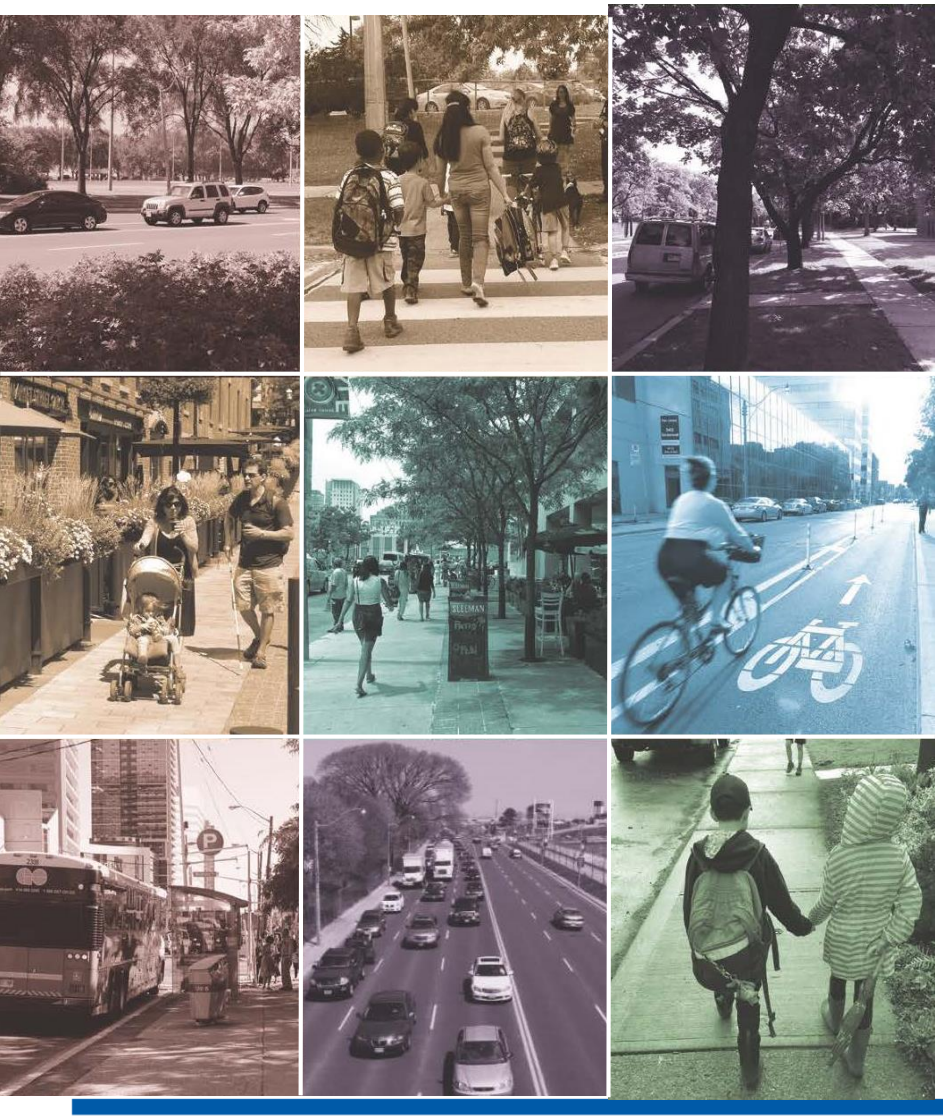


TORONTO COMPLETE STREETS GUIDELINES

Presentation by Fiona Chapman, Manager, Pedestrian Projects
Public Realm Section, Transportation Services, City of Toronto
June 2017

PURPOSE OF THE PROJECT

To develop Complete Streets Guidelines that would:

- integrate existing policies, standards and guidelines within the city
- use latest best practices on Complete Streets
- provide unified guidance on street planning and design to city staff, decision-makers, and external stakeholders

