Program Impaction at Sacramento State:  
Time for a Change?  

*Report to Provost Frederika (Fraka) Harmsen*

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I. Introduction

As Sacramento State emerges from an era of sharply reduced revenue, we ought to assess the legacy of changes to cope with the major cuts necessitated by the Great Recession. Interestingly, on the academic side of the house the structural alterations have been less pronounced than at least a few people imagined they might be. During the midst of the crisis some speculated that the University might consolidate academic units, eliminate programs, and the like. For the most part this did not occur. In particular, the University today has virtually the same array of undergraduate programs that were in place in 2008 prior to the economic downturn.

Yet one thing has changed dramatically: the importance of program impaction for the academic careers of undergraduate students. Prior to the recession, with only a couple exceptions undergraduates were free to choose any major offered at Sacramento State without meeting additional requirements, beyond in some cases satisfactorily completing a few prerequisite classes specified in the official course catalog. In the midst of the downturn several units faced a convergence of challenges that made it problematic to meet the needs of students who wished to declare particular majors: rising demand; reduced number of full-time faculty because of the inability to replace professors who retired or took other positions; and limited ability to cover all courses with contingent faculty given funding cutbacks. As a consequence, several campus units requested and received permission to “impact” particular majors, i.e., to limit the number of students who could enter the program and set additional, program specific mandates for such entry. Typically these additional requirements consisted of: a) meeting a specified overall grade point average (e.g., 2.7, 3.0) before a student would be allowed to officially declare a certain major; and b) performing in a satisfactory manner in specified “pre-major” courses.

While it is common knowledge that impaction now has a much broader reach, there is no agreed upon metric for assessing its overall impact. Table 1 provides one way of doing so, focusing on the number of undergraduate majors in programs subject to impaction. During fall of 2009, only 384 undergraduates were in majors subject to impaction rules. By fall of 2013 there was over a ten-fold increase in this number, with 4,463 students in majors subject to impaction. This includes two of the most popular majors on campus, Criminal Justice and Psychology, as well as the entire undergraduate program in the College of Business Administration. Furthermore, Biological Sciences, one of the largest programs on campus with 802 majors in 2013, is to be subject to impaction next academic year. Even the above figures in some sense understate the current reach of impaction: they do not count either students who are formally classified as “pre-majors” in impacted programs or those who might have been interested in an impacted program but opted not to pursue it because of that program’s requirements. For instance, in 2013 there were 569 students who had expressed interest in a Psychology major.

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1 Students choosing to do interdisciplinary “special majors” have always needed to get multiple approvals not required of those in traditional majors.
Table 1: Trend in Number of Undergraduate Majors in Programs Subject to Impaction

<table>
<thead>
<tr>
<th>PROGRAM &amp; COLLEGE</th>
<th>Fall 2009</th>
<th>Fall 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Business Admin.</td>
<td>--</td>
<td>1,704</td>
</tr>
<tr>
<td>Psychology (SSIS)</td>
<td>--</td>
<td>972</td>
</tr>
<tr>
<td>Criminal Justice (HHS)</td>
<td>--</td>
<td>887</td>
</tr>
<tr>
<td>Health Science (HHS)</td>
<td>--</td>
<td>318</td>
</tr>
<tr>
<td>Nursing (HHS)</td>
<td>193</td>
<td>257</td>
</tr>
<tr>
<td>Photography (A&amp;L)</td>
<td>--</td>
<td>145</td>
</tr>
<tr>
<td>Interior Design (A&amp;L)</td>
<td>114</td>
<td>92</td>
</tr>
<tr>
<td>Graphic Design (A&amp;L)</td>
<td>77</td>
<td>87</td>
</tr>
<tr>
<td><strong>Total in Impacted Programs</strong></td>
<td><strong>384</strong></td>
<td><strong>4,462</strong></td>
</tr>
</tbody>
</table>

Despite its potential significance, prior to the present effort there had been little research on the effects of program impaction at Sacramento State. Recognizing this gap, last summer Provost Frederika (Fraka) Harmsen requested that I study and evaluate the consequences of impaction on our campus, and give consideration to alternative approaches. She offered a single course buyout to do so and set no constraints on the research. The report before you presents my findings and recommendations. More specifically, it reflects interviews with a wide variety of people involved in the impaction process, review of available documents, and examination of data from the Office of Institutional Research and others. The appendix provides more details about the interviews.

I have two main goals in this report. The first is simply to *describe* where we stand with impaction and how we got here. I presume that many people are unclear about the specifics, though they may have a sense of what impaction means and how it has evolved. Therefore there is value in trying to build a common understanding. The

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2 Sources: Departmental Fact Book and Special Reports.
3 The nursing category does not include the program for students who already are registered nurses but are seeking a bachelor’s degree; the program for those students is not impacted.
second is to evaluate program impaction at Sacramento State, both in itself and relative to alternatives. Based on my review of the evidence, that evaluation is not favorable.

