# EFFICIENCY AND EFFECTIVENESS: CROSS-INSTITUTIONAL COMPARISON OF WORKFLOW TRACKING SYSTEMS

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Cailifornia Association for Institutional Research
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Embassy Suites Seaside, Monterey California

California State University
SAN MARCOS

- Decision Support Group formed (Joint IITS, IR, Enrollment Management and other entities) to discuss data issues and requests
- Data Request and Tracking process formed to develop a process for tracking, assigning and declining data requests
- Improving the Process of Analysis with new data warehouse and visualization tools, loads of SELF SERVE data available
- Data Governance Committee formed to develop, implement and enforce data policies and to ensure data are vetted

# DEVELOPMENT OF PROCESSES AND GOVERNANCE, 2015-PRESENT

# DECISION SUPPORT GROUP (DSG)




- Consists of key IITS, IR, Enrollment Management, Community Engagement professionals
- Meets bi-weekly for 1 hour
- Creates collaboration and communication, access to each other
- Discusses upcoming issues and events, due dates, and initiatives
  - HIPS, GI 2025, the infamous B-P files
- Discusses data request process, workload, who gets what requests
  - Institutional and static reportable data to IR
  - Queries and RaDAR report enhancements to IITS
  - Complex queries to the Data Authority in various departments

# IMPROVING THE PROCESS OF ANALYSIS: SELF-SERVE REPORTS

California State University SAN MARCOS

## STUDENT PROFILE - ENROLLED STUDENTS

Home : Report Repository : All Reports

**Report Notes:** Fall terms only. Based on static ERS files. Stateside students only. Descriptions of selected variables used in the profile can be found at http://www.csusm

Year: 2016, 2015, 2014, 2013, 2012 | College: College of Business Administration, College of Education, Health
Student Type: Undergraduate | Major: Accounting, Anthropology, App
Data Format: Both

1 of 3 | Select a format | Export

| Parameter | Value |
|---|---|
| Report Execution Date | 11/14/2016 12:15:13 PM |
| Year | 2016, 2015, 2014, 2013, 2012 |
| Major | Accounting, Anthropology, Applied Physics, Biochemistry, Biology, Biotechnology, Business Admin (genl & pre-bus), Cell Biology, Chemistry, Child Development/Early Childhood Education, Communications, Comput Education - MA, Exercise Physiology, Finance, Global Business Management, Global Studies, Global Supply Chain Management, High Technology Management, History, Human Development, Info Systems, Kinesolo Systems, Marketing, Mass Media, Mathematics, Music, Nursing, Physiology, Political Science, Pre-Nursing, Pre-Physical Therapy, Psychology, Social Sciences, Sociology, Spanish, Special Major, Undeclared, Visual & |
| Student Level | Undergraduate |
| College | College of Business Administration, College of Education, Health and Human Svcs, College of Hum, Arts, Behavorial, & Soc Sciences, College of Science and Mathematics, Undeclared Major |
| Data Format | Both |

### Profile of All Students for Fall Term

| College | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|
| College of Business Administration | 19.0% | 1891 | 18.6% | 2002 | 18.9% | 2189 | 18.0% | 2189 | 18.2% | 2281 |
| College of Education, Health and Human Svcs | 20.2% | 2008 | 20.8% | 2232 | 21.1% | 2437 | 21.0% | 2553 | 20.6% | 2584 |
| College of Hum, Arts, Behavorial, & Soc Sciences | 41.6% | 4135 | 40.6% | 4357 | 40.2% | 4650 | 40.2% | 4902 | 41.3% | 5174 |
| College of Science and Mathematics | 14.7% | 1463 | 15.9% | 1704 | 16.2% | 1873 | 17.4% | 2114 | 17.2% | 2157 |
| Undeclared Major | 4.4% | 432 | 4.1% | 443 | 3.5% | 410 | 3.5% | 426 | 2.7% | 333 |
| ***Totals*** | | ***9929*** | | ***10738*** | | ***11559*** | | ***12184*** | | ***12529*** |

** Figures include students pursuing a second Bachelor's degree are included in undergraduate head count.*
** For the years 2008-2011, ERSS numbers for the Computer Science major included students in the Management Information Systems plan code.*

| Class Level | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Undergraduate | 100.0% | 9928 | 100.0% | 10733 | 100.0% | 11555 | 99.9% | 12177 | 100.0% | 12524 |
| Second BA | 0.0% | 1 | 0.0% | 5 | 0.0% | 4 | 0.1% | 7 | 0.0% | 5 |
| ***Totals*** | | ***9929*** | | ***10738*** | | ***11559*** | | ***12184*** | | ***12529*** |

** Graduate figures include Undeclared Postbacc Students.*

| Age at Term | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 22 and under | 64.6% | 6416 | 66.6% | 7155 | 67.4% | 7787 | 68.1% | 8302 | 68.4% | 8566 |
| 23 to 25 | 18.8% | 1863 | 18.3% | 1967 | 18.6% | 2146 | 18.0% | 2197 | 17.2% | 2157 |

