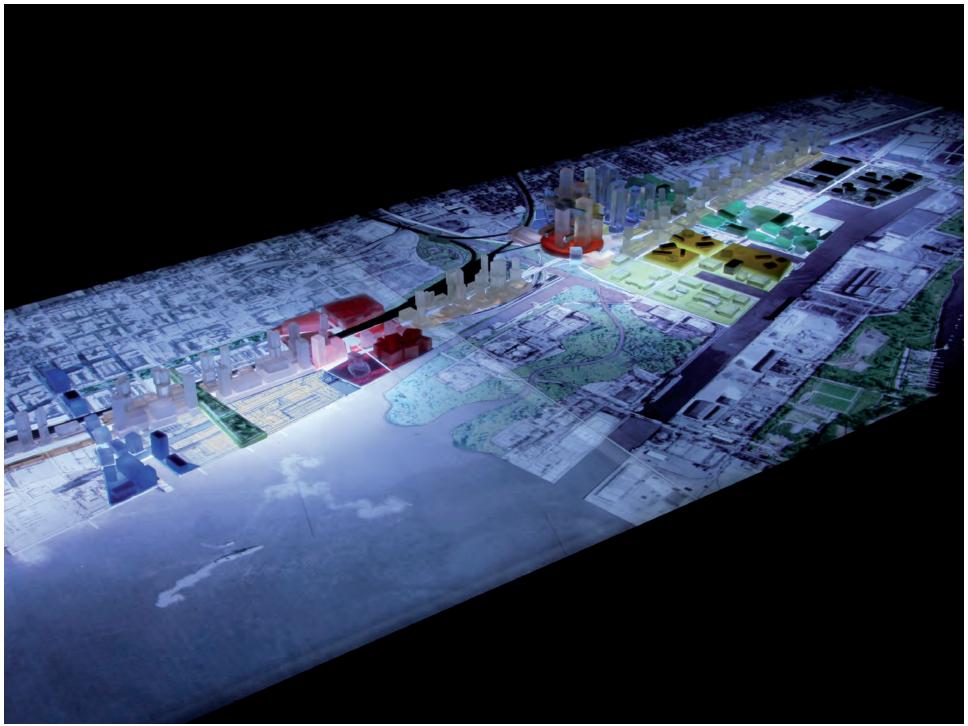
# Toronto 2036



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**Premise** 

- -Understanding Toronto
- -Site Potentials
- —Transferium
- -Boulevard Mix Strip
- -Arts District
- -Park Strip
- -Heritage Market
- —Creative City
- —Appendix

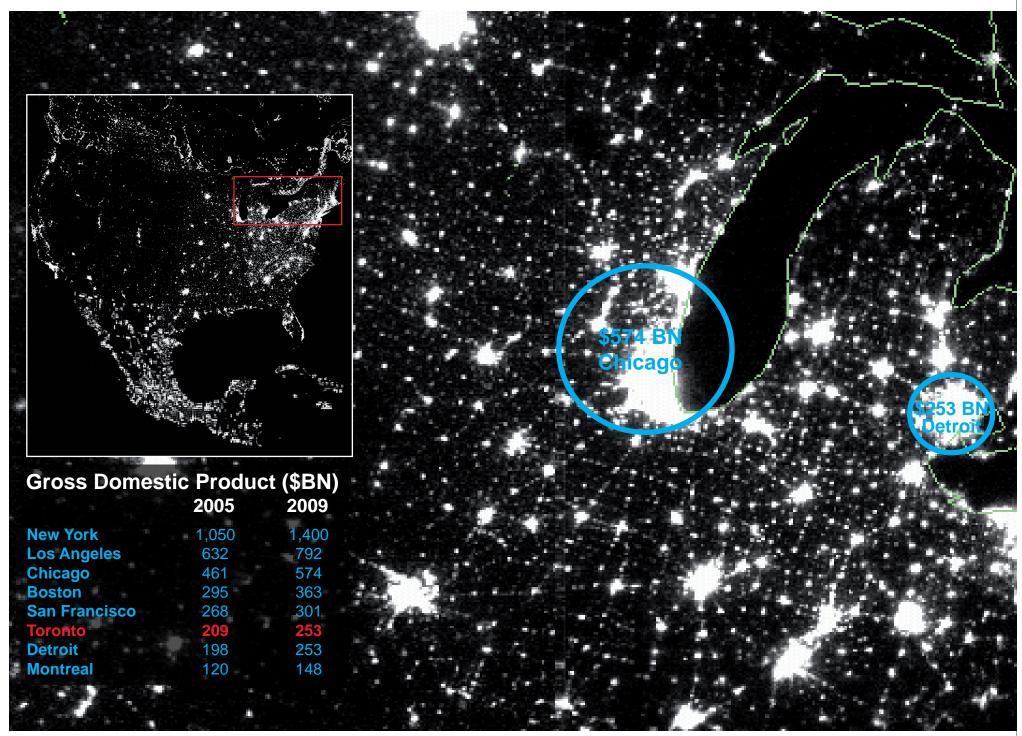


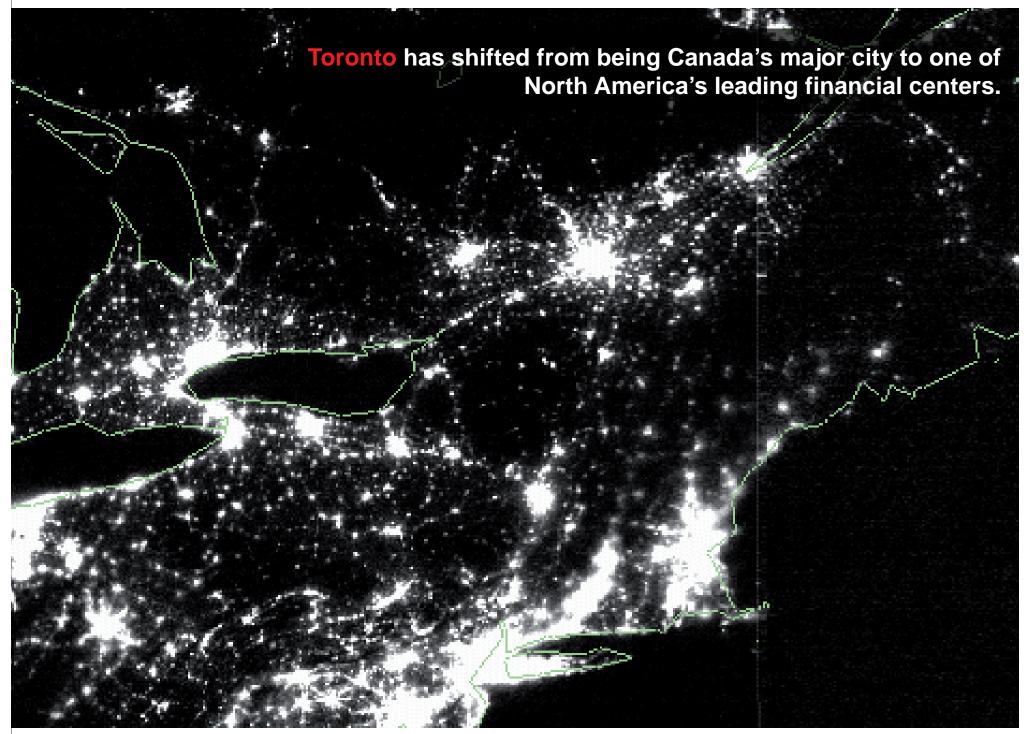
The Gardiner has long been acknowledged as a barrier between Toronto and its waterfront, sequestering the city from one of its key ecological assets and limiting development along its path. Removing the upper deck of the Gardiner offers both the best integration of the roadway with its surroundings and the greatest number of opportunities for navigating across it.

Reimagining the Gardiner as a grade-level boulevard—Lakeshore Boulevard—we have elaborated several key connections across it. Each of these navigates the new Lakeshore Boulevard in a different way, passing over, under or across it to create links between key cultural and urban points and the waterfront.

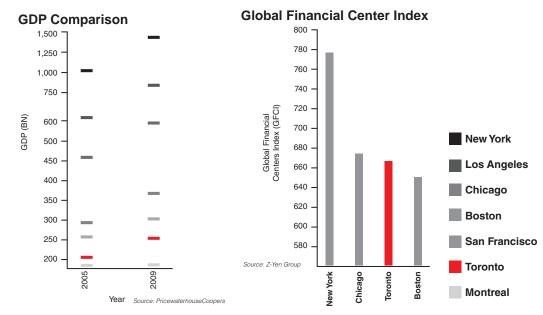
These connections, while necessary, will not be sufficient to support the growth of the area. Our proposal looks not only at crossing the Gardiner, but at potential new transit modes along it. The east end of the site is a crossroads of the highway, the future relief subway line, and the commuter rail. By creating a new transit hub at their conjunction—a Transferium that combines 6,000 parking spaces with stations for various modes of public transit—transportation to and from downtown can be reorganized and amplified, unlocking the untapped promise of Toronto's waterfront as not only an environmental amenity but as a new ground for Toronto's future growth.

In an age that has learned the limits of growth through sprawl, our proposal uses the opportunity of the Gardiner's alteration to imagine a new "smart growth" strategy for the city. This strategy offers a new dynamic between the past and the future, development and the environment, focusing development adjacent to the city's core and linking it with the city as a whole.

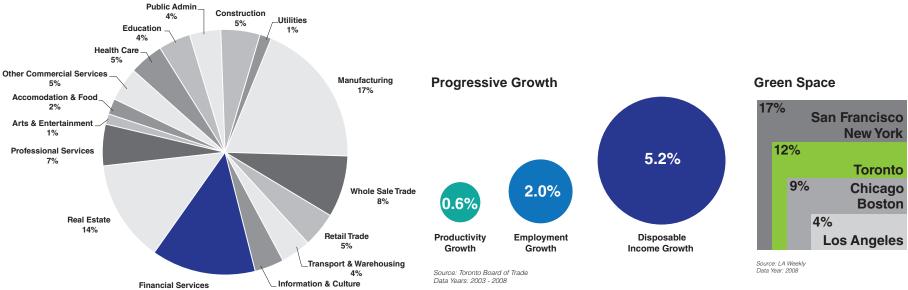




Toronto's quality of life and economic development, even post crisis, have kept pace with or outstripped its neighbors.



#### **Contribution of Industry Sectors to GDP**



Source: City of Toronto 2010 Econometrics Model

4%

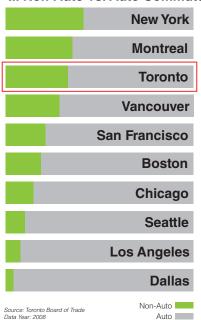
Despite its competitive mix of auto and public transport, Toronto suffers from the worst commute times in North America.

#### I. Air Pollution

New York	42
Los Angeles	39
Chicago	32
Toronto	27
Montreal	24
Vancouver	21
Accumulation of particulate matter sulfur and pitrogen	

dioxide in mg per cubic meter (mg/m³) Source: Toronto Board of Trade Data Years: 2001 - 2004





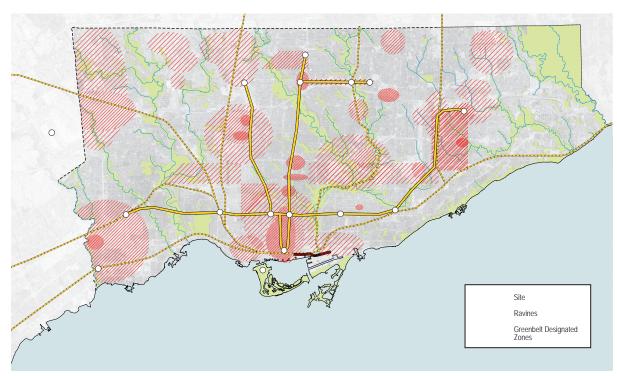
#### VI. Commute to Work



#### IV. Metro Ridership



Like many North American cities, Toronto has grown away from its urban center and waterfront. A dense core and suburban periphery form a collection of nodes linked through a road network and to a lesser degree by subway and commuter rail.

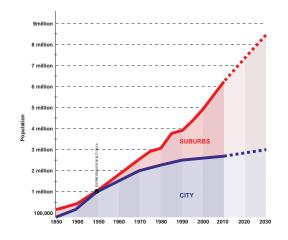


"The people of Toronto deserve more than urban sprawl and the congestion and pollution that comes with it."

- Jim Bradley **Minister of Municipal Affairs and Housing** 





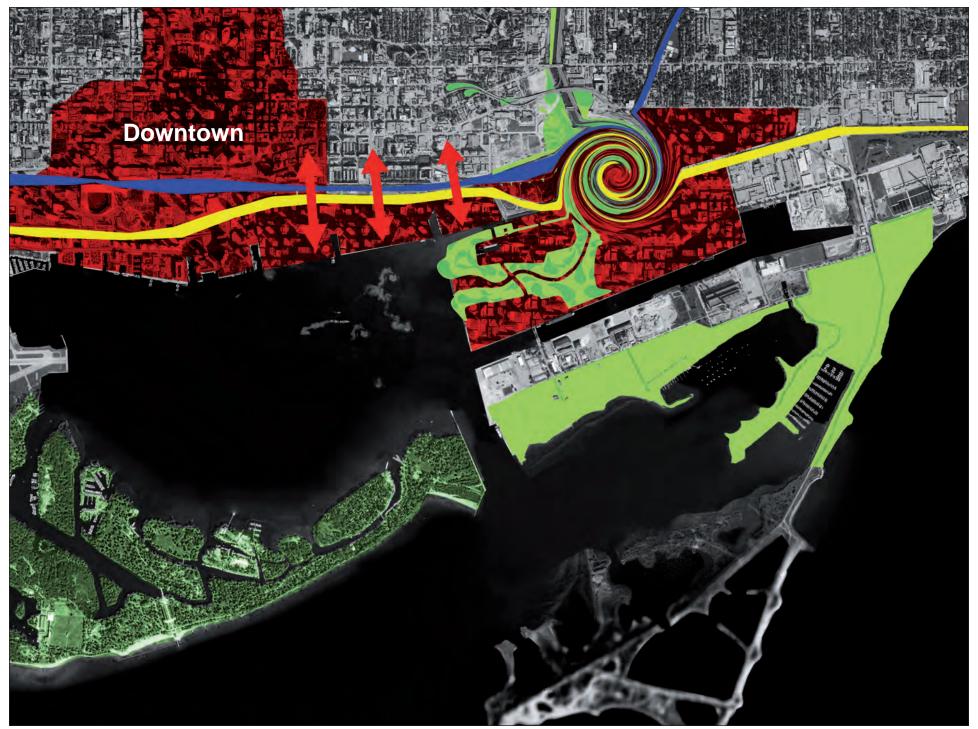


At the junction of the downtown, the periphery and the waterfront, the areas to the east and west of downtown are missing links within the city's network.



# —Site potentials

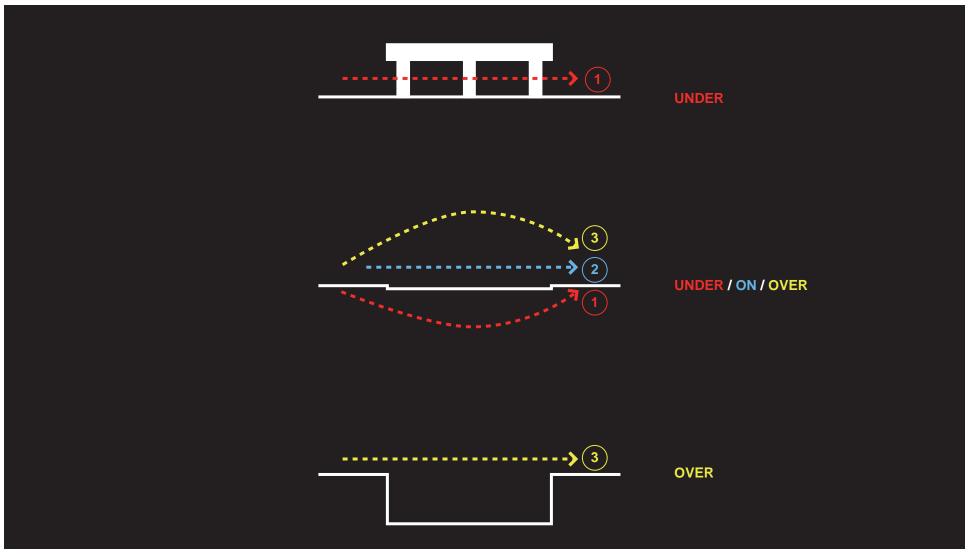
Can reducing the Gardiner's footprint simultaneously remove an impediment to the development of its surroundings and INCREASE downtown's connection to its periphery?



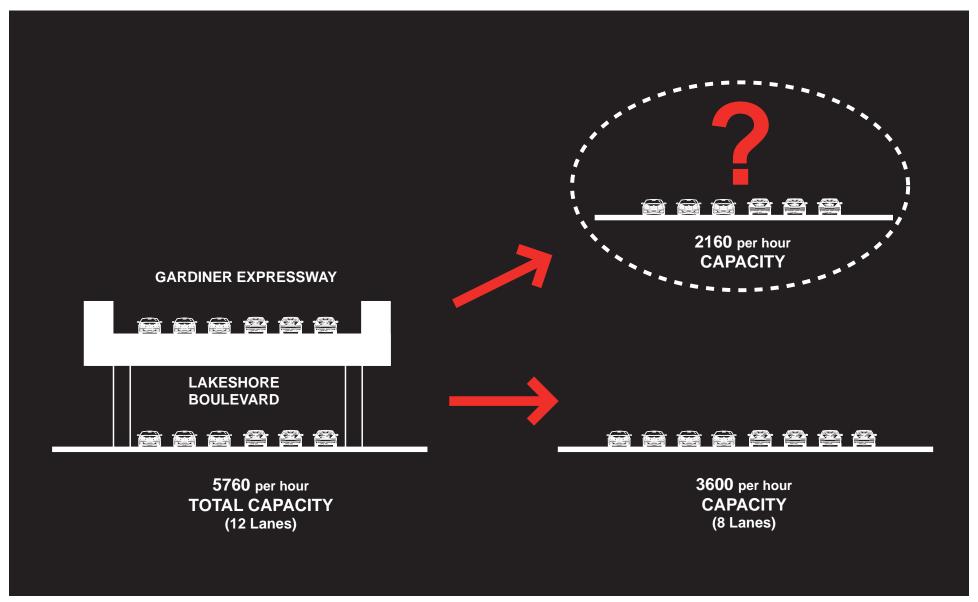
Removing the Gardiner as an obstacle is an important first step towards reorienting Toronto's growth, but only a first step...



