Welcome!
Notes about the BI Initiative

- Conversation about development of a BI system began in early 2012
- Initial conversation with data stewards, April 2012
- Merger of two projects – IS Project to replace the existing data warehouse and BI Query and the new Business Intelligence (BI) Initiative
- Project design, development & discussion, May 2012-December 2012
- Business Intelligence Center team formed in April 2013
- Provost BI Initiative kicked off with community event in May 2013
- CORE launch – June 2014
- The rest is history...
• CORE is a user-centric, web-based system
  • Accessible from any device & any where in the world.
  • Available 24 hours a day, 365 days a year
  • Automatic access with active employee record in Banner
• Released in June 2014 with approximately 200 reports available
• Replacement for obsolete reporting system, BI Query
  • BI Query Finance Data Warehouse decommissioned on 12/31/2016
• Currently there are over 1,000 reports available
• Access to certain data is limited by user security level
• More information available to OSU employees than ever before
• **Data source** – ODS (Operational Data Store)
  • Twice the size of Banner data tables
  • 3 TB of data available
  • Data available in ODS – Has all data since initiated
    • Millions of rows of data
    • Finance Data back to 1995
    • Student Data back to 1968
    • Human Resources Data back to 1998
• Awards have led to multiple presentations across the country about CORE
• The work of the Business Intelligence Center team and Michael Hansen is what has made the awards and presentations possible
• OSU is hosting the Higher Education Data Warehouse (HEDW) national conference in April 2018
• Access to data at OSU comes with responsibility for securing the data.
• Employees are responsible for understanding the University's policies on data, Acceptable Use of University Information and Information Security
Data Security & Responsibility

Who has access to CORE?

Access - Who?
• All OSU Classified & Unclassified employees have access to CORE
• Some students have access to limited financial information
• Position access levels defined by the university data stewards for finance, student, HR, etc.

How do I get access to CORE?

Access - How?
• Access is automatic, based on your job/position classification as recorded in Banner
• If you change departments or positions, your access to CORE may change

What happens if I change jobs?

Job Change?
• If you change jobs within your department, your access level may change. Access levels are determined by your position classification. If your positions have the same security level, you may not see any change in access.
• If you change departments and jobs, your access level most likely will change.

Are there exceptions?

Exceptions?
• Banner overrides – determined by Banner security classes
• Other exceptions – Require approval by the applicable data steward
• CORE security access levels are determined by the Principle of Least Privilege
• Level One – Aggregate summary of data, no details visible to the viewer, i.e. Budget Index look up
• Level Five – Highly sensitive data, details; very limited access; restricted access to human resource and student information
For example:

- A Buyer 2 has Finance Security access at Level 4 but only Level 1 for HR and Student. This is based on their job responsibilities and data necessary for their work.
- An Academic Advisor has a Student Security access Level 3, but Level 1 for Finance and HR. Once again, the rationale for access is determined by the need to know.
- A Trades Maintenance worker, however, has Security Level 1 for all data areas. This position typically does not require access to more data detail.
Data Access = Responsibility

- **ALWAYS** ensure the security of data
- **NEVER** share username and password
- **DO NOT** use another person’s credentials

[fa.oregonstate.edu/infosec-manual](fa.oregonstate.edu/infosec-manual)

- Access to data at OSU comes with responsibility for ensuring the security of the data
- Never share your username and password with others
- Do not use someone else’s username and password to access information or input data
• You are responsible for the security of OSU data that you print, copy, download, or save on other systems or databases.
• What if a data breach was caused by you?
Responsible Research
Using CORE data for Research?
Know the rules first
Contact the
Office of Research Integrity
for more information

research.oregonstate.edu/irb
Any Questions about Security?

"Mr. Osborne, may I be excused?
My brain is full."
• The Business Intelligence Center systems development team recommends you use Chrome or Firefox for accessing CORE, GRS or any of the Foundation Systems.
• All versions of Internet Explorer and Microsoft Edge, create problems with these systems, ranging from missing data to blank Nolij documents. Report formats may not line up as intended.
Where to find a link to CORE

- **Bookmark:** core.oregonstate.edu
- **OSU Home Page**
  - Tools & Services – type CORE in Search Box
  - OSU Faculty & Staff Page
    - Support Services > CORE Reporting
    - myOSU, Admin Tools
    - Support Services – type CORE in Search Box
- **Finance & Administration Home Page**
  - Units (BIC or CORE)
- **Budget & Fiscal Planning Home Page**
- **Business Intelligence Center Home Page**

