Appendix B-4: Stops and Streetscapes Workshop Summary Report
Stops and Streetscapes Workshop Summary

Bus Rapid Transit System

Prepared for City of London by IBI Group
WSP
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1 Introduction

In July 2017, City of London Council approved the Rapid Transit Master Plan, which established the 24 km BRT network (Exhibit 1-1) for London’s Bus Rapid Transit System.

The City of London and its consultants’, IBI Group and WSP, then undertook pre-planning and consultation to prepare for the Province’s mandated Transit Project Assessment Process (TPAP).

Consultation included hosting a public workshop for the design of rapid transit stops and streetscapes. The purpose of the workshop was to collect input and ideas from the public that would help shape the features and design of rapid transit stops and streetscapes, including:

- Safety and security;
- Accessibility;
- Heritage and Culture;
- Stop features, and
- Streetscape design.

Exhibit 1-1 Approved Bus Rapid Transit Network
# 2 Key Findings

Exhibit 2-1 is a summary of key findings based on public feedback and comments collected at the Stops and Streetscapes Workshop.

**Exhibit 2-1 Key Findings from the Bus Rapid Transit System Stops and Streetscapes Workshop**

<table>
<thead>
<tr>
<th>BOOTH TOPIC</th>
<th>KEY FINDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heritage and Transit Shelter Platform</td>
<td>• Heritage should be reflected in the design/form of the shelter.</td>
</tr>
<tr>
<td><em>The Heritage Booth invited the public to comment on heritage elements and how they could be incorporated into the rapid transit shelters/platforms (Exhibit 5-2).</em></td>
<td>• Shelters should be designed to withstand natural elements, vandalism, and to provide comfort.</td>
</tr>
<tr>
<td></td>
<td>• Stop design should include unique artwork that is reflective of the location (neighbourhood) of the shelter.</td>
</tr>
<tr>
<td></td>
<td>• Design of form of shelter should “feel like London”.</td>
</tr>
<tr>
<td>Heritage Elements</td>
<td>• Consult archives when using images to highlight London’s past.</td>
</tr>
<tr>
<td><em>Comments were received concerning significant physical elements that express the heritage of an area around the BRT network (Exhibit 5-3)</em></td>
<td>• Incorporate landmarks and architecture that are unique to London.</td>
</tr>
<tr>
<td></td>
<td>• Look to local heritage architecture, such as windows (e.g., keyhole, stained glass), gables and doorways characteristic of London.</td>
</tr>
<tr>
<td></td>
<td>• Incorporate historical maps.</td>
</tr>
<tr>
<td>Heritage Stories</td>
<td>• Historical London figures should be commemorated (e.g., Jack Chambers, Alice Munro), as well as historical events/groups (e.g., Memorial Cup, Garrison), and medical advancements (e.g., Banting).</td>
</tr>
<tr>
<td><em>Comments were received concerning the stories, memories and events that should be commemorated along the BRT network (Exhibit 5-4).</em></td>
<td>• The extensive literature on London’s history should be consulted when integrating heritage into design of stops.</td>
</tr>
<tr>
<td></td>
<td>• Highlight former places (e.g., London Street Railway).</td>
</tr>
<tr>
<td></td>
<td>• Each stop location has local stories to consider incorporating.</td>
</tr>
<tr>
<td>Stop Features - Curbside</td>
<td>• Shelters should protect from the elements (e.g., wind, rain, snow).</td>
</tr>
<tr>
<td><em>Attendees were asked to comment on what designers should consider for each of the elements of the transit stop. They were asked to comment on both curb-side and</em></td>
<td>• Stops should include:</td>
</tr>
<tr>
<td></td>
<td>o Bike racks, waste/recycling receptacles, and the platform should be distinguishable from the sidewalk.</td>
</tr>
<tr>
<td></td>
<td>o Lighting as a safety feature (lighting could run on sensors and use environmentally friendly energy sources, such as solar).</td>
</tr>
<tr>
<td></td>
<td>o Emergency intercoms</td>
</tr>
</tbody>
</table>
### Centre Platform Stop Features (Exhibit 5-5)

- Wayfinding signage, route information and durable materials.
- Accessibility features, such as braille, tactile materials and audio information for next bus.
- Off-board fare collection and vending.

### Stop Features – Centre-running

- Platforms should be visually distinct from sidewalk and road treatment.
- Shelters should protect from the elements (e.g., wind, rain, snow).
- Stops should include:
  - Accessibility features such as braille, ramps, and (continuous, non-stop) railings, audio messages, and high benches.
  - Safety features such as emergency intercom.
  - Off-board fare collection and vending.
  - Bike racks and other secure bike parking facilities.

### Stop Features – Top 3 Survey

As of November 15, 2017, the top three features as voted by 45 responses are:

1. Rapid transit bus arrival information (58%)
2. Fully enclosed shelter (47%)
3. Connecting bus arrival information (42%)

### Safety and Security

- Crosswalks to access platforms, accessible features, enough crossing time.
- Security cameras monitored and call buttons.
- Transparent materials and well-lit areas; not too much light near residential areas.

### Median Stops

- Audio announcements should be included.
- Consult with the community on how to offer additional guidance for visually impaired to reach the stop platform (braille and tactile strips are not sufficient).
- Wide platforms for wheelchair and scooter access.

