



Transit-supportive development and city-building

Brief 3: Tools for building infrastructure and policy conditions

Building the policy and infrastructure conditions

Municipalities are on the front lines of transit-supportive development implementation, due to their responsibility for developing municipal Official Plans, local zoning, reviewing development applications and managing infrastructure. However, the translation of density targets to municipal policy is not always straightforward. Municipalities often struggle to predictably reflect resident and job density/intensification targets in zoning while also responding to multiple local constraints and expectations. In the Greater Golden Horseshoe, provincial targets are prescribed but not enforced post-development, so the onus is on municipalities to drive toward best outcomes.

Updating local policy to be transit-supportive is not only needed to attract businesses and employment (as discussed in brief 2) but also to give direction to investment in infrastructure and the public realm to ensure that development provides public benefit. Policies that support connecting development to transit, including active transportation in street improvements, and providing an appropriate mix of land uses, are critical when creating transit-supportive communities.

The new density and different heights that transit-supportive development brings can require significant infrastructure upgrades, for example to water/wastewater systems or roads. Furthermore, good transit-supportive development requires connections to other modes, like cycling and walking, which usually require new investments in the public realm. Conversely, existing infrastructure may also impact or limit development potential near transit, especially in infill situations. A lack of appropriate supporting infrastructure can deter development.

In this brief, we review three specific tools and approaches that municipal planners and other authorities can use to build the policy and infrastructure conditions for transit-supportive development once transit is committed: planning land use, transportation, and infrastructure together; developing specific transit-supportive development zoning, understanding infrastructure constraints and investing in infrastructure.

Tools and approaches

1. Plan land use, transportation and infrastructure together

Land use, transportation and infrastructure planning tend to occur in silos, led by different departments or organizations. Planning frameworks are increasingly complex: a municipality might have half a dozen or more policies, plans and guidelines affecting an area targeted for transit development. However, there are great examples of integrated planning that demonstrate the benefits of a coordinated approach.

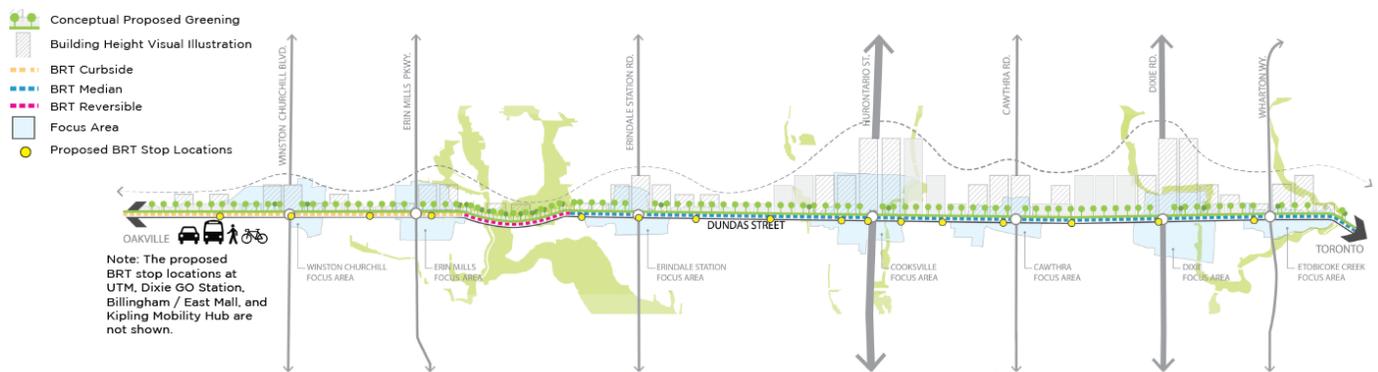
Integrated planning

Dundas Connects is a master planning process for Dundas Street in the City of Mississauga. In this project, the land use vision, public realm design and appropriate mode of transit for the corridor are being developed in tandem. This means that the choice of transit type (now identified as BRT) was made during the process of conducting real estate studies, travel demand forecasting, and public consultation on the corridor — not before. The integrated project team is comprised of staff from the planning and building division and transportation and works divisions, with land use

and transportation planners, engineers, landscape architects, urban designers and other experts, both from the City and private consulting firms.

