



5th Annual
**High School Analytics & Data
Visualization Competition**

Spring 2026
Department of Decision and System Sciences

Contents

1	Welcome Message & Purpose	2
2	Quick Reference	3
	Key Dates	3
	Contacts & Resources	3
	How Teams Will Be Evaluated	4
3	Case Study and Data Summary	5
	Background: Why This Matters	5
	Problem Statement	6
	Connection to National Initiatives: Anchor Points for Your Story	6
	The Challenge	6
	Required Analytical Elements	7
	Analytical Framing	7
4	Round 1: Virtual	9
5	Round 2: In-Person	12
6	General Guidelines	14
	Use of Outside Data & Resources	14
	Presentation Time & Logistics	14
	Dress Code	15
7	FAQs	16
8	Acknowledgments & Sponsors	18

1

Welcome Message & Purpose

The Department of Decision and System Sciences at Saint Joseph's University is proud to host the **5th Annual High School Analytics & Data Visualization Competition**, a multi-round team event culminating in a one-day on-campus competition on **March 11, 2026**, at the **Haub School of Business, Saint Joseph's University**, Hawk Hill campus.

This competition brings together teams from high schools to expand their working knowledge and understanding of analytics. Students will explore a data set, create meaningful visualizations, and present their findings to a panel of judges composed of both academics and industry leaders in Business Intelligence and Analytics.

No specific coursework or prior technical expertise is required to compete. Instead, the competition emphasizes **problem-solving, pattern recognition, and storytelling with data**. Students will be challenged to ask good questions, uncover insights that may not be obvious, and communicate their conclusions clearly and persuasively.

Beyond analytics, this event provides students with the opportunity to develop **critical thinking, teamwork, leadership, and presentation skills**—transferable abilities that will benefit them in any academic or professional path they choose.

We look forward to your creativity, curiosity, and enthusiasm as you take on this challenge. Welcome to the **High School Analytics Competition!**



2

Quick Reference

Key Dates

- **Round 1 (Virtual)** February 25, 2026 at 5:30 PM via Zoom
- **Round 2 (In-Person)** March 11, 2026 at 8:30 AM – 12:00 PM at the Haub School of Business, Hawk Hill campus

Contacts & Resources

- **Competition web page** <https://www.sju.edu/departments/dss/analyticscompetition>
- **General inquiries** hs-analytics@sju.edu
- **Competition chair** Silviya Valeva, Assistant Professor, Department of Decision and System Sciences svaleva@sju.edu
- **Tableau access** (*intended for participants only, not to be shared with anyone else*)
 1. Sign into an existing Tableau account, or **create** a new account using your school-issued email
 2. Once signed in, visit the **Academic Quick Start** page to download the latest version of Tableau Desktop
 3. Activate with product key: **TCD6-78E6-1900-614E-B6B1**
 4. Already have a copy of Tableau Desktop installed? Update the license key in the application: Help menu → Manage Product Keys
- **Online learning resources**
 - **Getting started with Tableau:** a tutorial that walks you through the features and functions of Tableau Desktop
 - **Tableau training:** free training videos

- Philadelphia Tableau User Group LinkedIn page: frequent posts of video tutorials
- **Makeover Monday Lab** SJU student-led tutor lab, available Mondays 10:00 AM – 9:00 PM both virtually and in person for walk-in support with Tableau
 - In person in Mandeville 203, SJU Hawk Hill campus
 - Virtually <https://sju.zoom.us/j/795807778> Meeting ID: 795 807 778 Password: #Hawk
 - Note that the lab will be closed March 2 due to Spring Break
- **Tutoring Appointment** request an on-demand appointment with a Tableau tutor from SJU
 - To schedule, complete this [form](#) with 48 hour notice
 - Note that tutors will not be available February 28 – March 7 due to Spring Break

How Teams Will Be Evaluated

Judges will evaluate teams holistically, focusing on how effectively your analysis, dashboards, and recommendations work together to support a clear and well-reasoned story. Judges place the greatest emphasis on the clarity of your data story, the quality of your insights, and how effectively you communicate your analysis. At a high level, judges will consider the following:

- Clarity and effectiveness of the data story (clear message, logical flow, and audience focus)
- Depth of analysis and quality of insights (meaningful patterns, comparisons, and interpretation)
- Presentation and communication skills (clear explanation, pacing, and engagement)
- Quality of visualizations (appropriate, readable, and well-designed dashboards)
- Thoughtful, transparent, and value-adding use of AI

3

Case Study and Data Summary

This year's challenge focuses on **GLP-1 Utilization and Public Health**. Following is a detailed description of the background and task to the participating teams.

