

# *More Time in Instructional Settings: Outcomes of School-Wide Positive Behavioral Interventions & Supports*

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# Schools Receiving Training and Implementation Support – Cohort 1

## Participating Buildings / LEAs / IUs by Region

	West	Central	East	Total
Schools	12	4	17	33
LEAs	7	4	12	23
Collaborating IUs	4	4	7	15

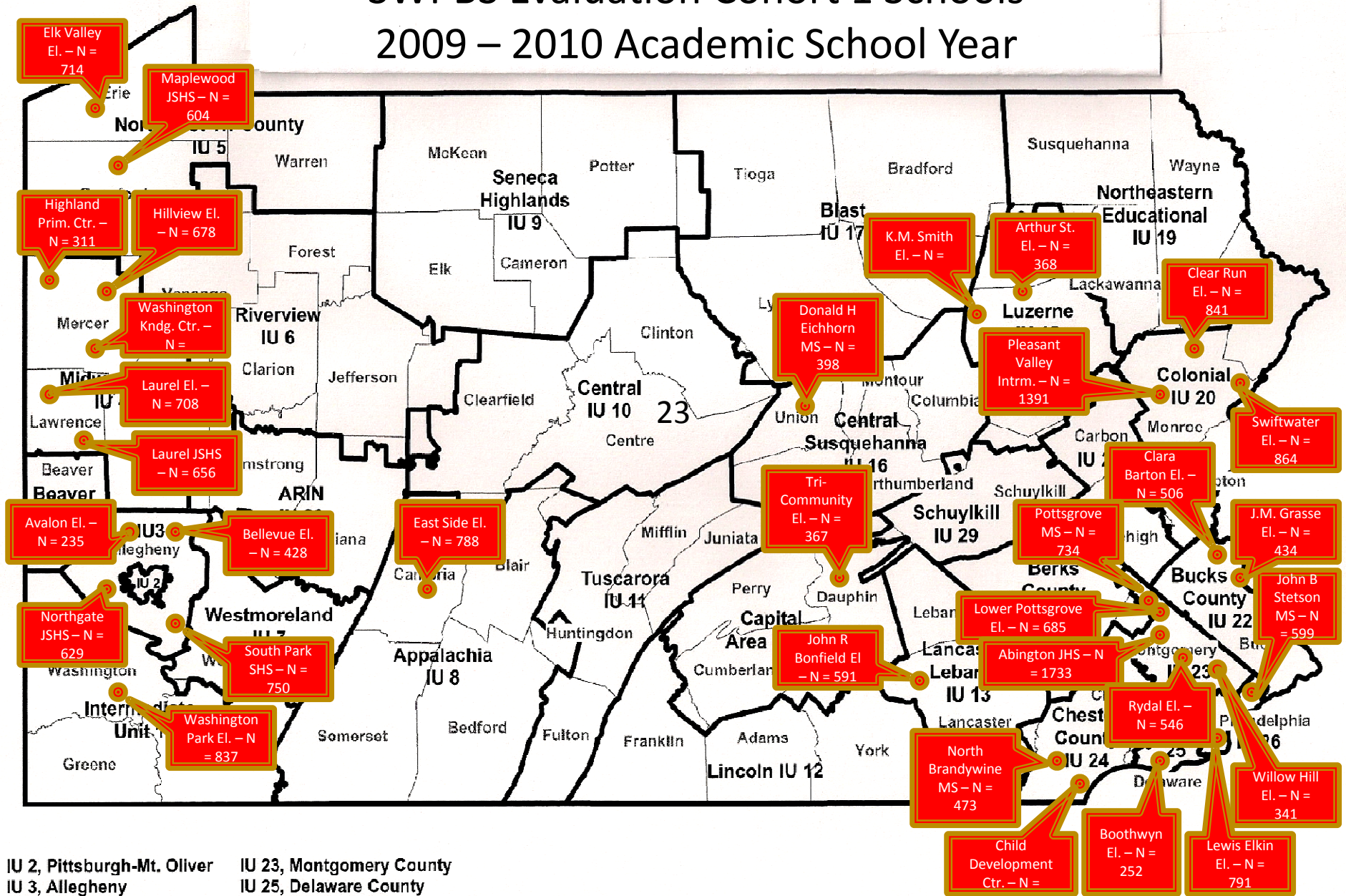
	Elementary (K-5)	Middle (6-8)	High School (9-12)
Number of Schools	23	9	5

Approximately 20,000 students in Cohort 1 schools (of 1.8 million in PA)

# Collaborating Mental Health Agencies

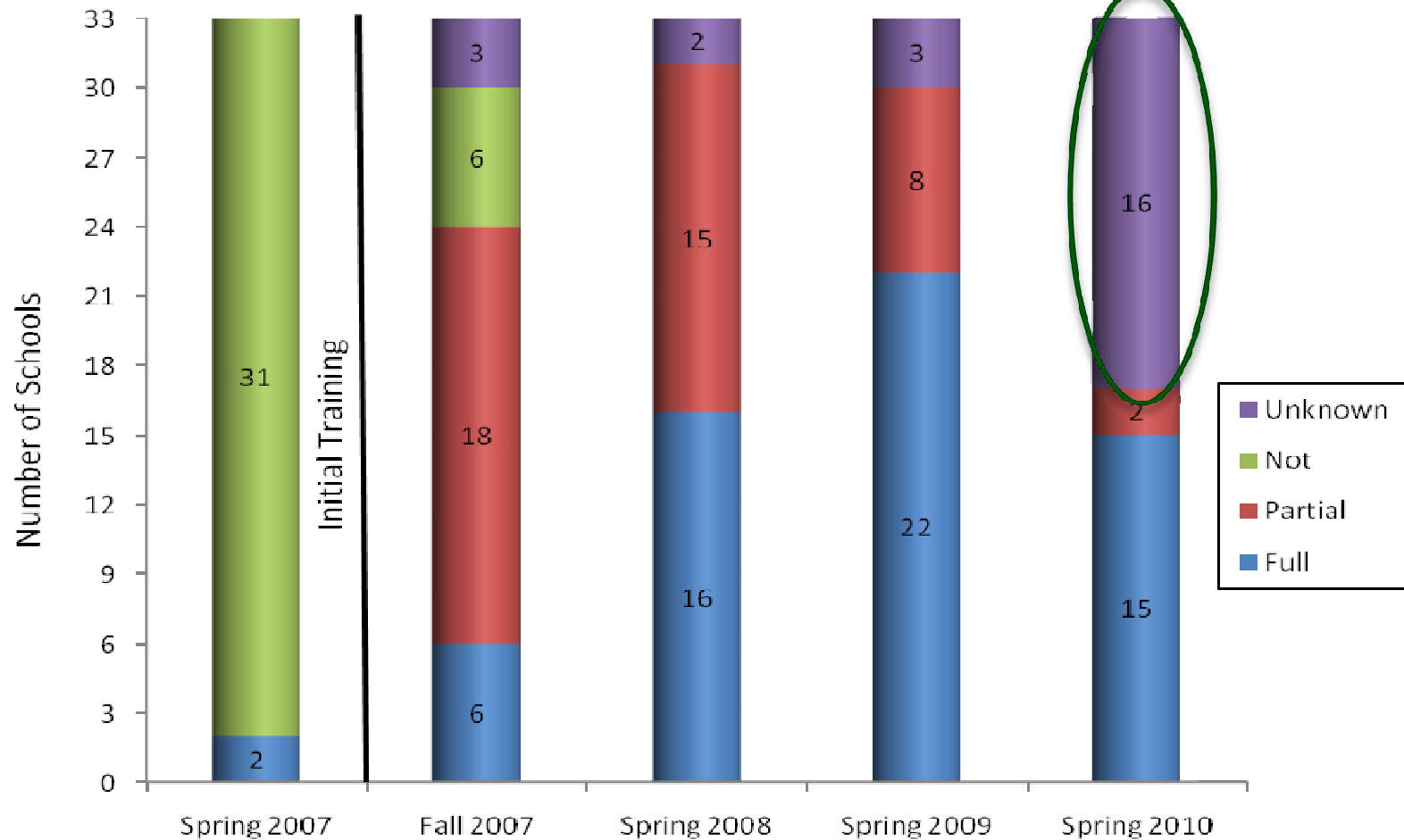
- Alternative Community Resources Program, Inc.
- Bradley Center
- Child and Family Focus Aldersgate Youth Services Bureau
- Creative Health
- Delaware Valley Children's Center
- Devereux Center for Effective Schools
- D.T. Watson
- Family Links
- Genelle Sweetser, LCSW
- Pendell Mental Health
- Presley Ridge
- North East Counseling
- Staunton Clinic
- Youth Advocate Programs, Inc.

