

# Exploratory Data Analysis of Telangana Growth Analysis

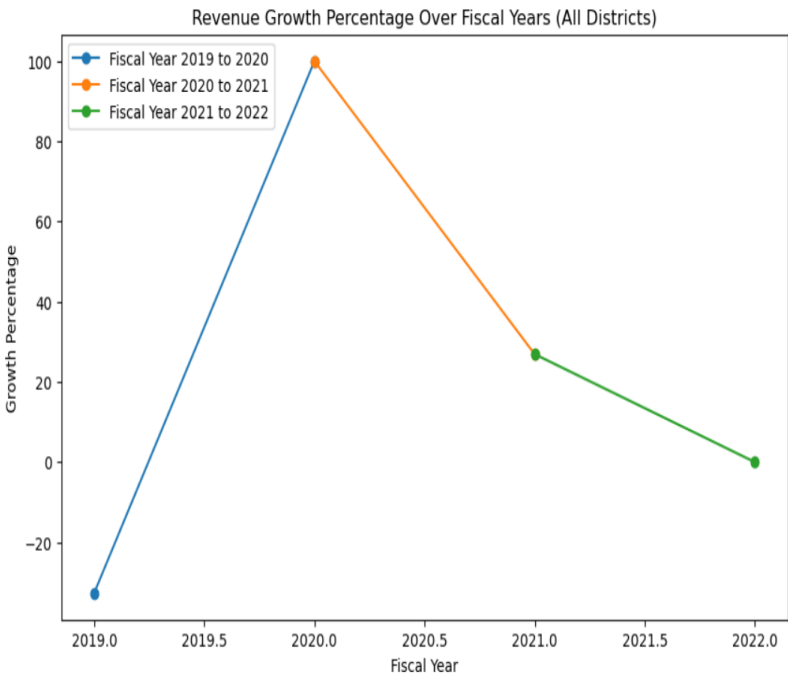
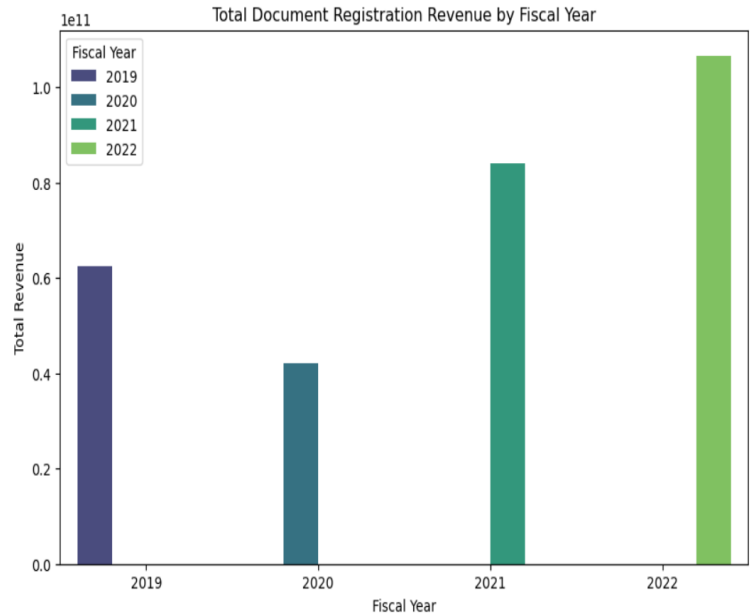
## Executive Summary Report

### Project Overview:

This project aims to comprehensively explore three vital datasets - **Stamp Registration**, **Transportation**, and **Ts-Ipass** - to gain insights into their attributes, categories, and temporal patterns. Analyze each department for growth opportunities and areas needing attention. Establish correlations to report the overall state growth, providing concise insights for strategic decision-making.

