

A Comparative Analysis of US School District-Municipality Law Enforcement Relations with a Special Focus on Pennsylvania and Allegheny County School Districts¹

Heinz College, Carnegie Mellon University

90-780 PA Data Impact Lab

January 17, 2023

Nicholas Lynn, John Villella, Isabella Wu, and Alison Wuensch

Client:

Mr. Christopher Berdnik, Chief Financial Officer at Pennsbury School District

Advisory Panel:

Dr. Cheryl McAbee, Senior Counsel at Hardwick Law LLC

Mr. Aaron Lauth, Chief of Police at Carnegie Mellon University

Course Professor:

Prof. Robert P. Strauss

¹ This report is one of two final deliverables as part of our completion of the PA Data Impact Lab's course requirements in the Fall of 2022. The other final deliverable is a presentation that was presented to the client, advisory board, and professor on December 7th, 2022. The presentation will be publicly available. The report expands on some details that were omitted or briefly discussed in the presentation and is the sole responsibility of the four authors.

Executive Summary

To improve school safety, state governments in the United States have experimented with many different mechanisms. In this report, we examine the use of Memoranda of Understanding (MOUs) to form school-municipal law enforcement partnerships in emergency situations such as gun violence, ranging from the national perspective to specifically analyzing the implementation of MOUs by public school districts among the states, in Pennsylvania, and in Allegheny County. We found that most states have established statutory and regulatory requirements for the execution of MOUs and some states have common requirements that align closely with core aspects of Pennsylvania's requirements, such as the endorsement of a model MOU, requiring conformity to the model MOU, and periodic revisions of MOUs. States differ on the range of topics contained within the MOUs, such as the provision of school resource officers, incident reporting, and student discipline. MOU implementation is common in U.S. public schools, more so across larger schools with higher grade levels. However, we found that U.S. public school officials' awareness of the specific details of MOU-equivalent policies was significantly low. Then, we focused on the implementation of MOUs in Allegheny County and the relationship between municipal law enforcement and school learning and safety outcomes. We found several cases of school districts in Allegheny County not compliant with the Pennsylvania rules and cases where school districts went beyond the requirements. Finally, we found a marginal partial effect of increased municipal law enforcement officers on learning outcomes for younger kids, in grades three and four, after controlling for significant covariates, poverty, and school violence.

Table of Contents

1. Background	6
1.1 Memorandum of Understanding	8
1.2 Pennsylvania’s MOU Requirements	9
1.2.1 Findings of Non-Compliance in Pennsylvania	10
1.3 The Mass Shooting in Uvalde, Texas	11
1.3.1 MOU Requirements in Texas	14
1.4 Research Questions	15
2. State-by-State Statutory Analysis	17
2.1 Methodology	17
2.2 Comparative State Analysis and Findings	18
2.2.1 The Statutory Requirements for MOUs Are Heterogeneous Across States	19
2.2.2 Does the State Offer a Model MOU?	20
2.2.3 Does the State Require Conformity to the Model MOU?	22
2.2.3 How Often Are MOUs Required to be Reviewed/Revised?	24
2.3 Limitations	24
3. Implementation of MOUs in US Public Schools	24
3.1 Methodology	25
3.2 Prevalence of Formalized Policies by School Level, Enrollment, and Locale	26
3.3 School Officials’ Ignorance of Formalized Policies	28
3.4 Future of SSOCS	30
4. Implementation of MOUs in Allegheny County	31
4.1 Methodology	31
4.2 Allegheny County’s School Districts	33
4.3 Allegheny County Municipal Law Enforcement Practices	33
4.4 Fast Facts on Allegheny County Policing by School District	34
4.5 Allegheny County Policing by School District SRO reporting (An interesting case for the City of Pittsburgh)	34
4.6 MOU Quality Criteria within the Allegheny County Analysis	36
4.7 School District MOU Case Studies Within Allegheny County	36
4.7.1 Overall Findings	37
	3

4.7.2 Case Study of School District Adequate Practices: North Hills School District–West View Elementary	38
4.7.3 Case Study of School District at Risk: Allegheny Valley School District–Acmetonia Elementary	40
4.7.4 Case Study of School District at Risk: Keystone Oaks School District — Fred L. Aiken Elementary	41
4.8 Limitations	42
5. Relationship between School Outcomes and Municipal Police	43
5.1.1 Data Source	43
5.1.2 Research Variables	44
5.2 Result of Simple Correlation Between Variables	45
5.3 Result of Multiple Regression Between Variables	47
5.4 Interpretation of Results	48
6. Implications	48
Appendix	50
Bibliography	59

Figures and Tables

Figure 1. State MOU Requirement (Unweighted)

Figure 2. State MOU Requirements (Weighted by Enrollment)

Figure 3. State Model MOU Presence (Unweighted)

Figure 4. State Model MOU Presence (Weighted by Enrollment)

Figure 5. US K-12 Public School's Formalized Policies

Figure 6. Presence of Specific Formalized Policies in US K-12 Public Schools (of Schools That Have Formalized Policies)

Figure 7. Boundaries Drawn by GIS Maps of North Hills School District, West View Borough, and West View Elementary

Figure 8. Boundaries Drawn by GIS Maps of Allegheny Valley School District, Harmar Township, and Acmetonia Elementary

Figure 9. Boundaries Drawn by GIS Maps of Keystone Oaks School District, Green Tree Borough, and Fred L. Aiken Elementary

Table 1. 9 State Rules' on Conformity to Model MOU

Table 2. 7 State Rules on Periodic Revisions of MOUs

Table 3. Proportion of Formalized Policies Across School Demographics

Table 4. Distribution of Unawareness of Formalized Policies in US K-12 Public Schools

Table 5. Schools in Allegheny County Not Covered by MOUs

Table 6. Descriptive Statistics Used in Regression Analysis

Table 7. Pearson Correlations Between Learning Outcomes, Poverty, Incidents, and Police Officers

Table 8. Multiple Regression Results with Total Students per Police Officer in Jurisdiction Measure

Table 9. Multiple Regression Results with Building-Level Students per Evenly Attributed Police Officer

1. Background

The first use of law enforcement in schools began in Flint, Michigan in the 1950's with the "Police School Liaison" program developed between the Flint schools and the Flint Police Department. The program was aimed at decreasing juvenile delinquency.² However, the use of law enforcement in schools was still uncommon in 1975, with just 1% of schools reporting a police officer on site.³ Today, that number has grown to an estimated 14,000 to 20,000 school resource officers in approximately one third of public schools in the United States, according to the National Association of School Resource Officers (NASRO).⁴ An exact number is difficult to obtain because school resource officers are not required to be in any national database, and law enforcement agencies and school entities alike are not required to report the use of school resource officers.⁵ Regardless of the exact number, NASRO reports that "[s]chool-based policing is the fastest-growing area of law enforcement."⁶

The use of law enforcement in schools began to increase with the adoption of zero-tolerance disciplinary programs in schools in the 1980's.⁷ This was partly due to the fear and moral panic of teenage delinquency in the 1980's and 1990's.⁸ Between 1984 and 1994, teenage homicide rates doubled, and nonfatal teenage incidents increased 20%.⁹ Additionally, there were fifteen mass shootings between 1993 and 1999. As a result, schools with existing zero-tolerance policies relied more on local law enforcement "to criminalize particular student behaviors and increase school safety."¹⁰ The federal Gun-Free Schools Act of 1994 required a zero-tolerance approach to weapons in schools; many schools extended this approach to apply to drugs and alcohol, also. This approach indicated a formalization of school discipline that removed decision-making from the

² Almanza, Matthew, Makayla Mason, and Chris Melde. 2022. "Perceptions of School Resource Officers: Protectors or Prosecutors?" *Criminal Justice Review (Atlanta, Ga.)* (2022). <https://doi.org/10.1177/07340168221113352>.

³ Connery, Chelsea. 2020. "The Prevalence and the Price of Police in Schools." Center for Education Policy Analysis, October 27, 2020. <https://education.uconn.edu/2020/10/27/the-prevalence-and-the-price-of-police-in-schools>.

⁴ Counts, Jennifer, Kristina N. Randall, Joseph B. Ryan, and Antonis Katsiyannis. 2018. "School Resource Officers in Public Schools: A National Review." *Education and Treatment of Children* 41, no. 4 (November): 405-430. <https://doi.org/10.1353/etc.2018.0023>.

⁵ Lesley, Jill. 2021. "Discipline or Crime: An Analysis of the Use of Memoranda of Understanding to Regulate School Resource Officer Intervention in South Carolina Schools." *The Journal of Law & Education* 50, no. 1 (Spring): 1-34.

⁶ Connery. "The Prevalence and the Price of Police in Schools."

⁷ Yaffe, Dara. 2016. "Reading, Writing, and Rethinking Discipline: Evaluation of the Memoranda of Understanding between Law Enforcement and School Districts in Massachusetts." *New England Law Review* 51, no. 1 (Fall): 131-154.

⁸ Lesley. "Discipline or Crime."

⁹ Na, Chongmin and Denise C. Gottfredson. 2011. "Police Officers in Schools: Effects on School Crime and the Processing of Offending Behaviors." *Justice Quarterly* 30(4). <https://doi.org/10.1080/07418825.2011.615754>.

¹⁰ Yaffe,. "Reading, Writing, and Rethinking Discipline."

hands of school administrators, replaced by procedures that were often mandated by higher levels of government.¹¹

A 1998 amendment to the federal Omnibus Crime Control and Safe Streets Act of 1968 encouraged partnerships between schools and law enforcement. Since 1998, the federal government has invested over \$1 billion in funding specifically for police presence in schools, while \$14 billion more has been invested in community policing, which can include school resource officers. Much of the funding for school resources officers came from the Office of Community Oriented Policing Services (COPS Office), and the legislation authorizing it contains the only federal definition of a school resource officer. Under that statute, a school resource officer is defined as

“a career law enforcement officer, with sworn authority, deployed in community-oriented policing, and assigned by the employing police department or agency to work in collaboration with schools and community-based organizations.”¹²

The Every Student Succeeds Act of 2015 removed its definition of school resource officers and contains no provisions for them.¹³ The COPS Office enacted the “Cops in Schools” program to provide funding for law enforcement in schools, and though the program ended in 2005, according to the Department of Justice, that program alone provided more than \$724 million in grants.¹⁴

In 2012, following the Sandy Hook shooting in Newtown, Connecticut, the Obama administration renewed funding to increase school resource officers in schools.¹⁵ In 2018, following the shooting at Marjory Stoneman Douglas in Florida, Florida passed the Marjory Stoneman Douglas Public Safety Act requiring a “safe-school officer” at every school. Similarly, Maryland passed the Maryland Safe to Learn Act in 2018, which required a school resource officer or “adequate local law enforcement coverage” at every school.¹⁶ Massachusetts did the same in 2014.¹⁷ However this requirement in Massachusetts was repealed in 2020 after the George Floyd murder.¹⁸

The growth of partnerships between schools and municipal law enforcement in the form of school resource officers led to mechanisms in which the two parties could align their goals, while formalizing their relationship with expectation of each other’s roles and responsibilities as well as

¹¹ Na, Chongmin and Denise C. Gottfredson. 2011. “Police Officers in Schools: Effects on School Crime and the Processing of Offending Behaviors.” *Justice Quarterly* 30(4). <https://doi.org/10.1080/07418825.2011.615754>.

¹² 34 USC § 10389(4).

¹³ Connery. “The Prevalence and the Price of Police in Schools.”

¹⁴ Lesley. “Discipline or Crime.”

¹⁵ Connery. “The Prevalence and the Price of Police in Schools.”

¹⁶ Viano, Samantha, F. Chris Curran, and Benjamin W. Fisher. 2021. “Kindergarten Cop: A Case Study of How a Coalition Between School Districts and Law Enforcement Led to School Resource Officers in Elementary Schools.” *Educational Evaluation and Policy Analysis* 43(2): 253-279. <https://doi.org/10.3102/0162373721989290>.

¹⁷ 2014 Mass. ALS 284, 2014 Mass. Ch. 284, 2013 Mass. H.B. 4376 (August 13, 2014).

¹⁸ 2020 Mass. ALS 253, 2020 Mass. Ch. 253, 2019 Mass. SB 2963, 2020 Mass. Acts 253 (December 31, 2020).

setting boundaries. This is why many education and law enforcement officials in the federal government and across the states have turned to Memoranda of Understanding (MOUs).

1.1 Memorandum of Understanding

For the purposes of this report, we use Pennsylvania's statutory definition of Memoranda of Understanding (MOUs): "A confirmation of mutually agreed upon terms between two or more parties in the form of a document mutually agreed to by a school entity and a local police department".¹⁹ An MOU is meant to act as the first step towards a working relationship between two parties. It is a "living document" that is supposed to be an active component of partnerships and not just a document to be signed and stowed away.²⁰ It's important that the development and execution of the MOU involve many stakeholders, including school principals and parents.

The literature on MOUs between schools and law enforcement is still sparse and often hidden in articles about other topics, there has been an increase in researchers investigating the use of MOUs. For example, we identified three articles that evaluated the use of MOUs in other states, such as South Carolina²¹, Massachusetts²², and Virginia.²³ Also, we identified a previous article that had a similar goal of finding MOU requirements across the United States, however the authors' analysis was restricted to MOUs for school resource officers specifically.²⁴

The focus of MOUs on regulating the roles of SROs likely stems from two federal guidelines that were issued by the Obama Administration. In 2014, the Department of Justice issued a fact sheet through the Office of Community Oriented Policing Services (COPS Office).²⁵ In 2016, the Department of Justice and the Department of Education issued a joint guidance that provided state and local governments with a rubric to assess their policies on effectively creating school-law enforcement partnerships.²⁶ While both of these guidelines focused their attention on school resource officers (SROs), they both showcase the commonalities in statutory requirements we observe in our state-by-state analysis: roles and responsibilities of law enforcement and schools,

¹⁹ § 10.2. Definitions, 22 Pa. Code.

²⁰ Shaver, E. A., & Decker, J. R. (2017). Handcuffing a third grader: Interactions between school resource officers and students with disabilities. *Utah Law Review*, 2017(2), 229–282.

²¹ Lesley, "Use of Memoranda of Understanding to Regulate School Resource Officer Intervention in South Carolina Schools."

²² Yaffe, "Memoranda of Understanding between Law Enforcement and School Districts in Massachusetts."

²³ Welfare, Laura, Alison Bowers, and Gerard Lawson. 2022. "Supporting School-Law Enforcement Partnerships: Evidence from a Content Analysis of Memorandums of Understanding." *Journal of School Administration Research and Development* 7(2): 72-82. <https://doi.org/10.32674/jsard.v7i2.4032>.

²⁴ Counts, Randall, Ryan, Katsiyannis. "School Resource Officers in Public Schools: A National Review."

²⁵ U.S. Department of Justice. Office of Community Oriented Policing Services. *Fact Sheet: Memorandum of Understanding for School-Based Partnerships*. Washington, DC, 2014.

https://case.edu/schubertcenter/sites/case.edu.schubertcenter/files/2020-04/2014_MOU-FactSheet_v3_092513.pdf.

²⁶ US. Department of Education and Department of Justice. *Safe School-based Enforcement through Collaboration, Understanding, and Respect*. Washington, DC, 2016. <https://www2.ed.gov/documents/press-releases/secure-implementation.pdf>.

information sharing, chain of command, model MOUs, periodic revisions, and restricting SROs role in student discipline.

Alongside these guidances, the Department of Education also signaled its interest in MOUs as a policy mechanism when the National Center on Education Statistics added a question to the School Survey on Crime and Safety (SSOCS) for the school year 2015-2016 that asked public schools whether they had a formalized policy with law enforcement.²⁷ The question provided examples of formalized policies, such as Memoranda of Understanding and Memoranda of Agreement.

It's important to note that the MOU as a policy mechanism is one amongst a constellation of policies that have been implemented across the country aimed at improving school safety. For example, the most common policies include school safety plans, school safety audits, school safety drills, school resource officers, etc. MOUs are often meant to compliment or explicitly interact with these other policies. For example, the MOUs that are required for the use of school resource officers in New York are required to be submitted alongside the school safety plan.²⁸ The Education Commission of the States (ECS) has a 50-State Comparison resource that has been updated as of October 5th, 2022, that compiles the other relevant school safety policies across the 50 states and DC.²⁹ This report aims to map the landscape of state rules pertaining to MOU implementation and should be used alongside the ECS data to inform school and law enforcement officials, policymakers, and researchers for future decision-making.

1.2 Pennsylvania's MOU Requirements

The Pennsylvania statute requires school entities, defined as a public school district, intermediate unit, area vocational-technical school or charter school, to execute a memorandum of understanding (MOU) with local law enforcement that has jurisdiction over the entity's school property.³⁰ The immediate purpose of the MOU in the statute is for ensuring the quality of school incident data by checking for discrepancies with police department data. However, the State Board of Education is tasked with promulgating additional requirements for the MOUs, such as protocols for the notification of offenses, nonemergency and emergency response, and the response and handling of students with a disability with law enforcement. The State Board of Education is also required to develop and biennially review a model MOU.

The codified regulations magnify the role of the State Board's model MOU, which requires school entities to "consult and consider" the model MOU and to "identify substantive differences" and

²⁷ § 13-1303-A. Reporting, 24 P.S.

²⁸ NY CLS Educ § 2801-a. School safety plans.

²⁹ Kelley, Bryan, Daizha Brown, Lauren Peisach, and Zeke Perez Jr. 50-State Comparison: K-12 School Safety. October 5, 2022. Distributed by Education Commission of the States, <https://www.ecs.org/50-state-comparison-k-12-school-safety-2022/>.

³⁰

provide a “statement of reasons for the differences” to the Office of Safe Schools.³¹ Additionally, during the State Board’s review of the model MOU, they are expected to consider the substantive differences filed to the Office of Safe Schools. The review of the model MOU provides the State Board the chance to experiment with new provisions and learn from the actual implementation of MOUs across the state.

The state Department of Education is empowered by the statute to discipline any chief school administrator or school principal who “intentionally fails” to execute a memorandum of understanding with law enforcement through the Professional Standards and Practices Commission.³² The consequences are an escalation of civil penalties from \$2,500 for the first violation, \$3,500 for the second, and \$5,000 for every violation after. The money is required to be used for the Office of Safe Schools. However, there is no publicly available case listed in the “Notification of Certification Actions” listing on the Department of Education’s website.³³ This may show reliable compliance across the state of school entities’ successfully executing MOUs. However, Dr. Cheryl McAbee’s research in 2018 shows otherwise.

1.2.1 Findings of Non-Compliance in Pennsylvania

In 2018, Dr. Cheryl McAbee’s dissertation documented the analysis of twelve Allegheny County school districts’ weapon policies and MOUs with law enforcement.³⁴ The twelve school districts were identified as either affluent or working-class school districts. Every affluent school district and half of the working class either followed or approximated the model MOU. Two working-class school districts had their own distinct MOUs implemented, however, neither responded having documentation of explanation for the differences from the Model MOU.

