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3. De 3 a 5 palabras clave:
   Walkability Index, Street segment, Dynamic, Madrid

4. Introducción:
   Walkability indices (WI) have been developed to measure the capacity of urban environments to promote daily physical activity. The computation of WI has to compromise between intensive, and expensive, field work producing highly detailed indices or the adoption of secondary sources to compute quick and low cost indices lacking on accuracy and precision.

5. Objetivos:
   The objective was to develop a WI as detailed as possible with the use of secondary sources avoiding this way the need for expensive field work.
   Additionally, we aimed at incorporating aspects related to comfort which are not common in existing indices.

6. Metodología:
   The study focuses on Madrid. Methods include data collection from local and national Spatial Data Infrastructures (SDI), harmonization and integration in a GIS, and cartographic representation. In addition to commonly used "D" factors, the proposed index includes noise pollution and protection against inclement weather. Each of the factors has been weighted by means of a consultative process. After normalization of all factors, the index is computed at street segment level and at different times of the day and different seasons of the year.

7. Resultados:
   A new highly detailed WI for the whole city of Madrid is made available with this method. The novelty of the proposed index lies on the fact that it changes over time as it takes into account daily and seasonal fluctuations of noise and other environmental variables.

8. Discusión

The proposed WI covers a gap in the available methods to estimate intra-urban walkability and facilitates the computation of spatially detailed, thematically rich, dynamic and inexpensive WI in any city possessing an up to date SDI.

9. Conclusión

Quantifying WI according to previous approach allows for a more realistic characterization of urban zones in terms of their capacity to promote physical activity. In addition, the dynamic WI permits embedding an interactive application suggests the more walkable path.