UCIRVINE | INTERNAL AUDIT SERVICES

Admissions and Enrollment

Internal Audit Report No. I2018-602 November 7, 2017

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INTERNAL AUDIT SERVICES IRVINE, CALIFORNIA 92697-3625

November 7, 2017

HOWARD GILLMAN CHANCELLOR

ENRIQUE LAVERNIA PROVOST AND EXECUTIVE VICE CHANCELLOR

RE: Admissions/Enrollment Report No. I2018-602

Internal Audit Services has completed the Admissions and Enrollment review and the final report is attached.

We extend our gratitude and appreciation to all personnel with whom we had contact while conducting our review. If you have any questions or require additional assistance, please do not hesitate to contact me.

Mike Battle

Mike Bathke Director UC Irvine Internal Audit Services

Attachment

C: Audit Committee

Mike Arias, Associate Chancellor, Chief of Staff, Chancellor's Office Edgar Dormitorio, Assistant Vice Chancellor, Chief of Staff, Student Affairs Jeff Lefkoff, Associate Provost & Executive Vice Chancellor, Provost's Office Patricia Morales, Executive Director, Admissions & Relations with Schools

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I. AUDIT REQUEST & MANAGEMENT SUMMARY

In light of the unexpected high yield rates of freshmen admits submitting a Statement of Intent to Register (SIR) for fall 2017, the Chancellor and Provost/Executive Vice Chancellor requested that Internal Audit Services (IAS) review admissions and enrollment processes to determine how practices missed enrollment targets, including recommendations on how to prevent over-enrollments in the future. In addition, IAS was asked to review the withdrawal notification process to determine if policies and practices were followed.

Based on the audit work performed, some internal controls need improvement and should be strengthened to minimize risks, ensure compliance with university policies and procedures, and/or best business practices. Specifically, the following observations were noted.

Communications – Inadequate communication between various areas, such as the Office of Undergraduate Admissions (Admissions) Operations, Admissions Marketing and Outreach, Financial Aid, and Office of Information Technology Admissions (Admissions IT), led to some inputs into the model being overlooked and to managerial decisions being adversely impacted by incomplete information. These factors contributed to the over-enrollment. In addition, one individual is responsible for all aspects of and performs the predictive modeling for the campus and there is no independent verification of the results of this individual's work. These observations are discussed in Section III.A.

Policies and Procedures – Admissions does not have adequately established guidelines or policies and procedures. Detailed policies and procedures for predictive modeling, including a list of all possible inputs to be considered, required management meetings, vetting and approvals, independent verifications, and other internal controls could have assisted in preventing the over-enrollment issues. In addition, there is no policy specific to the University of California, Irvine (UCI) on how to execute eligibility determination and how to apply Academic Clarification Reviews (ACR). Therefore, decisions are made without the benefit of a formalized, vetted, and approved policy. Also, there are no formalized and documented UCI-specific policies and procedures on how applicants who have not submitted required documents by the stated deadlines should be communicated with, how often, and at what point should offers be rescinded. Furthermore, there are no UCI-specific guidelines related to holistic review processes. These observations are discussed in Section III.B.

Resources - Inadequate resources were another contributing factor to the student overenrollment. Information comparing Admissions staff to other UC campuses relative to the number of student applications received revealed that Admissions is understaffed. In addition, some key Admissions management and experienced personnel have been required to spend a majority of their time on the Student Information System (SIS) implementation and not in Admissions. These observations are discussed in Section III.C.

Admissions Offer Withdrawal (AOW) Notifications – AOW notifications were sent to students emphasizing that the decision to withdraw their offers were final, implying that students could not file an appeal, which violates UCI's two-week appeal policy as well as prior practice. IAS also noted that the AOWs did not communicate to each applicant the exact reason for their rescission, but only listed possible reasons. Thus the AOWs likely created more frustration among these applicants than necessary, prompting an even larger number of inquiries than expected. IAS noted that there were inadequate resources, in terms of both personnel (some who were not adequately trained) and the telephone system, to accommodate the large volume of walk-ins and calls that came in following the AOW notifications. These observations are discussed in Section III.D.

Observation details and recommendations were discussed with management who formulated action plans to address the issues. These details are presented in sections III and IV below.

