solely on the mathematical projection of existing trends and do not take into account any future policy decisions or desired population distributions.

## Detailed Description

### Lancaster County

Lancaster County's population projections begin with the collection of several data inputs.

1. 2000 Census population of Lancaster County by age cohort and by gender<sup>1</sup>
2. 2010 Census population of Lancaster County by age cohort and by gender<sup>1</sup>
3. 2005-2009 Average birth rates for Lancaster County by mother's age cohort (replace the five year period with 206-2010 once 2010 rate is available)<sup>2</sup>
4. 2006-2009 Average death rates for Pennsylvania by age cohort and by gender<sup>2</sup>
5. 2010-2040 projected birth rates for U.S. by mother's age cohort (5 year increments)<sup>1</sup>
6. 2005 population intercensal estimates of Lancaster County by age and gender<sup>2</sup>
7. 2000-2010 annual deaths and live births counts<sup>3</sup>

<sup>1</sup>US Bureau of the Census

<sup>2</sup>EpiQMS database, Department of Health

<sup>3</sup>Health Statistics and Research, Department of Health

### Step One

For each age cohort, Lancaster County's average birth rate is compared with the 2010 US rate and the ratio between the two is calculated ( $\text{ratio} = \text{county rate} / \text{US rate}$ ). The comparison ratio is then applied to the projected US rates to compute projected Lancaster County Rates.

Next, to create 5-year birth rates, the average of two adjacent years is taken and multiplied by 5. These 5-year birth rates are used in the projections.

### Step Two

The Pennsylvania death rates are applied to the 2010 Lancaster County population to calculate the estimated deaths. The estimated deaths are then compared with the 2010 actual deaths for the county. A comparison ratio between the estimated and actual deaths is calculated by dividing the actual deaths that occurred by the estimated deaths ( $\text{ratio} = \text{actual deaths} / \text{estimated deaths}$ ). This ratio is then applied to the Pennsylvania death rates to fit the Lancaster County deaths. In order to turn the death rates into survival rates, the death rates are subtracted from 1 ( $1 - \text{adjusted death rate} = \text{survival rate}$ ). The resulting survival rate is raised to the 5<sup>th</sup> power to create a 5-year survival rate.

### Step Three

Two different methods for estimating migration are used because migration tends to be very variable. The first method is the Adjacent Cohort Average Method. First, the 2010 and 2000 Census data are placed side by side. Then, 2010 is "bumped down" two cohorts, so that the same groups of people are being compared. For example, someone

who is 22 years old in 2000 will be in the 20-24 year age cohort, but they will be in the 30-34 year age cohort in 2010. Therefore the 2010 population must be bumped down 2 cohorts. A comparison is made between the cohort population in 2010 and in 2000 by dividing the 2010 population by the 2000 population. The resulting number expresses the total population change over the 10-year period. Population change, however, is projected in 5-year increments. To express the estimated change over a 5-year period, the two adjacent cohorts are averaged. Next, the 5-year death rates are subtracted from the 5-year population change, leaving the change attributable to migration. By adding 1 to the change attributable to migration, a migration rate is created.

The second method used is the Cohort Survival Method. This method creates a number of net migrants for each age cohort, instead of the migration rate. This method involves the use of population by age and gender from the 2000 Census, 2005 Intercensal Estimates, and 2010 Census. First, the previously determined cohort-specific survival rates are applied to each cohort in 2000, and the result is moved into the next highest age cohort. The number of actual births in the years from 2000-2005 is added to the 0-4 age cohort.

The results of this calculation are compared to the 2005 Intercensal Estimates. The difference between the calculations and the 2005 Intercensal Estimates is the estimated net migration. These same calculations are repeated using the 2005 and 2010 data.

Averaging the net migration calculated from 2000-2005 and 2005-2010 creates the final 5-year net migration.

#### Step Four

To project population, the 2010 population is first survived (the age and gender specific survival rates calculated earlier are applied to the cohorts). Next, depending on what migration method was used, migration rates or net migration numbers are applied to the survivors of each cohort. After applying the migration calculation, the result is moved into the next highest cohort. For example, the 25-29 year old female cohort is first multiplied by the survival rate. This results in subtracting out the people estimated to die. The surviving population number is then either multiplied by the migration rate (if using first migration method), or the net migration is added to it (if using second migration method). This will add or subtract people according to estimated migration. The result of this migration calculation is placed in the 30-34 year old female cohort, because applying the survival rate and migration calculation, in effect, ages the population.

