TSA Complaint Analysis

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Introduction & Objectives

- **Overview**

  This analysis reviews TSA complaint data to uncover patterns and identify areas for improvement.
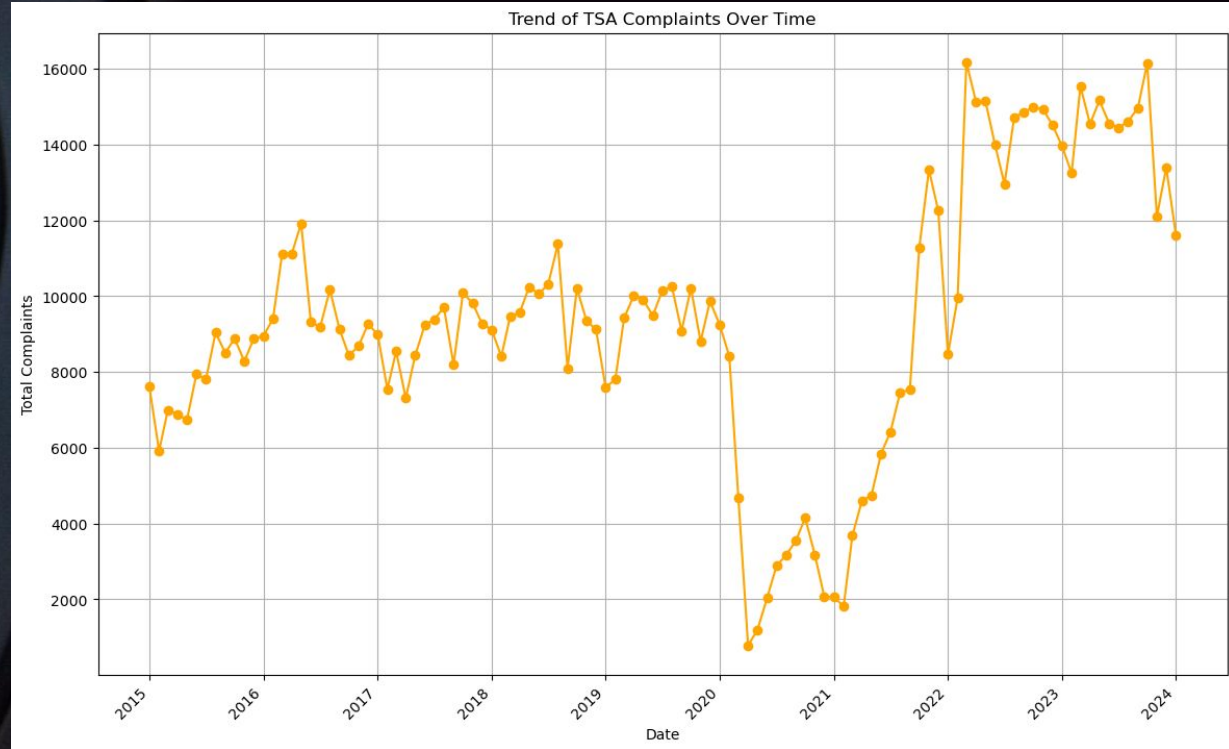
- **Objective**

  Identify high-complaint airports and common complaint categories to inform actionable recommendations.

- **Audience**

  TSA executives and operational decision-makers looking to improve passenger satisfaction and streamline security processes.

Overall Complaint Trends


Trend of TSA Complaints Over Time

Overall Complaint Trends

- This line chart shows the monthly trend of complaints over time.

- Noticeable peaks in complaint volume appear during specific months, likely due to seasonal travel surges.

