

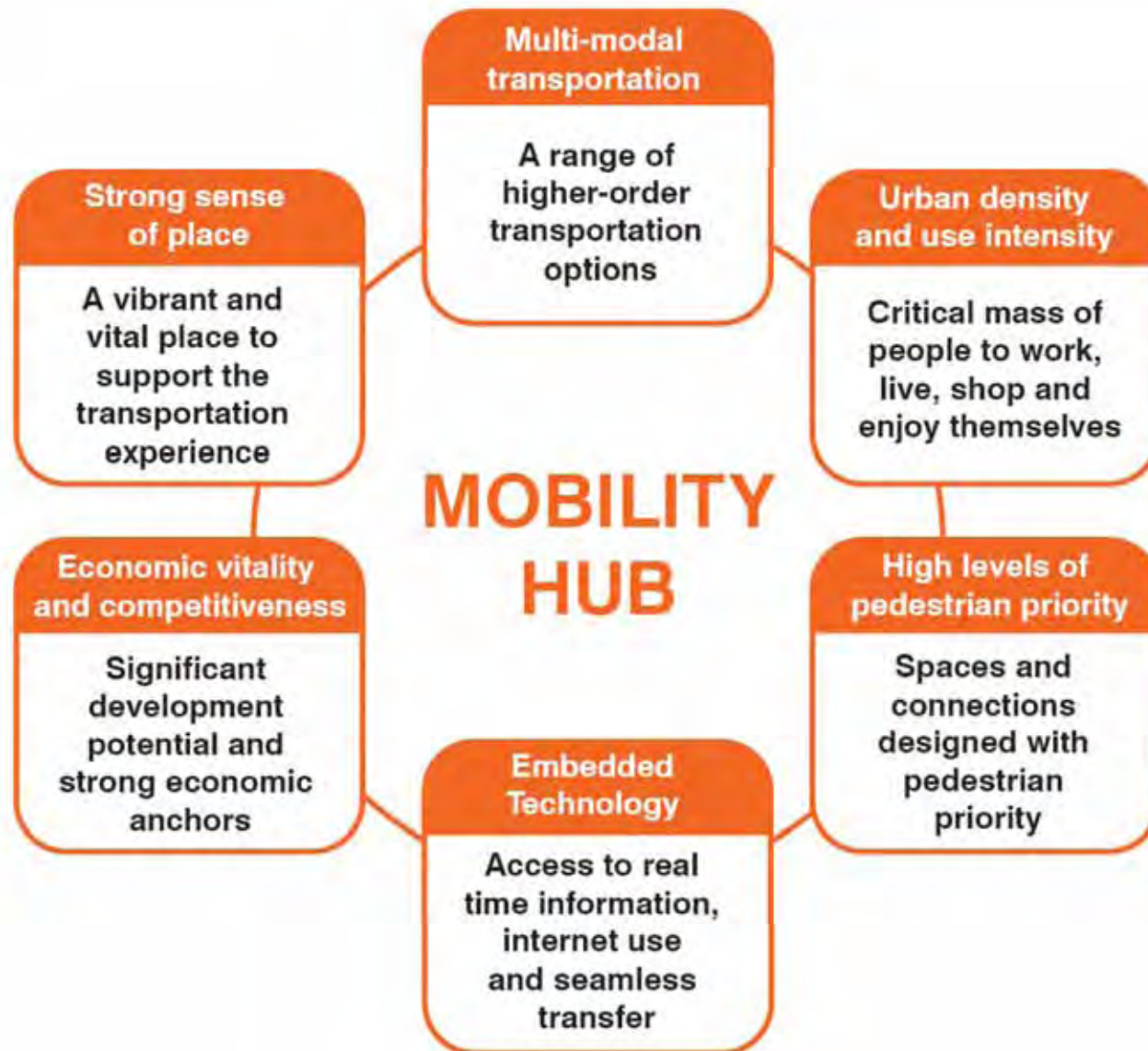
An aerial photograph of a city skyline at sunset. The sun is low on the horizon, casting a warm, golden glow over the city. The skyline is dense with skyscrapers, and a prominent tower with a spire is visible in the distance. The city is surrounded by greenery, and a body of water is visible in the background. The title 'MOBILITY HUBS' is overlaid in large, white, bold, sans-serif capital letters.

