Analysis of Ten Years of Data on Summer Term, with Recommendations for Addressing Declining Enrollment and Enhancing Student Success

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Office of Institutional Research and Planning

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I. Introduction

The Office of Institutional Research and Planning (OIRP) was asked to prepare a report covering ten years of trend data on Summer Term. This was in response to a steep decline in enrollment in summer 2019. The report contains findings from the data analysis and suggests areas of opportunity that could form the basis for institutional discussions about the future of Summer Term and its role in enrollment planning for the full academic year.

It should be noted that in 2012 (FY13), Portland State University (PSU) changed Summer Term from a self-support function to a model more consistent with the other three terms. Before FY13, the School of Extended Studies (SES) administered Summer Session (as it was previously known), providing support services to academic departments specifically for summer term. SES was eliminated as a unit in FY13, along with the self-support function, which resulted in a loss of headcount and student credit hours that had formerly contributed to PSU's total enrollment counts.

However, enrollments in summer had begun to decline even before the elimination of SES. They have been steadily decreasing every year since 2010, with the steepest declines immediately after the closure of SES, and continuing downward again to the lowest numbers reported for Summer Term 2018 and 2019. This corresponds with enrollment declines during the academic year, although summer has decreased more than other terms. With the elimination of SES, the College of Education (COE) terminated its Continuing Education Program, which had been the largest contributor to headcount and credit hours during Summer Term. Also, cessation of COE's cooperative education program offerings in 2018 contributed to enrollment declines in that year. Even given these changes, the substantial reduction in the number of sections offered within the College of Liberal Arts and Sciences (CLAS), which offered 51% fewer sections in

2019 than 10 years ago, has been a primary driver in lower enrollments; enrollments in other schools or colleges have remained largely flat, or have seen modest increases during this period.

A report written (but never finalized) in 2012 that addressed an earlier steep decline in Summer Session enrollment identified many of the same factors that have been proposed as reasons for the 2018 and 2019 enrollment declines: lack of sufficient marketing and promotion, insufficient course offerings or the "wrong courses" being offered, financial aid policies, cost of tuition, and overall institutional enrollment decline year over year since 2010. While not all of these factors continue to be relevant, many have persisted over time and, along with the downward trend in headcount and credit hours over the past eight or nine years, appear to suggest long-standing issues, perhaps with the way Summer Term has been administered, as well as the role it has played in overall institutional enrollment planning.

II. Opportunities and Recommendations

The findings of this report suggest opportunities for leveraging Summer Term more effectively within the academic year, both to support the four pillars of the Student Success Initiative and increase revenue generation. This report does not recommend a return to the SES model for Summer Session, which focused mostly on special interest courses rather than courses required for degree completion. Some consideration should be given to possibilities for generating revenue from non-credit courses or other activities; for example, excess physical space capacity has been mentioned as a place where Summer Term could be more effective. But the immediate issue for PSU, as it appears from the data, is stabilizing enrollment or reversing declines in all terms.

One idea might be to give more consideration to the role of Summer Term as a starting place for new students, as well as a route to more efficient degree completion. This could help to

stabilize or increase enrollment and help students better achieve their goals. Branding and marketing of Summer Term as a place to begin, catch up, or complete degrees could be enhanced. Advisers could contribute to this by identifying students with deficiencies or close to graduation who could benefit from summer enrollment. Incentive programs for students to enroll in the summer could be explored, including the availability of Pell Grants during this term. Also, marketing specifically to resident students, with student success goals in mind, might help stabilize PSU's enrollment of Oregonians, which has fallen in all terms, but more steeply in the summer. (It should be noted that lower resident enrollment overall has had a negative effect on state appropriations to PSU, as degrees awarded to resident students was lower in 2018-2019 compared to University of Oregon (UO) and Oregon State University (OSU), resulting in a loss of revenue from the Student Success and Completion Model.)

A mechanism to provide a greater degree of oversight over the undergraduate curriculum might be a helpful addition to existing enrollment planning and budgeting processes in the Office of Academic Affairs (OAA). For example, a vice provost for curriculum, or similar position, could provide additional coordination among units to help achieve institutional goals and support enhanced planning across all four terms, while allowing the schools and colleges autonomy over their own programs and course offerings.

Persistent enrollment declines in Summer Term, marked by two consecutive years of even steeper losses, have contributed to budget uncertainties for the full year. An institutional approach to strategic enrollment planning that includes summer as a key piece of the academic year would be an important step in addressing many of the issues noted in this report. Marketed effectively, Summer Term could play a stronger role in increasing enrollment across the university. However, it needs a clear and unified institutional focus, with all units participating,

to leverage enrollment patterns that have emerged over time and create opportunities for new students to complete degrees affordably.

Note on the data

This report is limited to an analysis of data available from the Student Centralized Administrative Reporting File (SCARF) for subject years: it is beyond the scope of institutional research to examine behaviors, decisions, or motivations at the department or school/college level. It is unclear from the data whether or not units uniformly responded to budgeting practices within OAA by cutting sections or adjuncts during the summer, as has been suggested. It is also beyond the purposes of this report to examine detailed data on individual courses. However, the findings reported here may provide a foundation for discussions at the executive level and within OAA, as well as further analysis of specific issues.

Detailed data tables are contained in Appendix A, while key findings are highlighted by graphs and charts in the report. It is organized under four major topics: student enrollment, courses and sections, faculty, and financial aid.

III. Findings from Analysis of Trend Data

Enrollment

Headcount and student credit hour enrollment in Summer Term have declined every year since 2010, with the lowest enrollments in summer 2018 and 2019. Enrollment had been in decline even before elimination of SES, along with similar declines in other terms (Figure 1).

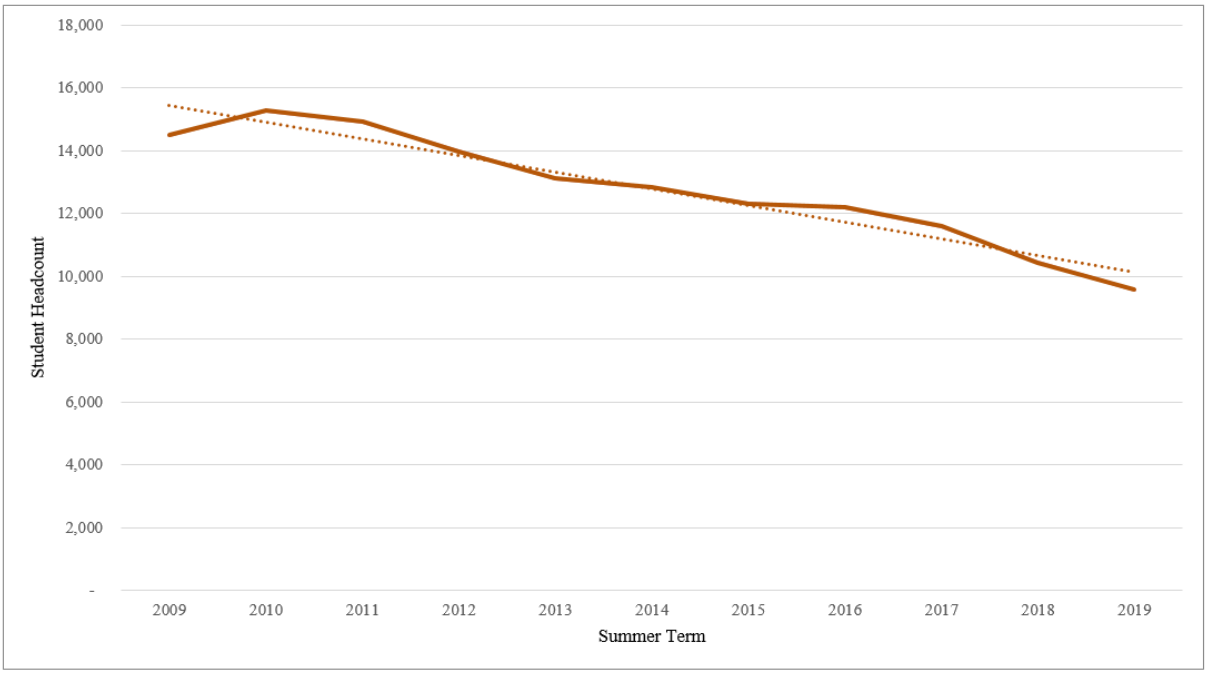

Figure 1. Headcount enrollment in Summer Term. (Source: SCARF, end of term, subject years.)

Enrollment in Summer Term has declined more steeply than other terms. On average, Summer Term has lost 530 students every year, whereas Spring Term, which is the second highest in overall declines, has lost 222 (Figure 2).