- Periods with higher complaints suggest potential strain on resources or specific operational challenges.
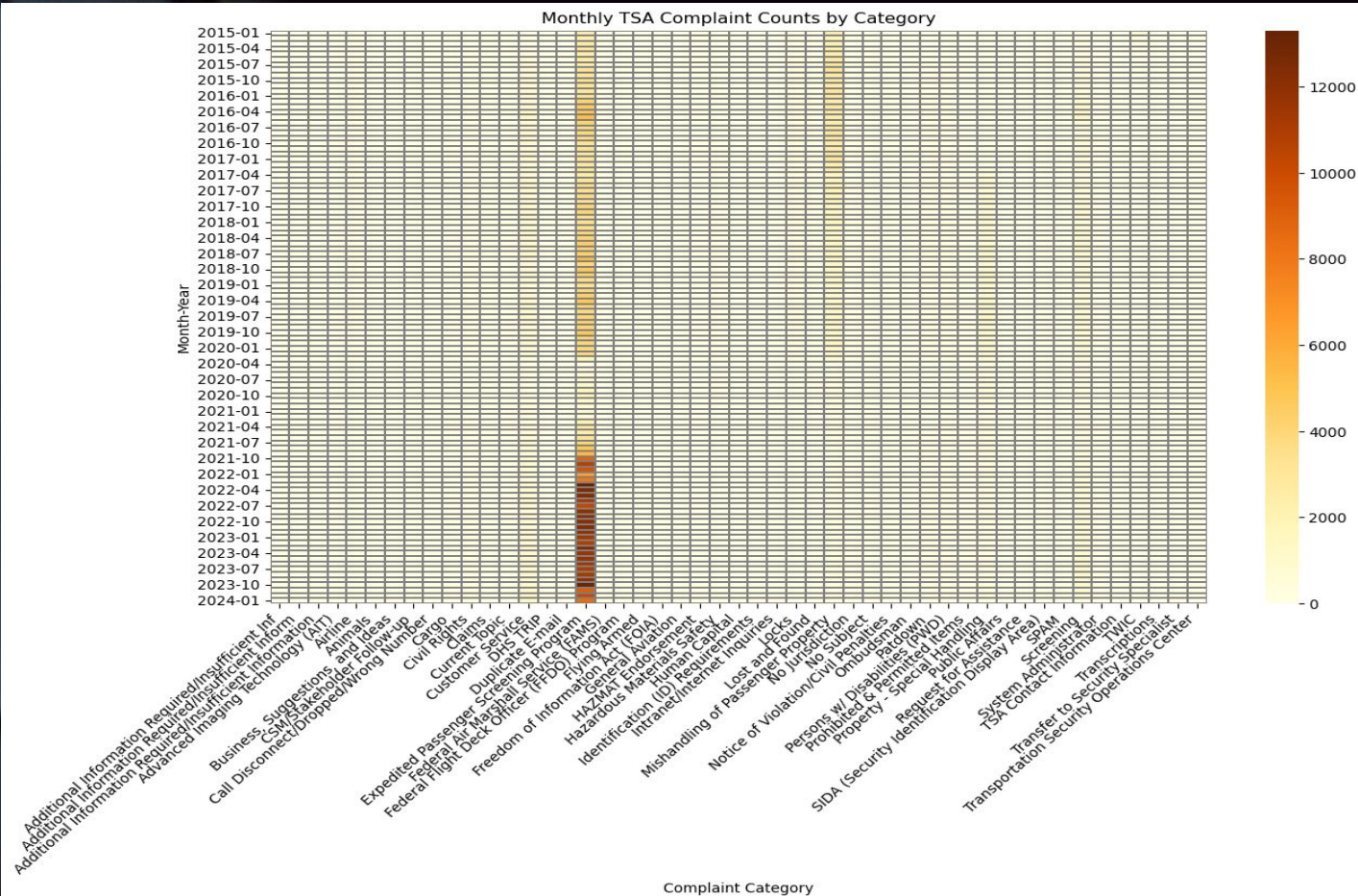
Top Complaint Categories