- The best method for quickly accessing CORE is to add a bookmark in your browser.
- OSU website search – enter CORE Login.
- Other options for links to CORE include the OSU Home Page, locate the Tools & Services link, click and type CORE in the search box.
- From the OSU Faculty & Staff Page – Links are found under the Tools & Services, myOSU and under Support Services.
- Finance & Administration Home Page under Units. Links available either under BIC or CORE.
- Office of Budget & Fiscal Planning Home Page
- Business Intelligence Center Home Page
- This is not an exhaustive list of CORE link locations.
- Search using Google: **CORE (all capital letters) Reports**, it will bring up a lot of options but OSU’s CORE will be there.
Terms of Use, FERPA & Welcome Pages
If you have logged in to CORE before, you can skip this slide.

- The first time you log in to CORE, you are asked to review and agree to the Terms of Use and whether or not you have completed the FERPA Tutorial (if required by your position).

CORE Terms of Use Agreement & FERPA
1. First time users and each year thereafter, CORE users are reminded to review the policies related to information security at OSU. Users are highly encouraged to click on the links and review the policies initially and then annually.
2. Once you have completed review of the policies, acknowledge your agreement by checking the box and clicking accept.
3. The next window populates the FERPA Tutorial Requirement for access to student information.
4. If, however, you will be accessing student information and have not yet completed the FERPA Tutorial, you will need to do so before you can access student data beyond Security Level 1. Click either the link to the tutorial or OK to proceed.
5. For first time users, the Welcome Page will appear offering information and links to resources for first time CORE users.
Parameter boxes in CORE reports, have multiple selection styles for narrowing data returned. The reports in CORE are designed on cascading parameters, the order from which data elements are pulled together in the report. You will see the parameters numbered 1), 2), 3), 4), etc. Any numbered parameter box must contain a value or your report will display an error message.

1. **Single Value Input Box** – Keyed entry. Allows only a single (one) value at a time. In this case you can only enter one Index code. Copy and paste of the single value is allowable.

2. **Multi-Value Input Box** – Keyed entry. Appears as a single value box, with an arrow on left but once you click the arrow, a blank dropdown box appears. Allows for multiple values in a single column, one per line. You can copy an existing list from an Excel workbook, Word document, etc. and paste the list into the box. Remember there can only be one value per line.

3. **Single Select Dropdown** – This style only allows a single selection based on the values/options in the dropdown list.

4. **Multi-Select Dropdown** – The multi-select dropdown allows you to select multiple values from the list. Note the triangle in the lower right bottom corner. This allows you to drag the window down revealing additional values. Note: Selecting a large number of values may increase the run time for the report or may cause it to fail.

5. **Radio Buttons** – This selection style is often available for “optional” changes. Reports will always have the default selected. It is up to the user to select the secondary option.

6. **Wildcard (%)** – A parameter box with a percentage sign (%) allows the user to enter only a partial value. This is really handy when you want to recall a number of different values or cannot remember the entire sequence of a alpha or numeric value. For
example, in this case, you cannot remember more than the first two numbers for the Supplies Accounts Listing, and you are looking for the Computers account code. You can enter 20% to bring up all the account codes which begin with 20.

7. Another item of note is **entry format for a year**. The standard format in CORE is the four digit style, i.e. 2-0-1-7. The team has been working to convert all reports to the four digit format. If you encounter a report that only uses two digits, please send a note with the report number to core.bic@oregonstate.edu.

8. **Dates** – Dates usually have a calendar feature; enter dates as MM/DD/YY or m/d/yy but do not separate the month, day and years with dashes.
Log in to CORE, core.oregonstate.edu

**Enrollment Dashboard**

1. **Term** – Current and Prior comparisons
2. **Days into term**. Not matched by calendar date but by the class day number into the term.
3. **Campuses** – [click on Enrollment Dashboard and it opens a larger view]
   a. Click on Past Term for another perspective
   b. College, Class, Student Type, Student Status & Residency buttons open new windows of detail for the categories
   c. Close the “Daily Enrollment Dashboard” tab
4. **Daily Enrollment Details**
   a. Current Year & Prior Year by day in term. Notice the differing calendar dates between the two years.
   b. Click on a plus sign next to the campus, and detail by college appears
5. **Chart** – Current vs. Prior Year Enrollment
   a. Sandwich/Hamburger (three lines) options for exporting the chart
   b. Term – Drop down list, single select option
   c. Campus – Drop down list, multi-select options; turn on/off the campuses you want to include in the report
   d. Hover over a chart column to see the number of students presently enrolled in majors of that college for current and prior term.
   e. Double-click on the chart column to reveal information for the schools and departments within the college. Once again, hover over the columns for
current and past enrollment counts.

