A Streetcar Suburb for the 21st Century:

Transit-Supportive Design Guidelines & Policy Recommendations

for Eglinton Avenue West in Toronto

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Executive Summary

This report seeks to develop a series of urban design guidelines and policy recommendations along a 4-kilometre segment of Eglinton Avenue West between Martin Grove and Scarlett Roads in Toronto, Ontario (The 'Study Area,' See figure below) to foster transit usage over a span of roughly 20 years in anticipation of a future at-grade light rail transit (LRT) line, the Eglinton Crosstown, expected to commence operations by 2030.

Study Method & Structure of the Report:

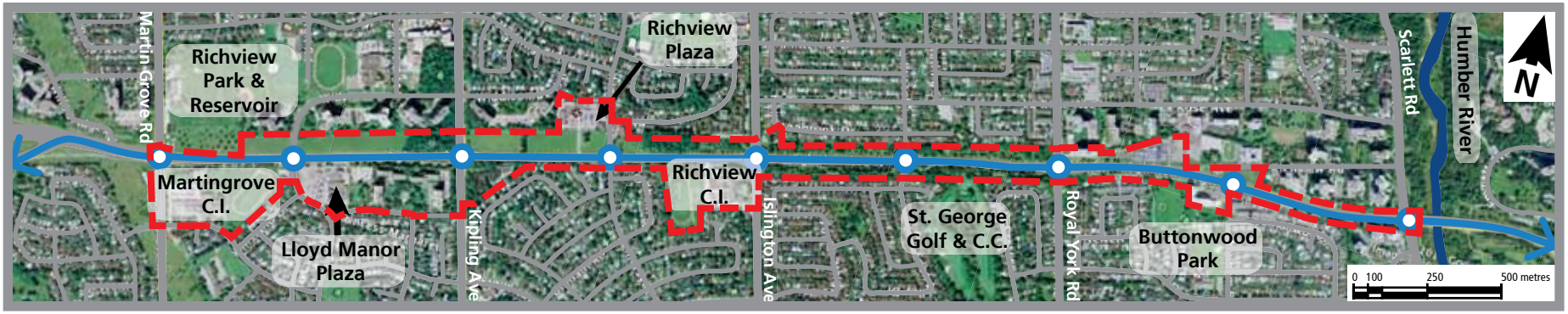
Qualitative methods are employed throughout this report, which is organized as follows:

A Study Area analysis, conducted using urbanist Kevin Lynch's 1984 work "Site Planning" as a framework, identified conditions within the Study Area through primary and secondary sources. Natural, built and demographic characteristics were looked at and analyzed for strengths, weakness, opportunities and constraints.

Two Case Studies of successful transit-oriented development, Collingwood Village in Vancouver, BC, and Orenco Station near Portland, OR were considered and compared using a number of secondary sources.

Urban design guidelines and recommendations for policy changes to promote a more transit- and pedestrian-oriented built form within the Study Area were then formulated using the lessons learned from the Case Studies.

An evaluation of these guidelines and recommendations was then done using qualitative indicators contained in a 'Transit Oriented Development Index' developed by the US Transportation Research Board's Transit Cooperative Research Program (TCRP). Guidelines were awarded points based on how well they fulfilled each indicator, with an overall score tallied and expressed as a percentage.



A 2011 satellite image of the Study Area (Outlined with red dashed line), with major landmarks and roads indicated. The future LRT line is in blue, with blue circles representing future station locations.

Study Area Analysis

The Study Area is, in many ways, typical of post-World War II suburban development and is surrounded by quiet, low-rise residential neighbourhoods. It is characterized by large amounts of open space, including undeveloped land concentrated along the north side of Eglinton Avenue, surface parking lots, and a bike path winding along the south side through green space of varying width. In general, the Study Area is centred on the automobile. Eglinton Avenue a noisy, four-lane, congested road. There are gaps in the sidewalks; connections to adjacent neighbourhoods are few, and the overall pedestrian environment feels exposed and isolated from its surroundings.

There are few non-residential or non-institutional land uses, with retail concentrated in two small plazas. The area was largely developed 40-50 years ago, and the now-mature communities of detached housing and pockets of high-rise buildings now house an aging and increasingly ethnically diverse population.

The area's strengths, weaknesses, opportunities and constraints are summarized in the table to the right; the photos below illustrate its physical character.