II. What Is Program Impaction and How Does it Depart from Campus Norms?

To fully understand program impaction, one must first be clear about how it departs from traditional norms. Historically, undergraduate students in good standing at most California State University (CSU) campuses generally\(^4\), and at Sacramento State specifically, have been free to declare whatever major they choose. This appears to reflect a deeply held belief that students ought to be able to determine the course of study that best suits them. This belief is reflected in a 2002 CSU Chancellor’s Office document setting forth for enrollment management at CSU campuses, in accordance with Board of Trustee policy (see https://www.calstate.edu/acadres/docs/CSU_Enroll_Mngment_Policy_Practices.pdf#page=1&zoom=auto,-169,175). The initial page of the document states:

CSU’s enrollment management policies are designed to assist eligible first-time freshman and upper-division transfer students to attend their first-choice CSU campus and to enroll in their chosen major. With the exception of certain high demand majors, programs, and campuses, nearly all students who meet CSU admission requirements are admitted to their first-choice campus or major [emphasis added].

The commitment to free choice of majors is also evident in many procedural choices. For example, even now when students apply to CSU campus through the “CSU Mentor” system they are allowed to designate any non-impacted major they want. Our campus then recognizes these designations for purposes such as which orientation session to attend. True, each undergraduate student is required to submit a form with signatures from both an advisor and from the department chair to formally move from undeclared status or change a major. Additionally, in a few cases even in non-impacted majors students must complete specified prerequisites before a major choice can be approved. Yet these mandates have not acted as a significant barrier to students pursuing the major they want.

Program impaction changes the rules, and allows campus academic units to exert more control over how many undergraduates are admitted to a major and what requirements they must meet to do so. The presumption is that such restrictions are necessary because of inadequate resources to meet demand. Units implement impaction by developing and seeking approval for “supplemental criteria” that students must meet that are specific to that program. Program impaction plans long have needed approval by the campus president and by the CSU Chancellor’s Office. As will

\(^4\) California Polytechnic University, San Luis Obispo has long been an exception in this regard. Even prior to the Great Recession that campus set additional standards for declaring particular majors, and sharply restricted the ability to change majors after arriving on campus.
be discussed further in the next section, in recent years the Sacramento State Faculty Senate proposed and President Alexander Gonzalez approved additional guidelines for sanction of program impaction plans.

It should be noted that program impaction rules do not apply to graduate programs, as departments offering such programs have long had the ability to set specific admission criteria and limit the number of enrollees. This is true of both master’s programs and the few stand-alone doctorate programs that CSU campuses have been permitted to operate. In a sense program impaction makes undergraduate somewhat more like graduate ones in terms of the amount of control over admissions granted to particular units.

Program impaction is one of a number of mechanisms that the Chancellor’s Office permits campuses to use to cope with resource constraints. Another major mechanism is campus impaction, which affects how many students are admitted to the campus in the first place. Like most of its CSU peers, Sacramento State has been operating under campus impaction for several years. However, in contrast to some other CSU’s, campus impaction has not had a major impact on Sacramento State, and the campus Admissions Director has not used impaction criteria in some semester to ensure that the University remains within its enrollment target. No doubt this is due in major part to the fact that the vast majority of undergraduate applicants are from the University’s six county “service region,” i.e., Sacramento, Yolo, El Dorado, Placer, San Joaquin, and Solano Counties. Campus impaction criteria do not apply to the service region; undergraduate applicants residing in that large area only need to meet the general criteria for eligibility to the CSU system.

III. The History of Program Impaction at Sacramento State

Perhaps the most critical historical point is that program impaction on our campus has evolved in an ad hoc manner, in response to specific challenges within particular units. There has been nothing resembling a campus strategy for determining when impaction is appropriate, how it fits with other options for controlling enrollment, etc. Program impaction has tended to be a “bottom-up,” localized phenomenon (which does not imply that the actual effects remain localized).

Before the Great Recession, program impaction affected relatively few Sacramento State students and appears not to have generated much controversy, although there were some concerns expressed even then. For a lengthy period prior to the middle part of the last decade, the only impacted program was the traditional Bachelor of Science in Nursing (BSN) program for students who were not already certified as registered nurses. (The School of Nursing also has a “RN to BSN” Program for registered nurses with an associate degree seeking a bachelor’s degree for career advancement; that program is not impacted.) Students aspiring to the traditional BSN program had long needed to have grade point averages in prior coursework that were significantly higher than what was necessary to graduate from the University generally; would-be nurses needed to meet other requirements as well. For many years only a
minority—and sometimes only a small minority—of students applying for the BSN program was accepted. This prompted some concern, expressed in the Faculty Senate and elsewhere, about elitism and the possible unrepresentative nature of nursing students, given the demographics of the student body as a whole. Yet nursing was widely seen as a special case. The sharp restriction on program size was necessitated by the program’s high costs. Nursing programs have uncommonly high per student costs because of strict certification requirements that affect the size of certain classes, additional equipment and facilities necessary for nursing training, and the difficulty of obtaining and retaining nursing faculty given that many could easily obtain highly paid employment in the nursing field itself.

