

# The Evolution of an IR Office: Then and Now

CALIFORNIA ASSOCIATION FOR INSTITUTIONAL RESEARCH  
41ST ANNUAL CONFERENCE  
NOVEMBER 16-18, 2016  
THE MILLENNIUM BILTMORE HOTEL, LOS ANGELES

# Different Eras for Institutional Research at CSUSM

- The Good Old Days, 2000-2005
- Period of Growth, 2006-2010
- Free for All, 2011-2015
- Development of Processes and Governance, 2015-present

## The Good Old Days, 2000-2005

- Enrollment around 6200 students
- Extended Learning was small and insignificant
- Institutional Research dealt with institutional data
- IR helped with grants occasionally
- ERS done by enrollment services (EMS), APDB by Academic programs
- Banner queries done by EMS, data given to IR

# Notable Characteristics: Good Old Days

- No EL workload
- Focus on Institutional Data
- Data requests fewer and manageable, more reports, less data providing
- Tools Used: SPSS, some BRIO queries, CIRP survey

## Period of Growth, 2006-2010

- Enrollment about 9,700 students in 2010
- Grant requests increase drastically, needing more information: First Generation, Low Income
- Program specific information needed (EOP, SSS, CAMP)
- Surveys increase, many are duplicative
- PeopleSoft brings issues- reporting, data transfer, mapping
- Extended Learning offers regular courses due to budget cuts
- CSUSM President uses data driven decision making

## Notable Characteristics: Growth Period

- EL explodes- how many students do we have?
- APDB arrives, process improvement
- IR on committees, HSI, AANAPISI
- Programs provide student lists for merging- are they accurate?
- Tools Used: SPSS, Data merges, CIRP survey, other surveys
- Busy period makes it hard to control data properly

## Free For All, 2010-2015

- Multitude of data requests, no process
- Requestors ask different people for same data
- Analysts develop “fans” that ask them for anything and everything
- No Common data definitions: enrolled vs. active student queries
- Requests for any type of data forwarded to IR- library expenditures, financials, surveys people signed up for
- Extended Learning has explosive growth

## Free For All, continued

- Queries used, non-institutional data becomes IR function
- Providing data for informed decisions becomes IR job
- Grant requests multiply, NIH, STEM
- Faculty and Employee Counts, cross departmental collaboration



# Notable Characteristics: Free for All

- Surveys become intrusive, overwhelming- **Survey Committee formed**
- ERS and APDB processes become important to get base data right- a big realization
- Data confidentiality, outside requests, dissertations, students
- The need for data control and processes is painfully obvious

# Development of Processes and Governance, 2015-present



# Development of Processes and Governance, 2015-present

- **Decision Support Group** formed (Joint IITS, IR and other entities) to discuss data issues and requests
- **Data Request and Tracking process** formed to develop a process for tracking and assigning and declining data requests
- **Improving the process of analysis** with new data warehouse and visualization tools
- **Data Governance Committee** formed to develop, implement and enforce data policies

# Decision Support Group (DSG)



- Consists of key IITS and IR professionals
- Meets bi-weekly for *2 hours*
- 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 steward in various departments

# Data Request Process

- Must have a campus log in
- Requestor identify themselves AND their supervisor
- Must provide the reason and type of data requested
- Requestor checked all available existing reports
- FERPA addressed and acknowledged

The screenshot shows the RaDAR website interface. The browser address bar displays 'https://radar.csusm.edu'. The page header includes the California State University San Marcos logo and name. The main content area is titled 'REPORTING AND DATA ANALYTICS REPOSITORY (RADAR)'. It provides an overview of the repository's purpose and offers links to an introduction video and a report guide. A login section is present with fields for 'Username:' and 'Password:', and a 'Login' button. Below the login section, there are two columns of report listings: 'Recently Viewed Reports' and 'Most Frequently Viewed Reports'. Each report listing includes a number, the report name, and a 'Run' button. The 'Recently Viewed Reports' list includes: 1 HR Employee Counts, 2 Pre Requisites - NOW INCLUDES Test Credit!!, 3 Student Profile - Enrolled Students, 4 General Degree Count Report, and 5 Department Data Report (DDR) - Degree. The 'Most Frequently Viewed Reports' list includes: 1 Student Profile - Enrolled Students, 2 General Degree Count Report, 3 Applicant Demographic Report Detailed, 4 College by Level, and 5 Top Feeder Institutions. A 'Find Reports' section at the bottom provides instructions on how to search for reports using the navigation or search fields.

California State University  
SAN MARCOS

## REPORTING AND DATA ANALYTICS REPOSITORY (RADAR)

RaDAR is a central repository for the campus community to access relevant data in a variety of formats. The RaDAR site provides a single point of entry to reports and analyses of campus data.

View the 4 minute [Introduction to RaDAR](#) video for an overview of this site and its information.

To see an overview of all reports, their descriptions and tutorials, please read the [RaDAR Report Guide](#).

Some reports require you to log in to view. You can login by entering your CSUSM username and password on the left.

**RaDAR Community**

Username:

Password:

**Recently Viewed Reports**

1	<a href="#">HR Employee Counts</a>	<input type="button" value="Run"/>
2	<a href="#">Pre Requisites - NOW INCLUDES Test Credit!!</a>	<input type="button" value="Run"/>
3	<a href="#">Student Profile - Enrolled Students</a>	<input type="button" value="Run"/>
4	<a href="#">General Degree Count Report</a>	<input type="button" value="Run"/>
5	<a href="#">Department Data Report (DDR) - Degree</a>	<input type="button" value="Run"/>

**Most Frequently Viewed Reports**

1	<a href="#">Student Profile - Enrolled Students</a>	<input type="button" value="Run"/>
2	<a href="#">General Degree Count Report</a>	<input type="button" value="Run"/>
3	<a href="#">Applicant Demographic Report Detailed</a>	<input type="button" value="Run"/>
4	<a href="#">College by Level</a>	<input type="button" value="Run"/>
5	<a href="#">Top Feeder Institutions</a>	<input type="button" value="Run"/>

**Find Reports**

Use the Report Repository and Search Repository pages in the left navigation to find reports. You can also search by using the search field in the upper right corner.

Campus employees can request an account to RaDAR by submitting an [Access Request Form](#)

# Data Request Process

The screenshot shows a web browser window displaying the RaDAR Data Request Form. The browser's address bar shows the URL <https://radar.csusm.edu/dataRequest/>. The page header includes the California State University San Marcos logo and navigation links. The main content area is titled "RADAR DATA REQUESTS" and provides instructions for users. A section titled "Ad Hoc Data Request Form" contains a checkbox for "I have reviewed existing reports." and a form for "Requestor Information" with fields for Name, Title, Department, Email Address, and Phone Number. Below this is a section for "Immediate Supervisor, Dept. Chair or Faculty Sponsor" with similar fields. The form concludes with a section for "Please indicate the reason for this request." featuring radio buttons for "Mandated Chancellor's Office Report", "Grant", "Research", and "Other".

File Edit View History Bookmarks Tools Help

EN English (United States) Help

RaDAR Data Request Form x +

https://radar.csusm.edu/dataRequest/ Search

California State University  
SAN MARCOS

Logged in as: talsania | Log Out

Search repository here Search

Home  
About RaDAR  
Report Repository  
Search Repository  
Data Request  
Help with RaDAR

## RADAR DATA REQUESTS

If you want to view or update a submitted request, [view your data requests](#) and click on the request 'ID' you want to update.

If you want to change or correct an existing report, send an email to [radarhelp@csusm.edu](mailto:radarhelp@csusm.edu).

If you need help or cannot view a report, send an email to [radarhelp@csusm.edu](mailto:radarhelp@csusm.edu).

### Ad Hoc Data Request Form

Much of the data needed on a daily basis is already available to the campus community through a variety of self-service resources, such as [RaDAR Reports](#), and the [IP&A website](#). Please review available reports before continuing.

I have reviewed existing reports.

If you are in need of data not available through these resources, you may submit an ad hoc data request by completing the form below.

