DataND Finance

A Journey into Enterprise Data Warehouse

About the Presenters

Vaibhav Agarwal

Manager, Finance Systems

Email: vagarwal@nd.edu

Chris Frederick

Business Intelligence Manager

Email: cfreder2@nd.edu

Agenda

- DataND Platform
- Data Governance
- Finance Project

dataND

The analytics portal powering Notre Dame

What is DataND?

DataND is the brand for our EDW and data portal

- Provides governed data to campus users
- Search for the data you need
- Share key metrics that answer common questions
- Make data definitions available

ND Data Map

(aligns business and data perspectives)

Who are the users?

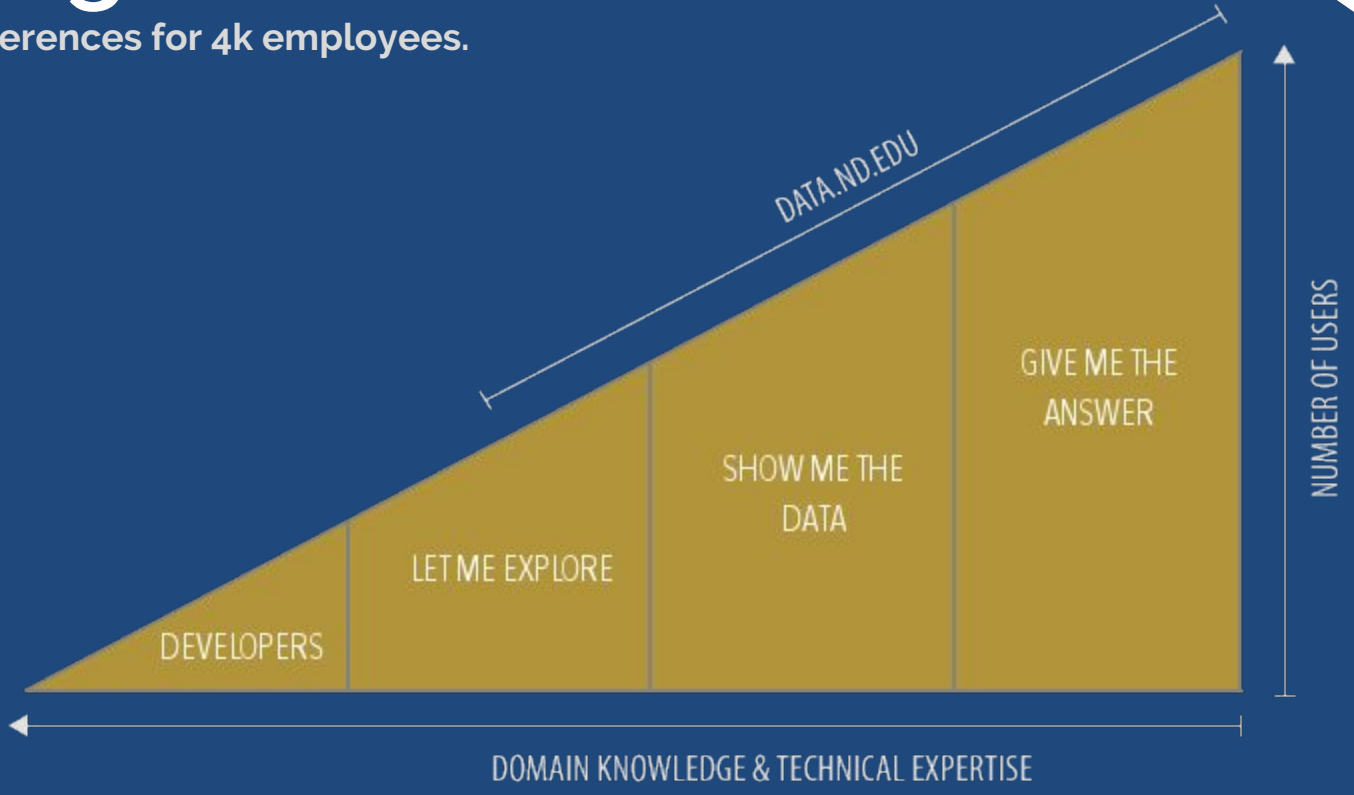
Targeting

4,000+

Staff & Faculty

Triangle of Justice

User preferences for 4k employees.