In the middle part of the last decade, two other relatively small, relatively expensive programs went under impaction: the Graphic Design Program and Interior Design Programs in the Department of Design, College of Arts and Letters. These cases did not fit the general pattern in that it was not the department faculty that requested impaction. Instead, it was the then Dean of Arts and Letters, who was concerned about program expenses and did not wish to fund further sections. The Dean was especially concerned about the costs of running and equipping studios.

The big changes came after 2009 and the severe cuts in CSU funding. Impaction was requested and approved for several large, popular undergraduate programs at Sacramento State. The first was the College of Business Administration, which requested and received approval for impacting its entire undergraduate program in 2010, to be effective in 2011-12. Next came: 1) the Health Sciences Program, Department of Kinesiology and Health Science, College of Health and Human Services; 2) undergraduate program, Division of Criminal Justice, College of Health and Human Services; and 3) undergraduate program, Department of Psychology, College of Social Sciences and Interdisciplinary Studies. Impaction for all of these programs took effect in 2012-13. In each of the above cases, impaction was motivated by departmental faculty concern about increased student demand, inability to hire new full-time faculty because of budget restrictions, rising section sizes, inability of major students to get classes, and the like. Some units took steps to decrease the flow of students, such as eliminating required classes, but found these inadequate to address capacity problems. For example, the Division of Criminal Justice chair reported that, prior to pursuing impaction, the unit eliminated a couple requirements, lowered the number of units required to graduate, and moved to requiring advising with the presumption that this would assist students to progress through the major in a timely manner. Yet these measures still left too many Criminal Justice students with too few faculty and sections to teach them.

Since 2012 the status of program impaction has changed only incrementally, with the notable exception of the previously mentioned move of the large undergraduate program in Biological Sciences to impaction status next academic year. None of the large programs have moved out of impaction status. The precise criteria used to select students for admission to these programs, such as overall grade point averages, have varied from year to year in response to the number of applications perceived. Yet this
was permitted under the supplemental criteria established for each unit’s impaction process and does not constitute withdrawal from impaction status. Within the Department of Design, one relatively small program, Interior Design, will move out of impaction status next year while another, Photography, has moved into impaction; the former move was prompted by a decline in the number of majors. There are at present no clear plans for when and if programs will move out of impaction. Consequently, as of fall 2015 it is very likely that a higher percentage of undergraduate students will be in impacted majors than has ever before been true at Sacramento State.

Faculty Senate Involvement in Program Impaction

Significant Faculty Senate involvement in program impaction has occurred only in the last few years. More precisely, it began after Sacramento State joined most of its CSU peers in seeking campus impaction status, and after several specific programs began to request impaction, per my earlier discussion. Senators expressed concern about the effects of these actions on choices available to undergraduates, effects on diversity goals, ability to meet larger University aims such as timely graduation, consequences for closely related programs not subject to impaction, etc.

Ultimately these concerns led to successive policy proposals that were considered by Faculty Senate committees, passed by the full Senate, and approved by President Gonzalez. The first was an Interim Policy on Program Impaction (FS 11/12-62) passed by the Senate in early 2012. It contained a broad statement that: “Programs are advised to explore alternatives to impaction prior to applying for program impaction status,” but mainly focused on the specific information programs should provide when requesting impaction. This included information on options considered to reduce capacity problems, admissions criteria to be used once impaction was granted, likely consequences for other programs, and effects on students (e.g., how advising would be handled). The Senate also established an Impaction Task Force to consider further policy recommendations. The Task Force issued its report in August of 2013. This short document focused on the recommendations themselves; it did not contain research findings or analysis of alternatives to impaction. Task Force recommendations were incorporated into a revised Policy on Impaction passed by the Senate in early 2014. The new Policy contained more lengthy guidelines that programs should follow in seeking impaction.

Perhaps most important for the present purpose, the recently approved Policy on Impaction contained a much stronger statement of reservation about the use of impaction. The first lines of that policy specify the following principle: “Program impaction status is a last resort, normally temporary, process to address a persistent, extreme imbalance between a program’s student capacity and student demand [emphasis added].” The clear implication is that in the absence of such a condition, it would be preferable to reinstate the prior status quo in which in the vast majority of cases undergraduates were free to select their majors.
IV. What Criteria Would Indicate if Program Impaction Is or Is Not Working Well?

I have argued that the wave of program impaction efforts a few years ago was prompted by local, unit specific concerns about capacity to meet undergraduate student demand—it did not emerge out of any sort of University-wide consensus or planning process. I have also contended that impaction violates generally accepted norms about student choice, and that concern about this and other issues has been incorporated in subsequent official University policy that refers to impaction as a “last resort.” What then might be the criteria for determining if program impaction at Sacramento State is or is not working well? The following criteria follow logically from our established policies, other stated University goals, and broadly shared considerations.

1. Program impaction should be reserved for programs with especially severe problems in meeting student demand, and should allow those programs to effectively control demand. All of this is consistent with stated reasons for seeking and allowing program impaction in recent years, including the policies contained in the successive policies approved by the Faculty Senate.