### Accessibility

- Provide uninterrupted railings.
- Ensure adequate space for wheelchairs and walkers.
- Open span of bench.

---

**centre platform stop features (Exhibit 5-5).**

**Stop Features – Centre-running**

**Attendees were asked to comment on what designers should consider for each of the elements of the transit stop. They were asked to comment on both curb-side and centre platform stop features (Exhibit 5-5).**

- Platforms should be visually distinct from sidewalk and road treatment
- Shelters should protect from the elements (e.g., wind, rain, snow).
- Stops should include:
  - Accessibility features such as braille, ramps, and (continuous, non-stop) railings, audio messages, and high benches.
  - Safety features such as emergency intercom.
  - Off-board fare collection and vending.
  - Bike racks and other secure bike parking facilities.

- Waste/recycling receptacles.

**Stop Features – Top 3 Survey**

A short survey was included at this booth, which asked attendees to select three features (among 11 options) that they considered most important for a BRT stop (Exhibit 5-6).

As of November 15, 2017, the top three features as voted by 45 responses are:

1. Rapid transit bus arrival information (58%)
2. Fully enclosed shelter (47%)
3. Connecting bus arrival information (42%)
### Streetscape – Downtown

*Attendees provided comments on elements the designers should consider for streetscape, with focus on a typical BRT corridor and downtown corridor (Exhibit 5-10).*

- Have trees/gardens/plants
- Incorporate wider sidewalks
- Integrate bike lanes with transit / separate bike lanes from traffic.
- Reinforce unique community identity for each place on corridors.

### Streetscape – Typical

*Attendees provided comments on elements the designers should consider for streetscape, with focus on a typical BRT corridor and downtown corridor (Exhibit 5-10).*

- Have trees, local plant species, sprinklers or rain gardens.
- Preserve as many trees as possible, and plan more.
- Pedestrian friendly, indestructible elements (e.g., wide sidewalks, crossing time at lights), comfortable seating.
- Incorporate separated / protected bike lanes.
- Use materials that are accessible (e.g., brick pavers are a disability hazard).
- Ensure adequate lighting that is appropriate or the neighbourhood.
- Reinforce unique community identity for each place on corridors.

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### 3 Notification of London’s Bus Rapid Transit System Transit Stops and Streetscapes Workshop

Notification of the workshop was posted on the Shift website ([http://www.shiftlondon.ca/brt_stop_workshop](http://www.shiftlondon.ca/brt_stop_workshop)), which was accessible to all external stakeholders and members of the public. Announcements were made on the City’s Facebook, Twitter and Instagram pages. Ads were also placed on Facebook *(Appendix A)* and Instagram *(Appendix B)* and ran from November 8 – 15, 2017.

Posters *(Appendix C)* advertising the workshop were placed at the following locations:

- Boyle Memorial Community Centre;
- Byron Optimist Community Centre;
- Carling Heights Optimist Community Centre;
- Civic Gardens;
- Earl Nichols Recreation Centre;
- East Lions Artisan Centre;
- Hamilton Road Seniors’ Centre and Community Centre;
- Kinsmen Recreation Centre;
- Kiwanis Seniors’ Community Centre;
Lambeth Community Centre;
Medway Community Centre;
North London Optimist Community Centre;
South London Community Centre;
Springbank Gardens Community Centre;
Stoney Creek Community Centre;
Stronach Community Recreation Centre;
Dearness Home;
City Hall; and
All London Public Libraries.

Announcements of the workshop were made on the radio stations AM 980 and FM 96.
The Notice of London’s Bus Rapid Transit System Transit Stops and Streetscapes Workshop was also emailed to those on the public mailing list by the City. The session was held as follows:

Date: Wednesday, November 15, 2017
Time: Information Display Drop In: 4:00 p.m. to 8:00 p.m.
Location: Central Library, 2nd Floor
           251 Dundas Street East
           London, ON

The workshop was a drop-in format where members of the project team were available to answer questions and address concerns. There were a number of interactive exhibits for the public to engage in and they were arranged in a series of booths (Exhibit 3-1). The booths included:

- Where do you live/work/attend school map;
- Heritage;
- Stop Features;
- Safety and Security
- Accessibility; and
- Streetscape

A summary of public comments, arranged by booth, are in Section 4
Exhibit 3-1 Workshop Floor Plan
Approximately 93 individuals attended the workshop. Members of City Council were in attendance and included Councillor Squire, Councillor Usher and Councillor Helmer. LTC Commissioner Dean Sheppard was also in attendance. Members of the project team were available to facilitate the understanding of information presented at the workshop. The project team present at the workshop included the following individuals:

- Jennie Ramsay, City of London
- Edward Soldo, City of London
- Ardian Spahiu, City of London
- Andrea Rosebrugh, City of London
- Claudia Jaimes, City of London
- Sam Shannon, City of London
- Brian Hollingworth, IBI Group
- Joe Heyninck, IBI Group
- Margaret Parkhill, IBI Group
- Grace Gao, IBI Group
- Ana-Francisca de la Mora, IBI Group
- Bijan Ghazizadeh, IBI Group
- Naquib Hossain, IBI Group
- Peter Vander Sterre, IBI Group
- Alex Mereu, IBI Group
- Hailey McWilliam, IBI Group
- Marianne Alden, IBI Group
- Andrew Shea, WSP

4 Information Presented

The exhibits were organized in a manner which effectively presented information on the project. The exhibits listed in Exhibit 4-1 were on display at the workshop and can be viewed in full in Appendix D.