Distribution of TSA Complaint Counts by Category
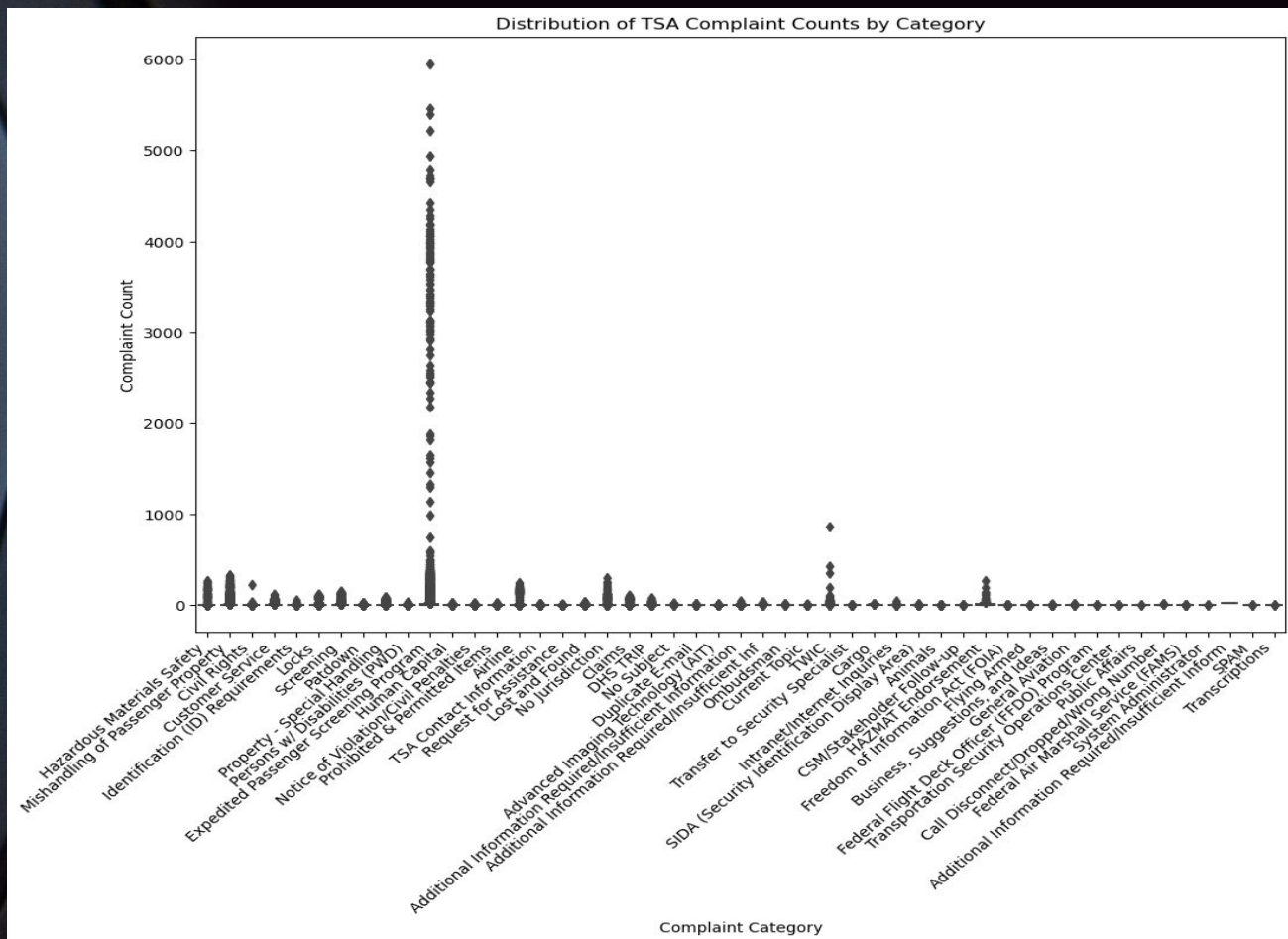
Top Complaint Categories

- This box plot shows the variability in complaint counts by category.

- Categories like 'Mishandling of Property' and 'Screening Processes' have high variability, indicating frequent issues.

- High median complaint counts in these categories suggest they are areas of concern across multiple airports.

Monthly Category Breakdown

Monthly TSA Complaint Counts by Category

Monthly Category Breakdown

- This heat map shows the distribution of complaints by category across each month.

- Categories such as 'Screening Processes' and 'Wait Times' exhibit seasonal spikes, particularly during peak travel months.

- Insights from this chart can help in allocating resources and training efforts during these periods.

Subcategory Distribution

Distribution of Top Subcategories within Each Complaint Category

Subcategory Distribution

- The stacked bar chart illustrates the distribution of complaints within the top subcategories of each major category.

- Subcategories like 'Damaged/Missing Items' under Property Mishandling and 'Pat-Down Procedures' under Screening contribute significantly to overall complaint volumes.

- This breakdown highlights specific issues that could be targeted for policy or procedural improvements.

