Hamilton Complete Streets Design Manual

BIA Advisory Sub-Committee

September 13, 2022





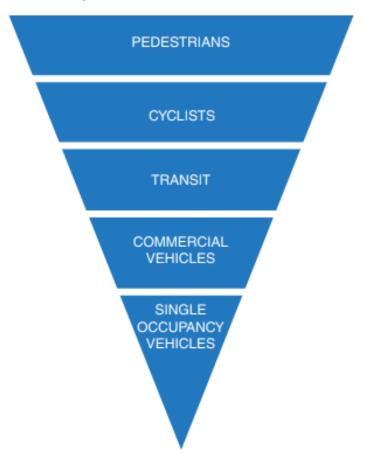
Hamilton's Complete Street Design Manual

Complete Streets are streets that are planned and designed to **balance** the needs of all road users, to allow people to get around safely no matter their age, ability or how they choose to move.

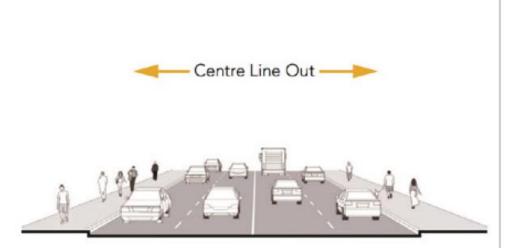
The Complete Streets concept is **tied to the Safe Systems and Vision Zero** approaches to road safety, which aim to design the transportation system to accommodate human error and with the **goal of eliminating death or serious injury**.

The approach recognizes that **there is no one-size-fits-all solution to street design**, as different streets have different priorities, depending on the street's location, context, and role within the transportation system.

Hierarchy of Transportation and Mobility Priorities

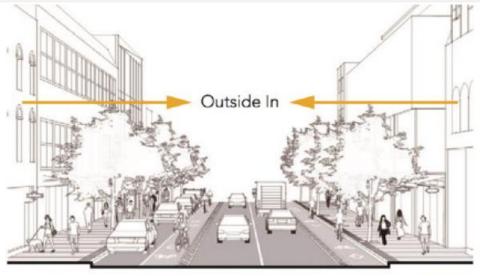


Our Design Goals Have Evolved



THEN

Auto-Mobility Automobile Safety



NOW

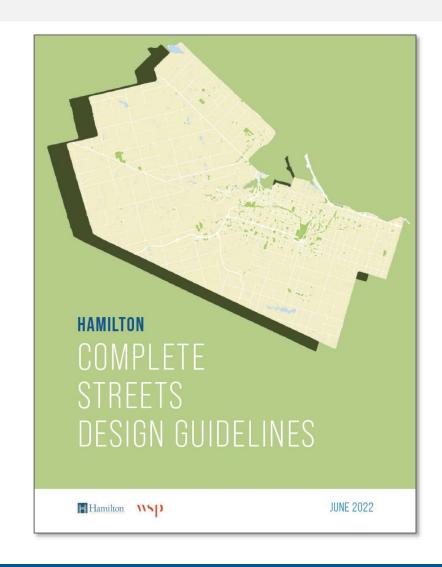
Multi-modal Mobility + Access
Public Health/Safety
Economic Development
Environmental Quality
Livability/Quality of Life
Equity

Design Manual Overview

The role of the manual is to **improve and normalize the role of complete streets** across all projects.

The design manual is structured in five sections:

- 1. Introduction;
- 2. Undertaking Complete Streets Design;
- 3. Elements of Complete Streets;
- 4. Complete Street Typologies; and,
- 5. Designing for Intersections.