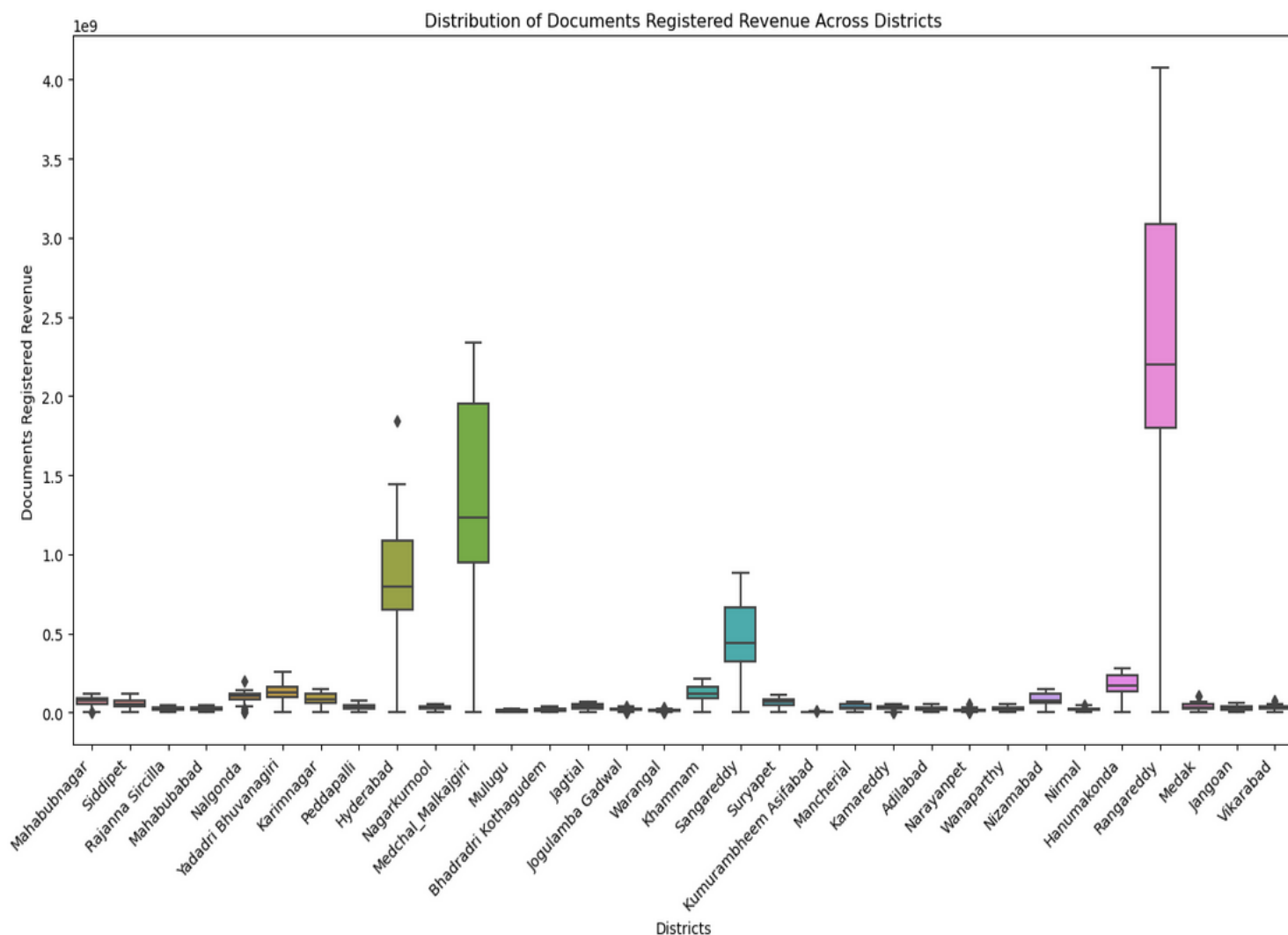
### Annual Report and Essential Metrics:

- **Total Document Registration Revenue:**
  - FY 2019: ₹624.11 Cr
  - FY 2020: ₹420.47 Cr
  - FY 2021: ₹840.76 Cr
  - FY 2022: ₹10,669.54 Cr
- **Document Registration Revenue Growth:**
  - FY 2019 to FY 2020: -32.63%
  - FY 2020 to FY 2021: 99.96%
  - FY 2021 to FY 2022: 26.90%
  - Total Growth from FY 2019 to FY 2022: ₹4,428.46 Cr (71.0%)



- **Top 5 Districts with Highest Document Registration Revenue Growth (FY 2019 to FY 2022):**