Complaint Distribution by Airport
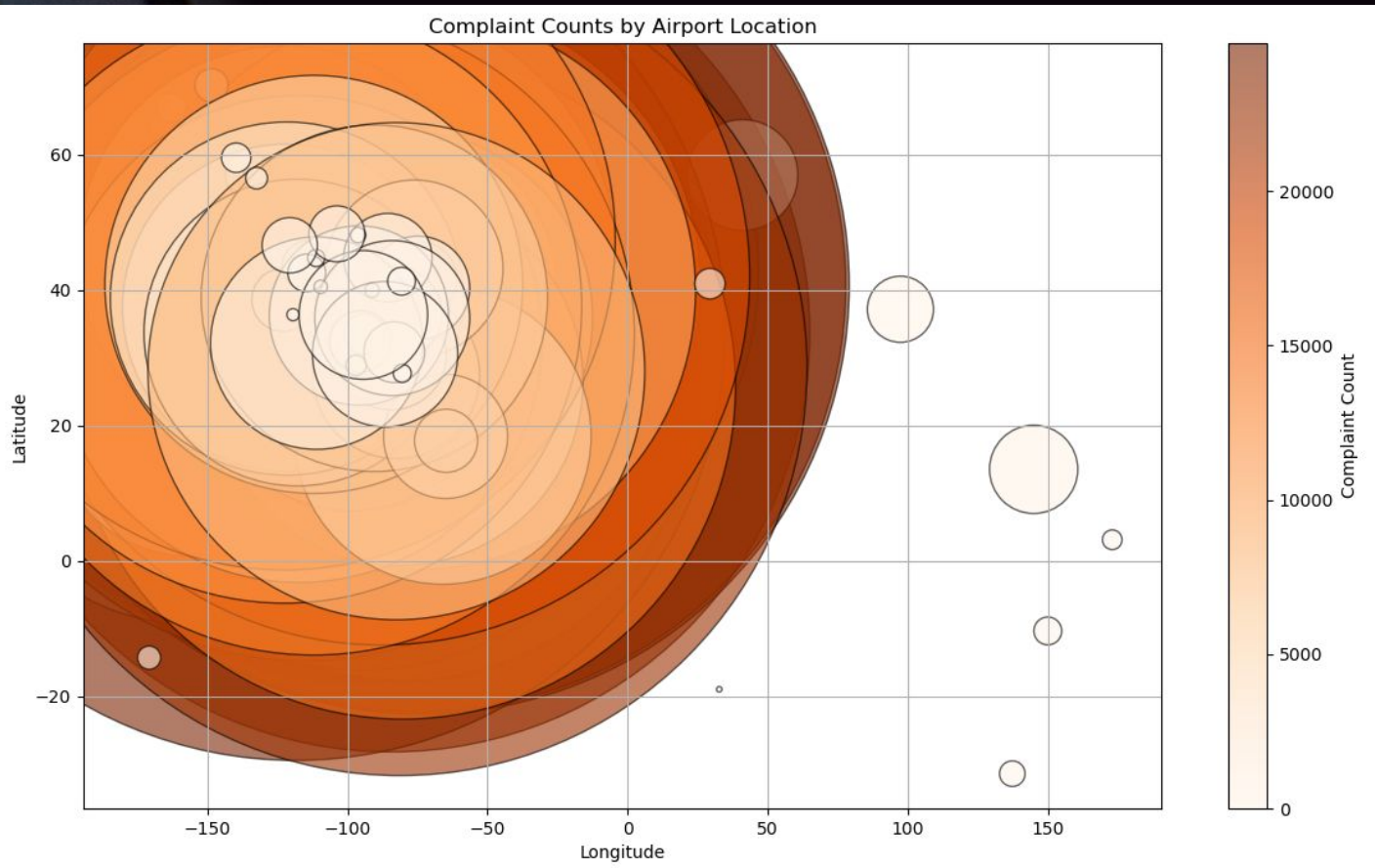
Complaint Counts by Airport Location

Complaint Distribution by Airport

- This scatter plot shows complaint volumes across airports, with bubble size representing complaint count.

- Airports with consistently high complaint counts are located in major urban areas, which handle high passenger volumes.