# MOBILITY HUBS

*Where land-use meets transportation*

**URBAN  
STRATEGIES  
INC .**

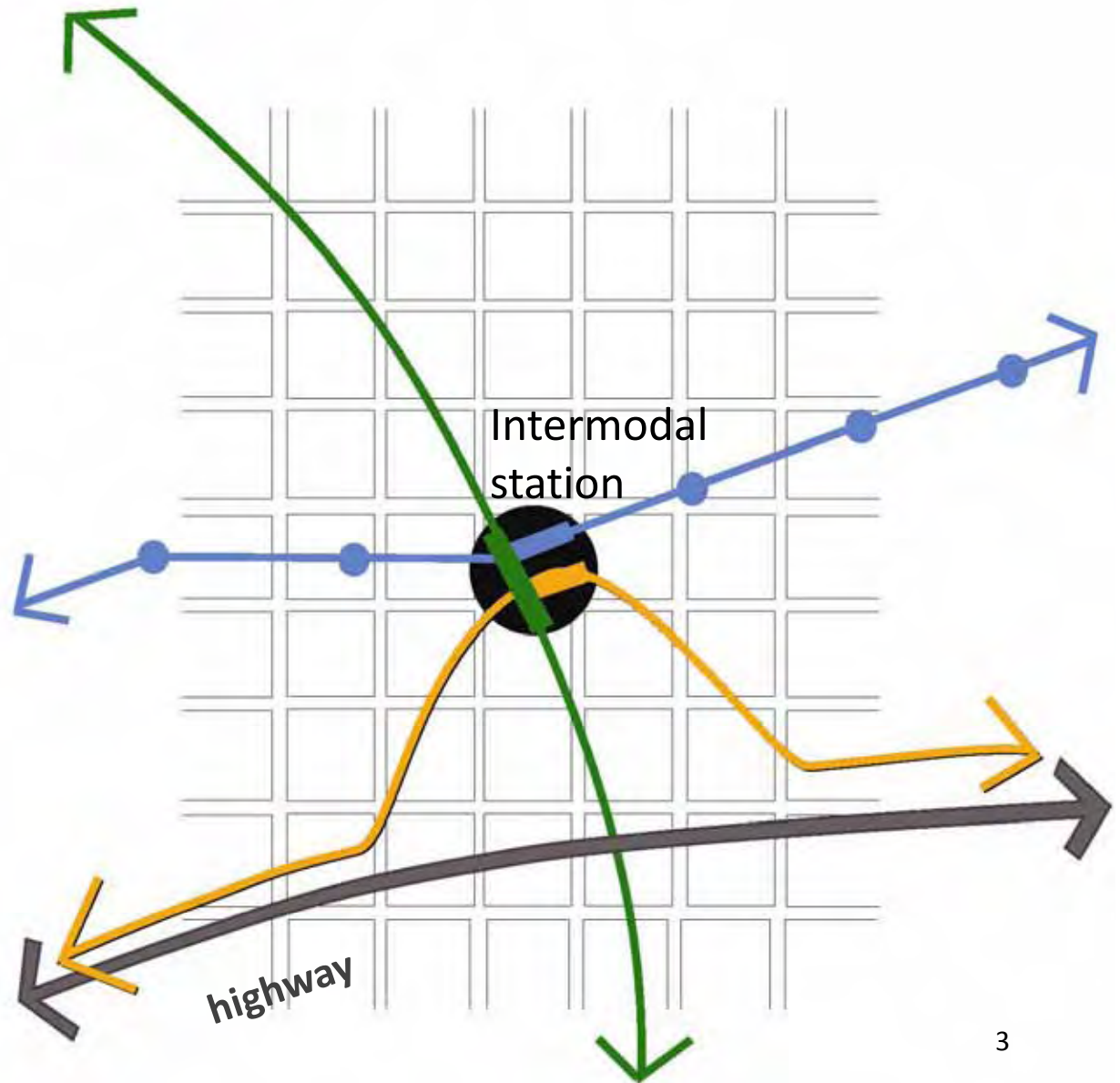
# Ingredients of a Mobility Hub



# Geography of a Mobility Hub

## 1. Transit Station:

- Multiple transit lines converge at an integrated facility
- Less than 100m walk between platforms
- Infrastructure improvements to support new population and employment

