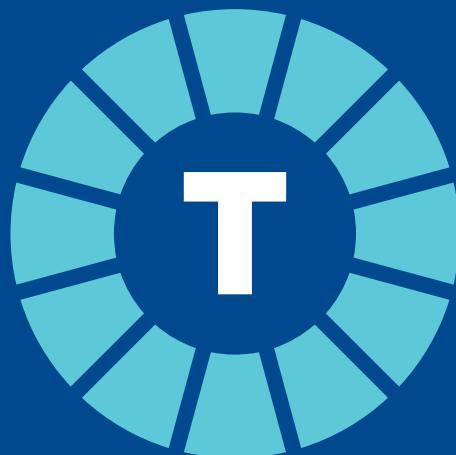


**WAYFINDING
STRATEGY FOR THE
CITY OF TORONTO**



**Wayfinding Strategy
Phase 3 Preparation**

BRIEFING

TO360 > TORONTO WAYFINDING STRATEGY

Toronto's TO360 wayfinding strategy supports walking as the primary mode of travel to unlock multi-modal transportation in the city

TO360 provides consistent information across modes and environments through a unified signage and mapping system delivered by the City of Toronto and project partners



WAYFINDING > THE BENEFITS

An integrated multi-modal wayfinding system is expected to:

- Enhance the overall image of Toronto as a destination
- Increase visitors at key attractions, spending in the Greater Toronto Area, boost the local economy
- Increase confidence to walk, reduce walk times, promote multi-modal transit and reduce auto use
- Improve urban realm, sense of community, pedestrian safety, health and environment

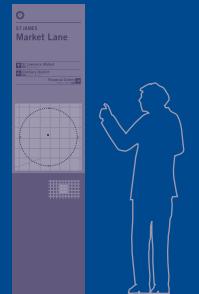


TO360 > SYSTEM COMPONENTS

Signage

wide totem

At or near major places of interest
At significant areas of each district



narrow map totem

At or near significant places of interest of each district
At transit exits



directional

At intersections of key pedestrian routes and decision points
At shared pedestrian/cycling routes



Digital

mobile apps

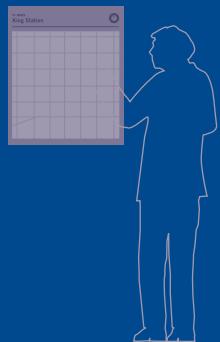
On internet-enabled mobile devices
Enhanced by features such as compass and location-based services
Multi-platform



Printed

local area maps

At mode transition points: Bus/Streetcar shelters, Transit stations, PATH, BIXI, Parking lots and others



pockets maps

At visitor welcome and entry points to the city (e.g. airports, hotel concierge, convention centres)



Roadway destination signs

current policy

Ontario Traffic Manual (OTM)
City of Toronto: Identification and Directional Road Signage Policy (IDRSP)



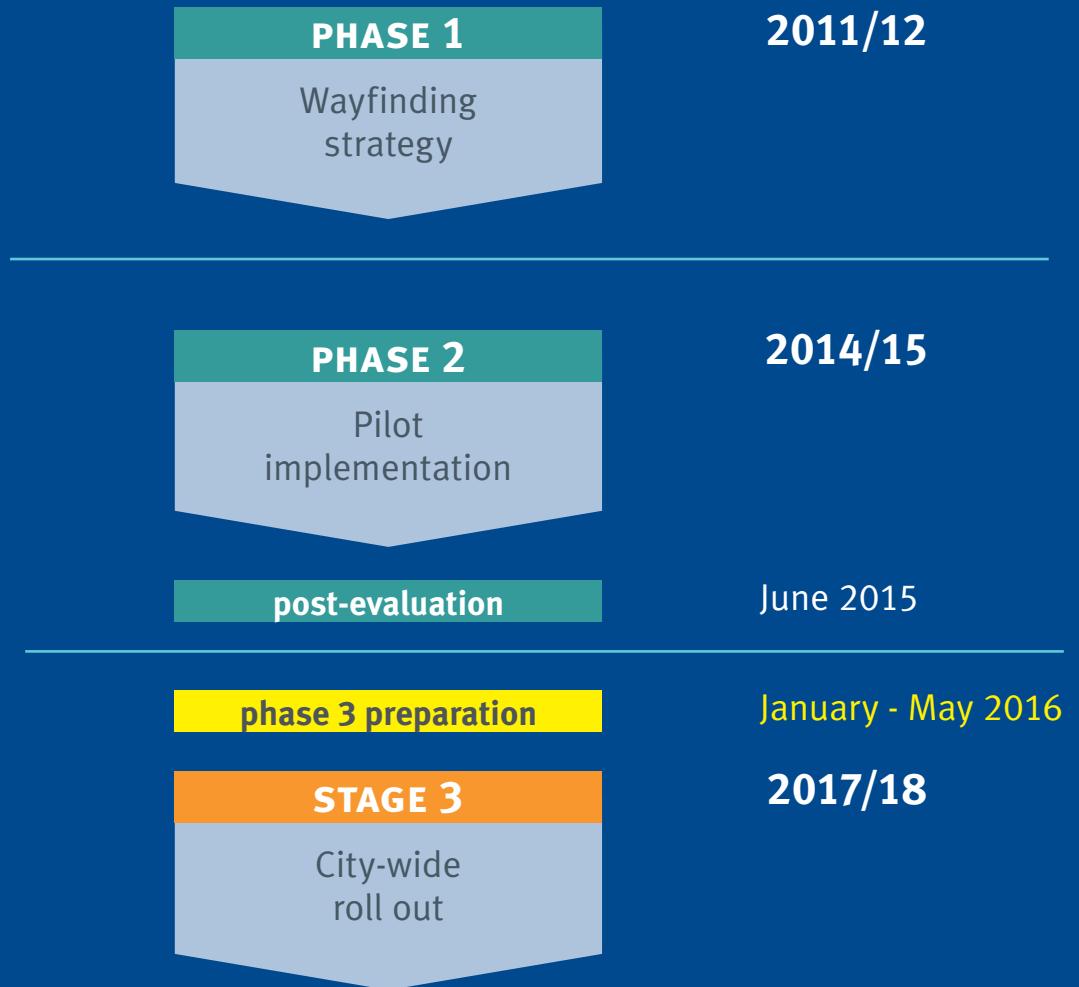
Urban Design

Improve connections, create new legible routes, improve quality of place, and encourage walking and exploring the city



TO360 > PROGRAMME

Toronto kicked off their wayfinding initiative in 2011 as a direct consequence of their 2007 Walk21 Conference, Putting Pedestrians First, and development of the city's Walk Strategy that identified pedestrian wayfinding as fundamental to the creation of a walkable city.



PILOT IMPLEMENTATION › JUNE 2015

The pilot scheme is centred around the Financial District supporting pedestrian movement to/from Union Station and connecting the adjacent Entertainment District and St Lawrence areas



PILOT IMPLEMENTATION > JUNE 2015

The pilot implementation consist of:



12

slim totems



4

wide totems



5

fingerpost signs

PILOT IMPLEMENTATION > PILOT OVERVIEW PLAN

PRODUCT	ACTION REQUIRED	QTY
A AdPillar	Update graphic panel	8
I InfoPillar	Remove	2
I InfoPillar	Update graphic panel	3 (x2 sides)
S Stop Shelter	Update graphic panel	34
S Stop Shelter	Add poster case	6
M Message Board	Remove	1
- Slim Totem	None	12
- Wide Totem	None	4
F Fingerpost	None	5



PILOT IMPLEMENTATION > INTENSIFICATION VIA THIRD PARTIES

ASTRAL INFOPILLARS

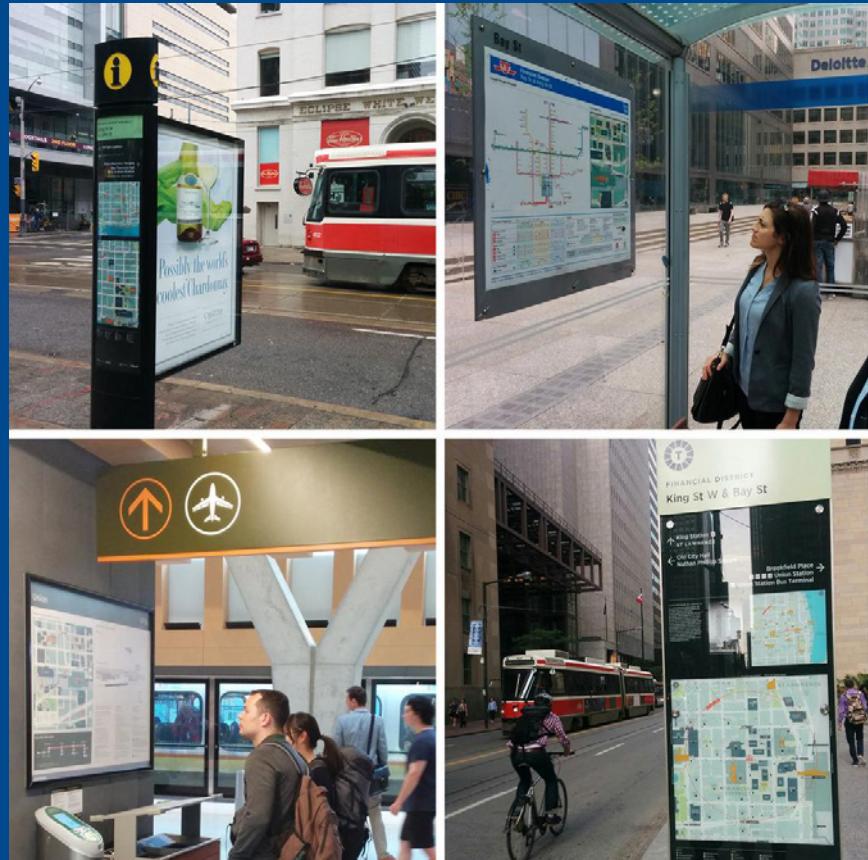
- 11 Info and Ad Pillar map cases in the pilot area updated to TO360 maps

TTC LOCAL TRANSIT POSTER PILOT

- 30 posters installed in and around the Financial District
- Poster combines local transit diagram with TO360 local area maps

UP EXPRESS UNION STATION

- Local area information posters include TO360 maps
- Sharing agreement with CoT



FEEDBACK > POSITIVE FEEDBACK ABOUT THE SIGN PRODUCT

“It looks tall, yet not too big as though it blocks any views”

“I like that it is clean, simple and identifiable – LOVE that there are NO Ads”

“Looks modern and inviting”

“Gorgeous, very unobtrusive given the tall slim build,... Maybe it should also light up at night?”

