

Infrastructure, Transportation and Utilities



This page has been
left intentionally blank

INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

6.1	GENERAL.....	6-5
	6.1.1 OBJECTIVES.....	6-5
	6.1.2 POLICIES.....	6-6
6.2	MULTIMODAL TRANSPORTATION	6-7
	6.2.1 GENERAL.....	6-8
	6.2.2 URBAN STREETS AND RURAL ROADS.....	6-10
	6.2.3 TRANSIT	6-13
	6.2.4 ACTIVE TRANSPORTATION.....	6-15
	6.2.5 RAIL.....	6-16
	6.2.6 AIR.....	6-18
	6.2.7 PUBLIC RIGHT-OF-WAY ALLOWANCES.....	6-18
	6.2.8 GOODS MOVEMENT	6-20
	6.2.9 MOBILITY HUB CONNECTORS.....	6-21
	6.2.10 TRANSPORTATION DEMAND MANAGEMENT	6-22
6.3	UTILITIES.....	6-24
	6.3.1 OBJECTIVES.....	6-24
	6.3.2 POLICIES.....	6-24
6.4	PHASING OF INFRASTRUCTURE TO SUPPORT DEVELOPMENT.....	6-28
	6.4.1 OBJECTIVES.....	6-28
	6.4.2 POLICIES.....	6-28
6.5	FINANCIAL SUSTAINABILITY.....	6-29
	6.5.1 OBJECTIVES.....	6-29
	6.5.2 POLICIES.....	6-30

This page has been
left intentionally blank

INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

Infrastructure is the underpinning of *development*. A particular type of *infrastructure's* existence, and available or planned capacity to deliver more of their given service, is critical to growth in the City. The planning for their delivery and their location within the City is critical to the success of the City.

Planning for *infrastructure* is undertaken by many different entities and organizations, each with their own planning and budgeting process. These partners should be part of discussions relating to how the *City's* vision for growth through *intensification* will impact demand for their services. For the same reason, the *City* must understand that since a significant portion of these critical services are provided by others, clear priorities must be identified as investments required to support the vision will be significant.

The *City* must ensure that the land use vision can be phased and planned in a manner that optimizes the use of existing and new *infrastructure* to support growth in a compact, efficient form. Through any investment or plan, the long-term financial *sustainability* of the City and the Region must be ensured.

6.1 GENERAL

6.1.1 OBJECTIVES

- a) To collaborate with all partners to ensure that *infrastructure* are planned comprehensively in a manner that effectively uses existing capacity and strategically invests in additional capacity to support the land use vision of this Plan, which calls for growth through *intensification*.
- b) To rely on the land use vision of this Plan to communicate with multiple partners the approach for developing servicing priority and phasing in a built up municipality through the development of a series of *area-specific plans*. Dependent upon the findings of the *area-specific plans*, the highest priority for ensuring servicing capacity *shall* be determined among the existing Urban Centres and the emerging *mobility hubs* identified as primary areas in the Growth Framework.
- c) To align with the City's long term Asset Management Plan.

6.1.2 POLICIES

- a) The Region of Halton is responsible for the planning, design, delivery and maintenance of municipal water and waste water. It is the policy of this Plan that:
- (i) all *development* within the Urban Area *shall* be connected to municipal water and waste water systems unless exempted by the policies of this Plan and the Regional Official Plan;
 - (ii) *development shall* be limited in the Urban Area to the ability and financial capability of the Region to provide municipal water and waste water services;
 - (iii) no servicing extensions beyond the Urban Area *shall* be permitted, unless exempted by the policies of the Regional Official Plan;
 - (iv) new servicing capacity, where required, *shall* be prioritized to those areas of the City identified as being Primary Growth Areas on Schedule B-1, Growth Framework, of this Plan. The *City shall* work closely with the Region of Halton to establish a means of addressing any servicing capacity challenges within the Growth Areas within the Urban built up areas consistent with the Regional Official Plan;
 - (v) the *City shall* further prioritize and phase the development of Growth Areas through the development of *Area-Specific Plans*, where required.
- b) The *City* is responsible for providing a wide range of *infrastructure* and *public service facilities* and has established a long term Asset Management Plan in order to understand capital investments and long term lifecycle costs of *infrastructure* provided by the *City*. Decision making related to the prioritization of investment in *infrastructure* will consider, timing, capital budget and strategic consideration of the long term operational costs in the context of the long term Asset Management Plan.
- c) The policies of this Plan including the Vision, the Urban Structure, the Growth Framework, the underlying land use designations and the commitment to the development of *Area-Specific Plans shall* be the means of communicating priority growth areas.
- d) The highest priorities for servicing capacity improvements within the built-up area are:
- (i) the Urban Centres (Downtown and Uptown); and,

- (ii) pursuant to the finalization of the *Area-Specific Plans*, with a full understanding of the short, medium and long term implications of *development* proposed and investment required.
- e) Collaboration among the *City*, Region and other critical service and *utility* providers *shall* be undertaken to ensure coordination of planning, investment and *development* in line with these priorities.
- f) Lands that are under the ownership or jurisdiction of Federal, Provincial or municipal bodies or agencies and that are used for transportation, *utility* or communication purposes *shall* be appropriately zoned.

6.2 MULTIMODAL TRANSPORTATION

Burlington's transportation system is made up of many elements and choices for moving around the City, including walking, riding a bike, taking transit or rail, and using vehicles. A diverse transportation system with many practical and realistic choices is an essential part of a *sustainable* city, one which fully integrates mobility with land use and improves the quality of life in the City.

A city that is growing up rather than out has a different kind of transportation system. As the city grows up, if everyone continues to rely on their automobile to drive everywhere, it will become harder and harder for anyone to move.

A Burlington that's growing up successfully is a walking-friendly city, a bike-friendly city and a city designed and built around public transit. It is a city that provides real and attractive choices outside of the car. One of these choices is a convenient and reliable transit system which includes a *frequent transit network (FTN)* where transit users can expect easy-to-use services that are frequent enough that they do not need to refer to a schedule. The FTN is also *essential infrastructure* to support community connectivity, facilitate *intensification*, and increase ridership in the City's growth areas, as identified by this Plan.

