

# Provide Insights to Chief of Operations in Transportation Domain

## 1. Top and Bottom Performing Cities

- Identify the top 3 and bottom 3 cities by total trips over the entire analysis period.

Top 3 Cities:

| city_name | Total trips | Total Revenue | Avg Fare Per Trip | Avg Trip Distance (Km) | Avg Fare Per Km | Avg New Customer Rating | Avg Repeated Customer Rating | Avg New Customer Driver Rating | Avg Repeated Customer Driver Rating |
|-----------|-------------|---------------|-------------------|------------------------|-----------------|-------------------------|------------------------------|--------------------------------|-------------------------------------|
| Jaipur    | 67K         | ₹ 32M         | ₹ 484             | 30.00                  | ₹ 16.1          | 8.98                    | 7.99                         | 8.99                           | 8.99                                |
| Lucknow   | 54K         | ₹ 8M          | ₹ 147             | 12.51                  | ₹ 11.8          | 7.98                    | 5.99                         | 6.99                           | 6.50                                |
| Surat     | 46K         | ₹ 5M          | ₹ 117             | 11.01                  | ₹ 10.7          | 7.98                    | 5.99                         | 7.00                           | 6.48                                |

Botton 3 Cities:

| city_name     | Total trips | Total Revenue | Avg Fare Per Trip | Avg Trip Distance (Km) | Avg Fare Per Km | Avg New Customer Rating | Avg Repeated Customer Rating | Avg New Customer Driver Rating | Avg Repeated Customer Driver Rating |
|---------------|-------------|---------------|-------------------|------------------------|-----------------|-------------------------|------------------------------|--------------------------------|-------------------------------------|
| Mysore        | 13K         | ₹ 3M          | ₹ 249             | 16.48                  | ₹ 15.1          | 8.98                    | 8.00                         | 8.98                           | 8.97                                |
| Coimbatore    | 18K         | ₹ 3M          | ₹ 167             | 14.97                  | ₹ 11.1          | 8.49                    | 7.47                         | 7.99                           | 7.48                                |
| Visakhapatnam | 24K         | ₹ 7M          | ₹ 283             | 22.56                  | ₹ 12.5          | 8.98                    | 7.99                         | 8.98                           | 8.99                                |

## 2. Average Fare per Trip by City

- Calculate the average fare per trip for each city and compare it with the city's average trip distance. Identify the cities with the highest and lowest average fare per trip to assess pricing efficiency across locations.

| city_name     | Total trips | Total Revenue | Avg Fare Per Trip | Avg Trip Distance (Km) | Avg Fare Per Km |
|---------------|-------------|---------------|-------------------|------------------------|-----------------|
| Jaipur        | 67K         | ₹ 32M         | ₹ 484             | 30.00                  | ₹ 16.1          |
| Kochi         | 44K         | ₹ 15M         | ₹ 335             | 24.08                  | ₹ 13.9          |
| Chandigarh    | 33K         | ₹ 9M          | ₹ 283             | 23.51                  | ₹ 12.1          |
| Visakhapatnam | 24K         | ₹ 7M          | ₹ 283             | 22.56                  | ₹ 12.5          |
| Mysore        | 13K         | ₹ 3M          | ₹ 249             | 16.48                  | ₹ 15.1          |
| Indore        | 36K         | ₹ 6M          | ₹ 180             | 16.49                  | ₹ 10.9          |
| Coimbatore    | 18K         | ₹ 3M          | ₹ 167             | 14.97                  | ₹ 11.1          |
| Lucknow       | 54K         | ₹ 8M          | ₹ 147             | 12.51                  | ₹ 11.8          |
| Vadodara      | 27K         | ₹ 3M          | ₹ 118             | 11.50                  | ₹ 10.3          |
| Surat         | 46K         | ₹ 5M          | ₹ 117             | 11.01                  | ₹ 10.7          |

Top 3 Cities by Avg fare per trip:

- Jaipur - Rs 484
- Kochi - Rs 335
- Chandigarh - Rs 283

Bottom 3 Cities by Avg fare per trip:

- Vadodara - Rs 117
- Surat - Rs 118
- Lucknow - Rs 147

Note: Vadodara and Lucknow have a higher Total Trips, there could be room for improvement as increasing the Avg fare per Km or Avg fare per trip (By means not necessarily Including raising prices per Km), this suggestion should only be pursued given price change does not drastically impact the number of trips the customers book.