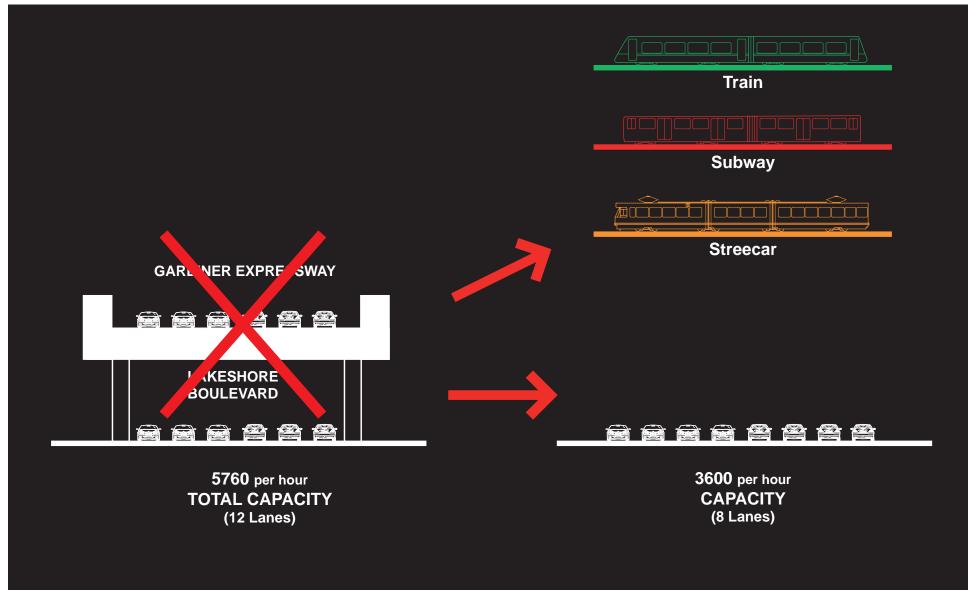
Of the available options to lessen the Gardiner's impact, removing the upper deck offers both the best integration of the New Gardiner with its surroundings and the greatest number of opportunities for navigating across it.



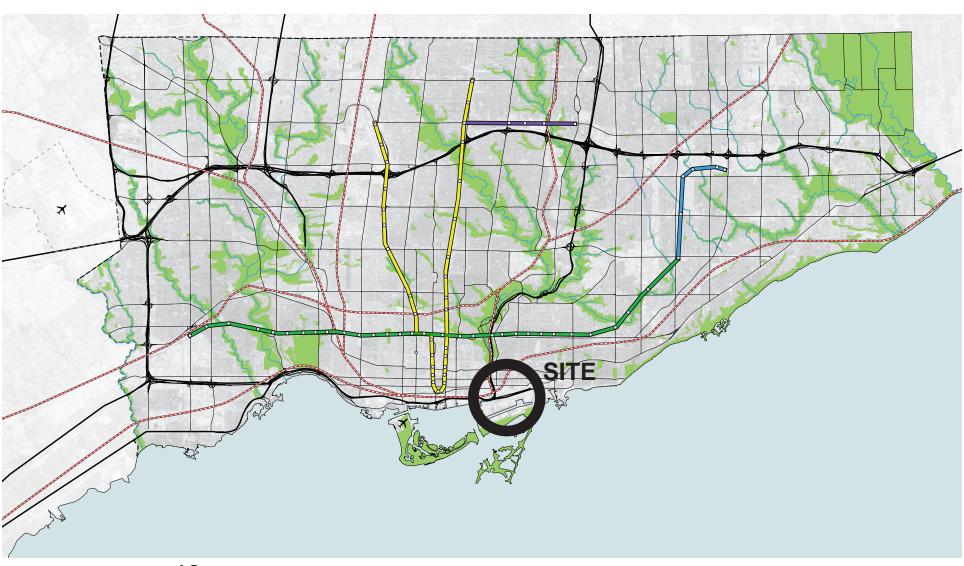
The resulting reduction in road capacity—a reduction that will exacerbate an already congested road network—begs the question of what can step in to fill the void.



Removing the upper deck provides an opportunity to invest in multiple new modes of transit into Toronto's core.

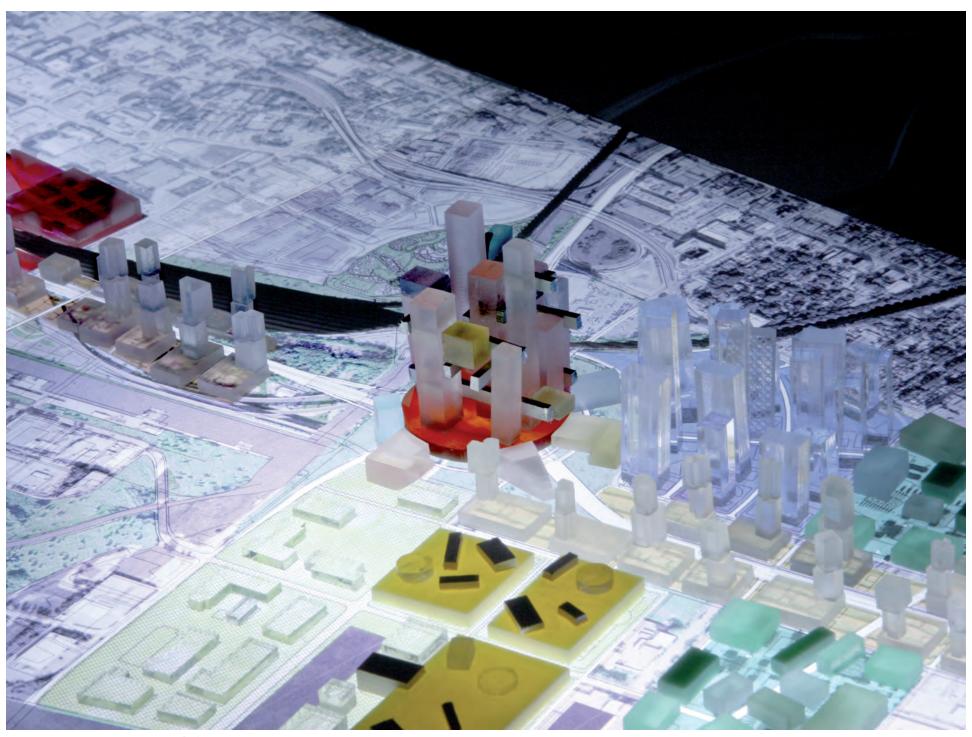


The east end of the site is a crossroads of highways, the future relief subway line, commuter rail, etc. By creating a new transit hub at their conjunction, these various transport modes can be reorganized and amplified.

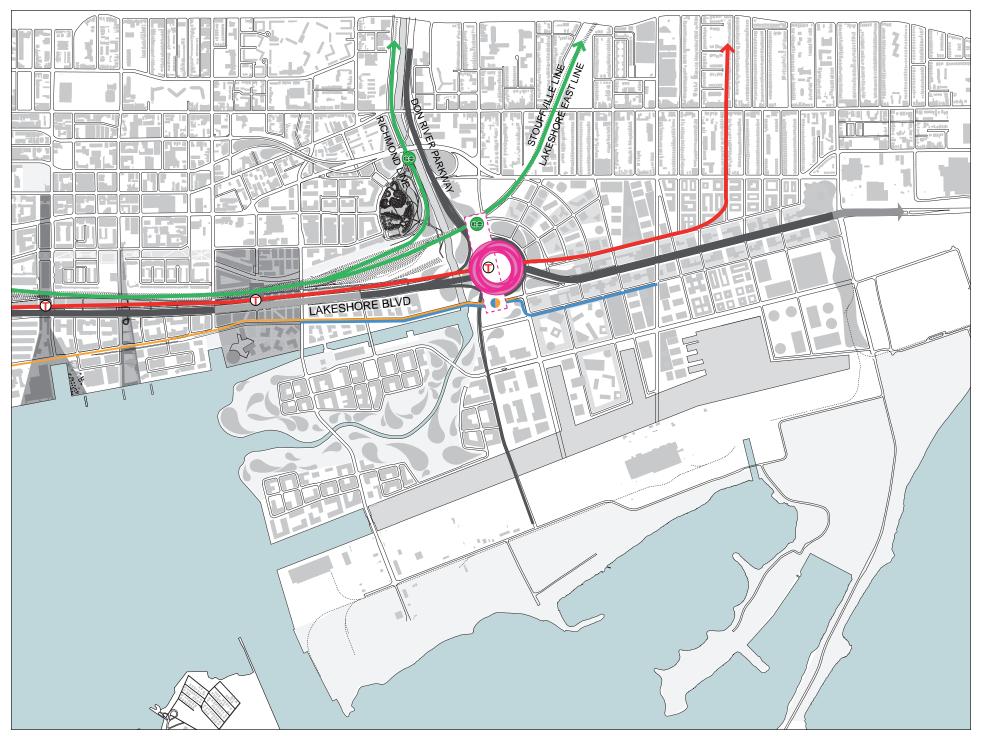


Their conjunction becomes the focal point of a new node within Toronto.

