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Taking Attendance:

An Analysis of Greater Milwaukee's Teacher Workforce

The first report in the Metro Milwaukee Educator series



ABOUT THE PUBLIC POLICY FORUM

The Milwaukee-based Public Policy Forum, established in 1913 as a local government watchdog, is a nonpartisan, nonprofit organization dedicated to enhancing the effectiveness of government and the development of Southeastern Wisconsin through objective research of regional public policy issues.

PREFACE AND ACKNOWLEDGMENTS

This report is intended to provide citizens and policymakers with useful statistical information regarding the K-12 teaching workforce in the four-county Metro Milwaukee region. We hope this report's findings will be used to inform education discussions and policy debates at the local and state levels. This report is the first in the *Metro Milwaukee Educator* series of reports that will explore the characteristics of teachers and school leaders in our metro region.

We would like to thank the Greater Milwaukee Foundation and Northwestern Mutual Foundation for their generous support of our education research. We also would like to thank the Herzfeld Foundation for its generous 100th anniversary gift, which also helped make this report possible.



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The first report in the Metro Milwaukee Educator series

August 2015

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TABLE OF CONTENTS

Introduction	3
Data and Methodology	4
The Number of Public School Teachers in Metro Milwaukee	6
Teacher Demographics in Metro Milwaukee.....	8
The Age of Teachers	11
The Experience of Teachers	14
Teacher Qualifications	17
Teacher Mobility.....	21
Conclusion.....	22



INTRODUCTION

“If you can read this – thank a teacher.”

This phrase – having long graced bumper stickers, t-shirts and posters – is at once both simple and profound. Teachers are found in every community and are essential to fulfilling the potential of every student. The teaching profession is large, with K-12 teachers comprising 3% of all jobs in the United States.¹ And yet, what do we know about the characteristics of teachers in our own metro area?

In this report, we address this question with a comprehensive look at public school teachers in Greater Milwaukee. This work builds on a pair of reports we published in December 2014 that defined and tracked changes to the K-12 educational landscape in the City of Milwaukee. The analyses broadly laid out the “system” of schools in the city – including public, charter, and private schools – to delineate where Milwaukee schoolchildren are being educated, student demographics in the various types of schools, and the performance characteristics of those schools. With this information in the public conversation, understanding the teaching workforce serving students in our region became a logical next step for our research.

Our analysis expands the scope of the K-12 reports to the four-county Milwaukee metropolitan area. It uses the most up-to-date data available to answer a number of questions, including:

- How many teachers are there in Greater Milwaukee and how does that number compare among school districts?
- What are the ages and demographics of the teaching workforce across the region?
- How do teacher qualifications and levels differ among different districts, and have there been significant changes over time?

The teaching profession in Wisconsin has been the subject of much discussion and debate in recent years, particularly during consideration and implementation of Wisconsin Act 10. Consequently, our analysis includes data over multiple years to capture changes in teacher characteristics that have occurred since Act 10’s adoption in 2011.

This report is the first in a series we will publish on the educator workforce in the Milwaukee area. Because reputable research points to the importance of school leaders in raising academic achievement, the second report in the series will focus attention on school and district leaders to identify and quantify their characteristics.

Our final research report then will examine the teaching profession pipeline. Anecdotal information suggests that fewer people are entering the profession and that the region may face a shortage of teachers in coming years. This research will quantify the number of teachers near retirement age as well as the number of students enrolled in teacher preparation programs throughout the state. The analysis will help to answer whether we have enough people entering the profession to replace those nearing retirement.

Education is an essential element to the health and vitality of a community. Teachers, in turn, are an essential element in the education process. The research findings presented here will shed light on the teaching profession and provide a greater understanding of the people who make up the educator workforce in Greater Milwaukee.

¹ U.S. Bureau of Labor Statistics. *Occupational Employment and Wages – May 2014*.
<http://www.bls.gov/news.release/pdf/ocwage.pdf>



DATA AND METHODOLOGY

The data used in this report primarily come from the Wisconsin Department of Public Instruction (DPI). The 'All Staff' files compiled by DPI include a variety of metrics for each public school employee, including name, gender, age, demographics, highest degree earned, and years of experience. The files also describe the position and role of each staff member as well as the district and school in which they are employed. Using these 'All Staff' data files as a starting point, we conducted analyses to explore the teacher workforce at public schools in the region.

The sample for analysis includes staff members who are classified as Teacher, Teacher in Charge, and Instructional Technology Integrator. The data sample does not include substitute teachers. We acknowledge there are many other staff members who positively affect the education of students. However, the goal of this report is to look at the personnel most responsible for classroom instruction.

This report focuses on individuals, rather than Full-Time Equivalent (FTE) positions. The sample includes any teacher who had at least one contract day in the 2009-10 and/or 2013-14 academic years, whether or not classroom instruction was their primary position. Unfortunately, the 2013-2014 school year represents the latest year for which a complete data set is available. We had hoped the DPI data set for the recently completed 2014-15 year would be available this summer, but we recently learned that would not be the case.

We chose not to include information on teacher salaries as part of this report. The DPI dataset includes every role for an employee, though only one amount for salary and benefits. A staff member who is an English teacher, chair of the English department, and an athletic coach appears in the data set three times, but his or her salary is the same for all three positions. Because we cannot isolate the amount of compensation resulting from teaching activities, we chose to omit salaries.

The geographic focus of our analysis is the four-county Milwaukee Standard Metropolitan Statistical Area, which includes the public school districts in Milwaukee, Ozaukee, Washington, and Waukesha counties. We also added the Racine Unified School District at the bottom of data tables to provide perspective on another large urban district that has some similarity to the Milwaukee Public Schools. We do not include Racine figures in aggregate Metro Milwaukee numbers, however.

Several districts in the four-county region are in fact singular elementary and middle schools that feed into one of three union high schools: Arrowhead Union in Waukesha County, Hartford Union in Washington County, and Nicolet Union in Milwaukee County. To help distinguish these singular schools in the analyses, each table provides the grade levels served by these districts that contribute to the union high schools.

Finally, it is important to note how charter schools are counted. Schools that are chartered by Milwaukee Public Schools are counted in the aggregate figures for Metro Milwaukee and are included in the district figures for MPS. Schools that are chartered by the Milwaukee Common Council and the University of Wisconsin-Milwaukee are included in the aggregate figures for Metro Milwaukee, but are not included in the district breakdowns.

Private schools are not included in any analyses, however, as data regarding the teacher workforce in those schools are not collected by DPI and are not publicly available. Consequently, because of the unavailability of these data, the analysis provided here reflects a large, but still incomplete view of the regional teacher workforce.



Act 10, adopted in 2011, included a series of fiscal “tools” intended to help schools balance their budgets in the face of increasing health care and retiree legacy costs, major reductions in state aid adopted as part of the 2011-13 biennial state budget, and lower school district property tax levy caps. The bill aimed to achieve cost reductions in three main ways: by severely restricting the topics subject to collective bargaining by public employees; by requiring public employees to contribute 5.8% of their salary toward their pensions; and by requiring public employees in state-sponsored health care plans to pay 12.6% of their health insurance premiums.

From the perspective of local school districts, perhaps the most significant provision of Act 10 was its elimination from the collective bargaining process of all topics other than wage increases, which the law limits to the rate of inflation. Topics that were traditionally subject to labor negotiations, such as tenure, seniority, fringe benefits, and retirement age, may now be established at the discretion of local school boards. Wage increases negotiated beyond the rate of inflation must be approved by a referendum, and unions and employers are no longer allowed to bargain over supplementary pay above base wages.



THE NUMBER OF PUBLIC SCHOOL TEACHERS IN METRO MILWAUKEE

Public school districts across Metro Milwaukee employed 14,411 teachers in the 2013-14 school year. The region is unique in that it encompasses large urban, suburban, and small rural districts, as shown in **Table 1**. Among the districts considered in our analysis, Milwaukee Public Schools (MPS) had the highest number of teachers with 4,374, followed by Waukesha with 859, and West Allis-West Milwaukee with 646 educators. Meanwhile, Herman School District had the fewest teachers – just 10 in the past school year. Rubicon and Neosho also are very small districts, with 13 and 15 teachers, respectively. In all, 20 of the 53 districts in our analysis employed fewer than 100 teachers, while 12 districts had fewer than 50 teachers.

