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## Determining the Relationship of Atmospheric CO<sub>2</sub> Concentrations to Vehicular Traffic

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This research aims to investigate the relationship between atmospheric carbon dioxide (CO<sub>2</sub>) concentrations, traffic count, vehicle type and meteorology at three study sites in Amphoe Muang Lampang in Thailand. Initial measurements were conducted since December 2016 from 2:00-4:00 PM. Since CO<sub>2</sub> concentrations also depend on biospheric processes (photosynthesis and respiration), the chosen measurement time period corresponded to stable CO<sub>2</sub> concentrations with a minimum amount of variability. This ensured that the measured CO<sub>2</sub> concentrations primarily come from traffic. Multiple regression analysis will then be utilized to determine which factors contribute significantly to the measured CO<sub>2</sub> emissions.

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