

VAUGHAN COMPLETE STREETS GUIDE

Stakeholder Meeting 01

DTAH, Traffic Calmer, HDR, LURA
June 07, 2022





Land Acknowledgment

We respectfully acknowledge that the City of Vaughan is situated in the Territory and Treaty 13 lands of the Mississaugas of the Credit First Nation. We also recognize the traditional territory of the Huron-Wendat and the Haudenosaunee. The City of Vaughan is currently home to many First Nations, Métis and Inuit people today. As representatives of the people of the City of Vaughan, we are grateful to have the opportunity to work and live in this territory.

Agenda

Housekeeping	LURA	02min
Opening Remarks	City/LURA	08min
Presentation	DTAH	25min
Questions	LURA	15min
Discussion	All	25min
Next Steps	DTAH	05min



Project Team Introductions

Poll Question #1

What sector are you representing today?

- a. Community member
- b. Private planners/developers
- c. Business
- d. Government/public agency
- e. Other



Background and Introduction

What Are Complete Streets?

A Complete Street is designed for all ages, abilities, and modes of travel.

Safe and comfortable access for pedestrians, bicycles, transit users and people with disabilities is not an afterthought, but an integral planning feature.

Ensures that transportation planners and engineers consistently design and operate the entire street network for all road users, not only motorists.

www.completestreetsforcanada.ca

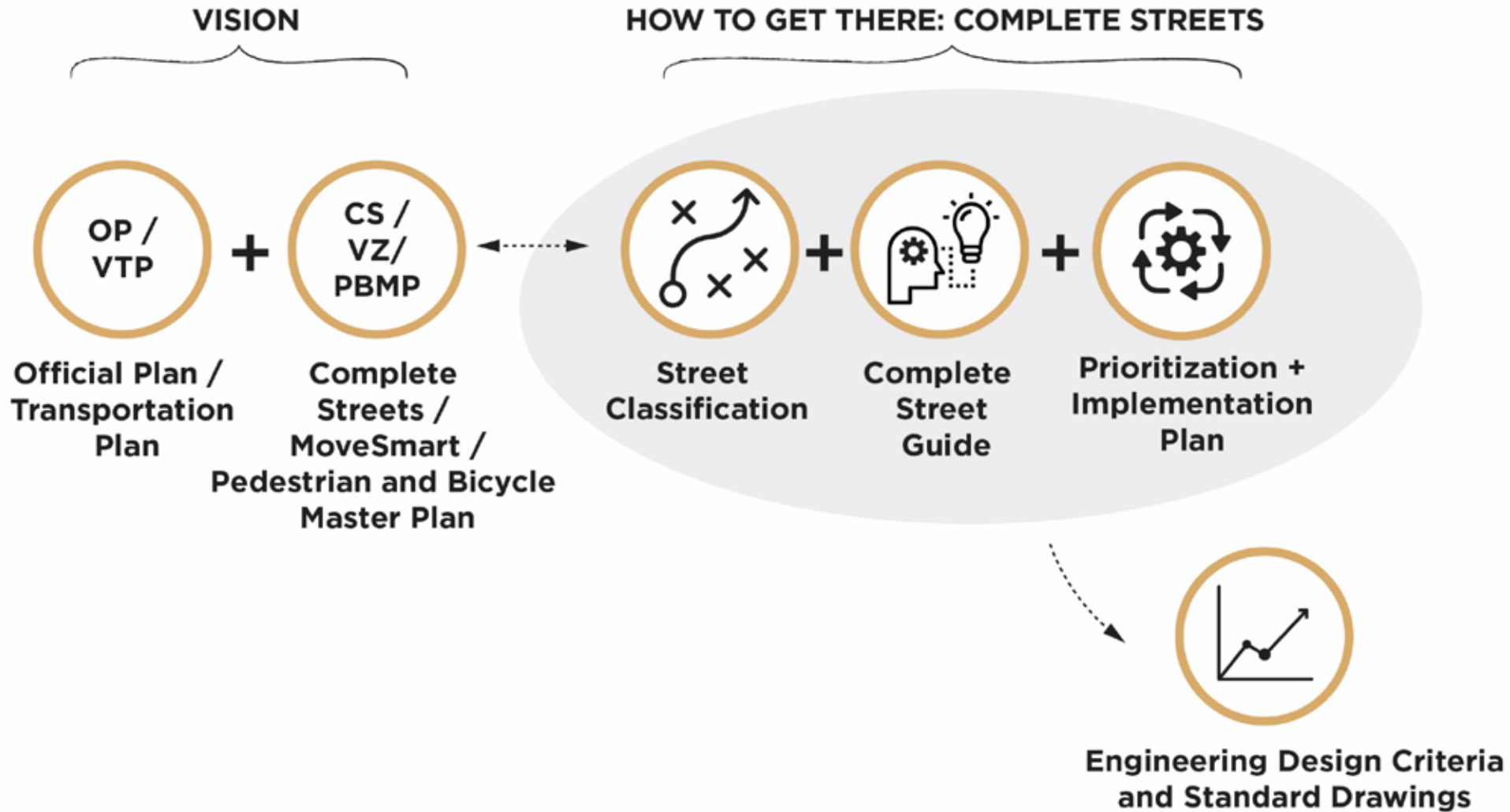


Benefits Of Complete Streets

- Improved safety
- Stronger place making
- Social benefits
- Environmental benefits
- Expanded mobility options
- Reduced infrastructure costs
- A more attractive and livable public realm



How to Get There: This Guide



Process



Goals and Objectives



Engagement

- City of Vaughan**
- Development Planning (Urban Design Division)
- Policy Planning and Special Programs
- Infrastructure Planning and
- Corporate Asset Management
- Development Engineering
- Transportation and
- Fleet Management Services
- Parks, Forestry and Horticulture Operations
- Environmental Services
- VMC Program
- Infrastructure Planning and Delivery
- Others

- York Region**
- Planning and Economic Development
- Transportation Services
- Others

- External**
- TTC/Viva/Metrolinx/YRT/TRCA/
- Utility Providers



- Urban Design
- Infrastructure Planning & Engineering
- Transportation Planning & Engineering
- VMC Program
- Infrastructure Delivery

- Residents/Ratepayers' Groups and BIAs
- Complete Streets/Transportation Advocates
- Local Developers and Homebuilders
- Regional and Agency Staff (others to be identified in partnership with the City's project team)

- Residents of Vaughan
- Workers in Vaughan
- Visitors to Vaughan

- Neighbouring municipalities:
- Markham
- Richmond Hill
- Toronto
- Brampton

Poll Question #2

1. In your experience, what are the top three challenges/barriers to making streets work for all users?
 - a. ROW too narrow or large
 - b. Streetscape design (e.g., landscaping, street furniture, street trees)
 - c. Pedestrian comfort and experience (e.g., crosswalk placement, sidewalk width,)
 - d. Inconsistent/disconnected street features (sidewalk ends, different cycling facilities, poor infrastructure placement)
 - e. Operations and maintenance
 - f. Political / legislative / public support
 - g. Traffic congestion
 - h. Other



What We've Heard – Core Team Meeting 01

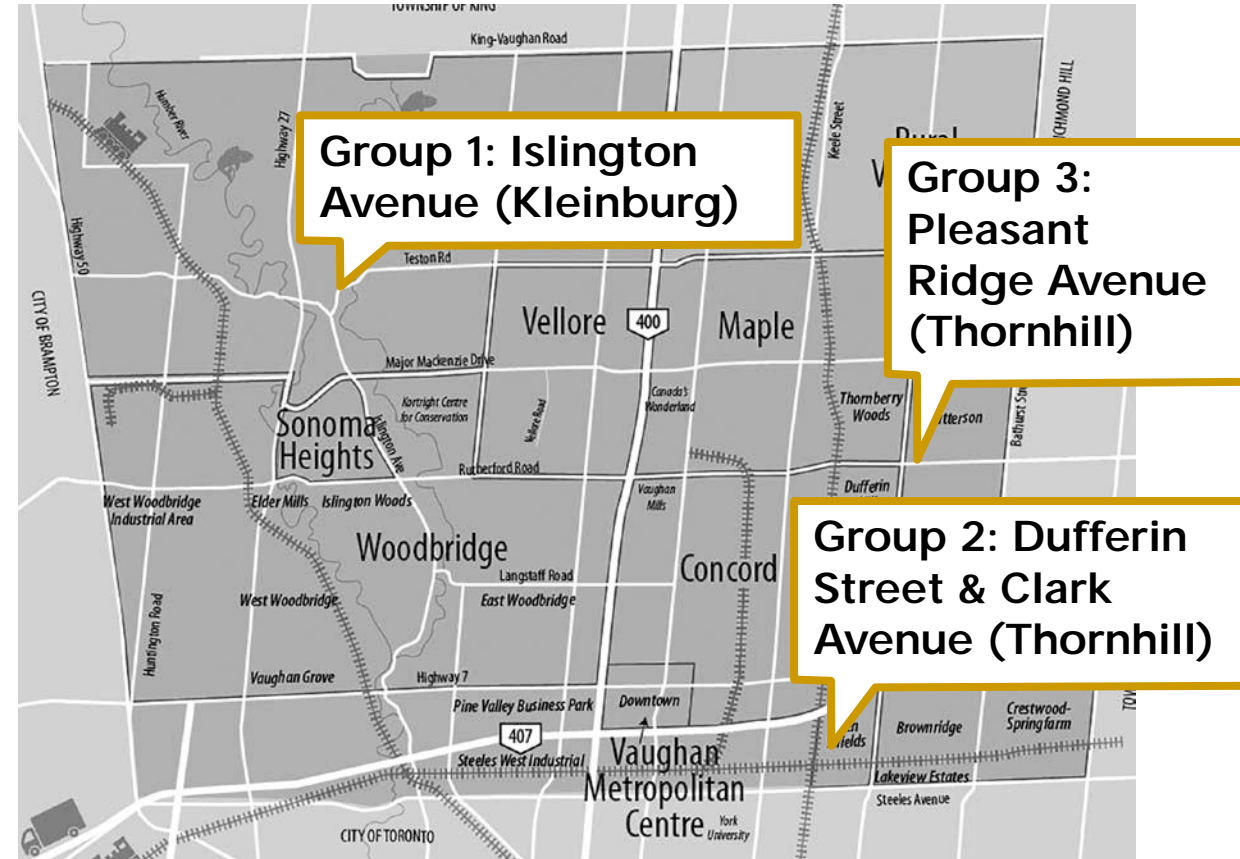
(December 8, 2021)

- One size doesn't fit all. The Guide needs to address Vaughan's varied street context.
- Providing safe streets is paramount.
- A Complete Street does not always include every element or every user.
- Challenges in determining and assessing trade-offs during street design.
 - E.g. trees, utilities, intersections, cycle infrastructure.

