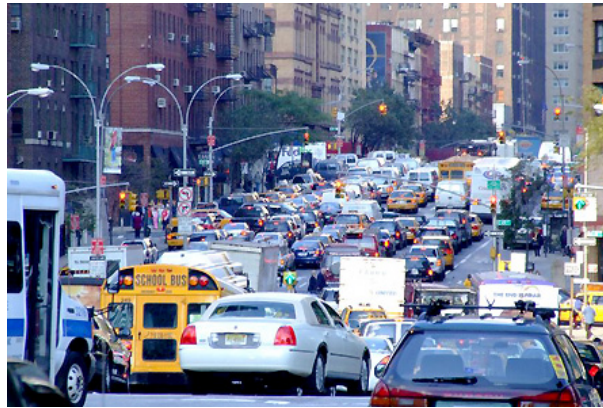


What's a Main Street For?

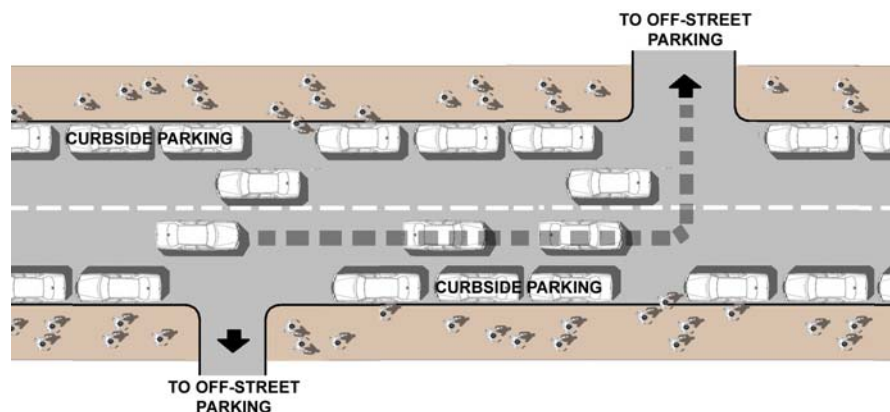
A Pedestrian-Mobility Manifesto

By John Darby Alt



“Main Streets” — whether they are in small tourist towns, big-city business districts, or suburban “new-towns” — invariably struggle with a close-in parking strategy that attempts, as best it can, to make the urban setting as convenient as possible for drivers— but with opposite results and misunderstood consequences.

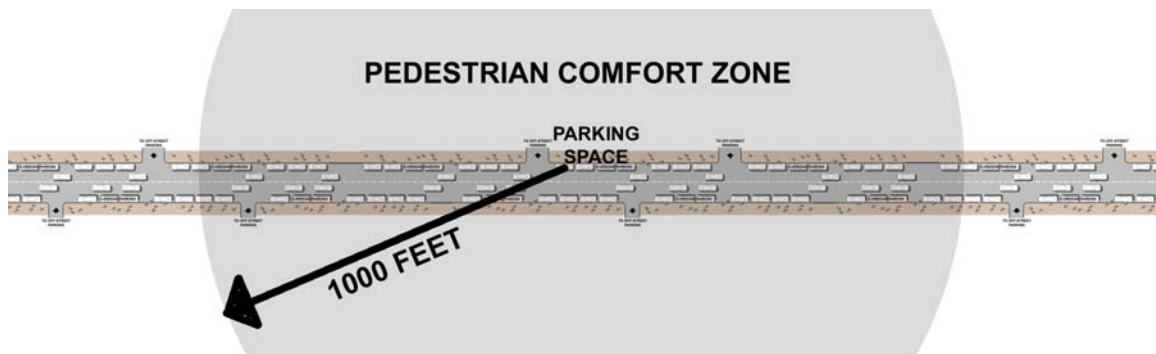
Look at any “Main Street” corridor and you will find that, aside from its purpose as a thorough-fare, the street-space invariably is allocated 100% to the parking of cars— either by providing curbside parking on the street itself, or by providing the necessary access to close-in off-street parking, or both. It seems self-evident that this close-in parking strategy is the best use of the public’s asphalt: People *need* parking spaces to access the local merchants—and the local merchants continually clamor for more parking spaces to attract more customers. The idea of using a portion of the Main-Street space for anything other than parking or parking access seems literally unthinkable.



