

Calgary



# 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



2016-05-18

SWANA 2016



13.08.2014 10:30



2016-05-18

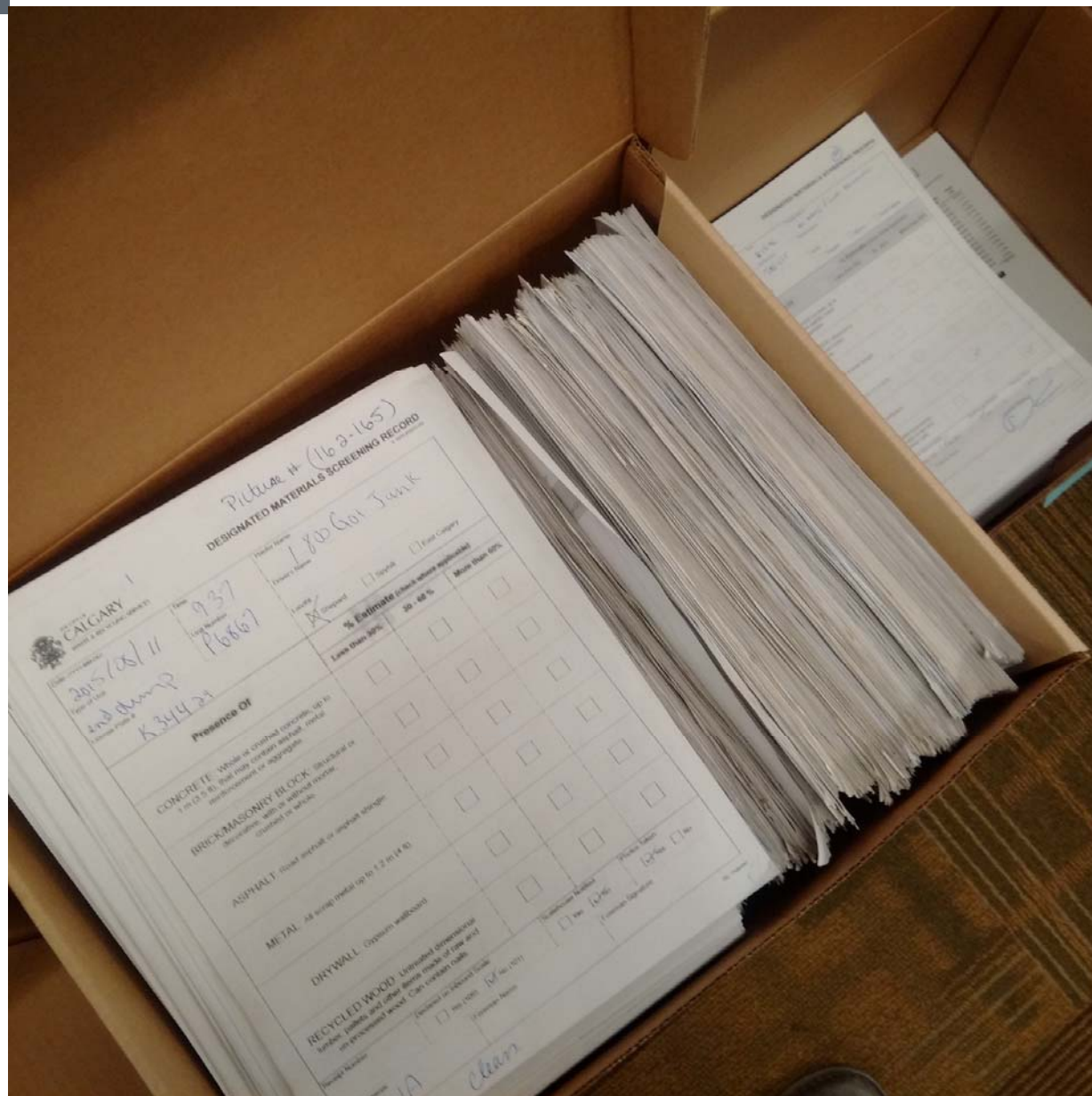
SWANA 2016



2016-05-18

SWANA 2016







Computer > wrsshared (\\coc\wrs) (W:) > DPS-Shepard > Archive > 2014 > DMI-FOREMANpics > 6Jun > June 27

Open Burn New folder

- DPS-IM
- DPS-LandfillOps
- DPS-Manager
- DPS-Shepard
- 1. NEW YEAR TEMPLATE
- 2015
- 2016
- Archive
  - 2012
  - 2013
  - 2014
    - AESRD
    - Compost
    - Contracted-Equip
    - DailyCover
    - DMI-FOREMANpics
      - 1Jan
      - 2Feb
      - 3Mar
      - 4Apr
      - 5May
      - 6Jun
      - 7Jul
      - 8Aug
      - 9Sep
      - 10Oct