The table also shows that between the 2009-10 and 2013-14 school years, the public school teaching workforce in the region declined by 700 teachers (from 15,111 to 14,411), or 4.6%. This decline, however, must be understood in the context of the change that occurred at MPS, which lost 730 teachers, or 30 more than the region as a whole. Of the 53 districts analyzed, 28 saw a decline in teachers over the period. The largest decreases after MPS were in Elmbrook (-42) and West Bend (-35).

Table 1: Number of teachers in Milwaukee Metropolitan public school districts over time

District	Number of Teachers, 2009-10	Number of Teachers, 2013-14	Change in Number of Teachers	District	Number of Teachers, 2009-10	Number of Teachers, 2013-14	Change in Number of Teachers
Arrowhead UHS (9-12)	128	122	-6	Muskego-Norway	292	293	1
Brown Deer	120	117	-3	Neosho (K-8)	15	15	0
Cedarburg	189	186	-3	New Berlin	279	295	16
Cudahy	201	187	-14	Nicolet UHS (9-12)	79	78	-1
Elmbrook	517	475	-42	Northern Ozaukee	94	73	-21
Erin (K-8)	27	25	-2	North Lake (K-8)	27	26	-1
Fox Point (K-8)	67	70	3	Oak Creek-Franklin	367	371	4
Franklin	267	267	0	Oconomowoc	309	314	5
Friess Lake (K-8)	27	21	-6	Pewaukee	155	165	10
Germantown	258	250	-8	Port Washington-Saukville	166	172	6
Glendale-River Hills (K-8)	67	71	4	Richfield (K-8)	30	30	0
Grafton	149	146	-3	Richmond (K-8)	33	30	-3
Greendale	174	182	8	Rubicon (K-8)	14	13	-1
Greenfield	207	220	13	Saint Francis	86	75	-11
Hamilton	287	283	-4	Shorewood	129	140	11
Hartford J1 (K-8)	126	126	0	Slinger	170	175	5
Hartford UHS (9-12)	103	90	-13	South Milwaukee	213	209	-4
Hartland-Lakeside (K-8)	83	75	-8	Stone Bank (K-8)	27	29	2
Herman (K-8)	10	10	0	Swallow (K-8)	41	40	-1
Kettle Moraine	264	255	-9	Waukesha	830	859	29
Kewaskum	132	132	0	Wauwatosa	519	509	-10
Lake Country (K-8)	46	39	-7	West Allis	588	646	58
Maple Dale-Indian Hill (K-8)	38	41	3	West Bend	456	421	-35
Menomonee Falls	299	284	-15	Whitefish Bay	200	207	7
Mequon-Thiensville	229	233	4	Whitnall	143	150	7
Merton (K-8)	67	56	-11				
Milwaukee Public Schools	5,104	4,374	-730	Metro Milwaukee	15,111	14,411	-700
Mukwonago	301	291	-10	<i>Racine</i>	<i>1,400</i>	<i>1,450</i>	<i>50</i>



Six districts saw no change in the number of teachers employed, while 19 districts experienced an increase. West Allis-West Milwaukee led the region by adding 58 teachers. Waukesha increased its workforce by 29 teachers, while New Berlin added 16.

Two considerations are worth noting with regard to consideration of this five-year comparison. First, the baseline year 2009-10 was the last full school year before the passage of Act 10, which included changes to teacher benefits as well as the collective bargaining process. While we can note changes to the workforce over time, deeper analysis would be required to determine the extent to which Act 10 influenced decisions by individual teachers and school districts.

Second, because changes in student enrollment obviously can influence changes to the number of teachers employed by districts, those districts cited above that experienced significant increases or decreases in teacher employment should be considered in the context of their enrollment changes. Overall, the four-county metro area enrolled 236,205 public school students in 2013-14, which represents a 0.4% decline from the 2009-10 enrollment level of 237,127 students.

The decline of 700 teachers across the region seems disproportional for an enrollment decrease of 922 students, but MPS' impact must be considered. MPS lost 3,580 students over the five-year period, which represents 4.4% of its student population, compared to the loss of 730 teachers, representing 14% of its teacher workforce. The decline in MPS teachers is indeed disproportional to the decrease in students.



TEACHER DEMOGRAPHICS IN METRO MILWAUKEE

The Greater Milwaukee teaching workforce is not especially diverse. As shown in **Table 2**, white teachers comprise 89% of the educators in the metro area, while the 1,566 minority teachers employed by districts account for only 11%. African Americans make up the largest minority group with 883 teachers, though this represents just more than 6% of all teachers in the area.

Table 2: Race/Ethnicity of Metro Milwaukee Teachers, 2013-14

Race/ Ethnicity	Number of Teachers in Metro Milwaukee	Percent of Metro Teacher Workforce
African American	883	6.1%
American Indian/ Alaskan Native	39	0.3%
Asian	150	1.0%
Hispanic	461	3.2%
Native Hawaiian/ Pacific Islander	6	0.0%
Two or More Races	27	0.2%
White	12,845	89.1%
Minority Teachers*	1,566	10.9%

* Includes all non-White teachers

Table 3 provides a district-level look at ethnic diversity among teachers. This breakdown shows that 16 of the 53 districts analyzed do not employ a single minority teacher. Moreover, in 34 districts, whites comprise 98% or more of the teaching workforce. MPS has the highest degree of racial diversity among its teachers, with 28.7% percent of the workforce comprised of minority educators. Brown Deer also stands out with 11.1% teachers of color.

The teaching workforce in Metro Milwaukee does not reflect the ethnic diversity of the population and, perhaps more importantly, the racial composition of teachers does not reflect the racial composition of the students they serve. While 89% of teachers in Greater Milwaukee are white, 44% of the students enrolled in public schools in the area are students of color.

No district in the region has a teacher workforce that matches the ethnic diversity of its students. Furthermore, in most cases, disparities in the level of diversity are substantial. This pattern affects urban, suburban, and rural districts throughout the region. Despite having the highest percentage of minority teachers (28.7%), MPS' educator workforce is much less diverse than its student body (86.3%). In Brown Deer, students of color make up 70.3% of school enrollment, though teachers of color comprise just 11.1% of educators. Wauwatosa enrolls about 33% students of color, though teachers of color represent just 3.5% of its workforce.



