# A Review Study on the Walkable City

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Abstract:- What exactly is meant by the term "walkability"? In professional, research, and public disputes the term is used to refer to several quite different kinds of phenomena. Some discussions focus on environmental features or means of making walkable environments, including areas being traversable, compact, physically-enticing, and safe. Others deal with outcomes potentially fostered by such environments, such as making places lively, attractive sustainable transportation options, and inducing exercise. Finally some use the term walkability as representation for better design whether composed of multiple, measurable dimensions or providing a holistic solution to urban problems. This review both problematizes the idea of walkability and proposes a conceptual framework distinguishing these definitions. This matters for urban design, because what is considered a walkable place varies substantially between definitions leading to substantially different designs. By mapping the range of definitions, this review highlights potential conflicts been forms of walkability.

*Key Words*: Walkable city, walkable transport, Pedestrian walkways, Walkability, Neighbourhood etc

#### **1. INTRODUCTION**

In Jeff Speck's excellent new book, Walkable City, he suggests that there are ten keys to creating walkability. Most of them also have something to do with redressing the deleterious effects caused by our allowing cars to dominate urban spaces for decades. I don't necessarily agree with every detail, and my own list might differ in some ways that reflect my own experience and values. But it's a heck of a good menu to get city leaders and thinkers started in making their communities more hospitable to walkers.

(I can't say that Jeff and I know each other well, but we're friends, and I like him a lot. I'm listed in the acknowledgments, and one of my articles is cited in the narrative. I previously reviewed The Smart Growth Manual, which Jeff co-authored with Andres Duany and Mike Lydon.)

He contends that a great deal of money and muscle have gone into streetscape improvements, but how important are these in convincing people to walk? The book is rooted in Speck's 'General Theory of Walkability', that for walking to be favored, it must be useful, safe, comfortable and interesting.

**1. Useful**: Most aspects of daily life close at hand and well-organized

**2. Safe:** Streets that are designed to be safe and also feel safe to pedestrians

3. Comfortable: Urban streets as outdoor living rooms

**4. Interesting:** Sidewalks lined by unique buildings with friendly faces

Speck then prefaces his ten steps to walkability with some notable cases studies proving the economic advantage of walkable places, real estate premiums of walkable urbanism versus drivable suburbanise, the personal and health benefits those in walkable places gain, the environmental impacts of driving, and one's risk of dying in a traffic crash versus murder by a stranger.

"It is the places shaped around automobiles that seem most effective at smashing them into each other."

#### **1.1 WALKABILITY CONCEPT**

The walkability concept has become popular due to the poor quality of urban spaces dedicated to pedestrians (footpaths, pavements etc.). City authorities have often forgotten that the streets offer a huge potential, which should not be limited to cars and parking spaces; rather, they should be available to all pedestrians, even if they are using urban transport. The pedestrian and cycling models of individual mobility should be accessible to all urban residents. Moreover, walkability is connected with quality of life (being healthy) issues, while offering environmental and economic benefits. To claim that a city is "walkable", it is necessary to meet four basic conditions: security, functionality, attractiveness and convenience.

Implementing the concept of walkability into cities has fostered a new culture of mobility, which brings with it many benefits, such as:-



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- Improving the level of safety on the streets
- Decreasing the environmental footprint and reducing air pollution, traffic, noise or vibrations
- Improving the attractiveness of public spaces, which can be help to support local businesses and local tourism, as well as encourage investment
- Decreasing spending on construction of and repairs to the road infrastructure
- Improving the health of residents and prolonging • their life
- Balancing the transport system load Reducing the scale of difference in the usage of means of transport

# 2. Ten steps to promote Walkability

Here are the author's ten steps of walkability, with a memorable line from his description of each:

## 1. Put cars in their place.

## ("Traffic studies are bullshit.")

Jeff believes, and I tend to agree, that a car-first approach has hurt American cities. This is in part because traffic engineers too often have failed to acknowledge that increased roadway traffic capacity can lead to more, not fewer, cars on the road. The resulting phenomenon of "induced demand" creates unanticipated consequences not only for traffic on freeways but especially in neighbourhoods and downtowns, where streets are sometimes treated not as critical public spaces for animating city life but as conveyances for motor vehicles. Jeff generally supports congestion pricing, but cautions that we must be very careful about assuming the merits of pedestrian-only zones.



#### 2. Mix the uses.

The research shows that neighbourhoods with a diversity of uses - places to walk to - have significantly more walking than those that don't. Jeff makes the point that, for most American downtowns, it is housing

- places to walk from, if you will - that is in particularly short supply. He also points out, quite correctly, that for most (still-disinvested) downtowns, affordability is not much of an issue, because relatively affordable housing is all there is. For those booming downtowns susceptible to gentrification, he recommends inclusionary zoning and "granny flats," or accessory dwelling units.

# 3. Get the parking right.

As do many progressive city thinkers, Jeff points out that we have a huge oversupply of underpriced parking, in large part due to minimum parking requirements for buildings and businesses. A side effect is that adaptive reuse of historic properties can be discouraged, because there isn't sufficient space to create parking required for the buildings' new uses. Jeff recommends consolidated parking for multiple buildings and businesses and higher prices, especially for curb parking, and shares a number of successful examples.

