Walkability — It's Not All About Design

Building Complete Streets with Good Maintenance and Norms of Use



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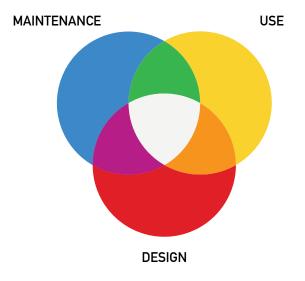
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Key Takeaways

- Norms of maintenance and use matter as much as design
- Slow the flow to reduce conflict and promote "complete streets"
- · Some separation of land uses can enhance walkability

Introduction

To better meet the needs of a diversity of users, especially children and elders, planners are giving more attention to creating walkable streets. New urbanism focuses on design-based solutions for better streets. But we find two other factors also determine walkability: maintenance and norms of use. Poor maintenance and norms of use can undermine good design, while conducive usage can promote walkability even on poorly designed streets. Planners can harness this broader framework to identify alternative solutions to building walkable neighborhoods, instead of focusing solely on design.



What makes a neighborhood walkable?

Research emphasizes the role of design in streets and sidewalks. Scholars have determined that "imageability, visual enclosure, human scale, transparency and complexity" are some of the major features of a walkable neighborhood (Ewing & Handy 2009, 66). This is often coupled with the new urbanist principle that mixed-use developments promote street activity, and therefore, safety.

We propose an alternative paradigm in which maintenance and norms of use are considered as important as physical design. We compare two neighborhoods in Rome, Italy — one well planned and one not — to illuminate this broader approach.

What planners can do

This framework frees planners from the "design trap" that assumes quality design is essential for walkability. When good design exists but a community remains difficult to walk through, planners must ensure that laws are being followed and maintenance is regular. For a neighborhood that lacks quality design of sidewalks, planners might focus on use patterns in the community.

For example, in North America, many post-war suburbs are aging and lack the financial resources or political capital to invest in design upgrades for pedestrian areas. These communities can instead play to their strengths — separated land uses, a diversity of users, meandering street patterns, slow traffic and a strong sense of community — to create complete streets.

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Poor maintenance and usage undermine good design

A case study of Piazza Alessandria

Piazza Alessandria is a mixed-use, old and wealthy neighborhood in Rome with good street and sidewalk design. However, in interviews with residents, they consistently named walkability as their chief concern. Improper norms of use and negligent maintenance obliterate this good design and are to blame for the shortcomings in walkability. One woman expressed concern that, "everything is broken," but when pressed to explain, it was the rules that were broken, not the physical streets.

Usage and maintenance problems are everywhere: parked cars obstruct well-designed curb cuts; crosswalks have almost completely faded from sight; sidewalk stalls block entire sidewalks. Examine the road that encircles the neighborhood market as an example — a nearly impenetrable wall of parked cars forces pedestrians to walk in the busiest parts of the street to reach the market, a common destination for the oldest residents of the community. Strip away the cars and the street could be considered a textbook example of well-designed walkability, but norms of use privilege cars over pedestrians.



Cars obstruct crosswalks in Piazza Alessandria

Good usage overcomes poor design

A case study of Pineta Sacchetti

Pineta Sacchetti, an unplanned neighborhood on the outskirts of Rome, violates many of the basic tenets of walkability design, and therefore, it would seem not child-or age-friendly. About 40 percent of the community's streets do not have sidewalks, and, among the roads that do, the sidewalks are thin and lack curb cuts.

Yet, in conversations with citizens of the community walkability is not an issue for the neighborhood. On the contrary, the residents of Pineta Sacchetti extol its childand age-friendliness and consider the neighborhood a safe place to walk. Residents say the norms of use promote complete streets despite poor design. The most notable positive usage pattern is a low flow of car traffic, which is the result of two factors: commercial development and transit corridors restricted to the edges of the neighborhood, which are only several blocks away. There is little street traffic in the interior of the residential neighborhood, creating streets that are quiet, and thereby walkable. Coupled with a strong social structure driven by local institutions (school, senior center, library), the neighborhood is an attractive place for children and elders to live.



Low traffic flow and separated uses makes walking safe for children and the elderly in Pineta Sachetti

References

Ewing, Reid and Handy, Susan. (2009). "Measuring the Unmeasurable: Urban Design Qualities Related to Walkability". Journal of Urban Design, 14(1), pp. 65-84. DOI: 10.1080/13574800802451155.

Material on Pineta Sacchetti credited to Raquel Blandon, Gray Brakke, Eduardo Carmelo Dañobeytia, Joshua Glasser and Amelia Visnauskas. Detailed case study reports of Piazza Alessandria and Pineta Sacchetti are accessible online at goo.gl/Yu5Nvq.