# SWPBS Evaluation Cohort 1 Schools 2009 – 2010 Academic School Year



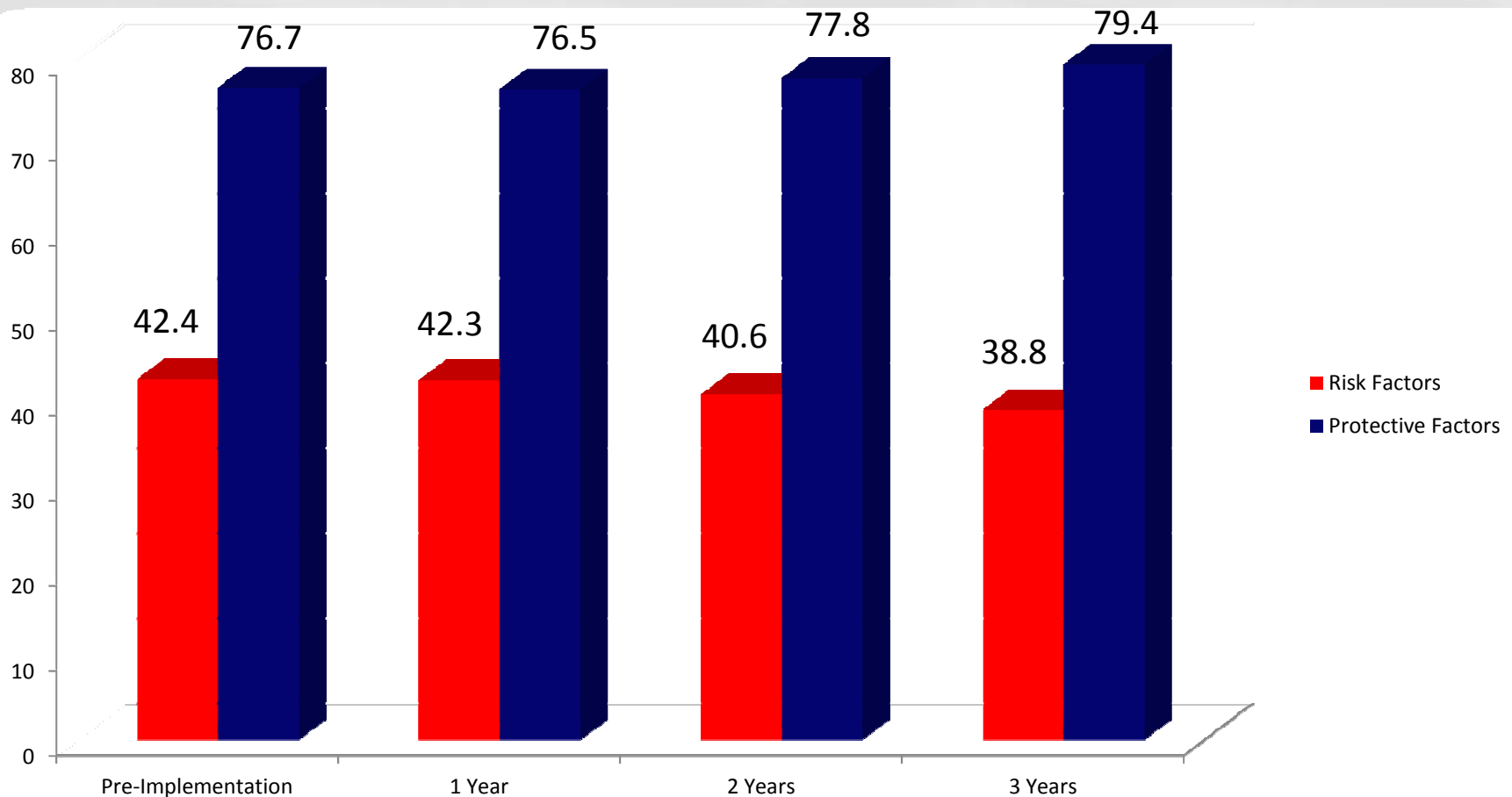
IU 2, Pittsburgh-Mt. Oliver  
 IU 3, Allegheny  
 IU 21, Carbon-Lehigh  
 IU 23, Montgomery County  
 IU 25, Delaware County  
 IU 26, Philadelphia

# PA-PBS Fidelity



**Note.** Fidelity assessed via BoQ (Kincaid, Childs, & George, 2005), SET (Sugai, Lewis-Palmer, Todd, & Horner, 2005), and TIC (Sugai, Horner, & Lewis-Palmer, 2002)

# Average Percentage of Risk and Protective Factors



**Note.** Data collected from the *School Safety Survey* (SSS; Sprague, Colvin, & Irvin, 2002); trends are not statistically significant

# Risk and Protective Factors as a Function of Fidelity at 2 Years

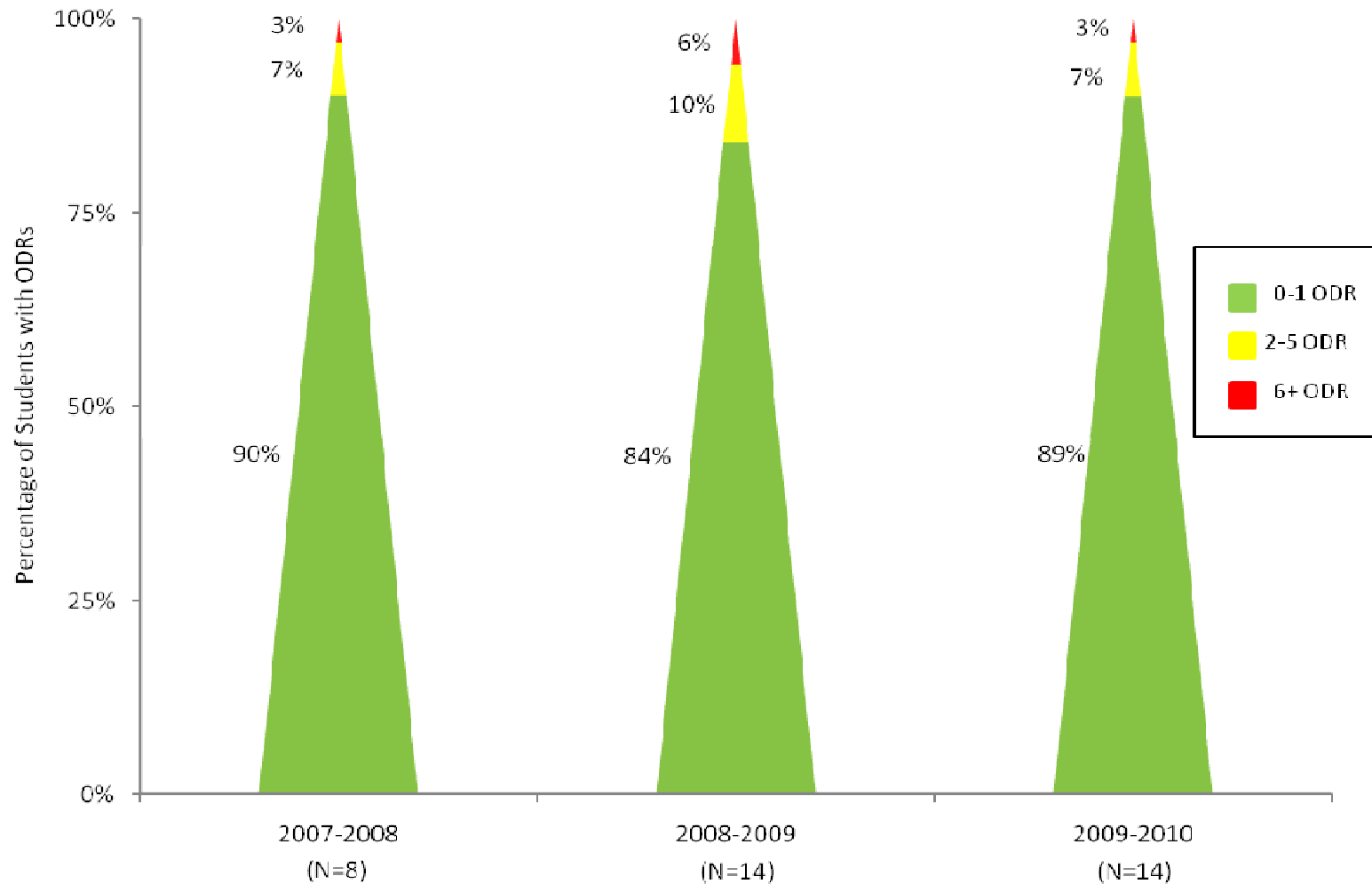
Variable	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>	<i>t</i>
Risk Factors					2.83*
Partial	8	50.15%	11.90	4.21	
Full	15	36.65%	10.33	2.67	
Protective Factors					-3.59*
Partial	8	71.04%	5.62	1.99	
Full	15	80.56%	6.26	1.62	

**Note.** *df* = 22

\*  $p < .02$

- Fully implementing schools see **MORE** Protective Factors and **FEWER** Risk Factors than partially implementing schools.
- Consistent with other research (e.g., Childs et al., 2010)

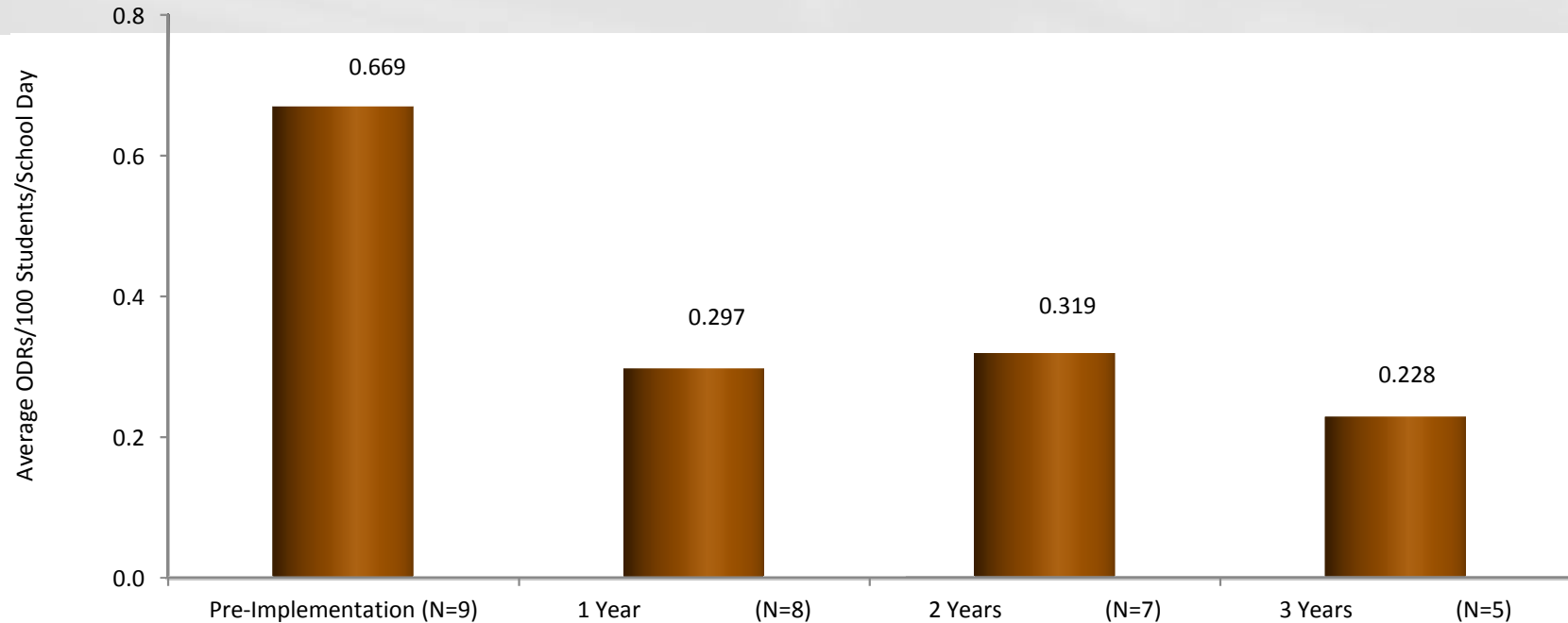
# ODRs – Cross Sectional Triangle Data



**Note.** All schools using SWIS were fully implementing beginning 2007-2008; no baseline data available to make pre-post evaluations



# ODRs – Cross Sectional



**Notes.** Trend was not statistically significant; *SD* also narrowed across time indicating more homogeneity; similar findings from longitudinal analyses with 5 schools

# Estimated Instructional Time Saved

- Reduction of .441 ODRs / 100 students / School Day
- Average size of school in Cohort 1 was ~600 students
- Therefore, 2.646 fewer ODRs per day
  
- Assume 180 school days
- Therefore, 476 fewer ODRs per year
- How much time is saved?
  