- Rangareddy: ₹1,444.81 Cr (Change %: -33.82% to 18.30%)
- Medchal\_Malkajgiri: ₹1,150.02 Cr (Change %: -25.99% to 32.10%)
- Hyderabad: ₹596.66 Cr (Change %: -38.32% to 33.18%)
- Sangareddy: ₹367.56 Cr (Change %: -38.90% to 30.40%)
- Hanumakonda: ₹107.90 Cr (Change %: -25.55% to 35.59%)

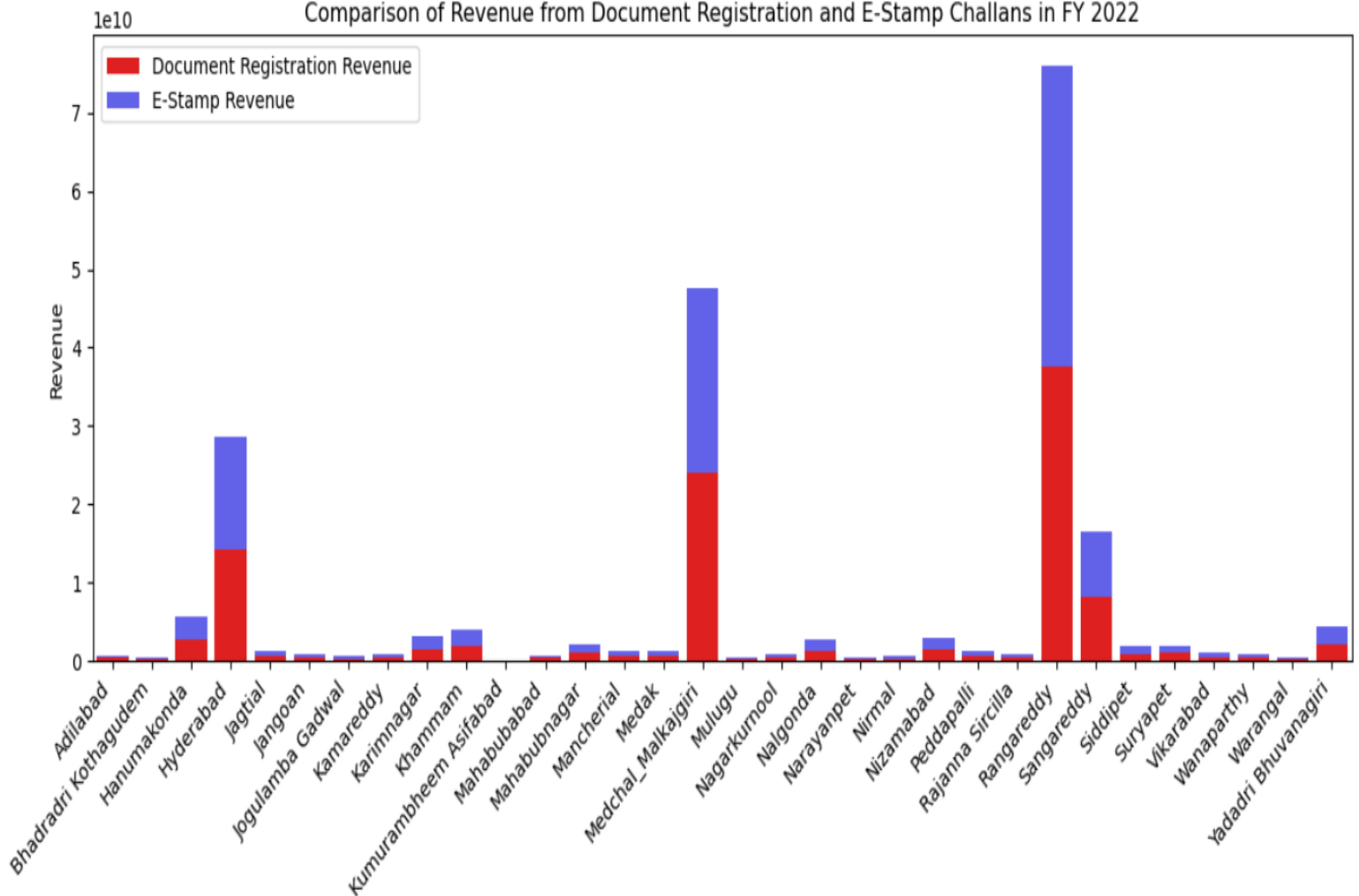


- **Top 5 Districts where E-Stamps Revenue Contributes More than 50.0% of Total**