What We've Heard – Technical Advisory Committee #1

(March 23, 2022)

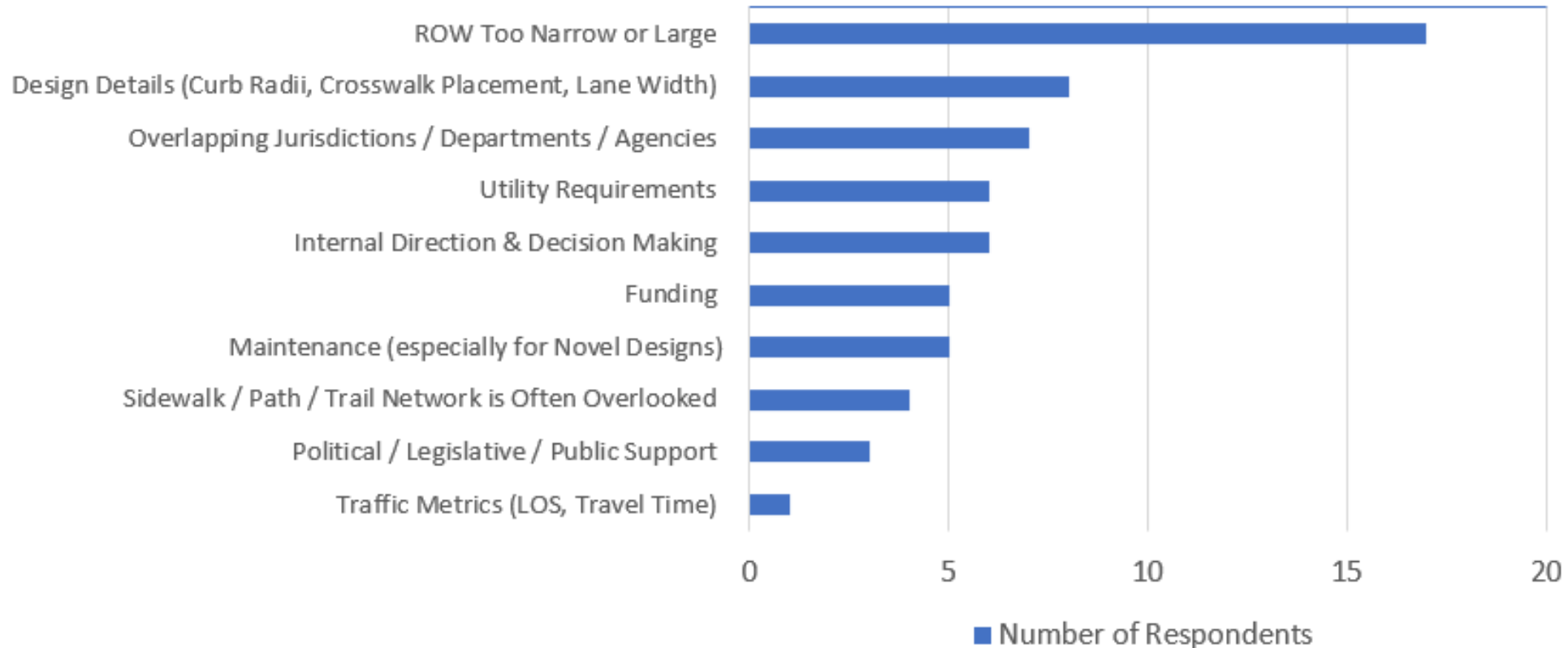
- Challenges balancing the needs and requirements of users and uses.
- Context is essential in informing design priorities.
- Challenges fitting all the elements, once setbacks are considered.



What We've Heard – Technical Advisory Committee #1

(March 23, 2022)

Poll: In your role, what do you see as the biggest barrier or challenge to Complete Streets implementation?



Process vs. Product

Complete Streets **AS A PROCESS**

Brings a holistic lens
to the street design process

Integrates multiple points of view
within the street design process

Helps prioritize the many demands
placed upon Vaughan's streets

Integrates social, economic and environmental priorities
within the street design process

Identifies ways to reallocate public rights-of-way
for a wide range of different modes and uses

Complete Streets **AS A PRODUCT**

Creates a safe environment
that offers improved mobility options for all users, especially people whose needs have not been met through a traditional transportation approach

Helps create complete communities

Provides opportunities for improved health and recreation

Promotes economic well-being

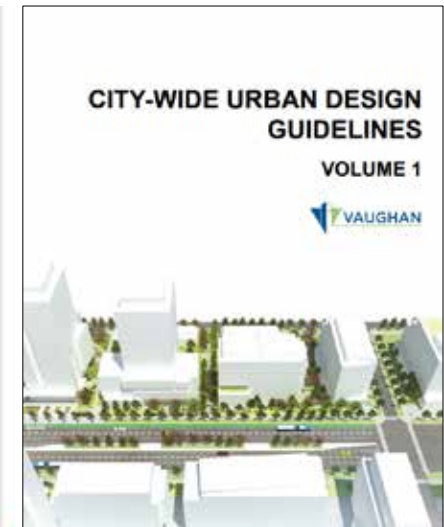
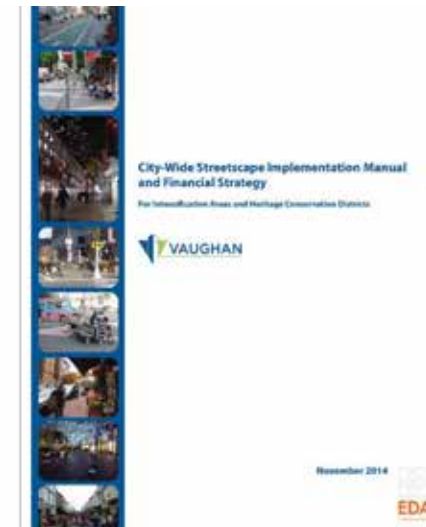
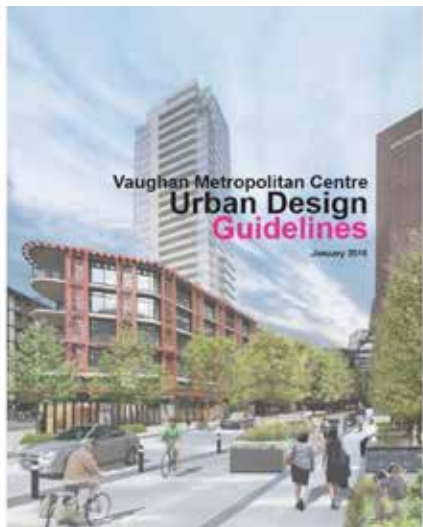
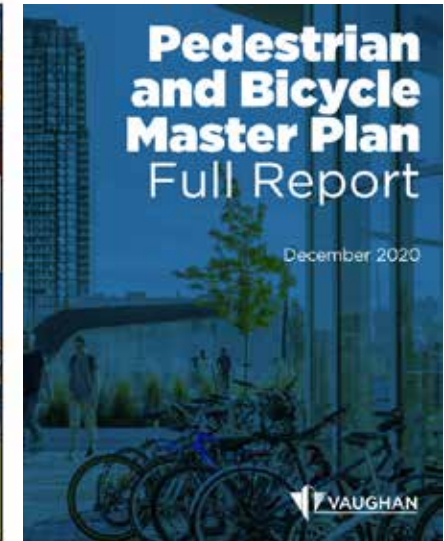
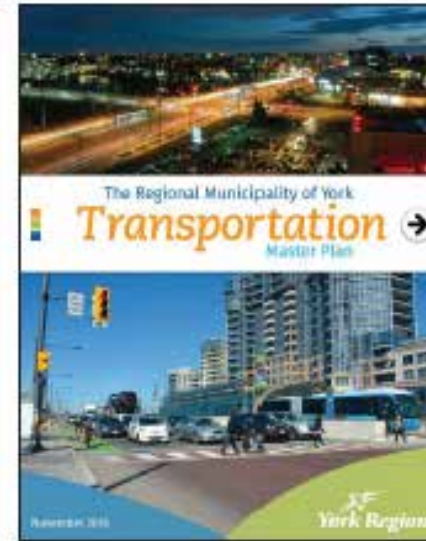
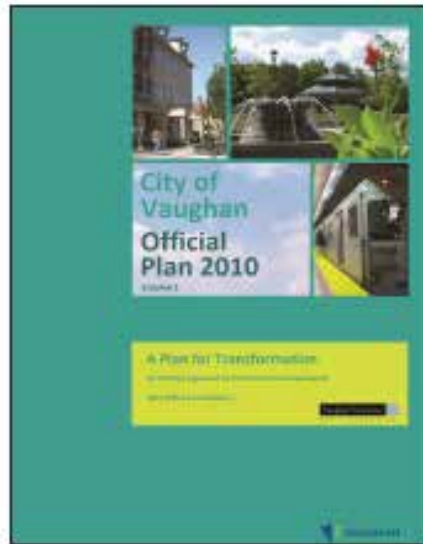
Each Complete Street is unique
and there is no one solution that fits all streets

