

## Admissions to Graduation (A to G) Project: Status and Next Steps

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**Figure 1. A to G: Clearing Hurdles on the Path to Graduation**



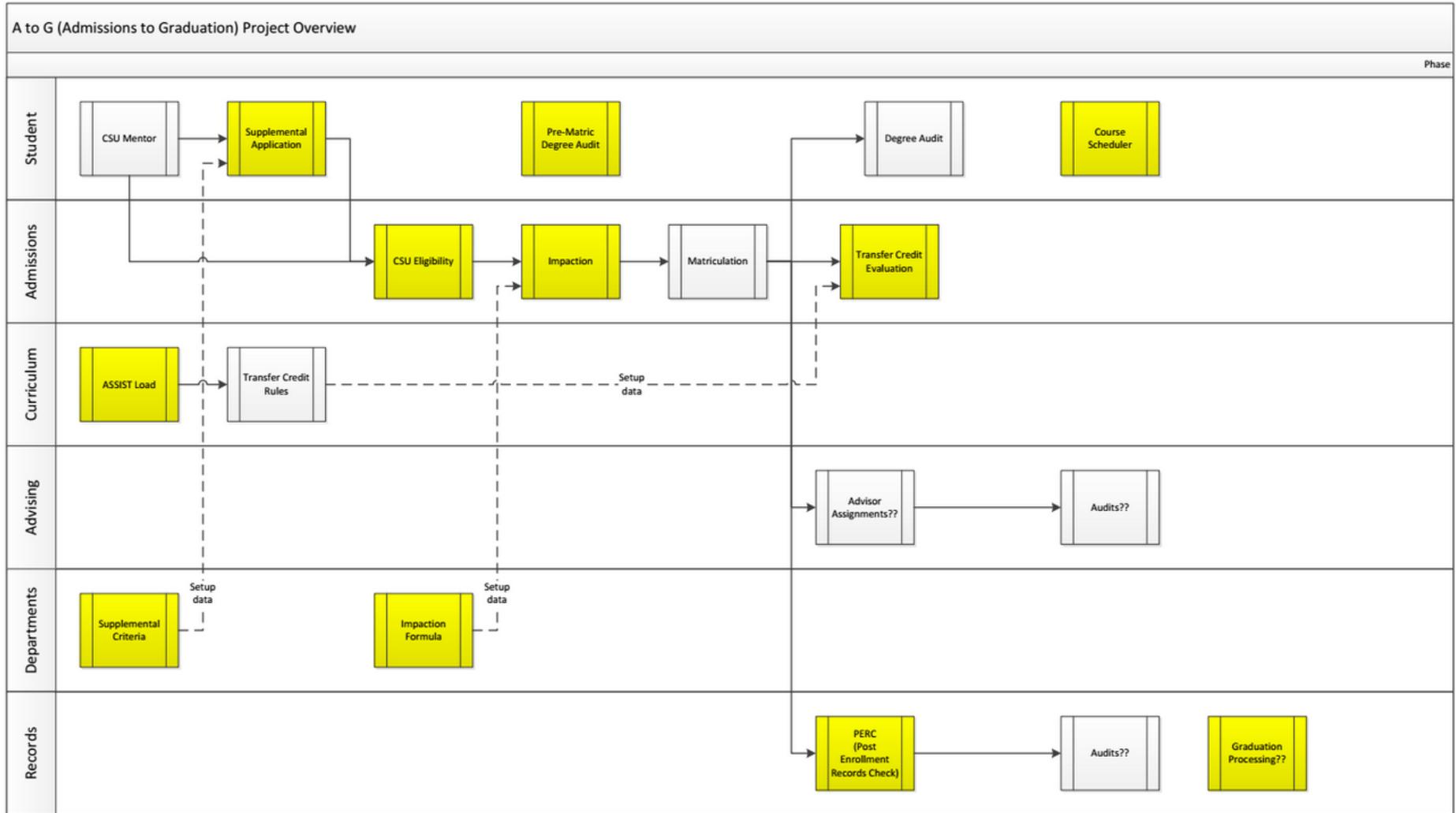
### Hurdles

|  |   |  |  |
|--|---|--|--|
| <ul style="list-style-type: none"> <li>• Insufficient space in highly-impacted majors</li> <li>• Some at-risk students are not identified for early support</li> <li>• Frosh: Late discovery of the need for remediation is possible</li> <li>• Transfers: Associates Degree for Transfer (ADT) is mistakenly claimed or not matched with major</li> </ul> | <ul style="list-style-type: none"> <li>• Transfer Credit and Test Credit may not be evaluated</li> <li>• Students are unable to see what requirements have been satisfied</li> <li>• May be admitted to the university but denied major</li> <li>• Not all students have an assigned advisor</li> <li>• Transfers: ADTs may not be identified</li> <li>• Transfers: Many students come with 60 units but no preparation in the major or w/o bottleneck courses</li> </ul> | <ul style="list-style-type: none"> <li>• Change of majors may be difficult or declared late and without data</li> <li>• Lack of an electronic database of individual advising plans</li> <li>• Multi-year planning difficult</li> <li>• Recent external coursework is not evaluated</li> <li>• Degree changes, substitutions, and waivers are “unofficial”</li> <li>• Difficult for a student to know if their plan satisfies all graduation req’s</li> <li>• Course demand difficult to predict</li> <li>• Many courses unavailable</li> <li>• Full 15-unit load toward grad req’s is not guaranteed</li> <li>• Students w/o prerequisites take spaces from prepared students</li> <li>• Intervention is not as early or pervasive for</li> </ul> | <ul style="list-style-type: none"> <li>• Post-matric. transfer credit is finally evaluated</li> <li>• Surprise requirements = late graduation</li> <li>• Student applies early and waits for manual process</li> </ul> |
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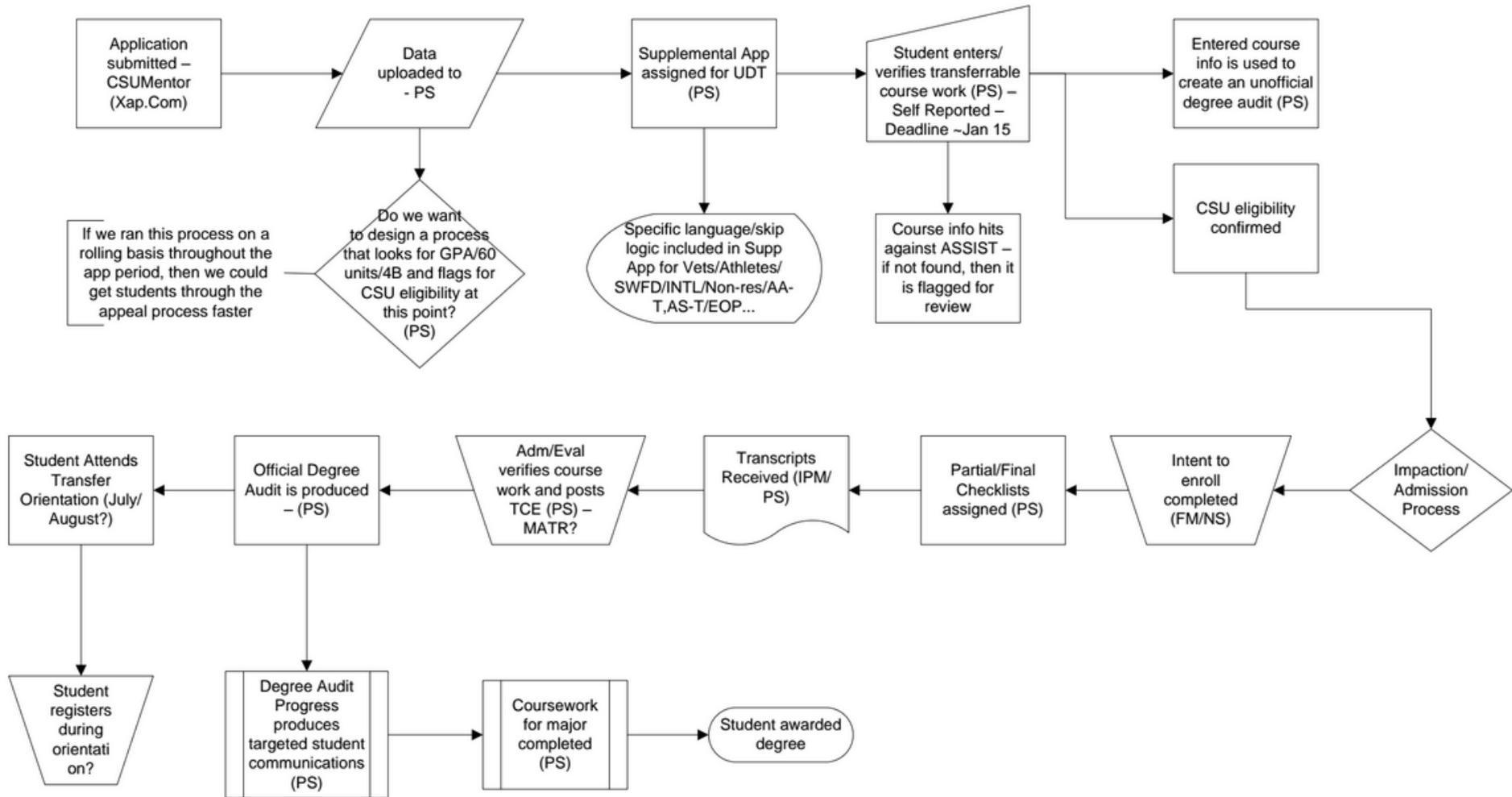
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|  |  | at-risk students (w/o benefit of big data) |  |
|--|--|--|--|

