

## Evaluation of the Impact of Green Infrastructure on Dispersion and Deposition of Particulate Matter in Near-Roadway Areas

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**Abstract :** Pollutant concentration is high in near-road environments, and vegetation is an effective measure to mitigate urban air quality problems. This paper presents the influence of roadside green infrastructure in dispersion and Deposition of Particulate matter (PM) by the ENVI-met Simulations. Six green infrastructure configurations were specified (i) hedges only, (ii) trees only, (iii) a mix of trees and shrubs (iv) green barrier (v) green wall, and (vi) no tree buffer were placed on both sides of the road. The changes in concentrations at all six scenarios were estimated to identify the best barrier to reduce the dispersion and deposition of PM10 and PM2.5 in an urban environment.

**Keywords :** barrier, concentration, dispersion, deposition, Particulate matter, pollutant

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