



# Student Location and Movement

## Analysis from

### By the Numbers: Matriculating Student Survey 2014

#### INTRODUCTION

Each year, PAEA's Matriculating Student Survey (MSS) attempts to capture a snapshot of first-year physician assistant (PA) students. In 2014, the annual MSS outlined the data collected from 5,330 unique responses from 167 programs (of the 180 programs that were PAEA members at the time).

The focus of this particular research brief is to look at where PA students come from and where their PA education takes them. This report also examines the different types of environments across various regions of the country where students have spent the majority of their lives.

#### RESULTS

Students were asked to indicate the zip code of their legal residence at the time they applied to PA school, not the zip code of the undergraduate university or college where they may have been enrolled at the time of the survey. Using this information, research staff identified the state and US Census Bureau Region of students' former legal residences.

**Table 1** shows the geographic distribution of PA students by state at the time they applied to PA school and their PA program's location. Also displayed is the distribution of PA programs in the United States in 2014.

States that provided the greatest number of students to PA education were Pennsylvania (8.1%), New York (7.9%), Texas (6.7%), California (5.8%), and Florida (5.3%). The states with the highest enrollment of students were Pennsylvania (10.6%), New York (9.8%), Texas (7.6%), North Carolina (6.1%), and Florida (5.9%). The five states with the greatest number of PA programs are New York (21), Pennsylvania (18), California (9), Florida (9), and Ohio (9).

**TABLE 1. Distribution of PA Programs and Students, by State**

	Students' Location at Time of Application		Students' Location at Time of Enrollment		PA Program Location	
	n	%	n	%	n	%
AL	68	1.3	84	1.6	2	1.1
AK	24	0.5	--	--	--	--
AZ	109	2.1	132	2.5	3	1.7
AR	49	1.0	--	--	1	0.6
CA	295	5.8	210	4.0	9	5.0
CO	143	2.8	78	1.5	2	1.1
CT	64	1.2	85	1.6	3	1.7
DC	10	0.2	60	1.1	2	1.1
DE	7	0.1	--	--	--	--
FL	273	5.3	313	5.9	9	5.0
GA	138	2.7	170	3.2	4	2.2
HI	7	0.1	--	--	--	--
ID	56	1.1	52	1.0	2	1.1
IL	164	3.2	143	2.7	5	2.8
IN	84	1.6	113	2.1	4	2.2
IA	64	1.2	74	1.4	2	1.1
KS	50	1.0	51	1.0	2	1.1
KY	32	0.6	28	0.5	1	0.6
LA	79	1.5	73	1.4	3	1.7
ME	13	0.3	35	0.7	1	0.6
MD	111	2.2	70	1.3	3	1.7
MA	128	2.5	143	2.7	6	3.3
MI	240	4.7	141	2.7	6	3.3
MN	132	2.6	55	1.0	3	1.7
MS	24	0.5	32	0.6	1	0.6
MO	55	1.1	50	1.0	3	1.7
MT	27	0.5	11	0.2	1	0.6
NE	54	1.1	69	1.3	2	1.1
NV	27	0.5	32	0.6	1	0.6
NH	31	0.6	34	0.6	2	1.1
NJ	114	2.2	64	1.2	3	1.7
NM	29	0.6	45	0.9	2	1.1
NY	405	7.9	516	9.8	21	11.7
NC	222	4.3	320	6.1	8	4.4

	Students' Location at Time of Application		Students' Location at Time of Enrollment		PA Program Location	
	n	%	n	%	n	%
ND	21	0.4	30	0.6	1	0.6
OH	226	4.4	211	4.0	9	5.0
OK	63	1.2	54	1.0	2	1.1
OR	60	1.2	85	1.6	2	1.1
PA	413	8.1	558	10.6	18	10.0
RI	6	0.1	--	--	1	0.6
SC	76	1.5	46	0.9	1	0.6
SD	27	0.5	24	0.5	1	0.6
TN	103	2.0	173	3.3	6	3.3
TX	343	6.7	399	7.6	8	4.4
UT	90	1.8	34	0.6	1	0.6
VT	20	0.4	--	--	--	--
VA	124	2.4	129	2.5	4	2.2
WA	60	1.2	53	1.0	1	0.6
WV	35	0.7	59	1.1	4	2.2
WI	127	2.5	124	2.4	5	2.8
WY	7	0.1	--	--	--	--
<b>Total</b>	<b>5,130</b>	<b>100.0</b>	<b>5,262</b>	<b>100.0</b>	<b>180</b>	<b>100.0</b>

As displayed in **Table 2**, the Northeast and South regions appear to be importers of PA students, while the Midwest and West regions export PA students. This finding is not surprising since the highest concentration of PA programs is in the Northeast and South.

