University of California, Merced

Office of Institutional Planning & Analysis (IPA)

Division of Planning & Budget

Self-Study Report

Prepared in Support of Administrative Program Review

February 25, 2014

Mission

UC Merced IPA collects, synthesizes and analyzes institutional data to fulfill mandatory reporting requirements and support campus planning and decision-making, serving as a source for comprehensive, consistent, and reliable information about the institution. Partnering with Information Technology (IT) in the design and implementation of a campus-wide data warehouse environment, IPA helps to integrate campus data, making data and reporting accessible and useful to campus stakeholders.

Office functions include:

- Supporting campus strategic planning and facilitating decision-making in areas such as enrollment management and forecasting, resource allocation, and campus performance/benchmarking.
- Monitoring campus goals and performance metrics.
- Integrating and analyzing campus and external data sources.
- Enhancing institutional effectiveness by making information and analyses widely available to the campus community.
- Complying with Federal, State, Regional Accreditation (WASC) and UC System reporting requirements.
- Often serving as the primary source for official campus statistics (in areas of enrollments, personnel, survey results, federal and State reporting, and other external reports).
- Providing research methods and statistical analysis advice and support to campus units and committees.
- Providing survey support, including survey tool management, survey design and analysis consulting.
- Assisting, as appropriate in campus accountability efforts and outcomes assessment initiatives.
- Coordinating internal and external surveys of UC Merced students, alumni, faculty and staff.
- Developing and maintaining reporting systems and processes to ensure data integrity, accuracy, and consistency, as well as appropriate and ethical use of campus data.
- Collaborating with IT to develop and support a campus Business Intelligence/Data Warehousing (BI/DW) environment.

History of Office at UC Merced

In July 2005, just two months before the opening of the campus and the start of classes, the founding director of IPA was hired (previously an IR Director at a University of Maryland campus). Two and a half additional FTE had been allocated as staff to the office, one programmer, one analyst and an administrative assistant (to be shared 50/50 with the Academic Senate Office). IPA reported to the EVC/Provost. These first few months were dedicated to organizing the office, establishing the mission and goals, understanding the student and personnel databases as well as available reporting tools, reaching out to IT staff and the Registrar to talk about roles and responsibilities and data-related processes and schedules, and developing job descriptions for the IPA staff. By early November 2005, the 2.5 positions were filled and attention was focused on creating a snapshot process for student and personnel data. A full back-up of the student information system (Banner SIS) was captured by IT staff on the student system fall census date (late September) and a snapshot of the personnel (PPS) data was captured by the IPA programmer on the fall personnel system census date (early November). Because UC Merced used UC Davis' set-up for the Banner student system and the UCLA set-up for the personnel system, the official files required by the UC Office of the President were already programmed and ready to be created and submitted on schedule.

During this early period of development, the IPA director also participated in quarterly system-wide Institutional Research (IR) meetings. These were extremely helpful in orienting the UC Merced office to the routines, policies, and procedures unique to the UC System. All nine of the other IR directors as well as various staff within the Office of the President were exceptionally gracious and helpful toward their newest colleague. Prior to 2005, the last UC campuses to join the System were in 1960 and 1965 (UCSD, UCSC, and UCI).

Driven by expanding responsibilities over the subsequent 8 years (2006 – 2013), IPA added 4.5 FTE staff (2 analysts, 1 programmer[1], 0.5 administrative specialist) plus 2 short-term, part-time contract employees (0.83 FTE[2]). These positions support the data warehousing efforts which are co-administered by IPA and IT, accreditation efforts that spanned over 6 years until the campus was accredited by WASC in 2011, external and internal survey and assessment projects, enrollment projections and other modeling efforts, faculty salary equity and faculty workload studies, among many other special short- and long-term projects. In 2013, in an effort to better integrate campus planning, IPA along with the Budget and Capital Planning offices were reorganized into a new Division of Planning and Budget. (Subsequently, Physical and Environmental Planning and Academic Facilities Planning also were moved to this new Division.) This move for IPA, as well as the campus' decentralization of assessment activities and staffing (in the Schools, Academic Senate, Student Affairs, and a newly established Office of Assessment in the Provost's Office), shifts emphasis more toward IPA's analytical and planning-support functions and potentially away from some of IPA's other roles (e.g.,

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[1] Although the line for an ETL programmer officially resides in IT, this position reports to IPA's Systems Manager.

[2] The contract of one of these employees expired at the end of January 2014.

survey and assessment support). Most recently, in early December, 2013, the Division went through a revision that included a name change for the IPA unit (now Institutional Research and Decision Support, or IRDS). For the purposes of this self-study document, however, we continue to refer to the unit as IPA. (Discussions regarding changes, if any, in IPA's roles as a result of the reorganization are still ongoing at this time, and should be considered in the Self-Study process. See <u>Memo from the Vice Chancellor for Planning & Budget to the staff in the Division, December 2, 2013</u>.)

IPA Organization Compared to Other Models

At most campuses, the institutional researcher is viewed as the "guardian of truth" or "the conscience" of the institution (<u>AIR Code of Ethics and Professional Practice, Preamble</u>). In addition to providing standards for institutional research competence and practice, the Code also gives guidance on confidentiality, data management, reporting integrity and overall integrity of the profession.

Authors Volkwein, Liu, and Woodall (in **The Handbook of Institutional Research, 2012**, edited by Howard, McLaughlin, and Knight) refer to the dominant functions of IR as the "golden triangle of institutional research:" (see Chapter 2).
1) Institutional reporting and administrative policy analysis;
2) Strategic planning, enrollment and financial management; and
3) Outcomes assessment, program review, accountability, accreditation, and institutional effectiveness.

They pointed out that campuses differ in the extent to which they combine these functions in IR or keep them separated in different units. IR offices also differ in at least four important ways: 1) staffing (depending on unit responsibilities and functions, from 1 to 11 FTE professional staff, according to Volkwien, et al.,, although our sister campus UC Berkeley has 13), 2) the office's reporting location within the campus organization (president/chancellor, provost, or vice president/chancellor), 3) the extent to which the office's functions are centralized or decentralized, and 4) the degree of specialization, division of labor or cross-training reflected in the IR unit.

Certain aspects of IR units, regardless of how they are staffed or where they report, are common to all:
- Use of standard definitions
- Emphasis on compliance with standards, federal and state guidelines & laws
- Efforts to make data accessible to campus users
- Emphasis on accuracy/quality assurance
- Maintaining unbiased approach to reporting
- Data-driven/evidence-based decision-making
- Seeking and supporting one version of the truth
- Emphasis on security and confidentiality
- Investment in data protection and storage
- Adhering to IRB human research standards and procedures

At UC Merced, IPA now[3] reports to the Vice Chancellor for Planning and Budget and collaborates with IT in the development of the campus' BI/DW environment. The three principal research analysts tend to assume primary responsibility for certain projects but also assume back-up responsibility for other projects. IPA has 7 permanent FTEs as well as 0.83 contract FTE. The range for the other UC campuses (excluding UCSF which is strictly a health sciences/medical school) is from 4-13. The differences in size of the UC IR units seem to be explained by breadth of responsibility (see chart below). At four campuses, for instance, IR does not support survey research (this function is housed in a separate unit).