A simple analysis, however, shows how this close-in parking strategy is self-defeating. It operates on the flawed assumption that, just like in suburban settings, adequate parking spaces are all that’s required for downtown commerce to flow with maximum efficiency and convenient satisfaction. But in downtown settings a parking

space is only *part* of what a shopper needs, and only part what merchants ought to be clamoring for. The other part is the ability for pedestrians to move with transparent convenience from one end of a Main Street corridor to the other without having to move their cars to another parking place—or, in the case of in-town residents, without having to get in their cars in the first place.

To see why downtown business districts need this kind of pedestrian mobility at least as much as they need parking spaces, it is necessary to visualize what might be termed “pedestrian comfort zones.” Pedestrian comfort zones are defined by the distance people are willing to walk to conduct their business as pedestrians. Research shows that in urban contexts this distance, on average, is about 1000 feet (300 meters). Approaching that distance, pedestrians begin to feel a sense of inconvenience and a strong resistance to walking further.



In suburban settings, of course, pedestrian comfort zones pose no problem at all—either for shoppers or businesses. In fact, the suburban context has been designed and constructed specifically to accommodate the comfort zones: The expansive parking lots adjacent to every commercial building enable people to easily patronize a multitude of shopping and entertainment choices simply by moving their cars from place to place.

In congested downtown settings, however, pedestrian comfort zones impose a significant limitation on commerce. Because downtown traffic congestion and parking shortages make parking so inconvenient, people usually don't move their cars from place to place. Instead, they tend to park only once and patronize the shopping and entertainment choices within that comfort zone. Then they get back in their car—and leave!

Imagine what the revenues of a shopping mall would be if shoppers were only willing to walk a third of the mall's length before they turned around and went back to their car. In virtually every Main Street setting across North America that's exactly what is happening. In other words, downtown merchants are losing huge numbers of potential transactions because customers only a few blocks away never get to them. By the same token, those same customers are short-changed in their downtown shopping

experience because their choices are limited to what's available within their 300 meter walking distance.

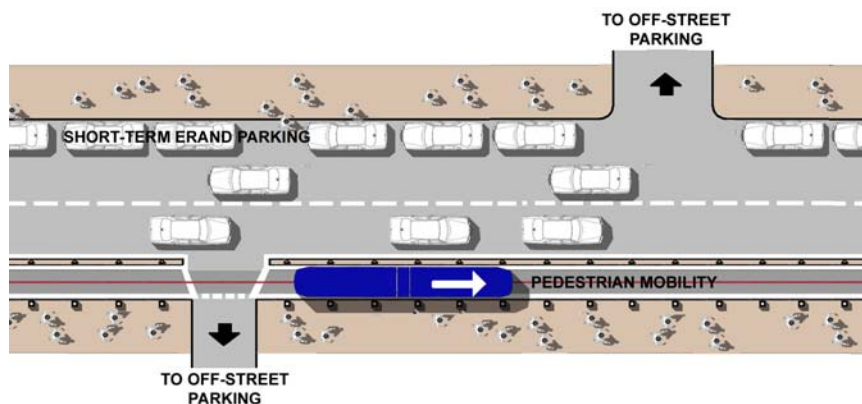
The biggest losers of this close-in parking strategy are the in-town residents. Because it is unlikely that all, or even most, of their household shopping needs will be located within walking distance of their residence, they are forced to get in their cars. And once this transition is made, they must either compete with the outside visitors, tourists and shoppers for a downtown parking space, or (what is likely to be the more convenient option) drive out to the suburban edge to do their shopping.

Thus, a close-in Main Street parking strategy achieves the opposite of its intended consequences: Visitors don't benefit so much from the convenience of a close-in parking space as they suffer from the inconvenience of finding one. Shoppers find their choices limited. And merchants see only a small percentage of the potential customers that are actually available to them. Finally, there is the ironic consequence that downtown residents—folks who ought not to have to use their cars at all—are often forced to drive out to the suburban edge to do their household shopping.

