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ACSP Enrollment Task Force Report on Masters Degrees

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EXECUTIVE SUMMARY

The ACSP Task Force on Enrollment was constituted in response to concerns raised by some ACSP member schools about decreasing student enrollment. The Task Force was charged with exploring opportunities and challenges faced by graduate planning education (primarily masters' program, but doctoral programs as well). The Task Force sought to:

1. Characterize recent shifts in demand for planning education and explain the causes underlying these shifts;
2. Identify the strategies planning programs have put in place to increase enrollments and their effectiveness to help diffuse successful practices;
3. Explore whether pursuing STEM designation would be beneficial or detrimental for planning programs, for domestic and international students, and whether ACSP should pursue a STEM designation for Planning as a discipline.

We pursued this investigation using multiple methodologies:

1. We held several focus-group-type meetings at the 2018 ACSP Conference. Based on these discussions, we identified the need to conduct a market analysis to identify whether enrollment declines might be linked to economic shifts and trends and to assess the demand for planning education, and we designed a Chairs Survey.
2. We explored the extent to which states' economic contexts may explain enrollment declines.
3. Following the 2018 ACSP conference, we conducted a survey of Planning Chairs and Directors about enrollment trends, their causes and consequences, and the strategies Planning programs are implementing to address this challenge.
4. We put Planning enrollment trends in the context of enrollment in other related disciplines.
5. Since we heard concerns about stagnating salaries in Planning, which, combined with the rising costs of higher education, may make Planning a less desirable profession, we examined Planning salaries in contrast with the salaries in other related disciplines.
6. Since the survey revealed both concerns about a STEM designation and the benefits of a STEM designation, especially for international students, we assessed the pros and cons and ways to pursue a STEM designation for Planning as field.

We reported preliminary findings at the ACSP Administrators Conference in Minneapolis on March 15-16 2019. This report includes the findings of the Interim Report, as well as subsequent research results.

Key findings are:

1. Enrollments in Planning graduate programs have been declining nationally since the end of the Great Recession in about 2010. Declines affect programs in many regions, but some programs are successfully expanding in spite of the national trend. Nationally, current enrollments are back down to where they were in 2003-04.
2. Both undergraduate and graduate education programs in many other fields have also experienced stasis or decline due to demographic factors and the opportunity costs of going to college and graduate school while the economy is booming.

3. Factors particular to the declining enrollments in Planning may include competition from similar fields, regional competition, slow regional economic growth, less attractive starting salaries for Planning graduates, and the recent decline in foreign students.¹
4. Programs at ACSP member schools are trying a variety of techniques to bolster enrollments including building pipelines from related undergraduate majors, pursuing non-traditional teaching models and cohorts, and increasing local public awareness of the field.
5. Enough programs are pursuing a STEM (Science Technology Engineering Math) designation to increase their attractiveness to foreign students that it may be better for the field as a whole to try to get its governmentally-specified CIP code re-designated as STEM for immigration policy purposes. The next time the list is likely to be updated is in 2020, although this is uncertain. But now would be the time for ACSP to resolve whether to pursue the field-wide re-designation.

¹ This report uses the term “foreign” to refer to students who enroll in a university from a residence outside of the university’s country, to be consistent with the terminology of key data sources.

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1. ENROLLMENT IN PLANNING AND STATES' ECONOMIC CONTEXT

The National Center for Educational Statistics collects data on enrollments and many other factors that characterize the U.S. educational system. From 2001 to 2018, the total number of Masters degrees awarded in City/Urban, Community and Regional Planning (CIP code 4.0301) rose significantly from 2001 to 2012 and it has since declined significantly (Figure 1). Throughout this period, the number of international students receiving degrees has steadily increased, until 2017. The decline in total degrees awarded since 2012, and the decline in degrees awarded to international students since 2017 are important concerns for ACSP members.

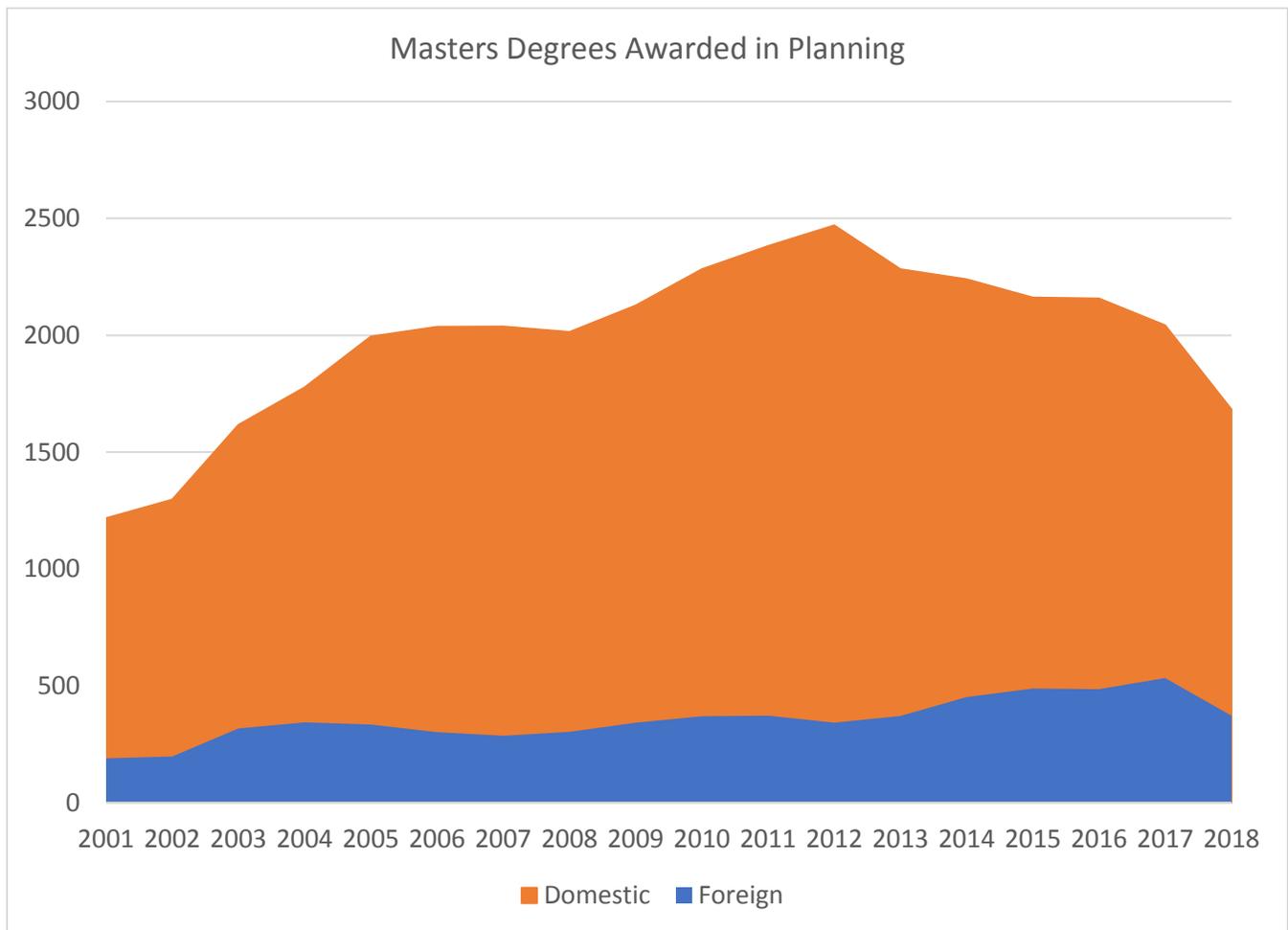


Figure 1: Masters Degrees Awarded in Planning by Year

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions component final data (2001-02, 2002-03, 2005-06 - 2016-17) and provisional data (2003-04, 2004-05, 2017-18). CIP code 4.0301.

Coincident with this period of declining completion numbers, there has also been a shift from more males to more females receiving degrees (Figure 2). However, degrees awarded are declining for both genders since 2012.

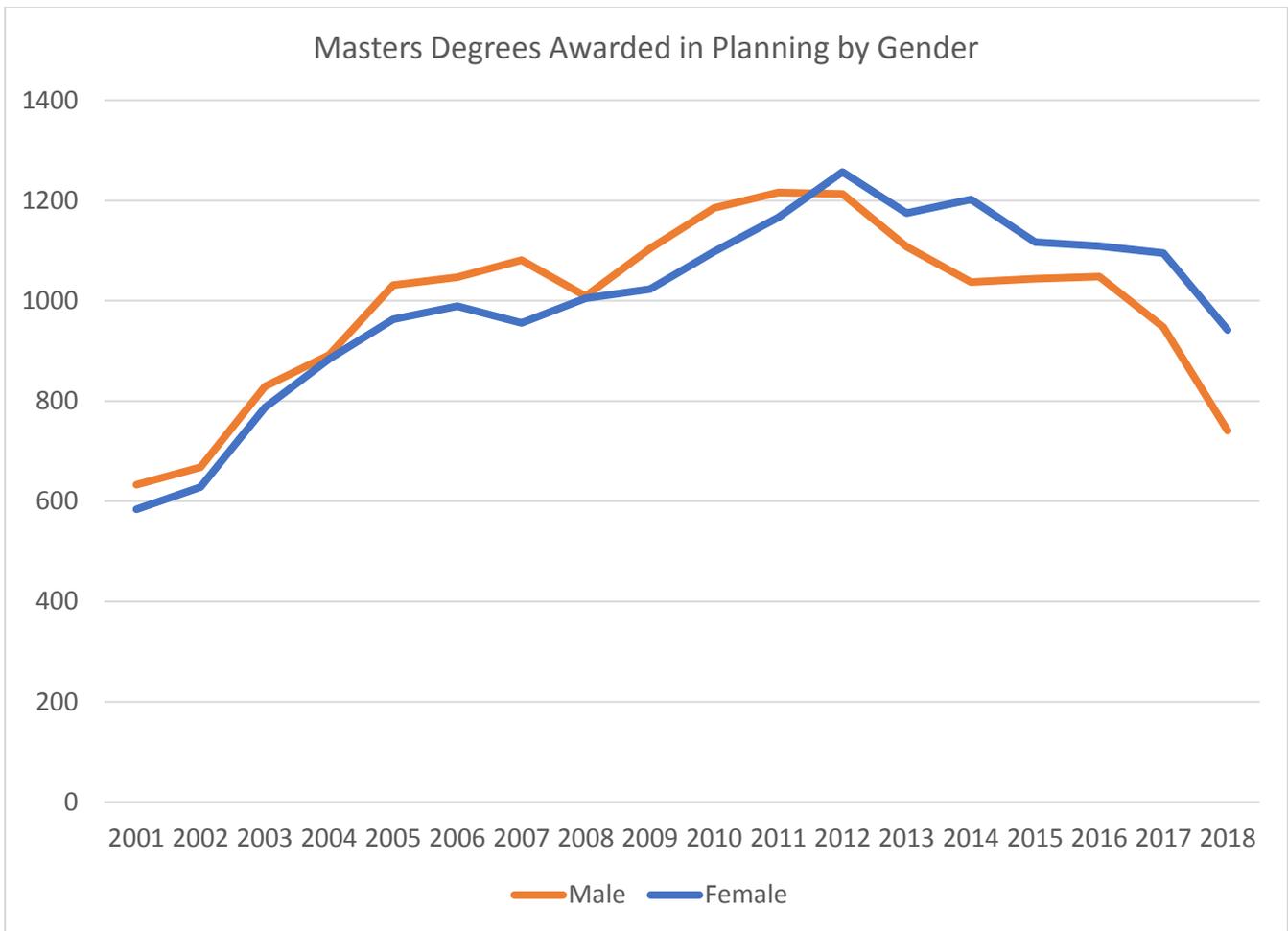


Figure 2: Masters Degrees Awarded in Planning by Gender

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions component final data (2001-02, 2002-03, 2005-06 - 2016-17) and provisional data (2003-04, 2004-05, 2017-18). CIP code 4.0301.

A different data source, the Planning Accreditation Board (PAB), collects enrollment data on all accredited programs, and data from 2008 onward are publicly available. Aggregate enrollments including full-time and part-time masters students have declined 18% over the five years from 2014 to 2018, and 27% over the decade from 2009 to 2018. Figure 3 shows that foreign student enrollments increased 37% over the decade from 2009 to 2018, but decreased more recently, losing 18% from 2014 to 2018, mostly since the beginning of 2017. Part-time student enrollments dropped by 44% over the decade from 2009 to 2018, slowing to a 16% decrease from 2014 to 2018.

