

# Employee FTE / Head Count Detailed Analysis Guide

Last Updated: 6/30/2011

### **Introduction to Employee FTE / Headcount**

Welcome to using a cube to analyze Head Count and FTE data. This product is designed specifically for individuals who want to look at Headcount or FTE changes over time. Its goal is to be easy or at least easier than writing your own reports. However, to be fair, this is not report writing; this is analysis. What does that mean, you ask? Well, it means that you don't have to have a specific question. You may have a question to begin with, but what you really want is to learn about how your Headcount or FTE has changed over time; to slice and dice the data.

This product does not show you daily changes. That much detail would not be useful. We take a monthly snapshot as of the 10<sup>th</sup> of each month. The 10<sup>th</sup> was selected for a couple of reasons. The first reason is historical. When the University provides official numbers, it looks at the 10<sup>th</sup> of each month. The other reason the 10<sup>th</sup> was selected is because it is close to the monthly payroll calc process. The calc process is important because it determines how people are paid. If they are set up incorrectly for calc, they will be paid incorrectly. Most units try to make sure they have all their employees set up correctly for the payroll calc.

We include both Employee E-Group and Job E-Group data, so you can see how the type of employees has changed over time. To expand the type of analysis you can do, we also break down the Headcount by the CFOAPAL Fund type from the Job Labor Distribution. This means you can see what percentage of your employees are paid from State Funds versus Grant Funds and how has that mix changed over time.

This product supports the university's ARR (Academic Review and Restructuring) objectives of reviewing our performance and reducing costs. Specifically, you can do analysis of IT (information technology) headcount and FTE.

This product will ensure the user a less manually-intensive process for collecting and organizing the data, allowing time and effort to be focused on analysis and decision making. It will also provide a more powerful analysis tool to support dynamic interaction with the data during the decision making process. This change will be accomplished by replacing current approaches of collecting data across a number of separate reports, in some cases manually re-entering data into spreadsheets, to directly support analysis and OLAP capability.

### **Targeted Users**

Given the serious financial challenges now facing the University, decision makers at all levels need more than just a current breakdown of their employee mix. They need to be able to analyze changes in headcount and FTE over time. They need both summarized information and the ability to drill in. They need to slice headcount percentage by where the employees are being paid from (e.g. State funds or Sponsored Research funds), what type of employees (Faculty, AP, Civil Service, etc.) they have.

This product is intended for use by any University employee who has the need to examine headcount and FTE counts over time. Example expected users for this data are: Assistant & Associate Deans, College and Departmental business managers, and personnel managers.

#### **Purpose & Use Cases (samples – not exhaustive)**

This product is intended to answer the primary question: How many and what type of employees did I employ over time? This question implies that the user is interested in a summarized picture of headcounts in their organization.

#### Grain

The grain of this product is determined to be one row per employee-position-job.

#### **Exclusions**

For the purposes of this product, the following have been excluded from the data set:

- Incomplete employee-position-job records.
- Employees who have left the University. Their historical employment will remain in the product, just once they leave, they will no longer be included in the monthly load process.
- Jobs that have ended prior to the load date.
- Job Suffixes of 'CE' (Internet / Cell Phone Stipends).
- Position Number 'C63998' (Insurance Stipend)

#### **Security**

All users that have access will be able to see Employee, Position and Job data. There is employee demographic data (Age, Gender, Race and Ethnicity) in the cube that only central HR, Access and Equity and Institutional Research will be able to see. It is limited because of the way security in controlled in OLAP cubes.

#### Refresh

This product is refreshed monthly on the eleventh day of the month to contain data as of the tenth day of the month.

#### Sourcing & Backfill of Data

Headcount data from earlier years was created to fill the product for use in multi-year analysis. The primary source of expenditure data is the following EDW tables:

T\_CALENDAR\_DT,
T\_EMPEE\_HIST,
T\_FAC\_RANK\_HIST,
T\_FAC\_TENURE\_HIST,
T\_JOB\_DETL\_HIST,
T\_JOB\_HIST,
T\_JOB\_LBR\_DISTR,
T\_ORG\_CD\_HIST,
T\_PERS\_HIST,
T\_POSN\_ORG\_HIST and
T\_POSN\_HIST

The University of Illinois implemented the new IPEDS Race and Ethnicity changes in March of 2010. The project team that implemented the changes, created a crosswalk table from the old values to the new values. We used this crosswalk table for historical Race and Ethnicity data prior to March 2010. All Race and Ethnicity data is in the new format.

#### **Data Retention**

At this time, we plan to retain ten years of data. Since Banner is our source, we will have less than 10 years of data until January 2014.

#### **Business Rules**

The Headcount / FTE product contains several groups of business rules designed to categorize headcount. At this time, most derived columns are intended to indentify information technology people. It should be noted that although these rules do a good job of systematically identifying IT expenses based on the defined rules, they do not necessarily identify all IT professionals.