Next, birth rates are used to estimate births. The birth rates are applied to the average of the two adjacent female age cohorts. The average of the two adjacent cohorts is used because the population will change over the five year span. The number of births so calculated is divided between males and females. 49% are males, and 51% females. This is a national statistic, which holds true in Lancaster County. Next, infant survival rates are applied to the number of births. The infant survival rates used are the average survival rates for Lancaster County from 2005-2010. Finally, the number of surviving infants is

added to the Under 5 age cohort. This process is repeated for each 5-year projection cycle.

### Projection Range

Because two different methods are used to calculate migration, two different sets of projections are the result. The two projections are considered to be the high and low of a range of population possibilities. **The high and low are averaged to create a middle projection and this became the official county projection.** To express the variability of the projection, a projection range is created. The percent difference between the middle projection and the high and low projection are calculated. The projections varied by as much as +/- 3.0% in 2010.

### Municipalities

The county population projections calculated with the cohort-component method are next used as control totals for the municipal population projections.

The model used for the municipal projections involves the use of four different simple projection methods. For each method, municipalities' population is projected and then adjusted to fit the county total for the three projection years 2020, 2030, and 2040. **Then, the four methods are averaged for each projection year to create a final projection.**

This process is performed for the high, middle and low county projections. The four methods used are:

1. Method one averaged the 10-year growth rate from 1980-1990, 1990-2000, and 2000-2010 for each municipality. Each municipality's average growth rate was then used to project 2020, 2030, and 2040. For each projection year, the county population total was compared to the control total projected by the cohort-component method. An adjustment factor was calculated using the county totals and applied to each municipality.
2. Method two averaged the numerical population increase from 1980-1990, 1990-2000, and 2000-2010 for each municipality. Each municipality's average increase was used to project the increase between 2010-2020, 2020-2030, and 2030-2040. For each projection year, the county population total was compared to the control total projected by the cohort-component method. An adjustment factor was calculated using the county totals and applied to each municipality.
3. Method three averaged each municipality's share of the county growth from 1980-1990, 1990-2000, and 2000-2010. Each municipality's average share of the growth was applied to the overall county growth predicted by the cohort-component method to project the growth for that municipality. No adjustment was needed, because the county control total was used in the calculation.

4. Method four kept each municipality's percent of the total county population in 2010 constant. So, the county's population projected by the cohort-component method in 2020, 2030, and 2040 was assigned to each municipality in the same proportion as it was in 2010.

#### Projection Range

As in the county projections, the percent difference between the middle projections and the high and low projections are calculated. Here, the projections varied by as much as +/- 3.5% in 2040.

**The results of the above described calculations became the county's municipal projections. They are based solely on the mathematical projection of existing trends and do not take into account any future policy decisions or desired population distributions.**

#### **How to Use Projections and Developing Forecasts**

As describe earlier the county and municipal projections are purely based on use of a number of tested mathematical population projection methods. Forecasts, on the other hand, can be developed using the projections and involve making adjustments to the projections using local knowledge/data and using either technical/analytical or more intuitive methods.

Use of the projections by municipalities/partners may be perfectly fine for some planning projects or studies but may need refinement into forecasts for others.

The county and likely the planning region projections developed should remain unchanged, but LCPC staff is willing to work with municipalities and planning regions in developing forecasts for their municipality/ies.