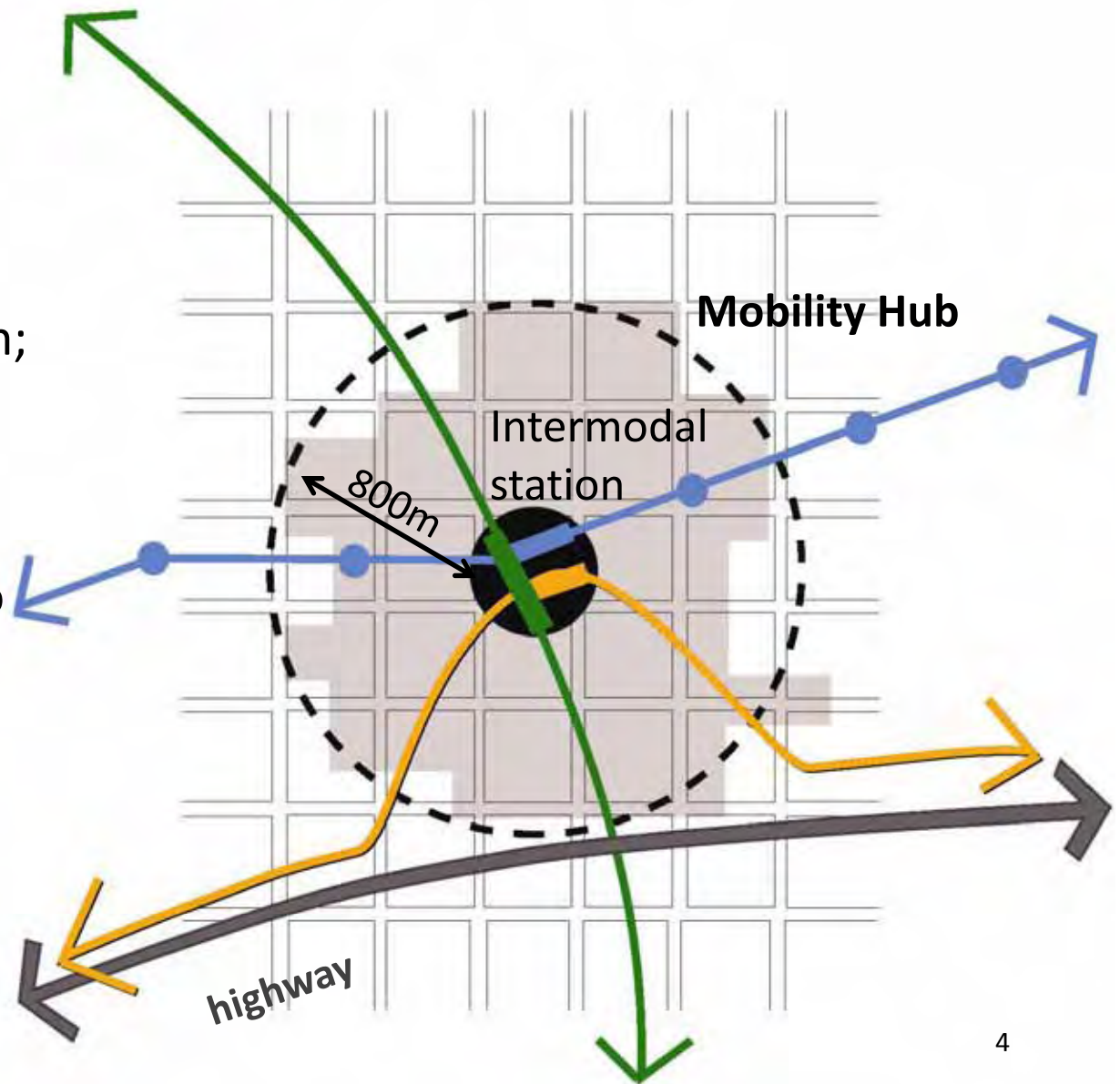




# Geography of a Mobility Hub

## 2. Mobility Hub:

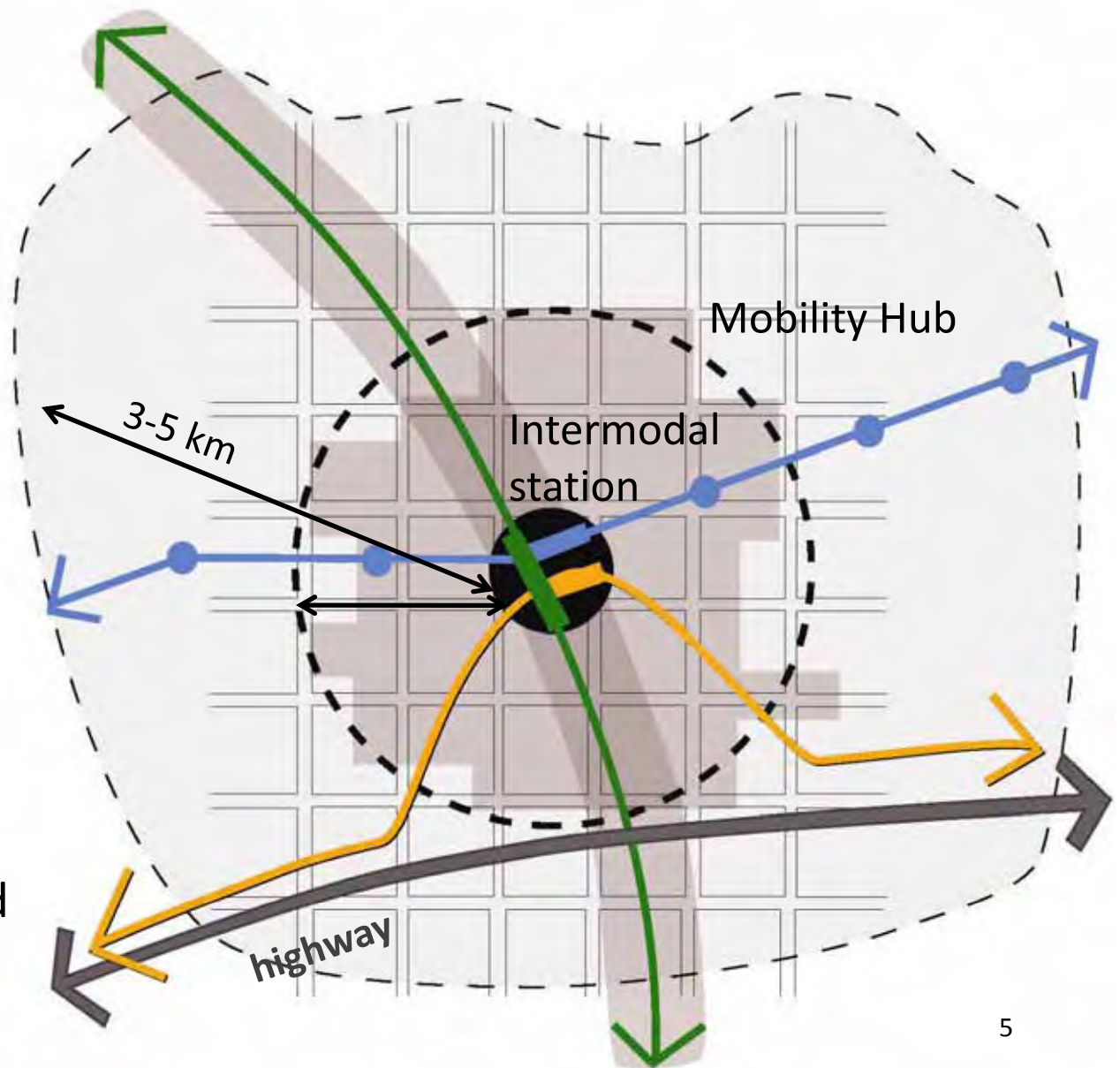
- 800m radius
- Composed of the station; surrounding buildings; public spaces; and streets
- Pedestrian accessibility to adjacent uses
- Access to a range of activities, services and amenities.



# Geography of a Mobility Hub

## 3. Catchment Area:

- 3-5km boundary
- Supports and connects the mobility hub to the outlying street network
- Defines the area in which most users of the mobility hub live or work.
- Transit corridors extend development reach



# Design of a Mobility Hub

## At the station

- Easy connections between lines
- Good signage
- Good lighting
- Weather protected, heated waiting areas
- Washrooms/change rooms
- Bicycle stations
- Real-time service information
- Service kiosks with refreshments, papers, etc.
- Local maps & info
- Web link
- Place making and public art
- Travellers' aid/telephones
- Virtual workplace
- Safe environmental design
- Car share program

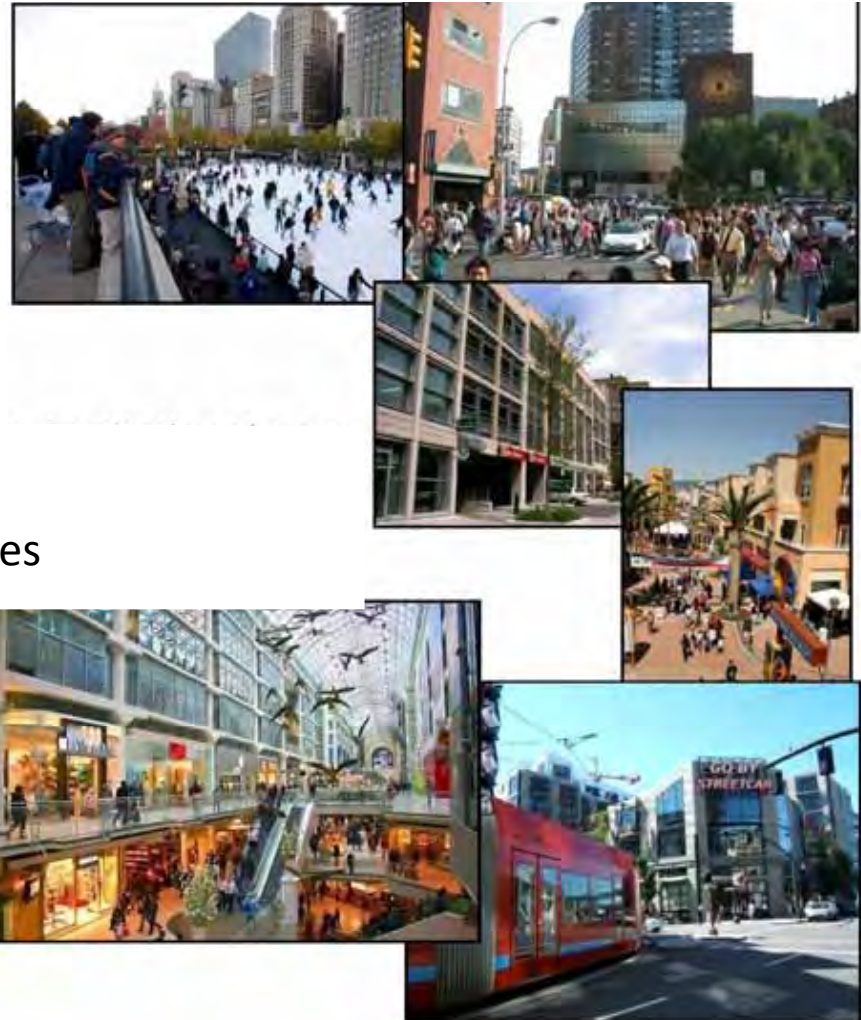




# Design of a Mobility Hub

## Around the station

- Transit Plaza
- Transit links to nearby destinations
- Convenience shopping
- Day-care
- Pleasant open spaces
- Cultural, educational, entertainment, institutional uses
- Convenient connections between modes (weather protected)
- Cafes, restaurants
- Grocery store
- Personal services
- HOV preferred parking
- Plug-ins for electric vehicles
- Facility for delivery of goods



