

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** March 26, 2014

**SUBJECT:** UNION PRECINCT STATUS REPORT  
- UPDATE ON CONSTRUCTION

## **INFORMATION ITEM**

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### **RECOMMENDATION**

It is recommended that the Board receive a presentation titled, *Union Precinct Status Report – Update on Construction*, for information. The presentation provides the Board with an overview of all work currently underway in the Union Station area with particular attention to the TTC's Union Station Second Platform Project.

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March 4, 2014  
50-71-82  
03075-135-178

Attachment: Presentation



# UNION PRECINCT STATUS REPORT

Update on Construction – March 2014



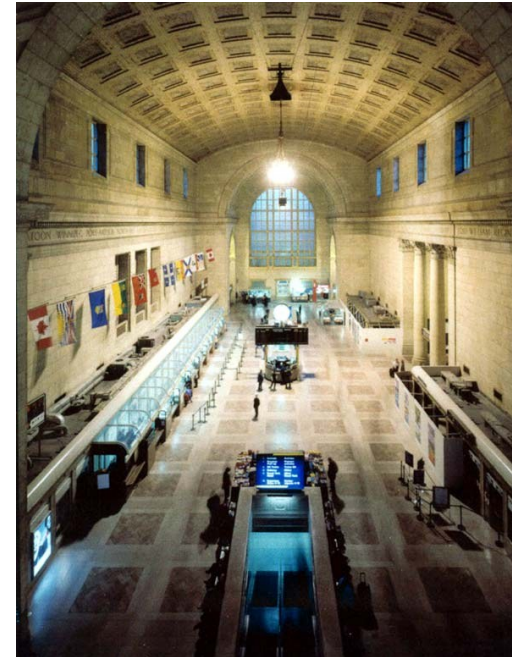
# UNION RAILWAY STATION



1858 - Toronto's first **Union Station** was built.

1873 - Grand Trunk Railway (GTR) built a new second Union Station.

1906 – Toronto Terminals Railway (TTR) (owned by Canadian Pacific Railway (CPR) and Canadian National Railway (CNR) formerly Grand Trunk Railway) incorporated to build third Union Station.



# UNION RAILWAY STATION



1913

Excavation

Construction Department  
03075-135-176



# UNION RAILWAY STATION



1927

Union Station Opens

Construction Department  
03075-135-176



# UNION RAILWAY STATION



1975

Designated a National Historic Site



# UNION RAILWAY STATION



2000

Purchase of Union Station – City of Toronto / GO Transit



# MASS TRANSIT (SUBWAY) PLANNING



The first subway proposals suggested running trains beneath or near this main thoroughfare. A number of proposals emerged between 1909 and 1912, but the public rejected subways in a plebiscite in 1912, forcing the issue into dormancy for another thirty years.



The TTC formed a Rapid Transit Department and worked on a proposal between 1942 and 1946. Finally, the TTC proposed a “rapid transit subway” beneath Yonge Street running from Eglinton Avenue south to Front Street and then west along Front to Union Station.

The matter was put to voters on a January 1, 1946, plebiscite and overwhelmingly approved. Toronto City Council approved construction four months later.

Construction began on September 8, 1949





# YONGE SUBWAY CONSTRUCTION 1949-1954



Union to Eglinton



# YONGE SUBWAY OPENING



Union to Eglinton – March 30, 1954

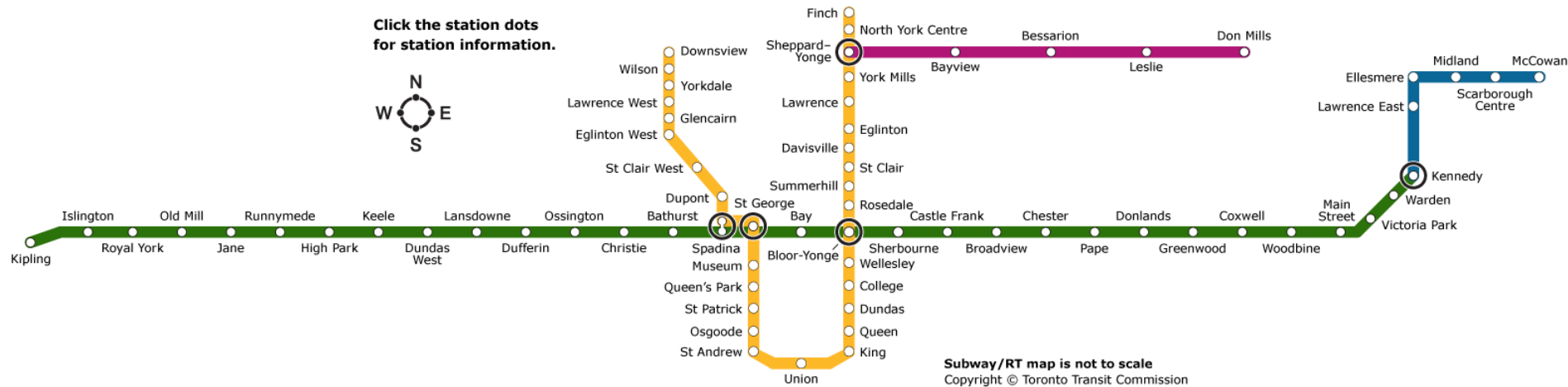


# TTC SUBWAY (LOCAL)



Yonge-University-Spadina Bloor-Danforth Scarborough RT Sheppard

Click the station dots for station information.



Daily Trips (System) – 2,683,000

Daily Trips (Rail) – 1,329,000

# of Stations – 69

2012 Passenger Trips (System) – 510,007,000



# GO TRANSIT (REGIONAL)



**GO Transit** is an inter-regional public transit system in Southern Ontario, Canada. The GO network carries over 57 million passengers a year using an extensive network consisting of diesel train and coach bus service.

GO Transit began regular passenger service on May 23, 1967.

Since then, it has grown from a mere two train lines to seven, and numerous bus routes.



# VIA RAIL CANADA (INTER-CITY)



From the mid 1800's - Passenger rail transport offered by Canadian Pacific Railway and Canadian National Railway

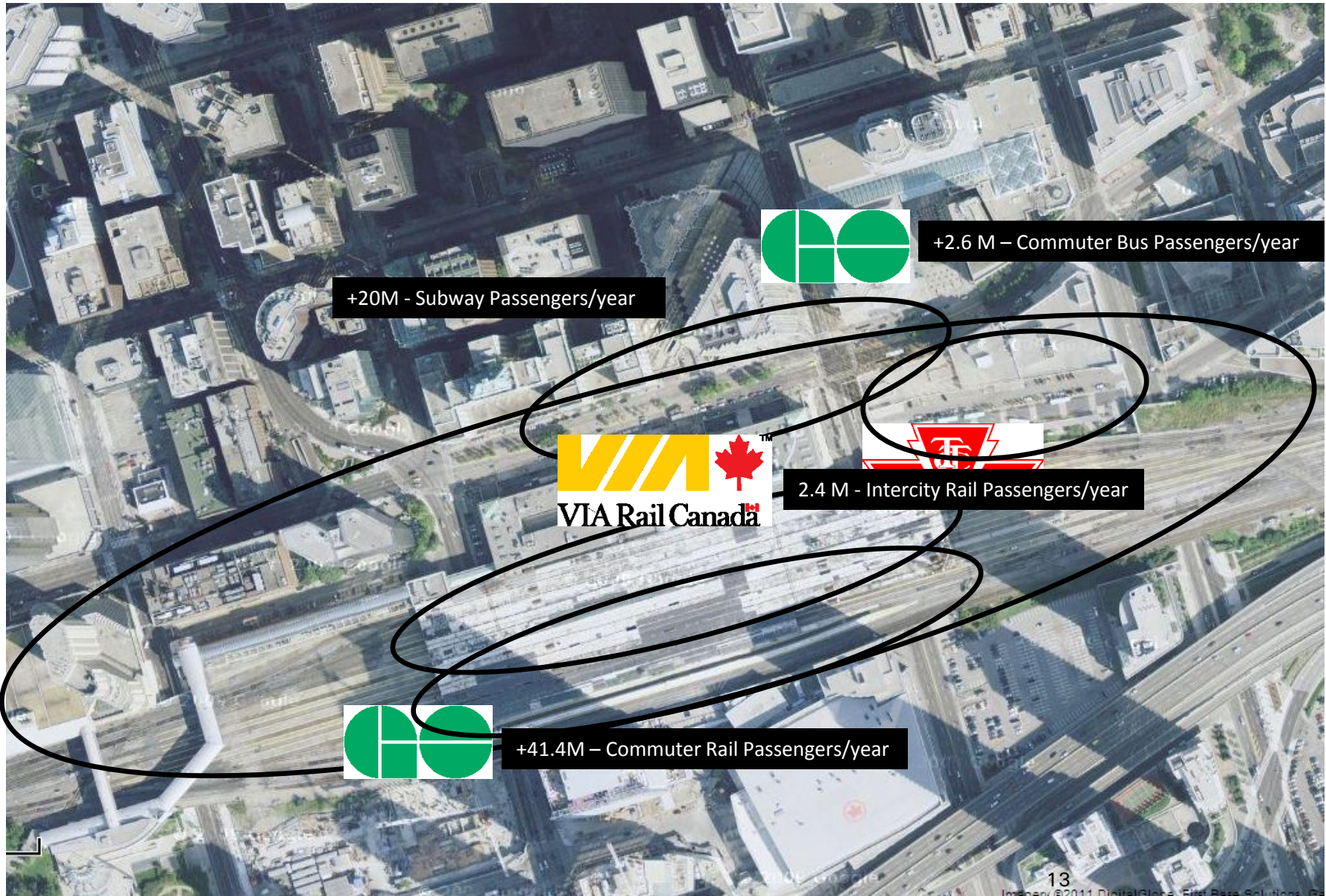
1978 - Via Rail Canada is formed as an independent crown corporation offering intercity passenger rail services in Canada.