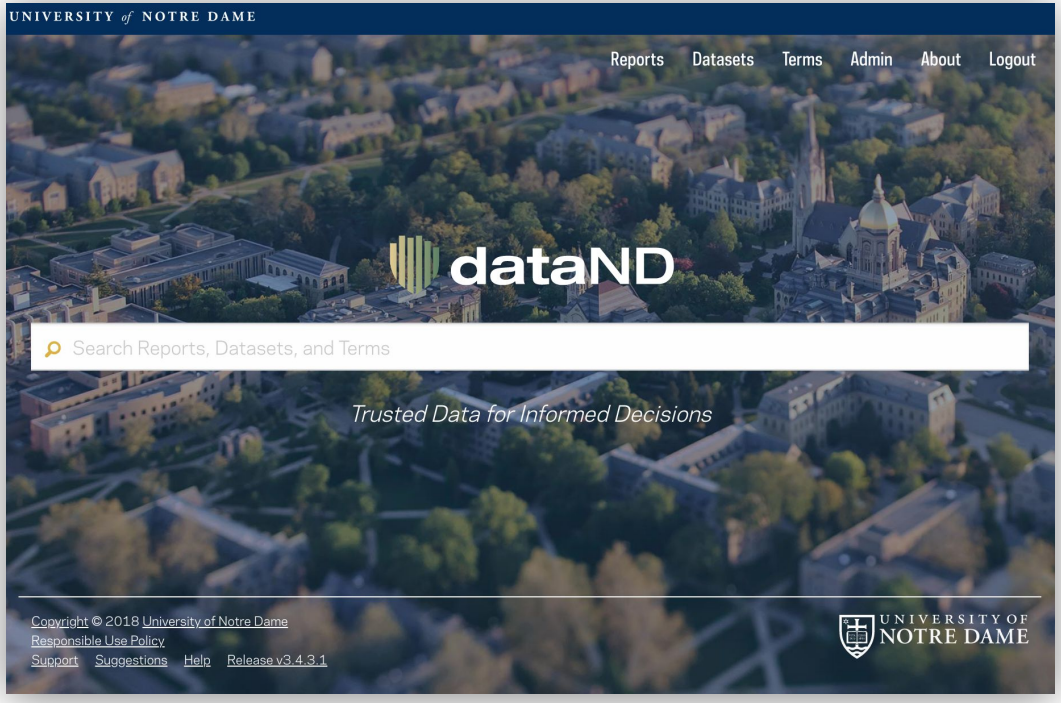
dataND Key Features

1. **Reports**
   Just give me the answer

2. **Datasets**
   Show me the data and let me explore it

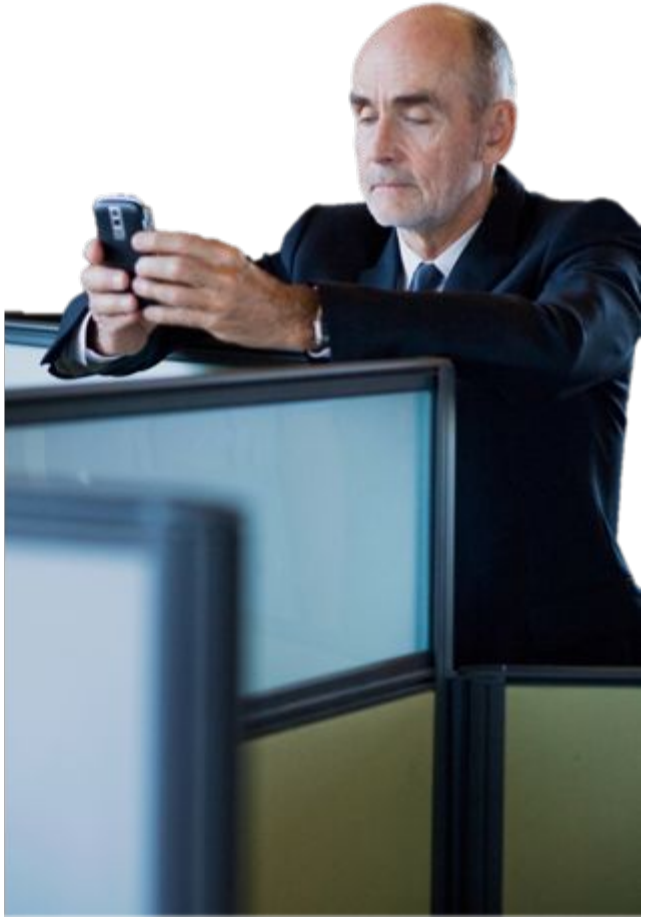
3. **Data Dictionary**
   Tie it all together, create a common language, and increase report clarity

