VISUALIZING IPEDS DATA FOR YOUR UNIVERSITY-CENTRIC BENCHMARK REPORTS

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GONZAGA UNIVERSITY

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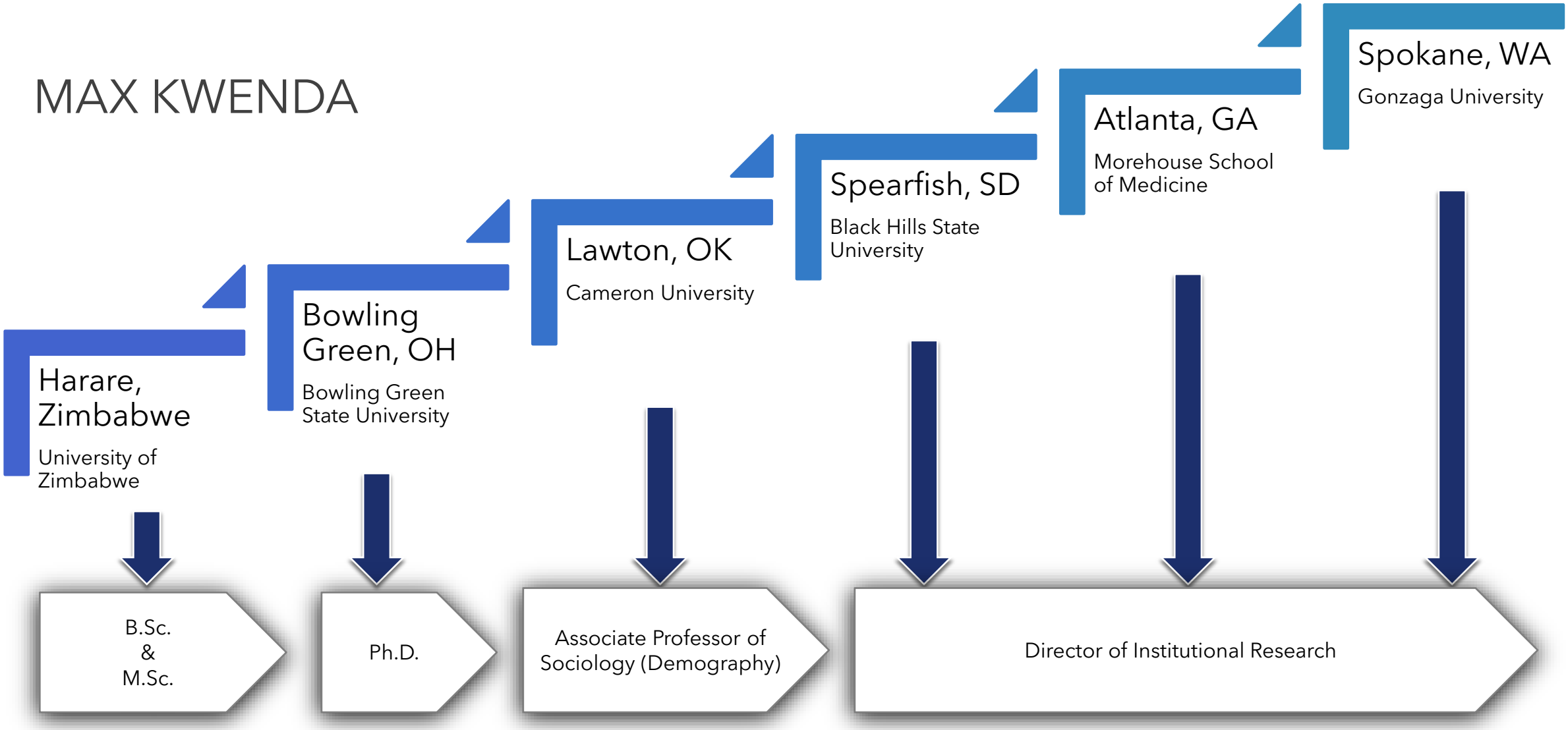
PRESENTATION AND BIOGRAPHICAL SUMMARY