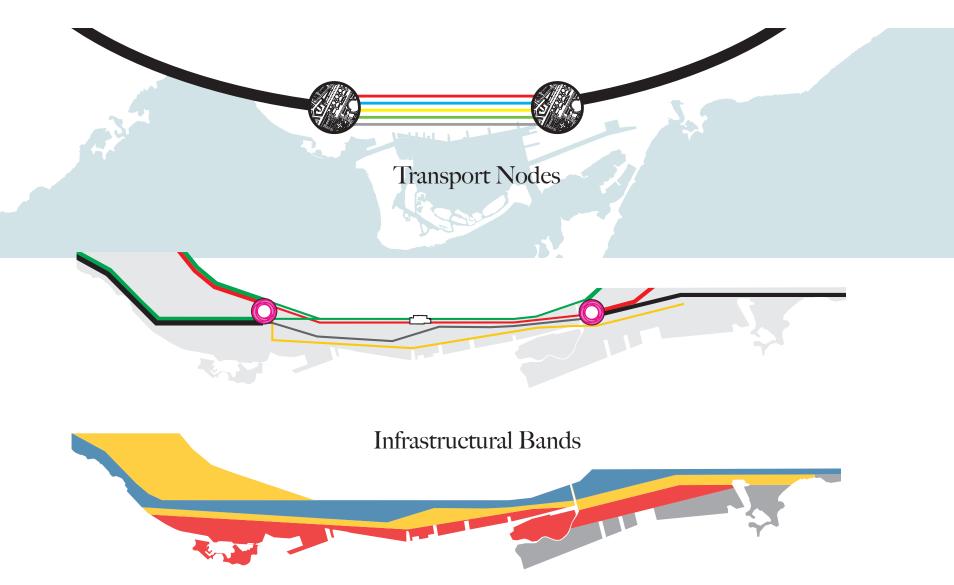




#### **Premise**

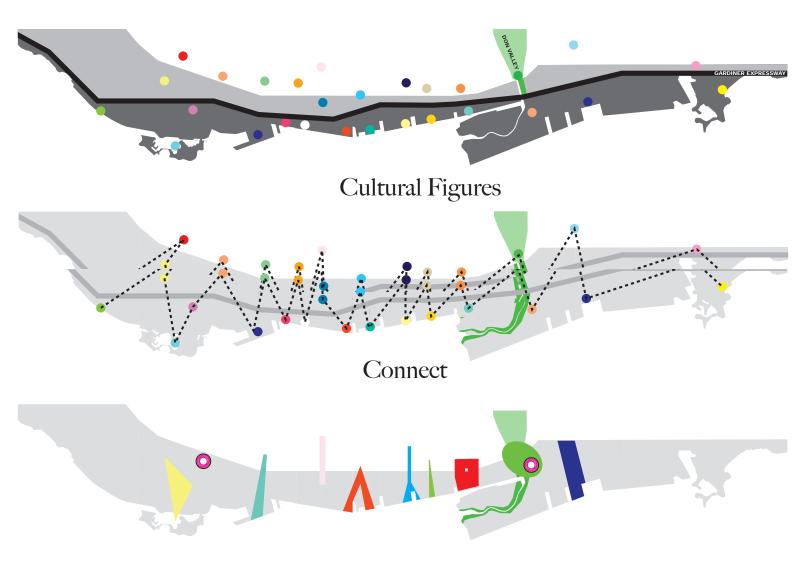


### **East-West Connections**

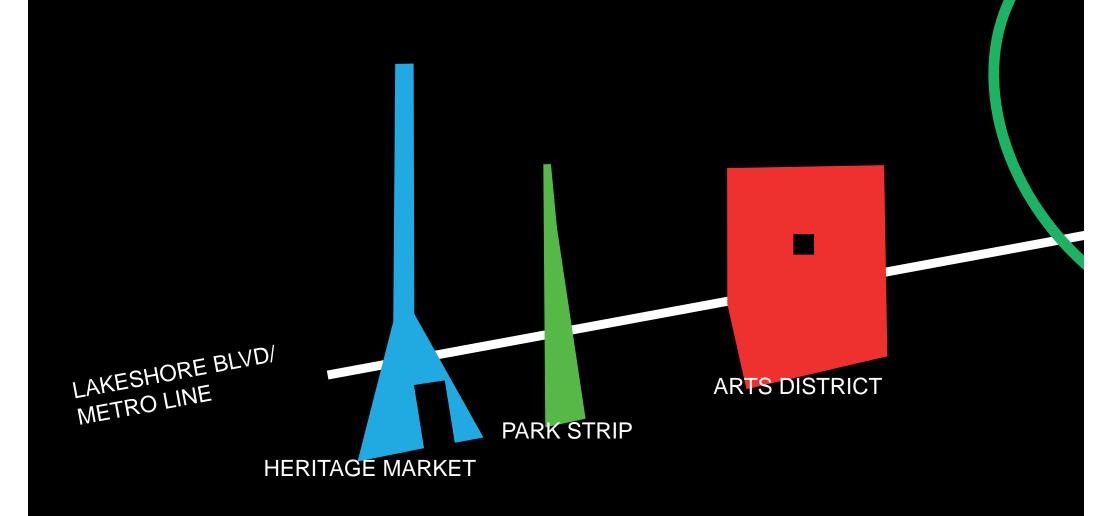


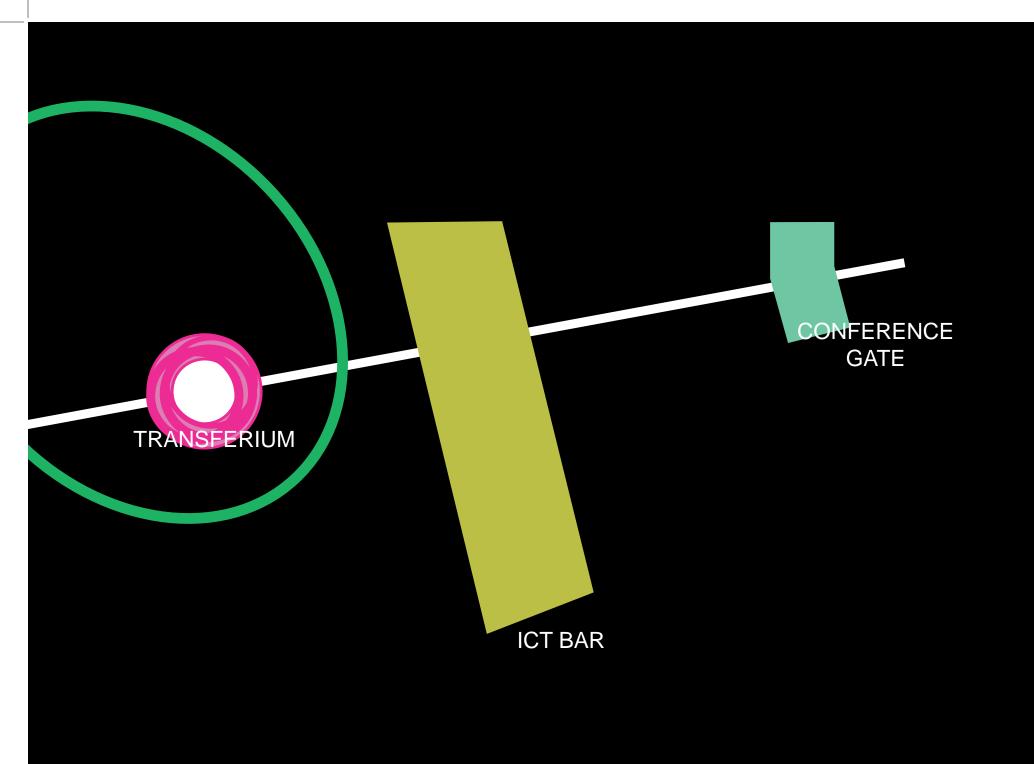
Program Bands

## North-South Connections

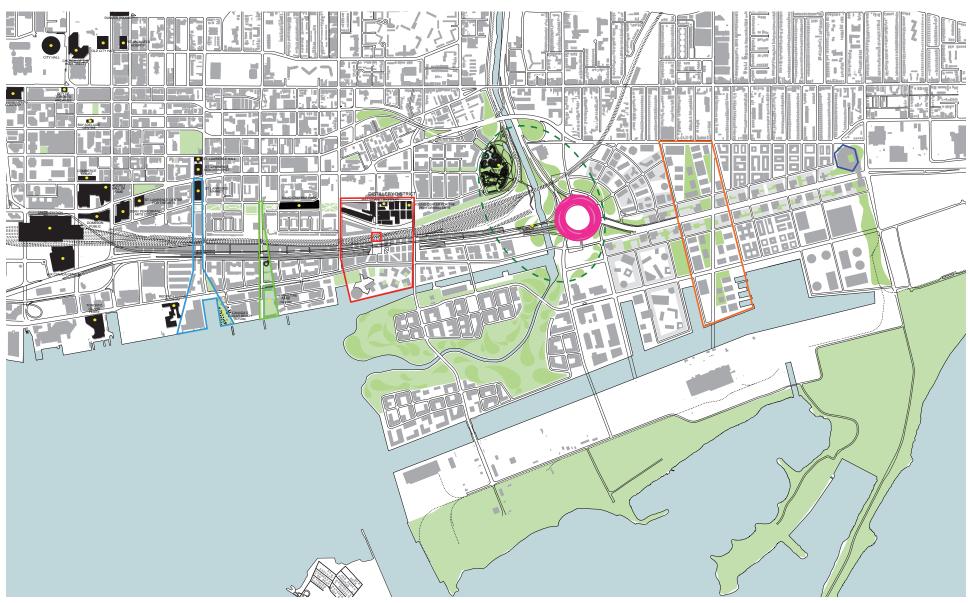


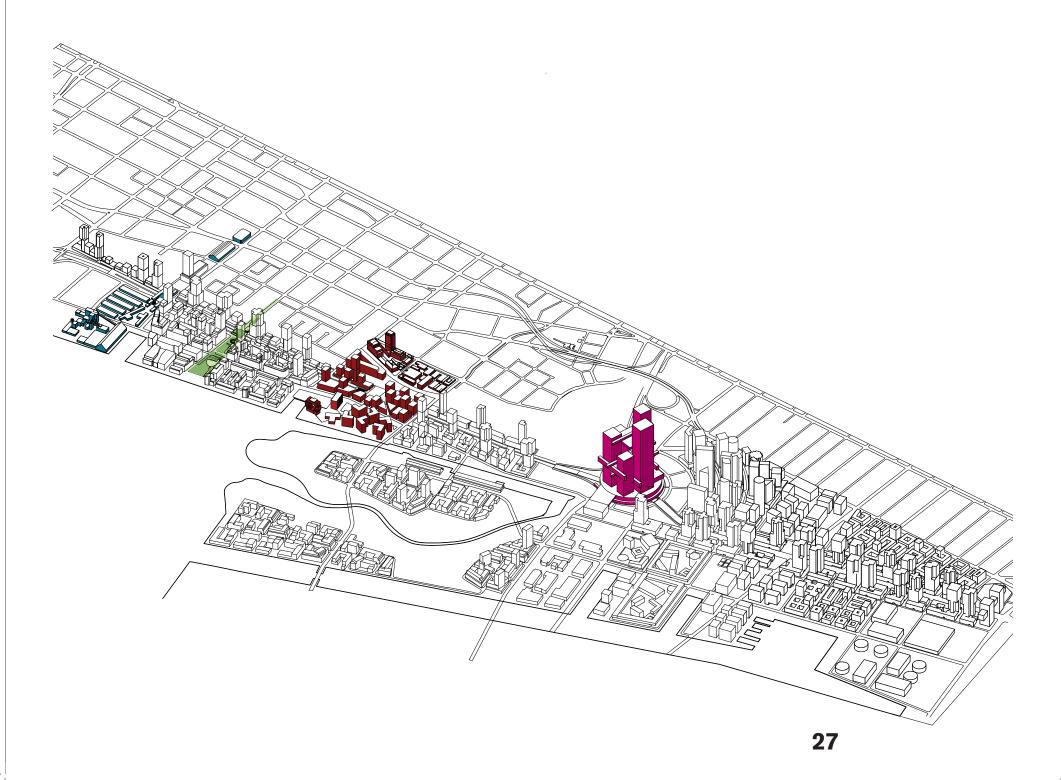
Culture Points



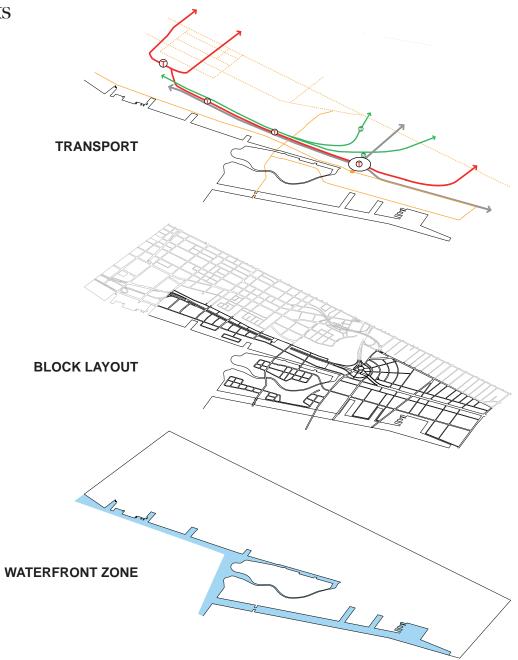


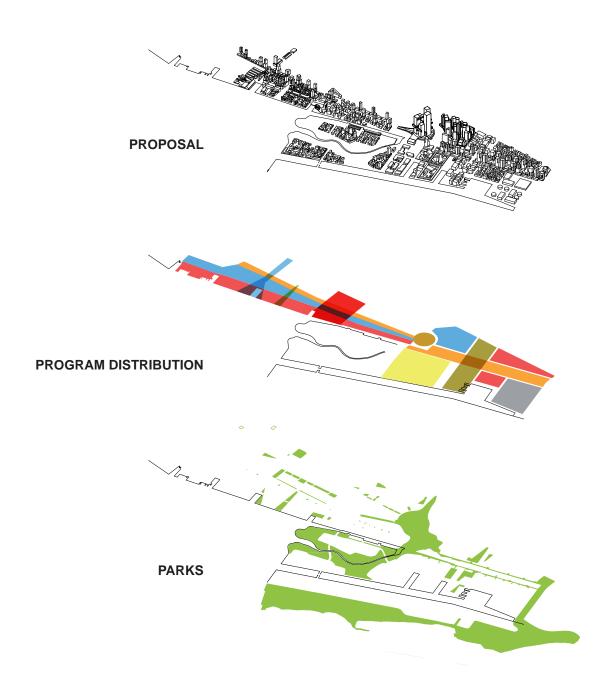
## Cultural Figures





## Networks



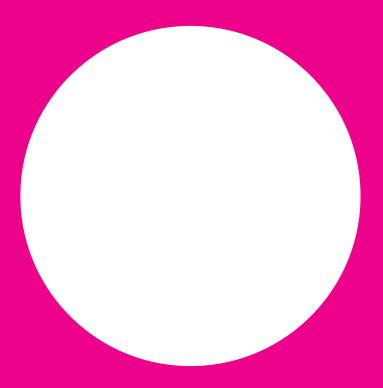




#### **Premise**



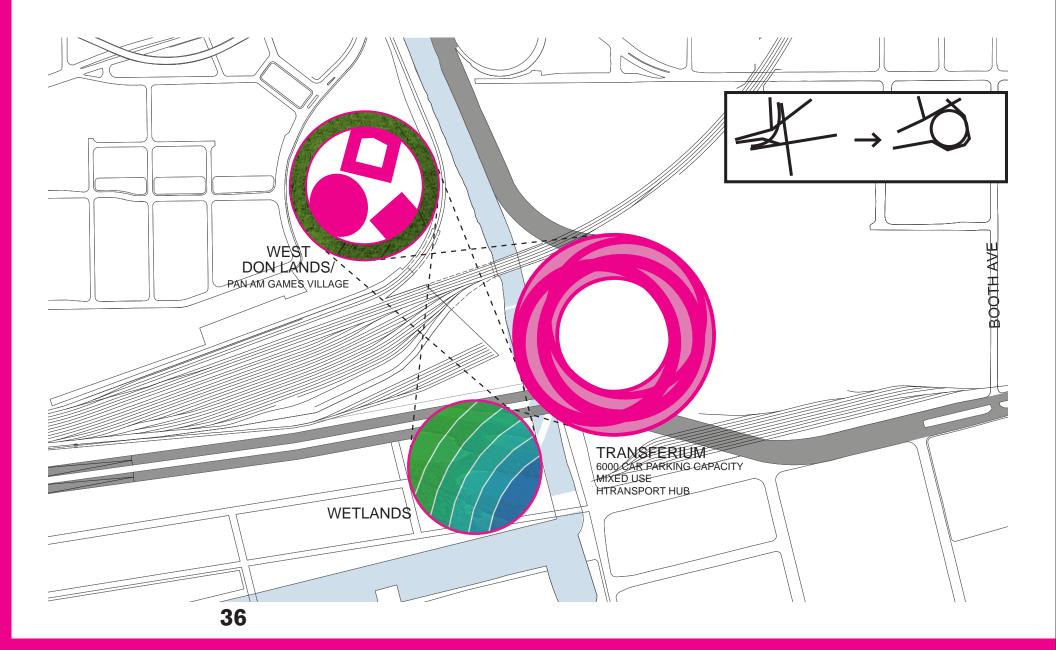
## **—TRANSFERIUM**



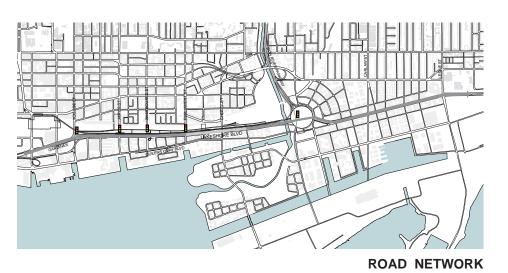




The transferium clarifies the current infrastructure network, facilitating the removal of the Gardiner by increasing modal use...

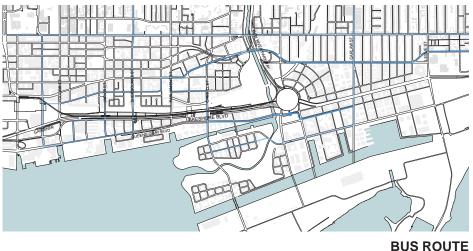


....providing connections to Subway, GO Trains (Richmond, Stouffville and Lakeshore East lines), Street car (along Queens Quay Boulevard) aswell as regular bus



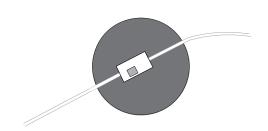




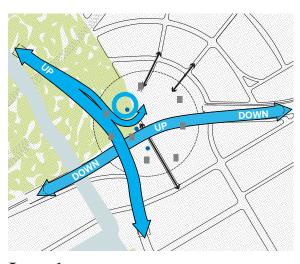


**37** 

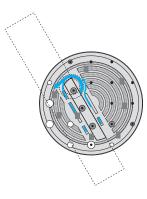
### Transferium Plans



Level o Subway

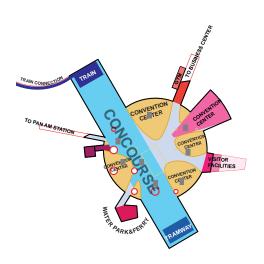


Level I Ground Level

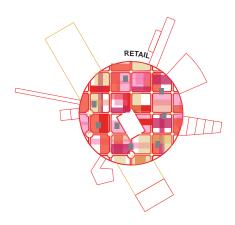


Level 2 Parking

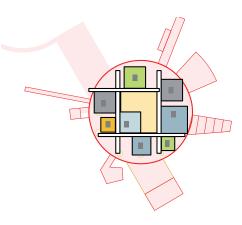
#### Transferium



Level 7 Concourse

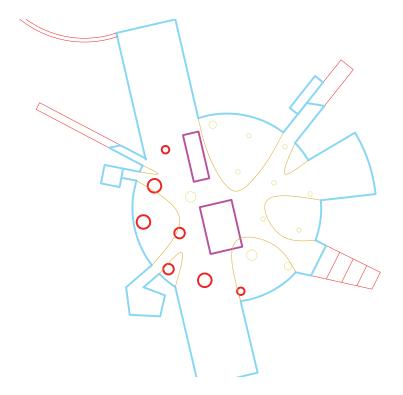


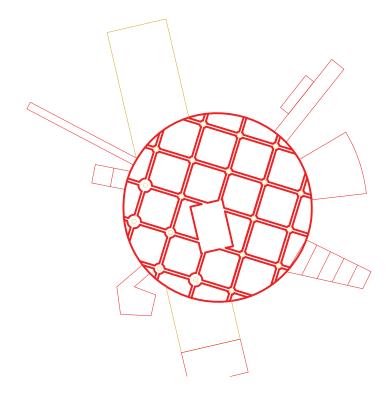
Level 8 Retail



Tower

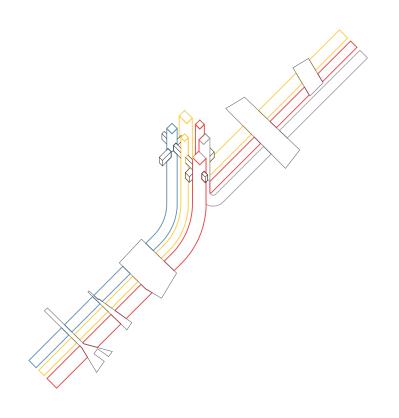
### Towers

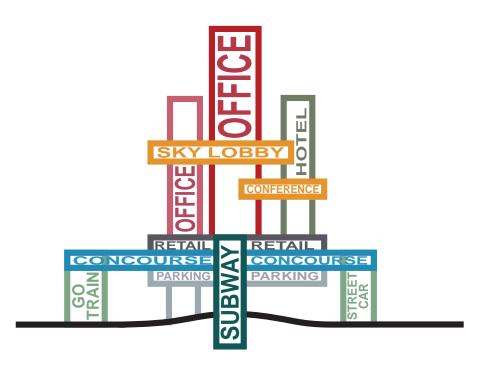




#### Transferium



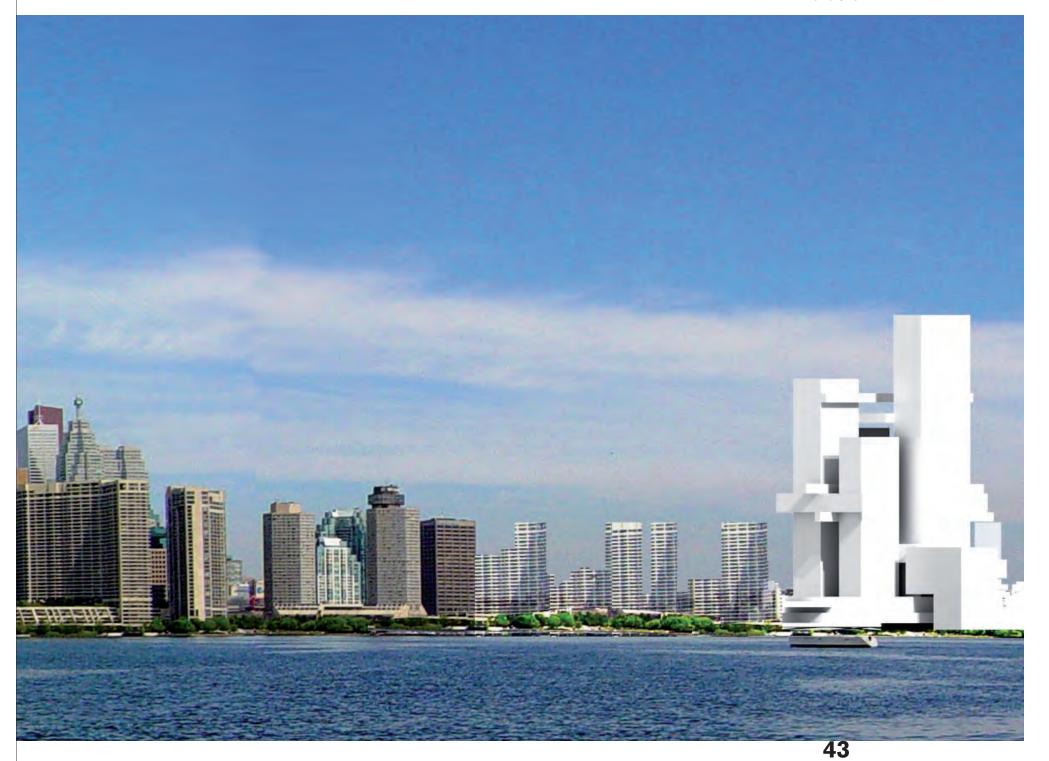






42

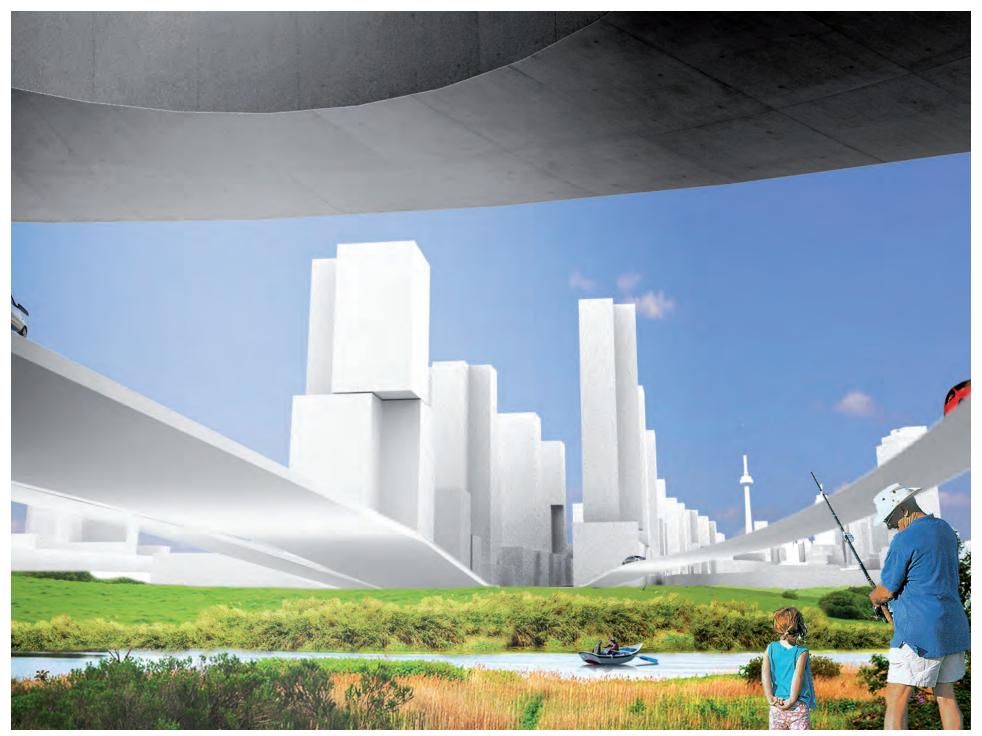
#### Transferium



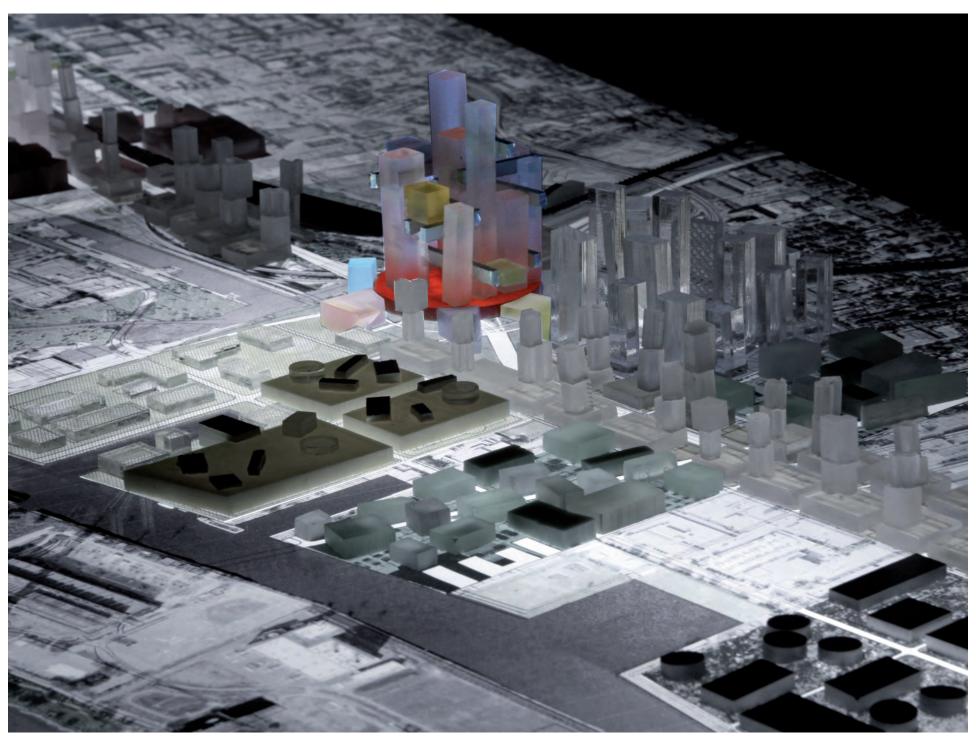
The Don River Valley flows beneath the transferium, creating an environmental connection to the surrounding areas.