A successful, integrated and *multi-modal* transportation system will be achieved by prioritizing decision-making in this order: walking first, then biking, public transit, car-sharing, goods movement, and finally, the private automobile. This reprioritization will be context-driven, with particular emphasis in the urbanizing/growing areas of the City. The goal in urbanizing places will be an environment where walking, biking and transit is enjoyable while in places expected to remain low density and suburban, and in rural places where appropriate, the goal will be a balanced mobility. The intent is not to ban the car, but rather to reprioritize in a way that works better for all *modes* of movement, including driving.

The main intent of the transportation policies of this Plan is to provide a *multi-*

modal transportation system for all residents and businesses that is safe, convenient, accessible, and efficient and that addresses many of our key challenges, including climate change, public health, fiscal responsibility and affordability. The policies in this section of the Plan speak to the different components of the transportation system, and offer guidance on various tools to manage mobility.

6.2.1 GENERAL

6.2.1.1 OBJECTIVES

- a) To develop an equitable, integrated, *multi-modal* transportation system that offers safe, convenient and efficient movement of people and goods within the City.
- b) To develop a transportation system that supports and complements the *City's* land use vision and provides a range of *mode* choices.
- c) To identify new and enhanced facilities to serve existing and future pedestrians, cyclists, transit riders and automobile users.
- d) To support the creation of urban environments that support *multi-modal* transportation with an emphasis on pedestrians, cyclists and public transit, connecting people and places.
- e) To maximize the capacity of existing transportation *infrastructure* and reprioritize decision making in order to achieve an equitable and integrated, *multi-modal* transportation system.
- f) To consider all environmental factors in evaluating improvements to the transportation system with emphasis on public safety, quality of life, noise and air pollution levels, health effects, and the maintenance of the *natural environment*.
- g) To implement *context sensitive design* for street, roadway and intersection designs, particularly where constraints, such as the *natural environment* and *natural heritage features*, property impacts and cost, require flexibility in *design guidelines* and creative design, in order to achieve an optimal solution.
- h) To establish a *complete streets* strategy in the City.
- i) To implement a range of *Transportation Demand Management (TDM)* strategies to reduce single-occupancy vehicle trips, to *encourage* more frequent travel by sustainable *modes* and outside of peak periods, and to reduce trip length.

- j) To recognize parking management as a tool to influence *mode* choice, affect housing costs and shape the *public realm*.

6.2.1.2 POLICIES

- a) Major *transportation facilities shall* be developed to comply with the classification, function and general design requirements outlined in Chapter 14, Table 1 - Classification of Transportation Facilities – Urban Area and Rural Area, of this Plan. The location of major *transportation facilities shall* comply with Schedule P-1, Classification of Transportation Facilities – Urban Area; Schedule P-2, Classification of Transportation Facilities – Rural and North Aldershot Areas; and Schedule P-3, Classification of Transportation Facilities – Downtown Urban Centre, of this Plan. Schedule P-1 does not show all Urban Local Streets.
- b) The public street rights-of-way identified in Schedule P-1, Classification of Transportation Facilities – Urban Area; Schedule P-2, Classification of Transportation Facilities – Rural and North Aldershot Areas; and Schedule P-3, Classification of Transportation Facilities – Downtown Urban Centre, and in Chapter 14, Table 2 – Public Right-of-Way Widths, *shall* be protected and secured through the *development* process of the approval for plans of subdivision and condominium, part-lot control applications, consents, site plan applications, Parkway Belt applications and Niagara Escarpment Plan Amendment applications, unless waived by the *City* in accordance with Subsection 6.2.7.2 f) of this Plan. Further, any public right-of-way identified in a detailed engineering study or class environmental assessment study *shall* be secured and protected in the same way through the *development* process.
- c) In developing the transportation system, the *City shall* evaluate and provide *infrastructure* to prioritize active and *sustainable modes* of travel based on efficiency, contribution to a more inclusive, healthy, livable and *complete community*, and to reduce environmental impacts and energy consumption. In the Rural Area, the transportation system *shall* be designed to minimize impacts to the Agricultural System.
- d) A detailed transportation study to assess the impact of a proposed *development* on current travel patterns and/or future *multi-modal* transportation requirements *may* be required before *development applications* are approved.
- e) The enhancement of all *transportation facilities* to maximize mobility and access for people of all abilities *shall* be required, including during construction and reconstruction projects.

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

- f) The *City shall* actively provide input in the planning of Regional and Provincial *transportation facilities* and services, in accordance with the policies of this Plan and the *City's* Transportation Plan.
- g) Opportunities for the sharing of parking will be *encouraged* between *compatible* uses where feasible, subject to an evaluation by the *City*.
- h) All transportation facilities *shall* be designed to provide seamless integration between all *modes* of local and regional transportation, including walking, cycling, transit and private vehicles.
- i) The identification of enhanced *multi-modal* transportation *infrastructure shall* be prioritized through the capital budgeting process in Mixed Use *Intensification Areas* and *Areas of Employment*, and the identified justified *frequent transit network*, as identified on Schedule B-2, Growth Framework and Frequent Transit Network, of this Plan, in keeping with Chapter 14, Table 1 - Classification of Transportation Facilities – Urban Area, of this Plan.
- j) Highways are under the jurisdiction of the Province and are identified on Schedule P-1, Classification of Transportation Facilities – Urban Area; Schedule P-2, Classification of Transportation Facilities – Rural and North Aldershot Areas; and Schedule P-3, Classification of Transportation Facilities – Downtown Urban Centre, of this Plan. Any *development* located within the Provincial permit control area under The Public Transportation and Highway Improvement Act is subject to Provincial review and approval prior to the issuance of entrance, building and land use permits. These permits must be obtained prior to any construction being undertaken within the permit control area.
- k) The *City shall* undertake a Transportation Plan and a City-wide Parking Study.