- 1 ODR = 20 minutes lost by student; 10 minutes lost by teacher; 10 minutes lost by administrator (Scott & Barrett, 2004)

# Estimated Instructional Time Saved

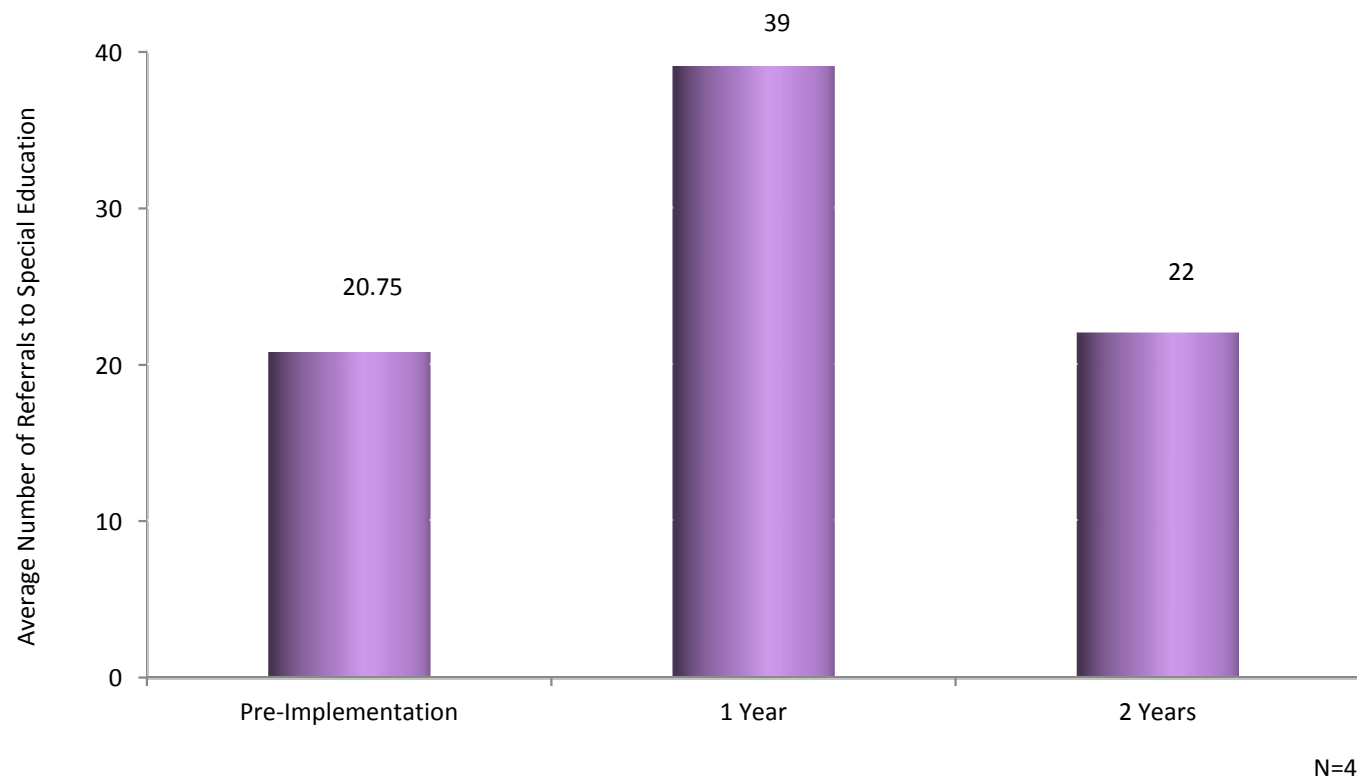
- 476 fewer ORDs per year for a school of 600 students

## Time Saved for the "Typical" School

- 9,520 student minutes = 158.6 hours
- 4,760 teacher minutes = 79.3 hours
- 4,760 administrator minutes = 79.3 hours

