

Measures To Mitigate Intersections That Are Conflict Zones For Pedestrians

Dr. Barry Wellar

Distinguished Research Fellow

Transport Action Canada

Policy and Research Advisor

Federation of Urban Neighbourhoods

Professor Emeritus, University of Ottawa

Principal, Wellar Consulting Inc.

wellarb@uottawa.ca

<http://www.wellar.ca/wellarconsulting/>

Remarks for Panel Presentation *Jane's Walk, 2010*



Prepared for the
Ottawa Organizing Committee
Jane's Walk 2010



May 1 and 2, 2010
Ottawa, Ontario

Measures To Mitigate Intersections That Are Conflict Zones for Pedestrians

by
Barry Wellar

Remarks for Panel Presentation, *Jane's Walk 2010*

1. Taking My Cue from Jane Jacobs.

Fifty years ago when writing *The Death and Life of Great American Cities* (published in 1961) Jane Jacobs was walking, observing, and having discussions similar to those being held during *Jane's Walk 2010*. And, I expect, she would not be surprised to learn that my *Jane's Walk* presentation in 2010 is grounded in part by the initial sentence in *The Death and Life of Great American Cities*, that is,

“This book is an attack on current
city planning and rebuilding.”

I hasten to add that this presentation is not in the diplomatic attack mode mastered by Jane Jacobs, and that I have concerns that go beyond city planning and rebuilding. However, there are important connections between this presentation and Jane Jacob's work done 50 years ago, and her contribution to my thoughts must be expressly acknowledged.

First, for those who have not recently read *The Death and Life of Great American Cities*, you may appreciate the reminder that after the Introduction in chapter 1, the subsequent chapters 2, 3, and 4 are respectively titled,

2. “The uses of sidewalks: safety.”
3. “The uses of sidewalks: contact.”
4. “The uses of sidewalks: assimilating children.”

And, you may also welcome having it recalled that throughout the text there are numerous direct and indirect references to various aspects of sidewalks.

The point of import to me is that in a book titled, *The Death and Life of Great American Cities*, the next three chapters after the Introduction are about sidewalks. Sidewalks.

The Jane Jacobs take on sidewalks was something special, and I am sure there are many of us who would have enjoyed being in attendance when she asked planners, engineers, social workers, and police officials such questions as,

“Please tell me all you know about how sidewalks promote safety, contact, and assimilating children.”

I build on an image of Jane Jacobs asking those kinds of questions to pose a few of my own for municipal officials in the next part of this presentation.

Second, I re-read *The Death and Life of Great American Cities* about 15 years ago during research on the Walking Security Index (WSI) project, and I re-read it again in preparation for a possible conference-related meeting with Jane in Toronto several years ago.

With regard to the WSI project, I reviewed the book for pertinent concepts, measures, data, etc., involving pedestrians and intersections. It was my finding that although *The Death and Life of Great American Cities* contained many concepts and variables related to the safety, comfort, and convenience aspects of “sidewalking”, the book did not appear to delve into “crosswalking” or the traversing of intersections by pedestrians.

As a result, the book was exceedingly useful as a context document, and as a mindset-shaper for my work on intersections. However, I was unable to incorporate Jane Jacobs’ writings about sidewalks, sidewalkers, and sidewalking directly into the indexes that I was designing to measure pedestrians’ safety, comfort, and convenience while using intersections.

As for the possible conference in Toronto, I anticipated an opportunity to discuss the Walking Security Index project with Jane, and in particular to link her work on sidewalks with my work on intersections.

It was my expectation that after even several hours of collaboration, we would produce a Walkers’ Rights or Pedestrians Rule Manifesto.

Further, given our joint interest in seeing things get done rather than just talked about, I was looking forward to trading thoughts about the components and elements of a pedestrian-based urban surface transportation infrastructure program that would give planners, engineers, police services, public health services, and legal services some important things to achieve, and with all due diligence.

Unfortunately, circumstances intervened and we did not have our meeting. I am therefore using this presentation as an opportunity to create a page or two of materials that honour the memory of Jane Jacobs, and continue the good work that she initiated 50 years ago on behalf of walkers and walking.