# Earls Court: London's New Central Place



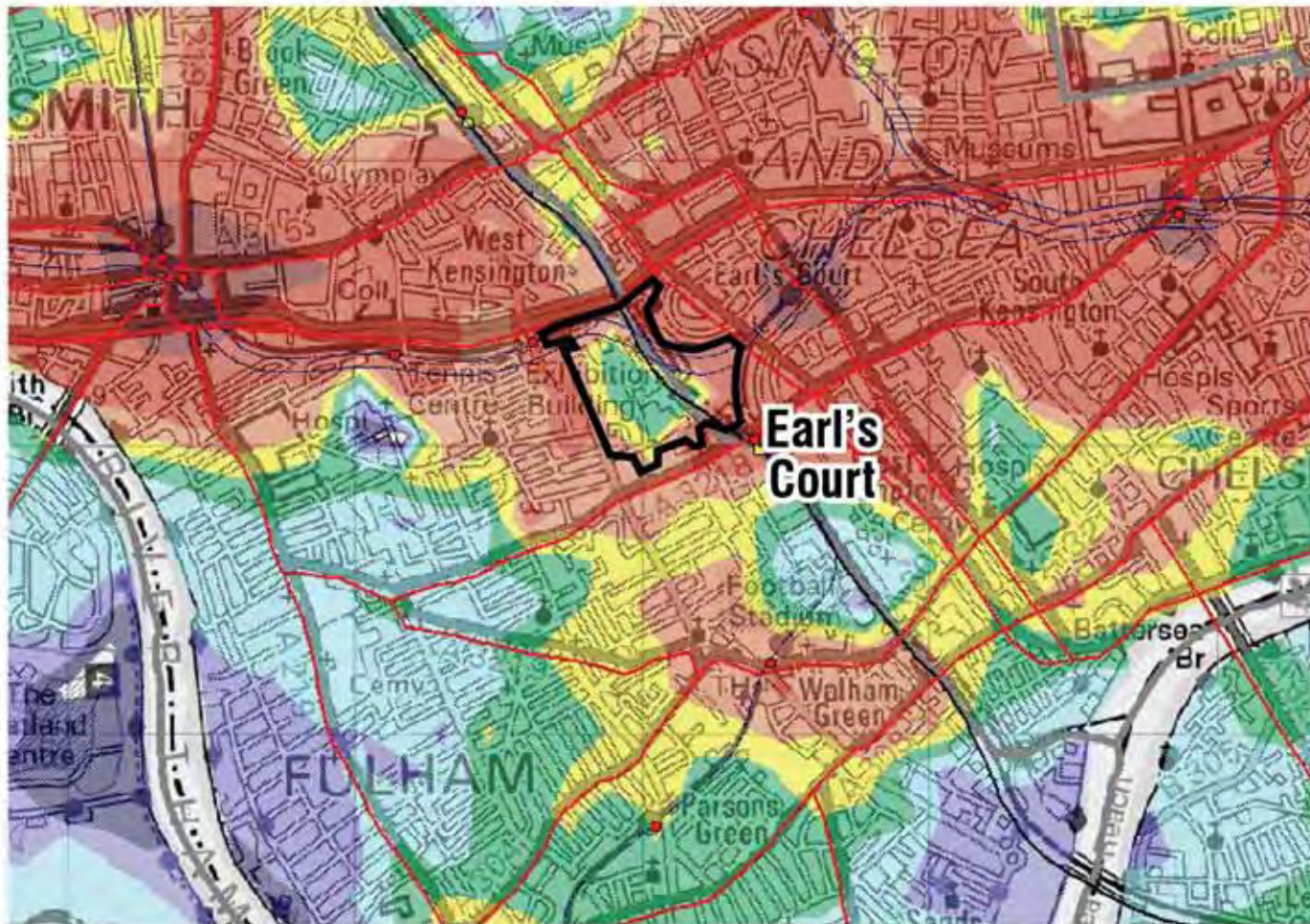


# Earls Court





# PTAL



This map shows the relative levels of access provided by public transport using LB Hammersmith & Fulham's PTAL method.

This map is for illustrative purposes only, the data has not been verified.

