Report Summary: Roller Coaster Dashboard Analysis

# **Executive Summary:**

The Roller Coaster Dashboard offers a comprehensive overview of key metrics and trends in the roller coaster industry. Through a combination of visualizations including donut charts, clustered column charts, line charts, clustered bar charts, and a stacked column chart, the dashboard provides valuable insights into roller coaster types, locations, ratings, construction trends, attendance patterns, heights, lengths, accidents, and maintenance activities. This report summarizes the key findings from each visualization and their implications for stakeholders in the amusement park and roller coaster industry.

### 1. Donut Charts:

The dashboard features two donut charts highlighting the distribution of roller coaster types and their geographic locations. These visualizations offer insights into the diversity of roller coaster designs and their regional concentration, aiding in strategic planning and marketing efforts for amusement park operators.

### 2. Clustered Column Charts:

Two clustered column charts compare roller coaster ratings across different categories and track construction trends over time. These charts help stakeholders assess roller coaster popularity and construction patterns, informing investment decisions and marketing strategies.

#### 3. Line Chart:

A line chart showcases attendance patterns at amusement parks over time. This visualization assists park managers in identifying peak seasons and optimizing resource allocation to enhance operational efficiency and revenue generation.

#### 4. Clustered Bar Charts:

The dashboard includes two clustered bar charts comparing roller coaster heights and lengths across various categories. These visualizations provide valuable insights into roller coaster magnitude within specific groups, aiding enthusiasts in planning their roller coaster experiences and park operators in ride design and placement.

## 5. Stacked Column Chart:

A stacked column chart overlaid with a line chart visualizes the relationship between roller coaster accidents and maintenance activities over time. This analysis helps safety managers identify correlations and implement proactive measures to enhance roller coaster safety and maintenance practices, ensuring guest safety and ride reliability.

# Conclusion:

The Roller Coaster Dashboard offers a comprehensive analysis of roller coaster characteristics, trends, and safety-related insights. By leveraging the insights presented in this report, stakeholders can make data-driven decisions to enhance guest experiences, optimize park operations, and ensure roller coaster safety and reliability.