Through the process, the intersections that were considered most likely to grow were chosen as focus areas and studied further for their potential. The master plan sets out the boundaries, target heights and densities for these areas and lays the groundwork for conversion to mixed use where appropriate. Anticipated growth in Mississauga has been checked against Growth Plan targets.

Importantly, the funding for the Dundas Connects master planning process was provided by the Province of Ontario and was explicitly tied to the development of an integrated land use and transportation vision. Further, staff from Metrolinx — the agency that builds most rapid transit projects in the Greater Toronto and Hamilton Area — participated on the study team to ensure the business case for transit would match their requirements. This approach is promising and could be reproduced in other corridors.



Dundas Connects Master Plan Area showing focus areas (in blue) and planned building heights.

Photo: City of Mississauga

2. Develop specific zoning categories for transit corridors and stations

Land use designations and zoning play a major part in implementing a city's vision for growth and provincial policy, including enabling transit-supportive development. Given the complex requirements for planning around transit corridors and stations, one option is to develop specific designations for the area around corridors and stations that takes into account the particular needs of those areas.

New zoning that is sensitive to context

The City of Hamilton recently approved a new zoning bylaw, which included the introduction of a new zoning category for transit-oriented corridors (TOC) along the future B-Line LRT line. The TOC designation is similar to a mixed-use zoning but contains four TOC zones with their own permitted uses, built form and regulations that were developed for specific areas within the corridor, responding to the context of existing land uses. All TOC zones are located outside of the downtown area, where a downtown plan already guides development. In some zones, minimum and maximum heights are established.

Snapshot of the 4 TOC zones in the City of Hamilton:

- **TOC 1:** mixed-use medium-density development; commercial at grade, residential above (maximum 6 storeys); can also be stand-alone residential or commercial buildings
- **TOC 2:** local commercial focus, limited residential permitted only above the ground floor
- **TOC 3:** multi-residential zone, commercial limited to buildings/units existing at the time of the passing of the by-law (however, new commercial uses are permitted to locate as long as they are in existing commercial spaces)
- **TOC 4:** mixed-use high-density development (minimum three storeys, maximum 12 storeys with required setbacks); can be stand-alone commercial or mixed use buildings, but residential is not permitted on ground floor; pedestrian focus.

Not only does the TOC zoning provide for a greater mix of uses than before, but it also improves the public realm and prioritizes the pedestrian environment. For example, each building's principal entrance must face the street and have a walkway. Drive-thru restaurants are not permitted, and driveways, car access, parking, outdoor storage cannot be located in the front of properties. In some zones, minimum glazing for first floor windows improves the connection of buildings to the public realm and gets more "eyes on the street." New parking regulations were also introduced in these zones.¹

3. Understand existing infrastructure constraints and opportunities

Likewise, understanding how existing land uses and related infrastructure impact the type of development possible is critical when evaluating an area's potential for transit-supportive development.

Additional information to help developers make informed decisions

In the City of Toronto, the Keele Finch Plus city-led study is looking at how to best leverage transit investment from the TTC subway extension (Finch West Station), now complete, and the future Finch West LRT, which will terminate at Finch West Station. The City's study and resulting secondary plan are expected in

draft form in 2018. The process has been instrumental in identifying several unique land use considerations that affect potential transit-supportive development.

First, the area is located in close proximity to Downsview Airport and building heights are limited by flight paths. Likewise, the area is home to one of the largest fuel distribution hubs, with underground pipelines, large volumes of fuel storage and heavy industrial uses. As a result, the impact of air quality, noise and existing environmental conditions on future development—and vice versa—need to be understood. The City of Toronto is undertaking further technical studies to evaluate environmental conditions from a cumulative impact

perspective to better be able to recommend which lands can accommodate residential or office uses, which may need mitigation measures, and which lands should only be used for industry or buffers from industry. The City is not contemplating residential uses in Employment Areas. This work is an extra level of due diligence for the City in producing the plan, and also provides an extra level of surety to potential developers who otherwise may have had to conduct their own studies to make the case for their desired land use, be it residential or employment.

The City's updated planning framework for the station area will not only take stock of how all kinds of infrastructure affect the area but it may catalyze

development interest by providing predictable, as-of-right zoning and more permissive land-use designations. The secondary plan will also identify infrastructure improvements such as improving cycling connections and creating a better pedestrian environment, particularly on Keele Street. In addition, funding for the Finch West LRT includes rebuilding the streetscape to include bike lanes and street trees.