Creates a public space
within the street

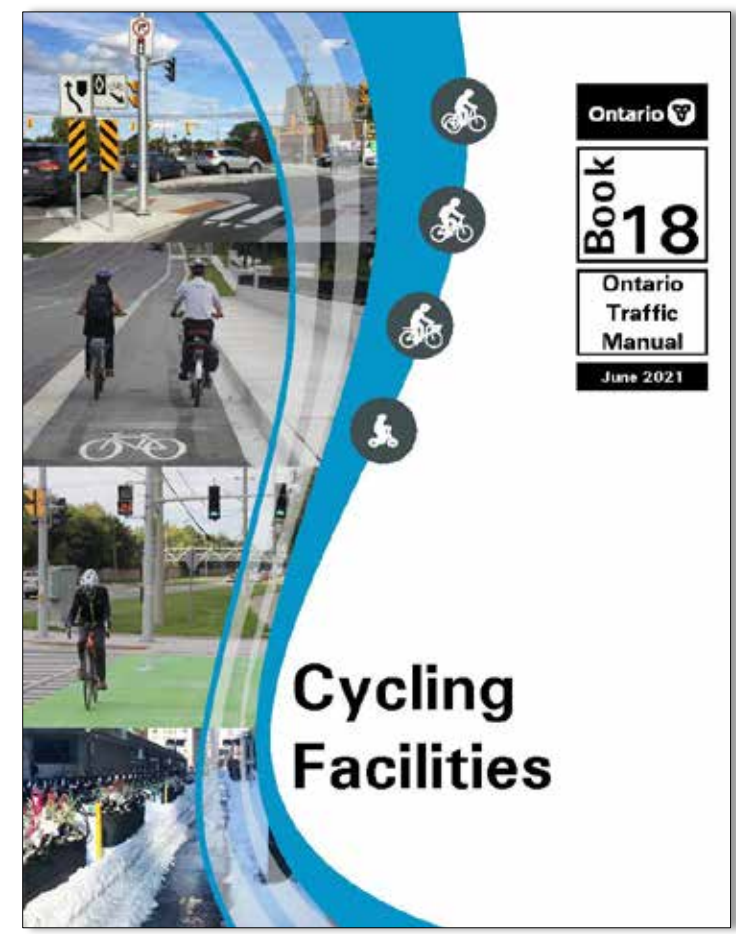
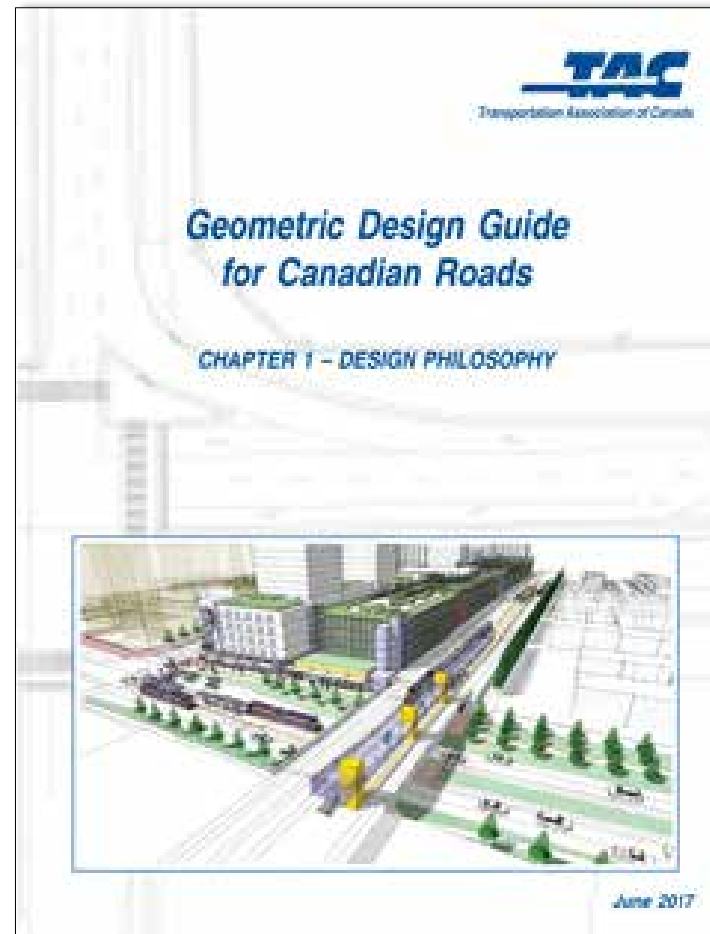
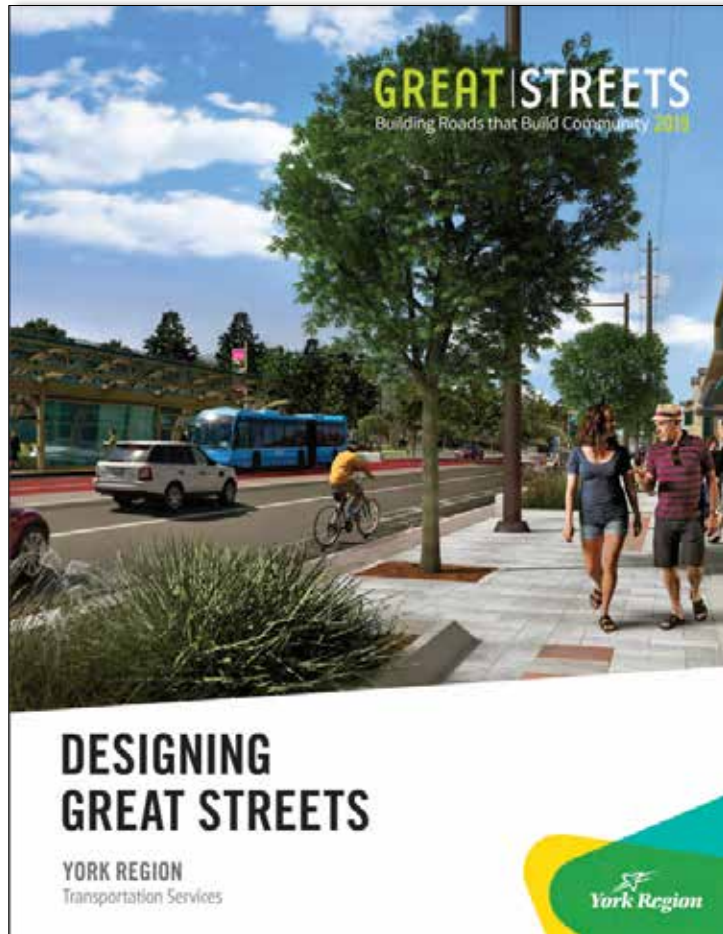
Many Stakeholders and Perspectives



Policy Context



Recent Practices



Draft VTP: Key Objectives from 2012 to Today



Speed



The City of Vaughan is implementing a comprehensive Speed Limit Policy across the city to ensure the safety of all road users and address the growing population. As part of the City's MoveSmart Mobility Management Strategy, the policy will be used as a speed management tool to set and adjust appropriate speed limits throughout the City's street network.

Council approved the policy on June 22, 2021 (PDF), and implementation began in summer 2021. Speed limit changes, including installation of new signage, were completed in school zone areas as of Sept. 8, 2021, and are anticipated to be completed on public laneways by Dec. 15, 2021 and select neighbourhood areas in fall 2022.

School zone areas will change from 50 to 40 kilometres per hour, public laneways will change from 50 to 30 kilometres per hour and select neighbourhood areas will change from 50 to 40 kilometres per hour.

- List of affected streets in school zone areas
- List of affected laneways

Poll Question #3

In your opinion, what is the top benefit of complete streets?

- a. Improved safety
- b. Stronger place making
- c. Social benefits
- d. Environmental benefits
- e. Expanded mobility options
- f. Reduced infrastructure costs
- g. A more attractive and livable public realm
- h. None of the above



