

Pollutant Long-term Trends (1990 – 2019)

Air quality is affected by both emissions and meteorology. Over a short period, for instance a few months to a year, air quality is more subject to variations in weather conditions, such as stronger solar radiation which promotes photochemical smog formation or more rainfall that cleans the pollutants from the air, even if the emission levels remain more or less the same. Air quality is primarily affected by emission sources in the long run. Therefore a scientific way to assess air quality changes and the effectiveness of emission control measures is to examine the long-term trend of annual average pollutant concentrations over several years.

The long-term trends for the air pollutants presented are based on their annual average concentrations recorded from the relevant air quality monitoring stations categorised into four groups of land use types, namely Urban, New Town, Rural and Roadside as defined in Table 1 below.

Table 1: Classification of Air Quality Monitoring Stations by Land Use Types

Land Use Type	Land Use Characteristics	Air Quality Monitoring Stations
Urban	Densely populated residential areas mixed with some commercial and/or industrial areas	Central/Western, Eastern, Kwun Tong, Sham Shui Po, Kwai Chung, Tsuen Wan and Tseung Kwan O
New Town	Mainly residential areas	Yuen Long, Tuen Mun, Tung Chung, Tai Po and Sha Tin
Rural	Rural areas	Tap Mun (background station)
Roadside	Urban roadside in mixed residential / commercial areas with heavy traffic and surrounded by many tall buildings	Causeway Bay, Central and Mong Kok