Via Rail operates 480 trains in eight Canadian provinces over a network of 14,000 kilometres (8,700 mi) of track.

Via carries approximately 4.3 million passengers annually, the majority on routes between Quebec City and Windsor.




# UNION PRECINCT - TRANSIT HUB



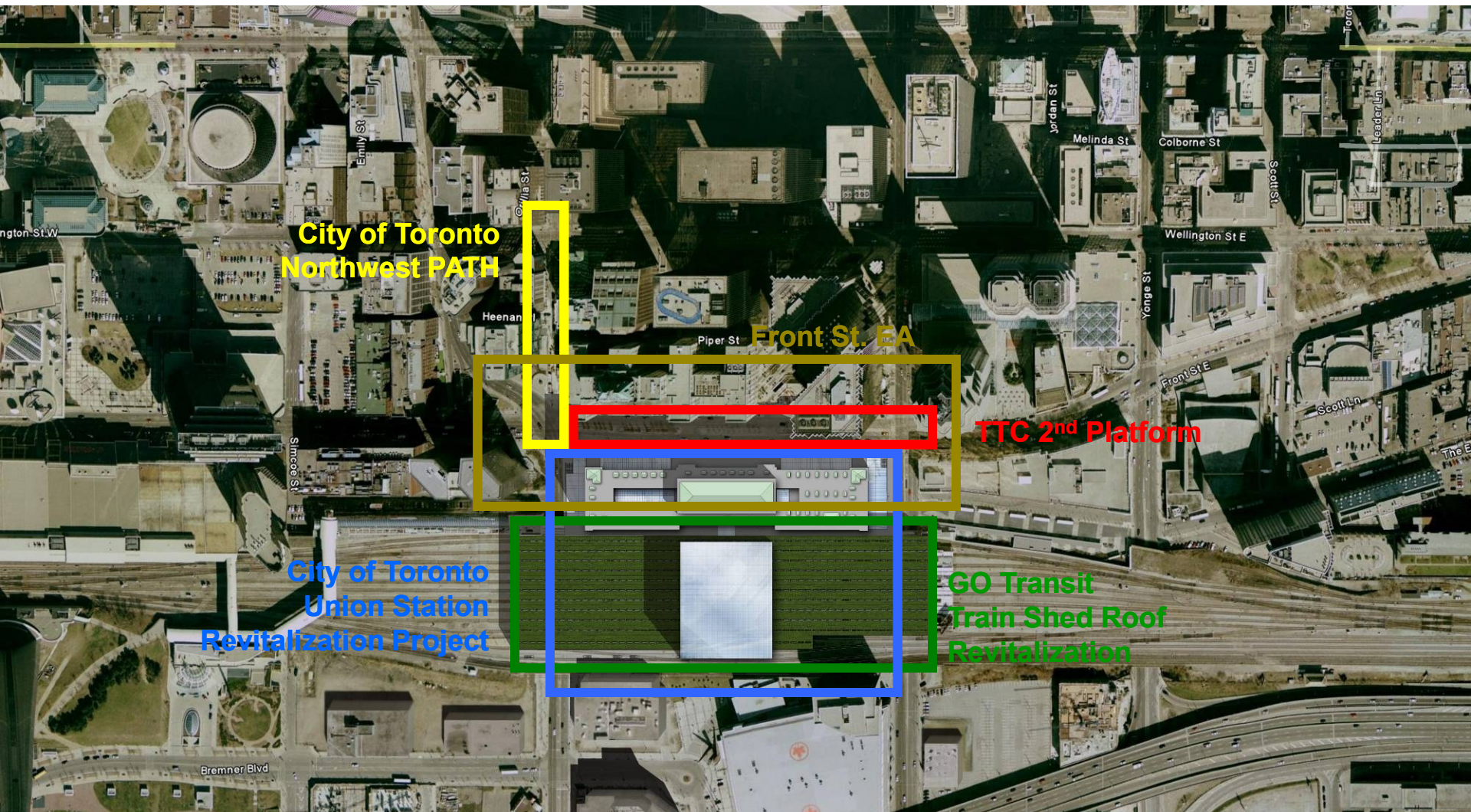


## Fast Facts:

- TTC Union Station Ridership + 100,000/day (3<sup>rd</sup> busiest)
- GO Transit Union Ridership + 200,000/day
- Busiest transportation hub in Canada
- Approximately twice as busy as Toronto Pearson International Airport
- Gateway to the  Network and Waterfront
- Over \$1.6B in construction currently underway



# UNION PRECINCT PROJECTS

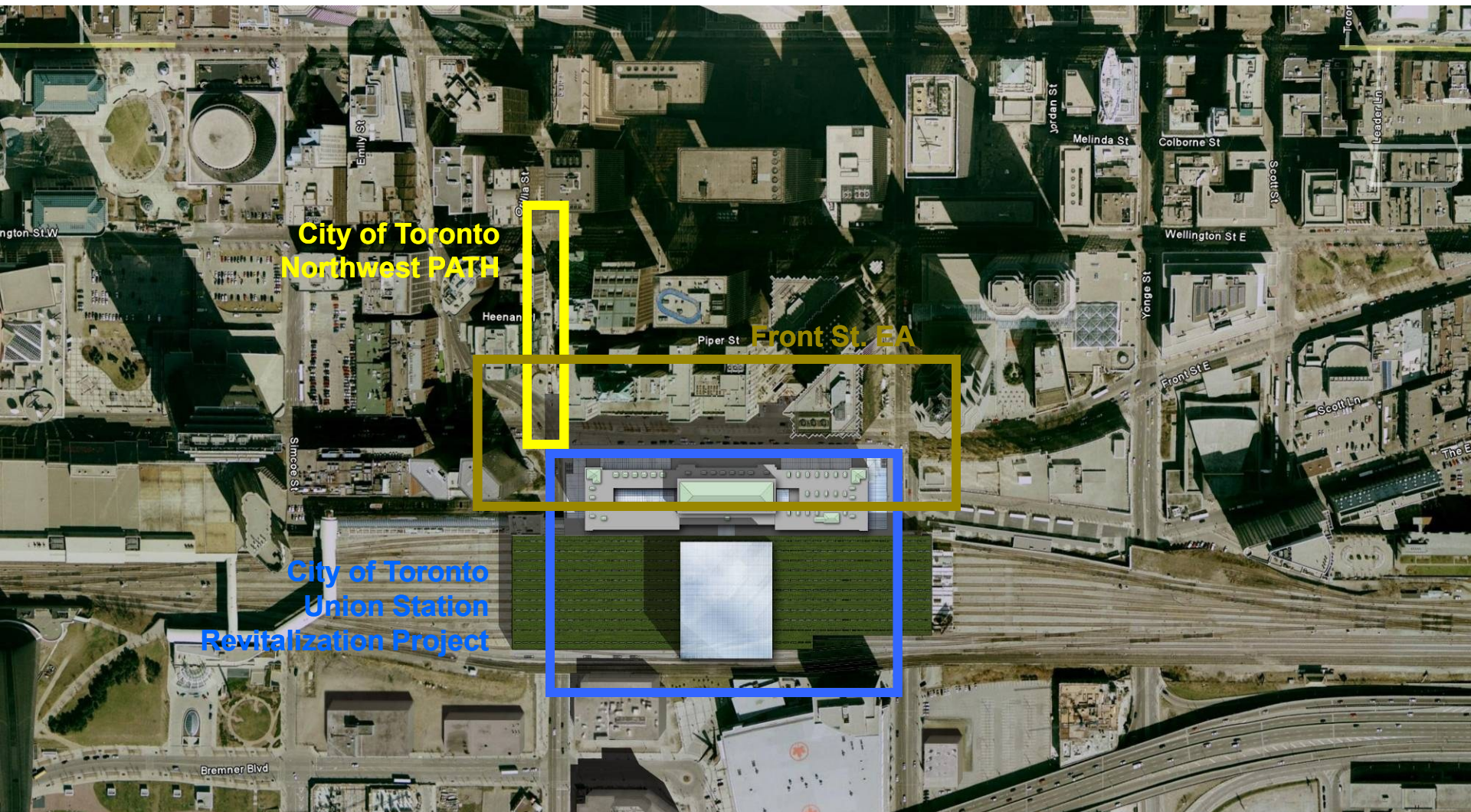


## Union Station – Precinct Projects





# CITY OF TORONTO PROJECTS



## Union Station – Precinct Projects

Construction Department  
03075-135-176





## Public Objectives

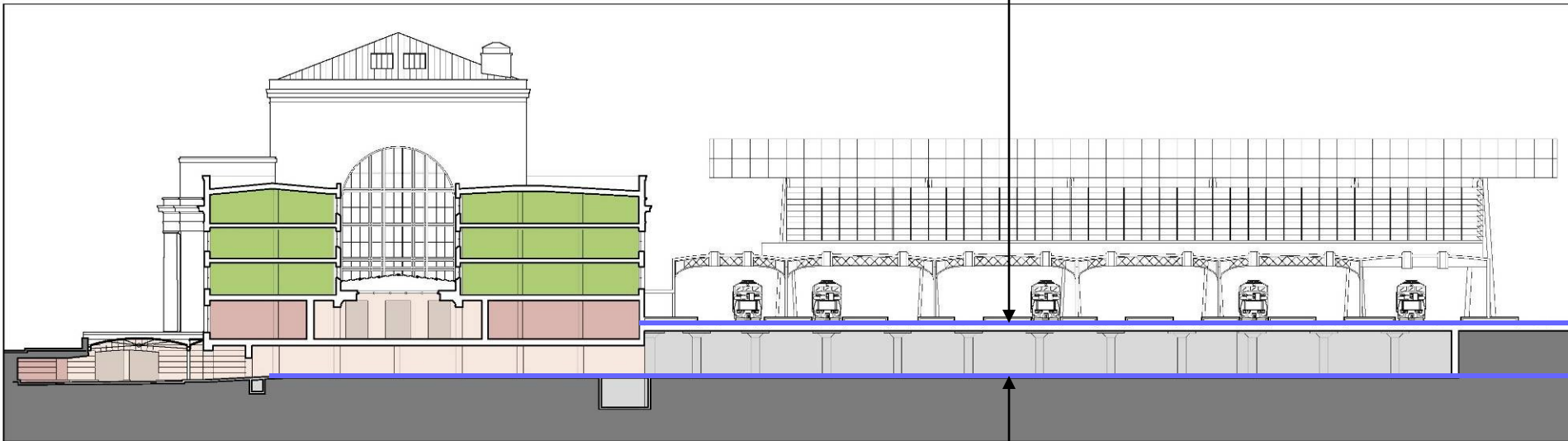
- **Transportation Hub**
- **Heritage Destination**
- **Pedestrian Flow**
- **Environmental Benefits**
- **Retail/Revenue Enhancement**