Exhibit 4-1 Workshop Exhibits

| i. Welcome Board | xiii. Stop Features: Curbside |
| ii. We want Your Input | xiv. Stop Features: Centre Platform |
| iii. City-Wide Benefits of Rapid Transit | xv. Master Plan Streetscape Vision |
| iv. Project Timeline | xvi. Common Streetscape Elements |
5 Workshop Station Comment Summary

The following sections summarize the public comments received at the workshop booths.

5.1 Where do you Live/Work/Attend School Map

Upon registering at the welcome desk, participants were provided with dots to place on the map, depicting where they live (red dot), work (yellow dot) and attend school (blue dot). There was a scattering of red dots around the City. Many were placed along the north BRT corridor and the downtown area. Many of the red dots were placed near a potential future London Transit Commission (LTC) route.

The yellow dots were concentrated mainly in the downtown core, indicating many of the attendees work downtown. A number of yellow dots were placed by Western University.

There were only a handful of blue dots placed on the map. They were at Western University, Fanshawe College and a few that could indicate high schools.
5.2 Heritage Booth

The Heritage Booth invited the public to comment on:

- Integrating London’s heritage into the Rapid Transit Shelter or Platform;
- Heritage Elements – significant physical elements that express the heritage of an area around the BRT network; and
- Heritage Stories – stories, memories and events commemorated along the BRT network.

5.2.1 London’s Heritage and Transit Shelter/Platform

A number of comments were received concerning integrating heritage into the transit shelters and platforms. The comments are summarized in Exhibit 5-2.
Exhibit 5-2 London’s Heritage and Transit Shelter/Platform Comments

<table>
<thead>
<tr>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Design of shelter/platform to reinforce community identity.</td>
</tr>
<tr>
<td>• Heritage reflected in form of structures.</td>
</tr>
<tr>
<td>• All enclosed shelters. We don’t live in Vancouver.</td>
</tr>
<tr>
<td>• Design of form of shelter should feel like London.</td>
</tr>
<tr>
<td>• Easy visibility of buses from shelter.</td>
</tr>
<tr>
<td>• Is this is what these will look like when they are located on people’s doorsteps? Make them soundproof and indestructible. All shelters along Richmond are long gone because of vandalism.</td>
</tr>
<tr>
<td>• Use consistent modern shelter design but with historic images unique to each area/block.</td>
</tr>
<tr>
<td>• As long as it is available to everyone.</td>
</tr>
<tr>
<td>• Have an evolving mural. Community messages. Info on resources, community events, activities and services.</td>
</tr>
<tr>
<td>• Might there be ways of borrowing forms from older London Street furniture like hitching posts that surround the cenotaph?</td>
</tr>
<tr>
<td>• Fully enclosed.</td>
</tr>
<tr>
<td>• Room to turn a stroller or wheelchair.</td>
</tr>
<tr>
<td>• Londoners hate the cold and outdoors.</td>
</tr>
<tr>
<td>• Local image and/or story board on back panel(s).</td>
</tr>
<tr>
<td>• Consider the shelter in front of St. Paul’s cathedral. It has important elements from London.</td>
</tr>
</tbody>
</table>

5.2.2 Heritage Elements

Comments were received concerning significant physical elements that express the heritage of an area around the BRT network (Exhibit 5-3).

Exhibit 5-3 Heritage Elements Comments

<table>
<thead>
<tr>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mutually shared architecture types.</td>
</tr>
<tr>
<td>• BRT will go through neighbourhoods. Please preserve the heritage and culture of the neighbourhood. Homes!</td>
</tr>
</tbody>
</table>
- Use consistent modern shelter design but with images unique to each area/block.
- Look at the gables and key windows from heritage architecture.
- Trees.
- Buff (yellow) brick.
- “Cornhusk” design of verge boards on the House of Five Gables at the south-east corner of Richmond and Sydenham.
- Slat board designs under porches.
- Stained glass windows and London doorways, which are unique.
- There are a lot of images and archives to source unique information.
- Use registered plans for the vicinity and birds eye views from the past.
- Were there stop shelters when London had rail transit (streetcars)? Can we consider that in the design?
- Unique landmarks in and of themselves.
- Built form that is unique to London.
- Hitching posts that surround cenotaph (cast from original on Princess and Palace, north-east corner).
- Designated bike routes.
- The river and its spring flooding.
- Gable trim.
- Include map of old heritage in shelter.
- Not a copy of heritage elements, but reflective of/sympathetic to nearby heritage elements.
- Superimpose or overlay of maps of the past and today.
- London doorways.
- Keyhole windows. Nearly unique to London and very characteristic of London.
- Look at example from Galveston, Texas.
- Don’t try to replicate in stop design, but include small elements.

### 5.2.3 Heritage Stories

Comments were received concerning the stories, memories and events that should be commemorated along the BRT network (Exhibit 5-4).