Demo


UNIVERSITY of NOTRE DAME
Reports
Datasets
Terms
Admin
About
Logout
dataND
Search Reports, Datasets, and Terms
Trusted Data for Informed Decisions
Copyright © 2018 University of Notre Dame
Responsible Use Policy
Support
Suggestions
Help
Release v3.4.3.1
UNIVERSITY OF NOTRE DAME

Data Governance

AT&T
2:09 PM
86%
Messages
Group Message
Edit
To: Registrar & 3 more...
Details
Apr 6, 2013, 2:20PM
President
How many students do we have?
iMessage
Send



AT&T
2:09 PM
86%
Messages
Group Message
Edit
To: Registrar & 3 more...
Details
Apr 6, 2013, 2:20PM
President
How many students do we have?
Registrar
12,016
Institutional Research
12,847
Provost
8,014
Engineering
1,948
iMessage
Send

We need data governance!

Inconsistent results

- Simple questions yield different answers, depending on how you ask

- Result: No one trusts the answers they get

What Is Data Governance?

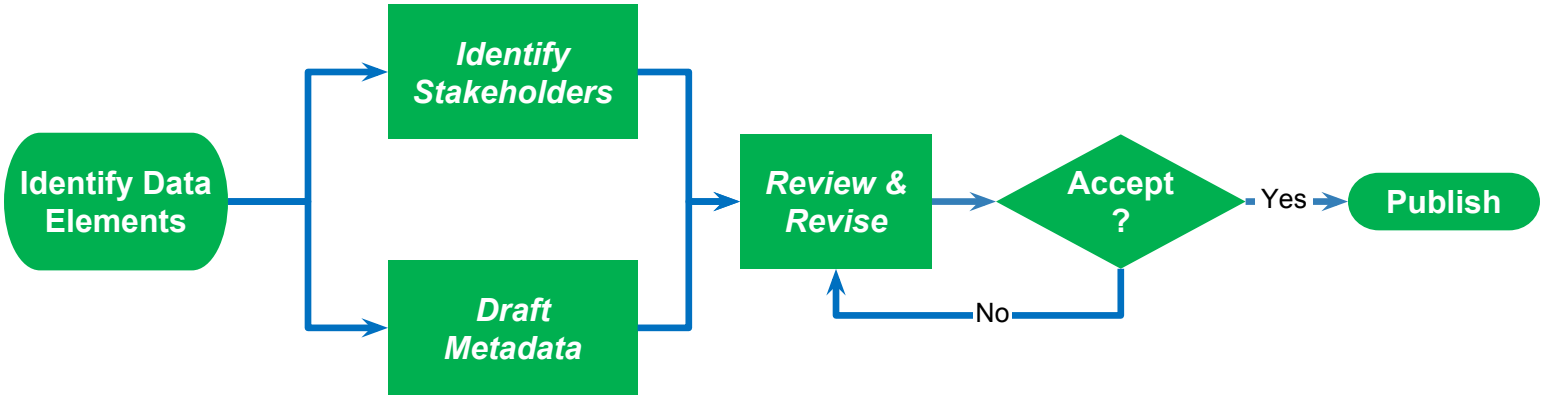
Data Governance is the process of establishing and managing information about the data generated, collected and used by the University.

It defines and ensures a common and consistent understanding of:

- Data term definitions
- For when the data is available
- How data should be handled (Sensitivity Classification)
- Who may have access to data elements (Access Designation)

