Elgin Street and Hawthorne Avenue
Functional Design Study

Laurier Avenue to Main Street

Workshop – June 28, 2016
Agenda for the Evening

1. Welcome and Introductions
2. Plenary Presentation
3. Question and Answer Period
4. Workshop
   i. Workshop Breakaway – Round 1
   ii. Workshop Breakaway – Round 2
   iii. Revelations
   iv. Wrap-up
Presentation Topics

PART A: Introduction to the Study
PART B: Study Area Sectors
PART C: Current Street Conditions & Policies
PART D: Issues Requiring Attention
PART E: Implementation
PART F: Street Design Choices
PART A: Introduction to the Study
Study Area

Elgin Street
* 1.3 km of Elgin Street
* North end limit: Laurier Avenue
* South end limit: Queen Elizabeth Driveway
* 15 blocks and many intersections
* Connection under Highway 417

Hawthorne Avenue
* 0.4 km of Hawthorne Avenue
* West end limit: Queen Elizabeth Driveway
* East end limit: Main Street
* Rideau Canal crossing
Area Context

Legend

- Study Area
- Utility and Comm
- Office
- Recreation
- Open space
- Vacant
- Street
- Water
Study Purpose

* To commence the **civic dialogue** on the future reconstruction of the Elgin Street and Hawthorne Avenue right-of-ways

* To identify and confirm a recommended **functional design** that will be the basis of subsequent detailed designs
Study Objectives

* Determine the street’s sidewalk widths and general lane arrangement
* Determine provisions for cycling and transit use
* Determine on-street parking, loading and access solutions
* Develop general streetscaping themes
* Understand below-grade services and utilities
Consultation Activities

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<th>Event</th>
<th>Timing</th>
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<tr>
<td>Working Group Meeting #1</td>
<td>June 13, 2016</td>
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<tr>
<td>Public Contact: Workshop</td>
<td>June 28, 2016</td>
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<td>Working Group Meeting #2</td>
<td>Early October 2016</td>
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<tr>
<td>Urban Design Review Panel</td>
<td>Mid-November 2016</td>
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<td>Public Contact: Public Open House</td>
<td>Late November 2016</td>
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<td>Working Group Meeting #3</td>
<td>Early January 2017</td>
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PART C: Current Street Conditions and Policies
Key Planning Documents

* Official Plan – Traditional Main Street, Arterial Road, Complete Street, Transit Priority Corridor
* Centretown Community Design Plan
* Old Ottawa East Community Design Plan
* Downtown Ottawa Urban Design Strategy
* Downtown Moves
Key Planning Policy Emphases

* Strengthen the “mainstreet” function
* Focus on pedestrians and pursue widened sidewalks
* Improve the public realm
* Coordinate the streetscape
* Improve cycling and transit environment
* Accommodate festivals and events
* Consider one lane of parking and/or lane reductions to free up space
PART D: Issues Requiring Attention
# Issues Requiring Attention

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<tr>
<th>Accommodating Pedestrians</th>
<th>Pedestrian Volumes</th>
<th>Sidewalks</th>
<th>Outdoor Patio Potential</th>
<th>Provisions for Events and Festivals</th>
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<tr>
<td>Burying Overhead Utility Lines</td>
<td>Cycling</td>
<td>OC Transpo Bus Routes</td>
<td>Vehicle Lane Requirements</td>
<td>Trucks &amp; Service Vehicles</td>
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<td>Traffic</td>
<td>Parking Supply &amp; Demand</td>
<td>Burying Overhead Utility Lines</td>
<td>Clearance to Adjacent Structures</td>
<td>Water &amp; Service Infrastructure</td>
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<td>Fibre Optic Infrastructure</td>
<td>Street Lighting</td>
<td>Property / Building Interface</td>
<td>Street Greening &amp; Furnishings</td>
<td>Street Trees in Sidewalks</td>
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## Competition for Surface Space

<table>
<thead>
<tr>
<th>Wide Sidewalks</th>
<th>Street Trees</th>
<th>Cycling and Bike Racks</th>
<th>Bus Stops</th>
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<tr>
<td>Bus Shelters</td>
<td>Street Furniture</td>
<td>Public Art</td>
<td>Vehicle Lanes</td>
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<tr>
<td>Turn Lanes</td>
<td>On-Street Parking</td>
<td>On-Street Loading</td>
<td>Private Driveways</td>
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<td>Street Lights</td>
<td>Utility Poles</td>
<td>Traffic Poles</td>
<td>Utility Cabinets</td>
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- Wide Sidewalks
- Street Trees
- Cycling and Bike Racks
- Bus Stops
- Bus Shelters
- Street Furniture
- Public Art
- Vehicle Lanes
- Turn Lanes
- On-Street Parking
- On-Street Loading
- Private Driveways
- Street Lights
- Utility Poles
- Traffic Poles
- Utility Cabinets
Accommodating Pedestrians

