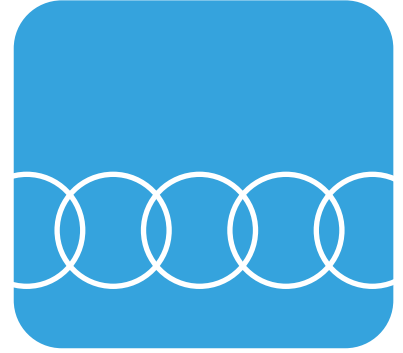




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THE NEW GENERATIONS PROGRAM



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College & University Students in the Pittsburgh Region: A 14-County Snapshot

FINDINGS

A review of college and university enrollment in the Pittsburgh region found that...

Of the **144,839** students attending the region's 33 colleges and universities, the majority are undergrads (84 percent), with 14 percent graduate students and 2 percent professional students.

About **three-quarters of students attend school full-time**; graduate students are the most likely group of students to be part-timers.

About 4 out of 5 freshmen are in-state students. Ninety-five percent of freshmen are from Pennsylvania and states sharing a border with Pennsylvania.

Business and education are the two most popular majors or degrees for students in Pittsburgh area colleges and universities.

INTRODUCTION

In the past century, workers in the Pittsburgh region transformed raw materials to produce steel as the primary export good. Today, young people from around the country and around the world come to the Pittsburgh region for the "added value" of higher education. Pittsburgh ranks 6th in the nation in student concentration and has a range of school types including large state-sponsored schools like the University of Pittsburgh and California University of Pennsylvania; international campuses like Carnegie Mellon University; smaller liberal arts colleges like Allegheny College; and community colleges like the Community College of Allegheny County and Beaver County Community College. Recently, Pittsburgh was ranked the second most attractive college town among similarly-sized cities.¹

Many of these students take the skills they develop here to other places when they leave. Graduates from our local colleges and universities are arguably our new regional export product. Between 1995 and 2000, the Pittsburgh metropolitan area "exported" 18,885 college-educated single people between the ages of 25 and 39. In the same time period, the area gained 11,441 young single educated people, for a net loss of 7,444.

If the region is creating a quality "product" through the value added by our local universities, what does that product look like? What kind of skills are these young people developing here, using when they stay, or taking with them when they go? Where do our raw materials come from? What places are the primary sources of our new student "imports"?

This report provides a brief snapshot of our regional student population. We gathered data from 33 colleges and universities in 14 counties in Southwestern PA and the Panhandle of West Virginia to find out:

- 1) *What is the enrollment status of students in the Pittsburgh region?*
- 2) *Where do students of regional universities come from?*
- 3) *Which majors are most popular among these students?*



To answer these questions, we gathered the following data from a variety of sources:

- > Enrollment data for Fall 2001 (broken down by undergraduate, graduate and professional students as well as part-time and full-time student status) was provided by the Pennsylvania Department of Education and the West Virginia Higher Education Policy Commission.²
- > State of origin for first-time freshmen in Fall 2000 was provided by the National Center for Education Statistics.³
- > Students' declared or intended majors were gathered directly from the 33 colleges and universities for Fall 2002.⁴

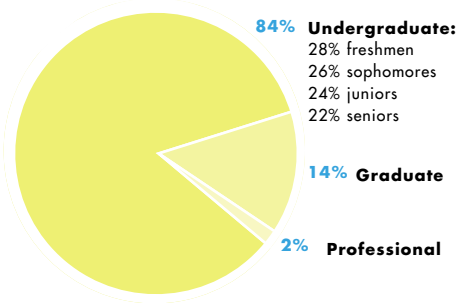
STUDENT ENROLLMENT

In 2001, there were 144,839 students in the Pittsburgh region. The vast majority of students are undergraduates — 84 percent are undergraduate students, 14 percent are in graduate school and only two percent are in professional degree programs (e.g., medical or

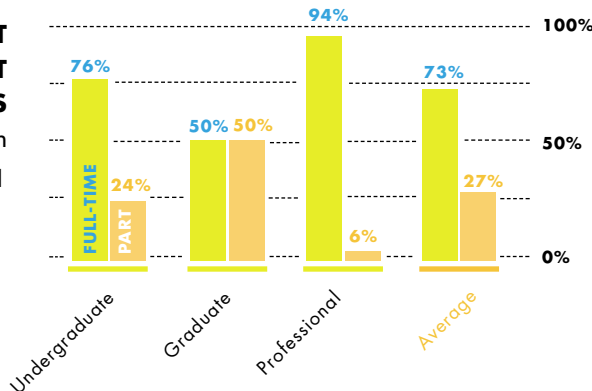
law school). Of undergraduates, an estimated 28 percent are freshmen, 26 percent sophomores, 24 percent juniors, and 22 percent seniors.