- **PRESENTATION**: The objective of the webinar is to relay information through examples of how an institutional research office can utilize IPEDS data to create reports that center on institutional priorities. A brief discussion on data architecture is also included to give a sense of resources (time, skillsets) required to build and maintain these reports. The presentation is interwoven with the author's professional experiences.
- **BIOGRAPHICAL SUMMARY**: Max Kwenda is the Director of Institutional Research at Gonzaga University in Spokane, Washington. Max transitioned in Oklahoma from a tenured associate professor faculty position teaching demography to full-time administrative work in institutional research. He has worked in the same role at a regional public institution in South Dakota, an HBCU private-not-for-profit medical school in Georgia, and now, at a Jesuit-Catholic affiliated institution. His work with IPEDS has included data entry and Keyholder roles. Max has automated and/or improved the processes associated with submission of IPEDS data at all institutions that he has worked. Because of the increased strategic nature of his role, his work is now focused on using IPEDS data including other NCES data to provide contextual analyses associated with institutional internal metrics. Max is a member of the Association for Institutional Research (AIR), Pacific Northwest Association for Institutional Research and Planning (PNAIRP), and the American Educational Research Association (AERA). He is currently serving as PNAIRP's President. Max earned his bachelor's and master's degrees from the University of Zimbabwe and his doctoral degree from Bowling Green State University, Ohio.

OUTLINE

- Introduction
- Office of Institutional Research at Gonzaga University
- Examples of Benchmark Reports
  1. Accreditation Metrics
  2. IPEDS Gonzaga University Diversity Report
  3. IPEDS Human Resources Benchmark Report
  4. IPEDS Expenditure/Revenue Comparisons
  5. Institution Comparison Report
- Questions and feedback – “Take what you can and leave what you can't presentation”

MAX KWENDA


Harare, Zimbabwe
University of Zimbabwe
Bowling Green, OH
Bowling Green State University
Lawton, OK
Cameron University
Spearfish, SD
Black Hills State University
Atlanta, GA
Morehouse School of Medicine
Spokane, WA
Gonzaga University
B.Sc. & M.Sc.
Ph.D.
Associate Professor of Sociology (Demography)
Director of Institutional Research