II. BACKGROUND

During the past seven years, Admissions' predictive modeling has been highly regarded for their relatively accurate enrollment projections. However, the business of predictive modeling in Admissions has many complex variables with expected tolerance levels that can vary widely and it is not uncommon for universities to experience missed projections. UCI's modeling is also based on historical data and validity is associated with all things being as equal as possible. This was not the case for fall 2017, and unlike prior years, the enrollment projection was over by an estimated 850 applicants. The yield rates calculated in the model simply were not conservative enough this year based on what was known as detailed in this report. An over-enrollment of 850 students imposed serious challenges to UCI relating to financial aid, housing (UCI guarantees freshmen housing), instructors, advisors, mental health counselors, etc. These issues were further exacerbated by the University's commitment to meet a state expectation of a 2:1 ratio between California freshman enrollment and transfer student enrollment.

Consequently, as published in newspapers nationwide and confirmed by Admissions management, UCI was more firm in holding applicants to the terms and conditions of their offers of admission for the fall 2017. This led to the University rescinding the offers of admission to 498 applicants. Although the applicants were made aware of these requirements during the application process, it was reported that the manner in which these rescission notifications were handled, the reasons for why offers were rescinded, and the subsequent Admissions Public Information desk response to devastated applicants calling in for clarification, was less than adequate.

In response to this issue, Admissions actively encouraged applicants who received AOWs to file appeals, and in return, Admissions applied standards that were more consistent with those of prior years, when there had not always been strict adherence to the terms of the admissions contract. As of August 29, 2017, offers to approximately 449 applicants out of the 498 have been reinstated.

III. OBSERVATIONS

A. <u>COMMUNICATIONS</u>

Background

Predictive Modeling is a process utilized by Admissions to predict how many applicants will ultimately enroll for a given year, based on historical analysis of a variety of student data, including enrollment statistics, student behaviors and characteristics, and academic trends. Models are generated using data analytics and enrollment targets to identify applicants who will be offered admission and to predict how many will ultimately accept such an offer. Students who accept the offer of admission will do so by filing a SIR.

Inadequate communication between the various units within the admissions enrollment cycle was the largest contributing factor to the student over-enrollment. Communication issues were observed in the following areas.

See Appendix B for a high level view of the admissions process.

1. Academic Clarification Review (ACR) Communication

Background

When students apply to a UC, all applications are submitted to an online system called ApplyUC. Individual campuses are then able to download the applications relative to their school and process them for admissions. While ApplyUC calculates eligibility of all applicants, UCI uses a legacy system (a 40 year old, custom-designed system utilized by Admissions to manage applicant data) to review eligibility, and the resulting derived eligibility is what has been used by Admissions predictive modeling for enrollment projections. Note: The terms eligibility or eligible as used here denotes a student's qualification to be considered for admission. It does not mean that they will necessarily be selected for admission.

However, IAS noted instances of conflict between ApplyUC eligibility and the legacy system-derived eligibility where ApplyUC would indicate an applicant as eligible but the legacy system would indicate that same applicant as ineligible.

Prior to a fall 2017 logic change, the legacy system would flag a majority of the applicants with a conflict for an ACR. ACR is a manual evaluation of student applications, performed by Admissions staff (Evaluations Team), to ensure that applicants flagged by the legacy system as needing review are reviewed by the evaluators and eligibility for admission is accurately determined. However, as detailed in the observation below, this did not happen in the fall of 2017. Continuous use of the legacy system process will require that ACRs are performed consistently in order to catch all eligible applicants.

Observation

Due to the ever-increasing number of applicants, and the additional workload coupled with limited staffing, a change was made to the ACR logic in the legacy system for fall 2017. This logic change reduced the number of applications requiring an ACR from a potential of 25,000 down to approximately 10,000. With only about 10,000 applicants going through an ACR, there was a large number of applications that were not flagged by the legacy system as needing review and therefore did not receive an ACR.

IAS noted that there were 3,829 applications discovered by the Evaluations Team that missed receiving an ACR and that were not communicated to the Predictive Modeling Team until after offers of admissions were already sent to students. Many of these applicants were highly qualified students who were not considered in the model, thereby causing the model to admit more applicants in the lower cohorts than in past admissions cycles. Incidentally, there is not a stable historical trend for this lower cohort group to accurately predict yield rates. Earlier communication from the Evaluations Team to the Predictive Modeling Team could have revealed these 3,829 applications, and therefore, had them considered in the modeling. However, it was not clear whether the Evaluations Team knew the significance of this information to predictive modeling.

After the discovery of the 3,829 applicants noted above, 1,051 applicants, most of whom were a subset of the 3,829, were identified and presented to Student Affairs management as applicants that would have had a high probability of being admitted and that their admissions would not have a significant impact on the yield. Based on Student Affairs management's understanding and past yield rates, there would have been room for these admitted students. This information was also presented to senior leadership, and it was agreed upon to admit these students. Therefore, admission was offered to 1,051 applicants who were not included in the model, yielding 256 who accepted the offer and contributing to the over-enrollment. Although UCI was not obligated to admit these applicants, legally or by policy, management felt that it was the right thing to do. However, this decision significantly impacted the model's accuracy and reliability.