California State University SAN MARCOS

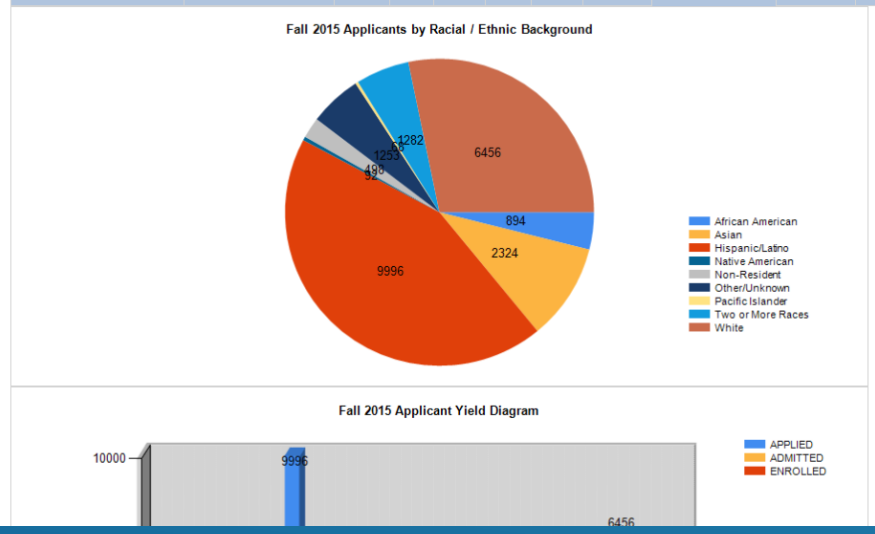
## APPLICANT DEMOGRAPHIC REPORT DETAILED

Home : Report Repository : All Reports

Term: Fall | Year: 2015

1 of 1 | Select a format | Export

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Transfer | 448 | 2.0% | 126 | 1.2% | 76 | 1.8% | 28.1% | 17.0% | 60.3% |
| | Subtotal | 1282 | 5.6% | 597 | 5.8% | 219 | 5.3% | 46.6% | 17.1% | 36.7% |
| White | First-Time Student | 3732 | 16.3% | 2345 | 22.8% | 650 | 15.8% | 62.8% | 17.4% | 27.7% |
| | Returning Student | 51 | 0.2% | 35 | 0.3% | 12 | 0.3% | 68.6% | 23.5% | 34.3% |
| | Returning Transfer | 83 | 0.4% | 34 | 0.3% | 3 | 0.1% | 41.0% | 3.6% | 8.8% |
| | Transfer | 2574 | 11.3% | 823 | 8.0% | 557 | 13.6% | 32.0% | 21.6% | 67.7% |
| | Transitory Student | 16 | 0.1% | 16 | 0.2% | 12 | 0.3% | 100.0% | 75.0% | 75.0% |
| | Subtotal | 6456 | 28.2% | 3253 | 31.6% | 1234 | 30.0% | 50.4% | 19.1% | 37.9% |
| Total | | 22863 | 100% | 10288 | 100% | 4109 | 100% | 45.0% | 18.0% | 39.9% |



# DATA REQUEST PROCESS DEMO

- https://www.csusm.edu/ipa/
- Student Requests need a faculty or staff sponsor
- Off campus requests (dissertation data, non-MOU school districts, fishers, all need an on-campus sponsor
- Web App (free): asp.net with Oracle Database behind it. Web form for data in, processes and sends emails as appropriate and stores in database for later viewing

# DATA REQUEST TRACKING

- After the request is submitted it is assigned a number and informs the requestor it has been received
- The request is then either denied or assigned to the proper DSG member who receives an email- one person per request!
- Requests are able to be examined, prioritized, and updated according to status (e.g., Work in Progress, Stakeholder Approval, Complete)
- Effects: fewer unusual requests (number of homeless students, student gamblers, course evaluations) if name is attached

# DATA GOVERNANCE




- Convened by CSUSM President
- Ensures a formalized and systematic approach to data and information security and management
- Specifies organizational data related decision-making authority (Data Steward)
- Identifies and maintains data standards, policies and procedures (PS data entry, student groups, when and how data is updated)

# DATA GOVERNANCE FUNCTIONS

- Establish priorities for reporting, dashboard development and analytics
- Provide cross functional oversight and prioritization for Business Intelligence Projects, recommend new BI and analytics capabilities
- Recommend operating policies and practices that focus on data standardization
- Identify required information and related data; manage metadata documentation
- Ensuring a common understanding and consistent interpretation of data; ensure data are uniquely and consistently defined

