Financial Aid Census Universe

Requirements Overview
And
Quick Reference Guide
DM - STU – Financial Aid Census

Project Objective
The objective of the Financial Aid Census project is to update the census model in the EDW to address the need of Financial Aid Office and Institutional Reporters for static, reproducible data used for internal and external reporting.

Currently, the Financial Aid Offices are using REPTPROD to run ad hoc and standard financial aid reports. While this contains the specific data required for running the reports, the data itself is not captured and stored at specific points in time. This creates a lack of reproducibility of financial aid reports. Updating and maintaining a financial aid data mart which captures and stores data at specific points in time will alleviate such a situation. Additionally, the outcome of this project will promote a transition to the EDW from REPTPROD by Financial Aid Office users.
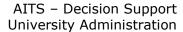
Target Users
The Financial Aid Census project will serve primarily the Financial Aid Office and Institutional Reporters.   However, in addition to the primary users, the end products will also target super analysts and solution providers in colleges.

Business Rules
- The student population will include students in T_STUDENT_TERM for each term.

- Dummy rows for each student in T_FC_STUDENT_DIMENSION will be included in all the fact tables for each census key, so that the need for outer joins is eliminated. Each student will have a row in each table regardless of whether or not the student has data in the table. In cases where the student does not have data, the student key will exist with nulls or blanks in all the columns.

- If there is an edw_pers_id does not exist in T_PERS, the edw_pers_id will not be included in the data set.

- All tables will need to allow for the existence of a student on multiple campuses within the same term.

- In order to assist with completing the state mandated reports, FAO have requested data be added to the data mart to detail the monies paid to students. These monies should be broken out by federal and institutional shares or distributions. The institutional share should be further broken out by appropriated (money from the state) and non-appropriated (money from grant or self supporting) funds. This data will be obtained from T_PAYR_ACCTG_DETL. The logic for this new data is:

  o For records where t_payr_acctg_detl.payr_acctg_catgry_cd = 'A'
    and t_payr_acctg_detl.payr_acctg_empee_cls_cd = 'GA' – only an example – query should not limit to only GA
    and t_payr_acctg_detl.fin_fund_cd <> '498107' -- Does not include Federal Work Study

    Sum(t_payr_acctg_detl.payr_acctg_exps_amt) and group in to below buckets:

    - APPROPRIATED – Funds from the State
      AND (((t_payr_acctg_detl.fin_fund_cd) Between '100000' And '189999') OR
      ((t_payr_acctg_detl.fin_fund_cd) Between '560000' And '599999'))

- NON-APPROPRIATED – Funds from non-State sources
  AND (((t_payr_acctg_detl.fin_fund_cd) Between '190000' And '399999') OR
  ((t_payr_acctg_detl.fin_fund_cd) Between '500000' And '559999') OR ((t_payr_acctg_detl.fin_fund_cd)
  Between '610000' And '999999'))

- FEDERAL – Funds and Sponsored Research from Federal sources
  AND (((t_payr_acctg_detl.fin_fund_cd) Between '400000' And '497999') OR
  ((t_payr_acctg_detl.fin_fund_cd) Between '600000' And '609999'))

- INSTITUTIONAL – Funds the institution receives from State sources
  AND (((t_payr_acctg_detl.fin_fund_cd) Between '100000' And '399999') OR
  ((t_payr_acctg_detl.fin_fund_cd) Between '500000' And '599999') OR ((t_payr_acctg_detl.fin_fund_cd)
  Between '610000' And '999999'))

- Below is an example of the query used by FAO to create this data. Please note this is query is using RERTPROD source tables, rather than EDW tables. The new columns will be sourced from the EDW.

```
            SELECT DISTINCT nhrdist_pidm AS PIDM,
            NHRDIST_ECLS_CODE AS ECLS,
             nhrdist_fund_code AS FUND_CODE,
             SUBSTR(nhrdist_fund_code, 1, 3) AS APPR_1,
             nhrdist_acct_code AS ACCT_CODE,
             nhrdist_pict_code AS PICT,
             nhrdist_payno AS PAYNO,
             rjrpayl_aidy_code as aidyr,
             rjrpayl_term_code AS PAYTRM,
             (DECODE (nhrdist_dr_cr_ind,'D', nhrdist_amt,'C', 0 - nhrdist_amt)) AS pay_amt
             --COUNT (DISTINCT nhrdist_pidm) cnt,
             --SUM (DECODE (nhrdist_dr_cr_ind,'D', nhrdist_amt,'C', 0 - nhrdist_amt)) AS pay_amt
            FROM nhrdist, pebempl, rjrpayl
        WHERE nhrdist_pidm = pebempl_pidm
             AND nhrdist_year = rjrpayl_year
            AND nhrdist_pict_code = rjrpayl_pict_code
            AND nhrdist_payno = rjrpayl_payno
            AND nhrdist_fund_code <> '498107'      -- Does not allow FWS to be selected
            AND (   nhrdist_coas_code = '1'
            OR nhrdist_coas_code = '9' AND pebempl_dicd_code = 'U')
             AND NHRDIST_ECLS_CODE = 'GA'
            AND NHRDIST_CATEGORY_CODE = 'A'
            AND rjrpayl_aidy_code = '0607'
```