Table 3: Ethnic composition of teacher workforce in 2013-14

District	American Indian	Asian	African American	Hispanic	White	Minority Teachers	Percent Minority Teachers	Percent Minority Students
Arrowhead UHS (9-12)	0	2	0	0	120	2	1.6%	6.7%
Brown Deer	1	2	9	0	104	13	11.1%	70.3%
Cedarburg	0	0	0	0	185	1	0.5%	8.1%
Cudahy	0	0	0	0	186	1	0.5%	31.1%
Elmbrook	1	3	4	7	460	15	3.2%	24.3%
Erin (K-8)	0	0	0	0	25	0	0.0%	5.8%
Fox Point (K-8)	0	0	0	0	70	0	0.0%	27.2%
Franklin	0	0	2	1	262	5	1.9%	23.2%
Friess Lake (K-8)	0	0	0	0	21	0	0.0%	8.4%
Germantown	0	0	0	1	248	2	0.8%	16.3%
Glendale-River Hills (K-8)	0	2	1	0	68	3	4.2%	46.6%
Grafton	0	0	0	0	145	1	0.7%	11.9%
Greendale	0	1	0	3	177	5	2.7%	21.1%
Greenfield	1	0	0	2	217	3	1.4%	40.4%
Hamilton	0	0	2	0	281	2	0.7%	15.9%
Hartford J1 (K-8)	0	1	0	1	124	2	1.6%	15.1%
Hartford UHS (9-12)	0	0	0	0	90	0	0.0%	9.2%
Hartland-Lakeside (K-8)	0	0	0	0	75	0	0.0%	11.1%
Herman (K-8)	0	0	0	0	10	0	0.0%	3.8%
Kettle Moraine	2	3	0	2	248	7	2.7%	8.8%
Kewaskum	0	0	0	0	132	0	0.0%	6.9%
Lake Country (K-8)	0	0	0	1	38	1	2.6%	12.0%
Maple Dale-Indian Hill (K-8)	0	0	0	1	39	2	4.9%	31.5%
Menomonee Falls	0	0	2	1	278	6	2.1%	24.0%
Mequon-Thiensville	0	3	2	0	227	6	2.6%	18.7%
Merton (K-8)	0	0	0	0	56	0	0.0%	5.4%
Milwaukee	20	96	771	367	3,120	1,254	28.7%	86.3%
Mukwonago	0	0	0	3	288	3	1.0%	7.7%
Muskego-Norway	1	0	0	1	288	5	1.7%	7.9%
Neosho (K-8)	0	0	0	0	15	0	0.0%	4.5%
New Berlin	0	1	1	0	293	2	0.7%	15.0%
Nicolet UHS (9-12)	0	0	1	0	77	1	1.3%	36.5%
Northern Ozaukee	1	0	0	0	72	1	1.4%	11.3%
North Lake (K-8)	0	0	0	0	26	0	0.0%	7.4%
Oak Creek-Franklin	2	9	1	0	359	12	3.2%	26.1%
Oconomowoc	0	1	0	2	310	4	1.3%	8.5%
Pewaukee	0	2	0	1	162	3	1.8%	18.2%
Port Washington-Saukville	0	0	0	0	172	0	0.0%	10.9%
Richfield (K-8)	0	0	0	0	30	0	0.0%	5.2%
Richmond (K-8)	0	0	0	0	30	0	0.0%	11.4%
Rubicon (K-8)	0	0	0	0	13	0	0.0%	3.1%
Saint Francis	0	1	1	0	72	3	4.0%	32.8%
Shorewood	1	0	3	1	134	6	4.3%	33.0%
Slinger	0	0	0	0	175	0	0.0%	6.6%
South Milwaukee	2	0	1	2	204	5	2.4%	22.8%
Stone Bank (K-8)	0	0	0	0	29	0	0.0%	4.7%
Swallow (K-8)	1	0	0	1	37	3	7.5%	6.3%
Waukesha	3	5	1	34	816	43	5.0%	31.1%
Wauwatosa	1	5	9	3	491	18	3.5%	33.2%
West Allis	0	3	4	2	630	16	2.5%	41.9%
West Bend	1	1	0	3	416	5	1.2%	12.1%
Whitefish Bay	1	1	4	1	199	8	3.9%	24.3%
Whitnall	0	1	0	1	148	2	1.3%	22.4%
Metro Milwaukee	39	150	883	461	12,845	1,566	10.9%	43.9%
<i>Racine</i>	4	8	59	88	1,280	170	11.7%	56.4%



Any comparison between teachers of color and students of color starts with the premise that the district employs minority teachers; as the data show, however, 16 districts have no minority teachers. The Port Washington-Saukville district employs 172 teachers and all are white, despite enrolling nearly 11% students of color. Minority students comprise 27.2% of the Fox Point district's enrollment, with every child taught by a white teacher.

A growing body of research suggests that minority students can benefit when assigned teachers of their own race or ethnicity. Dee (2004) found that students taught by teachers of the same race increased math and reading achievement levels for black and white students.² Research from Egalite, et. al. (2015) supports these results and also found the benefit was especially pronounced for low-performing black and white students.³ These and other findings should provide further motivation for districts to hire and retain minority teachers.

One contributing factor to the low number of teachers of color is the number of minority students enrolled in teacher preparation programs. According to the most recent data, there were 834 minority students enrolled at the 40 Wisconsin teacher preparation programs in 2012-13, accounting for just 8.8% of those studying to become teachers. While just a small fraction, this represents an increase from 2009-10 when students of color made up only 6.5% of enrollments at teacher prep programs. Increasing minority enrollment in these programs can help create a larger pool of teachers of color from which districts throughout the region can recruit and hire.

Table 4 examines five-year trends in minority teacher employment, and shows that the number of minority teachers in Greater Milwaukee declined by 88 over that period of time. As a percentage of total teachers, their representation remains unchanged at 10.9% of the workforce. However, this slight decline occurred while the enrollment of minority students increased in all but one district. The decline was most pronounced among African Americans with 130 fewer teachers, while the number of Hispanic teachers increased by 24 over the period.

Over the five-year timeframe, 25 of the 53 districts increased the number of minority teachers. Waukesha showed the largest increase, adding 12 minority teachers, followed by Muskego-Norway, which added five. Twenty districts saw no change in the number of minority teachers. For 15 of these districts, they did not employ, and currently do not employ, teachers of color. Nine districts showed a decrease in the number of minority teachers, with MPS showing the largest decline of 156 minority educators.

A number of districts have experienced significant growth in minority student enrollment since 2009-10, though employment of minority teachers remains low. For example, Greenfield experienced one of the largest increases in minority student enrollment in the metro region, increasing from 30.2% of enrollment in 2009-10 to 40.4% in 2013-14. Over this same period, teacher diversity in Greenfield declined such that the district now employs just three minority teachers.

² Dee, T.S. (2004). Teachers, race and student achievement in a randomized experiment. *The Review of Economics and Statistics*, 86(1), 195-210.

³ Egalite, A.J., Kisida, B., Winters, M.A. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics of Education Review* 45, 44-52.