2. A Brief Note about the Background Guide for Barry Wellar's Panel Presentation, *Jane's Walk*, 2010.

The Background Guide was prepared in advance of the *Jane's Walk* event to assist in preparations by the Organizing Committee and the Panel Session Chair. And, by posting it on several websites, it was available for pre-event reading by tour leaders and walk participants.

In one section of the Guide, I outline the differences and similarities between sidewalks and crosswalks. Much of Jane Jacobs' work focused on sidewalks, and my emphasis has been on intersections and crosswalks, so a brief comment connecting sidewalks and crosswalks seems appropriate to ensure a broader discussion of the urban walking experience.

Then, in response to a request from the Committee, the next section of the Guide contains a selection of publications from the Walking Security Index (WSI) project which are pertinent to my *Jane's Walk* presentation. They are posted on several websites for easy access by interested readers, including transport2000.ca, wellarconsulting.com, and slideshare.net.

Examination of the reports may be instructive for readers who have an interest in designing indexes, or in critiquing indexes proposed by consultants, researchers, municipal agencies, etc.

3. Questions, Questions, and More Questions About Who Is Doing What to Mitigate Intersections So that They Are Safety Zones, Comfort Zones, and Convenience Zones Rather than Conflict Zones for Pedestrians.

Municipalities have duty of care and standard of care obligations to pedestrians. At the operational level, professional and technical staff are responsible for ensuring that the standard of care provided to pedestrians in all public places, including sidewalks and intersections, is sufficient to meet the municipality's duty of care obligations.

Given the fact that there are collisions and other conflicts between pedestrians and motor vehicles at many intersections, questions and especially legal questions can be raised about whether the standard of care at particular intersections or at intersections in general are appropriate.

It is in that vein of asking questions, that I pose questions about ***Measures to Mitigate Intersections that Are Conflict Zones for Pedestrians***. My intent here is to suggest how *Jane's Walk* participants and others interested in the walk mode of urban surface transport can query their officials, both appointed and elected, about what is being done in specific, measurable terms, to make intersections

safety zones, comfort zones, and convenience zones for pedestrians, rather than conflict zones.

The questions that follow are directed to engineers, planners, and law enforcement, public health, public works, and legal officials of the City of Ottawa. No doubt Jane Jacobs would suggest other professions, departments, etc., that should receive the questions, and readers no doubt have candidate recipients to add as well.

The recipients selected for this presentation are sufficient, however, to illustrate a format that could yield insightful responses from municipal staff. And, I hasten to add (See the next section for related details), this approach is a very effective way to learn about the priorities and capabilities of your own councillor, as well as other councillors, when it comes to getting timely, pertinent answers to questions of public interest.

Questions for Police Services

1. For each of the past 10 years, what are the 10 worst intersections in the City of Ottawa in terms of the number of pedestrians killed as a result of collisions between motor vehicles and pedestrians?
2. For each of the past 10 years, what are the 15 worst intersections in the City of Ottawa in terms of the number of pedestrians injured as a result of collisions between motor vehicles and pedestrians?
3. For each of the past 10 years, what are the 25 worst intersections in the City of Ottawa in terms of the number of reported collisions between motor vehicles and pedestrians?
4. For each of the past 10 years, what are the 25 worst intersections in the City of Ottawa in terms of the number of complaints received about aggressive and/or careless driving events?
5. Over the past 10 years, what measures have police services identified to deal with the conflict-at-intersections problem?
6. Over the past 10 years, which of these measures have been implemented by the City of Ottawa?

Questions for Planning

1. Over the past 10 years, what measures have planners identified to deal with the conflict-at-intersections problem?
2. Over the past 10 years, which of these measures have been implemented by the City of Ottawa?

Questions for Engineering

1. Over the past 10 years, what measures have engineers identified to deal with the conflict-at-intersections problem?
2. Over the past 10 years, which of these measures have been implemented by the City of Ottawa?