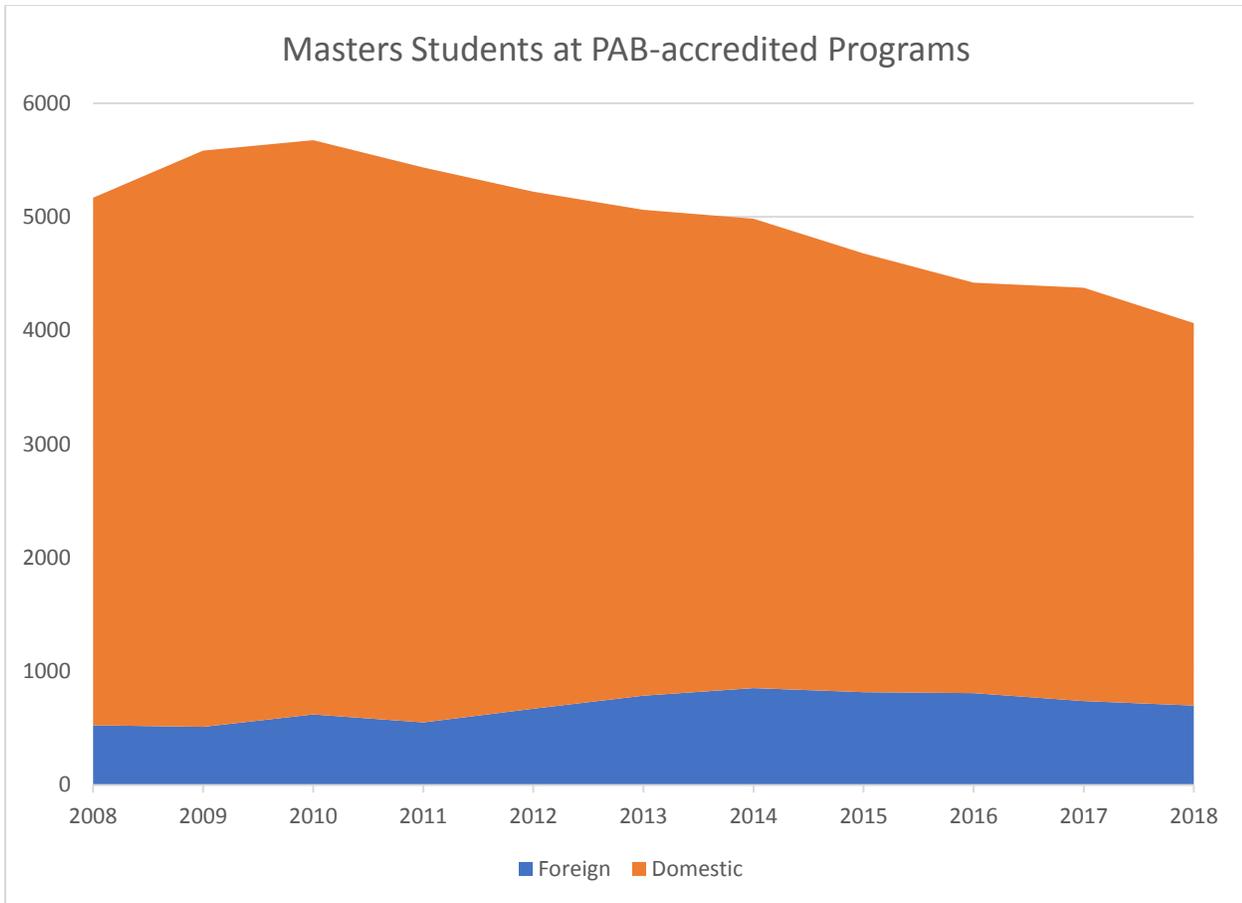


Figure 3: Masters Student Enrollments in PAB-accredited Programs 2008-2018
 Source: AB 2019

The overall pattern of declining enrollments masks great variation among individual universities' programs. Figure 4 summarizes these variations, showing that a majority of programs have experienced declining enrollments during both the decade from 2009 to 2018, and the 5-year window from 2014 to 2018. However, several programs grew during the decade but shrank recently, or shrank during the decade but grew recently. A few programs experienced growth during both time frames.

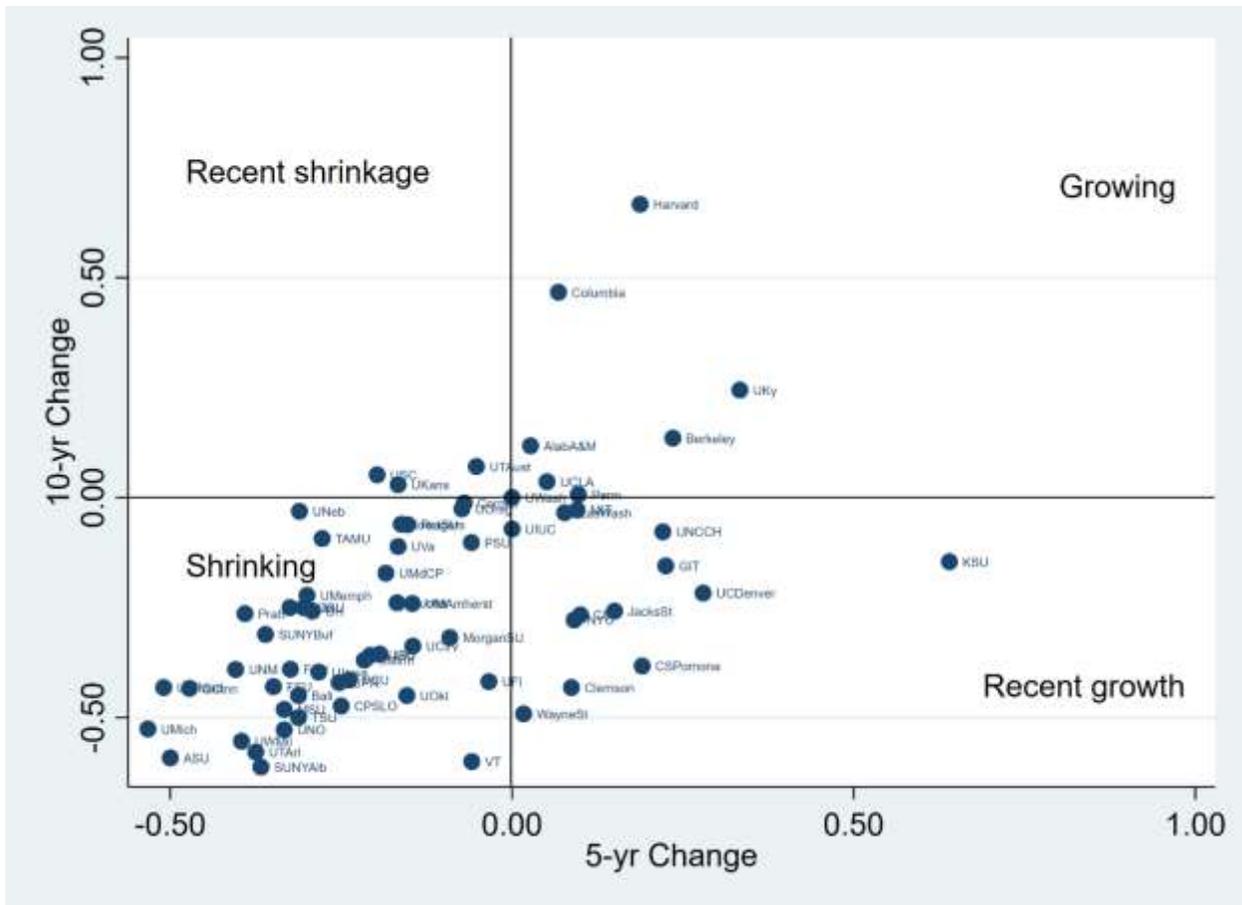


Figure 4: Change in Masters Student Enrollments in PAB-accredited Programs 2009-2018 and 2014-2018 (read 0.50 as a 50% change)
 Source: PAB 2019

There is an important economic context for these enrollment numbers, because the past decade starts at the peak of the Great Recession and continues through an unbroken period of economic growth and growing employment. Figure 5 shows unemployment rates nationally and for selected U.S. states from 1990 to 2018. The opportunity cost of attending graduate school arguably rises as the likelihood of instead directly obtaining paid employment increases. Admissions officers sometimes call graduate school a “counter-cyclical business.”

Does this explain part of the decline in enrollments experienced by planning programs? As an illustrative example, Figure 6 shows the historical pattern of unemployment in New Jersey and the contemporaneous trend in applications, admitted prospects, and admit-coming students for the Master of City and Regional Planning Program at Rutgers University, normalized to the year 2010. The Pearson’s r correlation between New Jersey’s unemployment rate and MCRP applications is 0.85 and somewhat less (0.77) for admits and admits-coming. Thus the local unemployment rate explains about 2/3 of the variation in MCRP applications. That is not the case for several other universities as Figure 7 illustrates: enrollments at ASU, Berkeley, and Georgia Tech do not reflect local unemployment rates. Those at University of Iowa, University of Michigan, and Texas Southern University do seem somewhat related to local unemployment rate, albeit with a time lag.

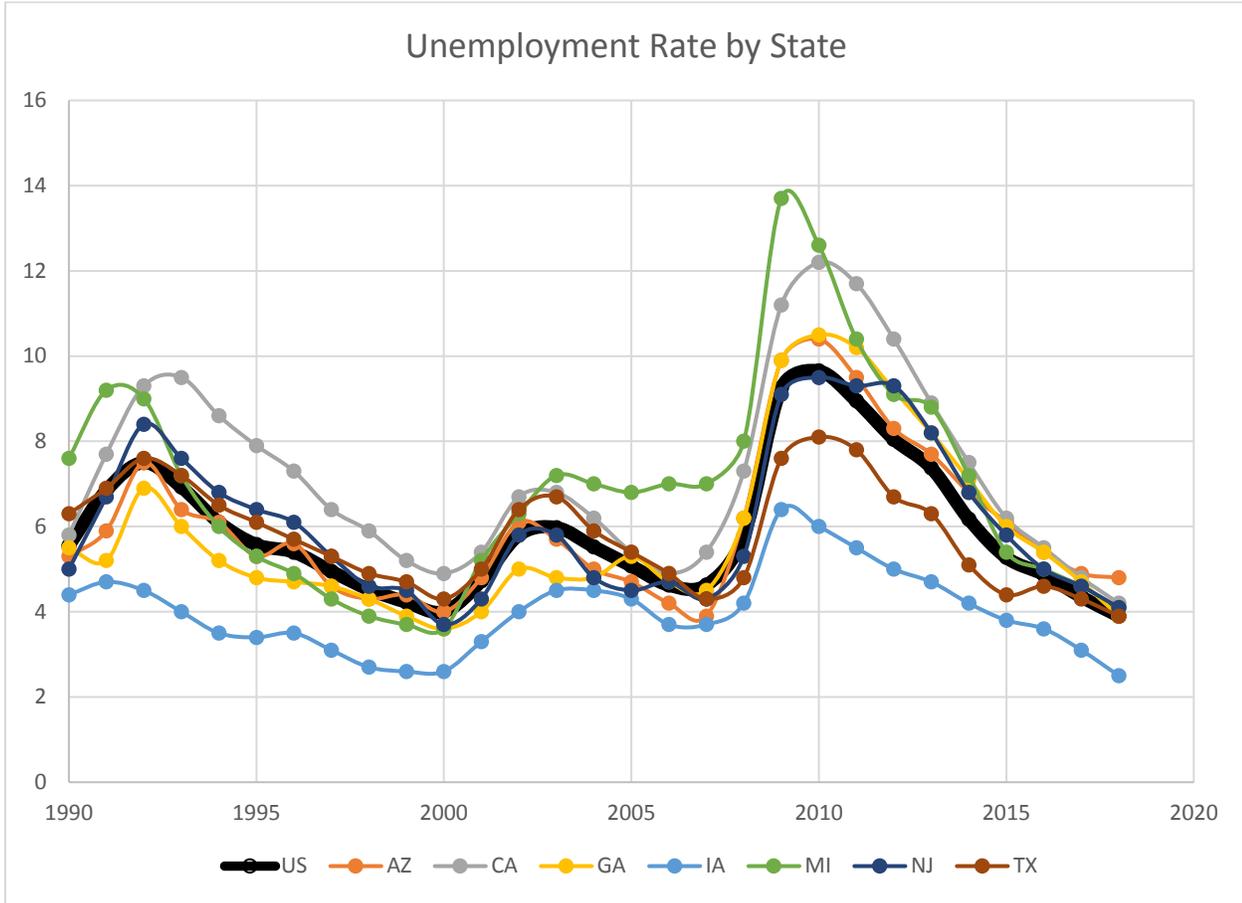


Figure 5: Average Annual Unemployment Rates 1990 to 2018 for Selected U.S. States
 Source: BLS 2019