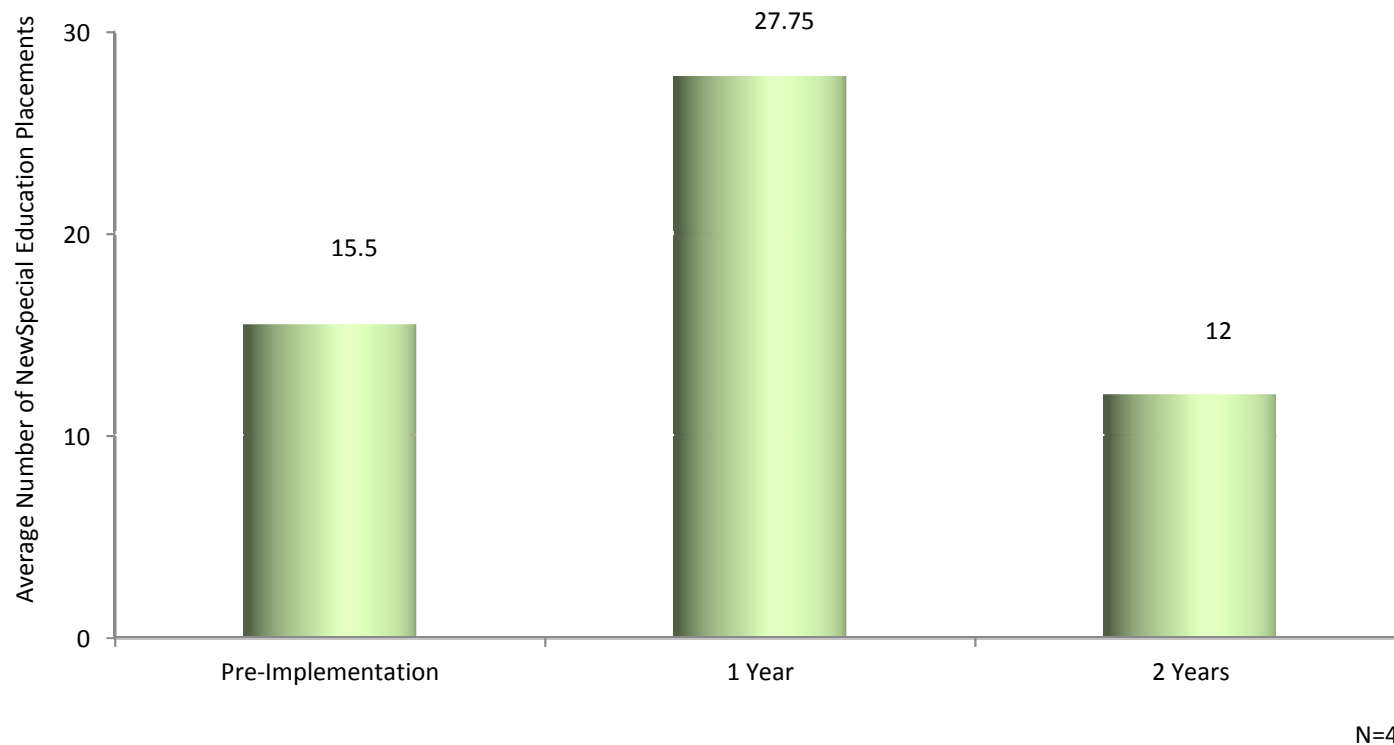
**MORE INSTRUCTIONAL TIME!**

# Longitudinal Comparison of Average Number of Referrals to Special Education



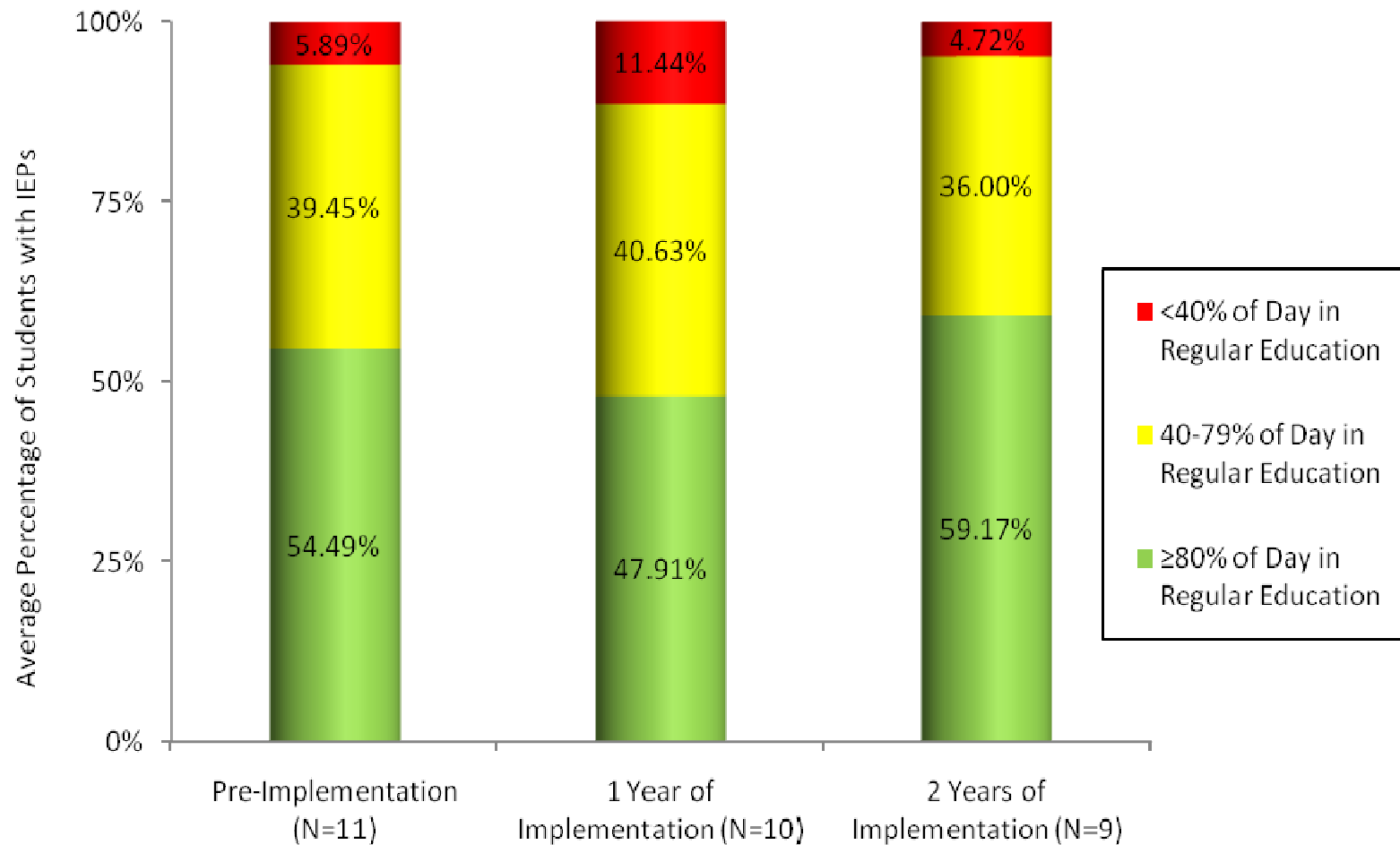
**Note.** Data include referrals for ALL exceptionalities according to IDEIA.

# Longitudinal Comparison of Average Number of New Students Identified for Special Education



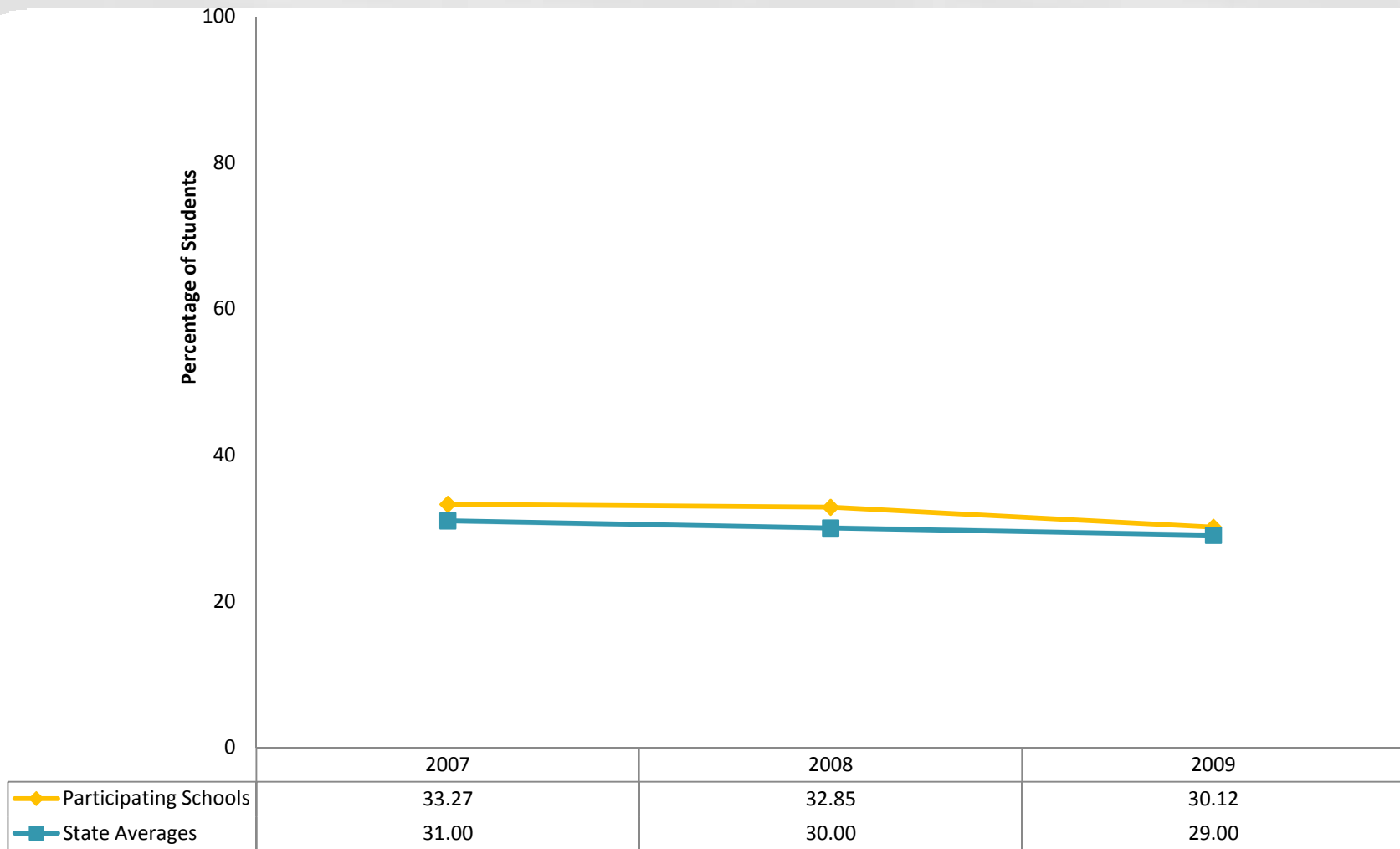
**Note.** Data include referrals for ALL exceptionalities according to IDEIA.

# SWPBIS and LRE – Cross Sectional

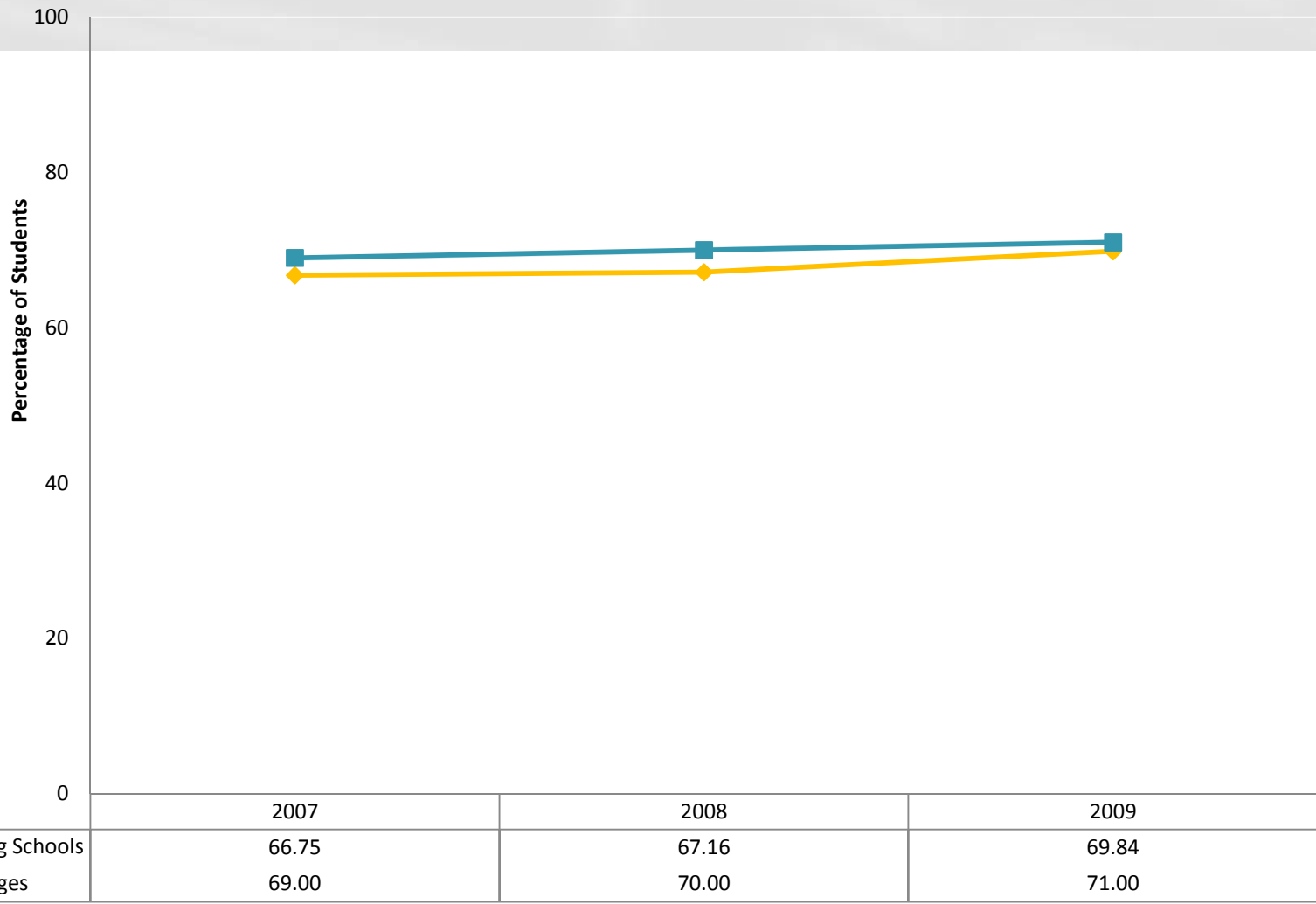


**Note.** Changes across time were not statistically significant

# Pre- and Post-Implementation Comparison of SWPBS Schools and State-wide Schools on Percentage of Students Performing “Below Basic and Basic” on PSSA Reading