Background: Why This Matters

Obesity and type 2 diabetes remain urgent and persistent public health challenges in the United States. According to the Office of Disease Prevention and Health Promotion (ODPHP), approximately **two in five U.S. adults** and **one in five children and adolescents** have obesity. Excess weight substantially increases the risk of developing type 2 diabetes, cardiovascular disease, and certain cancers, while also contributing to higher healthcare costs and reduced quality of life.

To address these challenges, ODPHP established the **Healthy People 2030** initiative, which sets national, data-driven objectives aimed at improving health and well-being over the decade. Within the *Overweight & Obesity* topic area, Healthy People 2030 emphasizes reducing obesity prevalence and promoting healthier behaviors through improved nutrition and increased physical activity. Key leading indicators highlighted by the CDC's Division of Nutrition, Physical Activity, and Obesity (DNPAO) include reducing childhood obesity (NWS04) and increasing the proportion of adults who meet physical activity guidelines (PA05).

Within this broader public health landscape, **GLP-1 receptor agonist therapies** (e.g., semaglutide, tirzepatide) have rapidly expanded in use for the treatment of type 2 diabetes and obesity. These medications have demonstrated clinical effectiveness for weight loss and glycemic control and are reshaping care delivery, payer coverage decisions, and patient demand. Thought leadership from organizations such as IQVIA documents the rapid growth of obesity-focused therapeutics and the expanding GLP-1 pipeline, raising important questions about utilization patterns, sustainability, and alignment with prevention-focused public health strategies.

Understanding how GLP-1 therapies are being adopted and utilized across populations and geographies is critical for stakeholders seeking to balance innovation, access, appropriate use, and long-term population health outcomes.

Problem Statement

How can GLP-1 therapies be used to support obesity reduction and prevent type 2 diabetes in the United States?

Your team will use three years of GLP-1 prescription utilization data to conduct a persuasive, data-driven analysis that:

1. Quantifies adoption patterns and utilization trends across populations and geographies;
2. Connects observed patterns to national public health goals, including **Healthy People 2030** or the **CDC National Diabetes Prevention Program (National DPP)**; and
3. Proposes actionable, evidence-based recommendations for a clearly defined stakeholder (e.g., state health agencies, payers or employer coalitions, or community health organizations).

Your analysis should focus on utilization patterns rather than clinical outcomes, emphasizing how data can inform policy, program design, and measurement strategies rather than clinical decision-making.

Connection to National Initiatives: Anchor Points for Your Story

Teams should explicitly anchor their analysis to one of the following national initiatives:

Healthy People 2030 (ODPHP) The Healthy People 2030 goal relevant to this case study is to *reduce overweight and obesity by helping people eat healthy and get physical activity*. Teams may reference leading indicators such as childhood obesity prevalence (NWS04), adult physical activity (PA05), and other nutrition- and activity-related objectives to contextualize utilization patterns and propose complementary strategies.

CDC National Diabetes Prevention Program (National DPP) The National DPP is an evidence-based lifestyle change program designed to prevent or delay type 2 diabetes among adults with prediabetes. Teams may examine how GLP-1 utilization patterns could interact with DPP participation, coverage, and referral pathways, and propose coordinated strategies that combine pharmacotherapy and lifestyle interventions for appropriate populations.

Teams must explicitly align their analysis to either Healthy People 2030 or the CDC National Diabetes Prevention Program (National DPP); teams are not expected to address both.

The Challenge

Data Provided

Teams will receive three years of aggregated GLP-1 prescription utilization data for an assigned cluster of U.S. states. The dataset includes the following dimensions:

- Age group
- Gender
- State (within assigned cluster)

- Product (brand)

All data are deidentified and contain no protected health information (PHI). The data are intended to be explored, analyzed, and communicated using Tableau dashboards.

