Abstract: Comprehensive information on air quality is very important for development and assessment of air pollution reduction measures, especially for urban areas facing these problems. Such information is useful not only for monitoring of air quality levels but also for validation of air quality modelling tools. These tools are used, among many application fields, to assess road transport related air pollution as well as to investigate impacts of traffic management measures. Today, in addition to high precision monitoring stations in the cities, there are several low-cost monitoring devices available which can provide additional information on a larger area with less costs. This paper investigates the utilization of such devices as an additional data source for air quality assessment through a case study in the city of Munich and focuses on PM10 measurements.