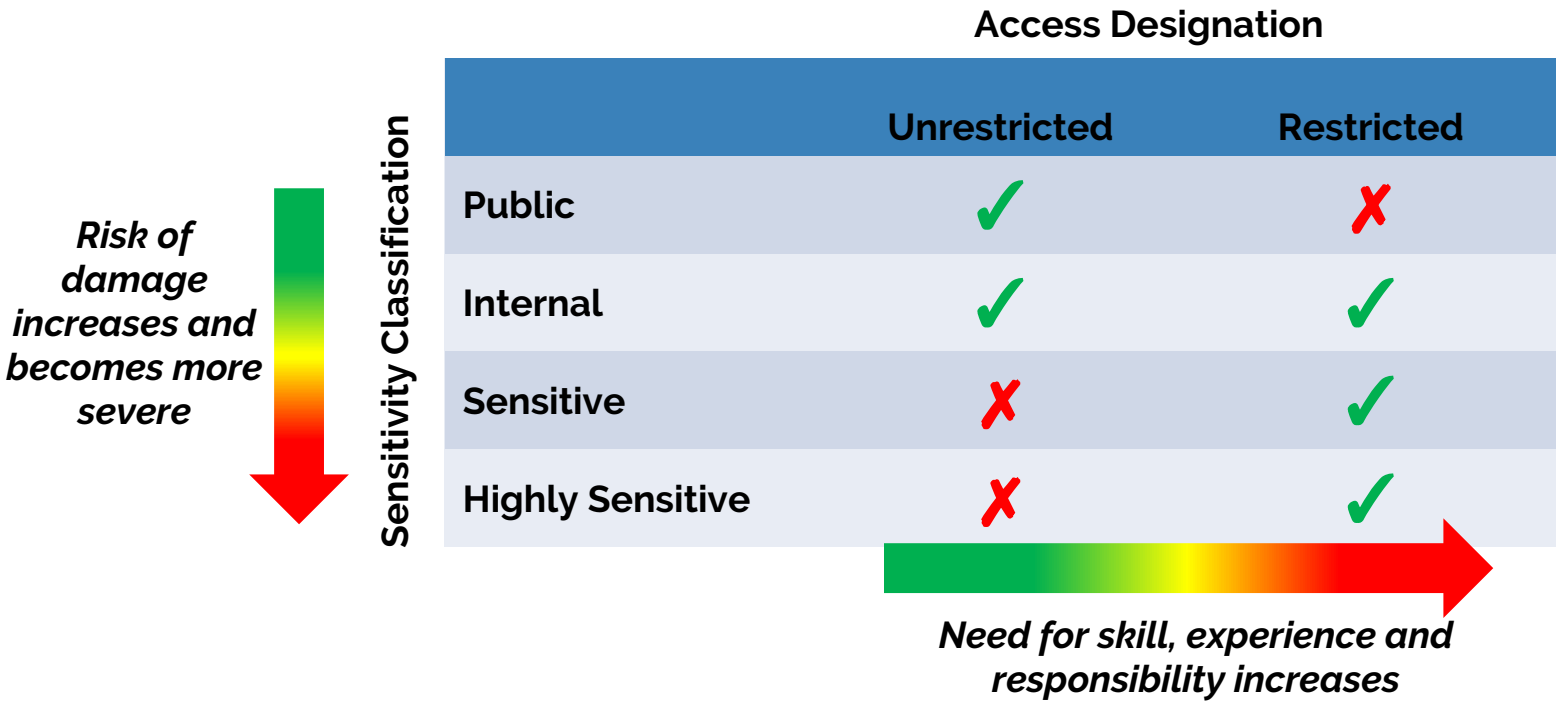
dataND

ND Data Governance Process



dataND

Sensitivity and Access



dataND

Access to Data

Instead of asking: “Is there an immediate and obvious business need for this person to access this information?”

Ask instead: “Will any serious damage happen to the institution (via reputation or operation) if this person accesses this information?”

Drama ≠ Damage

- David Bailey

dataND

Guiding Principles

- *Presume trust*
- *Restrict only when clear risk of significant harm*
- *Misinterpretation and discovery of inaccurate or incomplete data is not significant harm*
- *Periodic acknowledgment of appropriate use policies*
- *Train and certify*
- *Monitor and audit access*
- *Information used outside the University must be appropriately vetted*
- *Access to personally identifiable student data must have legitimate educational purpose*
- *Public-source data should be accessible to all*

dataND

ND Data Map

(aligns business and data perspectives)

Finance Project

The Problem

1. **Lack of common understanding**
   Key requirement to address data definitions and its use

2. **Finance data alone is not enough**
   Significant value can be derived when you combine data domains