Your Street Context



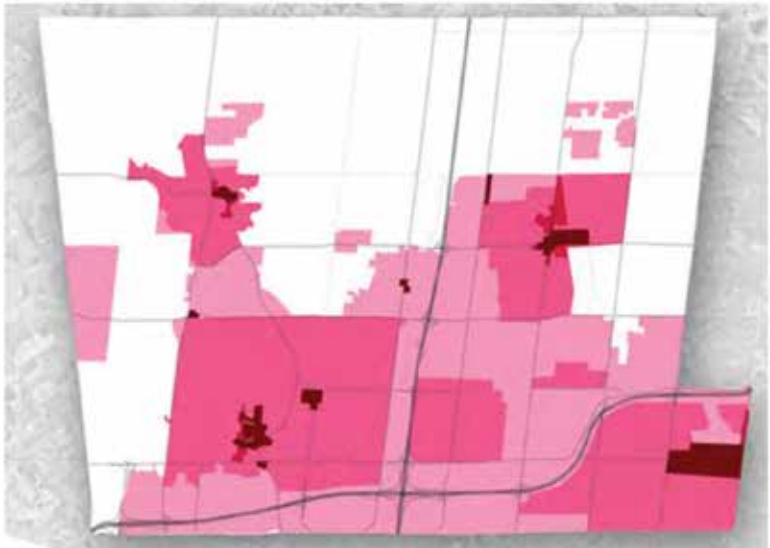
Vaughan Evolution



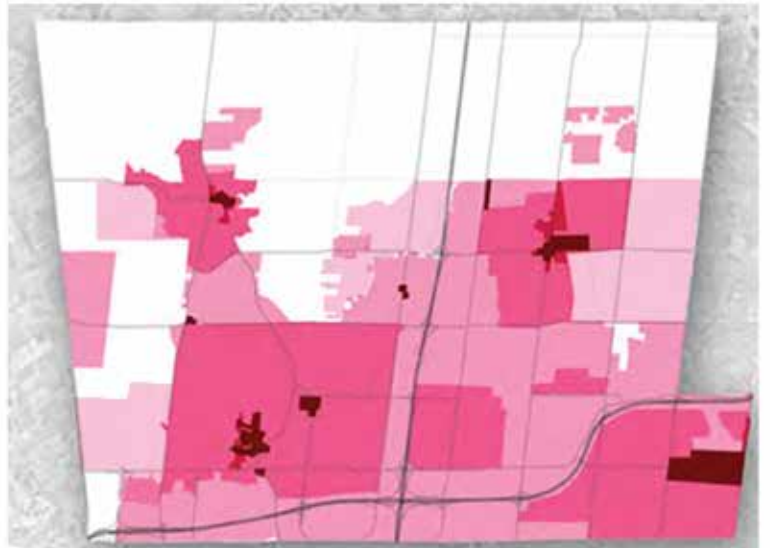
1880



1991



2006

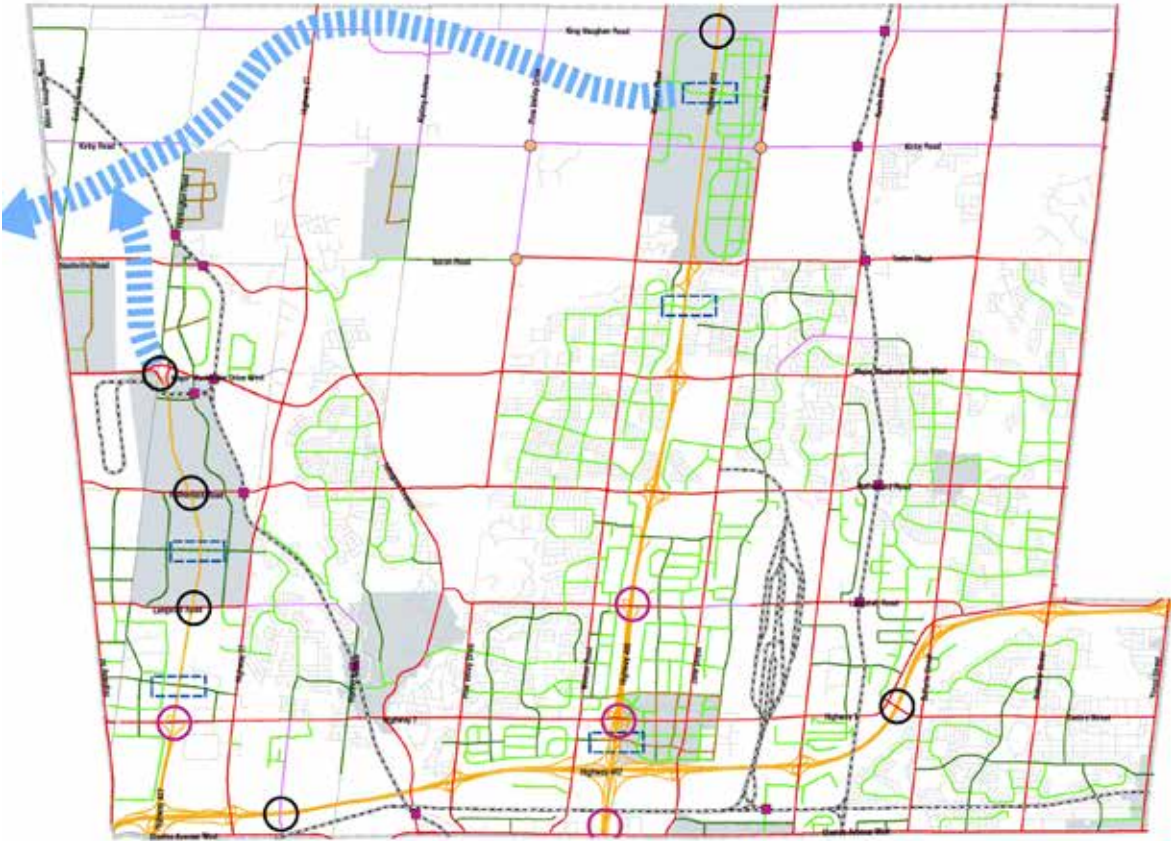


2021

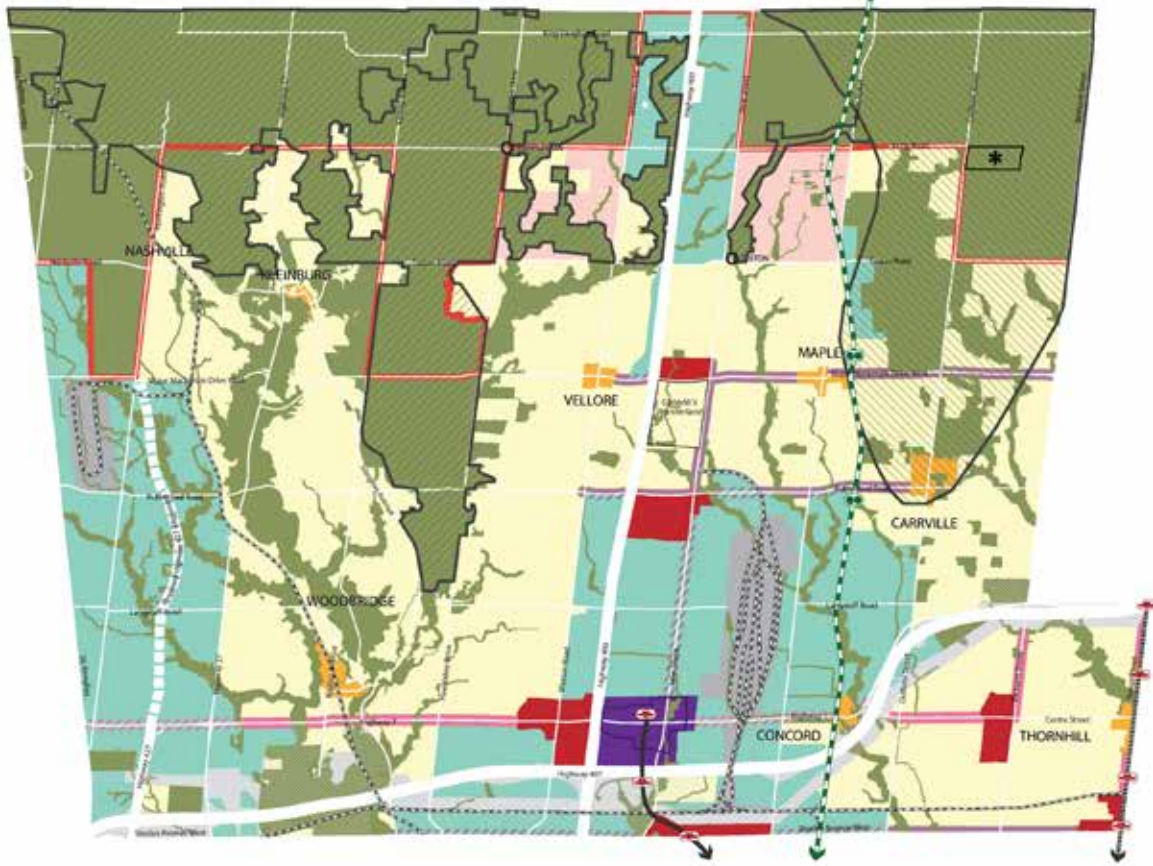
Source:
Vaughan Urban Structure, City of
Vaughan (2008)

Vaughan Future

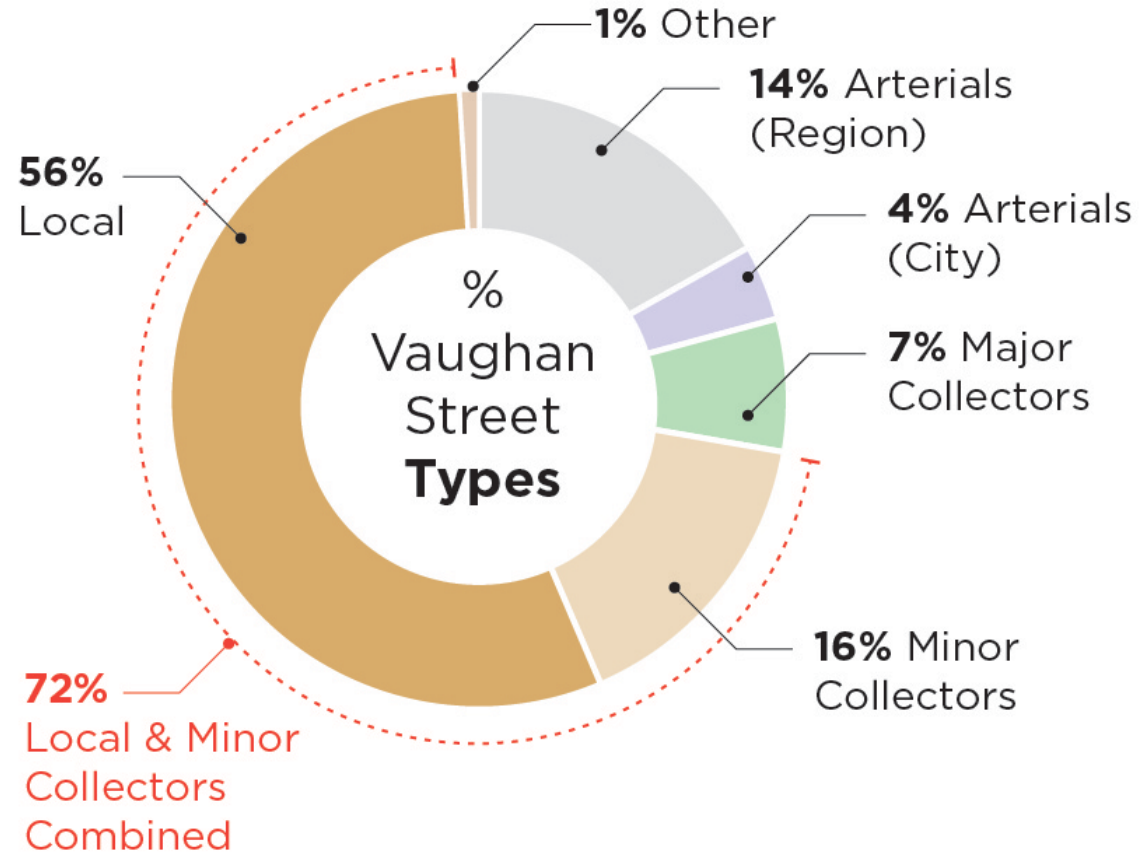
Future Transportation Network



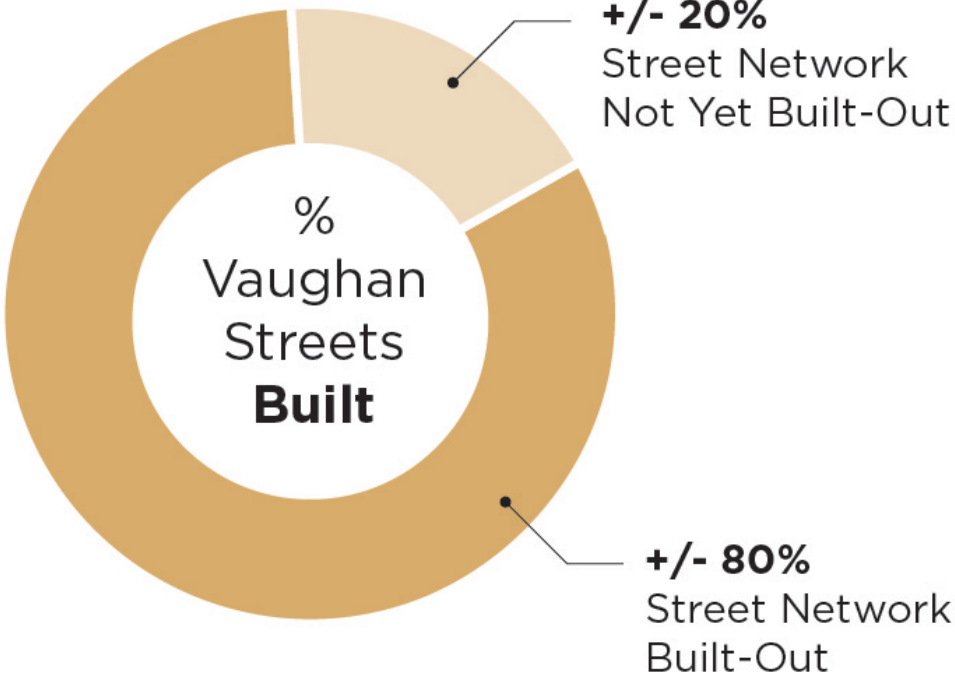
Urban Structure



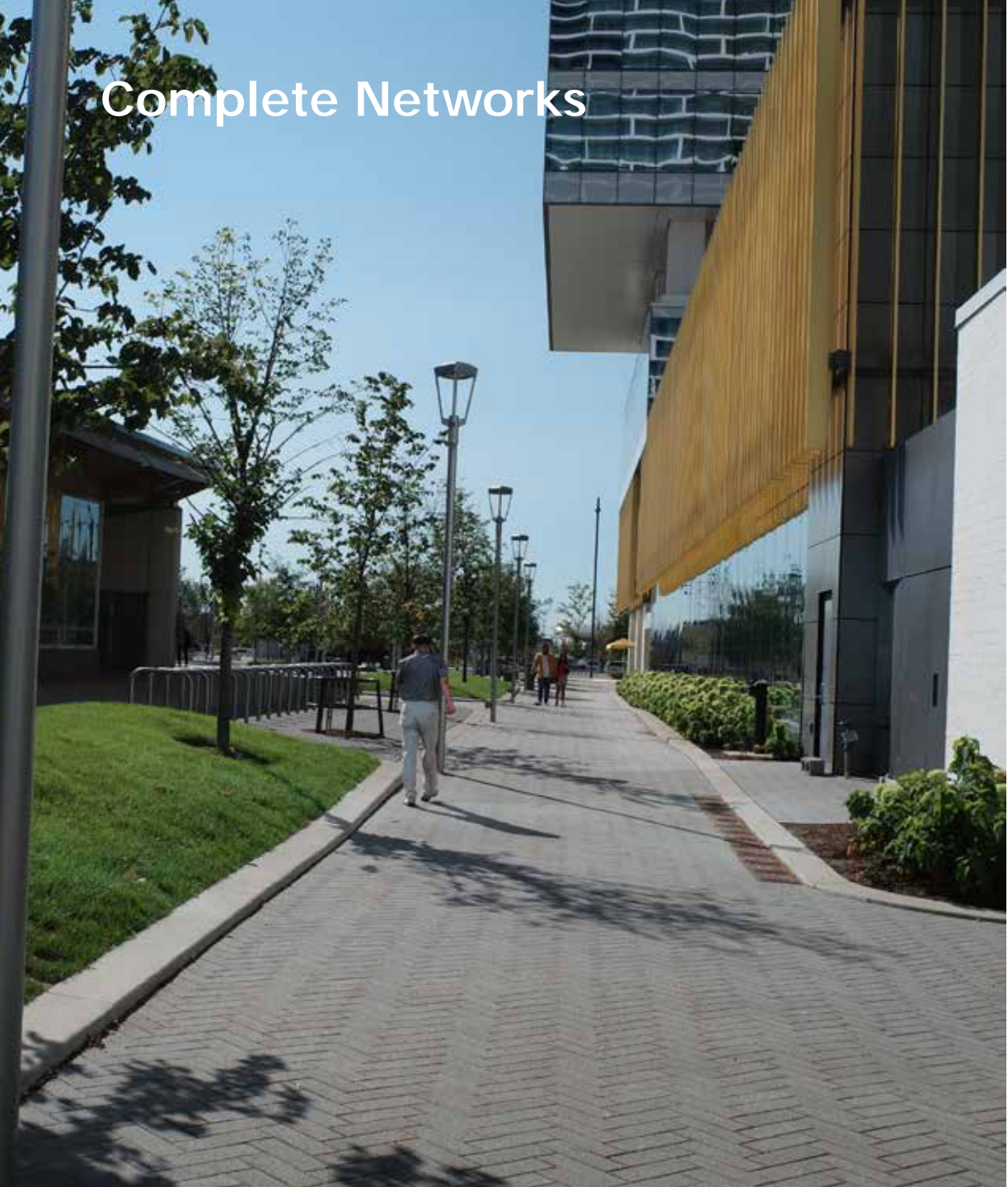
Existing Street Network Composition



Street Network Build-Out ('Guess-timate')