- Sidewalk widths – maintaining a pedestrian clear zone
- Benches / seating areas
- Priority crosswalks
- Bus stop areas
- Placemaking opportunities
Sidewalks

- Given the constrained 18m ROW, a target sidewalk width for downtown streets is main streets is 3m to 5m, depending on pedestrian volumes and sidewalk activities

- 3m+ is necessary to enable street trees

- City standard is minimum 1.8m “clear zone” (for sidewalk maintenance … between fixed obstacles)
Outdoor Patio Potential

- Wider sidewalks desired
Provisions for Events and Festivals

Elgin Street Commercial Area (Official Plan)

* “An appropriate balance and mix of uses will be achieved and maintained so as to adequately serve the local community, regional market and tourists; and to capitalize on the City’s yearly festivals and special events …”
Cycling

Elgin Street:
- **Local Route**, between Laurier Avenue and Isabella Street
- **Spine Route** between Isabella Street and Queen Elizabeth Driveway

Hawthorne Avenue:
- **Local Route** between Col. By Drive and Main Street

Local Route (Ultimate)
Spine Route (Ultimate)
Transit Requirements

* Bus stop zones occupy 18 - 20m of curb space
* Provide shelters whenever possible
* Transit Priority measures on Elgin Street north of Gladstone
Vehicle Lane Requirements

- Traffic studies indicate some potential for lane reduction
- Minimum Lane Widths: 3.0m to 3.25m, with extra 0.25m adjacent to curb
- Lanes to accommodate bus transit: 3.3m minimum
- Turning lane widths: 3.0 to 3.25m
Existing Vehicle Travel Times

* Travel Times Survey conducted on 5<sup>th</sup> of May, 2016:
  * Elgin Street from Queen Elizabeth to Laurier
  * Free Flow travel time 1.3 km / 50 km/h = 1.5 min

<table>
<thead>
<tr>
<th>Time Period (Peak Hour)</th>
<th>Northbound Travel Time</th>
<th>Southbound Travel Time</th>
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<tbody>
<tr>
<td>AM – 8:00-9:00</td>
<td>4 minutes</td>
<td>3 minutes</td>
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<tr>
<td>Noon – 11:30-12:30</td>
<td>3.5 minutes</td>
<td>4.5 minutes</td>
</tr>
<tr>
<td>PM – 16:00-17:00</td>
<td>6 minutes</td>
<td>4 minutes</td>
</tr>
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</table>
Trucks and Service Vehicles

- Elgin Street and Hawthorne Avenue are truck routes
- Businesses and institutions require appropriate service and delivery access
Area Parking Supply & Demand

* On-street parking is permitted on Elgin Street and on Hawthorne Avenue in various locations
  * 120 parking spaces available on Elgin Street
  * 28 spaces available on Hawthorne Avenue (approx.)

* Peak period restrictions apply for both streets
Renewed Street Lighting

* Several design choices
* Moving towards LED lighting technologies

- High Mount (Utilitarian)
- Mid-Height (Dual Duty)
- Pedestrian Level (Aesthetic Function)
Water and Sewer Infrastructure

* Water, sanitary, and storm systems to be installed
* Details confirmed at detailed design
Overhead Wires

* Recent Council policy:

“Direct that the undergrounding of overhead wires on City right-of-ways be undertaken only when the full cost of burial is paid for by the requesting party, or as otherwise approved by Council on a case-by-case basis.”

* Without a requesting/funding party identified, the City is not planning the undergrounding

* Poles may be shifted if new curb line is proposed
Private Utilities

* Underground private utilities may be renewed depending on age and condition (Bell, hydro, gas, fibre, etc)
Property / Building Interface

* Opportunity to tie the street edge together
* Three types of land use situations exist:
  * 1. Commercial or mixed use buildings with minimal setback
  * 2. Older mid-rise residential with minimal setbacks
  * 3. Parks, landscaped open spaces and parking lots
Street Trees in Sidewalks

- Soil Cells to provide soil volume

- Magic #s:
  - 2.92m sidewalk width, to enable street trees,
  - 2.7 to 2.8m to enable just ped lights
Streetscaping and Public Art