List of Data Elements

Below is a list of dimensions and facts which are required:

Person		
	UIN	Race/Ethnicity
	Name	Residency Code/Desc
	FERPA Indicator	Citizenship Code/Desc
	Gender	

Student		
	Student Type Code/Desc	College Code/Desc
	Student Level Code/Desc	School Code/Desc
	Academic Program Code/Desc	Department Code/Desc
	Major Code/Desc	Unmet Need Indicator

	CIP Code	Need Ind Indicator
	Degree Code/Desc	User Fields
	Degree Level Code	Student Cohort Code/Desc
	Campus Code	
Needs Analysis Measures	Gross Unmet Need	Estimated Family Contribution
	Unmet Need	Student Contribution
	Student's Total Budget	Parent's Contribution
	Estimated Total Resources	Income
	Actual Total Resources	
Award Characteristics (Fund)	Fund Code/Desc	Federal Fund ID
	Fund Source Code/Desc	Federal Fund Desc
	Fund Source Indicator	Federal Fund Title IV Indicator
	Fund Type Code	Fund Message Code/Desc
	Fund Detail Code	
Award Details by Student	Financial Aid Award Year	Cancelled Amount
	Award Fund	Cancelled Date
	Financial Aid Period	Authorized Amount
	Current Offer Amount	Authorized Date
	Current Offer Date	Memo Amount
	Original Offer Amount	Memo Date
	Original Offer Date	Paid Amount
	Accepted Amount	Paid Date
	Accepted Date	Gross Amount
	Declined Amount	Gross Date
	Declined Date	
Award (Fund) Measures	Current Offer Amount	Federal Share Amount
	Original Offer Amount	Institutional Share Amount
	Accepted Amount	Appropriated Amount
	Declined Amount	Non Appropriated Amount
	Cancelled Amount	Count of Students receiving award
	Authorized Amount	Distinct Count of Students receiving award
	Memo Amount	
	Paid Amount	
	Gross Amount	
User Defined Fields (UDF)	UDF Value	
	UDF Desc	
Satisfactory Academic Progress	SAP Code/Desc	SAP Status Lock Indicator
	Calculated SAP Code/Desc	SAP Rule Batch Process Indicator

Sourcing Updates

While most of the data currently exists in the EDW, the source of the EDW data is required to be updated. The new data structures will also include a few new data elements.

Case Number: 20090929_R137351
User Defined Fields – New sourcing and new tables
The largest change to the EDW is of the User Defined Fields (UDF) structure in the EDW. Currently, the source in REPTPROD stores the data in columns, producing one row per student, campus and financial aid year. The EDW design transposes the

columns to rows for each column which contains data in the source. For example, if a student has 2 columns in the source with a value, then the EDW will have 2 rows. The UDFs are used most often used as conditions in reporting and allow reporting to focus on a particular subset of students. The Financial Aid Offices have requested the EDW to be modified to mimic the source of the data. Storing the data in columns rather than rows will result in easier reporting. Storing the data in rows would have resulted in query output multiplying by the number of UDFs used in a query. Additionally, in Banner 8 data reviews, it was determined the EDW source of the UDF descriptions was out of date. The sources of the date should be RORUSER and ROBUSDF.

In addition to the structure changes of the UDF tables, the FAO's have requested we include past loan history. This is stored in UDF columns 113 and 114 from the 0304 Academic Year. It has been determined that given the design of the new table, there are no additional structures required in the data mart. Given the 0304 data will not change, users will be able to join to the UDF tables to gather the 0304 data.

Case Number: 20090827_R94701
Sourcing update to columns on T_FA_APPLICANT_STATUS

The following columns on T_FA_APPLICANT_STATUS are sourced from RORSTAT. It has been determined that RORSTAT has not been updated since 2006, thus the table does not have up to date data.

> T_FA_APPLICANT_STATUS.APPLICANT_STATUS_GROSS_NEED
> T_FA_APPLICANT_STATUS.APPLICANT_STATUS_PARENT_CNTRB
> T_FA_APPLICANT_STATUS.APPLICANT_STATUS_STUDENT_CNTRB
> T_FA_APPLICANT_STATUS.APPLICANT_STATUS_TOT_FAM_CNTRB
> T_FA_APPLICANT_STATUS.APPLICANT_STATUS_UNMET_NEED

The FAO's advised the data should be sourced as below.

