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A REVIEW ON WALKABILITY INDEX FOR TYPICALINDIAN CITY

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ABSTRACT
The study to focus on creating a "walkability index" for a Metropolitan city based on data collected through field surveys and pedestrian interviews. The index likely took into account various aspects of pedestrian facilities, such as the availability of walking paths and pedestrian amenities, as well as accommodations for individuals with disabilities. Development of pedestrian-friendly infrastructure and to move towards the concept of "complete streets," which prioritize the needs of all users. To improving walkability in cities can have a range of benefits, including promoting physical activity, reducing reliance on cars, and improving overall quality of life for residents. Complete streets typically include features such as safe and accessible sidewalks, protected bike lanes, crosswalks, and public transportation options. More precise and comprehensive data on pedestrian activity and infrastructure. Cities could apply walkability assessments to larger areas, such as neighborhoods or entire cities, to identify broader trends and opportunities for improvement..

1. INTRODUCTION
The measure of any area or path in terms of how inviting it is to walk may be termed as walkability. The factors affecting walkability are physical, psychological and environmental in nature. Pedestrian safety through thoughtful design, infrastructure improvements, and education, cities can create environments that are safer and more inviting for pedestrians, promoting active transportation and a healthier urban lifestyle. Examples of the type styles are provided throughout this document and are identified in italic type, within parentheses, following the example. Some components, such as multi-leveled equations, graphics, and tables are not prescribed, although the various table text styles are provided. The formatter will need to create these components, incorporating the applicable criteria that follow(Geetam Tiwari 2003; Soman, Kaur, and Ganesan, n.d.; Geetam Tiwari 2022).

In an urban planning context, a holistic approach is required to understand the walkability Index, factors affecting walkability, transport impact on environment, global footprint & public health. Walkability provides multifaceted Social, Thrifty, Environmental & Political benefits to mankind. This paper is anattempt to review the walkability and its impact and start a discussion on walkable Index(Jha et al. 2017).

ORIGIN OF TERM
What exactly is the term ‘Walkability’ meant? The term walkable has been in use since at least the 18th century (Oxford English Dictionary 2013). The literal meaning of ‘Walkable’ as per Oxford dictionary is “suitable or safe for walking” or the area (destination) being close enough to reach by walking. As far as ‘Walkability’ which in contrast with parent word is a very recent term and is concerned with the measure of how friendly an area is for walking, analyses the earliest identified definitions and descriptions of walkability or references of pedestrian friendly environments (Southworth and Ben-Joseph 1995; Southworth 1997; Alves et al. 2020).

DEFINITION
The term "walkability" refers to planning ideas that are best understood in high-density areas with amenities that are mixed-used and accessible on foot. It is founded on the notion that cities should be more than merely transportation hubs built to accommodate a large volume of moving vehicles.(Khushbu, Patel, and Bhagat 2008; Cubukcu 2013)

To identify built environment indicators affecting walking, only a limited number of studies aggregate various indicators to create an Index called as walkability index (WI).(Taleai and Taheri Amiri 2017; Keyvanfar et al. 2018)

The word Walkability is defined and used by many researchers. In 1995 Dan Burden & Florida Department of transport states walkable area as which provides continuously linked walkways, pedestrianized intersections, special accommodations for people with disabilities, signal placement, illumination, simplify median crossings, safe access to schools, eliminate backing out of parking spaces, commercial development access to have options other than vehicles, auto restricted zones, combine walking and transit, walkable scale land use planning of traditional neighbourhood design, planned mixed unit development.(Burden 2012)

2. INDIAN ROAD CONGRESS

A. Footfalls are the primary mode of transportation. Short distances can be easily covered on foot or by bicycle in cities. Even people who routinely take public transit and drive their own cars rely on walking for the last mile of their commutes. Maintaining the Integrity of the Specifications.(Bharath H M, Rohit Kumar B. R., Raghu G.M., Guruprashanth N. 2018)

B. According to data on the mode share in Indian cities, walking makes up between 25 and 35 percent of all journeys. According to Census 2011 data, nine out of every ten journeys made by women involved walking or taking public transportation. 62 pedestrians and 10 cyclists perished every day in road accidents in India in 2018.(Paul, Chatterjee, and Roy 2020; Geetam Tiwari 2022)

C. Sustainable modes of transportation like walking, cycling, and public transportation should take precedence on urban roadways.

