METROLINX
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MOBILITY HUB GUIDELINES
2012 TAC Sustainable Urban Transportation Award Submission

BACKGROUND

Rapid population growth, increasing congestion, and years of under investment in transit in the Greater Toronto and Hamilton Area (GTHA) led the Government of Ontario to create a regional transportation agency, Metrolinx, in 2006. In recent years, Metrolinx expanded significantly, when the following operating divisions joined:

- GO Transit, in 2009 - the Province's regional commuter transit (rail and bus) provider
- Airport Rail Link (ARL), in 2010 - responsible for building rail service from Toronto's Union Station to Pearson International Airport
- PRESTO, in 2011 - an electronic fare card system being implemented across the region

Metrolinx developed the region's first ever Regional Transportation Plan, The Big Move, in 2008, which builds on, complements, and conforms to the Province's award-winning Growth Plan for the Greater Golden Horseshoe, 2006. The Growth Plan aims to curb sprawl and protect green space, revitalize downtowns, create complete communities, provide for a range of housing options, reduce traffic congestion by offering a range of transportation choices, and integrate infrastructure investments with land use planning.

The award-winning Big Move provides a common vision for transportation across the region and contains close to 100 priority actions and supporting policies, with plans for over 1,200 kilometres of rapid transit – more than triple what existed in 2008. It also identifies nine "Big Moves" that have the potential to make the most transformational impact, and one of these is "a system of interconnected mobility hubs." Fifty-one mobility hubs are identified at major transit stations that are to be places that provide travellers with seamless access to the regional transit system, support higher density, mixed-use development, and demonstrate excellence in customer service (see Appendix Figure 1).

MOBILITY HUB GUIDELINES

In 2011, Metrolinx created Mobility Hub Guidelines. The Guidelines communicate the mobility hub concept; provide guidance for mobility hub and station planning and development across the GTHA; and guide Metrolinx in planning efforts, infrastructure design and facilities in mobility hubs and stations. They describe nine key mobility hub objectives, which are organized into three categories: Seamless Mobility, Placemaking, and Successful Implementation (see Appendix Figure 2). Under each objective are more detailed guidelines, and under each guideline are more detailed approaches (see Appendix Figure 3). Symbols identify where the approaches would apply to specific mobility hub typologies and cross references to other guidelines. Each Guideline also includes sidebars on the benefits and applicability of the guideline; tools and resources; relevant Big Move policy; case studies or best practices; and illustrative diagrams and precedent photos.

20 Bay Street, Suite 600
Toronto, Ontario, Canada M5J 2W3

20, rue Bay, bureau 600
Toronto, Ontario, Canada M5J 2W3

Development and Enhancement of Sustainable Urban Transportation

Social

The Mobility Hub Guidelines enhance the social sustainability of urban transportation in three ways:

1. They address offering more equitable and safe transportation choices:
    - Under the objective of "seamless integration of modes at the rapid transit station," a number of guidelines and approaches speak to improved facilities and access for people with disabilities, including barrier free design and specialized transit. As well, guidelines under this objective speak to creating safe and direct pedestrian and cycling routes to rapid transit stations, providing secure and plentiful bike parking at stations, and encouraging and prioritizing local transit access to the station.
    - Under the objective of "Safe and efficient movement of people with high levels of pedestrian priority," guidelines refer to building or retrofitting "a network of complete streets" to roads safer for all users, providing an attractive pedestrian environment, and creating cycling-supportive streets and communities.

2. The Guidelines speak to increasing housing options by:
    - providing non-market housing;
    - incorporating "a diversity of housing choices that includes a mixture of types, styles, price ranges and tenure to ensure that a large and diverse number of residents have access to transit;" and
    - ensuring "equity and diversity within the housing stock and plan for a mix of dwelling sizes to accommodate families," including amending "zoning by-laws to specify a certain percentage of residential units to have more than two bedrooms."

3. Under the objective of "a vibrant mixed-use environment," approaches encourage increased access to services by providing a variety of amenities and community facilities, including: schools; libraries; government service centres; police stations; public parks, plazas, and courtyards; co-working spaces, live-work units; artists' lofts; and business incubators.