A limited national-level summary table is also provided to support high-level benchmarking and contextual comparisons only; it is not intended for detailed state-level or cross-cluster analysis.

Your Task

Using the provided data, your team will develop a clear, persuasive narrative that explains how GLP-1 utilization patterns relate to public health goals and identifies opportunities for optimization. Teams will communicate their findings through Tableau dashboards, as described in the **Round 1: Virtual** section. Your work should culminate in a specific, actionable recommendation tailored to a defined stakeholder.

Required Analytical Elements

Your analysis should address the following components:

- **Stakeholder definition and objective** (e.g., “Increase appropriate GLP-1 utilization to support Healthy People 2030 obesity reduction goals in selected states”).
- **Adoption and utilization analysis:**
 - Three-year trend analysis of GLP-1 prescription volume and growth.
 - Utilization patterns by age and gender.
 - Interstate variation within the assigned cluster, including identification of segments with relatively high or low utilization.
 - Comparative product utilization over time (e.g., share-of-use by brand).
- **Public health alignment** (choose one):
 - **Healthy People 2030:** Map utilization patterns to obesity-related objectives and explain how GLP-1 strategies could complement nutrition and physical activity initiatives.
 - **National DPP:** Describe how observed GLP-1 uptake may support or interact with lifestyle-based prevention efforts and identify states or populations where integrated approaches may be most impactful.
- **Recommendations:**
 - Policy or programmatic actions (e.g., coverage criteria, referral pathways, patient education, school or workplace initiatives).
 - Measurement plan with leading indicators to track progress and responsible utilization.

Analytical Framing

Prescription counts reflect **utilization patterns**, not individual clinical appropriateness or patient outcomes. Teams should avoid causal or clinical claims and instead focus on identifying trends, differences, and opportunities for informed decision-making using aggregated data.

The goal of this challenge is to translate observed utilization patterns into meaningful public health insights and strategies. Ethical interpretation, avoidance of stigma, and person-centered framing are essential throughout the analysis.

4

Round 1: Virtual

Task

Please refer to the [Case Study and Data Summary](#) for a full description of the challenge. Each team will analyze GLP-1 prescription utilization data for their assigned cluster of states and deliver a persuasive, data-driven presentation aligned to either **Healthy People 2030** or the **CDC National Diabetes Prevention Program (National DPP)**.

Teams will present their insights using Tableau dashboards.

Dashboards

Each team must create **one Tableau workbook (.twbx)** containing **one or two dashboards**. Judges value clarity, focus, and storytelling over the number of dashboards presented.

For the purposes of this competition, a **dashboard** is defined as:

- A collection of **at least three visualizations** working together to tell a coherent story.
- Dashboards with only a single visualization are not permitted.
- A series of individual worksheets (one chart per sheet) does **not** meet the dashboard requirement.

Use of Outside Data

To ensure a fair and consistent competition, teams must base their analysis on the **data provided by SJU**. Outside data sources may be used for background research or context (e.g., Healthy People 2030 or National DPP information), but should not be merged with the competition dataset.

Cite external sources in a “Sources” dashboard/tab in the Tableau workbook.

Use of AI Tools

Teams are encouraged to thoughtfully incorporate AI tools (e.g., generative AI for brainstorming ideas, assistance with Tableau calculations or analytical logic, or built-in analytics features) to support their analysis and storytelling. A sponsor-supported award will recognize exemplary, value-adding, and ethical use of AI.

During the presentation, teams should dedicate **approximately 1–2 minutes** to discussing their use of AI. This discussion may be included as a brief segment within the Tableau dashboard (e.g., a text panel or annotation) and/or as part of the verbal presentation.

At a minimum, teams must clearly address:

- Which tools were used;
- How AI supported the team's work (e.g., idea generation, refining dashboard titles or explanations, or assistance with Tableau calculations or analytical logic);
- How the team verified AI-generated outputs for accuracy and appropriateness.

All analysis and visualizations must be created by the team in Tableau. Teams remain fully responsible for the accuracy, integrity, and ethical use of AI-supported work.

Failure to clearly disclose AI use may result in a deduction of points and will make a team ineligible for the AI award.

Presentation Format

Round 1 presentations will be conducted virtually via Zoom.