“Love the shape, colours, font & overall design. Really like the angular top, modern and sleek... Really impressed”



OUTLINE BUSINESS CASE > OVERVIEW

The 2012 Outline Business Case (OBC) report set out cost–benefit of a city-wide wayfinding system in Toronto, providing the information necessary for the City to proceed with the pilot implementation and subsequent roll-out strategy.

Wayfinding System Strategy for the
City of Toronto

Wayfinding Outline Business Case
Final Report
May 2012

Prepared for:
City of Toronto
City Hall
100 Queen Street West
Toronto, ON, M5H 2NZ

Prepared by:
Steer Davies Gleave
2500-120 Adelaide Street West
Toronto, M5H 1T1
Canada
+1 (647) 260 4861
www.steerdaviesgleave.com

OBC UPDATE > SURVEY RESULTS

PILOT EVALUATION (POST-WAVE)

- Wave 1: September 2014
- Pilot implementation: June 2015
- Wave 2: September 2015

METHODOLOGY

- Interviews (300)
- Mystery shopping (20)
- Accompanied journeys (10)

The image shows the cover of a report titled "Toronto Wayfinding Pilot Evaluation Post-wave Report" by Ipsos Public Affairs. The cover features the logos of Ipsos (a green and blue circular logo) and Toronto (a stylized building icon next to the word "TORONTO"). Below the title, there is a collage of four photographs: a brick building with arched windows, a street view with people walking, a smartphone displaying a map application, and a busy city street with tall buildings.

OBC UPDATE > SURVEY RESULTS

IPSOS WAYFINDING SURVEY (HEALTH)

- 1,000 respondents (online)
- December 2015

TO DETERMINE AND UNDERSTAND

- Current walking behaviours
- Motivations and barriers for walking in Toronto
- Attitudes and opinions towards walking in Toronto
- Understand of the relationship between walking and personal health
- Awareness and attitudes towards the Toronto 360 Wayfinding Pilot program



Ipsos Public Affairs

CITY OF TORONTO

Wayfinding Survey

Draft Report

January 2016

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GAME CHANGERS



OBC UPDATE > SURVEY RESULTS

KEY FINDINGS

WAYFINDING AWARENESS AND ATTITUDES

- Eight in ten (81%) rated the Wayfinding signs as helpful in helping to find their way around the city
- Three quarters (73%) would like to see more Wayfinding maps and signs throughout the City
- Seven in ten (69%) found that the maps made it easier to find their way to/from public transit/the PATH
- Eight in ten (83%) found the information effective in enabling people to navigate the City but nine in ten of those who had previously seen the signs found them to be significantly more effective (90%)

Results indicate that the effectiveness of Wayfinding will grow with increased awareness of the system

OBC UPDATE > SURVEY RESULTS

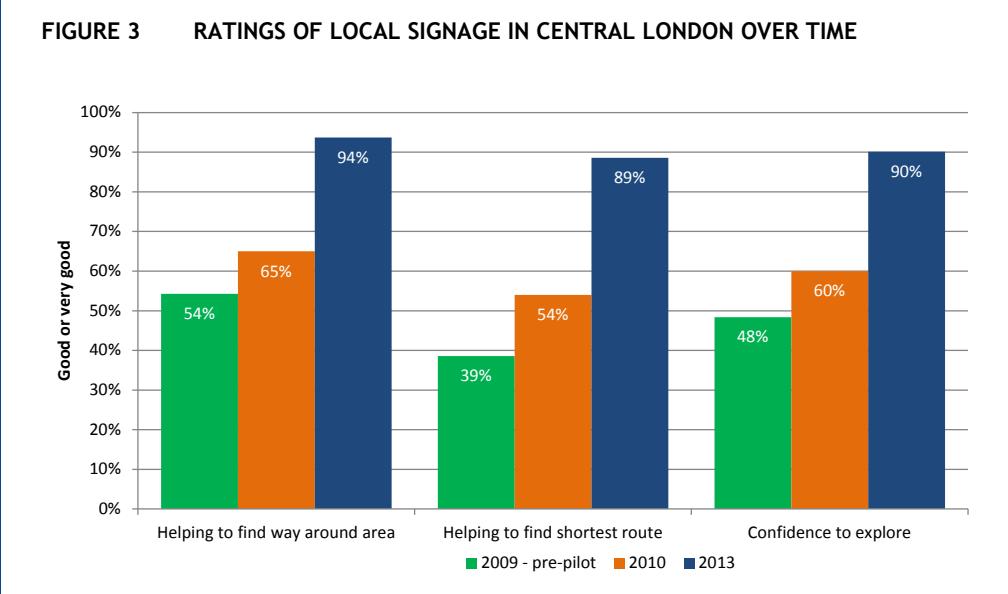
INCREASED RATING FOR SIGNAGE TO HELP PEOPLE:

	2014	2015
Find their way around:	61%	89%
Make informed choices about walking routes:	39%	83%
Learn about new and interesting locations or attractions:	44%	82%
Feel comfortable walking by foot in the local area:	91%	98%

OBC UPDATE > SURVEY RESULTS

The biggest challenge found was to improve awareness of the Wayfinding signs

- Members of the general public are not in the habit of looking for maps in their home city and consider that maps are for tourists
- When noticed, the new T0360° Wayfinding signs were key in helping mystery shoppers and members of the general public find destinations in the pilot area
- Evidence from London (UK) shows that benefit ratings increase exponentially over time as the system expands (increased awareness)



OUTLINE BUSINESS CASE > KEY PILOT FINDINGS AND BENEFITS

The pre- and post-pilot surveys enable the impacts of T0360 signage to be measured in a quantitative way. The relevant key findings include:

- Reduction in walk times for specific journeys (-13%)
- Increase in walking trips (33%)
- Increase in time spent walking in the local area (+27%)
- Reduction in auto mode share from 5% to 2% for journeys within the area
- Reduction in mystery shoppers feeling lost (-51%) or very lost (-90%)



OBC UPDATE > BENEFIT:COST RATIO

Based on these life-cycle costs and benefits, the indicative benefit cost ratio (BCR) is estimated at 4:1.

This means that **for every dollar invested, more than \$4 is returned through transportation benefits** so the monetized benefits are expected to outweigh the costs over the life cycle.



OUTLINE BUSINESS CASE > BENEFIT:COST RATIO

The case for T0360 is further enhanced by other **non-monetized benefits** such as additional tax revenues from tourism, reduction in emissions and health care costs.

However, it should be noted that the BCR is sensitive to a number of parameters which are likely to vary from one site to another



PHASE 3 PREPARATION > SCOPE

- Sign Product Refinement and Value Engineering
- Placement Guidelines
- Final Map Graphics
- System Management and Roll Out

IMPLEMENTATION STRATEGY



IMPLEMENTATION STRATEGY > APPROACH

The citywide roll-out of the TO360 strategy will be achieved through a 3-year implementation plan led by the City working with funding and delivery partners.

Estimated **Capital Cost** for the 3-year plan includes the Map Asset, TO360 signage, Astral products update and consultancy costs.

Operating and Maintenance costs will start on Year 2. These include ongoing staff cost and maintenance of signage and the map asset database.

IMPLEMENTATION STRATEGY > COMPONENTS

MAP ASSET

- Citywide base layers –suitable for TO360 and third-party digital and printed maps
- Localized upgrades as required for TO360 signage, street furniture elements and/or transit information products
- Citywide TO360 context map

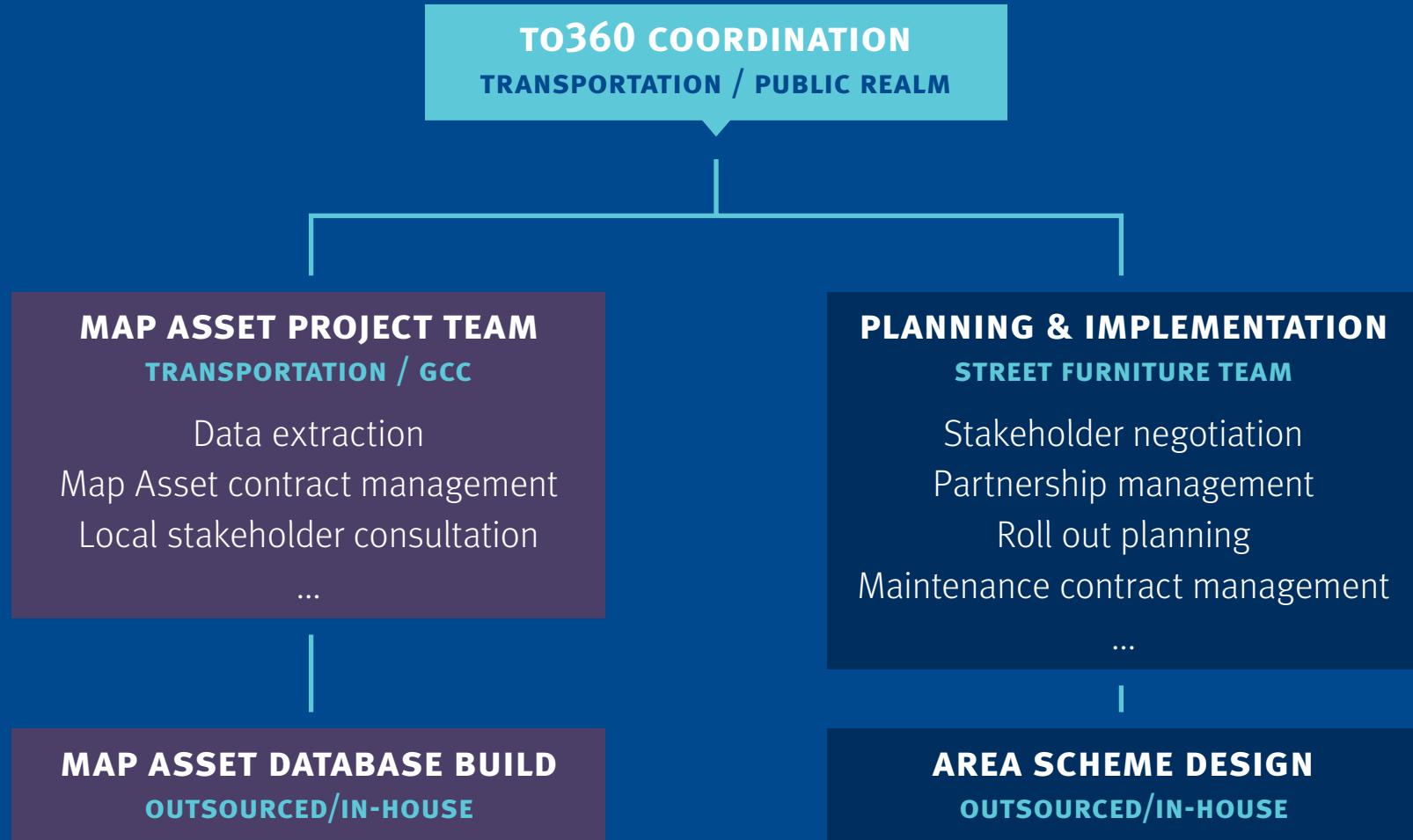


ON-STREET SIGNAGE

- Complete TO360 roll-out within TOcore
- Focused roll-out of TO360 signage in and around main streets, BIAs and transit hubs
- Citywide upgrade of Astral street furniture content to TO360 maps