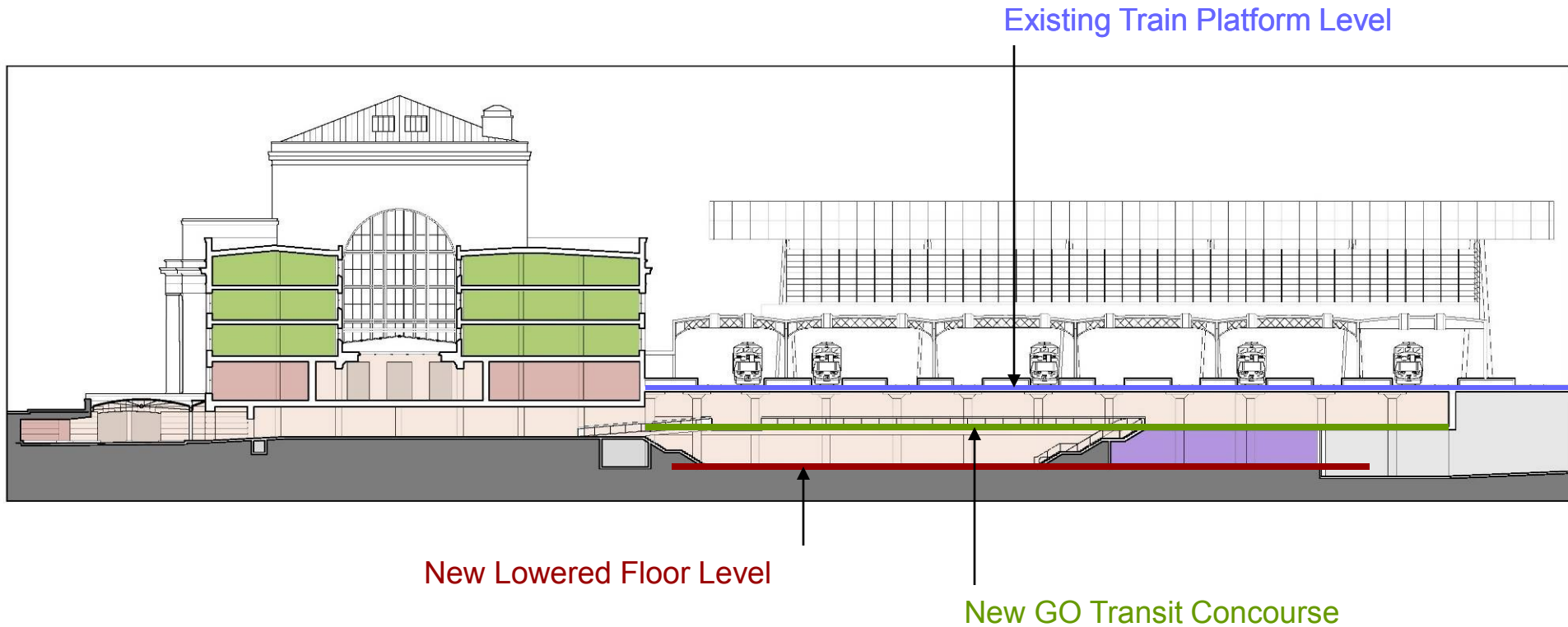


Existing Train Platform Level

Existing Floor Level

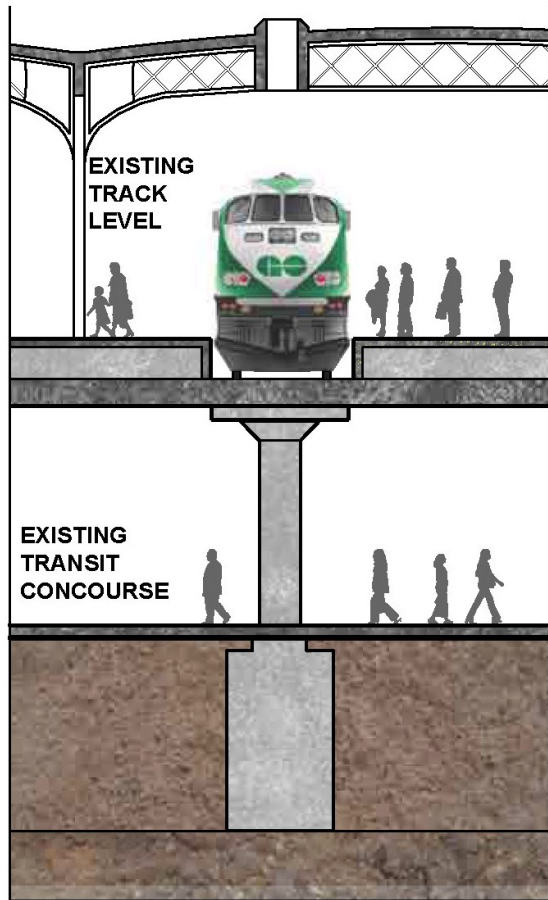


## Existing Typical Building Section

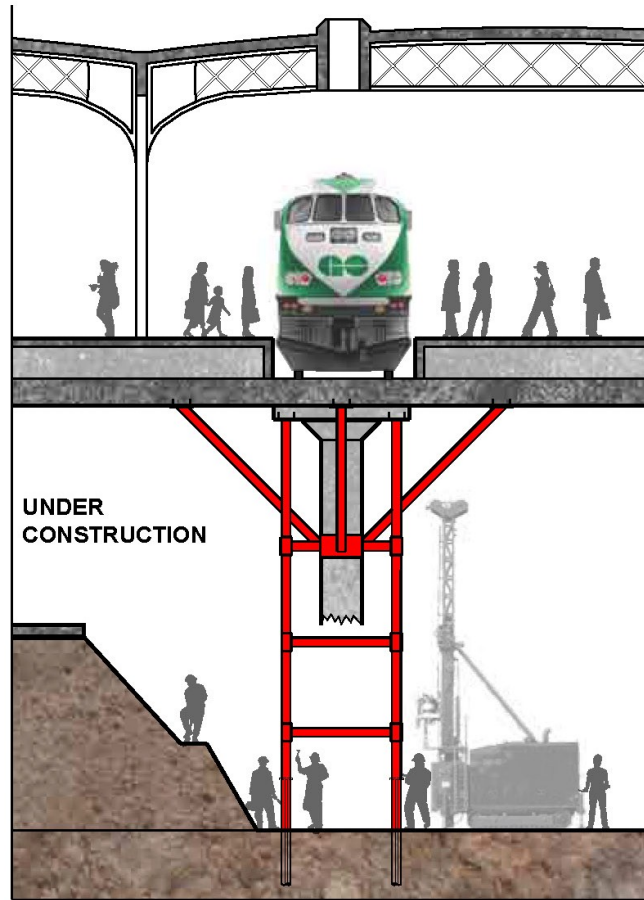


## Proposed Typical Building Section

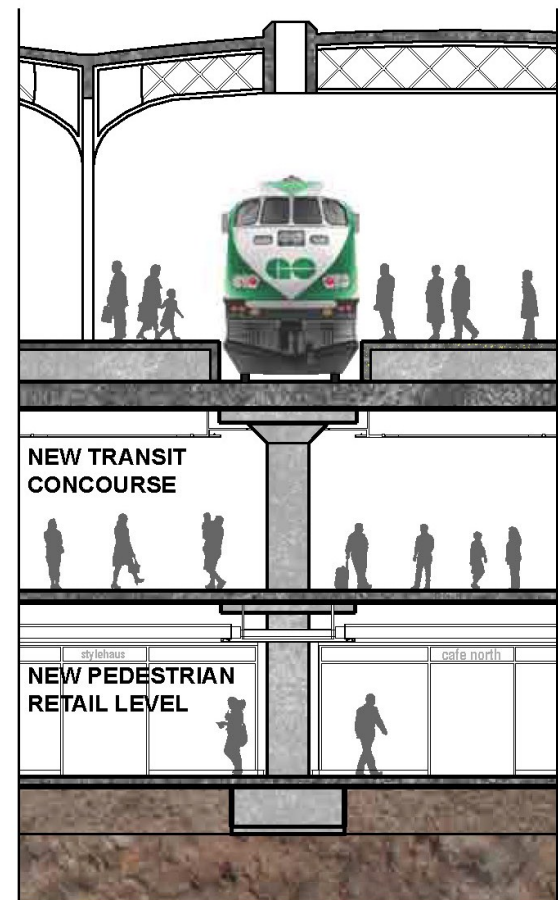
# UNION STATION REVITALIZATION



before



during construction



after

## Dig Down construction process



March 1, 2011