Table 4: Change in Minority Teachers and Students over time

District	Number of Minority Teachers	Number of Minority Teachers	Change in Minority Teachers	Percent Minority Teachers 2009-10	Percent Minority Teachers 2013-14	Change in % Minority Teachers	Percent Minority Students 2009-10	Percent Minority Students 2013-14	Change in % Minority Students
Arrowhead UHS (9-12)	2	2	0	1.6%	1.6%	0.1 pt	4.1%	6.7%	2.6 pts
Brown Deer	10	13	3	8.3%	11.1%	2.8 pts	61.2%	70.3%	9.1 pts
Cedarburg	1	1	0	0.5%	0.5%	No Change	5.1%	8.1%	3.0 pts
Cudahy	0	1	1	0.0%	0.5%	0.5 pts	27.1%	31.1%	4.0 pts
Elmbrook	11	15	4	2.1%	3.2%	1.0 pt	18.6%	24.3%	5.7 pts
Erin (K-8)	0	0	0	0.0%	0.0%	No Change	5.7%	5.8%	0.1 pt
Fox Point (K-8)	0	0	0	0.0%	0.0%	No Change	19.9%	27.2%	7.3 pts
Franklin	3	5	2	1.1%	1.9%	0.7 pts	21.0%	23.2%	2.2 pts
Friess Lake (K-8)	0	0	0	0.0%	0.0%	No Change	7.0%	8.4%	1.4 pts
Germantown	1	2	1	0.4%	0.8%	0.4 pts	10.9%	16.3%	5.4 pts
Glendale-River Hills (K-8)	1	3	2	1.5%	4.2%	2.7 pts	39.1%	46.6%	7.5 pts
Grafton	0	1	1	0.0%	0.7%	0.7 pts	7.9%	11.9%	4.0 pts
Greendale	4	5	1	2.3%	2.7%	0.4 pts	15.3%	21.1%	5.8 pts
Greenfield	5	3	-2	2.4%	1.4%	-1.1 pts	30.2%	40.4%	10.2 pts
Hamilton	7	2	-5	2.4%	0.7%	-1.7 pts	12.1%	15.9%	3.8 pts
Hartford J1 (K-8)	1	2	1	0.8%	1.6%	0.8 pts	11.8%	15.1%	3.3 pts
Hartford UHS (9-12)	1	0	-1	1.0%	0.0%	-1.0 pt	6.6%	9.2%	2.6 pts
Hartland-Lakeside (K-8)	0	0	0	0.0%	0.0%	No Change	6.4%	11.1%	4.7 pts
Herman (K-8)	0	0	0	0.0%	0.0%	No Change	2.0%	3.8%	1.8 pts
Kettle Moraine	3	7	4	1.1%	2.7%	1.6 pts	4.8%	8.8%	4.0 pts
Kewaskum	0	0	0	0.0%	0.0%	No Change	4.2%	6.9%	2.7 pts
Lake Country (K-8)	2	1	-1	4.3%	2.6%	-1.8 pts	4.8%	12.0%	7.2 pts
Maple Dale-Indian Hill (K-8)	2	2	0	5.3%	4.9%	-0.4 pts	28.2%	31.5%	3.3 pts
Menomonee Falls	7	6	-1	2.3%	2.1%	-0.2 pts	20.7%	24.0%	3.3 pts
Mequon-Thiensville	5	6	1	2.2%	2.6%	0.4 pts	14.0%	18.7%	4.7 pts
Merton (K-8)	0	0	0	0.0%	0.0%	No Change	5.1%	5.4%	0.3 pts
Milwaukee	1,410	1,254	-156	27.6%	28.7%	1 pt	84.8%	86.3%	1.5 pts
Mukwonago	0	3	3	0.0%	1.0%	1.0 pt	5.5%	7.7%	2.2 pts
Muskego-Norway	0	5	5	0.0%	1.7%	1.7 pts	6.2%	7.9%	1.7 pts
Neosho (K-8)	0	0	0	0.0%	0.0%	No Change	0.0%	4.5%	4.5 pts
New Berlin	3	2	-1	1.1%	0.7%	-0.4 pts	12.0%	15.0%	3.0 pts
Nicolet UHS (9-12)	1	1	0	1.3%	1.3%	No Change	31.8%	36.5%	4.7 pts
Northern Ozaukee	1	1	0	1.1%	1.4%	0.3 pts	7.6%	11.3%	3.7 pts
North Lake (K-8)	0	0	0	0.0%	0.0%	No Change	4.9%	7.4%	2.5 pts
Oak Creek-Franklin	9	12	3	2.5%	3.2%	0.8 pts	23.7%	26.1%	2.4 pts
Oconomowoc	3	4	1	1.0%	1.3%	0.3 pts	6.7%	8.5%	1.8 pts
Pewaukee	1	3	2	0.6%	1.8%	1.2 pts	11.8%	18.2%	6.4 pts
Port Washington-Saukville	0	0	0	0.0%	0.0%	No Change	9.2%	10.9%	1.7 pts
Richfield (K-8)	0	0	0	0.0%	0.0%	No Change	6.3%	5.2%	-1.1 pts
Richmond (K-8)	0	0	0	0.0%	0.0%	No Change	6.4%	11.4%	5.0 pts
Rubicon (K-8)	0	0	0	0.0%	0.0%	No Change	0.6%	3.1%	2.5 pts
Saint Francis	2	3	1	2.3%	4.0%	1.7 pts	26.1%	32.8%	6.7 pts
Shorewood	5	6	1	3.9%	4.3%	0.4 pts	26.7%	33.0%	6.3 pts
Slinger	0	0	0	0.0%	0.0%	No Change	3.9%	6.6%	2.7 pts
South Milwaukee	3	5	2	1.4%	2.4%	1.0 pt	19.2%	22.8%	3.6 pts
Stone Bank (K-8)	0	0	0	0.0%	0.0%	No Change	1.2%	4.7%	3.5 pts
Swallow (K-8)	2	3	1	4.9%	7.5%	2.6 pts	3.9%	6.3%	2.4 pts
Waukesha	31	43	12	3.7%	5.0%	1.3 pts	24.2%	31.1%	6.9 pts
Wauwatosa	19	18	-1	3.7%	3.5%	-0.1 pts	28.0%	33.2%	5.2 pts
West Allis	13	16	3	2.2%	2.5%	0.3 pts	30.4%	41.9%	11.5 pts
West Bend	4	5	1	0.9%	1.2%	0.3 pts	8.0%	12.1%	4.1 pts
Whitefish Bay	11	8	-3	5.5%	3.9%	-1.6 pts	20.8%	24.3%	3.5 pts
Whitnall	1	2	1	0.7%	1.3%	0.6 pts	15.0%	22.4%	7.4 pts
Metro Milwaukee	1,654	1,566	-88	10.9%	10.9%	No Change	42.3%	43.9%	1.6 pts
<i>Racine</i>	<i>118</i>	<i>170</i>	<i>52</i>	<i>8.4%</i>	<i>11.7%</i>	<i>3.3 pts</i>	<i>52.0%</i>	<i>56.4%</i>	<i>4.4 pts</i>



THE AGE OF TEACHERS

The average age of a public school teacher in Greater Milwaukee is 43 years old, as shown in **Table 5**. Stone Bank School District has the most senior teaching workforce with an average age of 48.3 years, followed by Nicolet Union High School and Friess Lake at 46.7 and 46.5 years, respectively. On the other end of the spectrum, New Berlin has the youngest teachers with an average age of 38.4 years. Other districts employing a young workforce include Richmond at 38.7 years, and Richfield and West Allis-West Milwaukee, both averaging 39.7 years.

The average age of teachers in the metro area has not changed over time. This finding contradicts the notion that districts would replace older teachers with new, younger teachers in the wake of early retirements associated with Act 10. Individual school districts experienced changes in average age over time, with small districts such as Richfield and Stone Bank showing large increases and decreases in the average age. New Berlin, a larger district with 279 teachers, saw the average teacher age decline from 41.2 years in 2009-10 to 38.4 years in 2013-14. This shift is largely the result of hiring young teachers to replace those who retired, with 24.1% of the district workforce now aged 20-29.

Table 5: Average Age of Teachers Over Time

District	Average Age 2009-10	Average Age 2013-14	Change in Avg Age	District	Average Age 2009-10	Average Age 2013-14	Change in Avg Age
Arrowhead UHS (9-12)	41.9	42.1	0.2	Muskego-Norway	43.2	42.4	-0.8
Brown Deer	41.0	42.8	1.8	Neosho (K-8)	42.5	45.8	3.3
Cedarburg	42.5	42.7	0.2	New Berlin	41.2	38.4	-2.8
Cudahy	41.4	41.7	0.3	Nicolet UHS (9-12)	47.5	46.7	-0.8
Elmbrook	43.9	44.1	0.2	Northern Ozaukee	41.6	41.3	-0.3
Erin (K-8)	39.4	43.2	3.8	North Lake (K-8)	48.2	44.8	-3.4
Fox Point (K-8)	45.5	46.4	0.9	Oak Creek-Franklin	40.9	40.4	-0.5
Franklin	44.7	44.8	0.1	Oconomowoc	41.4	41.3	-0.1
Friess Lake (K-8)	48.2	46.5	-1.7	Pewaukee	41.9	40.6	-1.3
Germantown	43.0	43.2	0.2	Port Washington-Saukville	43.9	41.6	-2.3
Glendale-River Hills (K-8)	41.4	43.5	2.1	Richfield (K-8)	46.2	39.7	-6.5
Grafton	40.4	42.9	2.5	Richmond (K-8)	42.9	38.7	-4.2
Greendale	42.2	40.5	-1.7	Rubicon (K-8)	44.9	46.0	1.1
Greenfield	42.8	41.9	-0.9	Saint Francis	42.3	42.1	-0.2
Hamilton	41.5	43.2	1.7	Shorewood	45.1	45.5	0.4
Hartford J1 (K-8)	43.9	42.5	-1.4	Slinger	42.5	41.4	-1.1
Hartford UHS (9-12)	43.1	41.6	-1.5	South Milwaukee	44.1	44.9	0.8
Hartland-Lakeside (K-8)	44.8	42.3	-2.5	Stone Bank (K-8)	45.9	48.3	2.4
Herman (K-8)	51.6	49.1	-2.5	Swallow (K-8)	41.4	42.9	1.5
Kettle Moraine	43.8	43.7	-0.1	Waukesha	45.1	43.8	-1.3
Kewaskum	42.4	41.7	-0.7	Wauwatosa	43.7	44.2	0.5
Lake Country (K-8)	47.6	49.7	2.1	West Allis	41.6	39.7	-1.9
Maple Dale-Indian Hill (K-8)	48.5	45.7	-2.8	West Bend	41.6	42.9	1.3
Menomonee Falls	41.9	42.6	0.7	Whitefish Bay	42.9	43.8	0.9
Mequon-Thiensville	47.5	46.1	-1.4	Whitnall	44.1	43.9	-0.2
Merton (K-8)	44.9	46.2	1.3				
Milwaukee	43.3	44.3	1.0	Metro Milwaukee	43.0	43.0	0.0
Mukwonago	44.9	43.9	-1.0	<i>Racine</i>	<i>44.8</i>	<i>44.3</i>	<i>-0.5</i>



Taking a closer look at the distribution of ages across the teacher workforce in **Table 6** yields some interesting findings. The teaching workforce is primarily comprised of middle-aged workers, with 53.2% in their 40s and 50s. Young teachers aged 20-29 make up a small part of the workforce, just 10.7% of all teachers in the area.