Environment through promoting walking-friendly urban Planning.(Nishant 2018a; Habibian and Hosseinzadeh 2018; Moayedi et al. 2013)

3. Pedestrian facilities principles:

The five most important criteria to keep in mind when designing and developing a pedestrian infrastructure are safety, security, continuity, comfort, and live ability. These guidelines not only guarantee a safe and happy walking experience, but also raise the likelihood that a person will walk more frequently than use motorised transportation for short distances.(Bassiri Abyaneh et al. 2021; Kelly et al. 2011; Agrawal 2021)

4. COMPREHENSIVE MOBILITY PLAN SURAT:

CMP is a strategic plan that lays out the goals for the growth of the city's urban transportation system. Under an integrated planning process, it includes all aspects of urban transportation. It is a long-term goal to create a city with a desirable accessibility and mobility pattern that supports and improves social, economic, and environmental sustainability. This connectedness must be safe, secure, efficient, dependable, and seamless.(Dhonde and Patel 2021)

Table 1. Mode Shares Of Surat City

Source: (Dhonde and Patel 2021)			
Partiular	*CRRI - 1988*	*CRRI - 2004*	*CMP - 2016*
WALK	45 %	42 %	41 %
BICYCLE	19 %	12 %	2 %
3Wh	7 %	11 %	10 %
BUS + RAIL	6 %	2 %	1 %
2W	21 %	28 %	36 %
4Wh	1 %	3 %	2 %
OTHER	0 %	0.3 %	9 %
Average Trip Length- 5.01 km Average Trip Length Motorised- 6.04 km Average Trip time: 18 minutes Avg. travel time by motorised mode: 13.5 minutes			

A. Trip Rate

The average trip rate and motorized trip rate for all scenarios except Scenario III are taken from the city's CMP (Saw et al. 2019). For Scenario III, trip rate assumptions involve demographic projections and travel demand estimation aligned with SDGs. Trip rate is calculated for each of the seven demographic groups (working age population- males, working-age population- females, children aged 0-6 years, children aged 6-15 years, early adults aged 15-29 years, older adults aged above 60 years, disabled population aged 15-65 years) by trip purpose (work, education, health, recreation, other). The demographic projections include improvement in development indicators like sex ratio, workforce participation rates (male and female), the share of school enrollments, and life expectancy based on the projections of countries with similar socio-economic characteristics(Saumya Lathia, Chandrima Mukhopadhyay 2019)

B. Transit Oriented Zone:

The urban planning that maximises the quantity of commercial, residential, and recreational area nearby public transportation. It encourages the use of public transportation in tandem with dense, compact urban form.(J. Singh, Chaudhary, and Malik 2022; S. Singh 2021)

C. Improving Walkability by Reducing Block Size:

- 200m buffer for TOD and 500m buffer for walkability.
- Plots considered with 50% and higher area under TOZ.(Khare et al. 2021)

5. PROMOTING LOW CARBON TRANSPORT IN INDIA

Due to the increased reliance on motorised transportation for urban mobility, problems with congestion, pollution, health, and safety have become increasingly acute. Local road improvements and the implementation of initiatives connected to the development of road infrastructure are the responsibility of cities or urban local authorities. By creating flyovers, enlarging roadways, and permitting a continuous flow of motorised vehicles on the road, urban local government organisations have primarily focused on alleviating traffic congestion.(Paul, Chatterjee, and Roy 2020; Saumya Lathia, Chandrima Mukhopadhyay 2019)

Modal share of NMT:

NMT, or bicycles and walking combined, made up between 40 and 60% of all journeys in Indian cities in the early 1980s. With the exception of Chennai and Patna, a trend assessment of seven Indian cities reveals that the modal share of NMT has been falling in each of these cities since the 1980s. Trips on bicycles and on foot follow different tendencies.(Deeksha Jain and Patil 2021; Rahiman V. 2022; Jain and Tiwari 2019)