6. To get **back to the CORE Home Page**, click on the OSU icon in the upper left hand corner. This feature works on every page.
CORE – Top Menu Bar

The top menu bar provides easy access to a lot of different information in CORE. Mentioned before, the Oregon State University icon always returns you to the CORE home page. We are going to skip the Search button for the moment.

1. **uReports Button** – uReports is the CORE Library of Reports
   a. Click on uReports, and the listing of report categories appear. The reports you see in the Library of Reports is determined by your employee position classification and CORE security level. My access is not that of a typical CORE user.
   b. We will come back to the uReports page in a bit.

2. **uDashboards Button** – The dashboards designed have typically been for senior executives who need snapshots of current data. The chart format makes it easy for quick drilldowns to more detail.

3. **Data Analytics Button** – Data Analytics in CORE is supported by TIBCO Jaspersoft, a third-party software BI analytics tool. Jaspersoft is not available to all CORE users as a business use must be demonstrated before access is provided. Many people have discovered that CORE, as it is currently, is meeting their data needs. The feature, *Ad Hoc Lite*, is an analytics tool within CORE. We will not be addressing Jaspersoft as part of this training session.

4. **Help Button**
   a. Within *Help & Training*, you will discover helpful information and support documents, such as the CORE help video. Although some references are not up to date, the information about CORE remains essentially the same.
b. **Contact Us** – Links to the BIC Website, BIC email, Grant Reporting System (GRS) and OSU Foundation Systems.

c. Link for subscribing to the weekly *CORE Update*.

d. Help documents for the various BIC supported systems.

e. More information and resources are found at fa.oregonstate.edu/bic/CORE/core-help.

1. **More Button** – Links to Other Systems, Documentation, Employment Classification and Security, FERPA & Terms of Use Agreements are found on this page.

2. **Your Name Here** Dropdown Button
   a. Your Business Center with email address and central telephone number
   b. **My Profile Button**
      i. **Edit Button** – The edit button allows for limited editing of personal information in **CORE only**. You can enter a preferred first name, last name and email. This is also the location for disabling your OSU ID photo in CORE so that it is not available to viewers. These changes only affect your information in CORE; will not carryover to Banner.
      ii. **CORE User Detail**, first & last names, ONID, latest terms of Agreement acceptance date, FERPA, and more
      iii. **CORE Security Domains**
      iv. **CORE Roles**
      v. **User Banner Data**
      vi. **User CORE Job Positions**
      vii. **User Banner Employment Data**
      viii. **Banner Security Classes**
      ix. **Grant Reporting System (GRS) Roles**, if applicable
      x. **CORE Login History**
      xi. **CORE Record Access History** – A list of those people who have viewed your employee profile.

c. **Logout Button** – Click to exit CORE
CORE Search Box Demonstration & Practice

One of the most robust features in CORE is the search function. The BIC Team put time and effort into this function as it is often the easiest way to locate what you are looking for. Additionally, you will see how the Wildcard (% sign) feature we discussed earlier works.

Using the Search Box, practice searching using the following elements:

1. First Name: Enter your first name (click)
2. Last Name: Enter your last name (click)
3. OSU ID: Enter your OSU Id number (click)
4. ONID: Enter your ONID (click)
5. Index Code: Enter an Index Code
6. Grant Code: Search using a Grant Code (if applicable)
7. Report ID: FIN1901
8. Report Name using a Wildcard: Trans% (transactions)
9. Course ID: MTH111
10. Key Words: Enter the word frog – Try again by entering a string of words and you are likely to find the report you are seeking.
uReports Page

- The CORE Library of Reports are categorized by Data Areas, such as Enrollment Management, Finance Data, Human Resources, Student, etc.
- Access to Data Areas is determined by your employee classification or job profile, and access within the Data Area is driven by your Security Level (1 through 5).
- So let’s get started at the top by reviewing the features and functions of the uReports page.