The Study Area is in many ways a typical example of post-WWII suburban development. Eglinton Avenue is a wide, congested roadway, but also has large amounts of undeveloped land available.

Strengths
• Mostly flat topography presents few barriers to new development. • Central location; some transit services/active transportation infrastructure in place. • Numerous parks & natural spaces in Study Area, particularly south side linear park.
Weaknesses
• High traffic negatively impacts pedestrian experience/ transit efficiency. • Land uses are segregated; limited non-residential uses or activities. • Large building setbacks and sometimes-overgrown vacant land create ill-defined streetscape and highly exposed environment for pedestrians. • Limited connectivity to surroundings, few destinations isolates Study Area.
Opportunities
• Large amount of open spaces available for redevelopment immediately adjacent to Eglinton Avenue, particularly along north side of street. • Official Plan's Avenues designation broadly supportive of intensification and higher standard of design, while transportation plans encourage active transportation and transit usage.
Constraints
• Area largely built up 40-50 years ago; communities may be reluctant to see change. • Land use designations in OP and current zoning are intended to maintain the status quo.

Case Studies

Collingwood Village, Vancouver, British Columbia

Centred on a station along the city's SkyTrain system and a 15 minute ride from downtown Vancouver, Collingwood Village is an 11 hectare, 2 800 dwelling unit development built by Concert Property on former light industrial lands. Its two phases were completed in 2006.

Collingwood Village contains a variety of housing to attract a variety of residents, including townhouses, garden apartments, mid-rise and high-rise condominiums, and affordable family housing with 3 or more bedrooms.

Retail was integrated into the ground floor of residential buildings and concentrated near the transit station to capture foot traffic and promote safety. Community uses such as a daycare, parks and an elementary school were also included. Densities are highest nearest the transit station, and transition to more low-density forms to integrate with surrounding low-density communities. Parking is contained underground or on-street, with requirements significantly reduced.

Early, extensive and continuous public consultation and engagement was cited as a key factor in the success of the project; it helped deliver community needs while alleviating existing residents' concerns over intensification.

Aerial view of Collingwood Village (Left), and a mixed-use building with ground-floor retail and residential units above (Right).

Orenco Station, Hillsboro, Oregon

Orenco Station is located in the suburb of Hillsboro outside of Portland, Oregon. Begun in 1996 and completed in 2002 by PacTrust developers, the neighbourhood is centred on a station along Portland's MAX light rail system.

Orenco Station includes a variety of low-rise housing forms, including detached houses, townhomes and walk-up apartments. It is laid out on an interconnecting grid, with traffic funneled toward a main street that contains wide sidewalks and patios. Shops and amenities open to the sidewalk to encourage pedestrian activity and are integrated into low-rise apartments. Streets are narrow and include traffic calming measures. Parking, vehicular access and servicing is provided through rear laneways rather than interfering with sidewalk activity.

Orenco Station's streets are narrow and tree-lined with wide sidewalks to calm traffic and create an intimate, safe and inviting environment for pedestrians.

Design Guidelines & Recommendations

Urban Design Guidelines

The site analysis and case studies inform a series of 5 guiding principles, which in turn give rise to 25 design guidelines, some of which are summarized below:

Principle 1: Prioritize Pedestrians & Cyclists:

- Preserve and enhance the south side linear park
- Provide sidewalks with a minimum width of 2.0 metres on all streets.
- Provide 'streetscaping' and landscaping improvements.
- Design transit stops with users in mind.

Principle 2: Diversify Land Uses:

- Encourage horizontally and vertically mixed uses.
- Encourage '24 hour' usage.

- Encourage a range of housing choices.
- Discourage automobile-oriented uses and activities.

Principle 3: Encourage a dense, fine-grained built form:

- Permit increased density through mid- and high-rise buildings.
- Locate highest densities and mixed uses closest to transit stops.
- Encourage architectural variety and articulate building facades.

Principle 4: Mass and Orient Buildings Appropriately:

- Orient buildings toward the sidewalk with minimal front setbacks.
- Create a continuous street wall.
- Step back front and side facades for taller buildings.
- Transition rear of buildings to respect abutting low-rise development.

Principle 5: Manage Parking:

- Eliminate front surface parking lots.
- Replace parking space rate minimums with maximums
- Locate servicing and access to parking at rear of lots.