Economic

The Guidelines enhance the economic sustainability of urban transportation in four ways:

1. They promote affordability by increasing housing options, including non-market housing, close to stations and having public services and community amenities within walking distance of each other and the transit station.

2. The Guidelines support operational efficiency by focusing on the "seamless integration of modes at the rapid transit station" through the creation of "clear, direct, and short transfers between transit modes and routes" and adopting "transit priority measures to ensure the efficient movement of surface transit." As well, they call for integrating "increased transit-supportive densities at, and around, transit stations to create…a critical mass of activity" to support the transit investment.

3. They encourage a choice of transportation modes, as noted above, including walking, cycling, local transit, pick up and drop-off, and private vehicles. The objective of "strategic parking management" aims to find ways to manage and reduce parking to "encourage sustainable mobility and create opportunities to build compact, people-oriented communities."

4. The Guidelines encourage supporting a vibrant economy by:
    - Adopting “strategies to accommodate goods movement;”
    - Promoting “flexible planning to accommodate growth and change” and respond to changing markets;
    - Using planning and finance tools/investments to both attract and “provide guidance and certainty” to developers;
    - Planning “public investment and infrastructure to enhance development potential;” and
    - Engaging in “joint development and other public-private partnership models to capture land value uplift from transit infrastructure investments.”

Environmental

The Guidelines enhance the environmental sustainability of urban transportation in two key ways:

1. They encourage active transportation and transit use combined with compact mixed use development, which minimizes emissions and the consumption of non-renewable resources, and uses land more efficiently.
2. Under the objective of “a minimized ecological footprint,” approaches call for:
    - Designing and retrofitting transit facilities and public buildings to maximize energy conservation” and be “designed to achieve LEED Gold status,” and encouraging other hub “development to meet high standards of energy conservation;”
    - Adopting “measures in water management to minimize water consumption and the impact of runoff and wastewater;”
    - Ensuring that landscape and building design … minimize heat retention and the urban island effect,” and
    - Adopting “waste management strategies that reduce the output of waste to landfills and increase recycling and the reuse of materials.”

Degree of Innovation

Technical

Most similar guidelines only address transit-oriented development around stations, while the Mobility Hub Guidelines give considerable attention to the design of the transit station and its integration with the surrounding neighbourhood, as well as implementation. Likewise, devoting an entire objective to “strategic parking management” realistically reflects and addresses the challenges faced in transforming car-oriented places into transit-oriented communities.

As well, rather than taking a ‘one-size-fits-all’ approach, the Guidelines provide a typology to speak to different kinds of hubs and tailor the application of the guidelines to these differences. The typologies are separated into two categories - urban context and transportation function – and each hub can be classified under both categories (see Appendix Figure 4).

Process

The Guidelines were created in consultation with a variety of stakeholders using a range of methods. These included:

- An Internal Working Group made up of a cross section of GO Transit, Metrolinx, and Provincial staff consulted throughout the development of the Guidelines;

- Three multi-stakeholder workshops attended by close to 200 professionals from municipalities, transit agencies, the Province, as well as institutions in the areas of planning, transportation, transit, urban design, real estate, and economic development; and
- Stakeholder meetings with key provincial ministries and other groups, such as the Metrolinx Accessibility Advisory Committee and the Metrolinx Planning Leaders Forum.

The Guidelines place a strong emphasis on setting targets and using performance measures, including "defining mode share targets and other transportation performance measures to inform the development of land use and transportation planning and policy" and developing "performance measures to evaluate and monitor implementation progress," connected to phasing strategies linked to infrastructure improvements. The Guidelines also describe performance indicators for assessing the road and transit network, the pedestrian and cycling network, and land use planning, economic, environmental goals.

In terms of the performance of the Guidelines themselves, Metrolinx is leading a number of mobility hub studies, where the Guidelines are providing the framework for planning and the criteria to assess options. As well, on the direction of its Board of Directors, Metrolinx is applying the Guidelines to all its major transit investments - not just mobility hubs. This includes the $8.2 billion Eglinton-Scarborough Crosstown LRT in Toronto and stations along the Airport Rail Link under construction between Pearson International Airport and Toronto's Union Station. Metrolinx is also bringing its own policies in line with the Guidelines by developing a GO Rail Parking Strategy. To increase its influence and authority over land at hubs and GO stations and ensure the Guidelines are followed, Metrolinx is:

- Creating a property acquisition, disposition, and land development policy, exploring the potential of tying transit funding to the Guidelines; and
- Strongly encouraging the Province to implement a Transportation Planning Policy Statement (TPPS) that reflects the objectives of the Guidelines - the Metrolinx Act, 2006 enables the Minister of Transportation to create a TPPS.