# UNION STATION REVITALIZATION



Future



Existing

# UNION STATION REVITALIZATION



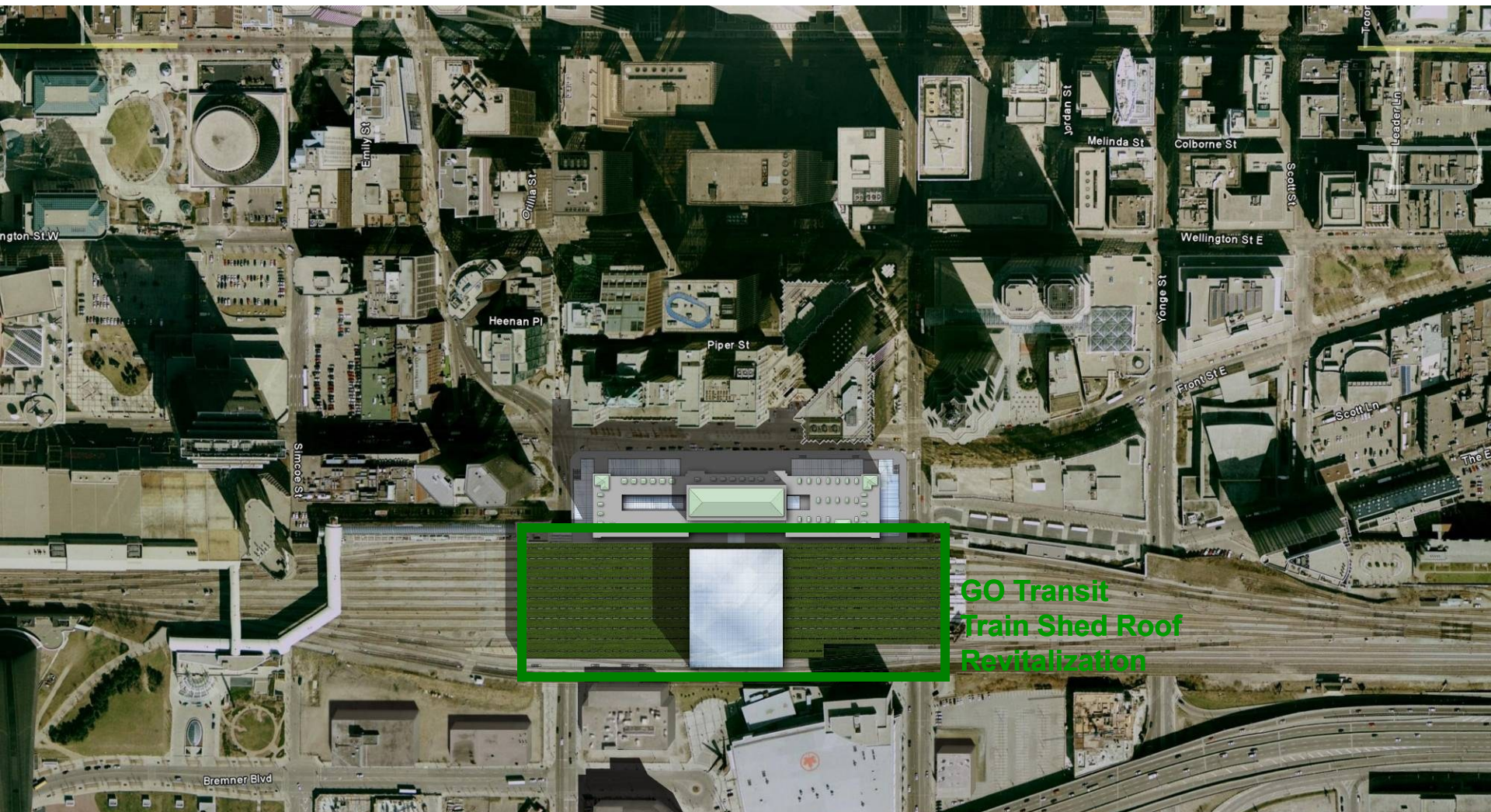
Future

Existing





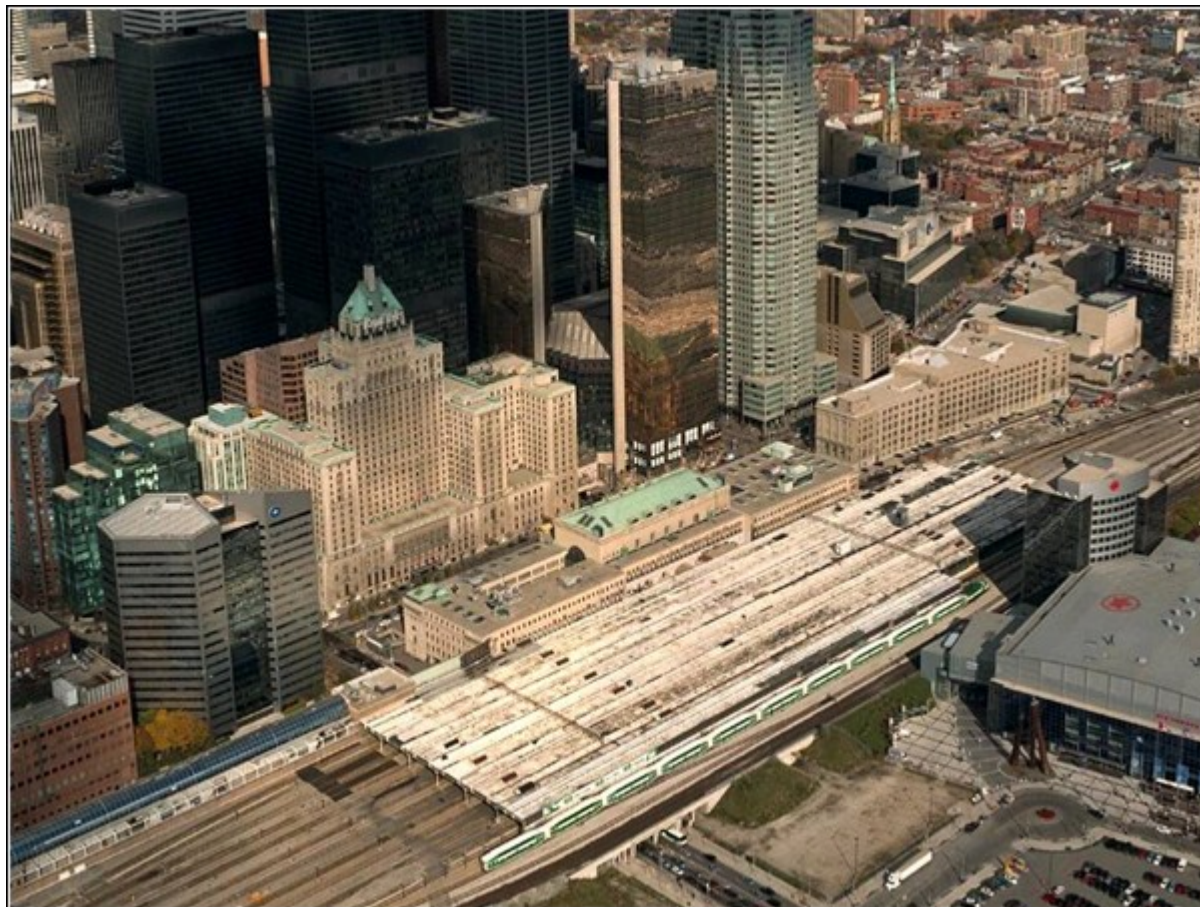
# GO TRANSIT PROJECT



GO Transit  
Train Shed Roof  
Revitalization

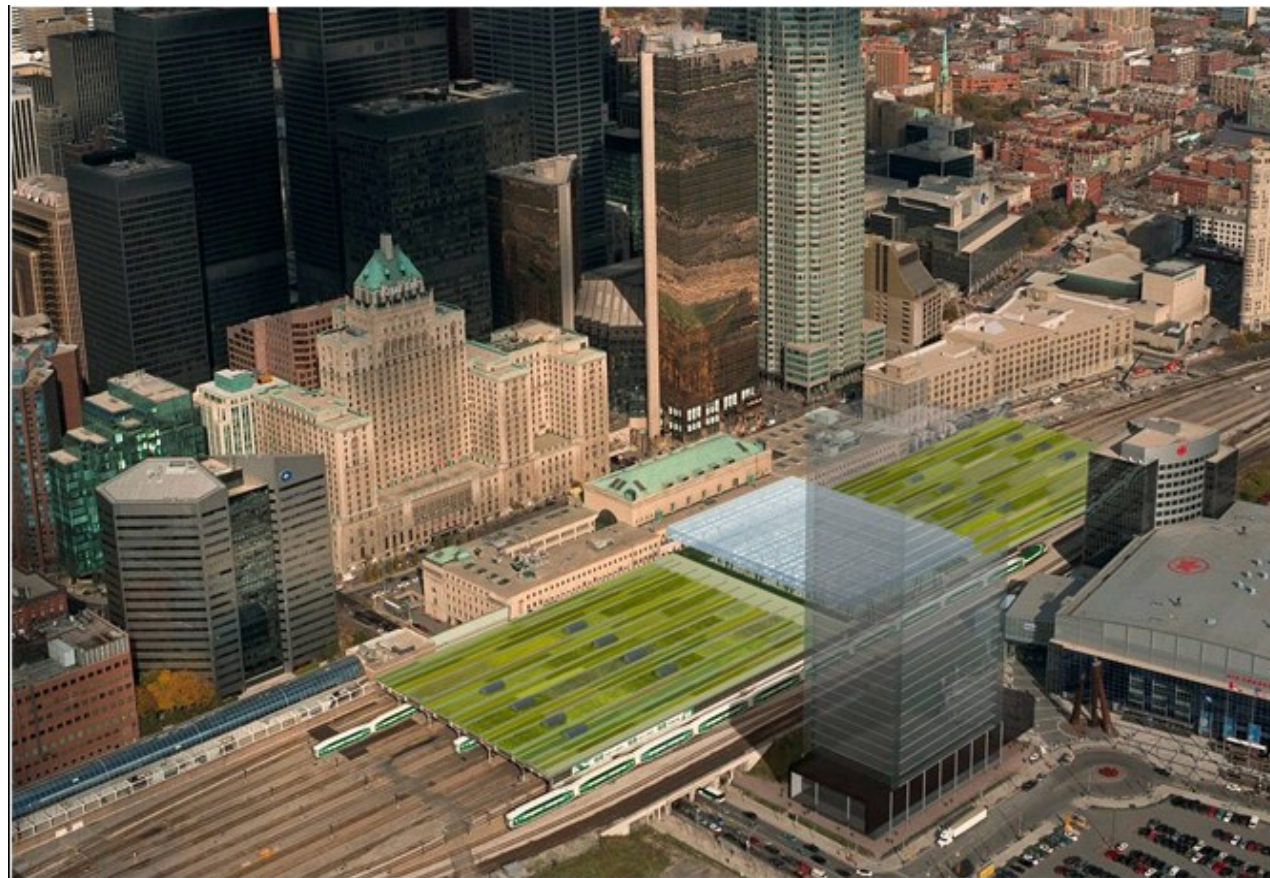
## Union Station – Precinct Projects





8.6 acre roof





Train Shed Revitalization