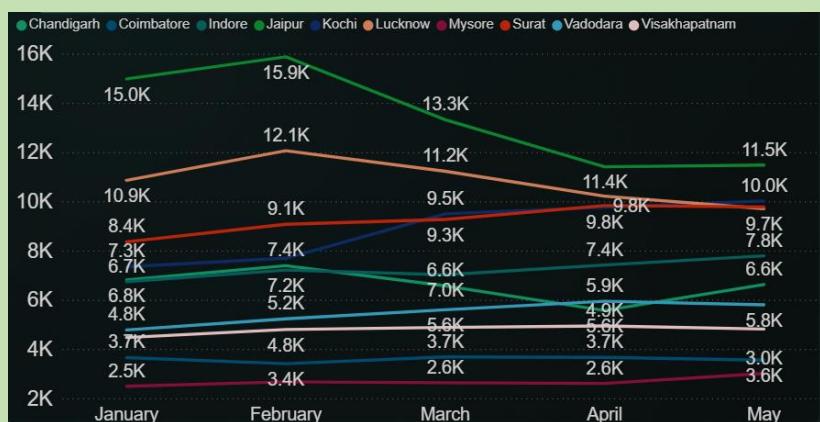
### 3. Average Ratings by City and Passenger Type

- Calculate the average passenger and driver ratings for each city, segmented by passenger type (new vs. repeat). Identify cities with the highest and lowest average ratings.

| city_name       | Avg Customer Rating | Avg Driver rating | Avg New Customer Rating | Avg Repeated Customer Rating | Avg New Customer Driver Rating | Avg Repeated Customer Driver Rating |
|-----------------|---------------------|-------------------|-------------------------|------------------------------|--------------------------------|-------------------------------------|
| ⊕ Mysore        | 8.72                | 8.98              | 8.98                    | 8.00                         | 8.98                           | 8.97                                |
| ⊕ Jaipur        | 8.58                | 8.99              | 8.98                    | 7.99                         | 8.99                           | 8.99                                |
| ⊕ Kochi         | 8.52                | 8.99              | 8.99                    | 8.00                         | 8.99                           | 8.99                                |
| ⊕ Visakhapatnam | 8.44                | 8.99              | 8.98                    | 7.99                         | 8.98                           | 8.99                                |
| ⊕ Chandigarh    | 7.99                | 7.73              | 8.49                    | 7.50                         | 7.99                           | 7.47                                |
| ⊕ Coimbatore    | 7.89                | 7.69              | 8.49                    | 7.47                         | 7.99                           | 7.48                                |
| ⊕ Indore        | 7.84                | 7.65              | 8.49                    | 7.48                         | 7.97                           | 7.48                                |
| ⊕ Vadodara      | 6.64                | 6.65              | 7.98                    | 5.98                         | 7.00                           | 6.48                                |
| ⊕ Lucknow       | 6.52                | 6.63              | 7.98                    | 5.99                         | 6.99                           | 6.50                                |
| ⊕ Surat         | 6.43                | 6.59              | 7.98                    | 5.99                         | 7.00                           | 6.48                                |
| <b>Total</b>    | <b>7.68</b>         | <b>7.84</b>       | <b>8.65</b>             | <b>6.97</b>                  | <b>8.32</b>                    | <b>7.50</b>                         |

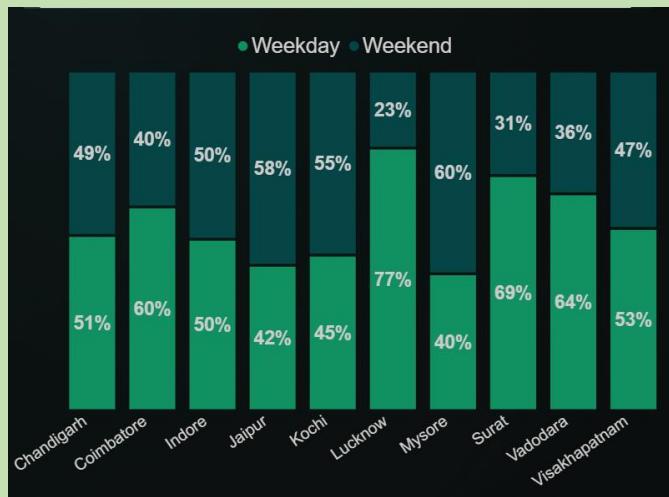
### 4. Peak and Low Demand Months by City

- For each city, identify the month with the highest total trips (peak demand) and the month with the lowest total trips (low demand). This analysis will help Goodcabs understand seasonal patterns and adjust resources accordingly.



