## Pennsylvania Population Network

# Pennsylvania Pomp and Circumstance: Trends in High School Dropout Rates

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**Key Findings:** 

- Average school district dropout rates declined from 2009 to 2013, from 5.4% to 4.6%
- Dropout rates are not evenly distributed across PA.
- Higher than average
   dropout rates are found in
   rural school districts and
   those with high poverty
   rates.
- School districts with higher proportions of nonwhite students have higher than average dropout rates. However, this trend is declining.

Educational attainment plays an increasingly important role in individual and family lifelong socioeconomic success. The completion of high school is a particularly crucial stage in a young adult's educational path and affects well-being in later life. However, according to national estimates, roughly 5% of all high school students drop out every year (Plank, DeLuca, & Estacion, 2008), and African American and Hispanic youth are at greater risk of dropping out, when compared to their white peers (Oropesa & Landale, 2009; Stearns, Moller, Blau, & Potochnick, 2007).

Following these national studies, we explore high school dropout rates at the unified school district level in Pennsylvania, from 2009-2018, using 5-year estimations from the American Community Survey. The dropout rate refers to the proportion of 16-19 year old's not enrolled in school and do not hold a high school diploma.

#### High School Dropout Rates over Time

Table 1 lists the top 5 school districts with the highest dropout rates in 2009, 2013, and 2018. Pequea Valley school district has been experiencing increases in dropout rate from 45.7% in 2009 to 48.7% in 2013 and 55.1% in 2018. Solanco school district shares similar trends with dropout rates increasing from 29.4% in 2009 to 37.8% in 2018. The average for the commonwealth during these years was 5.43%, 4.79%, and 4.62%, respectively. For comparison, in 2018 the average school district dropout rate across the nation is just under 4%, in New York, 3.5%, New Jersey, 2.7%, and Ohio, 4.0%. These figures represent a decrease from 2009 of 2.5%, 2.1%, 1.7%, and 1.3%, respectively.

Table 1. Top 5 School Districts with Highest Dropout Rates, 2009-2018

2009		2013		2018	
School District	Rate	<b>School District</b>	Rate	<b>School District</b>	Rate
Pequea Valley	45.7%	Pequea Valley	48.7%	Pequea Valley	55.1%
Eastern Lancaster County	29.7%	Solanco	33.6%	Solanco	37.8%
Solanco	29.4%	Eastern Lancaster County	32.6%	Salisbury-Elk Lick	34.9%
Sullivan County	28.5%	Fannett-Metal	30.9%	Fannett-Metal	32.0%
Neshaminy	26.6%	Aliquippa	24.1%	Octorara Area	29.1%

County Locations of School Districts: Pequea Valley and Solanco (Lancaster); Neshaminy (Bucks); Alquippa (Beaver); Salisbury-Elk Lick (Somerset); Fannett-Metal (Perry), Octorara (Chester/Lacanster)

Table 2 demonstrates the changes in the dropout rate from 2009 to 2018. The largest increase happened to Fannett-Metal school district with an increase of 24% in a decade, followed by Salisbury-Elk Lick, Berwick Area, Penns Valley Area, and Williamsburg Community school districts whose dropout rates increased by 21.7%, 20.4%, 19.2%, and 18.3%, respectively. Coversely, there are school districts whose dropout rates decreased from 2009 to 2018. Neshaminy, Aliquippa, and West Middlesex Area school districts witnessed a decrease of more than 20 percent, while Sullivan County and Southeastern Greene school districts also experienced a decrease of 18.6% and 15.6%, respectively.

Table 2. Top 5 School Districts with the Highest Increases and Decreases in Dropout Rate, 2009-

Largest Increase (2009-2018)	Largest Decrease (2009-2018)		
Fannett-Metal	24.0%	Neshaminy	-25.5%
Salisbury-Elk Lick	21.7%	Aliquippa	-24.7%
Berwick Area	20.4%	West Middlesex Area	-20.1%
Penns Valley Area	19.2%	Sullivan County	-18.6%
Williamsburg Community	18.3%	Southeastern Greene	-15.6%

County Locations of School Districts: Penns Valley (Centre); Williamsburg Community (Blair); West Middlesex (Mercer); Southeastern Greene (Greene)

