

A Pedestrian: The Forgotten Factor in Regional Transportation Planning

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Abstract

The pedestrian has been relegated to the status of a third class citizen in the planning schemes at the regional level in most metropolitan areas around the world. Several hopeful examples of pedestrian-friendly communities in Australia, Europe and North America are discussed. The emphasis of this presentation includes the implementation strategy, public policy considerations and proven examples of design and programs which enhance the pedestrian. The elderly and children tend to be the most vulnerable class of walkers, and therefore merit special emphasis in this paper. The author's dual role as a long term elected city council member and professor of environmental planning enables this paper to be a synthesis of public policy pragmatism and the hopefulness of new and better pedestrian environments for towns and cities across Australia and other continents where auto-dependent cities have departed from their earlier pedestrian origins.

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Introduction

Transportation planning at the regional scale is mired in bureaucracy, caught in conflicting constituencies, and largely dominated by powerful auto and road building interests. Sprawl is spawned by dependency on the automobile in an era of deceptively cheap petrol prices. Yet there are cities in Australian, European, and North American metropolitan areas such as Fremantle, WA, Copenhagen, and Denver/Boulder Colorado that seek alternatives to a future dominated by a reliance on the single occupancy vehicle (SOV). And, pedestrians are at critical risk. These huge problems have some hopeful solutions. Atlanta, Georgia could be singled out as one of many U. S. cities that is dangerous for pedestrians. This could be about to change. An Atlanta councilwoman, elected by a 67% majority, has put the safety of young pedestrians as her highest priority. And this is in the city with the highest death toll of pedestrian per capita of any U.S. city.

Cities like Kirkland, Boulder, Palo Alto, Berkeley, and many others are seeking ways to provide better and safer mobility for their pedestrians not by widening roads or building more expressways, but by reducing travel demand and providing cost-effective alternatives. The challenge of reducing SOV use is exacerbated by the myth that more lanes and more interchanges for cars will solve the problem. And the regional transportation authorities in places like Dallas, Denver, Detroit, Seattle, and Atlanta along with their Council of Governments (COGs) are heavily oriented to road construction and car accommodation. Since federal transportation funds are funneled through state and regional authorities with an anti-alternate mode bias it is a serious challenge for cities that wish to provide non-SOV options. Intermodal Surface Transportation Efficiency Act (ISTEA) and Transportation Efficiency Act for the 21st Century (TEA-21) made helpful overtures toward alternative modes but road builders still get the lion's share of the federal and state monies. Regional instrumentalities exist for park system, for sewage, water supply, cultural and athletic facilities. Almost any COG has a regional transportation plan but everyone is silent about pedestrian mobility. They are car dominated.

Sprawl is eroding urban livability and reducing options for children and other pedestrians who are trapped in most suburbs. The reason some cities and towns are becoming apprehensive of the highway construction solutions is that they don't work, and they reduce the livability of neighborhoods and the quality of individual communities. Extension and widening of roadways tend to increase the dominance of car-oriented development. Big box retailers like Wal-Mart, Home Depot, Costco, etc. spring up near expressway interchanges. Hotels, outlet stores, drive-in fast food chains proliferate along high volume streets and intersections. Locally owned downtown businesses fail. The economic vitality shifts from town centers to the auto suburbs. More than 50% of the population who cannot, or prefer not to drive are disenfranchised

from auto “mobility”. Those who once depended on pedestrian mobility are now relegated as third class citizens to transportation modes that they prefer not to use, or cannot afford, or because of age – are beyond their reach.

In short, regional and metropolitan agencies do not show an interest in reversing this unsustainable land use pattern. The question is, could they change, even if they wanted to, so as to promote rail, bus, walking, Travel Demand Management (TDM), biking, car pooling, congestion pricing, telecommuting, or hybrids of the above!

The irony of the metropolitan sprawl currently underway in the western United States is that regional councils have devised “Smart Growth” guidelines, urban service boundaries and other advisory tools while towns and cities in nearly every region build and fill the vacant land as though no one at the state or regional level cared one whit. Towns and cities annex land when speculators and developers put pressure on local levels of government. Annexation wars rage between municipalities as regional councils look the other way!

It is becoming clear that we cannot solve traffic congestion, the problem of increasing vehicle miles and vehicle trips per day by constructing more highways, extra lanes or new interchanges. The myth that increasing the (road) supply will alleviate the car congestion and stress-filled delays of commuting and SOV travel has essentially exploded in our faces. By the time most expressways or freeways (those are real misnomers – they are not express and certainly not free) are funded and built, they are near, at, or over capacity. The reason is simple: development follows on the heel of infrastructure expansion. Since roadways are the current favored investments no or few comparable travel options exist for the great majority of the population. Walking to your destination has become an event of the past. Pedestrian amenities or necessities fall to the responsibility of local levels of government. Usually towns and enlightened cities plan for accessibility or mobility. It is never done at the regional scale. The pedestrian is simply a Forgotten Factor in Regional Transportation Planning.