*Please note: Data will only be released in accordance with the Family Educational Rights and Privacy Act (FERPA) and applicable CSUSM policies. Not all requests will meet these criteria.*

#### Requestor Information

**Name**

**Title**

**Department**

**Email Address**

**Phone Number**

**Immediate Supervisor, Dept. Chair or Faculty Sponsor**

**Name**

**Email Address**

**Phone Number**

**Please indicate the reason for this request.**

Mandated Chancellor's Office Report

Grant

Research

Other

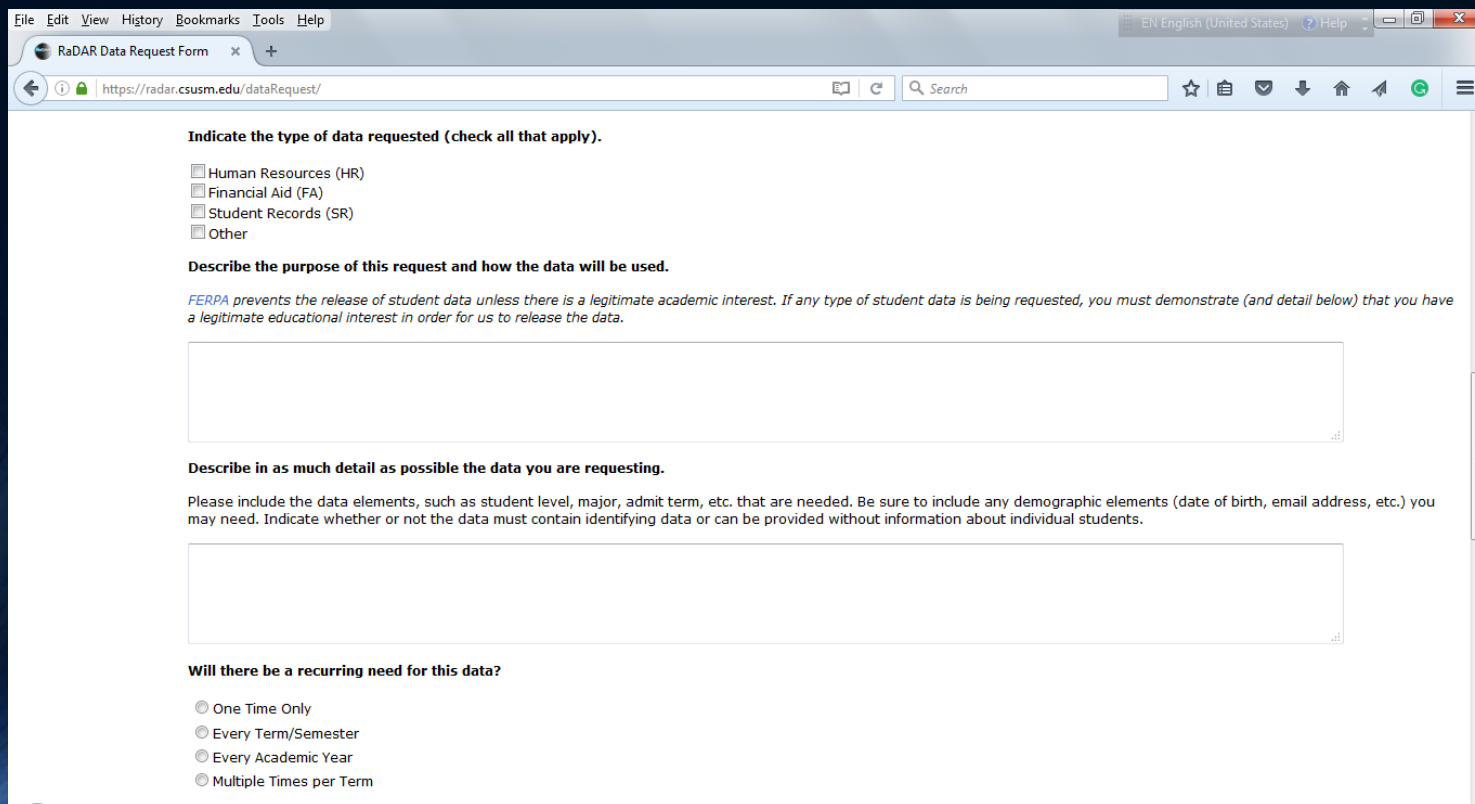
Metadata

- Data Sources
- Tables/Transformations
- Source Fields

Administration

- Sources
- Tables
- Fields
- Objects
- Reports
- Report Data
- Report Data - Field
- Navigation
- Data Team
- Data Request Tracking
- Email Setup
- Announcements
- Favorites
- Administrator Reports

# Data Request Process



The screenshot shows a web browser window with the title "RaDAR Data Request Form" and the URL "https://radar.csusm.edu/dataRequest/". The browser's address bar includes a search field and navigation icons. The page content is as follows:

**Indicate the type of data requested (check all that apply).**

- Human Resources (HR)
- Financial Aid (FA)
- Student Records (SR)
- Other

**Describe the purpose of this request and how the data will be used.**

*FERPA prevents the release of student data unless there is a legitimate academic interest. If any type of student data is being requested, you must demonstrate (and detail below) that you have a legitimate educational interest in order for us to release the data.*

[Empty text area for describing the purpose of the request]

**Describe in as much detail as possible the data you are requesting.**

Please include the data elements, such as student level, major, admit term, etc. that are needed. Be sure to include any demographic elements (date of birth, email address, etc.) you may need. Indicate whether or not the data must contain identifying data or can be provided without information about individual students.

[Empty text area for describing the data requested]

**Will there be a recurring need for this data?**

- One Time Only
- Every Term/Semester
- Every Academic Year
- Multiple Times per Term

# Data Request Process

The screenshot shows a web browser window with the title "RaDAR Data Request Form" and the URL "https://radar.csusm.edu/dataRequest/". The browser's address bar includes a search field and navigation icons. The page content is as follows:

**Once delivered to you, who will have access to the data?**

[Empty text area]

**By what date do you need to receive the data?**

*Due to the large volume of requests that we receive, please allow for a minimum of 10 business days. If the data is needed sooner than that, please provide a rationale in the Additional Comments section below.*

11/25/2016 [...]

Data delivered to you may be confidential and privileged and protected by FERPA. Information regarding FERPA is available on the CSUSM website at <http://www.csusm.edu/ferpa>.

**Do you understand the responsibilities with regards to FERPA and any applicable data that you will receive with this request?**

Yes, I have read the information provided by the Office of the Registrar regarding FERPA and I understand my responsibilities.

**Please provide any additional comments that you have pertaining to this request.**

[Empty text area]

**Attachments Upload (File names must be unique or file will be overwritten)**

File name must be <= 50 characters, file size <= 2MB. Valid file extensions are: .doc, .docx, .rtf, .xls, .xlsx, .csv, .pdf, .txt, .jpg, .jpeg, .png

[Browse...] No files selected.

No files for this request.

[Request Data]



# Data Request Tracking



Effects: fewer unusual requests (number of homeless students, student gamblers, course evaluations) if name is attached

# Data Request Tracking

File Edit View History Bookmarks Tools Help

EN English (United States) Help

RaDAR - Administration - ... x +

https://radar.csusm.edu/administration/admDataRequest.aspx

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Logged in as: talsania | Log Out

Search repository here Search

Home  
About RaDAR  
Report Repository  
Search Repository  
Data Request  
Help with RaDAR

**DATA REQUEST MANAGEMENT**

Filter Text:

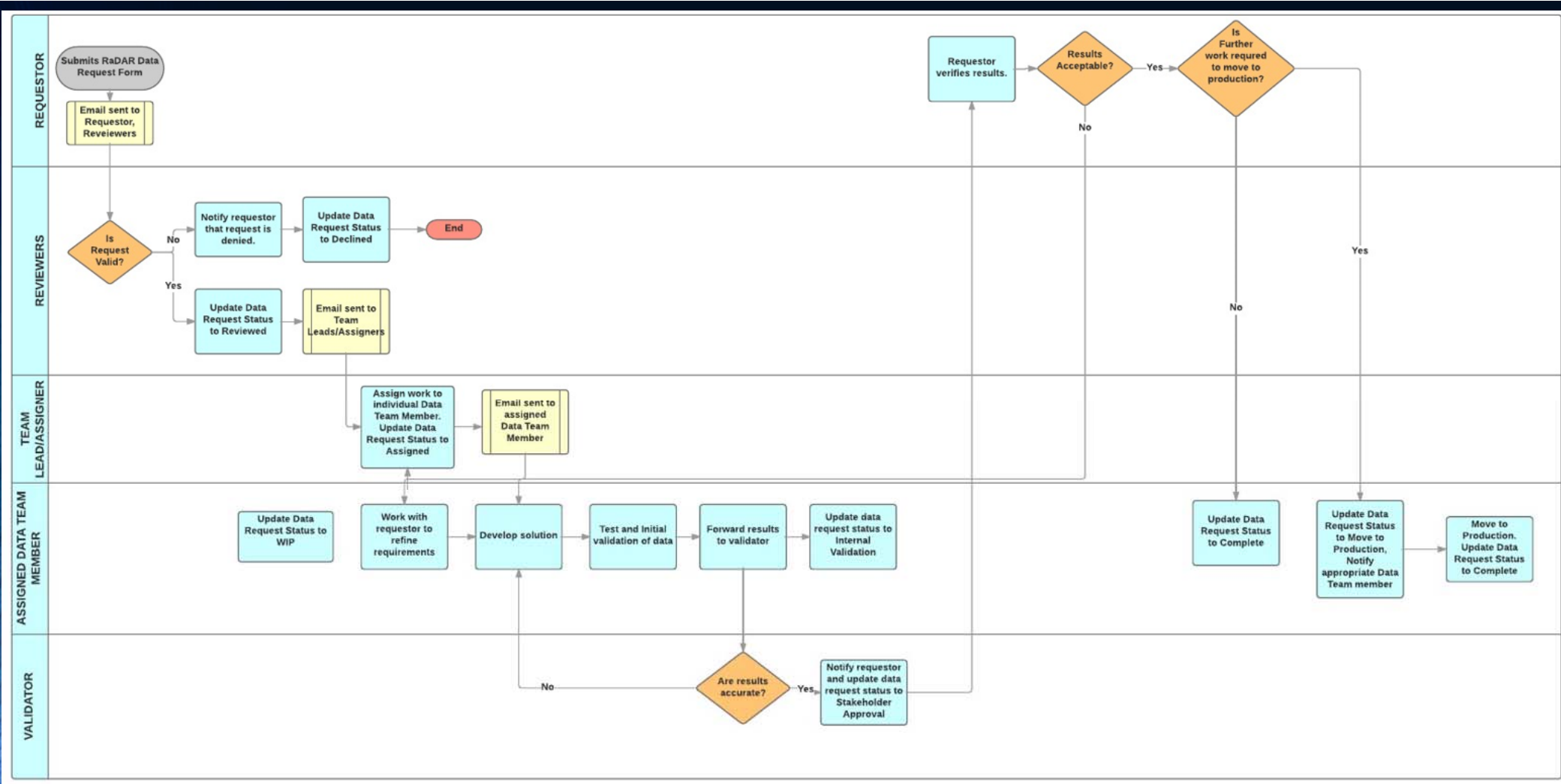
Filter Status:  New  Reviewed  Assigned  WIP  Declined  
 Internal Validation  Stakeholder Approval  Move to Production  Complete

To sort the results below click on any column header.

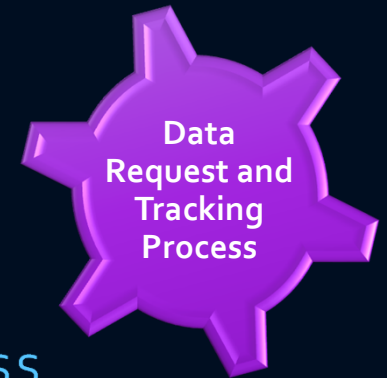
ID	Requestor	Date Submitted	Date Needed	Description	Status
6387	[REDACTED]	Nov 10, 2016	Nov 16, 2016	From the DLE survey may I again request responses just from STEM majors (same as before from DLE request) to the following questions. Can the data be disaggregated for URM/non-URM and transfer students/non-transfer? DLE Questions "I feel that I am a member of this college" (SA 25%, A 55%, D 16.3%, SD 3.7%) PG 3 "I feel a sense of belonging to this campus" (SA 18.7%, A 51.3%, D 24.3%, SD 5.7%) PG 5 "At least one faculty member has taken an interest in my development" (SA 28.2%, A 49.9%, D ...	Assigned
6367	[REDACTED]	Nov 9, 2016	Nov 23, 2016	Can I request data on when students are enrolling in BIO 210 (not sure how you recommend breaking that down--by units they have at the time of enrollment)? Is there any way of knowing attempts to register for BIO 210 or just actual enrollment? The background here is that the project team believes students cannot enroll in BIO 210 earlier in their academic careers because the course is full. ...	Complete
6347	[REDACTED]	Nov 8, 2016	Nov 14, 2016	Semester reports beginning Fall 2014 and going forward for each semester.. Include names, student id's, e-mail address, home address, GPA, phone number. And most importantly the gender of the graduates. We will run this report each semester going forward. This report will provide information we will use to contact graduates for graduation activities in the department. We will share only the gender of our students with the American Economics Association....	Complete
6329	[REDACTED]	Nov 4, 2016	Nov 18, 2016	• Students which submitted 2016-17 Cal App Dream App with an EFC between 0 - 4000 EFC • Students awarded Dream SUG \$5472 • Students awarded Cal B Access \$1670 • Students awarded Cal B Tuition \$5472 • Students which submitted 2016-17 Cal Dream App after priority deadline of march 2nd and met EFC criteria ( 0 to 4000) ...	Declined
6328	[REDACTED]	Nov 4, 2016	Nov 18, 2016	I am requesting the following demographic data for the attached lists of ID numbers: Sex Ethnicity First-Generation Status High School of Origin ...	Complete
6327	[REDACTED]	Nov 4, 2016	Nov 18, 2016	I have a request. Attached to this message are ID numbers for all of the first-year students we have tracked over the last three years. Would it be possible to get the following for each student: Sex Ethnicity First-Generation Status High School of Origin These ID numbers were pulled from our tracking lists and we would like to cross-reference this these demographics with the information we collect. I really appreciate it. ...	Complete
6308	[REDACTED]	Nov 3, 2016	Nov 17, 2016	I've included the questions for which we'd like disaggregated data from the DLE survey in a Word doc. This is a time-sensitive request and so if you can send completed questions as you have them, that'd be great. ...	Stakeholder Approval
6307	[REDACTED]	Nov 3, 2016	Nov 17, 2016	I'd like to request demographic (URM compared to non-URM) data for Fall 2016 and those who are in one of the following programs: integrated credential program, liberal studies with teaching concentration, and or a credential program. I didn't think I'd be able to get that level of detail with Radar, hence the request. ...	Complete

**Metadata**  
Data Sources  
Tables/Transformations  
Source Fields

**Administration**  
Sources  
Tables  
Fields  
Objects  
Reports  
Report Data  
Report Data - Field  
Navigation  
Data Team  
Data Request Tracking  
Email Setup  
Announcements  
Favorites  
Administrator Reports



# Advantages



## DATA REQUEST FORM

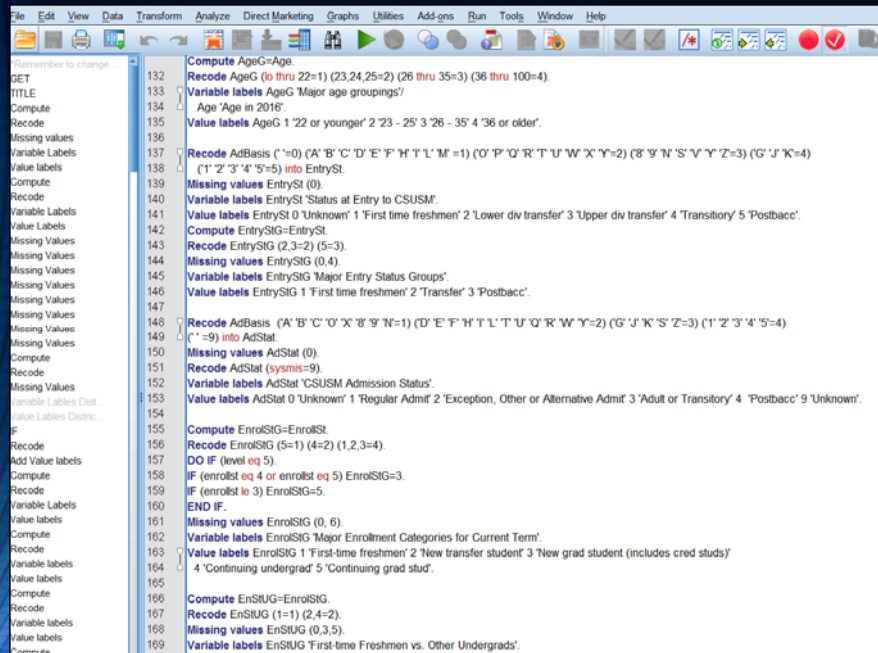
- One-Stop-Shop for the campus
- Transparent
- Formalized