- Identifying these high-complaint airports can help prioritize resource allocation for improvement efforts.
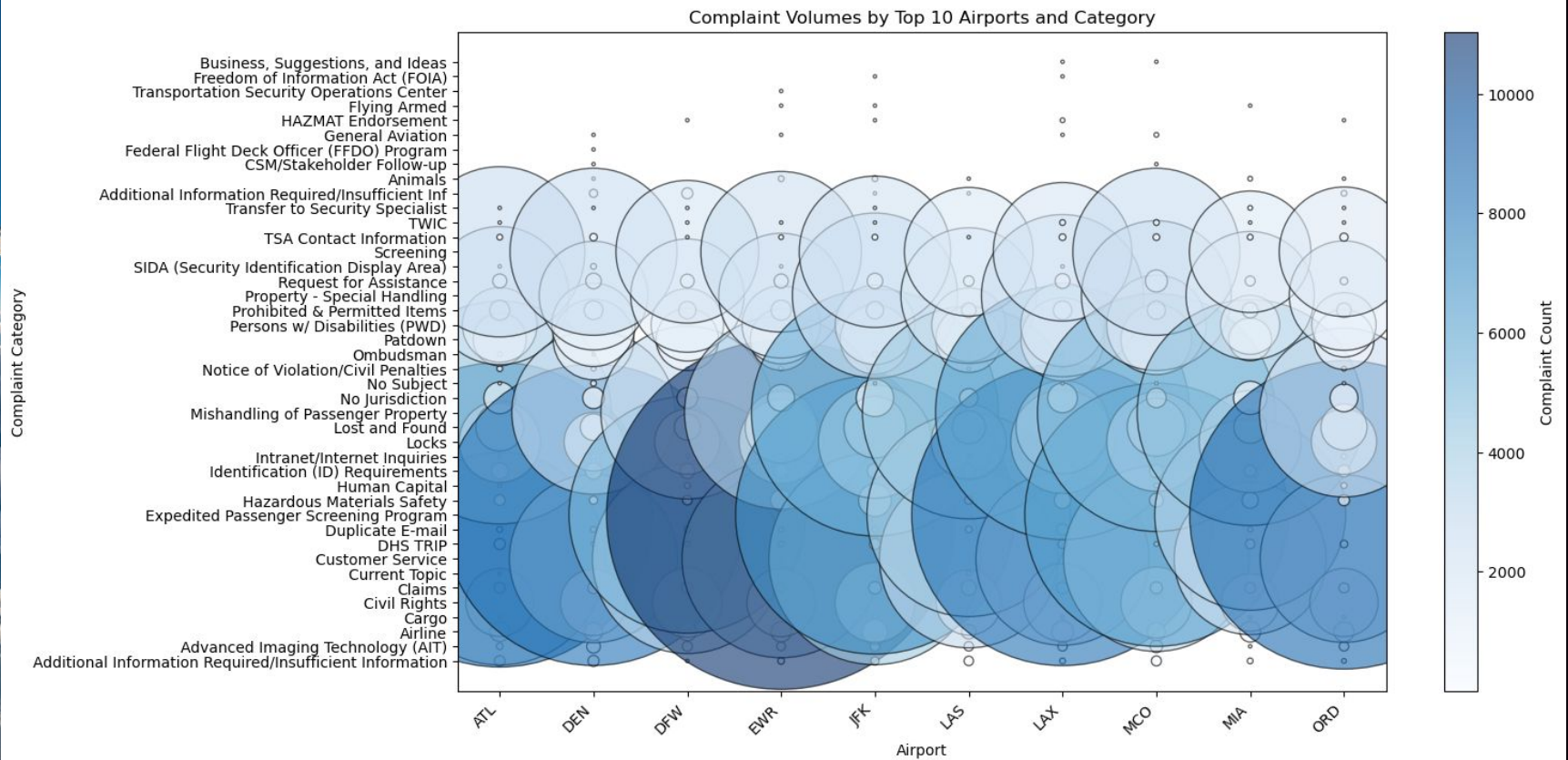
Focus Airports and Categories

Complaint Volumes by Top 10 Airports and Category

Focus Airports and Categories

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- This bubble chart illustrates complaint counts for the top airports across different complaint categories.

- Certain airports, like EWR, show high complaint counts specifically related to 'Screening Procedures' or 'Mishandling of Property'.

- This visualization allows TSA to focus on specific issues at particular airports, optimizing targeted improvements.

Conclusion & Call To Action

Summary:

- High complaint areas include Screening Processes, Mishandling of Property, and Wait Times.
- Certain airports consistently have higher complaint volumes, particularly during peak travel months.

Key Recommendations:

- Enhance training for high-complaint areas like property handling and screening.
- Boost resources at high-complaint airports, especially during peak seasons.
- Focus on targeted improvements at airports with recurring issues.

Call to Action:

- Implement these changes to improve passenger satisfaction and streamline TSA operations.