**Exhibit 5-4 Heritage Stories Comments**
- Jack Chambers.
- There are stories for every proposed stop on the routes!
- Stops in heritage districts can tell the story of the areas.
- Art pieces incorporated into shelters can do similar things.
- Closure of the LSR in the 1940s.
- Widening of Richmond will invade people’s properties and decrease home value. How will you compensate home owners?
- I remember when Richmond Street was a 2-lane road north of Oxford. It cuts through a cohesive residential area. Remember that when the BRT lanes force me to walk 3 blocks to get across the street.
- British Garrison.
- Paul Peel spending his teenage years in a house just west of Oxford and Richmond.
- Stan Rogers began his song-writing career in London living on Maitland.
- Alice Munro’s time as a writer in residence at Western University.
- London Hunt and Country Club when it was at Western Campus.
- South Street Hospital.
- Look at “Most Interesting Londoners” book edited by Mike Baker
- We do have kids that live and play on King and Adelaide. Will traffic slow here?
- Garth Hudson.

5.3 Stop Features

Attendees were asked to comment on what designers should consider for each of the elements of the transit stop. They were asked to comment on both curbside and centre platform stop features (Exhibit 5-5).

Exhibit 5-5 Stop Feature Comments

<table>
<thead>
<tr>
<th>CURBSIDE STOP FEATURES</th>
<th>CENTRE PLATFORM STOP FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Suggestions</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Lighting</td>
<td>• Full cut off light fixtures (meaning no upward lighting).</td>
</tr>
<tr>
<td></td>
<td>• Bright lighting. Safety feature.</td>
</tr>
<tr>
<td></td>
<td>• Lights on sensors. Nobody there – no light. Light impacts nearby residents.</td>
</tr>
<tr>
<td></td>
<td>• No comments received.</td>
</tr>
<tr>
<td>Signage</td>
<td>• Bus stop phone number in large letters.</td>
</tr>
<tr>
<td></td>
<td>• Braille signage.</td>
</tr>
<tr>
<td></td>
<td>• Pillar with street name and area name, map with &quot;you are here&quot; sign, separate from transit info.</td>
</tr>
<tr>
<td>Platform Paving</td>
<td>• Add some texture/variety of materials to distinguish platform from sidewalks.</td>
</tr>
<tr>
<td></td>
<td>• Smoking area or non-smoking should be considered with smoking at the end.</td>
</tr>
<tr>
<td></td>
<td>• Heating should not come from ceiling only from floor so there is no snow on floor.</td>
</tr>
<tr>
<td>Advertising Panel</td>
<td>• Great if it allows to recuperate costs.</td>
</tr>
<tr>
<td></td>
<td>• Advertise for light rail transit.</td>
</tr>
<tr>
<td></td>
<td>• Ensure advertising does not block sightlines.</td>
</tr>
<tr>
<td></td>
<td>• No thanks! There is no place for this in residential areas.</td>
</tr>
<tr>
<td>Shelter Roof</td>
<td>• Solar panels on the roof. Make sure it is well lit at night.</td>
</tr>
<tr>
<td></td>
<td>• Make sure there is sufficient roof protection.</td>
</tr>
<tr>
<td></td>
<td>• Solar powered roof panels for shelter lighting.</td>
</tr>
<tr>
<td>Bench</td>
<td>• No comments received.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>High Bench</td>
<td>• No comments received.</td>
</tr>
<tr>
<td>Railing / Guardrail</td>
<td>• No comments received.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Open Shelter** | **Back of platform needs guardrail. Approach to platform needs a bollard.**  
| | **Continuous non-stop rail from bottom to top.**  
| | **Open bus shelters provide coverage and save money.**  
| | **We don’t need iconic structures, but functional that fits in the area. This is not tourists.**  
| | **Shelters should fit within the context and scale - not “distracting” to drivers. Most people run out of their houses or use umbrellas.**  
| | **Open is good if you aren’t waiting for ½ - 1 hour in intense weather.**  
| | **All shelters enclosed – we don’t live in Vancouver.**  
| | **Glass –visibility.**  
| | **Closed shelter with heat (little) please.**  
| | **Use roof parcels to create visual interest.**  
| | **Enclosed protect from rain and snow and wind.**  
| | **Shelters similar to York Region.**  
| | **Enclosed and soundproof so nearby residents are not disturbed by noise.**  
| | **Should be enclosed but visible (glass).**  
| | **Enclosed with little heat.**  
| | **Enclosed please we don’t live in Vancouver.**  
| | | **“You are here” showing (with an arrow or something similar) the direction you are facing on the map.**  
| | **Community event information board.**  
| | **Station name or cross-street name needs to be prominent on map or shelter.**  
| | **Should be at every stop with clear routes designated.**  
| | **Digital sign for ease of updating and visibility at night.**  
| | **Wayfinding in 800m radius of area.**  
| | **Route info and map should have system map and details of local area near stop.**  
| | **Accessible to visually impaired and wheelchair height.**  
| | **Wayfinding is good for locals and tourism.**  
| | **Make it available at every stop. Very important for seniors and for women at night.**  
| | **Safety! Yes!**  
| | **No smoking on platform.**  
| | **Yes.**  
| | **Audio.**  
| | **Electronic ticker showing incoming buses mounted to roof of shelter and at each.**  
| | **Yes.**  
| | **Definitely do this for RT and local buses.**  
| | **Consider the strong east wind currents in the winter. Enclosed areas are good or staggered side panels.**  
| | **Walls or enclosures down to ground. Rain wets feet otherwise.**  
| | **Design for winter. It is our peak ridership period.**  
| | **Could shelters incorporate green elements i.e. green roof?**  
| | **Bus transfer station (indoor) near where most bus lines cross.**  
| | **Enclosed Area** |
| Back Panel                                                                 | Wide enough to accommodate two people comfortably.  
|                                                                           | Enclosed areas to be sized appropriately, some areas may need bigger ones.  
|                                                                           | An enclosed area is a must to be fully protected from snow and rain.  
|                                                                           | Consider heat in enclosed shelters.  
|                                                                           | Enclosed shelter. Climate change.  
|                                                                           | Make sure enclosed areas are accessible.  
|                                                                           | Sliding doors?  
|                                                                           | Solar powered (roof) lighting on all shelters.  
|                                                                           | High visibility clear glazing for majority.  
|                                                                           | Smash proof glass considering there is a lot of vandalism.  
|                                                                           | Non-breakable robust materials. Specifically glass.  
|                                                                           | What is the back panel facing? Is it 5 feet away from somebody’s front door?  
|                                                                           | Back wall facing prevailing winds specifically during winter.  
|                                                                           | No comments received.  
| Bike Racks                                                                 | Visible.  
|                                                                           | Allow for as many bike racks as possible.  
|                                                                           | Consider bike parking areas at strategic places.  
|                                                                           | More bike racks!  
|                                                                           | More than single bike racks. Need some sort of better security for bikes.  
|                                                                           | Enclosed, secure bike parking.  
|                                                                           | Secure bike lockup.  
|                                                                           | People need their bikes at the other end of their trip – racks belong on buses, not at the stops.  
| Ticket Vending Machine                                                    | It’s always lovely when these display the time when not being used.  
|                                                                           | One or more than one?  
|                                                                           | Ticket vending machines are important at each stop.  
|                                                                           | Low level to be easily reached from a push chair.  
|                                                                           | Braille.  
|                                                                           | Ticket machine next to map. Transit map perhaps on backing of bus stop / shelter.  
|                                                                           | Mobile payment options.  
|                                                                           | Is this vandal proof? Please consider the invitation to bring crime to these stops.  
|                                                                           | The blind and deaf. Non-English speakers/readers.  
|                                                                           | More ticket transfer.  
|                                                                           | Should have ticket vending at every centre platform stop and every major stop.  
| Platform Edge                                                            | Yellow contrast.  
|                                                                           | Urban braille on the ground.  
|                                                                           | No comments received. |
**Waste Receptacles**
- Waste receptacles that announce each category of waste and with colour coding to reduce cross-contamination. See Barcelona waste receptacle design for interesting example.
- Recycling receptacle.
- Yes to garbage cans on a stop so there is less litter.
- Please don’t shelter them.
- Recycling.
- Absolutely garbage container, recycling, etc.
- Recycling receptacle.
- Of course.