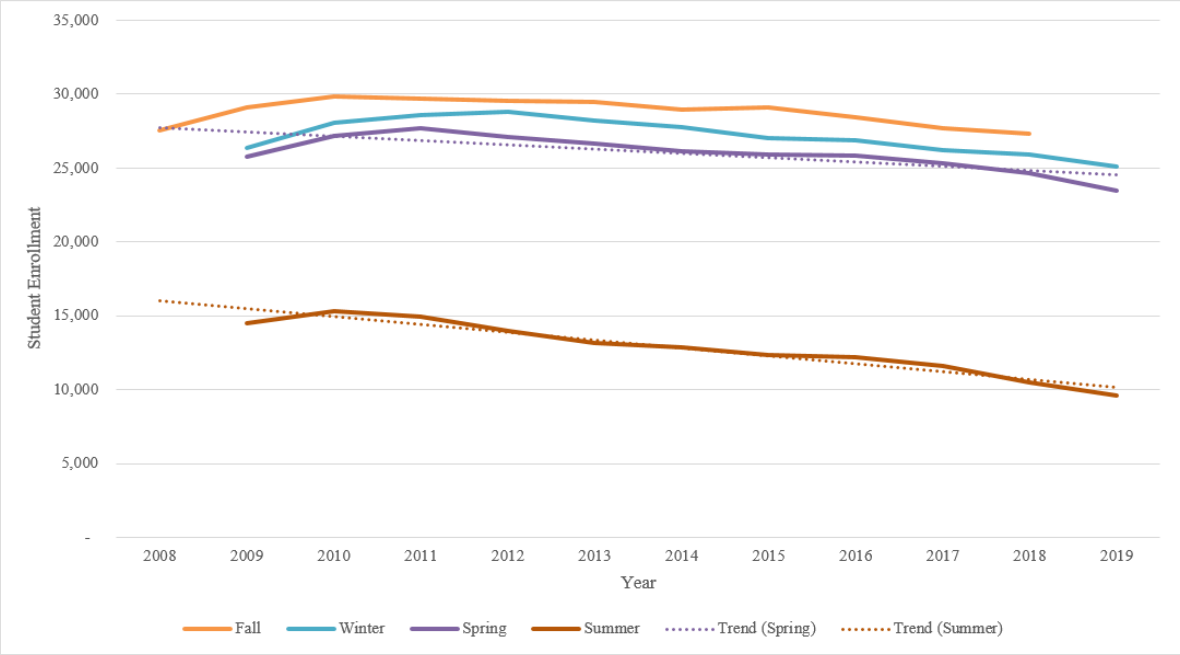

Figure 2. Term by term headcount enrollment. (Source: SCARF, end of term, subject years.)

PSU's summer enrollment decreased more than the other Oregon Public Universities (OPU) between 2017 and 2018, as shown in Table 1. OSU and Western Oregon University saw the largest increases in this period. Since 2009, summer enrollment at OSU and Oregon Institute of Technology has grown the most.

Table 1
Headcount Enrollment during Summer Term at Oregon Public Four-Year Institutions

Summer term	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Eastern Oregon University	1,829	2,092	2,097	2,057	2,142	1,873	1,642	1,483	1,264	1,272
Oregon Institute of Technology	1,321	1,434	1,394	1,392	1,446	1,512	1,586	1,739	1,667	1,633
Oregon State University	8,055	9,068	9,857	10,752	11,197	12,018	12,729	13,618	14,328	14,766
Portland State University	14,506	15,280	14,921	13,981	13,119	12,839	12,318	12,199	11,605	10,455
Southern Oregon University	2,178	2,142	2,262	2,064	2,015	1,968	2,036	1,952	1,840	1,878
University of Oregon	8,948	9,387	9,674	9,713	9,842	9,631	9,770	9,278	8,795	8,542
Western Oregon University	2,064	2,408	2,416	2,097	2,010	1,870	1,857	1,756	1,641	1,861
Total duplicated headcount	**38,901**	**41,811**	**42,621**	**42,056**	**41,771**	**41,711**	**41,938**	**42,025**	**41,140**	**40,407**

(Source: HECC Office of Research and Data)

Note: Totals are not unduplicated across institutions; some students could be enrolled at more than one institution at the same time.

Between 2012 and 2017, the overall decline in student credit hour (SCH) production was largely attributable to CLAS. In 2018 and 2019, SCH production in other units began to decrease, as well (Figures 3 and 4, and Table 2).

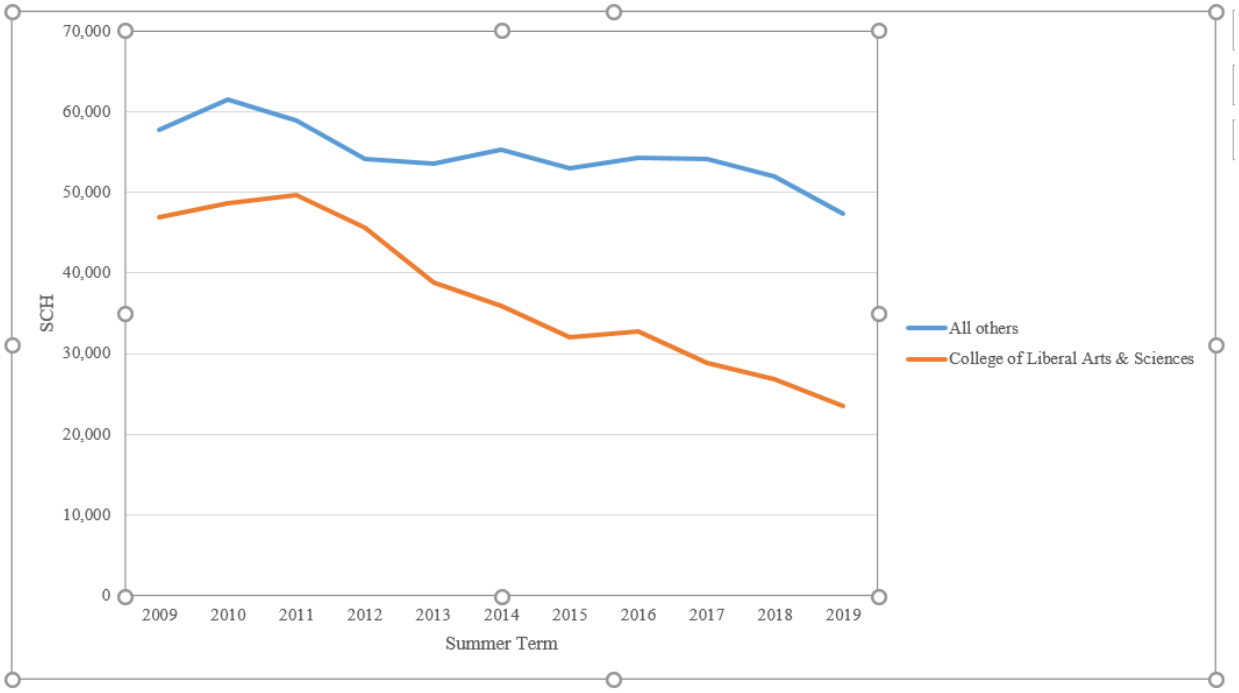

Figure 3. Summer Term student credit hours in CLAS, compared to all other schools or colleges. (Source: SCARF, end of term, subject years.)

Note: Credit hours for students enrolled in the Joint School of Public Health Oregon Health Sciences University programs, and University Honors, are excluded.

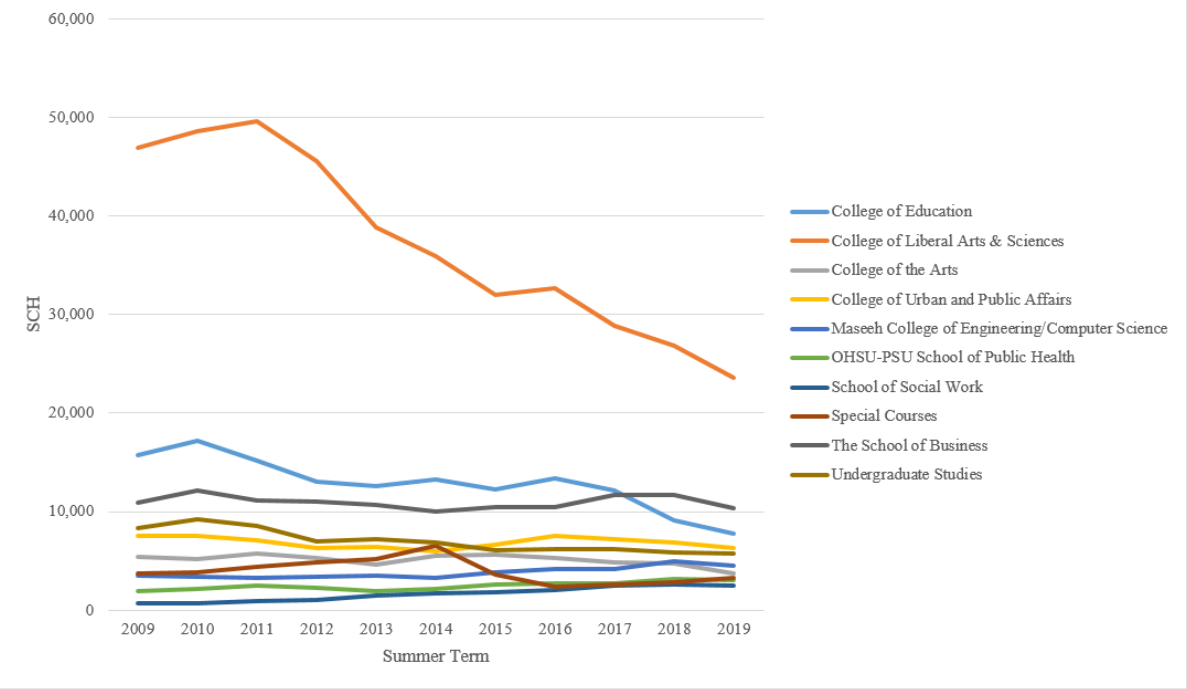

Figure 4. Student credit hours in Summer Term, by school or college. (Source: SCARF, end of term, subject years.)