2. Program impaction should not cause serious capacity issues in other, non-impacted programs. This has long been perhaps the foremost concern about impaction. Students who fail to get admitted to impacted programs, or who opt not to apply to them because of concern about admission, generally do not leave the University—they go to other programs. A particular worry is that such students will choose majors in a few closely related programs which remain open to any undergraduate, rather than spread themselves more broadly.

3. Program impaction should either advance or at least not hinder progress toward meeting other stated University goals, embedded in such documents as the University Strategic Plan. These include such aims as increasing the graduation and retention rates.

4. Program impaction should not result in major administrative costs. One indisputable fact is that program impaction creates administrative responsibilities that are not required for non-impacted programs. That is because one or more people must determine if students applying for an impacted major meet the supplemental criteria for the program, e.g., the overall grade point average (GPA) standard. The University receives no additional money (either from student fees or the state General Fund) for these extra costs. The empirical question is whether the new administrative costs are minor, i.e., easily absorbed into the regular responsibilities of existing unit level faculty and staff, or not.

5. Program impaction should occur after other credible alternatives have been shown to fail to address capacity issues or are not feasible. There are no readily apparent metrics to assess whether alternatives have been adequately considered.
Nevertheless, I will contend that we can make a reasonable judgment about whether this standard has been met in general.

V. Evaluation of How Impaction is Working

A. Helping Programs to Meet Severe Demand Challenges

Overall the evidence suggests that impaction has helped programs with serious capacity problems better meet demand. Data indicate that the majors that underwent impaction during the Great Recession were indeed among those that faced the greatest challenges in serving students with existing capacity. Notably, the student/faculty ratio (SFR) for the programs going under impaction was significantly higher than was the case for the University as a whole. For example, the SFR for the University as a whole in fall of 2011 was 26.1; the SFR for Psychology during that semester was 34.6 (source: Departmental Fact Book). Additionally, my interviews with chairs and heads of units that underwent impaction indicated that impaction did help them to stabilize enrollment, better ensure that majors were able to obtain sufficient classes, and the like. One chair told me it felt like her department was “always drowning” in students prior to impaction, with long wait lists for classes, and that this situation improved after the departmental impaction plan was implemented. Analysis of available statistical data supports this claim: the number of majors and percentage of undergraduates in impacted majors tended to stabilize or fall after impaction was implemented. For example, Figure 1 shows the number of Criminal Justice students among entering student cohorts in recent semesters; the downward trend since impaction is readily apparent, especially among the first-time freshmen cohorts.

Yet this control over demand is achieved at the cost of some potential inequity over time among applicants with similar qualifications for a particular program. That is because different standards of acceptance to the major may be used from year to year. For example, the College of Business Administration’s Web page dealing with impaction (http://www.csus.edu/cba/ubac/Impaction.html) indicates that the GPA cutoff for acceptance to the major has ranged from 2.5 to 3.0. This means that a student with an overall GPA of 2.9 and who has passed all prerequisites might be accepted in one semester, while an applicant with a nearly identical academic record might not be accepted in the following one.

Furthermore, some programs find a long run downside to public knowledge about their ability to assert control over demand: fewer students may apply to the major than is desirable as students become accustomed to impaction status. That is because some potential students may be discouraged by the extra work required to get into an impacted major, stories from peers about how they failed to be accepted, and the like. There is some concern that an impacted major may—rightly or wrongly—develop a reputation as inhospitable. The chair of the Department of Design indicated that this may well have happened in his department, and this may partially explain a drop in applicants. Interestingly, Design was the first department to move a program out of impaction in recent years.
Figure 1: Trend in Number Criminal Justice Students among Entering Cohorts

Source: Joel Schwartz, Senior Research Analyst, Office of Analytics and Institutional Effectiveness, based on analysis of CMS and other data.
More important still, *it is much less clear that all the programs that underwent impaction a few years ago remain those that face the most serious capacity problems.* This is evident by examining Table 2, which shows the SFR for the College of Business Administration and Department of Economics (within the College of Social Science and Interdisciplinary Studies, or SSIS) over time. This comparison is appropriate because Economics and Business Administration share required courses (Introduction to Macroeconomic Analysis, Introduction to Microeconomic Analysis, Introduction to Statistics), and faculty within each unit acknowledge that Economics is a common substitute for Business Administration as a major. As shown in Table 2, the SFR for Business Administration was well above the average for the University as a whole in the fall of 2009, and the SFR for Economics was only slightly above that average. Yet since that time the SFR within Business Administration has fallen significantly while the SFR within Economics has risen, and by fall of 2013 the SFR for Economics was higher than in Business Administration—yet the latter was still impacted while the former was not.

**Table 2: SFR in the College of Business Administration and Department of Economics over Time**

<table>
<thead>
<tr>
<th></th>
<th>Fall, 2009</th>
<th>Fall, 2011</th>
<th>Fall, 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Business Administration</td>
<td>35.8</td>
<td>33.9</td>
<td>31.3</td>
</tr>
<tr>
<td>Department of Economics</td>
<td>25.9</td>
<td>28.8</td>
<td>31.8</td>
</tr>
<tr>
<td>University as a whole</td>
<td>25.1</td>
<td>26.1</td>
<td>26.0</td>
</tr>
</tbody>
</table>

**B. Effects on the Capacity of Other Departments**

The prior paragraph encourages attention to the largest concern about program impaction at Sacramento State: its effects on the capacity of related, non-impacted programs. The evidence suggests this concern is justified. Part of this comes from statements by chairs of departments affected by impaction of related majors.