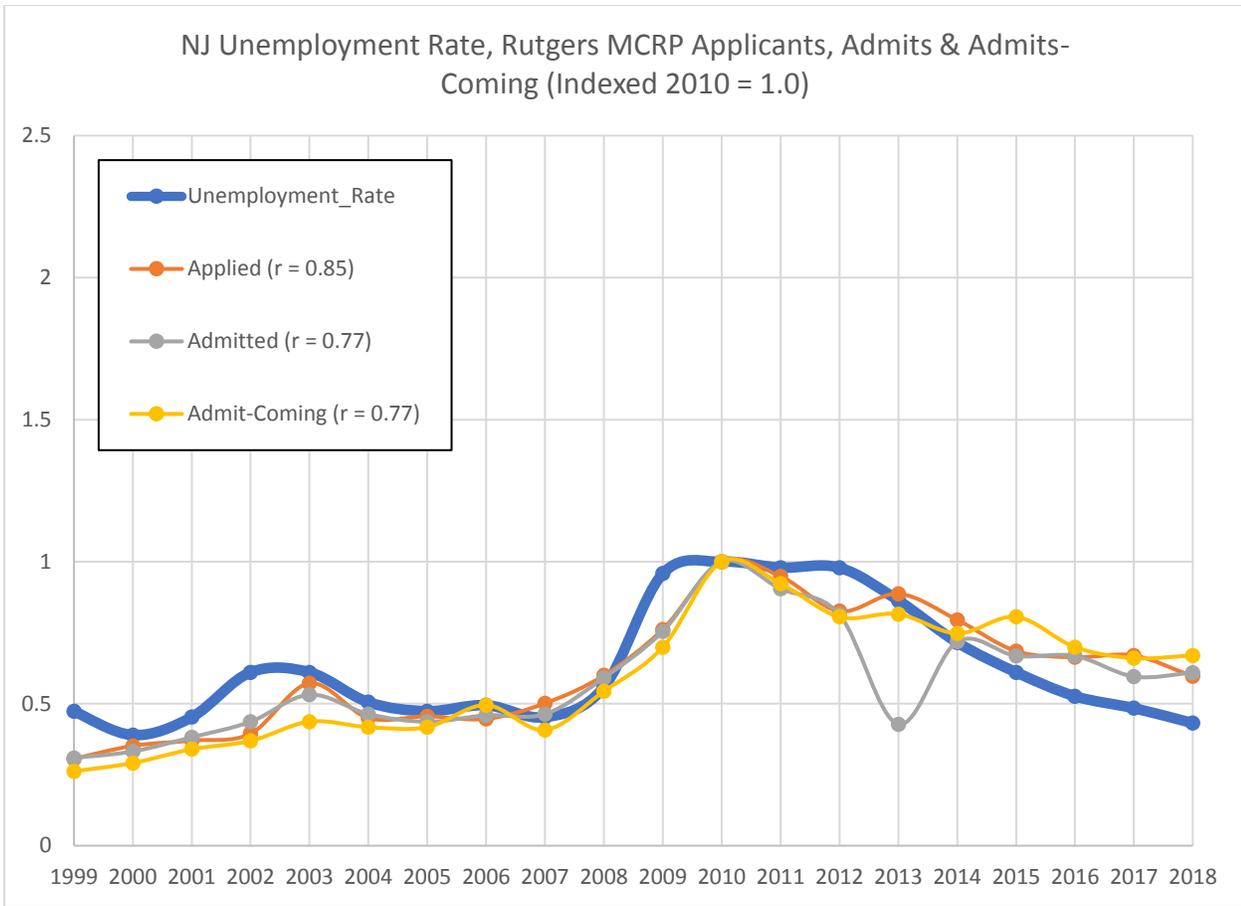
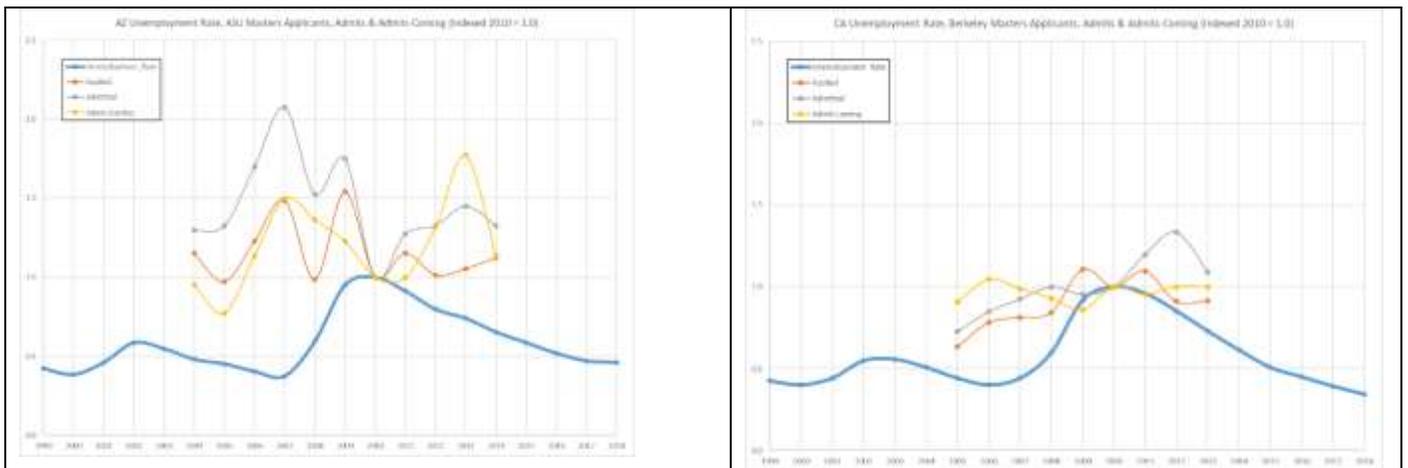


Figure 6: New Jersey Unemployment Rate, Rutgers MCRP Applicants, Admits & Admits-Coming (Indexed to 2010 = 1.0)
 Source: BLS 2019 and Rutgers 2019



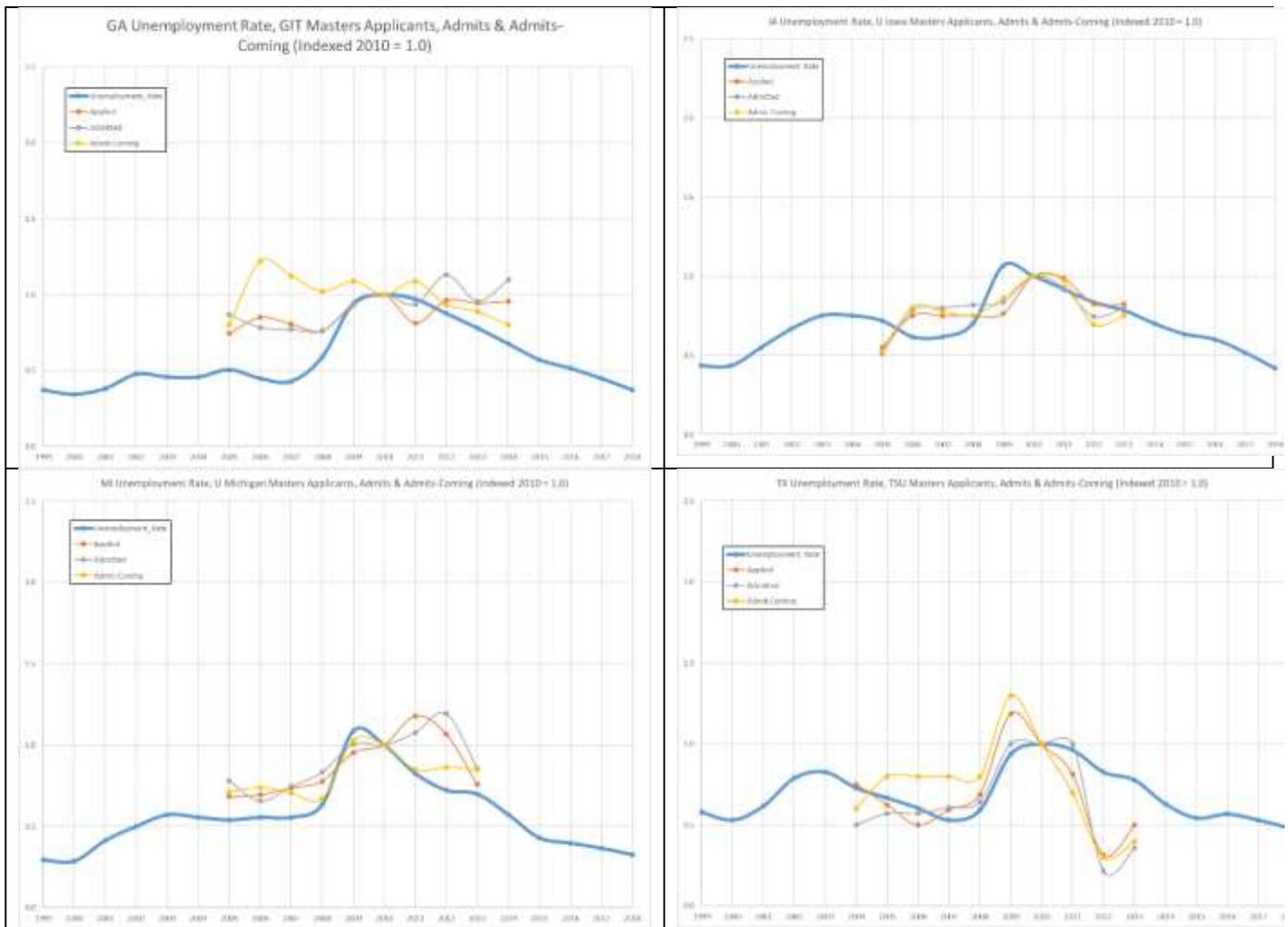


Figure 7: State Unemployment Rates, Masters Program Applicants, Admits & Admits-Coming (Indexed to 2010 = 1.0) shown alphabetically for ASU, UC Berkeley, Georgia Tech, Univ. of Iowa, Univ. of Michigan, and Texas Southern Univ.

Source: BLS 2019 and ACSP (various years)

Beyond national and local unemployment levels, other factors may potentially explain differences in enrollment trends, including program cost, reputation, real estate development and population growth, political culture, and regulatory environment. The Winter 2018 survey of chairs' perceptions provides a rich and complementary set of insights about local program sizes, enrollment declines, impacts on program health, strategies for increasing enrollments, and whether to pursue a discipline-wide STEM designation, as discussed below.

II. ENROLLMENT TRENDS, THEIR CAUSES AND IMPACTS ON PLANNING SCHOOLS AND MITIGATION STRATEGIES: FINDINGS FROM THE CHAIRS' SURVEY

1. Survey respondents

We conducted a survey of Planning Chairs and Directors following the 2018 ACSP conference. A total of 56 Chairs of Planning Programs responded. Of those, 84% have accredited Masters' programs (47), 20% have accredited undergraduate programs (11) and 45% have doctoral programs (25), see Figure 8. The great majority of these programs are located in public institutions (84%). Those 56 programs have an average faculty size of 10 faculty (with a large amount of variation since the standard deviation is 6.6) and 8 part time/adjuncts (with a standard deviation of 10).

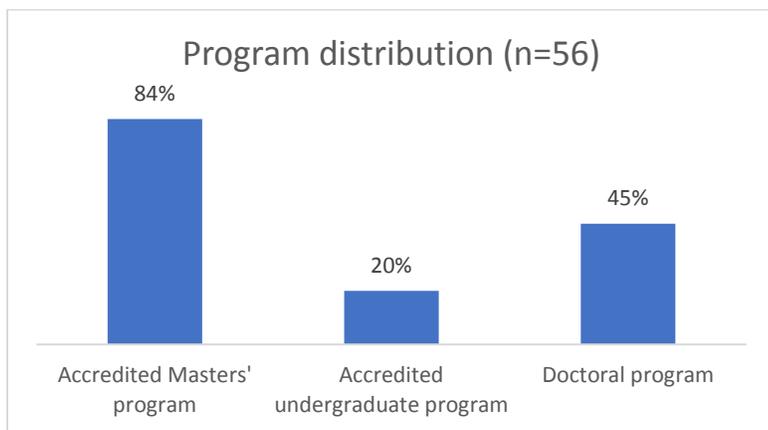


Figure 8: Program Distribution

Only 19 programs provided information about the size of their Undergraduate programs. Of those, enrollment vary from 12 to 458 Planning majors, with a mean of 88 and a median of 60 students. On average, programs have 27 students enrolled in Planning minors or Certificates, and again this varies widely from 1 to 80, with a median of 13.

In total, 49 programs reported the student enrollment in their masters' programs. Enrollment of full-time masters' students varies from 5 to 138, with a mean of 47 and a median of 36 students (6 programs have more than 100 masters students and 8 have less than 20 students). Enrollment of part time masters' students is much lower, with an average of 14 and a mean of 9 part-time students. Combining full-time and part-time students, the average size of Masters' program is 62 students with a standard deviation of 51 and a median of 45 (min: 6, max: 208).

2. Extent of enrollment decline

We asked: "In the last 5 years, how did your student enrollments change?" Of the 34 undergraduate programs whose Chair responded, about a third (32%) has experienced a decline, a third (38%) is stable and a third (29%) has experienced growth. Masters programs have experienced stronger declining trends: 57% have experienced declining enrollments. About 13% have experienced declines of 25% or more and 34% have declined by 10 to 25% of their past enrollment levels. A fifth of Masters programs are stable (21%) and a quarter (23%) are experiencing growth. See Table 1 below and Figure 9.