Transferium



Toronto Waterfront



#### Transferium



# -LAKESHORE BOULEVARD/ MIX STRIP

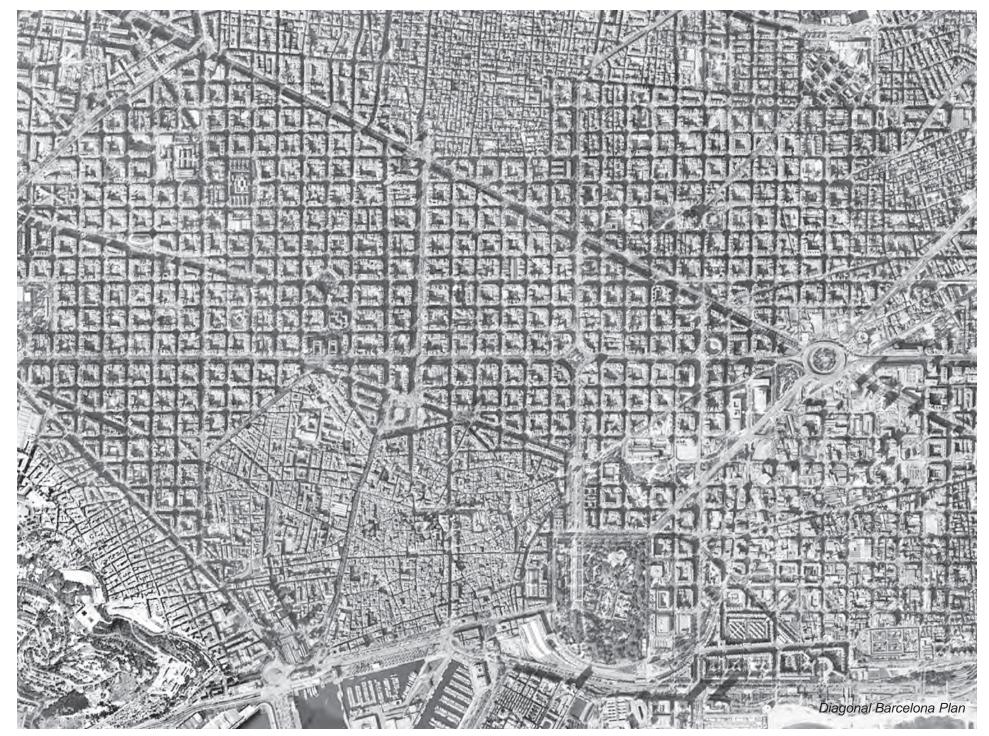
The removal of the Gardiner enables creation a two sided street by developing the space of land between rail tracks and road structure.



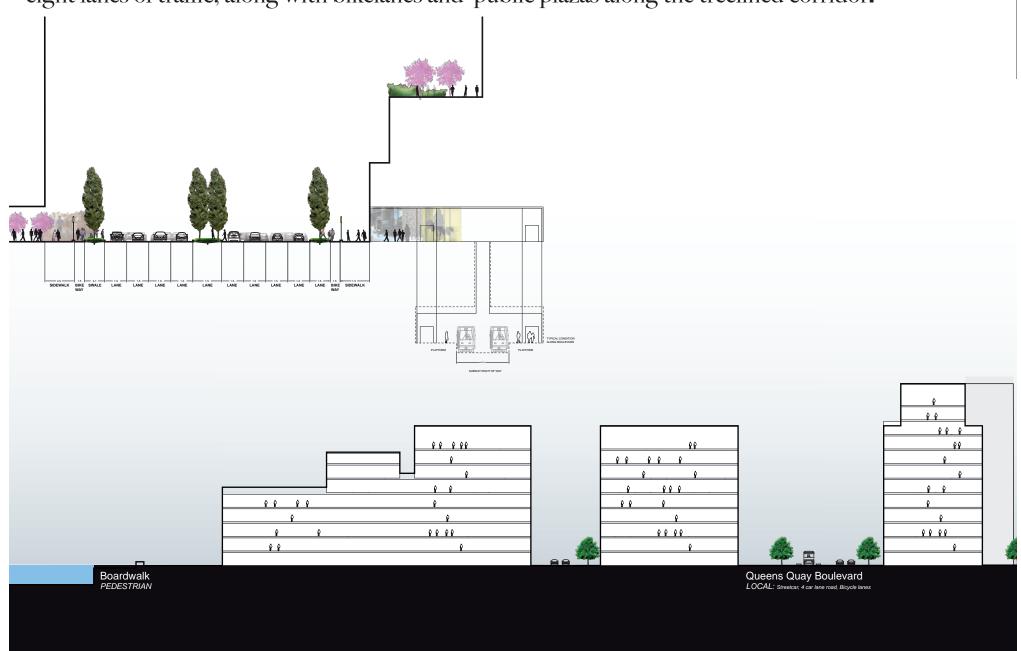


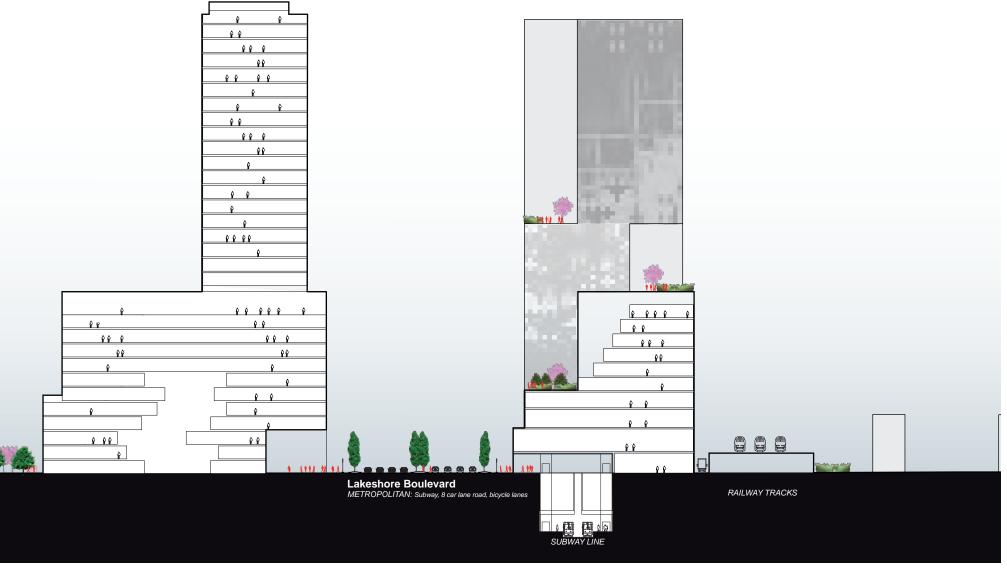
A new spine emerges, linking Downtown to future development and connecting significant elements of the city.





The new Lakeshore Boulevard maintains a status as a main artery into the city, accommodating eight lanes of traffic, along with bikelanes and public plazas along the treelined corridor.

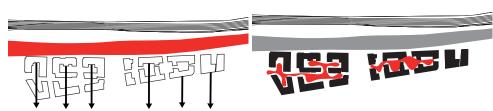


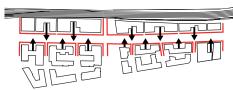


### Proposed Massings

I. Existing Condition:Buildings Face Awayfrom Gardiner.

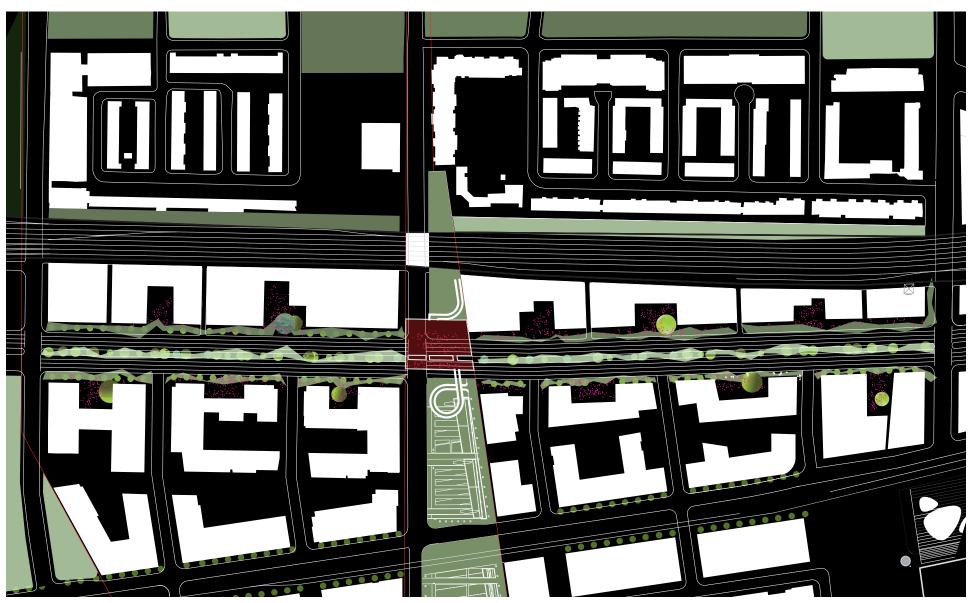
3. Proposal: Mirror the current condition, creating a new character to the Boulevard.

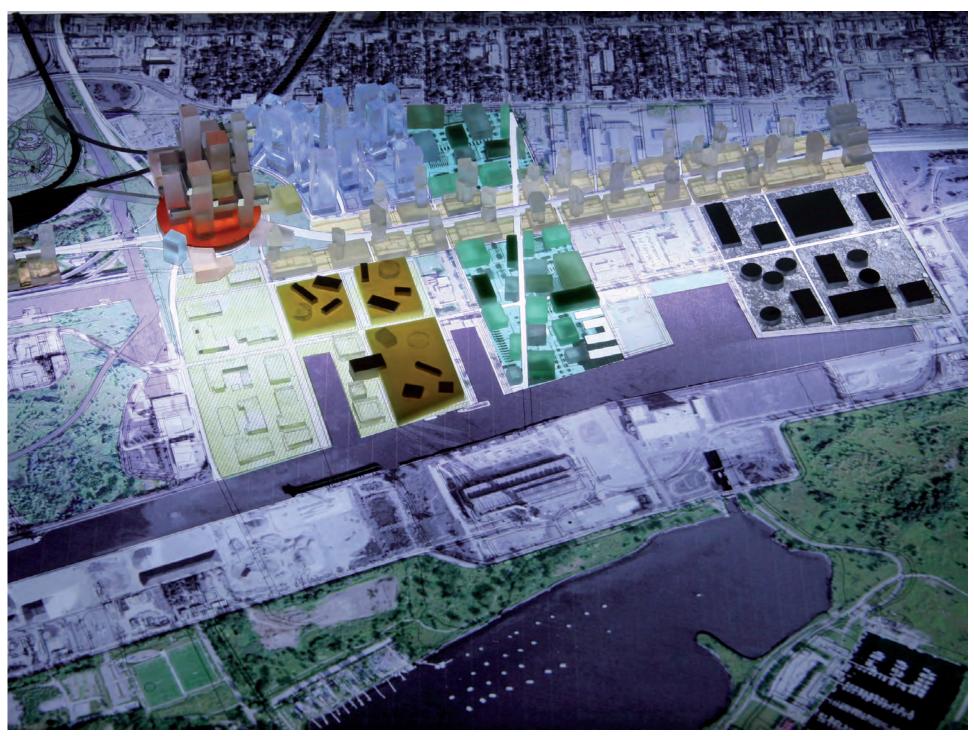






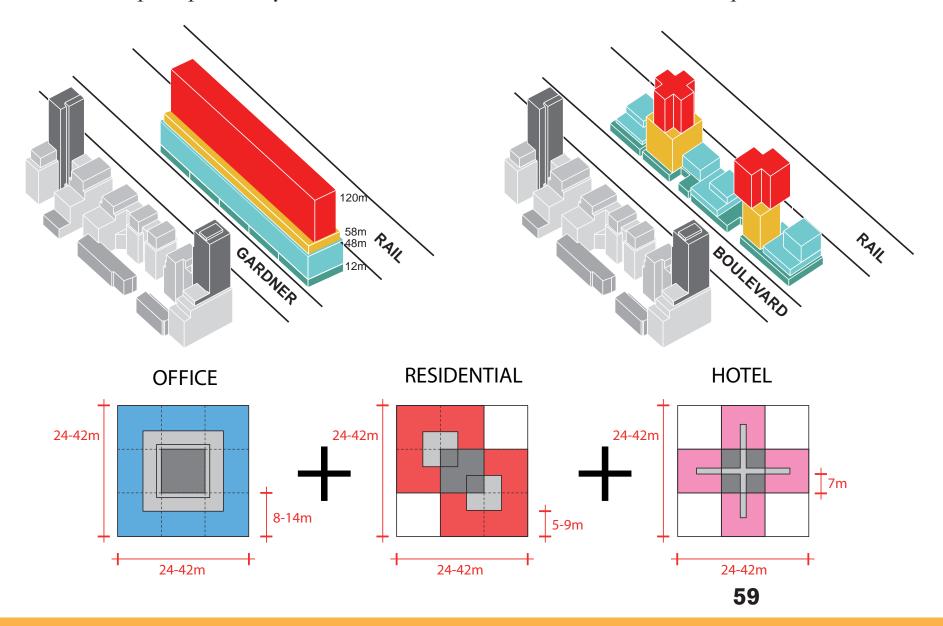
2. Existing Condition: Buildings turn away from Lakeshore Boulevard, creating intimate courtyards. 4. The growth of the current urban poche creates pockets of public space along the linear boulevard.



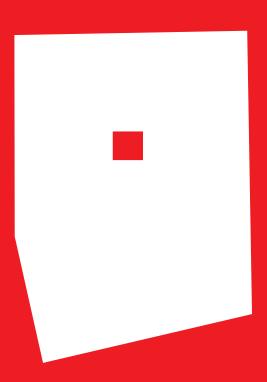


### **Tower Principles**

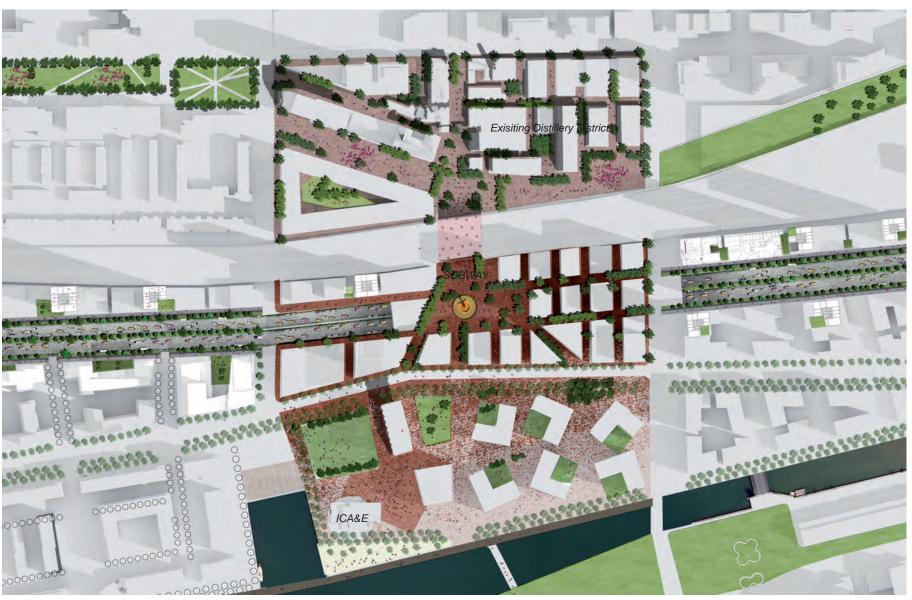
Towers have been developed within the precinct development guidelines with a maximum tower height of 120m. In order to encourage a mix use development, the tower has been developed specifically to accomodate office, residential, and hotel requirements.



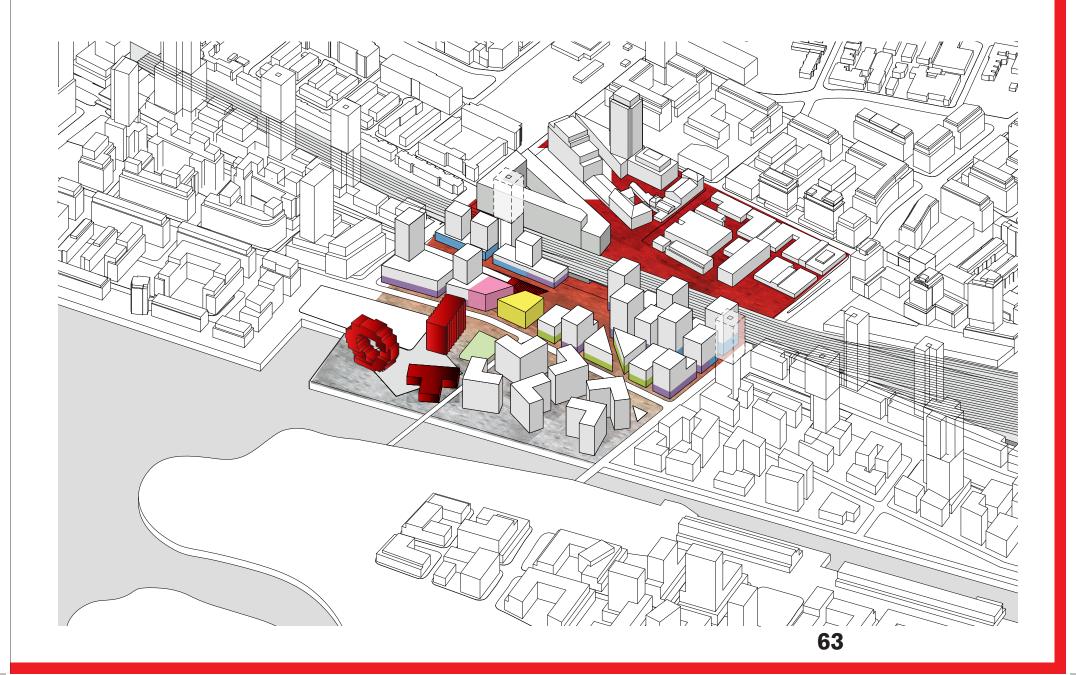
# **—ARTS DISTRICT**



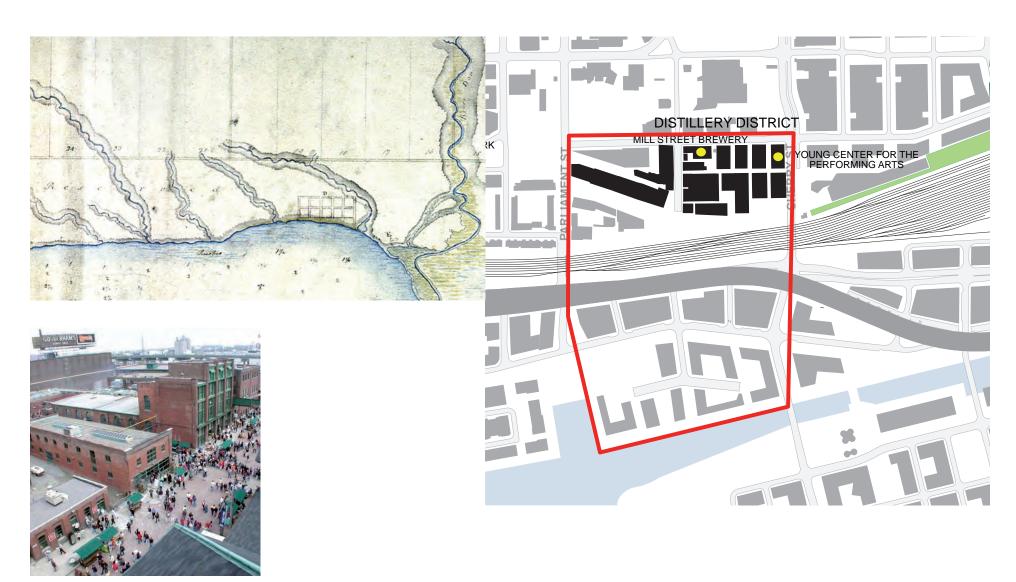
### Overview



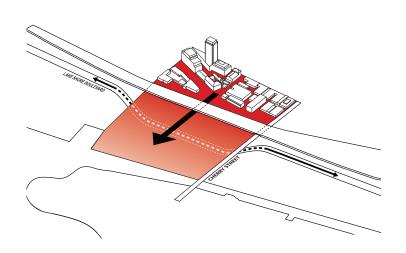
## Program Distribution

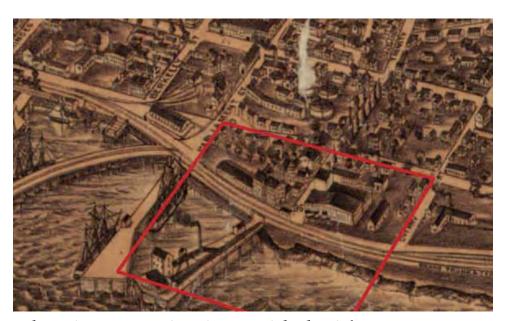


Historically, the Distillery District stands in the location of the first settlements of Toronto. A complex of different Distilleries, during the 1860's it was one of the largest Whiskey distilleries in the world. Now the area has been converted into an arts district.

