



Generating Reliable Collaboration Data:

A Proof-of-Concept Project Using Research Administration Data

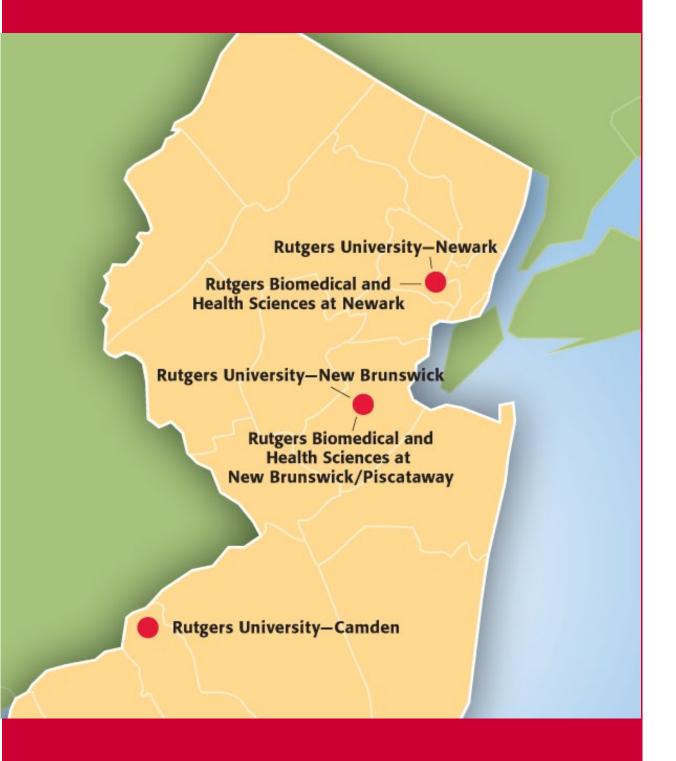
Christopher Perkins

Director, Data, Analytics & Business Intelligence

Julia Zappi

Senior Data Analyst, Data, Analytics & Business Intelligence

RUTGERS THE STATE UNIVERSITY OF NEW JERSEY



LEADER IN THE STATE

- First in New Jersey and 64th nationally on *Forbes*' list of 500 best large employers in America
- 6,000+ acres across New Jersey
- 900+ buildings spanning 30 million+ square feet
- 300+ research centers and institutions
- 29 decanal units
- 40+ research cores

INCLUSIVE AND DIVERSE

- Among the most ethnically diverse campuses in the nation and Big Ten
- 67,620 students representing all 50 states and over 120 countries
- 23,600+ full- and part-time faculty, full- and part-time staff, and international scholars

RESEARCH UNIVERSITY

- \$900+ million in sponsored awards funding annually
- \$12M in licensing revenue annually
- ~4,000+ sponsored awards annually
- ~1,600 Pls receiving awards annually
- 1,197 active issued worldwide patents
- 100+ active startups

Data, Analytics & Business Intelligence



Chris Perkins

Director

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Julia Zappi
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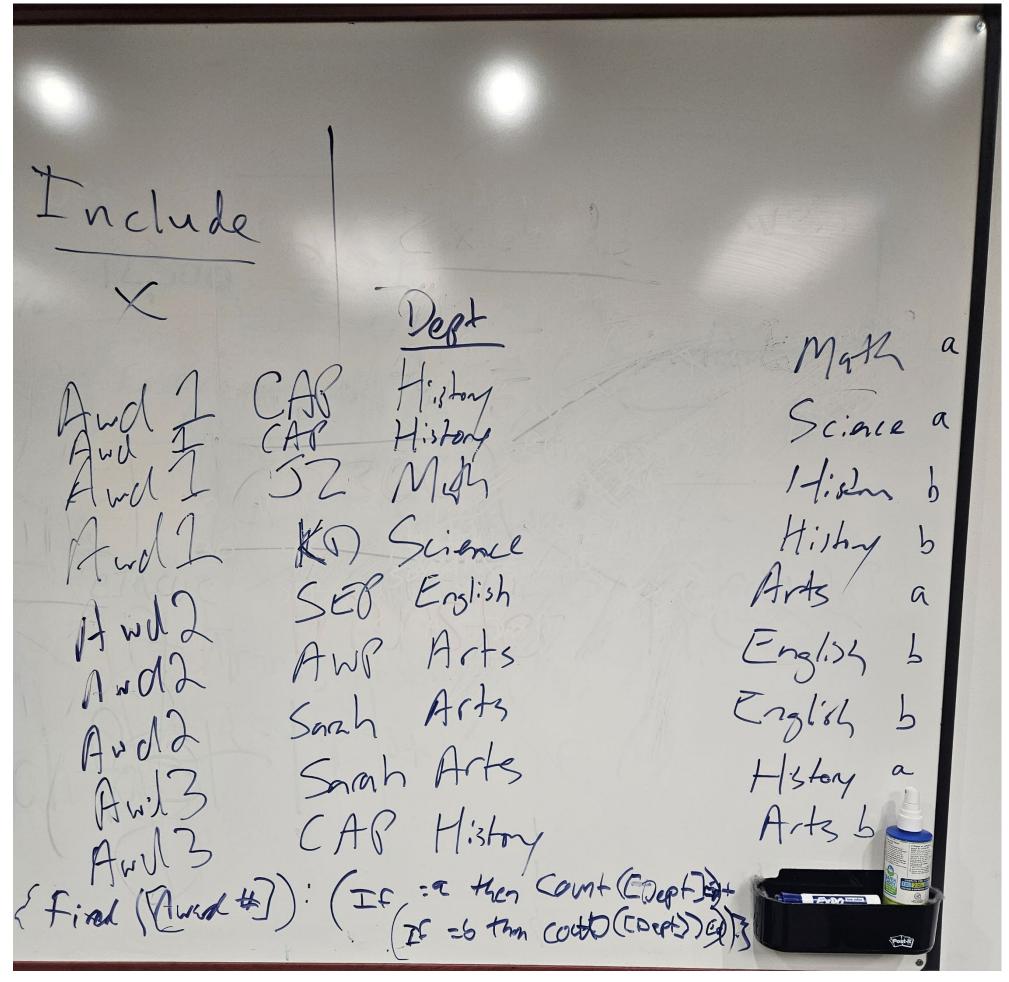
Kat Demarco
Data Analyst
kd764@rutgers.edu