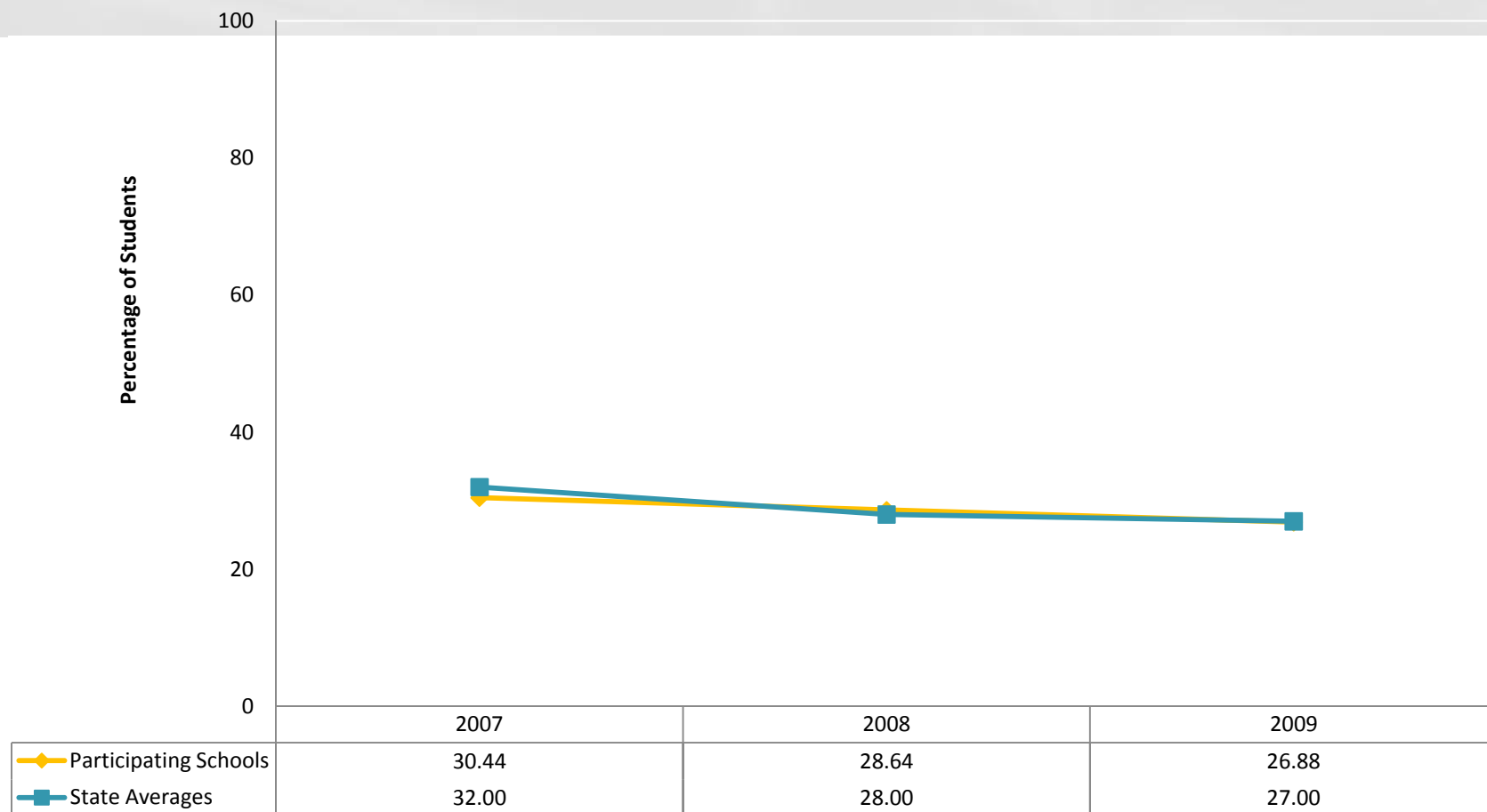


# Pre- and Post-Implementation Comparison of SWPBS Schools and State-wide Schools on Percentage of Students Performing “Proficient and Advanced” on PSSA Reading

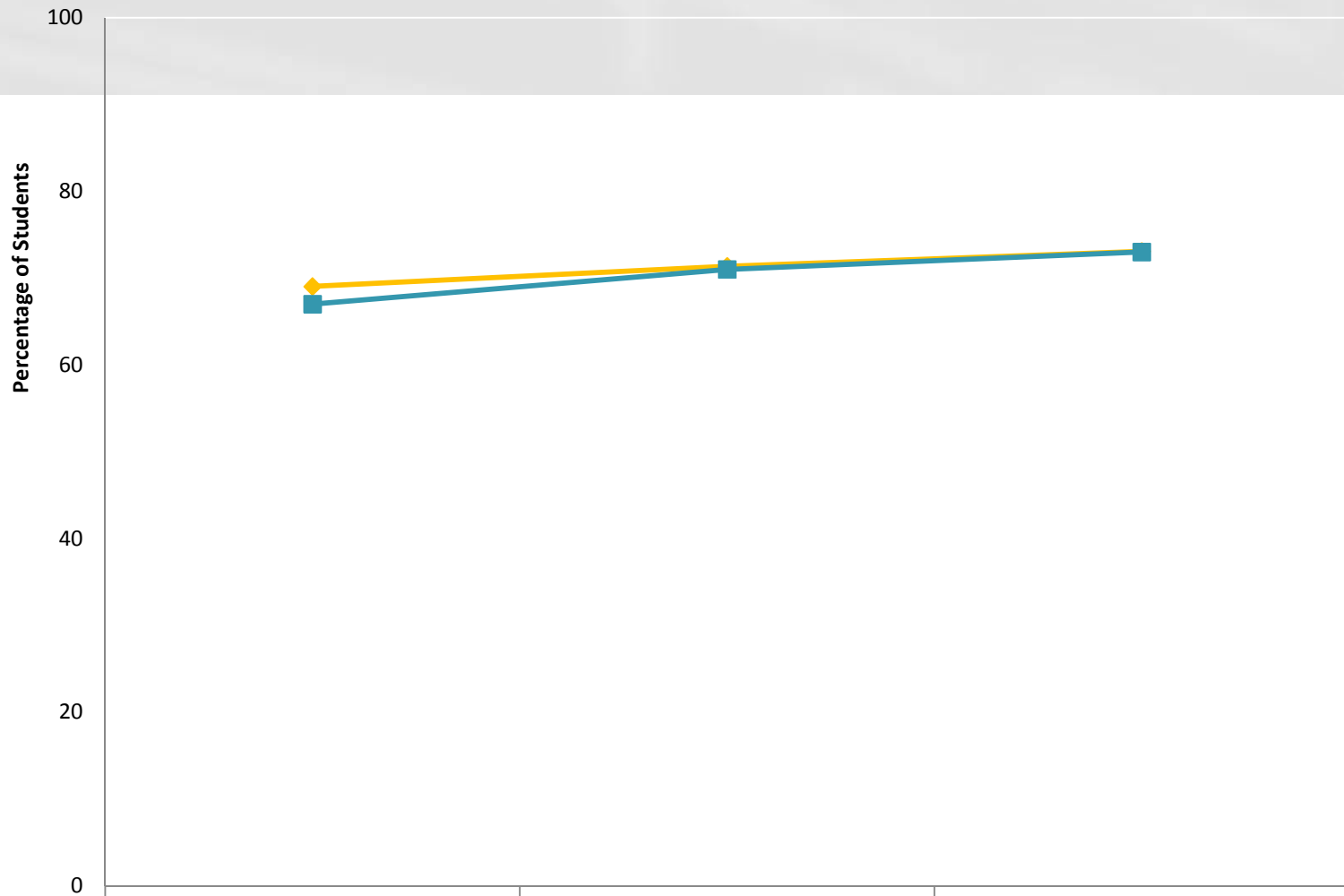




# Pre- and Post-Implementation Comparison of SWPBS Schools and State-wide Schools on Percentage of Students Performing “Below Basic and Basic” on PSSA Math



# Pre- and Post-Implementation Comparison of SWPBS Schools and State-wide Schools on Percentage of Students Performing "Proficient and Advanced" on PSSA Math



◆ Participating Schools  
■ State Averages

2007

2008

2009

69.03

71.35

73.08

67.00

71.00

73.00

# Analysis of Covariance Between Partial and Full Implementing Schools on **Reading** at Year Two

2009 Means

Variable	<i>N</i>	2007 Actual Mean	Actual	Adjusted	<i>F</i>	<i>p</i>
% Below Basic + Basic					5.29	.031*
Partial	9	41.0%	39.1%	32.4%		
Full	17	29.2%	25.4%	28.9%		
% Proficient + Advanced					4.02	.057
Partial	9	59.0%	61.0%	67.6%		
Full	17	70.8%	74.5%	71.0%		

**Note.** Schools that fully implemented SWPBIS had **significantly lower** percentages of students in Below Basic and Basic on PSSA Reading after 2 years. Percentages of Proficient and Advanced were approaching statistical significance between partial and fully implementing schools.

# Analysis of Covariance Between Partial and Full Implementing Schools on **Math** at Year Two

2009 Means

Variable	<i>N</i>	2007 Actual Mean	Actual	Adjusted	<i>F</i>	<i>p</i>
% Below Basic + Basic					2.58	0.12
Partial	9	43.2%	40.4%	29.8%		
Full	17	23.7%	19.7%	25.3%		
% Proficient + Advanced					4.65	0.04*
Partial	9	56.8%	59.4%	69.0%		
Full	17	75.5%	80.3%	75.2%		

**Note.** Schools that fully implemented SWPBIS had significantly higher percentages of students in Proficient and Advanced on PSSA Math after 2 years. Percentages of Below Basic and Basic were approaching statistical significance between partial and fully implementing schools.