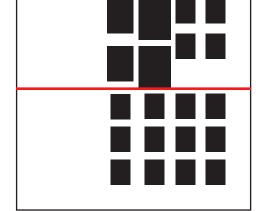


With a mix of cultural arts, galleries and performance arts studios and bars, the district promotes itself as an 'European village'.



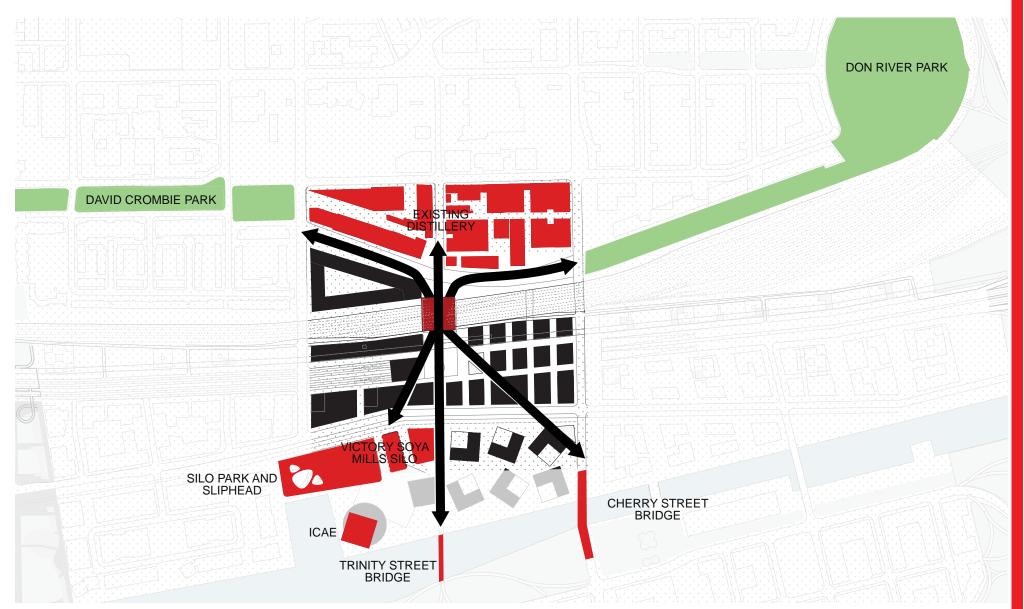


By pushing Lake Shore Boulevard under, a pedestrian extension is provided with access to the waterfront. The grid of the Distillery District is also extended South, retaining a similar urban scale within the two zones.



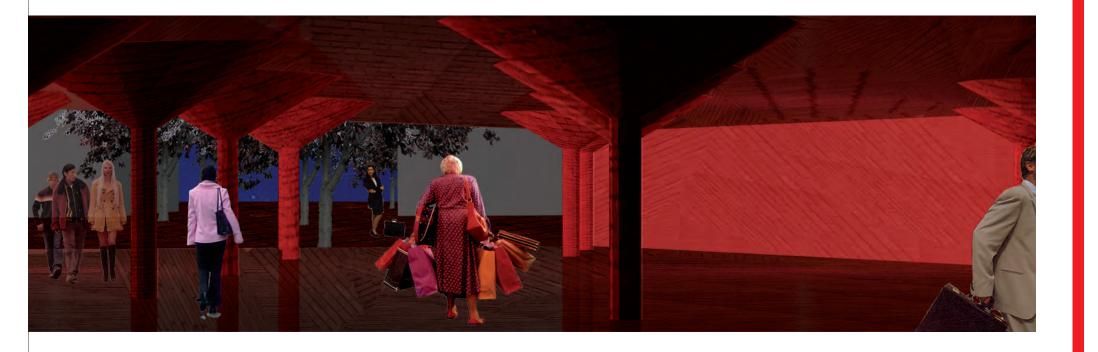


The ICA&E museum provides a clear counterpoint to the Distillery District in the North of the zone. Access to these two destinations creates a series of clearly defined routes through the site...

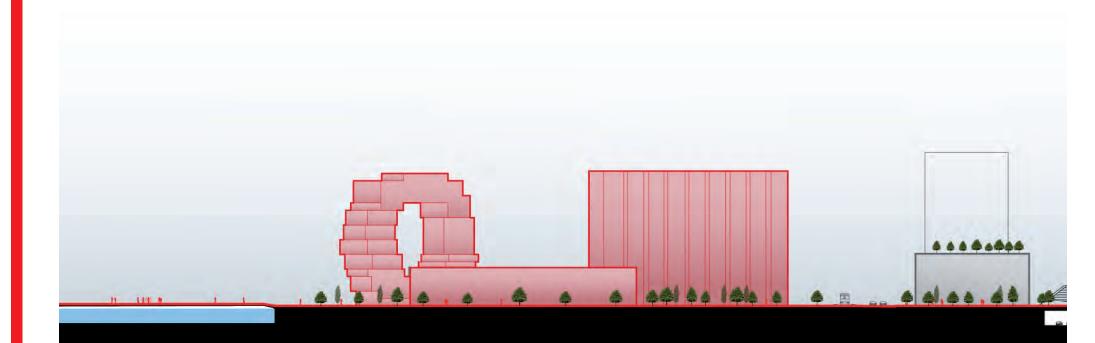


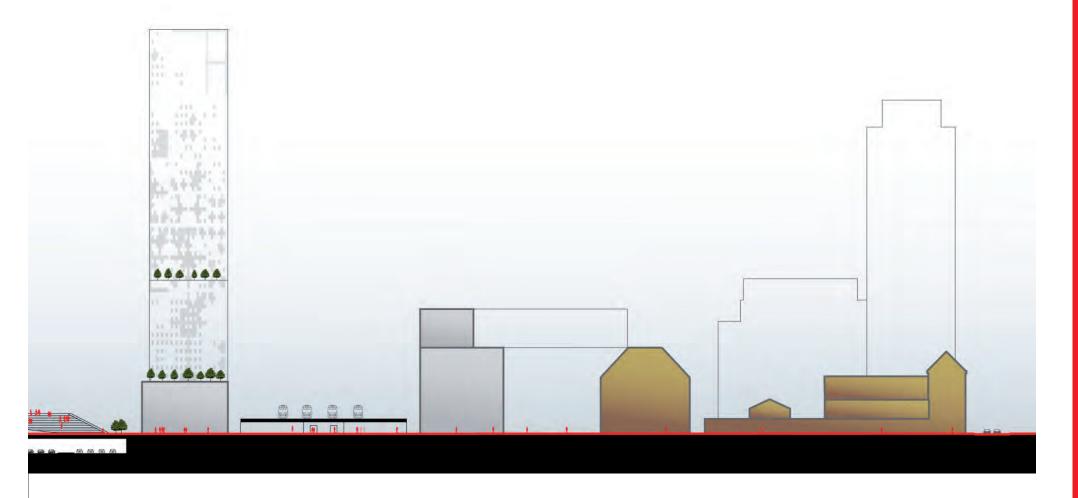
... at the centre a red glazed brick tunnel embedded within the railway berm with subway stop.





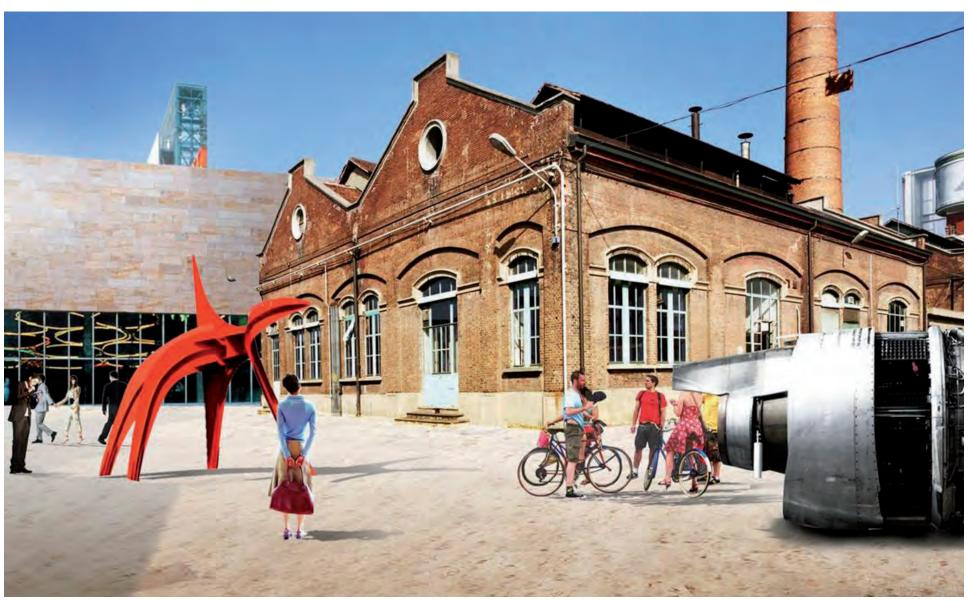
## Section through Arts District



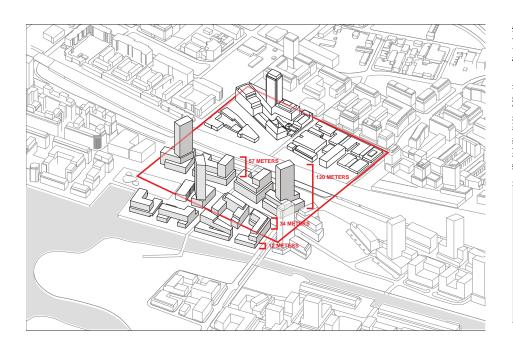


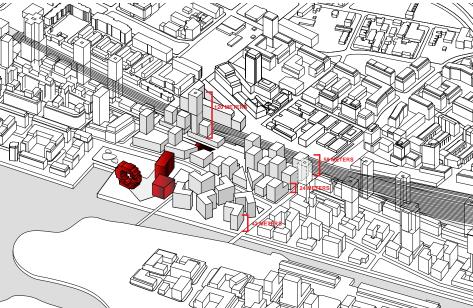




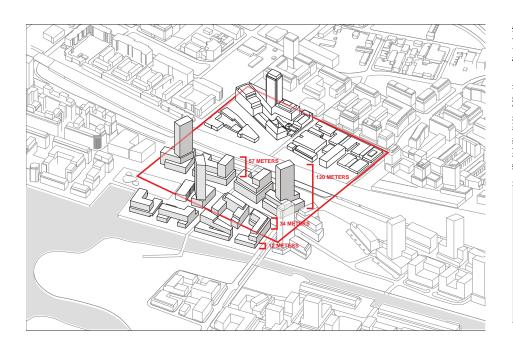


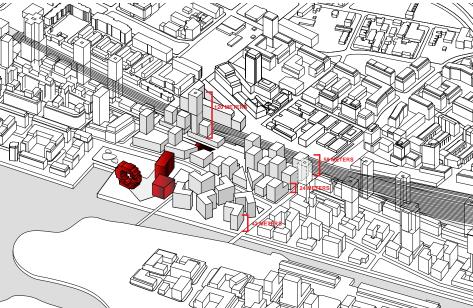
#### Program Density





#### Program Density





Toronto Waterfront

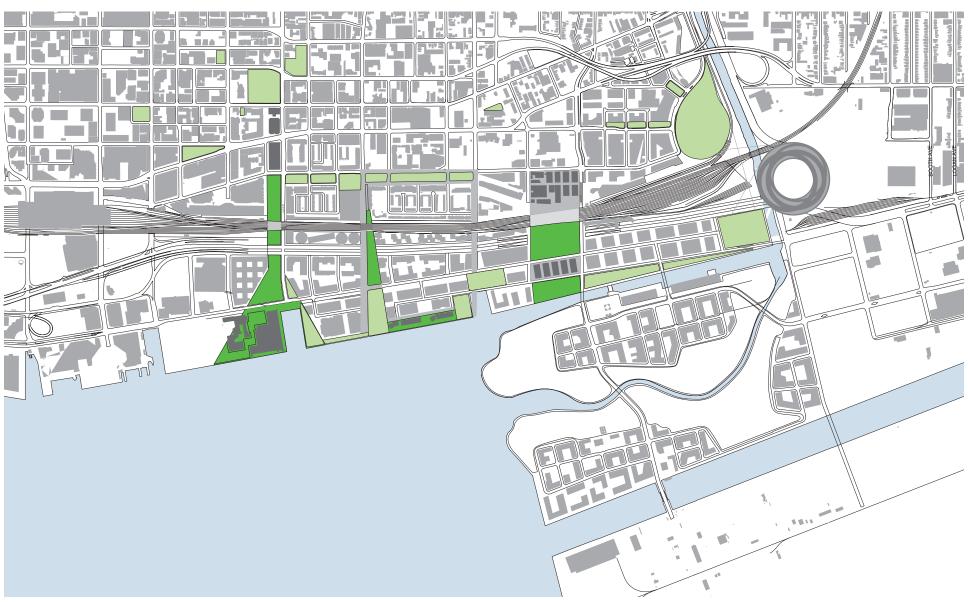
## **—PARK STRIP**

#### **Overview**





#### **Link Existing Park Bands**

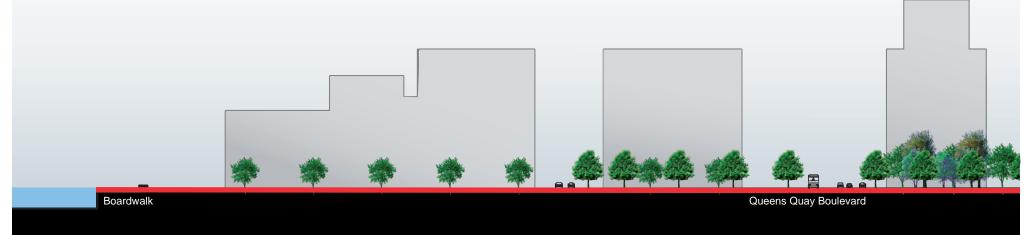


### Gardiner is left as a viewing post.



#### A fragment of the Gardiner is kept, providing an elevated pedestrian plat-

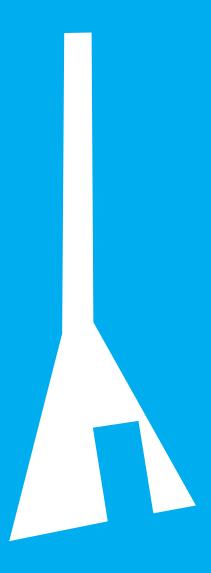




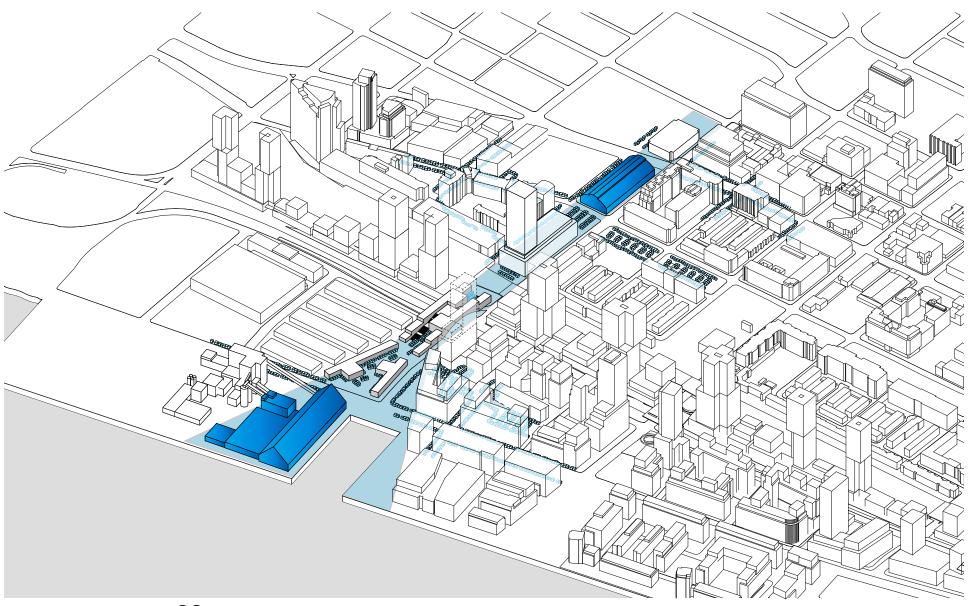


Toronto Waterfront

# -HERITAGE/MARKET



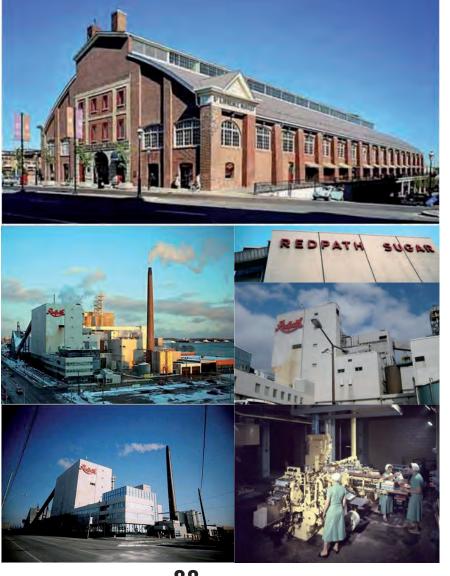
#### **Overview**

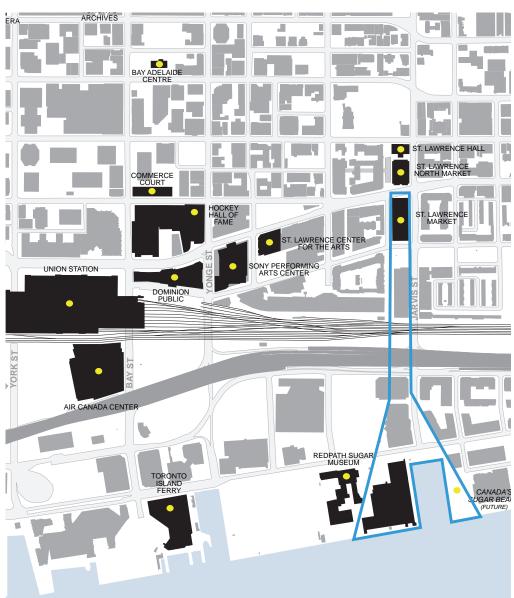


#### Heritage Market



The Heritage Market links two key establishments associated with Toronto's food production. St Lawrence market established in 1845 is one of only two major markets still operating within Toronto. The Redpath Sugar Factory located on the waterfront still operates, representing a link to To-





ronto's industrial history.