## 5. Weekend vs. Weekday Trip Demand by City

- Compare the total trips taken on weekdays versus weekends for each city over the six-month period. Identify cities with a strong preference for either weekend or weekday trips to understand demand variations.

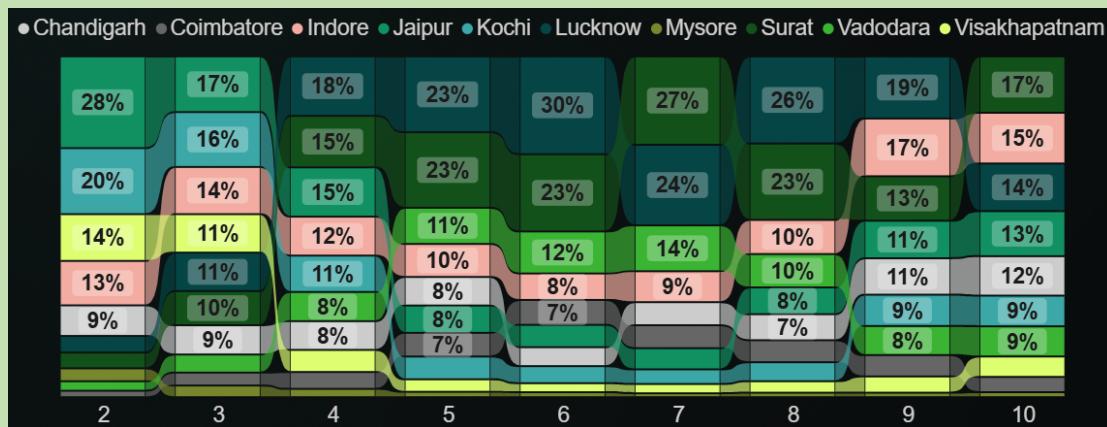


Heavy weekday activity shows that those cities have predominantly a work-oriented or business related customer profile. Eg: Surat, Lucknow, Coimbatore.

While cities with higher total trips concentration on the weekends are Consistent with the city consumer mentality of taking a vacation during weekends. Eg: Jaipur, Kochi, Mysore.

## 6. Repeat Passenger Frequency and City Contribution Analysis

- Analyse the frequency of trips taken by repeat passengers in each city (e.g., % of repeat passengers taking 2 trips, 3 trips, etc.). Identify which cities contribute most to higher trip frequencies among repeat passengers, and examine if there are distinguishable patterns between tourism-focused and business-focused cities.



Note: A clear trend for business focused cities vs Tourist cities can be observed from the above given chart, Cities like Jaipur, Kochi, Mysore, Vishakhapatnam top the charts when considering 2-3 trips, all the business focused cities like Lucknow, Surat, Indore, Vadodara have a higher RPR% when considering 4+ trips.

## 7. Monthly Target Achievement Analysis for Key Metrics

- For each city, evaluate monthly performance against targets for total trips, new passengers, and average passenger ratings from targets\_db. Determine if each metric met, exceeded, or missed the target, and calculate the percentage difference. Identify any consistent patterns in target achievement, particularly across tourism versus business-focused cities.

CR (Customer Rating):