Complete Networks



Varied Land Use Context

Intensification Areas

Regional, Primary & Local Centres;
Regional & Primary Intensification Corridors



Stable Areas

Community Areas, New Community Areas,
Natural and Countryside & Employment



TO place



Kleinburg

THROUGH place



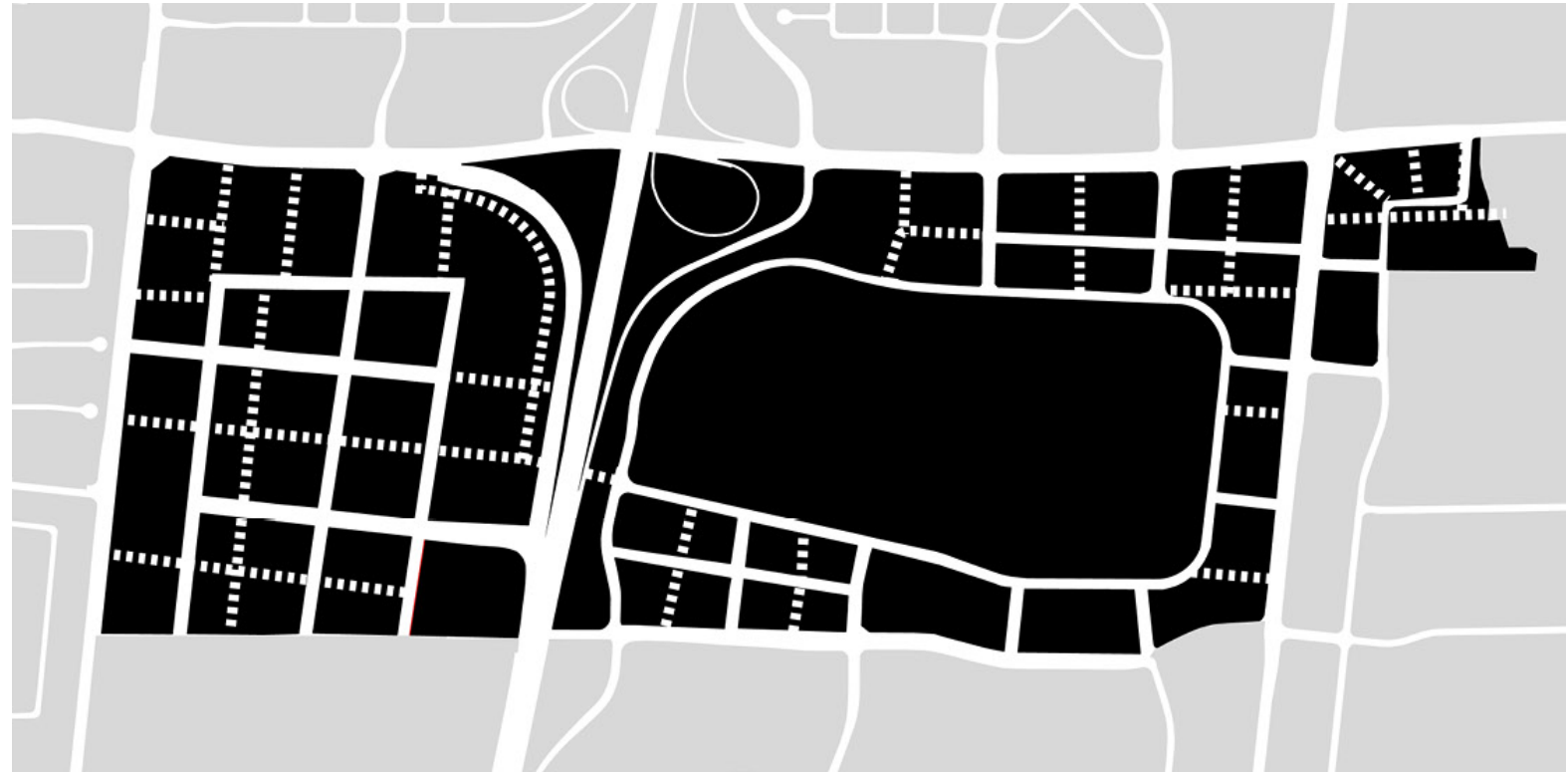
Rutherford Road

Street Patterns in Vaughan

Superblocks
Jersey Creek Neighbourhood



Grid Pattern
Vaughan Mills Centre (Future)



Design for the Most Vulnerable Users



Collisions Resulting in Injuries or Fatalities: 2014-2019

95%

of pedestrian related collisions in Vaughan resulted in someone losing their life or being seriously injured while using streets in the City.

74%

of all collisions in Vaughan happen at intersections or are intersection-related.

Why Safety Over Everything Else?

Safety is the paramount objective of complete streets.

Vulnerable users such as pedestrians and cyclists, especially children, the elderly and people with disabilities, are at greater risk of injury and mortality during a collision than vehicle occupants.