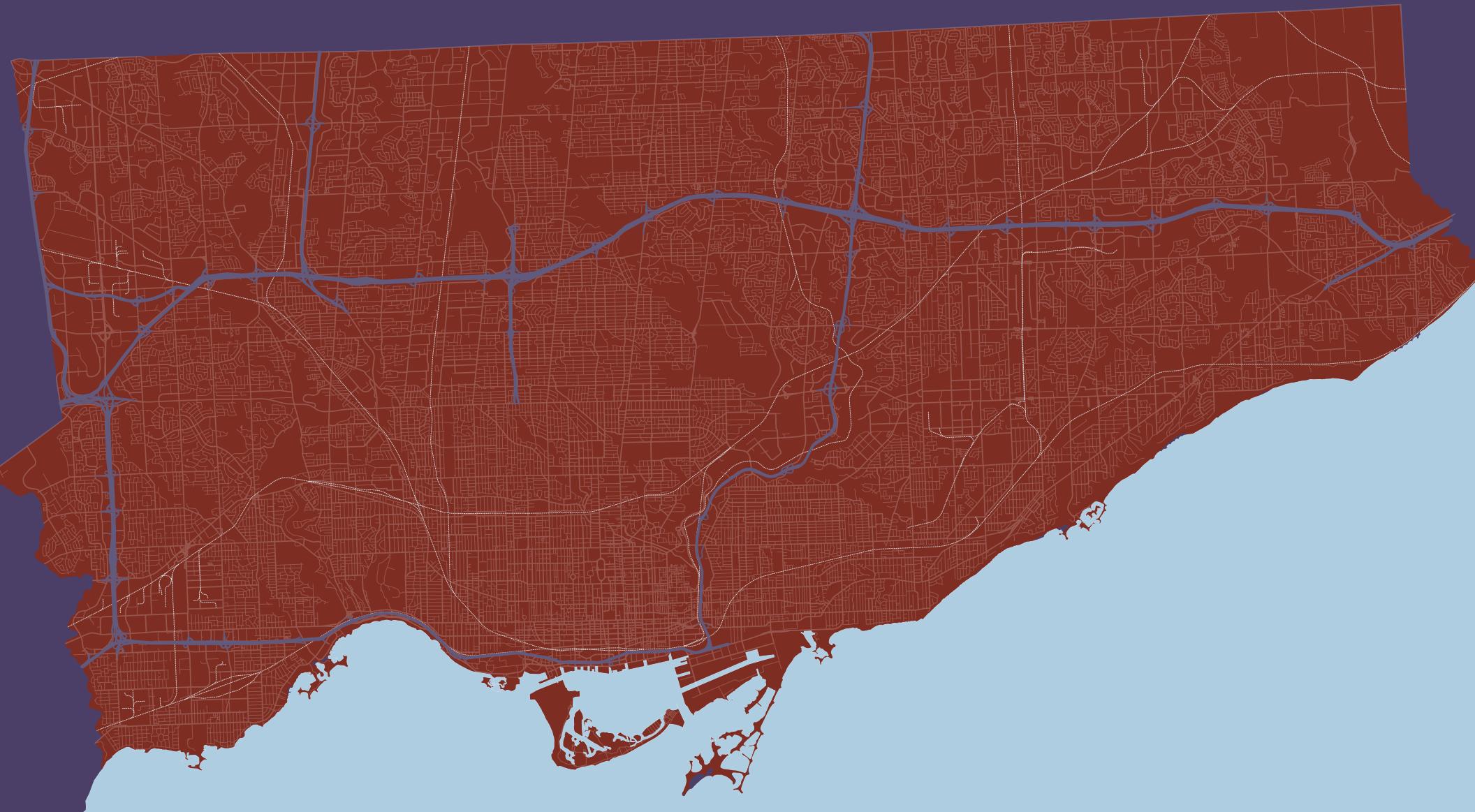
IMPLEMENTATION STRATEGY > ROLES



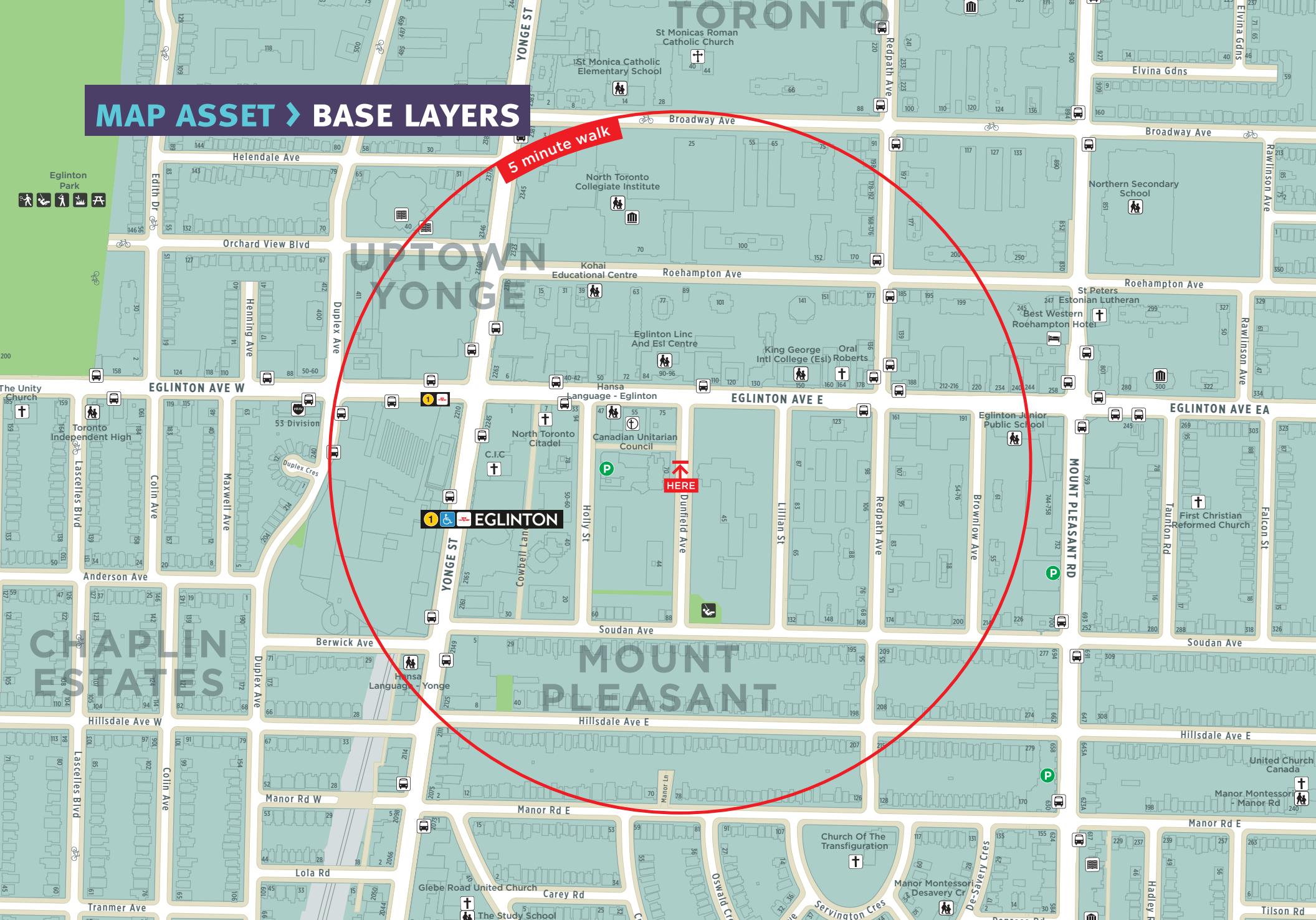
MAP ASSET > BASE LAYERS

630 km²

YEAR 1: TORONTO



MAP ASSET > BASE LAYERS



MAP ASSET > BASE LAYERS

PARKS & TRAILS
WAYFINDING MAPS



TORONTO
VISITOR MAP



EXPLORING
TORONTO'S
PARKS &
TRAILS MAP



DIGITAL
APP



BIKE SHARE
TORONTO
MAPS

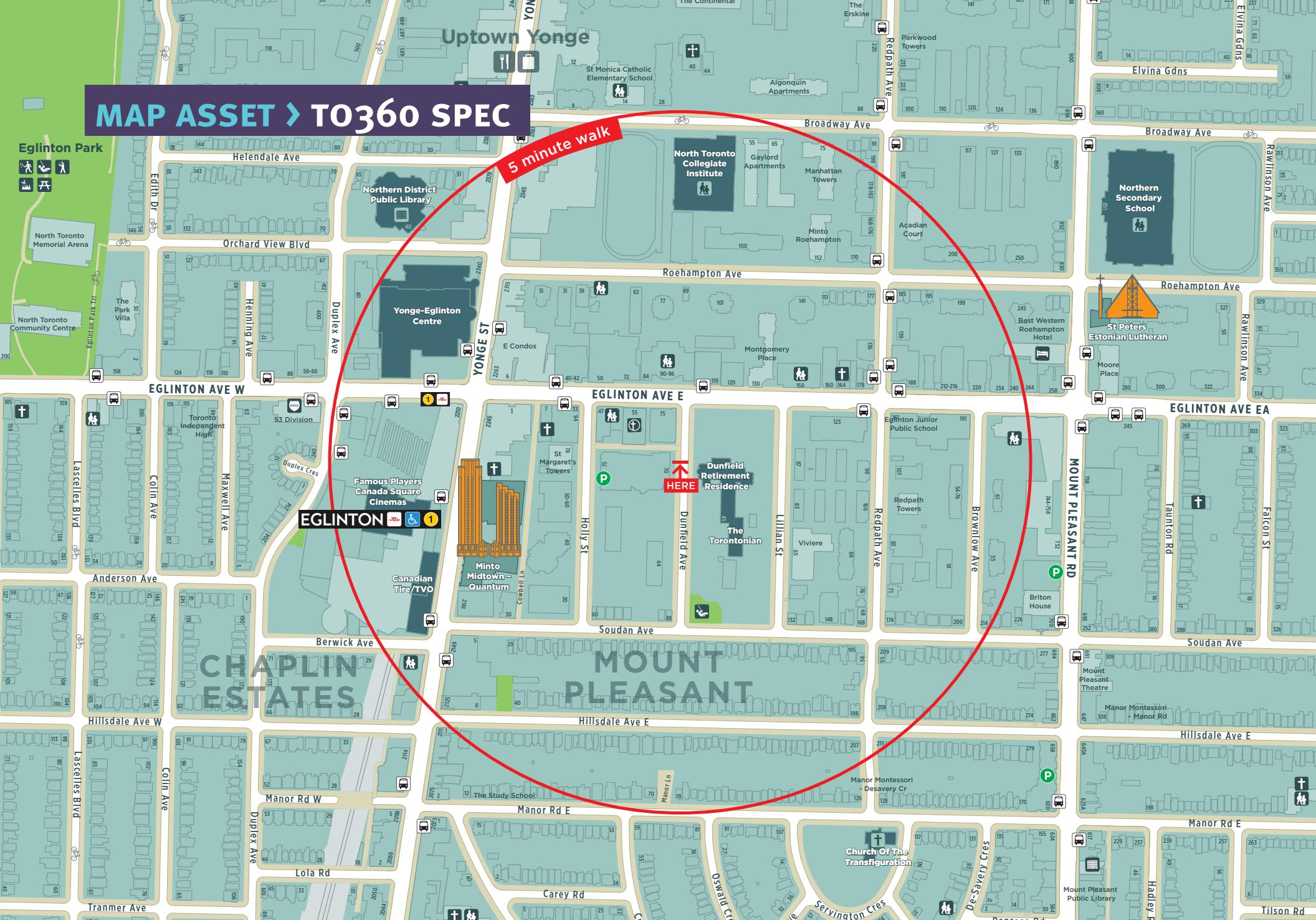


TORONTO
CYCLING MAP



MAP ASSET > TO360 SPEC

