

# Street Sweeper Tracking for the City of West Torrens

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Spatial Information Day 2011



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# Presentation

- Council Details
- Sweeper Details
- Tracking History
- New Tracking Solution
  - Dekho
  - Questions



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# Council Details

- Population 56,000
  - Area 38km<sup>2</sup>
- Key Locations

*Adelaide Airport*

*Brickwork Markets*

*Henley Beach Road*

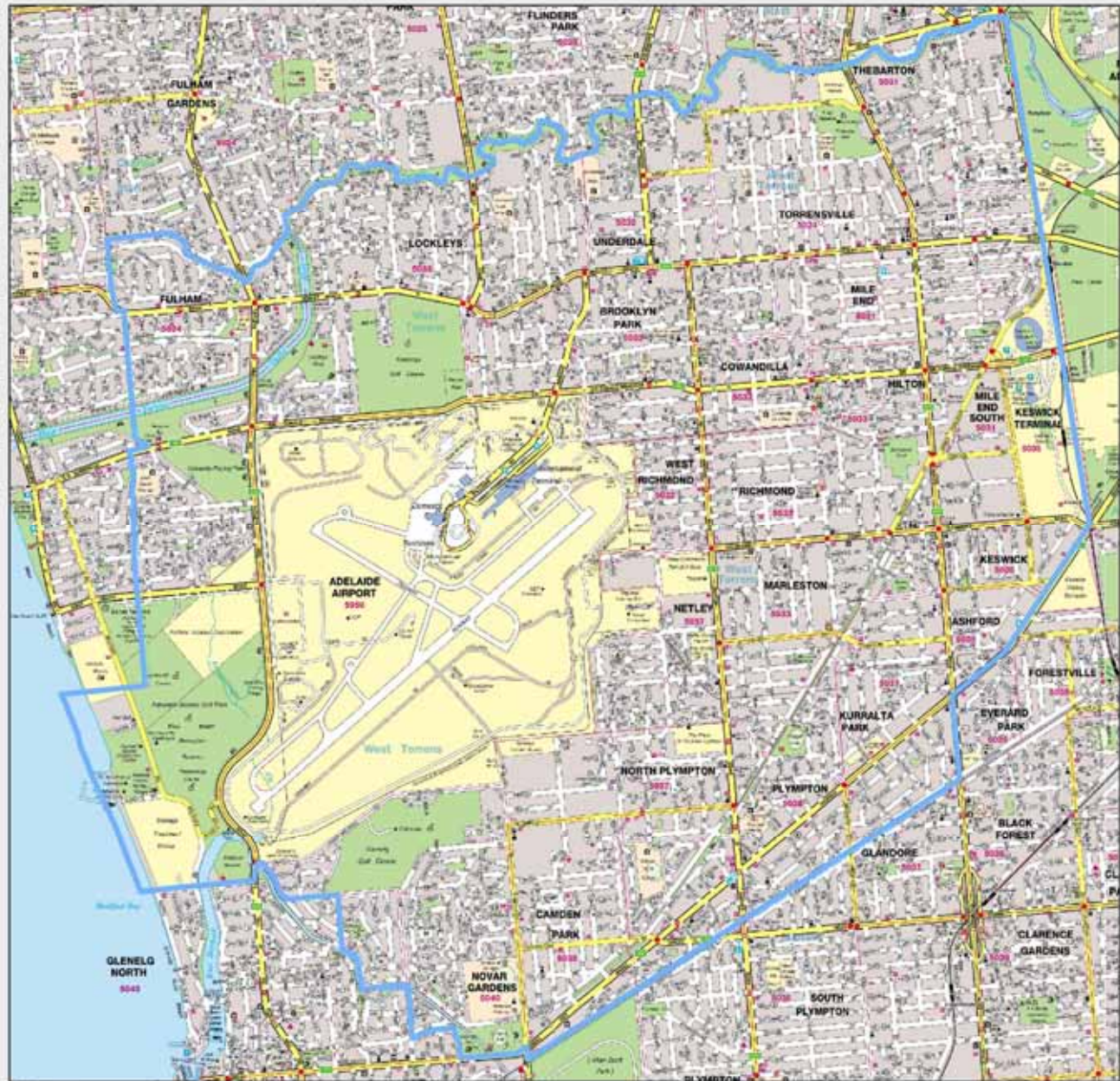
*Sir Donald Bradman Drive*

*Harbour Town Shopping Precinct*

*River Torrens*



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City of West Torrens [UBD Data]