# DATA GOVERNANCE FUNCTIONS (CONT.)

- Develop policies and rules for data access levels, permissions and confidentiality
- Mediating escalated data issues
- Identify and assign Data Stewards.  Provide guidance to ensure data are:
  - Accurate, complete, timely, relevant, and vetted by the proper Data Authority
  - Collected, maintained, used and disseminated in accordance with confidentiality and security policies
  - Meet the goals of promoting access to and use of data
  - Creating, maintaining and approving metadata definitions and data quality

# INTERESTING DATA REQUEST ISSUES

- Outside Requests
- Campus Communications and Coordination
- Grant Support Issues: Initial Consultation Needed
- Vetting of Dashboards and Data Requests with DG structure
- Adding New Helpers

# Strategic Planning

Organized and Systematic Workflow

## The Office of Institutional Effectiveness

Strategic Plan
2019 – 2024

### MISSION

The Office of Institutional Effectiveness provides high-quality data, analytical tools, strategic analysis, and partnership-based education and collaboration to foster a University culture of data-informed decision making.

### VISION

Be the trusted source for data that drive University success and recognized as a leader in impactful higher-education research and insights.

### WE WILL BE KNOWN FOR:

- Having high standards of data quality, including consistency and transparency in how data is collected and analyzed.
- Educating and empowering University constituents to access, analyze, and interpret data through user-friendly, self-service tools and ongoing education.
- Being on the leading edge of data delivery by employing automation, data visualization, predictive modeling and forecasting.
- Engaging University collaborators to become data experts and champions to support effective data governance.
- Facilitating meaningful, actionable research and insights.
- Supporting assessment of student learning outcomes, program review, and accreditation processes in an efficient and systematic manner.


www.calstatela.edu/ie
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323-343-2730


### Priorities and Goals

#### Priority I: Ensure data quality through collaboration

**Goal I:**
Establish sustainable business practices for the IE data warehouse (e.g., training, technical processes, business processes).

**Goal II:**
Cultivate a collaborative and collegial IE culture.

**Goal III:**
Work with campus data partners to ensure data quality and create University-wide data governance infrastructure.

#### Priority II: Empower campus constituents

**Goal I:**
Establish more effective dialogue with constituents to promote understanding of IE offerings, resources, priorities, and opportunities for collaboration

**Goal II:**
Broaden and increase training offerings to enable constituent self-service and increase overall University data competence.

**Goal III:**
Broaden and increase collaboration efforts with University constituents.

#### Priority III: Deliver actionable data and insights

**Goal I:**
Ensure IE plays a leadership role in University data service by understanding and addressing University data needs.

**Goal II:**
Conduct in-depth, quality analysis of data in order to produce impactful research.

**Goal III:**
Expand data visualization capabilities.

**Goal IV:**
Establish consistent processes to improve University-wide survey implementation and analyses.

**Goal V:**
Deliver efficient and systematic support of University-wide assessment, program review, and accreditation.

**Metrics**

## Assets

- Strategic Planning initiative identified three priorities
- Prior interest in Tracking Systems
- Existing self-service data dashboards
- Existing licenses for an online task management tool.

## Challenges

- Changes to Team Structure
  - New Team Members
- Unnecessarily duplicated communication
- Push for more accountability
- Data Governance not yet established
- Different ways of getting requests

# *INSTITUTIONAL EFFECTIVENESS* AT CAL STATE LA

# LA'S PROCESS

1. Gather information
2. Write a plan
3. Set up the technology
4. Train people to use it

# GOALS FOR A TRACKING SYSTEM

| Goal |
| --- |
| Be able to report on all completed, current, and upcoming requests. |
| Notify the team of new requests. |
| Allow us to study how our efforts align with Strategic Plan Priorities. |
| Enable clients to enter a request themselves. |
| Be simple for all parties. |
| Allow transfer of tasks from one staff member to another. |
| Previous or current work must be quickly and painlessly findable. |
| Be able to repeat methodology of previous work. |
| Everything should be made a "deliverable". |

# PRINCIPLES

1. Track as little as possible, but enough to satisfy ourselves, our clients, and our sponsors.
2. Avoid tracking data that are used infrequently but that could be calculated in the future.
3. Each request gets an ID. All files, directories and correspondence should use that ID.
4. Track the requests and tasks, but not how they get done.