Metrolinx will also be reporting back at regular intervals to its Board of Directors on the implementation of the Guidelines.

Financial

The Guidelines encourage:

- Providing certainty to investors, through the use of tools like detailed phasing strategies tied to infrastructure investments and interim use zoning bylaws;
- Providing flexible plans to allow for changing markets;
- Public-private partnerships; and
- Incentives for stimulating development, such as "height and density exchange, flexible zoning and through mechanisms like bonds, debentures and Tax Increment Financing"; implementing "municipal approval fastracking measures"; and providing "infrastructure interim financing."

In keeping with the Guidelines, Metrolinx is helping to stimulate investment at a number of its hubs and GO stations, in more ways than building/funding major transit infrastructure and significantly improving service. For example:

- Metrolinx recently sold surplus lands in Midtown Oakville mobility hub to an office developer who is planning to build the first significant office complex in this emerging suburban centre, as per the municipality's official plan and vision for the hub. This sale also generates revenue for Metrolinx to invest in transit.
- In the Downtown Pickering mobility hub, Metrolinx is building a $14.7 million, enclosed landmark pedestrian bridge across the rail corridor and a major highway, to connect the GO Station to

downtown (See Appendix Figure 5). This is spurring development interest on both sides of the bridge, including a new 11,000 square metre office building, being built to LEED Silver standards, which will tie in directly to the pedestrian bridge and house government agencies.

Transferability to Other Canadian Communities and Organizations

The Guidelines would be of great use to any Canadian municipality with transit, particularly the larger city regions facing similar challenges to the GTHA:

- Recognizing their wider applicability, the Guidelines state, "this document can also be used beyond the planning and implementation of mobility hubs, in planning for other areas in a transit supportive manner."
- The Guidelines are best practices, derived from a number of existing regional, national, and international sources and case studies. These are recognized throughout the document in sidebars identifying relevant tools, resources, and case studies, as well as in a consolidated list at the back of the document.
- The Guidelines are designed to work for the 13 various municipalities that have mobility hubs as well as the ten different transit agencies in the GTHA. These municipalities range in population from 54,000 to 2.5 million and in character, from suburbanized historic small towns to urbanized cosmopolitan cities. The transit agencies vary from small, local bus operators to large, multi-modal rapid transit operators.

With the exception of some specific references to The Big Move, identified mobility hubs, and provincial policy, the Guidelines could easily be applied across Canada, with local modifications, and be used by a range of organizations:

- The intended audience for the Guidelines beyond Metrolinx and GO Transit are "municipal land use and transportation planners, transit operators, major institutions, provincial ministries and agencies that engage in land use and transportation planning activities," and "private agents who are planning, developing, and investing in any of the identified hubs."
- Currently, Metrolinx is offering 13 training workshops on the Guidelines to Metrolinx staff, municipal staff, provincial staff, and stakeholder professional organizations (including planners, engineers, architects, landscape architects, and developers) across the region (see Appendix Figure 5).

Added Value

Metrolinx is actively promoting these Guidelines on a number of fronts, in addition to the workshops. It has:

- Developed a brochure to quickly and simply communicate the mobility hub concept (see Appendix Figure 6);
- Distributed the Guidelines and brochure via email, mail, and at the workshops;
- Presented on the Guidelines at seven conferences, including TAC in September 2010, The Canadian Institute of Planners in July 2011, and the Canadian Urban Transit Association in November 2011;
- Had articles published on the Guidelines in two stakeholder professional journals – the Institute of Transportation Engineers Journal and the Ontario Planning Journal;
- Begun developing an interactive online version which will greatly enhance search capabilities, including the opportunity to search by typology or key word; and

- Created complementary background information sheets on current demographic, economic and transportation conditions at each hub, which help inform the application of the Guidelines at these hubs. These are to be made available to the public, online in the spring.