**Revenue in FY 2022:**

- Jangoan: 50.63%
- Nirmal: 50.52%
- Mancherial: 50.49%
- Rangareddy: 50.43%
- Kamareddy: 50.40%

Comparison of Revenue from Document Registration and E-Stamp Challans in FY 2022



- **Districts with Predominant Preference for Specific Vehicle Class (FY 2022):**

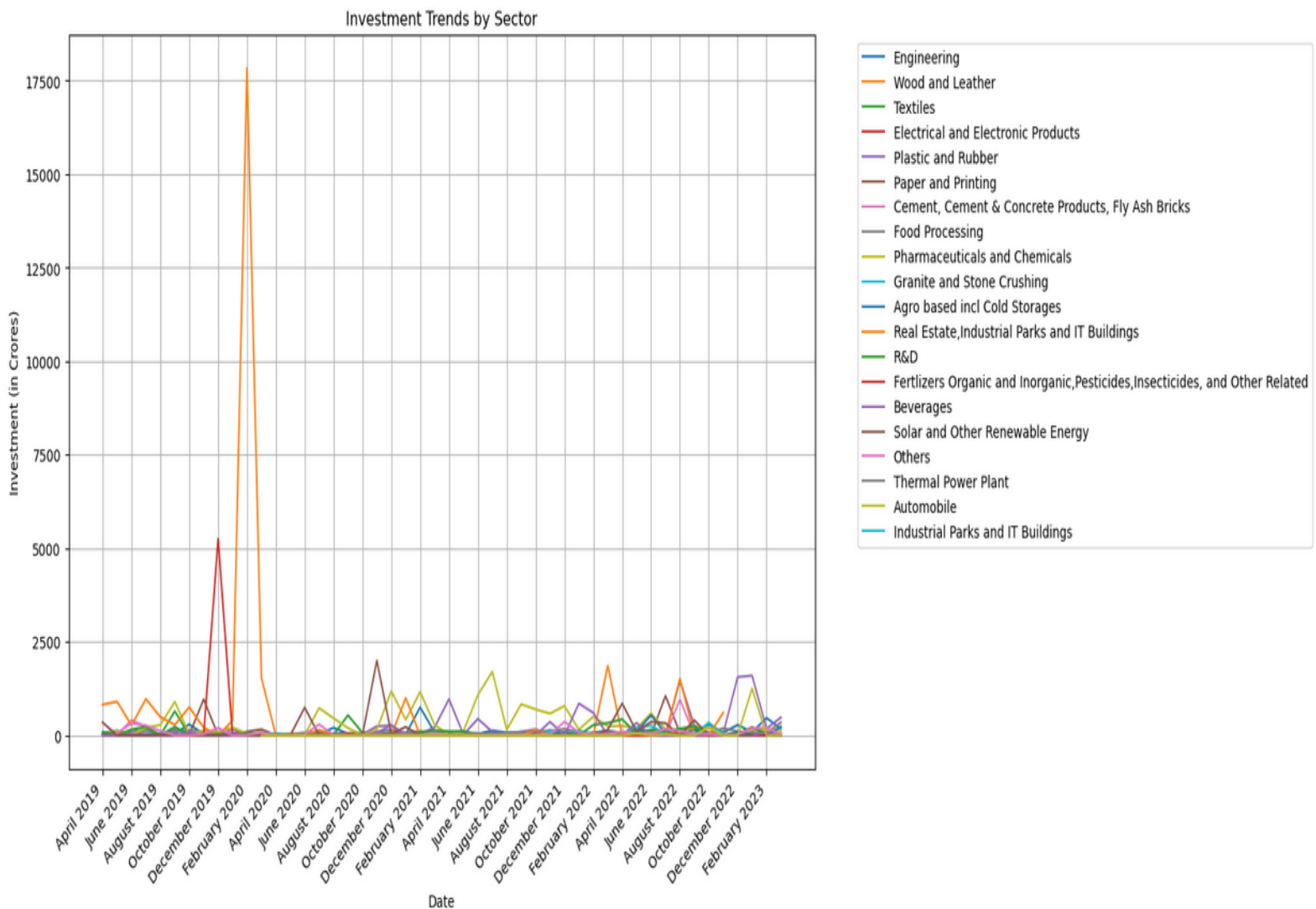
- All Districts: MotorCycle

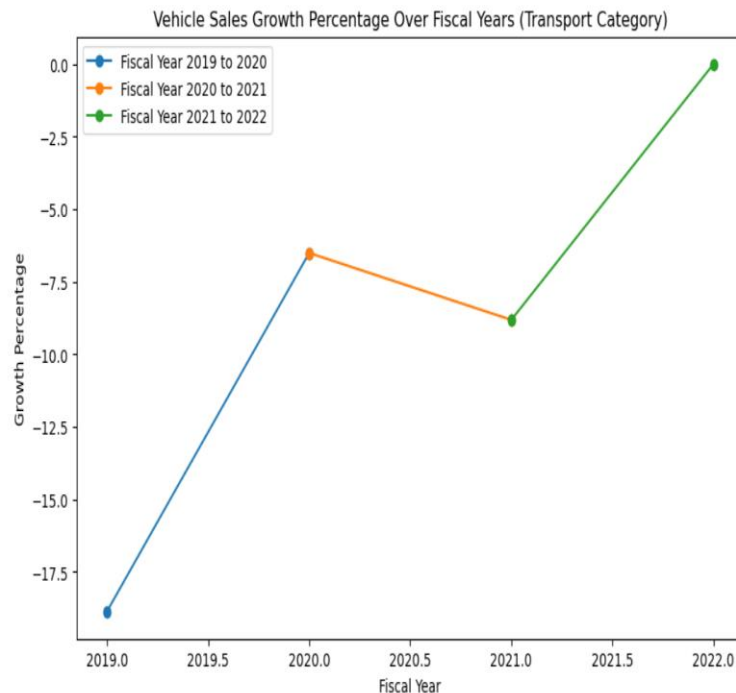
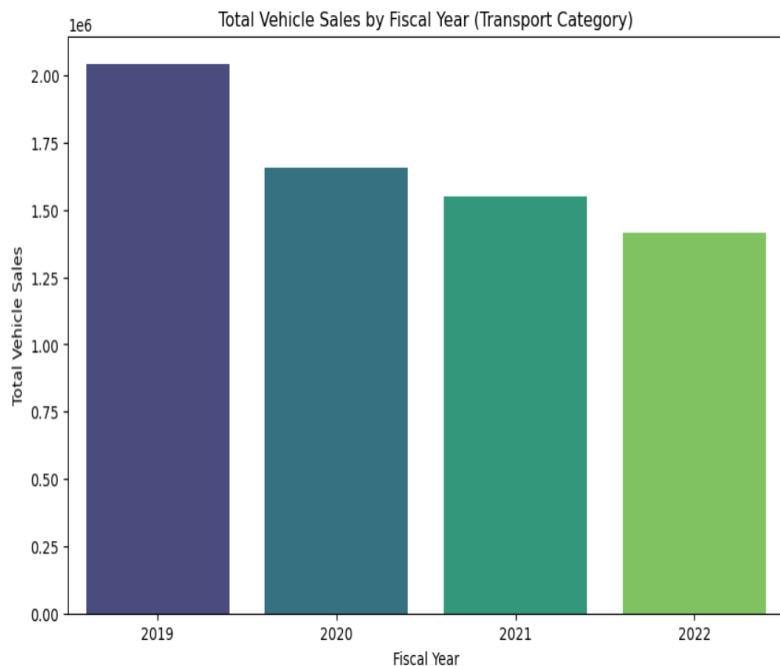
- **Top 3 Districts with the Most Significant Investments (FY 2019 to 2022):**

- Rangareddy: ₹40,984.28 Cr
- Medchal\_Malkajgiri: ₹9,987.25 Cr
- Sangareddy: ₹8,955.41 Cr