Figure 1: Sulphur Dioxide Long Term Trend

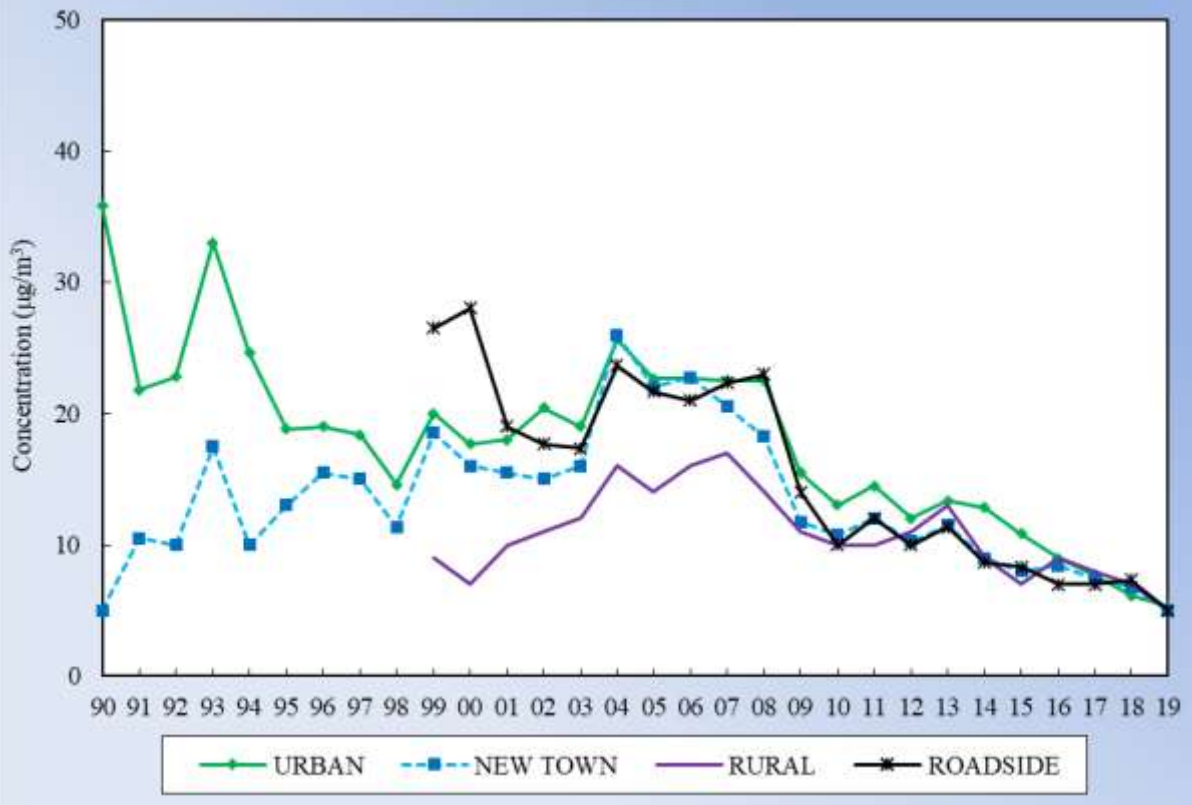


Figure 2: Respirable Suspended Particulates Long Term Trend