See Appendix A for fall 2017 Admissions process timeline.

2. Partner High Schools

Observation

Earlier versions of the model, which uses historical data, did not produce UCI's goals to be a more inclusive campus community. Accordingly, a new set of criteria was added to the later versions of the model to admit an entirely new set of cohorts from partner high schools. This criteria was not used in previous years, and therefore, no historical information was available as a basis for an accurate enrollment projection. Consequently, there was a risk of missed projections in this area, which resulted in admission offers going out to 1,779 students from the

partner schools, yielding 1,052 who accepted the offer (59 percent) as of May 1, 2017. This yield was much higher than anticipated, contributing approximately 300 to the over-enrollment.

3. Financial Aid

Observation

For the first time, the decision to coordinate financial aid packages to go out to admitted students within days of receiving their admission notifications and the decision to stack multiple scholarships per student, thereby giving some applicants larger amounts in financial aid packages, was made after modeling was completed, and this decision was not disclosed to the Predictive Modeling Team until after May 1. Therefore, the impact of these decisions could not be captured in the modeling. Based on analysis of information provided by the Financial Aid Office, the number of applicants who are recipients of scholarships that have paid their tuition as of September 18, 2017, is 914 compared to the anticipated recipients of 759, representing an increase of 155 students over what was anticipated. As of September 18, 2017, the amount of scholarships awarded was \$3,297,500 compared to \$1,891,573 for fall 2016. This lack of timely communication to the Predictive Modeling Team regarding changes in Financial Aid partially contributed to the over-enrollment.

4. Modeling Meetings

Observation

While many formal modeling meetings were held regularly in previous years amongst Admissions Management, Admissions IT, and the Predictive Modeling Team, there were fewer modeling meetings during the fall 2017 admissions cycle. Formal modeling meetings are typically held frequently to ensure that all possible inputs to the modeling have been considered, discussed, and/or vetted prior to making the model final for the conversion process. However, for this admissions cycle, there seemed to be less management oversight of the predictive modeling function. While there may have been some informal discussions, it is incumbent on management to facilitate and conduct adequate formal discussions and collaboration with all key participants. IAS noted, as one possible cause, an overextended management staff due to their involvement with the SIS implementation, which is discussed in section III.C.3.

As an example of the inadequate communication, although version 8.2 of the model was submitted to and vetted by Admissions management, the Predictive Modeling Team was then asked to make edits leading to model version 8.3. Because of a rush by management to push for its completion, version 8.3 was utilized by management as the final version without proper vetting. Furthermore, an eight page questionnaire was submitted by the Predictive Modeling Team to Admissions management in November to gather relevant information that was critical to the modeling and admission selection, with an anticipated completion date of January. However, by the end of February, the Predictive Modeling Team still had not received the completed questionnaire. The impact of these examples to the over-enrollment cannot be determined.

5. Marketing and Outreach

Observation

While marketing and outreach may have been considered in the predictive modeling in the past, for the fall 2017 cycle, its impact on the enrollment projections was not fully captured. IAS noted that Admissions management did not adequately factor in the possible impact of the many improvements, such as the use of an app and website that facilitated a more efficient process for applicants, with the Predictive Modeling Team.

6. Communications Between Admissions Operations and Admissions IT Team

Background

The Admissions IT Team is responsible for managing and maintaining the Admissions homegrown systems which process student applications received from the University of California, Office of the President (UCOP) ApplyUC system. The legacy system has complex business logic that requires a thorough assessment and an understanding of impacts when making changes. Therefore, close collaboration between Admissions Operations, Admissions IT Team, and the Predictive Modeling Team is critical.

Observation

Admissions Operations and Admissions IT were not under the same understanding of system processes to identify and resolve issues before they became major. For example, a logic change was implemented that affected how the applicants were flagged for ACR. As a result, applicants that used to be flagged as needing an ACR were not flagged as discussed in section III.A.1 above. Additional communication and collaboration could have enabled comprehensive impact analysis (by both Admissions Operations and Admissions IT) of changes to the business logic, and the issues identified would have been resolved timely.

In addition, Admissions Operations did not fully engage in thoroughly testing the legacy system logic changes and assessing the impact of those changes due to resource constraints. Although there were documents to support management acceptance of testing, interviews with Admissions Operations management and review of their approval in the acceptance testing document indicated that some key users were not fully involved in the testing process (see section III.C.3).