Map revised March 2005

# The development framework

## Existing Underground stations





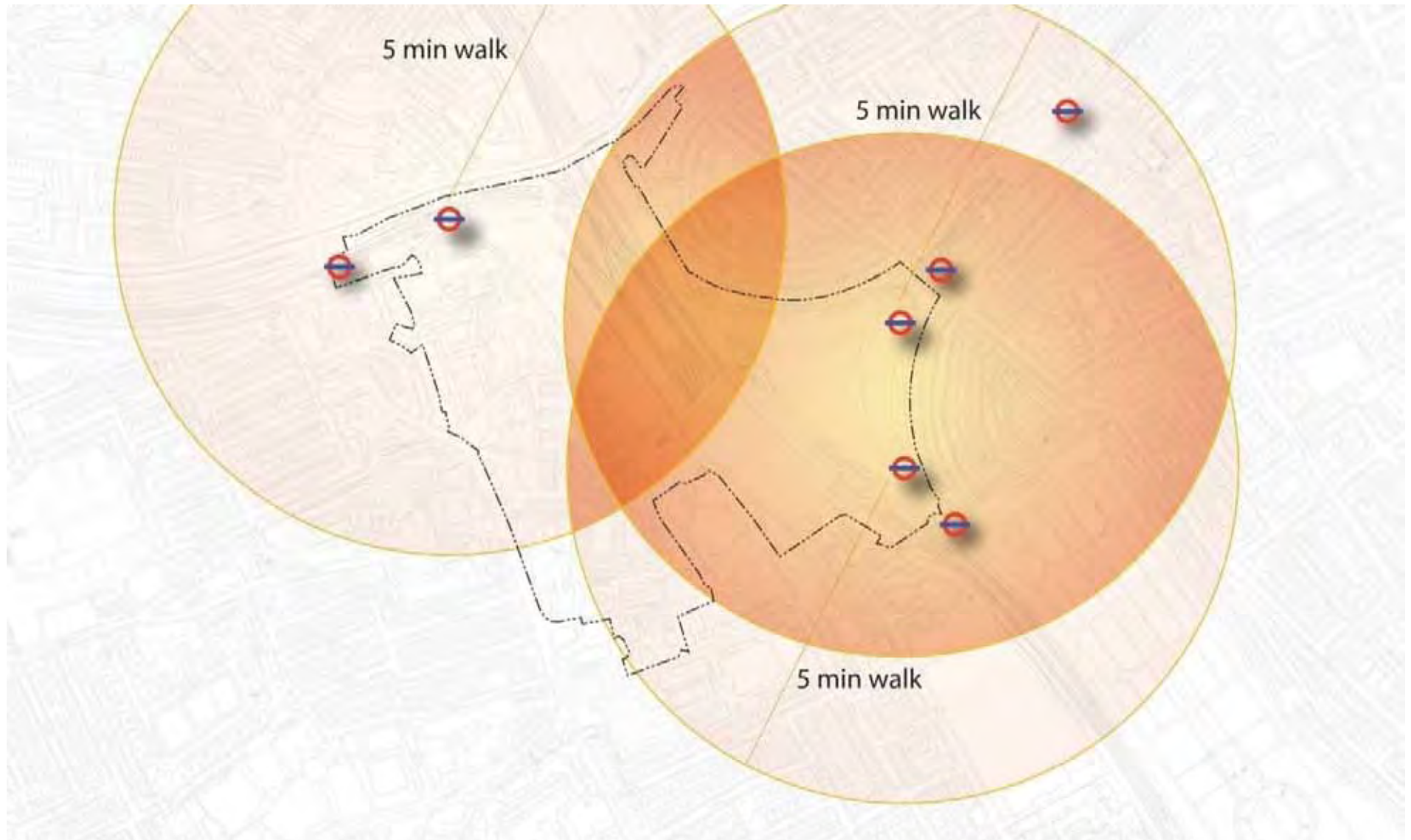
# The development framework

**Extend the Underground stations into the site**



# The development framework

## ...to make the site fully accessible





# Singapore: Waterfront Gateway District





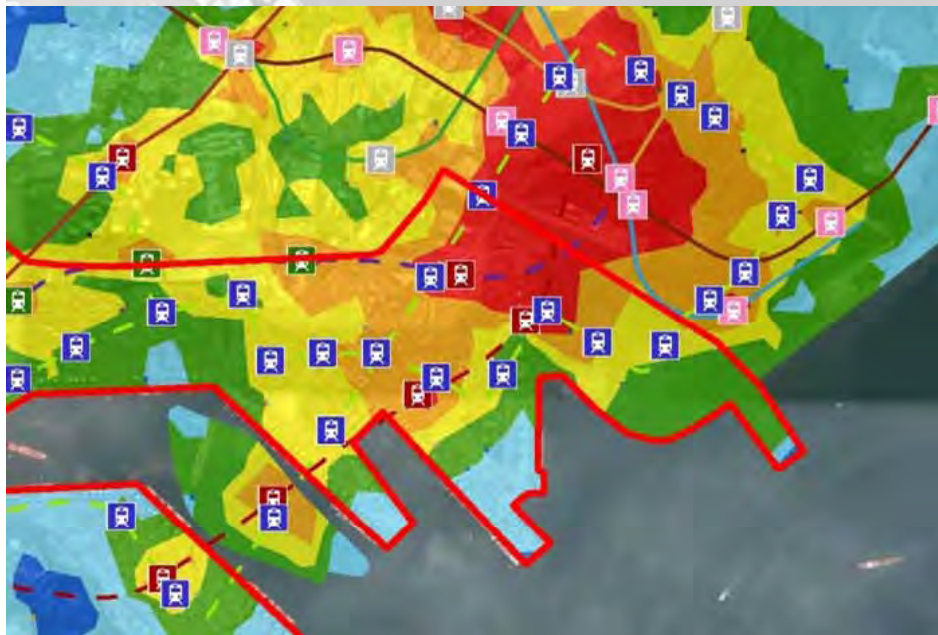
# Transport Routes: Marina Bay Option



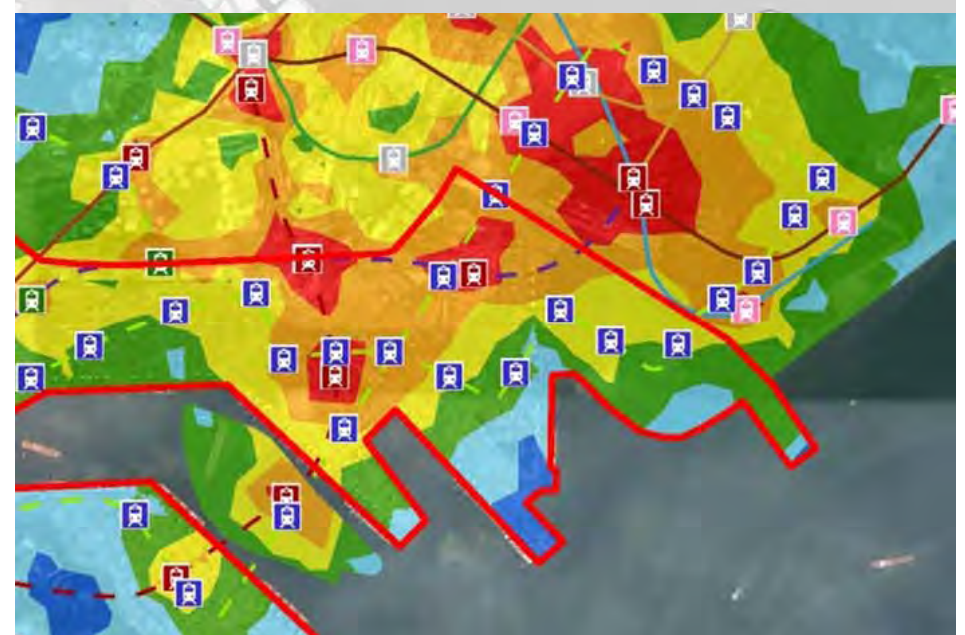
# Transport Routes: Outram Park Option







Marina Bay Option



Outram Park Option