Table 1. Percent change in enrollment over the last 5 years

	25% or more decline	10-25% decline	5-10% decline	No change	10-25% increase	25% or more increase	Total
Under-graduate	2.7%	17.7%	11.8%	38.2%	20.6%	8.8%	100%
(n)	1	6	4	13	7	3	34
Masters	13.2%	34.0%	9.4%	20.8%	13.2%	9.4%	100%
(n)	7	18	5	11	7	5	53

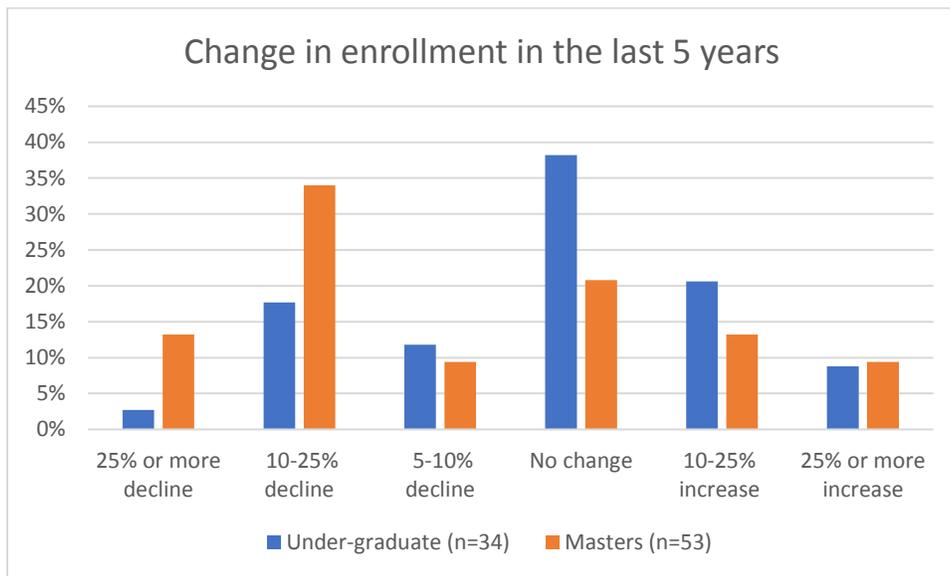


Figure 9: Change in Enrollment in the Last Five Years

These changes in enrollment are cause for concerns for 58% of Planning chairs. Of all respondents, 29% expressed being “very concerned,” another 29% are somewhat concerned, 15% have minor concerns and 27% are not concerned.

3. Causes of declining enrollments

According to program Chairs, the most important causes for declining enrollment (items they agree with or strongly agree with) are that:

- Students choose to attend other schools that offer better funding packages (86% agree),
- Many students don’t know about planning as a field (83% agree),
- Graduate studies in planning is less attractive than working when the economy is doing well (66% agree),
- International applicants perceive the national political climate as unfriendly (66% agree),
- Students chose to attend better-known programs (52% agree),
- Planning salaries are not attractive given the costs of higher education (51 agree)

Other causes mentioned in open-ended responses include: the strong economy, financial aid packages that are not competitive to attract top students, one respondent mentioned that students do not always see how knowledge and skills gained in a planning degree may be transferrable to a range of careers, and one respondent mentioned that students want flexible curriculum that may not be compatible with PAB requirements.

Employment opportunities for students does not appear to be an issue, since when asked “What percentage of your master's graduates find employment in planning or related fields within 1 year of graduation?”, the average response is 88.5% with a standard deviation of 10.5% (we excluded an outlier mentioning that only 20% find jobs from these averages/std dev).

4. Consequences of enrollment changes

Enrollment/tuition-based budgeting models are compounding the impact of declining enrollment for planning programs. The most often mentioned impact of these declining enrollments are: postponing faculty hires, reduced resources for faculty, reduced adjunct budgets, threats or declines in operational budgets and student financial aid. Some programs also mention that program resources are shifted to revenue-generating offering (eg., dual degrees, certificates, professional training) and that other programs in the School/College are offsetting revenue losses.

Other impacts mentioned in open ended responses are: Future hires/retirement replacement positions threatened, three program mention being “targeted for reorganization” with threats to the identity and existence of the programs. Some faculty teaching is reoriented toward undergraduate courses. In addition, one program mentioned the quality of students declining due to a smaller applicant pool.

In total, 22% of all programs have undergone “a major change in the last five years that influenced responses (e.g. department merger, college change).”

Some of these changes had negative impacts on enrollments:

- Changing colleges (a program changed college twice in 10 years)
- Changing from liberal arts to art and architecture
- A relocation from a downtown to a main campus
- Disruptions linked to building problems /construction
- Getting accredited

Some changes had positive impacts on enrollments:

- A move to a college of Social Work
- A move from a dysfunctional to a new department
- A move to a college with better support

5. Enrollment-boosting strategies

Planning programs have adopted a range of strategies to increase enrollments. Figure 10 below presents the prevalence of use of the most common strategies.

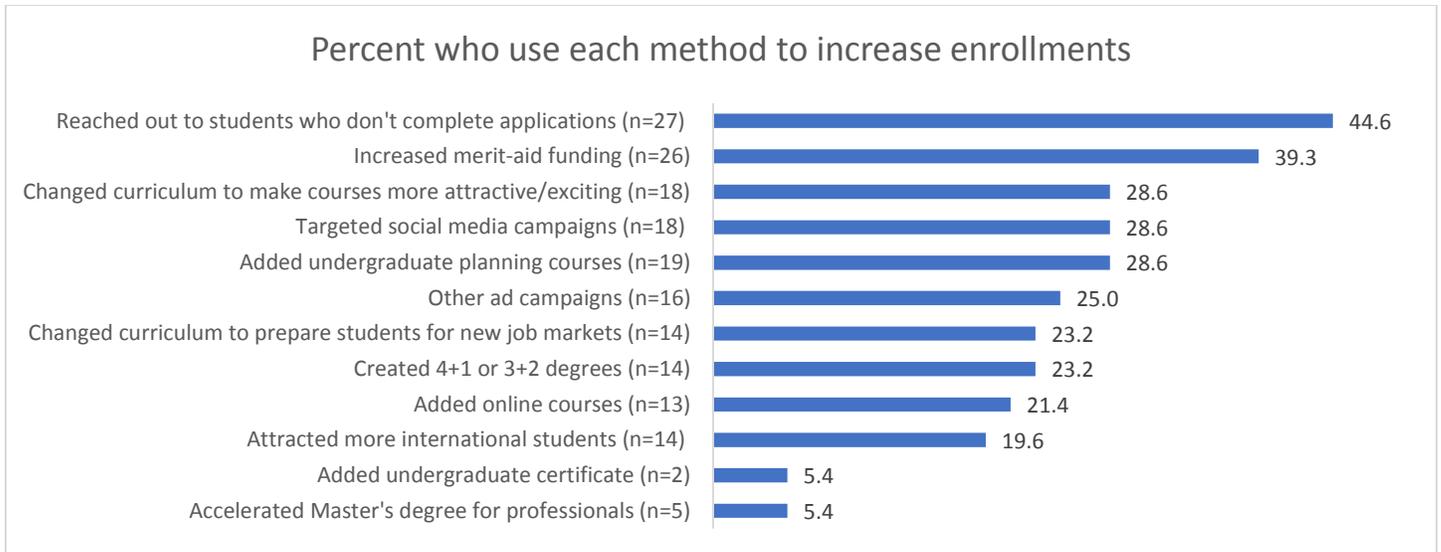


Figure 10: Percent Who Use Each Method to Increase Enrollments

Chairs were asked to rate the effectiveness of the strategies mentioned above (Figure 11). The sample size is very small since these percentages are based only on those who have implemented each strategy. The most effective strategies appear to be: merit-aid funding, making the curriculum more attractive, adding undergraduate courses, and attracting international students. It is noteworthy that except for reaching out to students who do not complete their applications, merit-aid funding, adding undergraduate and online courses, the Chairs are not certain about the effectiveness of these strategies (many “Not sure/ Don’t know” answers). They are often uncertain because it is too soon to know whether those strategies will yield a significant number of applicants.

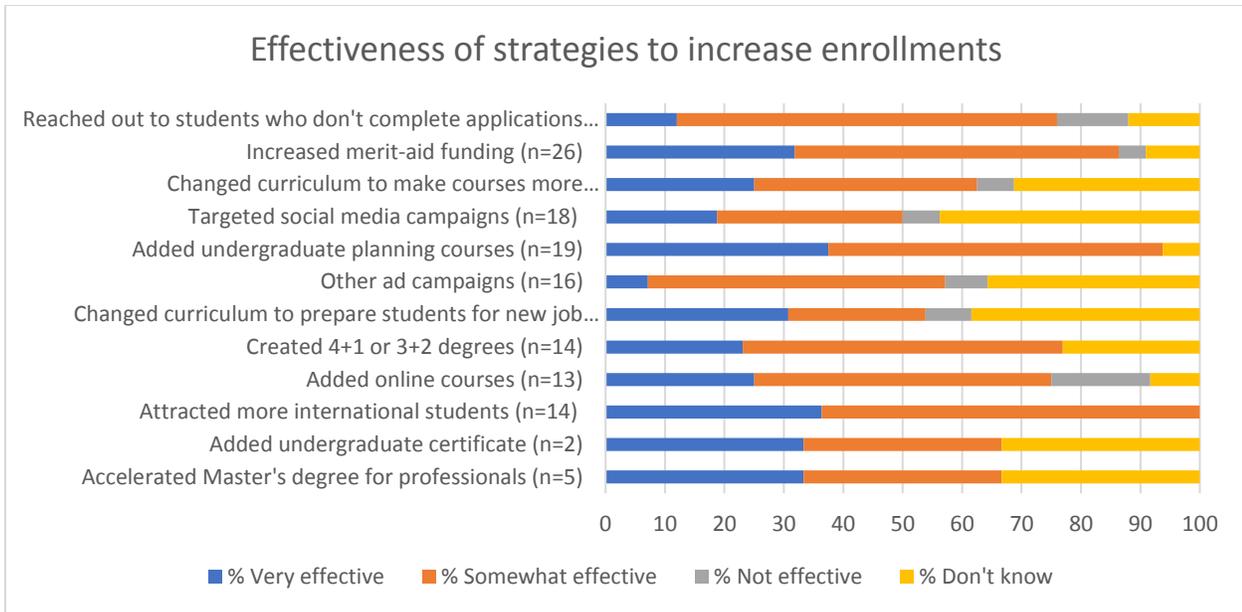


Figure 11: Effectiveness of Strategies to Increase Enrollments

Other strategies used to increase enrollment (open ended responses) include:

Application processing:

- Personal attention to each applicant by the chair.
- Following up with incomplete applications (mixed results).

Program marketing:

- Sponsoring state planning conference and staff booth at conference (very effective).
- Outreach to undergraduate programs on campus and at nearby schools.
- Inviting / surveying students who take the GRE and indicated an interest in Urban Planning (another Chair reported that the GRE name search yields "uneven" results).
- Online resources targeted to international students.
- Reaching out to graduates of the PhD program who teach abroad to encourage them to send us their best students.
- Social media ads.
- Partnership so that Marketing / Advertising students create plans for program marketing and advertising.
- Highlighting community engagement and outreach to alumni and prospective students via web page and Facebook.

New courses and programs:

- Adding hybrid courses taught partly in person and partly online.
- Undergraduate planning courses taught online
- Graduate certificate programs.
- Creating a co-op program ("external fellowship) to provide student funding.

6. CIP codes and STEM designation

In total, only 12.7% of programs (7 of 55) have changed their Classification of Instructional Programs (CIP) code to attain a STEM designation. There is no evidence of impact on student enrollment thus far. Only one program indicates increased enrollment, 2 programs indicate no change, the other are “not sure.” It is too soon to tell whether this will significantly impact enrollment levels. Nonetheless, 46.7% of programs (21) plan on changing their CIP code, while 53% (24) have no plan to do so (Figure 12).

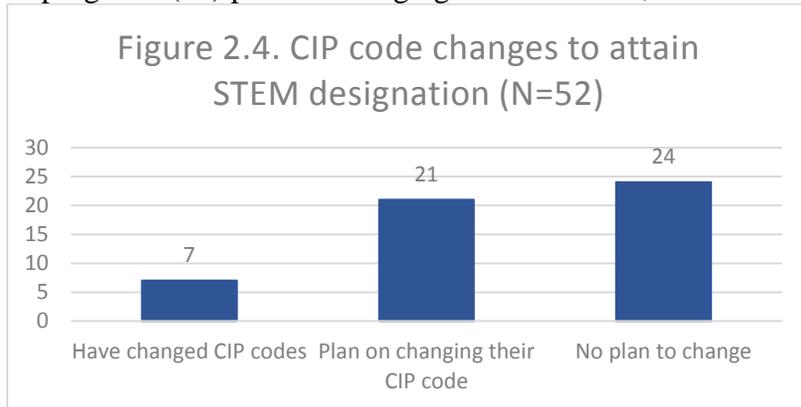


Figure 12: CIP Code Changes to Attain STEM Designation

Of those who plan on changing their CIP code, the main reason is to be more attractive to international students.

Of those who are not certain, five have not discussed it within their departments. Some are “trying to ascertain university support,” some are “not sure what STEM designation to use,” some are “experiencing pushback” or administrative difficulties. One mentions “too much administrative work.” Two respondents mention curriculum-related issues: one states that a STEM designation “Doesn't fit with the curriculum of our program home” and one that it is “difficult to change without substantial curriculum revision at our university.”