Comparison of IR Staffing at UC Campuses (and UCOP)								
Campus/Organization	Total # Staff	# Analysts/Content Managers	# Admin Support	# Directors/Assoc /Asst Directors	Includes Survey Support	Survey Support in separate unit	BI/DW/IT	Notes
UCOP	19	17	1	1	Yes			BI/DW in separate unit
UCSC	7	4	?	1	Yes		2	
UCSB	6	4	?	2	Yes			Assessment and Academic Program Review support in separate office; BI/DW in separate office
UCSD	5	3	1	1	No	Yes		Assessment and Academic Program Review support in separate office; BI/DW in separate office
UCLA	6	5	?	1	No	Yes		IR functions also distributed across campus units; BI/DW IN separate office
UCI	7	1	?	3	No	Yes	3	Assessment and Academic Program Review support in separate office; BI/DW in separate office
UCD	11	5	?	1	Yes		5	Includes some budget support
UCB	13	6	?	1	Yes		6	
UCR	4	3	?	1	No	Yes		
UCM	7.83	3	1	1	Yes		2.83	Two contract staff 1: at .43 and 1 at .40

At four of the campuses and at the system level, the BI/DW (Business Intelligence/Data Warehousing) function is in a separate unit. At the system level (UCOP), there are 19 IR staff members, 17 of whom are analysts (content managers).

See UC Merced's IPA organization chart below[4]. Note that, although the line for the ETL programmer officially resides in IT, this position reports to IPA's Systems Manager.

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[3] Until 2013, IPA reported to the Provost/EVC.
[4] Note that the contract for the Data Systems Analyst expired at the end of January, 2014.
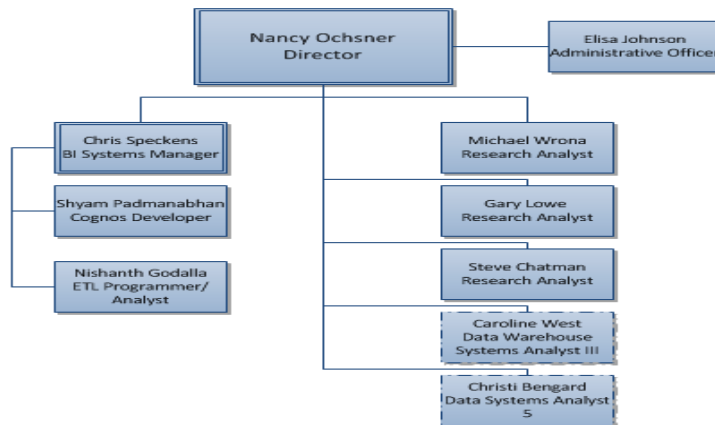
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Technology, Training and Expertise

IR analyst skills require expertise in multivariate and other statistical analyses, predictive and other statistical modeling, accountability, performance/effectiveness analyses, technology and information systems, outcomes assessment, as well as excellent writing, graphical, and other communication methods, and very good customer service traits. Typically, IR analysts have graduate degrees (master's, doctoral) in one of many fields that emphasize analysis, especially using statistics and mathematical modeling, and statistical tools, such as SPSS and SAS. Key IR traits (**Handbook of Institutional Research)** include diplomacy, honesty, trustworthiness, collegiality, organizational skills, cultural skills, policy analyst expertise and ability to be an impartial advisor.

The technical staff must have expertise and experience with best practices in data management, reporting capabilities, programming languages and ETL (extract/transform/load), data warehousing/business intelligence tools, hardware and software support.

IPA Staff Experience and Qualifications

					Total years		
IPA Staff	**FTE**	**Title**	**Years in IPA**	**Years elsewhere in related field/area**	**in field/area**	**Highest degree**	**Relevant awards**
Nancy Ochsner	100%	Director	8	9 yrs. Director, Institutional Research, University of Maryland, Baltimore County; 5 yrs. Research Analyst, University of Maryland, College Park; 6 yrs. in research and analysis in higher education and health-related positions	28	ABD, University of Maryland, Baltimore County, Policy Sciences (Evaluation Track)	
Michael Wrona	100%	Principal Analyst	6	25 yrs. building data systems, conducting applied social research, fostering organizational development, primarily in educational settings; 9 yrs. as institutional researcher	25	Masters, Political Science, Syracuse University Masters, Interdisciplinary Studies, San Jose State University	Fellowships: Summer Program in Quantitative Methods of Social Research, University of Michigan; Summer Data Policy Institute (from Association for Institutional Research, National Center for Education Statistics, and National Science Foundation)
Gary Lowe	100%	Principal Analyst	6	4 yrs. Interim Institutional Research Director, California State University, Stanislaus	10	Ed.D., California State University, Fresno	
Steve Chatman	100%	Principal Analyst	1	8 yrs. Director, Student Experience in the Research University Project; 5 yrs. Director, Student Affairs Research and Information, UC Davis; 10 yrs. Director, Analytical Studies, University of Missouri System; 4 yrs. Director, Institutional Research, Southeast Missouri State University; 4 yrs. Assistant Research Psychologist, Office of Planning and Institional Analysis, Texas A&M University	31	Ph.D., Educational Psychology Foundations, Texas A&M University	Invited presentation, 2012 Reinvention Center National Conference; invited paper, 2009 Wake Forest Conference, Rethinking Admissions; 2009 UC Berkeley Spot Award, an outstanding employee recognition prize; 2008 Best Paper, Annual Forum of the Association for Institutional Research
Chris Speckens	100%	Systems Manager	8	9 yrs. Software Engineer with various organizations, including Loadstar Consulting, Lawrence Livermore National Laboratory, Peoplesoft Inc., and E&J Gallo Winery	17	Masters, Business Administration, California State University, Stanislaus	
Shyam Padmanabhan	100%	Cognos Specialist	3	9 yrs. Business Intelligence consulting and implementation of medium- to large-scale BI reporting and DW for clients including County of Los Angeles, County of Orange, and Los Angeles Police Dept.	12	Masters, Information Technology, Ohio State Univeristy	Outstanding Graduate Teaching Assistant; Advantage Project Excellence - Performance Budgeting, County of Los Angeles; Project Management Excellence - Capital Assets BI Reporting, County of Los Angeles; Advantage Project Excellence - County of Los Angeles and County of Orange.
Nishanth Godalla	100%	ETL Programmer (line is officially in IT, although reports to IPA Systems Manager)	1	4 yrs. Software Engineer, GTECH Corporation; 2 yrs. Graduate Asst. Systems Administrator, UMass Amherst	6	Masters of Science, Electrical and Computer Engineering, University of Massachusetts, Amherst	Spot Award for mentoring interns, GTECH; Building Excellence awards, GTECH
Christi Bengard	43%	Data Systems Analyst	4	6 yrs. Asst. Director Data Management, UC Santa Cruz; 3 yrs. managing technical team in Planning & Budget, UC Davis; 4 yrs. Applications Mgr. for programming staff supporting Budget and IR function & campus financial data warehouse	17	Masters of Science, Information Systems, University of San Francisco	
Caroline West	40%	Business Systems Analyst	1	9 yrs. Director, Office of Analysis and Information Management, UCLA; 12 yrs. Director, Analytical Studies, Office of Resource Management and Planning, UC Davis	22	Masters of Arts, Economics, Harvard University	National Science Foundation Fellowship, Harvard University
Elisa Johnson	100%	Administrative Officer	2	4 yrs., Office of Business and Finance, California State University, Stanislaus	6	Bachelor of Arts, Journalism, UC Berkeley	

Table title: UC Merced Institutional Planning & Analysis Staff (as of 2013)

Committees and Workload

IPA staff-members serve on numerous short-term and long-standing committees. These include:

- Enrollment Management Council (EMC)
  - The EMC has four subcommittees, each of which includes an IPA representative.
  - The four subcommittees are Graduate Student Success, Undergraduate Student Success, Instructional Space, and Enrollment Management Model. The Enrollment Management Model subcommittee is chaired by the IPA Director.