Table 6: Metro Milwaukee Teachers by Age Group

Age Range	Percent of Workforce 2009-10	Percent of Workforce 2013-14	Change Over Time
20-29	12.7%	10.7%	-2.0 pts
30-39	28.7%	29.9%	1.2 pts
40-49	26.9%	29.8%	2.9 pts
50-59	24.9%	23.4%	-1.5 pts
60-69	6.7%	6.1%	-0.6 pts
70+	0.1%	0.1%	No Change

Looking at the how these age groups have changed over time, we see that the percentage of teachers in their 50s and 60s has declined. This was a predicted outcome of the Act 10 legislation, which made changes to benefits and pension policies affecting teachers near the end of their careers. To replace these teachers, it was logical to expect districts would hire younger teachers, in part because of the cost savings associated with younger employees. However, the percentage of teachers in their 20s actually declined over the five-year period, and at nearly the same rate as teachers age 50 and over. This finding suggests that districts haven't necessarily shifted to hiring new college graduates to fill vacancies in recent years.

Young teachers in their 20s make up a small portion of the overall teacher workforce, and the group has grown smaller over time. As show in **Table 7**, the proportion of teachers in their 20s has shifted towards those in their late 20s. Moreover, there are only 230 teachers in Greater Milwaukee aged 20-25. This figure has fallen by nearly half from 427 teachers in 2009-10. The decline in young, new college graduates entering the teaching profession may present challenges for workforce sustainability and development.

Table 7: Breakdown of Metro Teachers Aged 20-29

Age	2009-10	2013-14
20-25	22.3%	14.9%
26-29	77.7%	85.1%

At the other end of the spectrum, the number of Metro Milwaukee teachers aged 55 and over declined from 2,914 in 2009-10 to 2,332 in 2013-14, a 20% decrease. Over the same period, 39 of the 53 districts saw a decline in the number of teachers aged 55 and above. Despite lower numbers, educators in this age group still comprise more than 20% of the workforce in 15 school districts. The reliance on senior teachers in these districts may present different challenges for workforce sustainability.



THE EXPERIENCE OF TEACHERS

In 2013-14, the average teacher in Greater Milwaukee had 12.7 years of total teaching experience, as shown in **Table 8**. This figure is down from the 2009-10 level of 13.5 years of experience. This decline indicates that, on average, the teaching workforce in the area is less experienced today than it was five years ago. This finding aligns with the data showing sharp declines in the number of teachers who are age 55 and over. The departure of these older teachers, presumably with many years of experience, would lower the average for the workforce as a whole.

In 2013-14, the average experience level of teachers at Nicolet Union High School was 18 years, the highest in the metro area. At the opposite end of the spectrum, Richfield Public Schools had the lowest average experience level with 7.4 years. The average teacher at MPS has 12 years of experience. Interestingly, despite a sharp decline in the number of teachers, the experience level of MPS teachers is unchanged over time.

Table 8: Average Years of Total Teacher Experience Over Time

District	Avg Yrs Experience 2009-10	Avg Yrs Experience 2013-14	Change in Avg Yrs Experience
Arrowhead UHS (9-12)	16.0	13.4	-2.6
Brown Deer	13.8	13.7	-0.1
Cedarburg	13.8	14.1	0.3
Cudahy	13.8	12.6	-1.2
Elmbrook	16.6	15.1	-1.5
Erin (K-8)	14.6	15.7	1.1
Fox Point (K-8)	17.2	17.4	0.2
Franklin	15.7	14.9	-0.8
Friess Lake (K-8)	19.2	15.3	-3.9
Germantown	13.8	13.3	-0.5
Glendale-River Hills (K-8)	12.5	13.2	0.7
Grafton	12.3	13.7	1.4
Greendale	13.6	12.2	-1.4
Greenfield	13.9	12.6	-1.3
Hamilton	13.2	13.1	-0.1
Hartford J1 (K-8)	15.1	13.1	-2.0
Hartford UHS (9-12)	16.4	13.5	-2.9
Hartland-Lakeside (K-8)	15.9	12.5	-3.4
Herman (K-8)	23.4	17.0	-6.4
Kettle Moraine	14.6	14.1	-0.5
Kewaskum	14.3	12.9	-1.4
Lake Country (K-8)	16.5	14.9	-1.6
Maple Dale-Indian Hill (K-8)	21.0	14.1	-6.9
Menomonee Falls	13.6	14.0	0.4
Mequon-Thiensville	18.8	16.0	-2.8
Merton (K-8)	17.1	17.1	0.0
Milwaukee	12.0	12.0	0.0
Mukwonago	15.8	14.3	-1.5

District	Avg Yrs Experience 2009-10	Avg Yrs Experience 2013-14	Change in Avg Yrs Experience
Muskego-Norway	16.5	12.1	-4.4
Neosho (K-8)	11.2	11.3	0.1
New Berlin	13.4	9.8	-3.6
Nicolet UHS (9-12)	20.2	18.0	-2.2
Northern Ozaukee	11.8	12.7	0.9
North Lake (K-8)	19.2	15.3	-3.9
Oak Creek-Franklin	13.9	13.1	-0.8
Oconomowoc	14.1	13.0	-1.1
Pewaukee	13.3	10.3	-3.0
Port Washington-Sauville	16.2	13.2	-3.0
Richfield (K-8)	13.2	7.4	-5.8
Richmond (K-8)	14.6	10.6	-4.0
Rubicon (K-8)	14.4	15.2	0.8
Saint Francis	14.4	12.4	-2.0
Shorewood	16.0	14.8	-1.2
Slinger	15.7	13.9	-1.8
South Milwaukee	15.6	15.9	0.3
Stone Bank (K-8)	16.9	14.2	-2.7
Swallow (K-8)	15.0	14.0	-1.0
Waukesha	16.5	15.3	-1.2
Wauwatosa	11.5	10.2	-1.3
West Allis	13.1	10.2	-2.9
West Bend	12.4	13.4	1.0
Whitefish Bay	13.5	13.8	0.3
Whitnall	14.9	15.1	0.2
Metro Milwaukee	13.5	12.7	-0.8
<i>Racine</i>	<i>12.5</i>	<i>12.0</i>	<i>-0.5</i>



Overall, 38 of the 53 districts showed a decline in average years of experience. The reduced level of experience generally resulted from a loss of older, more experienced teachers and/or the hiring of younger, less experienced teachers. For example, Maple Dale-Indian Hill saw a 19.8% decline in teachers aged 50-59, which decreased the average experience level in the district by 6.9 years. New Berlin, on the other hand, greatly increased the number of teachers in their 20s, which contributed to a reduction in average experience levels by 3.6 years over time.

Looking at the distribution of experience across the workforce in **Table 9** again yields interesting results. New teachers with less than five years of experience made up nearly a quarter of all educators in 2013-14 and represented the largest group in terms of experience. When we combine that group with those in the next lowest category of experience, we see that teachers with less than 10 years of experience comprised 41% of the workforce.

Table 9: Percent of Metro Milwaukee Teachers by Total Years of Experience

Years of Experience	2009-10	2013-14	Change Over Time
0 - 4.9	19.6%	22.2%	2.6 pts
5 - 9.9	21.8%	18.8%	-3.0 pts
10 - 14.9	19.6%	20.8%	1.2 pts
15 - 19.9	14.4%	15.9%	1.5 pts
20 - 24.9	10.6%	11.5%	0.9 pts
25 - 29.9	6.2%	6.7%	0.5 pts
30+	7.7%	4.1%	-3.6 pts

Over time, two groups showed a sharp decline in their percentage of the educator workforce: teachers with 30 or more years of experience, and those with five to 10 years. The first group supports the pattern that districts employed fewer older and more experienced teachers in recent years, whether because of retirements or hiring priorities.

The second group, those with 5-10 years of experience, is more intriguing. Research indicates that between 40% and 50% of teachers leave the profession in their first five years.⁴ The data for Greater Milwaukee seem to indicate the greater concern is teachers with 5-10 years of experience. Digging deeper, the metro area employed 3,291 teachers with 5-10 years of experience in 2009-10. By 2013-14, that number had fallen to 2,709, a decline of 582 teachers. Such a decrease in teachers during their formative development may present challenges for workforce sustainability.

While it is reasonable to assume that there is a relationship between age and years of experience, a higher age does not necessarily equate to an increase in experience. **Table 10** shows the average years of total experience for each age group and illustrates how that average has changed over time. The level of experience has declined for each age group over time, except for teachers aged 40-49. The decline in average experience for teachers in their 30s aligns with the drop in the percentage of the workforce with 5-10 years of experience.

⁴ Ingersoll R., Perda D. (2010). *How high is teacher turnover and is it a problem?* Philadelphia, PA: University of Pennsylvania, Consortium for Policy Research in Education.