Two Chairs oppose changing CIP codes because: “Planning is not a STEM discipline ... and doesn't need to be!” and “If you change your CIP code you are weakening the field of planning by indicating that you are leaving the field.”

Despite these dissenting opinions, there is overall wide support for ACSP to pursue STEM designation on behalf of Planning schools. When asked whether program chairs “Would want ACSP to lobby for reclassification of the City/Urban, Community and Regional Planning CIP code (04.0301) as STEM”, 66% answered “yes” (37), 5% “No” (3) and 27% “not sure” (15) (Figure 2.5).

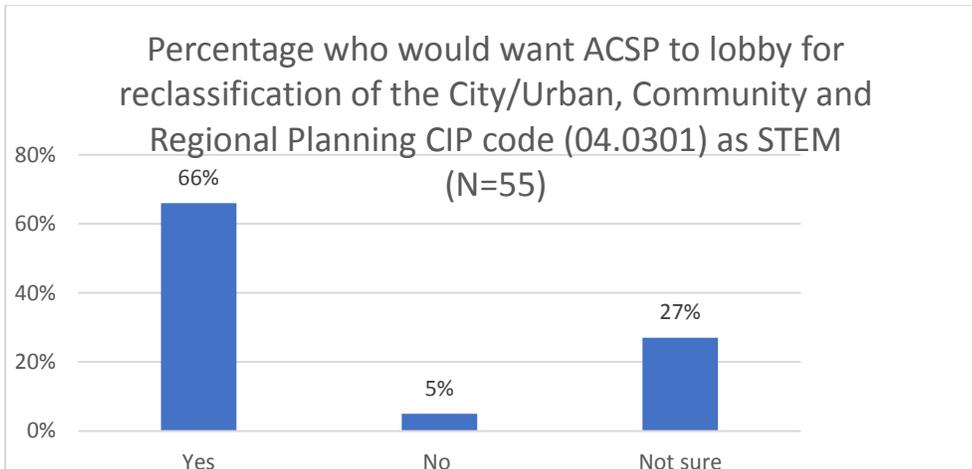


Figure 13: Percentage Who Would Want ACSP to Lobby for Reclassification of the City/Urban, Community and Regional Planning CIP (04.0301) as STEM

For those who answered “Yes,” the main reasons are:

- It would help international students (recruitment and entry on the job market),
- 100%. Planning is based on lot of analytics and science,
- This will improve access to STEM grants, better recognition in the industry,
- It will benefit in competitive funding from our state's legislature,
- Planning has become focused on sustainability issues,
- The CIP Codes are used for operating ratios.

Of those who say “No” or “Not sure,” the main concerns mentioned are:

- Every discipline does not need to be STEM,
- Potential to diminish / lose focus on arts/humanities and more qualitative approaches,
- Concern about how planning programs would be evaluated compared to other STEM programs in terms of research dollars, program size, etc. Planning may look weaker in comparison,
- Unclear whether a STEM designation might be unattractive to some students,
- Would STEM designation put pressure on curriculum to change in ways we don't want it to? Would it require new programming/courses that we are not well positioned to offer?
- We need to treat planning programs the same and make sure the CIP codes have real meaning for analyses such conducted by the Dept. of Education and by University administrations/consultants.

The main concerns are thus a potential loss of identity and threat to the arts / humanities / qualitative/ dimensions of planning, and potential issues if STEM designation requires curricular changes. These questions will need to be addressed to make sure ACSP best meets the needs of all Planning schools. The final section of this report revisits the STEM discussion.

III. PLANNING ENROLLMENT TRENDS IN CONTEXT: OVERALL ENROLLMENTS AND ENROLLMENTS BY DISCIPLINE

1. Undergraduate and Graduate enrollment trends

At the national level, enrollment in undergraduate education have declined since 2008 across disciplines. They peaked at 29,507,367 students in 2010-11 and were down to 26,694,877 in 2016-17 (Figure 14).

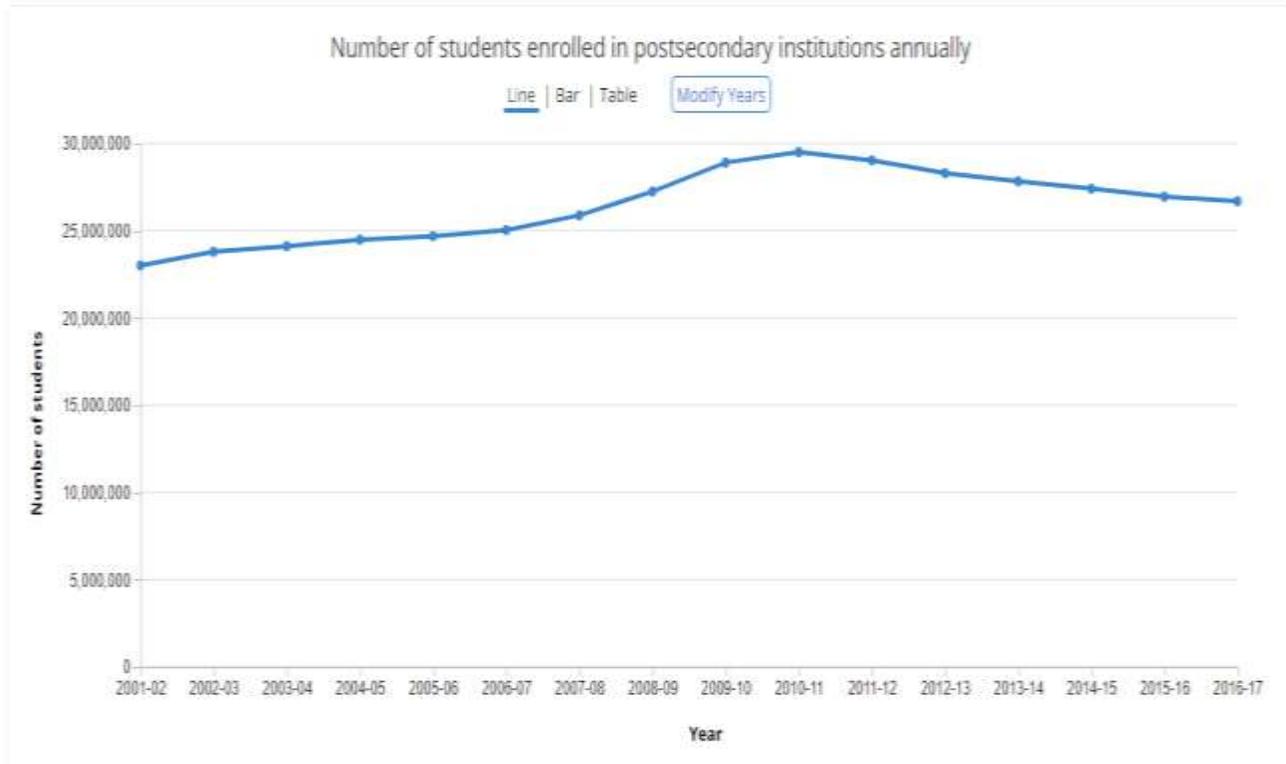


Figure 14. Students enrolled in postsecondary institutions since 2001

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 12-month Enrollment component final data (2001-02, 2002-03, 2005-06 - 2015-16) and provisional data (2003-04, 2004-05, 2016-17).

This declining enrollment affects female as well as male students. It is much more pronounced for white students than for minority students (Fig. 15). Among minority students, African American enrollments have been declining since 2010 following the national trend, while Hispanics are continuing to enroll in post-secondary education in increasing numbers. The decline is also more pronounced for full-time than for part-time students, suggesting that the higher costs of higher education may play an important part in limiting a student's ability to enroll full time.

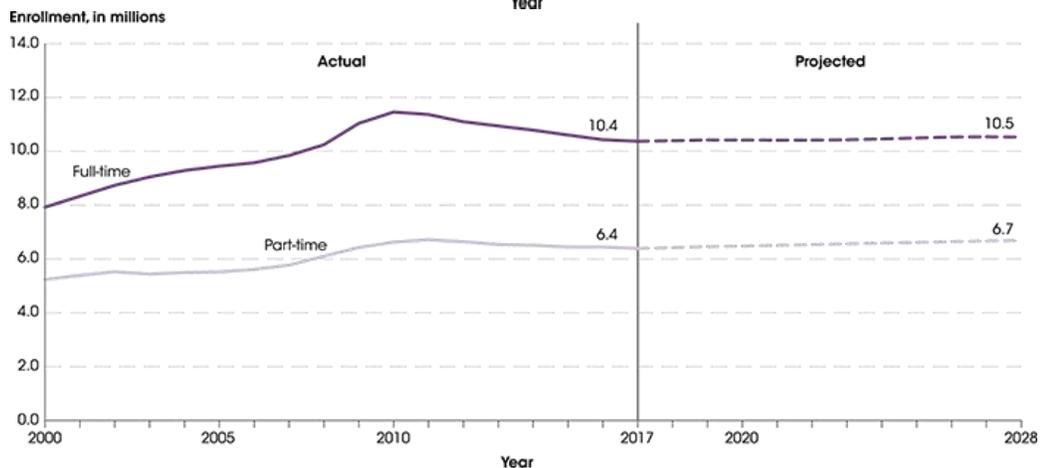
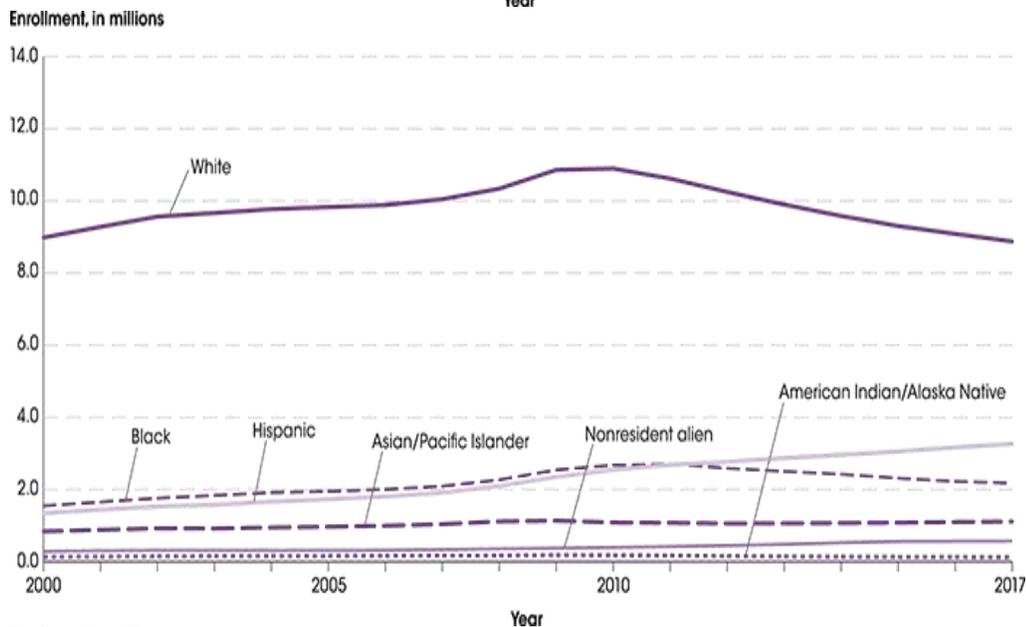
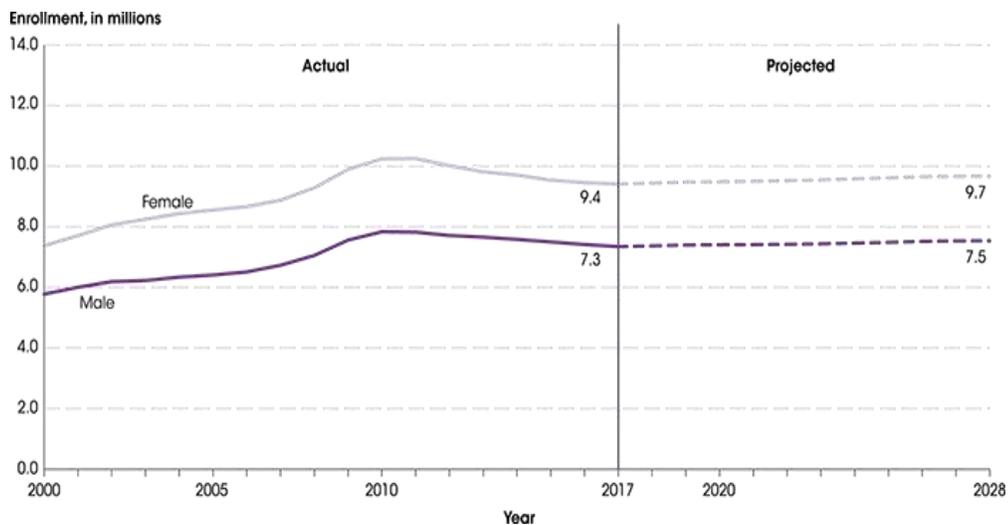


Figure 15. Undergraduate Enrollment by Gender, Ethnicity and Full-time and Part-time status
 Source : NCES 2019 https://nces.ed.gov/programs/coe/indicator_cha.asp, May 2019

Enrollments in post-baccalaureate education are also declining overall. As for undergraduates, declining enrollment in post-baccalaureate education is mainly due to declining enrollments of White students (Fig. 16). Unlike undergraduate enrollments, however, African American and Hispanic enrollments have been stable since 2010, while international students numbers increased from 2005 to 2016 and leveled in 2016-17.

