Street Trees in Downtown Hamilton
Outline

Locations
Observations
Cause
Impacts
Implications
Opportunities
Summary
Observations

- Some street trees are not indigenous to Hamilton
- Many are damaged (i.e. lesions)
- Some are displaying signs of stress (i.e. epicormic shoots)
- Potential to lose tree canopy on streets in downtown Hamilton
Cause

Base of trunk cut by metal grates and/or sidewalk squares
Impacts

- Epicormic shoots on trunk-indicator of stress
- Integrity of tree damaged - passageway for pathogens and pests
- Increases chance of mortality
<table>
<thead>
<tr>
<th>Tree Number</th>
<th>Photo Number</th>
<th>Health Description</th>
<th>Easting</th>
<th>Northing</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,2</td>
<td>Metal guard broken &amp; growing into tree</td>
<td>591378</td>
<td>4789949</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>3,4</td>
<td>Metal guard very close to tree/ tree gouged</td>
<td>591382</td>
<td>4789961</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>5,6</td>
<td>Metal guard growing into tree</td>
<td>591393</td>
<td>4789997</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>Metal guard growing into tree</td>
<td>591404</td>
<td>4790037</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>8,9</td>
<td>Metal guard growing into tree/epicormic shoots</td>
<td>591393</td>
<td>4790050</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>10,11</td>
<td>Metal guard growing into tree/epicormic shoots</td>
<td>591389</td>
<td>4790041</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>12,13</td>
<td>Metal guard growing into tree/epicormic shoots</td>
<td>591383</td>
<td>4790021</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>14,15</td>
<td>Metal guard growing into tree/epicormic shoots</td>
<td>591381</td>
<td>4790011</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Replaced tree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>No tree in hole</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18,19</td>
<td>Epicormic shoots removed previously</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trees between Main and King on Bay</th>
<th>Tree between Bay and Caroline on King</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL TREES SURVEYED</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL TREES DAMAGED</td>
<td>8 (53%)</td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>11 (65%)</td>
</tr>
</tbody>
</table>
Implications

- Dead trees will need to be replaced ($)
- Damaged sidewalk squares will need replacing ($)
Opportunities

- Remove metal grates
- Increase space around trees to allow for growth
- Remove unhealthy trees and replace with native species
- Monitor trees and conduct tree health assessments
Why monitor and maintain?

- Maintain urban tree canopy
  - Aesthetics
  - Cooling effects

- Contributes to the goals of:
  - Vision 2020
  - Urban Hamilton Official Plan
  - City of Hamilton Natural Heritage Strategy

- Contributes to improved air quality
Opportunities

- Conduct a further assessment of street trees within the City of Hamilton
- Review the City of Hamilton’s *Street Tree Planting Program*
  - Replace exotic species on available species list with native species
  - Include opportunities for meadow plantings where appropriate (amend by-law as it relates to yard maintenance)
Why plant native species?

- Public education on native species
- Habitat for native wildlife
- Food source for native wildlife
- Suitable for local climate
- Lower maintenance
Summary

- Trees are damaged due to metal grates and sidewalk squares
- Injuries lead to stress and increased probability of disease and/or mortality
- Dead trees decreases urban canopy, aesthetics, air quality, and value
- Current planting method is damaging sidewalks (cost $)
- Remove grates, replant with native species, and give trunk space to maintain healthy trees
Thank you!
PRESENTATION NOTES! For you

- Things to bring for presentation
  - List of trees in urban tree planting program