1. Below the **menu bar there are five buttons**.
   a. **What’s New?** – Clicking on this button displays the most recent reports (last two week period) developed by the BIC team. The new reports displayed is based on your user access levels. *(Do not return to the uReports page or the home page. Just proceed and the Collapse/Expand feature will only do so for the What’s New list.)*
   b. **Expand/Collapse All** – Clicking on expand/collapse all does exactly what it says, it expands the list of reports to reveal all the reports or collapses the expanded list back to the report categories display.
   c. **BI Query Reports** – This button opens a listing of reports by Data Area. The reports in this section are all of the BI Query screens with links to corresponding reports duplicated in CORE. Most of the CORE versions have more capability than those originally available in BI Query.
   d. **Show Previews** – The list of reports in the Data Areas are in a chart format. By clicking on show previews, the report information now includes a preview of the report, expected run time and the report popularity ranking. Clicking on the
report image brings up the page to parameterize and run the report.

e. **My Favorites** – Is the location where your preferred reports are saved for future use. Please note, Favorites does not save your select parameters. We will discuss this in more detail shortly. (See CORE help for more information.)

1. **Recent Reports** is located below the Library of Reports (if not visible on your monitor). This section lists the CORE reports you have ever viewed including last accessed, first accessed and the access count.
   a. The Go to List button produces a report with all the reports information.
   b. Note that Recent Reports opens in a new tab. **All CORE reports** open in a new tab rather than over the window from which you are working. This helps to prevent getting “lost” while accessing reports.
   c. Note the double arrow next to the header titles. The double arrow is a sort feature, which is found in numerous CORE reports. When you need to sort data, look for the double arrow in the report header before exporting to Excel. It may just save you some time.
      i. In the instance of Name, by clicking on the down arrow the list sorts alphabetically, descending (A to Z). Click on the up arrow and the list reverses (Z to A).
      ii. Last and first accessed sort based on date, Down arrow – Oldest to Newest; Up arrow – Newest to Oldest.
      iii. Access Count provides the number for how many times you have accessed the particular report. Down arrow is descending (lowest to highest) and the Up arrow is ascending (highest to lowest).

2. Below Recent Reports is the **Budget Index Search** feature, which has been referred to by other names over the years. This simple search system provides high level (Security Level 1) finance data.
   a. Select a Fiscal Year (it defaults to the current fiscal year).
   b. Enter an Index Code
   c. Optional – Enter an Activity Code
   d. Click Search
   e. Note the report produced is a different color and layout, and data rolls up to a high-level account code. You can drilldown but only summary information is presented.

3. At the **bottom of the uReports screen** are links to:
   a. OSU Home page
   b. OSU Official Web Disclaimer
   c. Acceptable Use of University Information
   d. Contact Us (Contact the BIC webform)
uReports – CORE Library of Reports, Data Areas

- The CORE Library of Reports are categorized by Data Areas, such as Enrollment Management, Finance, Human Resources, Student, etc.
- Access to Data Areas is determined by your employee classification or job profile.
- For CORE demonstrations we use OSU Finance Data because information is typically available to most OSU employees and does not contain Protected or Sensitive Information (see CORE Data Security for more information).
- Let’s review some of the report features within CORE. We will be using the Transaction Ledger, Report number FIN1900, Transaction Details by 1 Index and Fiscal Period (which is located in the Finance Data Area) for this demonstration.

1. Click on the Finance Data Area and the report sub-categories populate. Next, expand the list of reports available in the Transaction Ledger by clicking the plus sign (+).
2. The chart header includes the uReport title, Report ID (number), (summary) Description (of the report), and Manage Favorites and Information buttons.
   a. The double arrows located in the title, ID and description boxes are for sorting reports. The default format for the Transaction Ledger reports is alphabetical listing by title. Practice by clicking on the arrow next to the the Report ID in the header, click on the down arrow.
   b. Unfortunately, the current software version, collapses the list (in this case the Transaction Ledger list of reports) upon re-sort and returns you to the Data Area. Once you return to your list of reports, you will discover the re-sorted order. We hope when the software is upgraded, this will no longer be a challenge.
3. Often times you will discover that by **hovering over a button**, further instruction will appear. [Move cursor over the heart and info icons.]
   a. The *Manage Favorites* button allows you to either save or remove the existing report in *My Favorites*. It is not necessary to first run a report to save it to My Favorites as this option does not include retention of your select parameters. More about saving reports with parameters in a bit.
   b. Click the *Heart* button, which opens in a new tab the requirement you confirm this request. When you want to remove report, a confirmation page also appears.
   c. Clicking the *Info* button opens a *CORE Report Information* window.
      i. From this window you can open a sample report (preview). This is a great option for seeing if the report data and layout will meet your needs.
      ii. There is additional information in the window, Required Permission, Data Sources (location of the data table), date of last modification to report, Report Purpose, and a link to the report Metadata. The Metadata provides a significant amount of information about the report. In the development of CORE, it was decided as much information as possible would be collected. One of the CORE features is the audit-ability of the system, knowing who has accessed what information.
• Continuing with the Transaction Ledger reports, we will use the **Transaction Details by 1 Index & Fiscal Period** report for this demonstration.