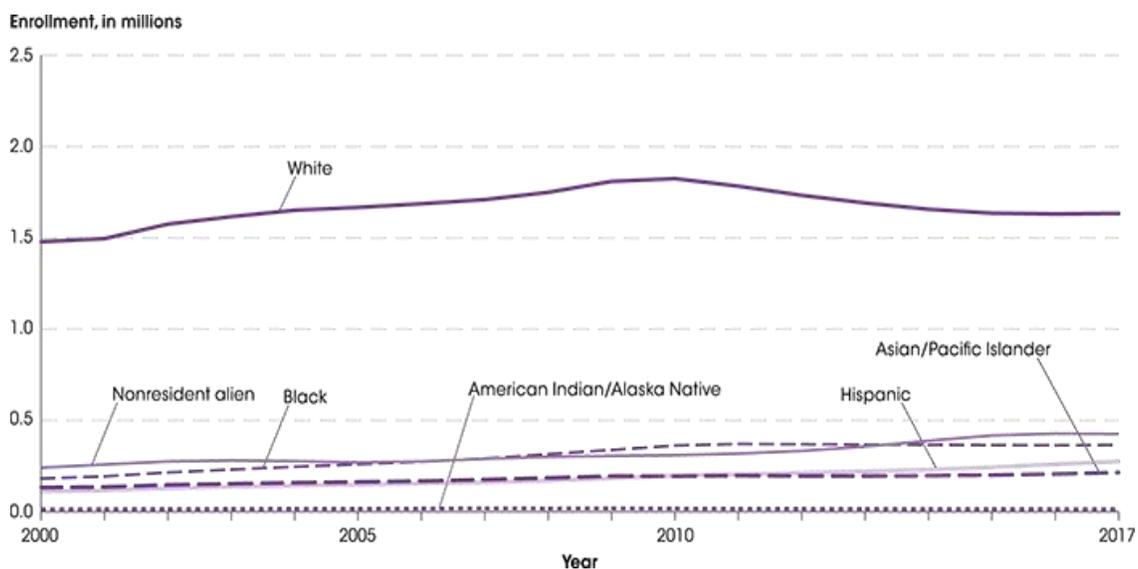


Figure 16. Enrollments in post-baccalaureate Education

Source: NCES 2019 https://nces.ed.gov/programs/coe/indicator_chb.asp

2. Graduate enrollments by discipline

Enrollment trends vary by discipline. For instance, the field of Education is seeing a steep drop in enrollments while Health professions, Business, Engineering and Computer and Information Sciences are experiencing increasing enrollments (Fig 17). This may be related to students’ preferences and/or perceived needs to pursue more lucrative professions.

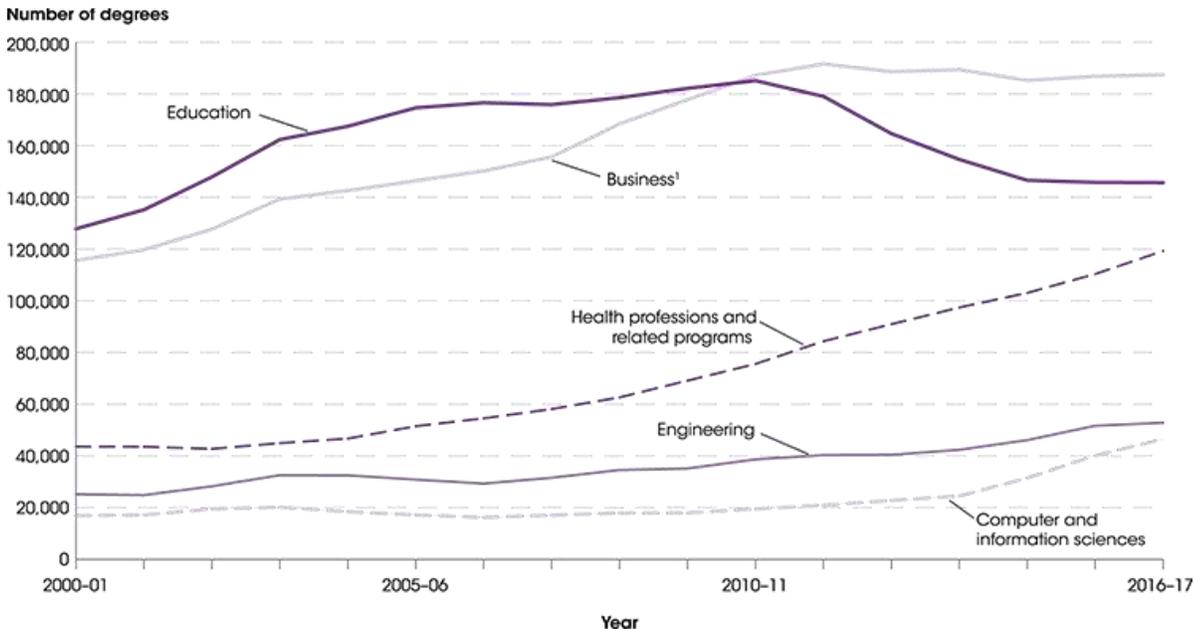


Figure 17: Graduate Enrollment by major discipline

When examining graduate enrollments by discipline within the social sciences, other trends emerge. Graduate enrollment in social sciences have declined overall since 2011, and Sociology and Political Science have declined the most (Table 2, Fig 18).

Table 2: Graduate enrollment in research-based programs (in degree-granting postsecondary institutions, by discipline division: Selected years, fall 2007 through fall 2015)

Discipline division	2007	2009	2010	2011	2012	2013	2014	2015
Social sciences	103,150	107,820	109,220	111,661	108,169	107,278	105,742	102,706
Agricultural economics	1,989	2,222	2,180	2,095	2,045	1,916	1,931	2,056
Economics (except agricultural)	12,597	13,993	14,317	14,920	14,959	14,819	14,604	14,299
Geography	4,660	4,810	5,059	5,188	5,016	4,891	4,810	4,434
Linguistics	2,879	3,170	3,132	3,219	3,256	3,509	3,489	3,370
Political science and government	41,349	43,919	45,045	49,660	48,855	48,411	47,370	45,781
Sociology and anthropology	18,453	18,666	18,740	18,365	17,404	17,360	16,789	16,104
Other social sciences ...	21,223	21,040	20,747	18,214	16,634	16,372	16,749	16,662

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, 2007 through 2015. (This table was prepared March 2017.) <https://nces.ed.gov/programs/digest/d16/tables/xls/tabn311.90.xls>

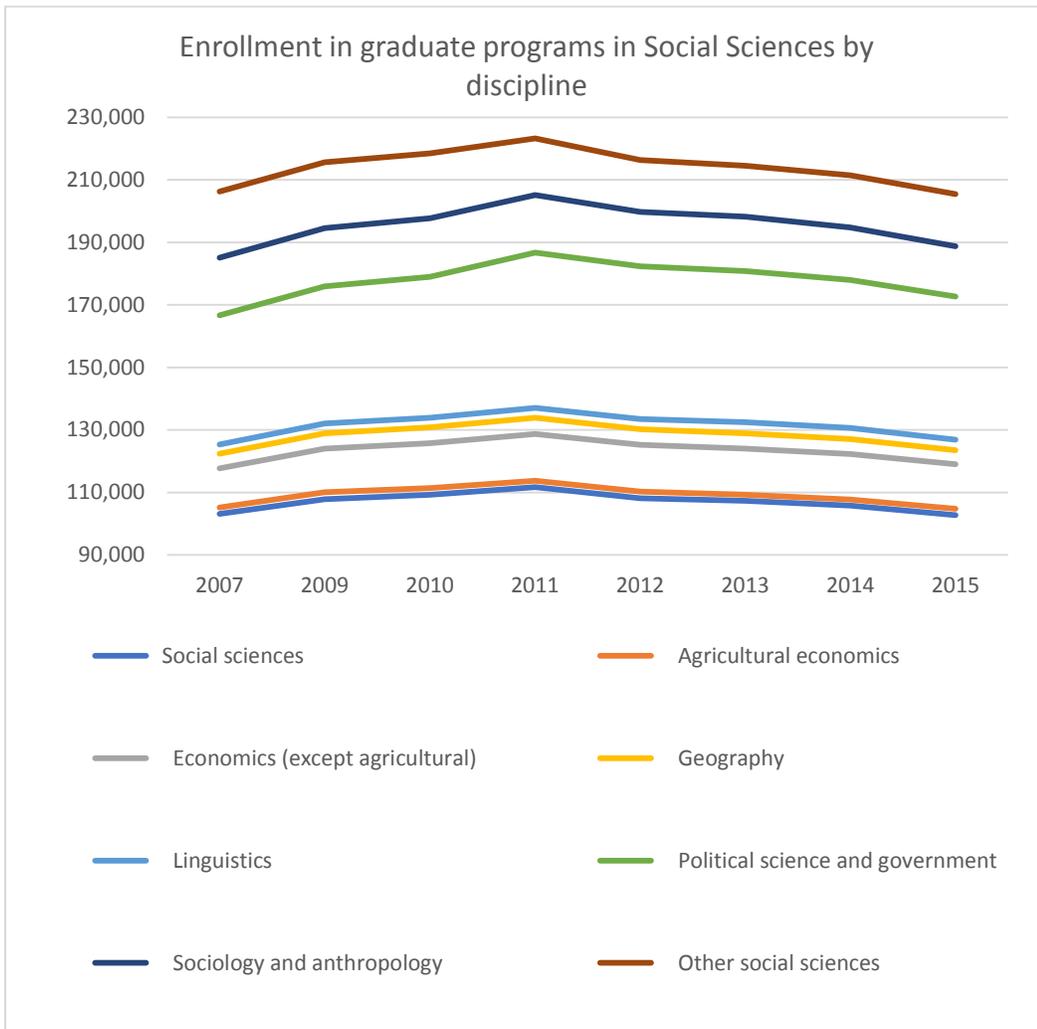


Figure 18: Enrollment in Graduate Programs in Social Science by Discipline

Planning is classified under “Architecture and related services” at the 2-digit CIP code level (CIP 04). Overall, enrollments in this 04 CIP has been fairly stable compared to social sciences and humanities. On the other hand, the fields of “Public Administration and Social Services” have gained more students since the mid-1980s than “Architecture and related services” (Fig 20).