#### **Dropout Rates by School Characteristics**

Paralleling national patterns, school districts that serve minority, rural or poor populations in Pennsylvania struggle with high dropout rates. Figure 1 compares the dropout rates between the state average, school districts serving higher proportion of African American students (African American > 15%), those serving higher proportion of Hispanic students (Hispanic > 10%), those located in more rural areas (population density < 284 persons per square mile), and school districts serving areas with higher poverty rates (poverty > 15%). The figure shows that the state average dropout rate decreases slightly from 2009 to 2018 (5.4% vs 4.6%). Although school districts serving minority, rural and poor student populations had higher dropout rates than the state average, they also experienced an overall decline in drop out between 2009 and 2018. Dropout rates in high African American school districts experienced an increase from 6.4% in 2009 to 6.7% in 2013, followed by a decrease to 3.4% in 2018, which is 1.3% below the state average. High Hispanic school districts experienced dramatic decreases in dropout rates from approximately 8% in 2009 to 3% in 2018. The dropout rates in rural school districts remained around 6%, a level that is higher than the state average. High poverty school school districts improved dropout rates by almost 2 percentage points between 2009 and 2013.

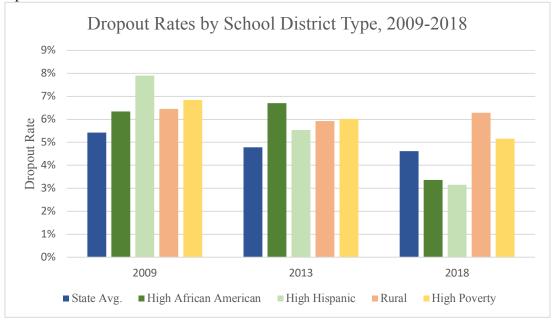


Figure 1. School District Dropout Rate by School District Characteristic, 2009-2018

## Geographic Dispersion of Dropout Rates

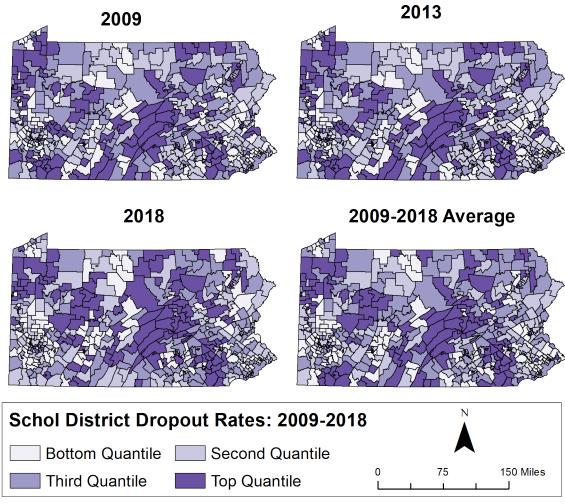


Figure 2. Statewide School District Dropout Rates, 2009-2018

Figure 2 displays the dropout rates across the state for 2009, 2013, and 2018. The rates are quite similar in 2009 and 2013, and we find clustering in several areas in Pennsylvania. The lowest dropout rates occurred mainly around Allegheny and Philadelphia counties, where the two largest urban areas in the state are located. School districts with higher rates are clustered in the northwestern corner and large portions of central Pennsylvania, as well as Bradford, Susquehanna, Fayette, and Lancaster counies.

In 2018, the dropout rates in the two major urban areas are lower than in previous years. The school districts in and around Fayette County have also improved. However, the dropout rates in the northwestern and central portions of the state and Lancaster county remain among the top quantile in Pennsylvania. High dropout rates also increasingly clustered around Armstrong and Jefferson counties.

## Policy Implications

Our findings highlight an overall decrease in dropout rates at the state level, over the past decade. The findings also reveal disparities in dropout rates between different race/ethnicity group concentration and rural/urban areas at the school district level. The data shows that high African American and high Hispanic school districts tend to have higher dropout rates than the state average but these districts have experienced a decline over time. Rural areas, however, have been continuously experiencing higher than average dropout rates.

Reasons for dropping out of school may differ by school district characteristics. Policymakers should pay specific attention to the variation in factors associated with dropout rates when developing educational policies at the local, state, and federal levels. Certainly, support is needed for schools working with diverse populations, particularly those groups with high poverty rates or other needs. Schools serving non-English speaking groups have different needs than those with fewer non-English speaking students, for example. Other targeted programs and funding should be directed to rural areas where high dropout rates continue to be a chronic problem in Pennsylvania.

#### About the Network:

The Pennsylvania Population Network (PPN) is a visible program of demographic and health research, application, and outreach focusing on population characteristics and change in Pennsylvania, the United States and the world.

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