WSU Managed Data Systems for Analysis and Reporting



The University community has three managed data systems from which to obtain information related to data for decision-making, planning and reporting. Depending on the type of information needed, these data systems are the Business Intelligence and Predictive Modeling (BIPM), University Assessment Data (UAD) and External Reporting Data (ERD). BIPM and UAD are used to provide data, reports and analysis for internal decision-making and strategic planning, whereas ERD are data and reports to external entities. Listed below are brief descriptions and examples of what each data system provides to University and non-university constituents.



Business Intelligence and Predictive Modeling (BIPM) is an integrated student/course data system that spans 1980 to the present day (refreshed daily from our Banner systems) encompassing the entire lifecycle of students from recruit to degree conferral including complete course activity (registration to grades) and the integration of cross-divisional data (e.g., financial aid, accounts receivable, payroll). Data analysis can be performed at the student level and aggregated to any higher level dimension; the same is true of course activity for course or program level analysis. In addition to complete student and course data, BIPM is used to perform modeling which assigns scores to students and institutions that are uploaded to Banner daily, allowing for the identification of students at academic risk, courses which place at-risk students in academic jeopardy, high matriculation yield rates of high schools and colleges for targeted mass recruiting, student probabilities of matriculation for targeted recruitment and admission decisions. Modeling also allows for the identification of statistically significant predictors in student



success which can be used to take institutional action. In addition to score modeling, forecasting models are automatically scheduled daily to produce estimates on future recruits, applications and enrollment outcomes for planning and targeted unit accountability. Tuition revenue models are produced at several different structural levels ranging from the course-level, departmental level, college level to the university-level in identifying revenues and cost for budgeting and resource allocation.

Examples of BIPM reports and analysis:

- Reports and analysis on student recruitment and admissions, enrollment and course activity, and degree completion including data on student retention and graduation rates.
- Identification of academically at-risk students and students at-risk for not being retained.
- Creation of scoring for identifying student prospects for recruitment and identifying educational institutions and geographic regions of high recruitment yields.
- Development of dashboards and scheduled reports for assessment of performance and goals.
- Forecast modeling for recruitment, enrollment and tuition revenue analysis including simulation analysis for alternative outcome scenarios.

University Assessment Data (UAD):

University Assessment Data (UAD) provides access to university data collection efforts, overseen by the Office of Assessment, pertaining to assessment and accreditation requirements. These data encompass student, program and university level initiatives aimed at assessing and improving performance including reporting to accrediting agencies such as the Higher Learning Commission (HLC).

Examples of UAD reports and analysis:

- Higher Learning Commission (HLC) data assets and reports.
- WSU Graduation Partnership initiatives.
- Survey data including the Student Exit and Alumni surveys, the Collegiate Learning Assessment (CLA) surveys and GradesFirst surveys.
- Performance dashboards including the Foresight2020 and WSU Performance Agreements.
- State mandated agreements such as the Kansas Senate Bill 127 Engineering Degrees Initiative.
- Studies on General Education learning outcomes.

External Reporting Data (ERD):

External Reporting Data provides data and reports to external constituents including federal, state, profit/non-profit agencies and individuals who have approved open records requests. ERD data is defined to meet the needs of external constituents which may be at odds with what is needed for internal decision-making and strategic planning.

Examples of IR reports and analysis:

- Prepare Federal reports that are required by statute such as the Integrated Postsecondary Education Data System (IPEDS).
- Prepare state reports including the Kansas Post-Secondary Database, Faculty Consolidated Report, plus 12-14 other annual reports.
- Prepare teaching load reports that describe the courses and student credit hours for each faculty member, department and college including FTE, SCH generated per FTE as well as SCH by type of instructor (e.g. TTF, lecturer) that are used in program and faculty review related to KBOR.
- Data for program review required by KBOR.
- Respond to various surveys such as US News, Peterson's, College Board, National Science Foundation, Reuters, and Cornell University.
- Preparation of the Common Data Set, College Portrait, and Community College Retention Report.
- Identify and maintain student cohort data for external reporting including KBOR, IPEDS and CSRDE (Consortium for Student Retention Data Exchange).
- Respond to ad hoc questions from the media, private individuals and companies who have secured permission from the general counsel's office for compliance with open records law.