5 minute walk



MAP ASSET > TO360 SPECIFICATION

TO360
PRODUCTS



UP EXPRESS
UNION STATION



ASTRAL INFO &
AD PILLARS

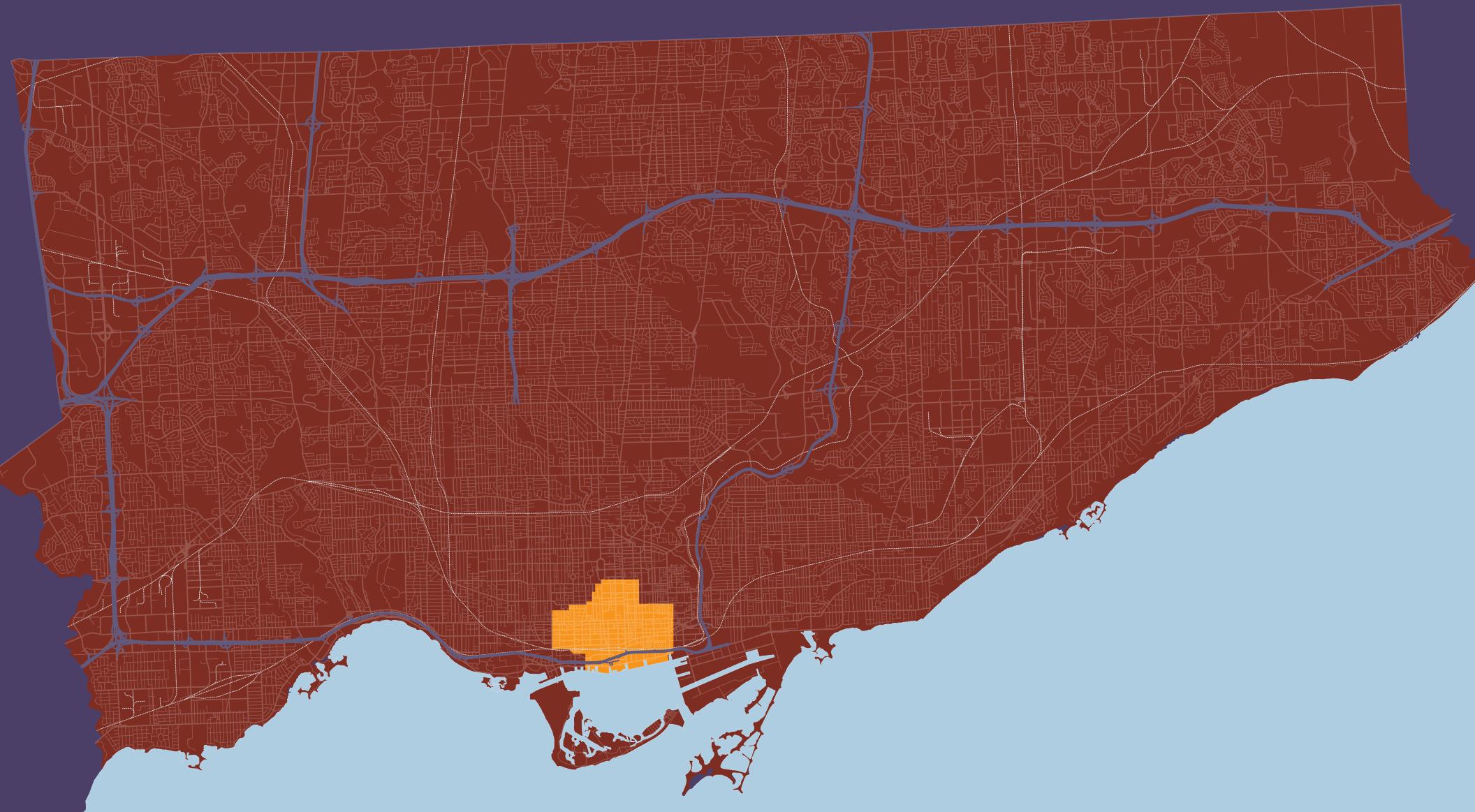


TTC BUS SHELTER
POSTER PILOT

MAP ASSET > TO360 SPEC

5.5 km²

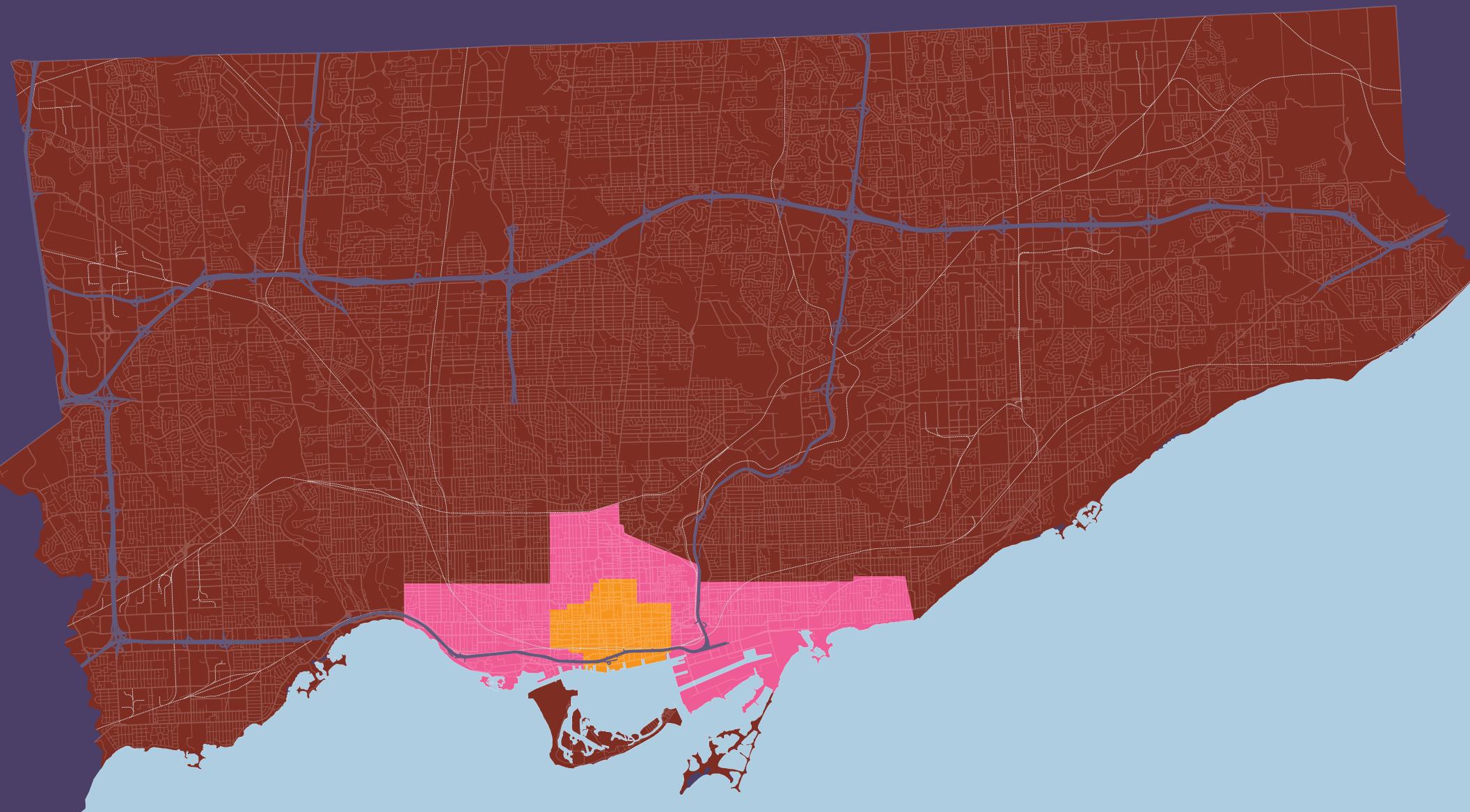
YEAR 0: PILOT



MAP ASSET > 3-YEAR PLAN

40 km²

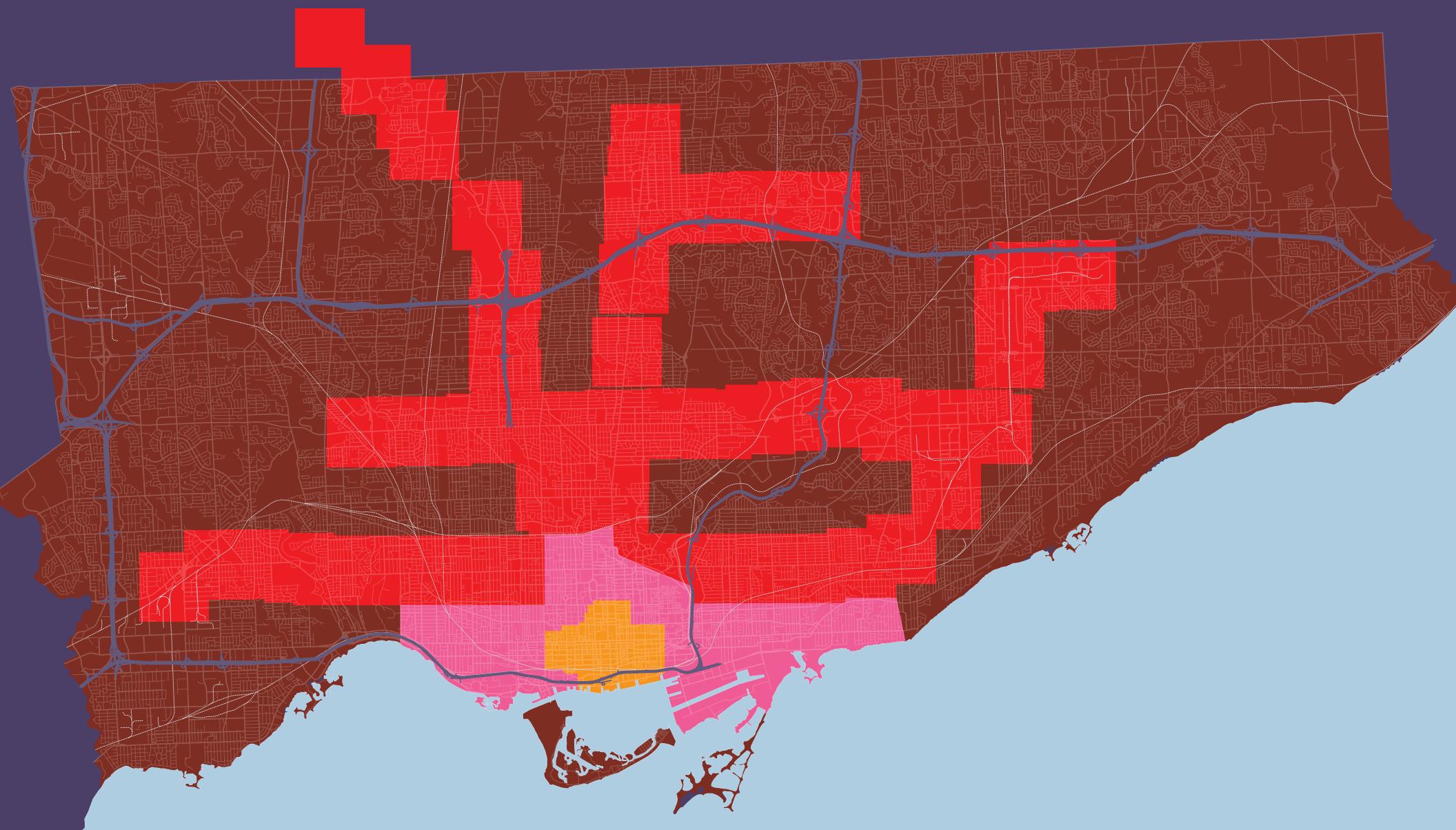
YEAR 1: TOCORE PLUS



MAP ASSET > 3-YEAR PLAN

150 km² (min)

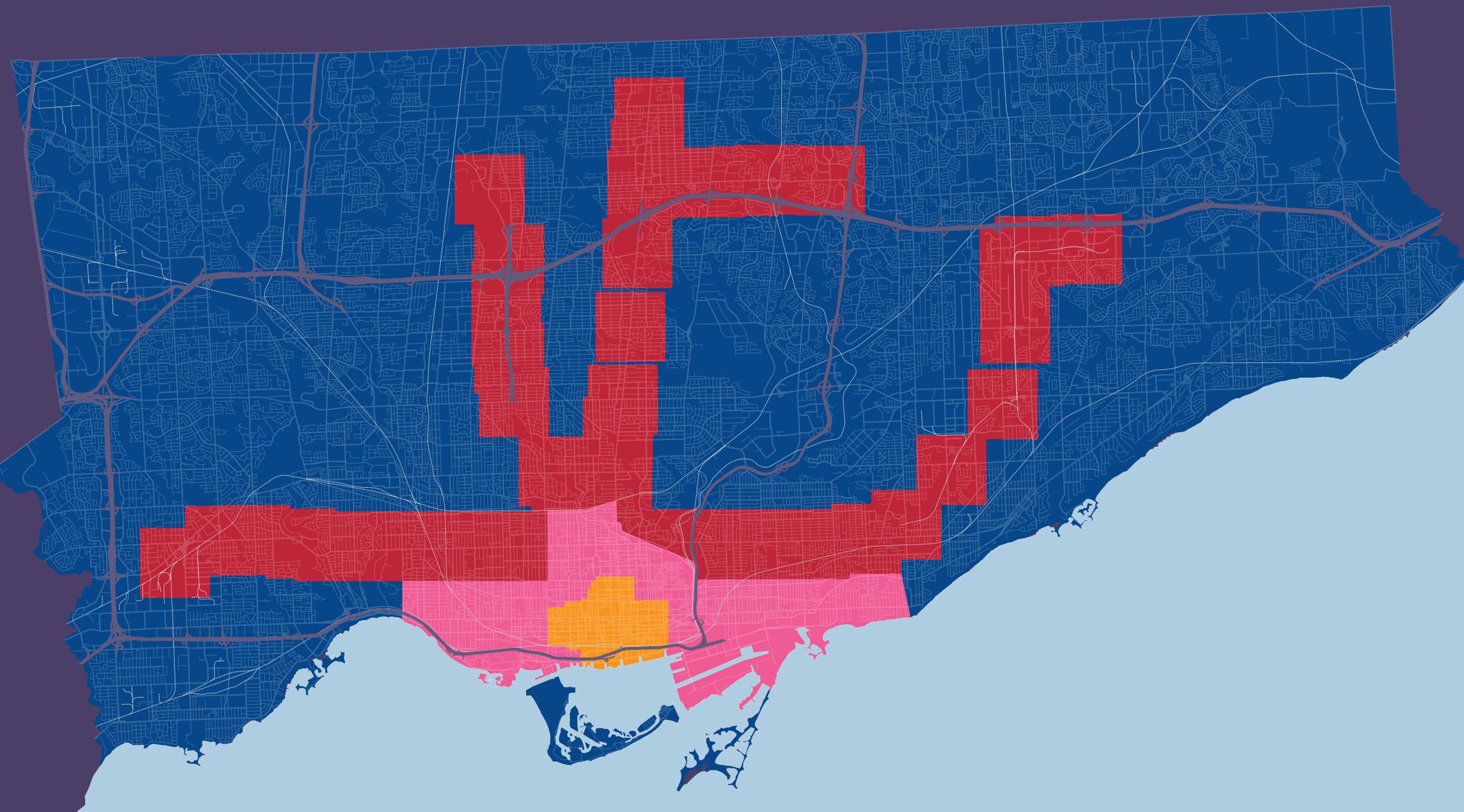