For example, individuals who perform IT related functions such as supporting a web site or working in a computer lab often do not have an IT related position class code. Therefore, these individual's will not be labeled as IT professionals.

### IT Expense Logic - general description

- 1. Look at the job detail employee-class (Academic Professional vs. Civil Service) and related position-classes (see list) for the employee expense. If the position class is an IT related position class, then code the job as an IT Job.
- 2. Look at the organization code on the job (timesheet org). If the organization is a designated IT organization (see list), then code the job as an IT Job.

If any of the above logic designates the row as IT, then the row will be labeled an IT Job.

#### **IT Job Logic**

### **Employee Class Codes and Position Class Codes**

To identify IT personnel expenses, we look at the Position Class and Employee Class for each Job. You can learn more about employee class codes here: <a href="http://nessie.uihr.uillinois.edu/pdf/Banner/JobAid\_EClass.pdf">http://nessie.uihr.uillinois.edu/pdf/Banner/JobAid\_EClass.pdf</a> and Position Class Codes here: <a href="http://nessie.uihr.uillinois.edu/pdf/Banner/JobAid\_PClassStruct.pdf">http://nessie.uihr.uillinois.edu/pdf/Banner/JobAid\_PClassStruct.pdf</a>. For Academic Professionals, these codes include embedded logic that classifies the type of work University employees do. For example, an "M" in the 3rd position of the P-Class Code designates jobs in "Information Technology Systems." For Civil Service employees, a list of specific P-Class codes was identified to determine IT-related jobs.

For Academic Professionals, Employee Position Class code:

- 3rd position of the p-class code equals M (Information Technology Systems)
   OR
- 3rd position of the p-class code is N (Library and/or Research Information) and the 4th position is either a C (Information Systems & Records Management), a D (Data Analysis/Institutional Research), or an F (Research Data Analysis/Support)
   OR
- 3rd position of the p-class code is a P (Research Support) and the 4th position is either an E (Technology Management) or an F
  (Technical User Support)
   AND
- The position is not "LUMP" or "SMMR"

For Civil Service, we use the State Universities Civil Service System Class specifications. You can find out more about these codes here: http://www.sucss.state.il.us/

- We consider the first four characters of the P-Class Code. We have selected 65 of these four digit codes based on key words like: technology, information, etc.
- The Job Detail Employee Class first digit will be C or D.
- The following is the complete list: 0062, 0063, 0064, 0065, 0103, 0104, 0105, 0108, 0116, 0117, 1036, 1037, 1387, 1388, 1389, 1390, 1391, 2421, 2422, 2853, 2854, 2855, 3053, 3054, 3140,3141, 3142, 3143,3148,3149,3150,3151,3152,3305,3306,3307,3308,3439,3477, 3619, 3907, 3908, 3909, 4195, 4522, 4560, 4565, 4639, 4640, 4641, 4642, 4705, 4712, 4713, 4714, 4813, 4826, 4827, 4828, 4829, 4830, 4831, 5030, 5031, 5032

## **IT Departments**

We also determined that for Departments that have IT as their primary function, all of their personnel should be classified as IT. Many people would be classified as IT based on the Position Class rules anyway, but many would not. For IT Departments, everything they do supports IT either directly or indirectly, so it makes sense to count all of their jobs as IT jobs.

Campus	College Title	Department Title	Organization
			Code
UIUC	Agr Consumer & Env Sciences	ACES Info Tech & Cmc Svcs	348002
UIUC	Agr Consumer & Env Sciences	ACES Info Tech & Cmc Svcs	348003
UIUC	Agr Consumer & Env Sciences	ACES Info Tech & Cmc Svcs	348004
UIUC	Agr Consumer & Env Sciences	ACES Info Tech & Cmc Svcs	348005
UIUC	Agr Consumer & Env Sciences	ACES Info Tech & Cmc Svcs	348008
UIUC	Agr Consumer & Env Sciences	ACES Info Tech & Cmc Svcs	348009
UIUC	Agr Consumer & Env Sciences	ACES Info Tech & Cmc Svcs	348010
UIUC	Auxiliary Units	Housing Division	270006
UIUC	Auxiliary Units	Housing Division	270007
UIUC	Beckman Institute	Beckman Institute	392005
UIUC	Chief Information Officer	CITES	798000
UIUC	Chief Information Officer	CITES	798001
UIUC	Chief Information Officer	CITES	798002
UIUC	Chief Information Officer	CITES	798003
UIUC	Chief Information Officer	CITES	798004
UIUC	Chief Information Officer	CITES	798005
UIUC	Chief Information Officer	CITES	798006
UIUC	Chief Information Officer	CITES	798009
UIUC	Chief Information Officer	Ofc of the Chief Info Officer	618000