Restore heritage sections

Rehabilitate/replace sections

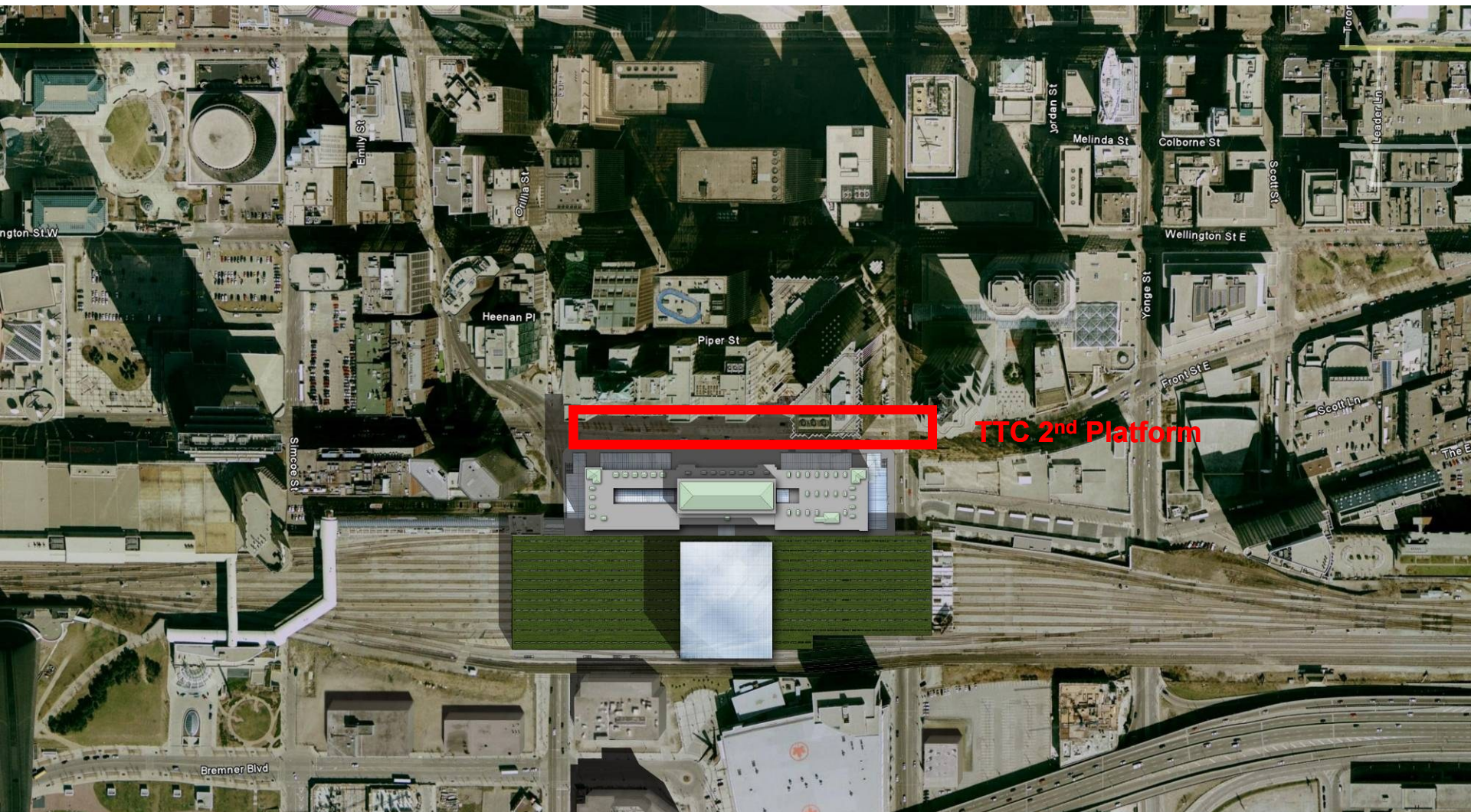
New atrium section- Green roof - Solar panels







# UNION STATION SECOND PLATFORM



## Union Station – Precinct Projects



# GENESIS OF SECOND PLATFORM PROJECT









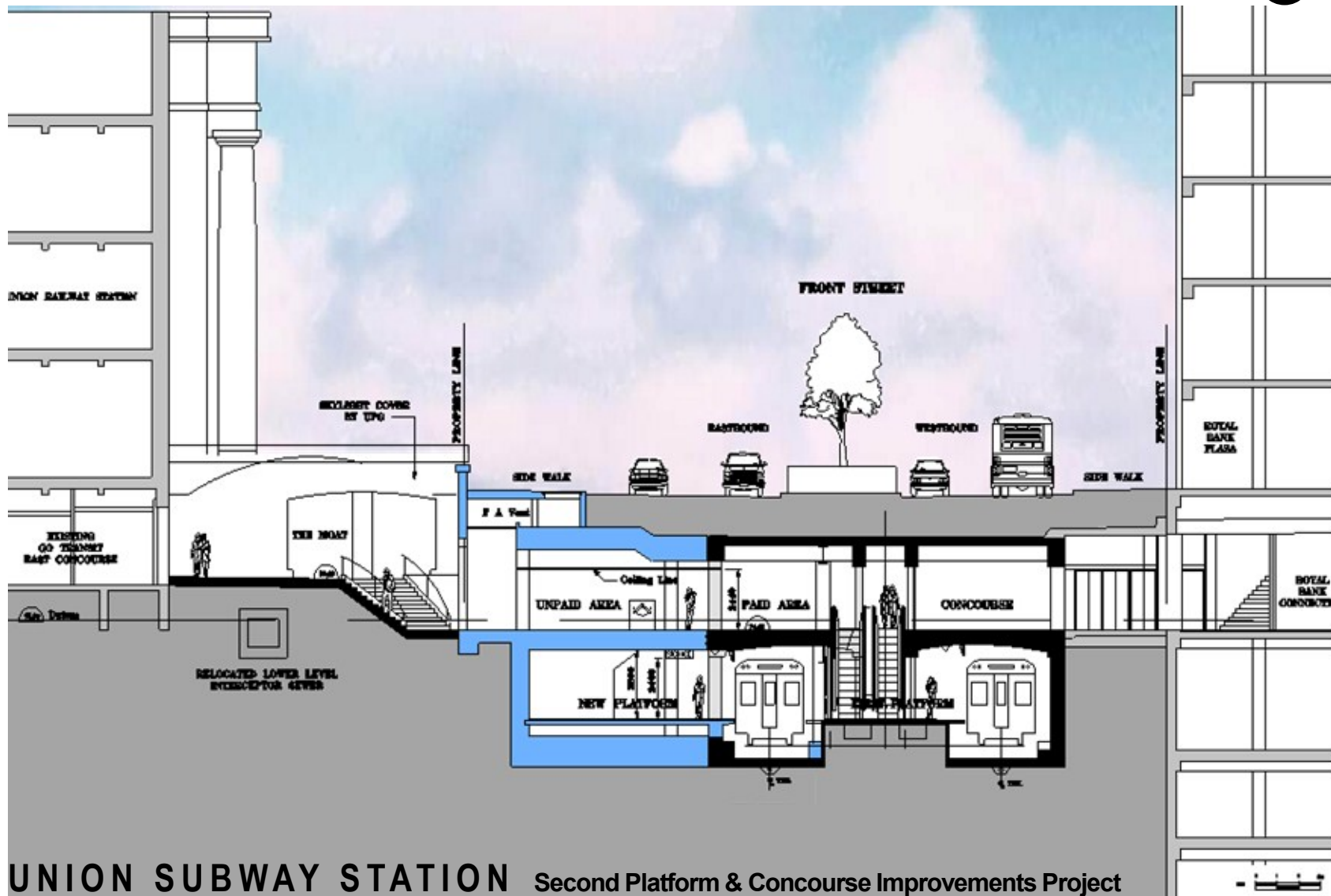
Increase platform capacity by separating eastbound and westbound passenger flow with a new second platform

