

General Issues Committee (GIC), City of Hamilton



Hamilton Pedestrian Mobility Plan

October 16, 2013



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General Issues Committee (GIC), City of Hamilton

Presenters:

- **Glenn A. O'Connor**, Principal of
G. O'Connor Consultants Inc., Burlington



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Consulting Team Members:

- **G. O'Connor Consultants Inc.**, Project Co-Lead, Burlington
- **CIMA+**, Project Co-Lead, Burlington
- **McKibbon Wakefield Inc.**, Burlington
- **Toole Design Group**, Seattle
- **DMD & Associates**, Vancouver



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Learning Outcomes:

This session is intended to provide participants with an understanding of how Hamilton will create a community where people choose to walk.



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Hamilton's Commitment to Improved Mobility Arises From:

- Provincial legislation
- Commitment to the International Charter for Walking (April, 2008)



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Step Forward – Purpose:

- 20 year framework to improve Pedestrian Environment, increase opportunity for walking as a transportation mode
- Improve health of communities
- Safe, inclusive, accessible
- Mobility – all modes of walking, running, scooters, wheelchairs and walkers
- Inclusive to all



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- **Significant public input/consultation process.**
- P.I.C. #1, at 4 locations held March/April, 2011.
- P.I.C. #2, at 2 locations held September, 2011.
- **On-line interactive “Community Walk” map.**
- **478 on-line and paper surveys.**
- **1,643 Community walk map views (this is 2x National/USA average).**



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- 6 Farmer's Markets at various locations.
- Community Events: Open Streets Hamilton; & Transportation and
- Living Fair.
- Social media used: Facebook/Twitter.
- Information posted to the City's website
- Significant public support received.