Stretching Pedestrian Comfort Zones

The only real solution to this downtown parking dilemma is to stretch the Pedestrian Comfort Zone itself. Ideally, in fact, every Main Street corridor should comprise a *single* comfort zone. In other words, a visitor ought to be able to park only once and access *every* shopping, service and entertainment choice from one end of the corridor to the other. And in-town residents ought to have the same end to end access without ever getting in their car at all.

This stretching of the pedestrian comfort zone could be accomplished by allocating a percentage of the Main Street space to a transparently convenient pedestrian mobility system—something people can get on and ride, virtually at will, to extend their walking distance. Something akin to an elevator in a tall building. Setting aside the question of what that something might be, let's first examine what would have to be given up to create it and what could be gained by having it.



Assume only a small slice of street space would need to be allocated—specifically, the curbside parking lane adjacent to one sidewalk. Through traffic lanes and curbside parking on the other side of the street would remain unaffected. So what exactly is being given up by trading half the curbside parking for a pedestrian-mobility system? The following thumbnail calculation may be surprising:

A theoretical one-mile Main Street corridor would have 198 curbside parking spaces on each side of the street (5280 feet divided by 20 feet per space, times 75% to account for cross streets and other curb-cuts.) If each parking space was occupied 80% of the time, and each parked car had an average of 1.5 occupants and parked for an average 1.25 hours, those 198 parking spaces would generate 190 potential customers per hour. Since they are distributed along five 1000 foot pedestrian comfort zones, this equates to 38 potential customers per hour from each zone. Since a business can draw from two zones (one up and one down the street) what is given up to create the space for a pedestrian-mobility system is about 76 potential customers per hour for each business. Now let's compare that with the potential gain.

Assume the pedestrian mobility system we insert in the allocated 8 foot wide space has a headway of 150 seconds. (This means at each stop a pedestrian can get on, going in either direction, every 150 seconds) This headway creates the capacity of moving 1200 people per hour, in each direction, up and down the Main Street corridor. Assume it operates, on average, at 50% capacity. That's 600 people per hour moving in each direction.

Each of these "pedestrian-riders" can now get off and walk to any business anywhere along the one mile corridor *without* exceeding their 300 meter walking distance. This means each business along the corridor has given up 76 potential customers per hour to provide the pedestrian mobility—but gains 1200 potential customers per hour (600 from each direction.) That's an increase of nearly 1600 percent! It is equivalent to giving each business 1250 new parking spaces right next to their front door!

These calculations may appear to reveal something impossible. What they reveal, however, is the remarkable inefficiency of curbside parking in downtown business districts—especially when there is an effective, affordable people-mover technology that can operate in that same space. They also reveal why, in downtown settings, parking spaces alone are not enough to serve the needs of shoppers and merchants. When people are only willing to park once—as is the case in congested urban settings—those parking spaces *need* pedestrian mobility to achieve their full value and effectiveness.

Obviously, if a downtown visitor can extend his or her walking distance a mile or more with a level of convenience so high it is virtually transparent, the compulsion to find a *close-in* parking space disappears. In fact, a parking space on the edge of a

downtown business district becomes a lot *more* convenient than that old, close-in space ever used to be. This suggests an overwhelming double benefit for cities: (1) fewer cars clogging the traffic lanes looking for close-in spaces and (2) the opportunity to significantly expand downtown parking capacity by placing new parking at the periphery.

In summary, this is what I argue a Main Street is for: It is for an optimum balance of through-traffic, short-term parking and delivery spaces, and transparently convenient pedestrian mobility up and down the corridor length. The pedestrian mobility system then connects all the business and entertainment venues along the corridor with easily accessed parking at the periphery. Allocating the public commons of our Main Street corridors in this way would resolve much of the conflict and alleviate much of the harm the age of automobiles has wreaked on our cities and urban communities.

Anyone with a curiosity about *how* a transparently convenient, two-way pedestrian mobility system can fit into an 8 foot wide ribbon adjacent to one sidewalk, please visit: www.villagetechology.com



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