6.2.2 URBAN STREETS AND RURAL ROADS

6.2.2.1 OBJECTIVES

- a) To ensure the provision of well-maintained streets and roads that will permit access to all parts of the City.
- b) To provide adequate capacity to meet local transportation needs, but not necessarily inter-municipal traffic demands, which *should* be met by Provincial and Regional *transportation facilities* and services.
- c) To place emphasis on developing a connected and continuous grid-oriented street network that supports convenient and efficient travel by all *modes* and discourages the development of street configurations that disrupt the grid network.

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

- d) To provide more pedestrian oriented *streetscapes* that increase safety and attractiveness of the street environment to support *active transportation* choices.
- e) To re-evaluate traditional width standards for roadways and indicate the circumstances under which reduced width standards *shall* be permitted.
- f) To carry out road extensions, where appropriate, in order to accommodate people, transit and goods movement.
- g) To avoid road widenings for the sole purpose of increasing capacity for single occupant automobiles.
- h) To employ *complete streets* standards and the use of *context sensitive design* standards.
- i) To plan for and develop a street network that accommodates all *modes* of travel in a safe and efficient manner.

6.2.2.2 POLICIES

- a) The City *shall* establish a *complete streets* strategy for all road and street projects, including those involving new construction, reconstruction, resurfacing and *rehabilitation*.
- b) The planning, staging and land requirements of road extensions and widenings *shall* be based on Schedule P-1, Classification of Transportation Facilities – Urban Area; Schedule P-2, Classification of Transportation Facilities – Rural and North Aldershot Areas; Schedule P-3, Classification of Transportation Facilities – Downtown Urban Centre; and Chapter 14, Table 2 – Public Right-of-Way Widths, of this Plan.
- c) Any localized widenings *shall* be evaluated and recommended based upon consideration for all *modes* of travel and ability to support active and *sustainable* transportation.
- d) Land dedication for daylight triangles on roads and streets under the *City's* jurisdiction *shall* be based on the following:
 - (i) 3 m x 3 m: Local Street/Industrial Street to Local Street/Industrial Street or Neighbourhood Connector Street;
 - (ii) 5 m x 5 m: Neighbourhood Connector Street to Neighbourhood Connector Street;
 - (iii) 5 m x 5 m: Local Street/Industrial Street to Urban Avenue, Main Street, Industrial Connector or Multi-Purpose Arterial Street;

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

- (iv) 7 m x 7 m: Neighbourhood Connector Street to Urban Avenue, Main Street, Industrial Connector or Multi-Purpose Arterial Street;
 - (v) 15 m x 15 m: Urban Avenue, Main Street, Industrial Connector, Multi-Purpose Arterial, or Major Arterial Street to Urban Avenue, Main Street, Industrial Connector, Multi-Purpose Arterial or Major Arterial Street;
 - (vi) 10 m x 10 m: All road intersections identified on Schedule P-2, Classification of Transportation Facilities – Rural and North Aldershot Area, of this Plan;
 - (vii) 15 m x 15 m: any City roadway intersecting with a Regional roadway;
 - (viii) daylight triangles having lesser dimensions than specified above *shall* only be acquired if the reduced standard is proven to be acceptable to the *City*, subject to the criteria in subsection 6.2.7.2 f) of this Plan.
- e) *Transit Priority Measures (TPM) shall* be considered in Mixed Use Intensification Areas and *Areas of Employment*. When *transit priority measures* are proposed, consideration *shall* be given to permitting the reduction in road capacity available to other vehicles and the need to widen the street.
 - f) Streets and roads serving as transit and primary response routes for emergency services *shall* be built early in the *development* process, so that transit service and primary emergency response can be provided at an early stage, subject to operational and financial feasibility.
 - g) Traffic flows *shall* be controlled within the Urban Area through traffic management, traffic calming, design features and other techniques.
 - h) Street and road construction and maintenance methods *shall* be regularly reviewed and implemented. The road asset management system will be continuously updated to determine maintenance requirements and priorities.
 - i) Street and road design standards *shall* be reviewed in a comprehensive manner and updated in order to consider all *modes* of travel and people of all ages and abilities.
 - j) The use of public and private laneways *may* be permitted subject to an evaluation by the *City* and Region of functional, operational, servicing and financial issues.
 - k) Within the Rural Area as shown on Schedule A, City System, of this Plan, all new, expanded and reconstructed transportation *shall* incorporate *context sensitive design* and shall be planned, designed and constructed in

accordance with Subsection 9.1.2 j) of this Plan. New public rights-of-way established through the subdivision of large parcels *shall* be designed in a manner which provides for safe and efficient pedestrian and transit connections.

- l) *Development* proposals within the City *shall* be required to take place on public streets, unless it can be demonstrated by the proponent, to the satisfaction of the City, that a private street is equally desirable from the standpoints of functionality, community safety, efficiency, servicing, neighbourhood connectivity, facilitating ease of land assembly for future *development*, reducing environmental impacts, and minimizing financial impacts to the *City*.
- m) Traffic flow on the City's arterial streets and industrial connectors is primarily constrained by intersection capacities and traffic signal operations. Generally, the target Levels of Service (LOS) will be LOS 'E' or better based on an analysis of overall intersection operation.
- n) Capacity improvements at major intersections will be evaluated on a number of factors including pedestrian operations, *streetscape* and aesthetic impacts, property impacts, critical movement volume-to-capacity ratios, and widening requirements, transit operations, operations during off-peak hours, and availability of other routes. At some locations, such as Mixed Use *Intensification Areas* and *Areas of Employment*, increased tolerance for at-capacity conditions will be considered and *encouraged*. LOS 'F' *shall* be deemed to be acceptable for peak hour conditions.
- o) The design standards for roads and streets *shall* be reviewed to support *transit-supportive land use*.
- p) Through *Area-Specific Plans* and *development applications*, a grid-oriented street network *shall* be provided to create a continuous and highly permeable *active transportation* network.

6.2.3 TRANSIT

6.2.3.1 OBJECTIVES

- a) To promote the use of transit and reduce reliance on the private automobile by making transit an attractive transportation option by encouraging *transit-supportive land use*.
- b) To develop the transit system as a part of a *multi-modal* network that supports the City's Urban Area, with a focus on the City's Mixed Use *Intensification Areas* and *Areas of Employment*.