# Replication, Improvement, Sustainability

	<b># of Schools with Fidelity Data</b>	<b># of Schools That Maintained or Improved</b>	<b>% of Schools That Maintained or Improved</b>	<b># of Schools That Did Not Maintain or Improve</b>	<b>% of Schools That Did Not Maintain or Improve</b>
2 Years	33	30	90.0%	3	9.1%
3 Years	20	20	100%	0	0%

# We Keep Expanding....

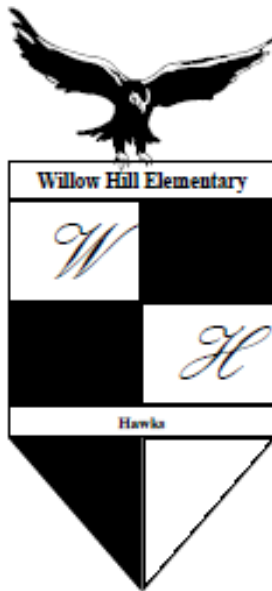
- Approximately 200 more schools trained in 2008-2010 with varying levels of implementation beginning fall 2010
- The PAPBS Network continues to grow

# “Scotty, We Need More Data!”

- Without schools’ data, our evaluation is severely limited by small sample sizes
- We are here to assist schools in:
  - Gathering their data
  - Interpreting their data
  - Developing customized reports
- We accept data from ANY year
- Most importantly, please submit your data:

[trunge@iup.edu](mailto:trunge@iup.edu)

# *A District's Data Story*



Mark Pellico, Ph.D.  
Abington School District  
Supervisor of Pupil Services





# Who Are We?

## Location

Northern suburb of Philadelphia in Montgomery County  
Includes Abington Township and Borough of Rockledge