- Campus Working Group on Assessment (CWGA)
  - This assessment group is chaired by the campus Coordinator of Institutional Assessment, who also is the campus ALO (accreditation

liaison officer). IPA is represented by one of the analysts (Michael Wrona).

- UCPath
  - o The UC System is transitioning from an old payroll/personnel system (PPS, a UCLA system) to a new one (PeopleSoft), referred to as UCPath. There will be two or three waves for implementation. UC Merced is slated to be in the first wave, which was originally planned to start in July 2014. The UC Project Management Office, however, has had significant turnover and it is not known at this point when the transition will take place and which campuses would be in each wave. In the meantime, all the campuses have local teams to deal with campus-specific implementation concerns, such as re-programming interfaces between the payroll/personnel system and all other systems downstream (e.g., at UC Merced, ODS/DW, COEUS, AP Recruit, various School of Engineering applications).
  - o The IPA Director and Systems Manager represent IPA on the UCM UCPath committee.

- SIS Team
  - o The Student Information Systems (SIS) Team has regular meetings to discuss SIS issues and the census snapshot process. IPA is represented by one of the analysts (Gary Lowe) and the Systems Manager (Chris Speckens)

- Chancellor's Leadership Council
  - o The Chancellor conducts a monthly campus Leadership Council meeting to update directors and other managers on system-wide and campus issues, events, etc. She also invites discussion on any concerns campus leaders have and feedback on proposed or ongoing initiatives, policies, procedures or any other topics of interest to the group.
  - o The IPA Director is a member of this Council.

- Planning & Budget Leadership Team
  - o The IPA Director participates in regular meetings of the Division of Planning & Budget. These meetings are especially helpful in supporting the integration of planning efforts.

- Long Range Enrollment Planning (LREP) Committee
  - o IPA representatives have included Gary Lowe (analyst) and the Director. Other key members included the VC Student Affairs, Graduate Dean, Undergraduate Dean, VC Research, AVC Admissions, VC Planning & Budget, and the Provost.

- WASC Steering Committee
  - The IPA Director has been a member of the campus' WASC Steering Committee from the beginning of the process: Eligibility, through Candidacy, to Initial Accreditation. The most recent WASC requirement is an Interim Report that is due in January 2014. There also are annual reports that involve updating data exhibits, such as enrollments, retention and graduation rates. Much of the data, analysis and information that support UC Merced's WASC reporting depend on IPA.

Collaborations

IPA routinely works collaboratively with other units on campus.

- **Business Intelligence/Data Warehousing Committee (BI/DW)**
  - The BI/DW initiative has been a partnership between IPA and IT (Information Technology). The current team is comprised of the CIO, a DBA, and an ETL/ODI Developer from IT; and the director, systems manager, Cognos developer, and part-time Business Systems analyst from IPA. The IPA analysts (business users) also participate as needed.
  - The BI/DW comprises two environments: Operational Data Store (ODS) and Data Warehouse (DW), both using Oracle database technology. The ETL (extract/transform/load) tool is Oracle Data Integrator (ODI). Cognos is the reporting tool.
  - Data that currently are being brought into the ODS include identity management (IDM), payroll, personnel, budget, and financial data (from QDB), student enrollment data (from Banner) and admissions data (from AARO). In addition, the campus' research awards and grants database (COEUS), as well as an application that supports faculty workload and space utilization reporting (MARS), reside in the ODS.
  - In fall 2013, the first data mart was launched (Student Enrollment) and resides in the DW. An Admissions data mart, started in 2010, will be completed within the next few months. Following good DW practices, of course, the BI/DW group works closely with the business experts to be sure that the data marts reflect their reporting needs.
  - To validate the BI/DW team's overall approach and assess technical, design, and modeling capabilities, the campus engaged IBM consultants to conduct a review in October 2010. [IBM had acquired Cognos in November 2007.] This 5-day review covered the following objectives:
    - Validate the overall design approach, including its extensibility and sustainability, to confirm viability of future integration of dimensional models, data marts, and cubes;
    - Evaluate use of Cognos tools to be sure that they are put to optimal use in the design of the dimensional models and cubes and the underlying framework manager packages;
    - Evaluate the use of Oracle ETL tools (ODI and OWB);

- - Confirm the campus' choice of hardware and operating system platform for Cognos;
    - Identify other products, staff skill sets, alternative approaches, etc. that might significantly improve staff productivity and product delivery schedule.
  - IBM determined that the current architectural configuration with Cognos was in line with proven best practice methodologies within the current development and production environments. A data architecture review of both the ODS and DW was conducted to ensure standard data warehouse practices were in use. IBM's major recommendation was to utilize a commercial ETL tool, rather than using custom code (PL-SQL) to do the ETL processes. This would greatly reduce development time and improve sustainability and maintenance.
  - The recommended ETL tool, ODI, was purchased and two new full-time members of the team were added to fill important skill-set gaps: an ETL programmer and a Cognos report developer and trainer.
  - A presentation by the BI/DW team to inform senior leadership about the history of the project, the current status, and future plans occurred in September 2013. Part of the presentation involved a demo of the enrollment data mart as well as the Cognos tools and reporting capabilities. [It was important to meet with the leadership, as they all were fairly new to the campus and had not been involved in the early development of the project and the allocation of resources to the project. These leaders included the VC for Planning & Budget, VC for Business and Administration Services, and the EVC/Provost.]

- **Integrated planning model**
  - In order to assess and project resources necessary to support the campus now and in the future, it was necessary to evaluate the impact of enrollments (undergraduate and graduate) on space, staffing levels, and financial and other resources. IPA took the lead by developing enrollment tracking and projections using a set of linked Excel spreadsheets. This model is comprehensive, starting with historical information about California high school graduates, public and private, and the percentage that apply to and enroll at UC campuses. UC Merced admissions trends also are tracked (applications by type: UCM only, referral pool, guarantee pool; California residents, out-of-state residents, international students, AB540 students; admit rates; yield rates). Analyses are broken out by School and program as well. Based on a formula provided by Sam Traina (Vice Chancellor for Research and formerly interim Dean of the Graduate School), projected rates of graduate level applicants were developed. These rates vary by the disciplines of faculty members. Since faculty in STEM disciplines tend to support more graduate students than those in non-STEM fields, the model uses different ratios of graduate applicants per faculty by discipline.

- In addition to admissions data, historical trends in retention and graduation rates are tracked, as well as numbers of staff and faculty, postdocs, TAs, and GSRs. Based on historical trends, projections are made using various indicators appropriate to each data category. As more historical data have been captured, the projections have become more accurate. The level of detail in the model also allows for trend analysis and scenario (what if) analyses. The model has been especially useful in supporting the Long Range Enrollment Projections (LREP), 2020 Project, and UCM-UCOP MOU processes.
  - Working with Capital Planning and the Budget Office, academic space (classrooms and laboratories) and financial implications (faculty salaries, expected grant funding, etc.) were added to the model and linked to appropriate predictors (enrollments, faculty, staff). Recognizing that this Excel-based planning model is relatively labor intensive, the Division of Planning and Budget has been evaluating other options to support resource planning, such as TM1, OP's Cognos planning model, and UCLA's C-Big model. Once the a decision is made regarding choice of planning tool, IPA (with help from the Budget and Capital Planning units) will migrate the planning data to the new application. [IPA purchased TM1 in 2013 and has loaded enrollment projections into the application. The next step is for The Budget and Capital planning offices to help load the financial and space utilization data.]