- Each team will present for **7–8 minutes**, followed by judge questions.
- Presentations must take place **entirely in Tableau**. No external slide decks or tools may be used.
- All team members must have cameras on and actively participate.
- Only the **three to five registered student team members** may present.
- Teachers may attend the Zoom session but may not assist during the presentation.

Teams are expected to remain within the allotted presentation time. Minor overruns may be permitted at the judges' discretion; however, if a presentation exceeds the time limit by a significant margin, judges reserve the right to stop the presentation and adjust scores accordingly.

Round 1 File Submission

All teams must submit a Tableau workbook (.twbx) prior to Round 1. This submission is intended for administrative and record-keeping purposes only and will not be reviewed by judges in advance of the presentation.

Teams will present live by sharing their screen during Round 1.

Notes and Presentation Style

Teams are encouraged to present without notes. If notes are used:

- Each student may use **one 3×5 index card (front only)**.
- Reading directly from notes may result in a deduction of points.

All team members should understand the analysis and address the audience directly.

Zoom Logistics

The Zoom link will be provided to all team leaders at least 24 hours in advance.

- Log in **10 minutes prior** to your scheduled presentation time.
- Enter quietly on mute if another team is presenting.
- Exit the Zoom session quietly after your presentation and judge Q&A.

Round One Results

Feedback and results will be emailed to all teams within 24 hours following Round 1. The **top eight teams** will advance to Round 2 and receive additional instructions.

5

Round 2: In-Person

Task

The top eight teams will be invited to Saint Joseph's University (Hawk Hill) for the final round.

Unless otherwise noted, all rules and guidelines from Round 1—including data use, dashboard structure, AI disclosure, and presentation expectations—continue to apply in Round 2.

- Teams will revise their dashboards based on Round 1 judge feedback.
- Each team will present for **7–10 minutes** to a new panel of judges.
- All team members must actively participate.
- Presentations must again take place entirely in Tableau.

Final results will be calculated immediately following the last presentation, with an award ceremony held shortly thereafter.

Round 2 File Submission

Teams advancing to Round 2 must submit a finalized Tableau workbook (.twbx) prior to the in-person competition. The submitted file will be used for the presentation on a shared computer. Teams should ensure that the submitted file reflects the version they intend to present.

Awards

The top three awards are based on the highest overall scores as evaluated by the judges. Special awards are evaluated separately from overall placement and focus exclusively on the specific component being recognized (design or use of AI), rather than the team's overall score. A team may receive both an overall placement award and one or more special awards.

- **First Place** (\$3,000)
- **Second Place** (\$2,000)
- **Third Place** (\$1,500)
- **The Eigen X Award for Design Excellence** (\$1,000): Exceptional clarity, visual effectiveness, and dashboard design. May be awarded independently of overall placement.
- **The Nest Award for Achievement in AI** (\$1,000): Transparent, ethical, and value-adding use of AI to enhance analysis, insight, or communication. May be awarded independently of overall placement.

6

General Guidelines

Use of Outside Data & Resources

To keep the competition fair, all teams are limited to using **only the data provided** for their visualizations. While you may research more data on the topic to educate yourselves and enhance your narrative, no outside data can be used in the visualizations.

Your work must be **original** and reflect your own insights and creativity. Teams may use AI tools to support their thinking, analysis, and communication; however, AI tools may not be used to automatically generate or design dashboards on your behalf. All visualizations must be created directly by the team in Tableau.

To enhance your designs, you are encouraged to explore [Tableau Public](#) for inspiration. This platform showcases a wide range of innovative and visually engaging dashboards that can help spark ideas while ensuring your work remains unique. Directly duplicating visuals from these reports is prohibited.

Presentation Time & Logistics

- All team members must participate in the presentation.
- Presentations should remain within the allotted time. Judges may adjust scores or stop a presentation if the time limit is significantly exceeded.
- Presenters may use one index card of notes. Do not read from a script—aim for a natural, story-driven delivery tailored to the judges.
- For the virtual round, keep cameras on and share the Tableau dashboard from your screen.

Dress Code

Participants are expected to present themselves in a professional and respectful manner. You may choose to wear either your **school uniform** (if applicable) or **business professional attire**. Business professional attire should be neat, conservative, and polished. Neutral or dark colors are recommended, and accessories should remain simple and understated. For visual reference, please see the examples below.