*Example: Sociology Undergraduate Program.* Sociology is an interesting example because it appears to be strongly influenced by the impaction of two related majors: Psychology and Criminal Justice. With respect to the latter, it should be noted that multiple Sociology faculty focus in major part on criminal justice issues, and the Department offers such classes as “Issues in Crime and Social Control” (SOC 10). The Sociology Chair reports that since the related programs have been subject to impaction there has been a surge in the number of Sociology majors and students. Input from many students indicates they were moving to Sociology precisely because they were discouraged about getting into other majors. The sharp increase in Sociology students has led to vastly increased chair and staff time advising students, long class wait lists, and the like.

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6 Source: Departmental Fact Books.
Statistical data also underscore the secondary effect of impaction on related programs. Figures 2, 3, and 4 (on the following pages) show trends over recent semesters in the percentage of undergraduates within sets of related programs. Figure 2 focuses on undergraduate programs in the College of Business Administration and the Department of Economics. Figure 3 presents information about undergraduates in Criminal Justice, Psychology, and Sociology. Figure 4 shows the trend in Health Sciences and Biological Sciences. With respect to the last set of programs, it bears emphasizing that Biological Sciences is moving to impaction because of the perceived extra pressure on its resources caused by impaction in related majors such as Health Sciences. In all cases, we see that: 1) the portion of students in impacted majors has stabilized or declined; and 2) the portion of majors in related programs has significantly and in some cases sharply increased. And it needs be emphasized that the increase in students in units affected by impaction of related programs has not been accompanied by a corresponding increase in resources. For example, some departments with non-impacted majors that have experienced a surge of majors in recent years have not hired a single new full-time faculty member from the beginning of the Great Recession through the beginning of the current academic year.

C. Effects on Major University Goals

One can imagine that program impaction could have effects on major University goals such as improving the retention and graduation rates. On the positive side, impaction might improve progress to degree for students within impacted majors by making it easier to get classes, allowing faculty and staff to spend more time with students, etc. On the negative side, program impaction may harm progress to degree for students outside of impacted majors for a number of reasons. First, students who fail to make it into impacted majors may “hang out” in related majors, hoping to eventually get into their first choice discipline while not making progress in another field. Second, students may need to take more units transitioning from an impacted major to a non-impacted one. Third, students who fail to get into a first choice major might get discouraged and leave school or reduce their unit load.

It should also be noted that impaction could improve progress to degree within impacted majors by excluding students with relatively weak academic qualifications. Research has shown such students are significantly less likely to receive a degree. However, to the extent this is true it simply means that those students have moved elsewhere in the University or dropped out. There is little if any reason to think that program impaction has affected the overall qualifications of Sacramento State undergraduates. As Table 3 shows, available evidence indicates these qualifications have been remarkably stable in recent years.
Figure 2: Major Trend Comparison between the College of Business Administration and Department of Economics

Source: Joel Schwartz.
Figure 3: Major Trend Comparison, Programs in Criminal Justice, Psychology, and Sociology

8 Source: Joel Schwartz.
Figure 4: Major Trend Comparison, Programs in Biological Sciences and Health Science

Source: Joel Schwartz.
Table 3: Stability in Academic Qualifications of Sacramento State Undergraduates\textsuperscript{10}

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First-Time Freshmen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Math SAT</td>
<td>488</td>
<td>484</td>
<td>489</td>
<td>483</td>
<td>480</td>
</tr>
<tr>
<td>Mean Verbal SAT</td>
<td>470</td>
<td>467</td>
<td>471</td>
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<tr>
<td>Average High School GPA</td>
<td>3.22</td>
<td>3.23</td>
<td>3.26</td>
<td>3.25</td>
<td>3.27</td>
</tr>
<tr>
<td><strong>Transfer Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Transfer GPA</td>
<td>3.07</td>
<td>3.03</td>
<td>3.05</td>
<td>3.04</td>
<td>3.07</td>
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</table>

A rigorous determination of the effects of impaction on progress to degree would require complex, multivariate analysis that is beyond the capacity of the present report. However, we may be able to get hints of possible consequences by examining trends in aggregate data for the past few years. It is too early to assess possible consequences on graduation rates. A review of retention rates does not provide clear evidence one way or the other. In 2013, with program impaction most fully in effect, the one year retention rate for native freshman was 82%; the equivalent rate in the four prior years had ranged from 79% to 83% (Source: University Fact Book, Section 7: Retention and Graduation). Also in 2013 the one year retention rate for transfer students was 85%; the equivalent rate in the four prior years ranged from 84% to 89%.