- **Assessment and Campus Survey Support**
  - IPA responds to many requests from campus units for data and support of their unit assessment activities and program reviews. These requests range from reports (such as those on IPA's website) to analyses of student success or help with the development and analysis of feedback surveys of campus academic and administrative units' "customers."
  - As mentioned earlier, IPA also serves on the Campus Working Group on Assessment, which is led by the Coordinator for Assessment. Other committee members include the School and Student Affairs assessment staff. The role of IPA in the administrative unit assessment process should be reduced substantially, as these assessment staff members throughout the campus take on that responsibility. Academic assessment still is one of IPA's functions, especially in the continued support of academic program reviews. In addition, IPA supports accreditation efforts by providing necessary data and guidance.

    Several years ago, the former Provost established a campus Survey Coordinating Committee (SCC), staffed by the Director of IPA. See information on website at: http://surveys.ucmerced.edu.

SCC Members included:

- Donald Barclay (Deputy University Librarian)
- Jim Genes (Special Assistant to the Vice Chancellor for Administration)

- Laurie Herbrand (University Registrar)
- Ben Lastimado (former Assistant Vice Chancellor for Human Resources and Labor Relations)
- Stefani Madril (former Alumni Coordinator in University Relations)
- Deborah Motton (Assistant Vice Chancellor for Research/Director of Research Compliance)
- Charles Nies (Assistant Vice Chancellor for Student Affairs)
- Nancy Ochsner (Director of Institutional Planning and Analysis)
- James Ortez (Assistant Dean of the School of Social Sciences, Humanities, and Arts)
- Michael Wrona (Principal Research Analyst in Institutional Planning and Analysis)
- Will Shadish (Professor of Psychology and Founding Member of the UC Merced Faculty)
- Chrisopher Viney (former Vice Provost for Undergraduate Education and Professor of Engineering)

The goals of this committee were to reduce duplication/overlap of surveys, improve survey questions and design so that results are more useful, and to analyze results and communicate them to campus constituents. The SCC members, however, after several meetings, decided to disband the committee, 'empowering' IPA to coordinate survey development and scheduling for the campus. For a short period of time, IPA had an analyst whose primary responsibilities included survey development, coordination, and support. When this analyst left UC Merced to take a position elsewhere, the position was revised, as IPA's focus shifted in its move from Academic Affairs to the Division of Planning & Budget. It also was assumed that the assessment coordinators in the Schools and Student Affairs would take over some of the survey responsibilities. One of the biggest impacts of WASC requirements for outcomes assessment, not only for academic units, but also for all administrative units, is the tendency for all these units to use satisfaction and other surveys to help demonstrate the effectiveness of the units. This substantially increased demand for IPA services in supporting survey development, using survey software, and assisting in survey analyses. IPA believes, therefore, that this survey analyst function should remain in the IPA unit and that it requires full-time analyst support. For the 2013-14 budget call, IPA requested and received support for a full-time analyst to support and coordinate campus surveys. A search is currently underway for this position.

Since 2011, IPA has managed and supported a campus survey application, Qualtrics. IPA pays for a 25-user Qualtrics license which allows units to purchase individual licenses at a modest fee. So far, four administrative units have their own user accounts (Library, IT, Student Affairs Assessment, and the Center for Research and Teaching Excellence (CRTE)). In addition, faculty members in Sociology, Psychology, and the School of Natural Sciences use Qualtrics to conduct academic research and support polling of members of their academic programs/Bylaw 55 units). Individual licenses allow the units to draft their own surveys (with IPA to review and edit them if necessary), check on the responses as needed, download the

data, and run reports. It also enables the campus to use the collaboration functionality in Qualtrics to share (and collaboratively edit) reports with other administrative users. To ensure and protect confidentiality, IPA links survey respondents to demographic and other data from the personnel or student systems so that identifying codes are not shared with campus survey users.

- **Development of campus metrics/benchmarks and identification of peer institutions**
  - o In 2013, senior leadership requested that IPA explore and recommend one or more sets of potential peer institutions against which UC Merced could compare various metrics or benchmarks. This was especially driven by the Provost's "strategic focusing" initiative, the Chancellor's 2020 Project, and the increased emphasis on resource management coinciding with the formation of the new Division of Planning & Budget. Another impetus was the new WASC requirement that all institutions identify three institutional peers for comparisons of retention and graduation rates. Two IPA analysts took the lead on this project (Steve Chatman and Gary Lowe). Using a variety of data sources (IPEDS, Carnegie Foundation, Common Data Set, US News, etc.), they identified three sets of peers:
    - Comparative peers (relatively similar to UC Merced at this point in time on many of the typical metrics, such as enrollment size and diversity, % part time undergraduates, % graduate enrollment, Carnegie classification, array of programs, quality of freshman class, etc.).
    - Aspirational peers (those campuses that represent metrics that UC Merced expects to attain within 7-15 years).
    - System (default) peers (sister campuses in the UC system). Because UC Merced is part of the UC system, UCOP, WASC, the State's governor and Department of Finance automatically benchmark UC Merced against campuses in the UC system.
  - o This was a highly collaborative process between IPA and members of the senior leadership team (EVC/Provost, VCPB, VC Student Affairs, Graduate Dean, Undergraduate Dean, and VC Research). The IPA analysts presented in detail their logic to the senior leadership, stepping through the process of identifying the three different peer groups. Questions were answered and feedback encouraged.
  - o As the report indicates, "UC Merced's remarkable uniqueness is the central finding of the study." (See Attachment A: Peer Institution Analysis Report)

- **Academic Program Reviews**
  - o IPA works with the Faculty Senate to support academic program reviews by providing basic trend data (enrollments by major and student level; degrees awarded; faculty numbers as well as workload, research and publication productivity; courses offered) and faculty and student survey data. (See Attachments B1 and B2: Cognitive Sciences Program Review.)

- o Because UC Merced is such a new campus, academic program review policies and processes have evolved over the past few years, and IPA has been part of that evolutionary process. Initially, IPA's director and research analyst Gary Lowe developed a template that defined the core set of indicators IPA would provide to programs undergoing review, (informed by reviews done at other institutions, especially UC campuses). To confirm the usefulness of these data to the academic programs and academic administrators, IPA initiated a meeting in August of 2012 with Academic Senate leadership and staff and with assessment coordinators in the schools to review the data we were providing and discuss issues related to the data. This discussion, in conjunction with changes in campus administrative leadership, precipitated the development of a new template, which hopefully will better meet the needs of the Academic Senate, the Deans, and the Provost.
- o In addition to restructuring and expanding the data provided for academic program review, and in an attempt to reduce the number of surveys administered on campus and obtain more useful data, IPA substantially expanded the Graduating Senior Survey. This survey now includes items based on program learning outcomes identified by the faculty for each major and minor, other items of value to the Schools that offer those majors, and items relating to general education. Because this survey is administered every year rather than just during the years in which programs undergo review, it allows tracking of changes over time and enables us to pool results from multiple years, when necessary. This process allows us to disaggregate results more deeply, even for programs with low enrollments. All of these changes are intended to facilitate richer assessment.