## Lancaster County PA - Population Projections

LCPC - June 2012

| Municipality      | Census         |                |                | Projections    |                |                |                |                |                |
|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                   | 1990           | 2000           | 2010           | 2015           | 2020           | 2025           | 2030           | 2035           | 2040           |
| Adamstown B       | 1,108          | 1,201          | 1,772          | 1,881          | 1,990          | 2,089          | 2,187          | 2,276          | 2,364          |
| Akron B           | 3,869          | 4,046          | 3,876          | 3,938          | 3,999          | 4,038          | 4,077          | 4,098          | 4,119          |
| Bart T            | 2,774          | 3,003          | 3,094          | 3,213          | 3,332          | 3,431          | 3,530          | 3,611          | 3,692          |
| Brecknock T       | 5,197          | 6,699          | 7,199          | 7,686          | 8,172          | 8,619          | 9,066          | 9,477          | 9,887          |
| Caernarvon T      | 3,946          | 4,278          | 4,748          | 4,955          | 5,162          | 5,337          | 5,511          | 5,658          | 5,805          |
| Christiana B      | 1,045          | 1,124          | 1,168          | 1,185          | 1,202          | 1,213          | 1,223          | 1,230          | 1,236          |
| Clay T            | 5,050          | 5,173          | 6,308          | 6,685          | 7,062          | 7,404          | 7,746          | 8,056          | 8,366          |
| Colerain T        | 2,867          | 3,261          | 3,635          | 3,857          | 4,079          | 4,281          | 4,482          | 4,665          | 4,848          |
| Columbia B        | 10,701         | 10,311         | 10,400         | 10,451         | 10,502         | 10,501         | 10,500         | 10,464         | 10,428         |
| Conestoga T       | 3,470          | 3,749          | 3,776          | 3,887          | 3,997          | 4,083          | 4,169          | 4,235          | 4,300          |
| Conoy T           | 2,687          | 3,067          | 3,194          | 3,329          | 3,463          | 3,576          | 3,689          | 3,784          | 3,878          |
| Denver B          | 2,861          | 3,332          | 3,861          | 4,139          | 4,417          | 4,678          | 4,939          | 5,185          | 5,431          |
| Drumore T         | 2,114          | 2,243          | 2,560          | 2,688          | 2,816          | 2,928          | 3,039          | 3,136          | 3,232          |
| Earl T            | 5,515          | 6,183          | 7,024          | 7,343          | 7,661          | 7,932          | 8,202          | 8,430          | 8,658          |
| East Cocalico T   | 7,809          | 9,954          | 10,310         | 10,924         | 11,538         | 12,089         | 12,639         | 13,132         | 13,625         |
| East Donegal T    | 4,484          | 5,405          | 7,755          | 8,403          | 9,051          | 9,663          | 10,275         | 10,855         | 11,434         |
| East Drumore T    | 3,225          | 3,535          | 3,791          | 3,974          | 4,157          | 4,316          | 4,474          | 4,611          | 4,748          |
| East Earl T       | 5,491          | 5,723          | 6,507          | 6,764          | 7,020          | 7,233          | 7,445          | 7,620          | 7,794          |
| East Hempfield T  | 18,597         | 21,399         | 23,522         | 24,785         | 26,048         | 27,159         | 28,269         | 29,243         | 30,217         |
| East Lampeter T   | 11,999         | 13,556         | 16,424         | 17,465         | 18,506         | 19,448         | 20,390         | 21,242         | 22,093         |
| East Petersburg E | 4,197          | 4,450          | 4,506          | 4,636          | 4,766          | 4,866          | 4,966          | 5,043          | 5,119          |
| Eden T            | 1,857          | 1,856          | 2,094          | 2,178          | 2,261          | 2,331          | 2,401          | 2,459          | 2,516          |
| Elizabeth T       | 3,691          | 3,833          | 3,886          | 4,075          | 4,263          | 4,431          | 4,599          | 4,750          | 4,901          |
| Elizabethtown B   | 9,952          | 11,887         | 11,545         | 12,032         | 12,519         | 12,930         | 13,340         | 13,684         | 14,027         |
| Ephrata B         | 12,133         | 13,213         | 13,394         | 13,768         | 14,142         | 14,429         | 14,716         | 14,933         | 15,150         |
| Ephrata T         | 7,116          | 8,026          | 9,400          | 10,087         | 10,773         | 11,424         | 12,075         | 12,696         | 13,317         |
| Fulton T          | 2,688          | 2,826          | 3,074          | 3,196          | 3,318          | 3,419          | 3,520          | 3,604          | 3,687          |
| Lancaster C       | 55,551         | 56,348         | 59,322         | 60,384         | 61,445         | 62,158         | 62,870         | 63,322         | 63,773         |
| Lancaster T       | 13,187         | 13,944         | 16,149         | 16,942         | 17,735         | 18,421         | 19,107         | 19,699         | 20,291         |