# LA'S PROCESS

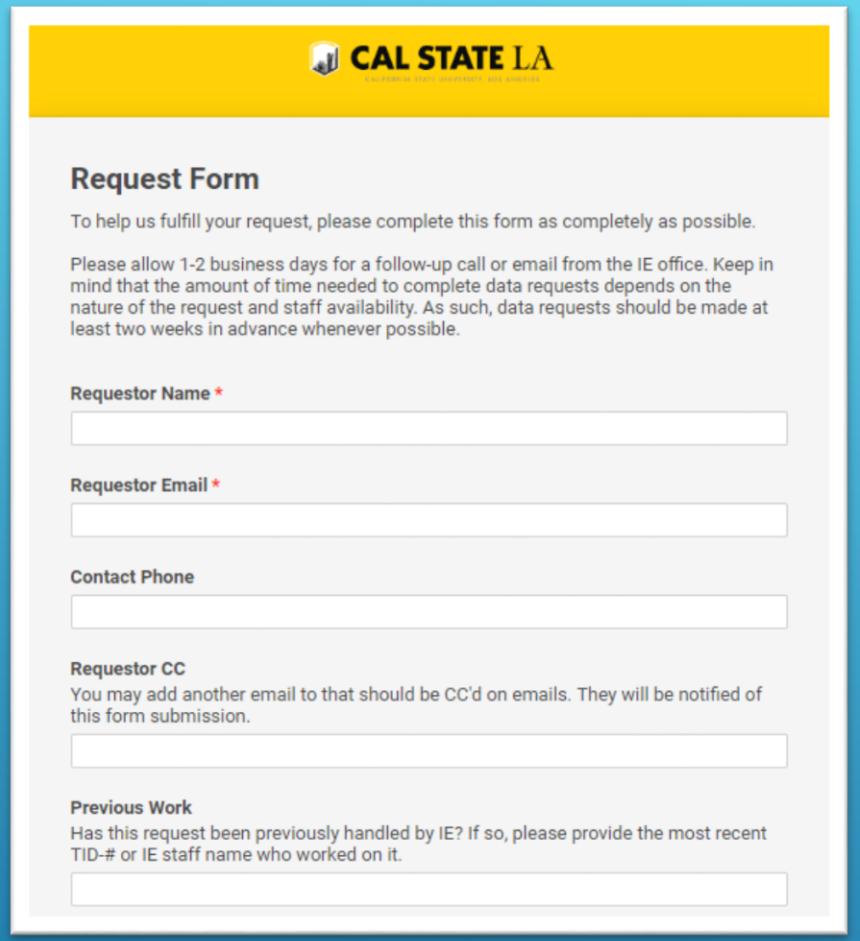
1. Gather information
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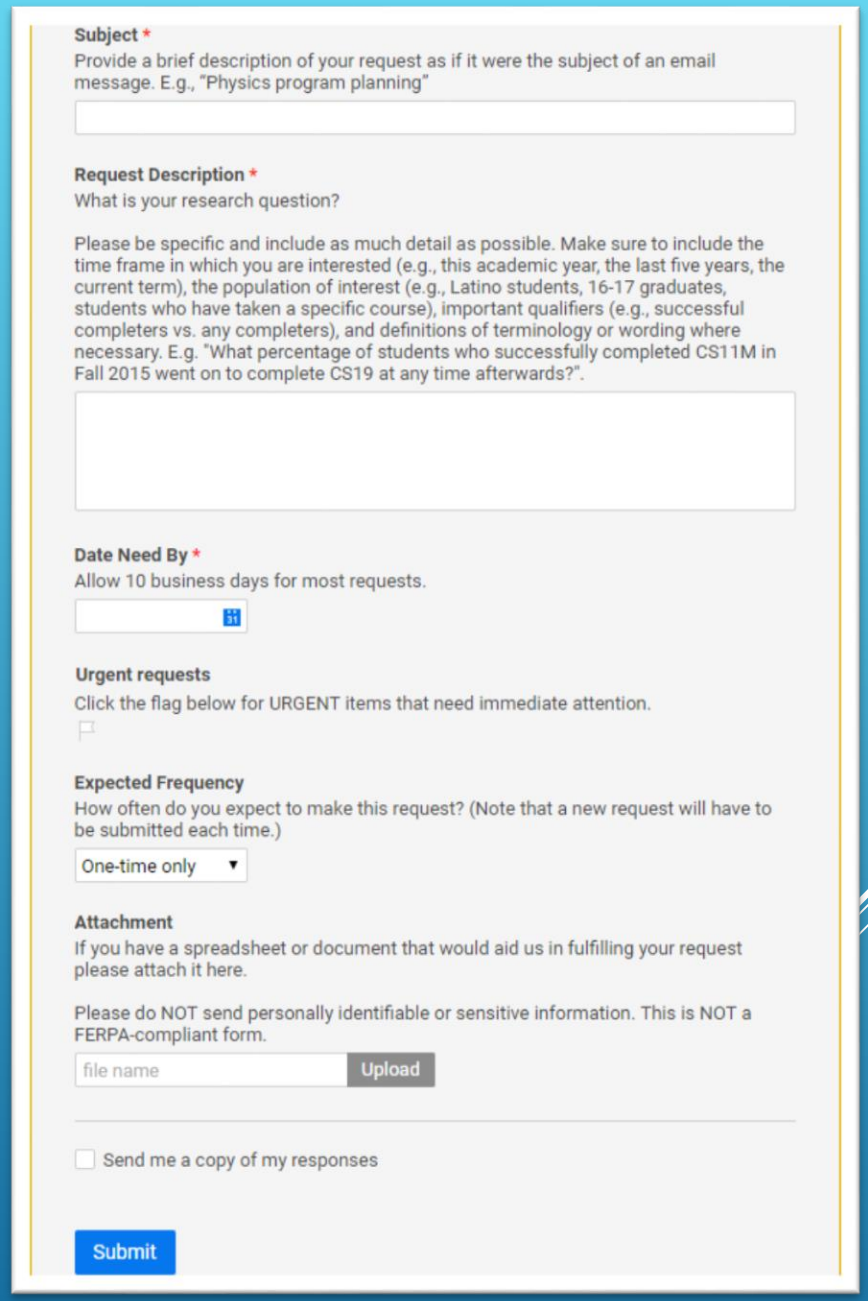
# LIFESPAN OF A TASK