June 27_the 108s	June 27.2014 001	June 27.2014 002	June 27.2014 003
June 27.2014 004	June 27.2014 005	June 27.2014 006	June 27.2014 007
June 27.2014 008	June 27.2014 009	June 27.2014 010	June 27.2014 011
June 27.2014 012	June 27.2014 013	June 27.2014 014	June 27.2014 015
June 27.2014 016	June 27.2014 017	June 27.2014 018	June 27.2014 019
June 27.2014 020	June 27.2014 021	June 27.2014 022	June 27.2014 023
June 27.2014 024	June 27.2014 025	June 27.2014 026	June 27.2014 027
June 27.2014 028	June 27.2014 029	June 27.2014 030	June 27.2014 031
June 27.2014 032	June 27.2014 033	June 27.2014 034	June 27.2014 035
June 27.2014 036	June 27.2014 037	June 27.2014 038	June 27.2014 039
June 27.2014 040	June 27.2014 041	June 27.2014 042	June 27.2014 043
June 27.2014 044	June 27.2014 045	June 27.2014 046	June 27.2014 047
June 27.2014 048	June 27.2014 049	June 27.2014 050	June 27.2014 051
June 27.2014 052	June 27.2014 053	June 27.2014 054	June 27.2014 055
June 27.2014 056	June 27.2014 057	June 27.2014 058	June 27.2014 059
June 27.2014 060	June 27.2014 061	June 27.2014 062	June 27.2014 063
June 27.2014 064	June 27.2014 065	June 27.2014 066	June 27.2014 067
June 27.2014 068	June 27.2014 069	June 27.2014 070	June 27.2014 071
June 27.2014 072	June 27.2014 073	June 27.2014 074	June 27.2014 075
June 27.2014 076	June 27.2014 077	June 27.2014 078	June 27.2014 079
June 27.2014 080	June 27.2014 081	June 27.2014 082	June 27.2014 083
June 27.2014 084	June 27.2014 085	June 27.2014 086	June 27.2014 087
June 27.2014 088	June 27.2014 089	June 27.2014 090	June 27.2014 091
June 27.2014 092	June 27.2014 093	June 27.2014 094	June 27.2014 095
June 27.2014 096	June 27.2014 097	June 27.2014 098	June 27.2014 099
June 27.2014 100	June 27.2014 101	June 27.2014 102	June 27.2014 103



## 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



**Calgary** Inspection

Waste & Recycling Services

USERNAME


PASSWORD

**SIGN IN**

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**Calgary** Inspection

Waste & Recycling Services

**START**  
begin a new inspection






user **lk** login successful **gged in**  
if this is not you [click here](#)

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# Customer Details Screen

Calgary     

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

**Calgary**     

DESIGNATED MATERIALS (1 OR MORE)






 <b>30%-</b> concrete		<b>30%-</b>	30-60%	60%+
 <b>0%</b> brick/masonry		30%-	30-60%	60%+
 <b>30%-</b> asphalt/shingles		<b>30%-</b>	30-60%	60%+
 <b>30%-</b> scrap metals		<b>30%-</b>	30-60%	60%+
 <b>0%</b> paper/cardboard		30%-	30-60%	60%+

 <b>0%</b> recyclable wood		30%-	30-60%	60%+
 <b>0%</b> drywall		30%-	30-60%	60%+


FINISHED?

**DONE** **RESET**


# Load Details Screen


**Calgary**     

DRIVER'S FULL NAME


John Doe 

DESIGNATED MATERIALS


 30%-  
scrap metals






 60%+  
paper/cardboard

DECLARED ON INBOUND SCALE?



**YES** **NO** 



SCALEHOUSE NOTIFIED?



**YES**  **NO**


**Calgary**     


PHOTOS


 **preview** 

 **preview** 

 **preview** 










# Signature Panel & Inspection Copy

**Calgary** 

**Inspection**

Waste & Recycling Services cancel ✕

**CUSTOMER** details **LOAD** contamination details


✕ CLEAR ✓ ACCEPT

DRIVER'S SIGNATURE

*John Doe*

**REFUSED TO SIGN**

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**Calgary** 

DRIVER'S SIGNATURE ✓

*John Doe*

INSPECTION COPY


`jdoe@abcjunkremoval.ca` OK

**FINISHED**  
SAVE INSPECTION

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# Inspection Report (PDF)





**WASTE & RECYCLING SERVICES**  
**DESIGNATED MATERIALS SCREENING RECORD**

Date and Time: 2016/05/05	Inspection Number: EC2016-05-05T10:41:37.271Z
Customer: ABC Junk Removal	Location: East Calgary
Unit Number: P12355	License Plate: 23-12345
Driver's Name: John Doe	Driver's Signature: <i>John Doe</i>

**Designated Materials Found**

Type of Material	% Estimate
paper/cardboard	Greater than 60%
scrap metals	Less than 30%

**Photos**

ISC: Protected

Page 1

2016/05/05



# Demo