# Case Study:

## Subway Station Area Development in Toronto



**Yonge Line**



**University/Spadina Line**



# Yonge Street Subway Line



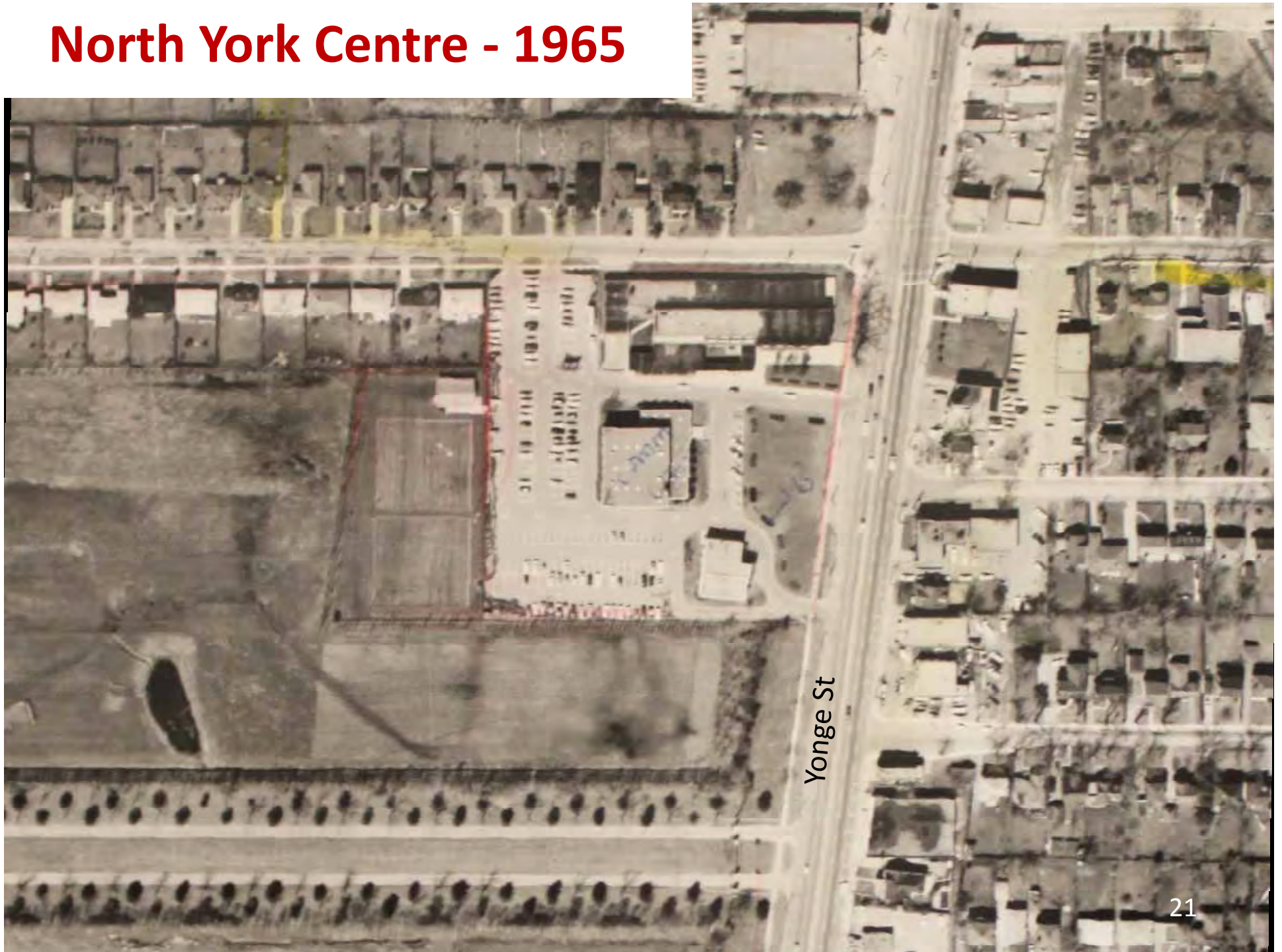


# Yonge Street Subway Line





# North York Centre - 1965





# North York Centre - Today







## University – Spadina Subway Line



# Wilson Station





# Mobility Hubs and Urban Growth Centres



**Richmond Hill/  
Langstaff Gateway**  
175 HA  
200 residents + jobs/HA



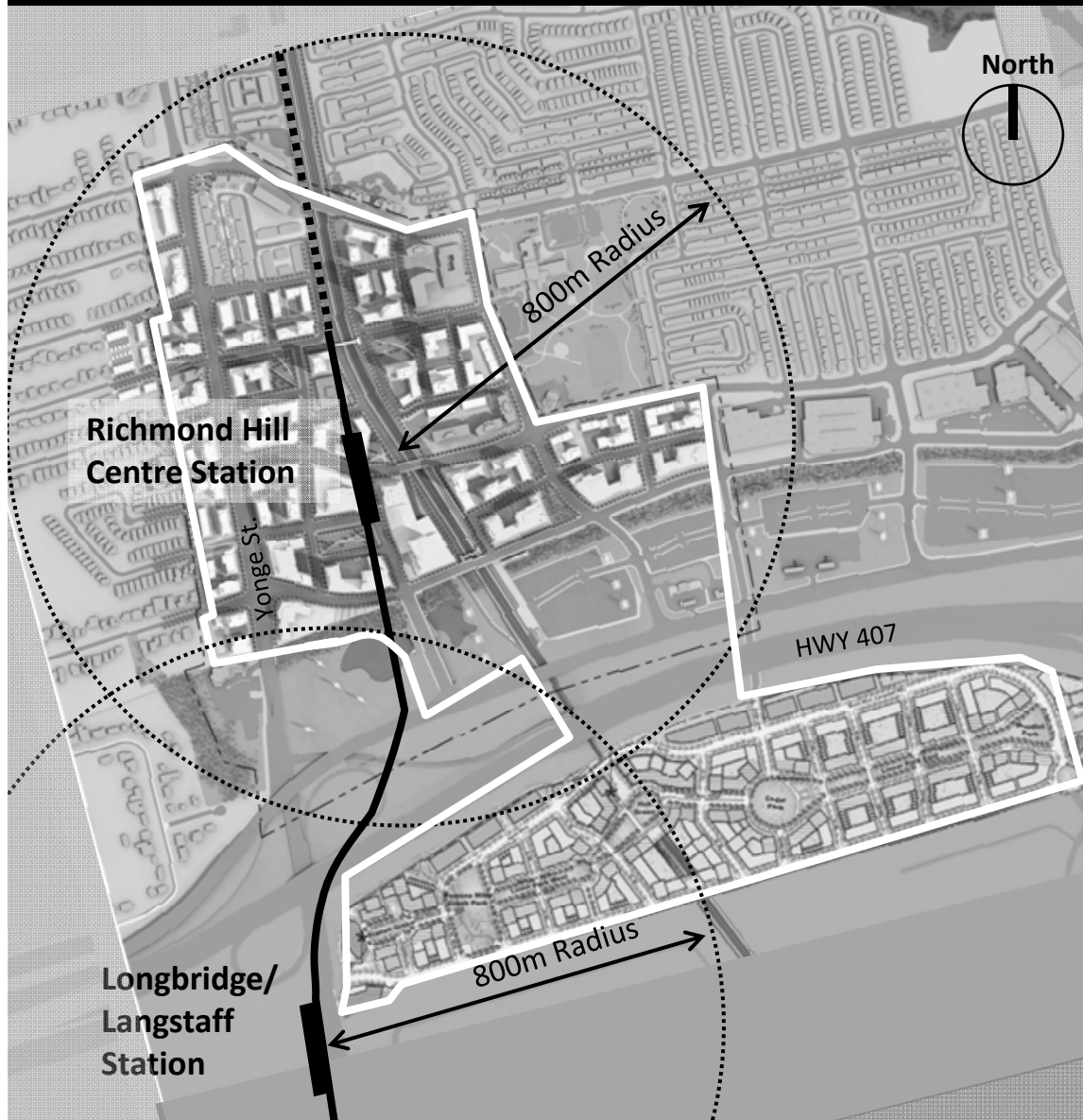
**Markham Centre**  
240 HA Land Area  
200 residents + jobs/HA