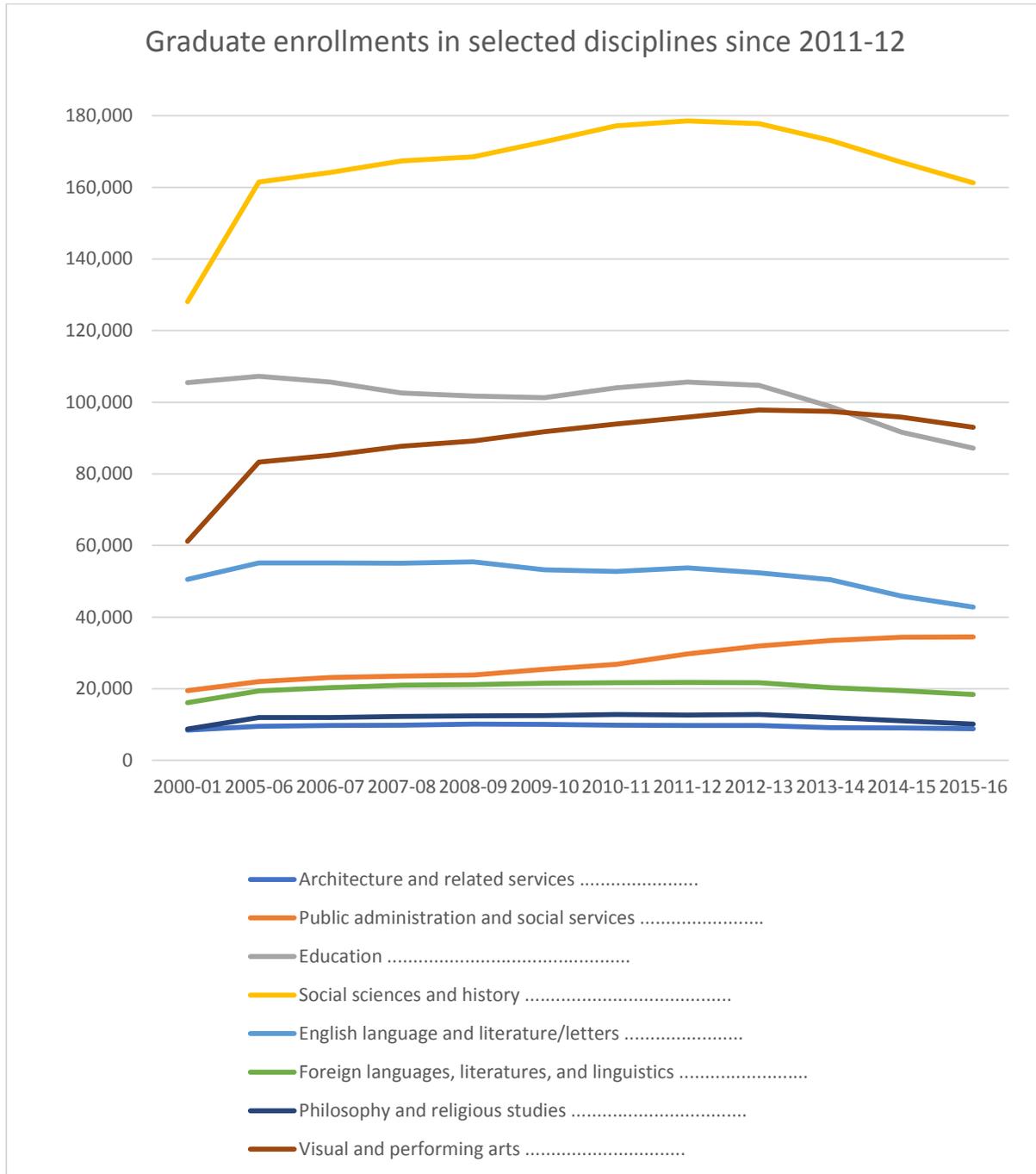


Figure 19: Graduate Enrollments in Selected Disciplines Since 2011-12

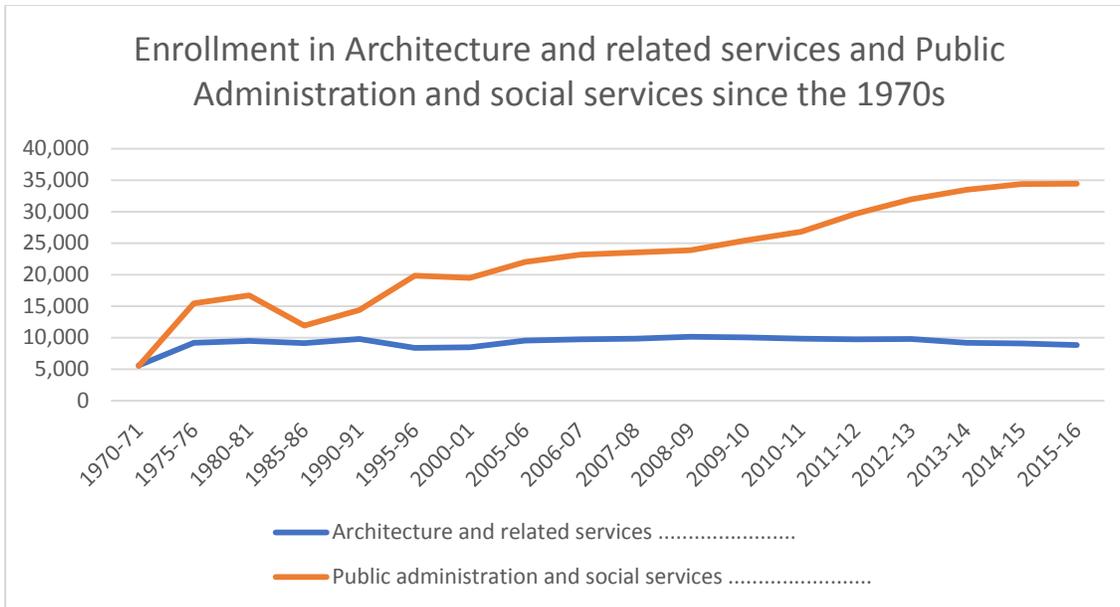


Figure 20: Enrollment in Architecture & Related Services and Public Administration & Social Services Since the 1970s

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred" surveys, 1970-71 through 1985-86; Integrated Postsecondary Education Data System (IPEDS), "Completions Survey" (IPEDS-C:91-99); and IPEDS Fall 2000 through Fall 2016, Completions component. (This table was prepared August 2017.)

NCES data on Masters degrees awarded show that planning has been declining more steeply than many comparable disciplines. Figure 21 shows this pattern on an indexed basis where 1.0 = the value in the 2002-03 academic year.

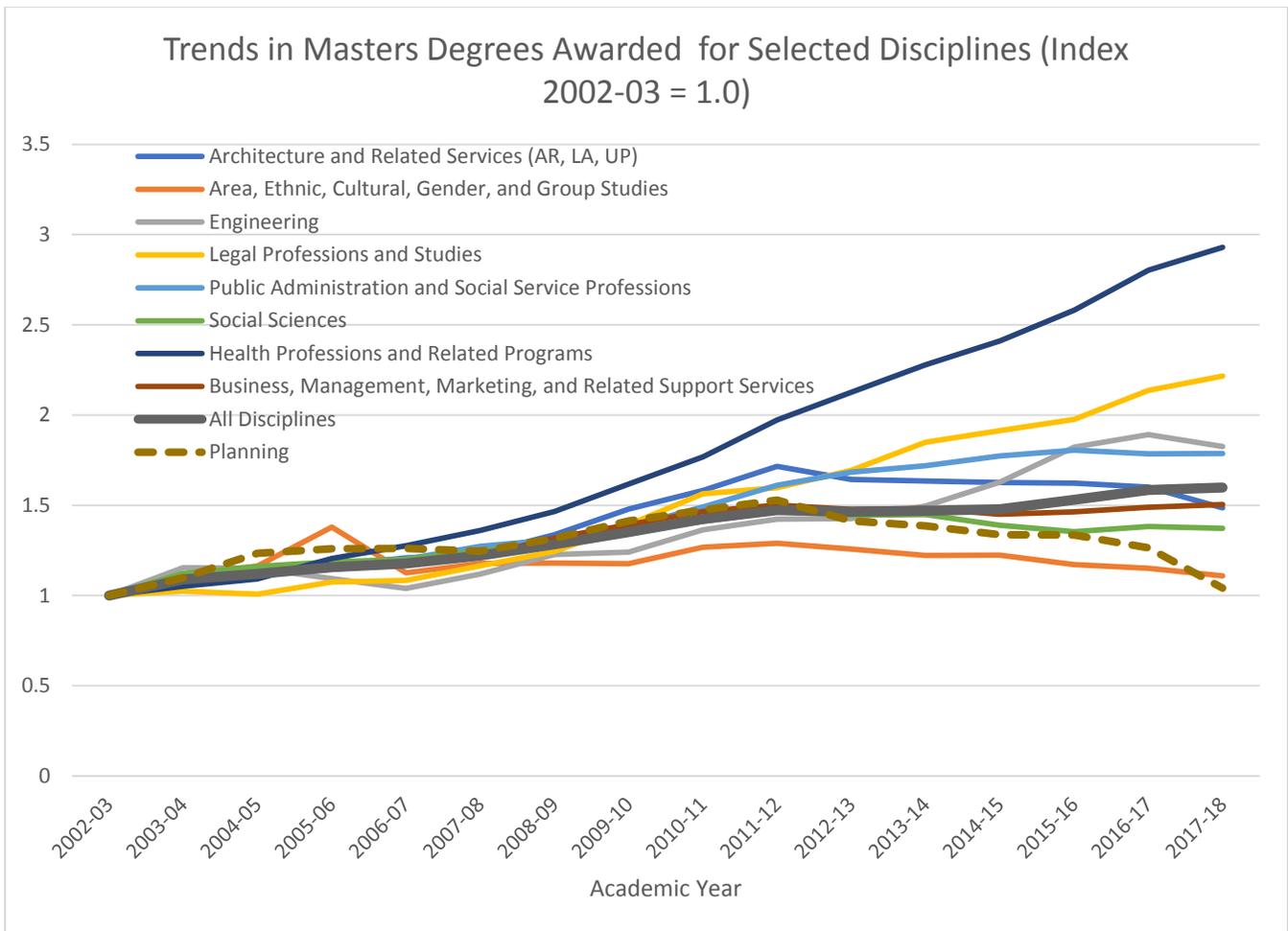


Figure 21: Trends in Masters Degrees Awarded for Selected Disciplines (Indexed to 2002-03)
 Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions component final data (2001-02, 2002-03, 2005-06 - 2016-17) and provisional data (2003-04, 2004-05, 2017-18). Planning is CIP code 4.0301.

Geography deserves special attention because in a job market that sometimes rewards skills over content knowledge, Geography may be in direct competition with Planning when seeking to attract students. While Figure 18 shows declining enrollments in Geography since 2011, Geography had experienced steep increases in enrollments in the early 1990s and early 2000s (Fig 22). While Geography departments may be struggling with lower enrollment in recent years, they are also somewhat protected by a stronger enrollment baseline.



Fig 22: Geography Degrees conferred from 1950 to 2004

Source: AAG Handbook and Directory of Geographers, 2005, in Geography's Place in Higher Education in the United States Alexander B. Murphy 2007 <http://www.aag.org/galleries/education-files/HDMurphyJGHE.pdf>

These increases in Geography enrollments until the early 2000s was stronger for undergraduate than graduate programs. It may be explained by the fact that most Geography departments offer degrees based on technical GIS skills that are in demand on the job market, and may also be linked to the need for training Geography High School teachers (Fig 23). According to NCES, in 2018 colleges and universities awarded 4,116 Bachelors degrees, 846 Masters degrees, and 229 PhDs in Geography.² Like Planning, Geography is back to its 2002 level of producing alumni.

² U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Completions component final data (2001-02, 2002-03, 2005-06 - 2016-17) and provisional data (2003-04, 2004-05, 2017-18). Geography is CIP code 45.0701.

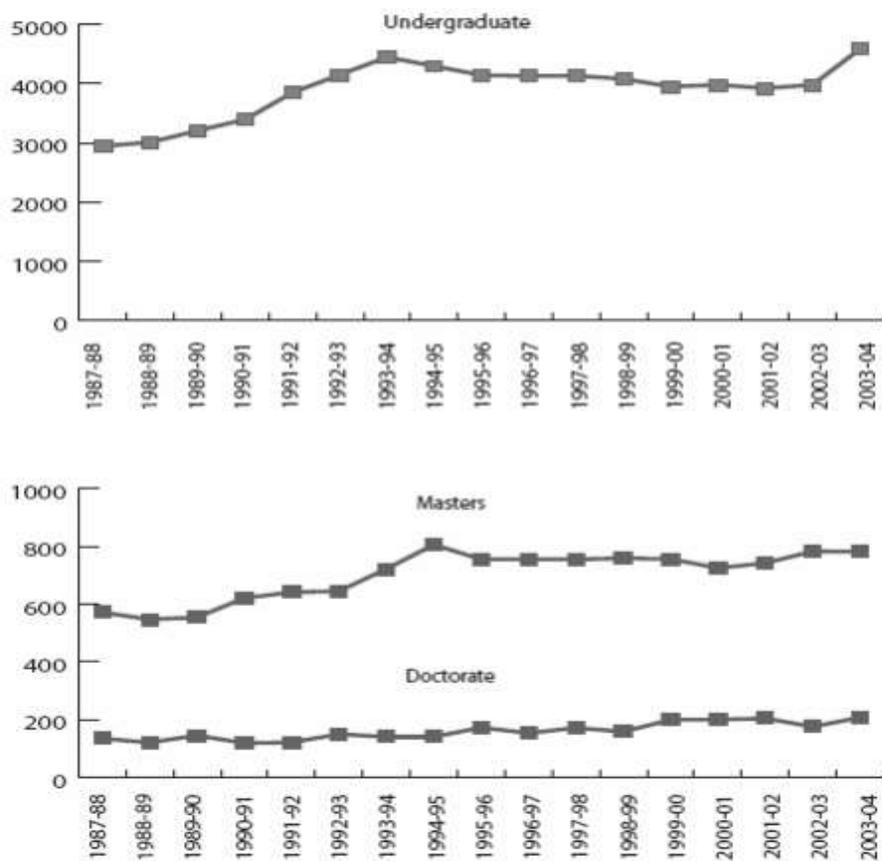


Figure 23. Undergraduate and Graduate Geography degrees conferred from 1990 to 2004
 Source: AAG Handbook and Directory of Geographers, 2005, https://gato-docs.its.txstate.edu/jcr:42d98ff7-42d2-418c-b14a-55f288f9d99c/State_of_Geography_Report.pdf

IV. PLANNING SALARIES IN CONTEXT

According to the 2019 Bureau of Labor Statistics assessment, “Employment of urban and regional planners is projected to grow 13 percent from 2016 to 2026, faster than the average for all occupations. ... Planners will also be needed as new and existing communities require extensive development and improved infrastructure, including housing, roads, sewer systems, parks, and schools...” (BLS 2019). This positive job market outlook is consistent with the assessments of Focus Group participants’ and the Chairs’ surveyed. Some focus group participants indicated that all their graduates find good jobs, and the Chairs’ survey confirms this: almost 90% of Planning graduates find employment in planning or related fields within a year of graduation.

On the other hand, focus-group discussions at the 2018 ACSP conference suggested that declining enrollment in Planning may be explained by planners’ salaries not keeping up with the increasing costs of higher education. In the same logic, teachers’ salaries are not keeping pace with higher education costs and enrollments in Education degrees are declining fast. While the Planning job market does not appear to be an issue with regards to job placement, we explored the possibility that Planners’ salaries may not be strong enough to incentivize students to pursue a Planning education.