- **Faculty Salary Equity Study**
  - o As part of a system-wide initiative, IPA and three faculty members (assigned by the Faculty Senate) have designed a UC Merced faculty salary equity study that will analyze faculty salaries by gender and ethnicity. Representatives from the campus' Academic Personnel Office also are contributing to the study, by helping to verify the accuracy of the relevant data (salaries, rank, hire dates, sabbatical and other leaves, etc.). (See Attachment F: UCM's Faculty Salary Equity Report, Nov. 2013)

- **Undergraduate Admissions**
  - o At UC Merced, the Undergraduate Council (UGC) of the Academic Senate sets undergraduate admission policy. IPA has, on occasion, worked with and made presentations to UGC, but IPA does not have a seat on the UGC and does not regularly attend UGC meetings. However, the Director of Admissions regularly participates in UGC meetings, and IPA works closely with the Undergraduate Admissions Office, providing analysis of admission criteria and subsequent student success. The types of analyses provided include:

- - Comparing proposed changes in admission criteria to previous incoming classes to determine the potential impact of these changes.
    - Analyzing the potential impact of changes resulting from the UC system-wide decision to no longer use SAT subject test scores in admission decisions.
    - Analyzing admissions criteria for predicting student success (first-year GPA/Retention/Graduate Rates) in order to help determine appropriate weights which should be assigned to academic and non-academic factors.
  - IPA purchased IBM modeling software that supports detailed analysis and informs the admissions process. Modeler generates predictions at the individual student level regarding students' GPAs, and likelihood of enrolling, being retained, earning satisfactory grades, and graduating.

Impact on Campus Planning and Decision-making

IPA's mission, as stated earlier, is to provide ongoing support for campus planning and decision-making and to help improve the effectiveness of the institution. This next section describes some of the ways that IPA has fulfilled these goals or made an impact so far:
  - IPA Website
    - The website is updated frequently as data become available.
    - Provides data and information to campus and external constituents, on demand.
    - Supports transparency in assessment of institution.

  - Long-Range Enrollment Plan (LREP)
    - **IPA provided historical and projected enrollment trends to facilitate decisions** regarding related resources (faculty and other staffing levels; courses; classrooms; labs; parking; housing; dining; etc.)

  - Project 2020 Initiative
    - IPA provided historical and projected enrollment and other resource data to help consultants develop private/public partnership plan to expand UC Merced's capital development to 2020.

  - MOU support
    - IPA played an important role in providing data and projections to influence the first MOU with UCOP and also provided data to measure compliance and progress.
      IPA also participated in the second MOU with UCOP, again by providing data for required metrics.

- o Faculty Workload Report
    - o IPA's faculty workload report is used by the EVC/Provost, the Senate's Committee on Academic Planning & Resource Allocation (CAPRA), and the Deans to inform resources decisions (faculty recruitments, course loads, etc.)

- o Faculty Salary studies (Equity; Peer Comparisons)
    - o IPA provides comparative faculty salary data to the EVC/Provost to determine competitiveness of faculty salaries (by program) relative to other UC campuses, AAU institutions, and other research universities (Carnegie Research Universities/High).
    - o IPA also works with members of the faculty Senate to conduct faculty salary equity (gender and ethnicity) studies.
    - o These studies are used to support faculty salary recommendations and decisions.

- o Faculty, Staff, Student Diversity Reports
    - o IPA participates in the campus' EEOC committee. The data that IPA provides on faculty and staff diversity are used in the required EEOC/affirmative action reporting which identifies areas that have diversity goals to be addressed.
    - o IPA also tracks student diversity.
    - o Gender and ethnicity data are available for faculty, staff, and students on IPA's website.

- o Program Review Profiles
    - o IPA provides substantial data for academic program reviews. These data include student characteristics (major, HS GPA, SAT scores, first generation status), student success (UCM GPA, progress toward degree), faculty characteristics (rank, faculty productivity, faculty turnover), student survey results, and faculty survey results. Examples of these Profiles can be found in Attachments B1 and B2.
    - o The academic program reviews are used to improve the effectiveness of the programs. Historically, IPA only provided data to programs every seven years, when they were up for program review, but moving forward IPA will make the program review data available annually for all programs, not just those scheduled for formal review. These compendia of data also are used in external reviews of the academic programs (ABET, etc.) and as an important resources for the EVC/Provost and other senior academic staff

- o Enrollment Data Mart
    - o The BI/DW Team (which includes IPA) developed and recently launched the enrollment data mart. The data mart provides the advantages of having encoded complex logic (e.g., cohort) so that users do not have to repeat that process. It also clearly defines (via metadata) all data elements so that

they are consistently understood and promote the philosophy of "one version of the truth."

- The data mart is accessible to all users who need to produce reports using student data. Reports developed by each report writer are made available to other users, thus increasing productivity for campus report writers.
- This data mart will be linked to the Admissions data mart (and other future data marts, such as financial aid) via conformed dimensions (using best practices in data warehousing design).

- Student Success Dataset and Analyses
  - IPA analysts created a student success dataset to be used by campus SPSS users who need to conduct in-depth analytical studies. These datasets were given to the assessment staff in the Schools and in Student Affairs.
  - In the future, a student success data mart will be developed and included in the data warehousing environment.
  - IPA analysts also use the dataset and have shared their analyses with campus leaders and staff who have decision-making impact in this area.
  - For instance, analysis has shown that low-income and first generation students, contrary to common assumptions, are not necessarily disadvantaged in terms of retention and graduation rates at UC Merced. (See Attachment C: Student Success presentation.)

- Enrollment Projection Model/TM1
  - IPA has taken the lead on finding an application to facilitate integrated planning (enrollment, capital, and budget/financial).
  - Staff in all three planning areas reviewed several products and decided to purchase TM1.
  - So far, IPA has loaded the enrollment history and projections into TM1. Capital Planning is in the process of loading classroom, laboratory, and other facilities information into the application. Budget and other financial data eventually will be incorporated as well.
  - In the end, TM1 will replace the excel model that has served as the planning model until now.

- Data System Development and Utilization
  - Because UC Merced is a start-up campus, much of the infrastructure that exists on more established campuses does not yet exist or was only recently put in place here. IPA is helping to create this infrastructure.
    i. IPA supports the efforts of the Digital Assessment Working Group, which was charged with identifying an Assessment Management System that would meet the needs of our campus.
    ii. IPA works with staff in IT and various functional offices to create a central repository of data in the ODS from hosted solutions such as Insight Advising (which tracks student participation in tutoring services), Collegiate Link (which tracks student participation in campus clubs and organizations and will enable us to create a co-

curricular transcript), and ICE (which tracks participation in student support services and other events on campus).

    iii. IPA participates in efforts spearheaded by the Registrar to optimize utilization of classroom space using Platinum Analytics and consulting services provided by AdAstra.

    iv. After the Registrar procured degree audit software, IPA initiated efforts to capture the data in DARS and use it for institutional planning.

    v. IPA also is involved in the implementation of UCPath, which will replace the 1970's era Payroll/Personnel System currently in use with a PeopleSoft solution.

- o Peer Institutions Analyses
  - o IPA's analyses of peer institutions and comparisons with UC Merced on various metrics are being used to make decisions about how to grow the academic programs in the future.
  - o These analyses contribute to decisions regarding faculty resources (ladder rank vs. lecturer), investments in research institutes and academic programs, graduate student support, etc.
    (See Attachment A.)