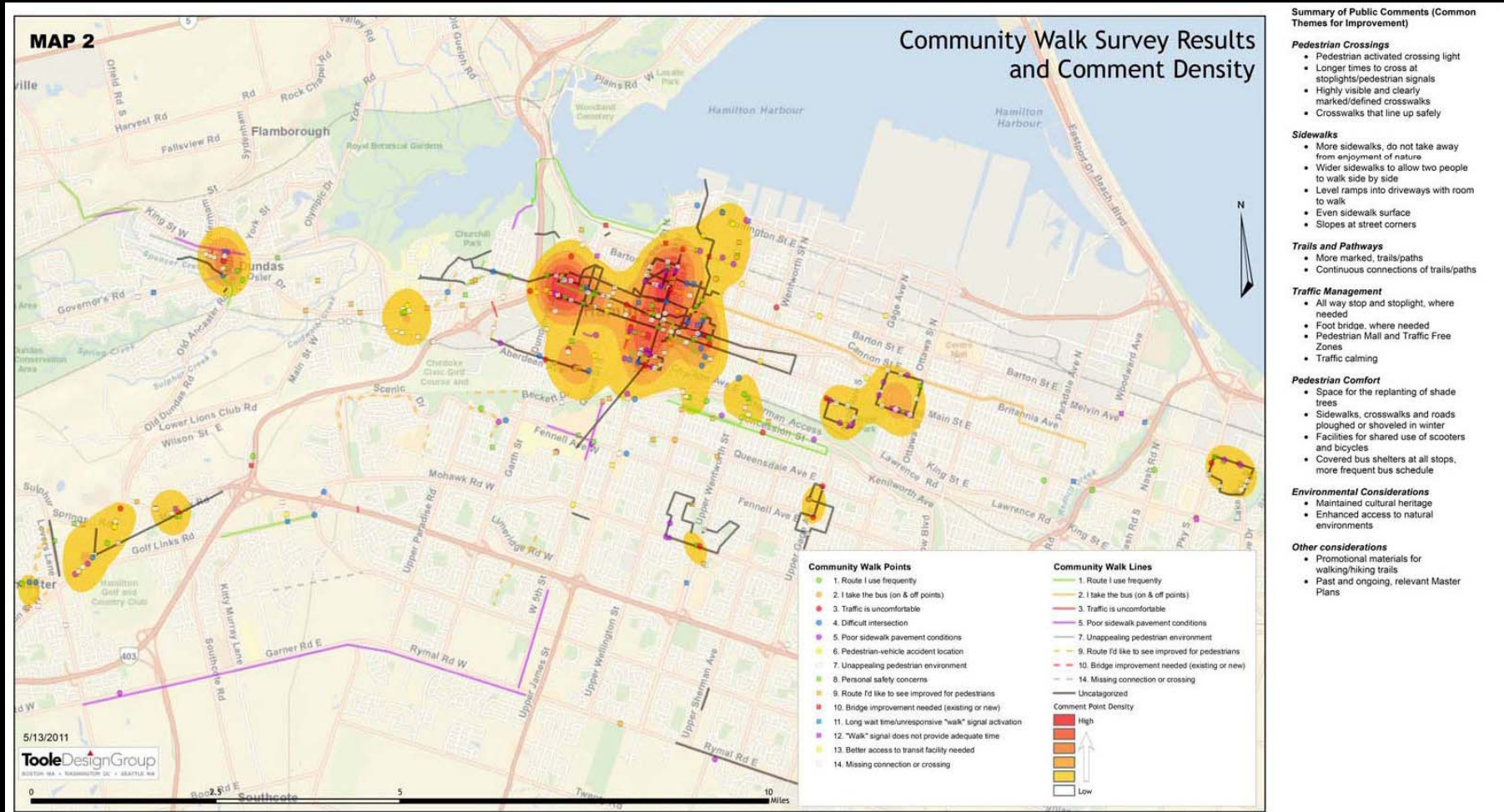


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Top Six (6) Things Public Told Us.....

1. Comfortable, safe street crossings (intersections/across)
2. Street trees/shade
3. Comfortable, safe sidewalks (corridor/along)
4. Continuous network of sidewalks
5. Public transit system link
6. Links to park/open spaces



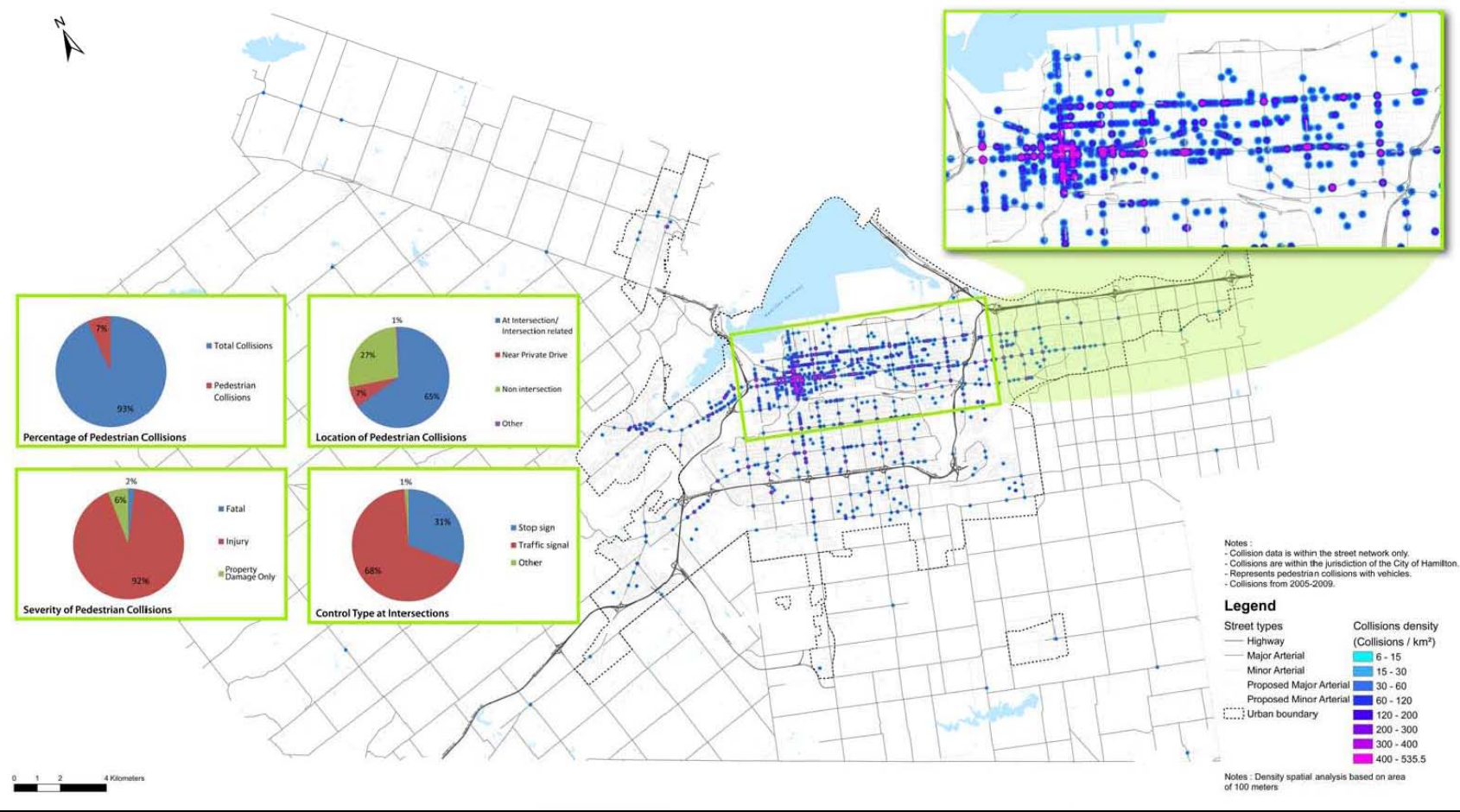
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LOCATION OF PEDESTRIAN INVOLVED COLLISIONS

