Report on Road Accident Analysis

1. **Total Casualties**: The dashboard reports a significant number of total casualties, reaching 417,883. The majority of casualties (333,485) involved cars, which represent 79.8% of all casualties.
The casualties are categorized into:

- **Fatal Casualties:** There are 7,135 fatal casualties, which account for 1.7% of total casualties.

- **Serious Casualties**: 59,312 serious casualties make up 14.2% of the total, indicating a significant number of severe road accidents.

- **Slight Casualties:** 35,143 slight casualties account for 84.1% of the total casualties, showing that most accidents result in less severe outcomes.

2. **Casualties By Road Types:**

- **Single Carriageway**: The majority of casualties occurred on single carriageways was recorded to be **309,698.** This suggests that it is more hazardous, possibly due to speed limit, violating traffic rules or road condition.

- **Dual Carriageway:** A total number of **67**,**368** was recorded, making it safer but still it at risk minimally

- **Other Road Types:** One way Street, Roundabout and Slip roads recorded fewer casualties but safety measures could still be taken to further reduce incidents in these areas.

3. **Casualties by Road Surface Condition:** Most accidents occurred in dry conditions which was a total of **384,769** incidents, which highlights the prevalence of accidents even in non-adverse weather conditions.

- **Wet road** recorded 149,663 casualties, highlighting the increased risk when roads are slippery due to rain

- **Snow:** The total incidents recorded was **28,377,** despite recorded the lowest, necessary precautions needs to be adhere to such as avoiding driving under this road condition. It can be hazardous and may result in more severe incident

4. **Casualties by Month:** The line chart indicates the trend in the number of casualties over the months with peaks observed in 2021 and 2022

In **2021,** the highest number of casualties occurred in June which was **17,320**

In **2022,** The peak was around October and there was a noticeable drop in December

5. **Geographical Distribution:**
The dashboard distinguishes between urban and rural areas, implying a need for safety precautions and implementation in different locations. The recommendation suggests focusing on rural areas where accident rates may differ significantly from urban areas.

Recommendations:
1. **Focus on Single Carriageway Safety**: Given the high number of accidents on single carriageways, targeted road safety interventions in these areas are crucial. Consider improving signage, road design, and enforcement of speed limits.
2. **Driver Education Programs**: With the majority of casualties involving cars, implementing educational programs focusing on defensive driving and road safety could help reduce the number of accidents.
3. **Enhanced Monitoring in Dry Conditions**: Since most accidents happen in dry weather, authorities should not only focus on adverse weather but also enhance safety measures during regular conditions. This could involve stricter enforcement of speed limits and other traffic laws.
4. **Increase Safety in Rural Areas**: If accident rates differ significantly between rural and urban areas, it could be worth focusing resources on the areas with the highest incidence.

Conclusion
Based on the visualization, focusing on single carriageways, addressing the challenges of rural safety and enhancing road and vehicle safety will help stakeholders reduce the number and severity of road accidents significantly.