Project Context

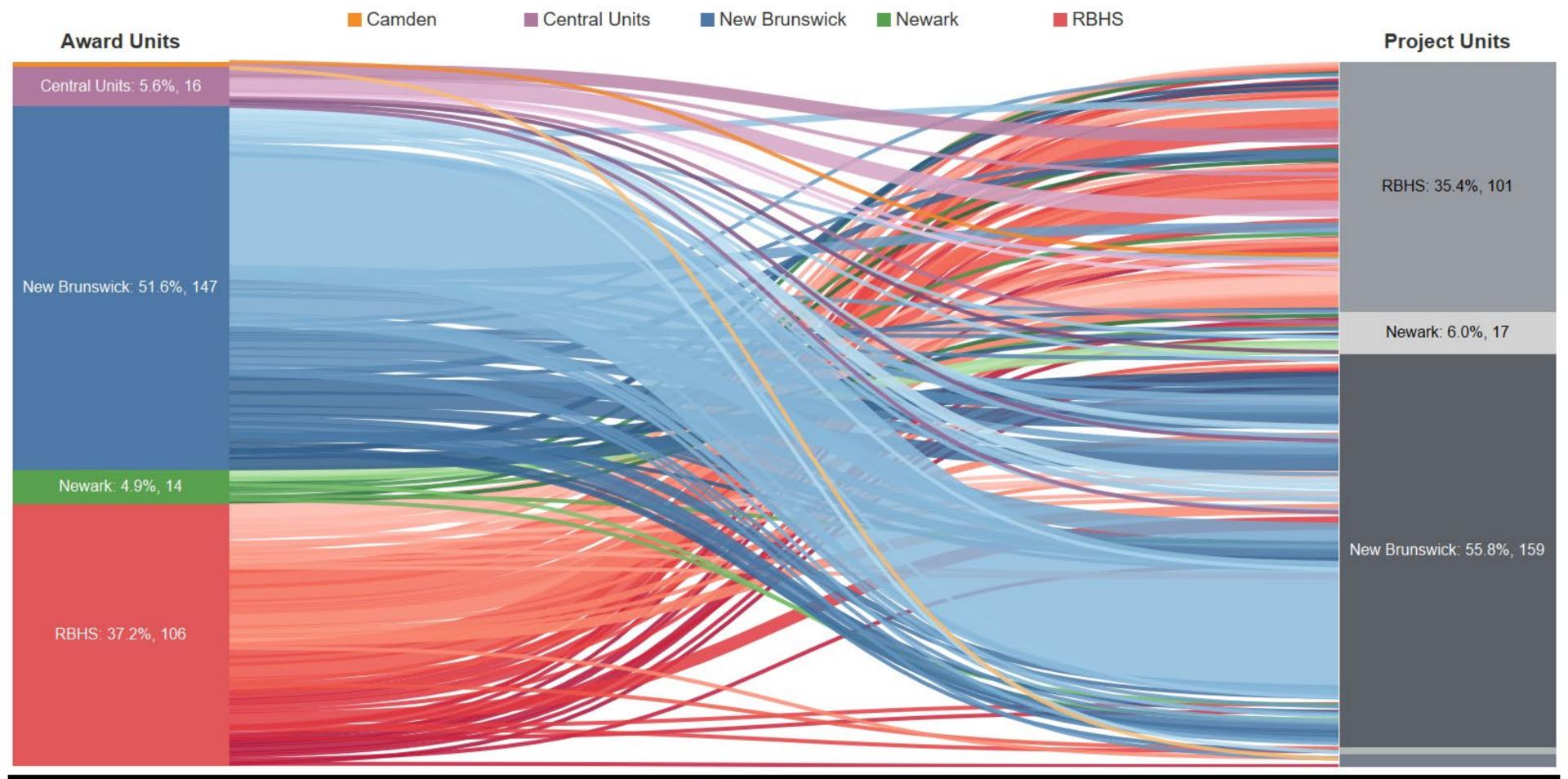
Request: Count collaborations across the university to identify potential areas for cluster hiring.

Brainstorming

What even is this?



FY 2023 Collaborations Between Different Departments Within a Single ORACLE Award



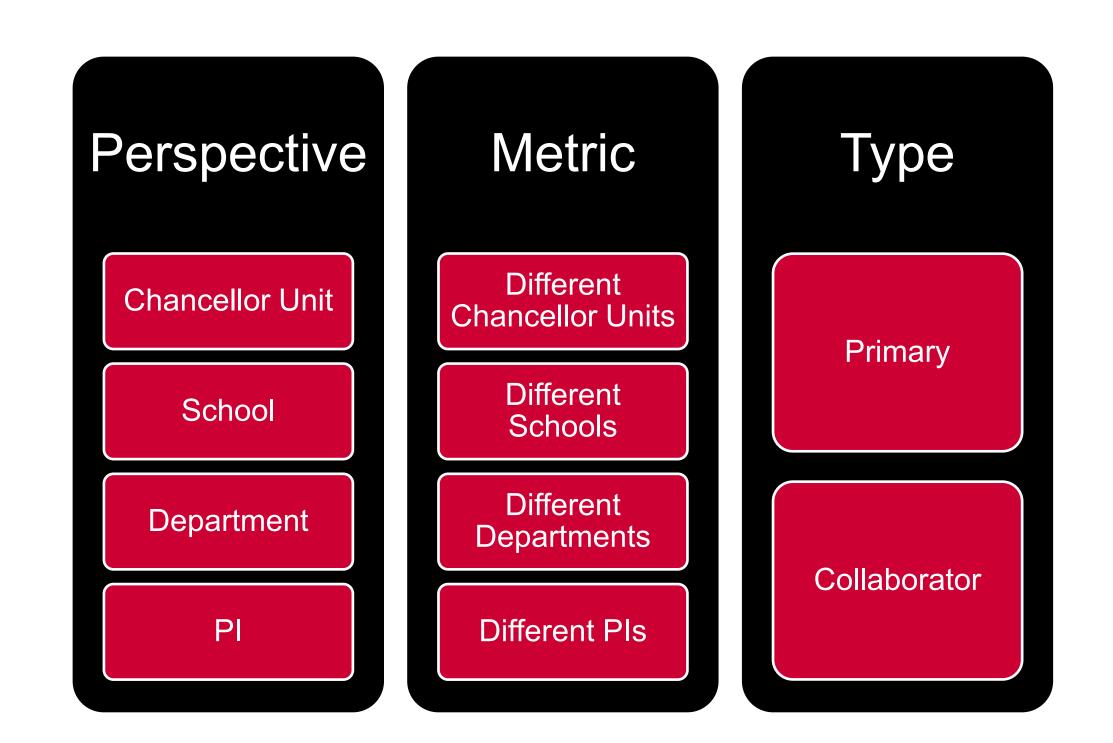
Defining Key Metrics

Standardizing <u>unit</u> definitions

Identifying collaboration <u>projects</u> by source

- Differentiate <u>levels</u> of collaboration
- Identify <u>dates</u> for change over time evaluations