STEP FORWARD: Pedestrian Mobility Master Plan
Public Information Centre #2
September 8th & 10th, 2011.



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Development Patterns – Context Areas



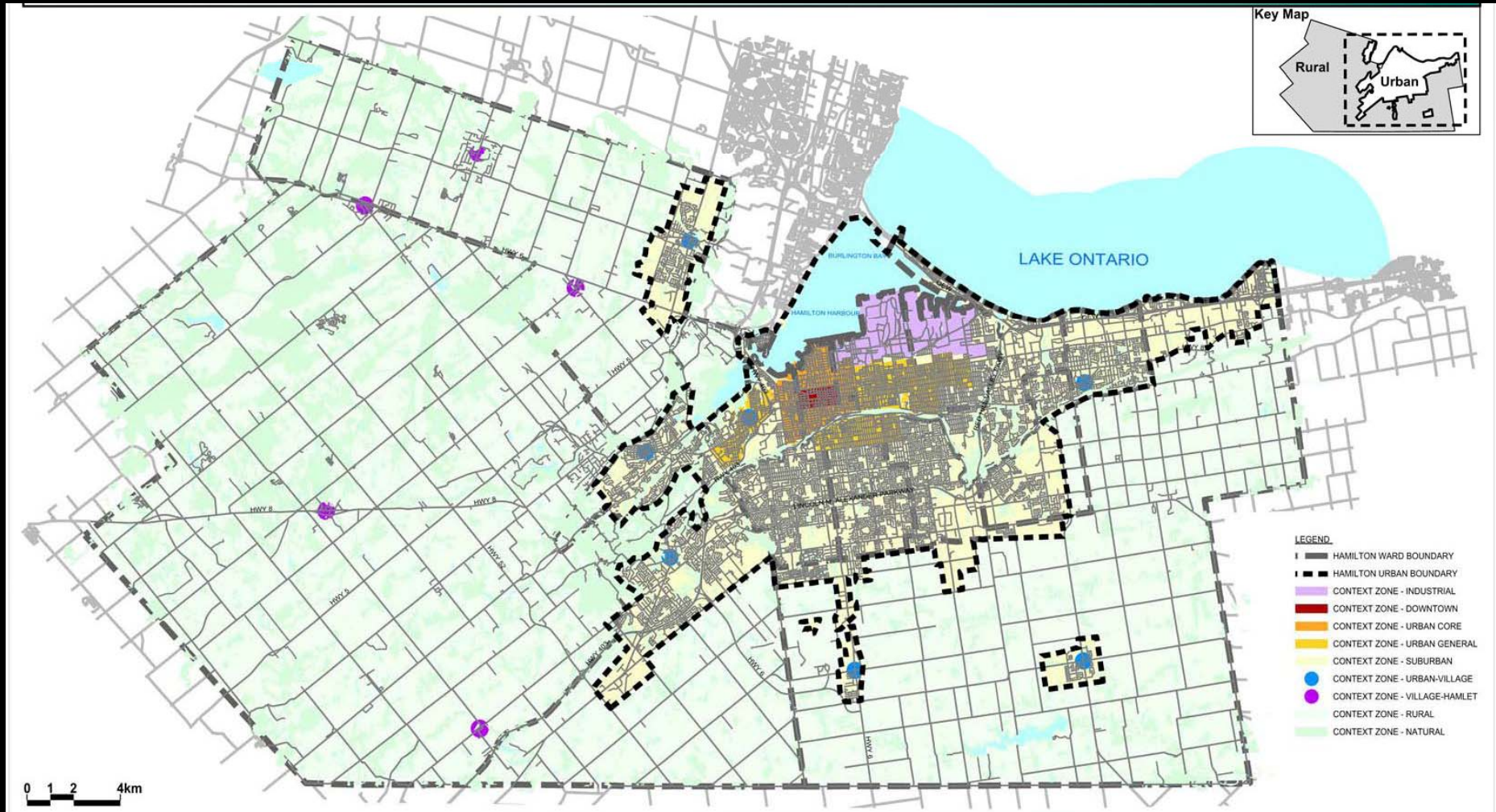
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Context Area Map – Existing Conditions