One working-class school district reported not having records related to MOUs, Pittsburgh School District. As of the school year 2021-2022, Pittsburgh School District has 19,859 students enrolled in their schools, which represents 15.1% of the students in Allegheny County. The Pittsburgh School District is also consistently one of the most unsafe districts in Pennsylvania as measured by the rate of arrests and incidents.³⁵ Considering 10% of the arrests made in Pennsylvania in the 2017-2018 school year are accounted for by the Pittsburgh School District, there is a need for the district’s administration to formalize the relationship and expectations of schools and law enforcement officials when law enforcement comes into contact with students.

³¹ § 10.2. Definitions, 22 Pa. Code.

³² § 13-1302.1-A. Regulations, 24 P.S.

³³ Pennsylvania Department of Education. “Certification Actions.” Accessed December 10, 2022, <https://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certificate-Actions.aspx>

³⁴ McAbee, Cheryl. 2018. "An Analysis of Zero Tolerance Weapon Policies Related to the School-to-Prison Pipeline Phenomenon." PhD diss. University of Pittsburgh.

³⁵ Strauss, Robert P. 2021. "Student Misconduct and Learning Outcomes Evidence from Pennsylvania’s K-12 Building Records: 1999-2018." EDWorkingPaper No. 21-505, Annenberg Institute, Providence, RI.

These reported instances of non-compliance indicate the lack of enforcement from the Department of Education's Office of Safe Schools. While the statute does provide an instrument in which the Department of Education can discipline non-compliant school officials, the lack of compliance may also indicate a lack of resources in order to assess compliance.³⁶ As of 2016, as reported in the Joint State Commission and in Dr. McAbee's dissertation, there are only five employees at the Office of Safe Schools.³⁷ The current OSS staff directory only reports eight employees.³⁸ There are 500 school districts in Pennsylvania and since multiple municipal law enforcement agencies may have jurisdiction over a school districts' property, there are at least 500 MOUs to assess, or thousands. Not only must the staff assess the existence of MOUs but ensure that the MOU has the correct signatures and whether they are similar to the model MOU (or explains differences). Additionally, these MOUs are required to be re-executed biennially.

Also, Dr. McAbee analyzed the model MOU to identify ten elements. We believe these ten elements would be useful to compare to other states' policies and rules. However, we were limited by time to comprehensively tabulate the comparisons, we recorded observations on a case-by-case basis. Additionally, we recorded where states' policies contained model policies that went beyond the Pennsylvania model MOU.

Since completing her dissertation, Dr. McAbee has continued her work on analyzing the implementation of MOUs across Allegheny County and has provided us an updated list of all collected MOUs through right-to-know requests, including the previously reported twelve school districts. She allowed us to report on the existing formalized relationships between school districts and municipal law enforcement in this report and our presentation.

1.3 The Mass Shooting in Uvalde, Texas

On May 24th, 2022, a gunman entered Robb Elementary School in Uvalde, Texas. Over the course of over an hour, he killed 19 students and 2 teachers in what has become the second-deadliest school shooting in U.S. history.³⁹ The public, media, and lawmakers are attributing the high number of fatalities to the lack of coordination and clear chain of command that led to a delayed confrontation of the attacker. Law enforcement killed the attacker at 12:50 pm that day, 77 minutes after he began his rampage. 376 law enforcement officers arrived on the scene, many of them belonging to state and federal law enforcement agencies. Of the 376 officers, 149 belonged to U.S.

³⁶ § 13-1303-A. Reporting, 24 P.S.

³⁷ Joint State Government Commission (2016). Discipline policies in Pennsylvania's public schools: Report of the advisory committee on zero tolerance school discipline policies (2015 House Resolution 540). Harrisburg, PA: General Assembly of the Commonwealth of Pennsylvania. Retrieved from http://jsg.legis.state.pa.us/publications.cfm?JSPU_PUBLN_ID=449.

³⁸ Pennsylvania Department of Education. "Contact Us." Accessed December 10, 2022. <https://www.education.pa.gov/Schools/safeschools/resources/Pages/Contact-Us.aspx>.

³⁹ Chappell, Bill, Joe Hernandez, and Rachel Treisman. "What We Know about the Victims of the Uvalde School Shooting." NPR. NPR, May 31, 2022. <https://www.npr.org/2022/05/27/1101286508/what-we-know-about-the-victims-of-the-uvalde-school-shooting>.

Border Patrol, 14 were from the Department of Homeland Security, and 91 were from the Texas Department of Public Safety. Earlier in the year, the Texas House investigative committee released a preliminary report on the response to the shooting. They cited that “the entirety of law enforcement...shares systemic responsibility for many missed opportunities.”⁴⁰ However, officials are still investigating conflicting claims about on-scene command.

Pete Arredondo, the chief of the Uvalde school district police, was listed as the commanding officer in the district’s active-shooter plan.⁴¹ However, whether other law enforcement agencies, including the Uvalde Police Department and the state Department of Public Safety, were involved in the development of the district’s active-shooter plan is unclear, as they have refused to release documents or answer questions.⁴² Lt. Mariano Pargas, the acting chief of the Uvalde Police Department, agrees that he thought Arredondo was in charge. Pargas claims, “The minute I saw Pete Arredondo...I figured this is school property and we’re here to assist pretty much...It’s their jurisdiction.”⁴³ Arredondo disputes this claim, saying that he did not consider himself the incident commander. “My approach and thought was responding as a police officer. And so I didn’t title myself.”⁴⁴

Pete Arredondo was fired from his position as school district police chief in August and denied his request to instead be taken off suspension and receive back pay.⁴⁵ The Uvalde Consolidated Independent School District Superintendent Hal Harrell recommended firing Arredondo before Harrell himself announced his retirement in October. That same month, elected officials in Uvalde also made the decision to suspend the entire school district police department.⁴⁶ Meanwhile, in July, Uvalde Mayor Don McLaughlin released a statement placing Lt. Mariano Pargas on

⁴⁰ Prokupecz, Shimon, Dakin Andone, Amir Vera, Matthew J. Friedman, Elizabeth Joseph, and Peter Nickeas. “Uvalde Shooting Report Describes Multiple Failures and a 'Lackadaisical Approach' by Law Enforcement.” CNN. Cable News Network, July 18, 2022. <https://www.cnn.com/2022/07/17/us/texas-house-ualde-shooting-report/index.html>.

⁴¹ Lopez, Brian, and William Melhado. “Uvalde School Board Fires Chief Pete Arredondo over Shooting Response, after He Calls Vote a ‘Public Lynching.’” The Texas Tribune. The Texas Tribune, August 24, 2022. <https://www.texastribune.org/2022/08/24/ualde-school-police-chief-pete-arredondo-termination-board-vote/>.

⁴² García, Uriel J. “Uvalde School Officials Approve Terms of Superintendent's Retirement without Publicly Disclosing Them.” The Texas Tribune. The Texas Tribune, October 20, 2022. <https://www.texastribune.org/2022/10/19/ualde-superintendent-retirement-hal-harrell/>.

⁴³ Prokupecz, Shimon, Matthew J. Friedman, and Rachel Clarke. “Exclusive: New Audio of Phone Call Shows for the First Time That a Senior Uvalde Officer Was Told Children Needed to Be Rescued from inside a Classroom.” CNN. Cable News Network, November 15, 2022. <https://www.cnn.com/2022/11/14/us/ualde-investigation-acting-police-chief-mariano-pargas>.

⁴⁴ Prokupecz, Shimon, Dakin Andone, Amir Vera, Matthew J. Friedman, Elizabeth Joseph, and Peter Nickeas. “Uvalde Shooting Report Describes Multiple Failures and a 'Lackadaisical Approach' by Law Enforcement.” CNN. Cable News Network, July 18, 2022.

⁴⁵ Lopez, Brian, and William Melhado. “Uvalde School Board Fires Chief Pete Arredondo over Shooting Response, after He Calls Vote a ‘Public Lynching.’” The Texas Tribune. The Texas Tribune, August 24, 2022. <https://www.texastribune.org/2022/08/24/ualde-school-police-chief-pete-arredondo-termination-board-vote/>.

⁴⁶ García, Uriel J. “Uvalde School Officials Approve Terms of Superintendent's Retirement without Publicly Disclosing Them.” The Texas Tribune. The Texas Tribune, October 20, 2022.

administrative leave “to investigate whether Lt. Pargas was responsible for taking command...and whether it was even feasible given all the agencies involved and other possible policy violations.”⁴⁷

“Other policy violations” may include the finding from the Texas House report that Robb Elementary School itself was found to be noncompliant with safety policies, such as lockdown alerts and issues with doors and locks.⁴⁸ For his part, Arredondo insists that the school district refused to take his security advice, with his legal team suggesting that if they had, events might have turned out differently. State Senator Roland Gutierrez also urged residents to continue seeking accountability, saying that “other law enforcement agencies also failed in their response.”⁴⁹

According to the report released by the Texas House, DPS is trained to respond to emergencies such as mass shootings in any of the 254 counties in Texas, but it is especially important in rural areas with less training and experience. DPS sent 91 troopers to Uvalde, while the Uvalde school district police consisted of five officers, the Uvalde Police Department had 25 emergency responders, and the county had 16 sheriff’s deputies. In other emergency situations in the past 30 years in Texas, including in other mass shooting situations, DPS troopers have arrived on the scene and taken control of incident command, yet the current head of DPS dismissed the idea that DPS should have taken control at Uvalde, despite police experts identifying signals that should have alerted troopers that no one was in command.⁵⁰

A former Seattle police chief specifically suggests that larger law enforcement agencies should have agreements with school districts for emergencies like active shooters. San Antonio is a good example of this, where the San Antonio police department, one of the largest in Texas, has agreements with local school districts specifying that they would take over in an active shooter situation. Though there is little information about such agreements in Uvalde, DPS has released that they did not have a written Memorandum of Agreement with Uvalde, which could specify who would take over incident command in emergencies. Experts have cited that the role of incident commander can be transferred to larger agencies with more training and experience in emergencies. This can occur when the initial incident commander requests help, but in cases such

⁴⁷ Prokuecz, Shimon, Dakin Andone, Amir Vera, Matthew J. Friedman, Elizabeth Joseph, and Peter Nickeas. “Uvalde Shooting Report Describes Multiple Failures and a ‘Lackadaisical Approach’ by Law Enforcement.” CNN. Cable News Network, July 18, 2022.

⁴⁸ Ibid.

⁴⁹ Lopez, Melhado. “Uvalde School Board Fires Chief Pete Arredondo over Shooting Response, after He Calls Vote a ‘Public Lynching.’”

⁵⁰ García. “Uvalde School Officials Approve Terms of Superintendent's Retirement without Publicly Disclosing Them.”

as Uvalde, where incident command was unclear, officers from other agencies may speak to the first responder and establish command.⁵¹

The response to the Uvalde shooting was disastrous and may have cost students and teachers their lives. The delay, lack of coordination, and lack of clear chain of command may also cost the city of Uvalde, the Uvalde Consolidated Independent School District, and local law enforcement agencies billions of dollars. Victims of the shooting have filed a lawsuit seeking \$27 billion for ““emotional or psychological damages as a result of the defendants’ conduct and omissions on that date.””⁵² Therefore, the question of who is at fault that day is not only a quest in seeking answers for victims’ families and survivors but also a crucial legal question. A Memorandum of Understanding identifying the relationship and responsibilities between school entities, such as the Uvalde Consolidated Independent School District, and local law enforcement, such as the Uvalde School District Police Department and the City of Uvalde Police Department, as well as other law enforcement agencies like DPS, could provide such critical information.

1.3.1 MOU Requirements in Texas

However, whether school districts like Uvalde have Memoranda of Understanding (MOUs) with local law enforcement may depend on whether Texas law requires it. There are three possible applications of MOUs for school districts:

1. School districts are encouraged to enter into MOUs with local and regional authorities that can support school safety, naming “emergency first responders”.⁵³
2. School districts are required to “enter into a memorandum of understanding with local law enforcement for the provision of school resource officers.”⁵⁴
3. If the school district has its own police department, they are required to enter into a MOU with the law enforcement agency that has jurisdiction over their buildings that “outlines reasonable communication and coordination efforts between the department and the agencies.”⁵⁵

According to the Texas Commission on Law Enforcement, Texas has 309 school police departments currently, including 91 created in the last five years after the Parkland and Santa Fe, Texas shootings in 2018. According to a 2017-2020 audit report by the Texas School Safety Center, those school districts with their own police departments represent 32% of Texas school

⁵¹ Despart, Zach, and Lomi Kriel. “91 Texas State Troopers Responded to the Uvalde Massacre. Their Bosses Have Deflected Scrutiny and Blame.” The Texas Tribune. The Texas Tribune, September 7, 2022. <https://www.texastribune.org/2022/09/06/texas-state-police-ualde-shooting/>.

⁵² “Uvalde Shooting Victims Seek \$27b, Class Action in Lawsuit.” AP NEWS. Associated Press, December 3, 2022. <https://apnews.com/article/shootings-austin-texas-lawsuits-school-5c2eba7d91b060843b65b2a43654a5b4>.

⁵³ Tex. Educ. Code Sec. 37.2121. Memoranda of Understanding and Mutual Aid Agreements.

⁵⁴ Tex. Educ. Code Sec. 37.081(a)

⁵⁵ Tex. Educ. Code Sec. 37.081(g)

districts, while 41% contract with another law enforcement agency.⁵⁶ That same report identifies that of the 1,022 school districts in Texas from which the District Audit Report collected data, 641, or 62.7% of them, reported having MOUs in place. 496 districts, or 48.5%, reported having interlocal agreements, while 34.1% reported having mutual aid agreements. 149 districts, or 14.6%, reported having no agreements in place.⁵⁷ The report does not identify individual school districts, however, and does not weight MOU coverage by enrollment.

Since the Uvalde Consolidated Independent School District had its own police department, as of 2018, that means the school district was legally required to have a MOU with law enforcement agencies that had jurisdiction over their buildings.⁵⁸ While the Investigate Committee Report demonstrates that the school police department had an active shooter plan in place before the incident, it makes no mention of a MOU between the school district police department and the City of Uvalde Police Department.

The three applications of MOUs between school districts and law enforcement were passed in three separate laws. The first was in 1995, the same year the first MOU provision was passed in Pennsylvania.⁵⁹ This law required that school district police departments create an MOU with any law enforcement agency that has overlapping jurisdictions. Then, in 2009, the Texas Safety Center was given the duty to encourage the implementation of mutual aid MOUs between schools and emergency responders.⁶⁰ Finally, in 2019, the Texas legislature defined a SRO and required the implementation of an MOU for the use of SROs.⁶¹

1.4 Research Questions

We formulated primary research questions that are answered in the report:

1. What is the range of state rules governing school district-municipal law enforcement Memoranda of Understanding (MOUs)?
2. What is the range of MOUs being implemented across the country?

⁵⁶ Méndez, María. “Almost 100 Texas School Districts Have Added Their Own Police Departments since 2017, but Not Everyone Feels Safer.” The Texas Tribune. The Texas Tribune, June 15, 2022. <https://www.texastribune.org/2022/06/15/uvalde-school-officers-texas-shootings/>.

⁵⁷ Martinez-Prather, Kathy, Jeffrey Caldwell, Shawna R. White, and Ohenewaa Dede-Bamfo. “2017-2020 District Audit Report: Findings on Safety and Security in Texas School Districts.” Texas School Safety Center. Texas School Safety Center. Accessed December 11, 2022. <https://txssc.txstate.edu/research/technical-reports/dar-2020/>.

⁵⁸ Burrows, Dustin, Joe Moody, and Eva Guzman. Rep. Interim Report 2022. Investigative Committee on the Robb Elementary Shooting, Texas House of Representatives, July 17, 2022. https://static.texastribune.org/media/files/d005cf551ad52eea13d8753ede93320c/Uvalde%20Robb%20Shooting%20Report%20-%20Texas%20House%20Committee.pdf?_ga=2.245439748.1053733320.1670705676-2104316185.1669823884.

⁵⁹ 1995 Tex. ALS 260, 1995 Tex. Gen. Laws 260, 1995 Tex. Ch 260, 1995 Tex. SB 1 (May 30, 1995).

⁶⁰ 2009 Tex. ALS 1280, 2009 Tex. Gen. Laws 1280, 2009 Tex. Ch 1280, 2009 Tex. HB 1831 (June 19, 2009).

⁶¹ 2019 Tex. SB 1707, 2019 Tex. Gen. Laws 402, 2019 Tex. Ch 402, 2019 Tex. ALS 402 (June 2, 2019).

3. How many school districts in Allegheny County have an MOU in place with the proper police department(s) which protects students from being placed “at risk”?
4. Is the number of students per municipal police officer related to learning outcomes and school safety measures?

2. State-by-State Statutory Analysis

In order to review, classify, and analyze state statutes on Memoranda of Understanding throughout the 50 states and the District of Columbia, we developed three secondary research questions to guide us:

- 1) How many states require public school entities to implement MOUs with municipal law enforcement?
- 2) How many public-school students in the United States are enrolled at schools that are mandated to implement MOUs with municipal law enforcement?
- 3) How do other states' rules compare to Pennsylvania's rules?

2.1 Methodology

We utilized three sources of information to review and classify state MOU statutes. First, the National Center on Safe Supportive Learning Environments provides a compilation of states' school discipline laws.⁶² In this compilation, they categorize "Partnerships between Schools and Law Enforcement," under which they include a section titled "Authorizations, Memoranda of Understanding (MOUs), and/or Funding." We reviewed whether they provided citations for each state and used them as an initial resource for reviewing the state statutes for information regarding Memoranda of Understanding.

Second, we explored the LexisNexis database available via the CMU library to identify state statutes regarding the use of Memoranda of Understanding for school entities. These search terms included "Police," "Law enforcement," "Sheriff," "Memorandum of Understanding," "Memorandum of Agreement," "Agreement," and "Contract." The search terms were generated after our first review of the Pennsylvania and Texas statutory requirements and attempted to avoid excessively limiting the search results. Though the term Memorandum of Understanding is often used to describe agreements between entities, we were aware that other terms may be used to describe such agreements depending on the state. These terms include terms searched above, such as "Memorandum of Agreement," "Agreement," and "Contract." Finally, in order to confirm the findings, we utilized these same search terms in each state's online statutory code portals.

For the first round of extracting and classifying the state statutes, each member of the project was assigned a subset of states. Then, two project members were each assigned approximately 50% of the states' classifications and citations to review and confirm. The project members also collected more information on the statutes regarding Memoranda of Understanding based on the initial findings to understand each state's MOU requirements more fully and accurately. Third, the same two project members developed an information request for each state with the help of project panel

⁶² National Center on Safe Supportive Learning Environments. "Compendium of School Discipline Laws and Regulations for the 50 States, Washington, D.C. and the U.S. Territories." Accessed December 11, 2022. <https://safesupportivelearning.ed.gov/school-discipline-compendium>.

advisor Dr. Cheryl McAbee to confirm findings regarding statutory requirements for Memoranda of Understanding. These requests included citations for the state's MOU requirements as well as citations for the correct law for requesting information according to each state (Right-to-Know, Freedom-of-Information, Sunshine Law, etc.). We had identified the correct contact and agency within the state to whom to send the requests for information.