**Background:** The Admission to Graduation Project (A to G Project) was formed in the Fall of 2014 to identify and implement enhancements to technical and business processes that would facilitate graduation for our students and contribute to meeting SJSU's goals. Figure 1 shows some of the many hurdles our students currently encounter on which the A to G project can make a meaningful impact. The project is a partnership between Administration & Finance, Academic Affairs, and Student Affairs led on the functional side by Enrollment Services and on the technical side by Information Technology Services with representation from across campus. The Chancellor's Office has provided partial funding, and SJSU has allocated one-time as well as base funding.

**Figure 2. A to G Project Overview**



**Figure 3. A to G Flow Chart**



**Vision:** The vast majority of students and prospective students know precisely their current degree progress and expected date to complete all degree requirements. SJSU uses this information effectively to facilitate faster progress to degree and prevent any avoidable delays in graduation.

**Success Criteria**

- Percentage of **students** who have an accurate and up-to-date account of their degree progress, unmet requirements, and a plan for graduation.
- Percentage of **admits** who have an accurate and up-to-date account of their degree progress, unmet requirements, and a course schedule that advances them toward graduation.
- SJSU advisors, course schedulers, and distributors of resources, use the information effectively to prevent any avoidable delays in graduation as measured by decreased time to graduation and increased access to bottleneck courses.

**Key questions to Answer:**

1. Are we on target to meet the original schedule (Figure 4)?
2. What are the gaps between our projected status and our vision?
3. When there are gaps, what are the key actions needed to close them?

**Status Updates**

**Figure 4. Project Timeline**

| Solution   | S15    | Su15   | F15    | S16    | Su16   | F16    | S17    | F17  |
|--|--------|--------|--------|--------|--------|--------|--------|------|
| College Scheduler/Spartan Planner                | Yellow | Blue   | Blue   | Blue   | Blue   | Blue   | Blue   | Blue |
| Transfer Credit Rules                            | Yellow | Yellow | Yellow | Orange | Orange | Orange | Orange | Blue |
| MyProgress (Degree Audit) - Undergraduate        | Yellow | Yellow | Orange | Orange | Orange | Orange | Blue   | Blue |
| MyProgress (Degree Audit) - Graduate             |        |        |        |        | Yellow | Orange | Blue   | Blue |
| Automation of Substitutions (exceptions)         |        |        |        | Yellow | Yellow | Orange | Orange | Blue |
| Automation of CSU Eligibility                    |        | Yellow | Yellow | Orange | Orange | Orange | Blue   | Blue |
| Automation of Impaction                          |        |        | Yellow | Orange | Orange | Orange | Blue   | Blue |
| Supplemental Application for Transfer Applicants |        | Yellow | Yellow | Blue   | Blue   | Blue   | Blue   | Blue |



|  |   |   |  |                           |
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| Automation for UDTs<br><br>and<br><br>Supplemental Application | pool received from Mentor for a given term and class level for <i>minimum CSU Eligibility</i><br><br>· Create a system for students to enter coursework required for impaction processing and validate CSUMentor info | -Fewer incoming transfers taking lower division courses due to better preparation   | maintain projects once consultants' contracts expire.<br><br>Application infrastructure environments being configured on AWS to enable dynamic scaling as needed.<br><br>Support model for each of the technical pieces has not been defined: A to G application, authentication layer, Peoplesoft |                           |
| Early Alert System GradesFirst                                 | A system to identify and monitor at-risk students that can also serve general advising needs and track student co-curricular activities with card swipes..  | -Number of faculty participating<br>-Number of at-risk students engaged in early intervention programs                                      | ONLY PARTIAL UTILIZATION by EOP and Student-Athletes; may add some under-represented minority students with less than 2.5 SJSU GPA this semester; undergoing software upgrade this semester  | SASS                      |
| Roadmaps for Frosh   | A term-by-term generic advising path for all students in a given major to complete all degree and SJSU graduation requirements.   | -Percent of plans with four-year roadmaps   | SASS, AARS, and GUP have identified a process to post current four-year roadmaps on the Advising Hub after roadmaps are submitted to GUP as a required part of curricular changes.   | Colleges / SASS- AARS/GUP |
| Roadmaps for SB 1440 Students (Assoc Degree for Transfer-ADT)  | A term-by-term generic advising path for ADT students in articulated programs   | -Percent of plans with two-year roadmaps  |  | Colleges / GUP            |
| Spartan Planner (aka: College Scheduler)                       | A third party application deployed and configured to integrate PeopleSoft Student Center provides students the ability to manage their course schedule.   | -Number of students using spartan planner<br>-increased AUL due to a decrease in class conflicts or improved scheduling to meet peak demand |  | ITS/SASS                  |

**Table 2. Current Projects**

|             |  |
|-------------|--|
| Off Target  | Cannot make original schedule without changing scope                                 |
| At Risk     | Original schedule at risk; have identified a mitigating strategy to achieve schedule |
| On Schedule | On schedule.   |

| Project Title                   | Brief Description  | Key Success Criteria/Metrics  | Status  | Primary Area         | Impediments to Realization of Vision Statement  |
|---------------------------------|--|---|---|----------------------|---|
| ADT Verifications               | Associates Degrees for transfer are verified and matched to the intended major, allowing for a bump in admissions and access to a 60-unit pathway to the degree.   | -Number of students with ADT verified prior to advanced registration for spring<br>-Number of students with ADT verified after advanced registration for spring         | 11/3/15 for current students and 5/15/16 for F16 students | ES                   | No verified lists for F14 and F15 ADT students to provide information to department ADT academic advisors.<br>A challenge is degrees are posted after final coursework transcript is received so students don't request a final transcript showing degree posted.   |
| Automation of Graduation        | Develop processes, tools and business practices that enable SJSU to automate the graduation process  | 80% of students have degrees posted utilizing degree audit (All colleges Spring 17)   | -Pilot Spring 2016<br>-Full Spring 2017                   | ES/<br>GUP/<br>Depts | Requires careful vetting of degree audit by departments and a business process to reflect requirement substitutions/waivers   |
| Impaction Processing Automation | Implement equation to assist university to reach the desired enrollment targets by program and for university as a whole.<br><br>Allow students to be ranked for admission by program and university:<br>- on a combination of<br>- class level,<br>- relevant coursework, | - Students are ranked for admission selection by program and for whole university<br>- Students are ranked with combination of class level, coursework, test score, GPA | 1/29/16<br><br>On Schedule                                | ES / ITS             | Product requirements doc business rules are written.<br>Waiting on programming support for implementation. Some development resources will transition from programming supplemental application to programming impaction processing. As planned staff development resources will replace some consulting development resources. |

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|  | - relevant test scores, and<br>-GPA   |   |                                    |                                     |   |
| Reporting Tools                          | <p>Analytical tools that will allow both enrollment and advising staff members to identify students who might need attention or intervention.</p> <p>Identify effectiveness of Fall 2016 impaction plan changes and future changes which could positively impact student success.</p> | <p>Minimal set of standard reports available and accurate for core users.</p> <p>Environment available for self-serve reporting and analysis.</p> | 12/15/15<br>and<br>1/29/16         | ITS/ES<br>IEA/<br>SASS/Coll<br>eges | <p>Reporting tools requirements need to be scoped, defined / articulated. Also solution for pre-admissions, admissions and post admissions processing needs to be scoped, defined / articulated.</p> <p>Current focus is on developing required reporting for the Supplemental Application and Impaction Processing projects.</p> |
| Student data warehouse                   | A repository for student data that allows current reporting to all end users and data-based decision making for student success and strategic resource utilization.   | Number of decisions made with timely data   | Fall 2016                          | ITS/IEA                             | No project documentation at this time. Substantial time commitment for set-up, validation, and training.  |
| Transfer Credit Evaluation (TCE)         | <p>Rules to electronically evaluate external coursework</p> <p>Practices to use rules effectively</p>   | -Proportion of transfer students with up-to-date Transfer Credit rules  | Fall 2016                          | GUP                                 | <p>This will never be completed as it always changes. One small change in the catalog can break hundreds of rules.</p> <p>Need a new business practice for equivalency and TCE rule exceptions</p>  |
| Degree Audit (for Matriculated Students) | An automated system to show what degree requirements are satisfied and which  | <p>-Percent of students with a current and accurate degree audit</p> <p>-Number of students and</p>   | Fall 2016 (degrees w/ >100 majors) | GUP/<br>ES/<br>ITS                  | <p>Need more personnel. Only one employee programming Degree Audit.</p> <p>Require more technical assistance from ITS to</p>  |