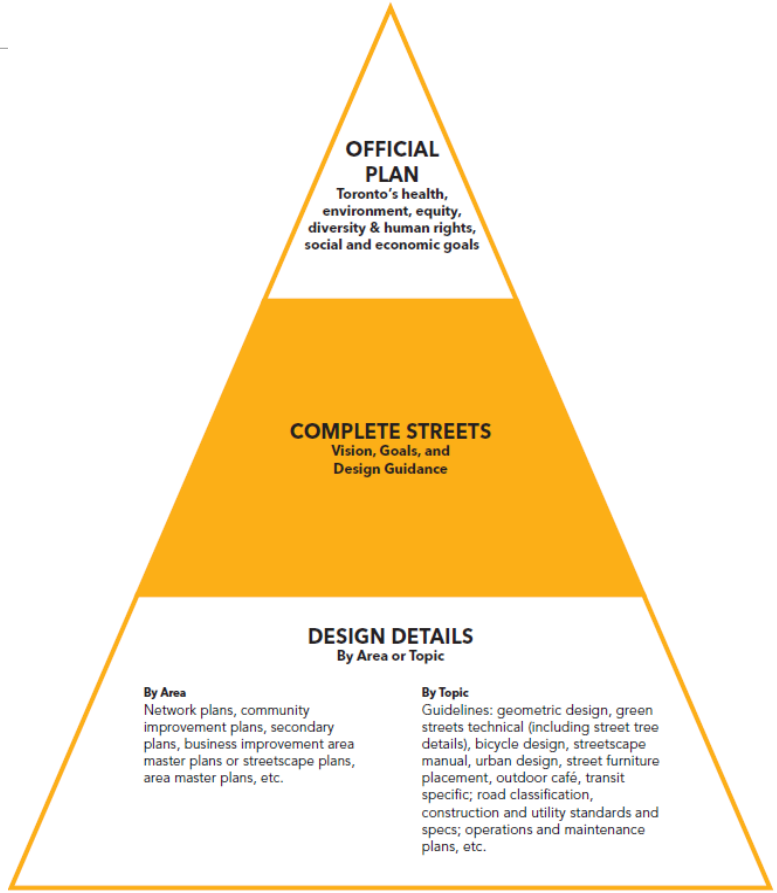
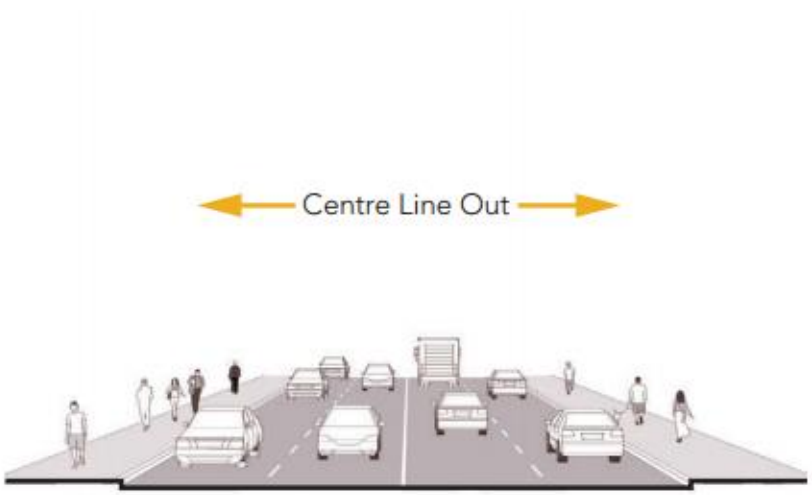


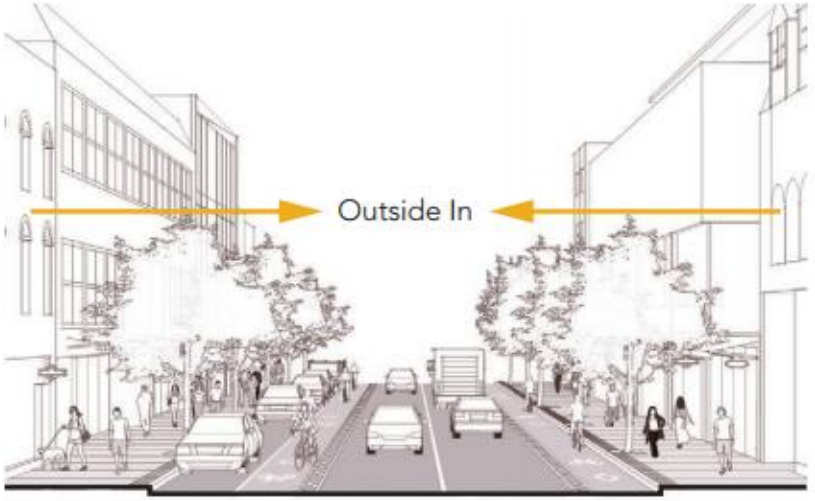
Figure 1-2: Toronto Complete Streets Policy Context

Our Design Goals Have Changed



THEN

Auto-Mobility
Automobile Safety

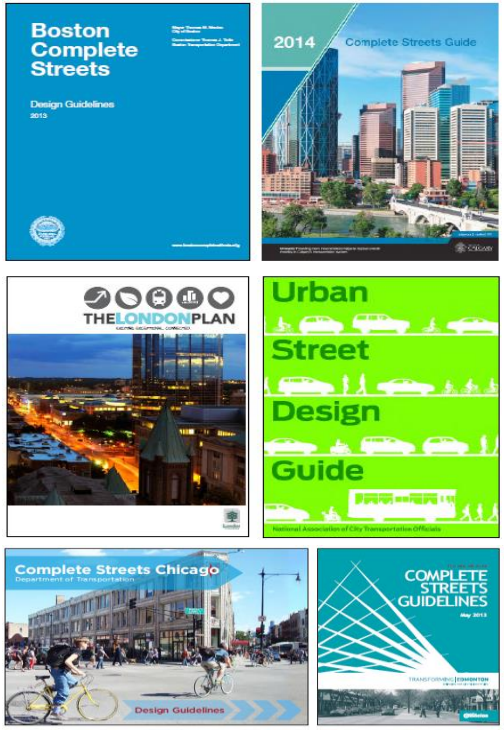


NOW

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

ALREADY HAVE COMPLETE STREETS

BEST PRACTICES FROM OTHER CITIES



- Have a clear vision and set of goals.
- Apply to a variety of streets projects.
- Give aspirational design objectives for different kinds of streets.
- Give guidance for assembling street design elements.
- Provide a framework for decision-making.
- Provide tools and protocols to address competing demands for space.