Campus	College Title	<b>Department Title</b>	Organization
_	_		Code
UIUC	Education	College of Education CIO	439000
UIUC	Education	College of Education CIO	439001
UIUC	Education	College of Education CIO	439002
UIUC	Education	College of Education CIO	439003
UIUC	Education	College of Education CIO	439004
UIUC	Education	College of Education CIO	439005
UIUC	Education	College of Education CIO	439006
UIUC	Facilities	Facilities and Services	701003
UIUC	Liberal Arts & Sciences	Appl Technol for Learning in	441000
		A & S	
UIUC	Liberal Arts & Sciences	Life Sciences	397002
UIUC	Liberal Arts & Sciences	School of Chemical Sciences	510021
UIUC	Liberal Arts & Sciences	School of Integrative Biology	383002
UIUC	Provost & VC Acad Affairs	Div of Management	962000
		Information	
UIUC	Provost & VC Acad Affairs	Undergraduate Admissions	593004
UIUC	Provost Academic Programs	Illinois Informatics Institute	468000
UIUC	Public Affairs	Office of Web Services	234000
UIUC	University Library	Library Admin	540013
UIUC	Veterinary Medicine	Vet Medicine Administration	444033
UIUC	Vice Chancellor for Research	Supercomputing Applications	320000
UIUC	Vice Chancellor for Research	Supercomputing Applications	320001
UIUC	Vice Chancellor for Research	Supercomputing Applications	320002
UIUC	Vice Chancellor for Research	Supercomputing Applications	320003
UIC	Architecture and the Arts	Architecture & Art Admin	894009
UIC	Healthcare Systems, UIC - Med	Administration Services	467008
	Ctr		
UIC	Healthcare Systems, UIC - Med	Administration Services	467011

Campus	College Title	Department Title	Organization Code
	Ctr		
UIC	Healthcare Systems, UIC - Med Ctr	Support and General Services	466006
UIC	Office of Admissions & Records	Office of Systems and Services	667000
UIC	Provost & VC Acad Affairs	Academic Computing & Comm Ctr	424000
UIC	Provost & VC Acad Affairs	Academic Computing & Comm Ctr	424001
UIC	Provost & VC Acad Affairs	Vice Chanc for Academic Affair	501001
UIC	Provost & VC Acad Affairs	Vice Prov Resource Plng & Mgmt	390003
UIC	Provost & VC Acad Affairs	Vice Prov Resource Plng & Mgmt	390014
UIC	School of Public Health	Ctr for Adv Dist Educ Pub Hlth	443000
UIC	School of Public Health	Ctr for Adv Dist Educ Pub Hlth	443002
UIC	School of Public Health	School of Public Health Admin	706001
UIC	School of Public Health	School of Public Health Admin	706002
UIC	School of Public Health	School of Public Health Admin	706003
UIC	School of Public Health	School of Public Health Admin	706004
UIC	School of Public Health	School of Public Health	706005

Campus	College Title	Department Title	Organization Code
		Admin	
UIC	Vice Chancellor for Research	National Ctr for Data Mining	403000
UIC	Vice Chancellor for Research	Vice Chancellor for Research	250002
UIS	Chancellor	Office of Web Services	483000
UIS	Provost & VC Acad Affairs	Information Technology Svcs	305000
UIS	University Library	Ofc Tech Enhanced Learning	840000
UA	Admn Info Technology Services	Admin Info Technology Services	699000
UA	Admn Info Technology Services	Admin Info Technology Services	699001
UA	Admn Info Technology Services	Admin Info Technology Services	699002
UA	Admn Info Technology Services	Admin Info Technology Services	699005
UA	Admn Info Technology Services	Admin Info Technology Services	699007
UA	Admn Info Technology Services	Admin Info Technology Services	699008
UA	Admn Info Technology Services	Admin Info Technology Services	699009
UA	Admn Info Technology Services	Admin Info Technology Services	699010
UA	Admn Info Technology Services	Admin Info Technology Services	699011
UA	Admn Info Technology Services	Decision Support	661000
UA	Admn Info Technology Services	Decision Support	661001
UA	Business & Financial Services	OBFS - Business Info Systems	204001
UA	Business & Financial Services	OBFS - Business Info Systems	204002

Campus	College Title	Department Title	Organization
			Code
UA	Business & Financial Services	OBFS - Business Info Systems	204003
UA	Business & Financial Services	OBFS - Business Info Systems	204007
UA	Business & Financial Services	OBFS - Business Info Systems	204008
UA	Business & Financial Services	OBFS - I-Card	835001
UA	UIF and Alumni Association	Alumni Relations & Records	637003
UA	University Audits	Office of University Audits	848003
UA	VP for Academic Affairs	CARLI	292000

## **Cube Data Element definitions**

See Cube definition sheet.