**NYC Taxi Trip Analysis**

**1. Overview**

* **Total Trips:** 6.2 million
* **Total Fare Amount:** $171.1 million
* **Average Trip Distance:** 3.7 miles
* **Average Tip Amount:** $3.4
* **Total Passenger Count:** 8.1 million

**2. Insights from Report 1**

**2.1 Trips and Payments**

* **Payment Distribution:**
  + 83.2% of transactions were made using credit cards.
  + 16.8% of payments were made in cash.
* **Total Fare by Payment Type:**
  + Credit card payments contributed $139.2M.
  + Cash payments contributed $22.8M.

**2.2 Trip Patterns**

* **Daily Trends:**
  + Highest trip count on **Friday (1M trips)** and **Saturday (0.9 M trips)**.
  + Lowest trip count on **Sunday (0.7M trips)**.
* **Trips by Hour:**
  + Peak hours are **4 PM - 7 PM**, with maximum trips and longer durations.
  + **Lower trips late at night (12 AM - 5 AM)** but with longer durations.

**2.3 Popular Routes**

* The **top 10 routes accounted for 2.59 million trips**.
* The most frequent routes include **Location IDs 236, 237, and 161**.

**2.4 Geographic Analysis**

* **Avg Fare and Avg Tip by Charleston Zone** were high.

**3. Insights from Report 2**

**3.1 Weekday vs. Weekend Trends**

* **Weekday trips dominate (72.4%)**, while weekend trips account for only **27.6%**.
* **Afternoon peak (2.5M passengers)** followed by evening (2.1M).

**3.2 Trip Distance Analysis**

* **1-3 mile trips are most common (2.9M trips)**.
* **Long-distance trips (10+ miles) are relatively rare (0.5M combined).**

**3.3 Fare and Tip Analysis by Borough**

* **Highest Average Fare:** EWR (Newark Airport) at $87.87.
* **Highest Average Tip:** EWR at $11.76.
* **Lowest Tips:** Bronx ($0.36 avg tip, 1.13% tip rate).

**3.4 Monthly and Yearly Trends**

* Data covers **January 2023 and December 2024**, showing a **slight decrease in trips in December 2024**.

**4. Key Takeaways**

1. **Peak Hours & Days:** Friday and Saturday see the highest trip volumes, with peak demand in the late afternoon and evening.
2. **Short-Distance Dominance:** The majority of trips are under 3 miles.
3. **Card Payments Preferred:** 83.2% of transactions are via credit cards.
4. **High-Value Routes:** Certain routes (PULocation 237, 236) have exceptionally high trip counts.
5. **Geographic Variations:** Manhattan sees the most trips, while EWR (Newark) has the highest fares and tips.
6. **Weekend Decline:** Weekend trips are significantly lower than weekday trips.