3. **Sharing data is hard**
   Data for the people, by the people, to the people

1

Establishing a common understanding

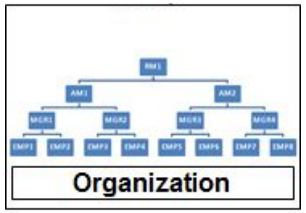
Establishing a common understanding

- Defining finance terms

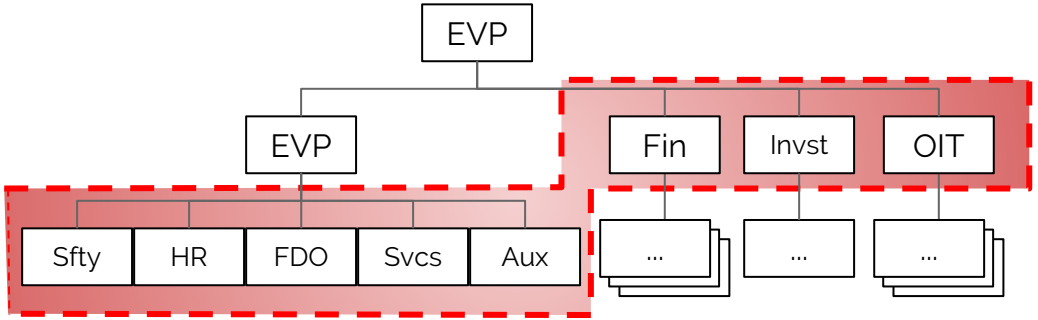
- Using Finance Organization Hierarchy

Governance Challenges

- Inconsistent roll-ups = inconsistent data



Hierarchy levels create inconsistent aggregation



2

Finance data alone is not enough

Finance data alone is not enough

Examples

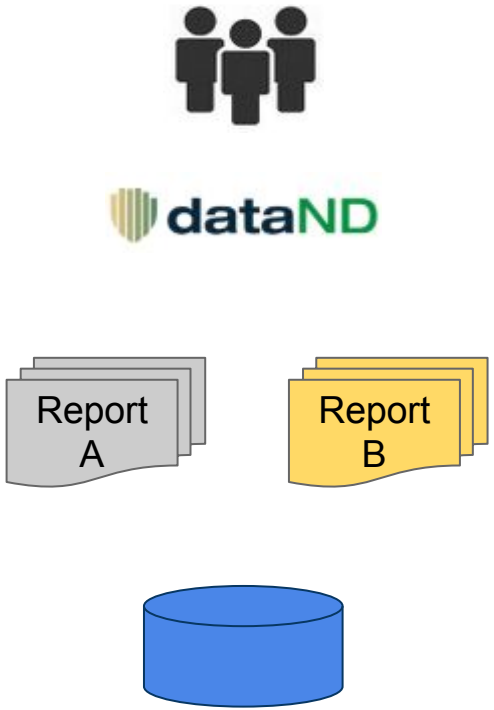
- For my college, can you tell me the endowment market value and the restrictions on the endowment funds?
- Why does building X cost more to maintain than building Y?
- Can you show me a breakdown of headcount and labor costs over time?

3

Sharing data is hard

Sharing data is hard - Current

Sharing data is easier - Future



Finance Project

Key Objectives

- Make Finance data ERP agnostic
- Allow for data blending with other domains

Finance Core Data

Migrated to EDW:

- ➔ Encumbrance
- ➔ Endowment
- ➔ General Ledger
- ➔ Grant Ledger
- ➔ Operating Ledger
- ➔ Transaction History
- ➔ Vendor

Pending:

- ❑ Budget Detail
- ❑ Fixed Asset
- ❑ Grant & Project
- ❑ Invoice
- ❑ Purchasing
- ❑ Positions

Team

- Executive Support
  - EVP & Provost Office
  - Finance Leadership

- Project Team
  - BI professionals (technical)
  - Application Developers (technical)
  - Subject Matter Experts (functional)

Conclusion

One Stop Shopping

For Finance & University data

Search for reports, data sets, or definitions

Share metrics, dashboards, and reports

Answer ad-hoc questions

Download datasets

1. Easier to find data
2. Improved Security & Access
3. Increased Report Clarity

More Delighters

"dataND will allow us to spend less time on finding and extracting data and more time on analyzing and understanding its implications."

Questions?