Total population: **56,444**

## District Organization/Enrollment 2009-2010

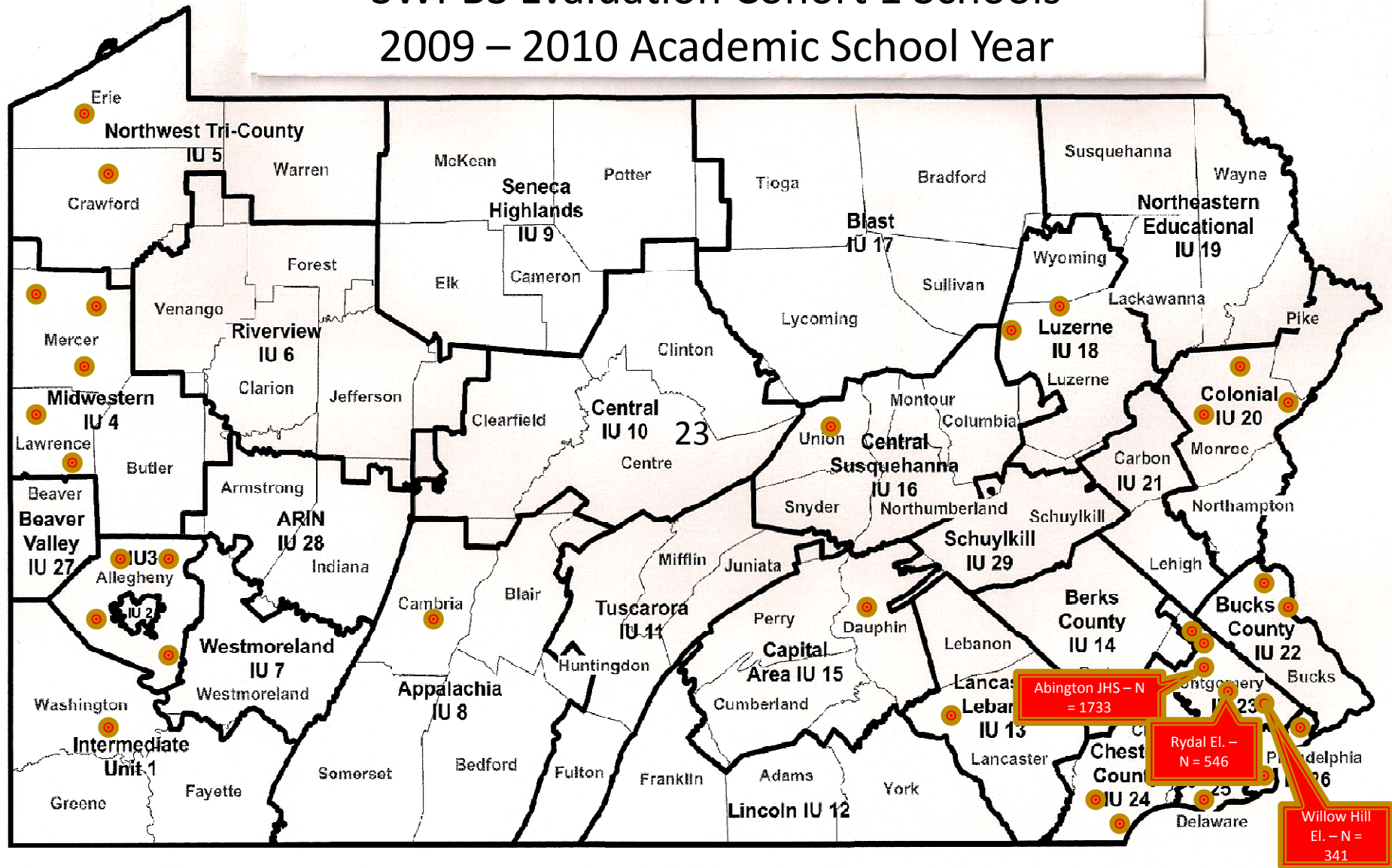
7 Elementary schools (K-6) = 3,774

1 Junior high school (7-8-9) = 1,739

1 Senior high school (10-11-12) = 1,923

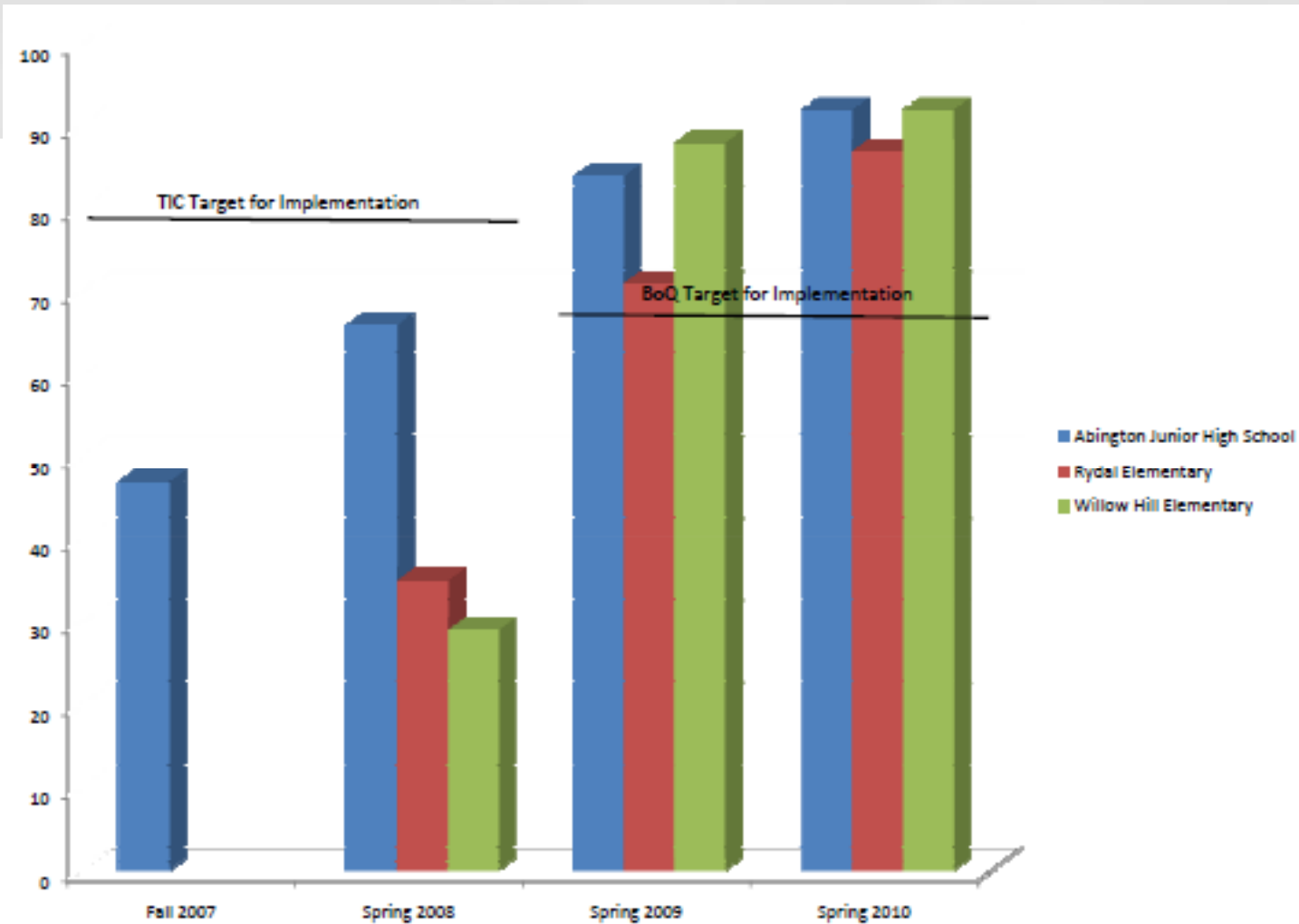
Total enrollment = **7,436**

# SWPBS Evaluation Cohort 1 Schools 2009 – 2010 Academic School Year



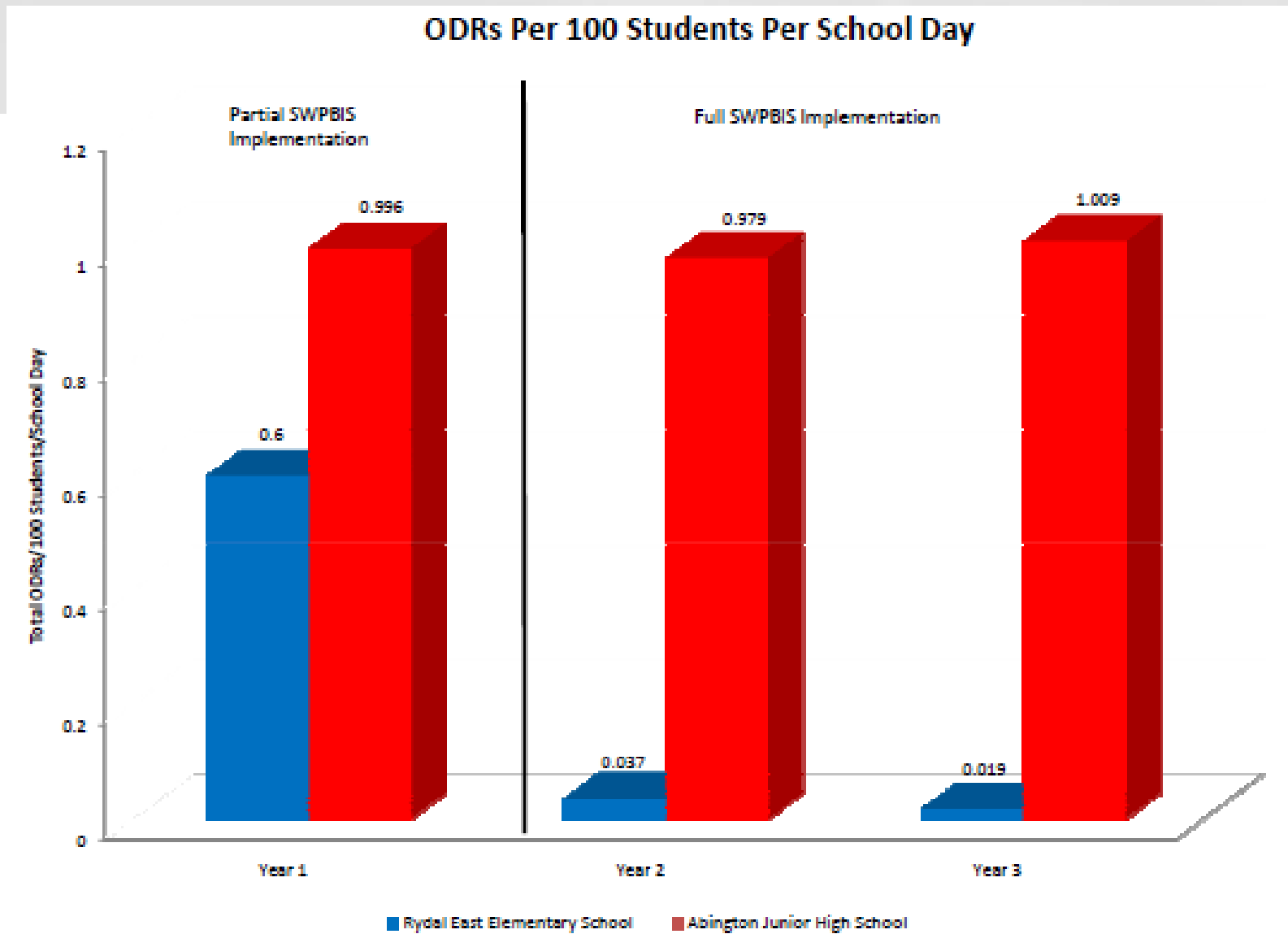
- IU 2, Pittsburgh-Mt. Oliver
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# Level of Implementation



**Note:** Fall 2007 & Spring 2008 implementation measured by TIC; Spring 2009 and 2010 measured by BoQ and/or SET

# Office Discipline Referrals



# Cost / Benefit Analysis - Rydal

- 1 ODR = 20 minutes lost by student; 10 minutes by teacher; 10 minutes lost by administrator (Scott & Barrett, 2004)