| Timeframe     | All Time |        |           | Jan              |        |           | Feb              |        |           | Mar              |        |           | Apr              |        |           | May              |        |           | Jun              |      |        |
|---------------|----------|--------|-----------|------------------|--------|-----------|------------------|--------|-----------|------------------|--------|-----------|------------------|--------|-----------|------------------|--------|-----------|------------------|------|--------|
|               | City     | Avg CR | CR Target | Achievement rate | Avg CR | CR Target | Achievement rate | Avg CR | CR Target | Achievement rate | Avg CR | CR Target | Achievement rate | Avg CR | CR Target | Achievement rate | Avg CR | CR Target | Achievement rate |      |        |
| Visakhapatnam | 8.43     | 8.50   | -0.8%     | 8.55             | 8.50   | 0.6%      | 8.47             | 8.50   | -0.4%     | 8.43             | 8.50   | -0.9%     | 8.37             | 8.50   | -1.5%     | 8.39             | 8.50   | -1.3%     | 8.40             | 8.50 | -1.2%  |
| Vadodara      | 6.61     | 7.50   | -11.8%    | 6.85             | 7.50   | -8.7%     | 6.80             | 7.50   | -9.3%     | 6.60             | 7.50   | -12.1%    | 6.55             | 7.50   | -12.7%    | 6.46             | 7.50   | -13.8%    | 6.44             | 7.50 | -14.2% |
| Surat         | 6.42     | 7.00   | -8.3%     | 6.58             | 7.00   | -8.0%     | 6.49             | 7.00   | -7.2%     | 6.40             | 7.00   | -8.6%     | 6.37             | 7.00   | -9.0%     | 6.33             | 7.00   | -9.6%     | 6.36             | 7.00 | -9.2%  |
| Mysore        | 8.70     | 8.50   | 2.4%      | 8.79             | 8.50   | 3.4%      | 8.79             | 8.50   | 3.5%      | 8.74             | 8.50   | 2.8%      | 8.68             | 8.50   | 2.1%      | 8.61             | 8.50   | 1.3%      | 8.62             | 8.50 | 1.4%   |
| Lucknow       | 6.49     | 7.25   | -10.5%    | 6.62             | 7.25   | -8.7%     | 6.57             | 7.25   | -9.3%     | 6.54             | 7.25   | -9.7%     | 6.45             | 7.25   | -11.0%    | 6.38             | 7.25   | -12.3%    | 6.35             | 7.25 | -12.4% |
| Kochi         | 8.52     | 8.50   | 0.2%      | 8.67             | 8.50   | 2.0%      | 8.56             | 8.50   | 0.7%      | 8.50             | 8.50   | -0.0%     | 8.49             | 8.50   | -0.1%     | 8.43             | 8.50   | -0.8%     | 8.48             | 8.50 | -0.3%  |
| Jaipur        | 8.58     | 8.25   | 4.0%      | 8.68             | 8.25   | 5.3%      | 8.67             | 8.25   | 5.1%      | 8.53             | 8.25   | 3.4%      | 8.52             | 8.25   | 3.3%      | 8.46             | 8.25   | 2.8%      | 8.58             | 8.25 | 4.0%   |
| Indore        | 7.83     | 8.00   | -2.1%     | 7.92             | 8.00   | -1.1%     | 7.89             | 8.00   | -1.3%     | 7.88             | 8.00   | -1.8%     | 7.79             | 8.00   | -2.7%     | 7.74             | 8.00   | -3.2%     | 7.78             | 8.00 | -2.8%  |
| Coimbatore    | 7.88     | 8.25   | -4.4%     | 7.98             | 8.25   | -3.2%     | 7.95             | 8.25   | -3.8%     | 7.91             | 8.25   | -4.2%     | 7.84             | 8.25   | -4.9%     | 7.78             | 8.25   | -6.0%     | 7.85             | 8.25 | -4.8%  |
| Chandigarh    | 7.98     | 8.00   | -0.3%     | 8.07             | 8.00   | 0.9%      | 8.03             | 8.00   | 0.3%      | 8.00             | 8.00   | -0.1%     | 7.94             | 8.00   | -0.7%     | 7.91             | 8.00   | -1.1%     | 7.89             | 8.00 | -1.3%  |
| Total         | 7.66     | 7.98   | -3.9%     | 7.82             | 7.98   | -2.0%     | 7.75             | 7.98   | -2.8%     | 7.67             | 7.98   | -3.9%     | 7.60             | 7.98   | -4.7%     | 7.57             | 7.98   | -5.1%     | 7.54             | 7.98 | -5.4%  |

NP (New Passengers):

