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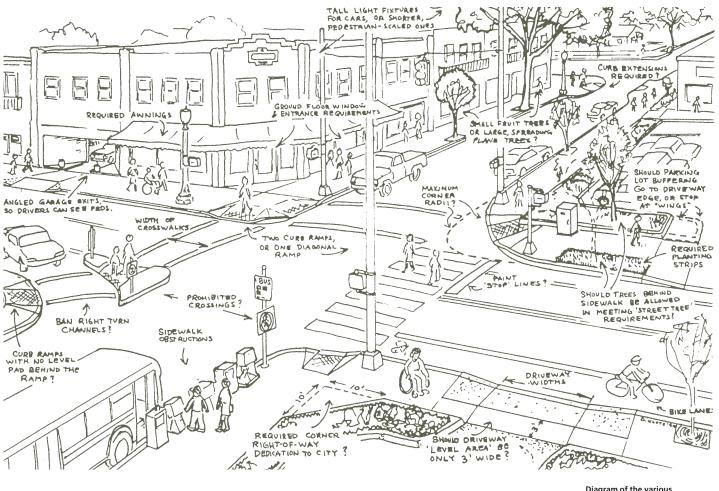


Diagram of the various issues to consider in making a street intersection more accommodating for pedestrians

Graphics: City of Portland, Office of Transportation

Location: Portland, Oregon

Sponsor: City of Portland Office of Transportation (Charles Hales, Commissioner; Vic Rhodes, Director)

Pedestrian Design Guide Project Staff: Ellen Vanderslice, Project Manager; Matt Brown, Jean Senechal

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The Pedestrian Master Plan

Pin the Tail on the Problem

Use this card to describe a pedestrian system problem at a particular location.

Where is it?

Street name

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Grossing

Second cross street

Second cross street

Crossing

Bridge

Other

Use this red crosssrys

Problem Number

Facility type

Street name

Crossing

Bridge

Other

Use blank if problem is at an intersection)

What's the problem?

Pedestrians

Cross

An Problem Number

Facility type

Street name

Crossing

Bridge

Other

Problem Number

Facility type

Street name

Crossing

Bridge

Other

Problem Number

Facility type

Street name

Crossing

Bridge

Other

Problem Number

Facility type

Street name

Facility type

Street name

Crossing

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Problem Number

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Street name

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Bridge

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Facility type

Facilit

City planners asked people to "pin the tail on the problem" to help identify pedestrian trouble spots

Many people consider Portland to be the exemplar of all that is right about land-use and transportation planning. They admire the walkable scale of its downtown and special pedestrian places like its waterfront and park blocks. They appreciate the decisions the city and region have made over the years to combine transit and public space investments downtown with a growth boundary at the metropolitan edge.

Beyond the core, however, much of Portland suffers from a built fabric similar to that of other cities, one that does not easily facilitate transit, cycling or walking. The pedestrian master plan, adopted by Portland's City Council in 1998, sets out a twenty-year vision and a detailed workplan for increasing opportunities to walk in these areas.

Portland has plenty of planning tools—federal (ISTEA and its successor, TEA-21), state (Oregon's Transportation Planning Rule), regional (the 2040 Regional Framework Plan) and local (Portland's comprehensive plan)—at hand for promoting a more balanced, affordable and efficient transportation system. It has vibrant pedestrian advocates, and several neighborhood-scale projects have embraced walking as the cornerstone of a healthy and sustainable community.

Yet none of these provided a clear program of specific improvements necessary to make walking easier. The master plan is the nuts-and-bolts document the city needed: it sorts through disparate requirements to establish priorities for projects the city should undertake and offers guidelines, sometimes in excrutiating detail, for designing the

pedestrian realm. The plan—whose five sections cover pedestrian policies and street classifications, design guidelines, priorities for capital improvement projects and recommendations for funding—has helped refocus how the city plans, pays for and builds transportation projects.

Setting Priorities

The document is notable because of three inter-related elements: establishing a set of priorities at the city scale, engaging the public and linking to the city's capital improvement budget. It is also significant for recognizing that successful pedestrian environments depend on a variety of factors, not simply putting in sidewalks where there aren't any.

Portland planners invented two tools to help them identify priorities for improvements a "potential index" and a "deficiency index" which they used to evaluate the nearly 32,000 street segments in the city. The potential index measures the presence of factors that support walking (land-use mix, connectivity in the street network, and presence of local destinations), proximity factors (closeness to schools, parks, transit and neighborhood shopping) and policy factors (how streets are designated in various other plans). The deficiency index measures the importance of improving a particular street segment, considering sidewalk continuity, street connectivity and the ease of crossing streets (manifested by auto-pedestrian accidents, traffic speed and volume and roadway width). Projects

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street

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sidewalk corridor

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curb offensiving through

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The plan includes detailed standards to guide the design of new pedestrian connections.

on street segments with high potential and high deficiency are ranked as high priority.

This analytical exercise was supported by a planning process that engaged the community in further helping to identify and select needed projects. In workshops, citizens were asked to "pin the tail on the problem" by mapping pedestrian problem areas in their neighborhood. Community leaders and a Pedestrian Advisory Committee helped the project team glean a better understanding of pedestrian needs throughout the city.

