

WE ARE ALL PEDESTRIANS: TRANSPORTATION PLANNING AND DESIGN SHOULD KISS OUR FEET

By Ella Dodson¹

Despite childhood dreams, we never developed Star Trek transporters or other teleportation devices to instantaneously beam people and cargo whenever and wherever desired. When we leave our homes to go to work, to run errands, to pick up family or to go to entertainment outside the home, at least one part of our trips will always involve walking. **We are all pedestrians.**

So when our governments and their advisors are planning transportation and considering urban design, **the primary focus should be to support the pedestrian environment** and to make the other parts of the transportation network mesh with the walking environment. Since being a pedestrian is a universal experience for all people, walking and rolling in a wheelchair or stroller in our cities and towns should be easy year round, should be safe for all ages and physical abilities, should allow for and protect a large zone for a slower pace of movement, should insulate and protect pedestrians from noxious fumes and smog, and should be pleasant. Although for the last fifty years, transportation planning has focused on making driving easy, changing the focus to support the pedestrian environment in urban areas, has the corollary effect of reducing congestion in urban areas and making driving easier, albeit more expensive.

Apart from the universality of the pedestrian experience, there are a number of other reasons for governments and planners to place the pedestrian experience at the core of transportation and urban planning and design.

- 1) Pedestrians support and grow the commercial tax base. When travelling at a slower pace, pedestrians are able to passively garner more information about the stores, restaurants and businesses along their routes than they would if they were in their cars or on some other enclosed or motorized form of transit. Pedestrians (and cyclists) who are travelling slowly are more likely to stop to look at menus or in windows and then purchase something. As a result, businesses located on active pedestrian routes are more successful and storefronts on active pedestrian routes don't stay vacant for long. Active pedestrian streets attract tourists and people from all over the region.
- 2) Pedestrians and an active pedestrian street life create jobs. Businesses along the pedestrian routes grow and need more employees and support services. Job growth also occurs along the periphery of pedestrian zones due to the use some other mode of transportation or other services to bring people into the slower pedestrian zone. Further, job growth continues because the transportation and infrastructure systems supporting the pedestrian areas need to be maintained and upgraded periodically.

- 3) An active pedestrian street life raises housing prices in adjacent areas and as a result increases the residential tax base.
- 4) Changing demographics mean that there will be increasing numbers of people who will not be driving and who will spend a more time as pedestrians and using mass transit.
 - a. More than half of Nova Scotia's population is over the age of 50 and the rest of Canada will soon face the same demographics. With more people living long after fifty, an increasingly larger proportion of the population will give up driving for health or safety reasons. Public mass transit and pedestrian zones will need to be structured to accommodate the aging population.
 - b. In a similar vein, Millennials are relying on bicycles, walking and mass transit instead of owning cars to get around.
 - c. For business, economic and social reasons, older people may still be working for pay on a part or full time basis and, like Millennials, they will increasingly depend on fast, frequent and reliable mass transit that is well integrated into slower forms of transit (cycling and walking) to get them to work. Urban planning and design should support more people working as it contributes significantly to the tax base and the economy.
- 5) Research is conclusively showing that smog, environmental pollution and inactivity are all contributing factors to the development of Alzheimer's disease, Parkinson's disease, heart disease and lung disease. Over 700 studies worldwide have found that living, working or exercising closer than 300 to 500 meters from diesel or gas powered motor transit is strongly associated with one or more of these diseases. So, transportation and urban planning should design to move and keep most diesel and gas powered motor transit a safe distance from residential areas, commercial shopping areas and pedestrian and cycling zones in order to prevent the staggering social and health costs caused by proximity of polluted air to people.
- 6) In order to keep the health costs of an aging population under control, urban planning should be designed so walking, cycling and other forms of active transportation are pleasant and easy to do in smog free zones. If transportation is designed to make it safe, easy and pleasant to routinely walk, cycle and roll as part of everyone's daily life, the health risks associated physical inactivity are diminished. The cost of designing a smog free, pleasant pedestrian and cycling streetscape where people don't even realize that they are engaging in exercise is miniscule against the financial and social costs of failing

to do so given that the majority of the Nova Scotia's residents are at the age where physical inactivity dramatically increases their health risks.