Table 10: Experience of Metro Milwaukee Teachers by Age Group

Age Range	Avg Years of Experience 2009-10	Avg Years of Experience 2013-14	Change Over Time
20-29	2.8	2.3	-0.5 years
30-39	8.1	7.3	-0.8 years
40-49	14.5	14.7	0.2 years
50-59	21.3	20.0	-1.3 years
60-69	23.8	21.6	-2.2 years
70+	24.3	24.6	0.3 years

The decline in average experience among teachers between the ages of 20-29 is intriguing. One theory is that a shift towards hiring new teachers in their early 20s straight out of college would lower the average for the age group. As we have described, however, the number of teachers in the 20-25 year-old age group fell by nearly 50% over time. Another explanation may be that large numbers of teachers in their late 20's left the profession, which would decrease the average for the age group. As shown in **Table 7**, however, teachers between the ages of 26-29 now comprise a greater portion of teachers in their 20s than they did in 2009-10.

A third possibility is that districts are hiring teachers who are less experienced, but not necessarily younger. In fact, the data bear out that possibility. In 2009-10, the average age of a new teacher with less than five years of experience was 32.1 years old. In the 2013-14 school year, the average age had increased to 33.3 years for new teachers.

There may be several factors that contribute to the fact that new teachers are now older than they once were. For example, students may be graduating college at later ages, which delays their entry into the workforce. Or, more individuals may be leaving established careers to join the teaching profession. Further research into this pattern is merited, though beyond the scope of this report. We hope to address these and other questions as part of this research series.

Some districts rely heavily on new teachers, such as Richfield, with 43.3% of the workforce made up of teachers with less than five years' experience. New Berlin and West Allis-West Milwaukee are similarly skewed towards new teachers, with 38.6% and 35.1% of their respective workforces having less than five years of experience. Conversely, in Fox Point, just 7.1% of teachers have less than five years of experience, while in Merton and Herman, the percentages are 8.9% and 10%, respectively.



TEACHER QUALIFICATIONS

Next, we explored the qualifications of the teaching workforce. Our first step is to understand the highest level of education attained by teachers. As shown in **Table 11**, about 51% of the teaching workforce had a Bachelor's degree as their highest level of education in the 2013-14 school year. Teachers with a Master's degree made up 48% of the workforce, while the remaining 1% was made up of teachers with a Doctorate and those with other qualifications, including Associate degrees and 6-Year Specialist certificates.

Table 11 also shows that the number of teachers with both Bachelor's and Master's degrees declined from 2009-10 to 2013-14, but the decrease was more pronounced for those with a Master's degree. This resulted in Bachelor's degree holders making up a slight majority of teachers in the metro region. This also indicates that teachers with a Master's degree comprised the bulk of those who left the workforce in recent years. Since the average age of a teacher with a Master's degree is 46.8, the decline in this group aligns with earlier findings that older and more experienced teachers have left the profession over time. The average age of a teacher with a Bachelor's degree is 39.4 years old. There are 23 teachers in the metro area with a Doctorate and this figure is unchanged over time.

Table 11: Metro Milwaukee Teachers by Highest Degree Earned

Degree	Number of Teachers 2009-10	Number of Teachers 2013-14	Change Over Time	Percent of Workforce 2009-10	Percent of Workforce 2013-14	Change Over Time
Bachelor	7,475	7,339	-136	49.5%	50.9%	1.4 pts
Masters	7,491	6,928	-563	49.6%	48.1%	-1.5 pts
Doctorate	23	23	No Change	0.2%	0.2%	No Change
Other*	122	121	-1	0.8%	0.8%	No Change

* Includes Other, 6-Year Specialists, and Associate Degree holders

Most districts in Greater Milwaukee have a balance of teachers with Bachelor's and Master's degrees, though some are more heavily staffed by one or the other. Eighty percent of the teachers in Richfield have a Bachelor's degree as their highest education level, the highest concentration in the area. MPS and Herman are similarly staffed, with 71% and 70% of teachers holding a Bachelor's degree, respectively. Fox Point (77.1%), Arrowhead Union High School (75.4%), and Lake Country (74.4%) lead the region in percentage of the teaching workforce holding a Master's degree.

One reason for the prevalence of advanced degrees is that teachers are frequently given salary increases for completing graduate-level courses and attaining Master's degrees. For example, teachers in the School District of Waukesha were given an additional \$1,200 annually for every nine graduate credits earned, while a Master's degree resulted in an additional \$3,500 in salary.⁵ These policies are common among school districts and can incentivize teachers to remain in the profession and seek additional education. In 2009-10, the teacher workforce in Waukesha was comprised of 65.9% Bachelor's degree holders and 34% Master's degree holders. By 2013-14, the breakdown had flipped, with 34.2% of teachers holding a Bachelor's degree and 65.7% having earned a Master's degree.

⁵Request for Salary Change Form. Human Resources. School District of Waukesha.
<https://www.waukesha.k12.wi.us/EMPLOYEES/EmployeeResources/EmployeeFormsandTools.aspx>



In addition to exploring the educational attainment of Greater Milwaukee’s public school teachers, we wanted to explore qualifications as they relate to special education and English Language Learners. **Table 12** provides information on the number teachers with these extra certifications as well as their percentage of the workforce over time. DPI classifies teachers by two categories: regular education and special education. Additionally, DPI provides an assignment area code which gives the subject taught by each teacher. **Table 12** includes teachers whose staff category is special education and those whose assigned area code is for English as a Second Language.

Greater Milwaukee employed 2,455 special education teachers in 2013-14, showing a slight increase over 2009-10. Altogether, special education teachers comprise 17% of the teacher workforce. By comparison, there were 34,481 students with disabilities in 2013-14 who qualified for an Individualized Education Program (IEP), accounting for 14.6% of public school students in the area. The fact that the proportion of special education teachers exceeds the proportion of special education students is not necessarily surprising given that some of these students require more focus and in-depth instruction.

Table 12: Metro Milwaukee Teachers and Students Over Time

	Number in 2009-10	Number in 2013-14	Change Over Time	Percent in 2009-10	Percent in 2013-14	Change Over Time
Special Education Teachers	2,436	2,455	19	16.1%	17.0%	0.9 pts
Special Education Students	34,512	34,481	-31	14.6%	14.6%	No Change
English as a Second Language Teachers	155	151	-4	1.0%	1.0%	No Change
English Language Learner Students	13,339	12,452	-887	5.6%	5.3%	-0.3 pts

MPS has the highest number (1,097) and percentage (25.1%) of special education teachers in the metro region. The district also has the highest number (16,194) and percentage (20.6%) of special education students, though the proportion of special education teachers exceeds the proportion of special education students. Small districts, such as Herman, Neosho, and Rubicon, have only one special education teacher, despite special education students comprising more than 11% of enrollments in each district. **Table 13** shows district-by-district breakdowns of special education teachers and students, including how the numbers have changed over the 2009-10 to 2013-14 timeframe.

English Language Learners (ELL) – defined as students for whom English is not their first language – are another student population that requires additional resources and attention. The ability of these students to learn the language greatly impacts their academic achievement, regardless of their innate intelligence. As shown in **Table 14**, Greater Milwaukee has just 151 teachers assigned to English as a Second Language (ESL) courses (this number has declined slightly over the past five years). Districts in the area serve 12,452 ELL students, though this number too has fallen over time from 13,339 in 2009-10. MPS has 67 ESL teachers, the most in the area.

We find that the percentage of ELL students in Metro Milwaukee school districts is disproportionate to the number of teachers that serve them. ESL teachers represent just 1% of the workforce, while ELL students comprise 5.3% of enrollments. Moreover, 30 of the 53 districts do not have any teachers assigned to English as a Second Language. One that stands out is the Cudahy district, which has 220 ELL students (8.5% of enrollments), yet no teachers assigned to ESL courses.