INSTITUTIONAL CONTEXT

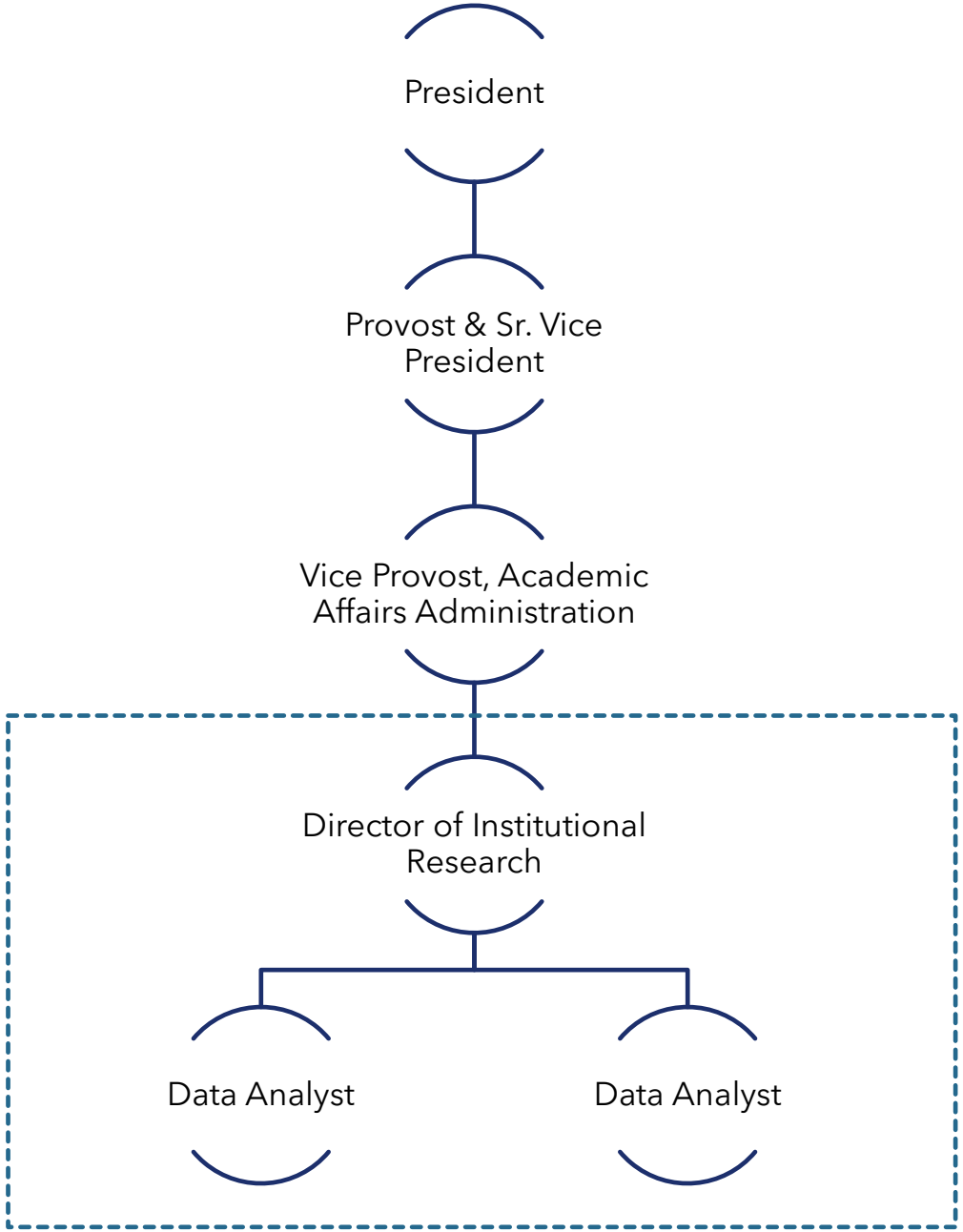
- Established 1887 in Spokane, WA
- Jesuit-Catholic Affiliation
- Carnegie classification: Doctoral/Professional University
- About 7,300 students (4,900 undergraduate & 2,400 graduate and Law students)

MISSION STATEMENT

The Office of Institutional Research serves the mission of Gonzaga University by performing objective, systematic research and analysis for the university's strategic and operational planning, decision making, and policy development that ultimately leads to the success of Gonzaga University students.

www.Gonzaga.edu/ir

Office of Institutional Research



WHAT WE DO

Institutional proprietary data

Access data gathered through proprietary systems – Banner, ZRM, Blackboard

Reporting

Compliance, accreditation, benchmarking, and ad hoc

Research

a. Serve as data repository
b. Provide linkages/analyses across disparate systems
c. Support academic and administrative research

GONZAGA IR DATA ARCHITECTURE & REPORTING FRAMEWORK

SOURCES

- BANNER
- DYNAMICS 365
- SLATE
- OTHER

EXTRACTION TOOLS

- ORACLE DATABASE
- Oracle SQL Developer
- Microsoft SQL Server
- Excel
- Power BI

VISUALIZATION & SHARING

- Microsoft SQL Server Reporting Services
- SharePoint
- Power BI SERVICE

IES NCES National Center for Education Statistics ☰ MENU Search Go

IPEDS Access Databases

About IPEDS: The Integrated Postsecondary Education Data System (IPEDS) is a system of interrelated surveys conducted annually by the U.S. Department of Education's National Center for Education Statistics (NCES). IPEDS annually gathers information from about 6,400 colleges, universities, and technical and vocational institutions that participate in the federal student aid programs.

Access Database: To eliminate the step of downloading IPEDS separately by survey component or select variables, IPEDS has made available the entire survey data for one collection year in the Microsoft Access format beginning with the 2004-05 IPEDS data collection year. Each database contains the relational data tables as well as the metadata tables that describe each data table, the variable titles, descriptions and variables types. Value codes and value labels are also available for all categorical variables. When downloading an IPEDS Access Database, the file is compressed using WinZip.