* Integrating with street lighting choice
* Street furnishings (benches, waste bins)
* Trees
* Public art program
PART E: Implementation
Managing Construction Period Disruption

* Street renewal includes construction of new underground services, requiring full-depth reconstruction
Traffic Management During Construction

* (Not part of the scope of this study, but still important)
* Some techniques to manage business and community impacts:
  * Pedestrian access maintained
  * Phasing and Staging
  * Varying degrees of vehicle access
  * Creative parking strategies
  * Business Open as Usual signage
  * Block Captains & regular meetings
  * Newsletters
  * Email notices
  * Website
Street Reconstruction Timing

- Timing of implementation not defined
- 2018 earliest start of construction
- Likely 2-3 years construction duration
PART F: Preliminary Street Design Choices
Complete Streets Approach

Official Plan Policies:

• Adopted by Council in order to balance the multiple roles of roads and to offer safety, comfort and convenience to all users

• Policy to be implemented in consultation with stakeholder groups through:
  – Measuring level of service and quality of service experienced by all road users in order to assess road designs and allocate right-of-way that maximizes the number of people served.
## Multi-Modal Level of Service

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<tr>
<th>MODE</th>
<th>ELEMENT</th>
<th>LEVEL OF SERVICE</th>
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<tbody>
<tr>
<td>Pedestrians (PLOS)</td>
<td>Segments</td>
<td>High level of comfort</td>
</tr>
<tr>
<td></td>
<td>Intersections</td>
<td>Short delay, high level of comfort, low risk</td>
</tr>
<tr>
<td>Bicycles (BLOS)</td>
<td>Segments</td>
<td>High level of comfort</td>
</tr>
<tr>
<td></td>
<td>Intersections</td>
<td>Low level of risk / stress</td>
</tr>
<tr>
<td>Trucks (TkLOS)</td>
<td>Segments</td>
<td>Unimpeded movement</td>
</tr>
<tr>
<td></td>
<td>Intersections</td>
<td>Unimpeded movement / short delay</td>
</tr>
<tr>
<td>Transit (TLOS)</td>
<td>Segments</td>
<td>High level of reliability</td>
</tr>
<tr>
<td></td>
<td>Intersections</td>
<td>Short delay</td>
</tr>
<tr>
<td>Vehicles (LOS)</td>
<td>Intersections</td>
<td>Low lane utilization</td>
</tr>
</tbody>
</table>

Legend:
- A: High level of comfort
- B: Low level of comfort
- C: Short delay, high level of comfort, low risk
- D: Long delay, low level of comfort, high risk
- E: High level of risk / stress
- F: Unimpeded movement / short delay
- G: Impeded movement / long delay
- H: High level of reliability
- I: Short delay
- J: Low lane utilization
- K: High lane utilization
Elgin Street – Existing Conditions
Hawthorne Ave – Existing Conditions
One Lane Per Direction, No Left-Turn Lane, No On-Street Parking
One Lane Per Direction, No Left-Turn Lane, Parking One Side
One Lane Per Direction, No Left-Turn Lane, Parking Both Sides
One Lane Per Direction, Left-Turn Lane, Parking One Side
One Lane Per Direction (Wide Shared Lanes), No Left-Turn Lane, Parking Both Sides
One Lane Per Direction (Wide Shared Lanes), Left-Turn Lane, Parking One Side
One Lane Per Direction (Wide Shared Lanes), Left-Turn Lane, No Parking
One Lane Per Direction, Left Turn Lane, No Parking
One Lane Per Direction, No Left-Turn Lane, Bike Lanes, Parking One Side
One Lane Per Direction, No Left-Turn Lane, Segregated Bike Lanes with Bollards, No Parking
One Lane Per Direction, No Left-Turn Lane, Raised Cycle Track, No Parking
One Lane Per Direction, No Left-Turn Lane, Raised Cycle Track, On-Street Parking
A Balanced Approach

* Many Competing demands within a narrow right-of-way:

- **Amenity**
  - High quality of Traditional Mainstreet streetscaping, street greening, and wide, comfortable pedestrian realm … a good public space

- **Mobility**
  - Traditional Mainstreet, Arterial Road, Bus Route

- **Utility**
  - Below-grade competition for space … trees, street light foundations, municipal services, and many private utilities

A solution that balances all needs will be pursued!
Discussion Table Topics

TOPIC 1: Pedestrian Environment / Accessibility
TOPIC 2: Cycling Environment
TOPIC 3: Vehicles and Transit
TOPIC 4: Parking
TOPIC 5: Streetscaping and Public Art
TOPIC 6: Placemaking Opportunities
Group Discussion