APPENDIX

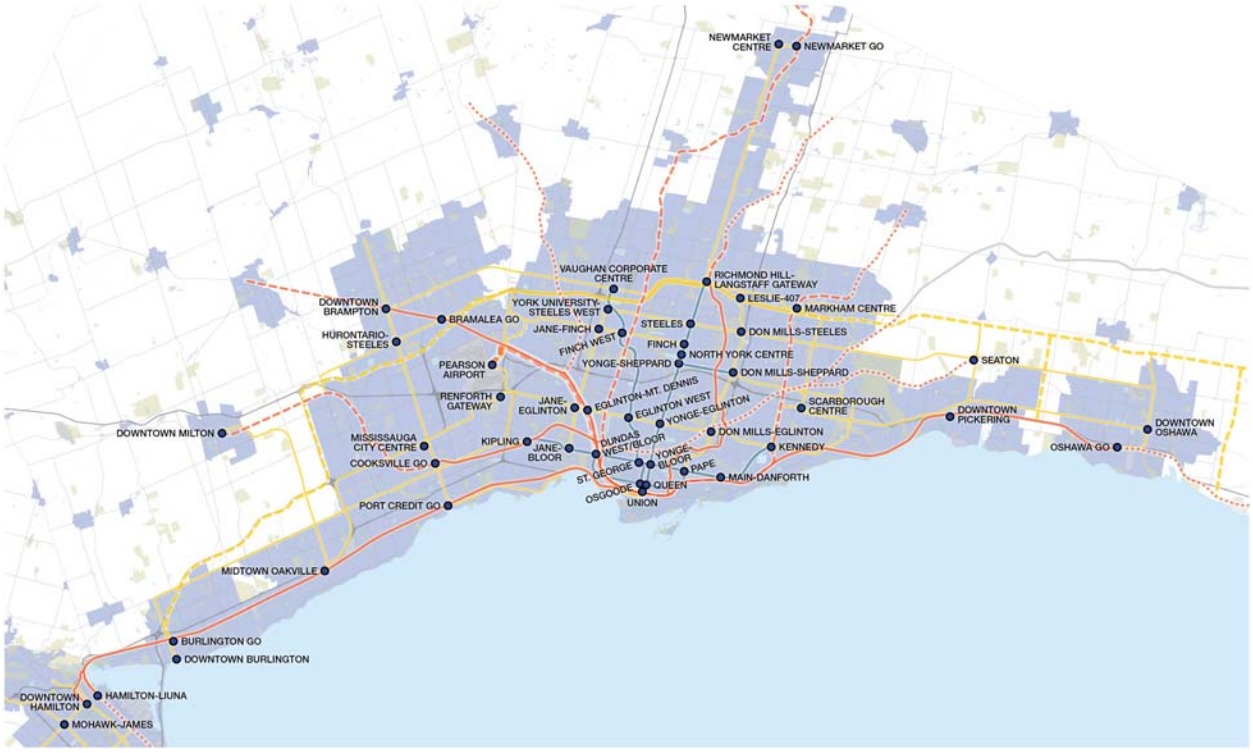

Figure 1 - Mobility hubs identified in The Big Move

Figure 2 - Mobility Hub Guidelines categories and objectives