**Ramp**
- No comments received.
- Not too steep.
- More time allowed for seniors; special abled to cross to bus.
- More protection as in Viva with “banana walls” most important.

**Pylon**
- No comments received.
- Yes at each end at least for safety.

**General:**
- Snow removal. Make sure there is an efficient method for removing.
- Signalling to be audible for accessibility.
- Make sure there is enough rain protection.
- Make sure it stands the test of time with contemporary simple design, not replicating the past forms.
- Robust, vandal resistant materials and security cameras.
- Contrast with surroundings. Bigger the contrast the better. Branding.
- Shelter clearly identifiable. It helps safety by letting drivers know what it is from afar.
- I encourage curves and diagonal lines on the design as opposed to boxy.
- Not all shelters are the same. Need larger in some places.
- Special stations at Western, Fanshawe, Victoria Park, OEV, Western Fair, Hospitals.
- Potential for analytics to better understand traffic patterns for future growth and to optimize the current use.
- Make sure is accessible, mobility devices (current bus shelters are not wide enough).
- Have stations like VIVA for some major stations.

There was a short survey at this booth that asked the attendees to check three features they considered most important for a BRT stop. The features they could choose from included:

- Fully enclosed shelter;
- Partially enclosed shelter;
- Benches;
- Leaning bars;
- Rapid Transit arrival information;
- Connecting bus arrival information;
- Heating;
• WiFi;
• Charging station for mobile phones;
• Area map with landmarks; and
• Other.

The results of the survey were projected at the workshop in real-time. There were 45 surveys submitted and the results are in Exhibit 5-6. Overall, 58% of respondents identified Rapid Transit bus arrival information, 47% a fully enclosed shelter and 42% connecting bus arrival information as the top three features.

Exhibit 5-6 Top Three Features Considered Most Important for BRT Stops (as of November 15, 2017)

5.4 Safety and Security

Attendees were asked to comment on what elements make them feel most safe at a transit stop (Exhibit 5-7).