Table 13: Metro Milwaukee Special Education Teachers and Students Over Time

District	Special Ed Teachers 2009-10	Special Ed Teachers 2013-14	Change in Spec. Ed Teachers	Percent Sp. Ed. Teachers 2009-10	Percent Sp. Ed. Teachers 2013-14	Change in % Spec. Ed Teachers	Percent Sp. Ed. Students 2009-10	Percent Sp. Ed. Students 2013-14	Change in % Spec. Ed Students
Arrowhead UHS (9-12)	14	12	-2	10.9%	9.8%	-1.1 pts	7.9%	7.9%	0.0%
Brown Deer	15	15	0	12.5%	12.8%	0.3 pts	13.5%	16.6%	3.1%
Cedarburg	29	23	-6	15.3%	12.4%	-3.0 pts	12.0%	9.4%	-2.6%
Cudahy	27	23	-4	13.4%	12.3%	-1.1 pts	17.0%	14.5%	-2.5%
Elmbrook	86	76	-10	16.6%	16.0%	-0.6 pts	12.4%	11.7%	-0.7%
Erin (K-8)	3	2	-1	11.1%	8.0%	-3.1 pts	16.9%	9.6%	-7.3%
Fox Point (K-8)	9	8	-1	13.4%	11.4%	-2.0 pts	10.7%	7.9%	-2.8%
Franklin	40	37	-3	15.0%	13.9%	-1.1 pts	9.9%	9.2%	-0.7%
Friess Lake (K-8)	4	2	-2	14.8%	9.5%	-5.3 pts	8.1%	11.0%	2.9%
Germantown	40	39	-1	15.5%	15.6%	0.1 pts	14.1%	13.6%	-0.5%
Glendale-River Hills (K-8)	10	11	1	14.9%	15.5%	0.6%	13.5%	10.8%	-2.7%
Grafton	27	24	-3	18.1%	16.4%	-1.7%	18.4%	17.3%	-1.1%
Greendale	20	20	0	11.5%	11.0%	-0.5%	10.7%	10.6%	-0.1%
Greenfield	33	29	-4	15.9%	13.2%	-2.8%	12.9%	11.6%	-1.3%
Hamilton	31	31	0	10.8%	11.0%	0.2%	10.7%	10.0%	-0.7%
Hartford J1 (K-8)	21	23	2	16.7%	18.3%	1.6%	17.0%	15.6%	-1.4%
Hartford UHS (9-12)	14	13	-1	13.6%	14.4%	0.9%	13.3%	13.0%	-0.3%
Hartland-Lakeside (K-8)	16	15	-1	19.3%	20.0%	0.7%	9.1%	9.6%	0.5%
Herman (K-8)	2	1	-1	20.0%	10.0%	-10.0%	20.8%	19.0%	-1.8%
Kettle Moraine	45	43	-2	17.0%	16.9%	-0.2%	13.3%	12.4%	-0.9%
Kewaskum	18	23	5	13.6%	17.4%	3.8%	9.0%	12.4%	3.4%
Lake Country (K-8)	3	3	0	6.5%	7.7%	1.2%	11.5%	9.9%	-1.6%
Maple Dale-Indian Hill (K-8)	3	4	1	7.9%	9.8%	1.9%	13.6%	13.6%	0.0%
Menomonee Falls	45	39	-6	15.1%	13.7%	-1.3%	12.1%	11.4%	-0.7%
Mequon-Thiensville	31	30	-1	13.5%	12.9%	-0.7%	12.3%	11.6%	-0.7%
Merton (K-8)	10	8	-2	14.9%	14.3%	-0.6%	6.4%	8.2%	1.8%
Milwaukee	1,070	1,097	27	21.0%	25.1%	4.1%	19.4%	20.6%	1.2%
Mukwonago	44	41	-3	14.6%	14.1%	-0.5%	13.5%	13.4%	-0.1%
Muskego-Norway	35	32	-3	12.0%	10.9%	-1.1%	9.9%	8.2%	-1.7%
Neosho (K-8)	1	1	0	6.7%	6.7%	0.0%	15.0%	11.4%	-3.6%
New Berlin	34	40	6	12.2%	13.6%	1.4%	6.9%	8.2%	1.3%
Nicolet UHS (9-12)	9	10	1	11.4%	12.8%	1.4%	12.6%	12.2%	-0.4%
Northern Ozaukee	4	2	-2	14.8%	7.7%	-7.1%	12.8%	11.5%	-1.3%
North Lake (K-8)	14	13	-1	14.9%	17.8%	2.9%	10.0%	11.3%	1.3%
Oak Creek-Franklin	47	44	-3	12.8%	11.9%	-0.9%	10.0%	9.6%	-0.4%
Oconomowoc	41	41	0	13.3%	13.1%	-0.2%	14.4%	11.7%	-2.7%
Pewaukee	15	16	1	9.7%	9.7%	0.0%	9.8%	7.1%	-2.7%
Port Washington-Saukville	20	21	1	12.0%	12.2%	0.2%	12.5%	13.3%	0.8%
Richfield (K-8)	3	4	1	10.0%	13.3%	3.3%	15.5%	10.8%	-4.7%
Richmond (K-8)	2	2	0	6.1%	6.7%	0.6%	9.4%	9.3%	-0.1%
Rubicon (K-8)	1	1	0	7.1%	7.7%	0.5%	12.9%	11.5%	-1.4%
Saint Francis	14	12	-2	16.3%	16.0%	-0.3%	11.2%	12.5%	1.3%
Shorewood	12	18	6	9.3%	12.9%	3.6%	12.8%	13.4%	0.6%
Slinger	20	21	1	11.8%	12.0%	0.2%	9.8%	10.5%	0.7%
South Milwaukee	33	34	1	15.5%	16.3%	0.8%	12.0%	12.5%	0.5%
Stone Bank (K-8)	2	2	0	7.4%	6.9%	-0.5%	9.9%	9.1%	-0.8%
Swallow (K-8)	1	2	1	2.4%	5.0%	2.6%	4.3%	8.1%	3.8%
Waukesha	134	141	7	16.1%	16.4%	0.3%	12.8%	13.1%	0.3%
Wauwatosa	80	75	-5	15.4%	14.7%	-0.7%	11.3%	11.4%	0.1%
West Allis	73	84	11	12.4%	13.0%	0.6%	13.7%	13.5%	-0.2%
West Bend	61	62	1	13.4%	14.7%	1.3%	13.1%	13.7%	0.6%
Whitefish Bay	19	23	4	9.5%	11.1%	1.6%	7.8%	8.8%	1.0%
Whitnall	18	20	2	12.6%	13.3%	0.7%	15.3%	15.1%	-0.2%
Metro Milwaukee	2,436	2,455	19	16.1%	17.0%	0.9%	14.6%	14.6%	No Change
<i>Racine</i>	<i>270</i>	<i>311</i>	<i>41</i>	<i>19.3%</i>	<i>21.4%</i>	<i>2.2%</i>	<i>16.7%</i>	<i>18.0%</i>	<i>1.3%</i>



Table 14: Metro Milwaukee English as a Second Language Teachers and Students Over Time