- **Top Sector for Each of the Top 3 Districts (FY 2019 to 2022):**

- Rangareddy: *Real Estate, Industrial Parks, and IT Buildings* (Investment: ₹28,970.27 Cr)
- Medchal\_Malkajgiri: *Pharmaceuticals and Chemicals* (Investment: ₹3,823.90 Cr)
- Sangareddy: *Pharmaceuticals and Chemicals* (Investment: ₹3,494.72 Cr)





- **Top 3 Districts with Highest Electric Sales Growth (FY 2021 to FY 2022):**

- Khammam: 409.40%
- Bhadradri Kothagudem: 281.58%
- Suryapet: 247.15%

- **Bottom 3 Districts with Lowest Electric Sales Growth (FY 2021 to FY 2022):**

- Wanaparthi: 5.48%
- Rajanna Sircilla: 14.92%
- Mancherial: 19.19%

- **Top 3 Districts with Highest Diesel Sales Growth (FY 2021 to FY 2022):**

- Karimnagar: 111.44%
- Sangareddy: 13.21%
- Rangareddy: 12.67%

- **Bottom 3 Districts with Lowest Diesel Sales Growth (FY 2021 to FY 2022):**

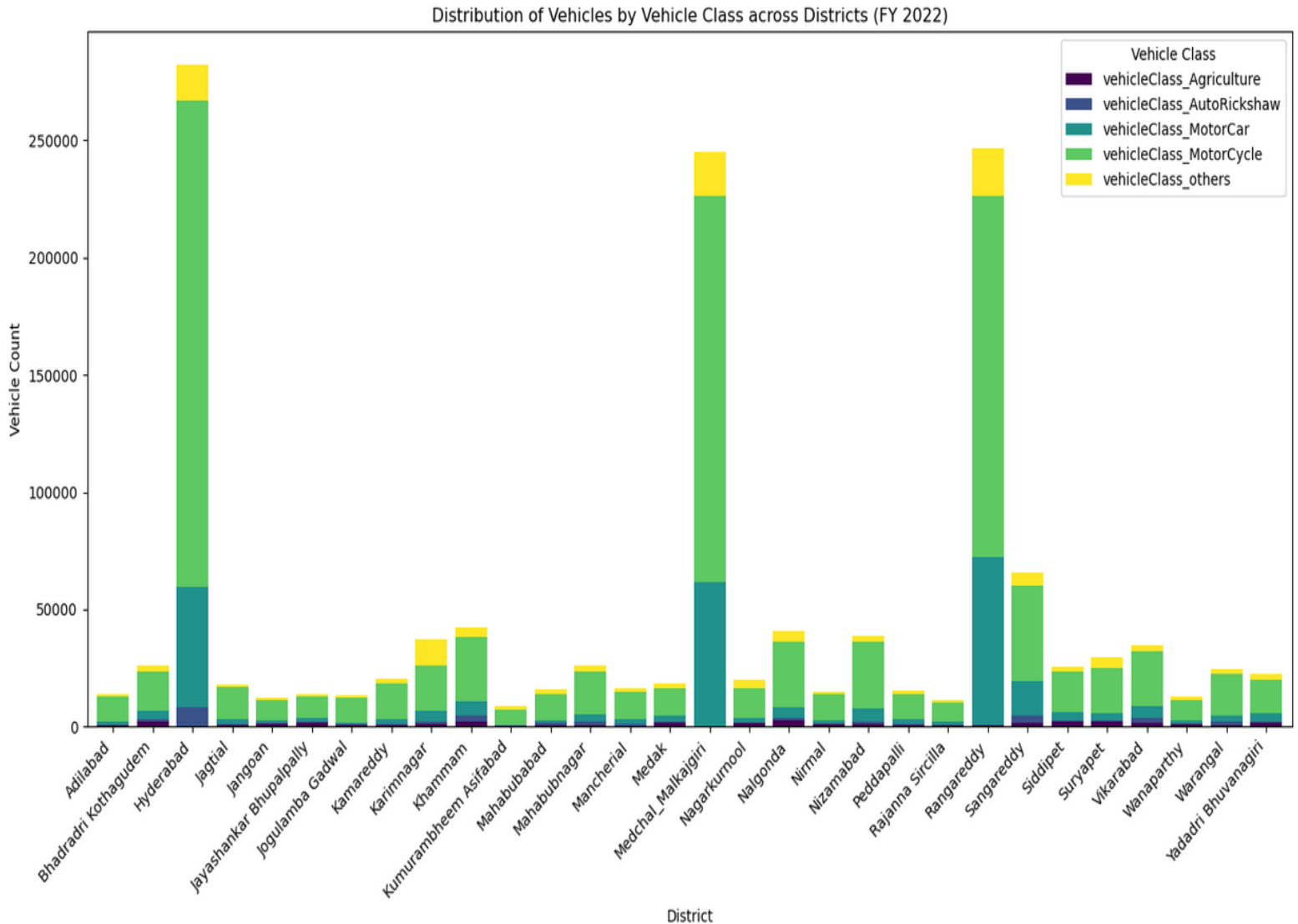
- Warangal: -48.03%
- Mahabubabad: -24.29%
- Jangoan: -21.99%