## 4. Let transit work

Jeff cites the disappointing experience of light rail in Dallas as an example of what not to do to support transit: insufficient residential densities, too much downtown parking, routes separated from the busiest areas, infrequent service, and a lack of mixed-use, walkable neighbourhoods near the stops. leff recommends concentrating on those transit corridors that can be improved to support ten-minute headways, and working there to simultaneously improve both the transit and the urban fabric. Quoting transportation planner Darrin Nordahl, Jeff also reminds us that public transportation is "a mobile form of public space," and thus should be treated with respect and made pleasurable.



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#### 5. Protect the pedestrian.

"The safest roads are those that feel the least safe." Here again, it comes back to driving. Jeff asserts that roadway "improvements" that facilitate car traffic such as wider lanes or one-way streets - encourage higher speeds; thus, we should instead use narrow lanes and two-way streets. Intriguingly, he argues - as have other new urbanists - for stripping some roadways of signage and mode delineation. The idea is that, if drivers feel they might hit someone or something, they really will slow down or change routes. Jeff supports, as I do, on-street curbside parking, because it buffers the sidewalk from moving vehicle traffic.

#### 6. Welcome bikes.

This step is only minimally about walkability, except for the point that bike traffic slows car traffic. It's all about making cities more hospitable to cycling, which many US cities are now doing. Although the drivers complain, both the research and my personal experience as a driver suggest that car traffic isn't really inconvenienced much if at all when the addition of cycling infrastructure is thoughtful. Jeff does discuss the very interesting point that some experienced cyclists actually prefer riding in the main roadway rather than in a designated lane. Personally, if I'm on a busy downtown street, I'd rather have a dedicated lane; otherwise, I'd probably prefer to have full access to the road.

#### 7. Shape the spaces.

"Get the design right and people will walk in almost any climate." Much as I liked this book, I'll admit to wondering when, if ever, my urban designer friend was going to get around to urban design. This chapter is mostly about providing the sense of enclosure we need to feel comfortable walking. And, once again, the main villain is the car, this time in the form of surface parking lots along the walkway. But Jeff also takes some shots at blank walls (correctly) and look-at-me architecture (I somewhat, but not entirely, agree). He believes, as I do, that the amount of density to support good city walkability does not necessarily require tall buildings.

#### 8. Plant trees.

Even though street trees correlate with fewer automobile accidents, many public transportation

agencies seek to limit them because they believe they interfere with visibility. But Jeff points out that, in addition to contributing to auto safety, trees provide myriad public benefits, including natural cooling, reduced emissions and energy demand for air conditioning, and reduced stormwater pollution.

#### 9. Make friendly and unique [building] faces.

"Pedestrians need to feel safe and comfortable, but they also need to be entertained." Of the ten steps, this is the one most about design, or at least the most about design of things other than roadways. For me, it evoked Steve Mouzon's wonderful theory of "walk appeal," holding that how far we will walk is all about what we encounter along the way. Stores and businesses with street-level windows help (meaning that most banks and drugstores don't), as does disguised or lined parking, vertical building lines, and architectural details. Jeff isn't so kind to parks, though, or green infrastructure designed to absorb stormwater.

#### 10. Pick your winners.

"Where can spending the least money make the most difference?" The subtitle here could well be, "in the real world, you can't do everything." True enough. Jeff argues for focusing on downtowns first, and on short corridors that can connect walkable neighbourhoods.

#### **3. CONCLUSION**

The walkable concept integrative theoretical and experiential approaches that are crucial to the practice of walkable city that consist of the problem, factor and characteristics of the public in the Kuala Lumpur city centre. There are two factors that influence the public to choose to walk. The main factors that influence the public to choose to walk are the psychological factors that are perceived as the components of the physical factor. However, there are significant factors to each other. In promoting walking and the aspiration to become a walkable city stems from the recognition that attractive and economically thriving cities are those that encourage public life and recreation. One of the most important attributes is the quality of public and physical environment, the way it contributes to character, promotes pedestrian activity and connectivity and encourages people to spend time within the city centre. Consequently, a walkable city comes when the public and walkable urban environment are readily to walk.



#### REFERENCES

- [1] Frank L.D., J.F. Sallis, T.L. Conway, J.E. Chapman, B.E. Saelens, W. Bachman. 2007. "Many pathways from land use to health: associations between neighborhood walkability and active transportation, body mass index, and air quality". Journal of the American Planning Association 72: 75-87. ISSN 0194-4363.
- [2] Scientific Journal of Silesian University of Technology. Series Transport by Zeszyty Naukowe Politechniki Śląskiej. Seria Transport, Volume 95,2017
- [3] "THE KEY TO BE A WALKABLE CITY."Conference Paper, October 2017
- [4] The ten steps of walkability, December 3, 2012 in Green Enterprise, Health and the Environment, Living Sustainably
- [5] Designing healthy communities:Testing the walkability model by Adriana A.Zuniga-Terann, BarronJ.Orr, RandyH.Gimblett, NaderV.Chalfoun, StuartE.Marsh, DavidP.Guertin, ScottB.Going
- [6] Engwicht D. 1992. Towards an Eco-city: Calming the Traffic. Sussex Inlet: Envirobook Publishing. ISBN 9780858810624.
- Short J.R., L.M. Pinet-Peralta. 2010. "No accident: traffic and pedestrians in the modern city". Mobilities 5(1): 41-59. ISSN: 1745-0101.