The creation of a pedestrian friendly urban area does not need to be expensive or be funded only by public monies. Serendipity and action by individuals and businesses can contribute to creating a walkable city. Greenery planted by guerilla gardeners, pop up parks and cafes, outdoor seating, artists working in public, buskers, wall paintings, green walls, sidewalk art or games or outdoor sculpture are all examples of non-government action that contribute to a pedestrian friendly city.

The pedestrian design parameters to improve transportation into and within Halifax can be distilled into four guidelines:

- 1) Plan for wet weather.
 - a. At some point in almost every day, Halifax experiences some form of precipitation (mist, fog, drizzle, rain, sleet, snow, hail or ice). Therefore, any transportation or urban plan should provide for some form of protection for pedestrians and those waiting at public transit stations.
 - b. Provide for methods to ensure that enough pedestrian zones remain dry, not slippery and passable so that everyone can get around Halifax all the time. Examples of such methods might be arcades, linked indoor pedestrian malls, heated sidewalks and bicycle lanes (using waste heat), or the use of permeable pavement to drain water from streets, sidewalks and bicycle lanes. While some of these alternatives are more expensive to install, they may be more cost efficient in the long run by reducing damage to pavement, reducing injury caused by slipping, and by reducing the need for services such as plowing or ice removal.
 - c. Encourage covered linkages among mass transit, buildings and other protected walkways, which should be accessible to the public generally, and more particularly during inclement weather.
- 2) Create a cozy and safe feeling space. Keep the perception of traveling distance on the street small, but provide for enough space for people to congregate. Create barriers between faster moving traffic and the slower zones for pedestrians and cyclists.
 - a. People will easily walk down small city blocks that are lined with small stores and businesses; but will find it more difficult to walk the same distance across a parking lot or city block which is taken up by one massive building.
 - b. Keep buildings and action right next to the street.
 - c. Encourage diversity in the size of ground retail space, but keep each storefront width relatively narrow.

- d. Street grade parking lots should be located behind the buildings with walkways to the street to encourage people onto the city block and to make the street front feel walkable and comfortable (cozy) for people.
 - e. Encourage parking lots to be placed below street grade or above street level to keep the street level interesting.
 - f. Make sidewalks wide enough to permit small groups of people to congregate without interfering with normal pedestrian traffic flow, including those who roll (people with strollers or carts or people in wheelchairs).
 - g. Create visible barriers between faster transportation forms (cars, buses, rails) and slower modes of moving. Trees, planters, islands, floating parking lanes or other barriers make pedestrians and cyclists feel safe and make driving in cities easier. Bicycle and pedestrian traffic should also be separated into different lanes with some form of barrier or different grades and clearly marked to promote safe use.
- 3) Balance uses to encourage public activity and diversity in appearance. Adopt district zoning and design guidelines which encourage private involvement and responsibility. Be flexible in regulation to allow solutions and amendments to the plan and land use to be incorporated easily.
- a. Include seating, water fountains, shade, pocket parks, playgrounds, schools, galleries, restaurants, farmers' markets, dog parks, public restrooms, and other public activities with small retail stores.
 - b. Create spaces for buskers and public art and spectacles.
 - c. Too much square footage in identical ground level retail units discourages pedestrian use.
 - d. Encourage mixed use development and integration at transportation hubs.
 - e. Encourage informal business and public involvement by not enforcing or removing regulatory and administrative barriers to self-help and local determination so long as there are no immediate safety or health risks associated with the action. Examples might be allowing pop up parks, easing up on public art or street festival regulation, allowing the public to cover up eyesores by paint or plants or encouraging the use of planters and curbside gardening.
- 4) Deal with the hills which can present difficulties for pedestrians and cyclists and especially if the pedestrians or cyclists have physical limitations or are transporting children or moving shopping carts. Provide well-marked, clear continuous and accessible pedestrian access at all times. Pedestrians and cyclists should have easy ways to move up hills, through plazas, parks, cul-de-sacs and other places where cars can't go.
- a. Tame the hills to support the aging population and the tourists by creating connections in the levels with stairways, ramps, covered outdoor escalators, cable

cars, gondolas or creating pocket parks with seating along the hill to break up the climb.

