

Alternate Measures of Job Density

Indicator	Description	Applicability	Limitation	Origin
General job density	Number of jobs per area of aggregate commercial, industrial, and institutional parcels. ³	This represents the employment intensity of land use.	While this is suitable for regional transportation origin-destination studies, it does not serve the purpose of understanding the mode of travel to that destination or within that destination.	
Job density	Number of filled jobs per all residents of working age in a geographic area. ⁴	This represents the employment opportunity of the labour force and assumes that jobs are accessible and available near where people live. Thus, spatial inequalities represent differential access to employment (i.e., structural deficits), which is the basis of privation, and can impact public health.	This indicator depends on whether the metric measures how much of the labour force is employed (they may be employed outside the area) or whether people and jobs are concentrated.	The United Kingdom National Statistics for Labour Market.
Retail jobs density	Number of retail jobs per square kilometre (or hectare) of ecumene area. ⁵	This metric uses retail employment as a proxy for the presence of retail activity and the likelihood that residents will walk to those land uses.	The changing character of the retail sector in a given retail market e.g. big box, medium box, power centre, "urban oriented" power centres, etc. and the changing relationships between retail space, retail intensity and retail employment, will increasingly frustrate that kind of proxy.	
Population-plus-job density	Population plus the number of jobs divided by the aggregate area of residential, commercial, and institutional parcels. ³	The provincial <i>Growth Plan for the Greater Golden Horseshoe</i> has mandated the use of this measure to compare land use density and intensification over time.	This is problematic to operationalize because the geographic units (e.g., CSD or CD) contain land uses that would preferably be excluded. ²	Ontario Ministry of Infrastructure

Indicator	Description	Applicability	Limitation	Origin
Employment density at the trip level	Number of jobs per geographic area at trip origins, destinations, or both. ⁶	It is one of several urban form variables that have been found to affect travel behaviour. It informs the development of urban form strategies that target at urban development that maximizes the efficiency of the city as a system while minimizing negative impacts on the environment. ⁶ It also aims to reduce travel demand.	The relationship between travel time and employment density at the trip origin was often less significant than at the destination. ⁶ In addition, the typical census tract may have an average employment density that is lower than the location from which the typical trip began or ended. This is because at the trip level the tracts with more trips have more impact on the urban form characteristics of the average trip. It is expected that at the trip level, the average of the job density at the origin and destination of the typical shopping trip is lower than for the typical working trip.	Job-housing balance policy

Three main reasons for the popularity of job density: (1) it addresses public pressure to manage or limit growth; (2) it is vague enough to avoid political obstacles associated with more specific policies such as those that are directly targeted at altering household travel behaviour; and (3) it reflects more general concerns about developing and maintaining communities with an adequate variety of employment and housing that is affordable to a wide range of income levels.⁷

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