Yet there is at least one more specific, worrisome indicator that the increase in programs subject to impaction may be having a negative effect on progress to degree. We know from past research that at any point in time, students who have failed to declare a major (i.e., are officially “undeclared”) are much less likely to make progress toward a degree. This suggests we ought to pay attention to the portion of “undeclared” students among all undergraduates. Figure 4 does just that, separating first term freshmen from other students (i.e., second term freshmen, sophomores, juniors, and seniors) because the former group has been growing in recent years as a portion of the student body. The striking thing is that the number of undergraduates who are undeclared, and the portion of all majors who are undeclared, have both risen sharply in both groups in the past few semesters, coinciding with the increase in impacted majors. The increase among first term freshmen is especially notable. For many semesters prior to Fall of 2012 the portion of first term freshmen who were undeclared never reached 10%. In the last three semesters that portion has exceeded 11%. The data do not allow us to determine why students are undeclared, so any attribution of causality would be speculative. But it is possible that program impaction restrictions are pushing more students into the undeclared category.

\textsuperscript{10} Source: University Fact Book.
Figure 4: Trend in Number and Portion of Undergraduates Who Are Undeclared\textsuperscript{11}

\textsuperscript{11} Source: Joel Schwartz.
D. Effects on Administrative Costs

Again, program impaction results in new, unreimbursed administrative costs. These costs are related to determining whether students are eligible for the major under approved supplemental criteria, as well as advising students about getting into the major and alternatives available in other units. The nature of these expenses depends on the rigor of the criteria, the strictness by which they are enforced, the number of applicants, the level of local commitment to student advising, and other factors. It appears that these costs vary significantly across units.

In at least some cases, additional administrative costs have been significant. The Department of Psychology is notable in this regard. The supplemental criteria for admission to the Psychology major have included overall student GPAs; students are ranked by GPA, and those with higher grades are admitted up to the number of majors that can be accepted. Psychology applicants must also have completed PSYC 2 ("Introduction to Psychology") or its equivalent with a grade of "C" or better, as well as 30 semester units in total. Originally the Department believed it could rely upon Student Affairs to supply timely and accurate student GPA information such that department staff would only need to conduct the ranking and establish the GPA cut-off. This turned out not to be the case: the information from Student Affairs commonly came too late and was missing key data needed to assess grades and eligibility. Accordingly, Department staff needed to evaluate student transcripts locally. This was time consuming and costly, resulting in the need for temporary employees. Additionally, the Psychology Chair and existing staff needed to spend much additional time advising students about what was necessary to get into the major and what alternative majors might be appropriate. The Department found it very challenging to cope with these extra responsibilities.

Ultimately the College of Social Sciences and Interdisciplinary Studies recommended hiring an SSP II to help the Department with impaction and assume other College-wide responsibilities related to academic advising. Academic Affairs supported creation of a new position and an additional staff member was hired at the College level beginning in Academic Year 2013-14. The critical point is this: half of the duties of the new position would not be necessary in the absence of program impaction. Nor is Psychology alone in this regard: other academic units under impaction also have a significant portion of staff time to impaction related responsibilities such as processing of major applications. For example, the Colleges of Business Administration and Health and Human Services have student service professionals whose job responsibilities are related to program impaction.

Furthermore, the additional administrative costs are not incurred only by units offering impacted programs. Other campus units, notably units within Student Affairs, incur extra expenses as well. To get a full sense of additional costs I recommend that Student Affairs conduct a time/effort survey of those involved with impaction administration.
E. Consideration of Alternatives to Program Impaction

Has adequate consideration been given to alternatives to program impaction? The answer to this question is straight-forward: no.

The key point to emphasize is that nothing at present in either CSU system or University level policies sets up a process for considering alternatives to program impaction for the campus as a whole. And I see little evidence that such consideration has in fact occurred. Current procedural requirements are entirely focused upon determining whether or not a particular program is appropriate for impaction. That is, academic units seeking impaction status must document problems meeting enrollment demand, efforts to do so short of impaction, potential effects of impaction on other programs, potential effects on student diversity, etc. Under CSU system rules such efforts are necessarily lengthy, requiring public hearings. But the focus remains localized. The question that gets addressed is not: “Should Sacramento State use program impaction as a means of meeting heavy student demand in particular areas?” Instead, the question that gets addressed is “Should program X go under impaction?” These are very different queries.

VI. What Are Possible Alternatives to Program Impaction?

The prior paragraph inspires the next question: what are possible alternatives to program impaction? The present section of this report addresses that query. My aim is not to be exhaustive either with respect to possible alternatives or evaluating their merits. Instead, I mainly wish to suggest possibilities and underscore the fact that there are options that warrant serious consideration.

Option 1: Set Aside Significant University Funds for Hiring Full-time and Part-Time Faculty in High Demand Programs

As it has evolved over the past few years at Sacramento State, program impaction is based on the notion that at a particular point in time, the demand for seats in a particular program exceeds the capacity of existing faculty. But faculty capacity is not fixed, especially as the University’s revenue base shows significant improvement. Extra faculty could be hired in high demand programs, and this could relieve capacity problems. Programs seeking impaction have long emphasized this point. For example, the Chair of Kinesiology and Health Sciences indicated that impaction for Health Sciences could be entirely avoided if the University was able to hire two more full-time faculty members in the Health Sciences area.