***Half of the people who die on streets are "vulnerable users"**



Pedestrians

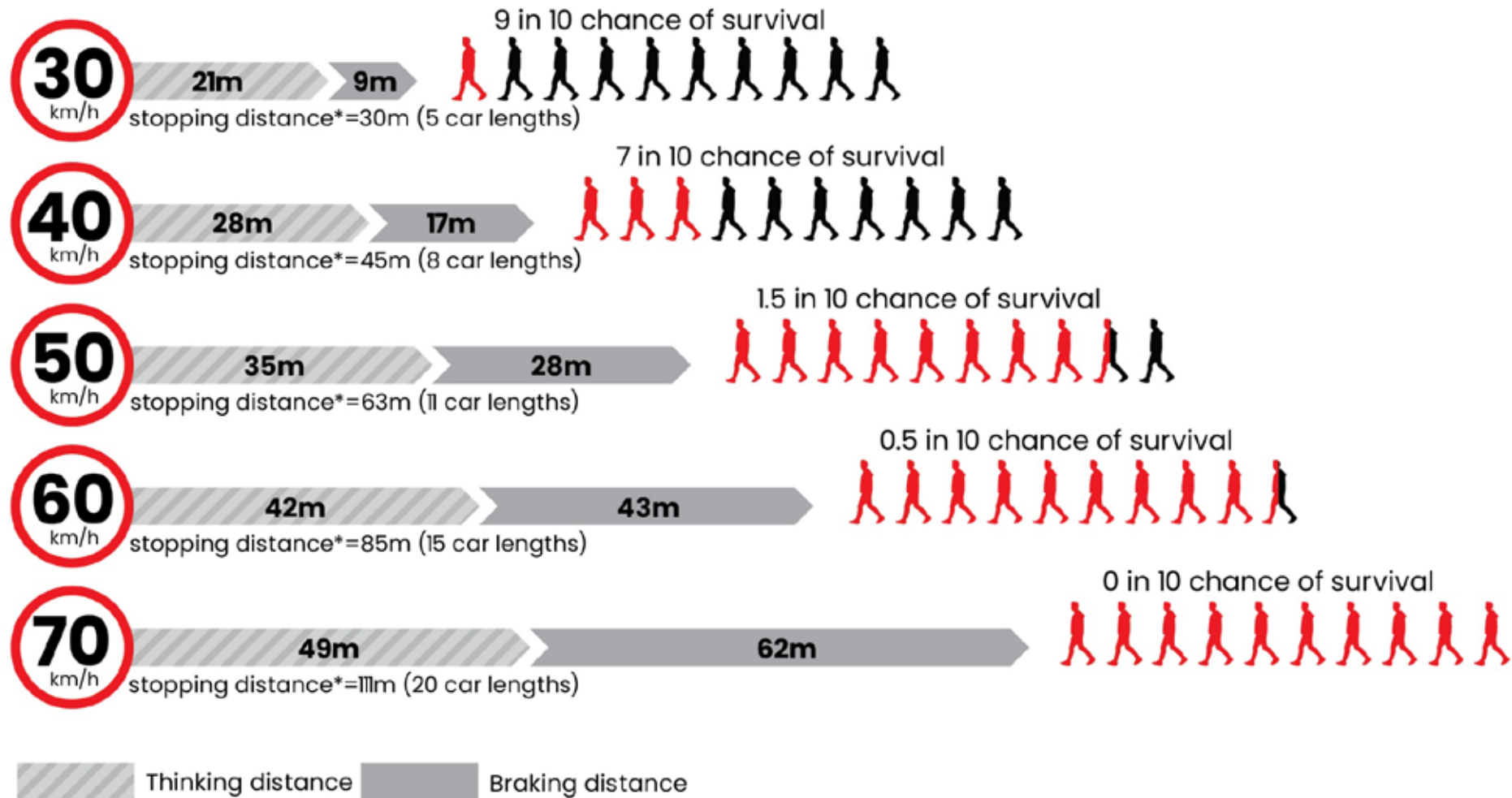


Cyclists



Motorcyclists

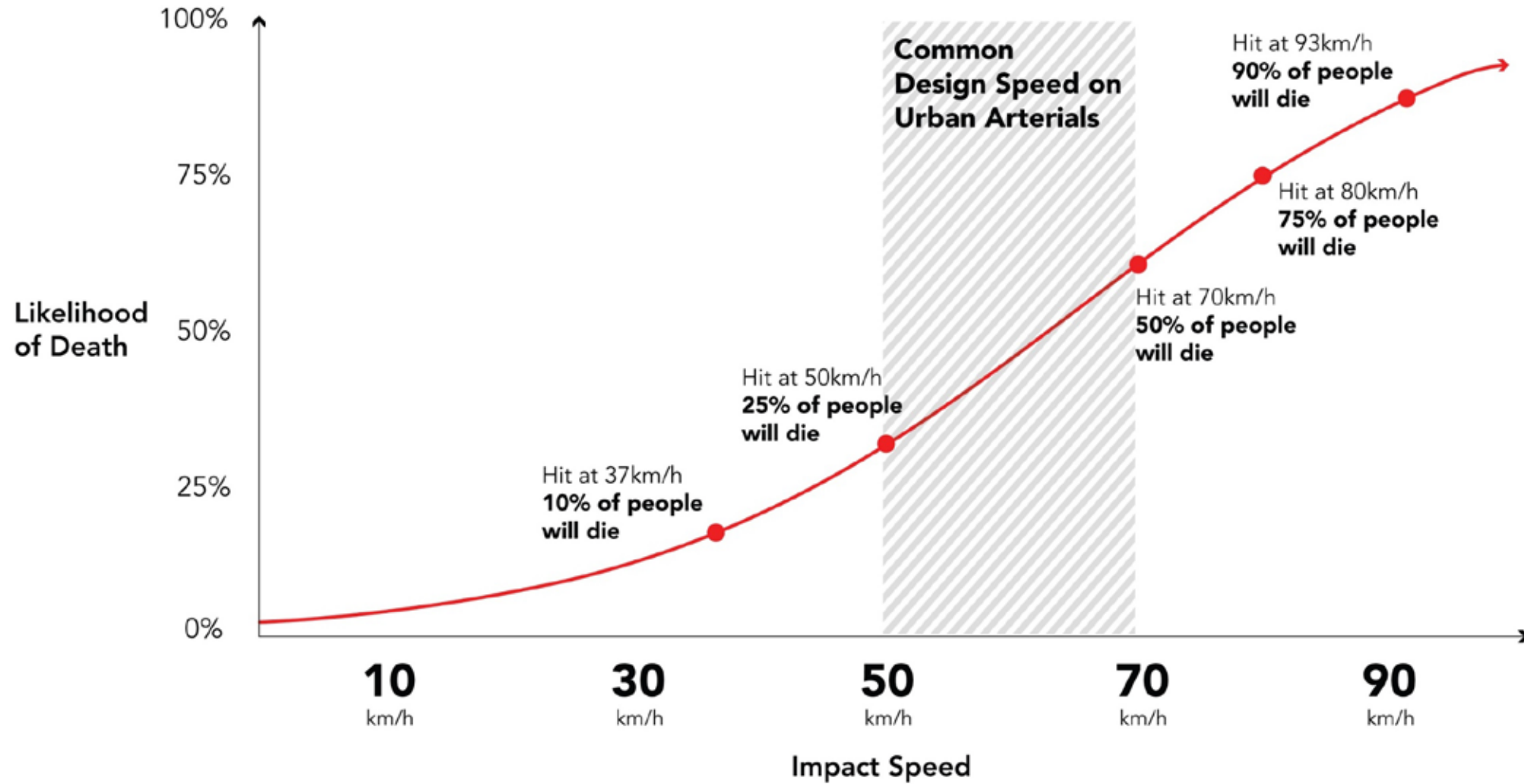
Vehicle Speed, Stopping Distance, and Chance of Survival



*Stopping distances during wet conditions. Single car length=5.6m. Based on a 2.5s reaction time, representing 90th percentile of drivers.

Source: DTAH; Adapted from World Health Organization, 2008. Speed management: a road safety manual for decision-makers and practitioners; Transportation Association of Canada, 2017. Geometric Design Guide for Canadian Roads Figure 2.3.1

“Speed Kills”



source: Tefft, B.C. (2011). Impact Speed and a Pedestrian's Risk of Severe Injury or Death. AAA Foundation for Traffic Safety. adapted from NACTO. DTAH

Target Speed: Conventional to Context Sensitive

CONVENTIONAL



CONTEXT SENSITIVE



Street Classification



Classification: Current Vaughan Official Plan



- City Centre Street
- Avenue
- Main Street
- Connector
- Rural Road
- Rural Hamlet Road



- Arterial
- Major Collector
- Minor Collector
- Local

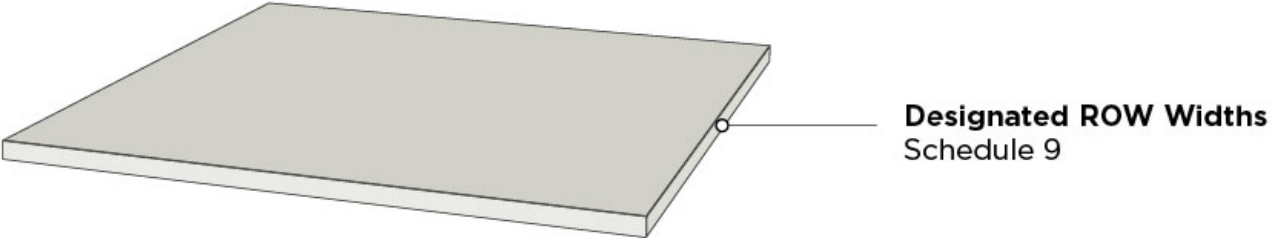


- 15.0m
- 17.5m
- 18.5m
- 20.0m
- 23.0m
- 26.0m
- 30.0m
- 35.0m

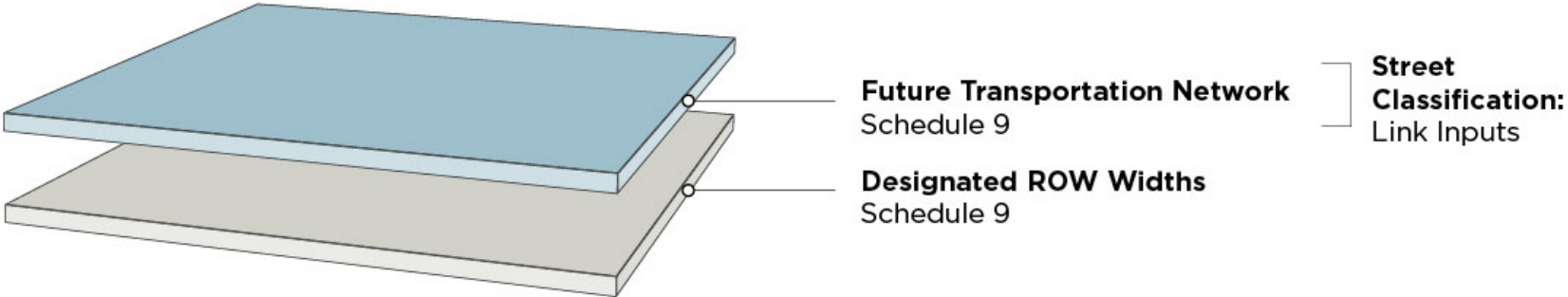
Proposed Classification (Draft VTP)

		Urban Structure →			
		Natural Areas	Community Areas	Employment Areas	Intensification Areas
Functional Classification ↑	Arterial	Arterial – Natural (36 m ROW)	Arterial – Community, Employment, Intensification (36 m ROW)		
	Major Collector	Major Collector – Natural, Community (29 m ROW)	Major Collector – Employment (29 m ROW)	Major Collector – Intensification (29 m ROW)	
	Minor Collector	Minor Collector – Natural, Community (24 m ROW)	Minor Collector – Employment (24 m ROW)	Minor Collector – Intensification (24 m ROW)	
	Local	Local – Natural, Community, Employment (19 m ROW)			Local – Intensification (20.5 m ROW)

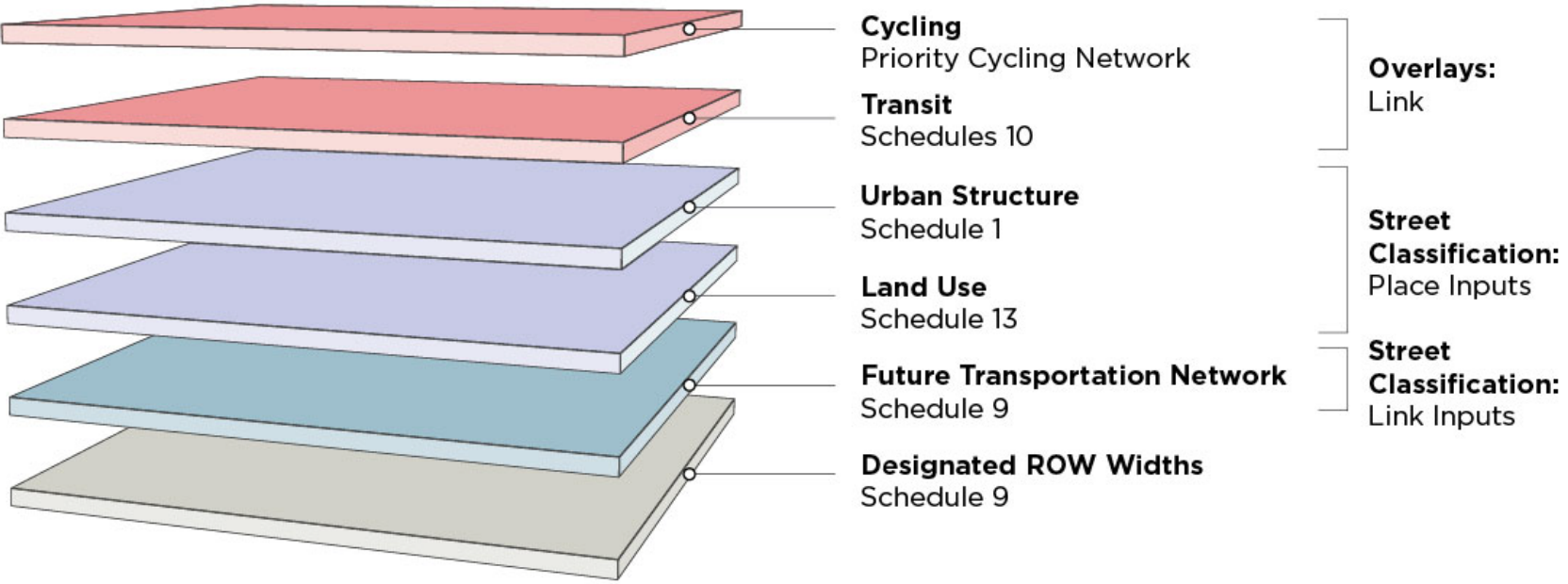
Classification + Overlays= Street Context