YEAR 2: TRANSIT



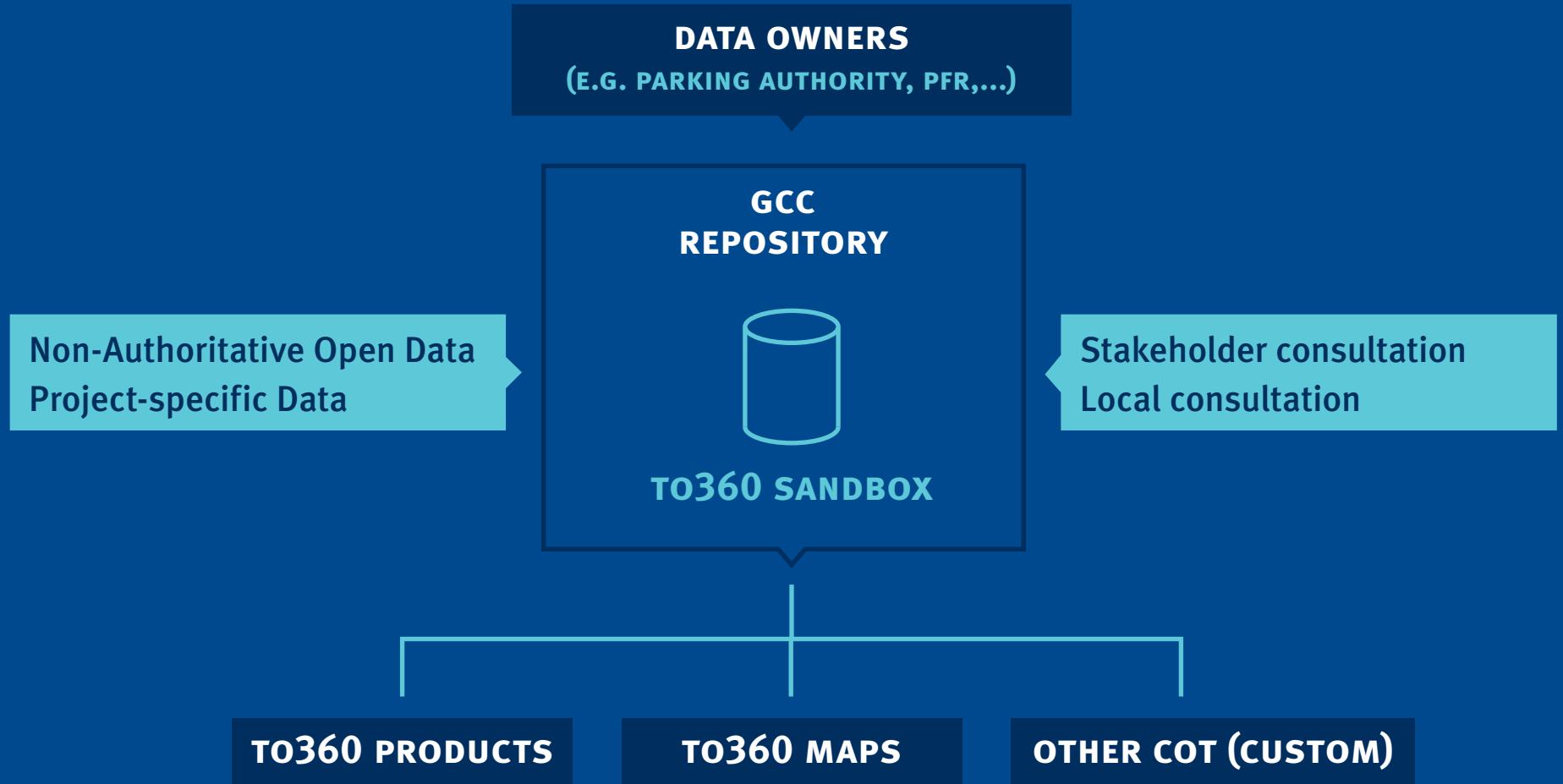
MAP ASSET > 3-YEAR PLAN

630 km²

YEAR 3: TORONTO



IMPLEMENTATION STRATEGY > MAP ASSET

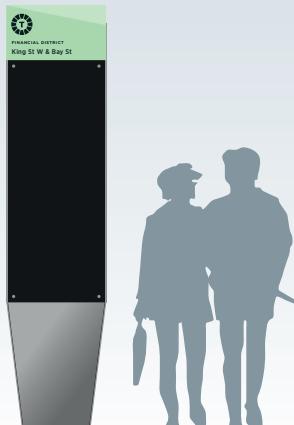


TO360 SIGNAGE > 3-YEAR PLAN

Over 600 signage units will be installed over 3 years, expanding from the pilot area to cover the TOcore and beyond, focusing on areas with high levels of pedestrian activity such as main streets, BIAs and transit interchanges.