In fact, even throughout the Great Recession and its immediate aftermath the University effectively had a campus-wide program for hiring additional part-time faculty in high demand areas. This was the “One Time Funded Sections” program by which Academic Affairs held a portion of extra funds from the Chancellor’s Office from a variety of sources and allocated them to different departments to add additional class
sections or expand existing ones, the vast majority of which were taught by contingent faculty members.

Simply hiring more contingent faculty members is not an adequate alternative to program impaction. Indeed, a main concern commonly expressed by high demand programs, and one that helped prompt them seek impaction status, was that the portion of classes taught by contingent faculty had reached an unhealthy level. The concern was not generally about the quality of teaching but about the need for full-time faculty to take on responsibilities for which contingent faculty members are not paid, such as advising and University service.

For the last two years the University has again been hiring a significant number of new, full-time faculty members. To serve as an alternative to program impaction, such significant hiring would need to continue and likely be expanded. It would also be highly desirable to develop some clear, specific campus-wide criteria about what conditions would justify one or more faculty hires as an alternative to program impaction.

Additionally, it is worth mentioning that even significantly increased faculty hiring would not fully address capacity issues facing a few specific units. This is because some units, especially within the College of Natural Science and Mathematics, face physical capacity problems. Notably, sufficient lab space is an issue for some departments such as Biological Sciences. Nevertheless, it was concern about availability of faculty resources that was the common denominator in moves toward impaction during the Great Recession.

Option 2: Pull Courses in High Demand Majors out of the General Education Program

The prior section emphasized that the supply of faculty members available to meet student demand is not fixed. Neither is the demand itself. To the contrary, it is possible for the University to make specific, conscious curriculum choices that are likely to influence the level of student demand in particular areas.

There are several ways in which the University could aim to reduce demand in majors experiencing capacity problems. For example, there could be further effort to redesign the curriculum to reduce demand for “bottleneck” courses in departments such as Biological Sciences that are used by majors in many departments. If successful, such efforts might reduce overall demand in Biological Sciences and elsewhere, thereby helping avoid the need for program impaction.

A reexamination of General Education (GE) appears especially promising if the aim is to reduce demand in departments experiencing capacity problems. Undergraduate students can take courses in a range of majors to fulfill the GE area requirements. Many of these courses are in impacted programs. For example, the current University Catalog lists seven Criminal Justice classes that may be used to fulfill
the GE Area D ("The Individual and Society"), Lower Division or Upper Division requirements. Presumably demand for Criminal Justice class sections would be lower if students could not receive GE credit for taking them.

This is not to argue that restricting GE in such a way is desirable. There may be strong programmatic reasons to include Criminal Justice classes in the GE curriculum. Additionally, pulling courses in impacted majors out of the GE program would lead to increased demand in other areas. Furthermore, restricting GE to courses in non-impacted majors would not affect demand in all presently impacted majors. Notably, the College of Business Administration has very few courses in the GE program so the above change would have very little impact on demand for its courses. The point is simply this: we can make curricular changes that could reduce demand for classes in particular programs.

**Option 3: Declare All Majors Impacted**

San Diego State University (SDSU) and San Jose State University point to a different option: declaring all majors at Sacramento State impacted. That is, incoming undergraduate students would need to meet specific requirements to be eligible for declaring any particular major (or pre-major), with those requirements presumably varying by program. Both of our sister campuses have been operating under such a system for several years.

To illustrate how this would work, consider the SDSU approach. All incoming SDSU freshmen are placed into “pre-majors,” with the number of slots available in groups of majors determined centrally through analysis of student demand data. Applicants are ranked for admission by their Eligibility Index score, which combines high school GPAs with scores on the SAT or ACT college admission exams. Only applicants with Eligibility Index ranking exceeding a threshold in their proposed major area are offered admission, although this is not necessarily a high bar. Students may also be admitted as undeclared majors.

To move from the pre-major to the upper-division major, both “native” and transfer students must meet the cumulative GPA requirements for their particular, desired course of study. These requirements are set by the individual departments and vary in their stringency. Perusal of the current on-line SDSU catalog shows that the overall GPA requirements for entry into the upper-division major range from 2.0 in many majors to 3.2 in Nursing. If we examine majors that have been substitutes for one another at Sacramento State, we find subtleties in GPA requirements. For example, students wishing to declare Psychology or Sociology majors at SDSU are required to have a cumulative GPA of 2.5, while those wishing to pursue a Criminal Justice major must have a cumulative GPA of 2.8. The San Diego State system has not resulted in lower graduation rates; indeed, a 2012 study indicated that the six-year SDSU graduation rate had increased significantly in recent years for both traditionally underrepresented minority students and undergraduates as a whole (Source: The
Education Trust, “Replenishing Opportunity in America,” Case Study: San Diego State University, May 2012).

The SDSU program impaction system evolved gradually over many years, and was conceptually linked with the University’s system of campus impaction. At the beginning of the last decade SDSU had only a select number of impacted majors, as is the case with Sacramento State presently. There was much discussion about the best approach in the University Senate and elsewhere.