6. INDIAN SCENARIO

Workers are defined as everyone (regardless of age or gender) who engaged in any economically productive activity for any amount of time during the reference period.(Nishant 2018b; Saumya Lathia, Chandrima Mukhopadhyay 2019)

- Main Workers
- Marginal Workers
- Cultivators
- Agricultural Labourers
- Household Industry Workers
- Other Workers

a) In both rural and urban areas, respectively, 58.1% and 48.9% of Indian workers commute on foot or by bicycle. Less than 5% of workers in metropolitan areas commute to work by automobile (or a jeep/van), compared to slightly more than 20% who do so on motorised two-wheelers. For both urban and rural India,

using public transport (such as buses and trains) to get to work is important. Workers in both industries reported using one of the two modes of transportation more than 20% of the time.(S. Singh 2021)

b) For both urban and rural India, using public transport (such as buses and trains) to get to work is important. Workers in both industries reported using one of the two modes of transportation more than 20% of the time.(Paul, Chatterjee, and Roy 2020; Khare et al. 2021)

c) The proportion of female workers who use public transport is even higher in urban regions. Despite having a greater modal share of pedestrians (46.5% in rural regions and 67.6% in cities) than men (28.8% in rural and 28.3% in cities), just 4.5% of women employees use bicycles to get to work, compared to 20.2% of men in cities.(Saumya Lathia, Chandrima Mukhopadhyay 2019; Jain and Tiwari 2020)

d) (Yenisetty, John, and Bahadure 2022) and lower size are associated with greater proportion of short trips and walking.

Table 2. Modal share in rural and urban work trips for Male & Female.(Nishant 2018b)

Particular	Total			Rural			Urban		
	M	F	All	M	F	All	M	F	All
On Foot	33.1	28.5	55.1	36.2	28.8	67.8	31.1	28.3	46.5
Bicycle	19.2	22.2	4.8	21.9	25.7	5.3	17.6	20.2	4.5
2W	17.7	19.8	7.8	12	13.8	3.9	21.2	23.3	10.5
4W	3.8	3.8	3.7	2.4	2.4	1.9	4.7	4.6	4.9
Auto	4.2	4	4.8	3.9	4.1	3.1	4.3	3.9	6
Bus	16.2	15.5	19.4	18.3	18.8	16	14.9	13.5	21.8
Train	4.7	4.9	3.6	3.8	4.3	1.5	5.2	5.2	5.1
Water	0.3	0.4	0.1	0.6	0.6	0.1	0.2	0.2	0.1
Any	0.8	0.9	0.5	1	1.2	0.5	0.7	0.8	0.6

(Jha et al. 2017)The processing of videographic data from an automobile driving in a naturalistic environment might reveal extremely specific patterns of pedestrian behaviour. The instrumented car also delivers data on speed, acceleration, and other vehicle characteristics from the controller area network bus in addition to the videographic information. These data can be paired with GPS data to synchronise land use statistics along the routes taken. Future research utilising these techniques would support the need-based planning of pedestrian facilities along particular metropolitan streets.

(Rani et al. 2018)According to the CAI-Asia study, 62% of individuals will switch from walking to another motorised mode if the environment and facilities for walking are not improved. According to the Clean Air Initiative for Asian Cities report(H.S.Kumara 2009), India is experiencing considerable transportation issues. Improving walkability canhelp address these issues. Most sites are easily reachable by non-motorized modes because Indian towns are generally designed for walking and cycling. According to Ministry of Urban Development data, walking accounts for at least 25% of trips and occasionally as much as 50% of journeys in Indian cities.(Study on Traffic and Transportation Policies and Strategies in Urban Areas in India MOUD 2008; Government of India 2017)

Table 3. Trip Mode Shares in Indian Cities, Study on Traffic and Transportation Policies and Strategies in Urban Areas in India.