- c) To implement a *frequent transit network* and other local transit service to support the needs of City residents, employees, employers and customers.
- d) To co-ordinate transit service with other service in the Hamilton Area and Greater Toronto Area to achieve convenient and effective transit service integration with GO transit, VIA rail, Hamilton Street Rail, Oakville Transit and other neighbouring service providers.
- e) To ensure that new *development* and *re-development* provides adequate connections to transit.

6.2.3.2 POLICIES

- a) Municipal transit services and facilities *shall* be provided in accordance with Schedule B-2, Growth Framework and Frequent Transit Network, of this Plan. This Schedule identifies the *frequent transit network* in the City, along with the City's Mixed Use *Intensification Areas* and *Areas of Employment, Mobility Hub Primary and Secondary Connectors*, and the location of GO and Bus Stations. Other less frequent transit service routes are not shown on Schedule B-2.
- b) Long range transit planning will support the City's *Intensification Areas* with a *frequent transit network* and priority will be placed on providing the highest level of transit service in the City's Mixed Use *Intensification Areas* and *Areas of Employment*.
- c) The *frequent transit network* identified in Schedule B-2, Growth Framework: Frequent Transit Network, of this Plan, *shall* be confirmed through the preparation of the City's Integrated Transit Mobility Plan and be updated periodically, and these updates *shall* not require an amendment to this Plan.
- d) New *frequent transit network* (justified and candidate) routes *may* be identified at the time of a *Municipal Comprehensive Review* that considers amendments to the Urban Structure and Growth Framework.
- e) The City's transportation system and land use *development* are intended to achieve or exceed the minimum transit *modal shares* in accordance with the Region of Halton's Transportation Master Plan.
- f) The *City shall* promote increased transit use through transit supportive densities, urban design measures and parking management measures to make *development* more accessible for transit users in Mixed Use *Intensification Areas* and *Areas of Employment*.
- g) Transit stations and facilities in the City *shall* be designed to provide comfortable and safe access between pedestrian, cycling, and transit *modes*.

6.2.4 ACTIVE TRANSPORTATION

6.2.4.1 OBJECTIVES

- a) To require *active transportation* as part of a *multi-modal* and inter-connected transportation system.
- b) To *develop and maintain a continuous on-road and off-road* bikeway and trail system across the City, connecting to nearby municipalities, for general commuting and *recreational* purposes.
- c) To establish the interconnections of on-road bike routes, multi-use trails and paths throughout the City with other open space linkages.
- d) To promote and support walking and cycling as viable *mobility* options for commuting, *recreation* and other travel.
- e) To continuously improve the pedestrian realm and cycling facilities through the design and implementation of *complete streets*.
- f) To ensure that the design of *Area-Specific Plans* and new subdivisions provides convenient *active transportation* access to schools, neighbourhood *recreational* facilities, shopping areas, *Areas of Employment* and existing or planned transit routes.
- g) To require that new *development* and *re-development* provides adequate *active transportation* connections to a public-right-of-way.

6.2.4.2 POLICIES

- a) Municipal cycling facilities *shall* be provided in accordance with Schedule Q, Long-Term Cycling Master Plan, of this Plan. This Schedule identifies the long-term location of bicycle routes, lanes, priority streets, cycle tracks and multi-use paths and connections to nearby communities.
- b) Schedule Q, Long-Term Cycling Master Plan, of this Plan *shall* be updated periodically and these updates *shall* not require an amendment to the Plan. In the event of a conflict between Schedule Q of this Plan and the Cycling Master Plan, the up to date Cycling Master Plan *shall* prevail.
- c) Municipal trail facilities *shall* be provided in accordance with Schedule R, Trails Strategy, of this Plan. This Schedule identifies the location of trail routes and connections to nearby communities.
- d) Schedule R, Trails Network, of this Plan, *shall* be modified or updated periodically and these modifications or updates *shall* not require an amendment to the Plan. In the event of a conflict between Schedule R of this

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

Plan and the Trails Network document, the up to date Trails Network document *shall* prevail.

- e) A periodic review of the *City's* Cycling Master Plan and cycling standards *shall* be undertaken.
- f) The connection of bicycle routes, cycle tracks and multi-use paths and trails with *recreational* facilities and other *public service facilities shall be encouraged*.
- g) Pedestrian, cyclist and overall public safety and security *shall be encouraged* in the design and *development* of the *active transportation* network.
- h) The continued integration of cycling with transit *modes shall be required* through adequate and secure bicycle parking and related end-of-trip facilities.
- i) The reconstruction of existing streets and the construction of new streets *shall* include safe, convenient and accessible pedestrian facilities, such as sidewalks and/or multi-use paths.
- j) Streets, sidewalks and walkways *shall* be designed to provide more direct *active transportation* access from the interior of blocks to transit locations and public rights of way. At the site plan application stage, proposed *developments* and *re-developments shall be required* to provide direct, safe, convenient and attractive interior pedestrian access through the site.
- k) The *development of streetscapes* that are safe, convenient, accessible and attractive for pedestrians and cyclists *shall* be implemented through the selection of appropriate site-specific measures such as providing wide sidewalks, bike lanes, illumination, locating retail and *service commercial* uses at street level to provide an active street front, *encouraging* building designs that provide shelter, and providing convenient and sheltered transit stops and bike parking, street furniture, shade *trees* and other amenities.
- l) Safe, accessible and unobstructed connections *shall* be provided where trails and other *active transportation infrastructure* intersects with roads, streets and other public rights of way.

6.2.5 RAIL

6.2.5.1 OBJECTIVES

- a) To integrate rail services with other transportation system components.