APPENDIX

Reports

Report Components

Report Name & Purpose

Quick Facts

The Viz

Suggested Reports

Toggle Parameters

Suggested Datasets

Who to Contact?

Terms used in this Report

Datasets

Datasets Components

Dataset Name & Purpose

Data Preview

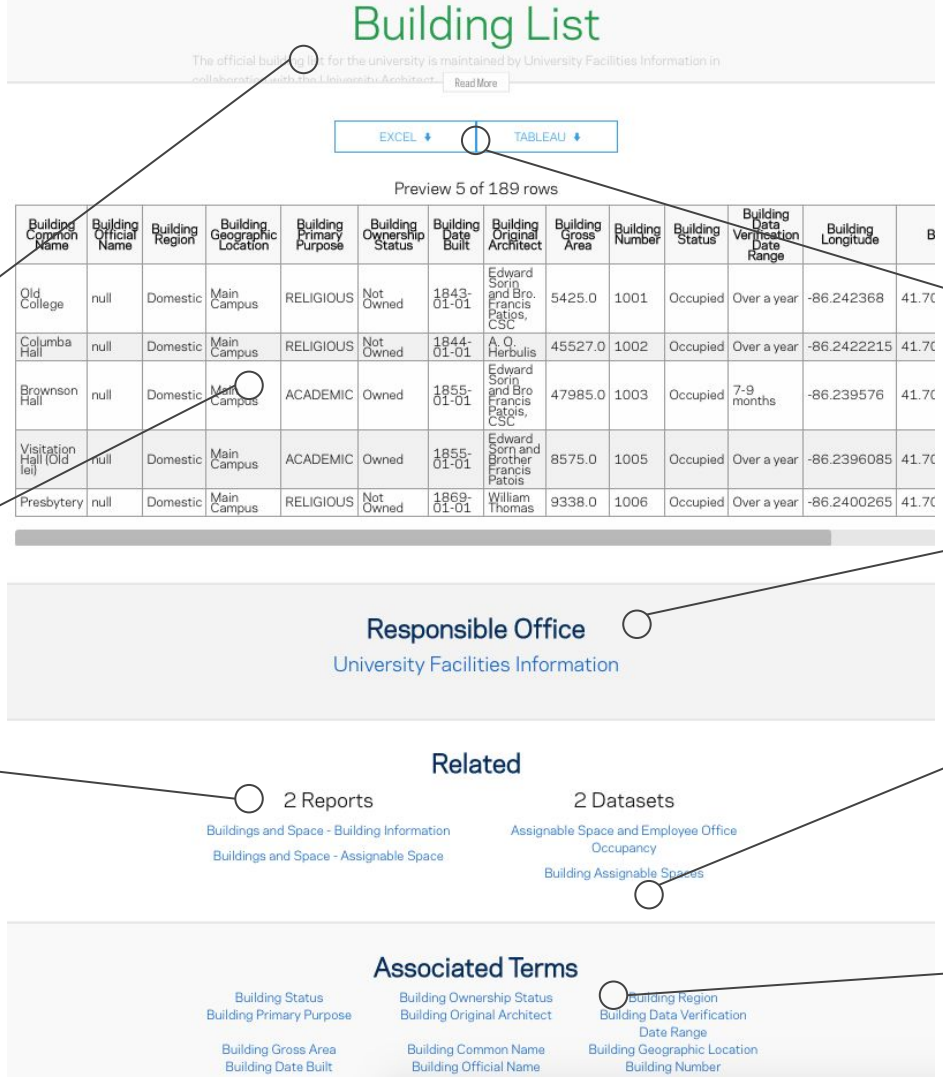
Suggested Reports

Download to Tableau or Excel

Who to Contact?

Suggested Datasets

Terms used in this dataset



Building List

The official building list for the university is maintained by University Facilities Information in collaboration with the University Architect.