- b. Create pedestrian (and bicycle) corridors and courtyards which incorporate residential neighborhoods, indoor malls, alleys and restricted access delivery streets.
- c. Provide clear and visible signage and maps to explain how to navigate along these corridors. Identify where certain public amenities (washrooms, water fountains, seating and mass transit connections) are located.

Below are several suggestions, which do not necessarily cost the taxpayer much money but which support urban and transportation design which promotes a pedestrian friendly Halifax with an active street life.

1. Halifax, together with the business and residential associations and walking clubs should create maps of possible walking (and cycling) routes (pedestrian corridors) which may connect with major motor transit routes. These maps should show the motor transit connections but should primarily focus on routes where cars are not allowed or where motor traffic is light. These pedestrian corridors should include quiet residential streets, parks, courtyards, cemeteries, indoor malls and walkways etc. These maps should be distributed widely and signage should be used to make navigation along these pedestrian corridors easy for pedestrians and cyclists, if applicable. Access to the indoor walkways should be clearly marked on the building entrances. The maps should clearly indicate which routes are under cover and all routes should be accessible most of the time. These maps should guide future transportation and urban design planning and land use guidelines to ensure that all of city is reasonably and safely accessible by pedestrians.
2. Place pocket parks with seating, some shade and curb cutaways for cyclists and wheelchairs to separate and divide residential streets from busy commercial streets. Put signs up at the entrances to residential streets indicating that the streets are for local motor traffic only. Examples of where this approach might be appropriate is Brunswick Street north of Portland , Gottingen north of Young Street and a number of the streets branching off of Gottingen heading down to Barrington.
 - a. Insulating residential streets from streets in commercial districts makes the areas safer for residents and keeps the air cleaner by preventing trucks and cars racing along the residential streets as a means of “shunpiking” or avoiding congestion on the larger commercial streets.
 - b. Separated residential streets could provide safer cycling and pedestrian routes into the commercial core.

- c. The planting and design of the pocket parks could be left to the street's residents.
- 3. Amend the urban planning and land use regulations to require developers to provide an ample set back from the street and to add pedestrian friendly amenities, if they want to build above one story (or some other stringent limit) so that those who develop in urban areas also contribute to the public infrastructure. The same sort of requirement to provide pedestrian friendly amenities should apply to owners of urban commercial real estate who make improvements to the real estate which require zoning approval. As a practical matter, urban land developers and land owners are directly benefited by the incorporation of pedestrian amenities (that are appropriate to the location) because an active pedestrian environment and street life will add to the development's value over time.
 - a. Pedestrian friendly amenities might include small narrow retail spaces with windows, pocket parks with seating and water features, public drinking fountains, trees or other shade, access to public restrooms or direct access to public transit or with other covered or indoor pedestrian walkways or public escalators going up some of the taller hills.
 - b. The requirements should be flexible enough to allow the property owner to suggest amenities. The requirements should be amended or revised every couple of years to take account of the changing urban environment and to tweak those requirements that do not work as intended
- 4. Consider supporting pedestrian use of streets adjacent to schools by a Safe Houses Program and Play Streets Designation
 - a. Designate streets adjacent to schools as "Play Streets" for the period of one hour before school begins until one hour after school ends in order to create a safe barrier between kids and cars and to reduce the amount of damaging air pollutants in the area when children are present. During this period, no truck or automobile traffic should be permitted on the Play Streets except service vehicles and school buses.
 - b. To promote walking to and from school, parents of school age children should be encouraged to designate a "safe house" on each block or so along the main walking routes. Each safe house should be readily identifiable by the youngest kids with a sign on the front and should have someone at home when children are walking to and from school. Children should be instructed to go to the closest safe house if they feel scared or uncomfortable about some circumstance or a

stranger while walking to or from school. The adult in the safe house can call the child's parents or police if necessary.