| Leacock T         | 4,668          | 4,878          | 5,220          | 5,388          | 5,556          | 5,689          | 5,822          | 5,927          | 6,031          |
| Lititz B          | 8,280          | 9,029          | 9,369          | 9,660          | 9,950          | 10,179         | 10,408         | 10,586         | 10,764         |
| Little Britain T  | 2,701          | 3,514          | 4,106          | 4,426          | 4,746          | 5,047          | 5,347          | 5,631          | 5,915          |
| Manheim B         | 5,011          | 4,784          | 4,858          | 4,872          | 4,885          | 4,876          | 4,866          | 4,842          | 4,818          |
| Manheim T         | 28,880         | 33,697         | 38,133         | 40,114         | 42,094         | 43,815         | 45,535         | 47,024         | 48,513         |
| Manor T           | 14,130         | 16,498         | 19,612         | 20,890         | 22,167         | 23,328         | 24,489         | 25,544         | 26,598         |
| Marietta B        | 2,778          | 2,689          | 2,588          | 2,583          | 2,577          | 2,561          | 2,544          | 2,520          | 2,496          |
| Martic T          | 4,362          | 4,990          | 5,190          | 5,460          | 5,729          | 5,967          | 6,204          | 6,413          | 6,621          |
| Millersville B    | 8,099          | 7,774          | 8,168          | 8,272          | 8,376          | 8,435          | 8,493          | 8,518          | 8,542          |
| Mount Joy B       | 6,398          | 6,765          | 7,410          | 7,680          | 7,949          | 8,168          | 8,387          | 8,565          | 8,742          |
| Mount Joy T       | 6,227          | 7,944          | 9,873          | 10,659         | 11,445         | 12,185         | 12,924         | 13,622         | 14,319         |
| Mountville B      | 1,977          | 2,444          | 2,802          | 3,005          | 3,207          | 3,396          | 3,584          | 3,760          | 3,936          |
| New Holland B     | 4,484          | 5,092          | 5,378          | 5,583          | 5,788          | 5,956          | 6,124          | 6,262          | 6,399          |
| Paradise T        | 4,430          | 4,698          | 5,131          | 5,304          | 5,477          | 5,615          | 5,753          | 5,863          | 5,973          |
| Penn T            | 6,760          | 7,312          | 8,789          | 9,253          | 9,716          | 10,121         | 10,525         | 10,878         | 11,230         |
| Pequea T          | 4,512          | 4,358          | 4,605          | 4,736          | 4,866          | 4,967          | 5,067          | 5,143          | 5,219          |
| Providence T      | 6,071          | 6,651          | 6,897          | 7,191          | 7,485          | 7,734          | 7,982          | 8,192          | 8,402          |
| Quarryville B     | 1,642          | 1,994          | 2,576          | 2,755          | 2,933          | 3,095          | 3,257          | 3,405          | 3,552          |
| Rapho T           | 8,211          | 8,578          | 10,442         | 10,962         | 11,482         | 11,932         | 12,381         | 12,769         | 13,156         |
| Sadsbury T        | 2,712          | 3,025          | 3,395          | 3,592          | 3,788          | 3,965          | 4,141          | 4,299          | 4,457          |
| Salisbury T       | 8,527          | 10,012         | 11,062         | 11,671         | 12,280         | 12,817         | 13,353         | 13,825         | 14,297         |
| Strasburg B       | 2,568          | 2,800          | 2,809          | 2,918          | 3,026          | 3,116          | 3,206          | 3,281          | 3,355          |
| Strasburg T       | 3,688          | 4,021          | 4,182          | 4,331          | 4,479          | 4,600          | 4,720          | 4,817          | 4,914          |
| Terre Hill B      | 1,282          | 1,237          | 1,295          | 1,312          | 1,328          | 1,338          | 1,347          | 1,351          | 1,354          |
| Upper Leacock T   | 7,254          | 8,229          | 8,708          | 9,054          | 9,399          | 9,685          | 9,971          | 10,207         | 10,443         |
| Warwick T         | 11,622         | 15,475         | 17,783         | 19,322         | 20,860         | 22,357         | 23,853         | 25,320         | 26,787         |
| West Cocalico T   | 5,521          | 6,967          | 7,280          | 7,664          | 8,047          | 8,381          | 8,715          | 9,005          | 9,295          |
| West Donegal T    | 5,605          | 6,539          | 8,260          | 8,820          | 9,380          | 9,890          | 10,399         | 10,863         | 11,326         |
| West Earl T       | 6,434          | 6,766          | 7,868          | 8,226          | 8,583          | 8,887          | 9,191          | 9,449          | 9,707          |
| West Hempfield T  | 12,942         | 15,128         | 16,153         | 17,297         | 18,440         | 19,530         | 20,619         | 21,666         | 22,712         |
| West Lampeter T   | 9,865          | 13,145         | 15,209         | 16,559         | 17,909         | 19,232         | 20,555         | 21,864         | 23,173         |
| <b>Totals</b>     | <b>422,822</b> | <b>470,658</b> | <b>519,445</b> | <b>544,394</b> | <b>569,343</b> | <b>591,276</b> | <b>613,208</b> | <b>632,595</b> | <b>651,982</b> |