6.2.5.2 POLICIES

- a) The seamless integration of rail passenger transportation services (such as GO Transit and Via Rail) with other transportation *modes shall* be planned for through *Area-Specific Planning*.
- b) The *development* of lands close to rail lines and rail spur line services *shall be encouraged for employment uses*.
- c) Noise and vibration-*sensitive land uses shall* generally be discouraged next to rail lines.
- d) The proponent of land uses *sensitive* to noise and vibration adjacent or in proximity to railway lines or railway yards *shall* be required to undertake, prior to *development* approval, the following studies by *qualified persons* in accordance with Provincial policies, to the satisfaction of the Region of Halton, the *City*, and the Province, in consultation with the appropriate railway agency, and to implement the study recommendations as approved, including the restriction of new residential and other *sensitive land uses* and noise and vibration mitigation measures:
 - (i) noise studies, if the *development* is within 300 m of the railway right-of-way or 1000 m of a railway yard; and
 - (ii) vibration studies, if the *development* is within 75 m of the railway right-of-way or a railway yard.
- e) The proponent of any *development* adjacent to railways *shall* ensure that appropriate safety measures such as, but not limited to, setbacks, crash walls, berms and security fencing are provided to the satisfaction of the *City* in consultation with the appropriate railways to mitigate the *adverse effects* of their *development* on the railways.
- f) The *City shall* consult with the appropriate rail operator(s) to ensure that projected rail service and *infrastructure* improvements are identified, planned for and protected in any planning approvals.
- g) The *development* of facilities for the transfer of goods between rail and truck *modes shall be encouraged* at appropriate locations.
- h) The assistance of Federal, Provincial and other agencies *shall* be sought in identifying areas where existing rail lines create significant barriers to pedestrian and cycling access, or to the *development* of a continuous network of roads. Once identified, these areas *shall* be examined for possible improvements including developing grade-separated crossings for automobiles, transit, pedestrians and bicycles.

6.2.6 AIR

6.2.6.1 OBJECTIVES

- a) To integrate air services with other transportation system components.
- b) To *encourage* the safe and convenient use and provision of air service.

6.2.6.2 POLICIES

- a) The operation of the Burlington Air Park located on Bell School Line is recognized as an *existing use* providing air service to residents and businesses. Any expansion *shall* be subject to necessary studies, applicable municipal by-laws and public review, and *shall* have regard for the surrounding area.

6.2.7 PUBLIC RIGHT-OF-WAY ALLOWANCES

6.2.7.1 OBJECTIVES

- a) To protect adequate public rights-of-way to meet future needs.
- b) To maximize the use of existing rights-of-way through reallocation of space instead of acquiring new rights-of-way and/or building new streets and roads.

6.2.7.2 POLICIES

- a) Public right-of-way allowances are intended to identify and protect strategic land areas for public use which are necessary to accommodate the long-term development of an efficient, safe, *sustainable* and attractive *multi-modal* transportation network.
- b) Public right-of-way allowances *shall* be developed to address the City's transportation priorities and to address needs with regard to the following:
 - (i) pedestrians;
 - (ii) cyclists;
 - (iii) public transit (including associated facilities);
 - (iv) public accessibility;
 - (v) street landscaping and boulevards;
 - (vi) permanent street furniture;
 - (vii) vehicular traffic;
 - (viii) public on-street or lay-by parking; and

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

- (ix) public *utilities*.
- c) Planned works within a public right-of-way *shall* build the elements of a *complete street*, as part of the final design and alignment of the public works.
- d) The public right-of-way width of all public right-of-ways not identified in Chapter 14, Table 2, Right-of-Way Widths, of this Plan *shall* be the actual width as it existed on the date of the registration of the plan of subdivision, or if a plan of subdivision does not exist, the date of approval of this Plan.
- e) Public right-of-way allowance widths identified in Chapter 14, Table 2, Right-of-Way Widths, of this Plan are approximate and *may* be increased to accommodate additional requirements associated with a planned public works project which *may* include, but are not limited to, noise walls, additional turning lanes at intersections, landscaped medians, elements required to address pedestrian, comfort, safety or accessibility, separated bicycle paths, wider roadway cuts or embankments.
- f) Required public right-of-way allowance widths identified in Chapter 14, Table 2, Right-of-Way Widths, of this Plan *may* be reduced on a site-specific basis by the *City's* Director of Planning/Chief Planner in order to address one or more of the following site-specific circumstances:
 - (i) a public need arising from the design and alignment of a planned public works project;
 - (ii) accommodation of the existing or planned *streetscape* elements;
 - (iii) accommodation of the existing built form and buildings;
 - (iv) the presence of the Natural Heritage System or other *sensitive* environmental features;
 - (v) the presence of a *cultural heritage resource*; and/or
 - (vi) the presence or potential risk of environmental *contamination*.
 - (vii) Reductions to public right-of-way allowance widths will be considered only provided the *City's* objectives to achieve *complete streets* standards, including all mobility and transit needs, have been addressed.
- g) Public right-of-way allowances identified in Chapter 14, Table 2, Right-of-Way Widths, of this Plan *shall* be conveyed to the *City* as a condition of *development*, unless waived according to Subsection 6.2.7.2 f) of this Plan.
- h) Where a public right-of-way has been transferred from another *public authority* to the ownership of the *City*, any existing public right-of-way allowances associated with the right-of-way *shall* be reviewed and, where

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

necessary, modified to ensure the right-of-way allowance reflects the *City's* needs and are modified as necessary, to incorporate the elements of a *complete street* as identified in Subsection 6.2.2.2 a) of this Plan.

- i) Where the *City* determines that a public right-of-way allowance widening is not required to be conveyed to the *City*, any required setbacks *may* be measured from the property line, rather than the edge of the deemed width of the allowance identified in Chapter 14, Table 2, Right-of-Way Widths, of this Plan. The Zoning By-law *shall* be updated to reflect this requirement.
- j) A public right-of-way allowance conveyed to the *City may* be used on an interim basis in conjunction with an approved *development* located on a property from which an allowance is to be conveyed to the *City*, provided that:
 - (i) no permanent structures are located within the allowance area;
 - (ii) the allowance area does not contain an activity or function that is required to fulfill the approval or compliance of an existing or proposed *development* on the site from which the allowance is to be conveyed;
 - (iii) the planned public works, for which the allowance has been conveyed, are not imminent; and
 - (iv) the owner of the site from which the allowance is to be conveyed enters into all necessary and appropriate agreements, as determined by the *City*.
- k) Upon receipt of a *development application*, the *City shall* confirm whether a public right-of way is required as per the policies of this Plan.