Defining & Counting Collaborations



Viable and Available Data







Sponsored Award Expenditure Data

Human Subject Protocols

Publications

Financial System

eIRB

Research With Rutgers

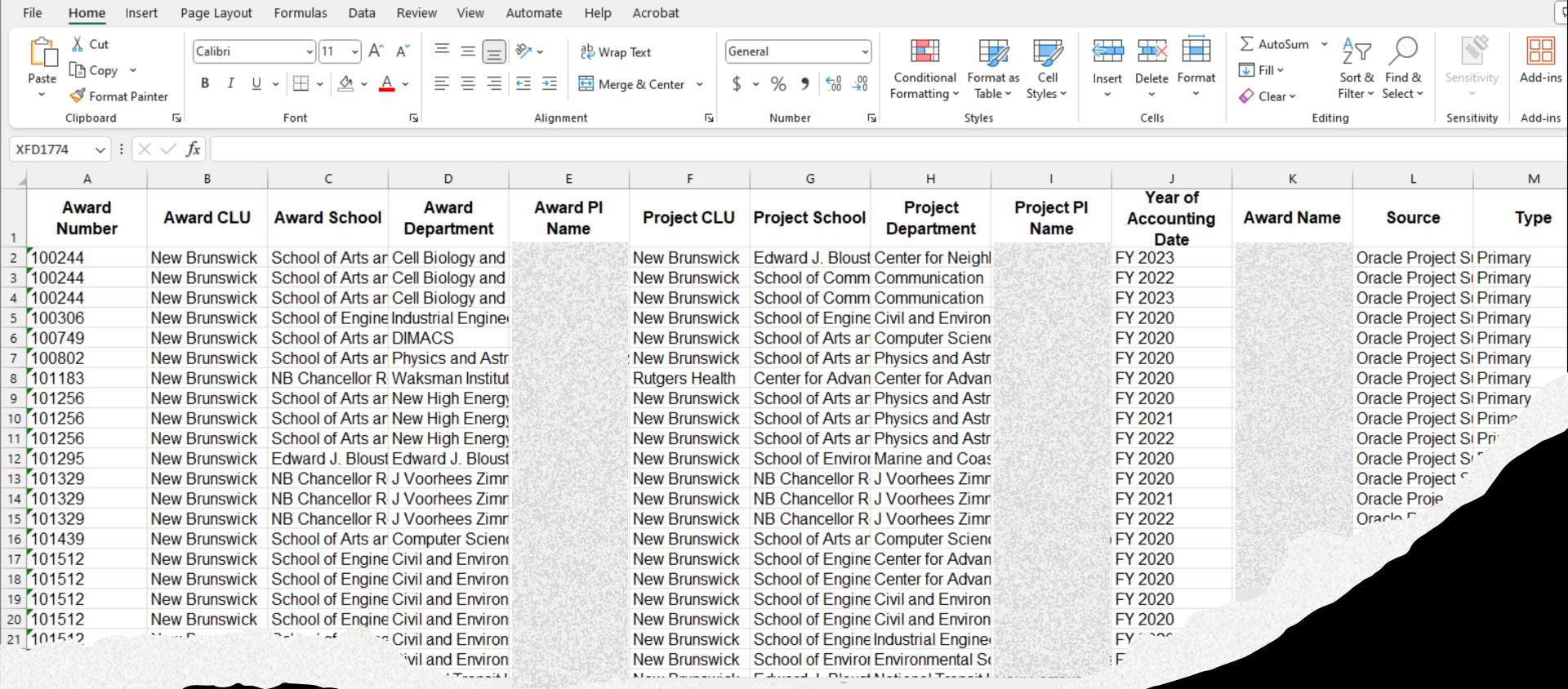
Data Structure

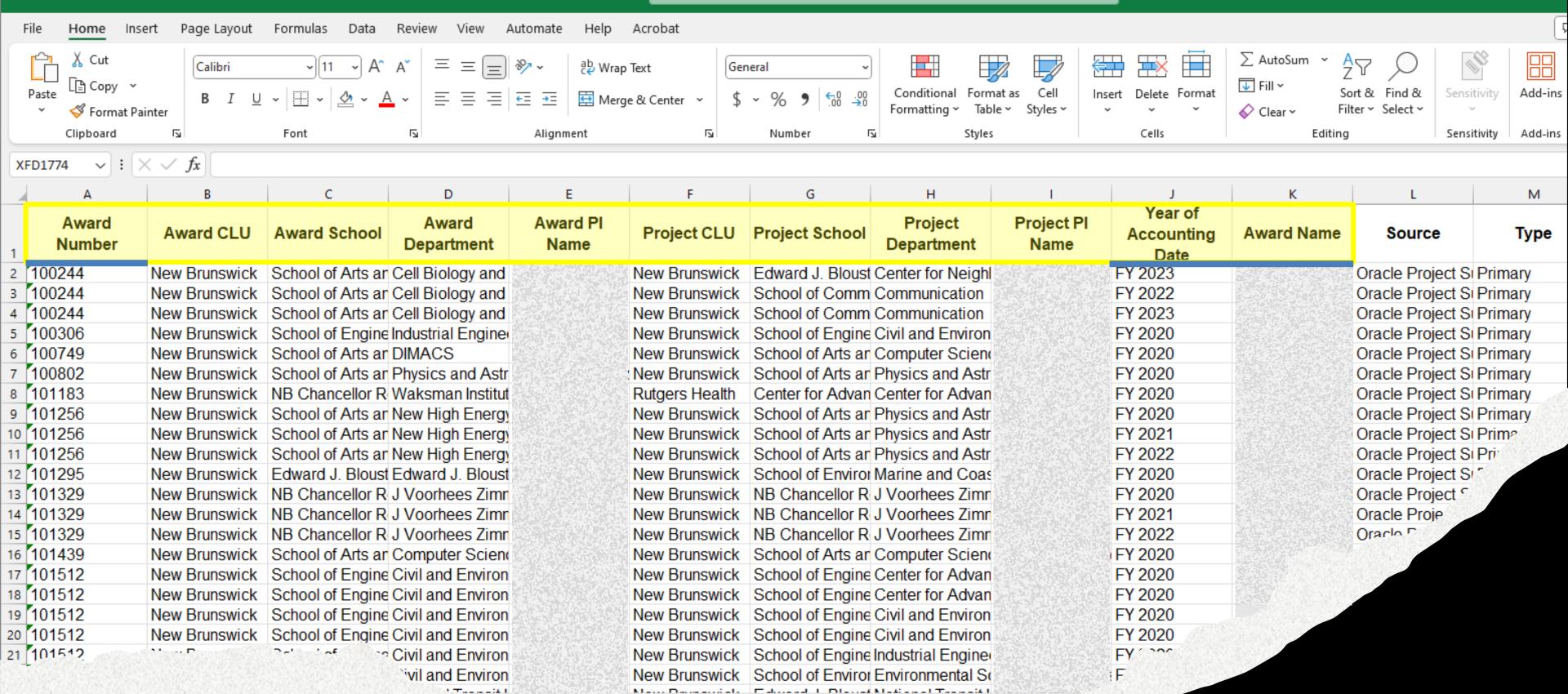
Simple but expandable

Scalable

Ready for interactive dashboards







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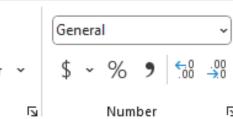
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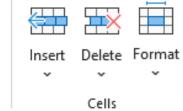