Source: (Rani et al. 2018)

City Category	Trip Mode Share						Average Trip Length
	Walk	Cycle	2W	Public	4W	IPT	
Category-1 a	34	3	26	5	27	5	2.4

Category-1b	57	1	6	8	28	0	2.5
Category-2	32	20	24	9	12	3	3.5
Category-3	24	19	24	13	12	8	4.7
Category-4	25	18	29	10	12	6	5.7
Category-5	25	11	26	21	10	7	7.2
Category-6	22	8	9	44	10	7	10.4
National	28	11	16	27	13	6	7.7
Category-1 a	34	3	26	5	27	5	2.4
Category-1b	57	1	6	8	28	0	2.5
Category-2	32	20	24	9	12	3	3.5

(Muzamil Rashid, Waseem Akram, and Shahid Rasool Tarry 2017) had studied that ratings for pedestrian facilities like footpaths are necessary for calculating the Walkability Index. The design and usability of the pedestrian facilities that are offered in the region are included in the pedestrian facility survey that is being created for the purpose of collecting pedestrian ratings. The city plan, a tape, or Google maps are used to determine the length of the main streets and walkways in the city. A pedestrian survey must be conducted in order to determine the pedestrian facility rating, taking into account numerous aspects such as pathway width, length, obstructions, cleanliness of the pavement, etc. The Ministry of Urban Development (MOUD) technique is used to calculate the Pedestrian Walkability Index (PWI). For the city of Jalandhar, the PWI score is 0.64.

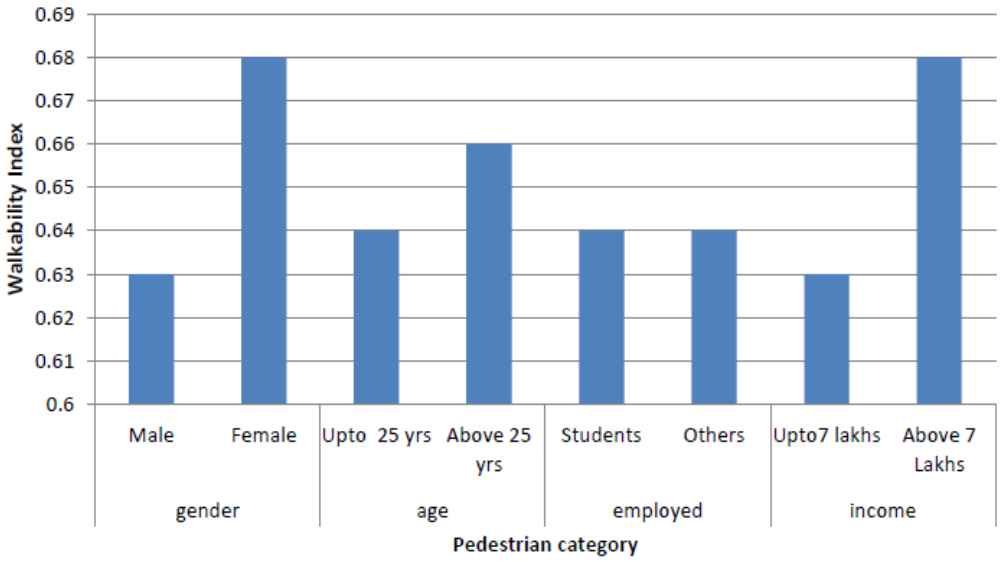

Figure 1. The variation in Walkability Index for various categories (Muzamil Rashid, Waseem Akram, and Shahid Rasool Tarry 2017)

(Bambawale 2019)provided a thorough evaluation method that takes into account both quantitative and qualitative aspects of sidewalk walkability. The Gross Sidewalk Walkability Index(GSWI) approach, which considers elements including street furniture, illumination, obstructions, and potential conflicts with moving cars, looks to be a valuable instrument for evaluating the physical state of sidewalks and the quality of the street environment.