- o Accountability (Campus Profile, HEOA Compliance, IPEDS, UCOP)
  - o IPA plays a major role in compliance reporting for the campus.

- o Private Data Collectors (Common Data Set, College Board, Peterson's, Wintergreen/Orchard House, US News & World Report, The Princeton Review)
  - o IPA also plays a major role in external reporting, especially to those publications that are used to compare institutions across the country.

- o WASC reporting and accreditation support
  - o From the very first year, IPA was a significant contributor to UC Merced's WASC 6-year accreditation journey.
  - o IPA provided much of the data used in each level of accreditation and the Director drafted the first required student success essay (2009), and contributed substantially to subsequent WASC accreditation documents.
  - o IPA continues to provide data for WASC annual reporting and interim reports.

- o Carnegie classification
  - o UC Merced does not yet have a Carnegie classification, but IPA has been instrumental in preparing the campus for that eventuality by informing campus leaders about the requirements to achieve different classifications, modeling the likelihood of UC Merced achieving different classifications, and ensuring that the Carnegie Foundation did not classify UCM until the campus classification would be meaningful and appropriate for a UC research university.

- o Because UC Merced does not yet have a Carnegie Classification, the campus has not, for example, been included in US News & World Report or other publications that rely on Carnegie Classifications to identify colleges and organize them by broad categories.[5]

- o Grant and faculty research support
    - o At various times, IPA is asked to provide information for grant proposals, faculty research studies and/or reports.
    - o The NSF Project Advance grant team has been a frequent user of IPA data over the years.
    - o IPA also has provided data to support evaluation of grant-funded Summer Bridge programs and other student support efforts.

Goals and Key Institutional Outcomes
The goals listed below were used by senior leadership to make budget decisions for 2012-13. Each unit was asked to respond to the campus goals. The following text explains how IPA supports the overarching campus goals.

Goal 1. In support of campus priorities, promote operational efficiency/effectiveness and help address critical undergraduate enrollment demands: **Refine and expand resources and projection model, working with Capital Planning, Budget Office, Enrollment Management, Graduate School, Undergraduate Education, Research Division, as well as with the Schools.**
Outcome: Model refined and expanded; used to project enrollments to 2020 and show impact on classroom utilization and needs and impact on financial revenues and expenses.

Goal 2. In support of campus priorities to make decisions based on data: Create and enhance campus-wide data warehouse: **Establish a plan for the development of data marts and dashboards or scorecards to support critical decision-making priorities (e.g., undergraduate admissions, student success analyses, faculty/staff recruitment and retention efforts, salary equity analyses).**
Outcome: The first data mart (Enrollment) was launched in mid-September. Report writers in the Registrar's Office, Schools, etc. will be able to develop Cognos reports against the data mart. Results will be faster and more consistent. The admissions data mart is under construction.

Goal 3. In support of campus priorities to use key metrics/benchmarks to improve the campus' reputation and visibility and to ensure the campus' Carnegie Classification in 2015 as a research/high university: **Identify and track appropriate metrics/benchmarks to use for comparison against various sets of peer institutions.**
Outcome: Met with campus leaders (Provost, VC Budget & Planning, VC Administration, Vice Provost & Dean for Undergraduate Education, AVC Student Affairs/Dean of Students) to discuss and review IPA's suggested metrics/benchmarks, methodology used, and potential peer groups generated (competitive, current, aspirational

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[5] UC Merced will be included in the next Carnegie Classification process, expected in 2015.

peers). Next steps include the drafting of peer groups for different campus groups to consider and react to.

Goal 4. In support of campus priorities to make decisions in important areas, such as how to:

    a. strengthen the research infrastructure;
    b. allocate faculty FTE within the constraints of budget and demands for courses;
    c. address faculty and staff retention challenges;
    d. respond to critical undergraduate enrollment demands
    e. improve the student campus experience, and
    f. ensure academic success and improve retention.
    Conduct ad hoc and recurring analyses/research studies driven by need for information to improve decision-making.

Outcome: IPA has addressed each of the above decision areas. For instance, faculty workload analyses help the EVC/Provost to make decisions about allocation of ladder-rank faculty and lecturers. Based on a [study](#) of faculty and staff separations by an IPA analyst, some assumptions regarding reasons for turnover were clarified. The creation of a [student success dataset](#), and analyses based on it, contributed to a better understanding of the factors that facilitate and those that impede retention and graduation rates.

Goal 5. In support of campus priorities to improve student experience, academic success and retention, address faculty and staff retention challenges, and promote operational efficiency and effectiveness: **Coordinate surveys of students, staff, and faculty (reducing overlap of questions/surveys sent to each population), summarize and disseminate survey data in a timely way to increase the usefulness of the results.** Outcome: IPA submitted a 2013-14 budget request for one FTE analyst to support campus survey efforts. The request was approved and the search for this analyst is underway. Using Qualtrics as campus-wide survey application: Better scheduling and timing of surveys; less overlap; Survey results are shared with campus ([posted](#) on IPA website).

Goal 6. In support of campus priorities to build capacity and excellence in graduate and undergraduate programs and promote operational efficiency and effectiveness: **Establish routine reports for academic program reviews and post the data annually for all programs in support of the academic programs and the Academic Senate Office.** Outcome:
Starting with the program review templates that IPA developed several years ago, IPA is expanding them and generating them annually for all programs. IPA plans to post them on its website (although some of the data, for small programs, may have to be redacted to protect confidentiality). The first programs to receive the expanded program review reports are Psychology, Computer Science and Engineering, and Earth Systems Science.

Goal 7. In support of regulatory compliance and campus priorities for transparency and sharing of information: **Continue to update and enhance IPA's website to make information/data available and useful to campus and external constituents to**

comply with federal and/or state and accreditation reporting regulations for higher education. Continue to support development and utilization of additional data and reporting systems for sharing information.

Outcome: Continue to add data/information to IPA website; IPA regularly maintains and updates regulatory reports, such as CDS, HEOA, Campus Profile, etc.

Continue to assist with identification, adoption, development, and utilization of applications that support assessment management, student involvement (e.g., Collegiate Link), classroom scheduling (e.g., Ad Astra) and other systems to enhance the campus' planning and decision-making infrastructure.

Challenges

- IPA faces several challenges. As mentioned earlier, the unit recently was moved from Academic Affairs to the Division of Planning and Budget. This has had some impact on priorities regarding projects. While this move presents challenges, it also has enabled the unit to concentrate more on its planning and analysis functions. The unit also has made a commitment to involve interested campus constituents to participate in working groups on various research topics that will result in white papers to be shared with senior leadership and, eventually, the rest of the campus. Without additional staff, however, IPA has had to de-emphasize somewhat its support of assessment activities, the demand for which increased tremendously as a result of accreditation requirements for outcomes assessment and measures of campus and unit-level effectiveness. Many units rely on the expertise within IPA to help them with their self-assessments, especially as they rely heavily on satisfaction or other surveys. Workload has become a persistent challenge. As mentioned earlier, IPA requested an additional full-time analyst to help provide support for analytical studies and surveys. (This position has been approved and posted. Review of applications will begin on March 1.)
- Another challenge involves the impact of the system-wide UCPath project on IPA's data warehousing responsibilities. UCPath will replace the old (1970s vintage) payroll/personnel system with a PeopleSoft payroll/HR system. While all campuses have allocated staff to work on this project, UC Merced is especially challenged by being in the first wave of adoption and having fewer staff to spread among their primary and UCPath responsibilities. IT, IPA and the data warehousing project are impacted by the need to replace many interfaces between the old PPS application and other applications (e.g., COEUS, ODS, MARS). The fact that IT has embraced the ODS as the campus-wide location for system integration will make the interface replacement project much easier.
- Space is an issue campus-wide. One solution was to put all the Division's analysts and other staff (IPA, Budget, and Capital) in a rented facility about 3 miles off campus. The leaders of these units, however, remain on campus. This was simultaneously a positive and a negative arrangement. Having all the analysts/staff in the three planning units together has led to some good partnerships on projects; however it has reduced the likelihood of impromptu/timely discussions between the leaders and their staff members. Some level of communication has been sacrificed.