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# Sweeper Details

- Program/Reactive
- Maintenance to the road network, including road sweeping and drainage maintenance
- Single Shift
  - 4am - 1pm
- Double Shift (High Leaf Periods May-Aug)
  - 4am -1pm
  - 12:30pm - 9pm
- 2 Large Truck Sweepers
- 1 Footpath Sweeper





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2007



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# Sweeping Details



The general sweeping program includes:

- DTEI, (TSA): 40km
  - High Profile: 20km
  - Industrial: 10km
  - Residential: 280km
- These lengths are centre line road lengths with K&G – therefore sweeping is approx double the kms



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# Sweeping Details

General Sweeping Cycle Includes:

- DTEI, (TSA): 5 working days
- High Profile: 5 working days
- Industrial: 10 working days
- Residential: 18/22 working days



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# Sweeper Tracking HISTORY

- Implemented in 1996.
- Installed in 2 large format Sweepers.
- GPS data was recorded onto PCMCIA data cards.
- Manual transfer of data into a corporate GIS using a standalone windows machine.
- Hardware failures, no replacement parts, software no longer supported.
- Alternatives were sought in 2007/08.



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# New Tracking Requirements

- Improved timeliness and accuracy
- Sweeper Actions – Sensors
- Live tracking – safety and security
- Accuracy – within 1m ?
- Frequent update interval 10s?
- Pull data into our Corporate GIS



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# New Tracking Solution



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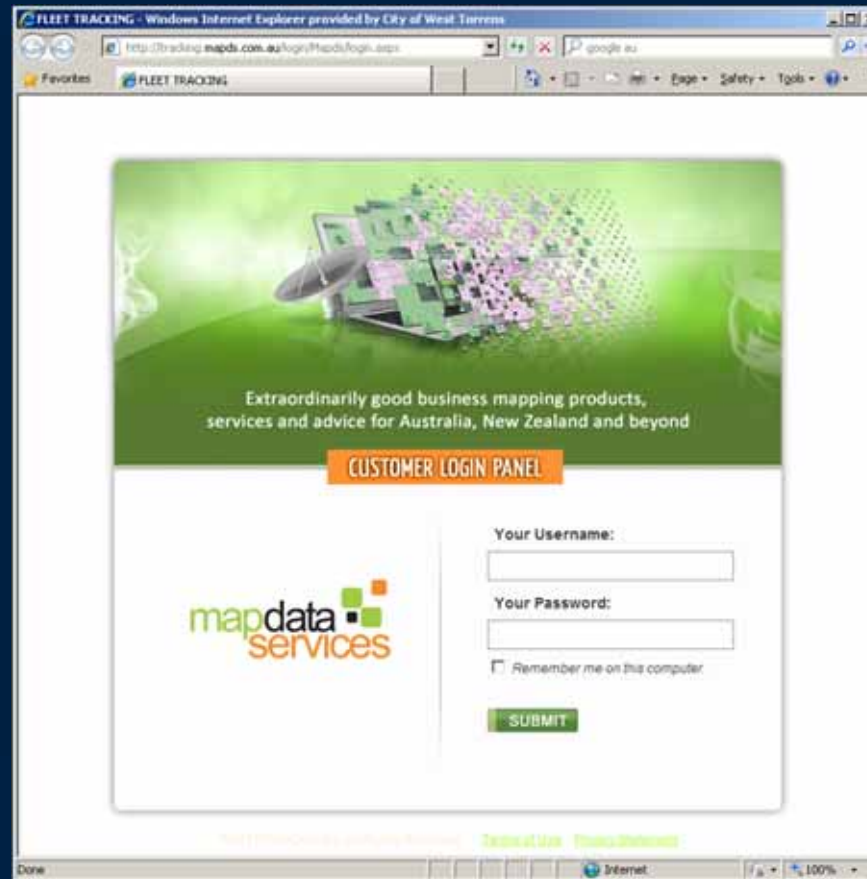
# New Tracking Solution

- **MDS FleetTrack**
  - Web based
  - GPRS Data transfer
  - Live tracking
  - History and Reports
  - Alerts
  - much much more...