B. POLICIES AND PROCEDURES

Background

Although inadequate or lack of written and formalized policies and procedures did not directly contribute to the over-enrollment, formalized policies and procedures could have facilitated improved communication and decision making, thereby preventing some of the issues that contributed to the over-enrollment. The Council on Undergraduate Admissions and Relations with Schools (CUARS) is the Academic Senate governing body through which all campus policies regarding admissions and enrollment services are vetted and recommended. IAS noted inadequate UCI-specific policies and procedures or guidelines related to the following areas.

1. Predictive Modeling

Observation

Various documents are available that are very important to the many processes involved in predictive modeling. However, there are no written and formalized policies and step-by-step procedures for predictive modeling. Although predictive modeling has been very accurate in previous years, written and detailed policies and procedures, including a list of all possible inputs to be considered, required management meetings and communications, vetting and approvals, independent verifications, and other internal controls, could have assisted in preventing at least some of the issues discussed in this report.

Clearly written, detailed, and formalized policies and procedures provide guidelines for management and staff to follow in performing their duties, creates consistency, and reduces the risks of errors, fraud, and abuse. It also provides an important guide for newly hired staff members to follow when experienced staff members are not available or when they separate from UCI.

2. Eligibility Determination and ACR

Observation

There are no formal UCI-specific policies on how to execute eligibility reviews for the ACR process. Based on interviews, some of the current business processes executed by the legacy system appear to be in conflict with Admissions' changing business operations and there appear to be differences in interpretation of the business logic rules between Admissions Operations and Admissions IT. Although written system procedures exist, the lack of pertinent policies has enabled decisions to be made without the benefit of a formalized, vetted, and approved policy.

3. Admission Offer Withdrawals (AOW)

Observation

During the course of discussions with various individuals that IAS interviewed, IAS was not provided with any formalized and documented policies and procedures (specific to UCI) on how applicants who have not submitted required documents by the stated deadline should be communicated with, how often, and at what point should offers be rescinded.

4. Holistic Review Process

Background

Holistic reviews are manual reviews of all student applications to determine their qualifications for admission to UCI using a wide variety of quantitative characteristics, such as grade point averages (GPA) and standardized test scores, such as SAT/ACT, as well as qualitative characteristics, such as extra-curricular activities and specific individual attributes.

However, there were three major changes to the holistic review process for fall 2017 whose impact may have influenced the missed enrollment projections but is not quantifiable. The changes to the holistic review process for fall 2017 are as follows:

- Where in previous years there were two human holistic reviews performed on each application, for fall 2017, there was only one human review, which produced an actual read score, and one automated machine review, which produced a predictive index. If the index exceeded the range of predictive tolerance, the application was routed to another human. This change was made in response to a significant increase in workload due to a large increase in student applications. The impact of this change on the overenrollment, if any, cannot be determined;
- There was a change in how holistic reviews are performed. In previous years, read scores from the University of California, Los Angeles (UCLA) were used. However, it was determined that UCLA read scores did not accurately represent the UCI applicant pool and resulted in eliminating applicants that should have been considered for admissions. Therefore, its use by UCI Admissions was discontinued. Note that UCI was the only campus in the UC system that relied on another campus' read scores. The impact of this change, if any, to the missed enrollment projections also cannot be determined; and
- There was also a change from using UCLA percentile rankings to UCI's own percentile rankings. These percentile rankings are one of the considerations for determining holistic review read scores.

Observation

Although a holistic review training guide and a written proposal regarding the changes in holistic review processes exist, and such changes were vetted and discussed with CUARS, IAS noted that an internal UCI-specific written and approved guidelines related to the holistic review process has not been developed to ensure that decisions made by Admissions regarding holistic reviews and processes are appropriate and not a detriment to student applicants and the overall admissions process.

Clearly written, detailed, and documented guidelines enable management and staff to perform their duties with consistency and reduce the risks of errors, fraud, and abuse. It also provides an important guide for newly hired staff members to follow when experienced staff members are not available or when they separate from UCI.

C. <u>RESOURCES</u>

Inadequate resources was another contributing factor to the student over-enrollment. Resources issues were observed in the following areas.

1. Admissions Understaffing

Observation

Information obtained by IAS revealed that Admissions is understaffed. Although the number of student applications have grown by over 22,000 (27 percent increase) since 2014, the number of Admissions staff members during the same period have only increased by four (eight percent increase). In addition, five key Admissions managers have spent at least 50 percent of their time on the SIS project, and this has been the case for the past three years. This understaffing is further exacerbated by the added workload created by the UCI legacy system, as discussed in III.A.1 and III.C.2. According to Admissions management, they have requested 16 Full-Time Equivalent (FTE) staff in the past four budget cycles but only netted four.