- Rydal saw a **reduction** of 522 ODRs from pre-implementation levels

- **Time Saved**

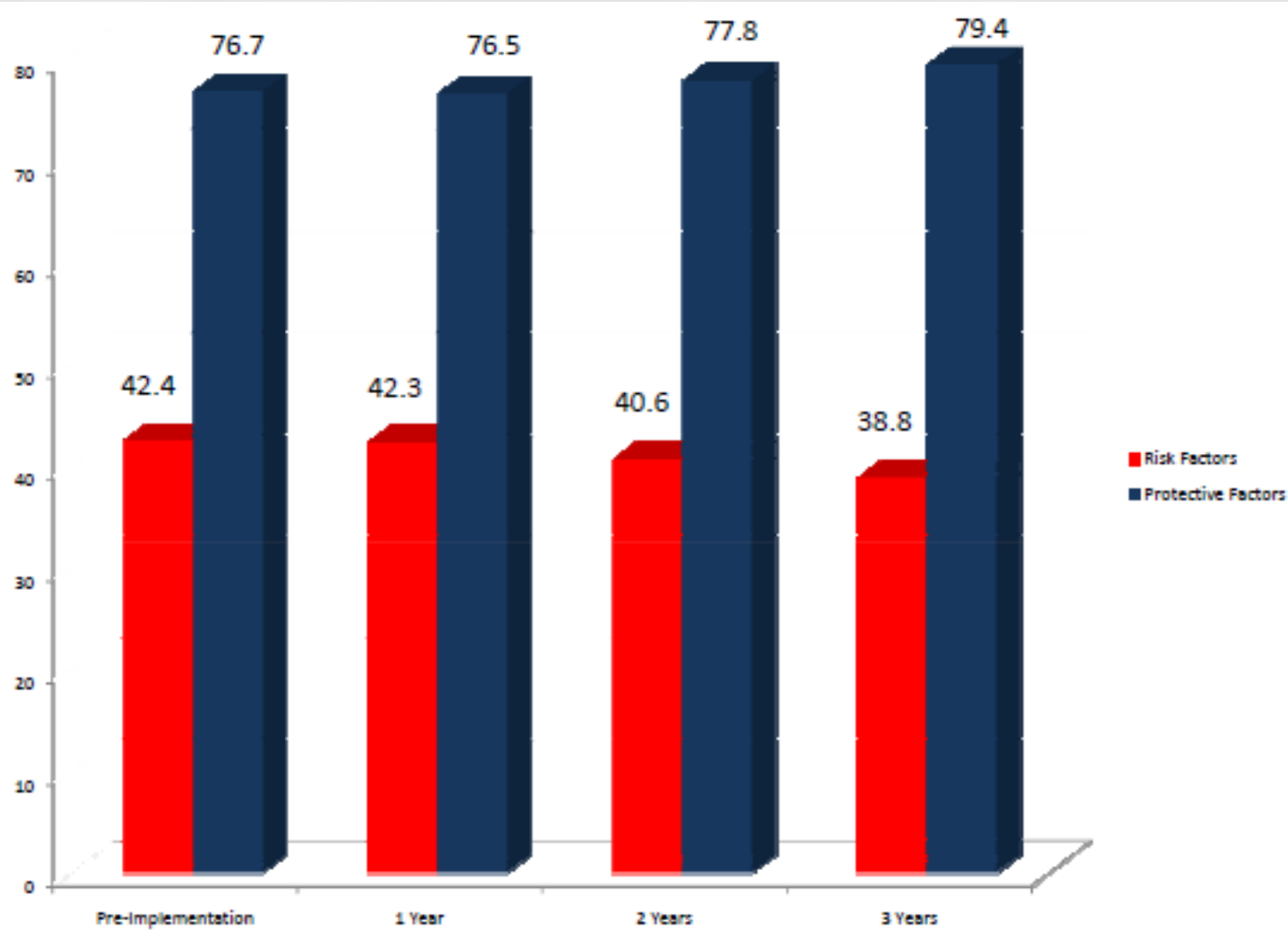
- 10,440 student minutes = 174 hours

- 5,220 teacher minutes = 87 hours

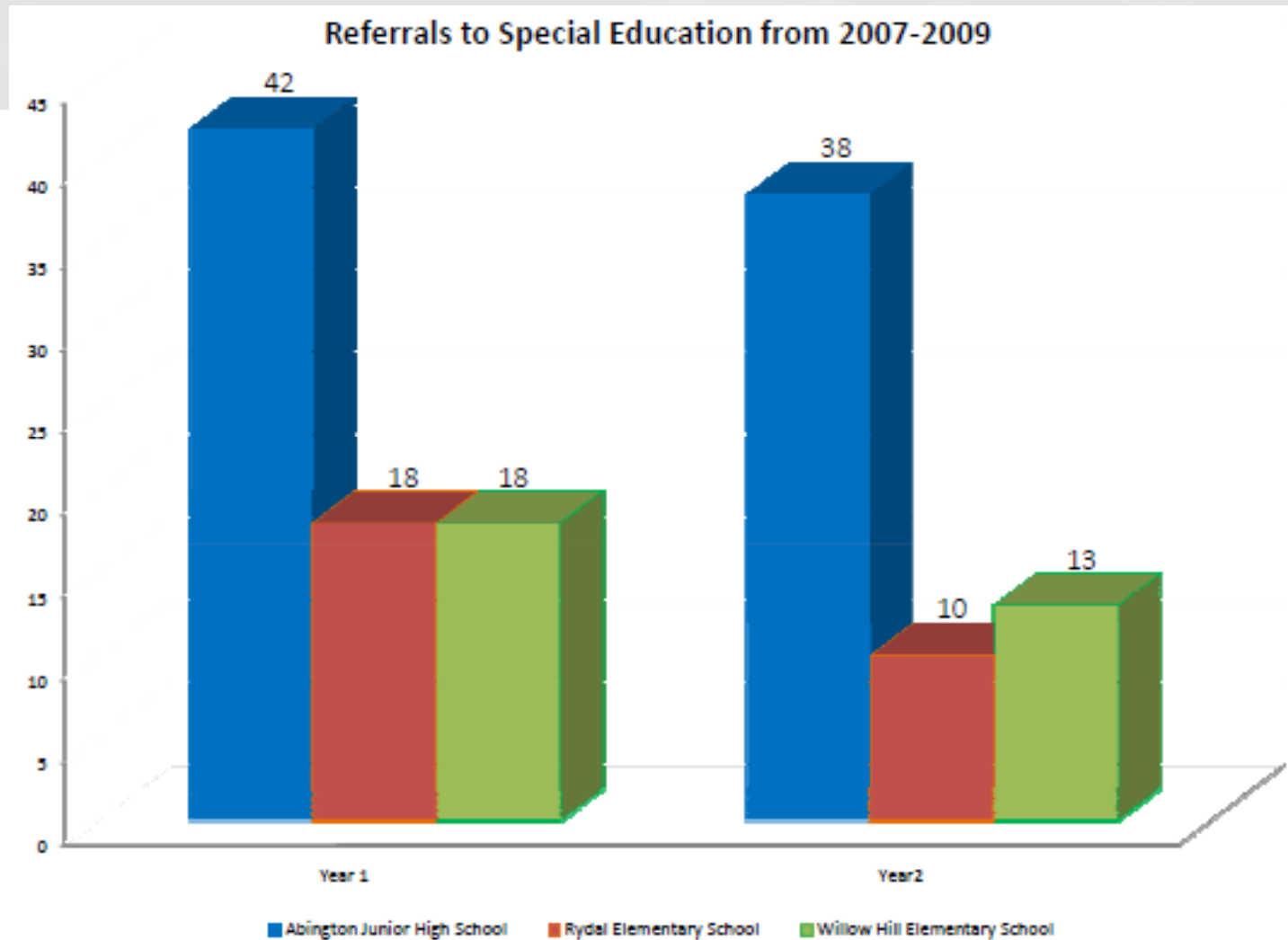
- 5,220 administrator minutes = 87 hours

- More time for instruction!

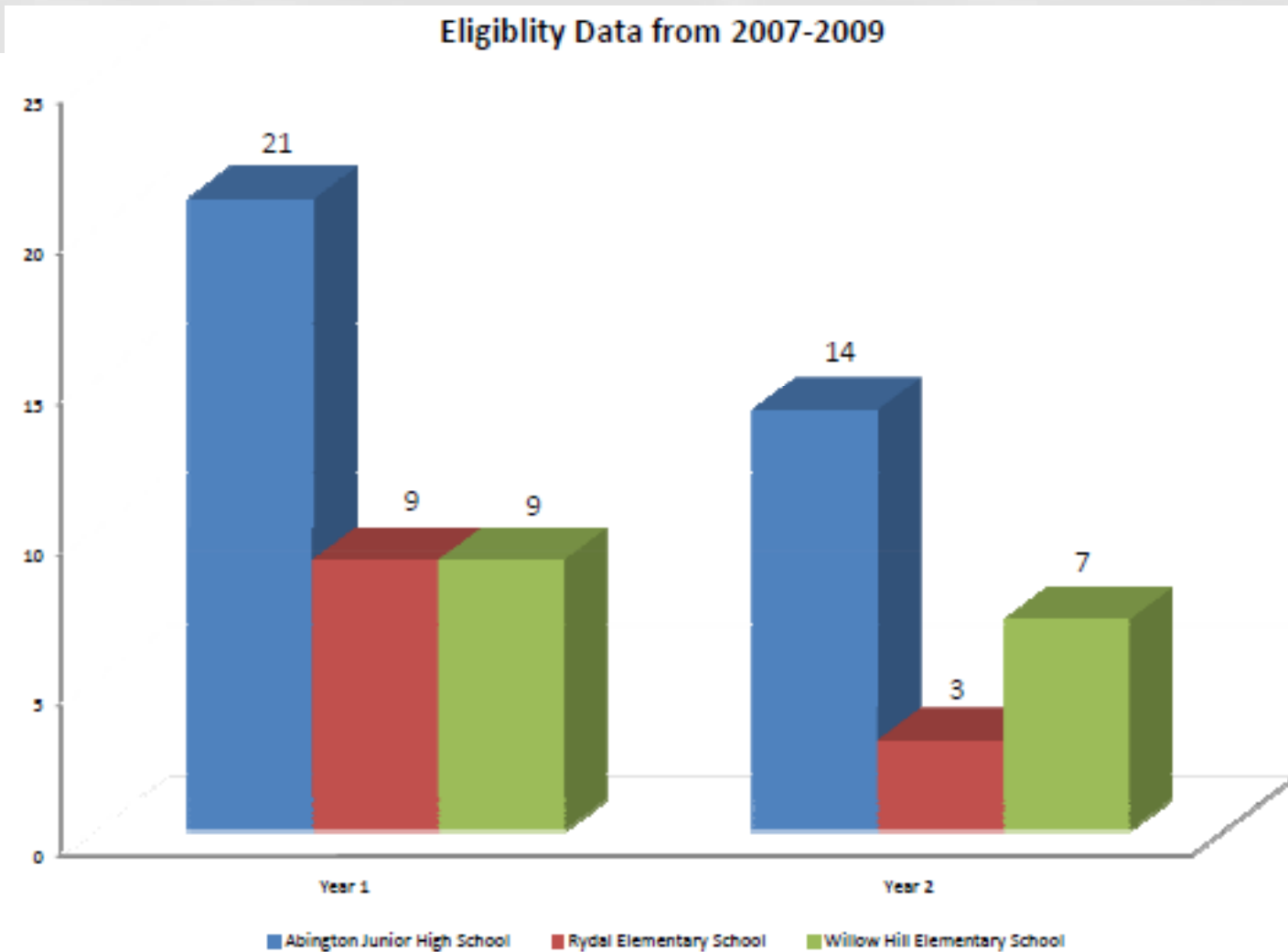
# Risk and Protective Factors – Across All SWPBIS Schools



# Referrals for Eligibility Determination

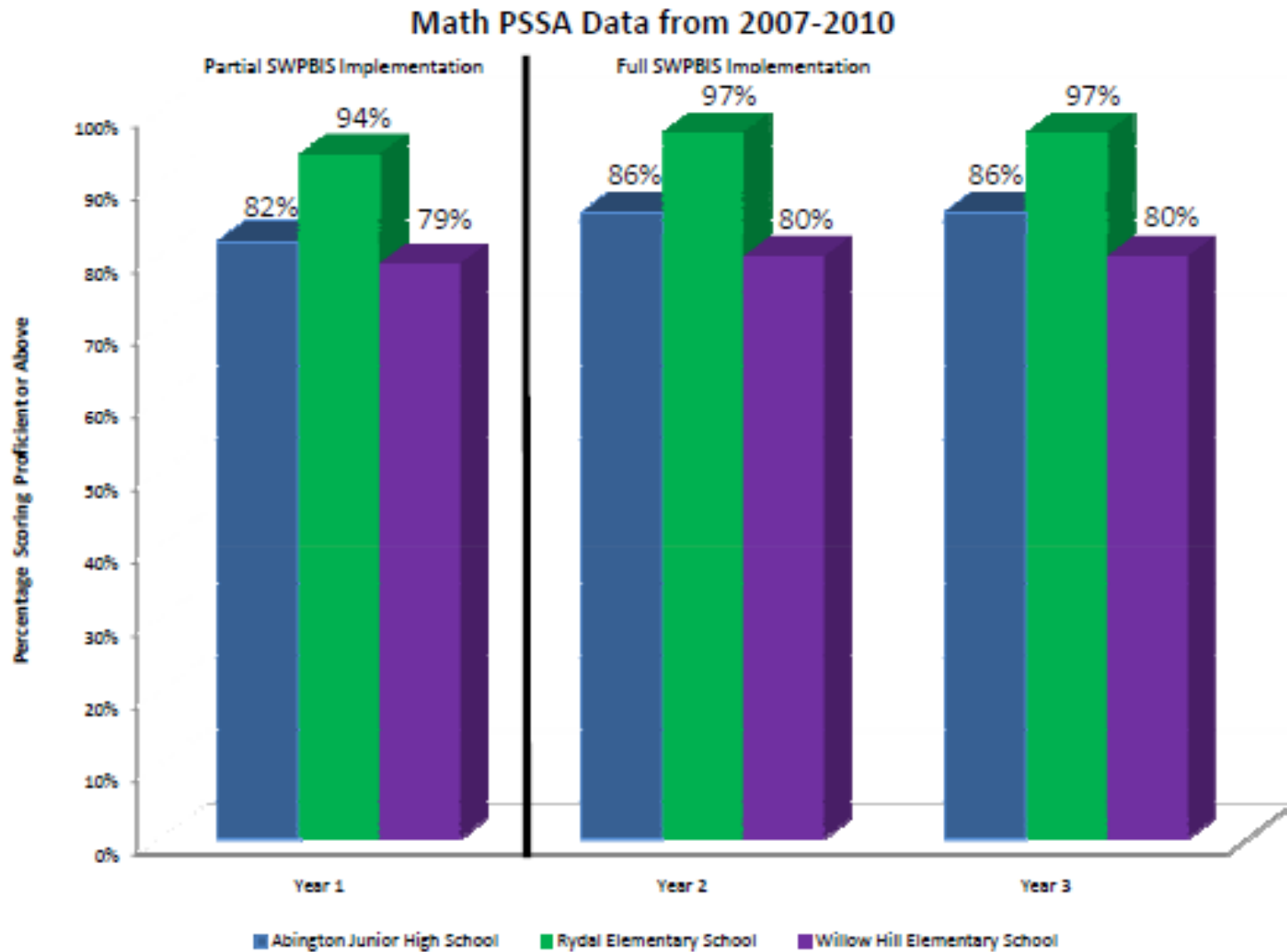


# Students Newly Identified for Sp.Ed.





# PSSA - Math



# PSSA - Reading

Reading PSSA Data from 2007-2010