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# New Tracking Solution

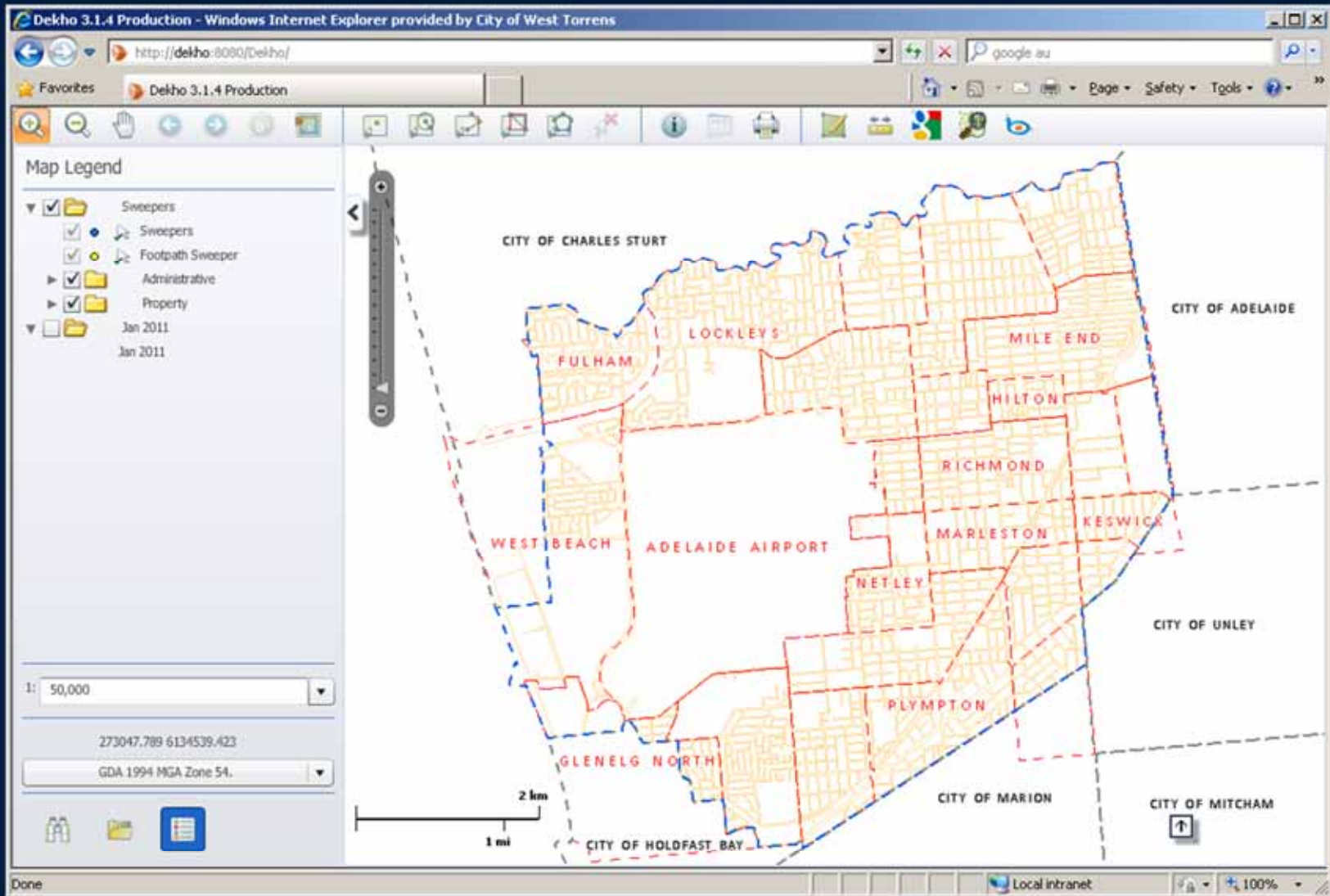


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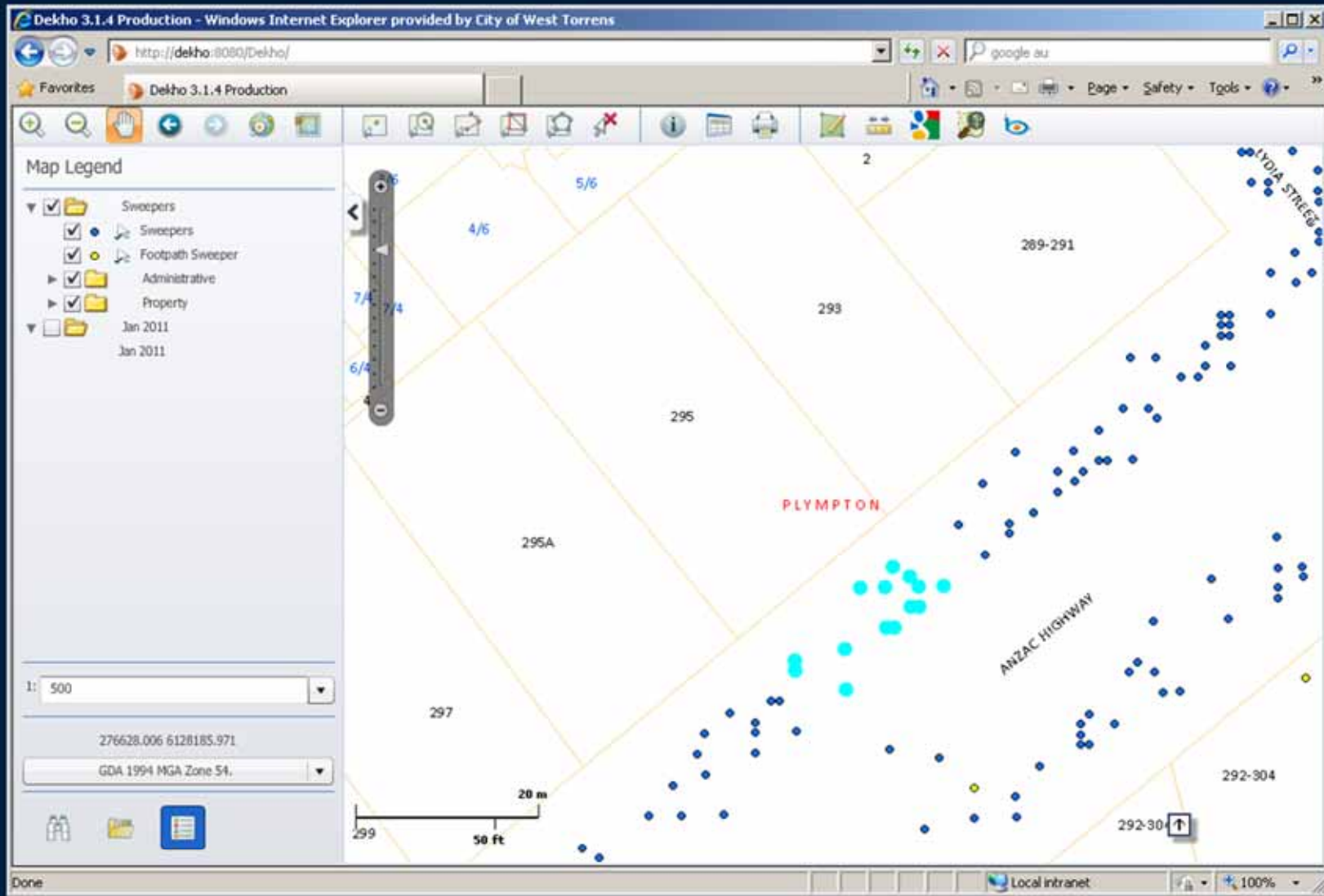
# New Tracking Solution

- Dekho layers (Corporate GIS portal)
- Ability for customer service staff to filter calls and answer the first line of defence calls eg:
  - *When was my street last swept?*
  - *My street hasn't been swept in <time>!*
  - *Sweeper hit my car!*
- Web service pulls features from MDS Servers
- Application runs daily to collect the previous days GPS data for all 3 Sweepers and imports them into the corporate GIS.
- Able to display data as current as yesterday in Dekho.
- Provide a “Sweepers” Map for all Dekho users.





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Dekho 3.1.4 Production - Windows Internet Explorer provided by City of West Torrens

http://dekho:8080/Dekho/

Map Legend

- ✓ Sweepers
  - ✓ Sweepers
  - ✓ Footpath Sweeper
  - Administrative
  - Property
- Jan 2011
- Jan 2011

1: 500

276573.899 6128123.132

GDA 1994 MGA Zone 54.

Selection Review

Sweepers (18)

Sweepers.Sweepers

OBJECTID	Input2	Input3	Input4	Input7	Vehicle	EventDate	EventDate 1	EventTimeStrin
40152	1	0	1	0	SB74CW	9/06/2011 11:15:32 AM	6/9/2011	11:15:32 AM
271561	0	0	0	0	WX1104	15/06/2011 5:09:10 AM	6/15/2011	5:09:10 AM
108211	1	0	0	0	WX1104	3/05/2011 5:25:36 AM	5/3/2011	5:25:36 AM
57409	0	0	0	0	WX1104	26/05/2011 1:11:14 PM	5/26/2011	1:11:14 PM
57413	1	0	0	0	WX1104	26/05/2011 1:11:48 PM	5/26/2011	1:11:48 PM
57408	0	0	0	0	WX1104	26/05/2011 1:11:14 PM	5/26/2011	1:11:14 PM

Done

Local intranet

100%



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*That's all Folks!*



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# Questions ?



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