A series of outdoor markets, organic in their growth provide a continuous link between the two buildings.





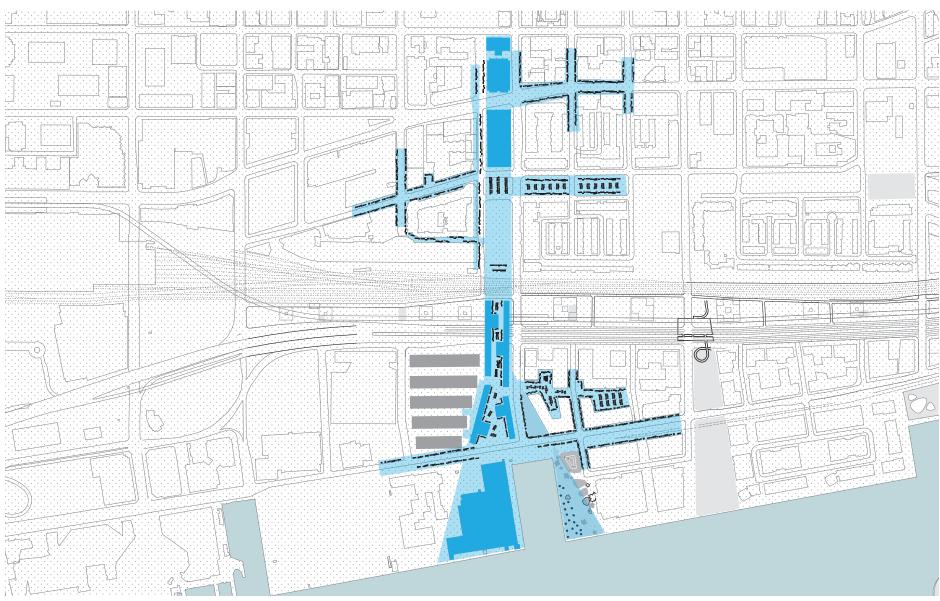
Toronto Heritage Market with potential informal market outgrowth

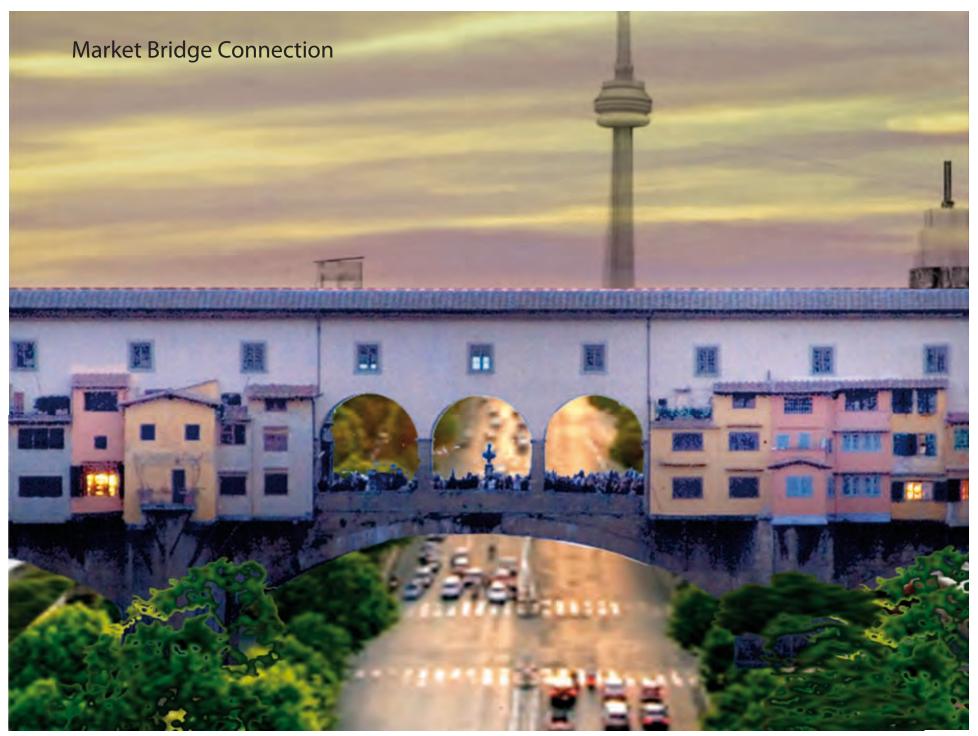
These informal markets suggest the potential of the Heritage Market to become a larger urban phenomena, "leaking" into its surrounding context.





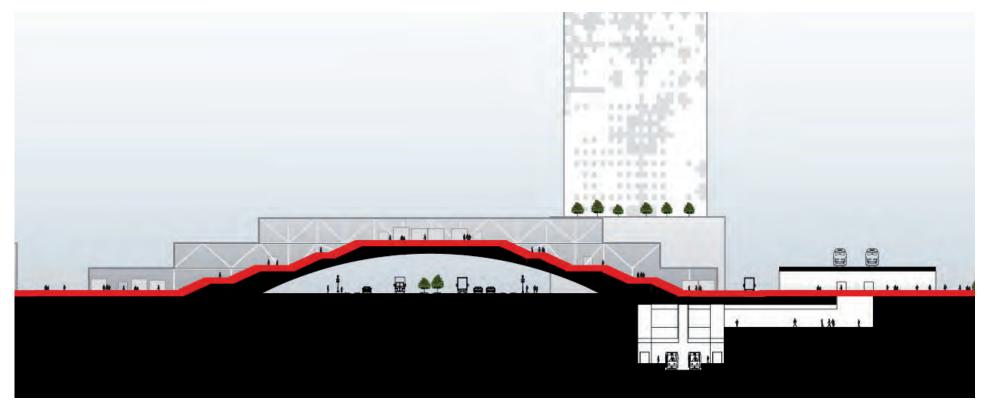
#### **Market Growth**







#### Heritage Market





## View from Market Bridge

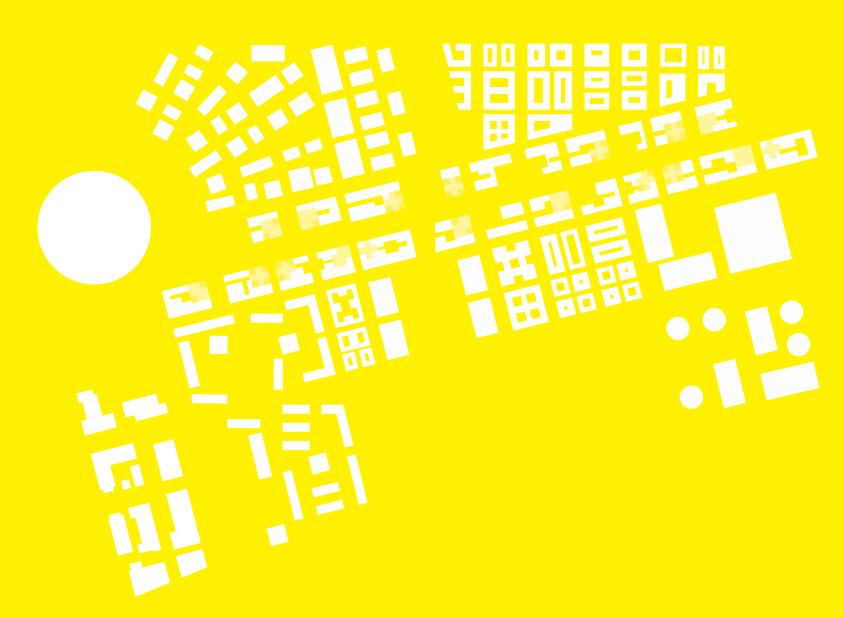


A continuous surface of 'sugar-like' glazed ceramic tiles provides a material link between the two sites.

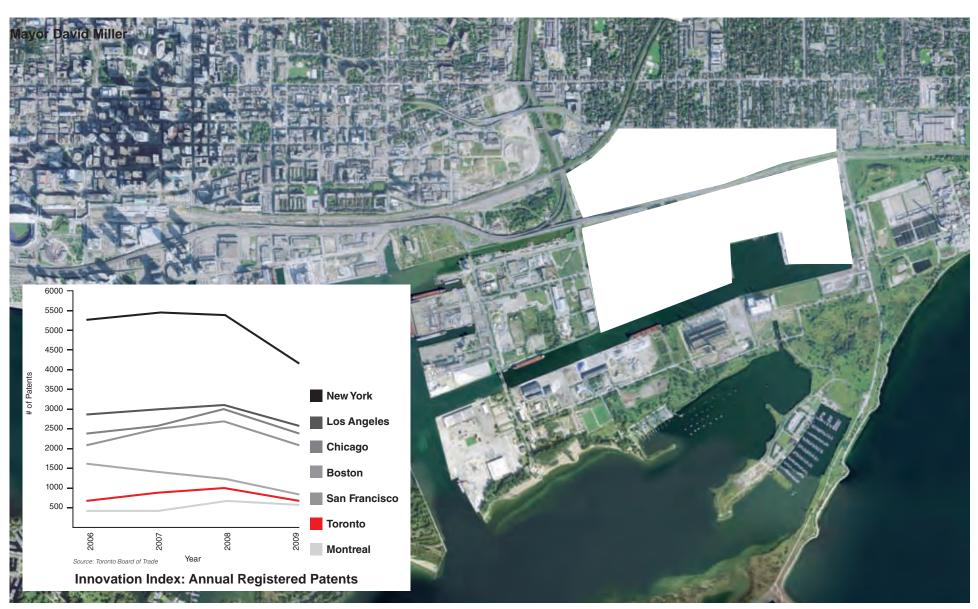


Toronto Waterfront

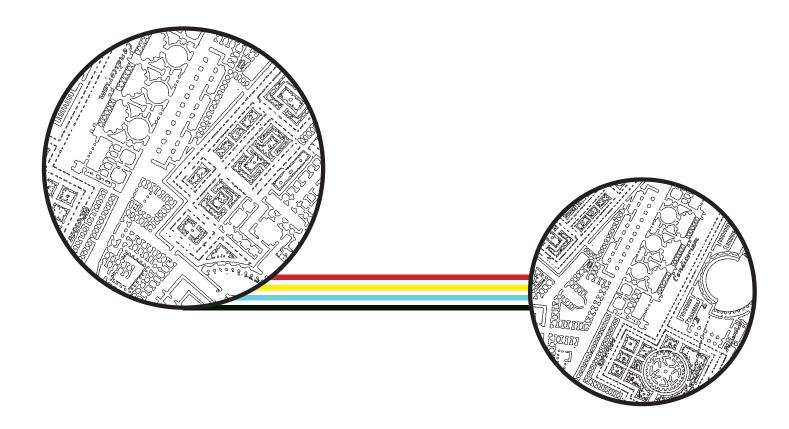
## ——CREATIVE CITY



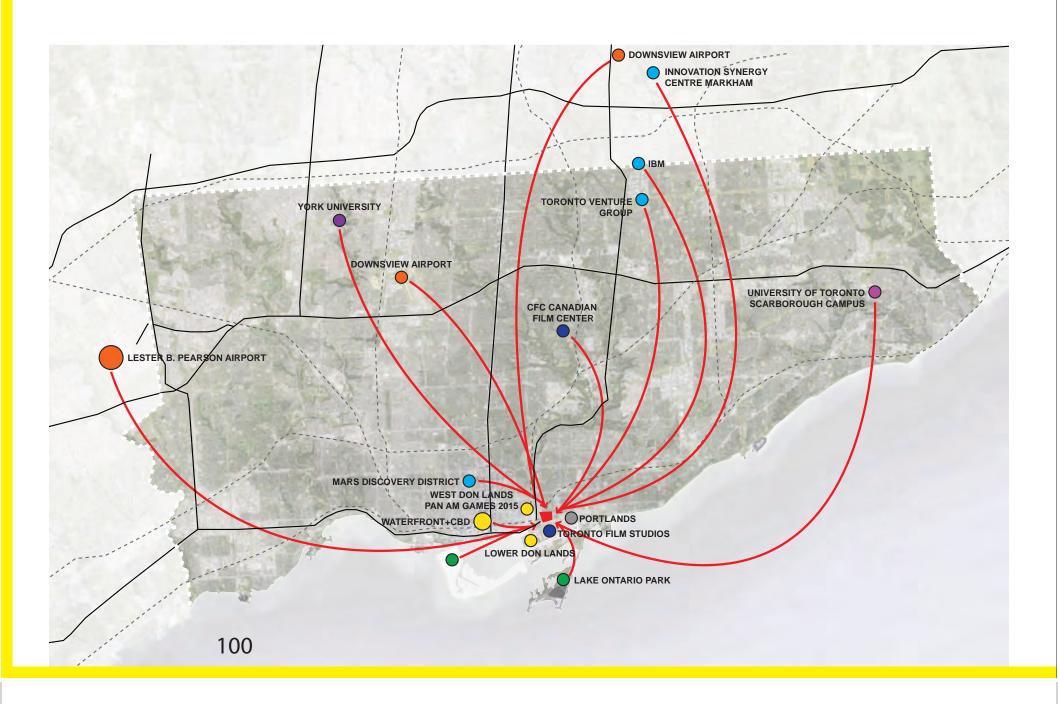
# "We must put creativity at the heart of Toronto's economic development strategy." -Mayor David Miller



#### Can Creative City become a new downtown?



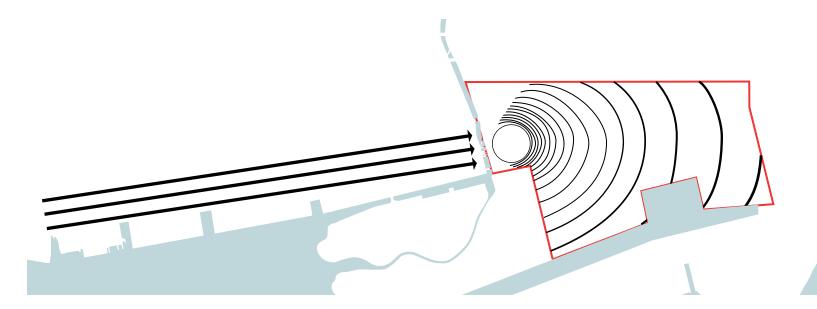
Can we provide a new centre, providing a link between Toronto's disparate zones of creativity?