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Paradigm Shift – A New Pedestrian Approach

- Historic focus of roads on vehicular needs
- Geometric design started at centreline to edges
- Left over space was for cyclists and pedestrians



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Paradigm Shift

- Start with requirements for pedestrians and cyclists first
- Work to centreline
- Accommodate recommended improvements using Routine Accommodation



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Routine Accommodation – Decision Making



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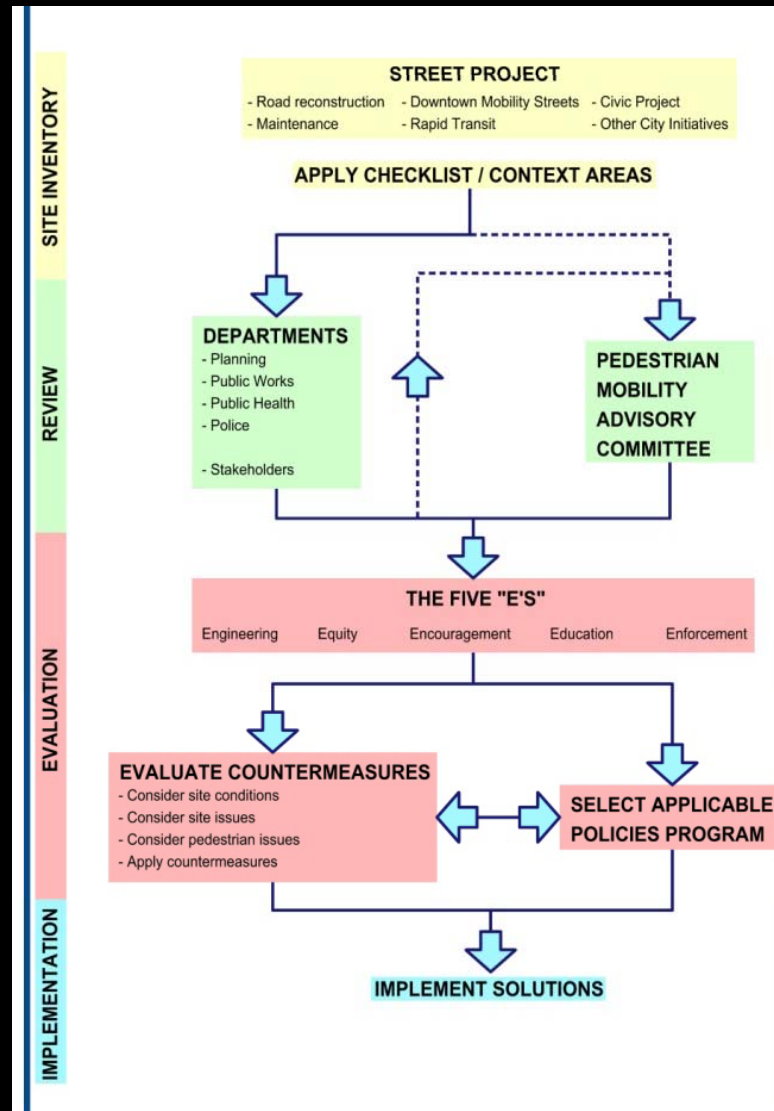
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Routine Accommodation