Prior to 2004-05 collection year, IPEDS data are not available in Access format. To access IPEDS data prior to 2004-05, please use either the Complete data files or Custom data files functions in the Use the Data's Survey Data.

IPEDS Final and Provisional Data Releases: Provisional release data have undergone all NCES data quality control procedures. Data are imputed for nonresponding institutions. These data are used for First Look (Provisional Data) publications and are released about one year after the initial data collection.

Final release data include revisions to the provisional release data that have been made by institutions during the subsequent data collection year through the Prior Year Revision System. The final release data can be used when the most up to date data are required; however, these data may not match tables from the First Look reports based on preliminary and provisional data. Final data are released about two years after the initial data collection.

Provisional data will not be available in the annual IPEDS Access Database when all survey components have been released as Final. Provisional data releases are still available in the Use the Data portal found on the IPEDS website.

Documentation for IPEDS Access Databases: All IPEDS Access Databases contain metadata tables that describe each data table and provide a list of the variables. The same metadata tables are placed in a WinZip Excel workbook to serve as a standalone reference without having to download an entire database.

Download an IPEDS Access Database:

Database Name	Documentation	Release Type	Release Date
2018-19 Access zip (73.3mb) | decompressed (532mb)	2018-19 Excel (IPEDS201819Tablesdoc.xlsx, 1391kb)	Provisional	December 2019
2017-18 Access zip (70.4mb) | decompressed (527mb)	2017-18 Excel (IPEDS201718Tablesdoc.xlsx, 1365kb)	Final	December 2019

IPEDS DATA SOURCE

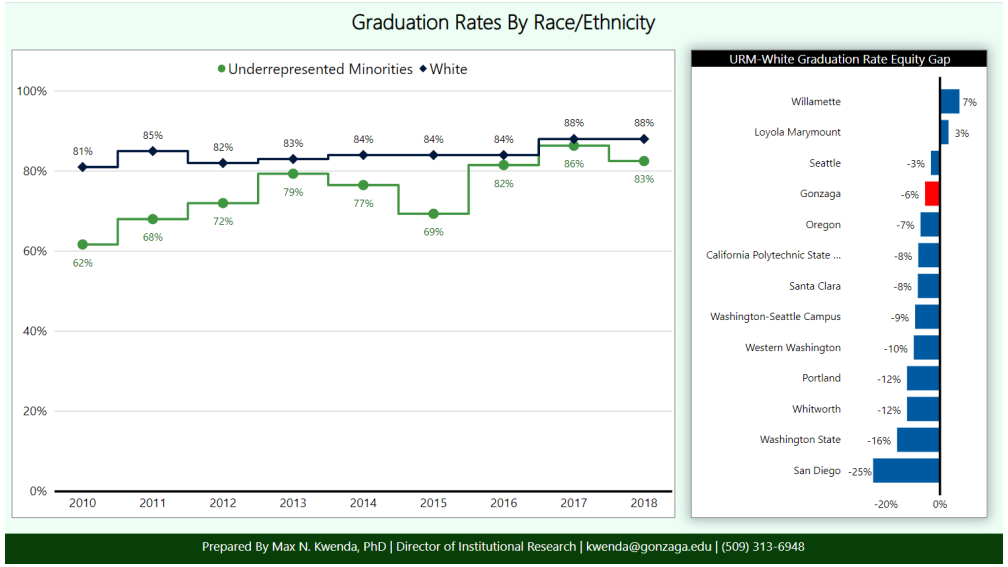
EXAMPLES OF SPECIFIC BENCHMARK REPORTS

WHY THESE REPORTS WERE CREATED

There are specific reasons why each report was created. However, there are overarching reasons why all these reports were created

1. Creating “useful” not just “interesting” reports
2. Everyone wants their own dashboard/report that tells their story
3. Defining the role of Institutional Research at Gonzaga University
    a. Fulfill the charge to be an institutional data aggregator
    b. Office bandwidth, skillsets, capabilities
    c. Office strategic goals:
        - Increase research output and reduce time spent on reporting (update datasets annually in December)
        - Move office to supply-side of data analytics (from reactive to proactive)
4. Relational institution where bureaucratic norms are not sufficient