We collected planners’ salaries and salaries in several related professions from a variety of sources (Table 3). Salaries vary widely across the country, and these averages do not account for regional disparities. Overall, the average planners’ salary of \$76,200 is lower than the salaries of architects (\$88,800), geographers (\$80,500) and business/MBAs degree holders (\$86,000). It is slightly higher than the average salary of landscape architects’ (\$73,200) and substantially higher than social workers’ (\$49,800). Starting salaries may be more relevant than average salaries at the point when students decide whether or not to enter the field. The average entry-level salary for planners is between \$52,000 (APA 2018) and \$56,000 (Payscale.com). Planner I salaries are generally commensurate with Architect I salaries – but architects appear to see higher pay progression over their careers.

It is possible that students consider starting and career-average salaries when deciding whether or not to join a planning program. If this is the case, Planning falls behind some fields, but remains commensurate with others. It is difficult to assess, from this analysis, whether planning starting salaries significantly contribute to declining enrollment in planning. It appears more likely that declining enrollments are more generally tied to declining graduate studies in all social sciences – in contrast to growing enrollments in the more lucrative engineering, computer sciences and health fields.

Table 3: Salaries by discipline. Entry-level specified when available

	Average salaries	Data source
Planner I	\$56,000	Payscale.com
	\$48-76,000	Glassdoor.com
	\$41-58,000	Salary.com
	\$52,000 with < 3 yrs experience	APA 2018
Planners all levels	\$76,240 (median = \$73,050)	BLS 2018
Architect I	\$39-64,000,	Payscale.com
	\$51,000 if less than 5 years of experience	2018
	\$49-87,000, average \$72,000	Glassdoor.com
	\$55,000 (\$45-61,000)	Salary.com 2019
	\$68,000	AIA 2019
Architects, all levels (except naval architects)	\$88,860 (median: \$79,380)	BLS 2018
Landscape architect all levels	\$73,160 (median: \$68,230)	BLS 2018
Geographers all levels	\$80,530 (median: \$80,300)	BLS 2018
Cartographers and Photogrammetrists	\$68,340 (median: \$64,430)	BLS 2018
Surveying and Mapping Technicians	\$47,690 (median: \$44,380)	BLS 2018
Public health all levels	\$57,452	Glassdoor.com
Epidemiology	\$75,690 (median: \$69,660)	BLS 2018
Sociology all levels	\$90,290 (median: \$82,050)	BLS 2018
Social work all levels (Child, Family, and School Social Workers)	\$49,760 (median: \$46,270)	BLS 2018
Business, MBA	\$86,000	Payscale.com
Business, MBA 1 yr experience	- Customer service analyst: \$47,000	Indeed.com
	- Mergers & acquisition: \$113,000	
Business administration, no experience	\$48,395	Payscale.com 2019

V. STEM DESIGNATION: PROS, CONS, PROCEDURES

The Chairs survey (Section II of this report) notes that some planning programs have switched to STEM (Science Technology Engineering Math) CIP codes and others are considering doing so. The purpose of these actions is to make the programs more attractive to foreign students who can take advantage of three years rather than one year of Optional Practical Training (OPT) under current immigration rules. The CIP codes they most often switch to are Sustainability Studies (30.3301) and Management Science (52.1301).

Chairs also ask whether ACSP, perhaps working with APA, could work to re-designate Planning's CIP code (4.0301) as STEM for immigration policy purposes. This involves persuading the U.S. Department of Homeland Security (DHS) to add a CIP code to a list of fields approved for extended OPT. This list is posted on the DHS website and changes are announced in the *Federal Register*. Other fields achieve this by working with their national organizations and local Congressional representatives to bring their case to the attention of DHS.

Pros of pursuing a field-wide re-designation include making Planning a more attractive field for foreign students, and ensuring the integrity of NCES CIP code-based data on enrollments, degrees awarded, and so on. Cons are that some in the field do not think of themselves as scientists but rather as humanists, and that immigration policy may change away from the OPT mechanism. In addition, the lobbying work necessary is very substantial, with highly uncertain outcomes.

Allied fields, specifically Architecture and Landscape Architecture, have attempted to re-designate their CIP codes to be STEM. The Association of Collegiate Schools of Architecture (2018) published a white paper and undertook Congressional lobbying that led to successful 2018 legislation designating Architecture as a STEM field (Carson 2019). The American Society of Landscape Architects (2016) published an earlier white paper that it sent directly to the U.S. Department of Homeland Security, where it has languished (Barth 2019), but ASLA continues to advocate for STEM designation in conjunction with a broader STEM education coalition (ASLA 2019).

As of the writing of this report, neither Architecture nor Landscape Architecture has successfully gained entry onto the list of CIP codes accepted by the Department of Homeland Security as eligible for extended OPT.³ That list has not been updated since 2016. The next expected update is in 2020. However, that is uncertain because of its links to the ongoing debates about U.S immigration policy (Francis 2019, Redden 2019).

If Planning wants to pursue a field-wide STEM designation for immigration policy purposes, it will likely need to go through the steps Landscape Architecture did in quantifying the STEM content of their curriculum (30% in their case), preparing a white paper summarizing this finding, working with friendly Congressional representatives, and advocating persistently for the change. Since the next likely date for revisiting the DHS list of approved CIP codes is 2020, this is a good time to make the effort. Next steps would be to form an ACSP ad hoc committee, review the ASLA and ACSA white papers, contact the STEM Education Coalition (<http://www.stemedcoalition.org/>), identify relevant Congressional staffers, and act before the new list is published in the *Federal Register* (if it actually happens).

³ U.S. Department of Homeland Security. Accessed on October 20, 2019 at <https://studyinthestates.dhs.gov/eligible-cip-codes-for-the-stem-opt-extension>.

VI. COMMENTS RECEIVED

Findings of this report were presented and discussed at the ACSP Business Meeting on October 25, 2019 and at a listening session during the ACSP Annual Conference on October 26, 2019 in Greenville, SC. Participants offered many insightful comments that we summarize here. We view these comments as helpful for framing future research and action by ACSP.

STEM

- International students are definitely asking for planning programs to have a STEM designation and they are very happy when we deliver it. The employment implications of extended OPT, and the increased odds of obtaining a green card, have tremendous value to them.
- Domestic children are raised on STEM now too. They and their parents increasingly value education that includes a serious STEM component.
- Planning as a field is becoming more analytical. Therefore a STEM designation is appropriate.
- Landscape Architecture has pursued a STEM designation with vigor. It is core to that profession. Their interest is not just a product of the heat of the moment due to enrollment declines. Maybe the same is true of planning.
- CIP codes are used for allocating resources within some universities. Hence there may be unintended consequences of switching to a STEM designation.
- It may make sense to do targeted marketing and branding for planning based on STEM if a change is made.

Parallel Efforts

- The Diversity Committee report has also collected and analyzed data on race, ethnicity, and nationality of students.
- The Global Planning Education report has relevant insights.
- The ACSP Institutional Data Task Force has or a building relevant data.
- Chairs would appreciate it if ACSP, PAB, Planetizen, NRC, and other data collection platforms coordinated to reduce their reporting burdens. A cross-walk of how these universes relate to one another in coverage would be valuable.
- For the next Chairs Survey, it would be valuable to ask (1) how did your students learn about planning, and (2) where are your grads now working?

Enrollment Enhancement Efforts

- By ACSP
 - Perform discipline-wide marketing.
 - Place ACSP content on Planetizen, CityLab and Next American City portals
 - Add an ACSP representative to the Urban Planning REDDIT forum.
 - Support weaker programs by offering recruitment education for their administrators.
- By Member Programs:

- Acquire data on prospective students for marketing purposes from Idealist, GRE takers, those who participate in alternative spring breaks, and veterans organizations.
- Develop night-school programs for professionals already working in the field.
- Develop online degree programs.
- Develop 3-1-1 (BA/MCRP) dual degree programs
- Prepare students for private sector employment (e.g., Uber, Google) as well as our traditional public and non-profit sector placements.
- Use social media in a more coordinated way for attracting students.
- Reach out to internal advisors within your university to steer students toward planning.
- Follow up unfinished admission applications and encourage completion.
- Establish stronger links with regional APA chapters.

Future Research

- Study regional variation in enrollment changes, losses to other fields, cost of education/student debt, losses of students to paying jobs, automation of jobs, diversity of students, changing mix of international students.
- Determine what is the effect of international competition for students. (1-year master degrees in UK and the Netherlands; Canada's attraction due to U.S. immigration restrictions; increased academic capacity in China & India).

VI. CONCLUSIONS

We reported preliminary findings at the ACSP Administrators Conference in Minneapolis on 15-16 March 2019. This report includes the findings of the Interim Report, as well as subsequent research results. This report concludes the efforts of the ACSP Enrollment Task Force to investigate shifts in demand, coping strategies, and STEM-related issues for Masters degree programs. A subsequent report will focus on Doctoral programs in Planning.

Our key findings are:

1. Enrollments in Planning graduate programs have been declining nationally since the end of the Great Recession in about 2010. Declines affect programs in many regions, but some programs are successfully expanding in spite of the national trend. Nationally, current enrollments are back down to where they were in 2003-04.
2. Both undergraduate and graduate education programs in many other fields have also experienced stasis or decline due to demographic factors and the opportunity costs of going to graduate school while the economy is booming.
3. Factors particular to the declining enrollments in Planning may include competition from similar fields, regional competition, slow regional economic growth, less attractive starting salaries for Planning graduates, and the recent decline in foreign students.
4. Programs at ACSP member schools are trying a variety of techniques to bolster enrollments including building pipelines from similar undergraduate majors, pursuing non-traditional teaching models and cohorts, and increasing local public awareness of the field.
5. Enough programs are pursuing a STEM (Science Technology Engineering Math) designation to increase their attractiveness to foreign students that it may be better for the field as a whole to try to get its governmentally-specified CIP code re-designated as STEM for immigration policy purposes. The next time the list is likely to be updated is in 2020, although this is uncertain. But now is the time to pursue the field-wide re-designation if the field wants it. On the other hand, we recognize that the effort would be very substantial, and would have highly uncertain outcomes. We recommend that the next Chairs Survey revisit the STEM question and that it be further discussed at the next ACSP Governing Board meeting.

References

- ACSP. *Guide to Planning Programs* (various years)
- American Institute of Architects (AIA). *2019 Compensation Report*.
<https://www.aia.org/resources/8066-aia-compensation-report>
- American Planning Association 2018. *Summary of 2018 Planners Salary Survey Results*
<https://www.planning.org/salary/summary/>
- American Society of Landscape Architects (ASLA), Committee on Education. 2016. Landscape Architecture and Science, Technology, Engineering, and Math (STEM).
- American Society of Landscape Architects (ASLA). 2019. ASLA makes a case for landscape architecture alignment with STEM. Press release, accessed on October 20, 2019 at <https://www.asla.org/NewsListingDetails.aspx?id=56180>.
- Association of Collegiate Schools of Architecture (ACSA). 2018. *White Paper on Architectural Education/Research and STEM*. Accessed on October 20, 2019 at <https://www.acsa-arch.org/docs/default-source/acsa-board-of-director-files/2018-stem-whitepaper2.pdf?sfvrsn=2>.
- Barth, Brian. 2019. ICed out. *Landscape Architecture Magazine* (February). Accessed on October 20, 2019 at <https://landscapearchitecturemagazine.org/2019/02/28/iced-out/#more-17189>.
- Bureau of Labor Statistics (BLS), U.S. Department of Labor. Un-adjusted Unemployment Rate by State (Series ID LNU04000000Q), Labor Force Statistics from Current Population Survey. Accessed March 9, 2019 at <https://www.bls.gov/cps/tables.htm>.
- Bureau of Labor Statistics (BLS) 2019. *Occupational Outlook Handbook: Urban and Regional Planners*
<https://www.bls.gov/ooh/life-physical-and-social-science/mobile/urban-and-regional-planners.htm>
- Carson, Giselle. 2019. Architecture Designated as STEM Subject – But Status Quo for Immigration. Marks Gray Blog dated January 8. Accessed on October 20, 2019 at <http://www.marksgrey.com/stem-opt-can-be-used-strategically-but-not-for-architecture-yet/>.
- Francis, Laura D. 2019. Republican Lawmaker Pushing to End Foreign Grad Training Program. *Bloomberg Law* (June 12). Accessed on October 20, 2019 at <https://news.bloomberglaw.com/daily-labor-report/republican-lawmaker-pushing-to-end-foreign-grad-training-program>.
- Planning Accreditation Board (PAB). Annual Report Online Database Accessed March 9, 2019 at <http://www.planningaccreditationboard.org/index.php?id=112>.
- Redden, Elizabeth. 2019. Waiting for Work Authorization. *Inside Higher Ed*. (June 25). Accessed on October 20, 2019 at <https://www.insidehighered.com/news/2019/06/25/international-students-applying-work-authorization-face-longer-wait-times>.

Rutgers University, Bloustein School of Planning and Public Policy, Student Services Office. Master of City and Regional Planning Program Applicants, Admits and Admits-Coming. February 2019.

U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS).

U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), survey data accessed at <https://nces.ed.gov/ipeds/use-the-data>.