Questions for Public Health

1. Over the past 10 years, what measures have public health officials identified to deal with the conflict-at-intersections problem?
2. Over the past 10 years, which of these measures have been implemented by the City of Ottawa?

Questions for Public Works

1. Over the past 10 years, what measures have public works officials identified to deal with the conflict-at-intersections problem?
2. Over the past 10 years, which of these measures have been implemented by the City of Ottawa?

Questions for Legal Services

1. Over the past 10 years, what measures have legal staff identified to deal with the conflict-at-intersections problem?
2. Over the past 10 years, which of these measures have been implemented by the City of Ottawa?

Other questions can be added, and the present set of questions can be tailored to particular situations, areas, times, seasons of the year, etc.

The common denominator to be maintained, however, is the term “measures”. In my experience, measures is one of those words that leaves no wriggle room for those who prefer to bob-and-weave, and obliges them to “Put their cards on the table, face side up”.

Further, the term measures cuts to the chase as a means of finding out exactly what has been done, why, and how by an agency of government to achieve a goal or objective in any field.

In this case our interest is in learning about the treatment accorded pedestrians, and the word measures, as in ***Measures to Mitigate Intersections that Are Conflict Zones for Pedestrians***, allows us to definitively ascertain the steps taken

and to be taken to serve and promote pedestrians' safety, comfort, and convenience.

4. How Long Does It Take to Get Right?

I used that question in several previous presentations to refer to the protracted, foot-dragging, excuse-making, until-hell-freezes-over process that is sometimes encountered when it comes to pedestrians actually getting their due, and it fits the theme of this presentation very well. Hence, I am using it again.

It is 50 years since Jane Jacobs wrote *The Death and Life of Great American Cities*, and in my experience less than a half-dozen cities throughout North America have made much progress in achieving what she envisioned.

This is not to say that her ideas have not been respected, and that there is not widespread agreement in principle with her thoughts and writings. Far from it.

In fact, there is lots of professed agreement in principle with her principles. The problem is that there has been limited progress in transforming her principles into practices, or her suggested practices into achieved practices.

That said, she stayed the course nevertheless, and provided a great deal of inspiration and encouragement to us lesser contributors to the art and science of understanding and explaining the urban condition.

In this closing section of my *Jane's Walk* presentation, I briefly re-visit the Walking Security Index project. It is my hope that by making these comments now, it will not take 50 years for the City of Ottawa to get it right when it comes to identifying and implementing ***Measures to Mitigate Intersections that Are Conflict Zones for Pedestrians***.

In the next several pages I briefly comment on a recent event associated with the Walking Security Index (WSI) research and publications. First, however, there is a brief background note that may be instructive.

During the early stages of the WSI research, including preparation of the project proposal in 1993 and 1994, we conducted many dozens of hardcopy and electronic literature reviews in the search for indexes designed to measure the safety, comfort, and convenience experienced by pedestrians at signalized intersections. And, we sent out numerous communications in search of indexes that may have been developed, but which may not have entered the extant literature.

We found one relatively crude formulation that was developed by the City of North York, Ontario on or about 1978 as I recall. A major limitation with that work is that the North York index took into account only the volumes of vehicular and pedestrian traffic. Such an index clearly has operational appeal, because counting

is about as simple as it gets in research or everyday life. However, the results of traffic volume counts provide little insight into how well intersections serve and promote pedestrians' safety, comfort, or convenience.

As for the record of the Region of Ottawa-Carleton and its municipalities up until 2000 when the (new) City of Ottawa was formed, I do not recall ever encountering a pre-WSI project publication by a member of staff or a retained consultant dealing with indexes in any field, much less one involving pedestrians. In brief, and without being overly dramatic, the WSI research was launched in what might be termed a methodological and empirical wasteland in regard to indexes.

It was 16 years ago (in 1994) that I formally began developing the Walking Security Index project for the Region of Ottawa-Carleton, and the design phase was completed in 1998. The pilot study report that tested the indexes for operationality was submitted to the (new) City of Ottawa in 2002, that is, eight years ago.

What has happened in the interim, you might ask? Well, consider the following events and their dates.