Table 2

Summer Term Student Credit Hours Generated by School or College

Row Labels	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
College of Education	15,776	17,142	15,206	13,069	12,635	13,266	12,300	13,386	12,169	9,139	7,800
College of Liberal Arts & Sciences	46,907	48,639	49,628	45,565	38,798	35,948	32,019	32,684	28,876	26,862	23,541
College of the Arts	5,397	5,240	5,769	5,295	4,646	5,574	5,669	5,352	4,862	4,780	3,686
College of Urban and Public Affairs	7,516	7,536	7,084	6,308	6,365	5,993	6,630	7,552	7,243	6,890	6,280
Maseeh College of Engineering/Computer Science	3,485	3,432	3,278	3,390	3,464	3,298	3,847	4,137	4,212	4,980	4,482
OHSU-PSU School of Public Health	1,898	2,155	2,468	2,243	1,967	2,117	2,569	2,730	2,764	3,120	3,105
School of Social Work	703	741	976	1,013	1,430	1,722	1,830	2,049	2,513	2,588	2,541
Special Courses	3,749	3,873	4,386	4,857	5,152	6,564	3,635	2,432	2,591	2,866	3,294
The School of Business	10,917	12,147	11,099	10,977	10,659	9,963	10,493	10,452	11,655	11,731	10,349
Undergraduate Studies	8,298	9,201	8,581	7,026	7,257	6,843	6,075	6,239	6,145	5,827	5,753
University Honors College	50	44	54	82	240	387	449	386	434	410	224
OHSU									204	285	171
Grand Total	**104,696**	**110,150**	**108,529**	**99,825**	**92,613**	**91,675**	**85,516**	**87,399**	**83,668**	**79,478**	**71,226**

(Source: SCARF, end of term, subject years.)

Note: Special Courses is primarily Intensive English Language Program (IELP) classes. It also includes Interdisciplinary Studies and International Studies.

Despite declining university enrollment overall, continuation rates across terms have increased for students who enroll in the summer. That means that, even with fewer students, a higher proportion enroll in summer and at least one other term. Since 2009, the proportion of students enrolled in Summer Term who were also enrolled in the preceding Spring Term has increased by 15 percentage points. The proportion of students enrolled in Summer Term who also enrolled in the following Fall Term has increased by 11 percentage points. There has been an eight percentage point increase in the proportion of Summer Term students who attended all three terms: spring, summer, and fall (Figure 5).

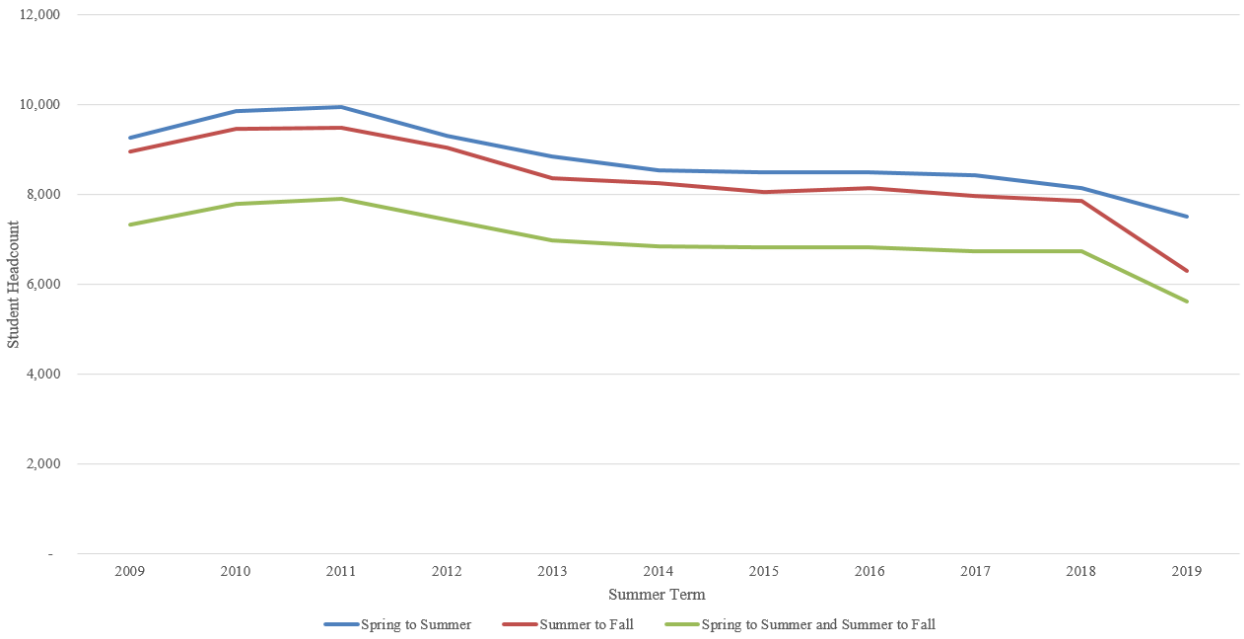

Figure 5. Student enrollment from spring through fall. (Source: SCARF, end of term, subject years.)

The chart shows an increase of approximately 50% between 2009 and 2014 of PSU students enrolled in the full academic year who took courses at other institutions during Summer Term[1]. On average, 80% of these students took classes at an Oregon community college, and about one-third also took PSU summer courses as co-enrolled students (Figure 6).

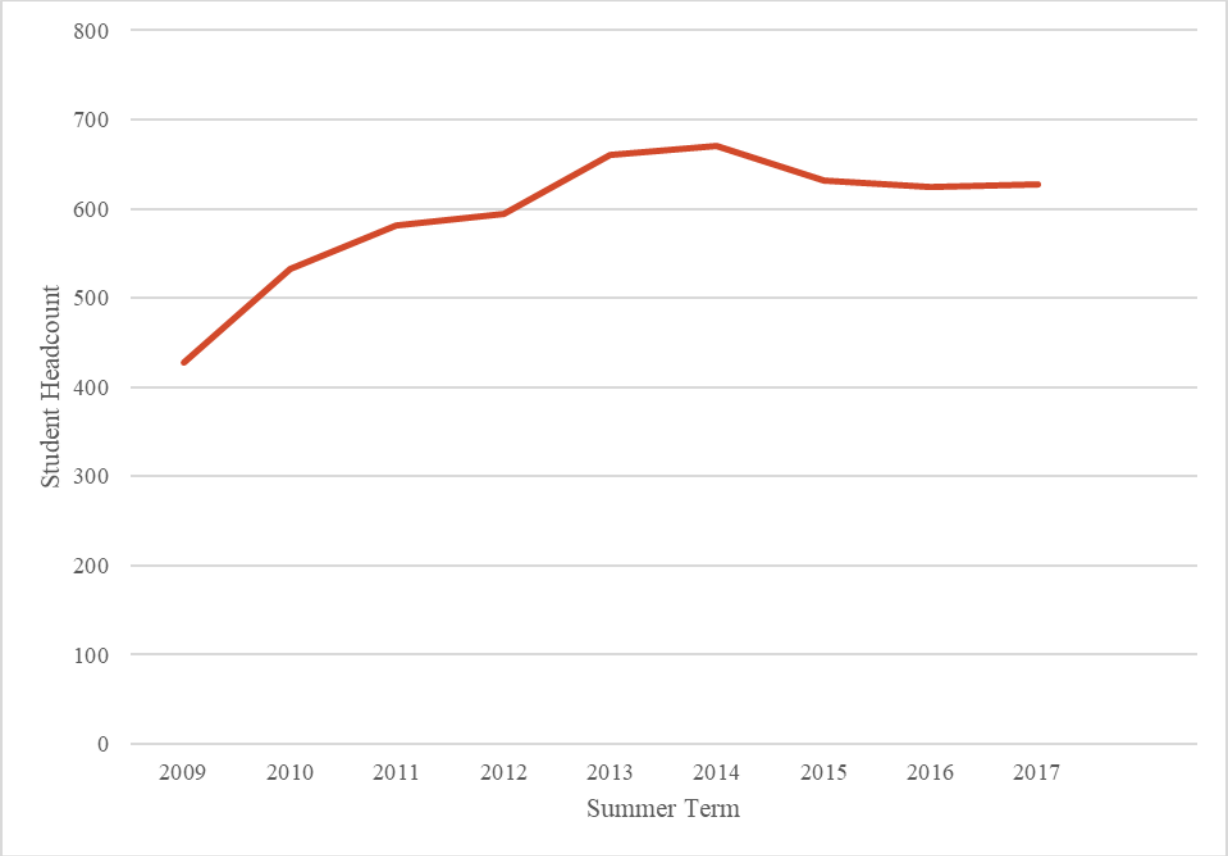

Figure 6. PSU students enrolled in the academic year who enrolled at other institutions during Summer Term. (Source: National Student Clearinghouse.)

Note: Data from National Student Clearinghouse (NSC) were not available for 2018 and 2019 at the time of this report.