**2040 Lancaster County PA Population Projections  
by Multi-Municipal Planning Area**

| Municipality      | Multi-Mun. Area  | Municipal      |                |                |              | Region         |                |                |              |
|-------------------|------------------|----------------|----------------|----------------|--------------|----------------|----------------|----------------|--------------|
|                   |                  | 2010           | 2040           | Num. Chg.      | % Chg.       | 2010           | 2040           | Num. Chg.      | % Chg.       |
| Adamstown B       | Cocalico         | 1,772          | 2,364          | 592            | 33.4%        |                |                |                |              |
| Denver B          | Cocalico         | 3,861          | 5,431          | 1,570          | 40.7%        |                |                |                |              |
| East Cocalico T   | Cocalico         | 10,310         | 13,625         | 3,315          | 32.2%        |                |                |                |              |
| West Cocalico T   | Cocalico         | 7,280          | 9,295          | 2,015          | 27.7%        | 23,223         | 30,715         | 7,492          | 32.3%        |
| Upper Leacock T   | Conestoga Valley | 8,708          | 10,443         | 1,735          | 19.9%        |                |                |                |              |
| West Earl T       | Conestoga Valley | 7,868          | 9,707          | 1,839          | 23.4%        | 16,576         | 20,150         | 3,574          | 21.6%        |
| East Donegal T    | Donegal          | 7,755          | 11,434         | 3,679          | 47.4%        |                |                |                |              |
| Marietta B        | Donegal          | 2,588          | 2,496          | -92            | -3.6%        |                |                |                |              |
| Mount Joy B       | Donegal          | 7,410          | 8,742          | 1,332          | 18.0%        | 17,753         | 22,672         | 4,919          | 27.7%        |
| Brecknock T       | Elanco           | 7,199          | 9,887          | 2,688          | 37.3%        |                |                |                |              |
| Caernarvon T      | Elanco           | 4,748          | 5,805          | 1,057          | 22.3%        |                |                |                |              |
| Earl T            | Elanco           | 7,024          | 8,658          | 1,634          | 23.3%        |                |                |                |              |
| East Earl T       | Elanco           | 6,507          | 7,794          | 1,287          | 19.8%        |                |                |                |              |
| Terre Hill B      | Elanco           | 1,295          | 1,354          | 59             | 4.6%         | 26,773         | 33,498         | 6,725          | 25.1%        |
| Columbia B        | LIMC             | 10,400         | 10,428         | 28             | 0.3%         |                |                |                |              |
| East Hempfield T  | LIMC             | 23,522         | 30,217         | 6,695          | 28.5%        |                |                |                |              |
| East Lampeter T   | LIMC             | 16,424         | 22,093         | 5,669          | 34.5%        |                |                |                |              |
| East Petersburg B | LIMC             | 4,506          | 5,119          | 613            | 13.6%        |                |                |                |              |
| Lancaster C       | LIMC             | 59,322         | 63,773         | 4,451          | 7.5%         |                |                |                |              |
| Lancaster T       | LIMC             | 16,149         | 20,291         | 4,142          | 25.6%        |                |                |                |              |
| Manheim T         | LIMC             | 38,133         | 48,513         | 10,380         | 27.2%        |                |                |                |              |
| Manor T           | LIMC             | 19,612         | 26,598         | 6,986          | 35.6%        |                |                |                |              |
| Millersville B    | LIMC             | 8,168          | 8,542          | 374            | 4.6%         |                |                |                |              |
| Mountville B      | LIMC             | 2,802          | 3,936          | 1,134          | 40.5%        |                |                |                |              |
| West Hempfield T  | LIMC             | 16,153         | 22,712         | 6,559          | 40.6%        |                |                |                |              |
| West Lampeter T   | LIMC             | 15,209         | 23,173         | 7,964          | 52.4%        | 230,400        | 285,395        | 54,995         | 23.9%        |
| Manheim B         | Manheim Central  | 4,858          | 4,818          | -40            | -0.8%        |                |                |                |              |
| Penn T            | Manheim Central  | 8,789          | 11,230         | 2,441          | 27.8%        |                |                |                |              |
| Rapho T           | Manheim Central  | 10,442         | 13,156         | 2,714          | 26.0%        | 24,089         | 29,204         | 5,115          | 21.2%        |