- Clearly outline the process for delivering a project.
- Be a living document, regularly updated and revised.
- Be supported by education, training, outreach, pilot projects and updates.
- Be graphically rich, augmented by text.
- Provide a system for review and compliance.
- Develop a comprehensive set of performance measures to evaluate a project.

Vision and Goals

Streets for People

Improve Safety & Accessibility

Give People Mobility Choices & Make Connected Networks

Promote Healthy & Active Living

Streets for Placemaking

Create Beautiful & Vibrant Public Spaces

Respond to Local Area Context

Improve Environmental Sustainability

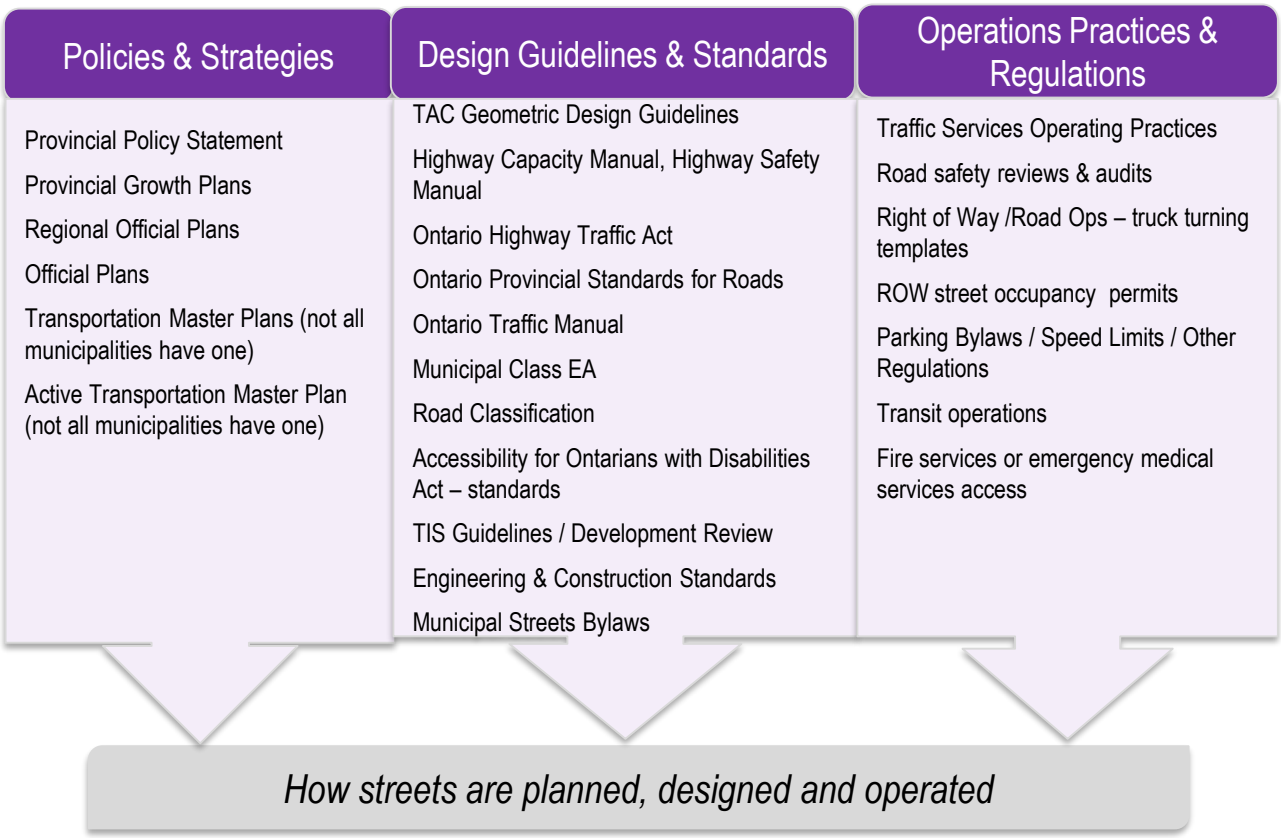
Streets for Prosperity

Support Economic Vitality

Enhance Social Equity

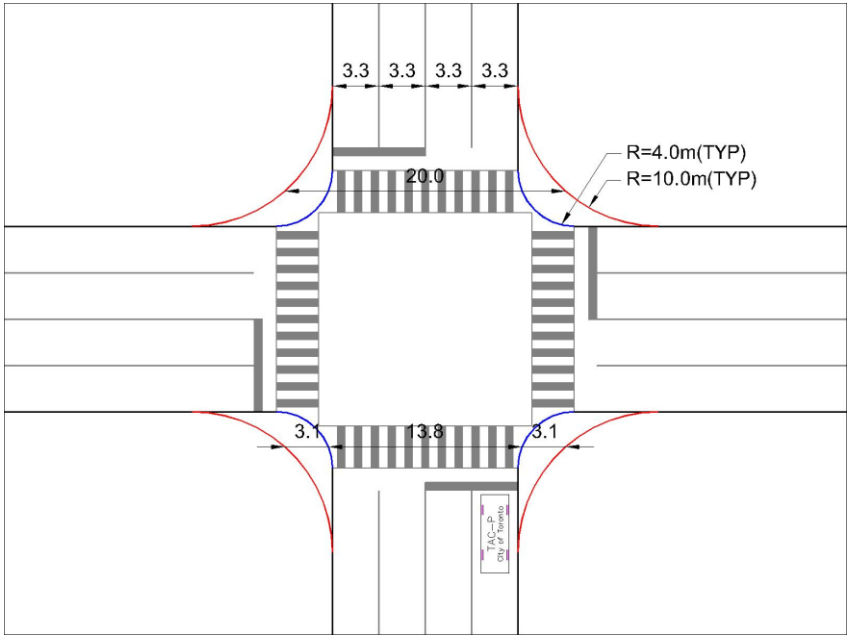
Balance Flexibility & Cost-Effectiveness

INTER-RELATED POLICIES – NEED ALIGNMENT



FOUNDATION POLICIES – Lane Widths & Curb Radii

			Minimum (m)	Target (m)	Maximum (m)	TTC		High Truck Volume	Horizontal Alignment Curves
						TTC Bus Routes	TTC Streetcar Routes		
Through Lane	60km/h or more		3.0	3.0	3.5	x	+[1]	+	+
	50km/h			3.0	3.3				
	40km/h or less			3.0	3.0				
Curb Lane	Shared Curb Lane without Urban Shoulder		3.3	4.3	4.3	+[2]	x	+	+
	Shared Curb Lane with Urban Shoulder or Curb Lane with Dedicated Cycling Facility	60km/h or more	3.0	3.5	3.5				
		50km/h		3.3	3.5				
		40km/h or less		3.3	3.5				
Urban Shoulder			1.2	2.3	2.3				
Two-way Left Turn Lane			3.0	3.0	3.3	x	x	+	+
Dedicated Left Turn Lane			3.0	3.0	3.3	x	x	+	+
Dedicated Right Turn Lane			3.0	3.0	3.3	+	x	+	+
Dedicated Parking Lane			2.0	2.4	2.8	x	x	x	+