> T_FA_APPLICANT_STATUS.APPLICANT_STATUS_GROSS_NEED – RNVAND1.RNVAND1_GROSS_NEED
> T_FA_APPLICANT_STATUS.APPLICANT_STATUS_UNMET_NEED - RNVAND1.RNVAND1_UNMET_NEED
> T_FA_APPLICANT_STATUS.APPLICANT_STATUS_PARENT_CNTRB -
> T_RCRAPP4_FA_APPL_PART_4.RCRAPP4_C_NA_1_P_CTRB_FOR_STDT
>
> T_FA_APPLICANT_STATUS.APPLICANT_STATUS_STUDENT_CNTRB -
> T_RCRAPP4_FA_APPL_PART_4.RCRAPP4_C_NA_1_CTRB_FOR_STDT
>
> T_FA_APPLICANT_STATUS.TOT_FAM_CNTRB –
> T_RCRAPP4_FA_APPL_PART_4. RCRAPP4_C_INST_1_TOT_FAM_CTRB

**Note – Due to the ETL time of RNVAND1, table T_FA_APPLICANT_STATUS will now be loaded weekly; every Saturday. The entire table is changing so as to keep the data from separate sources in sync in the table.

Case Number: 20091015_R154006
New Table for Fund Message Codes called T_FC_FUND_MSG_FACT

FAO requested to bring in the Fin-AID Message tables RFRMESG & RTVMESG into the EDW to enhance reporting for the FIN-AID DataMart Project.   These tables will be combined into one table. This table is a history tracking table with a current row indicator. Each row is identified for a unique surrogate key. Uniqueness will be enforced on (FA_FUND_CD,FA_YR_CD,CAMPUS_CD,MSG_CD). This table will have a default row with a surrogate key of 1 (with other values being space or NA). This row will be used to avoid outer-joins to this table.

Grain
Users wish to view the award information from three perspectives. First, they wish the view the detailed data for each student. This includes the student information by term and specific details regarding which types and amounts of awards received. Second, they wish to view summary data at the award level. This includes counts of students receiving awards as well as amounts awarded. Finally, they wish to view the data summarized by student.   The summarized information will not be stored in separate structures

with a different grain. The structures of the tables will be built so that summarizing can be easily accomplished via user written queries and Business Objects. The time grain for all perspectives is per financial aid year.

Security

Three user groups will have access to this data that will that will require table level security, as well as VPD. At the initial go live, no college/dept users will be implemented. The initial users will only consist of Financial Aid Office and IR users.

1) Financial Aid Office users will have access to all data for the specific campus. (FC_FULL)
2) Institutional Reporters will have access to subset of the tables and most likely all campuses. IR are re-writing the standard reports, thus the need to access all campuses data. (FC_LTD)
3) College/Dept users will have access to a smaller subset of tables, and VPD will be required to the college/dept level. At this time, it does not appear as though column level security will be required. (FC_RSTR)

TABLE	FAO (FC_FULL)	IR (FC_LTD)	College/Dept (FC_RSTR)	VPD
T_FC_AWARD_TERM_FACT	Yes	Yes	Yes	No
T_FC_FUND_DIMENSION	Yes	Yes	Yes	No
T_FC_NEED_ANLS_FACT	Yes	Yes	No	No
T_FC_SAP_DIMENSION	Yes	No	No	No
T_FC_STUDENT_DIMENSION	Yes	Yes	Yes	Yes
T_FC_AWARD_UDF_FACT	Yes	Yes	No	No
T_FC_TIME_DIMENISON	Yes	Yes	Yes	No
T_FC_STUDENT_CHRT_FACT	Yes	Yes	Yes	No
T_FC_FUND_MSG_FACT	Yes	Yes	Yes	No
T_FC_AWARD_PMT_FACT	Yes	Yes	Yes	No
V_FC_AWARD_UDF_FACT	Yes	Yes	No	No
V_FC_FUND_MSG_FACT	Yes	Yes	Yes	No

Refresh

This data collection will begin with the Financial Aid processing year = '0910'. The following tables will be refreshed on the indicated schedules:

TABLE NAME	10th Day FALL	10th Day SPR	MAR	APR	SEPT	OCT	NOV
T_FC_STUDENT_DIMENSION	X	X					
T_FC_STUDENT_CHRT_FACT	X	X					
T_FC_AWARD_UDF_FACT	X	X	X	X	X	X	X
T_FC_TIME_DIMENSION	X	X	X	X	X	X	X
T_FC_AWARD_PMT_FACT	X	X	X	X	X	X	X
T_FC_NEED_ANLS_FACT	X	X	X	X	X	X	X
T_FC_AWARD_TERM_FACT	X	X	X	X	X	X	X
T_FC_FUND_DIMENSION	X	X	X	X	X	X	X
T_FC_SAP_DIMENSION	X	X	X	X	X	X	X
T_FC_FUND_MSG_FACT	X	X	X	X	X	X	X

The 10th Day of Fall and Spring will be determined by the OAR offices by their CENSUS schedules and be updated in this data collection as the information is available.