Read More

EXCEL TABLEAU

Preview 5 of 189 rows

Building Common Name	Building Official Name	Building Region	Building Geographic Location	Building Primary Purpose	Building Ownership Status	Building Date Built	Building Original Architect	Building Gross Area	Building Number	Building Status	Building Data Verification Date Range	Building Longitude	B
Old College	null	Domestic	Main Campus	RELIGIOUS	Not Owned	1843-01-01	Edward Sorin and Bro. Francis Patois, CSC	5425.0	1001	Occupied	Over a year	-86.242368	41.7
Columba Hall	null	Domestic	Main Campus	RELIGIOUS	Not Owned	1844-01-01	A. O. Herbulis	45527.0	1002	Occupied	Over a year	-86.2422215	41.7
Brownson Hall	null	Domestic	Main Campus	ACADEMIC	Owned	1855-01-01	Edward Sorin and Bro Francis Patois, CSC	47985.0	1003	Occupied	7-9 months	-86.239576	41.7
Visitation Hall (Old Iei)	null	Domestic	Main Campus	ACADEMIC	Owned	1855-01-01	Edward Sorn and Brother Francis Patois	8575.0	1005	Occupied	Over a year	-86.2396085	41.7
Presbytery	null	Domestic	Main Campus	RELIGIOUS	Not Owned	1869-01-01	William Thomas	9338.0	1006	Occupied	Over a year	-86.2400265	41.7

Responsible Office

University Facilities Information

Related

2 Reports

Buildings and Space - Building Information

Buildings and Space - Assignable Space

2 Datasets

Assignable Space and Employee Office Occupancy

Building Assignable Spaces

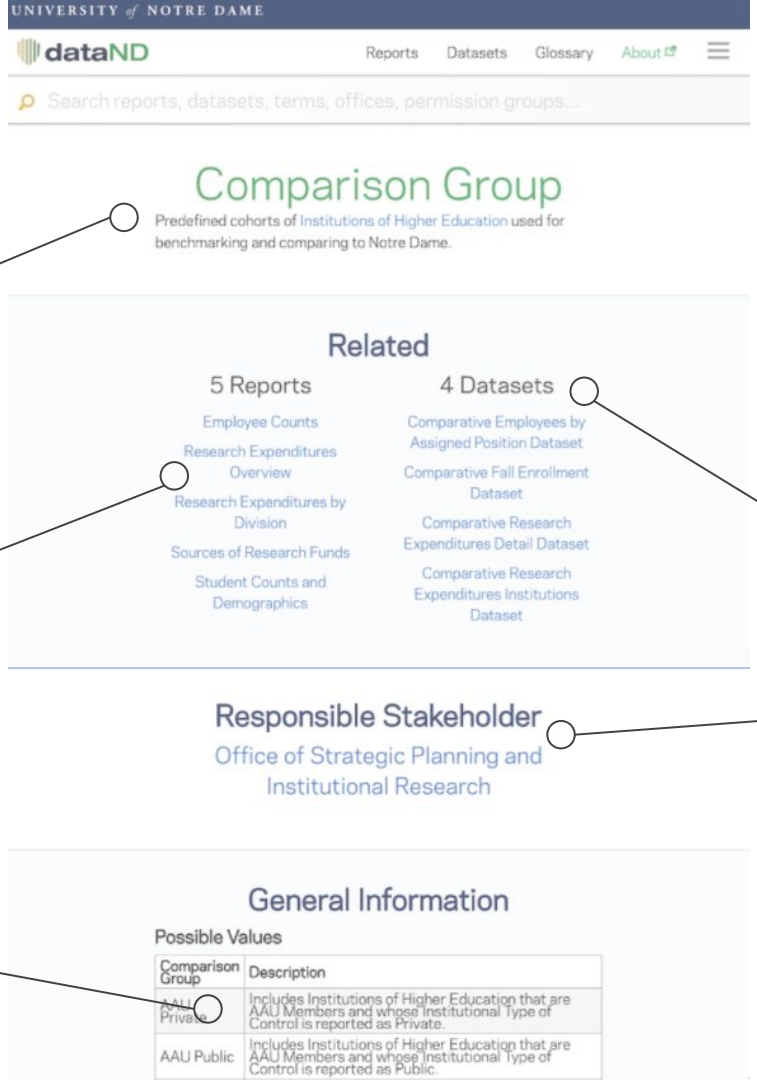
Associated Terms

Building Status
Building Primary Purpose
Building Gross Area
Building Date Built
Building Ownership Status
Building Original Architect
Building Common Name
Building Official Name
Building Region
Building Data Verification Date Range
Building Geographic Location
Building Number

3

Data Dictionary

Data Dictionary Components



Term Name & Definition

Reports that use this term

Datasets that use this term

Who to Contact?

More detail