The April 7, 2010 agenda for the Transportation Committee, City of Ottawa, contains the following item (click on the link to access the full report):

**PUBLIC WORKS
TRAVAUX PUBLICS**

**10. PEDESTRIAN SAFETY EVALUATION PROGRAM 71
PROGRAMME D'ÉVALUATION DE LA SÉCURITÉ DES PIÉTONS 89
ACS2010-COS-PWS-0001 CITY WIDE / À L'ÉCHELLE DE LA VILLE**

That the Transportation Committee recommend Council approve:

1. A three year pilot of the Pedestrian Safety Evaluation Program for intersections, as outlined in this report;
2. That countermeasures identified by staff, the ward Councillors and the community, through the Pedestrian Safety Evaluation Program, be implemented in 2010 at Donald Street and the Vanier Parkway; and Carling Avenue and Holland Avenue; and,
3. That staff prepare an evaluation report of the three year pilot for Transportation Committee in 2013.

However, even a cursory examination of the documentation reveals that

Lightning is not the City of Ottawa's middle name.

“On February 5, 2003, the Transportation and Transit Committee approved the following motion, which was subsequently approved by City Council on February 26, 2003:

“That Council direct staff to continue to pursue the development of methods that can be used to assess pedestrian safety at intersections, using both the information developed by the Walking Security Index, other analytical techniques, and report to Committee and Council.”

Yes, the instruction from council to undertake this work was given more than seven (7) years ago, and it will not be until 2013 (if then) that the pilot study report based on studying two (yes, two) intersections comes to Transportation Committee.

For professional and legal reasons I have no comment on this initiative in general, but I can comment on one section in particular.

In the section titled, Charette Consultation Event – Evaluation of the Process and Tools, it is stated that

“...Then, using the tools and guidelines, candidate countermeasures to reduce the pedestrian safety risks were discussed.

The candidate countermeasures identified and discussed through the review of the two pilot intersections included the following:

- Installing countdown pedestrian signals;
- Implementing a leading pedestrian interval (which give pedestrians a slight lead time making them more visible to traffic);
- Providing better access to the push buttons;
- Enhancing crosswalk markings;
- Improving the curb height and ramps with steep grades;
- Providing adequate sidewalk continuity and refuge areas between and at transit stops;
- Improving grades in crosswalk to reduce pooling of ice and water;
- Modifying or removing refuge islands (right-turn channel);
- Installing supplementary signage to identify the presence of pedestrians;
- Formalizing two-stage crossing; and,
- Improving visibility (shrubs/trees to trim or remove).”

Call it stunning, astounding, bizarre, mind-boggling, head-shaking, etc., but every single one of these so-called countermeasures is contained in one or more of the Walking Security Index project reports published from eight to 15 years ago by the Region of Ottawa-Carleton or the (new) City of Ottawa!

Moreover, there are other “countermeasures” in the WSI reports which, on the evidence, are even more effective than the ones identified to date for the so-called Pedestrian Safety Evaluation Program. One can only wonder when they will be “discovered”.

By the time that the pilot study is complete in 2013, the City of Ottawa may know a bit more about two of its 900 or so signalized intersections than it does now. Only 898 or so to go. And, by 2013 someone working at or for the City of Ottawa may know a bit more about the design and use indexes.

But, and this is the critical question,

Between now and 2013, and even years after 2013, will many pedestrians using Ottawa intersections continue to find themselves in conflict zones rather than in safety zones, comfort zones, and convenience zones?

Based on the events of the past 15 years, I am fearful that the answer will be a resounding and unfortunate,

“Yes, dammit, yes”.

However, in the spirit of Jane Jacobs, I wish to end my remarks on a note of optimism.

That is, I am optimistic that this presentation, along other *Jane’s Walk* presentations and events, and especially the force for change created by people joining in common cause, will help to accelerate the process of achieving and implementing ***Measures to Mitigate Intersections that Are Conflict Zones for Pedestrians***.

No doubt it will be both informative and rewarding to re-visit this expression of optimism during *Jane’s Walk* 2011 in Ottawa.