#### Draft Environmental Project Report (April 2018) – About this Document

This draft Environmental Project Report (EPR) has been prepared to satisfy the requirements of the Transit Project Assessment Process (TPAP, O. Reg. 231/08).

This document is a draft and will undergo technical review by the Ministry of Environment and Climate Change (MOECC), as illustrated in the Exhibit 1 below.



However, this report is written as if it is the Final EPR, at the end of the 6-month TPAP, with the intent of streamlining the review process during TPAP. As a result, certain sections are in-progress, and certain sections will be updated before and during TPAP, including:

- Section 5: Public consultation during the 120-day TPAP process will be conducted to allow the public more opportunity to review and provide input on the design. Comments from the public, stakeholders, regulatory agencies and Indigenous communities will be collected, considered and incorporated into the EPR during the 120-day period
- Sections 2, 4 and Appendix A: Design refinements may be incorporated based on feedback received from the public and technical agencies.
- Sections 6 and 7: Permits, approvals, and commitments to future work will be updated based on feedback received from the public and technical agencies.
- Appendices: A number of technical supporting studies were completed and are currently under review by the City of London's Advisory Committees and provincial Ministries. When comments from these bodies are received, the appendices will be updated.

EPR and submit written objections to the Minister of MOECC on matters of provincial importance. This process is illustrated in the timeline below.



# At the end of the 120-day consultation period, the final EPR will be published and the 30day public review period will commence. Interested persons will be able to review the final



The Rapid Transit Master Plan (RTMP) launches for London's Rapid Transit initiative with the first Public Information Centre in February

City Council approves the Rapid Transit Master Plan (RTMP), which gives the green light to a BRT system and defines the BRT network

45-day public review period for Londoners to give feedback on the RTMP.

C BRT team hosts nine public consultation events to outline design options for key areas of the BRT network and gather feedback.

After refining the design options based on stakeholder input and key criteria, BRT team hosts five public events to present recommended designs to the public and

BRT team presents Draft Environmental Project Report (EPR) to City Council for review and approval. Report defines the BRT project and includes supporting

Beginning of Transit Project Assessment Process (TPAP) – TPAP is a formal process for transit projects in Ontario with time-limited reviews and approvals

The BRT team hosts Public Information Centre as part of formal 120-day TPAP consultation period to give Londoners another opportunity to provide

30-day Public Review of Final EPR. Written objections on Matters of Provincial Importance can be made to the Minister of Environment and Climate Change.

35-days for Minister to consider the transit project. Minister of Environment and Climate Change makes decision and responds to any written objections

e BRT team continues consultation with the public, property owners, businesses. regulatory agencies and First Nations communities to refine the detailed design.

Shovels in the ground! Construction begins with quick-start elements of BRT in 2019, such as smart traffic signals. BRT route construction begins in 2020, with an expected 8-year timeline to complete the full 24-km network. BRT team continues consultation with the public and property owners

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|    |   |





Appendix L: Stormwater Quality/Quantity Control Strategy

| GLOSSARY  | OF TERMS  | Crime Prevention<br>Through<br>Environmental | A proactive design philoso<br>is based on the belief that   |
|---|---|--|---|
| Alighting:  | When passengers exit the transit vehicle at a stop.   | Design (CPTED):                              | crime as well as an improv<br>well beyond conventional a  |
| Auxiliary Lane:                                   | A lane in addition to, and placed adjacent to, a through lane intended<br>for a specific manoeuvre such as turning, merging, diverging, weaving<br>or for slow vehicles.  |  | and territorial reinforcemer<br>psychological deterrent for<br>behaviour as people intera                               |
| Annual Average Daily<br>Traffic (AADT):           | The total volume of traffic passing a point or segment of a roadway, in both directions for one year, divided by the number of days in the year.  | Crush Capacity:                              | The maximum feasible pas<br>one additional passenger of<br>discomfort to passengers a                                   |
| Area of Natural<br>Scientific Interest<br>(ANSI): | Lands and waters with features that are important for natural heritage protection, appreciation, scientific study or education in Ontario.  | Curbside Transit<br>Lanes:                   | Dedicated transit lane on o<br>immediately adjacent to th<br>general traffic lane(s). Stop                              |
| Articulated:                                      | Transit vehicles that have a flexible joint approximately mid-length.<br>Articulated transit vehicles can be longer than a rigid-body bus, with<br>increased passenger capacity.  |  | and other street edge feati<br>provide protected access.  |
| Boarding:   | When passengers enter a transit vehicle at a stop.  | Variable Message<br>Signs (VMS):             | Electronic signs which can<br>riders on changes, interrup<br>also be used to aid drivers<br>decisions about travel rout |
| Bus Rapid Transit<br>(BRT):                       | A bus-based Rapid Transit system to deliver fast, high-frequency, comfortable, and cost-effective services at the municipal level. Bus Rapid Transit operates predominantly in dedicated lanes, fully or  |  | activities for the BRT netw restrictions.   |
|   | partially separated from other traffic, with stops typically located in the centre of the road at signalized intersections with off-board fare collection. Buses can be higher-capacity and articulated with low-floors and other accessible features, and are powered by on-board    | Endangered Species:                          | A Species at Risk that live imminent extinction or exti   |
|   | fuel/energy.  | Environmental<br>Assessment (EA):            | A process used to determi<br>projects may have on the<br>decisions can be made on                                       |
| Centre-Running<br>Transit Lanes:                  | Dedicated transit lanes located along the centreline of the road paved<br>surface, with general traffic lanes on either side. Typically two transit<br>lanes, one in each direction of travel. Stop platforms are located at<br>signalized intersections to provide protected access. |  | projects. Types of Environ<br>Municipal Class Environ<br>Assessment Process. See  |
| Comfort Capacity:                                 | The passenger load of a transit vehicle, based on vehicle seated capacity plus approximately 20% additional passengers standing.  |  |   |



