Slide 1: Title Slide

Toronto Complete Streets (In Progress)
Disabilities Issues Committee Presentation
October 27 2015

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Slide 2: Presentation Outline

The presentation is in three parts:

- Introduction: What are Complete Streets?
- A New Approach
- Making Decisions

Slide 3: Title Slide – What Are Complete Streets?

Slide 4: What Are Complete Streets?

Complete Streets are streets designed with all users in mind: pedestrians (including those with impairments or disabilities), cyclists, transit users, motorists, and street trees. The primary goal is to build a city with streets and spaces that support the surrounding community, and where all users and uses have a well-functioning network so that people can travel easily and safely with the mode of their choice.

The term complete streets means both a process and a product. The process refers to the steps and decisions that lead to a specific street or intersection design. The product is the on-the-ground result of this process and the street designs that are used in our local communities. Complete streets are easiest to understand as a product, This guide will focus on creating the appropriate process that will lead to complete streets products—streets — which may look very different from one another depending on the context.

You may have heard of names similar to complete streets, such as livable streets, living streets, context-sensitive streets or multimodal streets. These all essentially point to the same idea — creating streets and spaces that balance the needs of a range of transportation users and support the surrounding community.

Complete streets are ***not***:
• A specific design prescription

• A mandate for an immediate retrofit
• A silver-bullet solution for all transportation issues

Slide 5: Benefits of Complete Streets

The primary benefits of complete streets are:
- Improved safety
- Expanded mobility options

Complete streets also provide:
- Stronger place making
- Social benefits
- Local economic benefits
- Environmental benefits
- Reduced infrastructure costs
- A more attractive and livable public realm

Slide 6: Creating Complete Streets

Streets have multiple roles:
- Movement
- Places
- Ecosystems/Stormwater

Complete Streets require coordination throughout the process for delivering street projects:
- Planning/Project Definition
- Scoping
- Design/Construction
- Measurement
- Maintenance

Slide 7: Summary of Feedback from Disabilities Issues Committee (2013)

On September 26th, 2013, Janet Lo, Pedestrian Projects in Transportation Services Presented to the Disabilities Issues Committee the groundwork for the development of Toronto's Complete Streets Guidelines by showing Council's 2013 direction (PW22.10 – 'Report Back with an Approach to developing Guidelines'), giving examples of various other Guides from cities in North America, and an overview project's stakeholders and work plan.

Summary of Feedback from Disability Issues Committee

- General and positive interest in the project and approach
- Would like persons with disabilities recognized in the principles

- that people with disabilities are included in the "vulnerable users" category to ensure safety
- Would like to see pedestrians and people with disabilities prioritized above other users
- Would like to be informed about the process through a report back during development
- Various other feedback related to specific street elements including: construction work zones, sidewalks, obstructions, parking, accommodating Wheeltrans and drop-offs

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Slide 8: Who is Involved in Creating Streets?

Streets are complex and require the cooperation and coordination with many public and private agencies and stakeholders

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Slide 9: Council Direction 2013

Council adopted a motion in 2014 (PW30.1) to develop the Complete Street Guidelines. Council adopted a motion in 2013 (PW25.7 (4)) to develop the Green Street Technical Guidelines which are concurrently being prepared and will relate to the Complete Streets effort.

May 6, 2014: Adopted Motion PW30.1
"City Council direct the General Manager, Transportation Services, together with the Chief Planner and Executive Director, City Planning, to develop Complete Streets Guidelines…"

October 8, 2013: Adopted Motion PW25.7(4)
"…Toronto Water, Transportation Services, Engineering and Construction Services City Planning to develop "green infrastructure" standards for the public right-of-way…"

Slide 10: Safety is the Primary Objective

Above all others, Safety is the Primary Objective. Some users are better protected than others, and soft bodies are the most vulnerable. When we think of safety we need to consider all users. Life should not be the cost for moving in our city.

Slide 11: Some Users are Better Protected Than Others

It is simple to understand that when a person on foot or bike is struck by a vehicle, the chances of serious injury increase with higher speeds. Far more effort has gone into improving the safety of drivers with substantial gains, but the same effort has not happened for other users.

Slide 12: Soft Bodies are More Vulnerable

When we think of safety we need to consider all users. Life should not be the cost for moving in our city.

Slide 13: What is the Toronto Complete Streets Guide?

The Toronto Complete Streets Guide is a holistic approach for how we design Toronto's streets. It will build upon the best practices from other places (and Toronto) and many of the city's existing policies, guidelines, and recent successful street design and construction projects. Overall, the guide will improve decision making.

Slide 14: Guiding Principles

Established through external and internal engagement, the guiding principles for the complete streets guide are organized under three main categories: Streets for People, Streets as Places and Streets for Prosperity.

