Analysis of CityScore Metrics in Boston

The CityScore dataset offers insights into the performance of Boston's city services, where scores below 1 indicate underperformance and those above 1 signify exceeding targets. Daily scores reflect the previous day's metrics, with updates for weekly, monthly, and quarterly scores.

**Trends and Patterns in CityScore Metrics**

Key trends reveal consistency in service response, particularly in infrastructure services like Pothole On-Time and Parks Maintenance On-Time, which maintain high average scores. Part 1 Crimes contribute the most (13.42%) to the overall CityScore, followed by BFD Incidents (6.66%) and Missed Trash On-Time (4.76%). Metrics such as Homicides (Trend) and 311 Call Center Performance contribute less than 1%, indicating their lower impact on overall performance.

Despite few days falling below the target score of 1, the 7-day moving average remains stable. Part 1 Crimes show high variability, suggesting ongoing challenges in crime management. Homicides (Trend) and Graffiti On-Time reflect stability but contribute minimally to the overall score.

**Comparison of City Performance Across Time and Categories**

Overall performance analysis reveals low scores for Homicides and Graffiti On-Time, along with concerns for City Services Satisfaction and EMS Response Time. The city's performance has improved, with a notable spike in late 2019 and a drop in mid-2022.

Adding a holiday column indicated no significant impact on CityScore performance. Weekly scores peak on Mondays and dip on Wednesdays, consistently above 1. Daily scores are generally higher in the third week of the month.

**Part-to-Whole Relationships**

Part 1 Crimes' high impact underscores the need for focused crime management. The correlation matrix shows a strong positive relationship (0.40) between BFD Incidents and Response Time, while a negative correlation (-0.46) between Graffiti On-Time and EMS Response Time suggests that prompt responses in one area could enhance efficiency in another. However, these correlations may be coincidental, warranting further investigation.

A screenshot of a computer screen

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A graph showing the average daily city scare

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A graph of a number of blue bars

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A screenshot of a graph

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