Actions include:

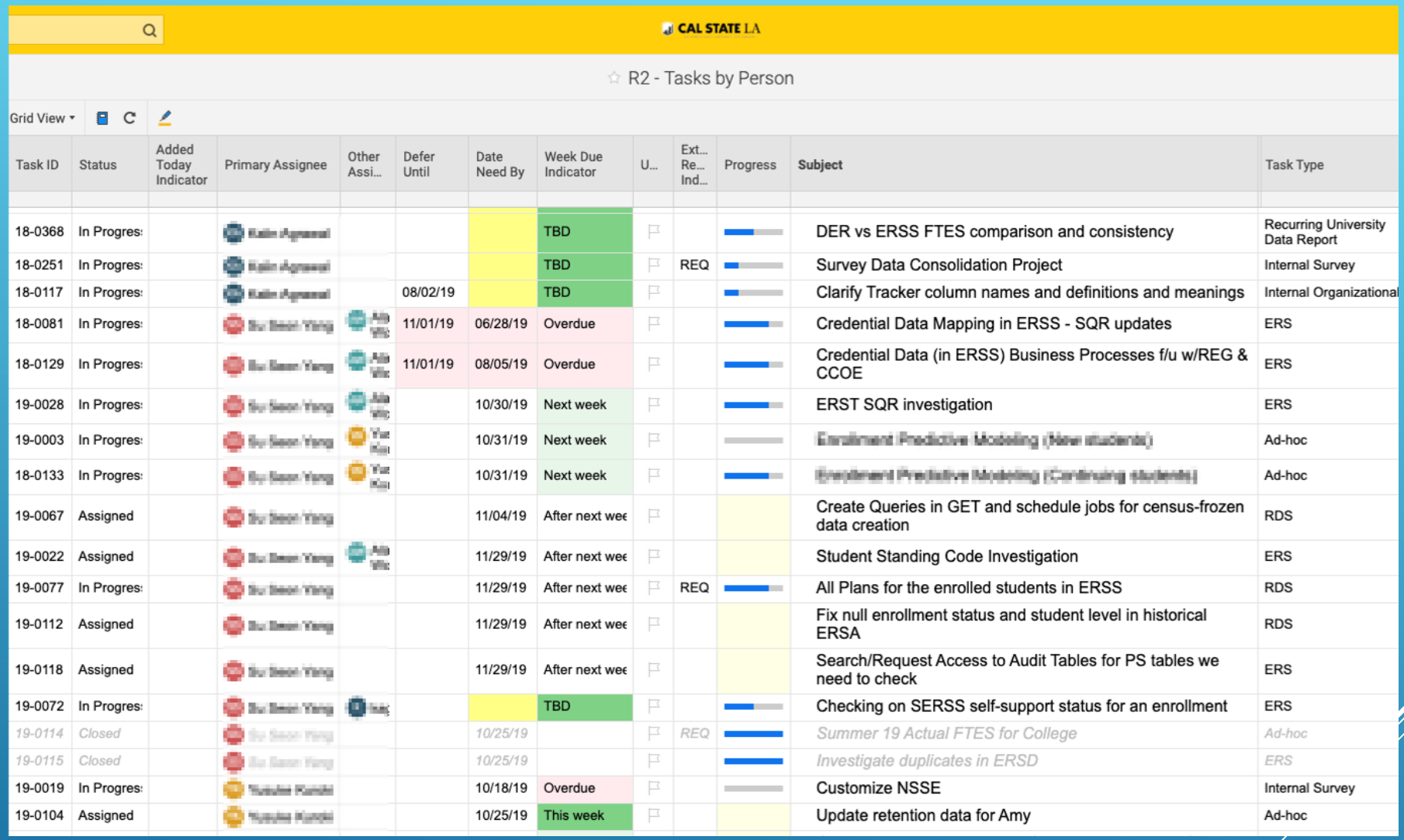
- Assigning
- Marking progress
- Completing, Stopping, or Denying