- **Top 3 Districts with Highest Petrol Sales Growth (FY 2021 to FY 2022):**

- Rangareddy: 8.73%
- Sangareddy: -7.61%
- Bhadradri Kothagudem: -30.09%

- **Bottom 3 Districts with Lowest Petrol Sales Growth (FY 2021 to FY 2022):**

- Warangal: **-45.32%**
- Nirmal: **-41.05%**
- Jagtial: **-40.53%**



### Insights and Observations from Telangana Economic Data (FY 2019 to FY 2022)

- **Document Registration Revenue:**

- Insight: Hyderabad significantly influences overall revenue, emphasizing the need for economic diversification to reduce reliance on a single city.

- **Document Registration Revenue Growth:**
  - Insight: Rangareddy's exceptional growth suggests successful strategies or unique economic conditions, making it a potential benchmark for other districts.
- **E-Stamps Revenue Contribution:**
  - Insight: Districts relying heavily on E-Stamps (Jangoan, Nirmal, Mancherial) may face vulnerabilities if the E-Stamps sector encounters challenges, highlighting the importance of economic diversification.
- **Vehicle Class Preferences:**
  - Insight: A consistent preference for motorcycles across all districts indicates an opportunity for policies promoting diversity in the automotive market.
- **Fuel Type Sales Growth:**
  - Insight: Khammam and Bhadrachalam's exceptional growth in electric vehicle sales suggests an opportunity for targeted investment in EV infrastructure.
- **District-wise Sales Growth (Petrol, Diesel, Electric):**
  - Insight: Warangal's significant declines in Petrol and Diesel sales highlight potential economic challenges, warranting detailed investigation.
- **Sector-wise Investments:**
  - Insight: Rangareddy's dominance in real estate investments suggests the need for diversified investment strategies to balance economic portfolios.
- **Sector-wise Diversification:**
  - Insight: The significant investments in Plastic and Rubber, Pharmaceuticals and Chemicals, and Solar and Renewable Energy sectors indicate opportunities for diversification.

- **Total Investments:**

- Insight: The substantial drop in total investments in FY 2020 indicates a potential economic shock or external factor influencing investment patterns, warranting further investigation.

- **Electric Vehicle Sales Growth (FY 2021 to FY 2022):**

- Insight: Khammam's extraordinary growth in electric vehicle sales could serve as a model for other districts, encouraging a shift toward sustainable transportation.

### Conclusion: Key Takeaways from Telangana Economic Data (FY 2019 to FY 2022)

- **Dynamic Revenue Landscape:**

- Telangana's economic landscape, driven by Document Registration Revenue, showcases dynamic growth patterns. While Hyderabad remains a major contributor, there is a need for diversification to reduce dependency on a single city.

- **District-Specific Opportunities:**

- Rangareddy emerges as an economic success story, highlighting opportunities for other districts to study and replicate successful strategies. Targeted investments in growth sectors can amplify economic development.

- **Shift Towards Electric Vehicles:**

- Notable growth in electric vehicle sales, particularly in Khammam and Bhadrachalam, signals a changing automotive landscape. Policymakers should consider supporting this trend with infrastructure development and incentives.

- **Sectoral Diversification for Sustainable Growth:**

- The dominance of certain sectors, such as real estate in Rangareddy, suggests a need for diversification. Encouraging investments in sectors like Plastic and Rubber, Pharmaceuticals, and Renewable Energy can enhance economic resilience.