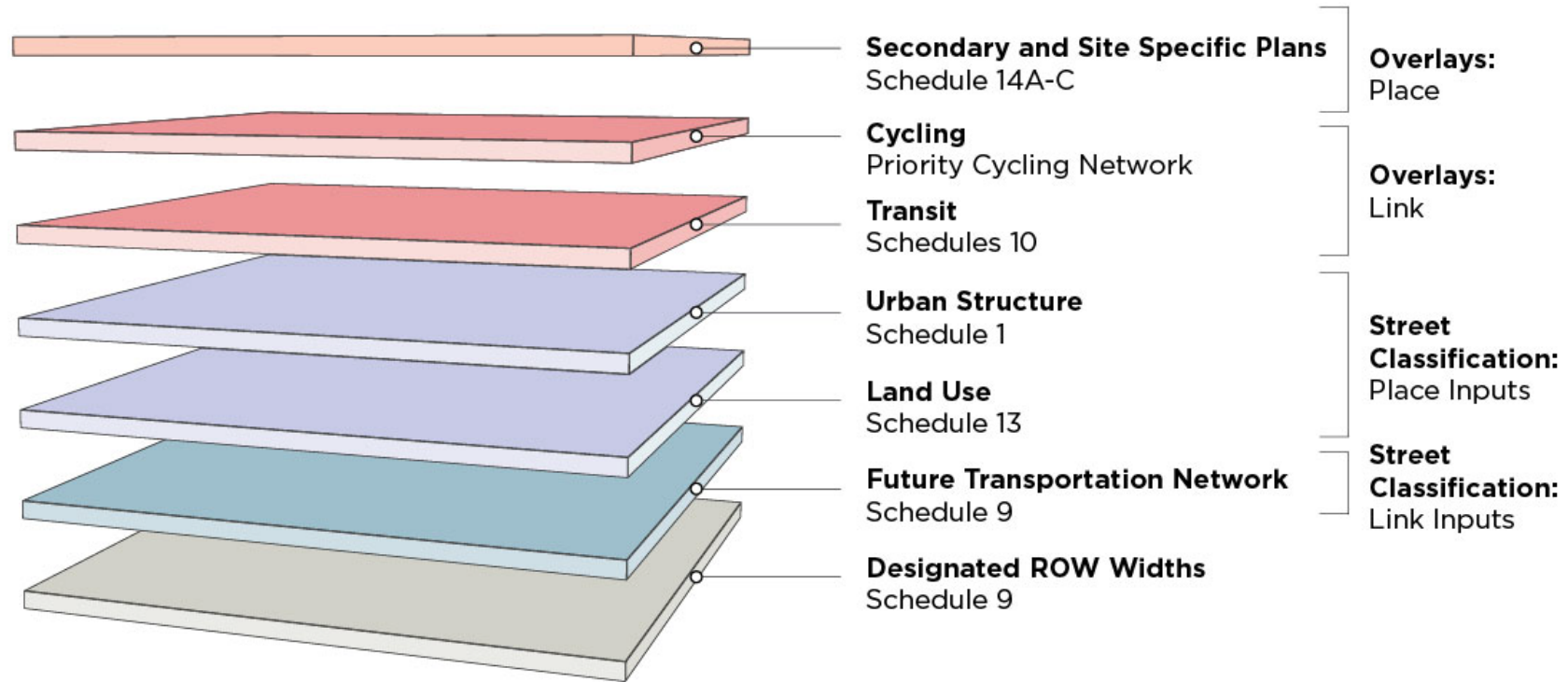
Classification + Overlays = Street Context



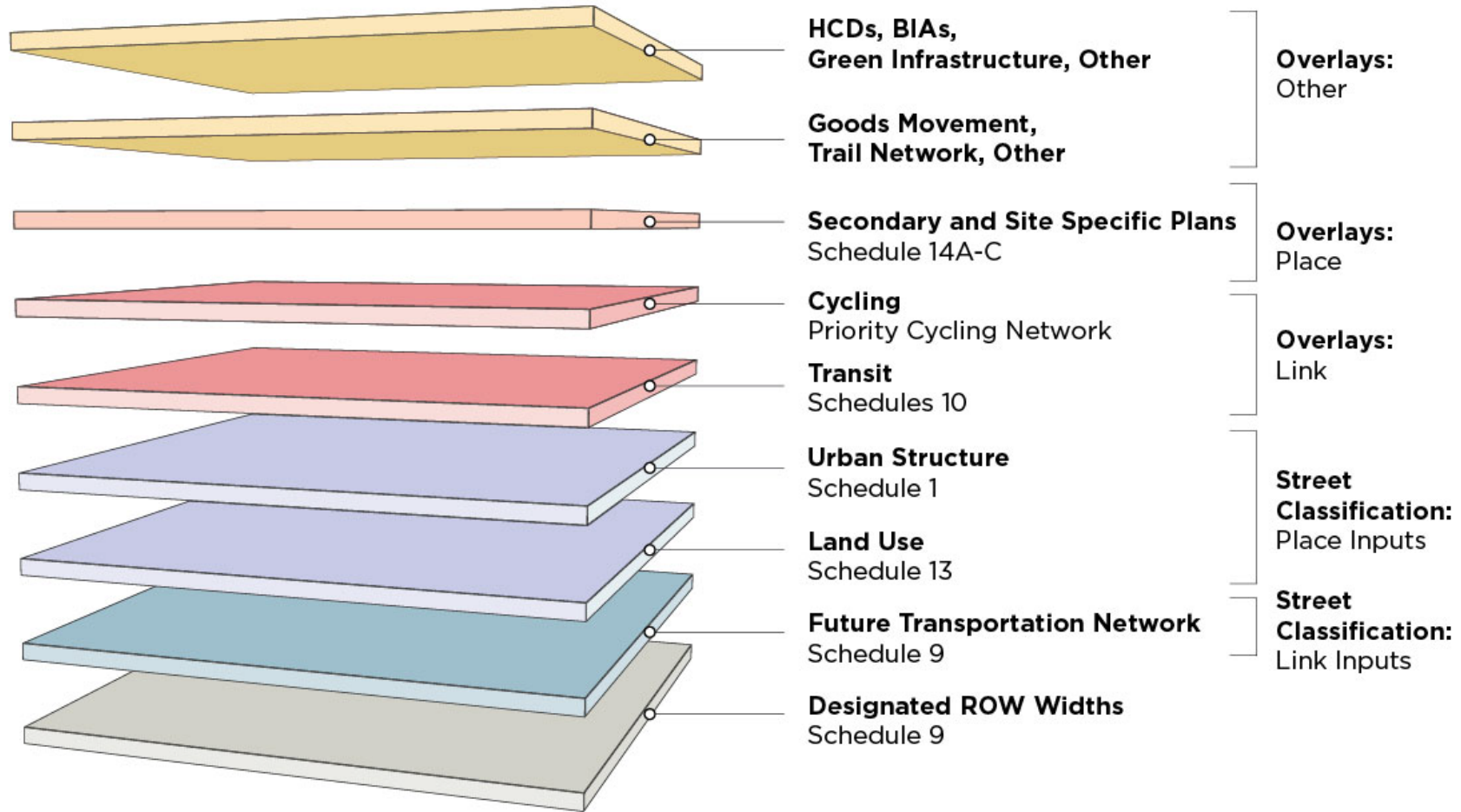
Classification + Overlays = Street Context