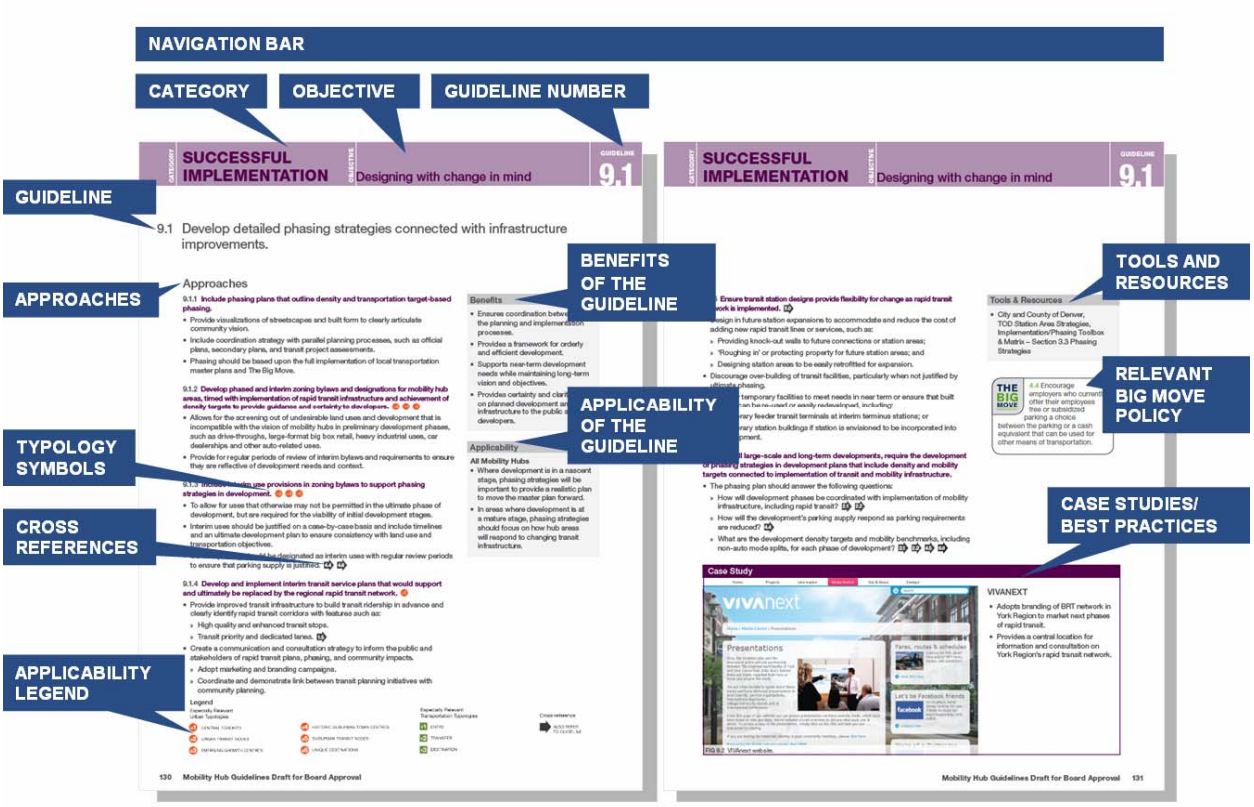

Figure 3 - Sample layout of the Mobility Hub Guidelines

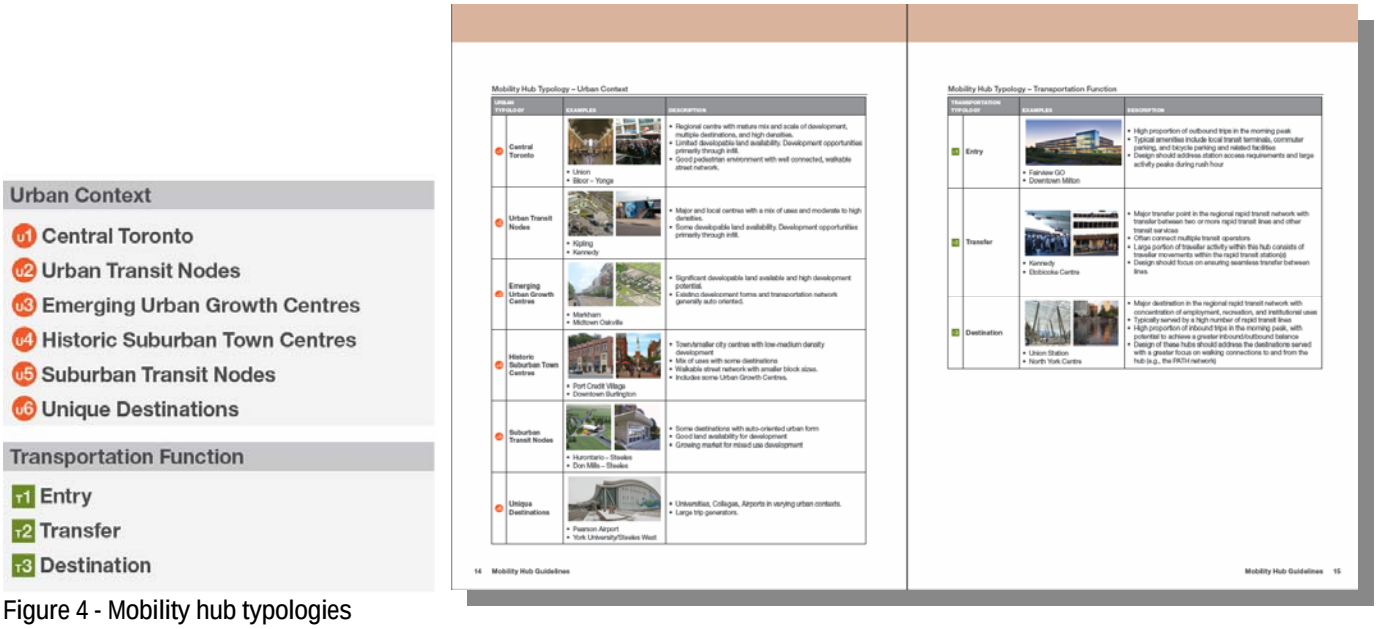

Figure 4 - Mobility hub typologies