Exhibit 5-7 Safety and Security Comments
- Reliable service that is on time.
- Next arrival audible.
- Have staff on site.
- Large waiting areas.
- Windows need yellow stripe across middle.
- Security cameras monitored.
- Emergency assistance module.
- Seating.
- Not too much light near residential areas.
- Braille signage.
- Should be a late bus running from west to east and north to south so people at bars downtown can use public transit to get home at quitting time. Walking a couple of kilometres is doable – walking 16km from Downtown is not.
- Audible route info for visually impaired.
- All elements are important.
- Safe crosswalks to stations.
- Wide, paint markings, well lit, signage.
- Continuous hand rails are important on ramps.
- #AODA fail – look at this website for design failures.
- Lighting.
- Safety buttons to call for help if and when needed.
- Actual leaves and arrives as specified. On time.
- Intercom.
- Enough time to cross to station (35 seconds is not enough).
- DWA? Not needed at every stop, but on main intersections such as Dundas & Clarence.
- Well-lit areas.
- Transparent materials are great as long as there is a continuous visual deterrent yellow is ideal.

### 5.5 Median Stops

Attendees were asked to comment on median stops (Exhibit 5-8).

**Exhibit 5-8 Median Stop Comments**
5.6 Accessibility

Attendees were asked to comment on accessibility (Exhibit 5-9).

Exhibit 5-9 Accessibility Comments

<table>
<thead>
<tr>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Get rid of “beg buttons”. Cue pedestrians crossing with car traffic lights.</td>
</tr>
<tr>
<td>• Help visually impaired know when they have reached the bus stop area. Talk to the community about how to do this.</td>
</tr>
<tr>
<td>• Audio announcement.</td>
</tr>
<tr>
<td>• Wider or no wall for those in wheelchairs (in particular, wider chairs) and scooters.</td>
</tr>
<tr>
<td>• Make sure its low enough.</td>
</tr>
<tr>
<td>• Braille.</td>
</tr>
</tbody>
</table>

5.7 Streetscape

Attendees provided comments on elements the designers should consider for streetscape. They were asked to comment on a typical BRT corridor and downtown BRT corridor (Exhibit 5-10).

Exhibit 5-10 Streetscape Elements Comments

<table>
<thead>
<tr>
<th>STREETSCAPE ELEMENTS - DOWNTOWN</th>
<th>STREETSCAPE ELEMENTS - TYPICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees and Plants</td>
<td></td>
</tr>
<tr>
<td>• Rain water gardens.</td>
<td>• More trees because it will make the area more lively and bright.</td>
</tr>
<tr>
<td>• Street trees stay healthy/mature to provide shade to the SW.</td>
<td>• Local species.</td>
</tr>
<tr>
<td>• Tree species that have historically lined London avenues.</td>
<td>• How we could get people aware to have our London City completely clean.</td>
</tr>
<tr>
<td>• Local trees.</td>
<td>• If trees and plants are in medians can water be run to them for sprinklers to avoid a water truck blocking lanes?</td>
</tr>
<tr>
<td>• Incorporate plants into the bus stops.</td>
<td>• Can trees in median have electricity run to them for lights and uplights at the holidays?</td>
</tr>
<tr>
<td><strong>IBI GROUP</strong> STOPS AND STREETSCAPES WORKSHOP SUMMARY</td>
<td><strong>BUS RAPID TRANSIT SYSTEM</strong> Prepared for City of London</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

- Can trees have electricity run to them for uplights as holiday lights?
- As many trees as possible. Forest City.
- How will trees/plants in the median be watered? Sprinklers?
- Keep trees.
- Nature’s beauty.
- Keep trees! Forest City!
- No lane widenings and no loss of general purpose lanes.

**Sidewalks**

- Is 2 metres enough walking space in Downtown areas?
- Please no brick pavers (disability hazard). If you want to know why check Richmond between York and King.
- Enough crossing time at lights.
- Ensuring sidewalks on both sides of the road are wide enough.
- Working crossing buttons.
- Guardrails at sharp turns e.g. Wellington Road curve.

**Cycling**

- Seamless integration of bike lanes with transit.
- Extend proposed cycle track along Wellington, to at least Base Line instead of Commissioners.
- Separation of bike lanes from traffic.
- Bike lanes?
- Protected bike lanes.
- Please incorporate bike lanes.
- Prefer centre of the road bus stop reduce cars lanes but keep bike lanes add transit bus way.
- Don’t remove healthy trees for road widening.
- Retain bike lanes on arterial roads.
- Protected bike lanes please. More bike racks.
- Separate cycling lanes.
- Like Toronto Bloor Street.
- Cycle tracks. AAA cycle tracks.
- Place cycle tracks separate from traffic.

**Benches**

- No comments received.
- Should feel like London. The benches with a forest city tree design did this well.
- Benches must be indestructible. Every bench on Richmond has been removed – smashed and vandalized.
6 Comments from the Public

The public were encouraged to submit comments. Those who provided contact information were added to the project contact list to receive future notifications relating to the study. In total 39 comment forms were submitted to the project team. Exhibit 6-1 summarizes written comments/concerns received. All comment forms are available in Appendix E.