# Richmond Hill / Langstaff Gateway

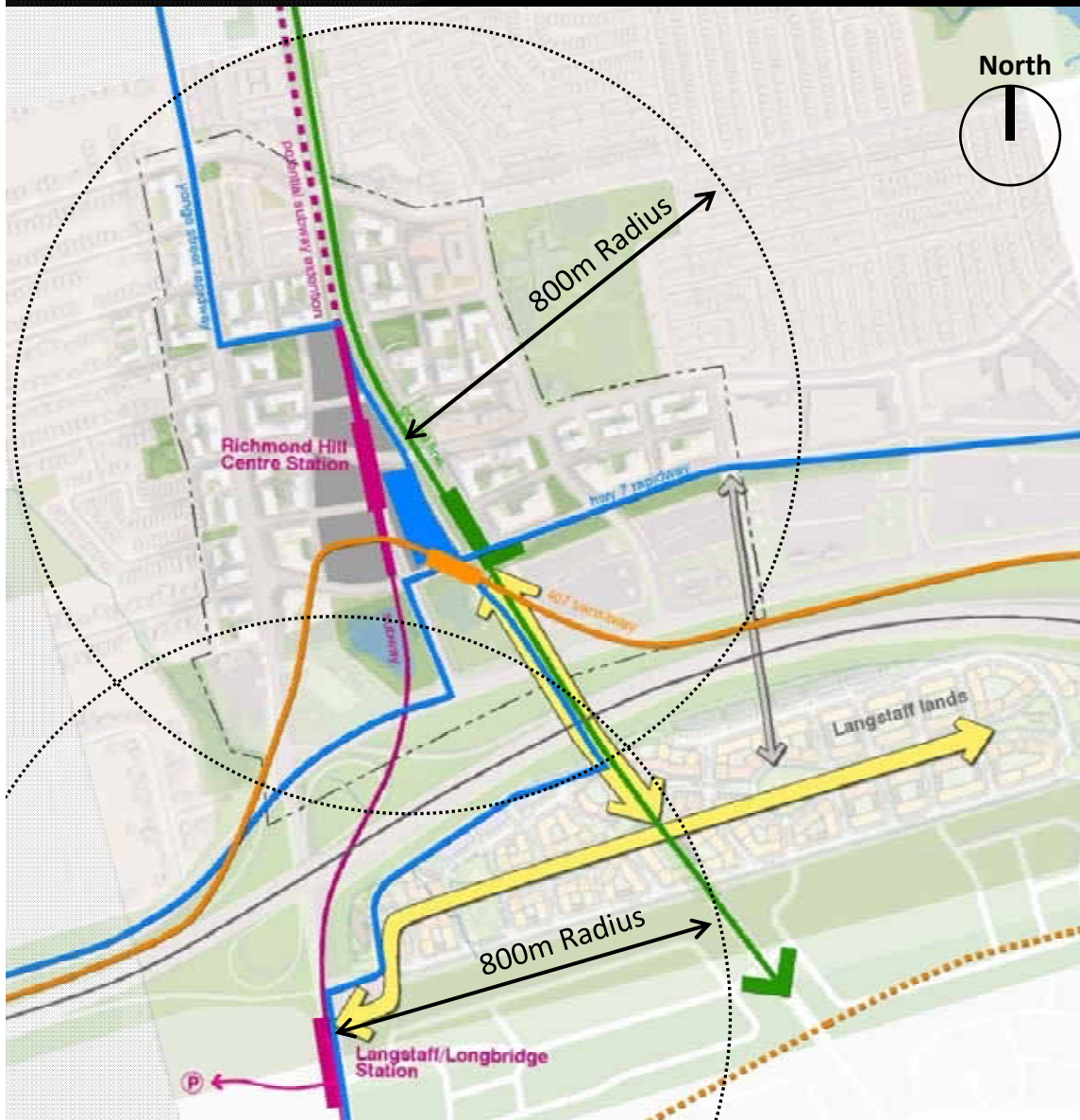
# Understanding the Station Area



-  Subway Station
-  Urban Growth Centre



# Recommended Transit Alignment



LEGEND	
	Subway
	VIVA
	GO Transit (Rail)
	407 Transitway
	Dedicated Transit Corridor
	Boulevard with dedicated Transit lanes
	Urban Growth Centre

- An integrated, compact station area
- Protected through the use of a Holding Zone
- Establishes convenient connections between modes