[1] Students must be proactive about notifying PSU of transfer coursework taken after enrolling at PSU and some students do not send their transfer courses until they apply for graduation. As a result, course enrollment in more recent years may be an underestimate of the number of PSU students taking summer courses elsewhere.

Table 3 shows that 45% of PSU undergraduates and 51% of graduates over the 10-year period had ever taken a course during Summer Term.

Table 3
PSU students who have ever taken a Summer Term course

	# of PSU Students	# Attended at least one summer term	% Attended at least one summer term
Undergraduate	130,272	58,673	45.0%
Graduate Students	47,087	24,168	51.3%

(Source: SCARF, end of term, subject years.)

Table 4 shows the number of students each year since 2011, and the percentage of the 10-year total, who were enrolled at other universities, and took PSU courses during the summer. Of the OPU, UO and OSU represent the highest percentages.

Table 4
Headcount Enrollment of Non-PSU Students Taking PSU Classes during Summer Term

	2011	2012	2013	2014	2015	2016	2017	2018	**Total**	
Oregon State University	49	50	48	40	28	17	28	28	**288**	**11.7%**
University of Oregon	63	43	44	35	27	35	20	14	**281**	**11.4%**
Portland Community College	8	7	10	6	8	11	15	11	**76**	**3.1%**
Reed College		39	37	35	25	26	20	24	**206**	**8.3%**
Other Oregon Colleges	92	62	69	77	61	65	46	48	**520**	**21.1%**
California colleges	23	24	26	15	23	30	27	31	**199**	**8.1%**
Washington colleges	46	46	16	9	19	17	26	19	**198**	**8.0%**
Other out of state colleges	56	81	62	80	122	108	98	94	**701**	**28.4%**
Total	**337**	**352**	**312**	**297**	**313**	**309**	**280**	**269**	**2469**	**100%**

(Source: SCARF,end of term, subject years; National Student Clearinghouse.)

Average carrying loads for admitted undergraduates and for doctoral students have declined over the 10-year period, while master's carrying loads have increased. The average has fluctuated for all other groups of enrolled students (Table 5).

Table 5
Average Carrying Load of Summer Term Students

Student Level	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Freshman	8.91	8.31	8.51	8.42	8.70	9.06	8.52	8.17	7.25	7.23	6.97
Sophomore	8.34	8.31	8.08	8.05	7.88	7.66	7.44	7.67	7.88	7.74	7.65
Junior	8.88	8.77	8.58	8.38	8.32	8.08	8.03	8.18	8.34	8.48	8.41
Senior	8.49	8.50	8.40	8.16	8.04	8.07	7.92	8.05	8.05	8.41	8.03
Post baccalaureate undergraduate	7.14	7.07	6.96	6.86	6.67	6.86	6.78	7.19	6.72	6.54	6.72
Non-admitted undergraduate	6.94	7.07	7.30	7.04	7.22	7.74	7.13	7.05	7.32	8.12	8.18
Masters	6.64	6.67	6.55	6.56	6.25	6.53	6.56	7.12	6.86	6.71	6.43
Doctoral	3.93	3.46	2.96	3.21	3.63	3.19	2.80	2.69	2.41	2.46	2.63
Post baccalaureate graduate	5.19	5.27	5.60	6.21	6.06	5.30	5.45	5.50	4.99	5.74	5.39
Non-admitted graduate	3.92	3.78	4.03	3.87	3.97	3.87	3.76	3.94	4.06	3.92	4.11
Total	**7.22**	**7.21**	**7.27**	**7.14**	**7.06**	**7.14**	**6.94**	**7.16**	**7.21**	**7.60**	**6.67**

(Source: SCARF, end of term, subject years.)

Resident enrollment in the summer has declined by seven percentage points over the ten-year period; international student enrollment also has declined. However, domestic non-resident enrollment has increased four percentage points (Figure 7; Table 4 in Appendix A).

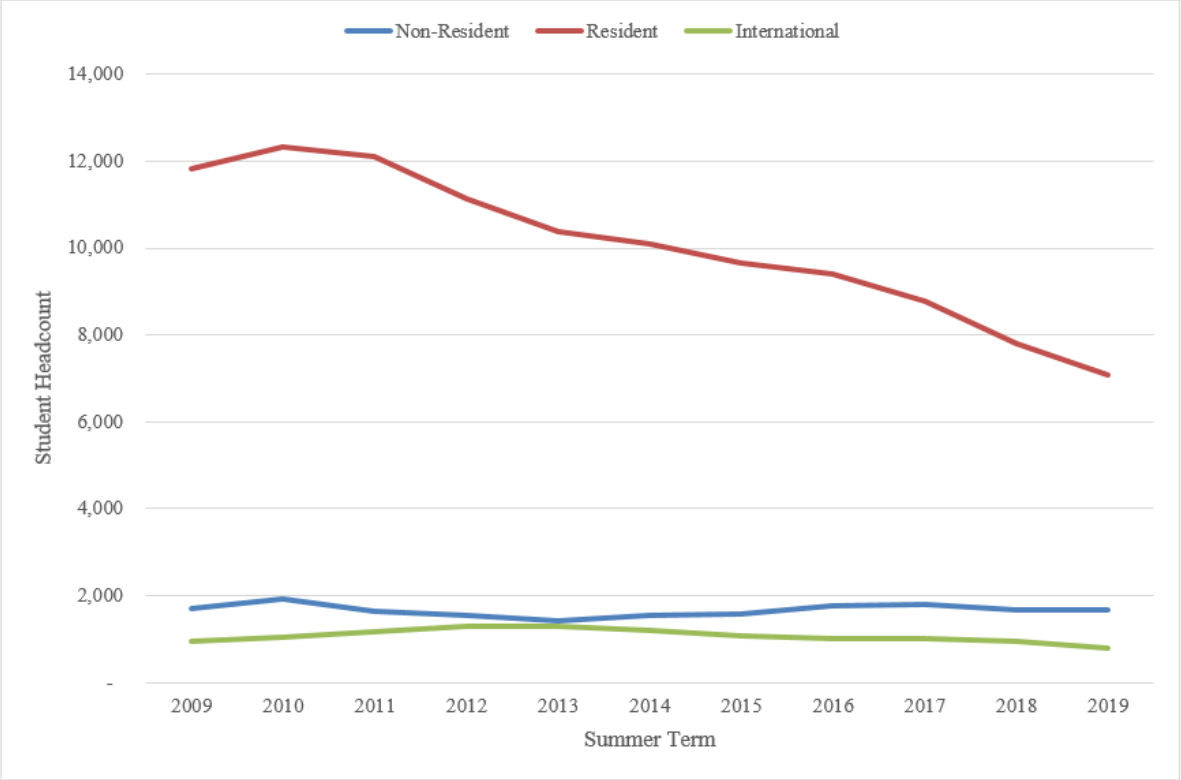

Figure 7. Student headcount enrollment in Summer Term, by residency. (Source: SCARF, end of term, subject years.)

Over the past 10 years, lower division and graduate enrollments have declined more than upper division undergraduate enrollments. While enrollment in all three levels declined in 2018 and 2019, lower division enrollments declined the most, while upper division enrollments have remained the highest (Figures 8 and 9). Figure 10 shows declines in non-admitted graduate summer students between 2010 and 2012, and again between 2015 and 2018. In Summer 2019, this was 14.6% of the 2010 total. The sharp decline in non-admitted graduate students was largely attributable to the reduction of course offerings in Continuing Education (Campus K).

