

Towson University's Data Analytics Competition

Spring 2025

Introduction

The [Office of Institutional Research](#) (OIR) at Towson University supports enrollment, assessment, program review, accreditation and academic planning by collecting, integrating, analyzing and reporting institutional data and information.

For this case, the OIR would like to investigate how TU compares to peer institutions in the U.S. The goal is to provide strengths and weaknesses for leadership as well as growth strategies.

The data is provided through the Integrated Postsecondary Education Data System (IPEDS) survey which is collected by the U.S. Department of Education. The survey is collected annually and gathers data from every college, university and technical/vocational institution that participates in federal student financial aid programs. The data collection occurs in the fall, winter and spring.

There are eight categories in which data is collected:

- institutional characteristics
- institutional spaces
- admissions
- enrollment
- student financial aid
- degrees and certificates conferred
- student persistence and success
- institutional resources (including human, resources, finance and academic libraries)

For more information about the IPEDS and the types of data collected, please visit the following link: [About IPEDS](#).

Problem of Practice

The OIR would like you to create a ranking of the given institutions and explain how you decided upon this ranking. You may consider methodologies from other rankings (e.g., U.S. News, Princeton Review, etc.). You may also have more than one ranking.

Questions:

1. Identify areas in which TU excels and areas which present growth opportunities
2. Suggest directions for TU's investments and goals
3. Based on your ranking of institutions, create a set of aspirant peer institutions for Towson University and explain why they are included in your set (such as, due to exhibiting certain characteristics which you view as important)

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Data Set

- The Office of Institution Research curated an IPEDS data set covering 756 institutions based on the following criteria:
 - Public, 4-year university
 - U.S. only
 - Enrolls first-time, full-time undergraduate students
 - Programs that are not offered completely via distance education (universities that are exclusively distance education were excluded)
- There are 107 variables in the data set
- A data dictionary is provided on the 2nd tab
- Code labels are provided on the 3rd tab
- Additional definitions of the variables are available in the [IPEDS Glossary](#)

Submission

Review the guidelines and previous submissions [here](#). Teams can use any tool to analyze and visualize the data. Make sure to document your analysis and methodology.

Each team must provide both 1) a one-page report analyzing their findings and the type of methods they used and 2) a visualization of their findings.

Submit your report and visualization on the [Data Analytics Competition website](#).

Judging Criteria:

Teams will be judged on the following criteria:

- relevance of the analysis (how does the analysis relate to the questions posed)
- completeness of the analysis (the degree to which the analysis answers the stated questions)
- depth of the analysis (sophistication of the analysis)
- consistency of the analysis (conclusions consistent with the analysis)
- clarity of the visualization (how well does the graphic stand out on its own without added explanation)
- creativity of visualization (originality of thought and uniqueness of approach)
- insight of the visualization (how the graphic aids understanding of the data)

Students are expected to uphold all the standards of academic integrity outlined in the [Student Handbook](#). If you used AI, please include how you used AI for this project in your report.