District	ESL Teachers 2009-10	ESL Teachers 2013-14	Change in ESL Teachers	ESL Students 2009-10	ESL Students 2013-14	Change in ESL Students	Percent ESL Students 2009-10	Percent ESL Students 2013-14	Change in % ESL Students
Arrowhead UHS (9-12)	0	0	0	13	5	-8	0.6%	0.2%	-.4 pts
Brown Deer	2	1	-1	150	95	-55	8.5%	5.9%	-2.6 pts
Cedarburg	1	0	-1	52	47	-5	1.7%	1.6%	-0.1 pt
Cudahy	1	0	-1	184	220	36	6.9%	8.5%	1.6 pts
Elmbrook	7	6	-1	304	251	-53	4.2%	3.6%	-0.6 pts
Erin (K-8)	0	0	0	0	3	3	0.0%	0.9%	0.9 pts
Fox Point (K-8)	0	0	0	16	25	9	1.8%	2.7%	0.9 pts
Franklin	6	4	-2	251	198	-53	6.0%	4.5%	-1.5 pts
Friess Lake (K-8)	0	0	0	0	0	0	0.0%	0.0%	No Change
Germantown	1	1	0	44	47	3	1.1%	1.2%	0.1 pt
Glendale-River Hills (K-8)	1	2	1	35	21	-14	3.5%	2.0%	-1.5 pts
Grafton	0	0	0	55	31	-24	2.5%	1.5%	-1.0 pt
Greendale	1	2	1	121	127	6	4.6%	4.8%	0.2 pts
Greenfield	5	5	0	226	229	3	6.5%	5.8%	-0.7 pts
Hamilton	1	2	1	103	87	-16	2.3%	1.9%	-0.4 pts
Hartford J1 (K-8)	0	0	0	88	68	-20	5.3%	3.8%	-1.5 pts
Hartford UHS (9-12)	0	0	0	18	21	3	1.2%	1.8%	0.6 pts
Hartland-Lakeside (K-8)	0	0	0	27	23	-4	1.9%	1.9%	No Change
Herman (K-8)	0	0	0	1	0	-1	1.0%	0.0%	-1.0 pt
Kettle Moraine	1	1	0	36	27	-9	0.9%	0.7%	-0.2 pts
Kewaskum	0	0	0	16	21	5	0.8%	1.1%	0.3 pts
Lake Country (K-8)	0	0	0	5	1	-4	0.9%	0.2%	-0.7 pts
Maple Dale-Indian Hill (K-8)	1	1	0	21	30	9	4.2%	6.3%	2.1 pts
Menomonee Falls	4	4	0	94	81	-13	2.1%	1.9%	-0.2 pts
Mequon-Thiensville	0	1	1	186	118	-68	9.7%	3.3%	-6.4 pts
Merton (K-8)	0	0	0	0	1	1	0.0%	0.2%	0.2 pts
Milwaukee	76	67	-9	7,998	7,420	-578	9.7%	9.5%	-0.2 pts
Mukwonago	0	0	0	15	14	-1	0.3%	0.3%	No Change
Muskego-Norway	0	0	0	34	20	-14	0.7%	0.4%	-0.3 pts
Neosho (K-8)	0	0	0	2	0	-2	1.1%	0.0%	-1.1 pts
New Berlin	0	0	0	89	47	-42	1.9%	1.0%	-0.9 pts
Nicolet UHS (9-12)	0	0	0	13	16	3	1.1%	1.5%	0.4 pts
Northern Ozaukee	0	0	0	0	0	0	0.0%	0.0%	No Change
North Lake (K-8)	0	1	1	11	17	6	0.7%	1.3%	0.6 pts
Oak Creek-Franklin	4	6	2	433	323	-110	7.1%	5.0%	-2.1 pts
Oconomowoc	0	0	0	38	55	17	0.8%	1.1%	0.3 pts
Pewaukee	0	1	1	25	39	14	1.0%	1.4%	0.4 pts
Port Washington-Saukville	0	0	0	31	31	0	1.1%	1.2%	0.1 pt
Richfield (K-8)	0	0	0	3	3	0	0.7%	0.7%	No Change
Richmond (K-8)	0	0	0	4	5	1	0.8%	1.0%	0.2 pts
Rubicon (K-8)	0	0	0	0	0	0	0.0%	0.0%	No Change
Saint Francis	0	0	0	126	96	-30	9.8%	7.6%	-2.2 pts
Shorewood	3	3	0	143	163	20	7.4%	7.9%	0.5 pts
Slinger	0	0	0	5	24	19	0.2%	0.8%	0.6 pts
South Milwaukee	3	3	0	141	131	-10	4.2%	4.0%	-0.2 pts
Stone Bank (K-8)	0	0	0	0	3	3	0.0%	0.8%	0.8 pts
Swallow (K-8)	0	0	0	0	0	0	0.0%	0.0%	No Change
Waukesha	17	19	2	1,201	1,210	9	8.6%	8.8%	0.2 pts
Wauwatosa	5	5	0	201	142	-59	2.8%	2.0%	-0.8 pts
West Allis	7	8	1	364	310	-54	4.2%	3.2%	-1.0 pt
West Bend	5	6	1	156	140	-16	2.2%	2.0%	-0.2 pts
Whitefish Bay	1	0	-1	67	50	-17	2.3%	1.5%	-0.8 pts
Whitnall	2	2	0	74	74	0	3.1%	3.1%	No Change
Metro Milwaukee	155	151	-4	13,339	12,452	-887	5.6%	5.3%	-0.3 pts
<i>Racine</i>	<i>40</i>	<i>40</i>	<i>0</i>	<i>2,709</i>	<i>2,892</i>	<i>183</i>	<i>12.7%</i>	<i>14.2%</i>	<i>1.5 pts</i>



TEACHER MOBILITY

The changes to collective bargaining encompassed in Act 10 have impacted the labor market for teachers in the state. No longer bound by salary and benefit structures established under union contracts, districts ostensibly have greater ability to craft special compensation packages to attempt to recruit sought-after teachers. Consequently, it might be expected that more teachers would be changing districts to take advantage of more favorable financial terms.

In **Table 15**, we sought to quantify the extent to which teachers have been moving from district to district since the adoption of Act 10. Each teacher in the DPI data set is given a unique identifying number, which allows us to follow a teacher over the course of his or her career. Of the 15,111 teachers in the four-county metro's public schools in 2009-10, 10,616 still were teaching in the 2013-14 school year. Of that amount, 9,899 still were teaching in the same school district, while 717 were teaching in a different school district. While a change in districts of so many teachers is not insignificant, this represents just 6.8% of the sample. Teacher mobility does not appear to be widespread.

Table 15: Teacher Mobility Over Time

	Number	Percent
Teachers Employed in Both 2009-10 and 2013-14	10,616	-
Teachers Employed in the Same District	9,899	93.2%
Teachers Employed in a Different District	717	6.8%

Table 16 shows the districts from which the largest number of teachers departed over the five-year timeframe as well as the top destination districts. MPS saw the most teachers leave for other districts, accounting for nearly 20% of all mobile teachers. West Allis-West Milwaukee, meanwhile, saw a large number of teachers leave for other districts, and yet the district also attracted a large number of teachers from other metro districts.

Table 16: Teacher Mobility Over Time

Largest Starting Districts for Mobile Teachers		Largest Destination Districts for Mobile Teachers	
Milwaukee Public Schools	135	Waukesha	54
West Allis-West Milwaukee	62	West Allis-West Milwaukee	48
Waukesha	32	Elmbrook	36
New Berlin	30	Milwaukee Public School	26
West Bend	28	Cedarburg	24

Of the teachers who left for another district, 27.6% were elementary education teachers. Special education teachers accounted for 21% of mobile teachers, while those teaching science or math comprised 14.5%. These three subject areas accounted for nearly two-thirds of all mobile teachers, with the remaining teachers licensed to teach a variety of subjects.

It may appear that special education teachers are particularly mobile as compared to teachers in other subject areas. However, the special education teachers who changed districts represent only 6.2% of all special education teachers. Consequently, it does not appear that districts are poaching specialty teachers from one another.



CONCLUSION

This report set out to quantify the number of public school teachers in the Greater Milwaukee area and to provide insight on their characteristics. Using data collected by the Wisconsin Department of Public Instruction, we were able to identify a number of trends and patterns in the teacher workforce over a period of time that included the adoption of Act 10. Those include the following:

- The number of teachers in the metro area has declined by 700 since 2009-10, with most of the decrease coming from MPS, which lost 730 teachers.
- The teaching workforce is predominately white, with minority teachers comprising just 10.9% of educators despite students of color making up 43.9% of enrollments.
- Twenty percent of teachers over the age of 55 have left the profession in recent years.
- The average experience level fell to 12.7 years, though the average age remains unchanged at 43 years, indicating the workforce is less experienced, but not necessarily younger.
- Just 1% of teachers are assigned to English as a Second Language courses, despite English Language Learners comprising 5.3% of enrollments.
- Teacher mobility between districts exists, but with only 6.8% of teachers moving over the recent five-year period we examined, mobility is not a widespread issue.

The research findings are both instructive and incomplete. The analyses provide an in-depth understanding of the teachers leading classrooms throughout our region. And yet, without the ability to include teachers from private schools, the figures, patterns, and trends identified in this report do not encompass the entire educational environment of Greater Milwaukee.

As with many research projects, this report raises more questions than it provides answers. Some questions for future research include:

- Are there labor efficiencies to be gained through consolidation of some smaller districts?
- Are there enough young teachers entering the profession to sustain the workforce over time?
- In what ways could an emphasis on teachers with low levels of experience impact student achievement?
- What are the implications of teachers entering the profession at a later age than in the past?

We aim to address these and other questions in further research. The second report in the *Metro Milwaukee Educator* series will focus on school and district leaders in the metro area, while our final report will quantify the teacher workforce pipeline to understand if current and projected staffing levels align with the number of teachers who may retire in the near future. Taken together, this body of research on the educator workforce in Greater Milwaukee will help to inform school district leaders, policy stakeholders, and the public, about the people who lead our schools and educate our children.