The neighbourhood around Keele Street and Finch Avenue has many circuitous residential streets that do not promote easy and quick access to main streets and transit. Future improvements in connectivity are anticipated to be identified in the plan.

4. Invest in infrastructure upgrades and public realm improvements

Ensuring infrastructure can accommodate more intense development and making sure that public realm and street design improvements complement transit can be challenging to implement in a timely manner.

Infrastructure funding from other levels of government

In the City of Brampton's Mount Pleasant Village, where a complete suite of public amenities were built and provided up front², the municipality took advantage of \$22 million in infrastructure funding obtained through the federal government's 2008 Economic Action Plan, with supporting funding from the federal and provincial governments. City Council voted to earmark \$22 million of this funding to Mount Pleasant village instead of other infrastructure needs in Brampton, such as new roads, signaling a commitment to improving

transit beyond automobile use.

Transit-oriented communities need to have public amenities within walking distance including community centres, schools and green spaces. This funding provided the public spaces that played a major part in the development being transit-supportive. Without this funding, the transit and transit amenities, the public realm, amenities and services that attracted many residents to Mount Pleasant Village would have been of lower quality, or would have been significantly delayed as the municipality would have been responsible for all costs. Since this time, new green infrastructure programs from the federal and provincial governments have come online that could be applied by municipalities to support these kinds of transit-supportive investments.

Taking sustainable neighbourhoods further

By providing residents and employees with more sustainable mobility options and using less land and infrastructure per person, transit-supportive development enables lower-carbon lifestyles. However, transit-supportive development frameworks typically do not take into consideration

the energy efficiency of buildings and their materials or the interrelationships between the development and the surrounding natural systems.

Several municipalities in Ontario have Green Development Standards to set and incentivize standards for sustainability features in a development that go

beyond existing regulatory requirements. In addition to requirements for transit and active transportation, these features can include green buildings and energy efficiency, sustainable transportation options, stormwater management, and more. In the City of Toronto, the Toronto Green Standards have influenced building code changes over time.

Transit-supportive development frameworks should be more closely integrated with these

other sustainability considerations. For example, Mount Pleasant Village in Brampton improved its environmental impact by incorporating elements of the city's Sustainable Development Guidelines, including: maximizing tree canopy, reusing rain water, rehabilitating and reusing a heritage building, restoring natural heritage and improving access, and co-locating a school, library and community centre. This resulted in service efficiencies and energy savings, and a more sustainable community.



About this transit-supportive development series

This brief is the third in a series of three papers looking at transit-supportive development in the Greater Golden Horseshoe and beyond. This brief includes a list of tools for building the infrastructure and policy conditions along major transit lines, drawing from past and ongoing examples. These tools have been flagged by leading planners and practitioners working in this space. While the list is not comprehensive, it provides a starting point for planners and project teams.

Acknowledgements

This paper was produced by the Pembina Institute with support from the Government of Ontario and Evergreen. We would like to thank Michelle German and Julie Fader at Evergreen for their significant contributions. We would also like to thank members of the Transit-Supportive Development working group, co-chaired by Evergreen and the Pembina Institute, for their helpful insights and comments on earlier versions.

References

We are very grateful to our participants for their time and insight. Participation in this project does not necessarily constitute an endorsement of the findings expressed in the report. Any errors or omissions are the responsibility of the Pembina Institute.

- Timothy Lee, Planner, City of Hamilton
 - Matt Armstrong, Planner, City of Toronto
 - Alex Taranu, Senior Advisor, Architectural Design, City of Brampton
- Gregg Lintern, Acting Chief Planner and Executive Director of Planning, City of Toronto
 - Andrew Miller, Strategic Leader, City of Mississauga
1. See Brief 2 for more information on Hamilton's new parking regulations.
 2. See Brief 1 for an overview of Mount Pleasant Village, Brampton

PEMBINA
institute



Andrew Cohrs*, Lindsay Wiginton

* Independent researcher

April 2018

pembina.org

 pembina.org/subscription
email updates

 twitter.com/pembina

 facebook.com/pembina.institute