sophy built around a core set of principles that at the proper design and effective use of the ad to a reduction in the fear and incidence of ovement in the quality of life. CPTED goes al approaches to safeguarding the g natural forms of surveillance, access control ent in a deliberate attempt to present a for the purpose of positively influencing human eract with the environment.

bassenger capacity of a transit vehicle, where or cannot enter without causing serious s already on board.

n one side of the road paved surface the curb, typically placed to the right of top platforms are integrated with the sidewalk atures, located at signalized intersections to s.

an display live information and alerts for transit uptions, or delays to service. These signs can rs at decision points to allow for informed utes – particularly during construction work, where there may be road closures or

ves in the wild in Ontario but is facing ctirpation.

mine the possible impacts that proposed e environment so that the best possible on if, where, when and how to construct such onmental Assessment processes include the mental Assessment and the Transit Project ee MCEA and TPAP definitions.

| Environmentally<br>Sensitive Area (ESA):        | A natural area identified by a municipality or conservation authority as<br>fulfilling certain criteria for ecological significance or sensitivity. ESAs,<br>regardless of type, tend to be treated in much the same manner from<br>a policy perspective. In some cases, a region will assign policy<br>associated with the ESA.   | Last Mile<br>Connections:                              | The connection by other m<br>from their origin to Rapid T<br>destinations at the start ar<br>modes could include, but a<br>transit routes. The quality<br>integration of Rapid Trans<br>connections to convention<br>component of a successful |
|---|--|--|--|
| Extirpated Species:                             | A Species at Risk that lives somewhere in the world, and at one time lived in the wild in Ontario, but no longer lives in the wild in Ontario.   |  |  |
| Geographic<br>Information System<br>(GIS):      | A system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data.  | Master Plan:   | A detailed long range plan<br>infrastructure requirement<br>environmental assessmen<br>addresses Phases 1 and 2  |
| Grade:  | The rate of rise or fall with respect to the horizontal distance.  | Multi-Use Path<br>(MUP):                               | An active transportation pacyclists.   |
| Grade Separation:                               | Vertical separation of two intersecting roadways or a roadway and a railway.   | Municipal Class<br>Environmental<br>Assessment (MCEA): | A planning process that m<br>projects. It is a proponent-<br>environmental impacts of a  |
| Headway:  | The scheduled time between successive transit vehicles on a given route, usually measured in minutes.  |  | and the development of m   |
| High-Occupancy<br>Vehicle (HOV):                | A roadway lane designated for use only by vehicles with a specified minimum number of occupants, usually two or three. HOV lanes can also be opened to buses, taxis, motorcycles and/or scooters.  | Policy Headway:  | A minimum service freque agency.   |
|   |  | Proof-of-Payment                                       | A system where riders pay  |
| Intelligent<br>Transportation<br>Systems (ITS): | The use of real-time computer/communications/information technology<br>for advanced, traffic-responsive, area-wide traffic control; also, to<br>provide information which allows transportation providers to optimize<br>transportation system operations and enable travellers to use the<br>system more safely, efficiently and effectively, while increasing their<br>convenience and ease of travelling. | System:  | passes or transfers to driv<br>system also allows for all-<br>than one point of entry.   |
|   |  | Quick Start Capital<br>Improvements:                   | Improvements that can be<br>construction, which will ult   |

| Rapid Transit (RT): | Transit service separated |
|---------------------|---------------------------|
|                     | and able to maintain high |
|                     | than can be achieved by   |



modes of travel which connect passengers Transit, then from Rapid Transit to their and end of their trip, respectively. These are not limited to: walking, cycling and other of this last mile trip is dependent on the sit with the active transportation network and nal transit services. This is a critical ul Rapid Transit system.

anning document that determines nts for existing and future land uses with ent principles. At a minimum, a Master Plan d 2 of the Municipal Class EA process.

path shared between pedestrians and

must be applied to all municipal infrastructure at-driven assessment of potential of a project and includes public consultation mitigate measures.

lency for a particular route set by a transit

ay their fare through the purchase of a ticket present only when prompted by a fare stem riders do not make payments or show ivers when entering transit vehicle. This I-door entry on to transit vehicles with more

be made in advance of Rapid Transit Iltimately be integrated with the BRT network.

ed partially or completely from general traffic gher levels of reliability and vehicle productivity by transit operating in mixed traffic.