Planners and designers can produce amenities and features that enhance physical, physiological, and psychological comfort by better understanding the demands of pedestrians. Since pedestrians are the primary users of these facilities, it is crucial to take human factors into account while designing pavements. the GSWI approach can be used to compare different design scenarios and assess how they align with existing design

guidelines. great contribution to the realm of urban design and could aid in making cities more accessible by foot and livable for everybody.(Bambawale 2019)

(Moayedi et al. 2013)the notion that walking on the streets shouldn't be prohibited because of discomfort brought on by traffic. This is a crucial factor to take into account while promoting eco-friendly transport and developing walkable communities. We can encourage more people to choose walking as a mode of transportation by developing environments that are safe, pleasant, and appealing for pedestrians. Walking has several advantages for public health, the environment, and community well-being. They point out that early-stage development utilising GIS technology can support monitoring walkability satisfaction scores in localised neighbourhoods at the macro level.

(Paul, Chatterjee, and Roy 2020)There are a number of reasons for the diminishing modal share of public transport systems (PTS) in India. The bad condition of the PTS may be a significant factor on the supply side. On the demand side, there can be a lack of understanding among the populace regarding the societal and individual economic and environmental advantages of using public transit. We can persuade more individuals to use public transit as a mode of mobility by enhancing the standard and accessibility of these systems and educating the public about the advantages.

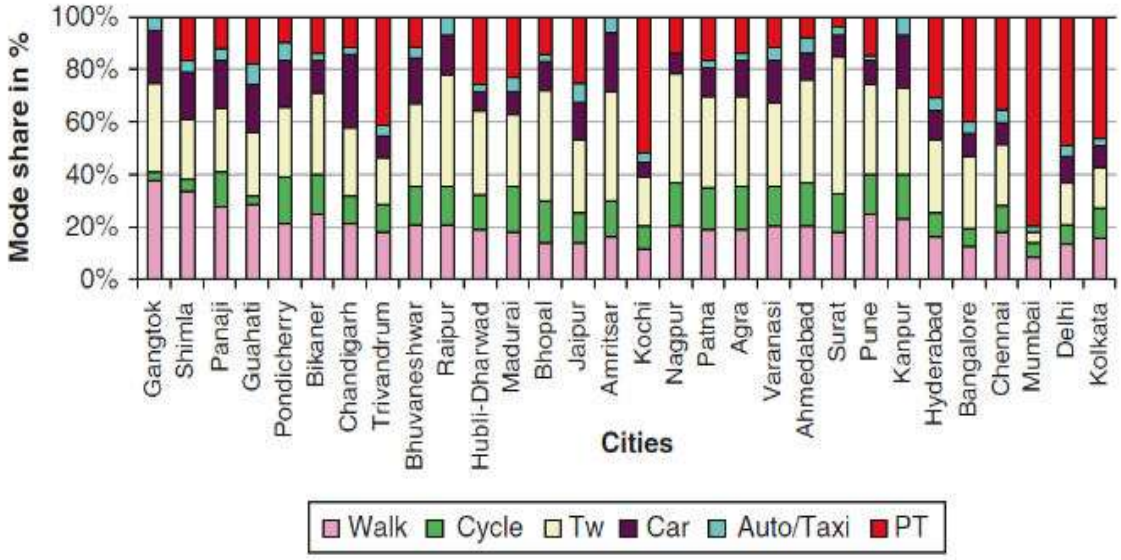

Figure 2. Modal share in Indian cities. (Study on Traffic and Transportation Policies and Strategies in Urban Areas in India MOUD 2008)

(M and Kumar R 2018)The survey and analysis were done in the Davangere, Karnataka city. To estimate the city's overall Pedestrian Walkability Index, the study will concentrate on two separate areas, namely the commercial and shopping sectors. The Pedestrian Walkability Index (PWI) survey consists of a field walkability survey and a pedestrian interview survey. The Highway Capacity Manual 2000's and IRC: 103-1988's respective guidelines served as the basis for the evaluation of the pedestrian LOS and the suitability of pathways. In the specified locations, the accessible walkway's width and length were measured. The average walking speed of pedestrians was manually determined during peak hours by conducting pedestrian volume counts.