Exhibit 6-1 Public Comments

<table>
<thead>
<tr>
<th>HOW OFTEN DO YOU USE TRANSIT IN LONDON?</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 – Often</td>
</tr>
<tr>
<td>18 – Sometimes</td>
</tr>
<tr>
<td>9 – Never</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IN YOUR OPINION, WHAT ELEMENTS MAKE A STREET A MORE WALKABLE PLACE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sidewalks:</td>
</tr>
<tr>
<td>o Width of sidewalks (9 comments)</td>
</tr>
</tbody>
</table>
- Level sidewalks (3 comments)
- Clear sidewalks (4 comments)
- Fix the sidewalks (3 comments)
- Weather based maintenance e.g., snow removal (5 comments)
- Walkability (2 comments)
- Crosswalks
- Well timed traffic lights
- Safer intersections
- Minimize travel lanes for pedestrian crossings
- Bike lanes (5 comments)
- No bicycles on the sidewalks
- Lighting (11 comments)
- Closed street e.g., Dundas is full of vendors and buskers
- Green environment, more trees and shrubs (11 comments)
- Reduction of vehicle traffic
- Restrict downtown vehicular traffic with fees, tolls and prohibited areas
- Amenities within a short distance
- Commercial development e.g., restaurants (4 comments)
- Street level businesses
- Architecture
- Have a mix of old and new, large and small
- Points of interest
- Safety (4 comments)
- Street furniture
- Less driveways
- Travel time
- Accessibility
- Heated Shelters
- Access to bus stops
- Less traffic (2 comments)
- Art
- Interactive streetscape
• Transit
• Access from suburbs to university, colleges and downtown

PLEASE PROVIDE YOUR IDEAS AND COMMENTS ON THE MATERIAL PRESENTED TODAY

• Great comparisons to other Rapid Transit systems in Ontario
• Look at light rail again, BRT is out of date
• BRT is a waste of money
• Expand existing bus routes and buy more buses
• BRT will compromise traffic flow
• Need service for new subdivisions and industrial areas
• Open and well-lit bus shelters
• Information and heritage screens not needed
• Route information at shelters crucial
• Good presentation (11 comments)
• Process seems preliminary. Need more ideas about constraints e.g., Richmond Row street width, rail tracks at Richmond and Oxford
• Interested in seeing how BRT will revitalize downtown
• BRT has promise
• No west, northwest or north facing entrances in shelters
• Heat in shelters (2 comments)
• Supports park and ride
• Need sidewalks on right side of the road from White Oaks Mall to Victoria Hospital
• Southbound from Western Campus to White Oaks Mall there are a lack of benches and bus shelters
• Central, off-street transfer site with indoor waiting rooms
• Have an app for BRT
• Lacked vision, appeared to be about the design of the bus shelters
• Disagree with King Street being two-way
• Timeframe not well defined
• Need cycle tracks
• Need shelters to protect from rain
• Non-BRT buses utilizing the platforms at transfer points
• Need transit to reduce traffic jams, pollution and wasting time
• How some stops will have design considerations
• Have smaller neighbourhood meetings to discuss design elements specific to particular sections of the route
• Concerned about widening the road and impacts on property
• BRT is being used to encourage development and high-rises on Richmond Street
• Have public washrooms at frequently used stops
• Supports heritage being integrated into stops (2 comments)
• Supports accessibility being integrated into stops (2 comments)
• Don’t copy other city’s design, make it unique to London
• Have BRT run later than current bus system (2 comments)
• More details specific to downtown needed
Stops and Streetscapes Workshop Summary

Appendix A – Bus Rapid Transit System Stops and Streetscapes Workshop Facebook Ads

Prepared for City of London by IBI Group
WSP
March 14, 2018
Help influence the features and design of London's Bus Rapid Transit System!

HAVE YOUR SAY!

LONDON'S BUS RAPID TRANSIT SYSTEM

BRT Stops & Streetscapes Workshop

Learn More

rtworkshop.eventbrite.ca/

Ahmad Alblouchi and 15 others

8 Comments 2 Shares
You can influence the features and design of London's Bus Rapid Transit System stops and streetscapes at the November 15th workshop.

REGISTER: https://goo.gl/A8SWw7
Help influence the features and design of London's Bus Rapid Transit System stops and streetscapes including:

- Safety and Security
- Accessibility
- Heritage and Culture... See More

LONDON'S BUS RAPID TRANSIT SYSTEM
STOPS & STREETSCAPES WORKSHOP!

Where
Central Library
When
Nov 15th / 2017

RT Stops and Streetscape Workshop
Wed 4 PM - 251 Dundas St, London, ON N6A 6H...
33 people interested · 6 people going

18 Likes 6 Comments
Help influence the features and design of London's Bus Rapid Transit System stops and streetscapes including:

- Safety and Security
- Accessibility
- Heritage and Culture

Collaborate with the City on the... More

**LONDON'S BUS RAPID TRANSIT SYSTEM**

**STOPS & STREETSCAPES WORKSHOP!**

**Where**
Central Library

**When**
Nov 15th / 2017

**WED, NOV 15**

**RT Stops and Streetscape Workshop**

33 people interested · 6 going

LIKE

Comment
Appendix A – Bus Rapid Transit System Stops and Streetscapes Workshop Facebook Ads
Help influence the features and design of London's Bus Rapid Transit System!

HAVE YOUR SAY!

LONDON'S BUS RAPID TRANSIT SYSTEM

BRT Stops & Streetscapes Workshop

Learn More

rworkshop.eventbrite.ca/

Ahmad Alblouchi and 15 others

8 Comments  2 Shares
Shift London

You can influence the features and design of London's Bus Rapid Transit System stops and streetscapes at the November 15th workshop.