orientation.

| Revenue vehicle hours per capita:             | The number of hours each year that transit vehicles are in service and collecting fares, in relation to the population served.  | Transit Project<br>Assessment Process<br>(TPAP): | A decision-making process<br>disadvantages to the envir<br>transit project. This proces |
|---|---|--|---|
| Ridership:                                    | Revenue Passengers: The number of passengers that pay a fare to board a transit vehicle.  |  | and Metrolinx Undertaking<br>Regulation provides a fram                                 |
|   | Boardings: The number of passengers that enter a transit vehicle at a station or stop, including both fare-paying and transferring passengers.  |  | consultation and objection<br>potential environmental im<br>making can be completed     |
| Right-of-Way (ROW):                           | The area of land acquired for or devoted to the provision of a road.  | Transit Signal<br>Priority (TSP):                | A set of techniques design signalized intersections.                                    |
| Service Frequency:                            | See Headway   | Thames Valley<br>Parkway (TVP):                  | A paved mixed-use path w<br>Thames River.   |
| Species at Risk<br>(SAR):                     | Species identified as Endangered, Threatened and/or Extirpated under the Endangered Species Act (Ontario).  | Threatened Species:                              | A Species at Risk that live   |
| Transportation<br>Demand<br>Management (TDM): | A program of incentives which influence whether, when, where and<br>how people travel, and encourage them to make more efficient use of<br>the transportation system. TDM programs can be applied on a city-<br>wide basis or in a localized area, and can be focused during<br>construction.   |  | factors threatening it.   |
| Transit Oriented<br>Development (TOD):        | A form of development that focuses on inward growth through<br>intensification. Major characteristics include: sufficient density to<br>encourage public transit use; location of residences, jobs, and retail<br>destinations close to public transit; mixed uses, with retail and<br>employment within walking distance of residential areas; and urban<br>design guidelines and design features to encourage a safe pedestrian |  |   |





gned to provide priority to transit vehicles at

which runs along all three branches of the

ves in the wild in Ontario, is not endangered, ndangered if steps are not taken to address

## LIST OF ACRONYMS

| AADT      | Annual Average Daily Traffic  |
|-----------|---|
| A.M. Peak | Morning rush hour   |
| ANSI      | Area of Natural Scientific<br>Interest                              |
| APC       | Automatic Passenger Counters  |
| AODA      | Accessibility for Ontarians with<br>Disabilities Act                |
| ASA       | Automated Stop<br>Announcement                                      |
| BAU       | Business as Usual   |
| BIA       | Business Improvement<br>Association                                 |
| BRT       | Bus Rapid Transit   |
| CAD/AVL   | Computer Aided Dispatch and<br>Automatic Vehicle Location<br>System |
| CIP       | Community Improvement Plans   |
| CIPA      | Community Improvement Plan<br>Area                                  |
| CN        | Canadian National Railway   |
| CPR       | Canadian Pacific Railway  |
| CPTED     | Crime Prevention Through<br>Environmental Design                    |
| CUTA      | Canadian Urban Transit<br>Association                               |

| dB    | Decibel (sound measurement)                   | Ν    |
|-------|---|------|
| EA    | Environmental Assessment                      |      |
| EPR   | Environmental Project Report                  |      |
| ESA   | Environmentally Sensitive Area                |      |
| GIS   | Geographic Information<br>System              |      |
| GGH   | Greater Golden Horseshoe                      | P.M. |
| GHG   | Greenhouse Gas                                | PF   |
| НСМ   | Highway Capacity Manual                       |      |
| HOV   | High-Occupancy Vehicle                        | R    |
| ITS   | Intelligent Transportation<br>Systems         |      |
| LRT   | Light Rail Transit                            | R    |
| LTC   | London Transit Commission                     | F    |
| MCEA  | Municipal Class Environmental<br>Assessment   | I    |
| MNRF  | Ministry of Natural Resources and Forestry    |      |
| MOECC | Ministry of Environment and<br>Climate Change |      |
| MSF   | Maintenance and Storage<br>Facility           | -    |
|       |   |      |

MTO Ministry of Transportation Ontario

| Ministry of Tourism, Culture and Sport                    |
|---|
| Multi-Use Path  |
| MNRF's Natural Heritage<br>Information Centre             |
| Official Plan Amendment                                   |
| Public Information Centre                                 |
| afternoon rush hour                                       |
| Passengers per hour per direction                         |
| Right-of-Way  |
| Revised Statutes of Ontario                               |
| Rapid Transit   |
| Rapid Transit Implementation<br>Working Group             |
| Rapid Transit Master Plan                                 |
| Transit Cooperative Research<br>Program                   |
| Transportation Demand<br>Management                       |
| 2030 Transportation Master<br>Plan Smart Moves (May 2013) |
| Transit Oriented Development                              |
| Transit Project Assessment<br>Process                     |
|   |

**TSP** Transit Signal Priority



- **TVP** Thames Valley Parkway (trail system along the Thames River)
- UTRCA Upper Thames River Conservation Authority
  - VMS Variable Messaging System