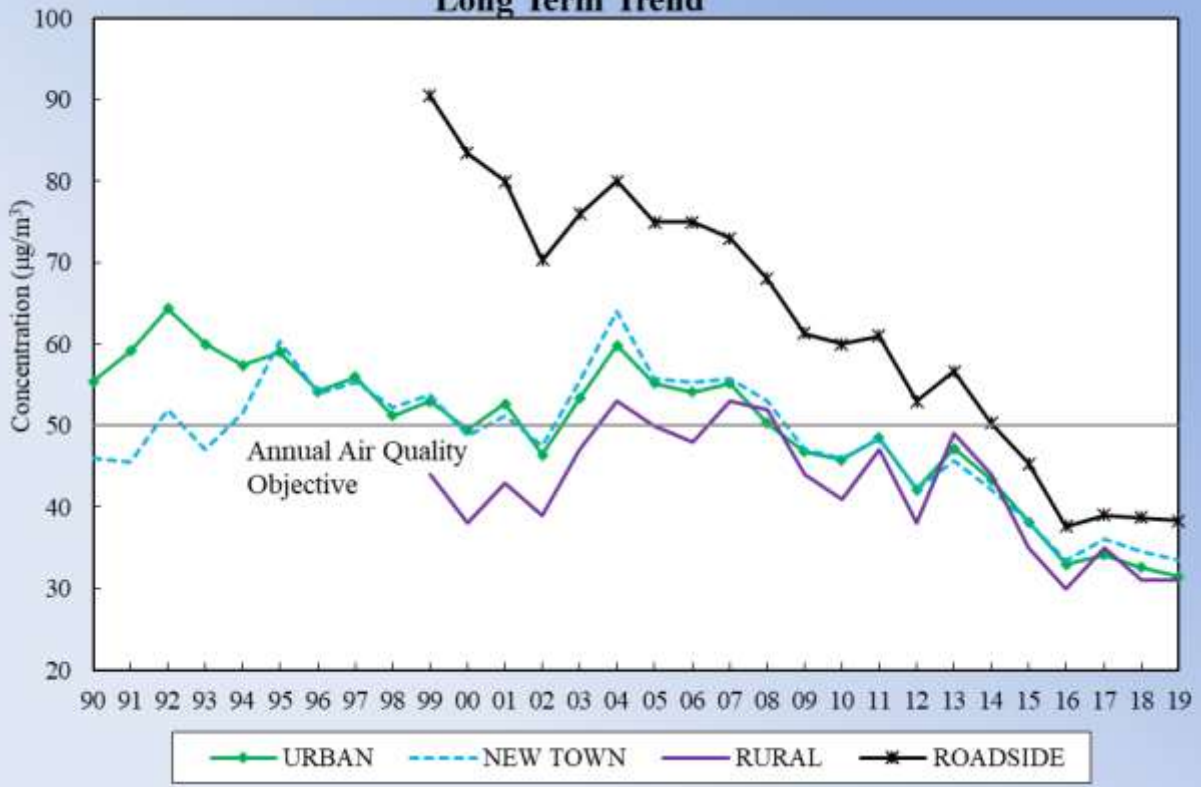


Figure 3: Fine Suspended Particulates Long Term Trend

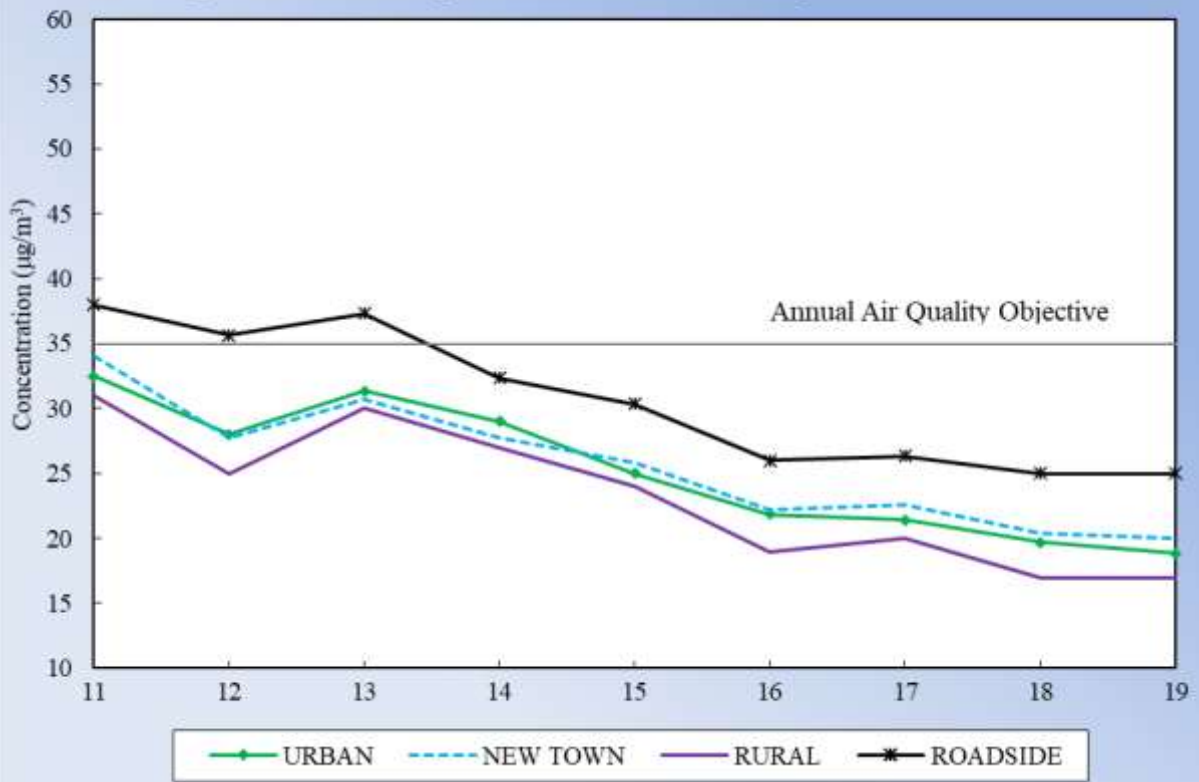