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|  | courses may be used to satisfy the remaining requirements.  | advisors using the degree audit  |             |               | <p>develop processes for DA.</p> <p>Many business practices need to be changed for transfer credit to be delivered to degree audit for effective advising.</p> <p>Perception by the campus that the DA doesn't work. Need major campaign to educate the campus about the DA and to train advisors how to use it and to give them access. Many advisors do not have access.</p> |
| Early Transfer Credit and Test Credit Processing | <p>Most incoming upper division transfers would have at minimum their unofficial transfer credit and ideally official transfer credit posted in summer</p> <p>Transfers and advisors could use this information in selecting courses for first term of enrollment</p> | 80% of incoming upper division transfers have at minimum their unofficial transfer credit and ideally official transfer credit posted in summer, prior to registration | Summer 2016 | ES / GUP/ ITS | <p>Many business practices need to change for this to be achieved.</p> <p>Additional staff are needed to verify and post transfer credit</p> <p>Numerous programming modifications in PeopleSoft are needed for this to work effectively.</p>  |
| Pre-Matriculation Degree Audit                   | Create process to facilitate the collection of data to be used by the Pre-Matriculation degree audit process  | -Percent of transfer students with a meaningful degree audit at the time of registration   | Spring 2016 | GUP/ES        | Need new business process developed in Admissions to make data available to Pre-Matriculation Degree Audit   |
| CSU Eligibility Automation for FTFs              | Assess the FTF applicant pool received from Mentor for a given term and class level for <i>minimum CSU Eligibility</i>  | Manual evaluation of first time freshmen applicants will be significantly reduced  | Fall 2015   | ES / ITS      | The functional design for this project has been completed but no programming has occurred. Original target was October 1, 2015 as part of IPSA   |

**Table 3. Potential Projects to Achieve Vision**

| Project Title  | Brief Description  | Key Success Criteria/Metrics  | Lead                       | Value to project and impediments to implementation  |
|--|--|---|----------------------------|---|
| Automated assignment of advisors   | Allows all students to have an assigned advisor, visible in their Student Center, with contact information, from the time of orientation to graduation.  | -Percent of students with an assigned advisor   | ITS/SASS/ Colleges/ Depts. | Clarity for students<br>Depts. required to have an assignment process<br>Department advisors change over time   |
| Broader programming of prerequisites and implementation of Post-enrollment Requisite Checking (PERC) | PERC is a delivered PeopleSoft feature that checks prerequisites for courses prior to the first day of class. Enabling students to enroll in coursework with self-declared transfer coursework or work in progress and freeing up faculty time by checking the prerequisites after transcript evaluation and course completion. This frees more spots for students who need the course and meet all prerequisites. | -Improved student course completion and grades due to proper course sequencing<br>-Number of spots freed up by prioritizing students who meet all prerequisites<br>-Amount of faculty time freed for other activities | ITS/ GUP/ Depts            | -PS programmer time limited<br>-Culture adjustment as departments come to grips with their course enrollment criteria   |
| EAB Student Success Collaborative  | A student advising and analytics system, mining prior student success data and allowing proactive advising to students based on their declared major and past record.  | -Percent of students who are successful after a change in major   | ITS/ IEA/ AA               | -Proven technology for data mining student success records<br>-Cost and effort<br>-Mechanisms to take full advantage of the wealth of information available<br>-Some canned reports/analyses will not be relevant to SJSU |
| Electronic approval of the substitutions and waiver process (recommended quick win)                  | Ability of advisors, dept. chairs, etc. to input substitutions, waivers, and other program requirement modifications into PeopleSoft as soon as they are encountered so that the   | -decreased number of students who need sub/waivers in the grad check  | ITS/SASS/ GUP              | -Student faith in degree audit is enhanced<br>-Allows up-to-date information to be reflected in the degree audit<br>-Change in business practice required   |