Due to the increase in the number of applications for fall 2017, there was not enough Admissions personnel to manually review the large volume of applications that would have undoubtedly required an ACR (approximately 25,000). For this reason, Admissions management felt that it was necessary to reduce the number of ACRs, creating the issues discussed in Sections III.A.1 above.

2. Legacy System Limitations

Observation

The legacy system is over four decades old, and there is a consensus that the system is generally out of date and has several limitations. The current legacy system is based on COBOL, a programming language that is declining in popularity resulting in a shortage of experienced programmers. Other limitations stated by the Admissions Operations team include limited capacity for independent querying and validation of data by end users, truncating of certain data displayed to users by the front end application, and obscure code within the system with which even current Admissions IT staff are not entirely familiar.

3. Inadequate Personnel Resources/Utilization

Observation

The SIS/Slate implementation has required the core Admissions Operations, Evaluation, and Management staff to spend significant portions of their time on the SIS/Slate projects with less focus on their regular Admissions operations. For example, a key management member in Admissions Operations only spends 20 percent of his time in Admissions and 80 percent on SIS/Slate. It also appears that some technical resources with significant institutional legacy system knowledge may be underutilized. For instance, the Admissions IT staff believe that they have not been adequately utilized in the SIS/Slate project and their institutional legacy knowledge contribution is not leveraged as the admissions process is being redesigned. In addition, some members of the Predictive Modeling Team feel that they have not been fully involved in the Slate project. However, leveraging these resources (with additional training as needed) might help alleviate time constraints for the experienced operations staff.

Furthermore, predictive modeling is essentially performed by one individual. Although highly qualified and producing accurate results in the past seven years, this individual is responsible for all aspects of predictive modeling, and there is no independent verification of the results of this individual's work. Where many UC campuses utilize their Office of Institutional Research (OIR) or outside consultants to assist in some way with enrollment predictions, UCI's Admissions does not.

D. ADMISSIONS OFFER WITHDRAWAL (AOW) NOTIFICATIONS

Background

When student applicants are given offers of admission to UCI, those who accept the University's offer will submit a SIR. Freshman SIRs are due by May 1. However, the offer of admission is conditional on the freshman applicant fulfilling all terms and conditions of their offer (this includes submitting final transcripts, maintaining academic requirements, etc.) by July 1. In previous years, those who had not complied by the deadline were typically placed on academic hold and were given further opportunities to correct any missing requirements.

With the pressures of over-enrollment, UCI held firm to the terms and conditions, and 498 applicants received withdrawal notifications. According to data obtained by IAS, from June 19, 2017 to July 17, 2017, 189 applicants who had not met the terms and conditions of their offer by the deadline were notified by Admissions that their offers had been rescinded. On or after July 18, 2017, another 309 applicants who had not met the terms and conditions of their offer were also notified that their offers had been rescinded.

Management interviews were conducted to determine what led up to the decision to rescind 498 applicants as well as to analyze the reportedly inefficient Public Information desk response to applicants who called or walked in hoping to get some answers.

1. Miscommunication, Policy Violation, and Deviations from Practices

Observation

Management interviews revealed what appears to be a conflict between what was communicated at the Chancellor's Cabinet meetings and Admissions management's plan of action to handle applicants who had missed the deadline for submitting outstanding documents. Email communication obtained by IAS, along with interviews, revealed that Admissions management had a plan to send weekly messages, through the first week of August, to remind applicants to submit outstanding documents or face cancellation of their admission offers. The plan, according to the email, was to begin canceling applications around the end of July. However, slides presented by Admissions and Enrollment Services at the Cabinet meeting shows that applications were to be canceled on the date of July 17, 2017.

Management interviews indicated that there was pressure to send rescind notices on July 17, 2017. Based on a review of the Cabinet meeting slides presented between May 16, 2017 and July 11, 2017, and interviews with cabinet members, IAS noted discussions to hold firm on the terms and conditions of admission. With the over-enrollment and pressures to reduce the number of SIRs, a majority of cancellation letters were sent to the applicants on or after July 18, 2017, including the statement that the decision was final, which is against policy and was a deviation from prior practices. See Appendix C for the Chancellor's Cabinet meetings timeline.