TO620
Wide Totem

50 units



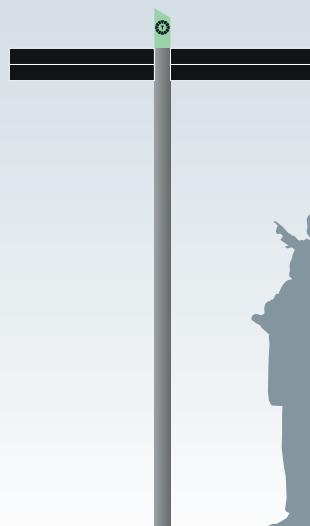
TO460
Narrow Totem

300 units



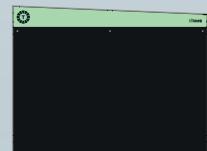
TO750
Finger Post

200 units



TO600/TO1200
Wall mounted maps

100 units



ASTRAL SIGNAGE > 3-YEAR PLAN

After 3 years all suitable elements of the Coordinated Street Furniture programme will be updated to TO360 maps. As these City assets are managed by a contract with Astral Media will not require additional fabrication or installation cost for TO360.

Astral
InfoPillar (non-Ad)

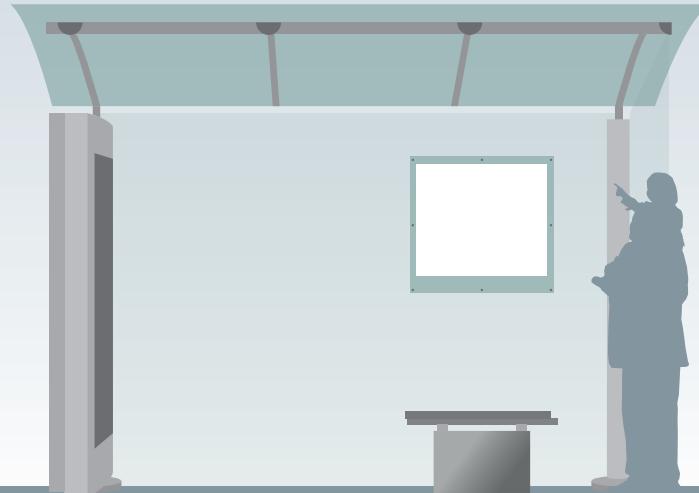
51 units

Astral
AdPillar

78 units

Astral
Bus shelters w/ poster board

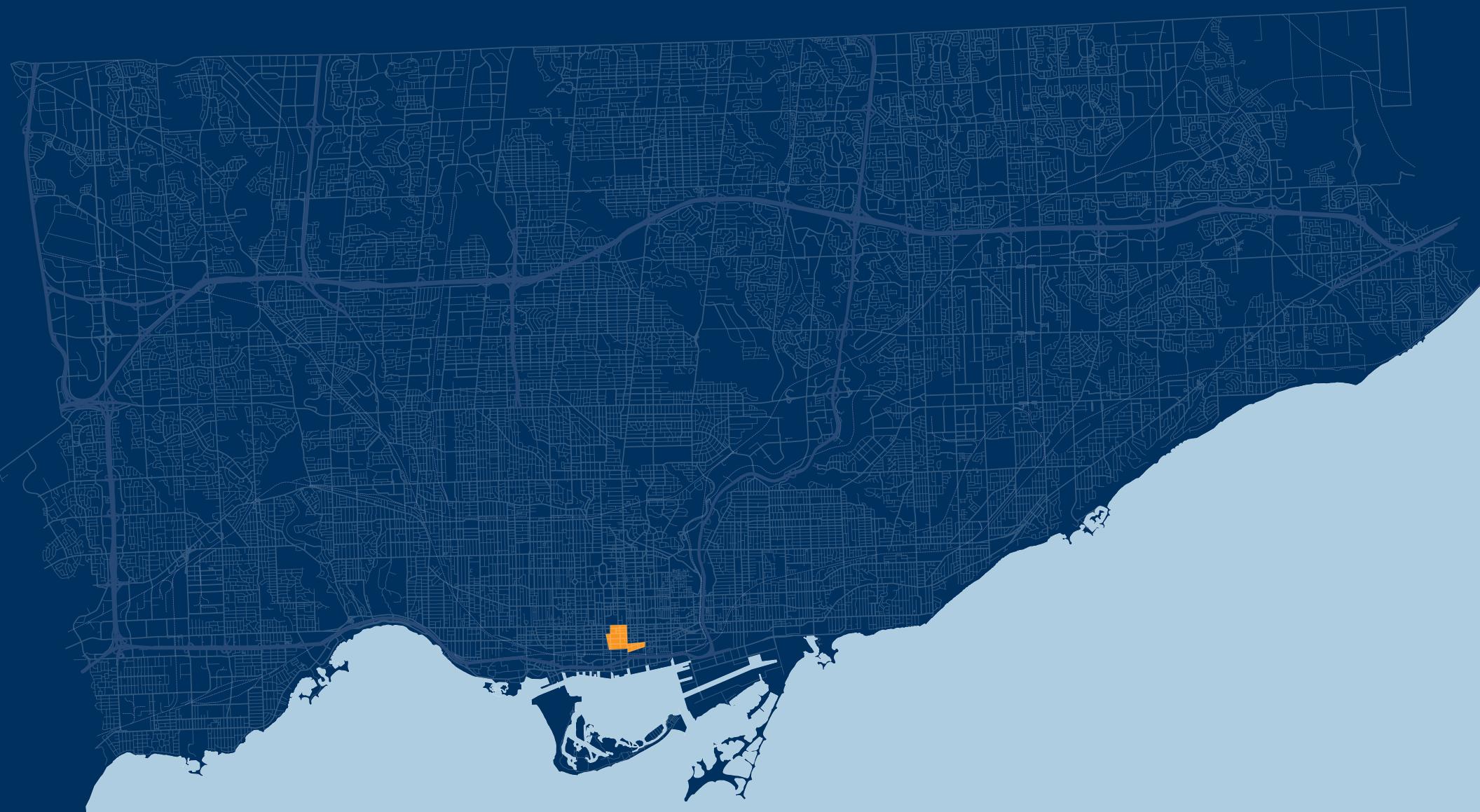
1,208 units



TO360 SIGNAGE > 3-YEAR PLAN

21 units

YEAR 0: PILOT



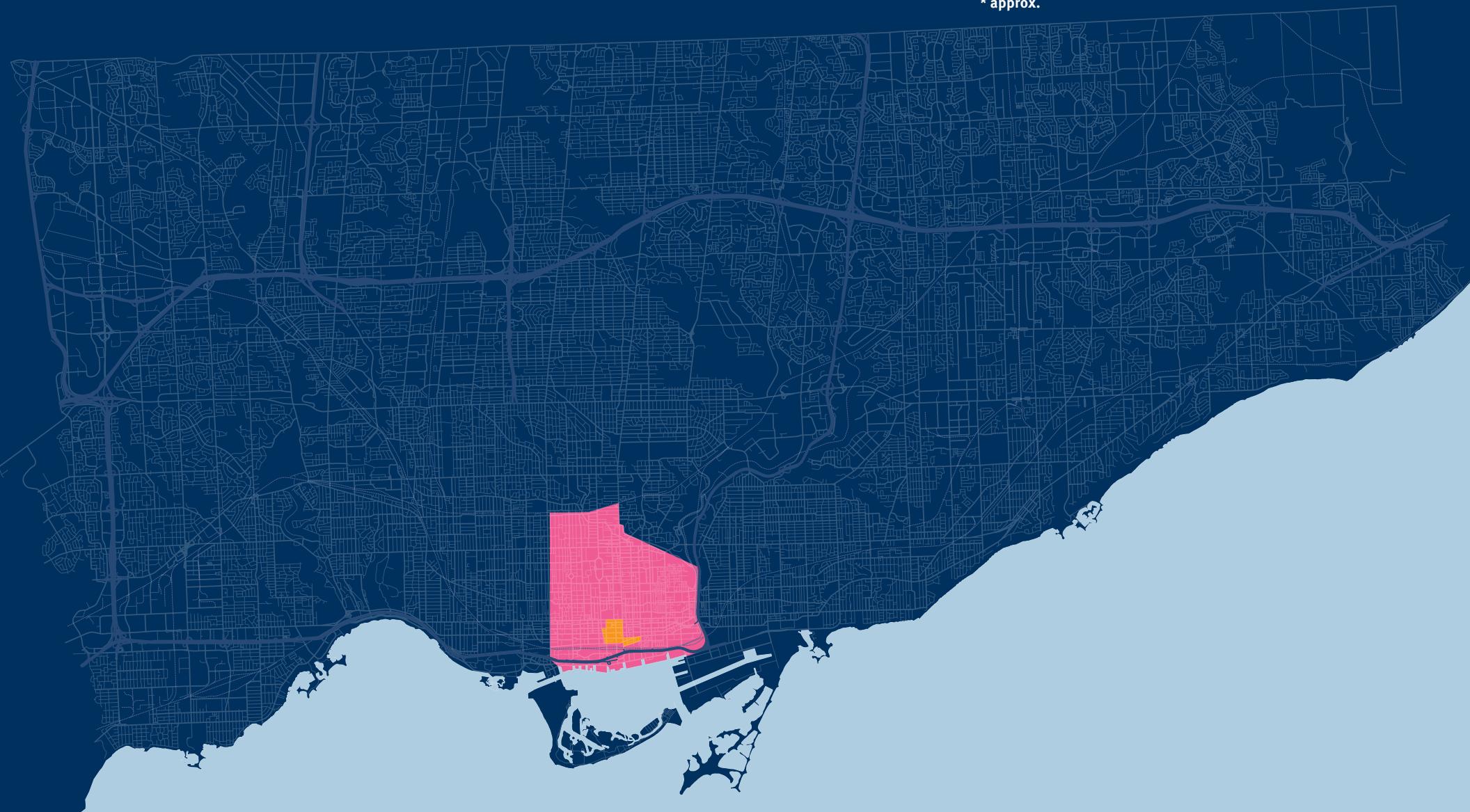
TO360 SIGNAGE > 3-YEAR PLAN

+ 220 units*

YEAR 1: TOCORE

= 240 units*

* approx.