For Women

- Tailored suit, or
- Dress slacks or skirt with a blouse, or
- Conservative dress
- Closed-toe dress shoes recommended
- Neutral/dark colors and modest accessories preferred

DRESS CODES

WOMEN'S



Business - Formal



Business

For Men

- Dress slacks with a button-down shirt
- Tie required
- Jacket optional
- Dress shoes
- Clothing must be clean, pressed, and in professional colors

DRESS CODES

MEN'S



Business - Formal



Business

7

FAQs

What do you mean by “dashboard”?

We are asking each team to provide a single Tableau file that contains 1–2 dashboards (collections of multiple visuals that work together to tell a story). Participants should keep the presentation time limit in mind as all dashboards need to be presented in the allotted presentation time. Please refer to the information in [Round 1: Virtual](#) for more details.

Can we use another data source/outside data?

To ensure a common foundation and a fair competition, participants are limited to use only the data provided by SJU in their visualizations. You are encouraged to use outside data sources to educate and inform the team members. Participants are permitted to use outside sources to incorporate information into their presentations, noting that all information of this sort must be transparent. Cite external sources in a “Sources” dashboard/tab in the Tableau workbook. The competition organizers reserve the right to conduct checks to ensure compliance with these rules. Participants found in violation will receive a deduction in points. Please refer to the information in [General Guidelines](#) for more details.

How do we get a Tableau License?

Follow the instructions below to obtain access to Tableau Desktop for the duration of the competition. Please note that this access key is intended for registered participants only.

1. Sign into an existing Tableau account, or [create](#) a new account using your school-issued email
2. Once signed in, visit the [Academic Quick Start](#) page to download the latest version of Tableau Desktop
3. Activate with product key: **TCD6-78E6-1900-614E-B6B1**
4. Already have a copy of Tableau Desktop installed? Update the license key in the application: Help menu → Manage Product Keys

Does my team need to be in the same place to present for Round 1?

No, your team does not need to be in the same location to present. Teams may present in the format that works best for them. All participants must have their cameras turned on, and the dashboard must be clearly visible to the judges. We recommend that one team member share their screen and manage the dashboard during the presentation.

What should we wear when presenting?

Schools with Uniforms—you have the option of wearing your school uniform or dressing business professional (see [General Guidelines](#) for further guidance).

Schools without Uniforms—business professional dress (see [General Guidelines](#) for further guidance).

What happens if we exceed our allotted presentation time?

Judges understand that presenting under time pressure can be challenging. Minor overruns may be permitted at their discretion. However, if a team goes significantly over the time limit, judges may stop the presentation and adjust scores to ensure fairness for all teams.

Where can we get help while we are creating our dashboard?

When in doubt or if you are unsure of the approach, please feel free to seek assistance. There are multiple resources available to you to get help and feedback.

1. **Makeover Monday Lab** – this is a student-led lab available to assist participants in learning data visualization. Available Mondays 10:00 AM – 9:00 PM both virtually and in person for walk-in support with Tableau
 - In person in Mandeville 203, SJU Hawk Hill campus
 - Virtually <https://sju.zoom.us/j/795807778> Meeting ID: 795 807 778 Password: #Hawk
 - Note that the lab will be closed March 2 due to Spring Break
2. **Tutoring appointment** – available for on-demand support with Tableau.
 - To schedule, complete this [form](#) with 48 hour notice
 - Note that tutors will not be available February 28 – March 7 due to Spring Break
3. **Tableau's Online Community** – Tableau has built an excellent structure online where people are able to ask questions and help each other. Chances are that if you have the question, many people have before you. Start a google search with your question and the word “Tableau.”
4. **General inquiries** – email hs-analytics@sju.edu.
5. **AI tools** – teams may use AI tools to assist their work, e.g., clarify concepts, troubleshoot Tableau calculations, brainstorm ideas, etc. Teams are responsible for verifying all AI-generated guidance and must disclose AI use as described in the competition guidelines.

8

Acknowledgments & Sponsors

We would like to extend a special **THANK YOU** to our sponsors and partners.

Award Sponsors



Data and Research Partners



SJU