## DATA TRACKING PROCESS

- Record of the data request
- Working with across divisions and departments
- Analysts can be on vacation

# Improving the Process of Analysis

SPSS, our bread and butter...



```
File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Add-ons Run Tools Window Help
Remember to change...
132 Compute AgeG=Age
133 Recode AgeG (0 thru 22=1) (23,24,25=2) (26 thru 35=3) (36 thru 100=4).
134 Variable labels AgeG 'Major age groupings'.
135 Value labels AgeG '1 '22 or younger' 2 '23 - 25' 3 '26 - 35' 4 '36 or older'.
136
137 Recode AdBasis ('=0) ('A' 'B' 'C' 'D' 'E' 'F' 'H' 'I' 'L' 'M' =1) ('O' 'P' 'Q' 'R' 'T' 'U' 'W' 'X' 'Y' =2) ('8' '9' 'N' 'S' 'V' 'Y' 'Z' =3) ('G' 'J' 'K' =4)
138 ('1' '2' '3' '4' '5' =5) into EntrySt.
139 Missing values EntrySt (0).
140 Variable labels EntrySt 'Status at Entry to CSUSM'.
141 Value labels EntrySt 0 'Unknown' 1 'First time freshmen' 2 'Lower div transfer' 3 'Upper div transfer' 4 'Transitory' 5 'Postbacc'.
142 Compute EntrySIG=EntrySt.
143 Recode EntrySIG (2,3=2) (5=3).
144 Missing values EntrySIG (0,4).
145 Variable labels EntrySIG 'Major Entry Status Groups'.
146 Value labels EntrySIG 1 'First time freshmen' 2 'Transfer' 3 'Postbacc'.
147
148 Recode AdBasis ('A' 'B' 'C' 'D' 'X' '8' '9' 'N' =1) ('E' 'F' 'H' 'I' 'L' 'T' 'U' 'Q' 'R' 'W' 'Y' =2) ('G' 'J' 'K' 'S' 'Z' =3) ('1' '2' '3' '4' '5' =4)
149 ('=' =9) into AdStat.
150 Missing values AdStat (0).
151 Recode AdStat (system=9).
152 Variable labels AdStat 'CSUSM Admission Status'.
153 Value labels AdStat 0 'Unknown' 1 'Regular Admit' 2 'Exception, Other or Alternative Admit' 3 'Adult or Transitory' 4 'Postbacc' 9 'Unknown'.
154
155 Compute EnrolSIG=EnrolSt.
156 Recode EnrolSIG (5=1) (4=2) (1,2,3=4).
157 DO IF (level eq 5).
158 IF (enrolst eq 4 or enrolst eq 5) EnrolSIG=3.
159 IF (enrolst le 3) EnrolSIG=5.
160 END IF.
161 Missing values EnrolSIG (0, 6).
162 Variable labels EnrolSIG 'Major Enrollment Categories for Current Term'.
163 Value labels EnrolSIG 1 'First-time freshmen' 2 'New transfer student' 3 'New grad student (includes cred studs)
164 4 'Continuing undergrad' 5 'Continuing grad stud'.
165
166 Compute EnSIUG=EnrolSIG.
167 Recode EnSIUG (1=1) (2,4=2).
168 Missing values EnSIUG (0,3,5).
169 Variable labels EnSIUG 'First-time Freshmen vs. Other Undergrads'.
170
```

# Improving the Process of Analysis

SPSS, our bread and butter...

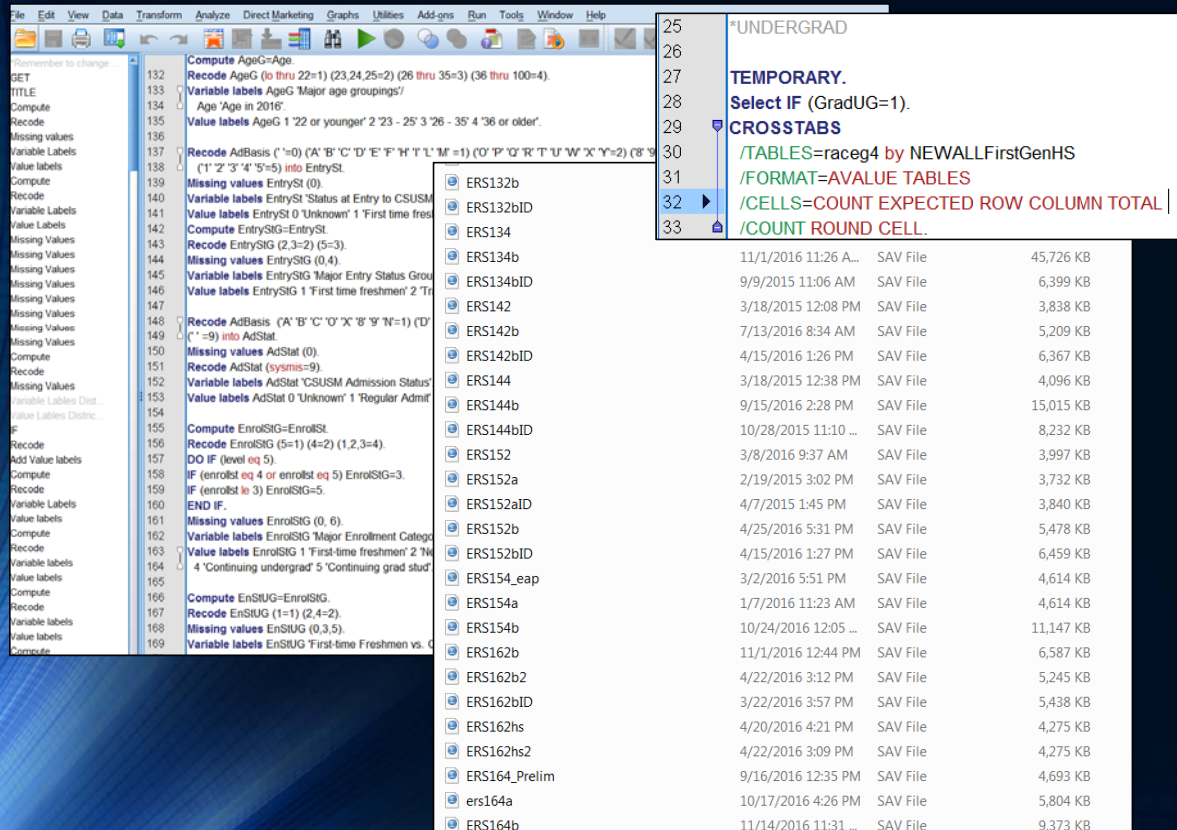
The image shows a screenshot of the SPSS software interface. On the left, a list of saved files is displayed, including names like ERS132b, ERS132bID, ERS134, ERS134b, ERS134bID, ERS142, ERS142b, ERS142bID, ERS144, ERS144b, ERS144bID, ERS152, ERS152a, ERS152aID, ERS152b, ERS152bID, ERS154\_eap, ERS154a, ERS154b, ERS162b, ERS162b2, ERS162bID, ERS162hs, ERS162hs2, ERS164\_Prelim, ers164a, and ERS164b. Each file entry includes a date and time, the file type (SAV File), and the file size in KB.