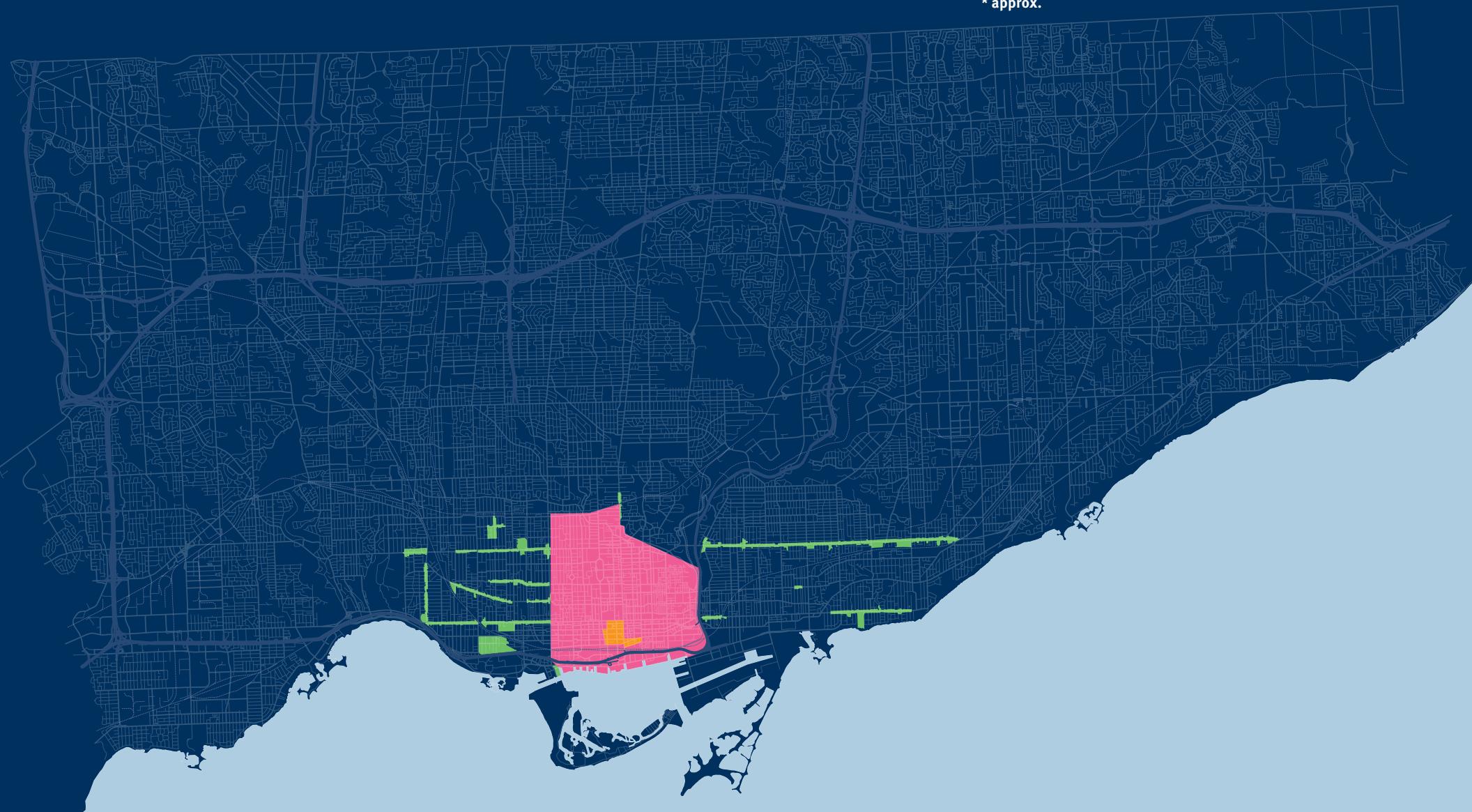
TO360 SIGNAGE > 3-YEAR PLAN

+ 200 units*

YEAR 2

= 440 units*

* approx.



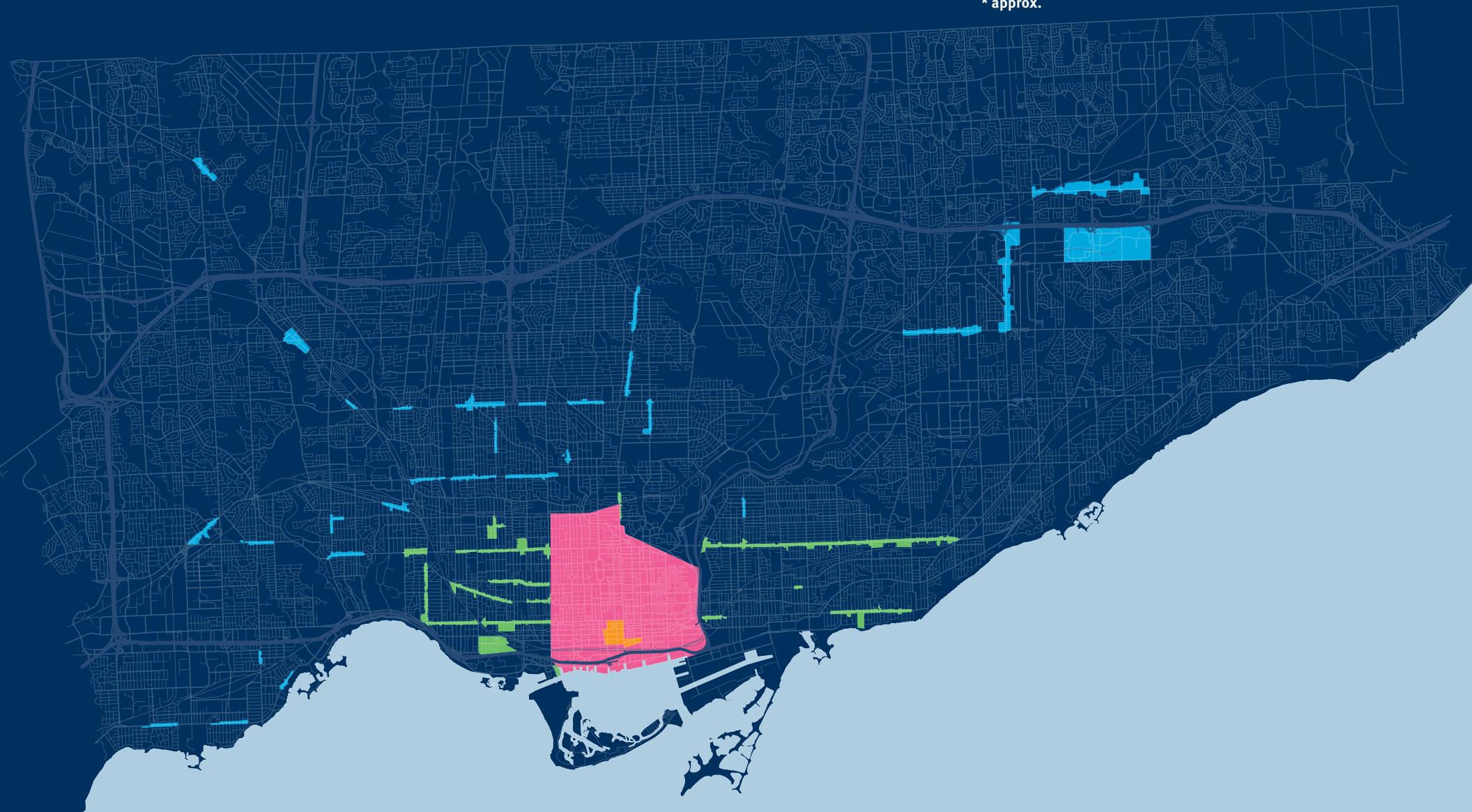
TO360 SIGNAGE > 3-YEAR PLAN

+ 200 units*

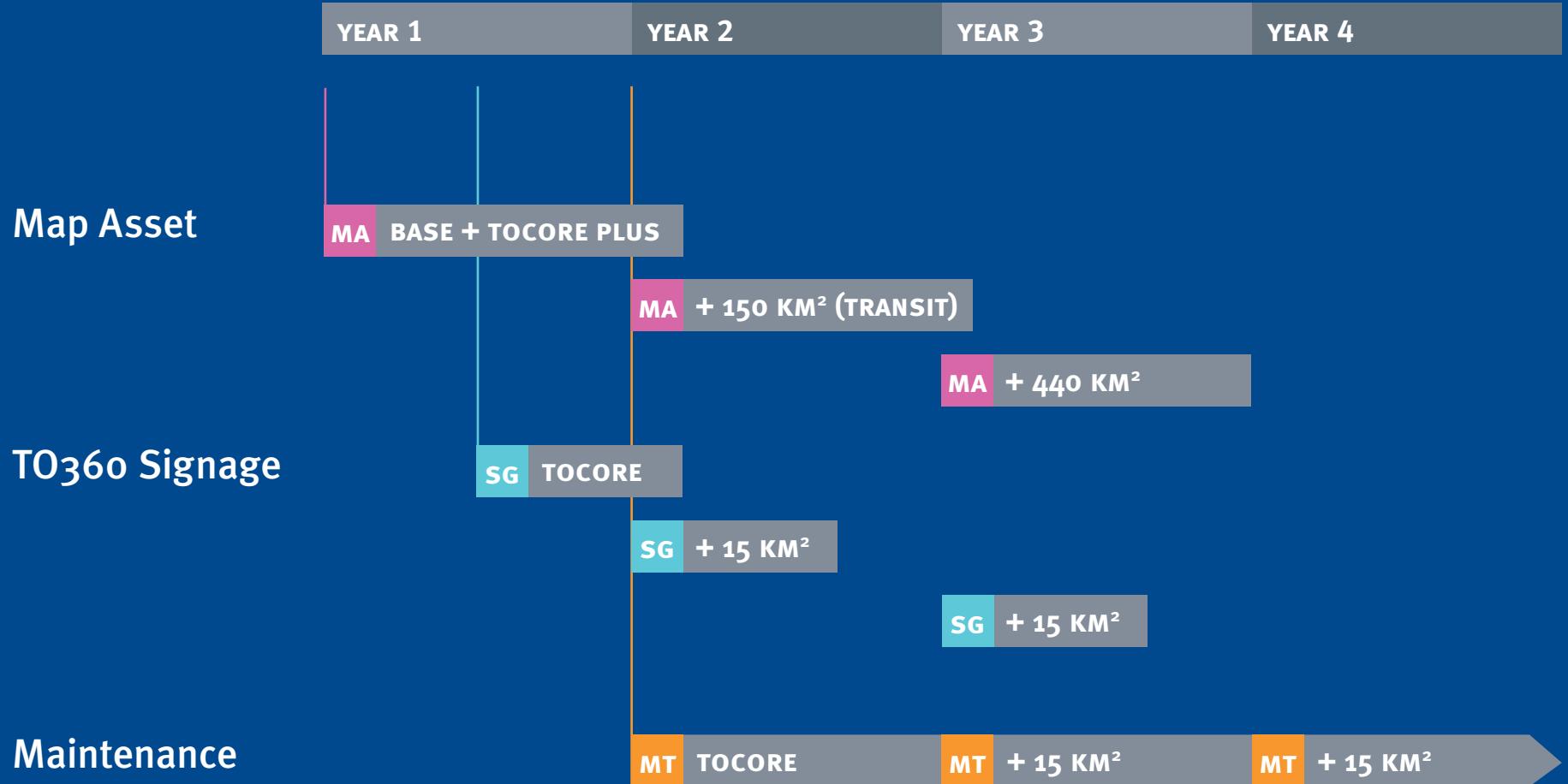
YEAR 3

= 650 units*

* approx.