It is also worth noting that the SDSU approach required a relaxation of the mandate that the University accept all CSU eligible applicants within its service region. Instead of such a blanket offer of admission, SDSU applicants from its service region are given a “bump” in their Eligibility Index score. This required permission from the CSU system and was politically sensitive.

The key advantage of declaring all majors impacted is that it can help to avoid the negative, secondary effects of individual program impaction common at Sacramento State. Currently only a subset of programs on our campus, i.e., those with approved impaction plans, can use additional tools (e.g., overall GPA requirements) to manage enrollment. As stressed previously, the pattern has been for the impacted programs to use such tools to stabilize enrollment, while related, non-impacted majors have experienced sometimes sharp increases in the number of students. Impacting all majors presumably would remove this inequity and allow each major to better fine tune its enrollment pattern.

Impacting all majors would not be costless. Additional administrative costs would follow. If we were to follow the SDSU plan, a central unit (presumably Academic Affairs) would need to gather and analyze data about demand for groups of majors to determine how many students could be admitted to particular pre-majors. Central staff or individual departments would also need to analyze transcripts of students while at Sacramento State to determine if GPA thresholds for particular majors and other requirements are met. This is currently being done for programs under impaction, but the practice would become more widespread.

Impacting all majors would also require that the campus explicitly abandon its commitment to allow undergraduate students to choose whatever major they want. The campus community has been reluctant to do so to this point.

Option 4: Adopt an Integrated Enrollment Plan

Sacramento State could also adopt an integrated enrollment plan that would combine some of the features discussed previously. Such an approach would be focused on guiding students toward particular majors rather than simply accepting whatever choices students made, especially before arriving at Sacramento State.
While the details of such an approach would need to be worked out, one can surmise possible key elements. The University could consciously send a message to prospective students that this campus is a place to learn about options rather than come with a choice made. All incoming students might be officially placed in pre-major status, with the expectation that they would need to have extensive advising before declaring a major. The University could invest heavily in advising, aimed at giving students extensive information about major options. Students might be encouraged to consider majors in areas which are conscious priorities for the University as a whole, and which have uncommonly strong employment opportunities.

VII. Conclusion

I have argued that Sacramento State has drifted (and I use this term very deliberately) into a situation in which program impaction has been increasingly important, without conscious planning or careful consideration of alternatives. I am convinced that individual movements toward impaction during the Great Recession were begun with good intentions. That is, departmental faculty initiated impaction requests when faced with very full sections, long waiting lists, loss of full-time faculty, and inability to hire new faculty. They believed their students would be better served by exerting more control over major enrollment.

Nevertheless, for the University as a whole these uncoordinated moves toward impaction have been costly. While impaction has brought some benefits to students and faculty, they have been almost exclusively limited to those within the impacted programs. The costs have been borne by the University more generally, in terms of secondary effects on non-impacted programs and potential harm to broader Sacramento State goals. Even within impacted programs, there have been some costs that have not been fully appreciated.

One can imagine circumstances in which a campus deliberately chose to create majors that were available to only a select group of admitted students. This might be part of a conscious strategy, with an eye toward sending signals about priorities. It is not my purpose here to evaluate the desirability of such an approach. Rather, my point is that this is not what has happened at Sacramento State. Any priorities or signals sent by the particular mix of impacted majors have been largely inadvertent, at least from the perspective of the University as a whole.

This is not a healthy situation. Campus leaders need to commit to further examination of the consequences of program impaction, consideration of eliminating or sharply reducing the number of programs under impaction, and consideration of other options for matching program capacity with student demand. Simply continuing to “muddle along” is not an approach worthy of respect.
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Appendix: List of Interviewees and Interview Dates
(All with Sacramento State Personnel Unless Otherwise Indicated)

1. Ryan Allain, ASI Vice President for Academic Affairs (and ASI officer colleagues), November 17, 2014
2. Andrew Anker, Chair, Department of Design, October 2, 2014
3. Seung Bach, Interim Associate Dean, College of Business Administration, September 24, 2014
4. Fred Baldini, Dean, College of Health and Human Services, September 16, 2014
5. Juanita Barrena, Emerita Professor, Department of Biological Sciences, December 18, 2014
6. Sandra Cook, Associate Vice President for Enrollment Management, and Geoffrey Chase, Dean of Undergraduate Studies, San Diego State University, September 29, 2014
7. Marya Endriga, Chair, Department of Psychology, September 24, 2014
8. Carolyn Goetze, Chair, School of Nursing (with Teri Tallman, SSP II for the School of Nursing), September 26, 2014
9. Mary Maguire, Chair, Division of Criminal Justice, September 24, 2014
10. Sheree Meyer, Dean of Undergraduate Studies, July 22, 2014
11. Ed Mills, Vice President for Student Affairs, September 24, 2014
12. Joan Neide, former Chair, Department of Kinesiology and Health Science, October 2, 2014
13. Suzanne O'Keefe, Chair, Department of Economics, September 26, 2014
14. Reza Peigahi, Chair, Faculty Senate, December 4, 2014
15. Bohsiu Wu, Chair, Department of Sociology, October 23, 2014