On the right, a snippet of the SPSS syntax editor is visible, showing commands for computing and recoding variables. The visible syntax includes:

```
132 Compute AgeG=Age.  
133 Recode AgeG (to thru 22=1) (23,24,25=2) (26 thru 35=3) (36 thru 100=4).  
134 Variable labels AgeG 'Major age groupings'.  
135 Value labels AgeG '22 or younger' 2 '23 - 25' 3 '26 - 35' 4 '36 or older'.  
136  
137 Recode AdBasis ('=0) ('A' 'B' 'C' 'D' 'E' 'F' 'H' 'I' 'L' 'M' =1) ('O' 'P' 'Q' 'R' 'T' 'U' 'W' 'X' 'Y' =2) ('8' '9' 'N' 'S' 'V' 'Y' 'Z' =3) ('G' 'J' 'K' =4)  
138 ('1' '2' '3' '4' '5' =5) into EntrySt.  
139 Missing values EntrySt (0).  
140 Variable labels EntrySt 'Status at Entry to CSUSM'.  
141 Value labels EntrySt 0 'Unknown' 1 'First time freshman'.  
142 Compute EntrySIG=EntrySt.  
143 Recode EntrySIG (2,3=2) (5=3).  
144 Missing values EntrySIG (0,4).  
145 Variable labels EntrySIG 'Major Entry Status Group'.  
146 Value labels EntrySIG 1 'First time freshmen' 2 'Transfer students'.  
147  
148 Recode AdBasis ('A' 'B' 'C' 'D' 'X' '8' '9' 'N' =1) ('O' 'P' 'Q' 'R' 'T' 'U' 'W' 'X' 'Y' =2) ('8' '9' 'N' 'S' 'V' 'Y' 'Z' =3) ('G' 'J' 'K' =4)  
149 ('=9) into AdStat.  
150 Missing values AdStat (0).  
151 Recode AdStat (system=9).  
152 Variable labels AdStat 'CSUSM Admission Status'.  
153 Value labels AdStat 0 'Unknown' 1 'Regular Admitted' 2 'Transfer' 3 'Continuing Undergrad' 4 'Continuing Graduate Student'.  
154  
155 Compute EnrolSIG=EnrolSt.  
156 Recode EnrolSIG (5=1) (4=2) (1,2,3=4).  
157 DO IF (level eq 5).  
158 IF (enrolst eq 4 or enrolst eq 5) EnrolSIG=3.  
159 IF (enrolst le 3) EnrolSIG=5.  
160 END IF.  
161 Missing values EnrolSIG (0, 6).  
162 Variable labels EnrolSIG 'Major Enrollment Category'.  
163 Value labels EnrolSIG 1 'First-time freshmen' 2 'Transfer students' 3 'Continuing Undergrad' 4 'Continuing Graduate Student'.  
164  
165  
166 Compute EnSIUG=EnrolSIG.  
167 Recode EnSIUG (1=1) (2,4=2).  
168 Missing values EnSIUG (0,3,5).  
169 Variable labels EnSIUG 'First-time Freshmen vs. Transfer Students'.
```

# Improving the Process of Analysis

SPSS, our bread and butter...



The screenshot displays the SPSS syntax editor with the following code:

```
132 Compute AgeG=Age.  
133 Recode AgeG (0 thru 22=1) (23,24,25=2) (26 thru 35=3) (36 thru 100=4).  
134 Variable labels AgeG 'Major age groupings'.  
135 Value labels AgeG '1 '22 or younger' 2 '23 - 25' 3 '26 - 35' 4 '36 or older'.  
136  
137 Recode AdBasis ("=0) ('A' 'B' 'C' 'D' 'E' 'F' 'H' 'I' 'L' 'M' =1) ('O' 'P' 'Q' 'R' 'T' 'U' 'W' 'X' 'Y' =2) ('8' '9'  
138 ('1' '2' '3' '4' '5' =5) into EntrySt.  
139 Missing values EntrySt (0).  
140 Variable labels EntrySt 'Status at Entry to CSUSM'.  
141 Value labels EntrySt 0 'Unknown' 1 'First time freshman' 2 'Continuing undergraduate' 3 'Continuing graduate student'.  
142 Compute EntrySIG=EntrySt.  
143 Recode EntrySIG (2,3=2) (5=3).  
144 Missing values EntrySIG (0,4).  
145 Variable labels EntrySIG 'Major Entry Status Group'.  
146 Value labels EntrySIG 1 'First time freshmen' 2 'Transfer students' 3 'Continuing undergraduate' 4 'Continuing graduate student'.  
147  
148 Recode AdBasis ('A' 'B' 'C' 'D' 'X' '8' '9' 'N' =1) ('O' 'P' 'Q' 'R' 'T' 'U' 'W' 'X' 'Y' =2) ('8' '9' 'N' =3) into AdStat.  
149 ("=9) into AdStat.  
150 Missing values AdStat (0).  
151 Recode AdStat (system=9).  
152 Variable labels AdStat 'CSUSM Admission Status'.  
153 Value labels AdStat 0 'Unknown' 1 'Regular Admitted' 2 'Transfer' 3 'Continuing Undergraduate' 4 'Continuing Graduate Student'.  
154  
155 Compute EnrolSIG=EnrolSt.  
156 Recode EnrolSIG (5=1) (4=2) (1,2,3=4).  
157 DO IF (level eq 5).  
158 IF (enrolst eq 4 or enrolst eq 5) EnrolSIG=3.  
159 IF (enrolst le 3) EnrolSIG=5.  
160 END IF.  
161 Missing values EnrolSIG (0, 6).  
162 Variable labels EnrolSIG 'Major Enrollment Category'.  
163 Value labels EnrolSIG 1 'First-time freshmen' 2 'Transfer students' 3 'Continuing undergraduate' 4 'Continuing graduate student' 5 'Continuing undergraduate' 6 'Continuing graduate student'.  
164  
165  
166 Compute EnSIUG=EnrolSIG.  
167 Recode EnSIUG (1=1) (2,4=2).  
168 Missing values EnSIUG (0,3,5).  
169 Variable labels EnSIUG 'First-time Freshmen vs. Other'.
```

The CROSSTABS command is defined as follows:

```
25 *UNDERGRAD  
26  
27 TEMPORARY.  
28 Select IF (GradUG=1).  
29 CROSSTABS  
30 /TABLES=raceg4 by NEWALLFirstGenHS  
31 /FORMAT=AVALUE TABLES  
32 /CELLS=COUNT EXPECTED ROW COLUMN TOTAL  
33 /COUNT ROUND CELL.
```

A list of files is shown on the right side of the window:

File Name	Date/Time	Format	Size
ERS132b	11/1/2016 11:26 A...	SAV File	45,726 KB
ERS132bID			
ERS134	9/9/2015 11:06 AM	SAV File	6,399 KB
ERS134b	3/18/2015 12:08 PM	SAV File	3,838 KB
ERS134bID			
ERS142	7/13/2016 8:34 AM	SAV File	5,209 KB
ERS142b	4/15/2016 1:26 PM	SAV File	6,367 KB
ERS142bID			
ERS144	3/18/2015 12:38 PM	SAV File	4,096 KB
ERS144b	9/15/2016 2:28 PM	SAV File	15,015 KB
ERS144bID			
ERS152	10/28/2015 11:10 ...	SAV File	8,232 KB
ERS152	3/8/2016 9:37 AM	SAV File	3,997 KB
ERS152a	2/19/2015 3:02 PM	SAV File	3,732 KB
ERS152aID	4/7/2015 1:45 PM	SAV File	3,840 KB
ERS152b	4/25/2016 5:31 PM	SAV File	5,478 KB
ERS152bID	4/15/2016 1:27 PM	SAV File	6,459 KB
ERS154_eap	3/2/2016 5:51 PM	SAV File	4,614 KB
ERS154a	1/7/2016 11:23 AM	SAV File	4,614 KB
ERS154b	10/24/2016 12:05 ...	SAV File	11,147 KB
ERS162b	11/1/2016 12:44 PM	SAV File	6,587 KB
ERS162b2	4/22/2016 3:12 PM	SAV File	5,245 KB
ERS162bID	3/22/2016 3:57 PM	SAV File	5,438 KB
ERS162hs	4/20/2016 4:21 PM	SAV File	4,275 KB
ERS162hs2	4/22/2016 3:09 PM	SAV File	4,275 KB
ERS164_Prelim	9/16/2016 12:35 PM	SAV File	4,693 KB
ers164a	10/17/2016 4:26 PM	SAV File	5,804 KB
ERS164b	11/14/2016 11:31 ...	SAV File	9,373 KB

# Improving the Process of Analysis

SPSS, our bread and butter...