REGISTER: https://goo.gl/A8SWw7
Shift London shared their event.

Help influence the features and design of London's Bus Rapid Transit System stops and streetscapes including:

- Safety and Security
- Accessibility
- Heritage and Culture... See More

**LONDON'S BUS RAPID TRANSIT SYSTEM**

**STOPS & STREETSCAPES WORKSHOP!**

**Where**
Central Library

**When**
Nov 15th / 2017

**NOV 15**

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**LONDON’S BUS RAPID TRANSIT SYSTEM**

**STOPS & STREETSCAPES WORKSHOP!**

**Where**
Central Library

**When**
Nov 15th / 2017

**WED, NOV 15**

**RT Stops and Streetscape Workshop**

33 people interested - 6 going

Ashley Lush and 17 others

9 Comments
Appendix B – Bus Rapid Transit System Stops and Streetscapes Workshop Instagram Ads
HAVE YOUR SAY!

LONDON'S BUS RAPID TRANSIT SYSTEM

Learn More

shiftldnont Help influence the features and design of London's Bus Rapid Transit System!
Appendix C – Bus Rapid Transit System Stops and Streetscapes Workshop Poster
Help influence the features and design of London’s Bus Rapid Transit System stops and streetscapes including:

- Safety and Security
- Accessibility
- Heritage and Culture

Collaborate with the City on the design of London’s Bus Rapid Transit stops. Help shape the direction for materials used and new features, such as Wi-Fi, that may be included at each stop.

If you are unable to attend the Workshop, but would like to share your thoughts or learn more, please contact the Rapid Transit Office at shift@London.ca or 519-661-2489 ext. 5823

Where
Central Library, 2nd floor, 251 Dundas Street

When
Wednesday, November 15th, 2017
4:00PM and 8:00PM

RSVP By:
November 13
BRTStops.Eventbrite.ca
Welcome!

Thank you for attending the London Bus Rapid Transit Stops and Streetscapes Workshop
We want your input!

Tell us what’s important to you in the Rapid Transit stops and streetscapes design for:

- Safety and Security
- Accessibility
- Heritage and Culture
- Stop Features
- Streetscape

Representatives from the Project Team are available to answer your questions and collect your feedback. Please also submit comments using the forms provided.

King Street east of Talbot Street. This picture does not represent a final design.
City-wide Benefits of Bus Rapid Transit

• Greater choice: Almost 40% of our future population and 60% of jobs will be within walking distance of BRT

• Integrated City-wide transit network: Rapid Transit plus Local Transit will have a combined service increase of 35% by 2035

• Ease congestion through Intelligent Transportation Systems

• Save almost $300 million in road expansion projects over next 20 years

• Encourage growth, city-building and intensification.

• Support a more sustainable and resilient community by reducing more than 230,000 tonnes of greenhouse gas emissions
City-wide public events will be held
December 11 to 14, 2017

Stay tuned for more information!

www.shiftlondon.ca/events
City of London has committed $130 million toward our estimated $500 million Bus Rapid Transit Network. To move forward, London is seeking approximately $370 million from federal and provincial partners.

- 24 km network
- 35 rapid transit stops
- 28 articulated buses
- 1.18 benefit-cost ratio
- $12.8 million annual operating costs
- $724.4 million in transportation, environmental and economic benefits over the project lifespan
BRT Specifications

- Vehicles run primarily in dedicated lanes, but can operate in mixed-traffic.
- Can carry up to 4,500 passengers every hour in each direction.
- BRT can cost between $15 to $40 million per route kilometre.
- Vehicles are high capacity, accessible and offer comfortable seating.
- Has the flexibility to operate outside of dedicated lanes.

Mercedes-Benz Smart Bus in Cologne, Los Angeles, Geneva.
Electric Buses

Electric bus technology is improving and more systems are starting to use them.

400 km
Depending on the model, electric buses can travel for up to 400 km on a single charge

12 Years
The typical lifecycle of an electric bus is 12 years – similar to that of a standard bus

$200 K
The typical additional cost of an electric bus compared to a standard bus

0
The amount of point source emissions that are produced by electric buses
Shelter Examples

**Higher Cost**

- **VIVANEXT**
  - YORK REGION, ON, CANADA
  - Dimensions: 1605mm x 1710mm x 2000mm

**Lower Cost**

- **MISSISSAUGA BRT**
  - MISSISSAUGA, ON, CANADA
  - Dimensions: 1864mm x 2040mm x 2000mm

- **ZUM - BRAMPTON BRT**
  - BRAMPTON, ON, CANADA
  - Dimensions: 2000-2500mm x 1986mm x 2040mm

- **ST. CLAIR WEST STREETCAR**
  - TORONTO, ON, CANADA
  - Dimensions: 2395mm x 1655mm x 1775mm

---

**Website:** WWW.SHIFTLONDON.CA
Where do you: Live?  ● Work?  ○ Attend School?  ●
Examples of how London’s heritage might be integrated into the Rapid Transit Shelter or Platform

- Story / event on the paving
- Historic / heritage image on back panel
- QR code to access video and audio
- Natural heritage image on back panel
What are the significant physical elements that express the heritage of an area around the BRT network?

Add your comment below and/or on the image that inspires you.