Dedicated Cycling Facility			Note 1						



CRITICAL "BUY-IN"

- Focused stakeholder meetings with Toronto Fire Services, Paramedic Services & Police Services; and Toronto Transit Commission, BIAs, Parking, Economic Development
- Brought in the Professional Engineers of Ontario with our Legal and Risk Services, and heads of Engineering & Construction Services and Transportation Services
- Key internal staff committees – traffic now SMC, IO, TPROW

CRITICAL “BUY-IN”

Key Content & Implementation

Toronto's Approach

- Greater emphasis and inclusion of **place-making**, **universal accessibility** and **green infrastructure**
- Outlines clear, collaborative **steps for street design** up-front, with **checklists** to support staff at each step
- **Design principles** are provided for all street components, have a user-focus on needs and characteristics, and on context-sensitive application
- **Key street elements** introduced for each component, with **additional resources** provided for more details

Guidelines: Key Content

- **Introduction: Ch. 1**
  - Guidelines overview and applicability, and Vision and Goals
- **Street Types: Ch. 2**
  - Understanding the roles of streets for both mobility and placemaking
  - 15 street types used as starting points for context-sensitive design
- **Steps to Street Design: Ch. 3**
  - Step-by-step process for design & decision-making, with checklists
  - Scalable to different project types and scopes
- **Street Design Principles: Ch. 4-9**
  - Design principles, zones, elements and key considerations for pedestrians, cyclists, transit users, green infrastructure, roadways, and intersections