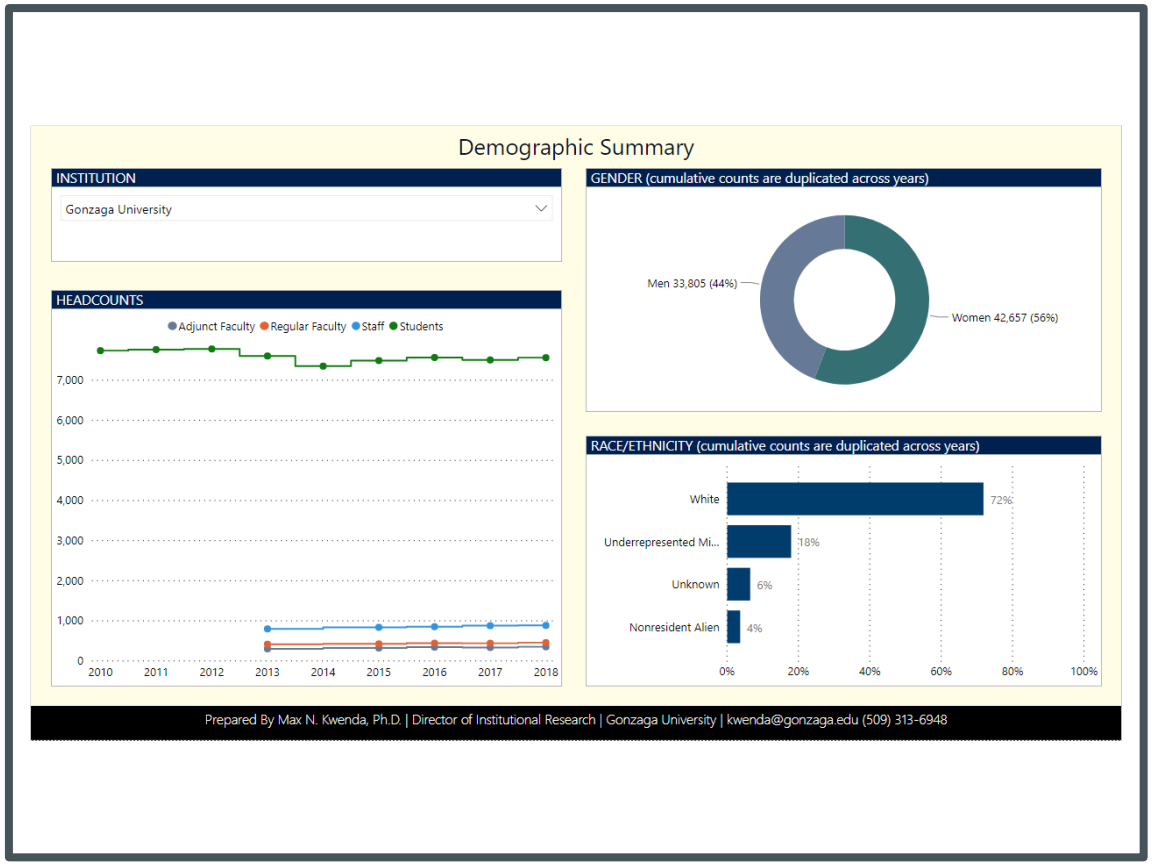
ACCREDITATION METRICS



Why this report was created:

- Requested by Accreditation Liaison Officer (ALO)
- Show key metrics specified by the NWCCU
- Show equity gaps (gender, race/ethnicity, and Pell status)
- Report is printable and can be posted publicly