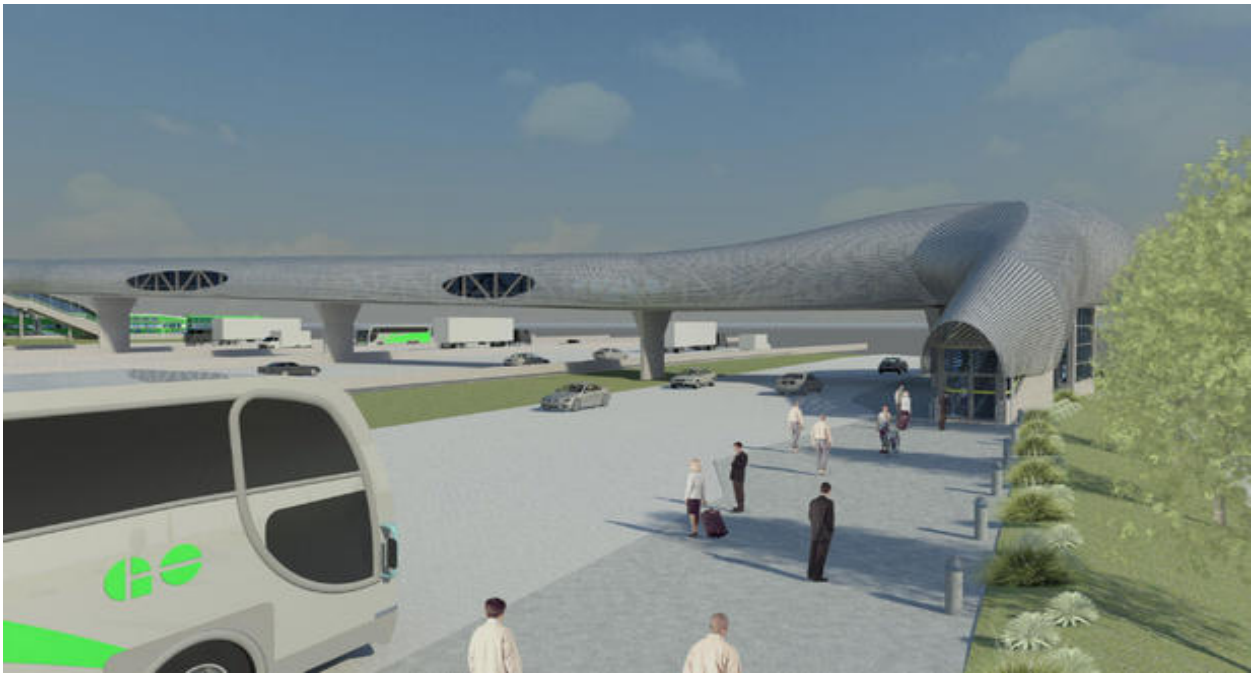

Figure 5 – Artist rendering of Pickering pedestrian bridge, currently under construction

Figure 6 - Mobility Hub Guidelines Brochure