**Audience**

The audience for this presentation includes my analytics manager and senior leadership within the TSA. These stakeholders have a good understanding of the overall TSA operations but may not be deeply familiar with complaint data specifics or analytics jargon. They are decision-makers interested in actionable insights to improve TSA passenger experience and operational efficiency. Therefore, the presentation will balance technical detail with clear business implications and avoid overly complex statistical language.

**Purpose**

The primary goal of this story is to highlight the emerging and concerning trend in complaints related to expedited passenger screening programs, which have sharply increased post-2021. I want the audience to understand that while previous complaints were more dispersed across various categories (mainly luggage mishandling), now a significant portion of complaints are concentrated in one category, signaling a potential systemic problem or overly broad complaint categorization.  
The call to action is clear: allocate focused resources toward investigating and addressing issues in expedited screening — including enhanced staff training, stricter enforcement of guidelines, and possibly revising complaint category definitions. Additionally, I recommend expanding the analysis to include per capita complaint rates adjusted for airport traffic or regional population to pinpoint systemic issues more accurately.

**Medium**

I will present the analysis through an interactive Power BI dashboard that allows the leadership team to explore complaint data by category, subcategory, airport, and year. The dashboard’s side-by-side layout facilitates comparison across categories and historical trends, making complex data more digestible.  
This format suits the audience’s need for a concise yet dynamic view that supports strategic decision-making and follow-up questions during the presentation.

**Design**

* **Gestalt Principles**: The dashboard design leverages proximity and grouping to clearly separate different reporting categories by dividing the screen into two halves. This segregation helps users focus on one area without distraction from others.
* **Spacing**: Adequate spacing around visuals prevents clutter and improves readability. Borders outline distinct sections, creating clear visual boundaries.
* **Color**: I used a consistent color palette that differentiates complaint categories without overwhelming the viewer — warm colors to highlight critical or increasing complaint trends and neutral tones for background elements to keep focus on the data.
* **Text**: Labels and titles are concise and positioned close to corresponding visuals for easy association. I avoided jargon and used simple terminology to maintain clarity.
* **Alignment & Sizing**: Visual elements are aligned uniformly and sized for optimal visibility and to maintain a balanced, professional look.

**Visuals**

1. **Choropleth Maps** — Show geographical distribution of complaints by airport/region, revealing hotspots. Though currently reflecting raw counts, I recommend augmenting with per capita rates for deeper insight.
2. **Heat Maps** — Display complaint counts by category and subcategory, highlighting shifts in complaint focus before and after 2021.
3. **Line Charts** — Illustrate historical complaint trends over time across categories and airports, showing the spike in expedited passenger screening complaints after 2021.

The other three visuals include bar charts and other comparative charts to clearly convey counts and category breakdowns.

**Ethical Considerations**

* **Data Changes**: To enable relational joins in Power BI, I concatenated fields (year-month-date, airport code, category) to create primary keys linking complaint counts, categories, and airports. This transformation was necessary for effective filtering but did not alter the underlying data values.
* **Legal/Regulatory Guidelines**: Complaint data is anonymized and aggregated by airport and category, avoiding any personally identifiable information, thus respecting privacy regulations.
* **Risks of Visualization**: Presenting raw complaint counts by airport could mislead viewers to assume an airport with more complaints necessarily performs worse; this is mitigated by recommending per capita normalization in future analysis.
* **Assumptions**: The complaint category “expedited passenger screening programs” may be too broad, potentially grouping multiple distinct issues under one umbrella. This assumption guides the call to action for deeper investigation and possible recategorization.
* **Filtering Transparency**: Filters applied on categories and years are clearly labeled on the dashboard to maintain transparency about data scope.
* **Data Sourcing & Credibility**: The datasets come directly from TSA complaint records, verified for accuracy and completeness. The sourcing process is internal and ethical, based on routine complaint reporting channels.
* **Mitigation of Ethical Implications**: To avoid misinterpretation, I recommend providing contextual notes and disclaimers on the dashboard explaining the limitations of raw counts and the need for adjusted metrics. Any data filtering or transformation should be documented and visible to users.

Dashboard

A screenshot of a computer screen

AI-generated content may be incorrect.

Dynamic tooltip

A screenshot of a computer

AI-generated content may be incorrect.