At concourse level combine two paid fare areas into one with two bypasses connecting to the City *PATH* system

New east automatic entrance



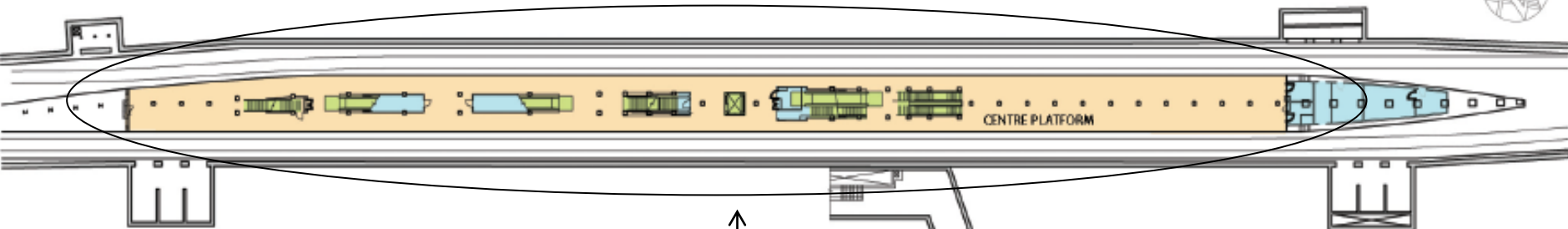
# NEW PLATFORM STRUCTURE (BLUE)



**UNION SUBWAY STATION** Second Platform & Concourse Improvements Project

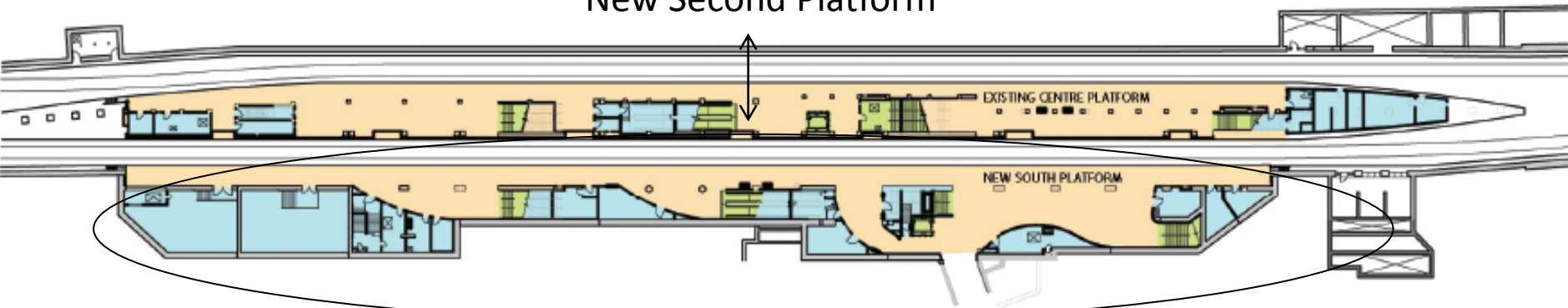


# PLATFORM LEVEL SCOPE






EXISTING

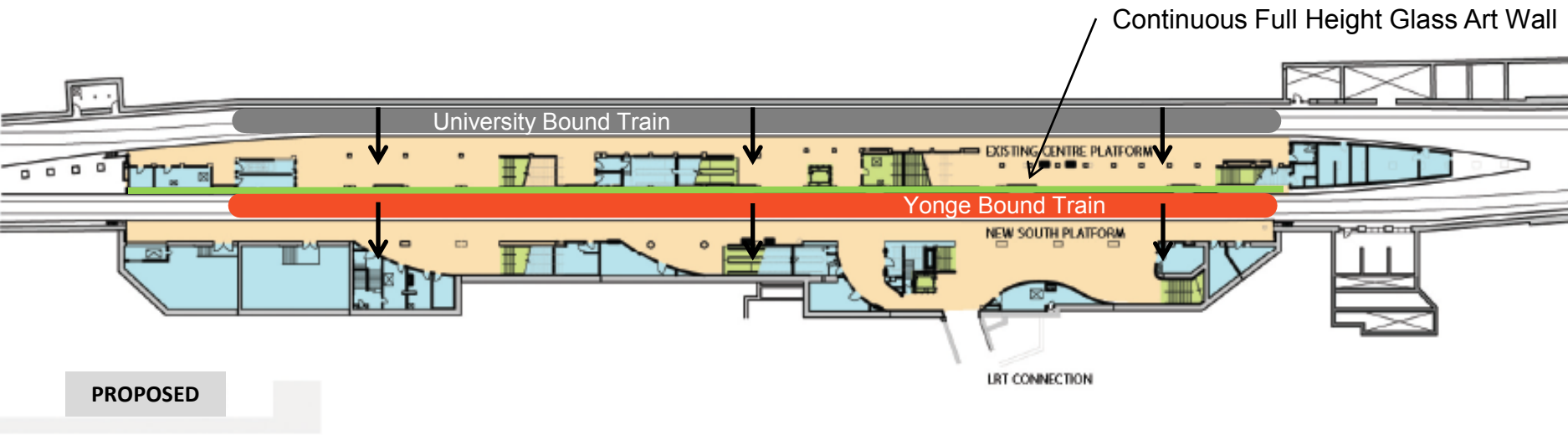
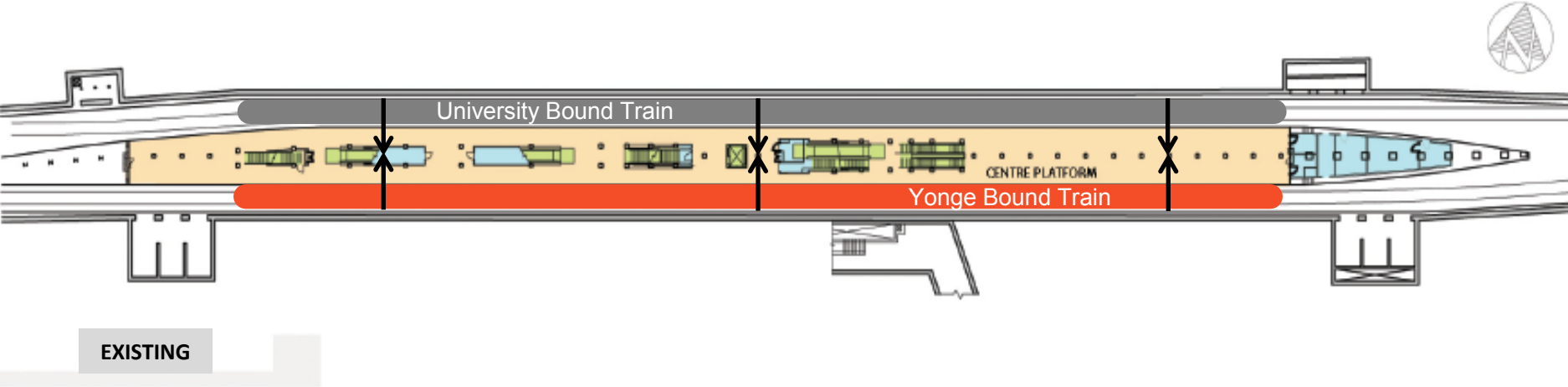
Single Centre Platform  
Capacity Doubled By Added  
New Second Platform



