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NON-COMPETITIVE DIVISION

Snow Squall Effects on Pennsylvania's Major Roads and Vehicle Accidents

Winter precipitation such as snow, sleet, and freezing rain can be disruptive and deadly to vehicular travel. Many of the resultant injuries or fatalities are considered "indirect" because they are due to vehicular crashes. Snow squalls are a particularly dangerous meteorological hazard due to how quickly they reduce driving conditions.

The purpose of this study is to correlate vehicular accident statistics with snow squalls or near zero white out conditions on Pennsylvania's major highways and interstates. The project developed basic statistics of how snow squalls have impacted drivers over the years on Pennsylvania roadways. This project used vehicular crash data along with meteorological data and used a GIS to produce statistical analysis. The goal is that a better understanding of snow squalls and the threat they pose may be used to reduce fatalities in the future.

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