Census Decision Center

Product Vision

For: GW Decision Makers
Who: Desire a simple way to access, use, and understand Census Information
The: Census Decision Center
Is an: Integrated source of Census data
That: provides easy to use information that spans multiple years and can be consumed in multiple ways (Reports, Ad hoc queries, Dashboards, etc...)
Unlike: Distributed Census reports
This Product: Will be easy to use, visual, automatically updated, secured, and certified

New Products:

Census data is data that is captured at a certain pre-determined date in a term and is used for reporting to external agencies. It is also used internally at GW for planning and budgeting purposes. Data for this project from the last five academic years is being provided by the Office of Institutional Research. In the next phase of this project, the data will be pulled directly from source systems.

- **Census Student Registration** – Shows student registration taken at the beginning and end of a term.

Availability:

- The BETA version is available to a select group of users in the Office of Institutional Research and Enrollment Management.
**Thoughtspot Implementation**

**Product Vision**

For: GW Faculty and Staff  
Who: Need to quickly answer questions using data from the University Data Warehouse  
The: Plan to bring ThoughtSpot into the BI environment  
Is an: Implementation of a key word search based BI tool  
That: Will allow customers to answer question in a self-service format  
Unlike: Our other BI tools (Cognos, Tableau, Linkurious) that need reports/dashboards custom made for users  
This Product: Does not require BIS intervention to meet the customer’s needs.

Thoughtspot is a new tool that has been added to the Business Intelligence (BI) environment. It will provide search-based BI capability to GW users, reducing time-to-insight for many ad hoc data needs.

In this Release, the Thoughtspot appliance was delivered, racked, networked and connected with the rest of the BI environment. Data has been loaded from the data warehouse for Student Course Registration.

* think Google

**New worksheet:**

- **Student Course Registration Worksheet** provides a user-friendly package of data elements, intended to provide UDW users with a way to search terms they are already familiar with and examine trends over time, course taking patterns, rosters, credits generated, and more.

![Sample of a search using Thoughtspot](image)

In the next Release, Thoughtspot will be made available to a select group of test users.

Learn more about Thoughtspot: [https://www.thoughtspot.com/](https://www.thoughtspot.com/)
Linkurious and Neo4j Implementation

Product Vision

For: GW Faculty and Staff
Who: Need to understand the complex relationships and pathways between items
The: Plan to bring Linkurious and Neo4j into the BI environment
Is an: Implementation of a graph database BI tool
That: Allows users to understand complex relationships and path analysis in a user friendly and secure manner
Unlike: Our other BI tools (Cognos, Tableau, ThoughtSpot) that are used for relational databases
This Product: Natively reads Neo4j graph database content.

Linkurious and Neo4j are new tools that have been added to the Business Intelligence (BI) environment.

Neo4j is a NoSQL graph database management system developed by Neo Technology. Unlike traditional relational databases like Oracle or MySQL that utilize tables to store data, a graph database is intended to capture relationships between entities using nodes and relationships. Today, Neo4j is used by thousands of companies and organizations in almost all industries. Use cases include matchmaking, network management, software analytics, scientific research, routing, organizational and project management, recommendations, social networks, and more.

Linkurious is graph visualization software meant to enable users to easily navigate the graph database and discover patterns in the data. Linkurious is best known for helping the International Consortium of Investigative Journalists (ICIJ) expose the connections behind the Panama Papers in 2016.

In this Release, the community edition of Neo4j and Linkurious v1.8.3 have been installed and connected to the BI environment. This puts BI in a position to be able to load graph data sets into Neo4j and analyze them using Linkurious.

Sample of a graph visualization using Linkurious

Master Data Management

[Master data management (MDM) is a method used in enterprises with multiple siloed applications. MDM provides users with a single trusted view of critical shared entities.]

LOCATION – Location is BIS’ first foray into Master Data Management. Using data maintained by the Division of Operations, information about all GW buildings has been brought into the data warehouse, including the building name, address, longitude, latitude, floors and rooms. In the future, data about locations from other applications (such as Banner and Housing) will be integrated with this data.

Pre-Award Decision Center

Product Vision

For: Principal Investigators, Office of VP for Research (OVPR) and Schools
Who: Desire a simple way to access, use, and understand Proposal/Pre-Award data
The: Pre-Award Decision Center
Is an: Integrated source of Proposal/Pre-Award data
That: Provides easy to use information that spans multiple years and can be consumed in multiple ways (Reports, Ad Hoc queries Dashboards, etc…)
Unlike: Manual requests for updates
This Product: Will be dimensional at the detail level, automatically updated, secured, and certified

The Pre-Award Decision Center is an extension of the Principal Investigator’s Dashboard where users will be able to view the status of award proposals submitted to different funding agencies. Users will also be able to stay informed about an award’s setup status.

Additional Features:

- Award Tracking Portal (ATP) Proposal – Shows award proposals that have been submitted to Cayuse that are waiting to be funded or have already been funded.