| Conoy T           | NW               | 3,194          | 3,878          | 684            | 21.4%        |                |                |                |              |
| Elizabethtown B   | NW               | 11,545         | 14,027         | 2,482          | 21.5%        |                |                |                |              |
| Mount Joy T       | NW               | 9,873          | 14,319         | 4,446          | 45.0%        |                |                |                |              |
| West Donegal T    | NW               | 8,260          | 11,326         | 3,066          | 37.1%        | 32,872         | 43,550         | 10,678         | 32.5%        |
| Bart T            | Octoraro         | 3,094          | 3,692          | 598            | 19.3%        |                |                |                |              |
| Christiana B      | Octoraro         | 1,168          | 1,236          | 68             | 5.8%         |                |                |                |              |
| Colerain T        | Octoraro         | 3,635          | 4,848          | 1,213          | 33.4%        |                |                |                |              |
| Sadsbury T        | Octoraro         | 3,395          | 4,457          | 1,062          | 31.3%        | 11,292         | 14,233         | 2,941          | 26.0%        |
| Leacock T         | Pequea Valley    | 5,220          | 6,031          | 811            | 15.5%        |                |                |                |              |
| Paradise T        | Pequea Valley    | 5,131          | 5,973          | 842            | 16.4%        |                |                |                |              |
| Salisbury T       | Pequea Valley    | 11,062         | 14,297         | 3,235          | 29.2%        | 21,413         | 26,301         | 4,888          | 22.8%        |
| Drumore T         | Solanco          | 2,560          | 3,232          | 672            | 26.3%        |                |                |                |              |
| East Drumore T    | Solanco          | 3,791          | 4,748          | 957            | 25.2%        |                |                |                |              |
| Fulton T          | Solanco          | 3,074          | 3,687          | 613            | 19.9%        |                |                |                |              |
| Little Britain T  | Solanco          | 4,106          | 5,915          | 1,809          | 44.1%        | 13,531         | 17,582         | 4,051          | 29.9%        |
| Strasburg B       | Strasburg        | 2,809          | 3,355          | 546            | 19.4%        |                |                |                |              |
| Strasburg T       | Strasburg        | 4,182          | 4,914          | 732            | 17.5%        | 6,991          | 8,269          | 1,278          | 18.3%        |
| Lititz B          | Warwick          | 9,369          | 10,764         | 1,395          | 14.9%        |                |                |                |              |
| Warwick T         | Warwick          | 17,783         | 26,787         | 9,004          | 50.6%        | 27,152         | 37,551         | 10,399         | 38.3%        |
| Akron B           | Independent      | 3,876          | 4,119          | 243            | 6.3%         |                |                |                |              |
| Clay T            | Independent      | 6,308          | 8,366          | 2,058          | 32.6%        |                |                |                |              |
| Conestoga T       | Independent      | 3,776          | 4,300          | 524            | 13.9%        |                |                |                |              |
| Eden T            | Independent      | 2,094          | 2,516          | 422            | 20.2%        |                |                |                |              |
| Elizabeth T       | Independent      | 3,886          | 4,901          | 1,015          | 26.1%        |                |                |                |              |
| Ephrata B         | Independent      | 13,394         | 15,150         | 1,756          | 13.1%        |                |                |                |              |
| Ephrata T         | Independent      | 9,400          | 13,317         | 3,917          | 41.7%        |                |                |                |              |
| Martic T          | Independent      | 5,190          | 6,621          | 1,431          | 27.6%        |                |                |                |              |
| New Holland B     | Independent      | 5,378          | 6,399          | 1,021          | 19.0%        |                |                |                |              |
| Pequea T          | Independent      | 4,605          | 5,219          | 614            | 13.3%        |                |                |                |              |
| Providence T      | Independent      | 6,897          | 8,402          | 1,505          | 21.8%        |                |                |                |              |
| Quarryville B     | Independent      | 2,576          | 3,552          | 976            | 37.9%        | 67,380         | 82,862         | 15,482         | 23.0%        |
| <b>Totals</b>     |                  | <b>519,445</b> | <b>651,982</b> | <b>132,537</b> | <b>25.5%</b> | <b>519,445</b> | <b>651,982</b> | <b>132,537</b> | <b>25.5%</b> |