Street Types

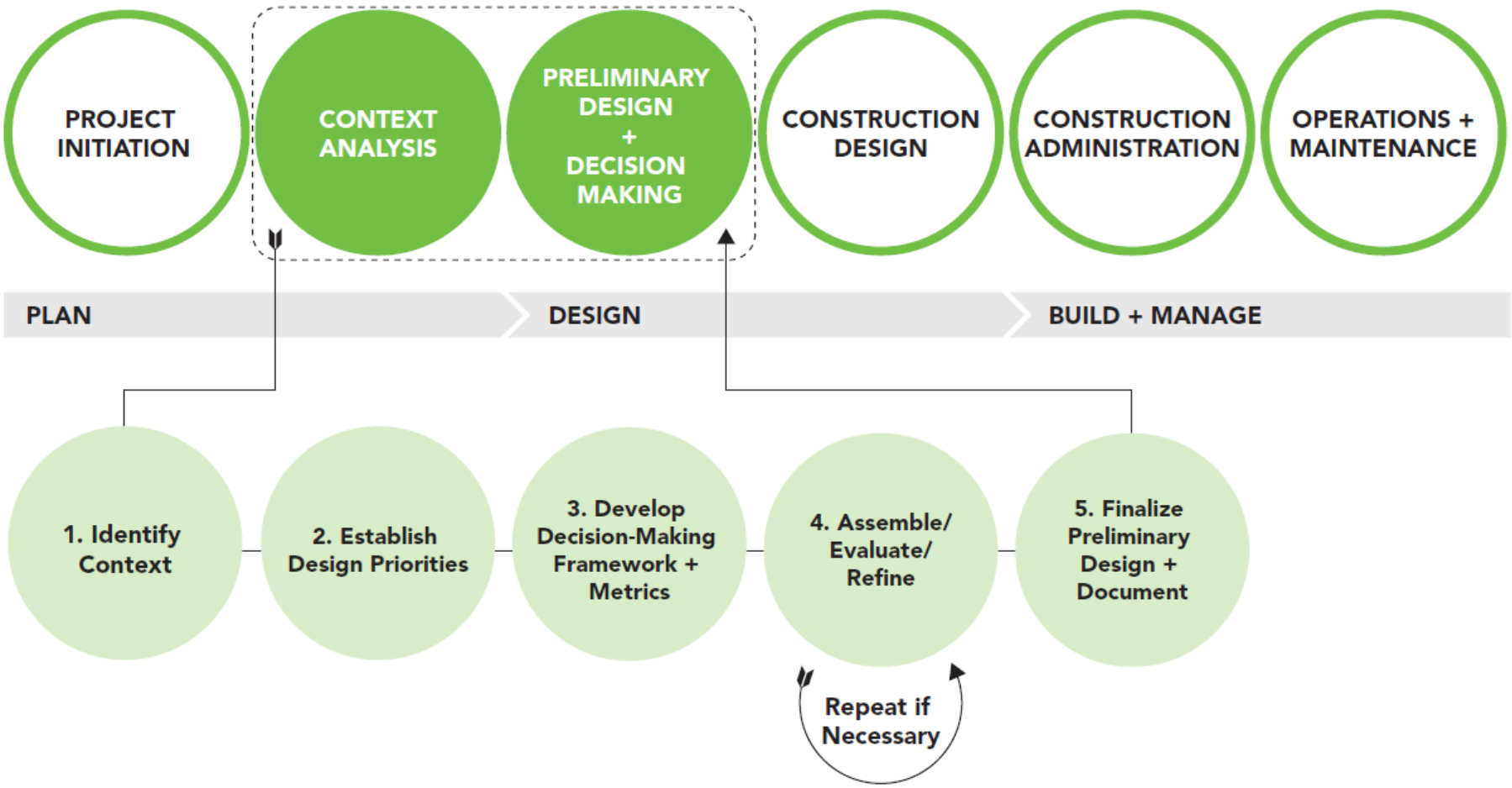
- Civic Street
- Downtown & Centres Main Street
- Avenue & Neighbourhood Main Street
- Downtown & Centres Residential Streets
- Apartment Neighbourhood Residential Street
- Neighbourhood Residential Street
- Mixed-Use Connector Street
- Residential Connector Street
- Scenic Street
- Employment Street
- Mixed-Use Access Street
- Mixed-Use Shared Street
- Mixed-Use Lane
- Residential Lane

Street Types

Steps to Street Design

- City staff, external groups, community members, and other **stakeholders are identified and involved** early in the process
- **Checklists are included for each stage** to prompt staff and assist in decision-making throughout the street design process
- **Decisions and rationale are documented** throughout the process to ensure it is transparent and defensible
- **Performance measurement considerations** are outlined to assess and communicate results of complete streets projects

Steps to Street Design



Street Design Components

- **Pedestrians**
  - Sidewalk zones, accessibility considerations, pedestrian clearway
- **Cyclists**
  - Context-sensitive cycling facilities, key cycling elements
- **Transit**
  - Context-sensitive transit design, transit-supportive street elements
- **Green Infrastructure**
  - Context-sensitive green streets, Green Streets Technical Guidelines
- **Roadways**
  - Considerations for the safety of vulnerable road users, designing a multi-modal transportation system
- **Intersections**
  - Focus on safety, holistic approach includes placemaking, green infrastructure, and consideration for all uses and users