PROPOSED

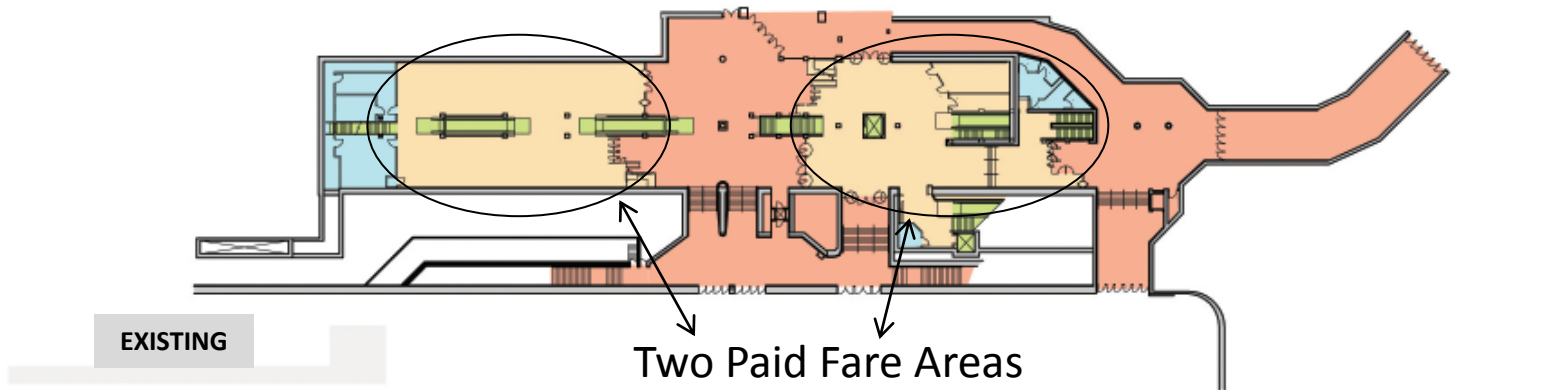
-  SERVICE AREA
-  FARE PAID AREA
-  VERTICAL CIRCULATION

# PLATFORM LEVEL OPERATIONS

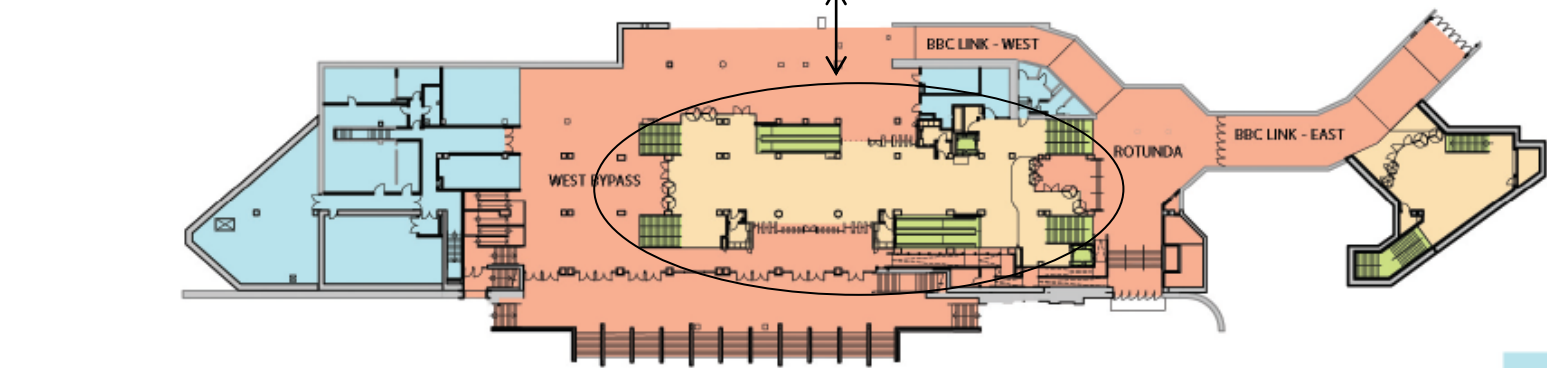


- SERVICE AREA
- FARE PAID AREA
- VERTICAL CIRCULATION

# CONCOURSE LEVEL SCOPE

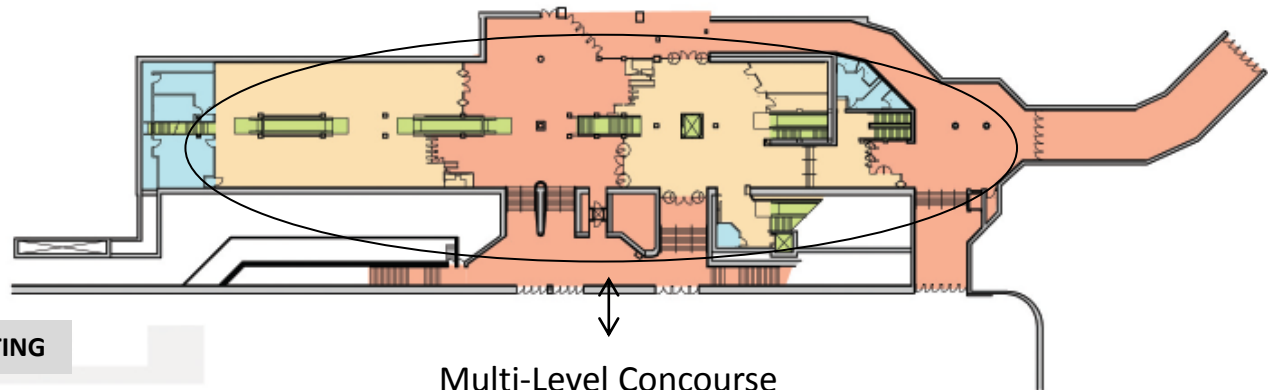


Two Paid Fare Areas  
Consolidated Into  
One Paid Fare Area



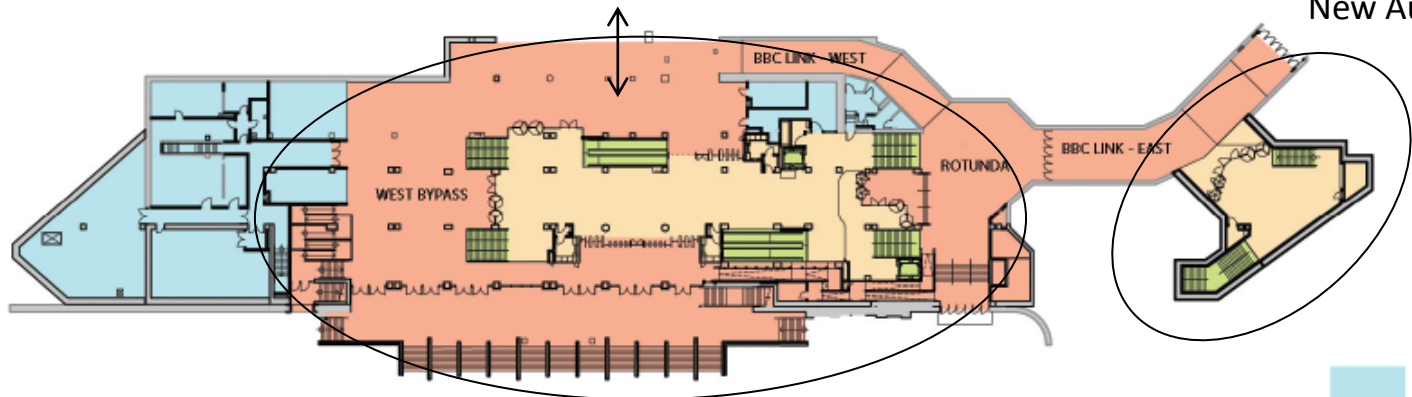
- SERVICE AREA
- FARE PAID AREA
- FARE UNPAID AREA
- VERTICAL CIRCULATION

# CONCOURSE LEVEL SCOPE



EXISTING

Multi-Level Concourse  
Re-Designed Into  
Single Level Concourse



New Auto-Entrance

PROPOSED

- SERVICE AREA
- FARE PAID AREA
- FARE UNPAID AREA
- VERTICAL CIRCULATION

# MAJOR MILESTONES



May 2011 – Start of Construction

May 2013 – Opening of First Phase of Concourse

October 2013 – Completion of Bulk Excavation

February 2014 – Permanent Power Connected

February 2014 – Commencement of Front Street Restoration

March 2014 – Completion of Major Concrete Work

Summer 2014 – Open New Second Platform

Summer/Fall 2014 – Rehabilitate Centre Platform

Early 2015 – Completion of Project



# TOTAL PROJECT BUDGET



|                          | <b>Waterfront Toronto*</b> | <b>City of Toronto**</b> | <b>TTC***</b> | <b>Total</b> |
|--------------------------|----------------------------|--------------------------|---------------|--------------|
| Budget                   | \$137.5M                   | \$26.7M                  | \$64.2M       | \$228.4M     |
| Construction Award Value | \$96.5M                    | \$7.8M                   | \$41.1M       | \$145.4M     |
| Contract Changes to Date | \$7.0M                     | \$16.3                   | \$2.8M        | \$26.1M      |

\*Includes:  
Second Platform and Concourse Improvements

\*\*Includes:  
Union Rail Station Revitalization Early Works Package  
300mm & 600mm Water Main Replacement  
Front Street Improvements (York to Bay)

\*\*\*Includes:  
Fire Ventilation  
Bridge and Structures  
Elev/Escal Rebuild  
Elevator A/C  
Collector Booth Improvements  
ATC  
Office Space Improvements  
Subway Pumps