All other dates have been determined by the FA Offices and are static so these dates will remain as is from processing year to processing year. The dates are as follows:

MAR	APR	SEPT	OCT	NOV	DEC
18	1	16	18	1	1
25		23	25		8
		30			15

Example: For the 0809 year the April, Sept, Nov, Oct and Dec dates would be captured in 2009.

Population of Tables

- T_FC_STUDENT_DIMENSION
- T_FC_STUDENT_CHRT_FACT
  - These tables should be populated on the 10th day of a term and only on 10th day. For example, for the 0910 year the table should be populated on the 10th day of the terms 120098 and 120101. (There may be additional days for GC). The data populated should be what exists on that day.
- Do not combine the term code from T_FC_STUDENT_DIMENSION (CENSUS_TERM_CD indicates the term the data was frozen) with the term code from T_FC_AWARD_TERM_FACT (TERM_CD indicates awards by term) because these are NOT like term codes.

- T_FC_AWARD_UDF_FACT
- T_FC_NEED_ANLS_FACT
- T_FC_AWARD_PMT_FACT
- T_FC_FUND_MSG_FACT
- T_FC_FUND_DIMENSION
- T_FC_SAP_DIMENSION
  - The data which populates the table should be what is in effect on the load date in the source for the financial aid year. All tables should be populated for each FC_STUDENT_KEY which exists in T_FC_STUDENT_DIMENSION for the financial aid year. Please note, a student will likely exist in T_FC_STUDENT_DIMENSION for both the fall and spring term. However, the T_FC_STUDENT_KEY will be unique between the two terms. This means each unique T_FC_STUDENT_KEY will have a row in each table.

- T_FC_AWARD_TERM_FACT
  - These tables should also be populated on the dates below, but must contain the data for all terms within the financial aid year. When this table loads, for every FC_STUDENT_KEY in T_FC_STUDENT_DIMENSION, a row should populated for all terms within the financial aid year. For example, if the an FC_STUDENT_KEY exists for term 120098 or 120101 in T_FC_STUDENT_DIMENSION, when the ETL runs on December 1, 2010, a row should be populate for term 120098, 120101 and 120105 (summer) in T_FC_AWARD_TERM_FACT with the same FC_STUDENT_KEY. This will allow users the ability to see the data for each term or to roll up by year. Please note, a student will likely exist in T_FC_STUDENT_DIMENSION for both the fall and spring term. However, the FC_STUDENT_KEY will be unique between the two terms. This means each unique T_FC_STUDENT_KEY will have a row for each term within the financial aid year.

Backfill of Data

Due to the rewrite of the federally mandated reports from the new census data, backfill data will be populated. The reports typically report on the previous year data. As such, for the IR offices to meet the requirements of the reports due in 2010, they must have 0809 data. Accordingly, backfill data will be supplied for the 0809 year. Specifically, T_FC_STUDENT_DIMENSION and T_FC_STUDENT_CHRT will contain Fall 2008 10th (traditional and global campus) census data. The source of this data will be Registration Census. Because some of the fields do not exist in past data for registration census, they will not be populated in the backfill. These include HISPANIC_ETH_IND, AIAN_RACE_IND, ASIAN_RACE_IND, BLACK_RACE_IND, NHPI_RACE_IND, WHITE_RACE_IND, OTHER_ETH_RACE_IND, MULTI_ETH_RACE_IND. The remaining fact tables will be also be loaded once for the 0809 year. The data will be sourced from the EDW and will reflect what is effective for the 0809 academic year on the day of production go live. Additionally, we will backfill fall 0910 data so that the 2011 reports will have the correct data available. The below census snapshots will be populated in production from registration census.

Term and Campus Description	Term and Campus Description
Fall 2008 - Urbana-Champaign	Fall 2008-Global Campus Urbana
Fall 2008 - Springfield	Fall 2008-Global Campus Chgo
Fall 2008 - Chicago	Fall 2009-Global Campus Chgo
Fall 2009 - Chicago	Fall 2009-Global Campus Spfld
Fall 2009 - Springfield	Fall 2009-Global Campus Urbana
Fall 2009 - Urbana-Champaign	Spr 2010-Global Campus Urbana
Spring 2010 - Urbana-Champaign	Spr 2010-Global Campus Chgo
Spring 2010 - Springfield	Spr 2010-Global Campus Spfld
Spring 2010 - Chicago	

Data Retention

Data Retention requirements are not determined at this time and are dependent on any future Decision Support policy.