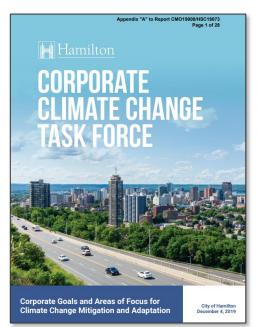


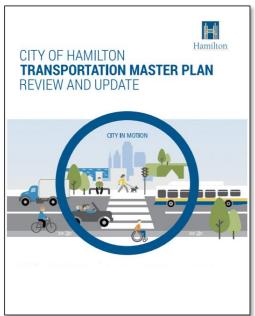
Chapter 1: Introduction

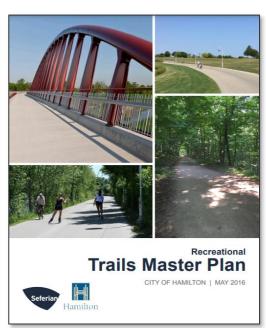
Provides an overview of the guidelines and their applicability, and relationship to other guidelines, strategies and policies.

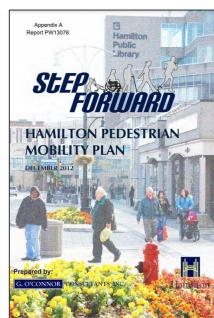


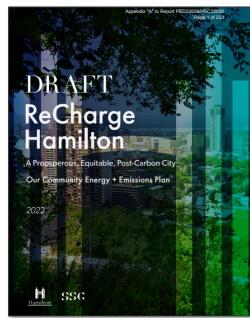












Chapter 2: Undertaking Complete Streets Design

- Establishes a process and tools for designing streets.
 - 1. Plan
 - 2. Conceptualize
 - 3. Design
 - 4. Implement
 - 5. Monitor
- Community and stakeholder feedback a central pillar of the process



Chapter 3: Elements of Complete Streets



The manual provides direction on the design of different complete street elements, including:

- Pedestrian Realm & Placemaking;
- Cycling Facility Design;
- Transit Facility Design;
- Roadways;
- Curbside Management;
- Green Infrastructure; and
- Utilities and Municipal Services.

Chapter 3: Elements of Complete Streets

- Narrower lane widths and updated design speeds.
- Wider sidewalks and accessible treatments at intersections.
- Greater separation in cycling facility design to support a wide range of ages and abilities.
- Opportunities for street trees, and green infrastructure.
- Traffic calming, particularly in neighbourhoods, from day one.





Chapter 4: Complete Street Typologies

- Conceptual cross-section for each of the eight street typologies, previously approved by Council.
- Represent the starting point for the design process, but all streets will need to take a context sensitive approach to the local conditions.
- Demonstrate how the different complete street elements can fit together in different contexts.