Freedom of information requests were sent to 49 states, excluding Pennsylvania and Texas. States had varying timelines and legal requirements for responding. We received responses from 25 of the 49 states to whom we sent requests, which represents a 51% response rate. Some states that responded declined our requests because we were not citizens of that state (Kentucky and Delaware) or because we requested information but not documents. In the latter case, the contact either referred us directly to other persons that could better review and confirm the accuracy of our statute citations or did not help us.

Below, we present state by state comparisons which are both weighted and unweighted. Unweighted data are the counts of the states. The weighted data account for the number of students in each state, using the National Center of Statistics' most recent data on enrollment in the school year 2021-2022.⁶³

2.2 Comparative State Analysis and Findings

Using Pennsylvania as our base case, we identified four dimensions of analysis for state rules on MOU implementation: (1) when does the state require MOU implementation, (2) does the state provide a model MOU, (3) does the state require conformity to the model MOU, (4) does the state require periodic revisions or review of the MOU. We have also extracted miscellaneous details related to the ten criteria identified in McAbee (2018).

⁶³ U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," School Year 2021-2022.

2.2.1 The Statutory Requirements for MOUs Are Heterogeneous Across States

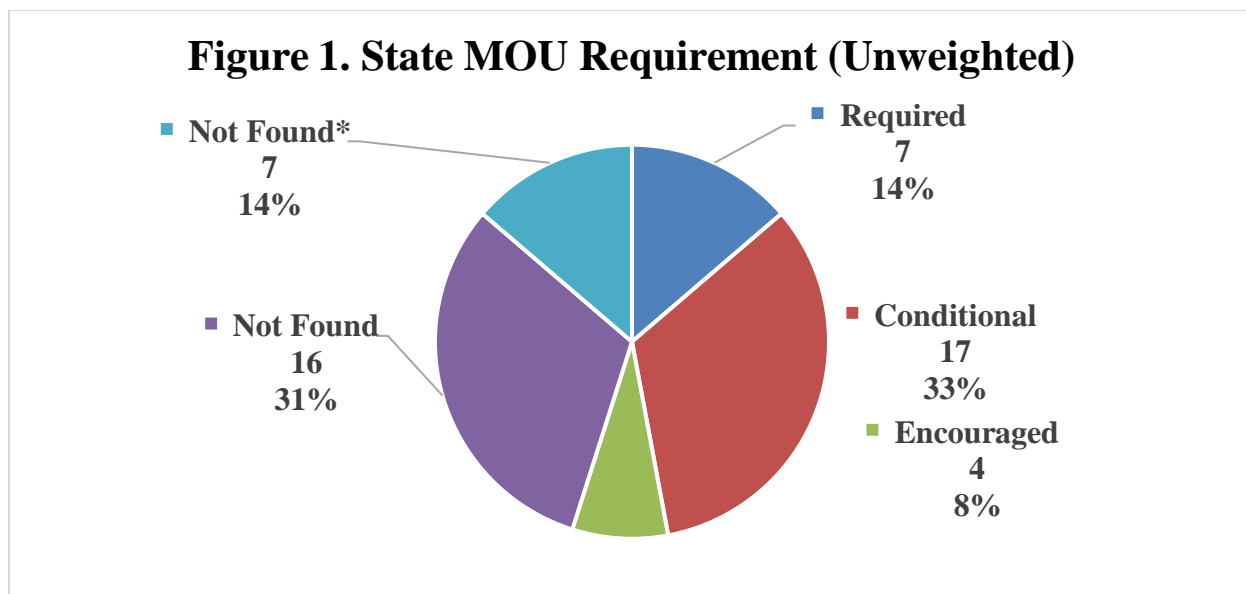


Figure 1. State *MOU Requirement (Unweighted)*

As seen in Figure 1, we identified mentions of MOUs in states' statutes and regulatory code in 27 states and DC. Six states (FL, PA, NJ, KS, NH, and DE) and DC require MOUs between school entities and municipal law enforcement. 17 states condition the requirement of an MOU on actions taken by the school entities. The most common is when schools hire school resource officers (SROs) from local law enforcement, they are required to develop an MOU (AR, CT, IN, KY, MD, MA, MO, NE, NY, OH, SC, TN, TX, UT, VA, and WA). However, Mississippi applies this requirement for applications to the state grant program to fund school resource officer programs in school entities.⁶⁴

It is important to note that these classifications do not convey the heterogeneity within these groups. For example, while we classified Texas as Conditioned on SRO, there are other applications of MOUs between schools and law enforcement as discussed previously.

The time pattern of state legislation varies across all the states, however, there is an emerging trend visible in the Conditional group. Most of the states that require MOUs for SROs passed their legislation in 2013 or later. This aligns directly with the release of federal guidance from the Department of Justice in 2013 and 2016 as previously mentioned. This may indicate the influence the federal government had in informing state policies. Therefore, the Department of Justice and Department of Education should continue their work in encouraging MOUs to make school-law enforcement partnerships more effective.

⁶⁴ Miss. Code Ann. § 37-3-82

Figure 2. State MOU Requirements (Weighted by Enrollment)

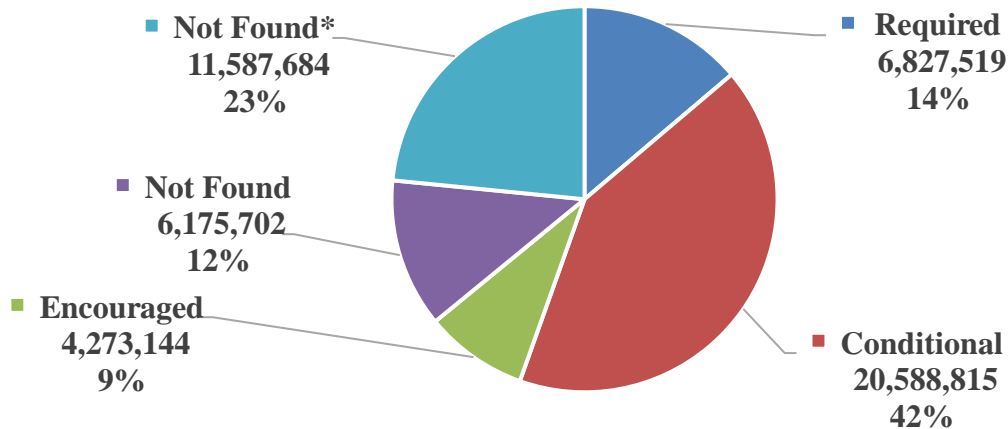


Figure 2. State MOU Requirements (Weighted by Enrollment)

In Figure 2, we see a dramatic change in the proportions of classifications after weighting for student enrollment. While the Required and Encouraged proportions stay consistent, the proportion of Conditional policies grew from 33% to 42%. This indicates that the states with more students are responding to policy recommendations more than the smaller states. Additionally, the states that did respond to the right-to-know requests outweighed the groups that did not.

2.2.2 Does the State Offer a Model MOU?

As stated previously, the Pennsylvania State Board of Education is required to create and biennially revise a model MOU. We found additional states that offered guidance in the form of model or sample MOUs for local school entities to base their MOUs on, but in some cases the state government was not required to do so like in Pennsylvania. In Figure 3, we distinguish between “Guidance” and “Mandated”, “Mandated” classification means that the state government is required by law to create and endorse a model MOU while “Guidance” indicates that the state government took voluntary action to advocate for a model MOU.

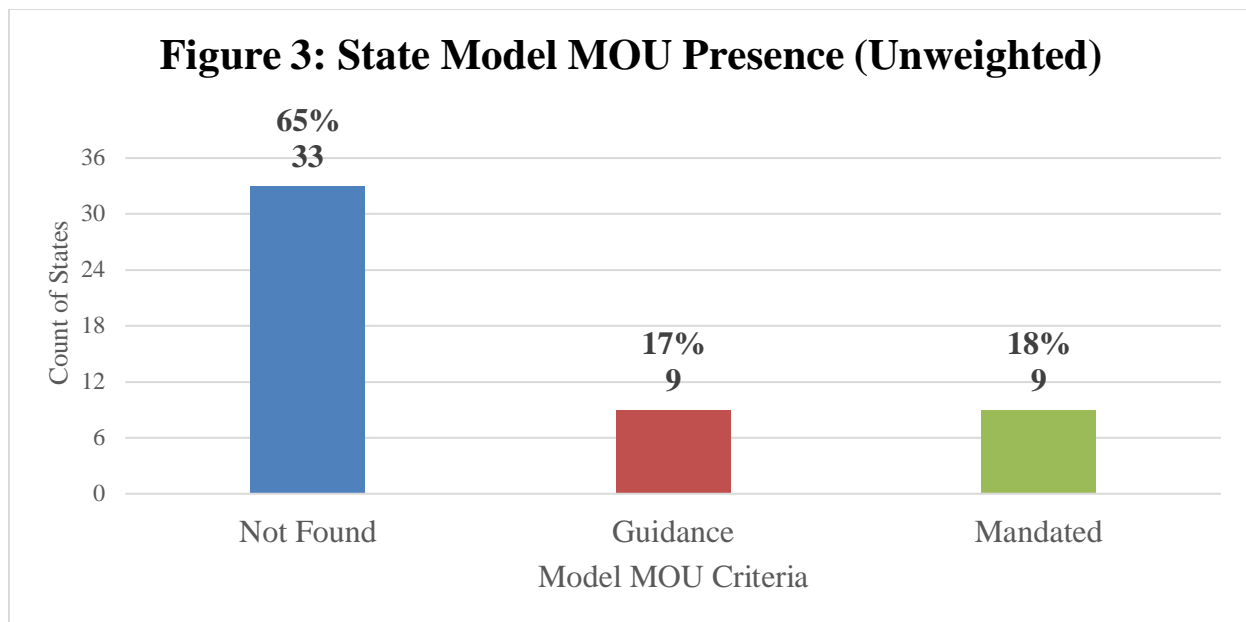


Figure 3. *State Model MOU Presence (Unweighted)*

As seen in Figure 3, 18 states offer a model MOU, nine of which are required by law to do so and the nine others are doing so voluntarily. Most of the time this action is taken by the state education agency except in Virginia, where the Department of Criminal Justice Services develops the model MOU.

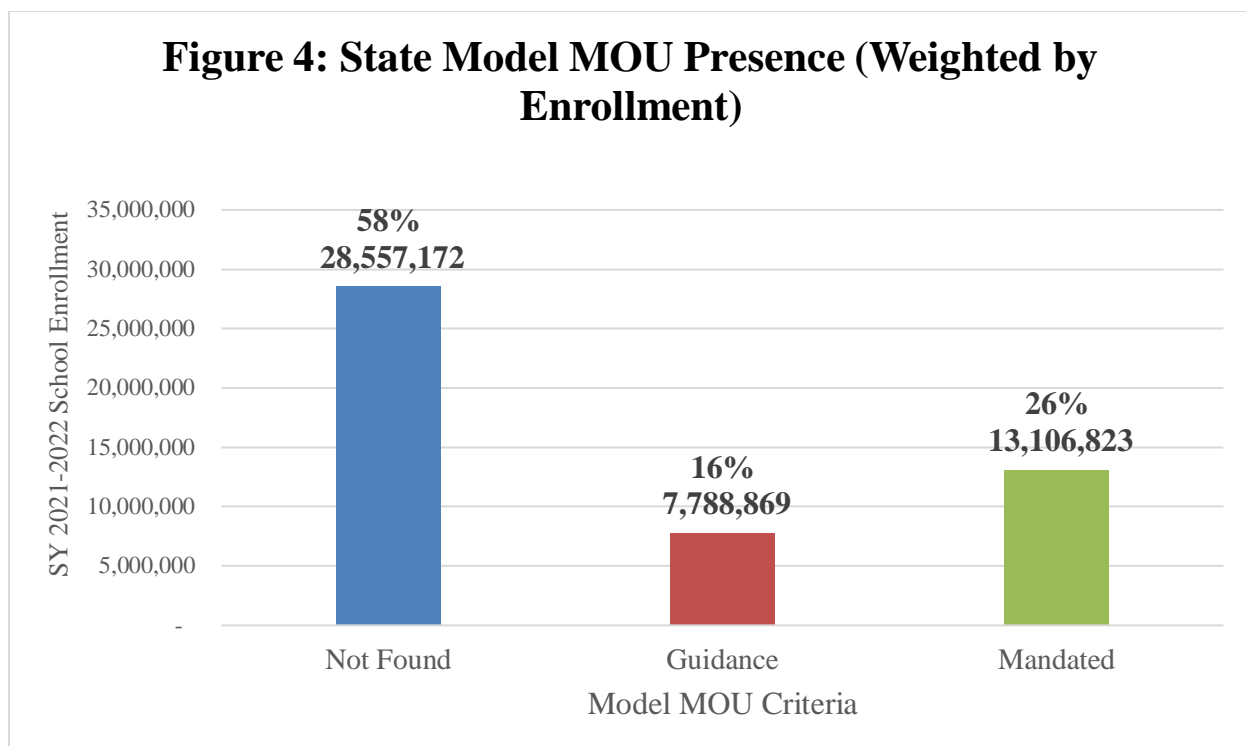


Figure 4. *State Model MOU Presence (Weighted by Enrollment)*

As seen in Figure 4, the states that mandate the creation of a model MOU outweigh the states that voluntarily endorse a model MOU in terms of enrollment.

2.2.3 Does the State Require Conformity to the Model MOU?

In Pennsylvania law, the model MOU is required to be consulted during the development of MOUs at the local level. Differences between the local MOU and the model MOU are to be identified and explained. This aligns with one of the recommendations from the DoE and DoJ in 2016, which recommends that MOUs be similar to state-endorsed MOUs.⁶⁵

⁶⁵ US. Department of Education and Department of Justice. “Safe School-based Enforcement”.

Table 1. *9 State Rules' on Conformity to Model MOU*

9 States That Mandate Model MOUs Use Imprecise Language to Measure Extent of Conformity to Model MOU			
State	MOU Requirement	Model MOU Presence	Extent of Conformity to Model MOU
Arkansas	Conditioned on SRO	Mandated	Based on
Delaware	Required	Mandated	Substantially similar
Massachusetts	Conditioned on SRO	Mandated	Minimum requirement
Michigan	Encouraged	Mandated	Consistent
Nebraska	Conditioned on SRO	Mandated	In conformance with the minimum standards
New Jersey	Required	Mandated	Include provisions that are in addition to and do not conflict
Pennsylvania	Required	Mandated	Identify substantive differences
Virginia	Conditioned on SRO	Mandated	Based on
Texas	Conditioned on SRO	Mandated	Comply with the guidelines
Source: Authors' classifications of state statute findings.			

As seen in Table 1, nine states have legal language requiring conformity to the state-endorsed model MOU. However, there are substantial differences in how that conformity is assessed across the states. Two states, Arkansas and Virginia, ask local school entities to base their MOUs on the state-endorsed MOU. Delaware and Pennsylvania both use the word substantially to indicate the measure of similarity. Massachusetts and Nebraska indicate that the model MOU is the minimum requirement.

New Jersey is a unique case because they take a different approach in the execution of MOUs at the local level (referred as MOA in New Jersey). The New Jersey State Board of Education is required to develop a Uniform State Memorandum of Agreement Between Education and Law Enforcement Officials (Ed-Law MOA). The MOA is the longest and most comprehensive of the model policies we found, running at 71 pages. This MOA is required to be implemented as a minimum in every school entity. The statute clarifies that school entities are allowed to add to the MOA, but they can not remove or have new provisions that conflict with the statewide MOA. This is the most extreme form of ensuring conformity across the state, but may be the most effective.

As mentioned previously, McAbee (2018) shows cases of non-compliance to conformity to the model MOU in Pennsylvania.⁶⁶ Therefore, it would be interesting to measure the rate of conformity across these states to assess the effectiveness of the various types of language.

⁶⁶ McAbee, "An Analysis of Zero Tolerance Weapon Policies".

2.2.3 How Often Are MOUs Required to be Reviewed/Revised?

In Pennsylvania law, MOUs are required to be revised on a biennial basis. This aligns with one of the recommendations from the DoE and DoJ in 2016, which recommends the periodic revision of MOUs.⁶⁷

Table 2. *7 State Rules on Periodic Revisions of MOUs*

7 States Require Revisions Every One to Three Years		
State	MOU Requirement	Review Period
Delaware	Required	Three years
Massachusetts	Conditioned on SRO	One year
New York	Conditioned on SRO	One year
New Jersey	Required	One year
Pennsylvania	Required	Two years
Virginia	Conditioned on SRO	Two years
Washington	Conditioned on SRO	One year
Source: Authors' classifications of state statute findings.		

2.3 Limitations

We searched for and reviewed state statutes as thoroughly as possible, but due to the complex and compartmentalized nature of state statute repositories, it is not possible to exclude the possibility that our searches did not find certain language pertaining to Memoranda of Understanding. Sending information requests to states allowed for the chance to minimize this possibility. However, due to the compact timeline of the research and varying requirements in time allowances for state information requests, states who have longer allowances for replying to requests may not have responded within our timeline. This is a consideration for future research.

3. Implementation of MOUs in US Public Schools

As mentioned previously, the National Center of Education Statistics (NCES) has conducted a survey of US K-12 public schools on topics concerning school crime and safety regularly since 2000. The goal of the survey, the School Survey on Crime and Safety (SSOCS), was to assess the frequency of school crimes in public schools and the various measures that schools are using to mitigate those incidents. The NCES has continuously updated the survey to reflect new areas of interest of policymakers and education researchers. For example, the survey generally assessed the prevalence of school security personnel in public schools, but did not differentiate between school security personnel hired by the school entity itself and sworn law enforcement, such as school resource officers (SROs) until the school year 2015-2016. This distinction reflects the evolution

⁶⁷ US. Department of Education and Department of Justice. “Safe School-based Enforcement”.

of definitions over time, as more governments, state and local, have formalized these concepts in their laws and programs. The school year 2015-2016 was also the first year in which the survey attempted to directly measure the use of “formalized policies” to delineate the roles of sworn law enforcement in schools, which includes memoranda of understanding (MOUs).

3.1 Methodology

The survey is based on 4,800 public schools in the United States chosen to create a nationally representative picture of school safety measures. The most recent data available is for the school year 2017-2018.⁶⁸ The sampled respondent is either the principal or someone who is knowledgeable about the schools’ crime and policies. 81% of the respondents were principals of the sampled school building. 12% of the respondents were vice principals. Therefore, the respondents are the school officials who are directly responsible for the public-school population.

We examined the public-use file which does not disclose the enrollment of the building. It provides a categorical variable with ranges of enrollment: less than 300, 300-499, 500-999, and 1,000 or more. Additionally, this variable is one of three strata that the survey provides: enrollment, school level, and locale. The survey uses these three strata because they are highly related to the various school safety measures. Since the strata are related to important school safety outcomes, they could also be related to the likelihood of implementing MOUs with law enforcement.

The variable of interest is school officials’ response to the following question:

“During the 2017-18 school year, did your school or school district have any formalized policies or written documents (e.g., Memorandum of Understanding, Memorandum of Agreement) that outlined the roles, responsibilities, and expectations of sworn law enforcement officers (including School Resource Officers) at school?”

Since the question directly names MOUs and MOAs, this will be our proxy measurement for the execution of MOUs at the school-level. However, it is possible that principals report a formalized policy that is advisory but not contractual. For example, a ‘written document’ does not presume that there are signatures on the policies between schools and municipal law enforcement to create liability.

If the respondent reports that the school does have a formalized policy, they are then asked whether the policy includes provisions on five topics: the use of firearms, the use of restraints, student discipline, making arrests, and reporting of offenses. These topics align very closely with some of the required policies in state statutes and model MOUs across the country. Therefore, it will be important to investigate how often those provisions are in place.

⁶⁸ U.S. Department of Education. School Survey on Crime and Safety (SSOCS): 2017-18 Public-Use Data File. April 9, 2020. Distributed by National Center for Education Statistics, NCES 2020054, <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2020054>.

3.2 Prevalence of Formalized Policies by School Level, Enrollment, and Locale

Overall, in school year 2017-2018, 49% of schools did not report having law enforcement present once a week. Therefore, 51% of US public schools report having law enforcement present once a week. Of those 51% of schools, 63% of those schools have formalized policies with law enforcement while 37% of them do not. As seen in Figure 5, of all US public schools, 32% of schools have formalized policies, while 19% do not.

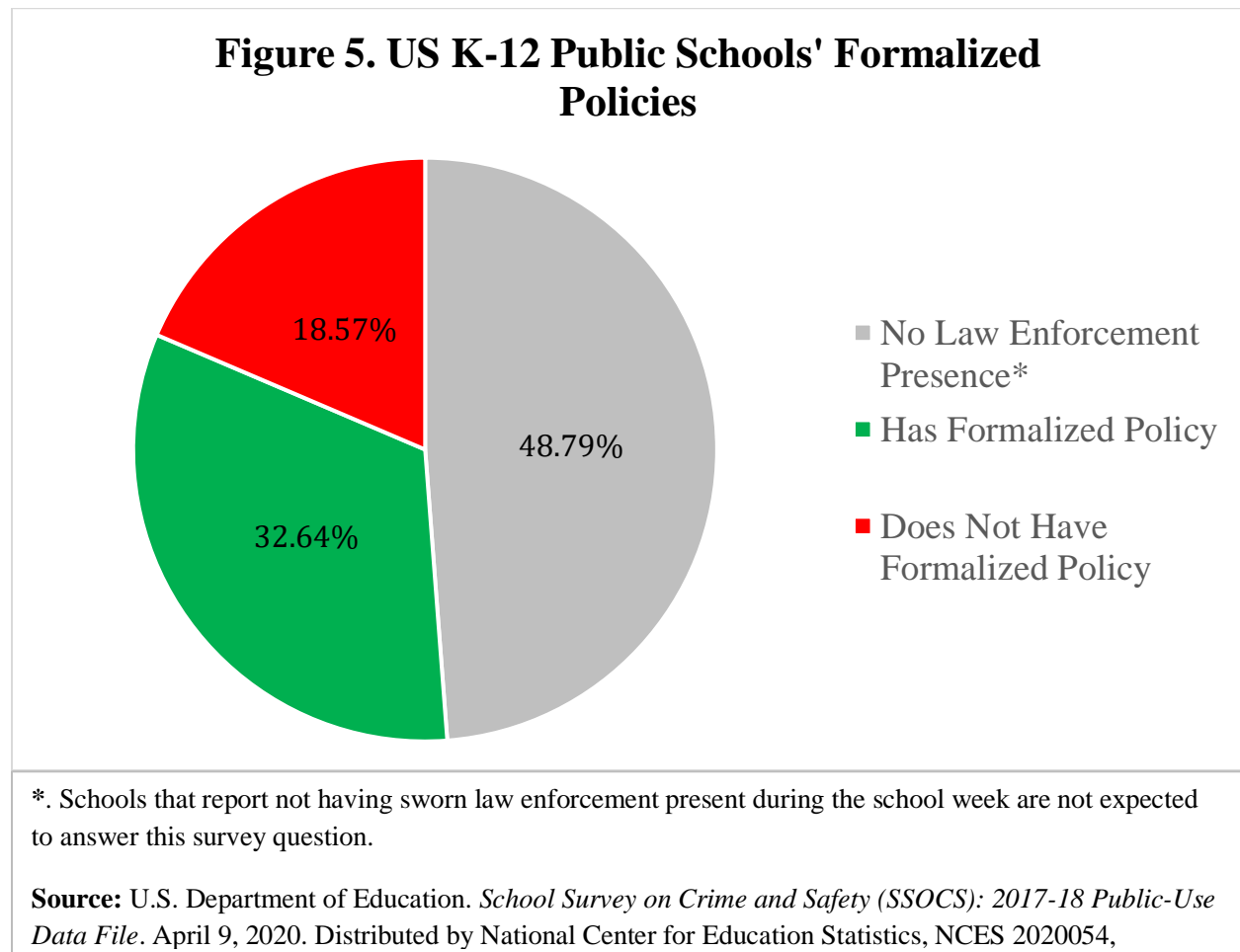


Figure 5. *US K-12 Public School's Formalized Policies*

We now turn to the prevalence of formalized policies by school level, school enrollment, and locale. Chi-Square tests of independence were performed to assess the relationship between formalized policies with law enforcement and the three available strata: school size, school locale, and school level. The null hypothesis is that the strata variables are independent of a school having a formalized policy. There was a significant relationship between the formalized policies and school size, $X^2(6, 2762) = 7610.70, p < .0001$. There was a significant relationship between formalized policies and school locale, $X^2(6, 2762) = 1511.81, p < .0001$. There was a significant relationship between formalized policies and school level, $X^2(6, 2762) = 9838.02, p < .0001$. Therefore, just as there is a relationship between the strata and common school safety outcomes,

there is also a relationship between the strata and the likelihood of formalized policies. In Table 3, we can observe the differences in proportion between each school demographic.

Table 3. *Proportion of Formalized Policies Across School Demographics*

		Percentage of Responses of School Officials		
		No Regular Law Enforcement Presence	No	Yes
School Grade Level	Primary	61%	18%	21%
	Middle	31%	23%	46%
	High	30%	19%	52%
	Combined	71%	15%	14%
School Size	< 300	62%	20%	18%
	300 - 499	59%	14%	27%
	500 - 999	42%	21%	36%
	1,000 +	18%	19%	63%
School Locale	City	56%	15%	29%
	Suburb	47%	18%	35%
	Town	36%	22%	43%
	Rural	51%	21%	28%

As the grade level of the school increases and the students get older, the more likely the school will have law enforcement present and have formalized policies with law enforcement. This is likely due to the increasing risk of school incidents in the school. Therefore, the school administrators will incorporate security measures such as hiring school resource officers.

As the number of kids in the school goes up, the more likely the school will have law enforcement present and have formalized policies with law enforcement. It's interesting to note that there does not seem to be a relationship between school size and not having a formalized policy. While larger schools will be more likely to have law enforcement, they are also more likely to establish a formalized policy. Therefore, while we were unable to calculate a weighted percentage of implementation of formalized policies in the United States by enrollment, the relationship between enrollment and likelihood of having formalized policies indicates that the percentage of students covered by formalized policies is more than 32%.

Since school locale is a nominal variable and not ranked, the relationship between locale and formalized policies requires further investigation. Schools in the city are the least likely to have regular law enforcement presence at school and the least likely to have formalized policies with law enforcement. This is interesting because schools in the city, such as Pennsylvania's major metropolitan areas Philadelphia and Pittsburgh, tend to be the more dangerous schools.⁶⁹

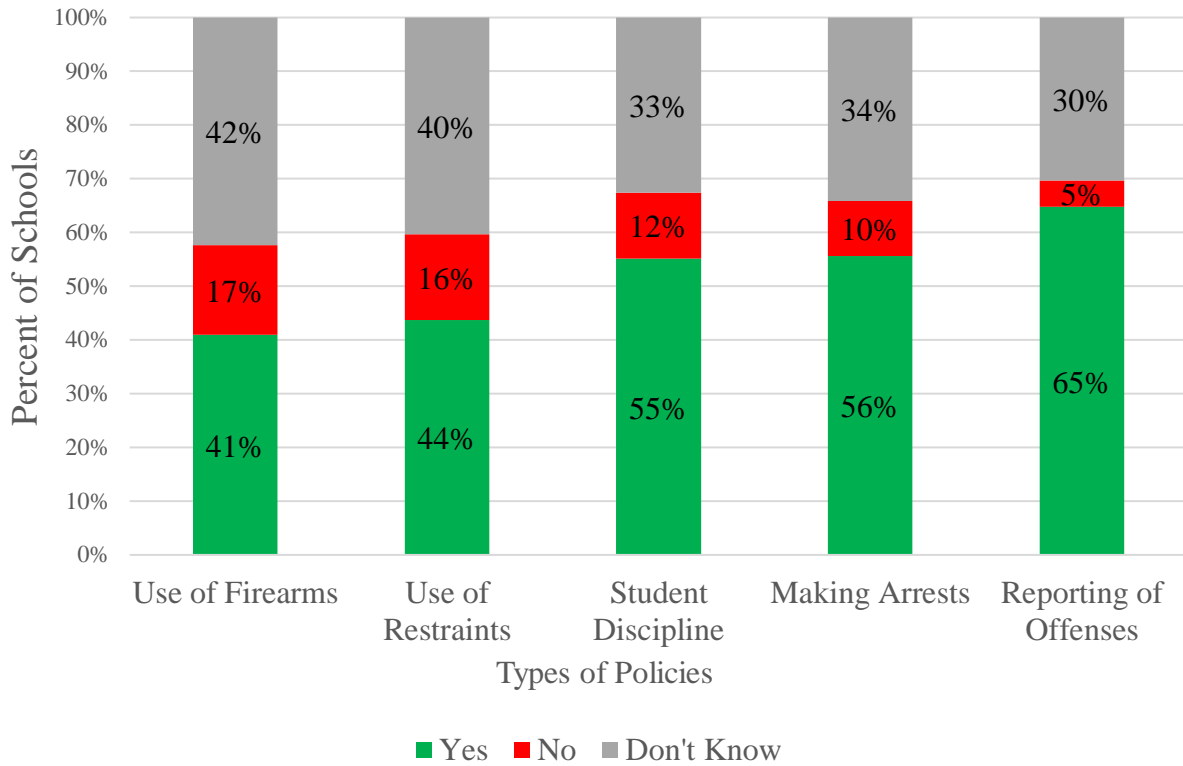
⁶⁹ Strauss (2021).

When comparing schools in the city and rural schools, they both have similar proportions of schools that do not report to have a law enforcement presence, but rural schools are more likely to have formalized policies with law enforcement if they are present during the school week. The relationship between locale and formalized policies warrants further investigation.

3.3 School Officials' Ignorance of Formalized Policies

Of the 32% of US public schools that report having formalized policies, how many of those schools report having provisions regarding important topics in the school-law enforcement relationship. This question in the survey is the only question that allows the respondent to say, "I don't know". Since almost all the respondents are the people in charge of US public schools, it is desirable that the officials have a working understanding of what is in their formalized policies with law enforcement. However, as seen in Figure 6, between 30% and 42% of school officials report not knowing whether specific provisions are written in their formalized policies.

Figure 6. Presence of Specific Formalized Policies in US K-12 Public Schools (of Schools That Have Formalized Policies)



Note: This graphic does not include schools that do not report having formalized policies with law enforcement.

Source: U.S. Department of Education. *School Survey on Crime and Safety (SSOCS): 2017-18 Public-Use Data File*. April 9, 2020. Distributed by National Center for Education Statistics, NCES 2020054, <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2020054>.

Figure 6. Presence of Specific Formalized Policies in US K-12 Public Schools (of Schools that Have Formalized Policies)

Figure 6 indicates that reporting of offenses is the most common provision in formalized policies in public schools. This aligns with the observation that states often orient the purpose of MOUs towards reporting offenses, for example, Pennsylvania.

However, it is surprising how often school officials are reporting that they do not know whether or not their formalized policies cover areas of interest, such as student discipline. Of schools that report having formalized policies with law enforcement, 57.17% of them report that law enforcement participate in discipline. These principles that allow law enforcement to participate in student discipline should be ensuring the rights of students, however, 31.18% of those principals

do not recall whether they have policies regulating law enforcement’s role in student discipline. The high number of principals unaware of their formalized policies raised a question of how concentrated the ignorance is.

Table 4. *Distribution of Ignorance of Formalized Policies in US K-12 Public Schools*

Number of Responses	Percentage of Responses of School Officials		
	Answered Yes	Answered No	Did Not Know
0	22%	76%	53%
1	10%	9%	10%
2	14%	4%	6%
3	8%	3%	8%
4	10%	5%	5%
5	37%	3%	18%

Source: Author's tabulations of School Survey on Crime and School Safety public-use data (school year 2017-2018)

As seen in Table 4, 53% of school officials did not respond “Did Not Know” to a single question and 43% responded “Did Not Know” to at least one of the questions. Therefore, the ignorance of formalized policies is relatively concentrated and not widespread. This finding warrants further investigation of how and why these school officials are not operating under a working understanding of the expectancies between schools and law enforcement. While Pennsylvania law requires the signatures of school principals on the required MOUs, it’s possible that the absence of this provision across other states lead to involvement of principals in the MOU execution and development process.

3.4 Future of SSOCS

The survey is still being conducted on a biennial basis. So, there will be data in the future for the school years 2019-2020 and 2021-2022. It appears that the NCES is still including the “formalized policy” question in the survey for both years.⁷⁰ Therefore, there will be an opportunity to assess longitudinal trends related to this variable.⁷¹

⁷⁰ U.S. Office of Management and Budget. National Center on Education Statistics. *School Survey on Crime and Safety: 2019-20 School Year*. OMB No. 1850-0761. Accessed December 10, 2022. https://nces.ed.gov/surveys/ssocs/pdf/SSOCS_2020_Questionnaire.pdf; U.S. Office of Management and Budget. National Center on Education Statistics. *2022 School Survey on Crime and Safety (SSOCS:2022)*. OMB No. 1850-0761 v.22. Accessed December 10, 2022. <https://omb.report/icr/202202-1850-004/doc/118432701>.

⁷¹ However, it appears the survey still does not require school officials to fill out that question if they do not report having sworn municipal law enforcement presence once every school week. As observed in the state-by-state analysis of MOU requirements, there are schools that are required

We could not identify any studies that were using this proxy variable for MOUs. Many analyses of the effects of MOUs are highly qualitative and anecdotal. However, the SSOCS provides an opportunity to assess these effects quantitatively and systematically.

4. Implementation of MOUs in Allegheny County

We now shift focus from our nationwide and state-level analysis of Memoranda of Understanding, this report provides a specified analysis into MOU implementation within Allegheny County. Based on methodology and unfinished tabulations from research conducted by Dr. McAbee, we aim to answer this primary research question: how many School Districts in Allegheny County have an MOU in place with the proper police department(s) which protects students from being placed “at risk”? To examine this, we developed three PA specific research questions and utilize extant school-district tabulations based on data from the PA Educational Names and Addresses Database:

1. Are all school buildings and school children in Allegheny County covered/protected by their School District’s MOU?
2. How many Allegheny County school children are at risk due to inadequately defined School District-Police Department relationships?
3. How many school children are there per police officer within each Allegheny County municipality?

4.1 Methodology

To answer the three research questions, we utilized eight distinct data sources. To begin, we could not have completed the analysis without obtaining Dr. Cheryl McAbee’s right-to-know requests sent to every school district within Allegheny County which detailed the presence of a MOU between school district and police department, as well as the detailing of which municipal police departments are included in the MOU for each school district.⁷² This dataset allowed us to uncover whether or not school districts within the county had an MOU established with municipal police departments of each municipality where a school building was located.

To learn information about school district boundaries as well as municipal boundaries, we utilized two open source Geographic Information Systems (GIS) maps developed and distributed by Allegheny County Government.⁷³ To obtain addresses to search for within GIS, we made use of the Pennsylvania Department of Education’s Education Schools & Addresses Database (EDNA),

to implement MOUs with law enforcement even if they do not hire SROs or have regular law enforcement presence. Therefore, NCES should consider asking this question to all school officials.

⁷² McAbee, Cheryl, Esq. 2022. "Portions of Tabulation of School Districts in Allegheny County and Relevant Police Departments responsible for School Districts in Allegheny County., private correspondence".

⁷³ Allegheny County Government: *Allegheny County Municipal Boundaries*. Distributed by Allegheny County GIS Team. (Manual Cross Check). https://openac.alcogis.opendata.arcgis.com/datasets/9de0e9c07af04e638dbc9cb9070962c2_0/explore?location=40.525916%2C-80.076170%2C12.50

which includes specific street addresses of all school buildings within Allegheny County.⁷⁴ We found the corresponding school district and municipality for each listed school building by utilizing the GIS maps. We cross-checked these results with the Find Municipality By Address function in the Pennsylvania Department of Community Services and Economic Development (DCED) website that allows one to identify what municipality respective school addresses are located in.⁷⁵ This information then allowed us to then make use of Dr. McAbee's data which revealed existing school buildings represented by a school district MOU that did or did not include the appropriate municipal police departments.

To calculate students per police officer for each school district and school building, we accessed two datasets: the Pennsylvania (DCED) Municipal Police Services dataset⁷⁶ and the Pennsylvania Department of Education Public School Enrollment Reports dataset for the school year 2021-2022.⁷⁷ The DCED data provided municipal police officer counts, both full time and part time, for all municipalities within Allegheny County. However, the dataset did not report police officer counts for municipalities that were serviced by the state police and regional police departments. To obtain these we averaged the number of officers listed in the regional police departments' websites and verified these numbers with the Carnegie Mellon Chief of Police, Aaron Lauth, over email.⁷⁸

The enrollment data from the PA Department of Education Enrollment Report reported listed enrollment amounts for each school building in Allegheny County which we then used to compile enrollment data by each school district. When making calculations, we utilized the full time equivalents or "FTE" method of counting police officers which treats full time officers as one whole officer, and part time officers as .5 or half an officer.

Another subject our analysis touches on is the set of inconsistencies in SRO data reporting to the State from Allegheny County School Districts. To analyze this subject two datasets were utilized: The Pennsylvania Department of Education LEA/School Discipline Report for school year 2021-2022 and the Pennsylvania Department of Education Professional Personnel Individual (PPIS) Staff Report for school year 2021-2022. Both datasets report law enforcement and school security officials employed by each Allegheny County School District, but have differing definitions, administrative codes or "titles" for equivalent law enforcement and school security positions. The dataset comparison allowed us to compile inconsistencies between the two datasets and highlight

⁷⁴ PA Department of Education: *Educational Names & Addresses Database 2022*. <http://www.edna.pa.gov/Screens/Extracts/wfExtractPublicSchools.aspx>

⁷⁵ Pennsylvania Department of Community Services and Economic Development. *Find Municipality By Address*. <http://munstats.pa.gov/Public/FindMunicipality.aspx>.

⁷⁶ Pennsylvania Department of Community Services and Economic Development. *Municipal Statistics-Municipal Police Service*. https://munstats.pa.gov/Reports/ReportInformation2.aspx?report=MuniPolice_Excel

⁷⁷ PA Department of Education: *Public School Enrollment Reports 2021-22*. Distributed by Pennsylvania Department of Education Data Quality Office. <https://www.education.pa.gov/DataAndReporting/Enrollment/Pages/PublicSchEnrReports.aspx>

⁷⁸ Northern Regional Police Department. *Directory*. Accessed December 10, 2022 <https://nrpolice.com/contact/directory/>; Allegheny Valley Regional Police Department. *Directory*. Accessed December 10, 2022. <https://avrpdc.com/directory/>; Aaron Lauth, personal communication, November 9, 2022.

overarching issues in understanding how researchers and administrators alike may run into difficulties in contextualizing findings.

4.2 Allegheny County's School Districts

Allegheny County has 43 School districts that service in total 128 municipalities⁷⁹. Each School district contains on average 5.7 schools. The school district with the most schools was the City of Pittsburgh with 55. The smallest school district was Duquesne City with 1. The standard deviation of the number of schools per school district was 7.98. On average, each school district services 2.97 municipalities⁸⁰. Within Allegheny County, there are on average 3,060 students enrolled in a school district and on average 537 children enrolled per school⁸¹. 22 (51%) of school districts in Allegheny County have multiple school buildings within separate police department jurisdictions leaving 21 (49%) of school districts with all of their school buildings under the legal jurisdiction of a single police department⁸². The implication of this finding is that when constructing MOUs, school districts must know which municipalities all their school buildings fall within, and properly understand whether a local municipal or regional police department exists which would have legal jurisdiction over the given school buildings. Once this information is realized, then proper MOU construction will include the police departments with legal jurisdiction over school buildings within the school district.

Our analysis uncovered variation in the enrollment levels at school buildings at large and in school district enrollments. The standard deviation for school enrollment was 346.6 students and for school districts we see a higher proportional variation of 3,060 students. This finding is primarily due to certain school districts housing more schools than others, and larger concentrations of middle schools and a single high school in certain districts over others.

4.3 Allegheny County Municipal Law Enforcement Practices

The creation of an MOU can be a complex process; ensuring the proper municipal police departments as well as neighboring police departments can be intensive depending upon how convoluted the surrounding municipal and school district boundaries are within a given area. In the case of Allegheny County, this process is especially complex since the area contains 128 municipalities⁸³. Of the 128 municipalities, 74 house at least one school building⁸⁴. When it comes to police departments which could potentially be included in a MOU, 100 of the 128 municipalities

⁷⁹ PA Department of Education: *Public School Enrollment Reports 2021-22*.

⁸⁰ Manual Cross Check with Allegheny County GIS Municipal and SD Boundary Maps

⁸¹ PA Department of Education: *Public School Enrollment Reports 2021-22*. Distributed by Pennsylvania Department of Education Data Quality Office.
<https://www.education.pa.gov/DataAndReporting/Enrollment/Pages/PublicSchEnrReports.asp>

⁸² Manual Cross Checking conducted between EDNA dataset, Allegheny County Municipal Boundaries GIS Map and PA Department of Community Services and Economic Development *Municipal Statistics-Municipal Police Service*. https://munstats.pa.gov/Reports/ReportInformation2.aspx?report=MuniPolice_Excel

⁸³ Pennsylvania Department of Community Services and Economic Development. *Municipal Statistics-Municipal Police Service*.

⁸⁴ Manual Cross Checking conducted between EDNA dataset and PA Department of Education: *Professional Personnel Individual Staff Report 2021-22*.

have their own funded police force which has legal jurisdiction over all school buildings within municipal boundaries. Of the 28 remaining municipalities, 18 Municipalities obtain policing services from another municipality that they have a policing contract with, 7 are under the jurisdiction of a regional police department that spans multiple municipalities and 3 are under the jurisdiction of state police⁸⁵.

4.4 Fast Facts on Allegheny County Policing by School District

In total, Allegheny County employs 2,264 full-time and 258 part-time municipal police officers. This totals 2,393 full-time equivalent (FTE) municipal police officers. However, 2,155 of these FTE municipal police officers are in municipalities that have school buildings. There are 102 municipal police departments within the county resulting in an average of 23.5 police officers per municipal law enforcement department⁸⁵. Also, when aggregating across all police departments that have jurisdiction over a school building(s) in Allegheny County, we find an average of 82.3 students per police officer. This data informs school districts of the importance of mutual assistance agreements needed to reduce student per police officer burdens in cases of mass shootings or other largely dangerous events that may arise. If multiple police departments can assist the police department with legal jurisdiction in the case of a dangerous event, additional officers can greatly reduce student per police officer burden which can allow for better protection of students. Multiple case studies illuminating this point will be discussed in section 4.6.

4.5 Allegheny County Policing by School District SRO reporting (An interesting case for the City of Pittsburgh)

To analyze measures taken by municipalities within Allegheny County to adequately report on employed School Resource Officers, we analyzed two primary datasets: The Pennsylvania Department of Education LEA/School Discipline Report for 2021-22' and the Pennsylvania Department of Education Professional Personnel Individual (PPIS) Staff Report for 2021-22'. To begin we observed the codes or titles for various positions reported to the state in the two reports and checked for any consistencies between the analyzed datasets. This process gave way to difficulties due to the complexity in the titles of positions, inabilities in understanding duties that distinguish what positions are responsible for, and of course the fact that position titles were not consistent between the datasets. The LEA/School Discipline Report listed the reported numbers of "School Police Officers", "School Resource Officers", and "School Security Officers"⁸⁶. In the PPIS file, there was difficulty in determining which administrative codes/position titles were relevant to crosscheck with the LEA dataset. We identified four codes: 1998- "School Safety & Security Coordinator", 2048- "Law Enforcement", 2112- "Protective Security Operations" and

⁸⁵ Manual Cross Checking conducted between EDNA dataset, Allegheny County Municipal Boundaries GIS Map and PA Department of Community Services and Economic Development *Municipal Statistics-Municipal Police Service*. https://munstats.pa.gov/Reports/ReportInformation2.aspx?report=MuniPolice_Excel

⁸⁶ PA Department of Education: *LEA/ School Discipline Report 2021-22..* Distributed by Pennsylvania Department of Education Office of Safe Schools. <https://www.education.pa.gov/DataAndReporting/ProfSupPers/Pages/ProfPersIndStaff.aspx>

9998- “School Security Personnel”⁸⁷. Due to the lacking similarity in position titles, we turned to PA law to determine if any of the listed codes encompassed School Resource Officers. We found that according to the 1949 Regular Session Act 14 of the Pennsylvania General Assembly, which clarified that the title of “School Security Personnel” (coded as 9998 in the PPIS data) are defined to include School Resource Officers⁸⁸.

Once uncovering the link between the code “School Resource Officers” in the LEA dataset and code 9998 “School Security Personnel” in the PPIS dataset, we cross checked the datasets to check for inconsistencies. What we found is that no Allegheny County school district reported SRO data in the PPIS file under the code 9998 “School Security Personnel” despite knowing that 10 school districts reported SRO totals in the LEA dataset for the 21-22’ school year.

Adding further complexity was the case of the City of Pittsburgh School District which was known by the public to have 12 employed School Resource Officers⁸⁹. However, when referring to CMU Police Chief Aaron Lauth directly, he clarified that these 12 individuals are not SROs but rather “School Police Officers” thereby showcasing how easily the public and administrators alike can confuse important terminologies. Chief Lauth clarified that “a school police officer is employed solely by the school district whom they work for. The school district obtains certification through the state for their school police officers to enforce laws and regulations on the district property only. Therefore, the school police officers' jurisdiction is the school buildings and grounds within their district alone.”⁹⁰ A school resource officer (SRO) on the other hand is a state-certified police officer, who is employed by a municipality or city. The SRO has jurisdiction anywhere in the community that they are employed. Typically, the school resource officer is specifically assigned to a school building via an MOU with the school district. What we found was that Pittsburgh failed to report their SRO totals in the LEA dataset as well as in the PPIS report, indicating that the LEA reports for 2021-22’ may not be exhaustive nor valid for all school districts in the county^{91, 92}.

What these findings revealed is that Pennsylvania State is not taking the proper measures to ensure that School districts are properly reporting data on School Resource Officers. Additionally, punitive measures against school districts not reporting this data are either non-existent or not strong enough to induce reporting actions among school districts that can help keep children from

⁸⁷ PA Department of Education: *Professional Personnel Individual Staff Report 2021-22*. Distributed by Pennsylvania Department of Education Data Quality Office. <https://www.education.pa.gov/DataAndReporting/ProfSupPers/Pages/ProfPersIndStaff.aspx>

⁸⁸ “1949 Act 14.” The official website for the Pennsylvania General Assembly. Legislative Data Processing Center. Accessed December 5, 2022. <https://www.legis.state.pa.us/cfdocs/legis/LI/uconsCheck.cfm?txtType=HTM&yr=1949&sessInd=0&smthLwInd=0&act=014&chpt=13C>.

⁸⁹ Earle, Rick. “Target 11: Where Have All the Pittsburgh School Police Officers Gone?” WPXI. WPXI, August 25, 2022. <https://www.wpxi.com/news/local/target-11-where-have-all-pittsburgh-school-police-officers-gone/IO5L42255RGLZG3SPVKYSIT3FA/>.

⁹⁰ Aaron Lauth, Carnegie Mellon University Chief of Police, 2022. Quoted in Email Communication with John Villella.

⁹¹ PA Department of Education: *LEA/ School Discipline Report 2021-22*.. Distributed by Pennsylvania Department of Education Office of Safe Schools. <https://www.education.pa.gov/DataAndReporting/ProfSupPers/Pages/ProfPersIndStaff.aspx>

⁹² PA Department of Education: *Professional Personnel Individual Staff Report 2021-22*. Distributed by Pennsylvania Department of Education Data Quality Office. <https://www.education.pa.gov/DataAndReporting/ProfSupPers/Pages/ProfPersIndStaff.aspx>

being at risk. We recommend the PA Department of Education to begin to think about instituting punitive measures to ensure accountability in reporting from school districts.

4.6 MOU Quality Criteria within the Allegheny County Analysis

Thanks to Dr. Cheryl McAbee Esq., our report could focus on established School District and Police Department relationships as defined by established Memoranda of Understanding she obtained through Right to Know requests. Our analysis focuses on whether (1) an MOU is in existence and (2) if an MOU exists, is the established MOU covering all school buildings and children within the school district by including all appropriate police department(s) with legally binding jurisdiction over buildings. Therefore, our analysis includes two quality criteria for School districts who have created a MOU:

1. The established MOU must be compliant with the applicable laws: 22 Pa. Code 10.11 - memorandum of understanding and the Safe Schools Act; 24 P.S. 13-1303- A(c).
2. There should always be an attempt to include multiple police departments in school district level MOUs even if the district only encompasses one police department jurisdiction because of the protective benefits mutual assistance can bring.

In this section we will repeatedly make use of the phrase “at risk”. This phrase implies that due to insufficient inclusion of municipal police departments with legal jurisdiction over school buildings in school district MOUs, schools and school children at given schools have been placed in an adverse risk situation where a potential violent event may result in insufficient police response.

4.7 School District MOU Case Studies Within Allegheny County

When evaluating School District MOU implementation, our analysis began by referring to Dr. Cheryl McAbee’s list of Right-to-Know requests she received from all Allegheny County School Districts. In her document, Dr. McAbee provided us information on whether a School District had a MOU and the listed Police Department(s) that were included in the MOU for each School District. Concurrently, our team used the Pennsylvania Educational Names and Addresses (EDNA) database to find all listed school building addresses in Allegheny County. We cross checked these addresses with the Allegheny County School District and Municipality GIS maps to discover the school district and municipality where each school building was located. We then used the PA Department of Community Services and Economic Development “Municipal Police Services” database to check the name of each municipality’s police department with jurisdiction over the municipal area. We located all school buildings within each school district, the municipalities where each school building was located and developed a tabulation of the police departments that had legal jurisdiction over school building(s) and sorted the list by school district. Lastly, this tabulation of information was then cross checked back to the listed MOUs from Dr. McAbee to check whether each school district had an MOU that included all proper municipal or

regional police departments with local jurisdiction over the school buildings within the school district.

4.7.1 Overall Findings

Our analysis revealed what we are labeling as a “Disconnect” between School Districts and Municipal Police Departments regarding MOU construction and enactment. Excluding the city of Pittsburgh, 12 or 4.9 % of individual Schools in Allegheny County representing 5,989 or 4.6% of school children were subject to a MOU agreed upon by their representative school district that failed to include the municipal police department with legal jurisdiction over their School^{93,94}. In all there were 5 school districts that failed to implement MOUs that included all Police Departments with legal jurisdiction over school buildings within the school district. However it must be reported that this data is based solely off of supplied Right to Know requests to Dr. Cheryl McAbee, implying that issues in municipal police department inclusion may be due to improper RTK reporting rather than MOU construction flaws. The 6 school districts at fault include: Allegheny Valley with 2 schools placed “at risk”, Elizabeth-Forward with one school placed “at risk”, Highlands with 2 schools placed “at risk”, Keystone Oaks with one school placed “at risk” McKeesport Area school district with one school placed “at risk”, and North Allegheny with 5 schools placed at risk. All schools listed can be found in the table “School Buildings at Risk by School District”. The North Allegheny School district’s MOU relationship with local police requires further investigation after discovery from our advisor Professor Strauss heard from a source with past experience working as an elected member of the North Allegheny School District for 8 years- Scott Cunningham.

⁹³ McAbee, Cheryl, Esq. 2022. "Portions of Tabulation of School Districts in Allegheny County and Relevant Police Departments responsible for School Districts in Allegheny County.".

⁹⁴ PA Department of Education: *Public School Enrollment Reports 2021-22*. Distributed by Pennsylvania Department of Education Data Quality Office. <https://www.education.pa.gov/DataAndReporting/Enrollment/Pages/PublicSchEnrReports.aspx>

Table 5. Schools Not Covered by MOUs

Police Department Legally Responsible But Not Included			
School District	in MOU	Students	Schools Not Covered by MOU
Allegheny Valley SD	Harmar Twp PD	496	Acmetonia El Sch
	Springdale Boro PD	389	Springdale JSHS
Elizabeth Forward SD	Forward Twp PD	332	William Penn El Sch
Highlands SD	Harrison Twp PD	1,345	Highlands SHS, Highlands MS
Keystone Oaks SD	Green Tree PD	222	Fred L Aiken El Sch
McKeesport Area SD	White Oak PD	610	Francis McClure El Sch
North Allegheny SD	Franklin Park PD	1,291	Franklin El Sch, Ingomar MS
			Bradford Woods El Sch, Marshall El
	Northern Regional PD	1,925	Sch, Marshall MS
Pittsburgh SD	Pittsburgh City PD	19,859	Every school in Pittsburgh School District

Another key finding was that the City of Pittsburgh School District was the only School District in Allegheny County that failed to implement any MOU. Without any MOU, the City of Pittsburgh has placed 55 or 22.4% of Allegheny County Schools representing 19,859 or 15.1% of county school children “at risk”^{95, 96}.

Our report highlights three specified case studies: one indicating what we find there to be an instance of “adequate” practices and two cases of school districts “at risk” due to varying ways in which their school district implemented MOUs that placed their school buildings in danger.

4.7.2 Case Study of School District Adequate Practices: North Hills School District–West View Elementary

North Hills School District is a relatively simple school district: the school district spans only two municipalities, and out of the six school buildings in the district, five are located in Ross Township. Ross Township Municipality takes on the same borders as North Hills, but there is a layer of complexity in this case study. As seen in figure 7, Westview Borough is entirely surrounded by Ross Township and falls within the North Hills school district boundaries. West View Elementary is located at the point within the figures which is within West View Borough. West View Borough possesses its own municipal police force which has legal jurisdiction over the elementary school.

⁹⁵ Manual Cross Checking conducted between EDNA dataset, Allegheny County Municipal Boundaries GIS Map and PA Department of Community Services and Economic Development *Municipal Statistics-Municipal Police Service*. https://munstats.pa.gov/Reports/ReportInformation2.aspx?report=MuniPolice_Excel

⁹⁶ PA Department of Education: *Public School Enrollment Reports 2021-22*. Distributed by Pennsylvania Department of Education Data Quality Office. <https://www.education.pa.gov/DataAndReporting/Enrollment/Pages/PublicSchEnrReports.aspx>

Therefore, these circumstances call for a School District MOU that includes both municipal police departments.

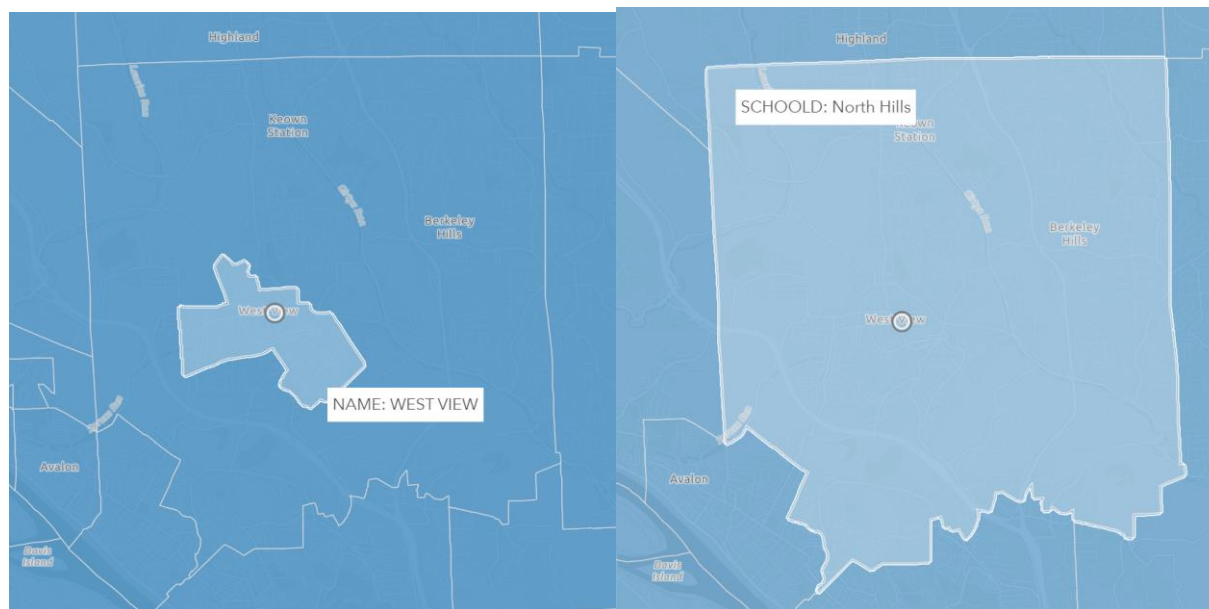


Figure 7. *Boundaries Drawn by GIS Maps of North Hills School District (right), West View Borough (left), and West View Elementary (the dot)*^{97,98}

North Hills School District displayed adequate practices since its MOU includes both Ross Part Township Police as well as West View Borough Police⁹⁹. Therefore the School District's MOU construction avoids violating state law, and includes multiple police departments at a district level so that the police departments can work together while responding to school violence incidents. By including both Police departments, student per municipal police officer ratio at Westview Elementary was reduced from 40 students per officer to 8.12 students per officer¹⁰⁰. Also, the most proximate police departments to school buildings have the ability to respond to violent incidents since the local municipal police departments within all district covered municipalities were included in the MOU.

⁹⁷ Allegheny County Government: *Allegheny County Municipal Boundaries*. Distributed by Allegheny County GIS Team. (Manual Cross Check). https://openac-alcogis.opendata.arcgis.com/datasets/9de0e9c07af04e638dbc9cb9070962c2_0/explore?location=40.525916%2C-80.076170%2C12.50

⁹⁸ Allegheny County Government: *Allegheny County School District Boundaries*. Distributed by Allegheny County GIS Team. (Manual Cross Check). https://openac-alcogis.opendata.arcgis.com/datasets/f5ac385118344bbf8f707cd88ba31a45_0/explore?location=40.436738%2C-80.064894%2C10.62

⁹⁹ McAbee, Cheryl, Esq. 2022. "Portions of Tabulation of School Districts in Allegheny County and Relevant Police Departments responsible for School Districts in Allegheny County."

¹⁰⁰ Pennsylvania Department of Education: *Educational Names & Addresses Database 2022*. <http://www.edna.pa.gov/Screens/Extracts/wfExtractPublicSchools.aspx> (Manual Cross Check with GIS Municipal and SD Maps)

4.7.3 Case Study of School District at Risk: Allegheny Valley School District–Acmetonia Elementary

In the dotted points within figure 8 below, it can be seen that Acmetonia Elementary is located within Harmar Township which is one of the municipalities serviced by the Allegheny Valley School District. The school district currently has an established MOU covering all school buildings in the district with the Allegheny Valley Regional Police Department which offers municipal police services to Cheswick Borough, East Deer Township and Springdale Township. However, the School District did not include the Harmar Township Police department in its MOU which happens to be the police department with legal jurisdiction over Acmetonia Elementary as is defined by 22 Pa. Code 10.11 - memorandum of understanding and the Safe Schools Act; 24 P.S. 13-1303-A(c). As a result, the Allegheny Valley School District MOU is in violation of State law and subject to a fine \$2,500 for the first violation, \$3,500 for the second, and \$5,000 for every violation thereafter ¹⁰¹.

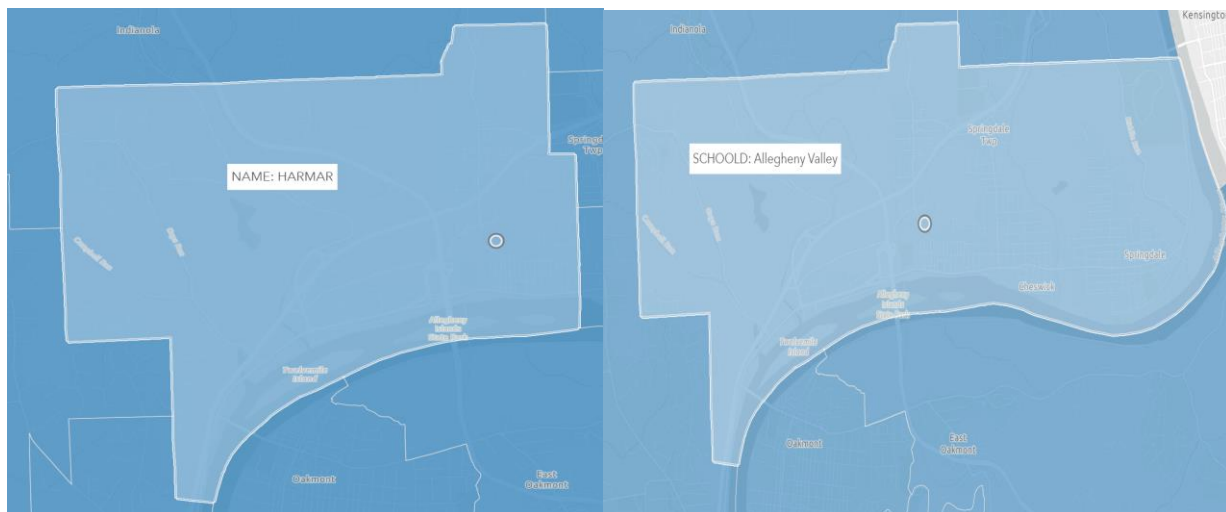


Figure 8. *Boundaries Drawn by GIS Maps of Allegheny Valley School District (right), Harmar Township (left), and Acmetonia Elementary (the dot)* ^{102,103}

Additionally, the lack of coverage results in unnecessary burdens on police officers when responding to violent incidents at Acmetonia Elementary. Without including the Harmar Township

¹⁰¹ McAbee, Cheryl, Esq. 2022. "Portions of Tabulation of School Districts in Allegheny County and Relevant Police Departments responsible for School Districts in Allegheny County."

¹⁰² Allegheny County Government: *Allegheny County Municipal Boundaries*. Distributed by Allegheny County GIS Team. (Manual Cross Check). https://openac-alcogis.opendata.arcgis.com/datasets/9de0e9c07af04e638dbc9cb9070962c2_0/explore?location=40.525916%2C-80.076170%2C12.50

¹⁰³ Allegheny County Government: *Allegheny County School District Boundaries*. Distributed by Allegheny County GIS Team. (Manual Cross Check). https://openac-alcogis.opendata.arcgis.com/datasets/f5ac385118344bbf8f707cd88ba31a45_0/explore?location=40.436738%2C-80.064894%2C10.62.

PD in its MOU, the students per officer ratio at Acementonia Elementary is 38.15 students per officer (496 students enrolled/ 13 officers staffed at AVRPD). If Harmar Township police, which employs 9 officers were included in the MOU, student per officer ratio could be reduced to 22.55 students per officer; a 41% drop. Also by not including Harmar Township PD, the police department most proximate to the school building will not be informed if and when a violent event occurs.

4.7.4 Case Study of School District at Risk: Keystone Oaks School District — Fred L. Aiken Elementary

As seen in Figure 9, the Keystone Oaks School District is a geographically complex district consisting of three separate, disconnected municipalities; Green Tree Borough, Castle Shannon Borough, and Dormont borough. Unknown to many, the Keystone Oaks School District contains schools located outside of its school district Boundaries. While the district boundaries are the boundaries of Greentree, Castle Shannon and Dormont Boroughs, the district has school buildings located in Mount Lebanon as well. Therefore, given that all four municipalities of interest have their own municipal police departments, adequate practices would require the district to implement a MOU that includes all four municipal police departments. However, the school district did not include Green Tree Borough PD in its MOU despite one of its school buildings; Fred L. Aiken Elementary, being located within the municipality. Therefore the school district is in violation of two state laws: 22 Pa. Code 10.11 - memorandum of understanding and the Safe Schools Act; 24 P.S. 13-1303- A(c)¹⁰⁴ .

¹⁰⁴ McAbee, Cheryl, Esq. 2022. "Portions of Tabulation of School Districts in Allegheny County and Relevant Police Departments responsible for School Districts in Allegheny County.".

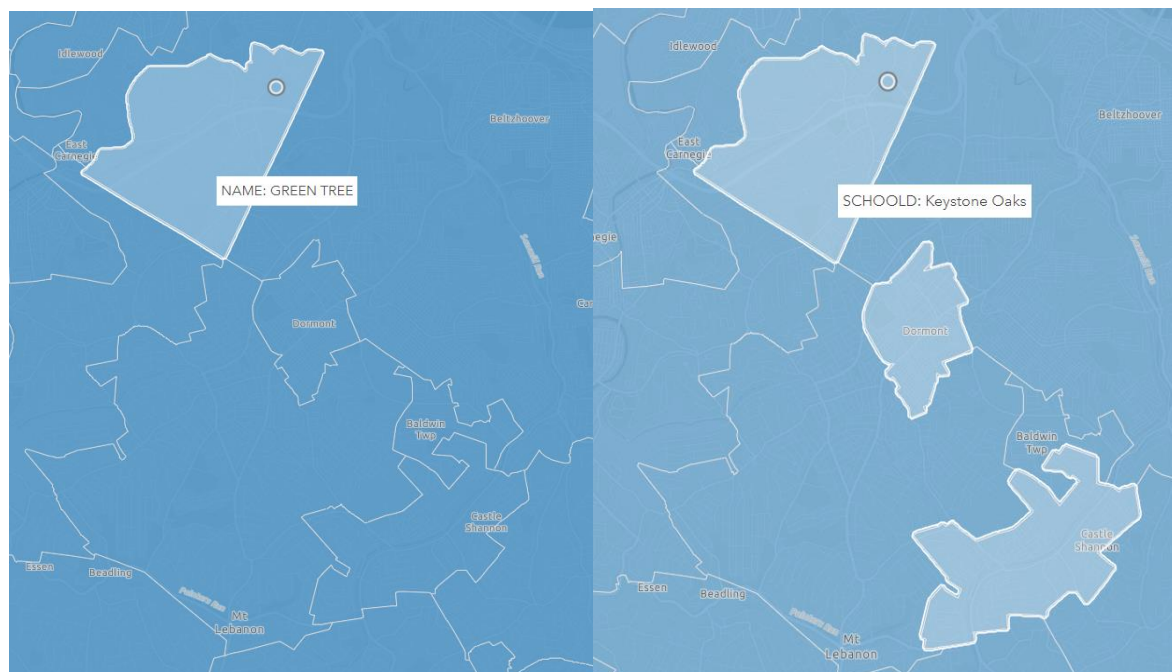


Figure 9. *Boundaries Drawn by GIS Maps of Keystone Oaks School District, Green Tree Borough, and Fred L. Aiken Elementary (the dot)*^{105,106}

Unlike the Allegheny Valley situation, Keystone Oaks took steps to include multiple police departments that house school buildings within the district, but failed to include Greentree Borough PD. As a result, if a violent event were to occur at Fred L. Aiken Elementary, the legally responsible and most proximate police department to the building, could not be utilized.

4.8 Limitations

Our analysis of Allegheny County’s established MOUs was limited. Due to time constraints, we were able to acquire only data on whether each school district in the county had a MOU, and, if they did, which police departments were listed as servicing agencies in the MOU. We were not able to acquire the full text on all School district MOUs in the county, read through the agreements in their entirety and evaluate the details of the MOUs.

Another limitation of our analysis were the inconsistencies in how SRO data is defined, collected and distributed by the PA Department of Education. The varying ways in which SROs are defined

¹⁰⁵ Allegheny County Government: *Allegheny County Municipal Boundaries*. Distributed by Allegheny County GIS Team. (Manual Cross Check). https://openac-alcogis.opendata.arcgis.com/datasets/9de0e9c07af04e638dbc9cb9070962c2_0/explore?location=40.525916%2C-80.076170%2C12.50

¹⁰⁶ Allegheny County Government: *Allegheny County School District Boundaries*. Distributed by Allegheny County GIS Team. (Manual Cross Check). https://openac-alcogis.opendata.arcgis.com/datasets/f5ac385118344bbf8f707cd88ba31a45_0/explore?location=40.436738%2C-80.064894%2C10.62.

by state laws and databases combined with inconsistent reporting by school districts inhibited our research from making robust findings. Therefore our main findings regarding SRO data came not in the form of statistical analyses but rather a simple finding that due to an insufficient punitive mechanism against school districts reporting SRO data, that certain school districts decided not to report SRO data.

5. Relationship between School Outcomes and Municipal Police

There are two secondary research questions to seek the relationship between school outcomes and municipal police:

1. What is the simple relationship between learning outcomes, school safety issues (incident rate), poverty of kids (poverty rate), and extent of municipal law enforcement around school buildings (ratio of kids per municipal law enforcement officer per building)?
2. What is the partial relationship between learning outcomes and extent of municipal law enforcement around school buildings (ratio of kids per municipal law enforcement officer per building), holding school safety issues (incident rate), and the poverty of kids (poverty rate) constant?

5.1 Methodology

5.1.1 Data Source

There are three sources of data, the first source of data comes from Professor Strauss's working paper "Student Misconduct and Learning Outcomes Evidence from Pennsylvania's K-12 Building Records: 1999-2018." published at EDWorkingPaper, which provided the number of kids in poor families, number of incidents and enrollment number in the school year 2017-2018.¹⁰⁷ The data was retrieved through a right-to-know request to the Pennsylvania Department of Education to obtain Pennsylvania System School Assessment (PSSA) scale scores at the building-level, measured as the building's mean scale score in school year 2017-2018¹⁰⁸.

The second source is the Pennsylvania Department of Education Public School Enrollment Reports dataset for the school year 2017-2018 to be able to assess the enrollment at the municipality level.¹⁰⁹

¹⁰⁷ Strauss, "Student Misconduct and Learning Outcomes Evidence".

¹⁰⁸ Strauss, Robert P. 2021. "Student Misconduct and Learning Outcomes Evidence from Pennsylvania's K-12 Building Records: 1999-2018." EDWorkingPaper No. 21-505, Annenberg Institute, Providence, RI.

¹⁰⁹ Pennsylvania Department of Education: Public School Enrollment Reports 2017-18. Distributed by Pennsylvania Department of Education Data Quality Office.
<https://www.education.pa.gov/DataAndReporting/Enrollment/Pages/PublicSchEnrReports.aspx>

The third source of data comes from the Pennsylvania Department of Community Services and Economic Development Municipal Police Services dataset and the Pennsylvania Department of Education Public School Enrollment Reports dataset for SY 2021-22. We use this data with the assumption that the number of police in each jurisdiction are similar in SY 2017-18 and SY 2021-22.

5.1.2 Research Variables

After we examine the Pennsylvania public school building level data, we generated the following main research variables:

1. Mean PSSA Scale Score: the mean of math and reading score for school buildings.
2. Incident Rate: the number of incidents involving weapons and violence divided by total enrollment for school buildings.
3. Poverty Rate: the number of students in low-income households divided by total enrollment for school buildings.
4. Math Test Dummy Variable: ‘0’ indicates a reading test, ‘1’ indicates a math test.

Incidents of school violence are rare events (Strauss, 2022). However, the effect of poverty rate and incident rate are significantly negative. As the poverty or incident rate goes up, the mean PSSA score in the building goes down. Here we wish to evaluate the effects of the number of cops available in the municipality where schools are located. However, we also needed to normalize this number based on enrollment, but there are three ways to approach this.

1. Do we normalize the number of cops at a municipal level based on the total enrollment in that municipality?
2. Do we evenly attribute the number of cops across each school building and then normalize those cops on the building enrollment?
3. Do we normalize the number of cops at a municipal level on the enrollment at the school building level?

We decided not to move forward with the third variation because the schools in Pittsburgh would be extreme outliers. Since the area is very large, there will be 914 police officers potentially available in the municipality. Hence, if we divided that by the average school’s enrollment in the county, 21,000, there would be 0.6 students per police officer. While this measure may be useful for a scenario in which every police officer had to respond to a school building, such as a mass shooting incident, it is not realistic for responses to everyday school violence. Therefore, we did not move forward with this metric. Future research could attempt to the Pittsburgh school district further, such as wards or police zones.

We decided to test the first two variations, as we believed they both have pros and cons. The first measure is referred to as “Students per Police Officer in Jurisdiction”. This is calculated by

aggregating the building-level enrollment up to the police department jurisdiction level. Then, we divided this total enrollment in the municipal police department with the number of full-time equivalent (FTE) police officers in that police department. A benefit of this calculation is that the number accurately portrays the workload of police officers in a jurisdiction. However, the disadvantage is that the variation is limited to just the variation between police departments.

The second measure is referred to as “Students per Evenly Attributed Police Officer”. Instead of aggregating the enrollment up to the police department level, we attempted to disaggregate the number of police officers according to the number of school buildings in the police departments’ jurisdiction. Therefore, if a police department has 2 school buildings and 10 cops, we attribute 5 cops to each school building. A benefit of this calculation is that we are able to leverage school-level variation. However, the assumption here is that the presence of police officers is even across school buildings. There may be other factors that determine the presence of police officers in and around a school, violence in the surrounding area, concentrated cluster of school buildings, proximity to the nearest police headquarters.

Table 6. *Descriptive Statistics Used in Regression Analysis (Allegheny County School Districts)*

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
Mean PSSA Score	744	1038.00	136.70	801.16	1565.00
Incident Rate	756	0.11	0.19	0.00	0.93
Poverty Rate	756	0.52	0.29	0.02	1.00
Students per Police Officer in Jurisdiction	756	72.95	53.28	21.73	183.59
Students per Evenly Attributed Police Officer	756	72.06	64.58	8.15	548.28

5.2 Result of Simple Correlation Between Variables

Table 7. *Pearson Correlations Between Learning Outcomes, Poverty, Incidents, and Police Officers*

Variable	Mean PSSA Score	Incident Rate	Poverty Rate	Students per Police Officer in Jurisdiction	Students per Evenly Attributed Police Officer
Mean PSSA Score	1.00				
Incident Rate	-0.28*	1.00			
Poverty Rate	-0.44*	0.54*	1.00		
Students per Police Officer in Jurisdiction	0.29*	-0.41*	-0.71*	1.00	
Students per Evenly Attributed Police Officer	0.38*	-0.32*	-0.61*	0.83*	1.00

* Correlation is significant at the .0001 level (2-tailed).

As noted in Professor Strauss's 2021 statewide data, there is a significant negative relationship between incident rate, poverty rate, and the building mean PSSA score. Across both variations of the students per police officer measures, we observe a significant negative relationship between each variable of interest.

5.3 Result of Multiple Regression Between Variables

As seen in Table 8 and Table 9, to find out the partial effect of kids per police on building-level test scores, we ran the multiple regression analysis to study the partial effect of incident rate, poverty rate, student per attributed police officer. We learnt that the partial effect of incident rate and poverty rate are very significant both in building and jurisdiction level. The partial effect of students per attributed police officer is small compared to other variables, but still significant given the t-ratio greater than 1.96. The adjusted R-square indicates that about 73%-76% of the variation in the output variables are explained by the input variables.

Table 8. *Multiple Regression Results with Total Students per Police Officer in Jurisdiction Measure*

Grade Level	Constant	Partial Effect of Incident Rate	Partial Effect of Poverty Rate	Partial Effect of Math Test	Partial Effect of Total Students per Police Officer in Jurisdiction	Adjusted R ²
3	1171.94*	-51.51*	-189.07*	-23.83*	-0.20*	0.72
t-ratio	91.67	-2.65	-12.42	-2.57	-4.19	
4	1147.70*	-42.57*	-192.77*	-39.02*	-0.19*	0.75
t-ratio	87.98	-2.18	-12.46	-6.72	-2.34	
11	1569.44*	-37.59	-89.71*	-13.28*	-0.07	0.77
t-ratio	180.51	-1.92	-8.22	-3.07	-1.28	

*. Coefficient is significant at the .05 level (2-tailed).

Table 9. *Multiple Regression Results with Building-Level Students per Evenly Attributed Police Officer*

Grade Level	Constant	Partial Effect of Incident Rate	Partial Effect of Poverty Rate	Partial Effect of Math Test	Partial Effect of Students per Evenly Attributed Police Officer	Adjusted R ²
3	1180.62*	-52.54*	-194.02*	-23.83*	-0.37*	0.73
t-ratio	105.73	-2.78	-14.53	-4.32	-4.00	
4	1129.91*	-42.01*	-176.19*	-39.02*	-0.08	0.74
t-ratio	105.86	-2.12	-12.69	-6.61	-1.03	
11	1559.27*	-33.18	-81.65*	-13.28*	0.00	0.76
t-ratio	206.45	-1.69	-7.07	-3.01	0.17	

*. Coefficient is significant at the .05 level (2-tailed).

5.4 Interpretation of Results

First, the learning outcomes of younger kids are more likely to be negatively affected by the effect of building-level students per evenly attributed police officer. From the multiple regression table, we can see that the partial effect of building-level students per evenly attributed police officer ratio on test scores from grade 3 to grade 11 dropped from -0.37 to almost 0. And the partial effects of students per evenly attributed police officer in jurisdiction dropped from -0.20 to -0.07.

Additionally, the partial effect of building-level students per evenly attributed police officer and students per evenly attributed police officer in jurisdiction are not as significant as the effect of poverty and school safety issues.

The results should be further validated with more current school safety and poverty data given the limitation of learning outcome data for school year 2021-2022.

6. Implications

This report is an updated tabulation of the various state rules' regarding Memoranda of Understanding (MOUs) that also allows a broader scope of school-law enforcement MOUs. Since the last article that attempted this, there has been an increase in the number of states requiring MOUs for the provision of school resource officers. States that require all school entities to execute MOUs tend to focus more on incident reporting, reporting to law enforcement and for data purposes.

The requirements across the state explain the prevalence of formalized policies in U.S. public schools, 35% (not weighted by enrollment). The most common component reported to be in the formalized policies are procedures for incident reporting. However, we also found a distressing number of school officials who report not knowing whether or not their formalized policies had specific provisions, such as regulating law enforcement's use of firearms. Since Pennsylvania is one of the only states that directly require the signatures of school building principals on MOUs, it would be interesting to see if this phenomenon is as present in Pennsylvania as compared to the rest of the country. However, as found in our analysis of MOUs in Allegheny County, compliance to Pennsylvania state rules is not perfect.

Dr. McAbee's dissertation in 2018 found non-compliance with multiple requirements, such as explanation of differences from the model MOU and the lack of an MOU in the Pittsburgh School District. Her work continues in this report, where we report that there are other instances of non-compliance in ensuring that every school building in a school district is covered by an MOU with the police department that has jurisdiction over that school building. We believe that this is a result of lacking enforcement from the Pennsylvania Department of Education's Office of Safe Schools. However, this may be due to a lack of resources, which can and should be resolved.

Finally, we attempted to assess the effects municipal law enforcement can have on various school outcomes, such as the average PSSA score and incident rate. There was a surprising result when running simple correlations between each variable. The number of students per municipal law enforcement officer was positively related to the buildings' mean test score and negatively related to incident rate. However, while controlling for other significant covariates of test scores, such as poverty rate and incident rate, we found a small partial negative effect of students per municipal law enforcement officer on the average test score. This effect was only observed as significant in the lower grades, third and fourth. While this may indicate that the effect of increased law enforcement presence in a municipality is marginal but does increase test scores, further investigation is warranted to both improve the measurement of municipal law enforcement and increase the sample size to capture more variation.

This report is on the frontline of a topic that is still being researched across the United States. We were able to find studies investigating MOUs in South Carolina, Massachusetts, and Virginia. One of the next steps after this report could be to broaden these analyses to the entirety of Pennsylvania to assess compliance and possibly the effects MOUs can have on school safety. Since Pennsylvania is one of a few states that require all school entities to implement MOUs, it should aspire to be the state to lead and inform future policies at the state- and federal-level.

Appendix

States Requiring MOUs

State	SY 2021-2022 US Public School Enrollment	MOU Requirement	Year of MOU Law	MOU Law Citation	Wording	Answered Right to Know Request	Model MOU Presence	Extent of Conformity to Model MOU	Review Period	Statute Citations
Delaware	138,163	Required	2017	2017 Del. ALS 189, 81 Del. Laws 189, 2017 Del. HB 142	MOA	TRUE	Mandated	Substantially similar	Three years	14 Del. C. § 4112F
District of Columbia	88,908	Required	2005	D.C. ACTS, 52 D.C. REG. 2005	MOA	FALSE	Not Found	Not Found	Not Found	D.C. Code § 5-132.04
Florida	2,833,186	Required	2002	2002 Fla. ALS 387, 2002 Fla. Laws ch. 387, 2002 Fla. SB 20	Agreement	TRUE	Not Found	Not Found	Not Found	Fla. Stat. § 1006.13
Kansas	485,424	Required	2016	L. 2016 ch. 41, § 58	MOU	TRUE	Guidance	Not Found	Not Found	K.S.A. § 72-6143
New Hampshire	170,005	Required	1995	1995 NH ALS 231, 1995 NH LAWS 231, 1995 NH Ch. 231, 1995 NH HB 140	MOU	TRUE	Not Found	Not Found	Not Found	RSA 193-D:4
New Jersey	1,372,381	Required	2001	RULE ADOPTION, EDUCATION, STATE BOARD OF EDUCATION, 33 N.J.R. 1443(a)	MOA	TRUE	Mandated	Include provisions that are in addition to and do not conflict	One year	N.J.A.C. 6A:16-6.2
Pennsylvania	1,739,452	Required	1995	1995 Pa. ALS 26, 1995 Pa. Laws 26, 1995 Pa. HB 20	MOU		Mandated	Identify substantive differences	Two years	§ 13-1303-A
Source: Authors' classifications of state statute findings.										

States Conditioning MOUs on School Resource Officers or Funding

State	SY 2021-2022 US Public School Enrollment	MOU Requirement	Year of MOU Law	MOU Law Citation	Wording	Answered Right to Know Request	Model MOU Presence	Extent of Conformity to Model MOU	Review Period	Statute Citations
Arkansas	489,565	Conditioned on SRO	2021	2021 Ark. ALS 551, 2021 Ark. Acts 551, 2021 Ark. SB 407	MOU	TRUE	Mandated	Based on	Not Found	A.C.A. § 6-10-128
Connecticut	508,686	Conditioned on SRO	2015	2015 Ct. ALS 168, 2015 Ct. P.A. 168, 2015 Ct. HB 6834	MOU	FALSE	Guidance	Not Found	Not Found	Conn. Gen. Stat. § 10-233m
Indiana	1,036,625	Conditioned on SRO	2013	2013 Ind. ALS 172, 2013 Ind. Acts 172, 2013 Ind. PL 172, 2013 Ind. SEA 1	MOU	TRUE	Not Found	Not Found	Not Found	Burns Ind. Code Ann. § 20-26-18.2-1
Kentucky	654,239	Conditioned on SRO	2019	2019 Ky. Acts 5, 2019 Ky. Ch. 5, 2019 Ky. SB 1	MOU	FALSE	Guidance	Not Found	Not Found	KRS § 158.4414
Maryland	881,461	Conditioned on SRO	2018	2018 Md. ALS 30, 2018 Md. Laws 30, 2018 Md. Chap. 30, 2018 Md. SB 1265	MOU	FALSE	Not Found	Not Found	Not Found	Md. Education Code Ann. § 7-1501
Massachusetts	921,180	Conditioned on SRO	2014	2014 Mass. ALS 284, 2014 Mass. Ch. 284, 2013 Mass. H.B. 4376	MOU	TRUE	Mandated	Minimum requirement	One year	ALM GL ch. 71, § 37P
Mississippi	442,000	Funding	2013	2013 Miss. ALS 546, 2013 Miss. Gen. Laws 546, 2013 Miss. S.B. 2659	MOU	FALSE	Not Found	Not Found	Not Found	Miss. Code Ann. § 37-3-82
Missouri	889,135	Conditioned on SRO	2009	2009 Mo. SB 291	MOU	TRUE	Not Found	Not Found	Not Found	§ 162.215 R.S.Mo.
Nebraska	327,564	Conditioned on SRO	2019	2019 LB 390, § 3	MOU	FALSE	Mandated	In conformance with the minimum standards	Not Found	R.R.S. Neb. § 79-2703
New York	2,548,490	Conditioned on SRO	2019	2019 N.Y. ALS 59, 2019 N.Y. Laws 59, 2019 N.Y. Ch. 59, 2019 N.Y. SB 1509	MOU	TRUE	Not Found	Not Found	One year	NY CLS Educ § 2801-a
Ohio	1,652,778	Conditioned on SRO	2018	2017 Ohio HB 318	MOU	TRUE	Guidance	Not Found	Not Found	ORC Ann. 3313.951
South Carolina	780,878	Conditioned on SRO	2017	State Register Volume 41, Issue No. 5, Doc. No. 4659	MOU	TRUE	Not Found	Not Found	Not Found	S.C. Code Regs. 43-210
Tennessee	996,709	Conditioned on SRO	2007	2007 Tenn. ALS 341, 2007 Tenn. Pub. Acts 341, 2007 Tenn. Pub. Ch. 341, 2007 Tenn. SB 938	MOU	FALSE	Guidance	Not Found	Not Found	Tenn. Code Ann. § 49-6-809
Texas	5,428,613	Conditioned on SRO	2019	2019 Tex. SB 1707, 2019 Tex. Gen. Laws 402, 2019 Tex. Ch 402, 2019 Tex. ALS 402 (June 2, 2019).	MOU		Mandated	Comply with the guidelines	Not Found	Tex. Educ. Code § 37.081
Utah	690,934	Conditioned on SRO	2016	2016 Ut. HB 460, 2016 Utah Laws 165, 2016 Ut. Ch. 165, 2016 Ut. ALS 165	Contract	TRUE	Guidance	Not Found	Not Found	Utah Code Ann. § 53G-8-703
Virginia	1,249,815	Conditioned on SRO	2019	2019 Va. ALS 455, 2019 Va. Acts 455, 2019 Va. Ch. 455, 2018 Va. HB 1733	MOU	TRUE	Mandated	Based on	Two years	Va. Code Ann. § 22.1-280.2:3
Washington	1,090,143	Conditioned on SRO	2019	2019 Wa. ALS 333, 2019 Wa. Ch. 333, 2019 Wa. HB 1216	Agreement	TRUE	Guidance	Not Found	One year	§ 28A.320.1242

Source: Authors' classifications of state statute findings.

States Encouraging MOUs

SY 2021-2022										
State	US Public School Enrollment	MOU Requirement	Year of MOU Law	MOU Law Citation	Wording	Answered Right to Know Request	Model MOU Presence	Extent of Conformity to Model MOU	Review Period	Statute Citations
Colorado	880,597	Encouraged	2008	2008 Colo. Sess. Laws, ch. 215, sec. 1	MOU	TRUE	Guidance	Not Found	Not Found	C.R.S. 22-32-109.1
Illinois	1,868,482	Encouraged	2015	2015 ILL. ALS 456, 2015 Ill. Laws 456, 2015 ILL. P.A. 456, 2015 Ill. SB 100	MOU	FALSE	Not Found	Not Found	Not Found	105 ILCS 5/10-20.14
Michigan	1,440,090	Encouraged	1999	1999 Mi. ALS 102, 1999 Mi. P.A. 102, 1999 Mi. HB 4240	Agreement	TRUE	Mandated	Consistent	Not Found	MCLS § 380.1308
Vermont	83,975	Encouraged	2012	2011 Vt. ALS 101, 2011 Vt Laws 101, 2011 Vt. ACT 101, 2011 Vt. S. 181	MOU	TRUE	Not Found	Not Found	Not Found	16 V.S.A. § 1167
Source: Authors' classifications of state statute findings.										

States Where MOU Requirements Were Confirmed Not Found

SY 2021-2022										
State	US Public School Enrollment	MOU Requirement	Year of MOU Law	MOU Law Citation	Wording	Answered Right to Know Request	Model MOU Presence	Extent of Conformity to Model MOU	Review Period	Statute Citations
California	5,960,120	Not Found*	Not Found	Not Found	Not Found	TRUE	Not Found	Not Found	Not Found	Not Found
Georgia ¹	1,740,875	Not Found*	2016	20-2-1183. Written agreement for law enforcement officers in schools., O.C.G.A. § 20-2-1183	Agreement	TRUE	Not Found	Not Found	Not Found	O.C.G.A. § 20-2-1183
Louisiana	683,216	Not Found*	Not Found	Not Found	Not Found	TRUE	Not Found	Not Found	Not Found	Not Found
Montana	150,195	Not Found*	Not Found	Not Found	Not Found	TRUE	Not Found	Not Found	Not Found	Not Found
North Carolina	1,525,223	Not Found*	Not Found	Not Found	Not Found	TRUE	Not Found	Not Found	Not Found	Not Found
Oklahoma	698,696	Not Found*	Not Found	Not Found	Not Found	TRUE	Not Found	Not Found	Not Found	Not Found
Wisconsin	829,359	Not Found*	Not Found	Not Found	Not Found	TRUE	Guidance	Not Found	Not Found	Not Found
1. Georgia requires "collaborative written agreements" but the Department of Education clarified to us in their RTK response: "The Department does not collect MOUs regarding law enforcement from school districts or have any specific rules pertaining to Source: Authors' classifications of state statute findings.										

States Where MOU Requirements Were Not Found

State	SY 2021-2022		MOU Requirement	Year of MOU Law		MOU Law Citation	Wording	Answered Right to Know Request	Model MOU Presence	Extent of Conformity to Model MOU	Review Period	Statute Citations
	US Public School Enrollment											
Alabama	748,268	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Alaska	129,944	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Arizona	1,133,284	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Hawaii	173,178	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Idaho	314,258	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Iowa	510,661	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Maine	173,215	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Minnesota	870,506	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Nevada	486,648	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
New Mexico	316,785	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
North Dakota	116,864	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Oregon	576,405	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Rhode Island	138,566	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
South Dakota	141,307	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
West Virginia	252,720	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found
Wyoming	93,093	Not Found		Not Found	Not Found		Not Found	FALSE	Not Found	Not Found	Not Found	Not Found

Source: Authors' classifications of state statute findings.

	Number of Students	Number of School Buildings	Names of Schools
Allegheny Valley SD			
Harmar Twp PD	496	1	Acmetonia El Sch
Springdale Boro PD	389	1	Springdale JSHS
Avonworth SD			
Ohio Twp PD	1892	4	Avonworth El Sch, Avonworth HS, Avonworth MS, Avonworth Primary Center
Baldwin-Whitehall SD			
Baldwin Boro PD	433	1	McAnnulty El Sch
Whitehall Boro PD	3910	3	Whitehall El Sch, Baldwin SHS, J.E. Harrison Education Ctr
Bethel Park SD			
Bethel Park PD	3888	8	Bethel Memorial El Sch, William Penn El Sch, Independence MS, Bethel Park HS, Abraham Lincoln El Sch, George Washington El Sch, Benjamin Franklin El Sch, Neil Armstrong 5-6 MS
Brentwood Borough SD			
Brentwood Boro PD	1123	4	Moore Sch, Elroy Avenue El Sch, Brentwood SHS, Brentwood MS
Carlynton SD			
Carnegie Boro PD	371	1	Carnegie El Sch
Crafton Boro PD	323	1	Crafton El Sch
Robinson Twp PD	597	1	Carlynton JSHS
Chartiers Valley SD			
Collier Twp PD	2559	3	Chartiers Valley MS, Chartiers Valley HS, Chartiers Valley Primary Sch
Scott Twp PD	769	1	Chartiers Valley Intrmd School
Clairton City SD			
Clairton City PD	809	2	Clairton El Sch, Clairton MS/HS
Cornell SD			
Coraopolis Boro PD	513	2	Cornell El Sch, Cornell HS
Deer Lakes SD			
West Deer PD	1797	4	Curtisville Pri Ctr, Deer Lakes HS, East Union Intrmd Sch, Deer Lakes MS
Duquesne City SD			
Duquesne City PD	415	1	Duquesne El Sch
East Allegheny SD			
North Versailles PD	1471	2	Logan El Sch, East Allegheny JSHS
Elizabeth Forward SD			
Elizabeth Twp PD	2014	5	Central El Sch, Mt Vernon El Sch, Elizabeth Forward SHS, Elizabeth Forward MS, Greenock El Sch
Forward Twp PD	332	1	William Penn El Sch

Fox Chapel Area SD		
Indiana Twp PD	1729	3 Dorseyville MS, Fairview El Sch, Hartwood El Sch
Ohara Twp PD	2422	3 Kerr El Sch, Fox Chapel Area HS, OHara El Sch
Gateway SD		
Monroeville Boro PD	3422	Evergreen El Sch, Dr Cleveland Steward Jr El Sch, University Park El Sch, Gateway SHS, 6 Ramsey El Sch, Moss Side MS
Hampton Township SD		
Hampton Twp PD	2699	5 Central El Sch, Wyland El Sch, Poff El Sch, Hampton MS, Hampton HS
Highlands SD		
Brackenridge Boro PD	674	1 Highlands Early Childhood Center
Harrison Twp PD	1345	2 Highlands SHS, Highlands MS
Tarentum Boro PD	229	1 Highlands El Sch
Keystone Oaks SD		
Castle Shannon PD	304	1 Myrtle Ave Sch
Dormont Boro PD	340	1 Dormont El Sch
Green Tree PD	222	1 Fred L Aiken El Sch
Mt Lebanon PD	1004	2 Keystone Oaks HS, Keystone Oaks MS
McKeesport Area SD		
McKeesport City PD	2487	3 McKeesport Area SHS, Founders Hall Middle Sch, Twin Rivers El Sch
White Oak PD	610	1 Francis McClure El Sch
Montour SD		
Kennedy Twp PD	952	1 David E Williams MS
Robinson Twp PD	2081	2 Montour HS, Montour El Sch
Moon Area SD		
Moon Twp PD	3976	Bon Meade El Sch, Moon SHS, J H Brooks El Sch, McCormick El Sch, Moon Area Lower MS, 8 Moon Area Upper MS, J.A. Allard El Sch, Richard J. Hyde El Sch
Mt Lebanon SD		
Mt Lebanon PD	5400	Washington El Sch, Lincoln El Sch, Markham El Sch, Howe El Sch, Foster El Sch, Jefferson El 10 Sch, Hoover El Sch, Mt Lebanon SHS, Mellon MS, Jefferson MS
North Allegheny SD		
Franklin Park PD	1291	2 Franklin El Sch, Ingomar MS
Mccandless Twp PD	5220	Ingomar El Sch, McKnight El Sch, Peebles El Sch, Carson MS, Hosack El Sch, North 6 Allegheny HS
Northern Regional PD	1925	3 Bradford Woods El Sch, Marshall El Sch, Marshall MS
North Hills SD		
Ross Twp PD	4115	5 Ross El Sch, North Hills MS, North Hills SHS, McIntyre El Sch, Highcliff El Sch
West View PD	439	1 West View El Sch

Northgate SD		
Avalon Boro PD	239	1 Avalon El Sch
Bellevue Boro PD	803	2 Northgate MSHS, Bellevue El Sch
Penn Hills SD		
Penn Hills PD	3069	3 Penn Hills SHS, Linton MS, Penn Hills El Sch
Pine-Richland SD		
Northern Regional PD	4520	6 Pine-Richland MS, Pine-Richland HS, Wexford El Sch, Richland El Sch, Hance El Sch, Eden
Pittsburgh SD		
		Pittsburgh Carmalt K-8, Pittsburgh Concord K-5, Pittsburgh Montessori K-5, Pittsburgh Minadeo K-5, Pittsburgh Morrow K-8, Pittsburgh Schiller 6-8, Pittsburgh Phillips K-5, Pittsburgh Grandview K-5, Pittsburgh Allderdice HS, Pittsburgh Carrick HS, Pittsburgh Perry HS, Pittsburgh Beechwood K-5, Pittsburgh Colfax K-8, Pittsburgh Dilworth K-5, Pittsburgh Fulton K-5, Pittsburgh Greenfield K-8, Pittsburgh Liberty K-5, Pittsburgh Linden K-5, Pittsburgh Oliver, Pittsburgh Pioneer, Pittsburgh Conroy, Pittsburgh Brashear HS, Pittsburgh Sterrett 6-8, Pittsburgh Spring Hill K-5, Pittsburgh Banksville K-5, Pittsburgh Woolslair K-5, Pittsburgh Allegheny K-5, Pittsburgh Allegheny 6-8, Pittsburgh Classical 6-8, Pittsburgh South Brook 6-8, Pittsburgh West Liberty K-5, Pittsburgh Roosevelt K-5, Pittsburgh Brookline K-8, Pittsburgh Lincoln K-5, Pittsburgh Manchester K-8, Pittsburgh Weil K-8, Pittsburgh Westwood K-8, Pittsburgh Arlington K-8, Pittsburgh King K-8, Pittsburgh Mifflin K-8, Pittsburgh Sunnyside K-8, Pittsburgh Whittier K-5, Pittsburgh Arsenal 6-8, Pittsburgh South Hills 6-8, Pittsburgh Arsenal K-5, Pittsburgh Chartiers Early Childhood Ctr, Pittsburgh Spring Garden Early Childhood Ctr, Pittsburgh Obama 6-12, Pittsburgh CAPA 6-12, Pittsburgh Science and Technology Academy 6-12, Pittsburgh Miller K-5, Pittsburgh Millions 6-12, Academy at Westinghouse, Pittsburgh Faison K-5, Pittsburgh Langley K-8,
Pittsburgh City PD	19859	56 Pittsburgh Online Academy
Plum Borough SD		
Plum Boro PD	3554	5 O'Block El Sch, Plum SHS, Plum MS, Pivik El Sch, Holiday Park Intermediate Sch
Quaker Valley SD		
Edgeworth Boro PD	410	1 Edgeworth El Sch
Leetsdale Boro PD	604	1 Quaker Valley HS
Sewickley Boro PD	845	2 Quaker Valley MS, Osborne El Sch

Riverview SD		
Oakmont Boro PD	740	2 Tenth Street El Sch, Riverview JSHS
Verona Boro PD	176	1 Verner El Sch
Shaler Area SD		
Reserve Twp PD	141	1 Reserve Primary Sch
Shaler Twp PD	3742	Scott Primary Sch, Shaler Area HS, Burchfield Primary Sch, Marzolf Primary Sch, Shaler 6 Area El Sch, Shaler Area MS
South Allegheny SD		
Liberty Boro PD	807	2 South Allegheny HS, South Allegheny MS
Port Vue PD	616	1 South Allegheny El Sch
South Fayette Township SD		
South Fayette PD	3437	4 South Fayette Twp El Sch, South Fayette Twp HS, South Fayette MS, South Fayette
South Park SD		
South Park PD	1786	3 South Park SHS, South Park MS, South Park Elem Center
Steel Valley SD		
Homestead Boro PD	217	1 Barrett El Sch
Munhall Boro PD	1119	3 Steel Valley SHS, Park El Sch, Steel Valley MS
Sto-Rox SD		
Kennedy Twp PD	662	2 Sto-Rox Primary Ctr, Sto-Rox Upper El Sch
Stowe Twp PD	559	1 Sto-Rox JSHS
Upper St. Clair SD		
Upper St PD	3916	6 Eisenhower El Sch, Fort Couch MS, Upper Saint Clair HS, Streams El Sch, Baker El Sch,
West Allegheny SD		
Findlay Twp PD	484	1 Wilson El Sch
North Fayette PD	2832	4 West Allegheny SHS, McKee El Sch, West Allegheny MS, Donaldson Elem Sch
West Jefferson Hills SD		
Jefferson Hills PD	2069	3 Gill Hall El Sch, Thomas Jefferson HS, Jefferson Hills Intermediate Sch
Pleasant Hills PD	1185	2 McClellan El Sch, Pleasant Hills MS
West Mifflin Area SD		
West Mifflin PD	2449	4 Clara Barton El Sch, West Mifflin Area MS, West Mifflin Area HS, Homeville El Sch
Wilkinsburg Borough SD		
Wilkinsburg Boro PD	506	2 Turner Intermediate Sch, Kelly Primary Sch
Woodland Hills SD		
Churchill Boro PD	1004	1 Woodland Hills HS
Edgewood Boro PD	530	1 Edgewood El STEAM Academy
Swissvale Boro PD	734	1 Dickson Prep STEAM Academy
Turtle Creek PD	516	1 Turtle Creek EL STEAM Academy
Wilkins Twp PD	440	1 Wilkins El STEAM Academy

Bibliography

§ 13-1303-A. Reporting, 24 P.S. § 13-1303-A (Pa.C.S. documents are current through 2022 Regular Session Act 53; P.S. documents are current through 2022 Regular Session Act 53).

§ 2801-a. School safety plans, NY CLS Educ § 2801-a (Current through 2022 released Chapters 1-569).

§ 37-3-82. Mississippi Community Oriented Policing Services in Schools grant program established; purpose; use of funds., Miss. Code Ann. §37-3-82 (Current through 2022 Regular Session legislation including changes and corrections made by the Joint Legislative Committee on Compilation, Revision and Publication of Legislation.).

§ 10.2. Definitions, 22 Pa. Code.

Sec. 37.2121. Memoranda of Understanding and Mutual Aid Agreements., Tex. Educ. Code §37.2121 (This document is current through the 2021 Regular Session of the 87th legislature, 2021 1st Called Session, 2021 2nd Called Session, 2021 3rd Called Session, and the 2021 & 2022 ballot propositions.).

1995 Tex. ALS 260, 1995 Tex. Gen. Laws 260, 1995 Tex. Ch 260, 1995 Tex. SB 1 (May 30, 1995).

2009 Tex. ALS 1280, 2009 Tex. Gen. Laws 1280, 2009 Tex. Ch 1280, 2009 Tex. HB 1831 (June 19, 2009).

2019 Tex. SB 1707, 2019 Tex. Gen. Laws 402, 2019 Tex. Ch 402, 2019 Tex. ALS 402 (June 2, 2019).

2014 Mass. ALS 284, 2014 Mass. Ch. 284, 2013 Mass. H.B. 4376 (August 13, 2014).

2020 Mass. ALS 253, 2020 Mass. Ch. 253, 2019 Mass. SB 2963, 2020 Mass. Acts 253 (December 31, 2020).

“1949 Act 14.” The official website for the Pennsylvania General Assembly. Legislative Data. Processing Center. Accessed December 5, 2022.
<https://www.legis.state.pa.us/cfdocs/legis/LI/uconsCheck.cfm?txtType=HTM&yr=1949&sessInd=0&smthLwInd=0&act=014&chpt=13C>.

“Uvalde Shooting Victims Seek \$27b, Class Action in Lawsuit.” AP NEWS. Associated Press, December 3, 2022. <https://apnews.com/article/shootings-austin-texas-lawsuits-school-5c2eba7d91b060843b65b2a43654a5b4>.

Allegheny County Government: *Allegheny County Municipal Boundaries*. Distributed by Allegheny County GIS Team. (Manual Cross Check). <https://openac->

alcogis.opendata.arcgis.com/datasets/9de0e9c07af04e638dbc9cb9070962c2_0/explore?location=40.525916%2C-80.076170%2C12.50

Allegheny County Government: *Allegheny County School District Boundaries*. Distributed by Allegheny County GIS Team. (Manual Cross Check). https://openac-alcogis.opendata.arcgis.com/datasets/f5ac385118344bbf8f707cd88ba31a45_0/explore?location=40.436738%2C-80.064894%2C10.62,

Almanza, Matthew, Makayla Mason, and Chris Melde. 2022. "Perceptions of School Resource Officers: Protectors or Prosecutors?" *Criminal Justice Review* 0(0). <https://doi.org/10.1177/07340168221113352>.

Burrows, Dustin, Joe Moody, and Eva Guzman. Rep. Interim Report 2022. Investigative Committee on the Robb Elementary Shooting, Texas House of Representatives, July 17, 2022. https://static.texastribune.org/media/files/d005cf551ad52eea13d8753ede93320c/Uvalde%20Robb%20Shooting%20Report%20-%20Texas%20House%20Committee.pdf?_ga=2.245439748.1053733320.1670705676-2104316185.1669823884.

Chappell, Bill, Joe Hernandez, and Rachel Treisman. "What We Know about the Victims of the Uvalde School Shooting." NPR. NPR, May 31, 2022. <https://www.npr.org/2022/05/27/1101286508/what-we-know-about-the-victims-of-the-uvalde-school-shooting>.

Connery, Chelsea. 2020. "The Prevalence and the Price of Police in Schools." Center for Education Policy Analysis, October 27, 2020. <https://education.uconn.edu/2020/10/27/the-prevalence-and-the-price-of-police-in-schools>.

Counts, Jennifer, Kristina N. Randall, Joseph B. Ryan, and Antonis Katsiyannis. 2018. "School Resource Officers in Public Schools: A National Review." *Education and Treatment of Children* 41, no. 4 (November): 405-430. <https://doi.org/10.1353/etc.2018.0023>.

Despart, Zach, and Lomi Kriel. "91 Texas State Troopers Responded to the Uvalde Massacre. Their Bosses Have Deflected Scrutiny and Blame." The Texas Tribune. The Texas Tribune, September 7, 2022. <https://www.texastribune.org/2022/09/06/texas-state-police-uvalde-shooting/>.

Earle, Rick. "Target 11: Where Have All the Pittsburgh School Police Officers Gone?" WPXI. WPXI, August 25, 2022. <https://www.wpxi.com/news/local/target-11-where-have-all-pittsburgh-school-police-officers-gone/IO5L42255RGLZG3SPVKYSIT3FA/>.

- García, Uriel J. "Uvalde School Officials Approve Terms of Superintendent's Retirement without Publicly Disclosing Them." *The Texas Tribune*. The Texas Tribune, October 20, 2022. <https://www.texastribune.org/2022/10/19/uvalde-superintendent-retirement-hal-harrell/>.
- Joint State Government Commission (2016). *Discipline policies in Pennsylvania's public schools: Report of the advisory committee on zero tolerance school discipline policies* (2015 House Resolution 540). Harrisburg, PA: General Assembly of the Commonwealth of Pennsylvania. Retrieved from http://jsg.legis.state.pa.us/publications.cfm?JSPU_PUBLN_ID=449.
- Kelley, Bryan, Daizha Brown, Lauren Peisach, and Zeke Perez Jr. *50-State Comparison: K-12 School Safety*. October 5, 2022. Distributed by Education Commission of the States, <https://www.ecs.org/50-state-comparison-k-12-school-safety-2022/>.
- Lesley, Jill. 2021. "Discipline or Crime: An Analysis of the Use of Memoranda of Understanding to Regulate School Resource Officer Intervention in South Carolina Schools." *The Journal of Law & Education* 50, no. 1 (Spring): 1-34.
- Lopez, Brian, and William Melhado. "Uvalde School Board Fires Chief Pete Arredondo over Shooting Response, after He Calls Vote a 'Public Lynching.'" *The Texas Tribune*. The Texas Tribune, August 24, 2022. <https://www.texastribune.org/2022/08/24/uvalde-school-police-chief-pete-arredondo-termination-board-vote/>.
- Martinez-Prather, Kathy, Jeffrey Caldwell, Shawna R. White, and Ohenewaa Dede-Bamfo. "2017-2020 District Audit Report: Findings on Safety and Security in Texas School Districts." Texas School Safety Center. Texas School Safety Center. Accessed December 11, 2022. <https://txssc.txstate.edu/research/technical-reports/dar-2020/>.
- McAbee, Cheryl, Esq. 2022. "Portions of Tabulation of School Districts in Allegheny County and Relevant Police Departments responsible for School Districts in Allegheny County."
- McAbee, Cheryl. 2018. "An Analysis of Zero Tolerance Weapon Policies Related to the School-to-Prison Pipeline Phenomenon." PhD diss. University of Pittsburgh.
- Méndez, María. "Almost 100 Texas School Districts Have Added Their Own Police Departments since 2017, but Not Everyone Feels Safer." *The Texas Tribune*. The Texas Tribune, June 15, 2022. <https://www.texastribune.org/2022/06/15/uvalde-school-officers-texas-shootings/>.
- Na, Chongmin and Denise C. Gottfredson. 2011. "Police Officers in Schools: Effects on School Crime and the Processing of Offending Behaviors." *Justice Quarterly* 30(4). <https://doi.org/10.1080/07418825.2011.615754>.

National Center on Safe Supportive Learning Environments. “Compendium of School Discipline Laws and Regulations for the 50 States, Washington, D.C. and the U.S. Territories.” Accessed December 11, 2022. <https://safesupportivelearning.ed.gov/school-discipline-compendium>.

Northern Regional Police Department. Directory. Accessed December 10, 2022 <https://nrpolice.com/contact/directory/>; Allegheny Valley Regional Police Department. Directory. Accessed December 10, 2022. <https://avrpd.com/directory/>; Aaron Lauth, personal communication, November 9, 2022

Pennsylvania Department of Community Services and Economic Development. *Municipal Statistics-Municipal Police Service*. https://munstats.pa.gov/Reports/ReportInformation2.aspx?report=MuniPolice_Excel

Pennsylvania Department of Community Services and Economic Development. Find Municipality By Address. <http://munstats.pa.gov/Public/FindMunicipality.aspx>.

Pennsylvania Department of Education. “Certification Actions.” Accessed December 10, 2022, <https://www.education.pa.gov/Teachers%20-%20Administrators/Certifications/Pages/Certificate-Actions.aspx>

Pennsylvania Department of Education. “Contact Us.” Accessed December 10, 2022. <https://www.education.pa.gov/Schools/safeschools/resources/Pages/Contact-Us.aspx>.

Pennsylvania Department of Education: *Educational Names & Addresses Database 2022*. <http://www.edna.pa.gov/Screens/Extracts/wfExtractPublicSchools.aspx>

Pennsylvania Department of Education: *LEA/ School Discipline Report 2021-22*. Distributed by Pennsylvania Department of Education Office of Safe Schools. <https://www.education.pa.gov/DataAndReporting/ProfSupPers/Pages/ProfPersIndStaff.aspx>

Pennsylvania Department of Education: *Professional Personnel Individual Staff Report 2021-22*. Distributed by Pennsylvania Department of Education Data Quality Office. <https://www.education.pa.gov/DataAndReporting/ProfSupPers/Pages/ProfPersIndStaff.aspx>

Pennsylvania Department of Education: *Public School Enrollment Reports 2017-18*. Distributed by Pennsylvania Department of Education Data Quality Office. <https://www.education.pa.gov/DataAndReporting/Enrollment/Pages/PublicSchEnrReport.s.aspx>

- Pennsylvania Department of Education: *Public School Enrollment Reports 2021-22*. Distributed by Pennsylvania Department of Education Data Quality Office.
<https://www.education.pa.gov/DataAndReporting/Enrollment/Pages/PublicSchEnrReports.aspx>
- Prokupecz, Shimon, Dakin Andone, Amir Vera, Matthew J. Friedman, Elizabeth Joseph, and Peter Nickeas. "Uvalde Shooting Report Describes Multiple Failures and a 'Lackadaisical Approach' by Law Enforcement." CNN. Cable News Network, July 18, 2022.
<https://www.cnn.com/2022/07/17/us/texas-house-uvalde-shooting-report/index.html>.
- Prokupecz, Shimon, Matthew J. Friedman, and Rachel Clarke. "Exclusive: New Audio of Phone Call Shows for the First Time That a Senior Uvalde Officer Was Told Children Needed to Be Rescued from inside a Classroom." CNN. Cable News Network, November 15, 2022. <https://www.cnn.com/2022/11/14/us/uvalde-investigation-acting-police-chief-mariano-pargas>.
- Shaver, E. A., & Decker, J. R. (2017). Handcuffing a third grader: Interactions between school resource officers and students with disabilities. *Utah Law Review*, 2017(2), 229–282.
- Strauss, Robert P. 2021. "Student Misconduct and Learning Outcomes Evidence from Pennsylvania's K-12 Building Records: 1999-2018." EDWorkingPaper No. 21-505, Annenberg Institute, Providence, RI.
- U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," School Year 2021-2022.
- U.S. Department of Education. *School Survey on Crime and Safety (SSOCS): 2017-18 Public-Use Data File*. April 9, 2020. Distributed by National Center for Education Statistics, NCES 2020054, <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2020054>.
- U.S. Department of Justice. Office of Community Oriented Policing Services. Fact Sheet: Memorandum of Understanding for School-Based Partnerships. Washington, DC, 2014.
https://case.edu/schubertcenter/sites/case.edu.schubertcenter/files/2020-04/2014_MOU-FactSheet_v3_092513.pdf.
- U.S. Office of Management and Budget. National Center on Education Statistics. School Survey on Crime and Safety: 2019-20 School Year. OMB No. 1850-0761. Accessed December 10, 2022. https://nces.ed.gov/surveys/ssocs/pdf/SSOCS_2020_Questionnaire.pdf; U.S. Office of Management and Budget. National Center on Education Statistics. 2022 School Survey on Crime and Safety (SSOCS:2022). OMB No. 1850-0761 v.22. Accessed December 10, 2022. <https://omb.report/icr/202202-1850-004/doc/118432701>.

- US. Department of Education and Department of Justice. Safe School-based Enforcement through Collaboration, Understanding, and Respect. Washington, DC, 2016.
<https://www2.ed.gov/documents/press-releases/secure-implementation.pdf>.
- Viano, Samantha, F. Chris Curran, and Benjamin W. Fisher. 2021. "Kindergarten Cop: A Case Study of How a Coalition Between School Districts and Law Enforcement Led to School Resource Officers in Elementary Schools." *Educational Evaluation and Policy Analysis* 43(2): 253-279. <https://doi.org/10.3102/0162373721989290>.
- Welfare, Laura, Alison Bowers, and Gerard Lawson. 2022. "Supporting School-Law Enforcement Partnerships: Evidence from a Content Analysis of Memorandums of Understanding." *Journal of School Administration Research and Development* 7(2): 72-82.
- Yaffe, Dara. 2016. "Reading, Writing, and Rethinking Discipline: Evaluation of the Memoranda of Understanding between Law Enforcement and School Districts in Massachusetts." *New England Law Review* 51, no. 1 (Fall): 131-154.