(Tarek et al. 2021)To create a complete walkability index, research evaluations of built environment elements that affect walkability were conducted. In order to investigate mixed land use streets in Cairo, Egypt, this study integrated the results of an online poll with a walkability evaluation model built using multi-criteria decision analysis techniques. A three-pronged approach—theoretical underpinning for the walkability index, numerical

assessment over the Egyptian examples using a multi-criteria decision-making (MCDM) procedure, and a qualitative user perception survey—was used to support the conclusions.

(Shahana H and Archana S 2019)Increased walkability and service levels on walkways can significantly improve pedestrian comfort and safety and persuade more people to use walks instead of driving. As a result, there may be less traffic congestion, air pollution, and greenhouse gas emissions. Individuals' and communities' health may also be enhanced. Therefore, it is crucial that walkability be given priority in urban design and development by city planners and lawmakers. When a sidewalk has a high level of service, it can handle many people moving at a comfortable speed, but when it has a low level of service, walkers are constrained to move slowly or even stop altogether. A measure called LOS (Level of Service) is used to assess the level of service offered by a transport facility, like a sidewalk or a roadway. In the case of walkways, LOS is determined by the quantity and density of pedestrians as well as their ability to move around the area quickly.

(Rahiman V. 2022) In this study, "walkability to public transit" variables for metropolitan areas in Kerala, a southern Indian state, will be chosen, ranked, and given a priority. Based on a fundamental framework of walkability parameters constructed following the literature research, the Delphi Method was used to elicit and choose the most significant walkability metrics from a number of fields, including transportation, planning, and urban design. Using the Analytical Hierarchy Process, the relative importance of parameters and sub-parameters was evaluated. The selection of walkability parameters is a difficult problem, thus the analytical strategy needs to be appropriate. Therefore, the multi-criteria decision-making technique (MCDM), also known as the Analytical Hierarchy Process, is used in this study because intuitive findings cannot be predicted. To identify ordering priority and weights corresponding to various walkability criteria, comments from academics, architects, and planners (n=86) were taken into consideration.

7. INTERNATIONAL SCANERIO

(Dr. Jaydip Barman and Chintan Daftardar 2010)The results of these tests and the pilot were used to refine the Index composition and data gathering processes, resulting in a two-pronged instrument. Infrastructure, amenities, and services for pedestrians are sometimes neglected in budgets and planning procedures in growing cities when a significant portion of trips are made on foot. In order to help city planners better understand the scope and extent of local pedestrian circumstances in comparison to those in other cities, a walkability index was created to rank cities globally based on the convenience, safety, and security of their pedestrian environments.

(Mayne et al. 2013)The condensed Sydney Walkability Index has shown predictive validity for utilitarian walking and is comparable to other indices that take into account store floor space ratio. Increased use of validated indices will increase the comparability of studies and provide information for urban planning and policy to enhance community walkability.

(Telega, Telega, and Bieda 2021)A brand-new Walkability Index was created for this study. Walkability indices gauge how feasible it is to reach various locations by foot in a given area. This Walkability Index (WI) incorporates elements of the WI defined with the six criteria are:

➔ Residential Density

➔ Diversity – Entropy Index

➔ Connectivity

➔ Proximity

➔ Environmental Friendliness

➔ Commercial Density – FAR.

(Stockton et al. 2016)using GIS and statistical software that are compatible while performing such analysis. More precise and thorough walkability scores may be obtained by combining field surveys to collect qualitative data with high-resolution spatial data from mapping databases. To get meaningful results, however, the problems with indexing walkability within small administrative units must be resolved. The extensions Productivity Suite, Spatial Analyst, Network Analyst, and the geo processing tool of ArcGIS for Desktop Advanced were utilised to store and manage the geographic data. Spatial data from Landmap'sUKMap collection, a mapping database product, was utilised to calculate the walkability components.