“Is the process where changes to improve pedestrian streetscapes utilize a range of solutions on each and every project”.



Application of Evidence-Based Design

- Applied research based on pedestrian mobility
- Health risks
- Helps makes decisions
- Considers site environment
- Assists decision making
- Used to develop our evaluation system

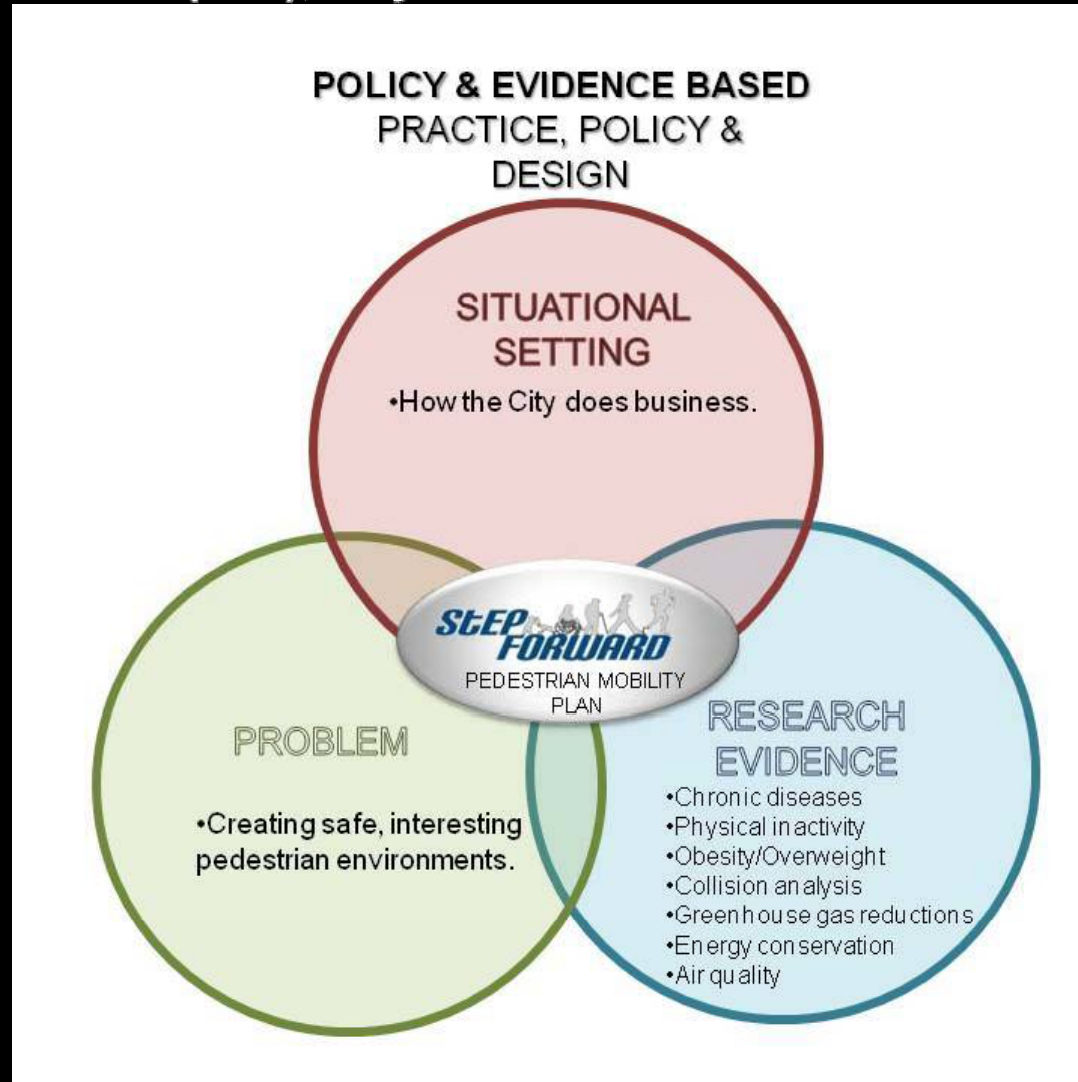


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Evaluation of Toolbox Solutions

TOOLBOX SOLUTIONS	CONTEXT AREAS										EVALUATION CRITERIA														POLICY CONFORMITY		IMPLEMENTATION		
											Administrative Implementation, Operations & Maintenance							International Charter for Walking									COST		
Walking Along The Street	Natural	Rural	Village Hamlet	Urban Village Hamlet	Suburban	Urban General	Urban Core	Downtown	Industrial	Property Requirements	Natural Environment	Public Health	Safety	Implementation Timing	Interfaces: Other Modes of Transportation	Inclusive Mobility	Well Designed Spaces	Supportive Land Use Planning	Reduce Road Danger	Less Crime and Fear of Crime	Supportive Authorities	Create Culture of Walking	Municipal	Provincial					
<i>Do Nothing</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	0	-1	-1	0	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	N/A
<i>Along the roadway</i>																													
Wayfinding	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	0	+1	+1	0	0	+1	+1	+1	0	0	0	+1	+1	0	0	+1	+1	\$	