| Timeframe     | All Time |          |           | Jan              |          |           | Feb              |          |           | Mar              |          |           | Apr              |          |           | May              |          |           | Jun              |     |         |
|---------------|----------|----------|-----------|------------------|----------|-----------|------------------|----------|-----------|------------------|----------|-----------|------------------|----------|-----------|------------------|----------|-----------|------------------|-----|---------|
|               | City     | Total NP | NP Target | Achievement rate | Total NP | NP Target | Achievement rate | Total NP | NP Target | Achievement rate | Total NP | NP Target | Achievement rate | Total NP | NP Target | Achievement rate | Total NP | NP Target | Achievement rate |     |         |
| Visakhapatnam | 13K      | 14K      | -5.58%    | 3K               | 3K       | 0.52%     | 2K               | 3K       | -4.80%    | 2K               | 3K       | -13.20%   | 2K               | 2K       | -7.75%    | 2K               | 2K       | -3.05%    | 2K               | 2K  | -5.00%  |
| Vadodara      | 10K      | 10K      | 2.29%     | 2K               | 2K       | 16.08%    | 2K               | 2K       | 19.22%    | 2K               | 2K       | -2.08%    | 2K               | 2K       | 9.13%     | 1K               | 2K       | -7.47%    | 1K               | 2K  | -28.40% |
| Surat         | 12K      | 11K      | 10.72%    | 2K               | 2K       | 21.60%    | 2K               | 2K       | 12.70%    | 2K               | 2K       | -2.70%    | 2K               | 2K       | 22.87%    | 2K               | 2K       | 7.40%     | 2K               | 2K  | 2.87%   |
| Mysore        | 12K      | 12K      | -2.66%    | 2K               | 2K       | -2.15%    | 2K               | 2K       | 5.35%     | 2K               | 2K       | -0.70%    | 2K               | 2K       | -8.20%    | 2K               | 2K       | -3.95%    | 2K               | 2K  | -8.30%  |
| Lucknow       | 18K      | 18K      | 4.23%     | 3K               | 3K       | 8.28%     | 4K               | 3K       | 10.28%    | 3K               | 3K       | -1.28%    | 2K               | 2K       | 15.55%    | 2K               | 2K       | -8.75%    | 2K               | 2K  | -1.45%  |
| Kochi         | 26K      | 27K      | -2.16%    | 5K               | 5K       | -2.70%    | 4K               | 5K       | -12.66%   | 5K               | 5K       | -2.70%    | 5K               | 4K       | 23.48%    | 4K               | 4K       | 9.23%     | 3K               | 4K  | -24.73% |
| Jaipur        | 46K      | 54K      | -15.08%   | 10K              | 12K      | -13.14%   | 11K              | 12K      | -10.09%   | 7K               | 12K      | -38.19%   | 6K               | 6K       | 2.00%     | 5K               | 6K       | -11.13%   | 6K               | 6K  | -3.75%  |
| Indore        | 15K      | 14K      | 5.41%     | 3K               | 3K       | 5.30%     | 3K               | 3K       | 6.50%     | 3K               | 3K       | 1.56%     | 2K               | 2K       | 17.55%    | 2K               | 2K       | 1.40%     | 2K               | 2K  | 1.05%   |
| Coimbatore    | 9K       | 8K       | 13.52%    | 2K               | 2K       | 21.47%    | 2K               | 2K       | 9.80%     | 2K               | 2K       | 2.53%     | 1K               | 1K       | 24.20%    | 1K               | 1K       | 3.90%     | 1K               | 1K  | 22.80%  |
| Chandigarh    | 19K      | 21K      | -9.96%    | 4K               | 4K       | -2.00%    | 4K               | 4K       | 2.60%     | 3K               | 4K       | -19.30%   | 2K               | 3K       | -16.80%   | 3K               | 3K       | -9.00%    | 2K               | 3K  | -19.00% |
| Total         | 177K     | 185K     | -4.38%    | 36K              | 37K      | -1.01%    | 36K              | 37K      | -1.36%    | 31K              | 37K      | -16.04%   | 27K              | 25K      | 6.48%     | 24K              | 25K      | -3.27%    | 23K              | 25K | -8.59%  |

Total Trips:

| Timeframe     | All Time |             |              | Jan              |             |              | Feb              |             |              | Mar              |             |              | Apr              |             |              | May              |             |              | Jun              |       |        |
|---------------|----------|-------------|--------------|------------------|-------------|--------------|------------------|-------------|--------------|------------------|-------------|--------------|------------------|-------------|--------------|------------------|-------------|--------------|------------------|-------|--------|
|               | City     | Total trips | Trips Target | Achievement rate | Total trips | Trips Target | Achievement rate | Total trips | Trips Target | Achievement rate | Total trips | Trips Target | Achievement rate | Total trips | Trips Target | Achievement rate | Total trips | Trips Target | Achievement rate |       |        |
| Visakhapatnam | 28K      | 28.5K       | -0.5%        | 4K               | 4.5K        | -0.7%        | 5K               | 4.5K        | 6.5%         | 5K               | 4.5K        | 8.4%         | 5K               | 5K          | -1.2%        | 5K               | 5K          | -3.8%        | 4K               | 5K    | -10.4% |
| Vadodara      | 32K      | 37.5K       | -14.6%       | 5K               | 6K          | -20.4%       | 5K               | 6K          | -12.9%       | 6K               | 6K          | -6.7%        | 6K               | 6.5K        | -8.6%        | 6K               | 6.5K        | -10.8%       | 5K               | 6.5K  | -27.9% |
| Surat         | 55K      | 57K         | -3.8%        | 8K               | 9K          | -7.1%        | 9K               | 9K          | 0.8%         | 9K               | 9K          | 3.0%         | 10K              | 10K         | -1.7%        | 10K              | 10K         | -2.3%        | 9K               | 10K   | -14.8% |
| Mysore        | 16K      | 13.5K       | 20.3%        | 2K               | 2K          | 24.3%        | 3K               | 2K          | 33.4%        | 3K               | 2K          | 31.7%        | 3K               | 2.5K        | 4.1%         | 3K               | 2.5K        | 20.3%        | 3K               | 2.5K  | 13.7%  |
| Lucknow       | 64K      | 72K         | -10.7%       | 11K              | 13K         | -16.5%       | 12K              | 13K         | -7.2%        | 11K              | 13K         | -13.7%       | 10K              | 11K         | -7.2%        | 10K              | 11K         | -11.8%       | 10K              | 11K   | -6.9%  |
| Kochi         | 51K      | 49.5K       | 2.4%         | 7K               | 7.5K        | -2.1%        | 8K               | 7.5K        | 2.5%         | 9K               | 7.5K        | 26.6%        | 10K              | 9K          | 8.5%         | 10K              | 9K          | 11.3%        | 8K               | 9K    | -28.9% |
| Jaipur        | 77K      | 67.5K       | 13.9%        | 15K              | 13K         | 15.2%        | 16K              | 13K         | 22.1%        | 13K              | 13K         | 2.4%         | 11K              | 9.5K        | 20.1%        | 11K              | 9.5K        | 20.8%        | 10K              | 9.5K  | 3.6%   |
| Indore        | 42K      | 43.5K       | -2.4%        | 7K               | 7K          | -3.8%        | 7K               | 7K          | 3.0%         | 7K               | 7K          | 0.3%         | 7K               | 7.5K        | -1.1%        | 8K               | 7.5K        | 3.8%         | 8K               | 7.5K  | -16.2% |
| Coimbatore    | 21K      | 21K         | 0.5%         | 4K               | 3.5K        | 4.3%         | 3K               | 3.5K        | -2.7%        | 4K               | 3.5K        | 5.1%         | 4K               | 3.5K        | 4.6%         | 4K               | 3.5K        | 1.4%         | 3K               | 3.5K  | -9.8%  |
| Chandigarh    | 39K      | 39K         | -0.0%        | 7K               | 7K          | -2.7%        | 7K               | 7K          | 5.5%         | 7K               | 7K          | -6.2%        | 6K               | 6K          | -7.2%        | 7K               | 6K          | 10.3%        | 6K               | 6K    | 0.5%   |
| Total         | 426K     | 429K        | -0.7%        | 70K              | 72.5K       | -2.8%        | 75K              | 72.5K       | 4.0%         | 74K              | 72.5K       | 1.6%         | 71K              | 70.5K       | 1.2%         | 73K              | 70.5K       | 2.9%         | 63K              | 70.5K | -11.3% |

## 8. Highest and Lowest Repeat Passenger Rate (RPR%) by City and Month

- Analyse the Repeat Passenger Rate (RPR%) for each city across the six-month period. Identify the top 2 and bottom 2 cities based on their RPR% to determine which locations have the strongest and weakest rates. Similarly, analyse the RPR% by month across all cities and identify the months with the highest and lowest repeat passenger rates. This will help to pinpoint any seasonal patterns or months with higher repeat passenger loyalty.

## RPR% By City

| City          | All Time | Jan | Feb | Mar | Apr | May | Jun |
|---------------|----------|-----|-----|-----|-----|-----|-----|
| Chandigarh    | 21%      | 16% | 17% | 21% | 24% | 26% | 26% |
| Coimbatore    | 23%      | 18% | 17% | 22% | 28% | 33% | 25% |
| Indore        | 33%      | 27% | 28% | 28% | 36% | 44% | 36% |
| Jaipur        | 17%      | 12% | 13% | 20% | 22% | 26% | 17% |
| Kochi         | 22%      | 14% | 19% | 22% | 24% | 30% | 26% |
| Lucknow       | 37%      | 29% | 32% | 34% | 39% | 48% | 47% |
| Mysore        | 11%      | 8%  | 8%  | 9%  | 11% | 15% | 15% |
| Surat         | 43%      | 33% | 37% | 43% | 46% | 50% | 49% |
| Vadodara      | 30%      | 21% | 22% | 30% | 34% | 38% | 39% |
| Visakhapatnam | 29%      | 21% | 25% | 30% | 35% | 33% | 30% |
| Total         | 26%      | 19% | 21% | 26% | 29% | 33% | 30% |