Street Typologies

Urban Avenue

Transitioning Avenue

Main Street

Connectors

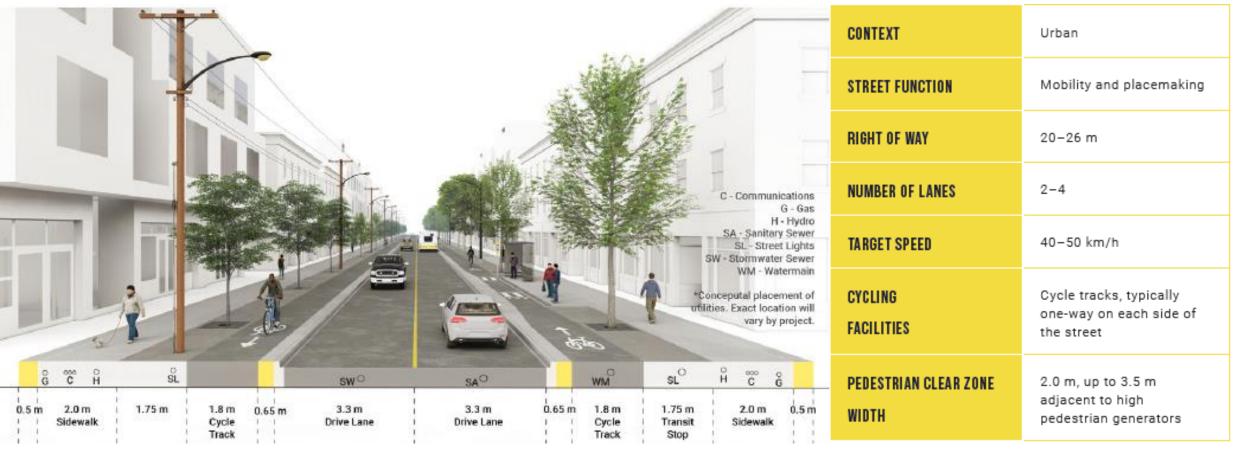
Neighbourhood Streets

Rural Roads

Rural Settlement Areas

Industrial Street

Typologies: Urban Avenue - 20 m



^{*} Alternative 26 m ROW included in the manual

Typologies: Main Streets - 20 m



CONTEXT	Urban
STREET FUNCTION	Placemaking and access
RIGHT OF WAY	18-20 m
NUMBER OF LANES	2
TARGET SPEED	30-40 km/h
CYCLING FACILITIES	Shared lanes
PEDESTRIAN CLEAR ZONE WIDTH	2.0 m, 3.5 m adjacent to high pedestrian generators

Chapter 5: Intersections

Guiding design principles:

- Prioritize safety
- Design for accessibility
- Minimize delay





Compact Urban Intersections

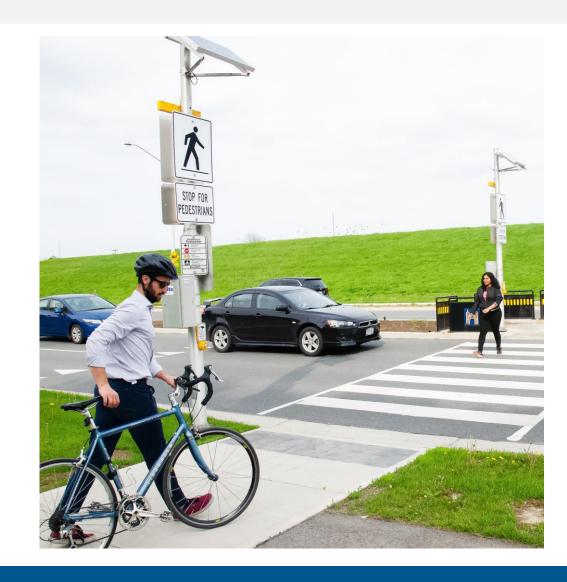


Urban Avenue to Main Street

- Raised corner to separate cyclists and motorists
- 2. Smaller corner radii
- 3. Left turn lane stop bar setback
- 4. Transition to shared cycling facilities
- 5. Bus stop integrated with cycle track
- 6. Crossing distances minimized

Making It Happen

- Updating internal design documents and standards.
- Continue to disseminate design manual amongst staff, including training sessions.
- Monitor implementation successes and opportunities for improvements over time.



Design Manual Overview





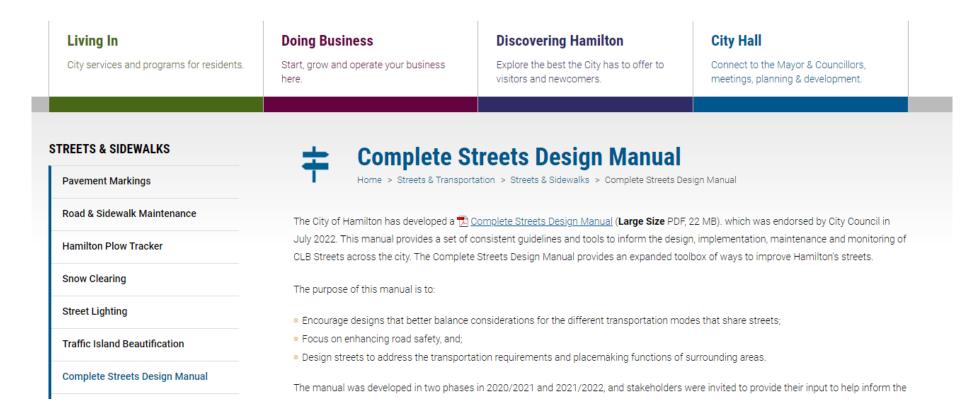












https://www.hamilton.ca/streets-transportation/streets-sidewalks/complete-streets-design-manual



THANK YOU