|                                       |   |  |                            |  |
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|                                       | degree audit is current.  |  |                            | across campus  |
| Need-Capacity Matching                | A practice of assessing course need and demand for continuing students and new admits resulting in plans to meet the needs with resources and admissions actions. | -Number of course sections added or resources redirected due to additional student demand data   | IEA/<br>Colleges/<br>Depts | -Prioritizes student need in resource allocation process<br>-Nascent stages of conceptualization   |
| Next Gen Advising                     | Advising that is informed by up-to-date information and data analytics to identify and intervene with at-risk students and benefit all students.                  | -Retention and graduation rates<br>-Number of successful interventions   | SASS /<br>Colleges         | -Transcripts, Test credit, need to be asked for after the close of initial filing (Nov 30) for course work through that fall due by the end of Jan. Final docs by July 15 <sup>th</sup> (and entered data when it arrives.)<br>-Post TC prior to orientation – for advising for first term<br>-Lack of centralized direction of advising means widespread adoption of a unified approach may be difficult. |
| Schedule Validation in Student Center | A feature in PeopleSoft that allows students to check their schedule for conflicts, prerequisite errors, and other blocks prior to advanced registration.         | -Number of users<br>-Number of students who avoid delays due to resolving conflicts prior to advanced registration   | ITS/ES/<br>GUP             | -Allows students to avoid unnecessary delays   |
| Smart Planner (recommended quick win) | A system that allows students to make individualized multi-year plans based on degree audit and typical course offering schedules.                                | -Number of students graduating by expected date<br>-Number of students using smart planner<br>-Number of course sections added or resources redirected due to additional student demand data | ITS/<br>SASS/GUP           | -Would allow multi-year student plans and resource matching to satisfy demand.<br>-Requires programs to identify “typically offered” in PS.<br>-Is most useful only if adopted broadly.  |
| Wait List and Add Order Automation    | Address the labor-intensive and imprecise method of adding students   | -Decreased time to graduation  | ES/<br>Senate              | -Channels resources where they can have the greatest impact on student success   |

|  |                                      |                                    |  |   |
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|  | into classes by an electronic system | -Less faculty time and aggravation |  | -Past culture hinders most effective use (few limits, disappearance prior to day-1, acceptance of large wait lists) |
|--|--------------------------------------|------------------------------------|--|---|

## Next Steps

- Reevaluate existing timelines and resource allocations
- Integrate changes in business practice into the A to G plans with designated leads and identified constituent consultations
- Determine cost benefit analysis and feasibility of IT resources for embarking on new projects on the potential projects list to enable each to be considered by campus decision makers
- Discuss protocols, expectations for communications about services
- Create communication plans for deployment
- Identify alternative plans if current recruitment plans for additional staff are not successful

## Recommended Action Items

### *Additional Budget Allocations Required to:*

- Adopt SmartPlanner
- Develop a student data warehouse
- Hire and retain sufficient PeopleSoft programmers or consultants with experience in Student Administration
- Hire additional GUP personnel for prerequisite, transfer credit rule writing, and degree audit programming
- Hire additional transfer credit evaluators to ensure timely posting of transfer credit prior to enrollment
- Endow an individual with the authority and responsibility to coordinate cross-divisional efforts

### *Changes in Business Practice (with impacted groups)*

- Front load evaluation of credit (ES & GUP)
- Front load program requirement changes, requirement substitutions or waivers (ITS & Faculty)
- Entry of “typically offered” term in PS is required in order to use SmartPlanner (GUP and Faculty)
- All students should create an individualized advising plan in SmartPlanner as a regular practice to derive the greatest benefit (Advisors, Deans, Faculty?)
- Advisors abandon past practice and adopt common use of technology (Advisors, Deans, Faculty?)
- Automatic assignment of advisors (Advisors, Faculty)
- Department review of degree audit Hamrock, p. 25 (GUP, Faculty)
- Move up fall registration to spring rather than summer to ensure advisors available for continuing students to consult with regarding recommended classes

- Allow for electronic approval of substitutions to allow for accurate degree audit

*Other Changes (e.g., new policies or changes in priority)*

- Priority for student progress toward degree takes precedence over headcount in planning efforts (may either require substantial loss of fee revenue or intercession of the Chancellor to temporarily exceed the FTES ceiling)
- Moving away from FTES caps for students, colleges, and programs
- Adoption of a long-term enrollment plan (by college/degree)
- Culture change toward one of intolerance for any substantive roadblocks on the path to graduation
- New policies for widespread adoption of practices (add order, use of early alert system, use of electronic individualized advising plans, etc.) -- N.B., alternate strategies should also be considered (e.g., default assumptions with opt-out possibility)