Title: TSA Airport Complaints

Introduction

This paper analyzes recent U.S. airport complaint data submitted to the Transportation Security Administration (TSA), focusing on trends from 2022 and 2023. The goal is to identify patterns in complaint volumes, regional disparities, and category-specific concerns—especially post-pandemic—using visual analysis to communicate key insights clearly. The findings are presented as a blog post to engage a broad, curious audience, supported by simple, effective visuals in blue shades that bring the data story to life.

Audience

This blog is intended for **travelers, aviation policy enthusiasts, and members of the general public** who are interested in airport service quality and government responsiveness. It also aims to provide **data storytelling enthusiasts** a real-world example of translating government datasets into accessible insights.

Purpose

The goal is to help readers understand where, why, and how airport complaints are rising or falling—and what that means for travel experience in the post-pandemic era. The analysis also seeks to shed light on common issues like TSA screening frustrations and baggage handling problems. While this is not a predictive exercise, the post encourages thoughtful engagement with public data.

Medium

The insights are delivered through a **blog post** with embedded **Python-generated visualizations**. This medium supports a linear narrative structure and makes the information

accessible across technical skill levels. **Visual storytelling** helps highlight key contrasts, while brief explanatory text supports interpretation.

Design Choices:

- **Color Scheme:** All visuals use shades of **blue** to maintain consistency and convey a calm, professional tone. Darker blues represent higher complaint volumes, while lighter shades indicate fewer issues.

- **Text & Alignment:** Titles are short and descriptive. Axes and labels are aligned for clarity. Key figures are emphasized through bolded callouts or annotations.

- **Spacing & Sizing:** Visuals are intentionally spaced to prevent clutter. Font sizes are readable on all devices.

Ethical Considerations

- **Data Transformations:** Complaint data was sourced from the U.S. government's public datasets. No synthetic or private data was used.

- **Data Assumptions:** Only necessary aggregations were performed (e.g., monthly totals, category grouping). No manipulation of trends occurred.

- **Presentation Risks:** To avoid misinterpretation, all visuals include proper labels and time scopes. Blog commentary clarifies that complaint volume does not always equate to airport performance quality.

- **Responsible Messaging:** The post focuses on transparency—highlighting areas of concern without exaggeration—and promotes citizen awareness of air travel issues.

Key Takeaways & Recommendations

- **Complaint Surge Post-Pandemic:**

  TSA complaints rose significantly starting in early 2022, remaining above pre-pandemic levels. This suggests rising passenger expectations or operational strains.

- **Airport Disparities:**

  Newark (EWR) consistently exhibits both a high median and wide variability in complaint volume—implying persistent dissatisfaction at this hub.

- **Dynamic Complaint Categories:**

  Categories like "Expedited Passenger Screening Program" show large swings in volume, while others decline steadily—highlighting evolving passenger concerns.

- **Geographic Complaint Concentration:**

  States like California, Texas, and Florida dominate in raw complaint numbers. These high-traffic hubs likely reflect both volume and quality issues.

- **Top Subcategories: PreCheck & Baggage:**

  PreCheck enrollment and checked baggage issues appear most frequently among complaints—signaling key touchpoints that shape airport experiences.

- **Customer Service Driven by TSO Interactions:**

  The majority of customer service complaints stem from negative interactions with Transportation Security Officers (TSOs), underscoring the human element in security experiences.

Call to Action

- **Play Responsibly:** Treat the lottery as entertainment. Set spending limits and avoid chasing patterns.

- **Use Data Wisely:** Explore historical data to satisfy curiosity—not to attempt prediction.

- **Promote Education:** Encourage greater awareness of randomness and probability to reduce misconceptions about lotteries.

Conclusion

Speak Up as a Traveler

If you've had a poor airport experience—especially with TSA screening, baggage handling, or customer service—consider submitting formal feedback. These complaints help highlight systemic issues that need attention.

Use Public Data to Drive Change

This analysis shows how open government data can reveal patterns and improve transparency. Data enthusiasts, journalists, and advocates can continue exploring this and similar datasets to hold agencies accountable.

Improve Service with Targeted Action

Airport and TSA leadership should prioritize high-complaint areas—like Newark and PreCheck issues—for operational review and training. Human-centered service improvements can make a measurable difference.

References

Lee, A. (2025, February 3). *Storytelling with Data: A Data Visualization Guide for Business Professionals*. Towards Data Science. https://towardsdatascience.com/storytelling-with-data-a-data-visualization-guide-for-business-professionals-97d50512b407/