Overall, about three-quarters of students (73 percent) are attending school full-time. Twenty-seven percent of students are attending part-time. Undergraduates reflect the averages, with 76 and 24 percent full-time and part-time respectively. Graduate students are split 50-50 between full-time and part-time status, while professional students are overwhelmingly attending school full-time (94 percent).

STUDENT ENROLLMENT BY TYPE OF DEGREE
Pittsburgh Region
FALL 2001



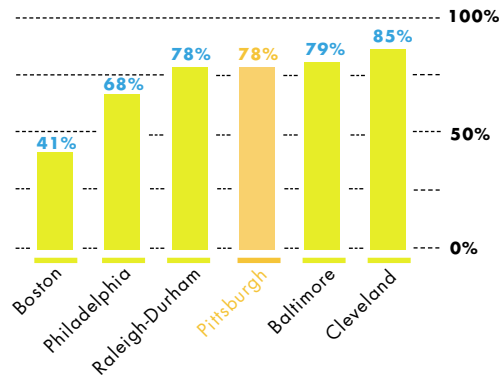
FULL TIME/PART TIME ENROLLMENT STATUS
Pittsburgh Region
FALL 2001



STATE OF ORIGIN

Not surprisingly, a large majority of freshmen at colleges and universities in the Pittsburgh region were from the state of Pennsylvania; 78 percent of Pittsburgh-area freshmen were Pennsylvanians in 2000.

PERCENTAGE OF IN-STATE FRESHMAN BY REGION
2000



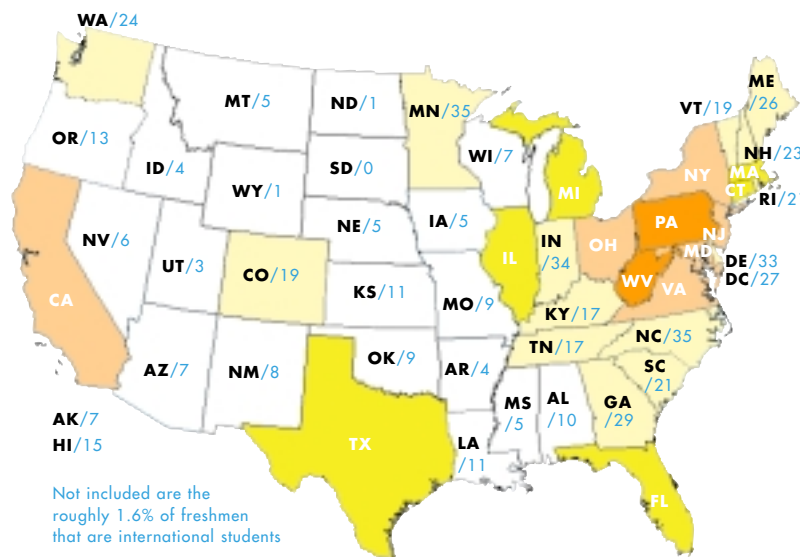
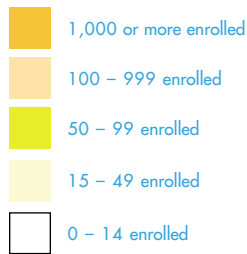
We examined in-state freshmen enrollment in five other college-rich regions that are comparable to Southwestern Pennsylvania: Baltimore, MD, Boston, MA, Cleveland, OH, Philadelphia, PA and Raleigh-Durham-Chapel Hill, NC.⁵ Pittsburgh's share of in-state students is about the same as Baltimore, MD and Raleigh-Durham-Chapel Hill, NC (with 79 and 78 percent of in-state freshmen, respectively). Compared to Pittsburgh, Cleveland had a higher percentage of in-state students with 85 percent of freshmen from Ohio and Philadelphia had a lower percentage of in-state students (68 percent). Boston had the lowest share of in-state freshmen, with less than half from Massachusetts (41 percent).

We examined data from the National Center for Education Statistics to determine the state of origin for first-time college freshman. This data was only available for U.S. students; the proportion of international freshman is estimated to be 1.6% of all first-time first-year students.⁶ Students from neighboring states that share a border with Pennsylvania make up another 17 percent of the Pittsburgh region's

freshman enrollment. West Virginians are well represented, with 10 percent of first year undergraduate students. Three percent of freshmen are from Ohio, and two percent are from New York. Students from Maryland and New Jersey make up about 1 percent each of the total freshman class. The map on the next page shows the number and percentage of Pittsburgh region students from the 50 states.

STATE OF ORIGIN FOR 27,830* STUDENTS IN THE PITTSBURGH REGION

*First Time College Freshmen
FALL 2001



PA	77.9%	/ 21,678
WV	9.9%	/ 2,757
OH	2.9%	/ 796
NY	2.2%	/ 603
MD	1.2%	/ 346
NJ	1.2%	/ 345
VA	0.7%	/ 186
CA	0.5%	/ 126
MA	0.4%	/ 99
FL	0.3%	/ 93
CT	0.3%	/ 86
MI	0.3%	/ 70
TX	0.2%	/ 63
IL	0.2%	/ 56

MOST POPULAR MAJORS AND DEGREES

Using a list of the most common majors, we asked for the declared major or degree of students in the Pittsburgh region. Graduate and professional students are also included in these figures (e.g., medical school and public health graduate students are counted under the broader category of "health sciences;" law students count in the "law/pre-law/paralegal" category).

The most popular major is business administration with 13 percent of students declaring business-related majors or pursuing graduate degrees in business. A close second is education, with 11 percent of students concentrating in that field. "Other," which includes a large percentage of students who have not yet declared a concentration of study, is tied for second, with 11 percent of students. Concentrations in health sciences and liberal arts round out the top five, with 9 and 8 percent of students, respectively.

MAJORS AND DEGREES FOR 125,782 PITTSBURGH AREA STUDENTS FALL 2002

Major & Degrees	Number of Students	% of Total
1. Business Administration (Management, International Business)	15,839	12.6%
2. Education	14,357	11.4%
3. Other (including undeclared students)	14,369	11.4%
4. Health Sciences (Physical Therapy, Occupational Therapy, Nursing)	11,814	9.4%
5. Liberal Arts	10,225	8.1%
6. Psychology/Human and Social Services	8,121	6.5%
7. Computer & Information Sciences	7,102	5.6%
8. Engineering (Chemical, Electrical, Industrial, Mechanical, Other)	6,070	4.8%
9. Communication (Journalism, Speech, Visual Communication)	4,295	3.4%
10. Biological Science	3,605	2.9%
11. Fine Arts	3,525	2.8%
12. Law/Pre-Law/Paralegal	3,142	2.5%
13. English/Technical Writing	2,488	2.0%
14. Public Administration	2,411	1.9%
15. Accounting	2,096	1.7%
16. Criminal Justice	1,699	1.4%
17. Finance	1,814	1.4%
18. Marketing/Sales/Public Relations	1,782	1.4%
19. Human Resources/Labor Relations	1,461	1.2%
20. Environmental Science	1,078	0.9%
21. Chemistry	1,037	0.8%
22. Economics	900	0.7%
23. Geology/Geography	870	0.7%
24. Mathematics/Actuarial Sciences	928	0.7%
25. Foreign Languages	741	0.6%
26. Commercial Art/Graphic Design	517	0.4%
27. Physics	442	0.4%

QUESTIONS FOR FUTURE RESEARCH

These basic facts and figures about local students raise two main questions for future research.

1.

Can research give us a better understanding of the types of students most attracted to the Pittsburgh region? What are our best avenues for attracting additional students from other regions, states, and countries?

Research suggests that certain majors attract more students from outside the region. The Center for Economic Development (CED) at Carnegie Mellon University found that, between 1990 and 1999, 38 percent of business majors were from outside the Pittsburgh region, while more than half of computer and engineering students were from outside the region.⁷ Dr. Susan Hansen's research shows that students coming to Pittsburgh were primarily attracted by the quality of local universities.⁸

How can the region leverage its reputation as a top-notch "college city" to attract more students from outside the region? Out-of-state and international students bring new dollars into the region and can have a positive impact on the local economy. For instance, we calculated that for every foreign student attracted to the Pennsylvania, more than \$25,000 flowed into the state economy each year.⁹ Could we market the region's institutions of higher education more aggressively to international students, thereby bringing more dollars into the region?

2.

Which students are we best able to absorb into the local economy and retain? How does retention vary by degree and place of origin? What steps can the region take to capture more graduates from our local colleges and universities?

Pittsburgh's overall retention rate is estimated to be between 40 and 52 percent. Yet for certain types of graduates, that rate is much lower. Undergraduates and doctoral students leave at higher rates than students pursuing Masters degrees; students majoring in science and technology are more likely to leave than business majors; graduates of Carnegie Mellon University are more likely to leave than Duquesne graduates.¹⁰

Dr. Susan Hansen's research shows that certain factors impact the decision to stay or leave the Pittsburgh region.¹¹ Low starting salaries, especially for women, minorities and international students, proved to be a major factor for "leavers." Positive factors for "stayers" include affordable housing, proximity to family, low-cost transportation, access to high quality continuing education and economic opportunities in the region.

If Southwestern Pennsylvania is a net loser in the race to attract and retain young educated people, as some recent Census data suggests, can the region take steps to reverse the flow? Can we better align the skills developed by local students to meet the demands of the local economy, so that more graduates can be absorbed into local jobs?



COMING SOON...

This research is the first report in a series designed to get a better handle on the student population in Southwestern Pennsylvania. In particular, future reports will examine the issue of regional internship opportunities for local students to better inform the programs and strategies of the Regional Internship Center (RIC) of Southwestern Pennsylvania. Internships can help transform southwestern Pennsylvania's concentration of college students into a regional competitive advantage and talent retention benefit. Research by Collaborative Economics shows that students are more inclined to remain in a region where they have completed an internship. Internships can also meet the needs of the region's businesses. Internships are a cost-effective way to test-drive potential employees, allowing firms to gauge a potential employee's fit with the company at relatively low cost and risk. Several companies, like Intel and Union Carbide, hire 70 percent of their new hires from the ranks of intern.

Future research reports about students and internships include:

- What Students Think About and Want From Internships (*Winter 2004*)
- What Employers Think About and Want From Internships (*Spring 2004*)
- Internship Map and Wage Range for Southwestern Pennsylvania (*Summer 2004*)

For more information about internships, please visit the RIC's website at www.ric-swpa.org.

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The New Generations Program was created by the Coro Center for Civic Leadership to help inform a wide range of regional demographic conversations and initiatives. New Generations staff conducts applied research that is aimed at developing a better understanding of the region's talent attraction and retention challenges. Coro would like to thank the Richard King Mellon Foundation for their generous support of the New Generations Program.

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Please visit our website at www.newgenerations.info

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END NOTES

¹ Donald Hammonds, "Of college towns its size, Pittsburgh ranked 2nd best," Pittsburgh Post-Gazette, November 12, 2003.

² Pennsylvania Department of Education, Division of Data Services, Fall Enrollment 2001. Last Update: 02-25-2003. (Available on-line at <http://www.pdehighered.state.pa.us/higher/lib/higher/collunivprof2003.pdf>). "Enrollment Report, Fall 2001," West Virginia Higher Education Policy Commission, May, 2002. (Available on-line at <http://www.hepc.wvnet.edu/resources/index.html?..../menu.html&title.html&reports.html>).

³ National Center for Education Statistics, Integrated Postsecondary Education Data System. (Available on-line at <http://nces.ed.gov/ipeds/pas/specifyLinchPin.asp>).

⁴ Our list of majors was assembled from lists given to us by local colleges and universities.

⁵ Collegia Inc. recently ranked the most attractive college towns in the US. Five of the six regions shown (not including Philadelphia) were included in Tier II (metropolitan areas with populations between 1 million and 2.6 million with at least one nationally ranked college institution). Donald Hammonds, "Of college towns its size, Pittsburgh ranked 2nd best," Pittsburgh Post-Gazette, November 12, 2003.

⁶ We estimated the percentage of foreign students using data from the Division of Data Services of the Pennsylvania Department of Education.

⁷ Center for Economic Development, "Plugging the Brain Drain: A Review of Studies and Issues for Attracting and Retaining Talent," Carnegie Mellon University, November 2, 2001.

⁸ Dr. Susan Hansen and Leonard Huggins, "Career and location decisions: Recent Pittsburgh area university graduates," Graduate School of International and Public Affairs at the University of Pittsburgh, September 19, 2001.

⁹ NAFSA: Association of International Educators, "Pennsylvania Foreign Student Contribution," 2003. (Available on-line at <http://www.nafsa.org/pdf/Pennsylvania.pdf>).

¹⁰ "Plugging the Brain Drain," 2001. Paul Gottlieb, "The Problem of Brain Drain in Ohio and Northeastern Ohio," Center for Regional Economic Issues at Case Western Reserve University, 2001. "Career and Location Decisions: Recent Pittsburgh Area University Graduates," 2001.

¹¹ "Career and Location Decisions: Recent Pittsburgh Area University Graduates," 2001.