6.2.8 GOODS MOVEMENT

6.2.8.1 OBJECTIVES

- a) To support the reliable and efficient distribution of truck traffic and facilitates goods movement to commercial and *employment* areas by heavy commercial vehicles.
- b) To minimize the impact of goods movement on the overall transportation network.

6.2.8.2 POLICIES

- a) The *City may* identify goods movement routes.

- b) Heavy truck traffic *may* be restricted to selected goods movement routes, as established by the *City*, to minimize the impacts that this traffic will have on residential areas.
- c) The *City shall* ensure goods movement routes are as efficient for heavy truck traffic as possible, without compromising safety for pedestrians and other street users.
- d) All uses that facilitate goods movement *should* have regard for the Province of Ontario’s Freight Supportive Guidelines.
- e) Where heavy truck traffic occurs outside of any established goods movement routes, the heavy truck traffic *shall* have regard for pedestrians and cyclists, through such measures as not obstructing sidewalks and bicycle lanes, among other measures.
- f) The design and location of buildings adjacent to goods movement routes *shall* consider means to mitigate any impacts that truck and commercial traffic will have on the surrounding areas. For new *development*, the *City may* require loading facilities and activities to be located off the road rights-of-way through site plan review.
- g) Where heavy truck traffic occurs outside of *Areas of Employment*, the impacts on the pedestrian and cyclist environment *may* be mitigated, by developing wider sidewalks, developing landscaping schemes to reduce noise and visual impacts within pedestrian areas to provide additional buffering. The adoption of such mitigation features *shall* require the consideration of the maintenance, safety, traffic operations and air quality implications of these measures.
- h) The *City should* develop, where required, specific goods movement and delivery strategies for Mixed Use Intensification Areas.

6.2.9 MOBILITY HUB CONNECTORS

Mobility Hub connectors are streets and other supporting active transportation corridors that link each of the *mobility hubs* both to one another and to key surrounding areas. These connectors have the potential to provide direct and convenient connections for all users, including pedestrians, cyclists, transit users and drivers.

Mobility Hub connectors *shall* be developed over time to reflect their role according to policies within Subsection 8.1.2 of this Plan, as well as with those applicable policies within the *City’s* Transportation Master Plan.

Mobility hub connectors consist of *mobility hub primary connectors*, *secondary connectors* and *tertiary connectors*. *Mobility hub primary and secondary*

connectors are shown on Schedule B-2, Growth Framework: Transportation Network, of this Plan.

6.2.9.1 OBJECTIVES

- a) To ensure direct, convenient connections between *mobility hubs* for all users, including pedestrians, cyclists, transit users and private automobiles.

6.2.9.2 POLICIES

- a) *Mobility hub primary and secondary connectors shall be complete streets* and take into consideration the policies contained in Subsection 6.2.7, Public Street Right-of-Way Allowances, of this Plan.
- b) Enhanced levels of transit service and facilities such as *frequent transit shall be provided on primary and secondary connectors.*
- c) The *Area-Specific Plan* for *mobility hubs shall* evaluate the role of *mobility hub connectors* and provide recommendations on any works required along connectors to support individual hub objectives and to achieve *transit supportive land uses* and improved design standards on *primary and secondary connectors.*

6.2.10 TRANSPORTATION DEMAND MANAGEMENT

6.2.10.1 OBJECTIVES

- a) To manage transportation demand through the use of such means as transit, walking, cycling, carpooling, ride sharing, car sharing, bike sharing and the implementation of flexible working hours.
- b) To support and enhance *sustainable* transportation choices and discourage single occupant vehicle trips.
- c) To reduce traffic congestion, parking supply needs, and demand for parking spaces by *encouraging* non-automobile *modes* of travel.

6.2.10.2 POLICIES

- a) The *City shall* recognize the role of *Transportation Demand Management (TDM)* in promoting the more efficient use of existing transportation *infrastructure*, reducing automobile use, and promoting increased transit use and *active transportation.*
 - (i) within *Mixed Use Intensification Areas* and *Areas of Employment*, *development* proponents *shall* be required to submit a *Transportation Demand Management Plan* and implementation strategy for the *development*, subject to *City* approval, prior to occupancy;

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

- (ii) in other areas of the City, excluding Residential Low-Density areas, *development* proponents *may* be required to submit a *Transportation Demand Management* Plan and implementation strategy for the *development*, subject to *City* approval, prior to occupancy.
- b) The *Transportation Demand Management* Plan shall:
 - (i) be integrated with the required transportation impact study submitted to support the proposed *development*;
 - (ii) identify design and/or program elements to reduce single occupancy vehicle use;
 - (iii) identify the roles and responsibilities of the landowner with respect to each recommended program and its implementation; and
 - (iv) identify the operational and financial roles and responsibilities of the landowner including, but not limited to, program development, implementation and ongoing management and operations of the *Transportation Demand Management* Plan and/or implementation strategy.
- c) The *Transportation Demand Management* Plan *shall* consider, but is not limited to, the following measures:
 - (i) secure, conveniently located, weather protected on-site bicycle storage facilities and associated amenities such as showers, change rooms and clothing lockers;
 - (ii) reserved, priority car-pool parking spaces;
 - (iii) carpooling and ridesharing programs;
 - (iv) bike-sharing and/or car-sharing programs;
 - (v) provision of Provincial, Regional or City Transit Passes to building occupants or residents;
 - (vi) measures that shift travel times from peak to off-peak periods;
 - (vii) enrollment with Smart Commute Halton; and/or
 - (viii) other measures that reduce single occupancy vehicle trips.
- d) The *City shall* consider reduced parking requirements for *development* and/or *re-development* where a comprehensive *Transportation Demand Management* Plan is submitted and implemented to the satisfaction of the *City*. The *City may* evaluate reduced parking standards through a city-wide Parking Study.

- e) The *City shall encourage* community-wide and area-specific *transportation demand management* programs, such as car share and bike share.
- f) A co-ordinated approach *shall be encouraged* in the *development, implementation and monitoring of Transportation Demand Management* measures.
- g) The *City will work with development* proponents to provide all new building occupants with information on available pedestrian, cycling and transit facilities and carpooling options within the community, including local transit routes and schedules.