25 \*UNDERGRAD  
 26  
 27 **TEMPORARY.**  
 28 **Select IF (GradUG=1).**  
 29 **CROSSTABS**  
 30 **/TABLES=raceg4 by NEWALLFirst**  
 31 **/FORMAT=AVALUE TABLES**  
 32 **/CELLS=COUNT EXPECTED ROW**  
 33 **/COUNT ROUND CELL.**

Race/Ethnicity First Generation Students By Fall Term**										Percentage of First Generation Stu		
	Both Parents High School or Less				Both Parents Some College or Less				Both Parents 2 Yr. Degree or Less		Both Parents	
	Fall 2010		Fall 2011		Fall 2012		Fall 2013		Fall 2010		Headcount	
	%	n	%	n	%	n	%	n	%	Headcount	%	Headcount
African American	2.5	(51)	2.4	(55)	2.1	(54)	2.0	(59)	20.4	(250)	42.6	(249)
Asian America	6.7	(135)	6.9	(158)	6.1	(156)	6.0	(181)	15.3	(885)	30.7	(883)
Pacific Islander	0.4	(8)	0.4	(10)	0.4	(9)	0.4	(13)	15.4	(52)	34.6	(52)
Latinoa	61.3	(1241)	61.9	(1419)	65.1	(1670)	68.6	(2076)	48.6	(2556)	67.5	(2555)
Native American	0.2	(5)	0.3	(7)	0.2	(6)	0.3	(8)	7.8	(64)	40.6	(64)
White	20.3	(410)	19.4	(445)	16.8	(432)	15.1	(457)	9.8	(4186)	29.1	(4183)
Other/Unknown	6.4	(129)	5.9	(135)	6.5	(167)	4.8	(145)	14.7	(877)	35.5	(874)
Non-resident	0.7	(14)	0.7	(17)	0.7	(17)	0.8	(23)	11.4	(123)	14.6	(123)
Multiple Race	1.5	(30)	2.0	(46)	2.1	(54)	2.1	(63)	10.6	(282)	3.7	(282)
<b>TOTAL*</b>	<b>100.0</b>	<b>(2023)</b>	<b>100.0</b>	<b>(2292)</b>	<b>100.0</b>	<b>(2565)</b>	<b>100.0</b>	<b>(3025)</b>				

5,804 KB  
9,373 KB



# Improving the Process of Analysis

RaDAR, our first attempt at self-service...

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.edu>

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

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, Computer Education - PA, Exercise Physiology, Finance, Global Business Management, Global Studies, Global Supply Chain Management, High Technology Management, History, Human Development, Info Systems, Kinetics Systems, Marketing, Mass Media, Mathematics, Music, Nursing, Physiology, Political Science, Pre-Nursing, Pre-Physical Therapy, Psychology, Social Sciences, Sociology, Spanish, Special Major, Undeclared, Visual & Design  
Student Level: Undergraduate  
College: College of Business Administration, College of Education, Health and Human Svcs, College of Hum, Arts, Behavioral, & 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, Behavioral, & 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
<b>Totals</b>	<b>9928</b>	<b>10736</b>	<b>11559</b>	<b>12184</b>	<b>12526</b>

\* Figures include students pursuing a second Bachelor's degree are included in undergraduate head count  
\* For the years 2008-2011, ERS 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
<b>Totals</b>	<b>9929</b>	<b>10736</b>	<b>11559</b>	<b>12184</b>	<b>12526</b>

\* 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	66.1% 8202	68.4% 8566
23 to 25	18.6% 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

Table with columns: Student Type, Race/Ethnicity, Transfer, Subtotal, First-Time Student, Returning Student, Returning Transfer, Transferring Student, Subtotal, Total.

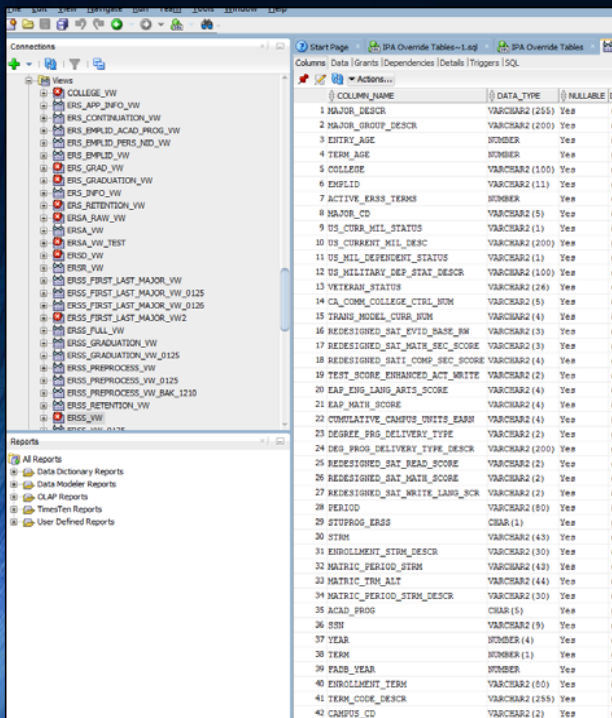
Student Type	Transfer	Subtotal	First-Time Student	Returning Student	Returning Transfer	Transferring Student	Subtotal	Total
White	448 2.0%	1282 5.6%	3732 16.3%	51 0.2%	83 0.4%	2574 11.3%	6456 28.2%	22863 100%
Hispanic/Latino	126 1.2%	997 5.8%	2345 22.8%	35 0.3%	34 0.3%	16 0.2%	3253 31.6%	10288 100%
Asian	76 1.8%	219 5.3%	650 15.8%	12 0.3%	3 0.1%	12 0.3%	1234 30.0%	4109 100%
Other	28.1%	46.6%	62.8%	68.6%	41.0%	32.0%	50.4%	45.0%
Black	17.0%	17.1%	17.4%	23.5%	3.6%	21.6%	19.1%	18.0%
Other Races	60.3%	36.7%	27.7%	34.3%	8.8%	67.7%	37.9%	39.9%

### Fall 2015 Applicants by Racial / Ethnic Background

Fall 2015 Applicant Yield Diagram

# Improving the Process of Analysis

A new data warehouse...



The screenshot displays a database management interface. On the left, a tree view shows a list of views, including 'COLLEGE\_VW', 'ERS\_APP\_INFO\_VW', 'ERS\_CONTRIBUTION\_VW', 'ERS\_IMPLD\_ACAD\_PROG\_VW', 'ERS\_IMPLD\_PERS\_NED\_VW', 'ERS\_IMPLD\_VW', 'ERS\_GRAD\_VW', 'ERS\_GRADUATION\_VW', 'ERS\_INFO\_VW', 'ERS\_RETENTION\_VW', 'ERSA\_RAW\_VW', 'ERSA\_VW', 'ERSA\_VW\_TEST', 'ERSD\_VW', 'ERSR\_VW', 'ERSR\_FIRST\_LAST\_MAJOR\_VW', 'ERSR\_FIRST\_LAST\_MAJOR\_VW\_0125', 'ERSR\_FIRST\_LAST\_MAJOR\_VW\_0126', 'ERSR\_FIRST\_LAST\_MAJOR\_VW2', 'ERSR\_FULL\_VW', 'ERSR\_GRADUATION\_VW', 'ERSR\_GRADUATION\_VW\_0125', 'ERSR\_PRRPROCESS\_VW', 'ERSR\_PRRPROCESS\_VW\_0125', 'ERSR\_PRRPROCESS\_VW\_BAK\_1210', 'ERSR\_VW', and 'encc.vw\_0126'. Below the views, a 'Reports' section lists 'All Reports', 'Data Dictionary Reports', 'Data Melder Reports', 'OLAP Reports', 'TimesTen Reports', and 'User Defined Reports'. The main pane shows a table structure with columns: 'COLUMN\_NAME', 'DATA\_TYPE', and 'NULLABLE'. The table contains 43 rows of data, including columns like 'MAJOR\_DESCR', 'MAJOR\_GROUP\_DESCR', 'ENTRY\_AGE', 'TERM\_AGE', 'COLLEGE', 'EMPLID', 'ACTIVE\_EXRS\_TERMS', 'MAJOR\_CD', 'US\_CURR\_MIL\_STATUS', 'US\_CURRENT\_MIL\_DESC', 'US\_MIL\_DEPENDENT\_STATUS', 'US\_MILITARY\_DEP\_STAT\_DESCR', 'VETERAN\_STATUS', 'CA\_COMM\_COLLEGE\_CTRM\_NUM', 'TRANS\_MODEL\_CURR\_NUM', 'REDESIGNED\_NAT\_EVID\_BASE\_BN', 'REDESIGNED\_NAT\_NATV\_SEC\_SCORE', 'REDESIGNED\_NATV\_COMP\_SEC\_SCORE', 'TEST\_SCORE\_ENHANCED\_ACT\_WRITE', 'EAP\_CURR\_LANG\_AKIS\_SCORE', 'EAP\_NATV\_SCORE', 'CUMULATIVE\_CAMPUS\_WRITE\_EARN', 'DEGREE\_PROG\_DELIVERY\_TYPE', 'DEG\_PROG\_DELIVERY\_TYPE\_DESCR', 'REDESIGNED\_NAT\_READ\_SCORE', 'REDESIGNED\_NAT\_NATV\_SCORE', 'REDESIGNED\_NAT\_WRITE\_LANG\_SCR', 'PERIOD', 'STOPPROG\_EXRS', 'STNM', 'ENROLLMENT\_STRM\_DESCR', 'MATRIX\_PERIOD\_STRM', 'MATRIX\_STM\_ALT', 'MATRIX\_PERIOD\_STRM\_DESCR', 'ACAD\_PROG', 'SSN', 'YEAR', 'TERM', 'FADE\_YEAR', 'ENROLLMENT\_TERM', 'TERM\_CODE\_DESCR', and 'CAMPUS\_CD'.