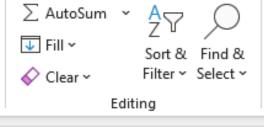


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1	Award Number	Award CLU	Award School	Award Department	Award PI Name	Project CLU	Project School	Project Department	Project PI Name	Year of Accounting Date	Award Name	Source	Туре
	100244	New Brunswick	School of Arts an	Cell Biology and		New Brunswick	Edward J. Bloust	Center for Neighl		FY 2023		Oracle Project S	Primary
	100244	New Brunswick	School of Arts ar	Cell Biology and		New Brunswick	School of Comm	Communication		FY 2022		Oracle Project S	Primary
4	100244	New Brunswick	School of Arts ar	Cell Biology and		New Brunswick	School of Comm	Communication		FY 2023		Oracle Project S	Primary
	100306	New Brunswick	School of Engine	Industrial Engine		New Brunswick	School of Engine	Civil and Environ		FY 2020		Oracle Project S	Primary
6	[100749	New Brunswick	School of Arts ar	DIMACS		New Brunswick	School of Arts an	Computer Science		FY 2020		Oracle Project S	Primary
7	100802	New Brunswick	School of Arts ar	Physics and Astr		New Brunswick	School of Arts an	Physics and Astr		FY 2020		Oracle Project S	Primary
8	101183	New Brunswick	NB Chancellor R	Waksman Institut		Rutgers Health	Center for Advan	Center for Advan		FY 2020		Oracle Project S	Primary
	101256	New Brunswick	School of Arts ar	New High Energy		New Brunswick	School of Arts an	Physics and Astr		FY 2020		Oracle Project S	Primary
10	101256	New Brunswick	School of Arts ar	New High Energy		New Brunswick	School of Arts an	Physics and Astr		FY 2021		Oracle Project S	Prime
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12	101295	New Brunswick	Edward J. Bloust	Edward J. Bloust		New Brunswick	School of Environ	Marine and Coas		FY 2020		Oracle Project S	
13	101329	New Brunswick	NB Chancellor R	J Voorhees Zimr		New Brunswick	NB Chancellor R	J Voorhees Zimr		FY 2020		Oracle Project ?	
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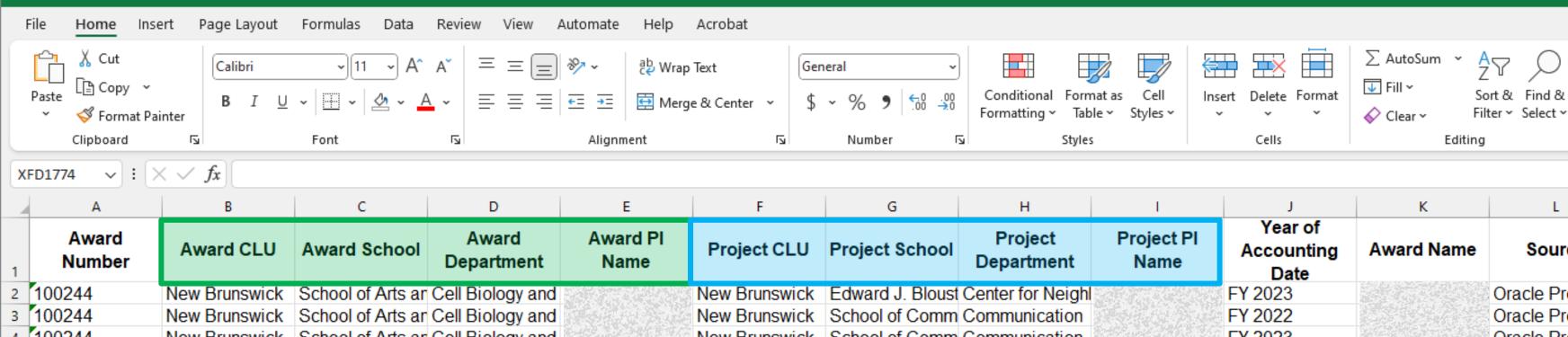
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19	101512	New Brunswick	School of Engine	Civil and Environ		New Brunswick	School of Engine	Civil and Environ		FY 2020			

New Brunswick School of Engine Civil and Environ

New Brunswick School of Engine Industrial Engine
New Brunswick School of Enviror Environmental School of Environmental Engine