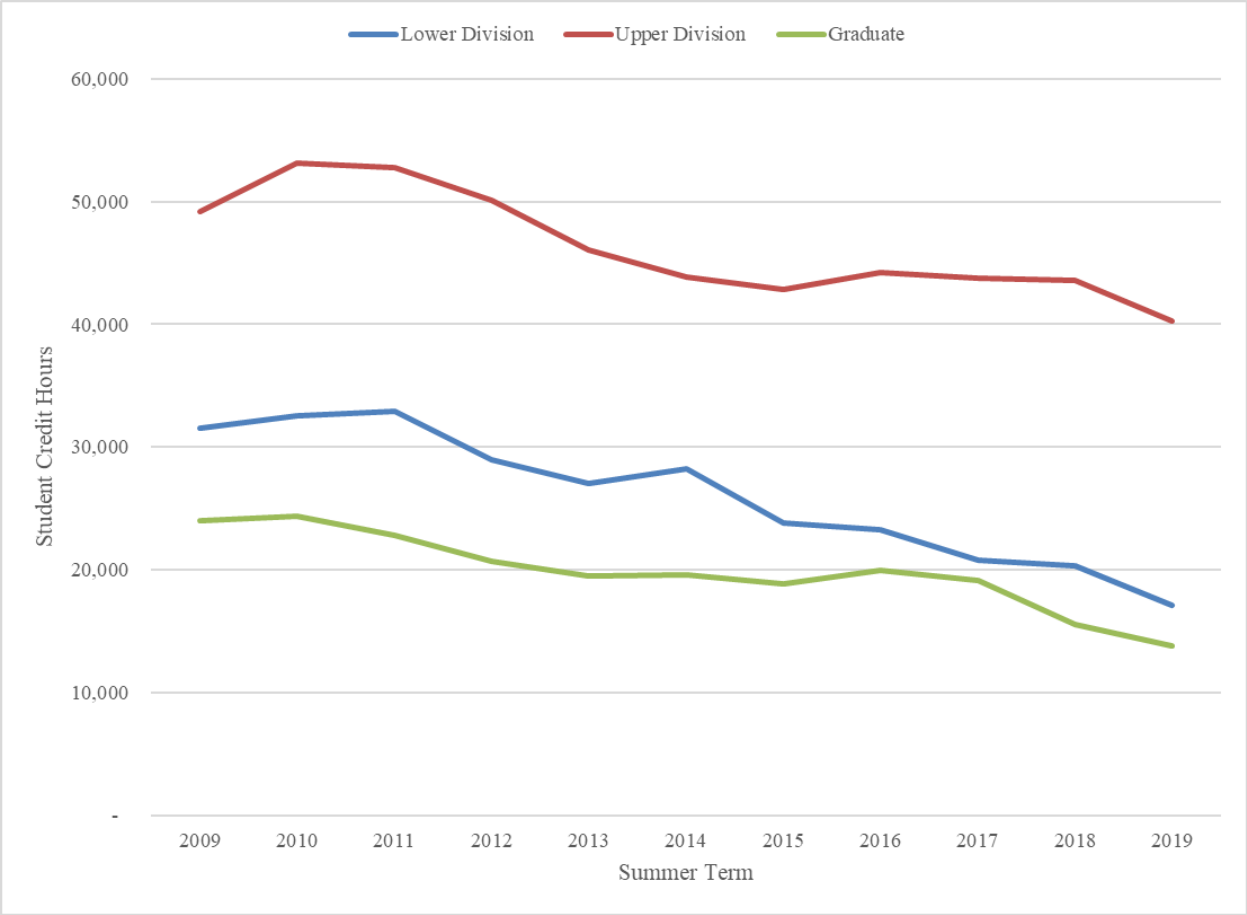

Figure 8. Enrollment by class level. (Source: SCARF, end of term, subject years.)

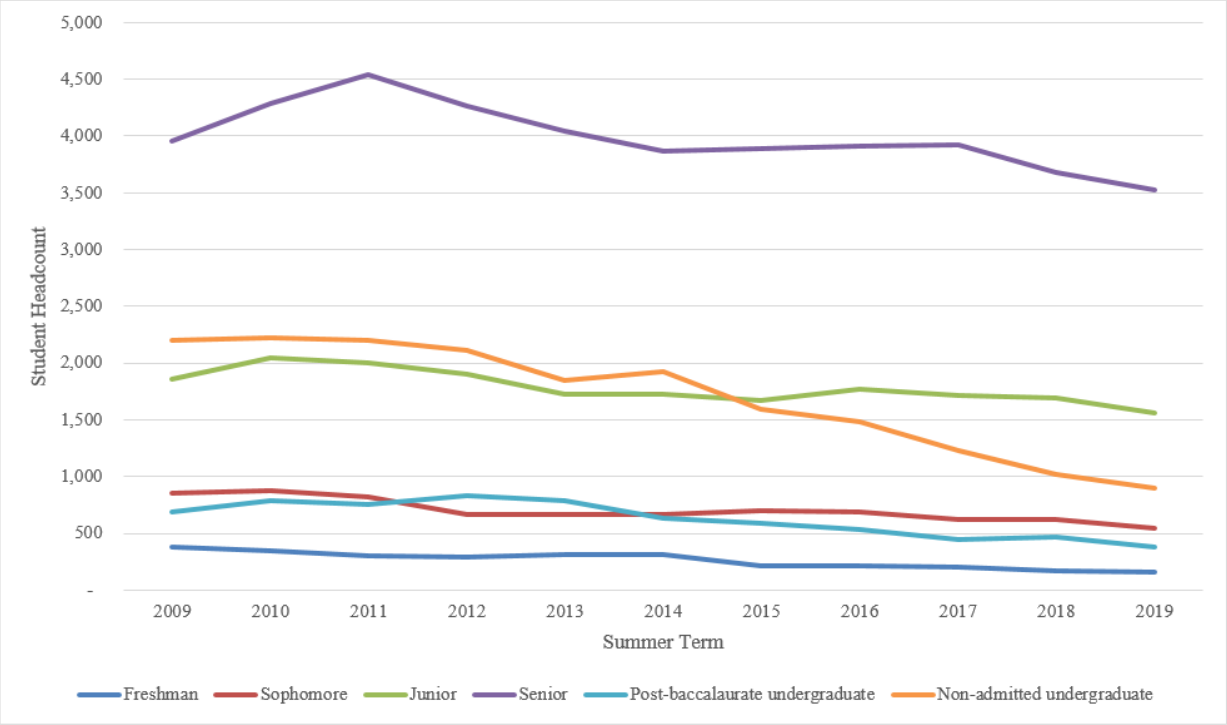

Figure 9. Undergraduate enrollment by student level. (Source: SCARF, end of term, subject years.)

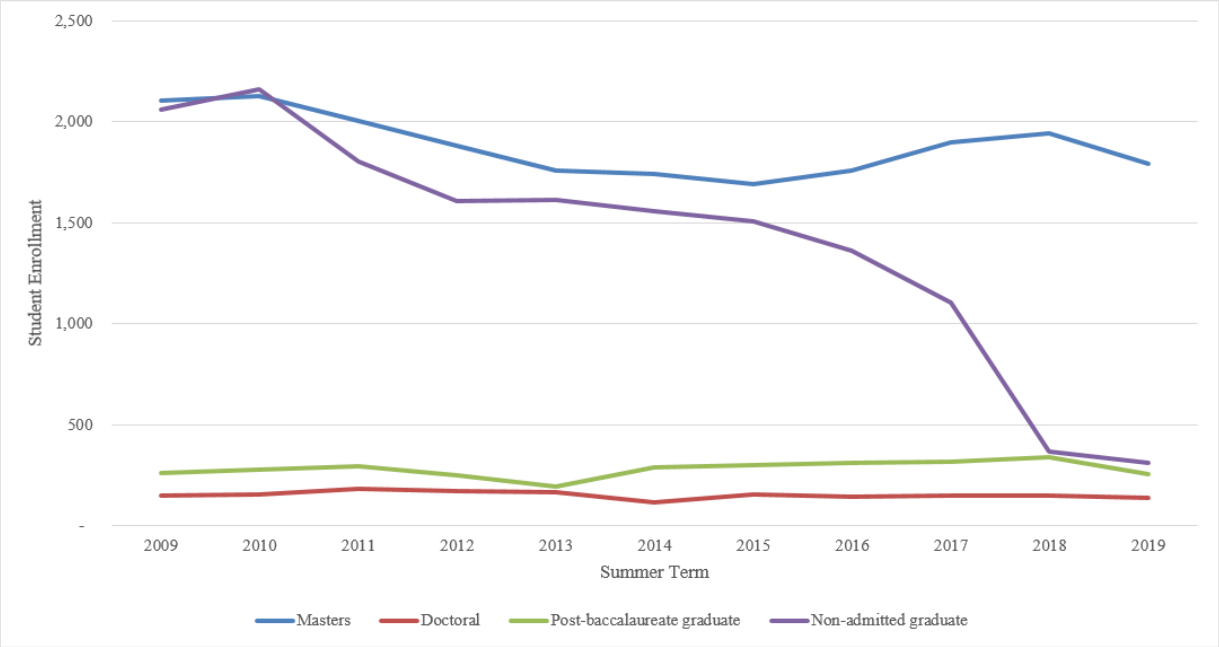

Figure 10. Graduate enrollment by degree level and admit status. (Source: SCARF, end of term, subject years.)

Courses and Sections

As shown in Table 6, the number of sections offered during the summer has decreased every year. The highest reductions were in 2014 at 16% (237), corresponding with the elimination of self-support courses, and 2019 at 12% (114).

Table 6.
Total Summer Term scheduled sections

Summer Term	Total Sections Scheduled	Change from previous summer	% Change from previous summer
2009	**1,593**		
2010	**1,581**	-12	-1%
2011	**1,566**	-15	-1%
2012	**1,605**	39	2%
2013	**1,462**	-143	-9%
2014	**1,225**	-237	-16%
2015	**1,180**	-45	-4%
2016	**1,100**	-80	-7%
2017	**1,023**	-77	-7%
2018	**951**	-72	-7%
2019	**837**	-114	-12%

(Source: SCARF, end of term, subject years.)

Reductions in course offerings within CLAS have been the predominant driver in overall decreases in Summer Term enrollment, while other schools or colleges have remained flat or have seen modest increases. CLAS has seen a 74% decrease in offerings since 2012, a loss of 677 sections (Figures 11 and 12). One reason for the decline was the application of the low enrollment policy, before or just after the beginning of the term.