Classification + Overlays = Street Context



Classification + Overlays = Street Context



Examples: Community Local Street



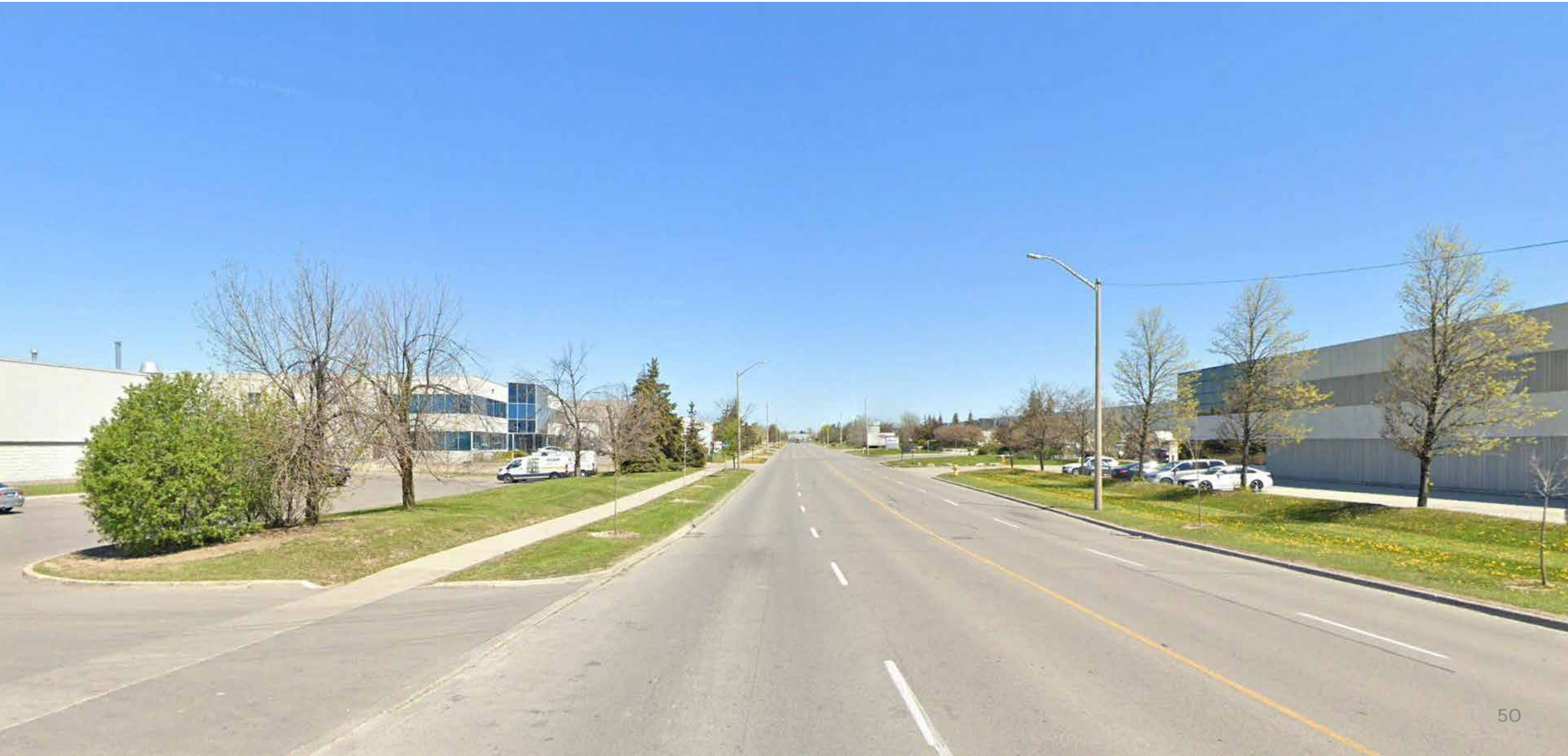
Examples: Employment Local



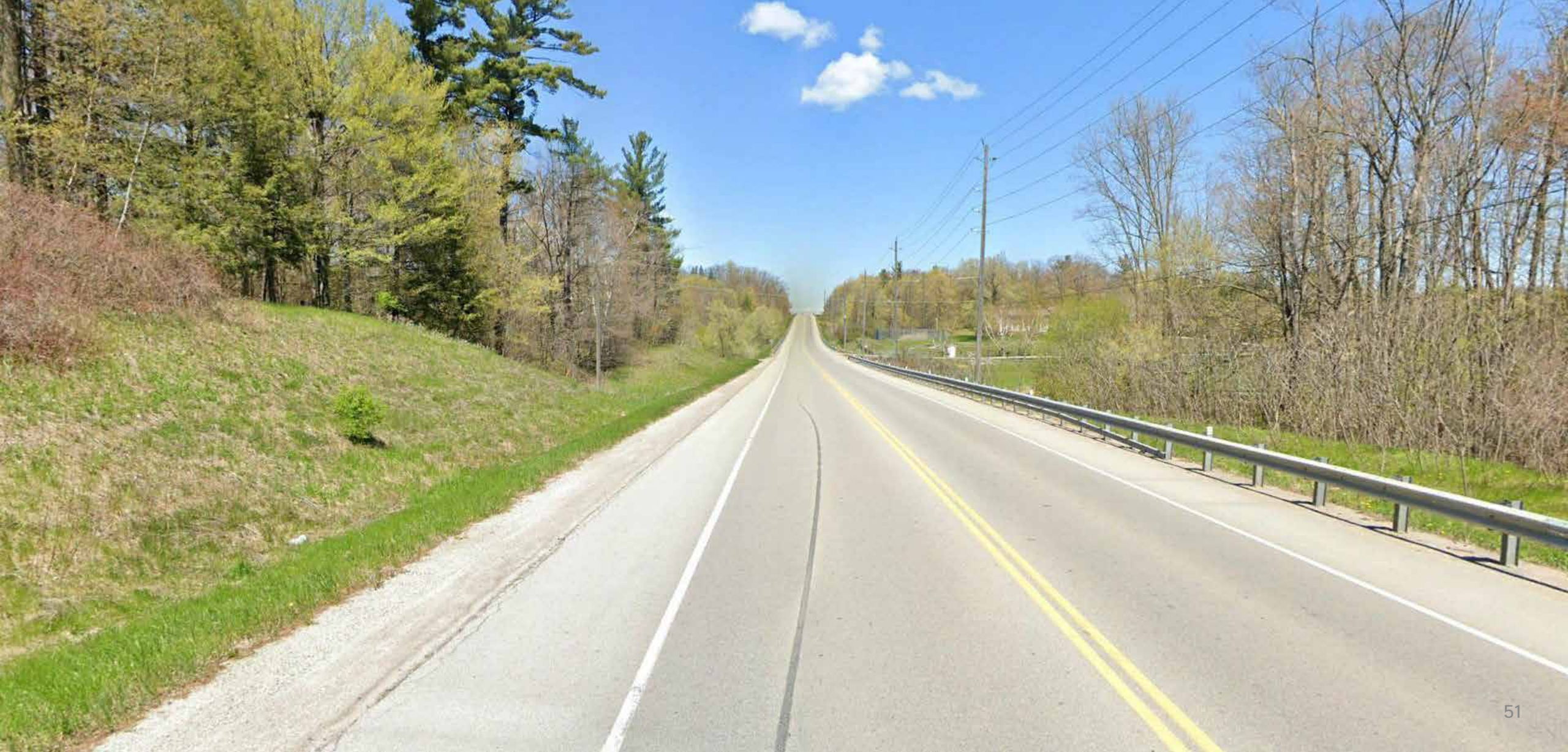
Examples: Intensification Major Collector



Examples: Employment Major Collector



Examples: Natural Arterial

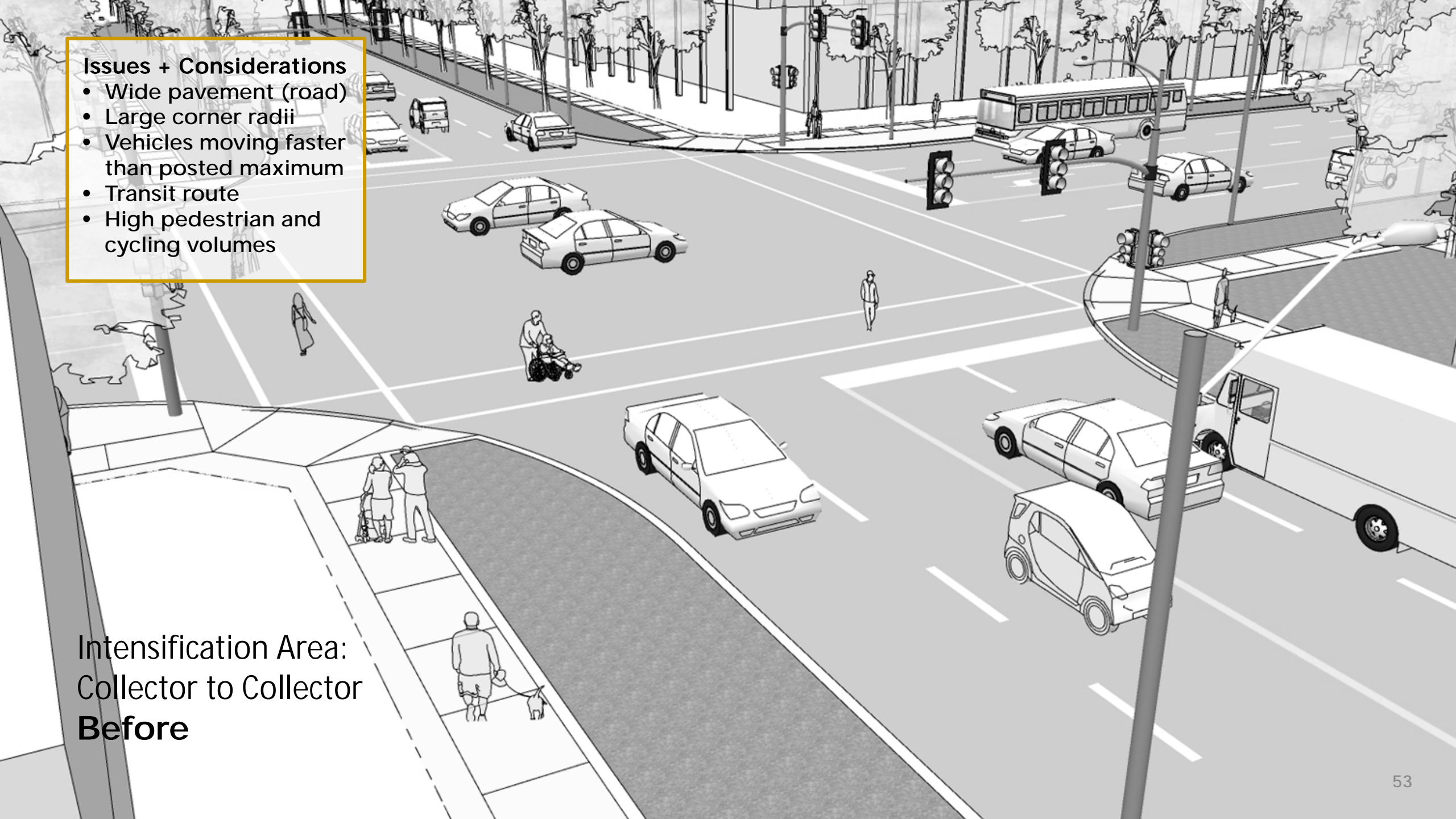


Demonstrations

Issues + Considerations

- Wide pavement (road)
- Large corner radii
- Vehicles moving faster than posted maximum
- Transit route
- High pedestrian and cycling volumes

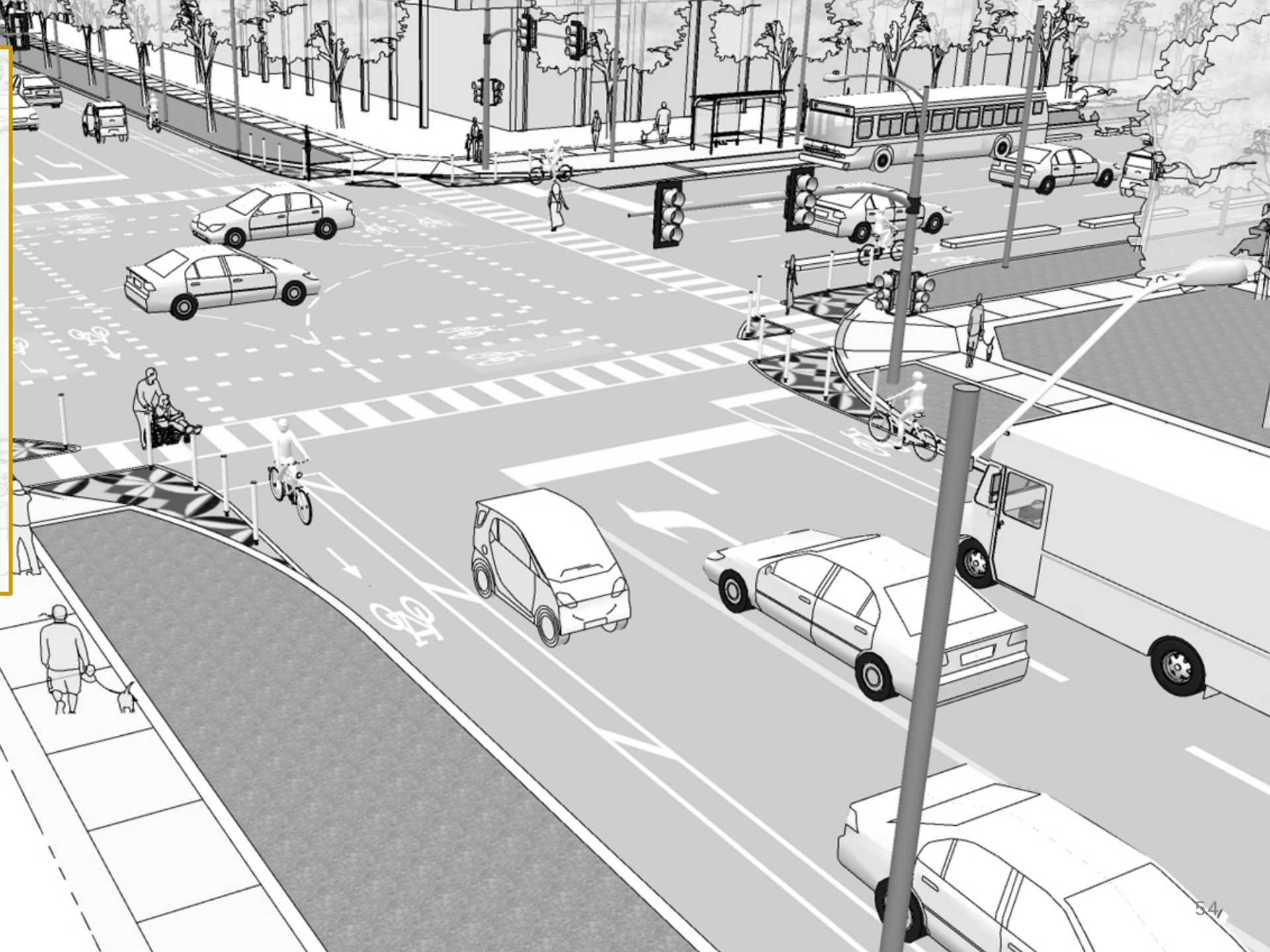
Intensification Area:
Collector to Collector
Before



Retrofit Techniques

- Road diet: convert a travel lane to bike lanes or cycle track and add left-turn lanes
- Flex bollards and paint to tighten corner radii and formalize
- Lower posted speed
- Add two-stage left-turn bike boxes
- Add signal priority tools
- Add transit stop amenities
- Add street tree planting and greening

Intensification Area:
Collector to Collector
Retrofit



Reconstruction Techniques

- Narrow and reduce motor vehicle lanes
- Add separated cycling facilities (cycle tracks)
- Add protected intersection
- Reconstruct corner radii
- Add street tree planting and greening
- Widen sidewalks

Intensification Area:
Collector to Collector
New

Questions

Discussion

In the context of improving the safety of streets in Vaughan for all users:

Reflect on your experience taking trips within Vaughan. What are some of the things you noticed?

Do you consider Vaughan streets safe for all users?

Do you have any additional advice you'd like to offer to the project team?



Next Steps

- Review and Incorporate Workshop Input in Existing Condition Report
- Phase 3: Classification Review + Develop initial Cross Sections