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Availability:

- The BETA version is available to a select group within the Office of the Vice President for Research.
Human Resources Decision Center

**Product Vision**

For: GW HR Decision Makers  
Who: Desire a simple way to access, use, and understand Human Resources Information  
The: HR Decision Center  
Is an: Integrated source of Human Resources data  
That: Provides easy to use information that spans multiple years and can be consumed in multiple ways (Reports, Cubes, Dashboards, etc...)  
Unlike: SQL reports and manual spreadsheets  
This Product: Will be easy to use, visual, automatically updated, secured, and certified

**Modified Features:**
- To accommodate the changes in Banner brought about by the re-alignment with the EAS Chart of Accounts, the Activity and Banner Index dimensions were added to the HR Payroll Labor Distribution model in the data warehouse. This allows Finance Directors to match labor distributions in Banner and its corresponding financial transaction in EAS with ease.
- The Chart of Accounts re-alignment also affected reports run by the Grants and Contracts Accounting Office for Labor Effort. Several reports were modified in this Release.

Advancement Decision Center

**Product Vision**

For: GW Development and Alumni Relations Decision Makers  
Who: Desire a simple way to access, use, and understand Advancement Information  
The: Advancement Decision Center  
Is an: Integrated source of Advancement data  
That: Provides easy to use information that spans multiple years and can be consumed in multiple ways (Reports, Cubes, Dashboards, etc...)  
Unlike: Cognos reporting from Ellucian Advance  
This Product: Will be integrated with other GW ERP data, easy to use, visual, automatically updated, secured, and certified

**Modified Features:**
- With the conclusion of the “Making History” fundraising campaign, the data source for the GWU Campaign Dashboard was frozen to include only transactions till the end of fiscal year 2017 (6/30/2017).

GW Crime Trends and Locations

**Product Vision**

For: The Office of Safety and Security (OSS) and the GW Police Department (GWPD)  
Who: Desire a simple way to access, use, and understand service and crime trends on campus  
The: GW Crime Trends and Locations  
Is an: Integrated source of campus crime data  
That: Provides easy to use information that spans multiple years and can be consumed in multiple ways  
Unlike: List based detail reports  
This Product: Will be easy to use, visual, automatically updated, secured, and certified

**Modified Features:**
- The GW Crime Trends and Locations Dashboard was improved to make it easier to use and present to the Board of Trustees. The Office of Safety and Security and the GWPD are the primary users of this dashboard.
Student Lifecycle Decision Center

**Modified Features:**
- The Course Start Date and End Date were added to the data warehouse to allow Finance to pull the information easily and account for undergraduate tuition distribution by fiscal year.

**GW Housing**
- The BIS team worked with GW Housing to create and publish a Residence Hall Move-In Information visualization on Tableau Public to help inform students where to go on move-in day.

**Availability:**
- View the full [Residence Hall Move-In Information](#) viz.
First Destination Dashboard

**Product Vision**

*For:* GW Community and the General Public  
*Who:* Are interested in the success rate of GW students in finding jobs after graduation  
*The:* First Destination Dashboard  
*Is an:* Interactive and visualization tool  
*That:* Provides the results of graduation-related surveys taken by GW students  
*Unlike:* A static infographic on paper or PDF file  
*This Product:* Is interactive and can be accessed by anyone online

Developed for the GW Career Center and in partnership with the Survey and Research Analysis (SRA) Office, the First Destination Dashboard provides details about post-baccalaureate outcomes of GW students. It includes post-graduation activity including employment, graduate school, volunteer or other activities.

The data used for the First Destination Dashboard comes from graduation surveys and is integrated with student data from the data warehouse. The dashboard is being developed by SRA using Tableau Desktop with data coming from the data warehouse via Tableau Server.

**Additional features:**

- Added industry and volunteer organizations to the data model so users can use them to filter the dashboard.

**Availability:**

- View the full [GW First Destination Dashboard](#).
Principal Investigators (PI) Dashboard

Product Vision
For: Principal Investigators
Who: Would like to manage their awards
The: PI Dashboard
Is an: Interactive visualization tool
That: Provides key information and metrics
Unlike: Compiling data from different sources and merging them together in spreadsheets
This Product: Can be accessed online or on mobile devices, is secure, and pulls data from the data warehouse

Modified Features:
- Changes were made the Award Management Actual Expenditure model in the data warehouse. The account number of the Sponsor was added to the lookup in order to correctly identify the Sponsor for an Award.

Business Intelligence Services (BIS) Strategic Initiatives

Tableau Upgrade:
- To avail of the latest features, Tableau Server has been upgraded from version 10.2 to 10.3.2. This is expected to resolve the following issues:
  - Tableau Issue ID #649063: In some cases, extracting a published data source would unhide hidden fields in the data pane.
  - Tableau Issue ID #670693: Extracts on Tableau Server with hidden columns could sometimes be unhidden during an extract refresh.
- Desktop users with current licenses are advised to upgrade to version 10.3.2 especially if the workbook will be published on the server.
- To find out what’s new in Tableau 10.3.2, please visit Tableau’s website.