• To access the report, all you need to do is click on the report title of interest. Note the report ID number is listed next to the report title. Also, the question mark button takes you to the report Metadata page we view previously.

• Now it is time to enter the parameters. Note that parameter boxes with numbers may require some type of response from you. Think of these fields as “required”.

  1. Fiscal Year – The parameter format for this report is a **Multi-select** box. Before you scroll down the list, remember grabbing the triangle and dragging downward displays more dates. If you **Select All**, the report will likely run for a really long time. We have a run time limit on reports so no data will be returned. Just because the data is available does not necessarily mean you need to access it all at one time. Select the current and/or prior fiscal year. Enter.

  2. Index Code – The parameter format for this element is **Single-entry** box. Enter an Index Code in the box. Enter.

  3. Account Code – The **Wildcard** (percent sign) is featured in this parameter. If you want to target a specific account code (enter the number and remove the percent sign) or account code category. For example, Supplies & Services (excludes travel as the account code begins with a 3), enter 2% as this brings back all account codes beginning with 2. This field defaults to all account codes if you leave the Wildcard in the box.

  4. Fiscal Period – A parameter box with the **Multi-select** option. Select the fiscal periods for the data of interest. Note the box only displays the fiscal periods for
which data is available. If there is no data for a fiscal period, the option will not be available.

5. **JV Type** – This box demonstrates a *Single-select* parameter box. Defaults to Expense Transactions only.

6. **Activity Code** – A *Single-select* parameter to include or exclude Activity Codes. Defaults to Exclude Activity Code.

7. **Include Account Types** – A *Multi-select* parameter which defaults to Labor, General Expense, Transfer account types.

8. **Include Commodity Description** – *Radio Button* parameter that defaults to False.

9. **Include Coding Details** – Another *Radio Button* parameter which default set to True. Click *Review Report*.

- If you have a small monitor screen, click on the up arrow located below parameter 9. Hovering on the up arrow indicates the action, *Show/Hide Parameters*.

- A quick review of the report reveals a lot of information. When multiple fiscal periods are selected, this report defaults to fiscal period, date order format. The report header – double arrows for sorting data (that does not return you to the Data Area screen). Links to *Doc Code* details and *Nolij* images when available. Subtotals by Fiscal period, Expenses & Budget.
uReports Features & Functions

- **Far Left** - Report Paging.

- **Far Right** – Report **Actual** Run Time. Additionally, most reports have an orange triangle, which indicates numerically how far you have drilled down into that particular report.

- **Icon Buttons** – Functions: Hovering over icons provides function description. Help documents for these functions are found at fa.oregonstate.edu/bic/core/core-help.
  - Printer
  - Excel
  - PDF
  - CSV
  - Star
  - Heart
CORE Help Resources

Questions? core.bic@oregonstate.edu

CORE help resources: fa.oregonstate.edu/bic/core/core-help
A few CORE Reminders

1. **USE**: CORE *Search* function to find people, reports, etc.
2. **BROWSER**: CORE is acting funky, check or change your browser
3. **REMEMBER**: Data security is your responsibility!
4. **ENGAGE**: The listserv for Weekly Updates
5. **QUESTIONS**: Contact the BIC Team, [core.bic@oregonstate.edu](mailto:core.bic@oregonstate.edu)

Weekly Updates sign up link: [fa.oregonstate.edu/bic/core/core-updates](http://fa.oregonstate.edu/bic/core/core-updates)
Questions?
Be sure to contact the BIC for assistance.

Business Intelligence Center
fa.oregonstate.edu/bic - 520 Kerr Administration Building