6.3 UTILITIES

6.3.1 OBJECTIVES

- a) To recognize major *utility* corridors and other lands required for *utility* purposes.
- b) To permit *compatible accessory* uses within *utility* lands and to ensure the *compatible* future use of abandoned or surplus *utility* lands.
- c) To ensure *that the design, construction and operation of essential utility facilities* or expansions to existing facilities *occur in a compatible* manner and with a minimum of social and environmental *impact*.
- d) *To encourage* early access and provision for a common *utility trench to minimize* disruption to municipal property and rights-of-way.
- e) To promote co-ordinated public and private *utility* planning and *infrastructure* design.
- f) To promote the use of district energy systems for electricity, heating and/or cooling.

6.3.2 POLICIES

- a) Public open space and *recreation uses, may* include, but *shall* not be limited to, parks, linear bicycle and pedestrian path systems and playing fields. These uses *shall be encouraged* on lands zoned for transportation, *utility* or communication purposes in consultation with the affected transportation, *utility* or communications provider, where such uses are *compatible* with the primary *utility* function of these lands and are *compatible* with existing surrounding uses and the permitted uses in the land use designations of the adjacent lands. Technical approvals *shall* be obtained from the *utility* corridor owner and agreements *may* be required to permit *accessory* uses.

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

- b) In the Urban Area, *accessory uses may include, but shall not be limited to, passive recreation and multi-use trails, parking lots, private rights-of-way and driveways, agricultural uses, golf courses and driving ranges, miniature golf, community gardens, the cultivation and storage of nursery stock for horticultural trade uses and garden centres, indoor and outdoor storage, and private services and utilities.* These uses *may* be permitted on lands zoned for transportation, *utility* or communication purposes in consultation with the affected transportation, *utility* or communications provider, where such uses are *compatible* with the primary *utility* function of these lands and are *compatible* with existing surrounding uses and the permitted uses in the land use designations of the adjacent lands. Technical approvals *shall* be obtained from the utility corridor owner and agreements *may* be required to permit *accessory* uses.
- c) In the Rural Area, *accessory uses may include, but shall not be limited to, parking lots, private rights-of-way and driveways, agricultural uses, community gardens, the cultivation and storage of nursery stock for horticultural trade uses and garden centres, outdoor storage, and private services and utilities.* These uses *may* be permitted on lands zoned for transportation, *utility* or communication purposes in consultation with the affected transportation, *utility* or communications provider, where such uses are *compatible* with the primary *utility* function of these lands and *compatible* with existing surrounding uses and the permitted uses in the land use designations of the adjacent lands. Technical approvals *shall* be obtained from the *utility* corridor owner and agreements *may* be required to permit *accessory* uses.
- d) With the exception of private rights-of-way and driveways and *accessory* uses described in Subsections 6.3.2 b) and c) of this Plan *may* require an amendment to the Zoning By-law.
- e) The reuse of abandoned or surplus *utility* lands for public open space, access or *recreational* uses *shall* be *encouraged*.
- f) Where abandoned or surplus *utility* lands are not required for public uses, the *City may* consider applications for rezoning. Evaluation of applications *shall* consider whether the proposed use is *compatible* with existing and proposed uses on nearby lands, and consistent with the policies of this Plan.
- g) Proposals for the construction or expansion of new *utility* facilities *shall* be reviewed based on the following criteria:
 - (i) the impact of the proposal upon existing and planned communities, including public safety;

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

- (ii) environmental *impacts*, including air quality and the *negative impacts* on identified areas of environmental significance, including the Niagara Escarpment, the Natural Heritage System and *Key Natural Features*;
 - (iii) the impact on existing *agricultural* lands and operations and Mineral Resource Extraction Areas;
 - (iv) land use compatibility policies in Section 4.6, Land Use Compatibility, of this Plan;
 - (v) where applicable, the proponents of proposals for new or expanded utility systems, including District Energy Systems, *shall* obtain Environmental Compliance approvals from the Province; and
 - (vi) any other relevant considerations.
- h) The proponents of proposals for the construction or expansion of *utility* facilities *may* be required to prepare an Environmental Impact Assessment (EIA) as described in Subsection 4.2.4 of this Plan.
 - i) Proposals for the location and construction of *utilities* or expansions and extensions of existing utilities within the Rural Area *shall* also be subject to the policies of Subsection 9.1.2 j) of this Plan.
 - j) Although electric power facilities are permitted in all land use designations, *utility* companies *shall* consult with the *City* and the public regarding the location of proposed facilities.
 - k) Setbacks for buildings and excavations abutting *utility* lands *shall* be specified by the *City* based on consultation with the appropriate *utility*. In some unique situations, modifications *may* be allowed, subject to land use compatibility assessment. The *City shall* require early consultation with the affected *utility* for any *development* proposals in the vicinity of *utility* lands.
 - l) All public and private *utilities*, approved for installation by the municipality, *shall* be planned for and installed on an integrated basis in order that joint trench(es) and concurrent installations be utilized.
 - m) The design of public and private *utilities shall* be required early in the *development* approval process in order to minimize disruption to the community.
 - n) In order to reduce *streetscape* clutter where feasible, the *City* will *encourage* that public and private above ground *infrastructure* be integrated, grouped or combined at the time of *re-development* and at the cost of the proponent.
 - o) The Downtown Urban Centre and *mobility hubs shall* be considered special areas where all existing and proposed overhead utilities are to be buried.

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

- p) Telecommunications *utilities shall* be installed as per *City*-approved telecommunication policies. These policies *may* be amended from time to time in consultation with the telecommunications industry.
- q) Renewable energy projects that are subject to a Provincial approval process *shall* be reviewed in accordance with the City of Burlington's Renewable Energy Protocol and guidelines prepared by the Region of Halton.
- r) TransCanada Pipelines Limited operates one high pressure natural gas pipeline within its right-of-way which crosses the City. *Development* within 200 m of TransCanada facilities *may* affect the safety and integrity of the pipeline.
 - (i) any *development* proposals within 200 m of its facilities require early consultation with TransCanada. Further:
 - a. no permanent building or structure *may* be located within 7 m of the pipeline right-of-way; and
 - b. *accessory* structures *shall* have a minimum setback of 3 m from the limit of the right-of-way.
 - (ii) approval is required for activities on or within 30 m of the right-of-way.
- s) The City *shall* encourage consultation with all utility providers prior at the time of considering *development applications* within close proximity to utility corridors or facilities.