Almost without exception, bland SOV-oriented development follows lock step after road extension or widening. The lessons repeat themselves in metroplexes like Dallas, Atlanta, Houston, Phoenix, Orange County, Las Vegas, Denver, Salt Lake City and Seattle. The outrageous “high occupancy” vehicle (HOV) lane which usually means one passenger is a short-term band-aid. HOV lanes are constantly violated and in several situations jammed bumper to bumper with buses, SOV + 1, car-poolers and shuttle vans. Interstate 880 in the San Jose and San Francisco Bay Area is an example of HOV gridlock at most peak times.

“Lexus Lanes” or high occupancy toll (HOT) lanes are another short-term concrete solution that shouts ECONOMIC DISCRIMINATION in capital letters. Drivers who cannot afford to pay for the exclusive use of the otherwise bus and HOV lanes are stuck in the concrete spaghetti of Los Angeles rush hour gridlock.

Creative citizens have begun to tame the automobile in several communities and take back the sidewalks

There is reason for hope despite the bleak history of our decades of auto addiction. Citizens in several cities have persuaded transportation staff to experiment with a

multitude of alternatives to the SOV. In some cases progressive transportation officials have put forth innovative options to reduce automobile demand and the community rose to embrace new ways of getting to the future from where we are at the turn of the century.

There is even reason for hope in a city like Atlanta which has the reputation of one of the least walkable cities in America. There is hope because the citizens, the City Council and the Mayor are beginning to say STOP. It takes more than just “to walk your talk”. It takes citizens in neighborhoods to join together to identify places that are dangerous for pedestrians. It takes a City Council and a Mayor to declare a war against the unnecessary killing and maiming of children, seniors and other pedestrians. It takes a commitment from the law enforcement agencies to enforce pedestrian and driving laws. It takes a planning department, a public works department and a transportation department to give priority to pedestrians over cars. A sidewalk must be smooth and free of obstacles not only for the people with disabilities but for parents and others who wish they could use those sidewalks without fear. And, you can’t walk your talk without a budget to pay for the pedestrian staff, facilities, repairs/maintenance and the research and innovations that will keep a city on the cutting edge of pedestrian needs and solutions.

Some changes will be very, very difficult to make such as having cars stop when a pedestrian has the right of way in a crosswalk. Other approaches will be easy such as installing pedestrian activated flashing lights in the pavement of the midblock crosswalk, or starting the Walking School Bus program for elementary neighborhood schools. If a long-term behavioral change could take place to give the city back to pedestrians, a generation from now teenagers on the 16th birthday would ask for a good pair of walking shoes or hiking boots instead of the family car keys! Talk is cheap and it takes much, much more than to walk your talk; you must build the grassroots support, educate the public about the health and dollar savings, and build an infrastructure which is truly friendly to the pedestrian. For example, there should never be a road repair or any construction project that does not provide a well-marked, safe, convenient, easy detour. Cars and trucks that violate 1 m.p.h. over the speed limit in school zones, construction zones or near parks should pay double or triple the fine when violations occur. Each city needs to invent its pedestrian code of ethics.

Some of the mid-sized towns and cities have also adapted ideas from well known “alternative mode” capitals such as Toronto, Portland, Vancouver, Hong Kong, Copenhagen and Zurich. It may be useful to list some of the programs and concepts that provide pedestrian enhancements, auto alternatives and traffic calming. Here are forty-six ways to build support for pedestrians and other alternate modes of transportation. All these ideas grew out of research efforts in Australia, UK, and North America that favour pedestrianism. None are regional in scale or scope. But each one could be coordinated at the regional level of transportation planning for pedestrian needs. The Center for Disease Control and Accident Prevention (CDC) has recently sponsored a research symposium that identified how vulnerable children pedestrians are. Reaction time, sense of speed, and degree of risk from cars are not skills most children age 5-12 possess. This negates many of the safety education programs presented to schoolchildren. What appears to be more effective is intensified driver education and a redesign of the “transportation environment,” part of which is described in the list that follows:

1. Pedestrian maps to show safe, direct routes to key destinations.
2. Carsharing – multiple owners of one or two vehicles.
3. Universal Ecopass or seamless bus pass.
4. Guaranteed ride home in unusual circumstances.
5. Downsized or miniaturized city buses.
6. Bus fleet equipped with bicycle racks.
7. Pedestrian activated crossing lights embedded in crosswalk pavement.
8. Full time pedestrian facilities coordinator.
9. Bright safety flags carried by pedestrian at busy crosswalk.
10. Pedestrian grade separation with attractive design.
11. Digital display of number of days without a pedestrian death.
12. Digital display of number of days without a pedestrian or bicycle accident.
13. Pedestrian hotline for concerns, complaints or ideas.
14. Awards to local businesses or schools that have highest per capita percentage of bike to work/walk to work employees or students.
15. Increasing parking fees.
16. Discounts on pedestrian “equipment” during walk to work days.
17. Reduced parking fee for full car and half car occupancy.
18. Urban bicycle network with grade separations.
19. Showers, storage space for bike and pedestrian commuters.
20. Bus headway in the five to seven minute range.
21. Reduced, replaced minimum parking/parking requirements.
22. Computerized carpooling.
23. Effective passenger rail with pedestrian directions in several languages.
24. HOV lanes for three or more passengers.
25. Connectivity of pedestrian/cycleways with school, shopping, recreation.
26. Adequate bikeways and sidewalk maintenance staff.
27. Congestion pricing on main arteries at peak load times.
28. Seamless connections between ferry, rail, bus and other alternate modes.
29. Pedestrian Bill of Rights.
30. Well-designed roundabouts or traffic circles with pedestrian safety crossing well designed.
31. Median landscaping and other alternative lane separation.
32. Traffic humps, bumps, impediments to slow speeders.
33. Traffic speed monitors with digital display.
34. Photo radar and red light photo radar for speeders.
35. Neckdowns and other road reconfiguration to discourage traffic.
36. Raised pedestrian crossing.
37. Pedestrian crossing lights w/ digital display of seconds remaining to cross.
38. Striped or painted bicycle climbing lanes – safe zone for cyclists.
39. Bike and walk to work week or month (competition).
40. Dial-a ride.
41. Shuttle buses to feed regional bus or ferry network.
42. One “car free” day per week.
43. Family travel diaries.
44. Computation of annual SOV costs versus walking or biking annual costs.
45. Digital display of parking structure vacancies for car poolers, ride shares.
46. Digital display of dollar costs of pedestrian accidents during calendar year.

These and many others including combinations of those listed above have reduced car usage dramatically in a few cities. Boulder, Colorado is a leading example of how effective traffic calming can be. Forty-seven percent of employees traveling to the central business district for their jobs use alternate modes, including biking, telecommuting, walking, bus and car pools. Dozens of traffic circles and speed bumps and raised pedestrian crossings have been created across town. Boulder has negotiated with the Regional Transportation District (RTD) to replace 55 person buses with small 24 seaters that operate on a 5-6 minute headway. The HOP, SKIP, JUMP and LEAP cover north-south and east-west corridors. These small buses all interconnect with Boulder's regional service of large express buses.

Demand-response small buses operate in several mid-size and large cities. Some are private; others are part of an integrated regional bus system or passenger rail system.

Perhaps the secret to success of many of Boulder's alternative modes programs is the grass roots idea or support. This is a bottom up approach where citizens – usually at a neighborhood level wish to create a program that will work for them. Extensive pre-testing of the idea or equipment is mandatory. Public involvement generates future demand for the HOP or SKIP. After two years the HOP and SKIP ridership increased forty (40%) percent from previous bus patronage. Ecopasses were made available to neighborhoods on a cost-sharing basis. Local business leadership liked the idea of ecopasses for all employees. The University students and faculty voted to fund ecopasses for themselves. Soon there may be a universal bus pass for all Boulder residents.

The results of several years of GO BOULDER ideas, citizen involvement, and proactive advocacy have yielded noteworthy results. A Transportation Master Plan and Tributary Trails Greenway Master Plan both pay considerable attention to car free programs and facilities. Transportation Demand Management (TDM) is the most underutilized tool in transportation planning. By reducing the demand instead of increasing the supply of roadways, the quality of life is maintained. Newman and Kenworthy (1999) in their study of thirty-nine cities around the world illustrate the economic value of cities that have moved away from auto dependency.

But this move away from auto dependency requires bold and steadfast citizen action. If there is a neighborhood coalition or a citizen-based advocacy group to pressure a town board or city council, elected officials will take notice. If the request for greater opportunities on alternate modes is thoughtfully presented a city or county staff will be directed “to pick up the torch” and do additional study and analysis.

At some time it is useful to create a citizen advisory board to keep the alternate transportation opportunities on a high priority level.

There must be early success. Small but symbolic projects that work well i.e. slow speeders, give pedestrians or cyclists more safety, or increase bus ridership in a substantial way are critical to sustain car-taming efforts.

Celebrate success. Do not miss a chance to dedicate a new section of a bike path, a new pedestrian underpass. Ribbon cutting ceremonies promote confidence in the community's ability to finish a project.

Conclusion

Health and safety are more likely reasons for citizens to endorse the up-front costs of switching to biking, walking or transit. Maintaining the city sidewalk system or bicycle network builds confidence the community cares for, and sustains the concept of auto reduction. You need to walk your talk but it takes money, commitment and community leadership to provide safety and freedom to the pedestrian. To be a safe pedestrian should be a God-given right. One each of us can choose.

In conclusion, it should be noted that America is a land that champions choice. In recent decades we have been denied a reasonable range of choices among transportation alternatives. For reasons of national security, environmental sustainability and social justice the choice of modes other than the automobile should be ours – especially in urban and regional contexts. The pedestrian friendly city should be a model for regional transportation planning not only for reasons of efficiency and safety, but for reasons of fairness and social justice that should be available to the majority of citizens in any and every region who commute, or do not operate a motor vehicle.

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