IMPLEMENTATION PLAN > TIMESCALES



IMPLEMENTATION PLAN > CAPITAL COSTS

Estimated capital cost for the 3-year plan is **\$9.8m**, including:

- A citywide **map asset** database
- Fabrication and installation of **TO360 signage** within the TOcore and selected main streets and transit hubs across Toronto
- Retrofitting **TO360 maps** in all suitable elements of the Coordinated Street Furniture program
- Dedicated part- and full-time **City staff** and outsourced **consultancy** to support coordination, implementation planning and preparation of system guidelines over the 3-year implementation.

IMPLEMENTATION PLAN > CAPITAL COSTS

		YEAR 1	YEAR 2	YEAR 3	TOTAL
Map Asset	Base layers, incl. context map	\$1,150,000	--	--	\$2,850,000
	Upgrade to TO360	\$100,000	\$400,000	\$1,200,000*	
TO360 Signage	Fabrication, artwork, installation	\$1,900,000	\$1,650,000	\$1,650,000	\$5,200,000
Astral update	Artwork only	\$200,000	\$400,000	\$400,000	\$1,000,000
City Staff	Location planning - PT	–	\$50,000	\$50,000	\$100,000
Consultancy	TOCore location planning, Planning + System Guidelines	\$300,000	\$350,000	–	\$650,000
Total		\$3,650,000	\$2,850,000	\$3,300,000	\$9,800,000

* subject to availability of 3rd-party products

IMPLEMENTATION PLAN > ANNUAL OPERATING AND MAINTENANCE

Estimated annual operating and maintenance cost will gradually increase as the system expands and are expected to level at around **\$475,000** from Year 4 onwards. This cost includes:

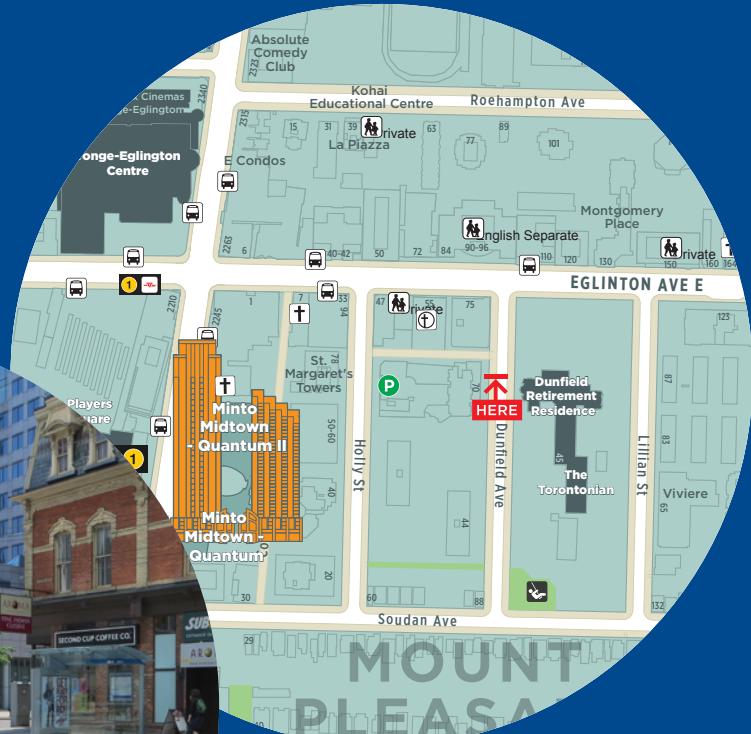
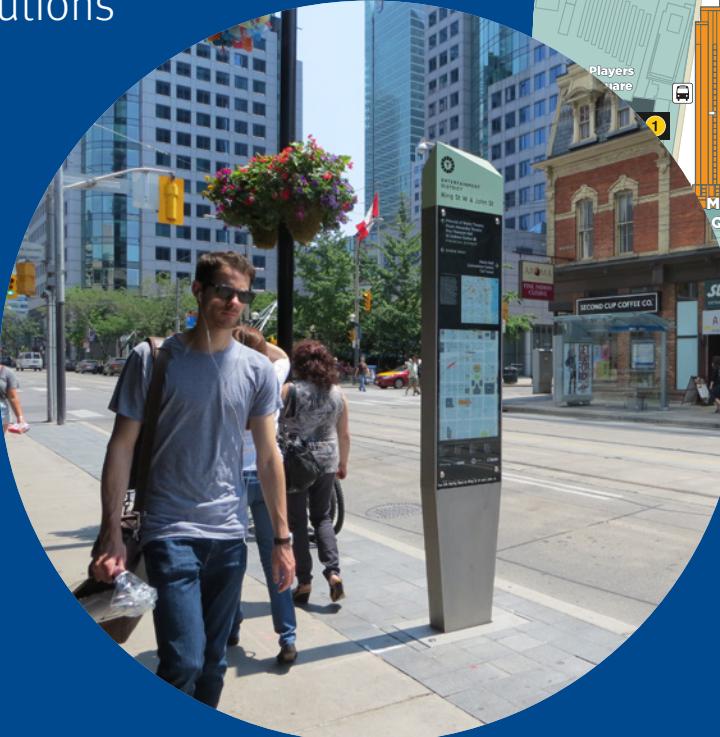
- Ongoing **staff cost**
- **Maintenance, renewal and cleaning** of signage
- **Maintenance** of the map asset database and physical map updates in all signage every 2 years

IMPLEMENTATION PLAN > ANNUAL OPERATING AND MAINTENANCE

		YEAR 1	YEAR 2	YEAR 3	YR 4 ONWARDS
Map Asset	Ongoing maintenance	–	\$30,000	\$45,000	\$60,000
T0360 Signage	Maintenance, incl. 3yr map update (10%)	–	\$100,000	\$190,000	\$280,000
	Cleaning every 6m (2%)	–	\$20,000	\$40,000	\$55,000
City Staff	T0360 coordinator (PT)	\$70,000	\$70,000	\$70,000	\$35,000
	Map Asset data extraction (FT)	\$95,000	\$95,000	\$95,000	\$45,000
Outsourced	tbc	–	–	–	–
Total		\$165,000	\$315,000	\$440,000	\$475,000

IMPLEMENTATION STRATEGY > COST SHARING

- The City will develop baseline mapping
- Third parties to pay for TO360 totem supply and installation costs
- Other ways to expand the system include implementation through private developer contributions



IMPLEMENTATION STRATEGY > TO360 IN YOUR NEIGHBOURHOOD

Unit cost to implement signs in your area include fabrication, panel and map artwork, and installation. This cost estimate includes for automatic refresh every 2 years, cleaning and maintenance delivered by the City. Signage elements could include sponsors' logos.

TO620
Wide Totem

\$14,000 *

* current pre-tender estimate

TO460
Narrow Totem

\$12,000 *

TO750
Finger Post

\$7,000 *

TO600/TO1200
Wall mounted maps

\$3,500 *



IMPLEMENTATION STRATEGY › FUNDING BENEFITS AND RATIONALE

Potential Funder	Capital Costs			Ongoing Costs	Benefits of TO360 to funder	Rationale for funding contribution
	Map Asset	Artwork	Signage			
City of Toronto	●	●	●	●	Increased attractiveness of the City of Toronto as a place to live, work and visit. Improves physical and mental health, noise impacts and air quality. Increased tax revenues from tourism.	Promoter of TO360 – contribution to demonstrate commitment in the programme. The City is also best place to manage the development and maintenance of this data.
Provincial/Federal government	●	●	●	●	Benefits as per City of Toronto	Capital grants may be available for initiatives such as TO360.
Metrolinx	●	●	*	*	Improves quality of life and the efficiency of the transit and highway network, particularly during peak periods. Reduces greenhouse gas emissions.	As regional transportation planning agency they have a mandate to promote and improve walking through capital grants available.
TTC	●	●		●	Additional revenues through increased use of TTC as a mode of transportation in conjunction with walking.	If a map base was provided to TTC for use on TTC owned infrastructure, TTC would no longer require to maintain the map asset themselves. Cost savings can then be passed on towards TO360 along with any additional contributions towards an integrated system.
GO Transit	●	●		●	Benefits as per TTC	Rationale as per TTC

* potential 'last-mile' implementation scheme around Eglinton Crosstown

IMPLEMENTATION STRATEGY › FUNDING BENEFITS AND RATIONALE

Potential Funder	Capital Costs			Ongoing Costs	Benefits of TO360 to funder	Rationale for funding contribution
	Map Asset	Artwork	Signage			
Bike Share	●			●	Additional revenues through familiarity with Bike Share products with an integrated system	Bike Share can potentially benefit from utilising the base map asset in its online/app products
Business Improvement Areas			●	●	Increased visibility, accessibility and awareness of BIA resulting in increased footfall and spending	Presence of TO360 signage will directly benefit the BIA.
Major attractions			●	●	Increased visibility, accessibility and awareness of attraction resulting in increased revenues	Presence of TO360 signage will directly benefit the attraction.
Major developers			●	●	Increased attractiveness of the City of Toronto as a place to live, work and visit resulting in increased profits	Presence of TO360 signage will directly benefit the development.
Local tourism agencies			●	●	Increased attractiveness of the City of Toronto as a place to visit. Increased tax revenues from tourism.	Presence of TO360 signage will directly benefit tourism

NEXT STEPS

AUGUST 2016

- Phase 3 Preparation closure
- Meeting potential partners and funders

SEPTEMBER 2016

- Report to Council preparation

AUTUMN 2016

- Report to Council

Many Thanks!