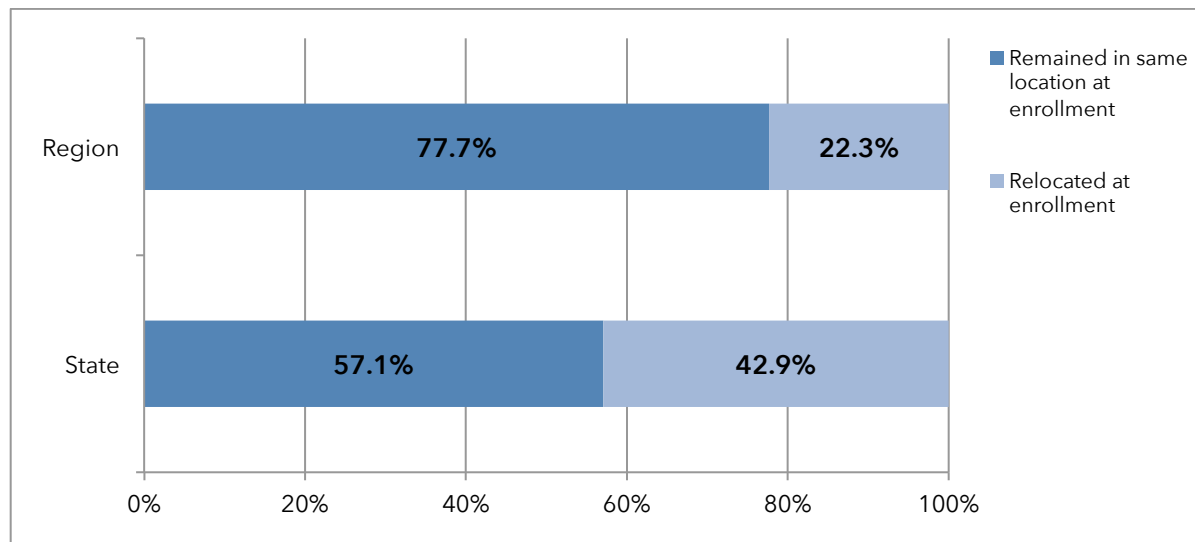
**TABLE 2. Distribution of PA Programs and Students, by U.S. Census Bureau Region**

	Students' Location at Time of Application		Students' Location at Time of Enrollment		PA Program Location	
	n	%	n	%	n	%
Northeast	1,194	23.3	1,435	27.3	56	31.1
Midwest	1,244	24.2	1,085	20.6	42	23.3
South	1,757	34.2	2,010	38.2	60	33.3
West	935	18.2	732	13.9	22	12.2
<b>Total</b>	<b>5,130</b>	<b>100.0</b>	<b>5,262</b>	<b>100.0</b>	<b>180</b>	<b>100.0</b>

Note: See [By The Numbers: Matriculating Student Survey 2014](#), Appendix A for US Census Bureau Regions.

**Figure 1** shows the proportion of students who enrolled in a PA program located in the same state and region as their legal residence at the time of application to PA school. Fifty-seven percent (n = 5,063) of respondents remained in the same state. More than three-quarters (77.7%, n = 5,064) remained in the same region, suggesting geographic location is an important factor in program choice. This suggestion is supported by the fact that 79.9% of students (n = 4,028) reported that the selected program’s location had a positive influence on their choice of program.

**FIGURE 1. PA Student Movement at Enrollment into a PA Program**



Students were asked to report the environment(s) in which they spent a majority of their lives. This information was categorized by the region in which they resided at the time of application to PA school (see **Table 3**).

More than than 60% of all students reported spending a majority of their lives in a suburban environment, regardless of the region they resided in before matriculation. Among students who reported spending a majority of their lives in a rural environment, the greatest proportion of those (39.5%, n = 1,510) resided in the Midwest. Of the students who came from an urban environment, the highest proportion was from the West (24.5%, n = 1,174).

**TABLE 3. Environments Where Students Spent a Majority of Their Lives, by US Census Bureau Region at Time of Application**

	Northeast		Midwest		South		West	
	n	%	n	%	n	%	n	%
Suburban	742	64.4	735	60.2	1,074	62.7	577	63.4
Rural	323	28.0	482	39.5	517	30.2	272	29.9
Urban	205	17.8	202	16.5	331	19.3	223	24.5
Inner city	97	8.4	55	4.5	108	6.6	60	6.6
Overseas	38	3.3	33	2.7	80	4.7	33	3.6
Other	8	0.7	3	0.3	21	1.2	9	1.0
<b>Total</b>	<b>1,413</b>	<b>--</b>	<b>1,510</b>	<b>--</b>	<b>2,131</b>	<b>--</b>	<b>1,174</b>	<b>--</b>

*Note: Students were able to select more than one answer; thus, totals may not equal 100%.*

## CONCLUSIONS AND LIMITATIONS

PA program location may have a major impact on students' program choice, as suggested by the movement of students from states and regions across the country following enrollment into a PA program. The Northeast and South regions of the United States tend to import students from other areas of the country, while the Midwest and West regions export PA students. Concentration of students in a particular state or region will be influenced by a number of factors, including student preferences for a particular geographic setting or environment. Another factor that may impact the concentration of PA students is the class size of programs, which was not taken into account for this report.

Even though there was a robust response rate, not all programs and students participated in the 2014 MSS. Therefore, a potential limitation includes overrepresentation or underrepresentation of students in a state or region. However, based on the location of the PA programs that did not respond to the survey, it is unlikely that their participation would have affected the findings.

Students' former legal residence does not accurately assess where PA students are from or where they spent a majority of their lives. Respondents may have misinterpreted the survey item that requested the zip code for their former legal residence and instead indicated the zip code of the college or university at which they were enrolled before PA school, which may have affected the results. Additionally, the survey did not account for satellite campuses that may be located in different states or regions from the main PA program. This limitation will be addressed in future administrations of the survey.

Further research is needed to track PA students as they enter practice in order to determine how many students remain in the same state in which they studied, as well as how many PA students return to the state where they lived before beginning their PA education.

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