Street Design for Pedestrians

Key Content

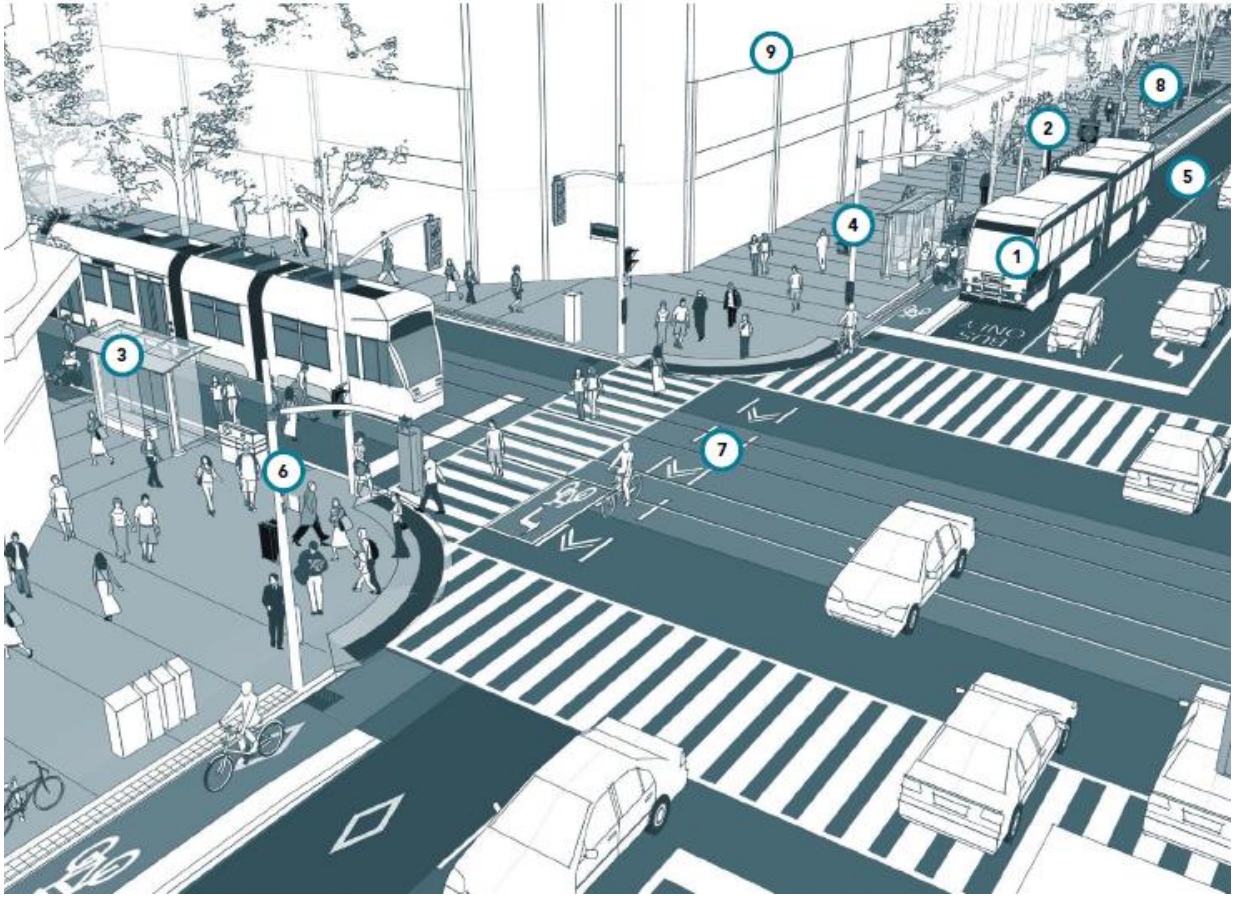
- Focus on pedestrian clearway
- Accessibility and universal design
- Pedestrian crossings
- Public realm and placemaking
- Utilities, maintenance and operations

Street Design for Cyclists

Key Content

- Context-sensitive cycling facilities
- Cyclist user characteristics
- Key cycling elements