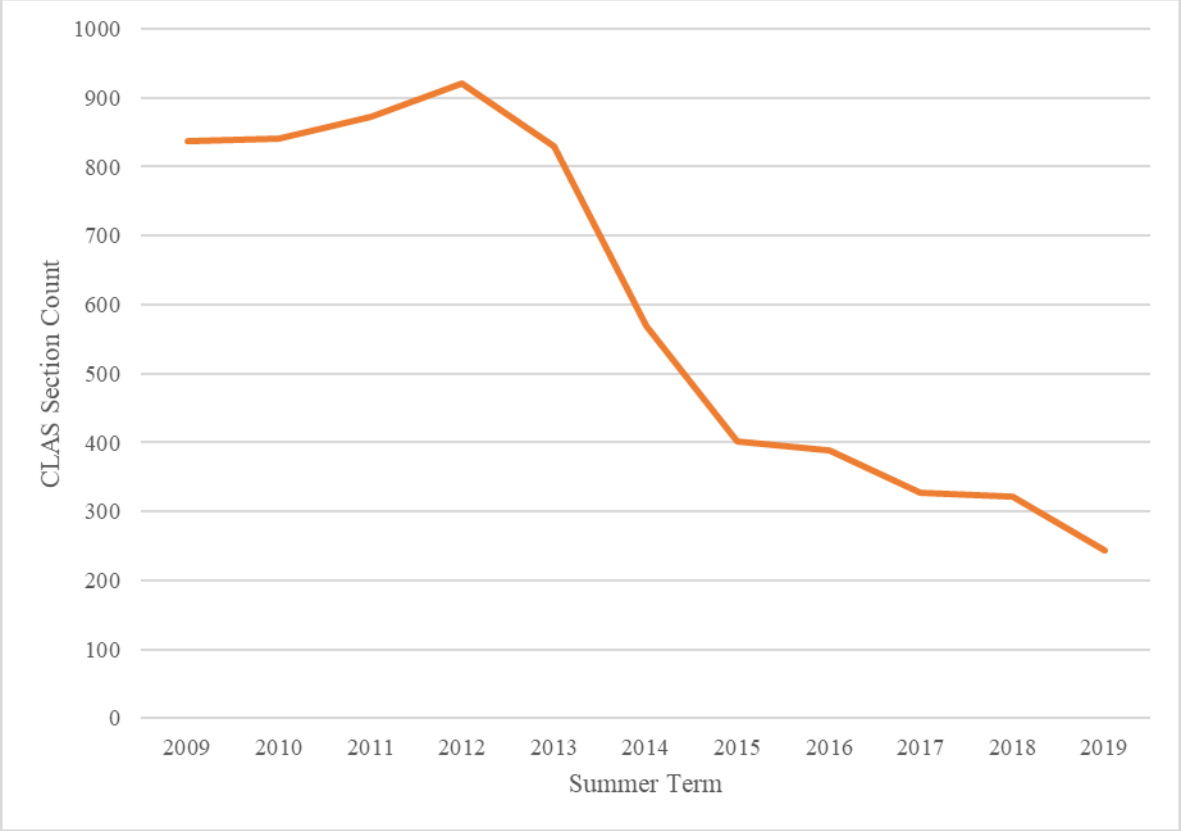

Figure 11. Reduction in number of sections offered by CLAS during Summer Term. (Source: SCARF, end of term, subject years.)

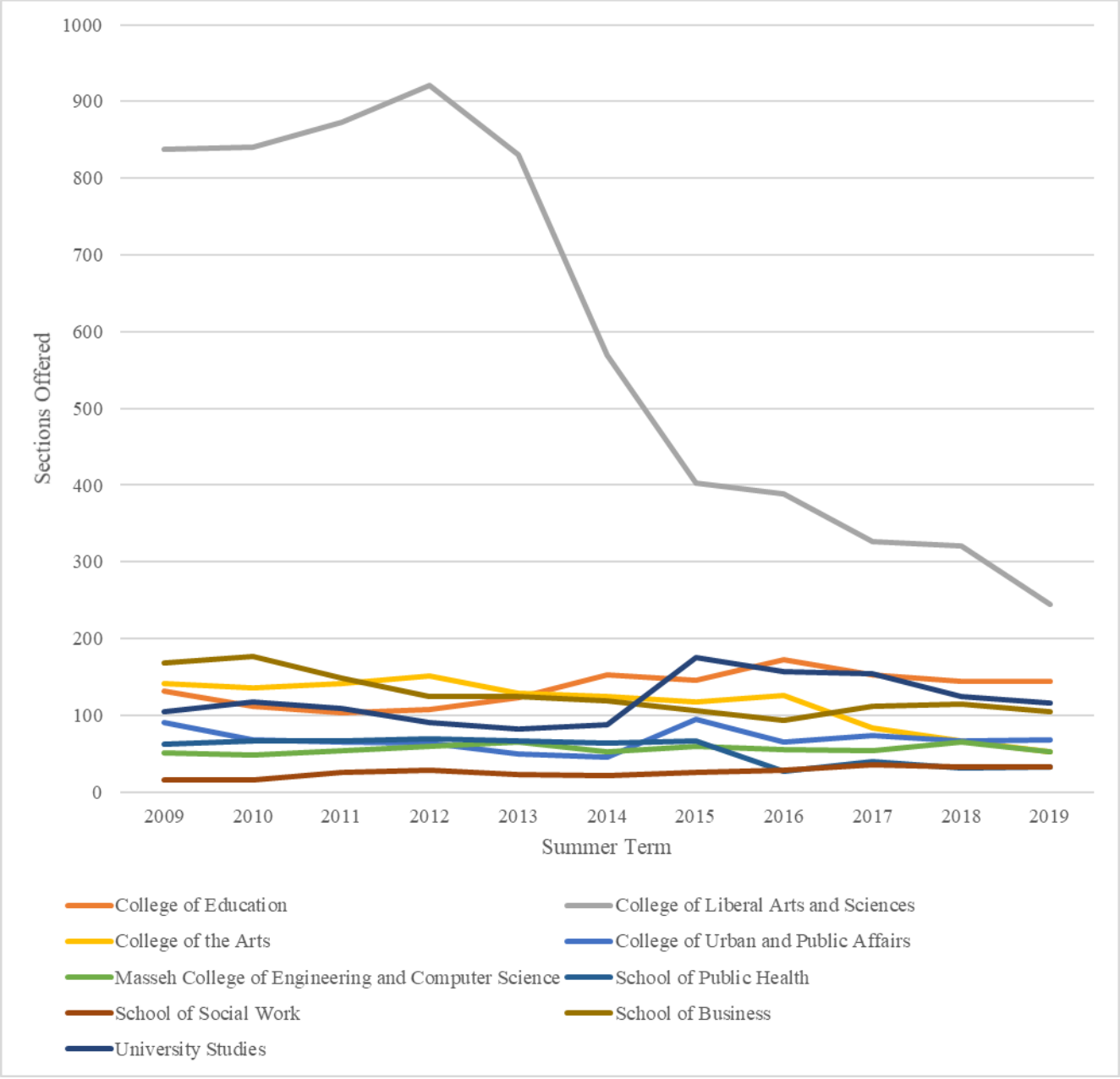

Figure 12. Reduction in number of sections offered during Summer Term. (Source: SCARF, end of term, subject years.)

One example of what may happen when required courses are not offered at PSU during the summer emerges from examination of data from the NSC. It appears to show that when STAT 243 ceased to be offered during the summer, PSU students enrolled in this course at community college and some later transferred the credits to PSU. It is not clear from the data if this was seen as an efficiency in the department, or an unintended consequence of cost cutting in the summer (Figure 13).

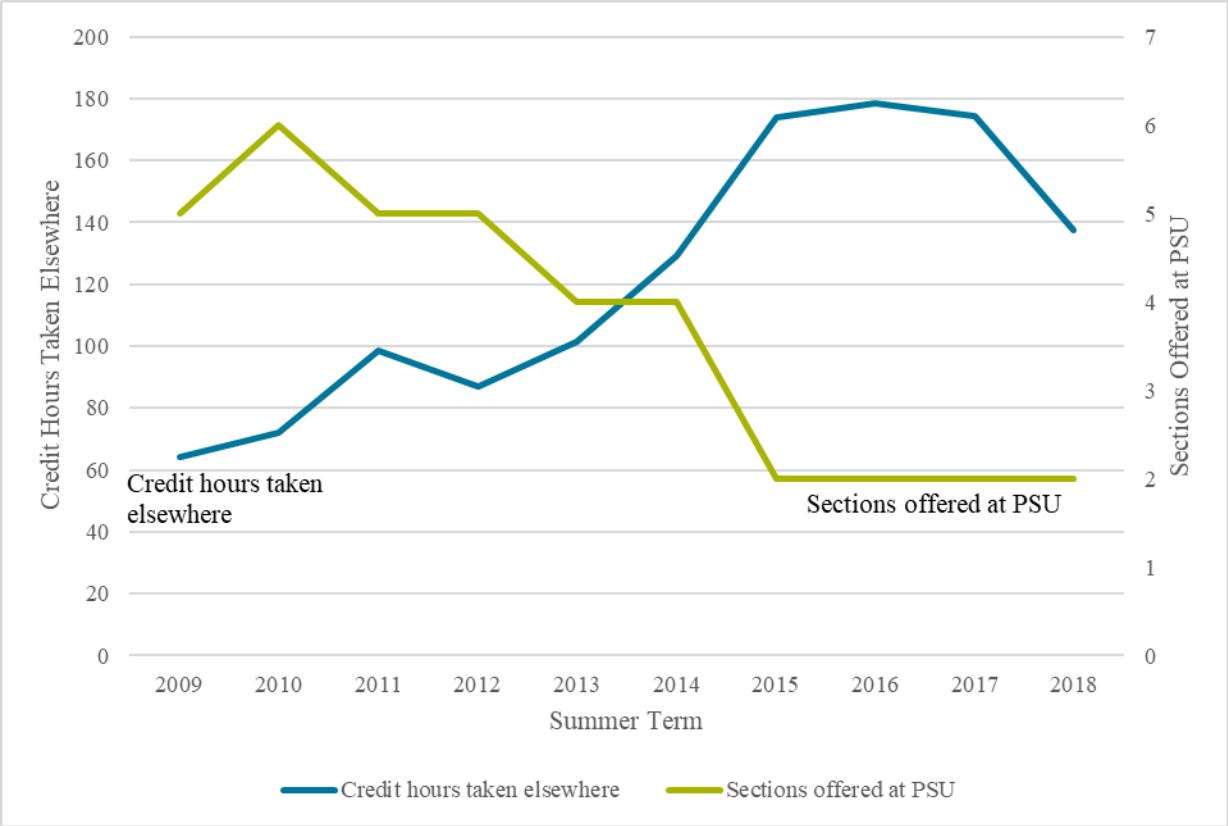

Figure 13. STAT 243 summer sections offered at PSU vs. equivalent credits earned elsewhere by PSU students and later transferred to PSU. (Source: SCARF, end of term, subject years.)