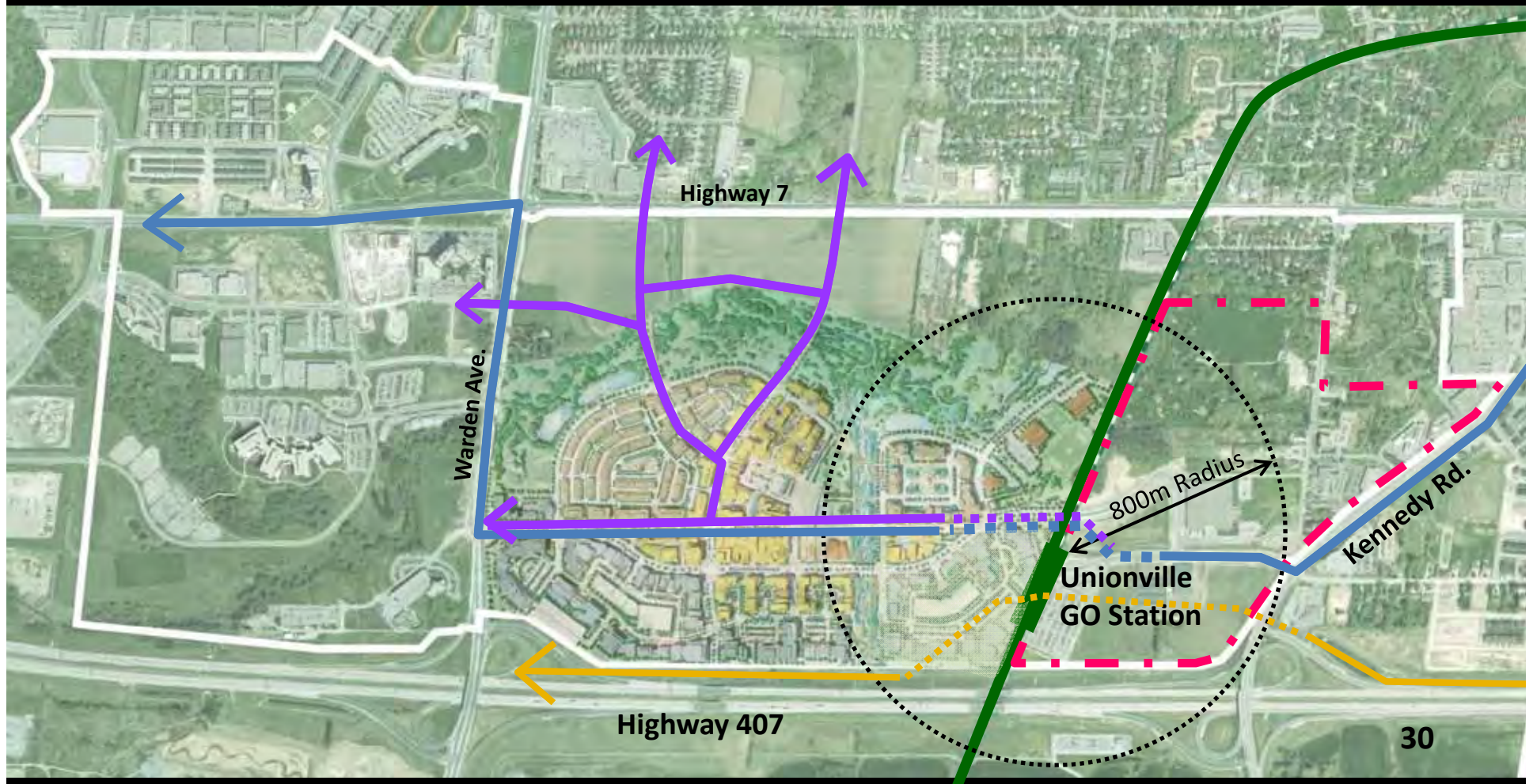


# Markham Centre – East Precinct

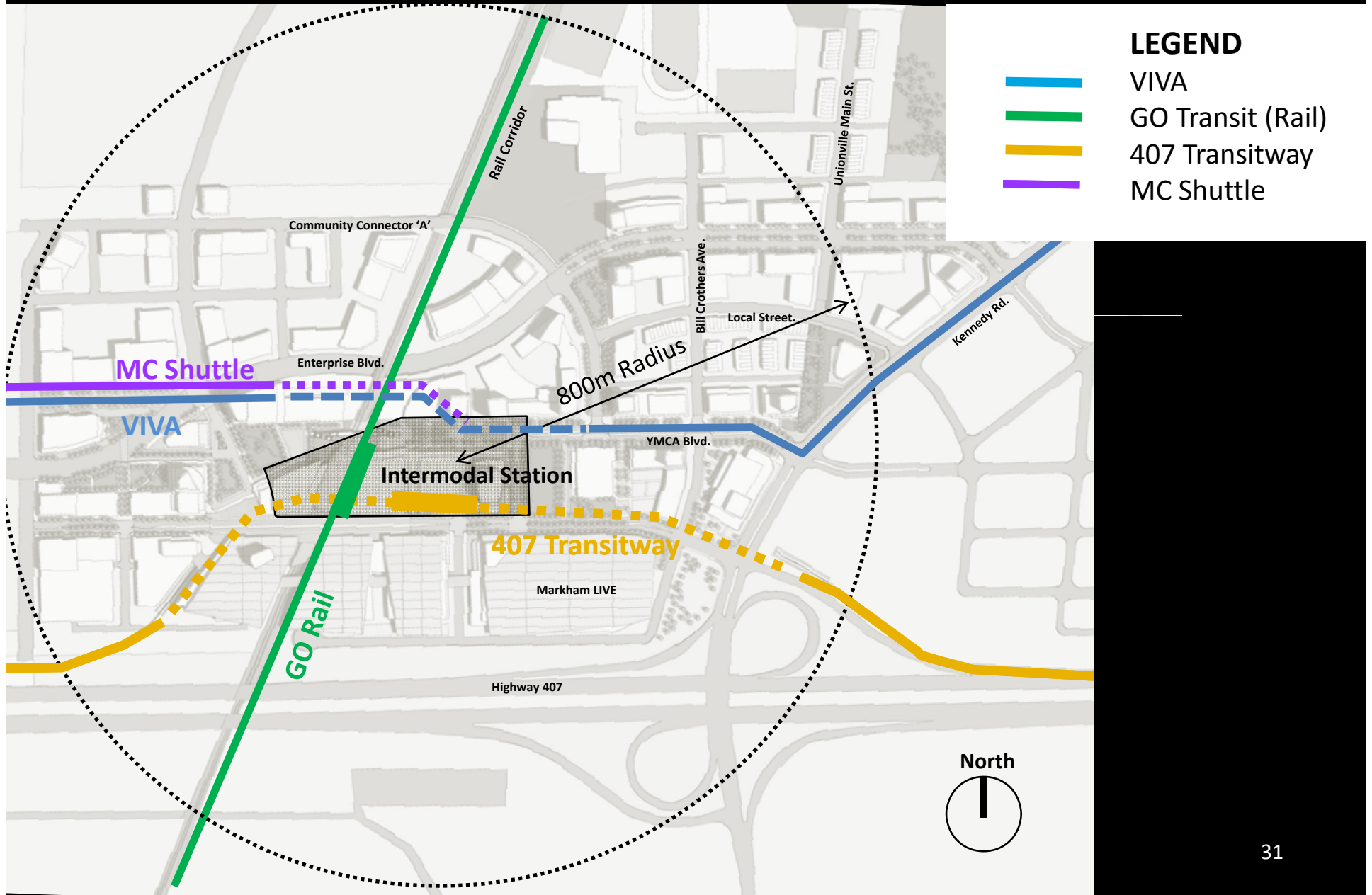


# Understanding the Station Area

- |   |                   |   |   |
|---|-------------------|---|---|
|  | Area of Influence |   | Markham Centre – East Precinct Boundary |
|  | MC Shuttle System |   | VIVA                                    |
|   |                   |  | 407 Transitway                          |

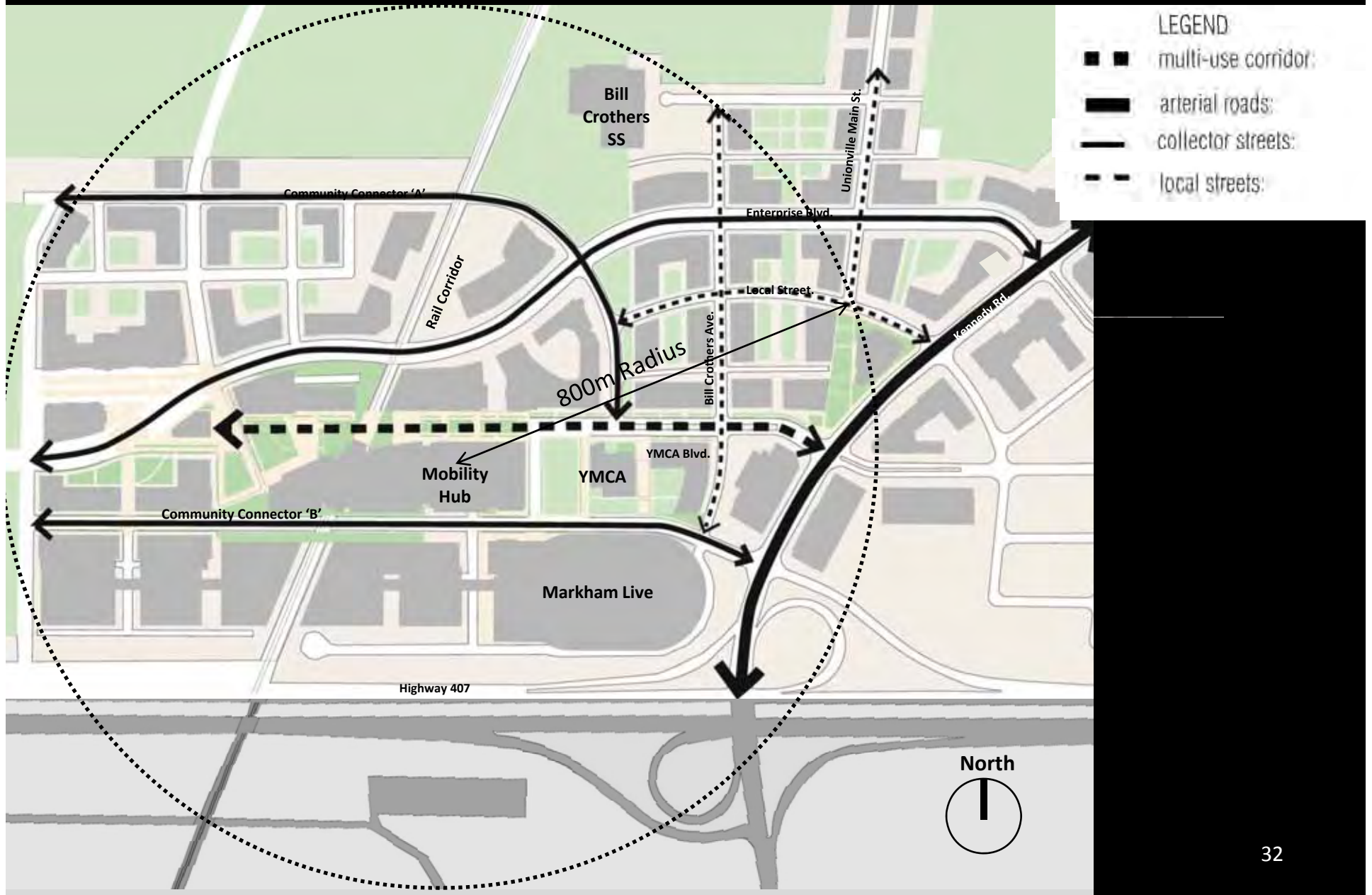


# Understanding the Station Area





# Preliminary Street Network



# Preliminary Development Framework





The background is a grayscale map of a city layout. It features a central area with a dense grid of streets and building footprints. From this central area, several major roads or transit lines radiate outwards in different directions, creating a hub-and-spoke pattern. The map is rendered in a simplified, schematic style, focusing on the overall structure of the urban environment.

# **MOBILITY HUBS**

- **Close connections between lines**
- **Short, easy pedestrian connections**
- **Straightforward development parcels**
- **Minimize separations by road and rail infrastructure**
- **Development at street level to extent possible**