# WEB FORMS FOR INTAKE



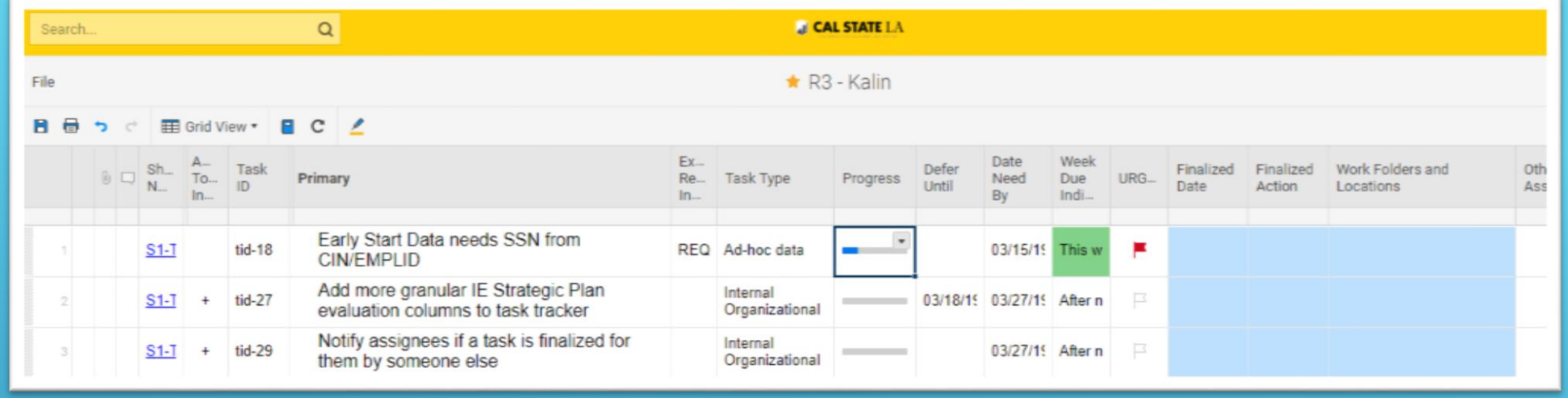
CAL STATE LA

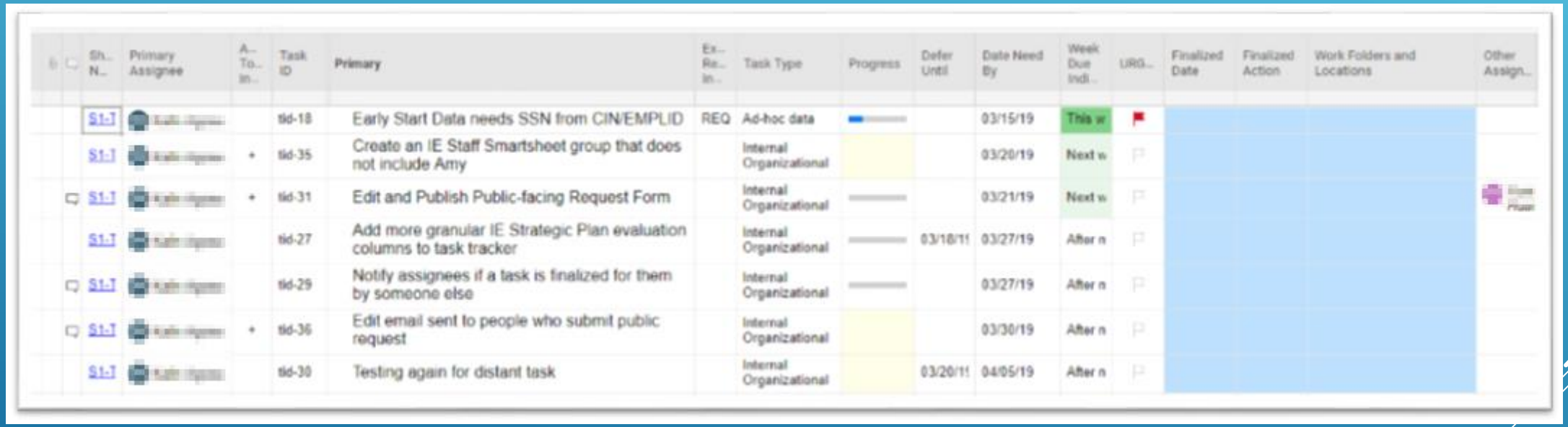
☆ R2 - Tasks by Person

Grid View

| Task ID | Status | Added Today Indicator | Primary Assignee | Other Assi... | Defer Until | Date Need By | Week Due Indicator | U... | Ext... Re... Ind... | Progress | Subject | Task Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18-0368 | In Progres: | | [redacted] | | | | TBD | | | | DER vs ERSS FTES comparison and consistency | Recurring University Data Report |
| 18-0251 | In Progres: | | [redacted] | | | | TBD | | REQ | | Survey Data Consolidation Project | Internal Survey |
| 18-0117 | In Progres: | | [redacted] | | 08/02/19 | | TBD | | | | Clarify Tracker column names and definitions and meanings | Internal Organizational |
| 18-0081 | In Progres: | | [redacted] | [redacted] | 11/01/19 | 06/28/19 | Overdue | | | | Credential Data Mapping in ERSS - SQR updates | ERS |
| 18-0129 | In Progres: | | [redacted] | [redacted] | 11/01/19 | 08/05/19 | Overdue | | | | Credential Data (in ERSS) Business Processes f/u w/REG & CCOE | ERS |
| 19-0028 | In Progres: | | [redacted] | [redacted] | | 10/30/19 | Next week | | | | ERST SQR investigation | ERS |
| 19-0003 | In Progres: | | [redacted] | [redacted] | | 10/31/19 | Next week | | | | [redacted] | Ad-hoc |
| 18-0133 | In Progres: | | [redacted] | [redacted] | | 10/31/19 | Next week | | | | [redacted] | Ad-hoc |
| 19-0067 | Assigned | | [redacted] | | | 11/04/19 | After next wee | | | | Create Queries in GET and schedule jobs for census-frozen data creation | RDS |
| 19-0022 | Assigned | | [redacted] | [redacted] | | 11/29/19 | After next wee | | | | Student Standing Code Investigation | ERS |