Despite enrollment declines, average enrollment in sections during the summer has increased from 17 to 22 during the period (Figure 14). Table 13 in Appendix A provides a slightly different measure of capacity. It compares fill rates in courses by school or college and student level, between Summer Term 2014 and 2019. In most areas, the rates are about the same; for Maseeh College of Engineering and Computer Science (MCES) there has been an increase, while for the College of Urban and Public Affairs (CUPA) there has been a decrease.

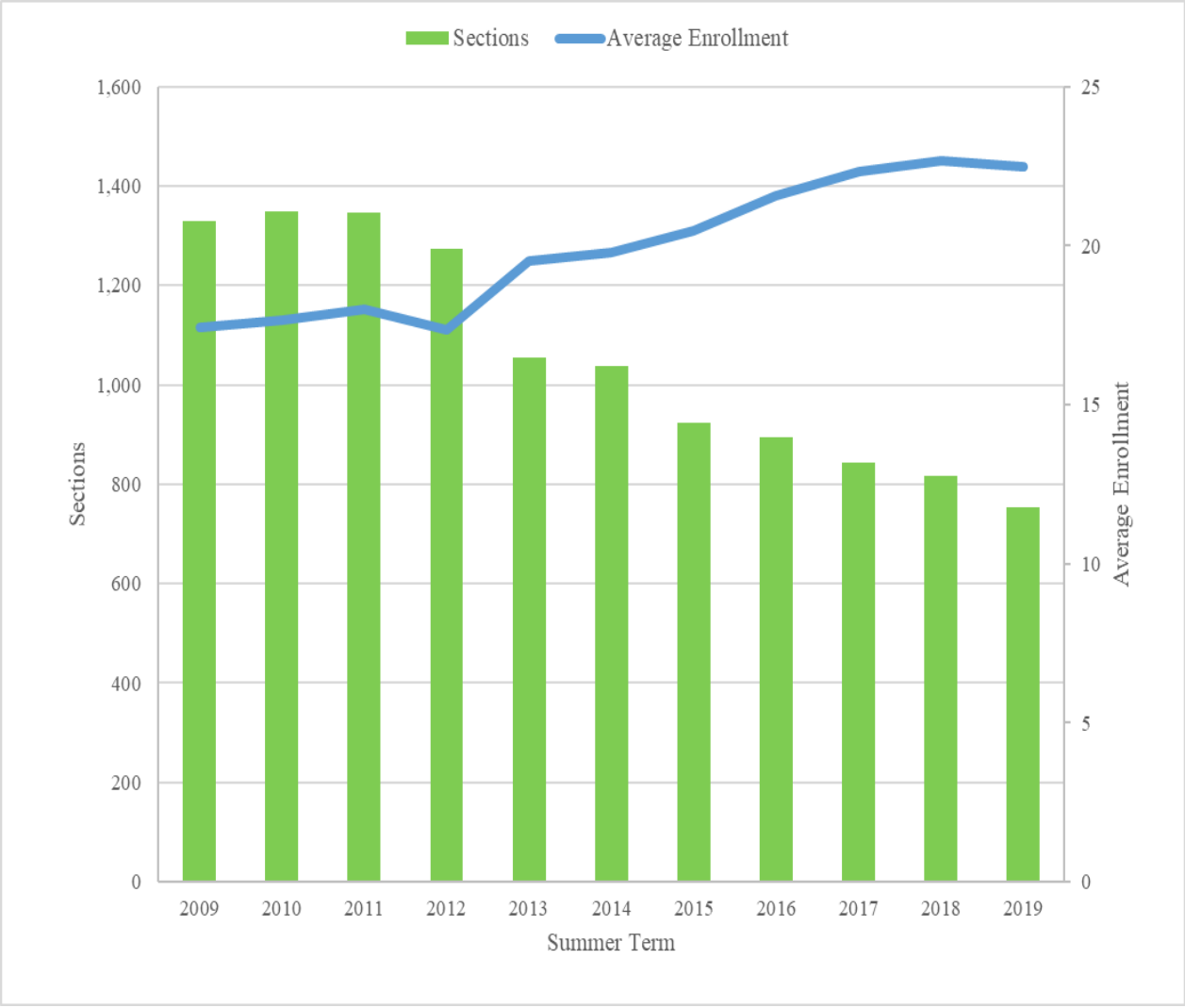

Figure 14. Average course enrollment by number of sections offered in Summer Term. (Source: SCARF, end of term, subject years.)

Online offerings have increased 152% percent over the 10-year period, while face to face offerings decrease. Increases have been at the upper division and graduate levels (Figure 15).

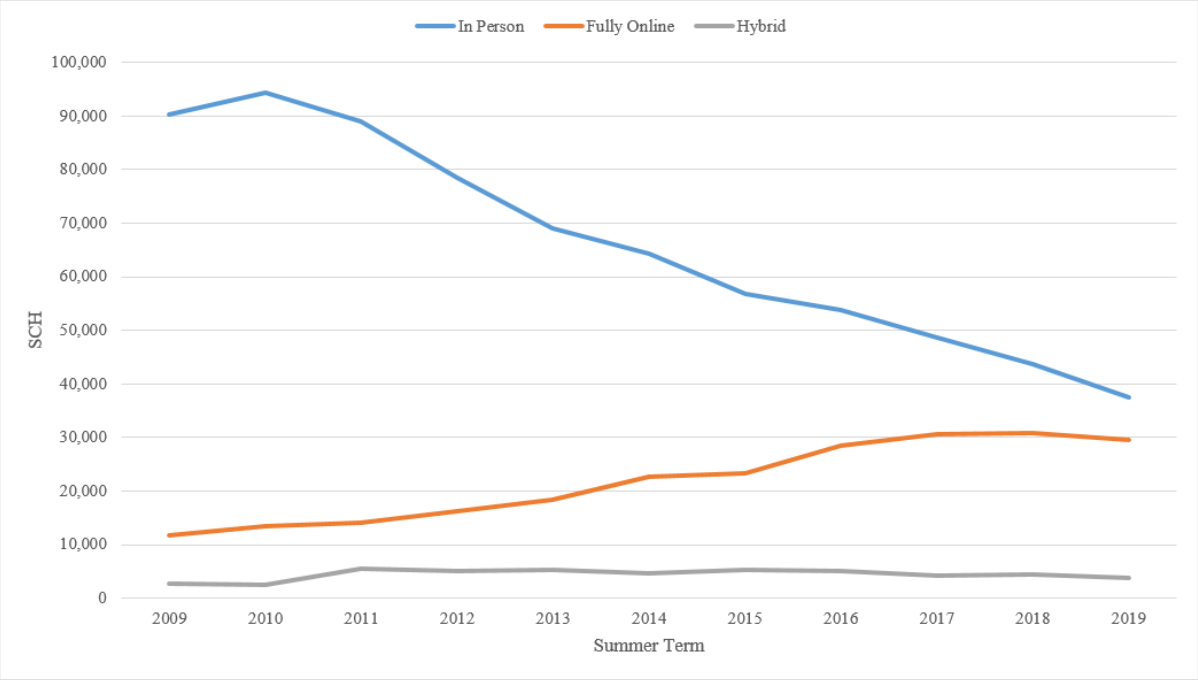

Figure 15. Student credit hours by instructional type: online, face to face, or hybrid. (Source: SCARF, end of term, subject years.)

Table 16 in Appendix A reports the top 20 courses offered over the past 10 years, by total enrollment. Capstone courses and Skills Enhancement credit courses offered to IELP students account for the most enrollment. Other courses represent offerings across the schools and colleges. Course fill rates by school or college, and lower division, upper division and graduate, are compared between 2014 and 2019 in Appendix A, Table 13. Whereas the average fill rate has not changed (61%), there is variation within the schools and colleges and by course level.

Table 7 lists some courses that were popular in the past but are no longer offered. They are primarily cluster courses. Courses like these may represent an opportunity for enrollment during the summer for students completing their degrees and warrant further examination.

Table 7.
List of formerly offered Summer Term courses.