DIVERSITY REPORT



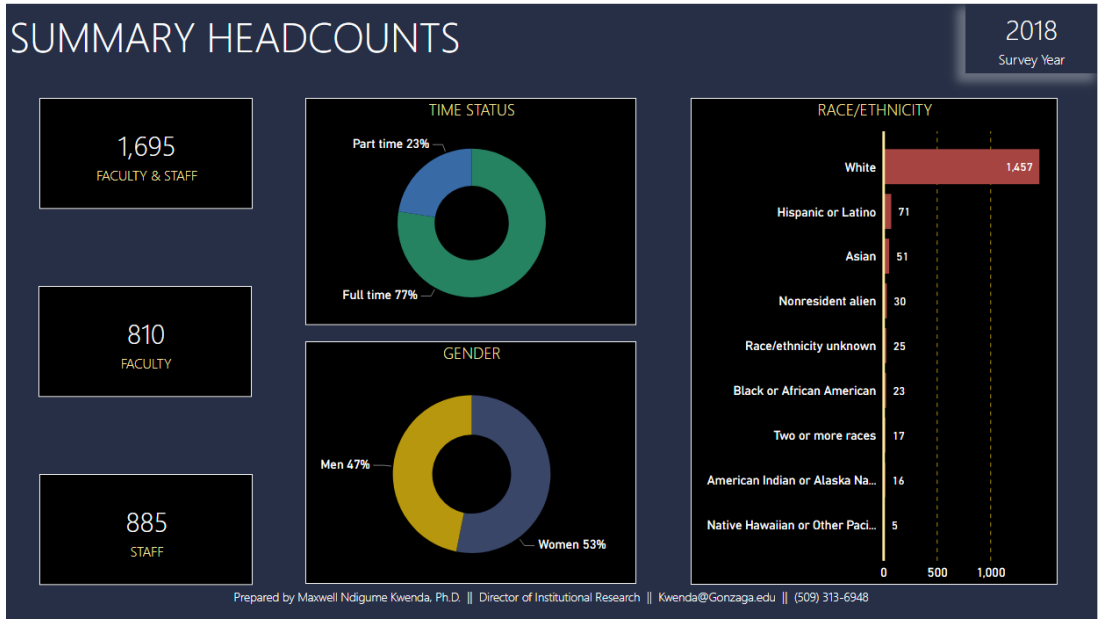
Why this report was created:

- Requested by the Chief Diversity Officer
- Have we met the strategic goal for diversity?
  - *"We cannot hold people accountable for data we do not share"* – Liz Lee, University of Portland
- Does faculty diversity mirror student body?
- Published on public-facing website

HUMAN RESOURCES BENCHMARK REPORT

Why this report was created:

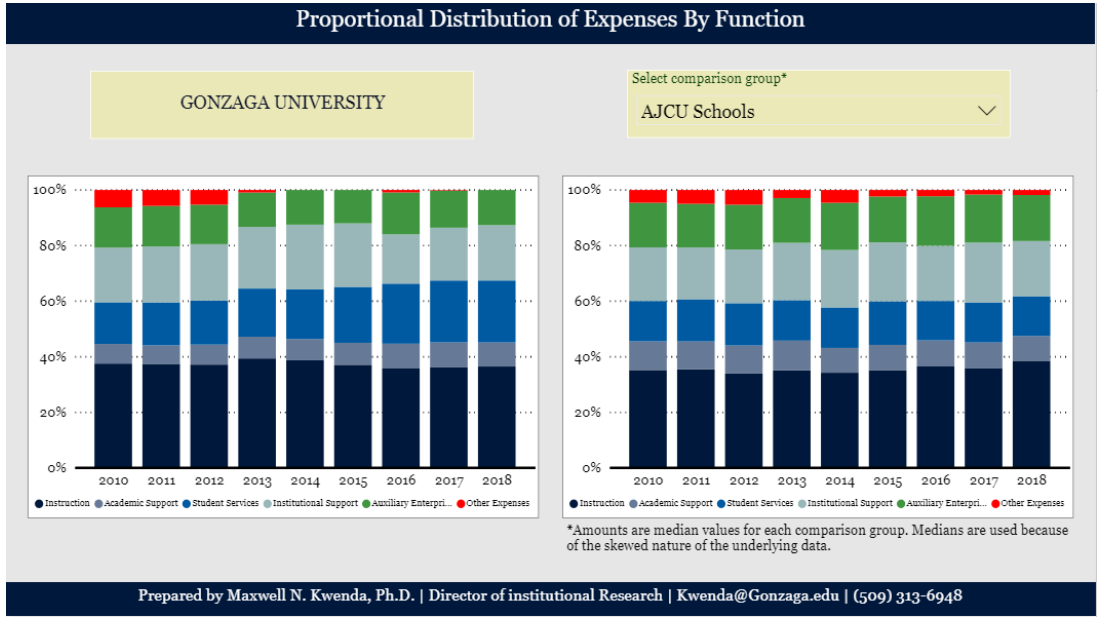
- Indirect requests from administrative offices wondering about employee metrics at other institutions
- Serve as a starting point for discussing “sensitive” HR data