COLUMN_NAME	DATA_TYPE	NULLABLE
1 MAJOR_DESCR	VARCHAR2(255)	Yes
2 MAJOR_GROUP_DESCR	VARCHAR2(200)	Yes
3 ENTRY_AGE	NUMBER	Yes
4 TERM_AGE	NUMBER	Yes
5 COLLEGE	VARCHAR2(100)	Yes
6 EMPLID	VARCHAR2(11)	Yes
7 ACTIVE_EXRS_TERMS	NUMBER	Yes
8 MAJOR_CD	VARCHAR2(5)	Yes
9 US_CURR_MIL_STATUS	VARCHAR2(1)	Yes
10 US_CURRENT_MIL_DESC	VARCHAR2(200)	Yes
11 US_MIL_DEPENDENT_STATUS	VARCHAR2(1)	Yes
12 US_MILITARY_DEP_STAT_DESCR	VARCHAR2(100)	Yes
13 VETERAN_STATUS	VARCHAR2(24)	Yes
14 CA_COMM_COLLEGE_CTRM_NUM	VARCHAR2(5)	Yes
15 TRANS_MODEL_CURR_NUM	VARCHAR2(4)	Yes
16 REDESIGNED_NAT_EVID_BASE_BN	VARCHAR2(3)	Yes
17 REDESIGNED_NAT_NATV_SEC_SCORE	VARCHAR2(3)	Yes
18 REDESIGNED_NATV_COMP_SEC_SCORE	VARCHAR2(4)	Yes
19 TEST_SCORE_ENHANCED_ACT_WRITE	VARCHAR2(2)	Yes
20 EAP_CURR_LANG_AKIS_SCORE	VARCHAR2(4)	Yes
21 EAP_NATV_SCORE	VARCHAR2(4)	Yes
22 CUMULATIVE_CAMPUS_WRITE_EARN	VARCHAR2(4)	Yes
23 DEGREE_PROG_DELIVERY_TYPE	VARCHAR2(2)	Yes
24 DEG_PROG_DELIVERY_TYPE_DESCR	VARCHAR2(200)	Yes
25 REDESIGNED_NAT_READ_SCORE	VARCHAR2(2)	Yes
26 REDESIGNED_NAT_NATV_SCORE	VARCHAR2(2)	Yes
27 REDESIGNED_NAT_WRITE_LANG_SCR	VARCHAR2(2)	Yes
28 PERIOD	VARCHAR2(80)	Yes
29 STOPPROG_EXRS	CHAR(1)	Yes
30 STNM	VARCHAR2(43)	Yes
31 ENROLLMENT_STRM_DESCR	VARCHAR2(30)	Yes
32 MATRIX_PERIOD_STRM	VARCHAR2(40)	Yes
33 MATRIX_STM_ALT	VARCHAR2(44)	Yes
34 MATRIX_PERIOD_STRM_DESCR	VARCHAR2(300)	Yes
35 ACAD_PROG	CHAR(5)	Yes
36 SSN	VARCHAR2(9)	Yes
37 YEAR	NUMBER(4)	Yes
38 TERM	NUMBER(1)	Yes
39 FADE_YEAR	NUMBER	Yes
40 ENROLLMENT_TERM	VARCHAR2(80)	Yes
41 TERM_CODE_DESCR	VARCHAR2(255)	Yes
42 CAMPUS_CD	VARCHAR2(2)	Yes

# Improving the Process of Analysis

And a new data analysis tool...

The screenshot displays a data analysis tool interface. At the top, the query editor shows the query: `ERSS_VW (IPA.ERSS_VW)+ (IPA)`. Below the query editor, a diagram shows the relationship between `ERSS_VW` and `ERSA_RAW_VW`. The main area displays a data table with columns: `Ssn (Ersa Raw...`, `Year (Ersa Ra...`, `Term (Ersa Ra...`, `Term Code De...`, `App Strm Desc`, `Campus Cd (E...`, `Accommodati...`, and `Ad...`. The table contains multiple rows of data, including columns like `COLLN_NAME`, `MAJOR_DESCR`, `MAJOR_GROUP_DESCR`, `EXTRY_AGE`, `TERM_AGE`, `COLLEGE`, `EMPLID`, `ACTIVE_ERSS_TERMS`, `MAJOR_CD`, `US_CODE_MIL_STATUS`, `US_CURRENT_MIL_DESCR`, `US_MIL_DEPENDENT_STA`, `US_MILITARY_DEP_STA`, `VETERAN_STATUS`, `CA_COMM_COLLEGE_CTR`, `TRANS_MODEL_CURR_NUM`, `REDESIGNED_SAT_EVID`, `REDESIGNED_SAT_GATE`, `REDESIGNED_SAT_COMP`, `TEST_SCORE_ENHANCED`, `EAP_ERSS_LANG_AMIS_SC`, `EAP_SAT_SCORE`, `CUMULATIVE_CAMPUS_WHITE_EARN`, `DEGREE_PROG_DELIVERY_TYPE`, `DEG_PROG_DELIVERY_TYPE_DESCR`, `REDESIGNED_SAT_READ_SCORE`, `REDESIGNED_SAT_MATH_SCORE`, `REDESIGNED_SAT_WRITE_LANG_SCR`, `PERIOD`, `STOPFROG_ERSS`, `STRN`, `ENROLLMENT_STRM_DESCR`, `MATRIC_PERIOD_STRM`, `MATRIC_STM_ALT`, `MATRIC_PERIOD_STRM_DESCR`, `ACAD_PROG`, `SSN`, `YEAR`, `TERM`, `FADE_YEAR`, `ENROLLMENT_TERM`, `TERM_CODE_DESCR`, and `CAMPUS_CD`.

# Improving the Process of Analysis

And a new data analysis tool...