Figure 4: Ozone Long Term Trend

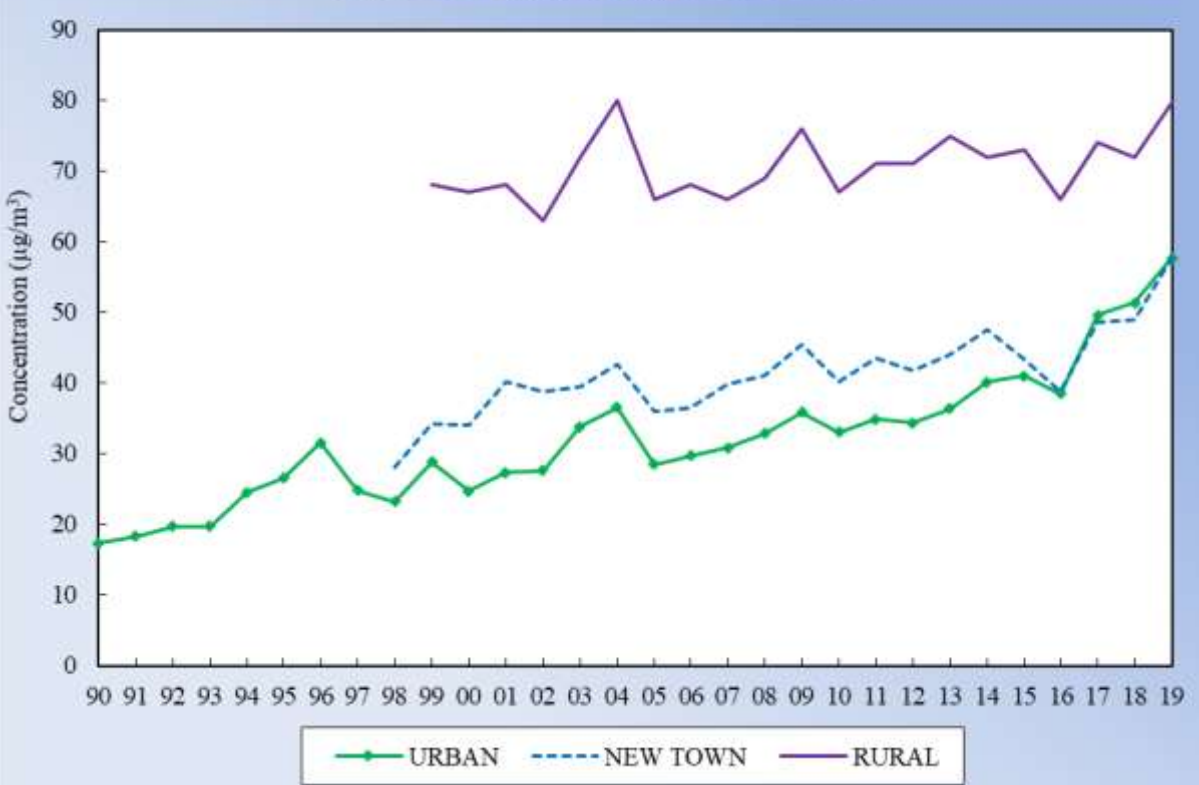


Figure 5: Nitrogen Oxides Long Term Trend

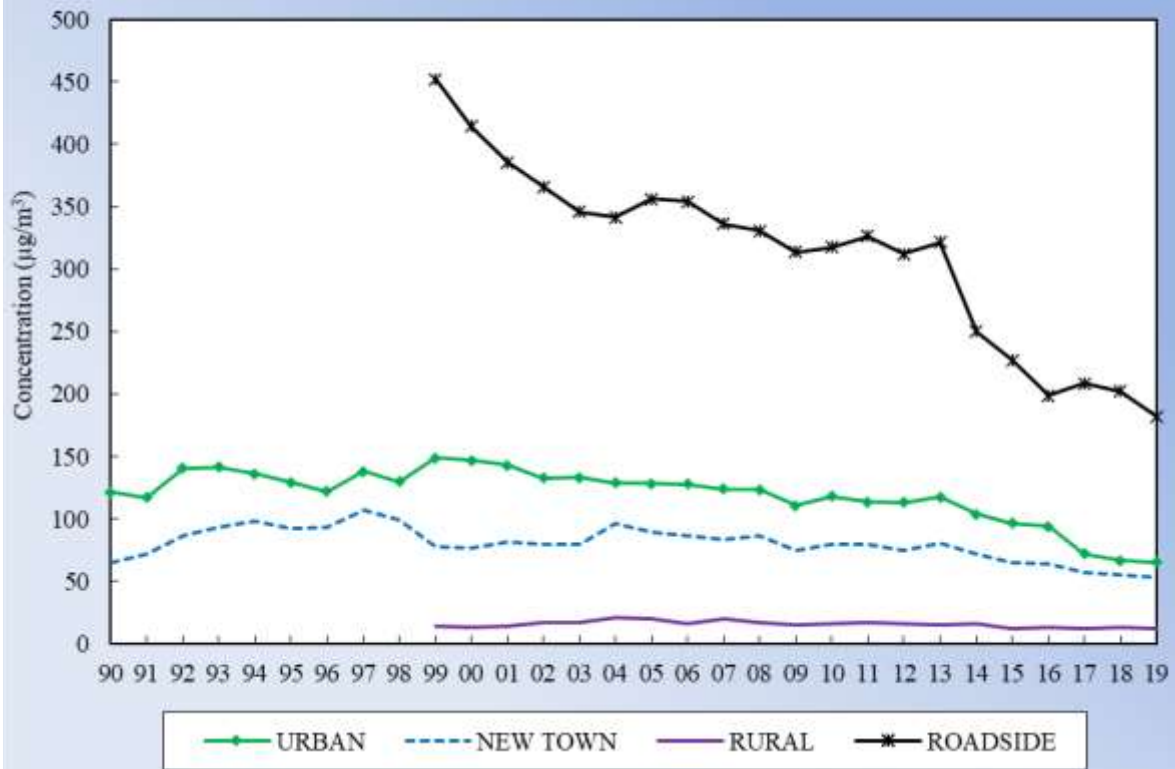