There is an official policy published at the Admissions website stating that applicants have two weeks to file an appeal following their AOW notification. The AOW notices sent to applicants stated that, "Please note this decision to withdraw your offer of admission is final," implying that applicants could not file an appeal, which violates the two week appeal policy. However, on July 21, 2017, another message was sent to applicants, who had not yet filed an appeal, stating that, "If you believe you have compelling evidence to support an appeal, we would like to make you aware of the details of our appeal process," and a link was included to the Admissions appeals webpage.

2. Impact to Public Information Desk Support

Observation

As stated in this report, a majority of affected applicants were sent AOW notifications on or after July 18, 2017. Following these notices, it was widely reported in the newspapers and discussed by frustrated applicants on social media that telephone calls and visits to the Admissions' Public Information desk were met with long wait and hold times, and at times, applicants were unable to get through on the telephone.

The large number of AOW notifications, sent all at once, obviously created an unusually large volume of telephone calls to the Admissions Public Information desk. However, Admissions management was interviewed to determine exactly what happened at the Public Information desk when applicants called in and to determine how Public Information desk operations can be improved.

According to management in charge of the Public Information desk, the expectation was that the applicants would be informed of the exact issue that caused their offers to be rescinded, but that did not happen. A review of a sample copy of the AOW letter confirmed that the notices did not communicate to each applicant the exact reason for their rescission, but only listed possible or generic reasons. According to Admissions management, the exact reason for rescission is not always as straightforward as it may seem and current system limitations make providing specific reasons difficult. The notifications also stated that the withdrawal decision was final, implying that applicants could not file an appeal. Thus the letter likely created more frustration among these applicants than necessary, prompting an even larger number of inquiries than expected.

IAS noted that there were inadequate resources, in terms of both personnel and the telephone system, to accommodate the large volume of walk-ins and calls that were received following the AOW notifications.

Some of the student staff did not have the ability to quickly obtain answers to the applicants' questions. As each applicant's issue is different, what may have caused them to receive an AOW required further research and review of their application and transcripts. However, student staff are unable to perform these reviews efficiently due to student privacy concerns. Furthermore, July is the traditional time for training the new student Public Information desk staff but because the AOW notifications were made abruptly and with little notice to the Public Information desk management, the Public Information desk student staff were unprepared and could not efficiently and knowledgeably answer applicant inquiries. However, according to management, any issue that student staff were unable to address was quickly forwarded to a supervisor, who had the knowledge to do so.

Immediately following the AOW notifications, three telephone lines were staffed and available for incoming calls, plus a capacity to have seven callers in queue while the three lines were occupied. This queue capacity was quickly reached on the first day following AOW notifications. This was the likely cause of applicants not getting through at times. After realizing that the current capacity was not enough, Admissions management increased capacity to 20 callers in queue the following day. Normally, the original capacity would be more than enough to handle the relatively small volume of calls. However, given the unusually large volume of calls that inundated the phone lines in this instance, the system capacity was quickly overwhelmed.

IV. RECOMMENDATIONS & MANAGEMENT ACTION PLANS

Recommendations

Based on the observations noted, IAS has recommended the following.

- Establish appropriate committees and workgroups (i.e. Steering Committee consisting of process owners, high level stakeholders, and industry experts who can provide guidance, develop policies and procedures, and enhance collaboration).
- Establish a group of members (i.e. Admissions Predictive Modeling Team, OIR, Financial Aid, external consultants, OIT) to inform the predictive model process and provide an independent verification of modeling results.
- Admissions should conduct a comprehensive review of Admissions processes (utilizing the expertise of the committees/workgroup).
- Improve communication and collaboration between the Admissions Operations, Admissions IT Team, and other established workgroups. This is key to adequately implement and execute the business process in the current legacy system and also in Slate (currently under development).
- Ensure staffing requirements are met based on Admissions management assessments, including cross training and subject matter experts where necessary.
- Relieve workload for the operational units by leveraging the current Admissions IT staff through adequate involvement in the Admissions system process changes.
- Provide training opportunities as necessary and train accordingly.
- Establish formalized policies, procedures, and guidelines related to predictive modeling, legacy system processes, UCI eligibility determination, ACR, and holistic review processes.

- Establish formalized policies and procedures related to AOW, addressing specific issues related to the student's application deficiencies (transcripts, high school credits, etc.).
- Ensure that students and staff are adequately educated on the appeal policy and process.
- Consider enhancing applicant communication protocols to include social media monitoring and communication related to the admissions and enrollment process.
- To further enhance applicant communication, ensure applicants have continued access to the online portal with the capability to remedy any issues related to their records.

Management Action Plans

- Establish appropriate committees and workgroups (i.e. Steering Committee consisting of process owners, high level stakeholders, and industry experts who can provide guidance, develop policies and procedures, and enhance collaboration).
 - 1. Implement an enrollment management model and organizational structure for the university. The current role of Associate Vice Chancellor (AVC) of Enrollment Services should be developed into the role of Associate Vice Chancellor of Enrollment Management. The AVC Enrollment Management's principal responsibility is to convene various cross-functional offices, i.e., admissions, financial aid, registrar, institutional research, housing/campus planning, as well as representatives from retention, alumni, and parent engagement, in order to devise specific, well-planned strategies and tactics (including data integration and cross-functional, high-level reporting) that will ensure undergraduate enrollment goals align with specific academic, resource, and strategic planning goals for the campus.
- Establish a group of members (i.e. Admissions Predictive Modeling Team, OIR, Financial Aid, external consultants, OIT) to inform the predictive model process and provide an independent verification of modeling results.
 - Expand participants in admissions' predictive modeling team to include partners in financial aid and institutional research, as well as external consultants. Leveraging resources from these partners, ensure a broader range of model inputs are incorporated.

- 2. Engage external consultants to assist with multiple iterations and testing of different methodologies that will allow for the current model to keep pace with changing business processes, system resources, applicant demographics, and year-over-year variability.
- Admissions should conduct a comprehensive review of Admissions processes (utilizing the expertise of the committees/workgroup).
 - 1. The comprehensive review of Admissions processes has been and continues to be conducted as the foundational component of the SIS/Slate implementation.
 - 2. As a fundamental and ongoing part of the SIS/legacy system migration process, the development of comprehensive policy and business process documentation is well underway.
 - 3. In partnership with Admissions IT, migration plans to transition business processes from the legacy system are being incorporated into all phases of the SIS/Slate implementation project. A comprehensive Process Impacts Analysis Report has already been completed. This document has highlighted areas of potential risk and also makes recommendations for how best to mitigate those risks as the final stages of implementation take shape over the next 12 months.
- Improve communication and collaboration between the Admissions Operations, Admissions IT Team, and other established workgroups. This is key to adequately implement and execute the business process in the current legacy system and also in Slate (currently under development).
 - 1. The Executive Director of Admissions and the Director of Enrollment Services IT will convene a half-day retreat-style meeting during the fall term that brings together the Admissions IT and functional units (i.e. operations and modeling staff), along with external consultants.
 - 2. The goal of the half-day meeting will be to re-establish a baseline for positive communications; plan the working calendar for both units; and identify goals (both unique and shared) among the teams in support of constructive outcomes associated with the fall 2018 admissions cycle.
 - 3. Representatives from each of the groups should continue to meet monthly (at a minimum) to monitor progress on goals and pursue effective communication.
- Ensure staffing requirements are met based on Admissions management assessments, including cross training and subject matter experts where necessary.

- 1. The Executive Director of Admissions will continue work with the business manager to assess staffing requirements (already underway) and provide recommendations to senior management on new positions.
- 2. Current analysis of staffing requirements proposes the need for an additional 14 new FTE to effectively handle the volume and complexity of Admissions' work, and to achieve parity with peer institutions.
- Relieve workload for the operational units by leveraging the current Admissions IT staff through adequate involvement in the Admissions system processes changes.
 - 1. Admissions operations will continue to work closely with key individuals from Admissions IT, who will provide ongoing assistance with the ApplyUC XML load into Slate and participation in modeling.
- Provide training opportunities as necessary and train accordingly.
 - 1. Training is always ongoing. Staff development is a high priority, and all staff engage in professional development and cross-training opportunities throughout the year.
- Establish formalized policies and procedures related to predictive modeling, legacy system processes, UCI eligibility determination, ACR, and holistic reviews.
 - Concurrent with the development of business process revisions to align with new SIS/Slate functionality, and also in response to best practices advised by peer UC campuses, the ACR process will be discontinued as a necessary pre-cursor to modeling.
 - 2. The Executive Director of Admissions will work with input from the Admissions operations and modeling staff to develop documentation of this new business process, and will also include notes explaining why the former practice will be discontinued.
 - 3. Consistent with practices at other UC campuses, freshman eligibility review will be performed *after* the selection of admits has been modeled, and with the use of the UC eligibility field (which, to date, has not been utilized). Eligibility updates will be assigned by evaluation staff, in accordance with policies outlined in the system-wide admission evaluator guidelines. Any potential admits by exception will be flagged as needed. Estimate is that this will be no more than one to two

percent of the predicted enrollment pool, which is well within the allowance of UC policy of six percent (with no more than two percent being non-resident).

- Establish formalized policies and procedures related to AOW, addressing specific issues related to the student's application deficiencies (transcripts, high school credits, etc.).
 - 1. The UC System-wide Verification Task Force, convened under directive from President Napolitano, is developing a set of policies and guidelines regarding the admission offer validation. The Executive Director of Undergraduate Admission serves as UCI's campus representative on this task force.
 - 2. The task force will propose a set of best practices regarding transcript and test score validation, admission offer cancellations, and appeals. These recommendations are being shared with the Regents in November 2017, and then will be finalized by the end of the year.
 - 3. Once approved, UCI will implement these procedures.
- Ensure that students and staff are adequately educated on the appeal policy and process.
 - 1. Building on lessons learned from this past cycle, new training guides and modules are currently in development to assist front-line and admission counseling staff on how to best direct students to appropriate resources, including information on the appeals process.
- Consider enhancing applicant communication protocols to include social media monitoring and communication related to the admissions and enrollment process.
 - 1. Communication protocols, including social media engagement, are a core dimension of the SIS/Slate implementation. Documentation of the updated business processes have already been developed and will continue to be refined through the final stages of the Slate implementation.
- To further enhance applicant communication, ensure applicants have continued access to the online portal with capability to remedy any issues related to their records.

1. All modes of applicant communication will be greatly enhanced once we are able to go live with Slate (scheduled for Sept 2018). Slate offers best-in-class communication tools, including live chat, texting, campaign editing tools, and extensive notes features. Each of these features – as well as additional, end-user controlled functionality – will enable Admissions staff to have more nuanced and dynamic communication with applicants. The applicant's experience will also be greatly improved, as the Slate platform is user-friendly and "plugs-in" to many college planning tools that students typically use (e.g. Naviance, CollegeNet, etc.). As with our current portal, all student interactions will be logged and archived through the system.

| Glossary of Acronyms and Terms: |
|---------------------------------|
|---------------------------------|

| Acronym/ | Description | Remarks/Comments |
|----------|----------------------------------|--|
| Terms | | |
| ACR | Academic Clarification Review | ACR is a manual evaluation of student applications, performed by Admissions staff (Evaluations Team), to ensure that applicants flagged by the legacy system as needing review are reviewed by the evaluators and eligibility for admission is accurately determined. |
| ALA | Anteater Leadership | The Academy supports UCI's strategic plan goal to |
| | Academy | create new, innovative academic approaches to |
| | | ensure greater student success. |
| AOW | Admissions Offer Withdrawal | |
| AVC | Associate Vice | |
| | Chancellor | |
| СА | California | |
| CUARS | Council on | UCI Academic Senate council who make |
| | Undergraduate | recommendations regarding policies on |
| | Admissions & | admissions, enrollments, and relations with |
| | Relations with | schools to the administration and to the Academic |
| | Schools | Senate |
| DIR | Director | |
| ED | Executive Director | |
| FR | Freshman | |
| GPA | Grade Point Average | |
| Holistic | | Holistic reviews are manual reviews of all student |
| Review | | applications to determine their qualifications for |
| | | admission to UCI using a wide variety of |
| | | quantitative characteristics, such as grade point |
| | | averages (GPA) and standardized test scores, such |
| | | as SAT/ACT, as well as qualitative characteristics, |
| | | such as extra-curricular activities and specific |
| | | individual attributes. |
| IAS | Internal Audit | |
| | Services | |

| IVC | Irvine Valley College | |
|------------------------|---|--|
| MOU | Memorandum of Understanding | An agreement between two or more parties outlining the terms and details of an understanding. |
| OARS | Office of Admissions & Relations with Schools | Now known as Office of Undergraduate Admissions and known as "Admissions" for the purposes of this report. |
| OIT | Office of Information Technology | |
| Predictive Modeling | | Predictive Modeling is a process utilized by UCI's Admissions to predict how many students will ultimately enroll for a given year, based on historical analysis of a variety of student data, including enrollment statistics, student behaviors and characteristics, and academic trends. |
| SIR | Statement of Intent to Register | |
| SIS | Student Information System | |
| Slate | | New admissions system. To replace legacy system and be integrated with SIS. |
| VC | Vice Chancellor | |



Appendix A: Timeline of Admissions Process for Fall 2017

Admissions and Enrollment



Appendix B: High Level Detail of Admissions Process Flowchart



Appendix C: Timeline of Chancellor's Cabinet Meetings Regarding Status of Enrollment