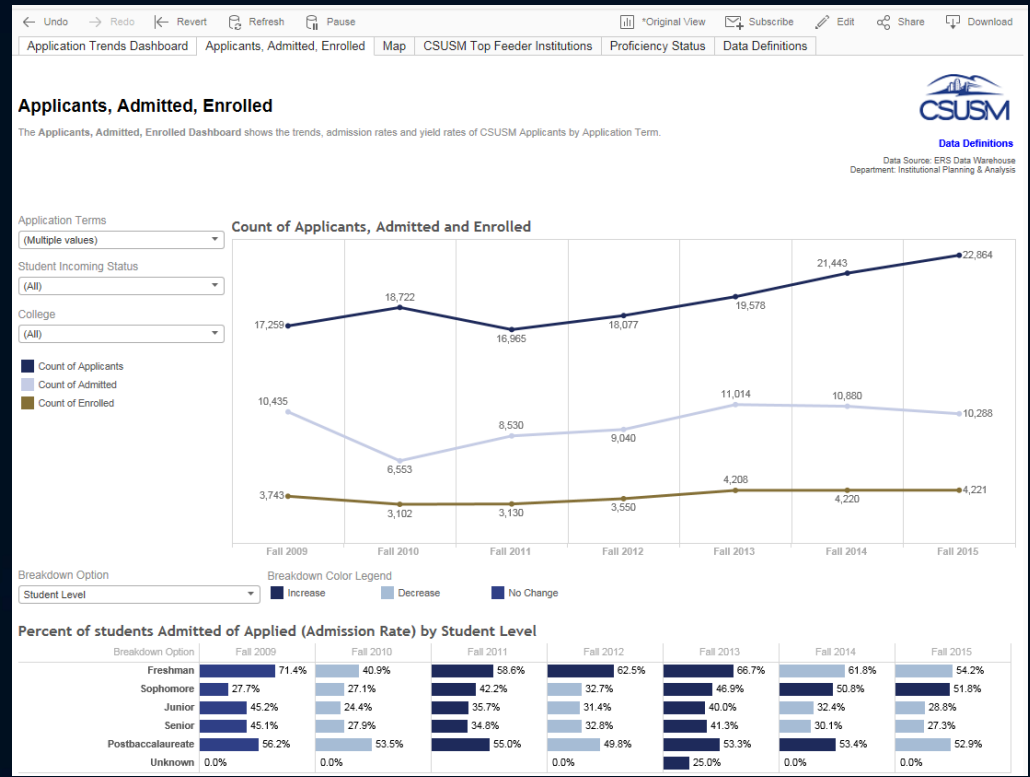
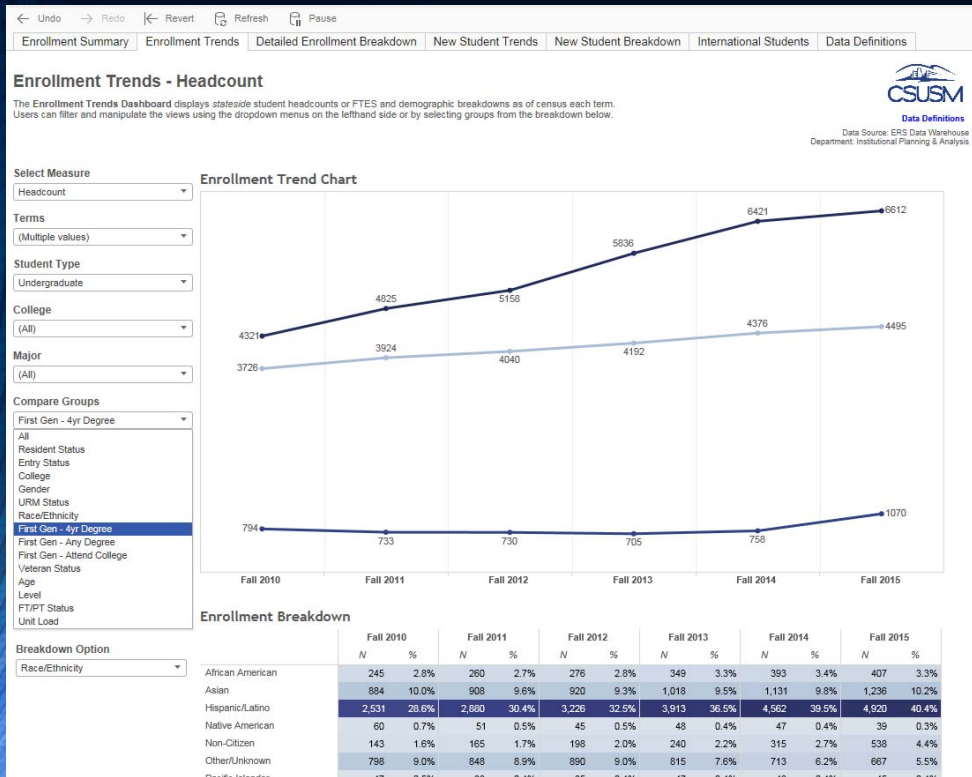
The image displays a data analysis tool interface with three main components:

- Top Panel:** Shows a connection to the data source: "ERSS\_VW (IPA.ERSS\_VW)+ (IPA)". The connection type is set to "Extract".
- Left Panel:** A data dictionary for the "ERSS\_VW" table, listing columns such as "COLLEGE\_NAME", "MAJOR\_DESCR", "ENROLLMENT\_TERM", and "ETHNICITY\_FINAL".
- Right Panel:** A pivot table titled "Sheet 1" showing enrollment statistics. The columns are "ENROLLMENT\_TERM", "ETHNICITY\_FINAL", "Y", "%", "Fg Two Yr Deg", and "Unknown". The rows are categorized by "ENROLLMENT\_TERM" (Fall 1998, Fall 1999, Fall 2000, Fall 2001) and "ETHNICITY\_FINAL".

ENROLLMENT_TERM	ETHNICITY_FINAL	Y		Fg Two Yr Deg		Unknown	
		N	%	N	%	N	%
Fall 1998	African American	28	3.63%	6	0.96%	117	3.22%
	Asian	52	6.74%	65	10.43%	260	7.16%
	Hispanic/Latino	189	24.51%	49	7.87%	615	16.94%
	Native American	16	2.08%	6	0.96%	59	1.62%
	Non-Citizen	6	0.78%	4	0.64%	74	2.04%
	Other/Unknown	85	11.02%	67	10.75%	487	13.41%
Fall 1999	Pacific Islander	8	1.04%	2	0.32%	12	0.33%
	White	387	50.19%	424	68.06%	2,007	55.27%
	African American	45	3.65%	17	1.63%	125	3.61%
	Asian	94	7.62%	101	9.66%	273	7.89%
	Hispanic/Latino	299	24.25%	92	8.80%	598	17.28%
	Native American	16	1.30%	7	0.67%	47	1.36%
Fall 2000	Non-Citizen	12	0.97%	6	0.57%	79	2.28%
	Other/Unknown	146	11.84%	127	12.14%	472	13.64%
	Pacific Islander	8	0.65%	3	0.29%	18	0.52%
	White	613	49.72%	693	66.25%	1,840	53.41%
	African American	71	3.54%	24	1.42%	85	3.32%
	Asian	140	6.98%	163	9.67%	209	8.15%
Fall 2001	Hispanic/Latino	525	26.16%	146	8.66%	449	17.51%
	Native American	30	1.49%	6	0.36%	28	1.09%
	Non-Citizen	31	1.54%	17	1.01%	76	2.96%
	Other/Unknown	203	10.11%	203	12.05%	386	15.05%
	Pacific Islander	13	0.65%	3	0.18%	15	0.59%
	White	994	49.53%	1,123	66.65%	1,316	51.33%
Fall 2001	African American	79	3.20%	34	1.64%	65	3.23%
	Asian	158	6.55%	187	9.03%	163	8.10%
	Hispanic/Latino	629	26.00%	162	7.82%	346	17.19%
	Native American	29	1.20%	9	0.43%	17	0.84%
	Non-Citizen	36	1.49%	18	0.87%	71	3.53%
	Other/Unknown	243	10.07%	283	13.66%	328	16.29%
Pacific Islander	15	0.62%	8	0.39%	9	0.45%	
White	1,223	50.70%	1,370	66.15%	1,014	50.37%	

# Improving the Process of Analysis

Tableau, the next step in self-service...



# Improving the Process of Analysis

## Goals:

- Fewer simple and repeat data requests
- Non-“data people” exploring and understanding data
- Shorter time to completion of requests
- More resources available for research and analytic projects
- Single source of truth (or at least fewer sources of truth) with consistent metrics and data definitions

# Data Governance



- Convened by the President of CSUSM
- 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
- Reducing redundancy, Mediating escalated data issues
- Identify and assign data stewards. Provide guidance to ensure data are:
  - Accurate, complete, timely and relevant
  - 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

# Data Governance Members

- Dean and CIO, Instructional and Information Technology Services (Co-Chair)
- Director, Institutional Planning & Analysis and Decision Support (Co-Chair)
- Vice Provost
- Associate Vice Presidents: Administration, Student Academic Support Services, Enrollment Management Services, Community Engagement
- Executive Director, IT Projects
- Associate Dean, Extended Learning
- Director of Advancement Services
- Registrar
- Senior BI Analyst
- Assistant Director, Institutional Planning & Analysis and Decision Support
- Information Security Officer



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