(Blečić et al. 2015; Blecic et al. 2020)multiple operational techniques for measuring urban walkability were examined. These techniques may be useful as tools to aid in urban planning and decision-making. They have developed a taxonomy for comparing different evaluation methods. The taxonomy not only provides a way to organise the most recent research on walkability, but it also provides a list of requirements they think a decision- and design-support tool should meet in order to successfully incorporate the urban walkability paradigm into urban planning and design strategies while being mindful of sustainability issues and attentive to the interaction between residents and the city. Comparison is challenging because there is little agreement among the approaches.

(Dobesova and Krivk 2012)The results of his case study in Olomouc further support the necessity to alter the IPEN Methodstrategy. For instance, the policy ignores the accessibility of public transport and the manner in which people use it on a regular basis. Residents can combine their modes of transportation, for instance, by walking to a bus and tram station. Additionally, even though biking is an active physical mode of transportation, bike paths and transit are not considered. This might be because the USA, where the IPEN technique is utilised, has less cycling and public transport than, say, Europe.

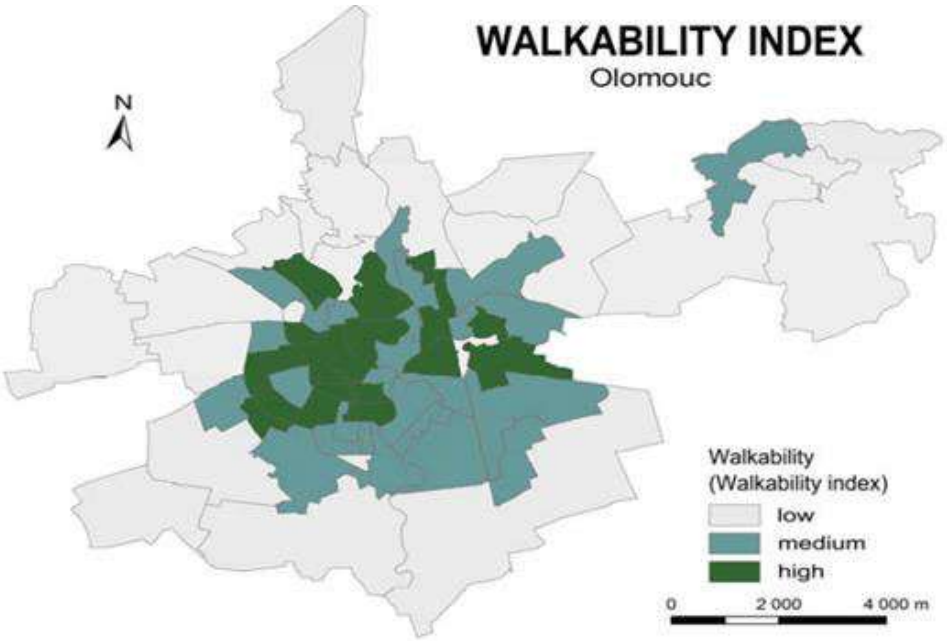

Figure 3. Walkability index in the Olomouc urban units.(Dobesova and Krivk 2012)

(D'Orso and Migliore 2020)the quality of pedestrian paths is often overlooked in studies on public transportation accessibility, despite being a crucial factor affecting accessibility to stations. By using this approach, decision-makers can understand the most pressing obstacles to pedestrian accessibility and predict how the quality of pedestrian networks would change as potential actions are implemented. Presents a system for assessing the walkability and quality of pedestrian paths in urban environments, taking into account various factors such as network distance, obstacles, and perceived quality. The methodology involves the use of a decision support

system in a GIS context, which enables policymakers to identify areas where pedestrian mobility needs improvement and prioritize interventions accordingly.

(Talen 2002; Talen and Koschinsky 2013)bolster the argument that walkable communities are taking on more significance in urban planning and architecture. The authors point out that the idea of walkability has been associated with a variety of advantageous outcomes, such as less reliance on automobiles, enhanced physical and mental health, increased social contact, and financial advantages. Measures of walkability have significantly improved over the previous ten years, in part because of government programmes and funding in the transportation and health sectors. Additionally, assessments of walkability have become more precise and thorough because to digital data sources like Walk Score.