Figure 6: Nitrogen Dioxide Long Term Trend

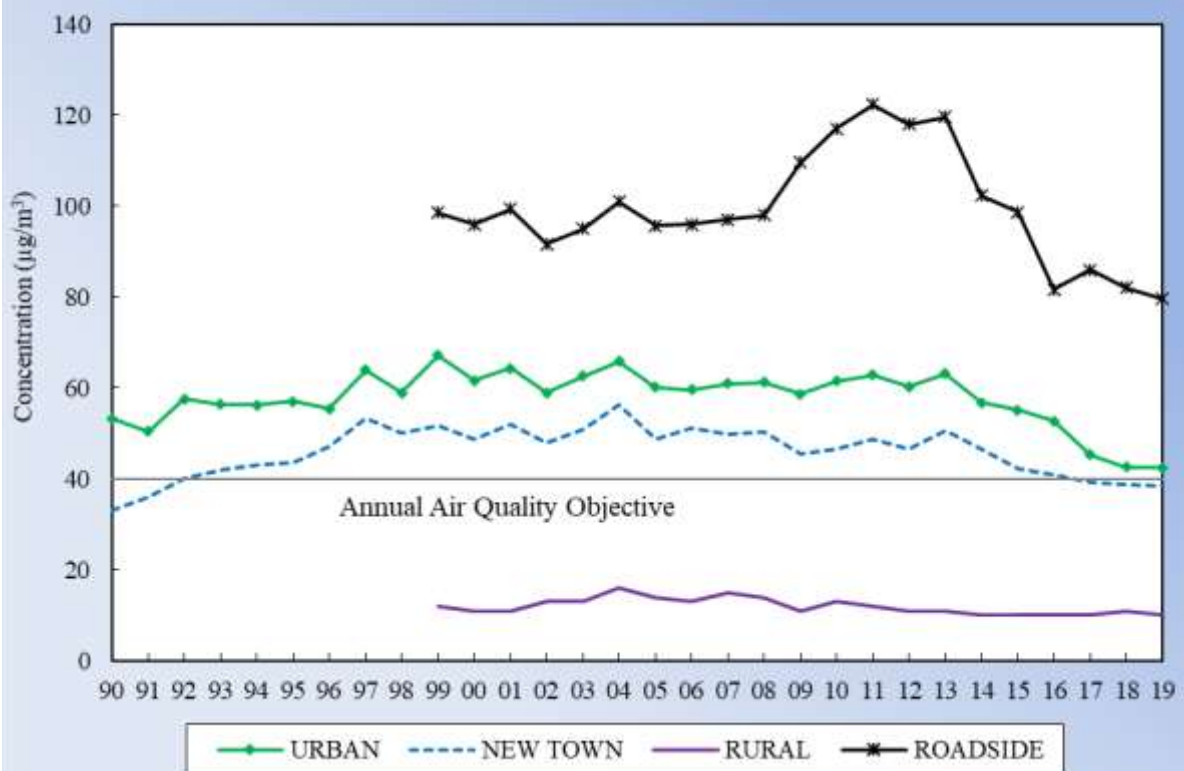


Figure 7: Carbon Monoxide Long Term Trend