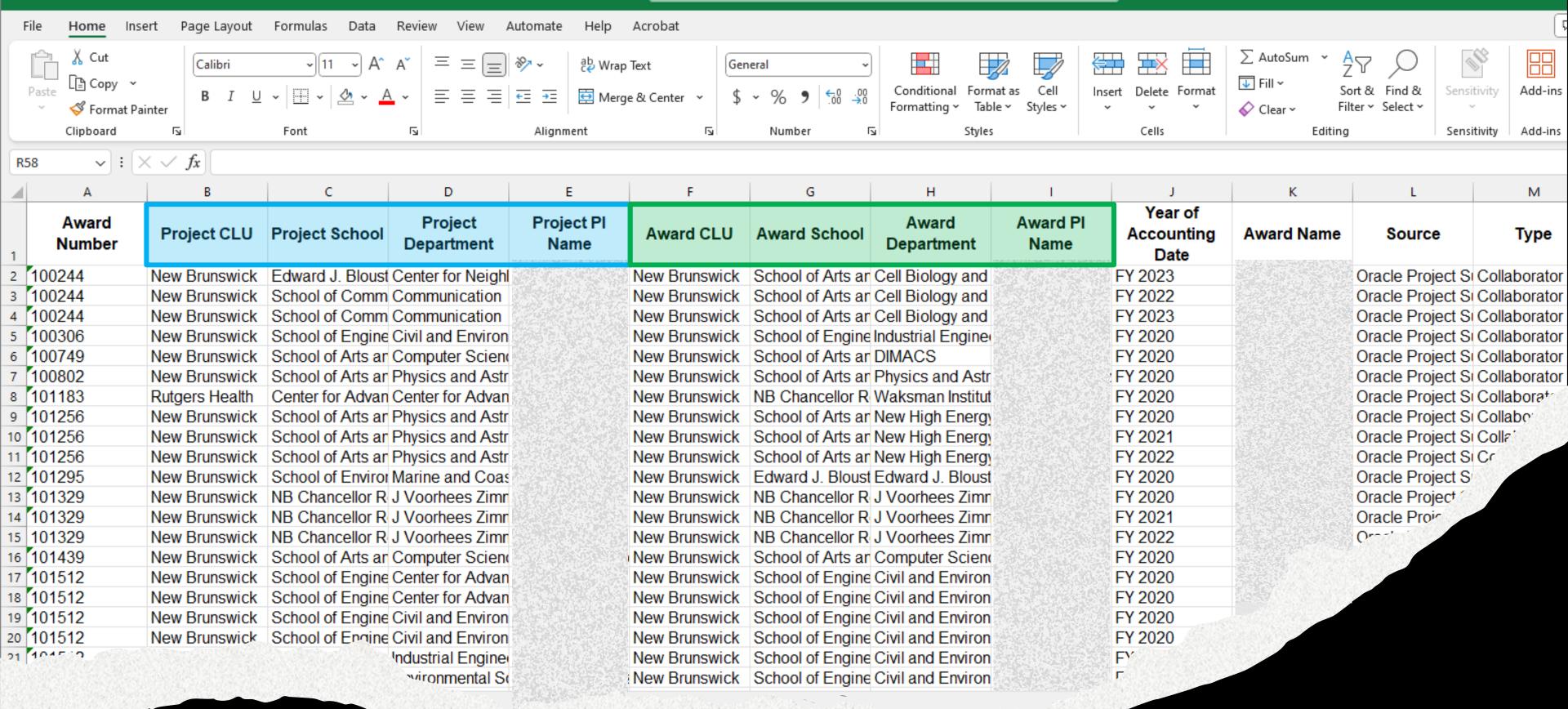
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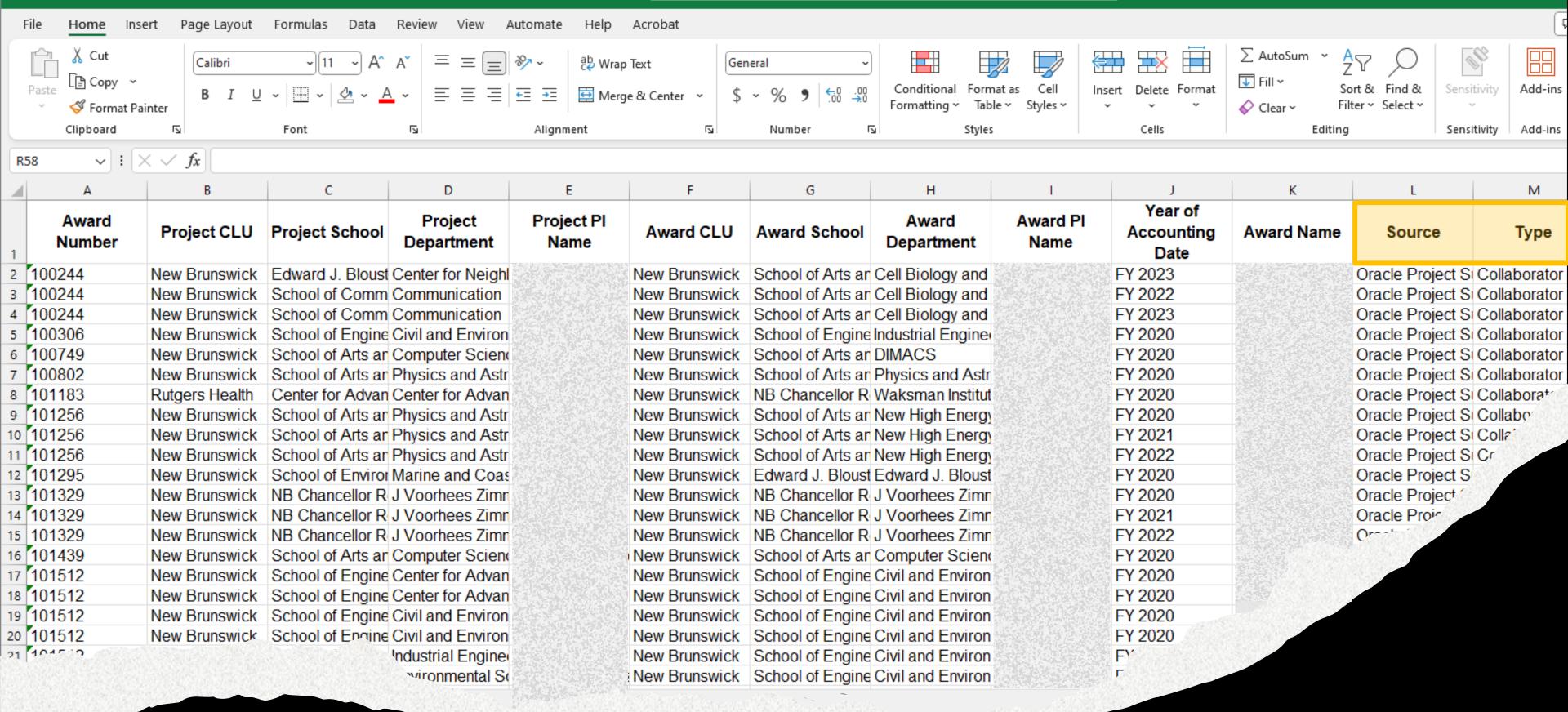
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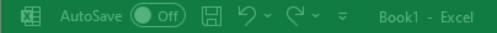
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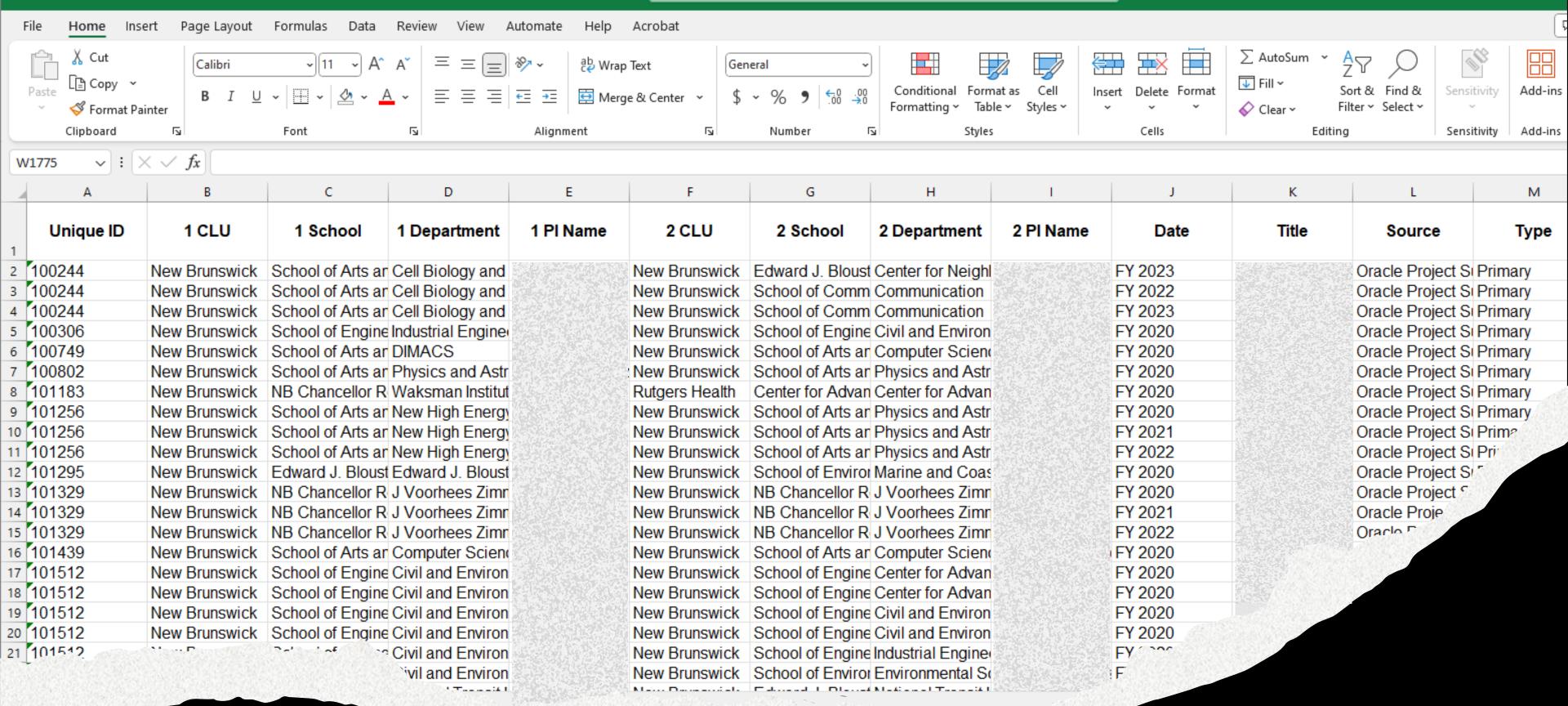