Widen, Construct, and/or Reconstruct Sidewalks			✓	✓	✓	✓	✓	✓	✓	-1	0	+1	+1	0	-1	+1	+1	0	+1	0	+1	0	+1	+1	+1	+1	N/A	\$\$	
Provide Sidewalk Buffers			✓	✓	✓	✓	✓	✓	✓	-1	0	+1	+1	0	-1	+1	+1	0	+1	0	+1	0	+1	+1	+1	+1	N/A	\$\$	
Provide Clearance for All Mobility Levels			✓	✓	✓	✓	✓	✓	✓	-1	0	+1	+1	0	0	+1	+1	0	+1	0	+1	0	+1	+1	+1	+1	N/A	\$\$	
Paved Shoulders	✓	✓							✓	0	0	+1	+1	0	+1	+1	0	0	+1	0	0	0	+1	+1	+1	+1	N/A	\$\$	
Street Trees	✓	✓	✓	✓	✓	✓	✓	✓	✓	+1	0	+1	+1	0	0	0	+1	+1	+1	0	+1	0	+1	+1	+1	0	+1	\$\$\$	
<i>Driveways *</i>																													
Modify Design of Sidewalk across Driveway				✓	✓	✓	✓	✓	✓	0	0	+1	+1	0	N/A	+1	+1	0	+1	0	+1	+1	+1	+1	+1	N/A	\$		
Minimize Driveway Width				✓	✓	✓	✓	✓	✓	0	0	+1	+1	0	N/A	+1	+1	+1	+1	0	0	+1	+1	+1	+1	N/A	\$		
Prohibit Driveways at Intersections				✓	✓	✓	✓	✓	✓	0	0	+1	+1	0	+1	+1	+1	+1	+1	0	+1	+1	+1	+1	+1	N/A	\$		
Consolidate Driveways, where possible				✓	✓	✓	✓	✓	✓	0	0	+1	+1	0	+1	+1	+1	+1	+1	0	+1	+1	+1	+1	+1	N/A	\$		
Provide Right-In, right out access only				✓	✓	✓	✓	✓	✓	0	0	+1	+1	0	-1	0	0	0	-1	0	0	0	0	0	0	+1	N/A	\$	
<i>Channelization</i>																													
Road Diets (Reduce No. of Lanes)				✓	✓	✓	✓	✓	✓	+1	0	+1	+1	-1	-1	+1	+1	0	+1	0	+1	+1	+1	+1	0	0	\$\$\$		
Lane Diets (Reduce Width of Lanes)				✓	✓	✓	✓	✓	✓	0	0	+1	+1	-1	-1	+1	+1	0	+1	0	+1	+1	+1	+1	0	0	\$\$\$		
<i>Curbside management</i>																													
Parking Restrictions at Intersections			✓	✓	✓	✓	✓	✓	✓	0	0	+1	+1	0	+1	+1	+1	0	+1	0	+1	0	+1	+1	0	N/A	\$		
Back Angle Parking			✓	✓	✓	✓	✓	✓	✓	0	0	0	+1	0	0	+1	+1	0	+1	0	0	0	0	0	0	N/A	\$		