(Sabzali Yameqani and Alesheikh 2019)The Walkability Index Tool is a useful tool that can assist researchers and policymakers in better comprehending and enhancing the walkability of Australian communities. The authors stress the significance of adopting data-driven strategies to inform decisions and encourage the development of walkable neighbourhoods that are advantageous to both individuals and the larger community. Elucidate the potential worth of a technology that assesses walkability across Australia, particularly through the development of the Walkability Index Tool for the Australian Urban Research Infrastructure Network (AURIN). According to the authors, all levels of government can use this tool to compare Australian towns and make planning and policy decisions. Show how the tool can be effectively utilised with data from the states, and they propose that it should be scaled up to assess the walkability of all Australian capital cities, allowing for comparisons both within and between cities.

8. FINDINGS

The findings are framed for walkability. The first category is essential because it addresses elements like mixed-use, compact design, accessibility, closeness, and connectedness that have an impact on walkability. The second group, referred to as recommended, consists of zoning, density, street design and layout, and traffic calming measures. The opportunity to use public transportation and include a second category of street directions will always increase walkability.

The Essentials Suggestions and Recommendations according to Walkability Variables are

1) **Mixed Use:** Combination of public, commercial, and residential dwelling types in a neighbourhood unit.
2) **Compact design:** Assure effective land use to promote walking and lower construction and maintenance costs.
3) **Accessibility or Proximity:** Activities are close to one another and to residential areas, and the travel origin and destination are 800 meters or half a mile apart.
4) **Connectivity:** Short blocks and preferably four-way intersection designs.

The Encouraged Suggestions and Recommendations according to Walkability Variables are

1) **Density:** Residential densities range from 6 to 25 dwelling units per acre, and employment densities in commercial districts are rising.
2) **Zoning:** rational zoning for a neighbourhood that is walkable to avoid excessive separate usage and Zoning might unnecessarily increase the distance between activities.
3) **Street Pattern and Design:** Ideally four-way intersections should have a grid-like arrangement that is closely related to sidewalks, crosswalks, curb ramps, medians, and minicircles, among other pedestrian-protecting features.
4) **Traffic Calming and Street Speed:** shared lanes, no one-way streets, little parking, a shortening of the street, miniature circles, and allow a maximum speed of 35 mph and a speed limit of 15-20 mph.

5) **Open Spaces and Parks, Plazas:** parks and open spaces at all scales, whether sectoral, local, regional, or all open spaces are connected by walking trails, which also encourage sports.

6) **Aesthetics:** Residential, commercial, and meeting spaces should have attractive and interesting facades or landscaping, and all walkways should be well-lit, illuminated, clean, and free of obstructions.

The Extra Suggestions and Recommendations for Walkability are

I. **Street Orientation:** Porches will be built on narrow lots that are next to sidewalks.

II. **Access to transit:** Transit stops should be situated correctly to encourage walking and should be 400 to 800 meters or less away from intermediate stops.

9. CONCLUSION

The urbanisation politics to pay attention to protection and revival of the old areas, creating an appropriate pattern in development of new areas, creating a city garden, giving more priority to pedestrians than cars, and ceasing city development, there are no politics to genuinely motivate the programmers to design and build intricate and multifunctional areas to promote hiking.

Design and programme must comprehend who is more drawn to a region, why they are drawn there, and who will actually reside there. Despite all obstacles, given the rise in energy supply costs, it is imperative that programmers educate the public on how the right principles (if implemented) might impact each person's life in both hygienic and financial matters. executives' casual attitude, incomplete information is provided about the public's perception of complex districts. Programmers must create a great design if a district is to have one.

- The districts ought to be recognised for their distinctive and eloquent identities.
- People with different ages and income levels could live in security and welfare.
- Social and personal relations have their real value.
- Plenty of daily needs of humans should be satisfied through pedestrianism.
- Respect should be shown for the natural environment and beauty.
- The requirements of the populace should come before those of the traffic.
- People should opt to live in the districts for both themselves and future generations.

The entire city should have the majestic sense of urban city and architectural patterns.

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