Improving safety and accessibility is the primary principle.

Streets For People
Improve Safety & Accessibility
Give People Mobility Choices
Make Connected Networks
Promote Healthy & Active Living

Streets As Places
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

Slide 15: Best Practices: What A Good Guide Should Include

To understand what has been done previously, we reviewed a number of guides from other places. Most have common components, where the best of the best address issues in greater detail that we see as more important for Toronto.

In short, a good guide doesn't start from scratch and is tailored to existing processes. It is not a prescription but rather helps the user to make decisions. It is written by those whose who plan, design and build streets. A key aspect of a good guide is that it defines a process from reviewing projects for their completeness to ensure that streets comply with the guidelines.

Qualities of a Good Guide

- Clear intentions
- Process for review and compliance
- Tailored to existing processes
- rarely revisits outdated policies, guides and practices
- decision-points and outcomes, not prescriptions
- written by and for practitioners
- research, experimentation, data, review
- training, outreach, pilots, updates
- more than traditional planner-engineer
- understands that streets are not highways
- is graphically rich, augmented by text
- knows the audience and type of document up front

Slide 16: Toronto Complete Streets Guide - Table of Contents

Following from our Best Practices Review, the Guide is organized into seven chapters.

- Introduction
- Vision and Goals
- Street Types
- Steps to Designing Streets
- Design Guidance by Street Section
- Making It Happen/Implementation
- Performance Measures

The first part of the guide we are writing to serve a broad audience and be more public facing. The subject matter for the second part is more technical in nature and directed more towards the practitioner.

Slide 17: The Guide Will Apply to All Toronto Street Projects

In Toronto there are many different types of street projects ranging from studies and local improvements to full reconstruction. The Guide will apply and guide decisions for every type of project.

Slide 18: The Guide Will Apply to All Toronto Street Projects but It Won't Make New Projects or Changed Approved Projects

One common question from the public and elected officials was if the Guide will lead to new projects or change projects that have received approvals and funding or are under construction. The short answer is no, it will not. The Guide will inform all new street projects, no matter the type of project.

Slide 19: Making Decisions – When Everyone Gets Their Space

To make decisions about streets is easier when we have enough space to accommodate the optimal needs of all users. However, in Toronto we often do not have enough space to achieve complete balance. Evaluating trade-offs is a common transportation practice, especially in cities with restricted right-of-ways.

The goals of different street users often stand at odds. Bicyclists come into conflict with unloading trucks, pedestrians vie with cars for crossing time at congested intersections, and emergency vehicle response times counter the desires of a community for slow traffic speeds and speed humps. Urban street design must strive to balance these goals, making strategic trade-offs in search of a win-win scenario.

Slide 20: Making Decisions – Our Common Reality – What To Do With Limited Space?

In Toronto, like most other cities, we do not often have the luxury of too much space. When faced with many competing interests for limited space the difficult conversation then begins. The Complete Streets Guide will help to inform the decision.

Slide 21: Title Slide - A New Approach to Street Design

Slides 22 to 26: Street Design is Not Plumbing

The way that we have designed our city streets for the past century is similar to that of plumbing: big pipe, medium pipe, small pipe. This approach has not served us well. Our streets are more than conduits for moving a single user. In an ideal condition this approach appears as though it can work, but as more and more vehicles make use of a limited and narrow transportation system it can lead to frustration and anxiety. We can do better.

Slide 23

The highway approach to road and street design demonstrated in less intense settings is what many think is the ideal condition with free flowing traffic and little congestion.

Slide 24

On limited access highways with higher volumes of traffic, they can still flow but are entirely motor vehicle based.

Slide 25

Applied to a complex urban setting, this approach does translate well.

Slide 26

Designing our cities to support one way of moving over all others can lead to increased congestion, frustration and anger.

Slides 27 and 28: Road vs Street, TO Place vs THROUGH Place

Central to thinking of streets in a complete way is understanding the distinction between roads and streets. Roads connect places, streets are places.

Streets can be places that you go to and want to spend time. They can also be places that you move through.

Slide 28: To Place and Through Place

Streets--like St. George--are places that you want to go TO; Streets—like Lakeshore Boulevard—are places that you move THROUGH.

Slide 29: Link and Place Model

The model we find useful to describe a new approach to the design of streets is Link and Place. This model defines the dual function of streets as links and places, shifting from a road based approach to a street based approach. This model can inform many different aspects of street planning and design.

The Link and Place Model is best illustrated as a matrix with Place along one axis and Link along the other. Streets can have high to low status within either category.

Slide 30: Link and Place Model

Along one axis is the Place Status, the content within which the street exists, the land use and/or character.