| 19-0077 | In Progres: | | [redacted] | | | 11/29/19 | After next wee | | REQ | | All Plans for the enrolled students in ERSS | RDS |
| 19-0112 | Assigned | | [redacted] | | | 11/29/19 | After next wee | | | | Fix null enrollment status and student level in historical ERSA | RDS |
| 19-0118 | Assigned | | [redacted] | | | 11/29/19 | After next wee | | | | Search/Request Access to Audit Tables for PS tables we need to check | ERS |
| 19-0072 | In Progres: | | [redacted] | [redacted] | | | TBD | | | | Checking on SERSS self-support status for an enrollment | ERS |
| *19-0114* | *Closed* | | [redacted] | | | *10/25/19* | | | *REQ* | | *Summer 19 Actual FTES for College* | *Ad-hoc* |
| *19-0115* | *Closed* | | [redacted] | | | *10/25/19* | | | | | *Investigate duplicates in ERSD* | *ERS* |
| 19-0019 | In Progres: | | [redacted] | | | 10/18/19 | Overdue | | | | Customize NSSE | Internal Survey |
| 19-0104 | Assigned | | [redacted] | | | 10/25/19 | This week | | | | Update retention data for Amy | Ad-hoc |

# OVERVIEW OF ALL CURRENT WORK




# INDIVIDUAL WORK LIST

# REVISITING OUR GOALS

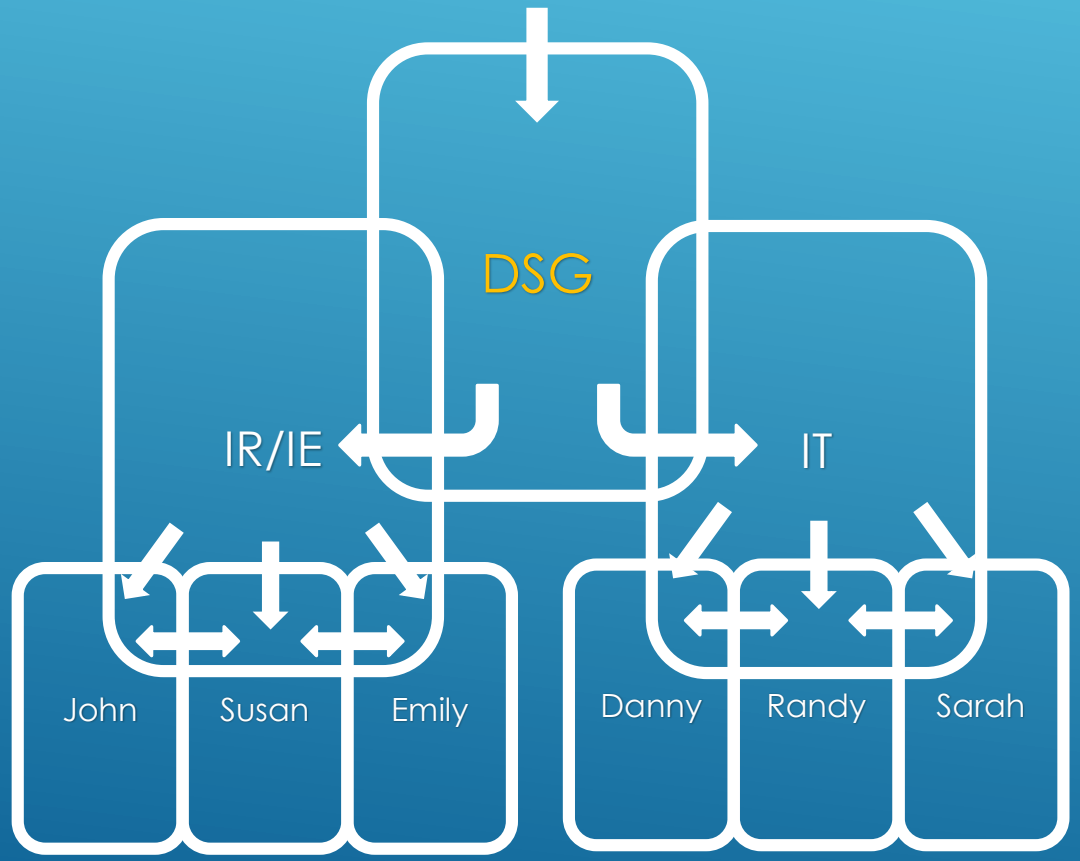
| Goal | Result |
|---|---|
| Be able to report on all completed, current, and upcoming requests. | Yes |
| Notify the team of new requests. | Yes |
| Allow us to study how our efforts align with Strategic Plan Priorities. | Yes |
| Enable clients to enter a request themselves. | Yes |
| Be simple for all parties. | Maybe |
| Allow transfer of tasks from one staff member to another. | Untested |
| Previous or current work must be quickly and painlessly findable. | Yes |
| Be able to repeat methodology of previous work. | No |
| Everything should be made a "deliverable". | No |