EXPENDITURE/REVENUE COMPARISONS

Why this report was created:

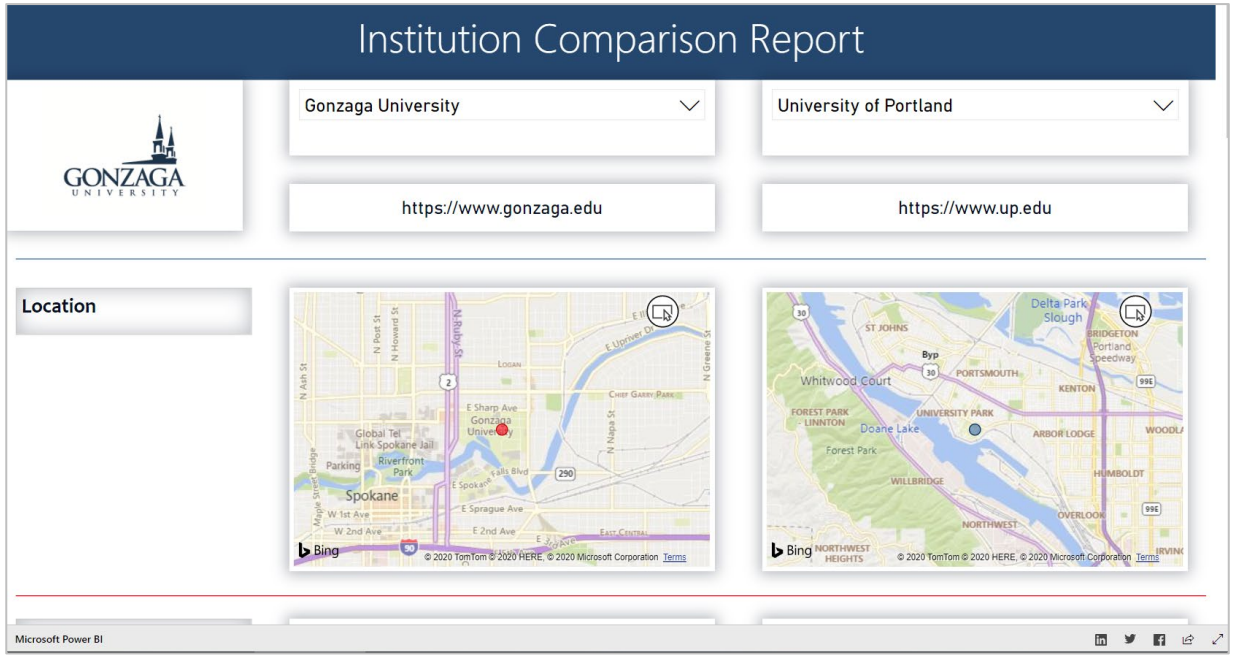
- Requested by the Assistant Controller
- Substitute for a manual/Excel report
- Include benchmark institutions used by other areas – how are we fiscally similar/dissimilar from other institutions?



INSTITUTION COMPARISON REPORT

Why this report was created:

- Marketing and Communications Office discussion
- What if you needed a quick comparison between Gonzaga and another institution?
- Includes Equity in Athletics data
- Subtext: IR can combine and analyze data from multiple sources



CONCLUSION AND FUTURE REPORTS

- Education/Professional development
  - Need to learn institutional data structures
  - What are the needs of your institution, departments, administrative units?
- Risks
  - Use time to create reports no-one ever uses (?)
- Future reports
  - Undergraduate Admissions Office
  - Financial Aid
  - Library
  - Student Affairs-related report (what would that look like)

QUESTIONS & FEEDBACK