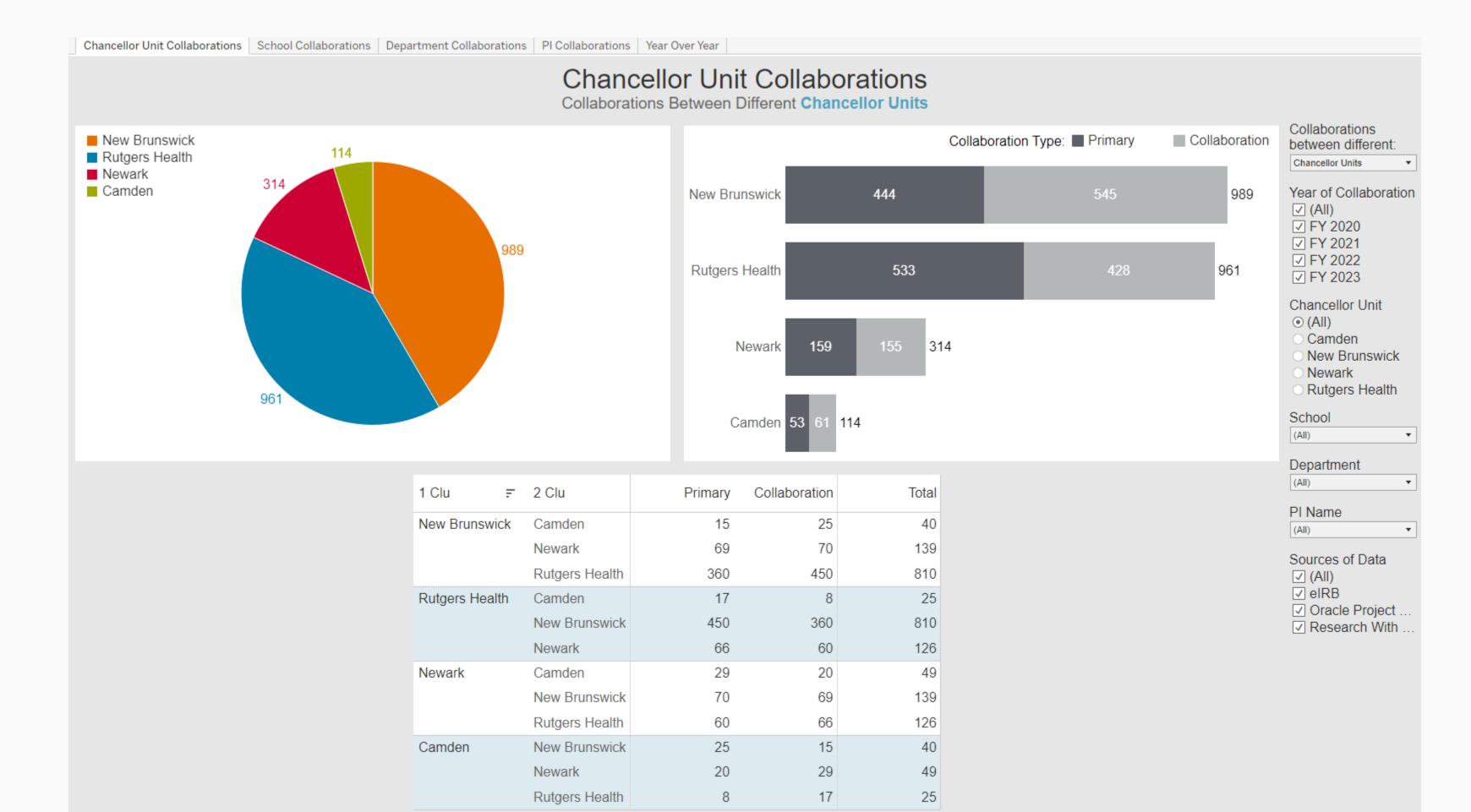


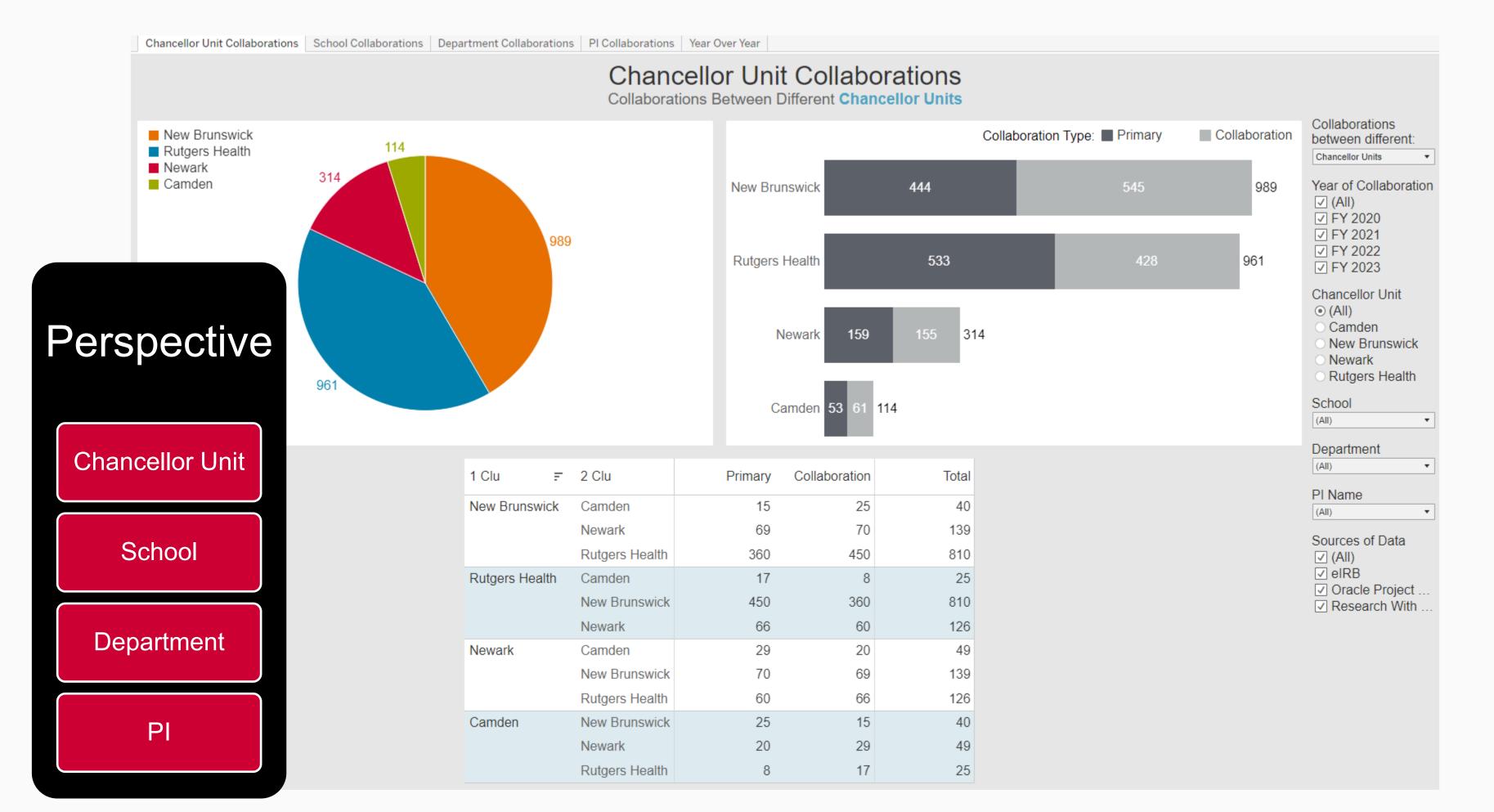


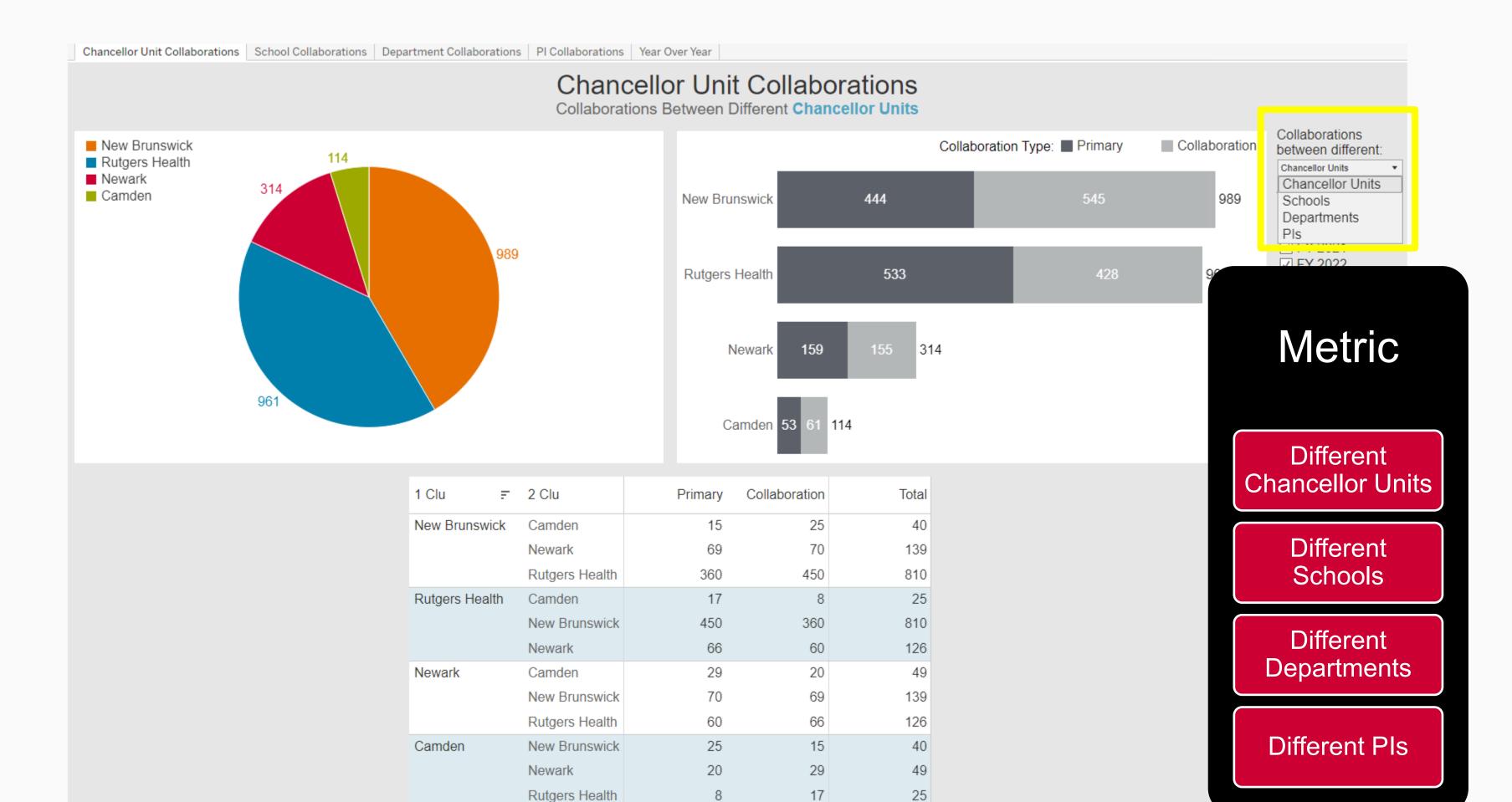


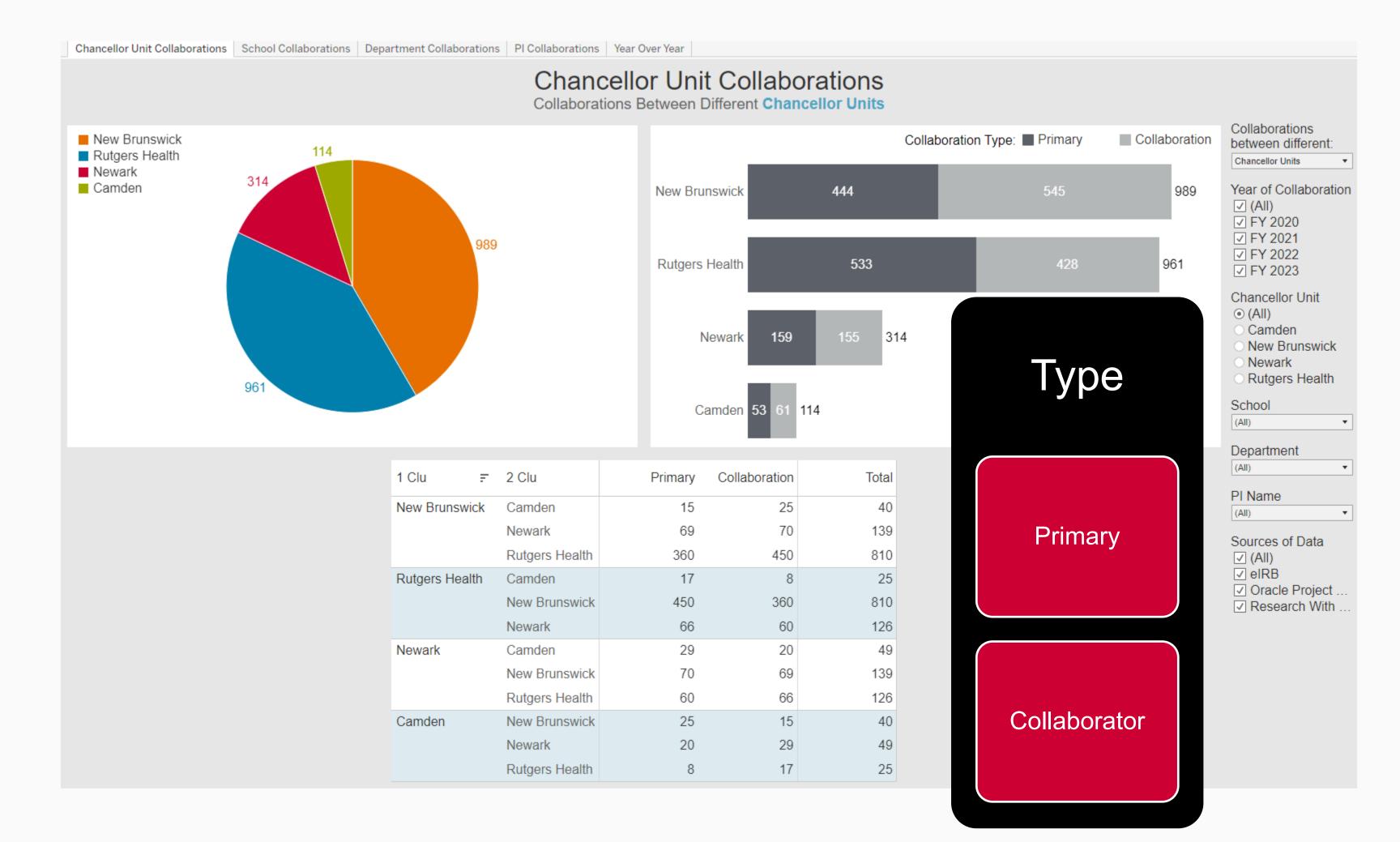


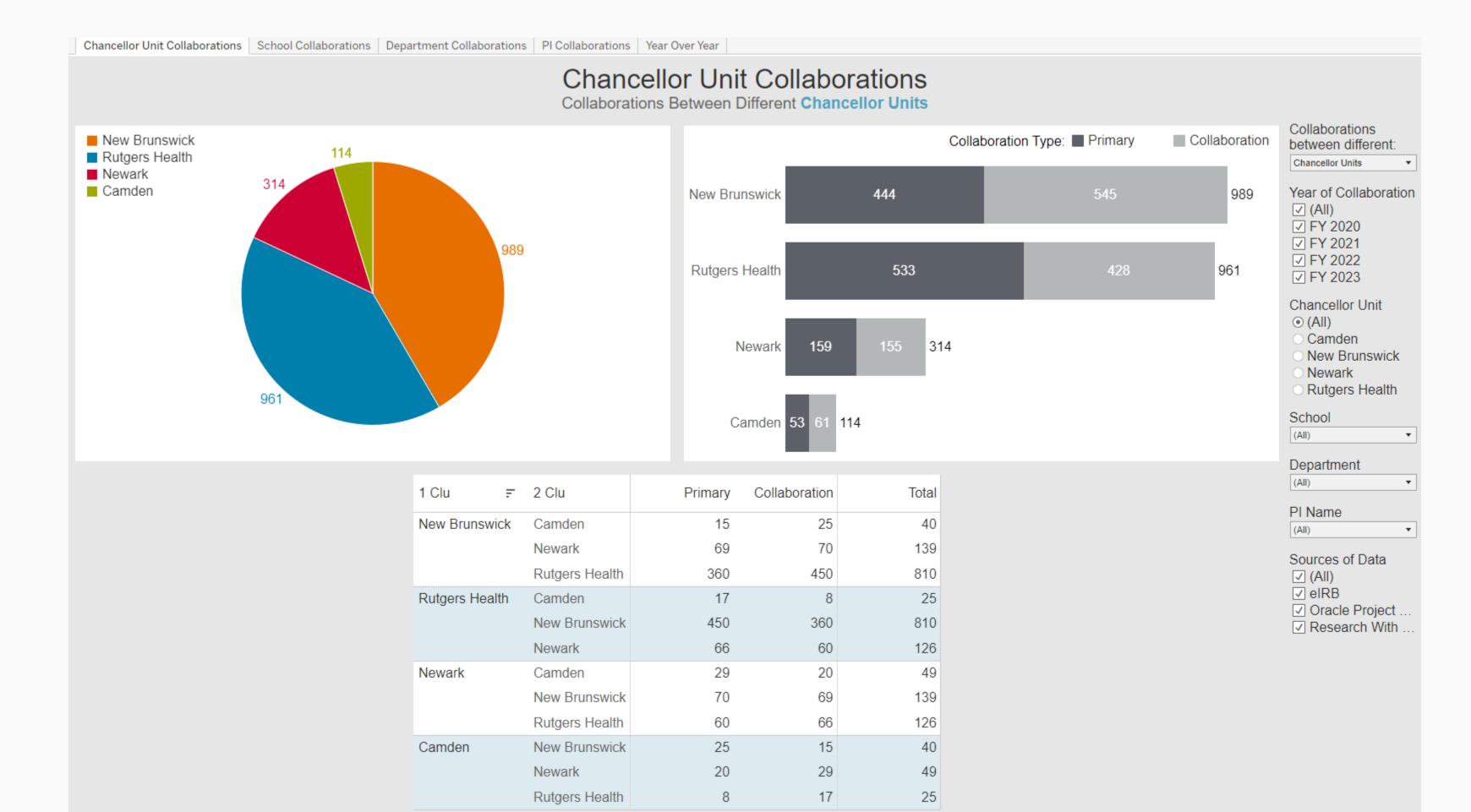












Limitations and Next Steps

- There are more ways for people to collaborate on grants
- How does Effort Reporting factor in?
- Expenditures on grants can occur after the project is completed
- What happens when a researcher changes units?
- Underrepresentation in sources used
- MORE DATA
 - Office for Research data (IACUC protocols, Inventions, Patents, Licenses)
 - Academic data from Institutional Research
- Streamline the data setup process using Tableau Prep
- Incorporate fields of study
- Account for projects/outputs that do not have collaborations X% of Department Y's activities have collaborators

Questions?

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Julia Zappi – jzappi@rutgers.edu







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