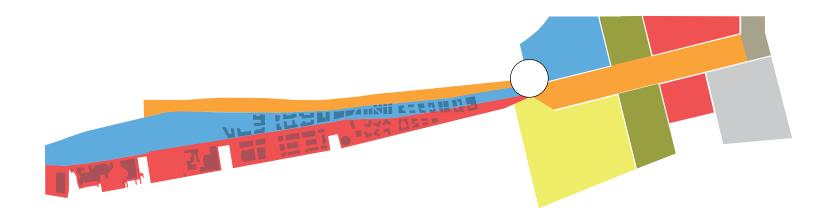


#### Scale Comparison



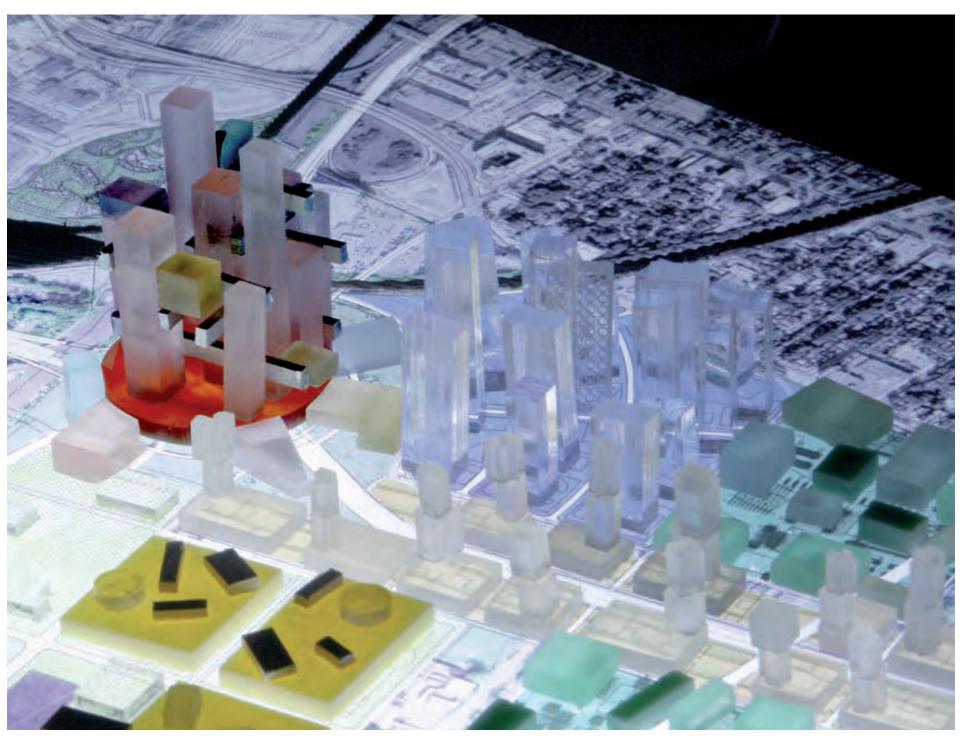
### Program Clarity





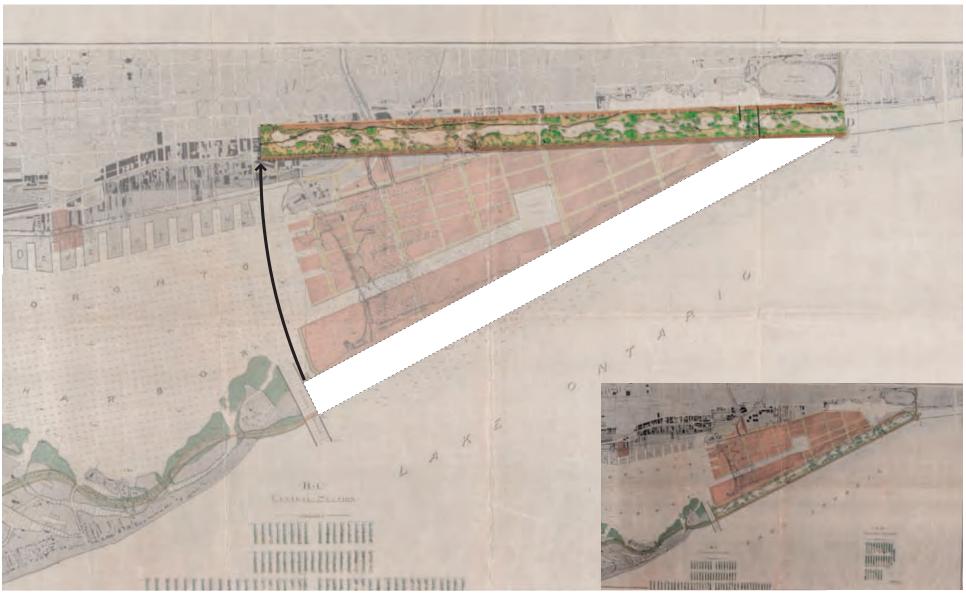
### Program distribution





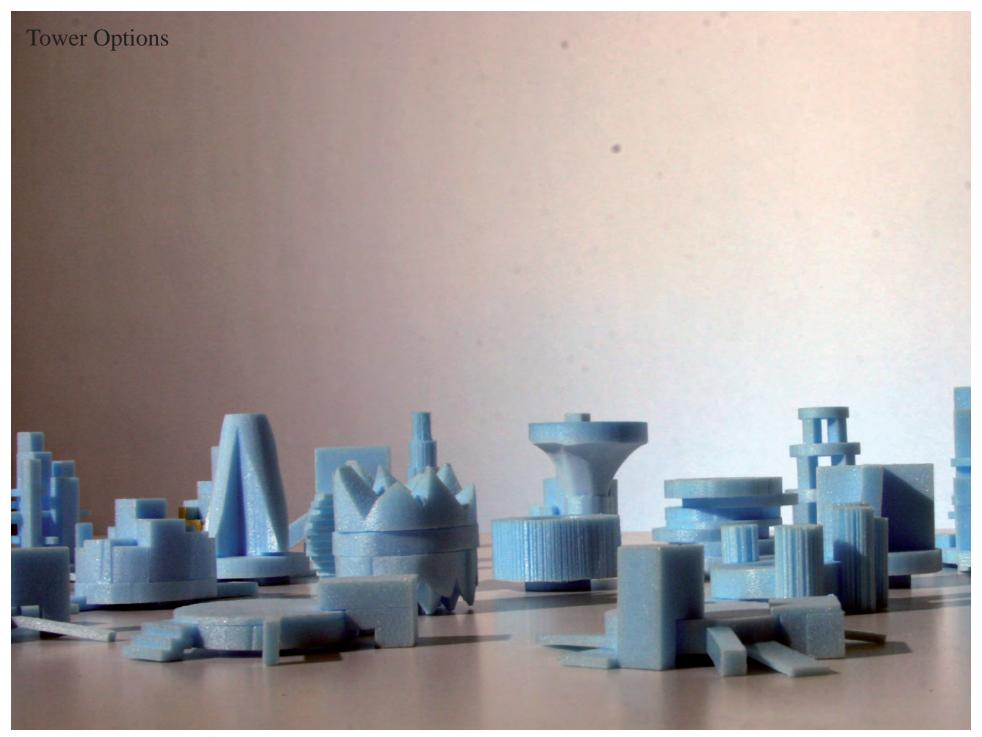


### A Revisiting of the Park Olmstead Hinge

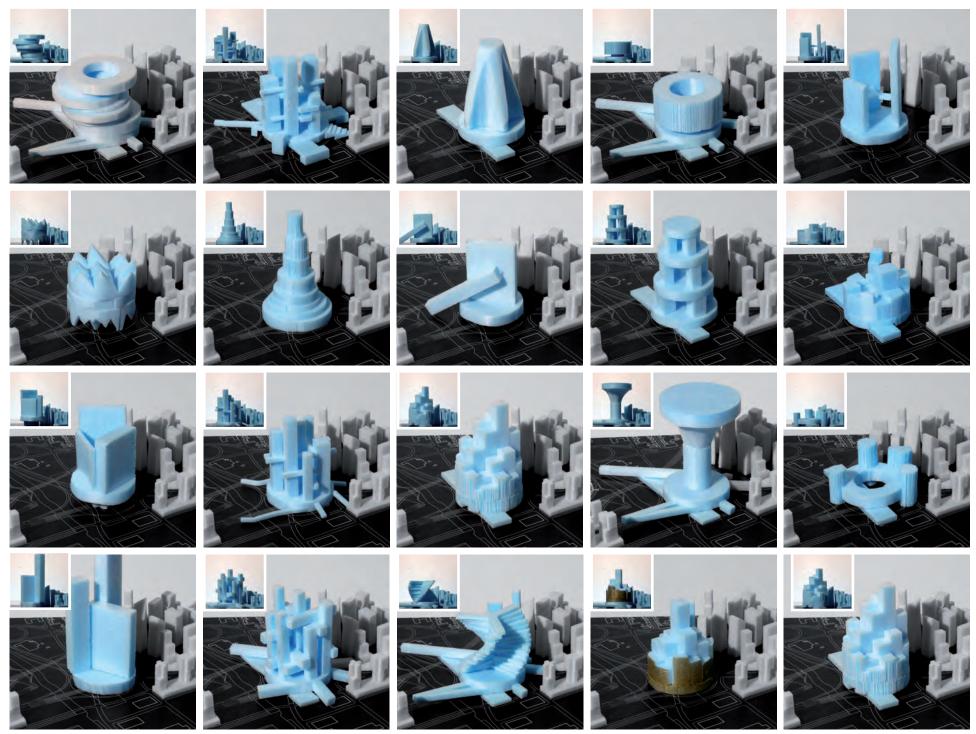




# ----APPENDIX



#### **Premise**



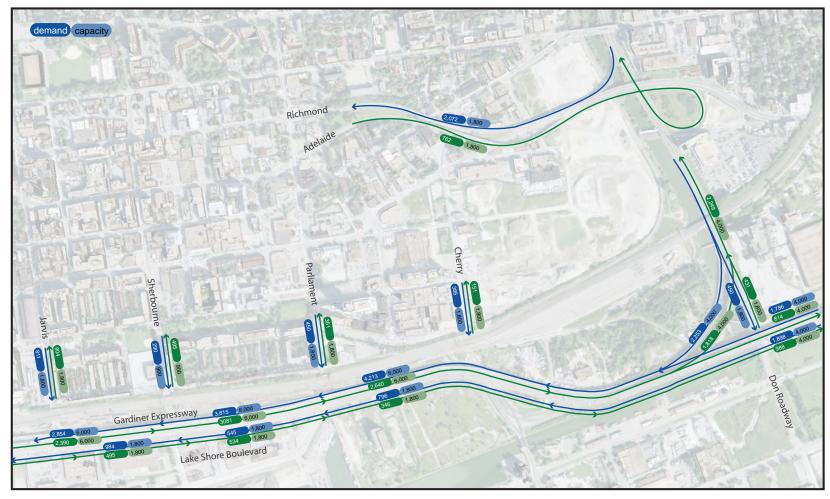
111 111

## **Transport:** Existing (2004-2008) traffic volumes

The Gardiner currently operates at near-capacity levels in the westbound direction during the AM peak hour. The next downtown exit from the Don Valley Parkway, Eastern Avenue/Richmond Street, is currently over-capacity and cannot accommodate a shift in vehicle distribution. Additionally, the Gardiner is a major

barrier to north-south movement, especially for pedestrians and cyclists.

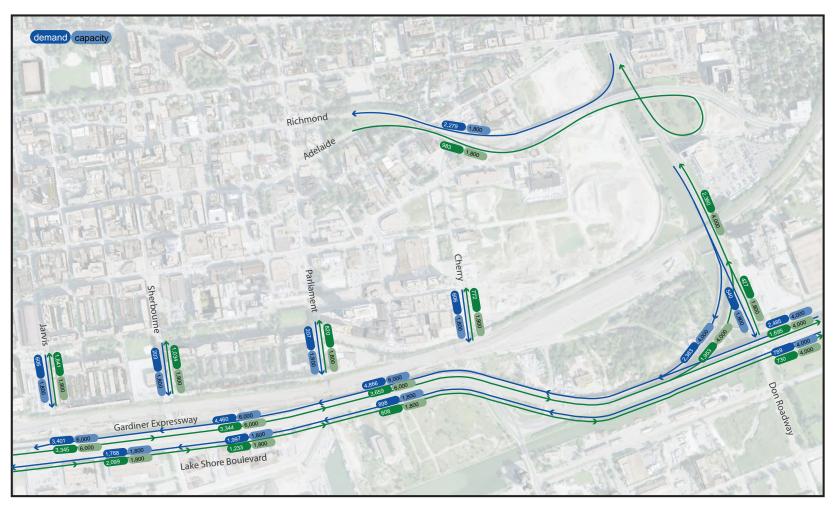
## **Existing AM Peak Hour Volumes**



Transport: Estimated future (2031) traffic volumes

The future development of the Lower Don Lands, West Don Lands and Port Lands will add significant east-west vehicular traffic, especially to Lake Shore Boulevard. The Gardiner is not fully at-capacity between Jarvis and Don Valley Parkway, indicating potential to reduce capacity by replacing the structure with an at-grade boulevard.

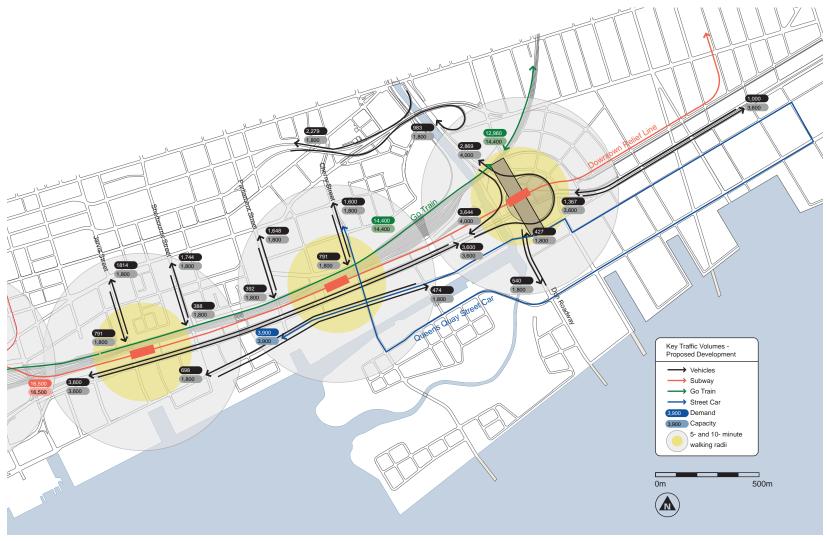
## Future AM Peak Hour Volumes



# **Transport**: Estimated road and transit demand for full build-out of proposed development

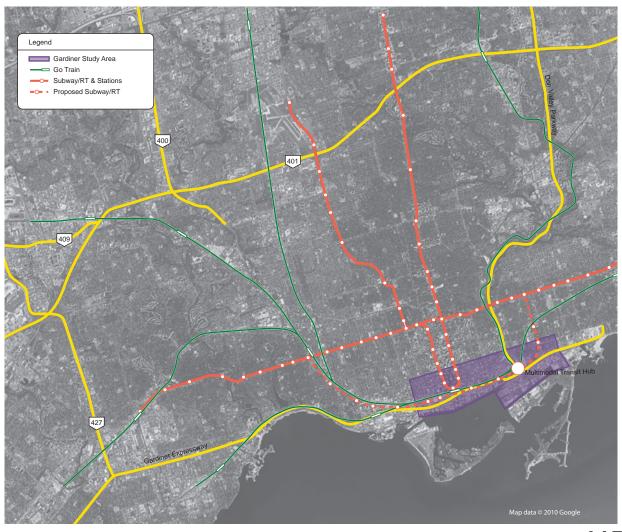
The reduction in road capacity, and a significant increase in transit capacity, bicycle/pedestrian capacity, and transit-oriented development will help realize a considerable mode shift away from auto travel along the corridor. The Transferium is the catalyst for this

shift, encouraging drivers to leave their cars at home or park and take transit from this multimodal hub.



Transport: Regional Connectivity

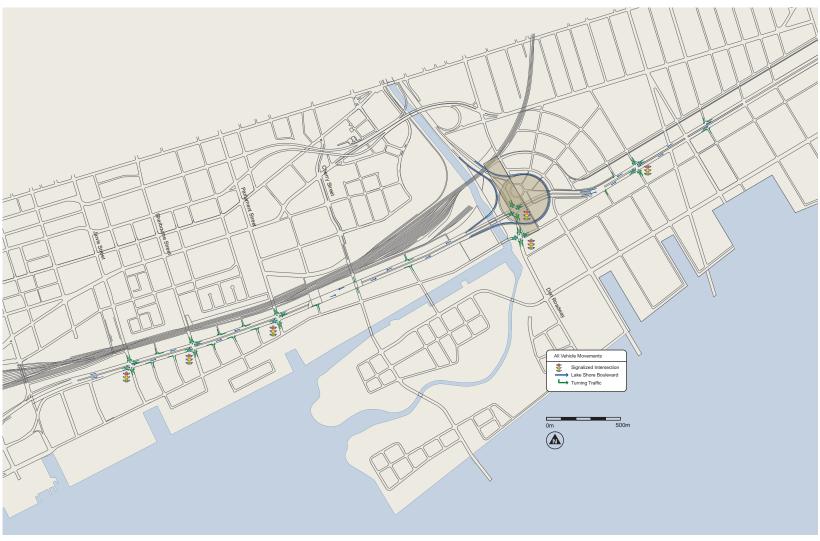
The proposed Transferium provides regional vehicular and transit access via the Don Valley Parkway and potential Go Train stop. Local transit connectivity is improved via the Downtown Relief line and connection to the Queens Quay streetcar.



### Toronto Waterfront

## **Transport**: Possible vehicular movements

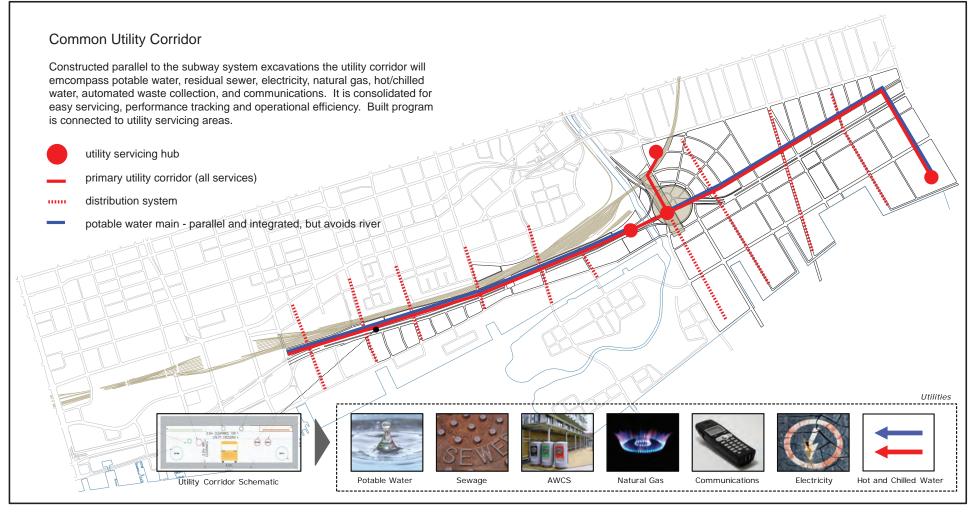
Traffic operations along the new boulevard, allowing improved north-south access across Lake Shore Boulevard to and from the waterfront via at-grade intersections.

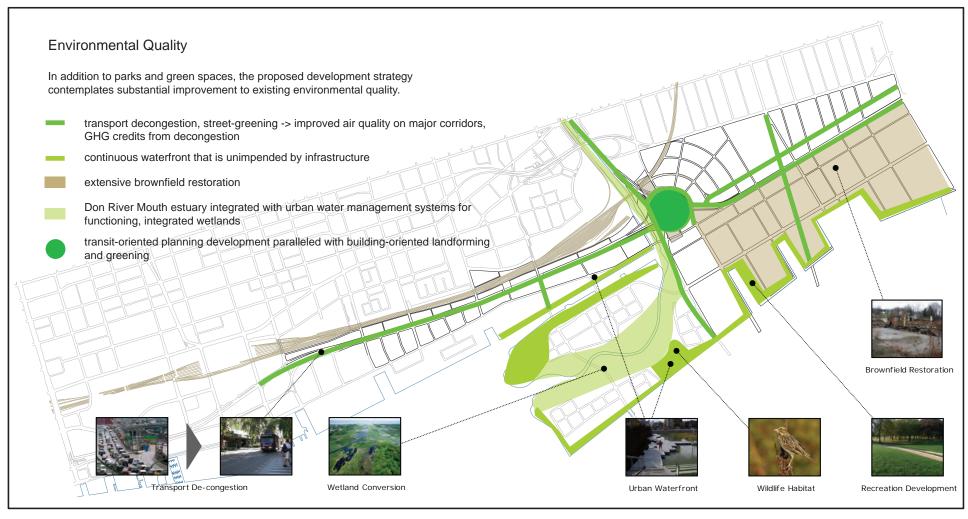


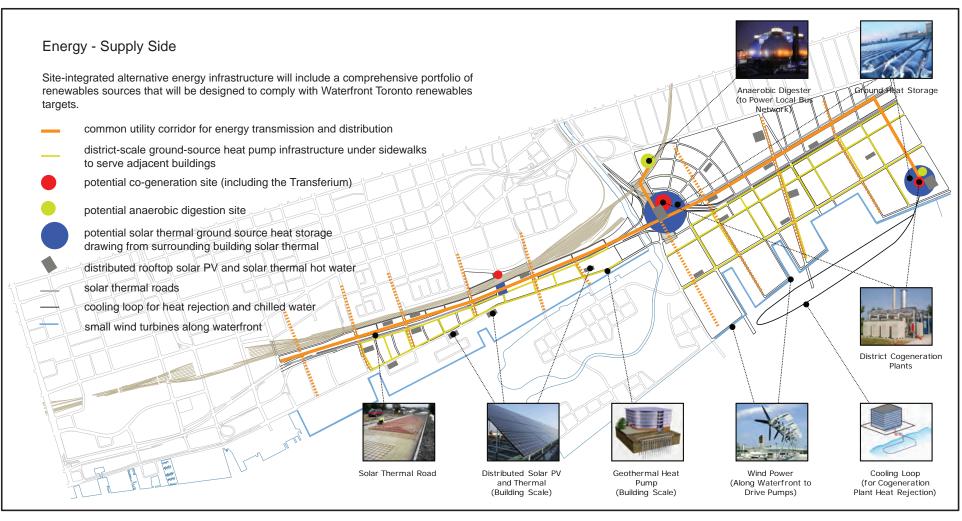
#### Environment

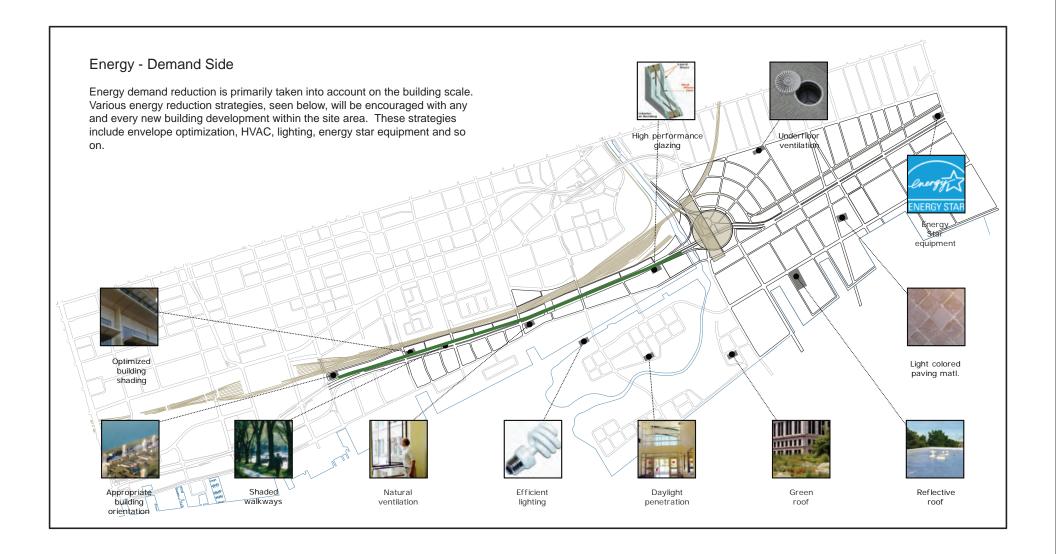
The plan has been developed with a strong focus on environmental sustainability, fully implementing Waterfront Toronto's sustainability framework and facilitating achievement of Waterfront's Climate Positive targets The excavation spine north of Lakeshore Drive will enable organization of sustainable infrastructure around a common utility corridor potentially serving all of the Waterfront projects. An autonomous stormwater management

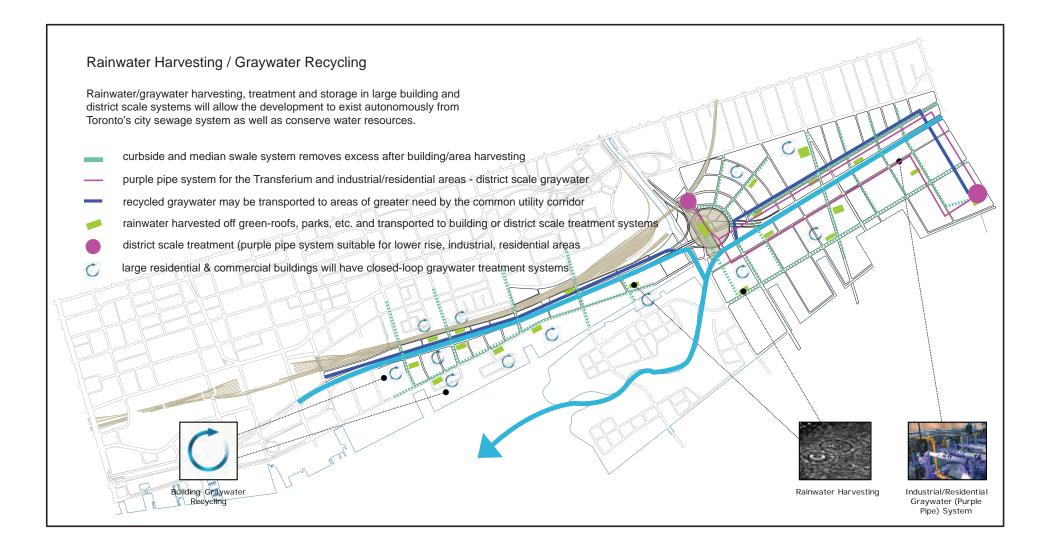
and graywater/rainwater recycling system will exploit and augment the wetlands function of the reconstructed Don River estuary. The plan includes a comprehensive portfolio of renewable energy generation systems, with the transferium area itself as a key energy production hub. Environmental quality will be addressed with waterfront restoration, air quality improvements and carbon emissions reductions from traffic decongestion, and expanded street tree cover.