[Note: As of early March, IPA's Director is scheduled to move to co-locate with the staff.]

- Improvements need to be made in terms of tracking requests. IPA has tried various methods. Initially the staff tried tracking requests in Excel. Later JIRA issue- tracking software was used. Most recently, IPA implemented a system wherein the analysts create an email notice to IPA's Administrative Specialist, describing each request and naming the requestor. This helps to keep track of the requests and also to enable the Administrative Specialist to follow up with the requestor to get feedback. (See section below on Periodic Assessment/Feedback from Structured Interviews: pg. 24)

- IPA is always looking for better ways to disseminate information and analyses to campus leadership and other stakeholders. The IPA website is one vehicle, but not sufficient. The unit is exploring ways to push out information in timely ways and to anticipate the need for analyses. At the request of the Vice Chancellors, IPA is establishing a process to engage interested participants from various areas across the campus in the development of targeted research studies (white papers). Some of the future topics for these IPA-campus conversations include:
  - Faculty salary equity study
  - Transfer student success
  - UCUES survey results
  - Time to degree

- The youth of the campus (currently in its ninth year of operation) is a challenge as well as an asset. Building the infrastructure for a fully developed research university in such a short amount of time requires tremendous coordination, rapid growth in academic and administrative personnel and facilities/physical plant/technological support and the development of a viable strategic plan. Having access to the UC System Office and sister campuses was critical in facilitating UC Merced's progress and timely development in all areas. UC Merced benefited and continues to benefit from the experiences of older campuses, being able to learn from them while also being able to take advantage of current technologies and practices.

- One of the biggest challenges for UC Merced is to meet the needs of the undergraduate population which is largely less well-prepared for a UC college experience than the students who enroll at our sister campuses. At the same time, these college students are very ambitious, with a large percentage interested in STEM fields and having goals to become professionals in health fields, business, engineering and technologies. IPA has played a significant role in trying to identify the needs and assess strategies to best help these undergraduates. When the campus matured to the point where there was sufficient amount of data to analyze, IPA analyzed those data and presented results to campus stakeholders. "Relative achievement of success by freshmen cohorts at UC Merced" and "Who are our freshmen?," presented to the Academic Senate's Undergraduate Council in 2008 and 2009 respectively, examined the characteristics of our freshmen classes and their successes. "Our inaugural class in their senior year: Insights from NSSE" and "2008 University of California Undergraduate Experience Survey Results", both presented to the Dean's Council in 2009, used survey results to contextualize the success of UC Merced undergraduate students in light of their preparation for college and their experiences after they matriculated. These topics were updated and shared with key stakeholders as the

campus has matured. Starting with the 2009 Student Success Essay, required by WASC as part of the Capacity and Preparatory Review, IPA's early reports focused on early-warning systems for student success and retention (in the absence of having data on graduation rates). These early reports were limited in what they could say about degree attainment by our students because the campus had not been open long enough to have meaningful graduation data. Since then, however, IPA has expanded analyses of student success to include predictions of four- and six-year graduation rates. See Attachment C for a recent example, presented to the Undergraduate Student Success Committee of the Enrollment Management Council, in 2013. In addition to analyzing campus-specific data, for three years IPA participated in the College Board's SAT Validity Study, which examined the utility of various pre-admission characteristics as proximal and distal predictors of student success. Since that time, (as indicated earlier) IPA purchased SPSS Modeler and has begun using it to help identify factors that impact student success.

- The IPA/IT collaboration in development of an enterprise Business Intelligence/Data Warehouse (BI/DW) provides accessible and consistent data and reports to support campus decision-making. The resources to date, however, have been inadequate to sufficiently support rapid development. So far, one datamart was launched (Enrollment) and a second (Admissions) will be launched very soon. Only one of the data warehousing staff is full-time on this project. A search is underway to hire a full-time Business Systems Analyst to help speed up the time it takes to document customer needs and to define the data elements and structures that will satisfy those information needs.

- Confidentiality vs. transparency is a data-related challenge for UC Merced. Often IPA has the challenge of providing meaningful disaggregated data when UC Merced student or staff populations, and the number of survey respondents, are too small to analyze (e.g., by program/unit by gender by ethnicity). This has been a particular problem for annual academic program review data for small programs. Until campus populations grow sufficiently, IPA must continue to aggregate the data appropriately to protect confidentiality and avoid drawing unsound inferences.
The UC Office of the President (UCOP) frequently reports system-wide and individual campus data to various constituents, but sometimes their numbers differ from what the campus reports, despite the fact that UCOP's data come from data files submitted by the campus. For instance, UCOP reported three fewer Fall 2012 new freshmen to IPEDS than UC Merced captured in the census snapshot that is used for all official reporting (and is submitted to UCOP via the fall census file). Another example is discrepancies in graduation rates. UCOP does not include retroactive degrees, whereas the campuses do. These inconsistencies create internal problems when campus administrators see different numbers being used by UCOP and trying to resolve them is an inefficient use of analysts' time. It also creates problems when granting agencies (e.g. NSF), for instance, request additional information based on the numbers reported to IPEDS regarding students or personnel. IPA is trying to work with the IR group at UCOP to reconcile, and hopefully align, reporting processes with the campuses. This topic was on the agenda at the most recent UC IR Directors' meeting (which included representatives from UCOP).

Staffing Needs

Three FTE analysts are not sufficient to support all the current responsibilities (reports, data requests and analyses, data warehousing development, committee participation, and other projects.) As mentioned earlier, IPA is searching for an additional analyst to meet current demands, especially support of campus internal and external surveys, and help with the demand for ad hoc and recurring analyses/research studie**s**. (Review of applications should begin in March 2014.)

An additional analyst is also needed to provide analytical support for the Undergraduate Admissions Office to help determine how to use program-specific criteria to better inform recruitment and admission decisions (e.g., Engineering's need for stricter math admissions criteria for prospective Engineering majors). Currently, one IPA analyst has been allocating at least 50% of his time to provide data and analyses to help Admissions make decisions about how to (or if to) change admissions procedures to improve students' odds of being successful at UC Merced (improve retention and graduation rates; time to degree; etc.). One full-time IPA analyst dedicated to admissions would make a significant difference in providing timely support.

The BI/DW initiative depends mostly on IPA and IT staff, all of whom have full-time responsibilities in their respective units. In order to accelerate the process of developing and launching decision-support applications (data marts and cubes), the BI/DW group needs dedicated staff. A full-time Business Systems Analyst would expedite the process of gathering business needs, documenting requirements and working with programmers/developers to create the system specifications for the data marts. The Business Systems Analyst would also validate the requirements against the users' needs, develop complex user interface designs, organize and conduct acceptance testing, participate in cross-functional teams to help solve issues, and support training on the new applications. (This position was approved and has been posted. Review of applications should begin in March 2014.)