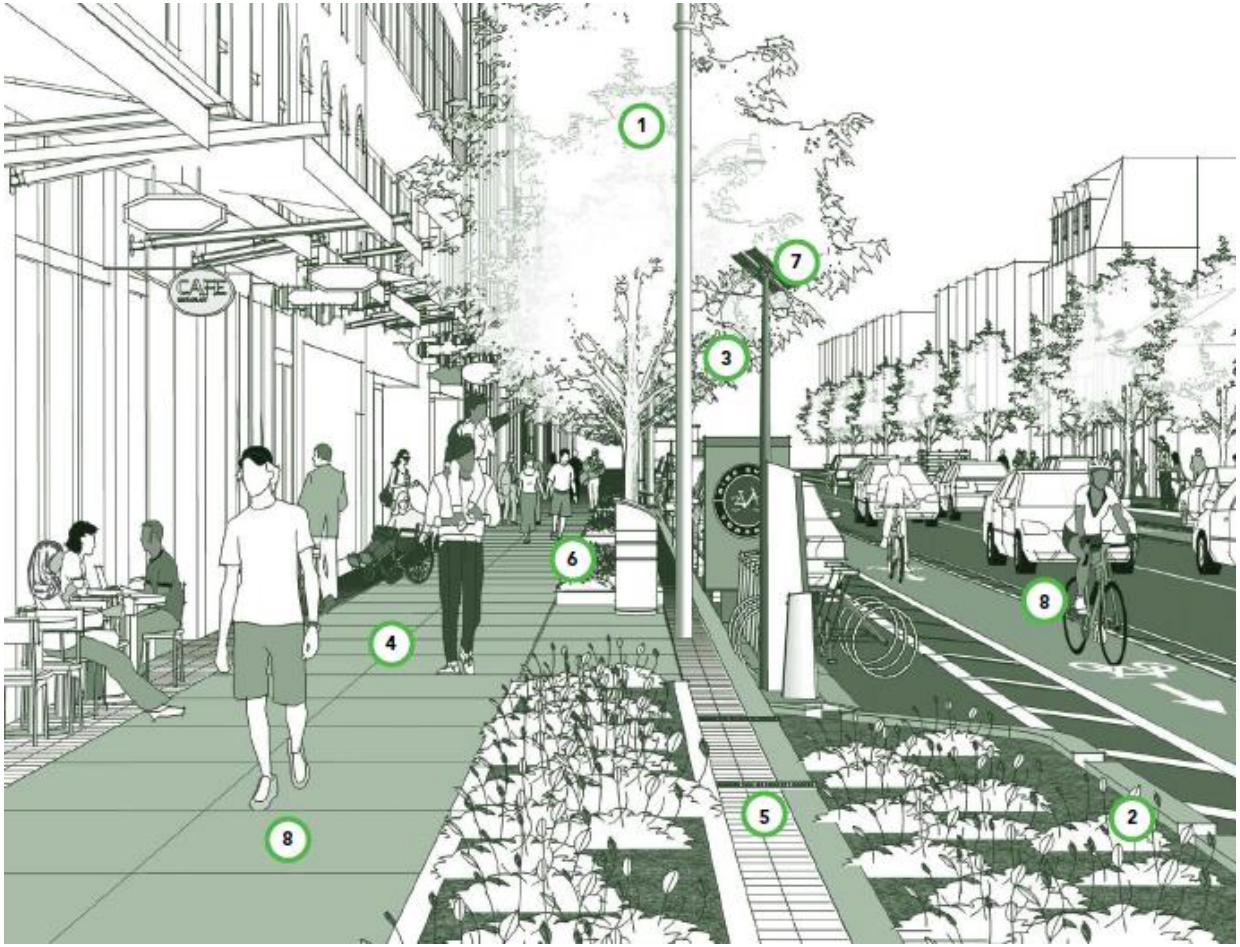
Street Design for Transit



Key Content

- Key transit street elements
- Context-sensitive transit design

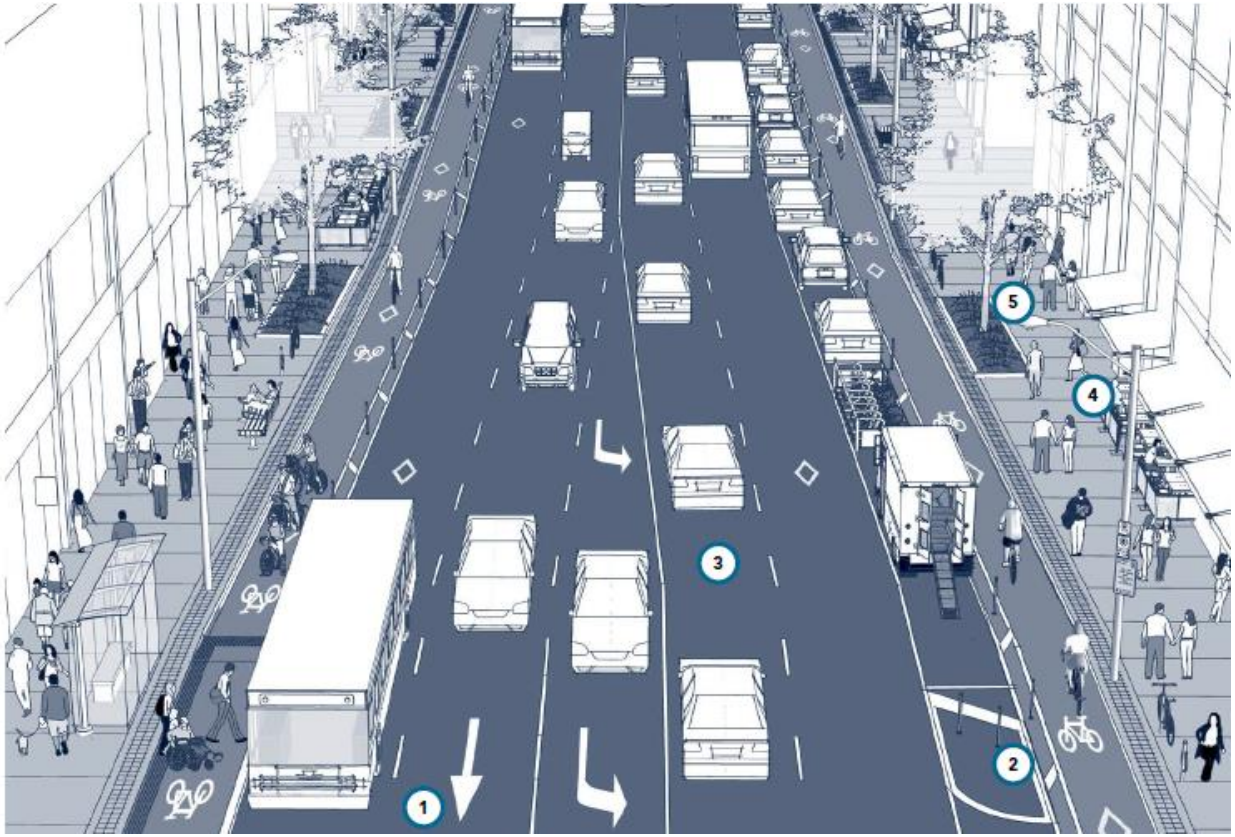
Street Design for Green Infrastructure



Key Content

- Context-sensitive green streets
- Key green street elements

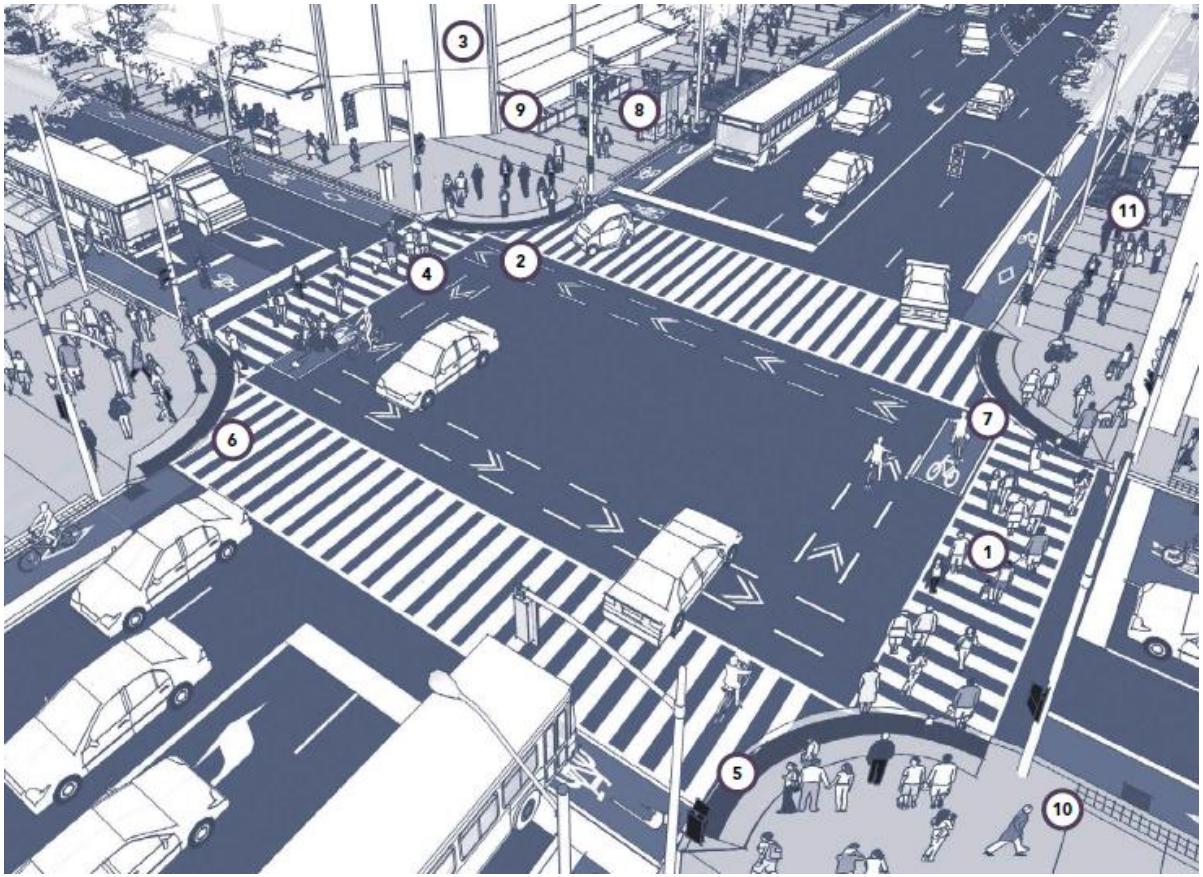
Street Design for Roadways



Key Content

- Design for a multi-modal system
- Design for safety of vulnerable users
- Design for target speed
- Design for placemaking and street context
- Rightsizing and repurposing roadways

Street Design for Intersections



Key Content

- Key needs of each road user
- Accessibility and universal design
- Context-sensitive intersection design
- Intersection elements and geometric design
- Intersection signals and traffic controls

Applicability of the Guidelines

Plans

Area Plans, Secondary Plans, Precinct Plans, Context Plans, Transportation Master Plans

Avenue & Corridor Studies

Major Street Projects

New construction

Reconstruction or revitalization, major resurfacing

EAs for new & existing streets

BIA projects

Highway interchanges & grade separated crossings

Medium to Smaller Scale Projects

Development applications

New sidewalks & other pedestrian links

New bicycle infrastructure/facilities

TSLIP

Streetscape improvements

Short-term/temporary interventions

Signs, signal installations, lighting

Utility cut repairs

Next Steps

- Next steps will focus on how to **operationalize Complete Streets** across the city

- **Demonstration projects** will be selected to apply the Guidelines
  - Projects will vary by project type, scale, district, and year
  - Application will provide opportunities to understand implications for capital costs, maintenance costs, and staff resourcing

KEY RESOURCES

- toronto.ca/completestreets
- Toronto Road Engineering Design Guidelines (ongoing updates0
- Toronto Traffic Signal Operations & Strategies 2015
- Toronto Accessibility Design Guidelines (being updated)
- Toronto Green Streets Technical Guidelines (internal draft completed)
- Many other resources listed in the guidelines.