The project team ranked each potential project by combining information from the analysis and the public comments. Final adjustments were made for projects especially related to pedestrian safety and for those that take advantage of existing opportunities. The end result is a list prioritizing each possible project for each of the city's seven transportation districts.

The plan does not venture into politically volatile water by addressing questions about the relative importance of improving auto environments versus walking environments, or about the ensuing urban form. It does, however, provide pedestrian projects with a stronger basis, allowing them to compete better for city capital improvement and regional transportation planning funds.

Links to Research

Decades have passed since several seminal works offered a better understanding of the ingredients of successful pedestrian environments. It is reassuring to see many of their findings infiltrating public planning documents prescribe pedestrian improvements. For example, William Whyte taught us about the importance street corners play in pedestrian life; the design guidelines devote an entire chapter to curb radii and obstruction-free areas at street corners. Jan Gehl reminds us of the space requirements for pedestrians; the plan devotes several tables to recommended widths for sidewalks and clear zones.

Some important aspects of good walking environments, however, are not explicitly attended to. For example, Christopher Alexander offered myriad guidelines about how far people will walk for services. Donald Appleyard found that the height, continuity and solidity of buildings affect the amount of street life. Kevin Lynch emphasized the importance of strong termini along walking paths. Regrettably, these factors are generally taken up as land-use, urban design or site planning matters that are regarded to be beyond the planning jurisdiction of this document.

It is also difficult to consider the plan (or the planning process) as completely integrated with Portland's active planning aparatus. Portland's design commissions, streetscape plans and progressive zoning code specify various pedestrian improvements under different agendas. The master plan provides little information about how these play out with respect to the improvements it recommends.

Nonetheless, Portland's Pedestrian Master Plan provides a framework that is useful to other cities. Downtowns continue to wrestle with the influx of sports stadia, arts and entertainment districts and other tourist draws. Suburbs continue to mature with apartments, offices and stores being built in close proximity to each other. Too often, these developments occur haphazardly, precluding successful pedestrian environments from emerging. The tools developed by Portland could easily be adapted for settings like these.

Portland's attempt to reconcile such issues does so in a clear and simple manner, providing a public document accessible to people from various walks of life. Most importantly, the plan serves as a valuable, officially adopted record for the entire city's pedestrian needs—which in itself is no small feat.

_Kevin J. Krizek

Jury Comments

OLIN: People are still doing this kind of planning for automobiles, but almost no one is doing it for pedestrians. Yet you can move more people per lane per hour on the sidewalk than you can in any other mode.

FRANCK: The measures they have for figuring out what areas are pedestrian friendly versus which ones are pedestrian deficient areas are good.

OLIN: This is not a proposal for the historic center, because the center is okay. The project they are showing is alternative paths that go up and down the river, over the hill and across the river, into the neighborhoods, out to the suburbs. That is where so much has been without sidewalks or with inadequate walks; downtown there are rules, there are sidewalks, and people can get around.

FRANCE: They paid very close attention to the details. They considered the material that the manhole covers are made of, to make sure they are not slick when it rains. There is even attention to the downspouts, the drainpipes, to make sure that they follow ADA requirements. It just could not be more precise and comprehensive.

GRIFFITH: Except perhaps for its linkage to the capital budget, this looks like a lot of other pedestrian plans I have seen.

HESTER: I don't think that I have ever seen a pedestrian plan on the scale of this large, citywide plan. The capital improvements plan goes far beyond just saying we are going to pave sidewalks and seems to me to be an important innovation.

OLIN: One of my favorite phrases here was "pin the tail on the problem." The planners got people from the community to look at paths and routes that they took, to figure out where the opportunities for improvement were, and where there were problems on all those routes.

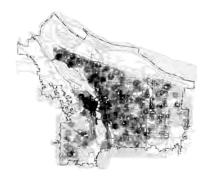
Throughout the city, they had the community identifying their preferred routes, along both vehicle and pedestrian routes, helping them invent alternatives to unpleasant or unworkable or problematic routes. So, there is an extremely successful integration with the social process that led to specific results with a means of following through.

KLEIN: I just wish it went further. If there are other plans, or if this is part of the overall Portland plan, then maybe my looking at this as a totality when it is just a piece of a larger picture is skewing it. However, if the goal is to have people use their feet more and automobiles less, then issues about zoning and land use are more critical than what you do with the sidewalk corner. Or whether you put planting in. Its heart is good, and it is well thought through on the micro level. Still, I just do not think it is innovative or goes far enough.

OLIN: The dilemma is, how do you make a good town once everybody has to have an automobile? This plan does everything right. What we're saying is keep going, do not stop, do more.













Plan combines analyses of deficiencies in the pedestrian network and opportunities for encouraging walking to set priorities for pedestrian improvements. The "deficiency index" considers breaks in sidewalk continuity and street connectivity, as well as the ease of crossing streets. The "pedestrian potential index" considers the presence of factors that support walking; such as land-use mix, closeness to schools, parks,

Portland's Pedestrian Master

transit and neighborhood shopping, how streets are designated in various other plans. The plan then suggests projects that should be included in the city's capital improvement program, as well as suggesting other funding sources.

Graphics, photos: City of Portland, Office of Transportation