6.4 PHASING OF INFRASTRUCTURE TO SUPPORT DEVELOPMENT

The *City's* land use vision must be phased and planned in a manner that optimizes the use of existing and new *infrastructure* to support growth in a compact, efficient form. Through any investment or plan the long-term financial *sustainability* of the City and the Region must be ensured. Priorities must be set clearly in policy, and tools for implementing the land use vision *shall* be guided by the policies of this Plan.

6.4.1 OBJECTIVES

- a) To provide new, and invest in existing, urban municipal *infrastructure, utilities* and *public service facilities* in conjunction with the Region only within the Urban Area, unless otherwise permitted by specific policies of this Plan.
- b) To ensure that investments in new and existing *infrastructure, utilities* and *public service facilities* are made strategically to support the land use vision and Urban Structure established in this Plan.
- c) To recognize that investments in new and existing *infrastructure, utilities* and *public service facilities* must be made in a way that supports compact, efficient *development* and that considers the long-term financial *sustainability* of the City, Region, and service providers.
- d) To communicate priority for *infrastructure* investment and a process to consider these priorities in relevant processes including, but not limited to, the Regional Official Plan, Regional Water and Wastewater Master Planning, , Development Charges Background Studies, capital budgets, the City's Long Term Asset Management Plan.

6.4.2 POLICIES

- a) The Urban Structure, the Growth Framework and the land use designations of this Plan will communicate the vision for growth for the City.
- b) Through the development of *Area-Specific Plans*, the *City shall*, in co-ordination with the Region of Halton and other service and *utility* providers, clarify long term *employment* and population growth targets and to establish phasing priorities to describe how investment in *infrastructure* will be made to support the vision for the Primary Growth Areas.
- c) The *City* will consider the role of *Area-Specific Planning* in supporting future growth, beyond the planning horizon of this Plan, within the Secondary Growth Areas.

- d) The *City* will work collaboratively with the Region of Halton and other service providers to develop plans to support timely, sustainable investment of *infrastructure, utilities* and services to support *intensification* in the *City*.
- e) The *City* will support the development of new tools that acknowledge the challenge that *intensification* growth poses in terms of committing to and developing the appropriate *infrastructure* to support growth.

6.5 FINANCIAL SUSTAINABILITY

The *City's* financial *sustainability* is integral to the successful implementation of this Plan and the ability to achieve the *City's* long-term vision.

Within the context of a built-out, two-tier municipality, the *City* will recognize the need to consider the net financial impact of all decisions on the *City*, particularly with respect to major *development applications*.

The *City* will develop in a manner which ensures that it has the financial capacity to provide and maintain *infrastructure* and *public service facilities* that meet the needs of Burlington's residents and businesses over the long term.

The impact of major *developments* and initiatives on the *City's* and Region's capital budgets and over the long term *should* also be considered.

The following objectives and policies are intended to provide a co-ordinated approach towards the long-term financial *sustainability* and prosperity of the *City*.

6.5.1 OBJECTIVES

- a) To ensure that revenue generated from *development* is reflective of the *City's* costs for providing new and upgraded *infrastructure* and public service facilities now and in the future.
- b) To ensure the *City* promotes new growth opportunities and operates in a cost-effective manner to promote the *City's* financial *sustainability* over time.
- c) To ensure that new *development* utilizes existing *infrastructure* and *public service facilities* capacity, where possible.
- d) To recognize, as a built-out municipality, the importance of remaining competitive at attracting new *development*.
- e) To ensure the *City* develops as a *complete community* with a diversified mix of land uses and assessments in order to develop a diversified economy and tax base.
- f) To ensure that the financial impact of major *development applications, re-designations* and other initiatives are investigated, where appropriate.

6.5.2 POLICIES

- a) Growth-related costs *shall* only be incurred for the purposes of accommodating new *developments* which are in conformity with the policies of this Plan and the Regional Official Plan.
- b) *City* development charges *shall* be established at a rate which is reflective of the growth-related capital costs as permitted by legislation.
- c) The *City may* negotiate development charges from other municipalities, where appropriate, for the provision of connected *infrastructure*.
- d) The *City shall* engage with the Region and other levels of government to ensure the *City* has a *sustainable* funding model now and in the future.
- e) The *City shall* promote new growth opportunities and remain competitive at attracting new *development* to the *City* by exploring innovative financial and economic development tools available to a lower-tier municipality which *may* include, but are not limited to:
 - (i) differential *development* charges;
 - (ii) Community Improvement Plans;
 - (iii) public/private *infrastructure* agreements, including front-ending agreements;
 - (iv) *City*-initiated land *development*; and/or
 - (v) *City*-initiated Official Plan and/or Zoning By-Law amendments.
- f) *Developments* which optimize the *City's* capital and operating costs for *City infrastructure* and *public service facilities* while maintaining acceptable levels of service will be *encouraged*.
- g) To the extent that land is available within the Urban Area, the *City shall* provide adequate opportunities for new *development* in a timely and efficient manner.
- h) The *City may* assess proposed land uses within a mixed use *development* to ensure that the *development* achieves an optimal mix of uses that will contribute towards a diversified economy over the long-term.
- i) A financial analysis *may* be required for, and considered in the evaluation of, major *development* proposals which meet one or more of the following criteria, in order to understand potential financial impacts on the *City*:
 - (i) the land area affected is greater than 10 ha;
 - (ii) the amount of retail floor space is greater than 50,000 sq. m;

CHAPTER 6 – INFRASTRUCTURE, TRANSPORTATION AND UTILITIES

- (iii) the number of dwelling units is greater than 500;
- (iv) the conversion of *Areas of Employment*;
- (v) an expansion to the Urban Boundary; or
- (vi) any other *development* or initiative which is deemed to have a potential impact on the *City's* financial *sustainability* as determined by the *City*.

This page has been
left intentionally blank