Along the other axis is the Link status, the transportation role of the street. This can defined by the volume of users, intensity of use, and/or modal priorities.

The result of thinking about streets using this model is context sensitive street design.

Slide 31: Link (Functional Classification Only)

When we consider streets by their link status only, this results in only a few types of streets that are defined by their functional role only. This is how the current Road Classification System used by many jurisdictions defines streets resulting in 5 street types (Major Arterial, Minor Arterial, Collector, Local, and Lane).

Slide 32: Applying Link and Place Model to Toronto

When we consider both link and place, the result is a more robust system that defines 15 different street types. Each street type is characterized by its functional role within the city alongside its civic importance, intensity of uses, land use and built form character, and the transportation role the street plays for all users.

Slide 33: Example of Thinking as Streets as both Links and Places

A recent project on Dufferin Street in North York is a good example of how when we change our approach from link to link and place can lead to more complete streets.

Dufferin Street evolved from a rural concession road, with little development and agricultural fields. Dufferin at this time was designed to support its link role only.

Slide 34: Example of Thinking as Streets as a Link Alone

Dufferin Street: Existing. An urbanized arterial, where the needs of motor vehicles were considered above all other users. The built form and land use along this corridor reflected this emphasis.

Slides 35: Example of Thinking as Streets as both Links and Places

Dufferin Street - Aspiration. As part of a comprehensive redevelopment study, the street changed to reflect the anticipated change to context, from an auto dominated road to a multi-modal place that can support higher pedestrian and cycling movement and transit usage.

Slide 36: Toronto Street Types

We have defined 15 different street types for Toronto. These street types are useful as a tool to provide guidance during street visioning and design stages. They move the conversation beyond the functional role alone to define what Toronto streets should be. The street types are aspirational and will inform priorities during the street planning and design process.

Civic Street
Main Street
- Core and Centres
- Avenues and Neighbourhood

Connector
- Mixed Use
- Residential

Residential Street
- High Density
- Moderate Density
- Low Density

Mixed-Use Access Street
Employment Street
Scenic Street
Park Street
Lanes
- Mixed Use
- Residential

Slides 37 to 39: Samples of How We Will Illustrate the Street Types within the Guide

The street types are meant to illustrate what we want the streets to become in Toronto, what we aspire to, they are not meant to illustrate the existing condition.

The following slides illustrate what an aspirational complete street could look like.

This first slide illustrates a Shared Street similar to Market Street in St. Lawrence Market. This special type of street is designed so that all users are moving at the speed of the pedestrian. The qualities that exemplify this street type are a shared pavement surface without curbs,

tactile paving to delineate the portions of the street with and without vehicles, bollards, tree planting, and sufficient space for outdoor seating and displays.

Slide 38: Street Type Sample – Residential Street – Moderate Density

The qualities that exemplify this street type are sufficient sidewalks on both sides, bike facilities (in this case as part of a planned network), storm water collection, traffic calming, and street tree planting.

Slide 39: Street Type Sample – Main Street – Neighbourhood and Avenues

The qualities that exemplify this street type are generous sidewalks on both sides, bike facilities, transit facilities, sufficient space for outdoor seating and displays, street furniture, and street tree planting.

Slide 40: Title Slide – Part 3: Making Decisions

Slide 41: Design Priorities and Decision Making – Key Considerations

The guide will provide direction and instruction to help make decisions. Again, the guide is not prescriptive so it won't tell one what to do, but provide guidance to help inform the decision maker. We have defined a number of factors that the planners and designers of streets must consider.

First and foremost is safety. This will include thinking about and prioritizing the most vulnerable user (the soft bodies); speed, exposure risk, predictability; and self-regulation design.

Other considerations include thinking about streets as part of an overall network, placemaking, sustainability and live-cycle considerations.

Slide 42: Street Elements

The guide will also include as reference material a discussion of the many elements collectively work together to make a street.

The chapter related to street elements is organized by five main sections:

- Sidewalks
- Roadways
- Intersections
- Materials
- Operations

Subjects specifically related to accessibility are include under the discussion of:

- sidewalks (clearways, sidewalk slope, driveway crossings, and transit ramps)
- intersections (safety issues, user experience and crosswalks)
- materials (robustness of materials, surface materials and paint)
- operations (pedestrian signals)

Slides 43: Overview, Compliance and Accountability

An important aspect of the guide is to define an overview and compliance process that everyone understands will take place for each and every street project, leading to greater accountability for the decisions that are made.

This step will:

- Ensure that projects are complete, as per the TCSG
- Daylight decisions - shed light on decisions that are made deep within the process
- Set performance-based expectations, as opposed to minimum standards
- Document decisions transparently - this (hopefully) will settle internal arguments and allow projects to proceed

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Slide 44: Thank You. The End. Final Slide