# LESSONS

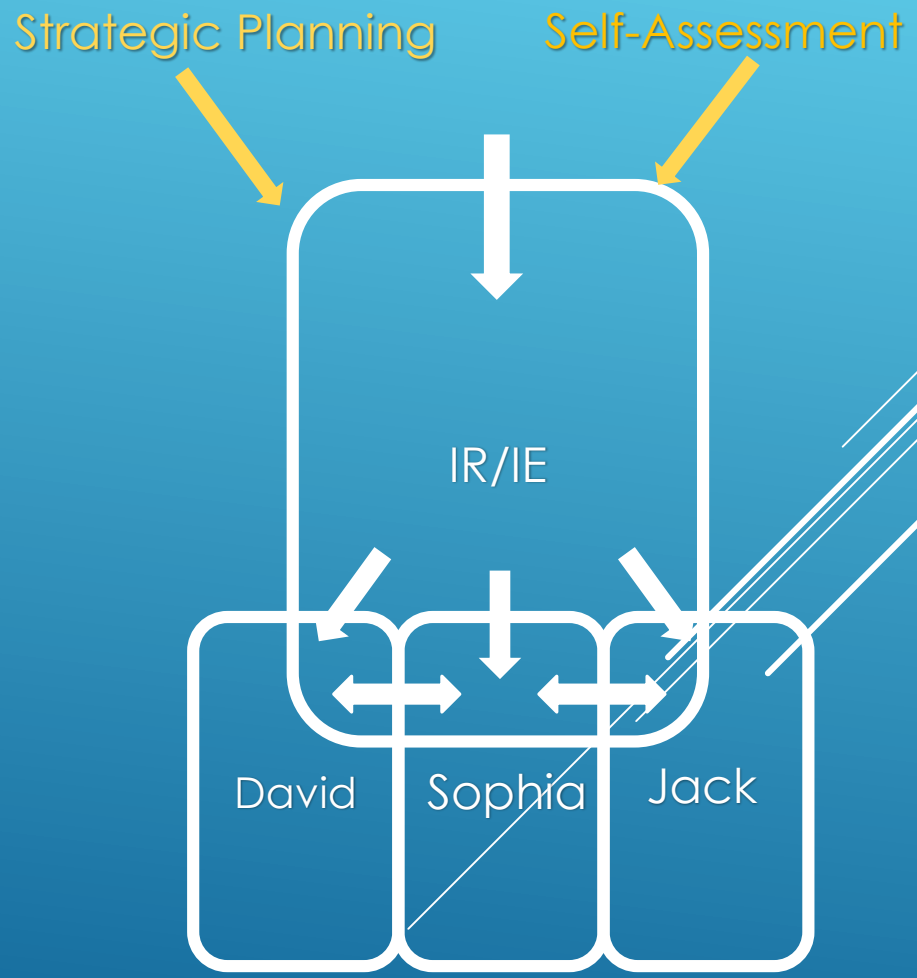
1. Use what is available.
2. Get everyone on board with using the same tools.
3. Commit to it by enforcing rules for all clients.
4. Train to establish skills and culture.

# CONTRASTING SYSTEMS

## San Marcos




## Los Angeles





# REMEMBER: WITHOUT A DATA REQUEST PROCESS GETTING DATA IS LIKE PULLING TEETH!

# Q&A

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