Course	Sections in Last 10 Years	Average Enrollment	Summer Term of Most Recent Offering
CCJ320	5	134.4	2013
BI101	3	66.7	2011
BI251	7	65.1	2015
CS106	6	62.8	2014
MUS361U	4	55.8	2017
BI102	3	51.0	2011
BI253	7	47.1	2015
BI103	3	46.7	2011
MUS301U	8	46.3	2016
MUS262	7	45.4	2015
STAT105	6	35.3	2012
SCI335U	3	35.3	2011
WS363	4	35.0	2012
WS362	4	34.3	2012
PHL312U	4	33.0	2013
MUS261	5	32.2	2015
PSY310U	4	30.8	2014
PSY347	7	30.6	2015
SPED590	6	30.3	2011
CS488	5	29.8	2013

(Source: SCARF, end of term, subject years.)

Figure 16 reports the number of courses coded as community-based learning courses, or CBL[2], during the summer. This number declined steeply between 2018 and 2019.

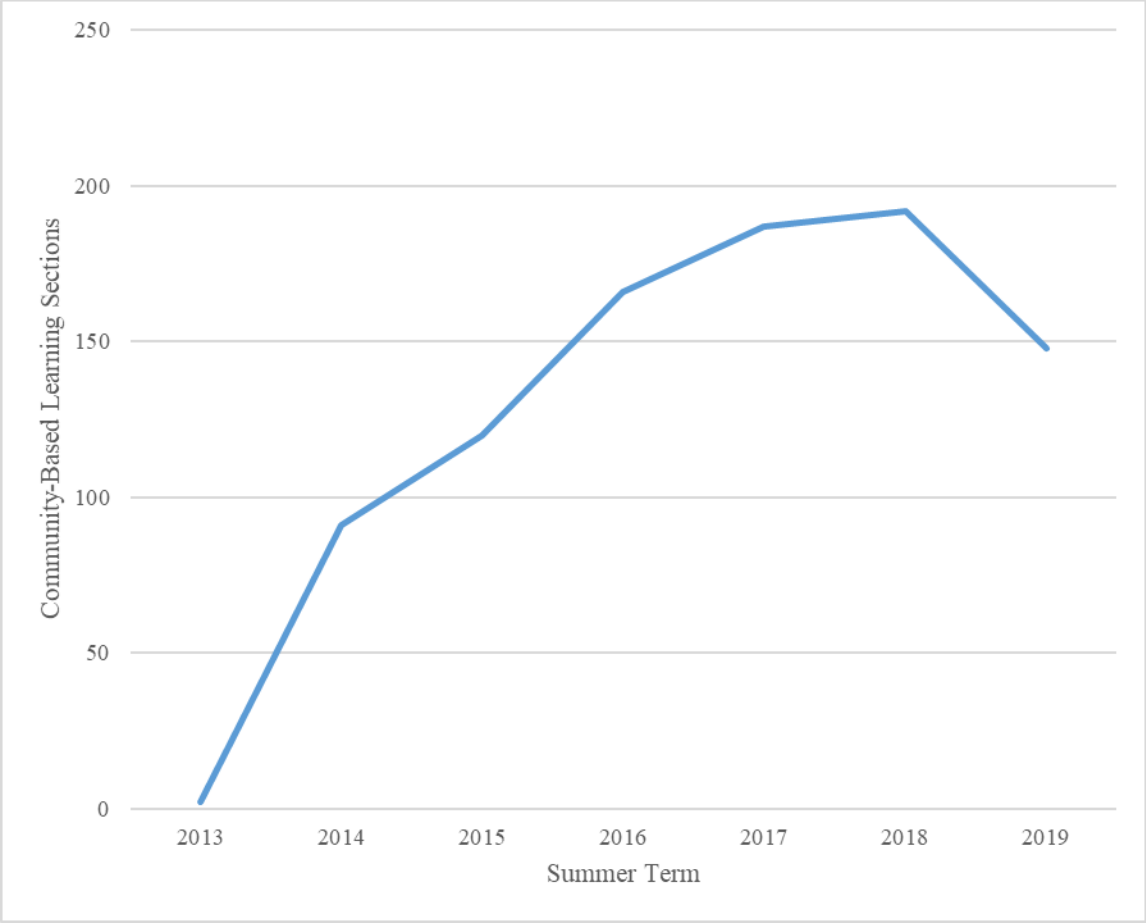

Figure 16. Courses coded as community-based learning. (Source: SCARF, end of term, subject years.)

[2] CBL coding was only formalized in 2013 and prior years are not available. There was approximately a two-year lag in its application to all courses.

Faculty

Table 8 shows the mix of faculty by tenure type for Summer Term 2019 and Fall Term 2018. Because of changes in the way faculty have been coded on the data base for summer terms, data from year to year may not be comparable. This comparison, however, shows fewer tenure-line faculty taught during the summer compared to fall, while non-tenured teaching faculty (NTTF) and adjuncts represented greater proportions of the faculty mix.

Table 8.
Summer Term and Fall Term Instructional Faculty and Graduate Assistants by Tenure Status

Faculty Type	Fall 2018	Summer 2019
Tenure-line	33%	28%
NTTF	18%	23%
Adjunct	41%	48%
Graduate assistant	7%	1%
Total	**100%**	**100.0%**

Source: Human Resources Information System, subject terms.

Note: The table counts faculty hired with instructional funds during Summer Term, and groups them according to the position those faculty normally hold during the regular academic year.

Financial Aid

In 2012, the US Department of Education (USDOE) discontinued year-round award of Pell Grants. Figure 17 shows that when Pell Grants have been available in the summer, eligible students take advantage of them to enroll in Summer Term classes. Again in 2018 and 2019, USDOE allowed students to receive 150% of their annual Pell grant award if they were enrolled at least half-time during the summer. This resulted in higher enrollment of students receiving Pell Grants, although it did not result in an increase in overall enrollment for the term.

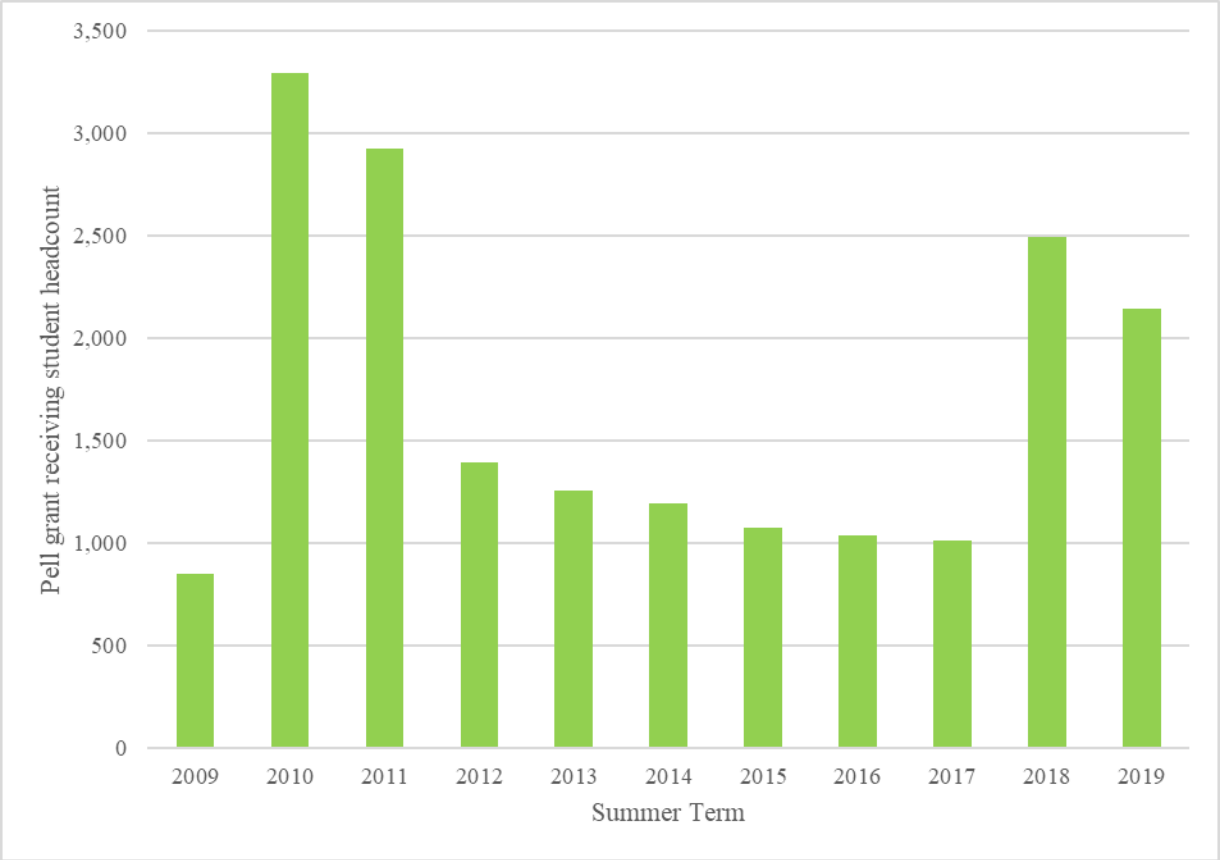

Figure 17. Pell Grant recipients enrolled in Summer Term 2009 to 2019. (Source: Student Financial Services)