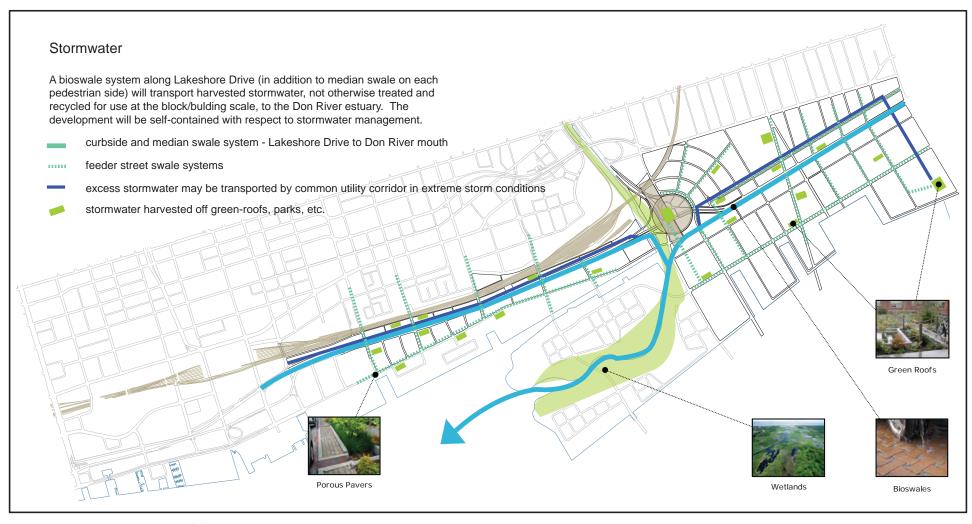


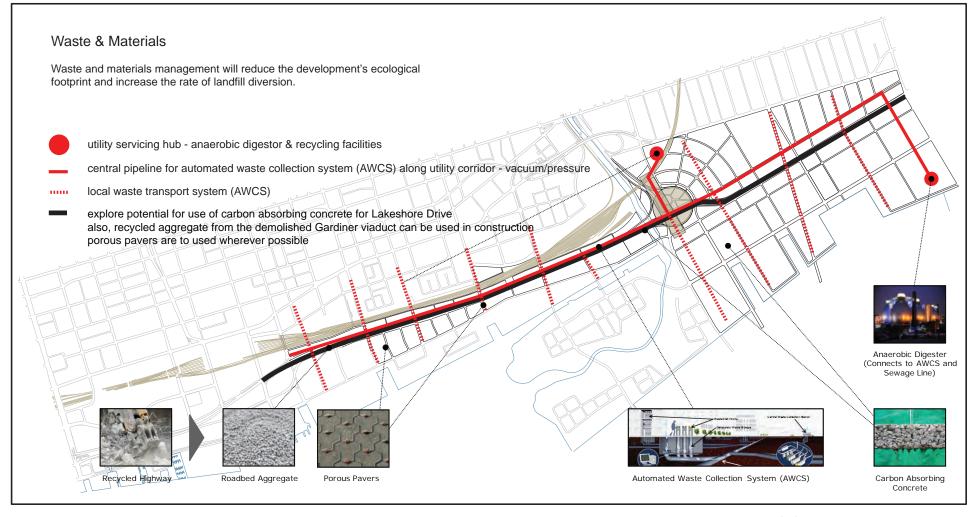














Avenue J.F. Kennedy - Plateau du Kirchberg - Luxembourg (Source : BING MAPS)

Quercus robur 'Fastigiata'

#### PROPOSED TREE ON LAKE SHORE BOULEVARD

Quercus robur 'Fastigiata' 'Fastigiata' English Oak

Upright columnar tree; 50'-60' high and 10'-16' wide;

trees are tolerant to urban conditions, air pollution, salt spray, compacted soil and are drought resistant; trees are planted in linear continuous tree trench.



Continuous tree trench in front of the CCA - René-Lévesque Boulevard - Montreal (Source : CLAUDE CORMIER)

Trifolium repens

#### PROPOSED GROUND COVER ON LAKE SHORE BOULEVARD AND MEDIAN

Trifolium repens
White clover

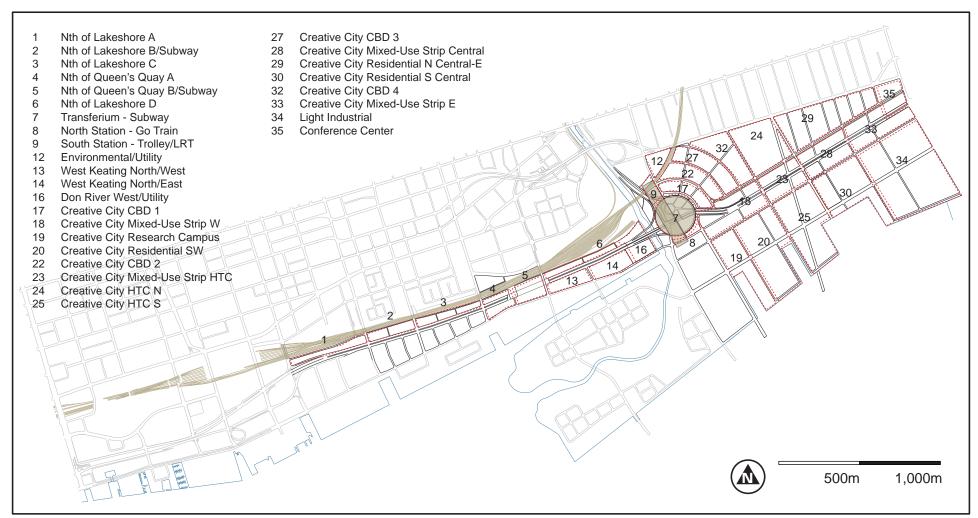
White clover terra-seeding - ecological approach

Precedent work – Canadian Centre for Architecture, Montreal – 3m wide continuous tree trench slightly raised to emphasize visual presence of green. The traffic median is covered with white clover terra-seeded as ground cover on René-Lévesque Boulevard in front of the Canadian Centre of Architecture – (Completed in 2003 - CCAP) (Photo 2010)

## **Urban Design**

The plan endeavors to create a new eastern annex and center for Downtown Toronto. All development will be intensely mixed use, with a dynamic commercial, cultural, and residential spine along Lakeshore Drive. New development along the spine will occur at a net average Floor Area Ratio in excess of 7.1 and with housing density greater than 400 units/ha. The transferium will serve as the anchor for the spine, providing multimodal access to

the area and to Downtown as well providing a standalone employment, cultural and entertainment destination. It will be augmented by an adjacent commercial district. North and south of the spine, in the Creative City area, lower intensity development on rehabilitated brownfields sites will focus on R&D and technology-oriented employment with associated housing, schools, local retail, and a major university research center.



## Innovative Design Competition Master Plan Summary Table OMA\*AMO

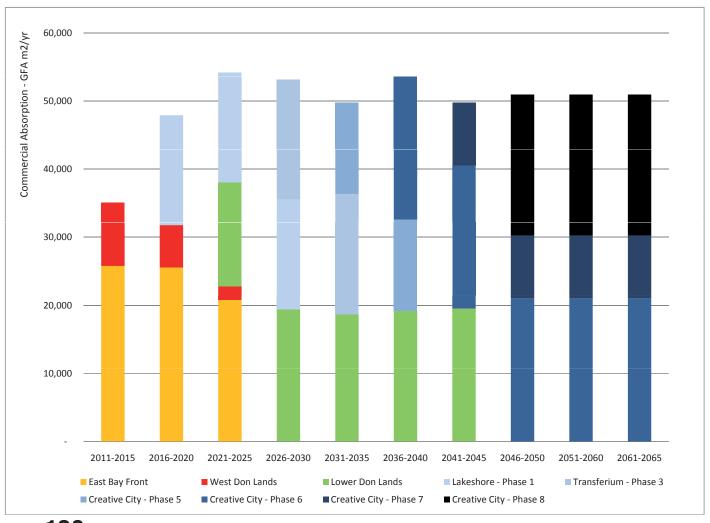
Block # Description							Office		Retail		Residentia	41	Other		Open Space			Other Data				· · · · · · · · · · · · · · · · · · ·
		0	Max					011						0.1			D.		Res.		Retail Space/	
	Block Type		Height H	Block Max		Total GFA m2	Office %	Office GFA* m2	Retail %	Retail GFA* m2		Res. GFA*	Other %	Other GFA*	Space %	Open Space m2	Phase #		res. Population		pop+iob	Notes
					floors		%				% %	m2	%	m2				Units i	Population	JODS	pop+job	Notes
1 Nth of Lakeshore A - W of Jarvis	mixed-use	1.7	120	44	30	139,296	0%		2%	2,786	95%	132,331	3%	4,179	10%	1,741	1	881	1,718	67	1.59	Lakeshore to berm
2 Nth of Lakeshore B - Jarvis to Parliament	mixed-use	1.7	120	72	30	233,338	60%	140,003	10%	23,334	25%	58,335	5%	11,667	10%	1,667	1	388	757	2,775	7.21	Lakeshore to berm, Subway Station
3 Nth of Lakeshore C - Parliament to Sherbourne	mixed-use	1.8	120	80	30	254,758	40%	101,903	10%	25,476	45%	114,641	5%	12,738	10%	1,820	1	763	1,488	2,160	7.67	Lakeshore to berm
4 Nth of Queen's Quay A - Sherbourne-Cherry Plinth W	mixed-use	1.6	60	24	15	124,656	0%	-	3%	3,740	85%	105,958	12%	14,959	20%	3,116	2	705	1,375	160	2.52	Plinth/Distillery Transition
5 Nth of Queen's Quay B - Sherbourne-Cherry Plinth E	mixed-use	2.3		36	15	183,400	0%	-	3%		85%		12%		20%	4,585	2	1,038	2,024	235	2.51	Plinth/Distillery Transition, Subway Station
6 Nth of Lakeshore D - East of Cherry	mixed-use	1.7		56	30	173,970	0%	-	2%		95%		3%		10%	1,740	2	1,101	2,147	84	1.59	Lakeshore to berm
7 Transferium	mixed-use	4.9		180	40	587,688	30%	176,306	10%		10%	58,769	50%	293,844	0%		3	391	762		13.95	Subway Station, Parking, Towers Above
8 North Station	utility	0.7		4	4	13,798	0%	-	2%			-	98%		50%	3,450	3	-	-	105	2.72	Go-train
9 South Station	mixed-use	0.8		12	15	50,556	0%	-	2%	1,011	30%	15,167	68%	34,378	50%	4,213	3	101	197	271	2.22	Trolley Station
10 Transferium Frontage Parcels - East	open space	0.5		-	-	-	0%	-		-		-	100%		100%	5,180	3	-	-	-	-	
11 Don River Parkway Ramp Medians	open space	0.4		-	-	-	0%	-		-		-	100%		100%	3,715	3	-	-	-	-	
12 Environmental Infrastructure	utility	1.6	8 6	4	2	7,752	0%	-					100%				3		-	58	-	Environmental Infrastructure, Utilities
13 Nth of Queen's Quay B - West Keating North W	mixed-use	2.0		24	20	122,670			2%		95%		3%		15%	3,067	4	776	1,513		1.59	Overlaps with West Keating/LDL precinct
14 Nth of Queen's Quay C - West Keating North E	mixed-use, utility	2.6	80	32	20	155,892	0%	-	2%	3,118	90%	140,303	8%	12,471	15%	3,897	4	934	1,821	133	1.63	Overlaps with West Keating/LDL precinct
15 Medians - Lakeshore	open space	0.8				-	0%		0%		0%		100%		100%	8,001	4	-	-	-	-	
16 Don River - West Bank & Medians	utility, open space	3.9	)			19,526	0%		0%		0%		100%	19,526	60%	23,431	4	-	-	146	-	Includes Environmental Infrastructure
17 Creative City - CBD 1 (first ring)	mixed-use	1.6		32	37	161,650	35%	56,578	3%		57%		5%		10%	1,617	5	613	1,195	799	2.51	NE of Transferium, Westmost
18 Creative City - Mixed-Use Strip W	mixed-use	3.7		48	37	221,616	35%	77,566	5%		55%		5%		10%		5	812	1,583	887	4.76	East of Transferium along Lakeshore
19 Creative City - Research Campus	institutional	7.7		20	5	115,106	0%		1%		20%		79%		20%	15,347	5	153	298	697	1.17	University-affiliated research/tech campus
20 Creative City - Residential SW	mixed-use	10.5		48	15	315,708	0%		2%	6,314	95%	299,923	3%	9,471	25%	26,309	5	1,998	3,896	152	1.59	SE on Ship Channel
21 Creative City - Boulevard Medians W	open space	0.4				-									100%	4,206	5	-	-	-	-	
22 Creative City - CBD 2 (second ring)	mixed-use	3.5		96	35	314,748	35%	110,162	3%		57%		5%		10%	3,497	6	1,195	2,330		2.51	NE of Transferium, East
23 Creative City - Mixed-Use Strip HTC	mixed-use	3.5		44	37	212,676	35%	74,437	5%		55%		5%		10%	3,545	6	779	1,519	851	4.76	High Tech Corridor, Along Lakeshore
24 Creative City - HTC N	R&D/labtech	7.8		36	15	233,418	70%	163,393	1%		25%		4%		25%	19,452	6	388	757		1.29	Tech Campus, North of Corridor
25 Creative City - HTC S	R&D/labtech	10.2		36	15	254,018	70%	177,812	1%	2,540	25%	63,504	4%	10,161	25%	25,402	6	423	825	1,171	1.29	Tech Campus, South of Corridor to Chann
26 Creative City - Boulevard Medians HTC	open space	0.4													100%	3,583	6	-	-	-	-	
27 Creative City - CBD 3 (third ring)	mixed-use	5.0		124	33	400,112	35%	140,039	3%		57%		5%		10%	5,001	7	1,519	2,962	1,977	2.51	NE of Transferium, Further East
28 Creative City - Mixed-Use Strip Central	mixed-use	4.3		52	37	259,134	35%	90,697	5%		55%		5%		10%	4,319	7	949	1,851	1,037	4.76	East of High Tech Corridor, Along Lakesh
29 Creative City - Residential N Central, E	mixed-use	10.6		48	15	317,379	0%	-	2%		95%		3%		25%	26,448	7	2,008	3,916	152	1.59	NE, East of Tech Campus
30 Creative City - Residential S Central	mixed-use	9.4		40	15	281,247	0%	-	2%	5,625	95%	267,185	3%	8,437	25%	23,437	7	1,780	3,471	135	1.59	SE on Ship Channel, West of Light Industr
31 Creative City - Boulevard Medians Central	open space	0.4		40	15	13,203									100%	4,401	7	-	-	-	-	
32 Creative City - CBD 4 (fourth ring)	mixed-use	4.1		88	31	289,814	35%	101,435	3%		57%		5%		10%	4,140	8	1,100	2,145		2.51	NE of Transferium, Easternmost
33 Creative City - Mixed-Use Strip E	mixed-use	4.3		52	37	259,638	35%	90,873	5%		55%		5%		10%	4,327	8	951	1,854		4.76	Eastern Extent of Site, Along Lakeshore
34 Creative City - Light Industrial	light industrial	20.7		20	5	124,463	95%	118,240	1%		0%		4%		40%	82,976	8	-	-		1.67	Includes Environmental Infrastructure
35 Creative City - Conference Center	institutional	3.1		16	5	61,586	0%	-	1%	616	0%	-	99%	60,970	30%	9,238	8	-	-		1.35	NE corner of site
36 Creative City - Boulevard Medians E	open space	0.6	5												100%	5,967	8	-	-		-	
	<del></del>	140.9	)			5,902,815		1,619,443		238,759		3,265,688		765,721		346,528		21,746	42,405	20,942	3.18	38% commercial, 54% tech/R&D, 8% indus

GFA calculations include structured parking associated with the requisite program.

### **Economics**

The plan presents a transformative but achievable vision for the site, creating a new western hub for Toronto with 21,000 new jobs focused on technology and clean energy R&D and homes for 42,000 residents. Impact fees and future tax revenue from intense development above and beside the transferium, subway excavation, and Gardiner will substantially offset infrastructure costs. Phased development from 2016 to 2065 is assumed to occur

alongside other Waterfront Toronto projects, with commercial and residential development occurring at annual absorption rates comparable to the peak forecasted 2011 to 2015 absorption for other Waterfront Toronto projects together – approximately 50,000 commercial m2/year and 1,000 housing units/yr. Projected commercial and residential absorption will be limited by phasing until Lower Don Lands reaches buildout in 2046.



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