Scoring Criteria		Implementation Cost Comparison	
+1	Possible Positive Effect	Low	\$
0	No Effect	Medium	\$\$
-1	Possible Negative Effect	High	\$\$\$
N/A	Criteria not applicable (note: Natural, Cultural and Socio-Economic Environment criteria were considered in all cases to meet the intent of the Class EA process)		

* Includes private and public costs



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Potential Toolbox Solutions

Walking along the Street



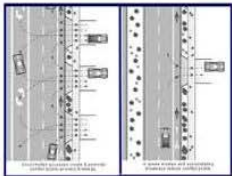
Improved Sidewalks



Crossing at Access



Buffered Medians/Street Trees



Safer Driveway



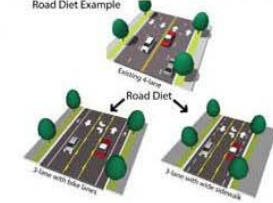
Lane Diet (Narrower Lanes)



Reverse Angle Parking



Clearance from Obstruction



Road Diet (Reduced No. of Lanes)



Roadside Parking Management



Restrictions at Intersections

Crossing the Street



Midblock Signals



High Visibility Crosswalks



Lighting at Crosswalk



Reduced Crossing Widths



No Right on Red



Midblock Staggered



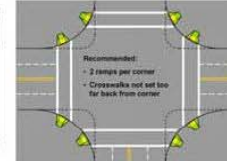
Countdown Signals



Signal Timing



Better Pedestrian Wait Areas



Intersection Design/Geometry

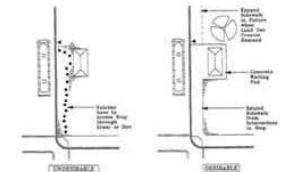


Lighting along Street



Marked Crosswalk Locations

Policies



Transit Connections



Crosswalk Near Stop



Wider Area at Stop



IPS DIAGRAM



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Summary

- Good engineering invites right use.
- Implementation through Routine Accommodation.
- Objective review and assessment of appropriate toolbox solutions, on a project by project basis.
- Multi-departmental approach to problem solving.
- Consensus based scoring using chart, multiple reviewers.



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Summary

- Scoring/Ranking of toolbox solutions relative to each other.
- Consistent, improved application of solutions.
- No large capital projects, small wins through Routine Accommodation.
- Improved pedestrian mobility, create a better place to walk.
- Establish Pedestrian Mobility Advisory Committee (P.M.A.C.)



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Conclusion

- Using the techniques and proposed range of solutions and decision making, will address Provincial Legislation, International Charter for Walking
- Improve opportunities for walking as a Transportation Mode
- Improve health of communities
- Create a community where people choose to walk



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Thank You



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