In this activity, you will use iSENSE to view the statistics of 30 Major League Baseball teams from the 2013 regular season.

Getting Started

1. Navigate to the iSENSE web site (isenseproject.org).
2. Select **Projects** from the main navigation menu and enter "MLB" in the search area.
3. Select the project called **MLB Team Statistics 2013**.
4. In the Data Sets area, click **Visualize**. You should see the map shown below.

The markers correspond to one or more Major League Baseball teams.

Challenge #1: Map

In the control panel to the right of the map, Group By: **Team** and deselect **Cluster Markers**.

1. Which MLB team plays at the northernmost latitude? (HINT: Click the marker.)

2. What was this team's total home attendance during the 2013 season?

3. The surface road on the south side of the stadium is named after which longtime MLB designated hitter? (HINT: Zoom in to see.)

4. What four metropolitan areas had teams with the highest payrolls in 2013? (HINT: Deselect **Display Markers** and make a **Heat Map** based on Payroll.)

Challenge #2: Bar Chart

1. Which team scored the most runs in 2013? (HINT: Put **Runs** on the Y Axis. Sort by **Runs**, and mouse over the bar to identify the team.)

2. What was the mean number of runs scored by all National League teams in 2013? (HINT: Group By: **League** and select **Mean** as the Analysis Type.)

Challenge #3: Scatter Chart

1. Did teams with higher payrolls draw more fans than teams with lower payrolls in 2013? (HINT: Set the X Axis to **Payroll** and the Y Axis to **Home Attendance**. Group By: **Team**.)

2. Which three teams with payrolls under $100 million drew more than 2.5 million fans?

3. Among the teams with payrolls of more than $150 million, which team had the fewest wins?

4. Which statistic is a better predictor of total runs: Home Runs or On Base Plus Slugging? (HINT: A straighter line of markers indicates a stronger correlation.)

Challenge #4: Histogram

1. Within 10 home runs, what total was most commonly achieved by MLB teams in 2013? (HINT: Set the Y Axis to **Home Runs** and Bin Size to **10**.)

2. How many National League teams achieved home run totals in this range during 2013?

Extra Credit Challenge

What is the relationship between stolen bases and payroll? How can you explain this relationship?