5. Create urban core congestion pricing to cover the real costs of smog caused by trucks and cars and to raise funds to support and invest in the development of a pedestrian friendly urban core and policies to reduce air pollution.
 - a. A daily congestion toll of \$6 or \$7 should be charged for all diesel and gas vehicles entering a defined core (perhaps including the Halifax Peninsula and downtown Dartmouth) from 6AM to 6 PM daily. The tolls could be collected using the existing Mac Pass electronic toll system, or through cash and credit card payment channels at retail stores, telephone and web-based systems technology.
 - b. Electric vehicles, public utility vehicles, police and emergency vehicles, buses, other forms of mass transit and taxis should be exempt from the congestion charge.
 - c. Residents living in the defined core should have 50 free entries into the core congestion zone per year and then a discounted charge of \$2 for each trip into the core congestion zone.
 - d. Hybrid electric and bi-fuel natural gas vehicles (CNG and LPG) should be entitled to the discounted charge of \$2 per trip into the core congestion zone.
6. Ensure fast, reliable frequent mass transportation to and within the downtown core by:
 - a. Creating dedicated bus lanes on streets adjacent to pedestrian zones and place stops no closer than 3 to 4 blocks apart. (Fewer stops allow the buses to travel more quickly). Dedicated regional bus lanes can be established in the medians of highways and on bridges.
 - b. Buses as a mode of transport are more flexible and less expensive than light rail. Bus stops can be moved easily to take account of changes in business and transit. It is always possible to add rail transit later along the dedicated bus lines
 - c. Ensure that adequate interchanges ("transportation nodes") of the various modes of transportation exist. Clear signage and maps should be at the transportation nodes so that anyone can figure out what stops at the transportation node, where it is going, what are the connections, what are the hours of operation and what is the frequency. One should not need to resort to finding a bus map or going online to find this information.

- d. Park and Ride schemes can be used to integrate regional transportation to the core and to support mass transit and ferry ridership.
 - e. Place covered transportation ticket kiosks at transportation nodes. People should be able to buy their tickets for any form of public transit as well as the congestion toll at the kiosk using debit, credit or cash prior to boarding to keep the bus or ferry moving quickly. Pre-purchasing of the tickets speeds up transit by allowing passengers to board quickly through all doors, instead of loading only by the driver's door. Purchases of tickets on the bus or ferry should carry a penalty since the sale of tickets onboard slows the commute for everyone. The ticket should allow one to be able to transfer between modes of transport without additional cost within a certain period of time.
 - f. Incorporate more ferries to support the Halifax Waterfront pedestrian zone. Establish other ferry terminals (which can be tethered covered barges) at the Seaport Market or Bishop's Landing or in Bedford.
7. In light of the upcoming federal elections, consider lobbying Revenue Canada to give a tax deduction for the purchase of any form of "clean" transportation vehicle or upgrade to an existing clean vehicle (by the addition of an electric motor, carriers to increase the number of passengers or cargo transported) to support the transition to smog free transportation in urban centers. These vehicles might include electric cars, vans, scooters or buses, electric or solar powered ferries, electric assist bicycles, urban bicycles or cargo bicycles or electric wheelchairs.

Beginning now, Halifax must plan for and implement significant changes to its transportation and urban planning to meet the needs of the changing population demographics and public attitudes about climate change, sustainability and the environment. Baby Boomers and Millennials want a vibrant and pleasant urban environment, which is pedestrian and cyclist friendly and where mass transit supports the city, its pedestrians and cyclists. In short, Baby Boomers and Millennials are uniting in the refrain "Kiss our Feet": the pedestrian experience should be the base of the urban transportation policies and design.

If transportation and urban policy officials do not heed the refrain, pedestrians and those who are interested in urban planning, the environment, cycling, Alzheimer's disease, heart and lung diseases and folks over the age of 50 should speak out forcefully to remind government that everyone is a pedestrian, that changes in demographics and that climate change require a different approach and perspective. Creating better walking paths is more important than widening streets for car traffic. The new approach should be to place the pedestrian on a pedestal and transportation planning should Kiss Our Feet. After all, walking

does not cost anything and the benefits of the change in paradigm outweigh the minor costs.

ⁱ Ms. Dodson is a transactional lawyer who has worked with companies, banks and governments in the areas transportation, finance and infrastructure. In addition to being a pedestrian, she has traveled by almost every type of public and private form of conveyance, including automobiles, bicycles, rickshaws, horse, pedicabs, tuk-tuks, subways, light rail, water taxis, ferries, commuter trains, elevated trains, buses, regional trains, cable cars, tramways, escalators, trains, planes, boats and ships.