# MOAT STAIRS – MAY 2013 (STAGE 4C)



Concourse Level

New Stair Area



# MOAT STAIRS – NOVEMBER 2013 (STAGE 4C)



Demolished and  
Excavated

Concourse Level

New Stair Area



# MOAT STAIRS – FEBRUARY 2014 (STAGE 4C)



New Station

Concourse Level

New Stair Area



# COMPLETED MOAT W/CANOPY



# NEW SECOND PLATFORM



Final Preparation for Finishes

Subway Trains Behind Barrier



# NEW SECOND PLATFORM



# NEW PLATFORM & CENTRE PLATFORM



New Platform



Centre Platform



# REFURBISHED CENTRE PLATFORM

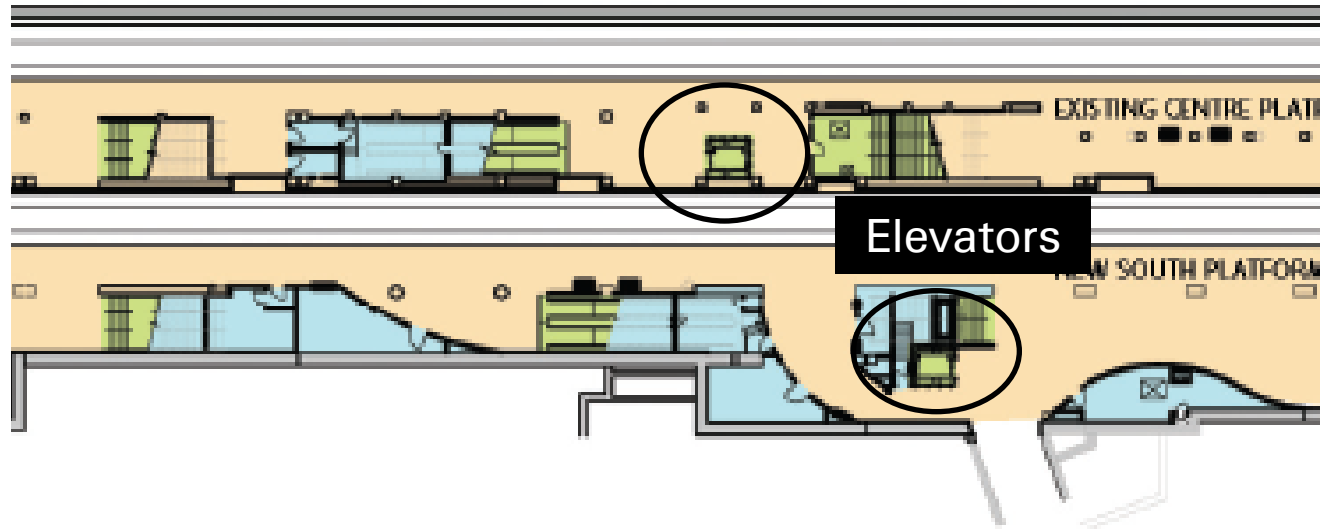




# PLATFORM LEVEL ACCESSIBILITY



## Future

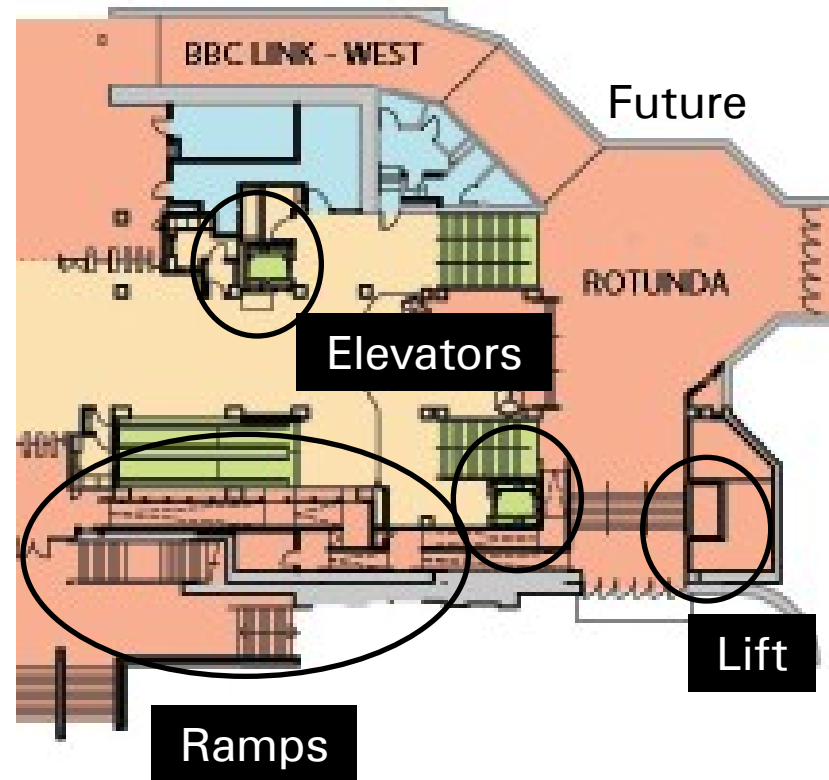
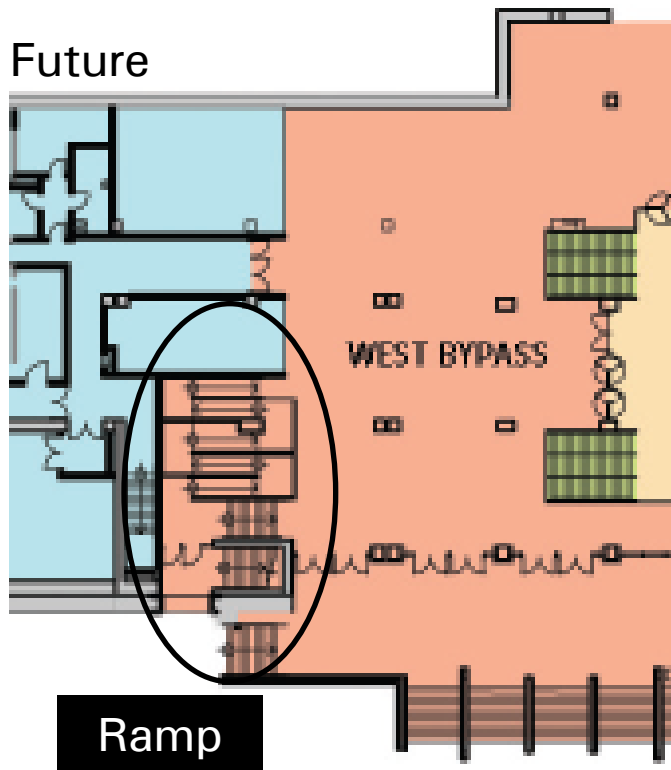


## During Construction

- Barrier Free Accessibility is maintained to Platform level at all times
- Changes are signed, marketed, and electronically communicated
- Station Managers are engaged fully with barrier accessibility needs
- Wayfinding is clear and prominent



# CONCOURSE LEVEL ACCESSIBILITY

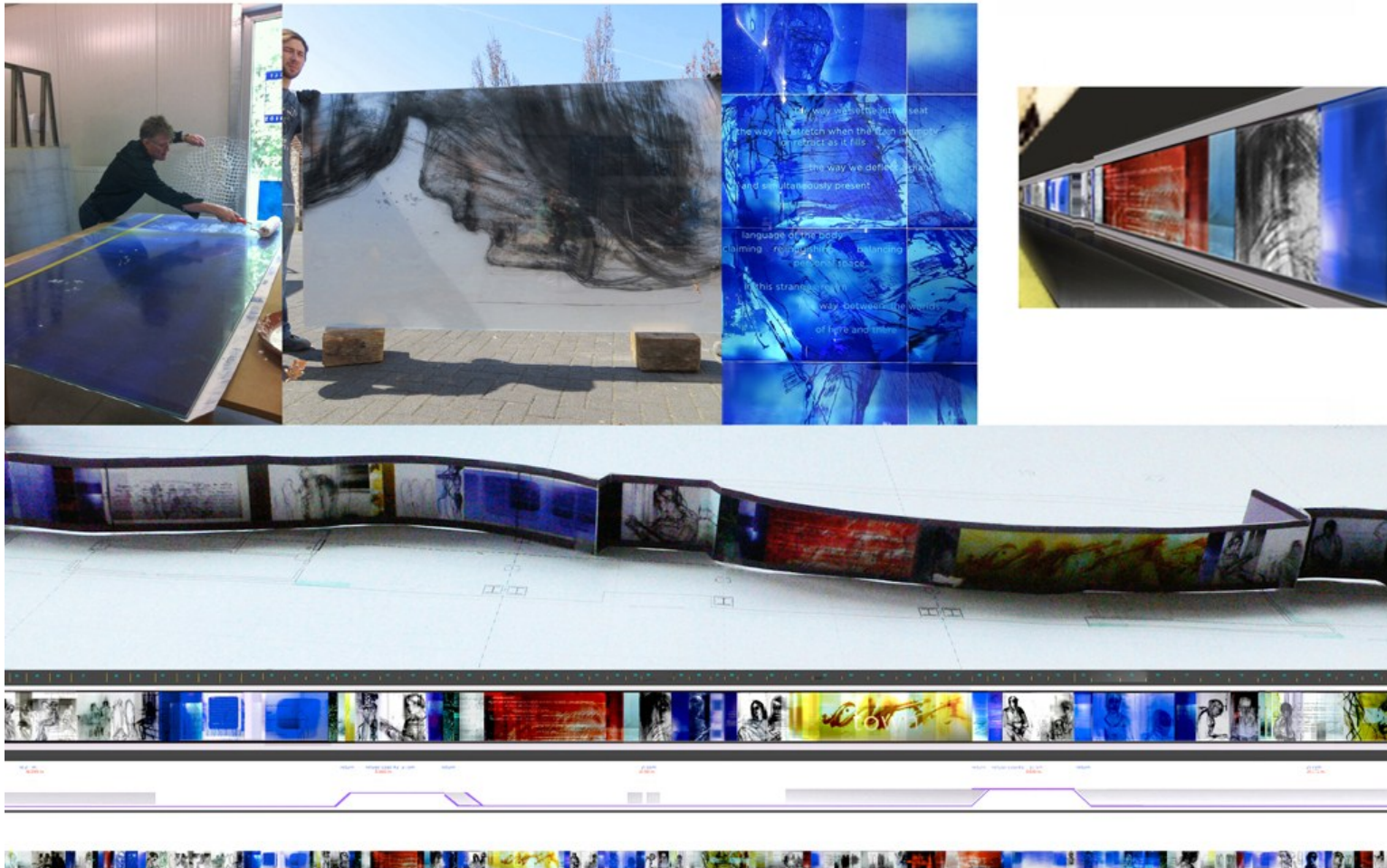


## During Construction

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# ART WALL



“zones of immersion” for TTC Union Station    installation 2014    7' tall x 500' long    multilayered laminated glass    see video at [www.stuartreid.ca](http://www.stuartreid.ca)



Northbound to Finch Station  
Next Station: King



a partnership after the crush of rush hour, going north on the yellow line  
you are thrown back up down, making you start to bobble  
down and a massive rattle to the platform  
it's a pin station at the next station  
there the station a soft rumble of friction, the swelling acceleration, and a clean slide through  
it's like to go to the city, on and you will be pulled into the steel wheels on the intersecting tracks.  
for you feel the wheels kick in and you are steady at the next station.  
It's a pin station, and if you're not in a hurry, it's easy to wish the ride wouldn't end



# Thank you

- Project Funding from:

