

**Improving Educational and  
Well-Being Outcomes:  
School-DHS Data Sharing in Allegheny County**



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<sup>1</sup> The Data Warehouse is the central repository of data integrated to support research and evaluation, program planning and design, policy analysis and decision-making, and quality improvement. The Data Warehouse contains data on more than one million clients, from more than 20 data sources, including human services programs, the criminal justice system, school districts and public benefits programs.

More than two years ago, the Woodland Hills School District (WHSD) became one of four Allegheny County public school districts to integrate student data into the Allegheny County Department of Human Services (DHS) Data Warehouse.<sup>1</sup> For Superintendent Alan Johnson, the decision to do so was “a no-brainer.”

## DATA-SHARING PARTNERSHIPS AS OF 6/30/15

### School Districts

- Avonworth
- Baldwin-Whitehall
- Carlynton
- Chartiers Valley
- Clairton
- Cornell
- Duquesne
- Elizabeth-Forward
- Gateway
- McKeesport
- Penn Hills
- Pittsburgh Public Schools
- Steel Valley
- Sto-Rox
- West Mifflin
- Woodland Hills

### Other

- Allegheny Intermediate Unit
- Propel Schools

By the spring of 2015, 16 school districts, Propel Schools<sup>2</sup> and the Allegheny Intermediate Unit had signed legal agreements with DHS, allowing data to be shared on a level never before possible and providing the opportunity for greater insight into the students they have in common, the challenges they face, and ways in which to improve their success both in and out of school.

An important by-product of these agreements was the way in which they reshaped the relationship between DHS and the school districts, leading to partnerships focused on specific issues, such as homelessness, greater collaboration between human services and school social workers, and faster and more through identification of students in need. For schools, the agreements also provide opportunities to network with a range of stakeholders, including foundations with an interest in improving the outcomes of students facing hardships that jeopardize their education.

“When DHS came to us with this opportunity to share data back and forth, it wasn’t a terribly complicated decision for me. We are all working toward the same goal. If we’re able to pool our resources and do it together, it makes a lot more sense.” said Johnson. “My only question was why it hadn’t happened before.”

<sup>2</sup> Propel Schools operates charter schools in several of DHS’s partner school districts.

### Removing barriers

The ability to integrate student academic and human services–related data had long been stymied by legal and technical barriers and complicated by the ways in which the two systems functioned independently of each other. Even though they shared a significant number of students, neither understood the extent of the overlap. School personnel did not know which

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students might be addressing issues ranging from child welfare involvement to mental health issues; DHS lacked a clear picture of how children in services were faring in school, including their grades, attendance and disciplinary records.

Now, almost six years after the first agreement was signed, the sharing of data between DHS and a growing number of school districts has emerged as a catalyst for gaining deeper insight into those students and eroding the barriers that tend to discourage collaboration and partnerships designed to address their full range of needs.

The formal agreements address legal issues such as confidentiality, and add school-related data, such as enrollment information, special education involvement, performance, attendance and behavior, to the vast amount of service-related information stored and managed in the Data Warehouse. DHS then works with districts to identify indicators of academic and behavioral successes and deficits, prepare statistical analyses, and develop interventions and strategies to improve the delivery of services and academic outcomes for students in need. DHS also offers analyses of human service involvement in each district.

In addition, partnering schools are invited to join the community stakeholders group assembled to help guide and support the use of data in improving student outcomes. The network affords them access to grantmakers in the region, as well as scholars, community organizations, foundations, juvenile probation staff and court officials, who share an interest in the well-being of students involved in human services. All of the analytic and networking opportunities are provided at no cost to the schools.

### The Process

Once DHS and a school district sign a formal memorandum of understanding, allowing the integration of student and human services data, DHS secures data extracts of the district's students and integrates them into the Data Warehouse. This can be a lengthy and cumbersome process, given that data systems, capabilities and practices can vary significantly among school districts.

Under the agreement, DHS receives three basic data sets from the district. One contains attendance records, including details related to the times each student is absent or tardy. Another contains enrollment information, including the schools where students are enrolled and the grades they are in — information helpful in assessing such issues as school mobility. The third contains year-to-date summary information related more to academic outcomes, such as standardized test scores and quarterly grade point averages.

DHS is able to match the school information with human services information about students who have received or are receiving various services. DHS is then able to conduct a range of analyses to help school officials, social workers, DHS officials, caseworkers, policymakers and others better understand the children they share.

### Partnerships expand

Late in 2009, the Pittsburgh Public School District (PPS) became the first, and largest, district in Allegheny County to sign a memorandum of understanding with DHS to allow the sharing of data. The significance of the partnership was quickly apparent, as the first analysis of the integrated data showed that 14,450 students — about 53 percent of the district’s enrollment — had prior involvement with at least one of 17 human services programs ranging from child welfare to homelessness. Thirty-six percent of those students had received those services within the previous year.

After spending more than a year working out technical issues and refining the practice of integrating the data, DHS began to recruit other school districts.

“We looked at the extent of human services involvement in other school districts, in order to reach out to districts with the greatest overlap in clients,” said Emily Kulick, manager of external partnerships in the DHS Office of Data Analysis, Research and Evaluation. “We didn’t have specific student information from the other districts, but using Census data and available data from the Data Warehouse, we identified districts where we thought there were high rates of students with human services involvement.”

In recruiting new districts, DHS staff typically met with school officials, often superintendents, to explain the data-sharing concept, details of the agreement and potential benefits. The Allegheny Intermediate Unit (AIU), which provides specialized education services to school districts and vocational/technical schools in the region, often facilitated the introduction, as did DHS school liaisons in certain districts.

### “Now we have the numbers that people can see and understand.”

“The pitch is: Look how many students we share. And we know these students don’t do as well as their peers,” said Samantha Murphy, DHS educational liaison. “Schools know they have kids with service involvement. But it’s important for them to understand how many, where they are and what kind of service they are involved in. Now we have the numbers that people can see and understand. It’s also important that the schools know who to partner with and that they have good contact information about who to reach out to.”

Along with WHSD, the Clairton and Elizabeth Forward school districts signed agreements in 2012. They were joined by the Penn Hills, Gateway, McKeesport, Sto-Rox and Steel Valley school districts in 2013. Another data-sharing agreement was struck that year with the AIU. In 2014, the Baldwin-Whitehall, Duquesne, Chartiers Valley and West Mifflin school districts became the newest data-sharing partners.

Data from six of the partnering school districts, including Pittsburgh Public Schools, had been integrated in the DHS data warehouse by the end of 2014.

### Broader insight

Analyzing the shared data offers each district a precise statistical profile of its students' involvement in human services.

For example, a preliminary analysis of the integrated data from the Penn Hills School District showed that 46 percent of all students enrolled in Penn Hills during the 2013–2014 school year had a history of human services involvement. In Woodland Hills, such students accounted for 60 percent of all students enrolled. And 74 percent of Clairton School District students had experienced human services involvement.

A deeper analysis provides definition to these data and provides information about issues that might influence a student's academic performance. In Penn Hills, for example, 24 percent of the children with human services involvement have a history of involvement with child welfare, and 20 percent had involvement in mental health services. Almost 30 percent lived in families receiving food stamps and six percent were homeless. These analyses provide other details, such as where the students live and what local schools they attend, and explore important issues, such as chronic absenteeism, in greater depth.

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These details are significant, as the relationship between human services involvement and academic achievement demonstrate. For example, only 46 percent of Penn Hills students involved in human services had a grade point average of 2.5 or higher. In Clairton, 38 percent of such students earned a GPA of at least 2.5. And only 36 percent of students in WHSD with a history of receiving human services achieved a GPA of 2.5 or better.

### New capabilities and partners

Recently, DHS researchers used the integrated student and human services data to examine student homelessness. They found a wide gap in the number of students that DHS identifies as homeless and the number of students that schools identify as experiencing a housing crisis — a gap due largely to the different definitions of homelessness that guide DHS and school districts. This disconnect between students considered homeless can impact access to services and support designed to increase housing stability and avert a crisis.

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These findings are expected to provide opportunities for earlier identification and will impact resource allocation decisions and service planning and coordination. They have already had a direct impact on state funding, which is based upon the number of children identified by the schools as experiencing a housing crisis.

“It has already been huge,” said the AIU’s Nicole Anderson, who is the Region 4 coordinator of the Education for Children and Youth Experiencing Homelessness Program. Only seven months after the AIU signed a data-sharing agreement with DHS in March 2014, “We’d already identified about 500 additional children who we didn’t identify last year, just through the data-sharing agreement, and in the future that number could be significantly higher.”

Last year, as a direct result of WHSD’s decision to join the data-sharing initiative, DHS and the district began collaborating on ways to better identify, understand and help students whose families were experiencing a housing crisis. The effort includes developing a tool to answer questions such as whether a family’s housing instability is increasing and/or whether services are immediately needed to prevent their situation from worsening. DHS and the district are also collaborating on a Community-Based Participatory Research model to engage community stakeholders in identifying strategies to close the gap in homeless student identification and to design more effective interventions to support them.

The new partnership and data tools have also been put to work to address other issues, including suspensions and absenteeism, which have been particularly stubborn problems in the district. First, DHS analysts helped the district quantify the issues. The data showed, for example, that the rate of students chronically absent — those who miss at least 10 percent of school days in a year — rose from 19 to 20 percent between School Years 2011–2012 and 2012–2013, and the rate for students active in human services was nearly three times as high. Moreover, the data showed that some of the highest chronic absenteeism rates are among students living in public housing. Analysts were also able to provide demographic and geographic information and trends about the chronically absent students.

The same approach is also helping to define the high rate of suspensions in the district and lend insight into what steps the district can take to address this problem.

“They [DHS] have what I call a GIS focus,” said Johnson, the WHSD superintendent. “Schools haven’t looked at things that way. With my own system, I could easily call up the number of suspensions I gave to black males in the last month versus suspensions given to white males. That’s fine. But DHS can show me suspensions by streets, by neighborhood, by other parameters — even by individual blocks. They can also do a multi-dimensional analysis, like looking at suspensions and trancies together.

“It is extraordinarily useful. I generally don’t need to go to them for information about a particular student. I look at the group data tools they offer. I can’t put a price tag on that. I don’t know how else I could get that information.”