Recommendations for Implementation

A number of tools and mechanisms are required to facilitate the long-term growth and intensification of Eglinton Avenue West that will help deliver the vision and design guidelines. These implementation tools include:

- Official Plan amendments to encourage redevelopment and intensification of Eglinton Avenue as a mixed-use corridor
- Zoning By-law amendments to support Official Plan policy;
- Roadway realignments and leveraging vacant property to encourage high-quality development and intensification;
- Financial incentives such as tax relief and density bonusing to encourage new development that responds to community needs;
- Careful phasing to ensure new development is gradual, minimizes disruption to the community, and, ultimately, successful.

The urban design guidelines and policy recommendations are intended to create a dense, mixed-use, street-oriented and pedestrian-friendly environment that fosters transit usage along the future Eglinton Crosstown LRT.

Evaluation of Recommendations

The guidelines and recommendations were evaluated on a matrix for their 'TOD-ness' using the indicators contained in the TCRP's "TOD Index." Points were awarded for each indicator and weighted based on whether the indicator was deemed 'essential' or 'supportive' by the TCRP. Points were then summed up and expressed as a percentage, as shown in the table below:

Indicator Type	Points Awarded	Total Points Available	Percentage Awarded
Essential	51	55	**93%**
Supportive	15	30	**50%**
TOTAL	**66**	**85**	**78%**

As can be seen, the guidelines performed quite well for essential indicators, which dealt with issues of density, building form and land uses. The only issue was block length and street connectivity, which is difficult to alter significantly given the built-up nature of the Study Area. The guidelines did not do as well with supportive indicators, however, as many indicators were not directly addressed and assumed to be directed by market forces, or were outside the original scope of the recommendations as design and policy interventions.

Overall, however, with a score of 78%, it can be said the guidelines would perform well in fostering a transit-supportive environment.

Regardless, the aim of these guidelines and recommendations is to provide a vision for the future of Eglinton Avenue West centred on the pedestrian, the sidewalk, and the light rail line. It is not intended to be prescriptive, detailing every building and every block, but rather, it is intended to be the start of a conversation with the community as to what Eglinton Avenue West could be.

Proposed Official Plan Land Use Designations

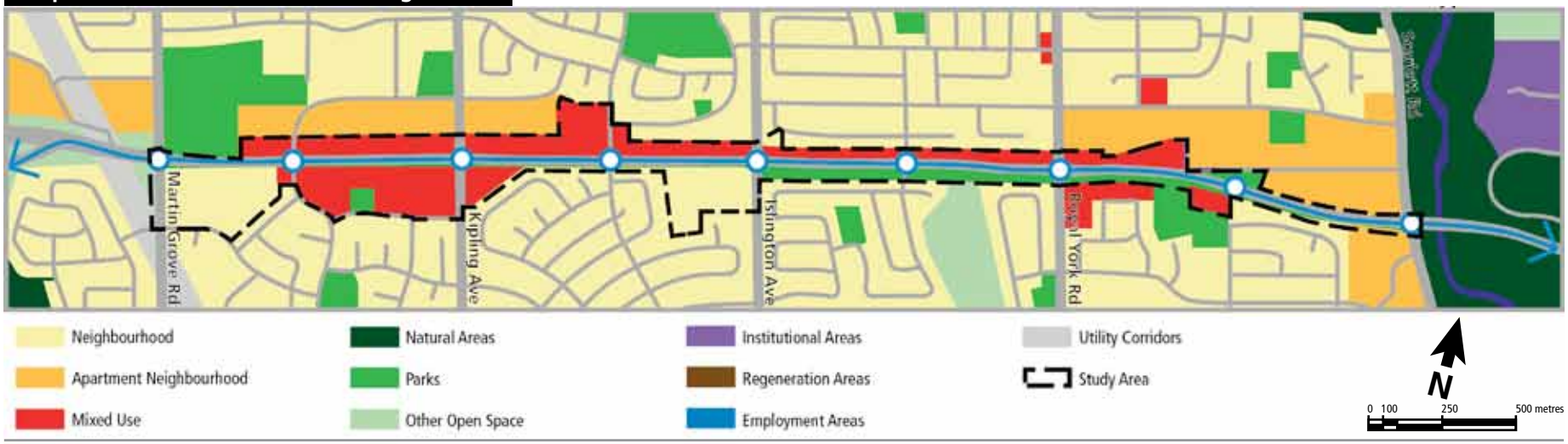


Figure 5.16: *Proposed amendments to Land Use designations in the City of Toronto's 2006 Official Plan. Source: By author.*