After the successful deployment of the Enrollment data mart and the Admissions data mart referred to earlier, other planned decision-support data marts include:
- o Faculty workload/resources
- o Budget and financial analytical support
- o Integrated survey dataset
- o Student success measures data mart (retention, graduation, degrees, etc.)
- o Course enrollment data mart

The priorities for additional data mart development will depend on guidance from the Vice Chancellors and the willingness and availability of the potential users of the data marts to work with the development team.

Periodic Assessment/Feedback from Structured Interviews

IPA established a system for obtaining feedback from customers. All requests submitted to the analysts are put into a common email folder. (When the requests come via other

modes, such as phone, casual conversation, committee meetings, the analysts create emails with the request details and forward the emails to the common folder.) From these emails, IPA's administrative assistant contacts the requestors to solicit their feedback, as appropriate, regarding:

- Website usability
- Timeliness of deliverables
- Knowledge of staff
- Responsiveness
- Staff professionalism
- Frequency of use of specific IR products
- Awareness of product/services
- Ease of use
- Accuracy and consistency
- Meets needs
- Level of product comprehensiveness

Campus clients report across-the-board approval of their interactions with IPA staff. When queried about the above-referenced measures, and offered metrics ranging from "satisfied (3)" to "not satisfied (1)" and "agree (3)" to "don't agree (1)", clients consistently give IPA strong, top-end ratings (see Attachment D). Typical comments include:

"I learn a great deal about assessment and student data every time I work with IPA staff. I wonder if it might be possible to offer workshops to faculty and staff on institutional data and reports. I realize that this outreach might increase workload (in increasing faculty interest in IPA projects); however, the workshops might also refine requests and prepare faculty to work more effectively with institutional data. Maybe a workshop for program review? In any case, I mention this because I value consultation time with IPA and imagine that other faculty might benefit from further contact with IPA staff, too."

And with regard to familiarity with and utility of IPA's website:

"The site is really useful and intuitive. IPA's site and tables have been a reference point for our grant proposals. Also, I encourage graduate students to explore the site to understand UCM better. Finally, my undergraduates cite IPA's site for local research projects. The site is very well organized, with useful data and survey templates."

2011 IPA Feedback Survey

Prior to this structured interview strategy, IPA had launched an anonymous survey to capture campus feedback (See report in Attachment E). It was administered in February 2011 to all 894 full-time, regular employees and 3 part-time regular employees. A total of 267 instructional and non-instructional employees responded (30% response rate). A little over 50% of the respondents indicated that they had at some point contacted IPA or used the IPA website to obtain data or information about UC Merced. Most of them (84%) visited IPA's website; 58% used email to contact IPA; 41% phoned; and

only 6% met in person with an IPA staff member. By far the data or information most requested or searched for was enrollment or admissions demographics (82%). Direct contact with IPA staff (by phone, email, or in person) tended to be most helpful (89-93% saying very helpful). IPA's website was very helpful to 71% of the respondents.

Trends in Use of IPA Website (Google Analytics): FY 2009-10 through FY 2013-14

In the last two years, IPA has continued to enhance its website. Use of the website is monitored by Google Analytics, which helps inform usage, not just by campus staff, but external constituents as well.

	FY 09-10	FY 10-11	FY 11-12	FY 12-13	YTD 13-14
New Visitors	2800	2770	3120	3206	2769
Page Views - Student Stats Page	7966	7340	8789	9111	6648
Page Views - Home Page	2747	3202	3978	3543	2879
Page Views – Faculty & Staff Page	1340	1650	1772	1880	1436

After the initial rollout of the IPA website in 2008, Google analytics were implemented to help capture a variety of statistics on the website usage. On average there have been approximately 3000 new visitors to the site each year from FY09-10 through (year-to-date) FY13-14. The majority of new visitors accessed the site during early Spring (February, March) and in the Fall (October, November), most likely looking for the latest student census data.
The top three pages visited on the IPA website are the Student Stats page, home page, and Faculty & Staff page. On average, over the past several years, approximately 68% of new visits are to the Student Stats Page.

Conclusion

The timing of this program review is ideal. We have a relatively new Executive Vice Chancellor/Provost, Vice Chancellor of Business and Administrative Services, and Vice Chancellor of Planning and Budget (to whom IPA now reports), none of whom has been at UC Merced for much more than a year. In addition, the Deans of the three Schools and even the Chancellor are all relatively new. (The most senior of these joined our campus in 2010.) This leadership team has undertaken significant organizational restructurings designed to foster important synergies and create divisions of labor and chains of command that will improve decision making and increase efficiency. Together, they launched a significant planning initiative (2020 Project) that addresses the facilities and academic as well as administrative support needed to reach the goal of 10,000 students (10% of whom would be graduate students)

While still small by University of California standards, UC Merced has grown from 875 students in Fall 2005 to almost 6,200 in Fall 2013. Many of the staff that used to work

next door to one another on campus have been moved off campus and are now scattered in various locations throughout the greater Merced area. Increasingly, staff hires have been more specialized and, in many cases, have filled roles that didn't exist previously. For example, a few short years ago, the campus did not have a formalized assessment function. Today, there is an Office of Institutional Assessment, assessment coordinators in each of the Schools, and a coordinator for assessment, evaluation and research in the Division of Student Affairs. How should changes such as this impact IPA's role at UC Merced? How can IPA transition from a unit that tried to respond to the data and information needs from all parts of the campus to a unit that can be more proactive, emphasizing analytical studies that help identify strategies for campus improvement? How can IPA better balance the level of customer service expectations that we were able to offer in the early years with the expectations and need for more investigative and evaluative studies at this stage in the campus' development?

IPA is undertaking a host of initiatives, and rapidly expanding the types of data sources we need to understand and analyze. Some of the initiatives, like the faculty salary equity study, are mandated by the UC Office of the President. Some are the result of adding new data systems, such as Ad Astra, Degree Audit, Digital Measures, and Collegiate Link. We are using expenditure data to estimate how the costs of education differ by major and to contextualize those costs by comparing them with costs at other institutions. We are undertaking faculty salary equity studies. We are heavily involved with space planning, which is one of the most pressing issues the campus faces. We are tracking grant awards and research expenditures over time to understand productivity by discipline and the potential to increase the campus' research productivity. We are being asked to produce white papers about a range of topics that can focus the campus's attention on important issues, like defining peer institutions and key performance indicators.

The traditional approach to conducting periodic reviews of administrative (non-academic) organizational units focuses largely on the unit itself. It looks to the past to see what has been done and how to do it better. While IPA would certainly benefit from advice about how to do better what we have historically done (especially with regard to the challenges we have outlined herein), we also seek guidance about how to facilitate cultural change with regard to stakeholder expectations about IPA's priorities. As IPA takes on new responsibilities and projects, what do we eliminate?

IPA is at a crossroads. Trade-offs need to be made. We would benefit immensely from the guidance of our peer reviewers about which trade-offs to make, and how to implement them. The external review team has a unique opportunity to conduct rich qualitative research by conducting group interviews with key stakeholders, some of whom may be adversely impacted by change, and some of whom may be aware of great opportunities that are not even on our radar screen. So in addition to determining what we do well and how we can improve, we hope we can get advice about how to adapt to our changing environment. Such advice would not only benefit IPA, it would benefit UC Merced.