The City of Calgary Mobile Inspection App Pilot 2016
Background

- Designated Materials (DM) Rate
  - Surcharged tipping fee to encourage diversion from landfills
  - Originally construction and demolition (C&D) materials focused
  - Concrete, road asphalt / asphalt shingles, scrap metals, bricks (2008)
  - Recyclable wood, drywall (2013)
Background (Cont’d)

- 2014 ICI Waste Diversion Strategy
  - DM list expanded to include ICI paper and cardboard
  - DM list expanded to include ICI organics
  - Extended beyond the C&D sector
  - Progress from DM to landfill bans for some materials
  - Enforcement is key to success of the program
## DESIGNATED MATERIALS SCREENING

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME OF DAY</th>
<th>HAUER NAME</th>
<th>UNIT #</th>
<th>LICENSE PLATE #</th>
<th>TYPE OF UNIT</th>
<th>DRIVER'S NAME</th>
<th>LANDFILL</th>
<th>FOREMAN NAME</th>
<th>PAYROLL NUMBER</th>
<th>% Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 2012</td>
<td>13:15</td>
<td></td>
<td></td>
<td></td>
<td>Roll O A</td>
<td>Blair</td>
<td>East Calgary</td>
<td>Chris Ettienne</td>
<td>Foreman Signature</td>
<td>LESS THAN 30%</td>
</tr>
</tbody>
</table>

### Presence of:

- **CONCRETE**: whole or crushed concrete, up to 1 m (3.3 ft), that may contain asphalt, metal reinforcement, or aggregate
- **BRICK / MASONRY BLOCK**: structural or decorative, with or without mortar, crushed or whole
- **ASPHALT**: road asphalt or asphalt shingles
- **METALS**: all scrap metal up to 1.2 m (4 ft)

### Already been paid for on inbound scale?
- Yes
- No

### Scalehouse notified?
- Yes
- No

### Photos taken? (Yes/No)
- Yes
- No

### ISD:Protected

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**2016-05-18 SWANA 2016**
Opportunities

• Triple handling of data
• No mine-able data
• No search functionality
• Records are only retained for 6 months
• No data to set targets or track performance
• No connection to other systems, e.g. Geoware, email, etc.
• Paper copies require physical storage space
Mobile Inspection App Pilot

To test the feasibility of the use of mobile apps and devices for designated materials (DM) and other types of inspection
Goals and testing criteria

• Streamline data entry
• Performance of functionalities built in mobile devices
• Adaptability to different devices, systems and technologies
• Data transfer reliability
• Produce mine-able data
• Track performance
• Practicality at tipping face
In-house or Off-the-shelf?

• True costs
  • Development, customization, tech support, license, training, sustainment, etc.
• Data (cloud versus local server)
  • Storage, access, ownership, transfer, analytics, etc.
• Security (data and hardware)
Next steps

- Pilot completes at the end of May 2016
- Reporting tools
- Expansion to other inspection activities
- Enhancement to the mobile inspection app
Login Screen

USERNAME

ie: CoC Username

PASSWORD

ie: COC password

SIGN IN
Customer Details Screen

CUSTOMER NAME
ABC Junk Removal

UNIT NUMBER
P12355

VEHICLE LICENSE PLATE
23-12345

NOTES
Provided driver with DM pamphlet

INSPECTION RESULT
CLEAN
CONTAMINATED
Designated Materials Selection Screen

- **Concrete** (30%+): 30%-30-60%-60%
- **Brick/Masonry** (0%): 30%-30-60%-60%
- **Asphalt/Shingles** (30%+): 30%-30-60%-60%
- **Scrap Metals** (30%+): 30%-30-60%-60%
- **Paper/Cardboard** (0%): 30%-30-60%-60%

FINISHED?

DONE

RESET
Load Details Screen

- **Driver's Full Name**: John Doe
- **Declared on Inbound Scale?**
  - Yes
- **Scalehouse Notified?**
  - Yes
- **Designated Materials**
  - 30% - Scrap Metals
  - 60%+ - Paper/Cardboard
- **Photos**
  - Preview
  - Preview
  - Preview

Inspection Report (PDF)
Demo