Gazetteers – reaping the benefits of data management in service delivery in the East Riding of Yorkshire Council

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1

Where Are We?

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Yorkshire Council

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Demographics

- Unitary Authority
- Area: 1,000 sq. miles
- Population: c.330,000
- 176 parishes
- 50% live in 11 parishes

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Gazetteers

- A "gazetteer" is a "geographical index or dictionary'
- Important reference for information – places and names
- Early gazetteers?
  - Ancient Egypt – 1100BC
  - Ancient Greece – 323BC
  - Doomsday Book – 1086 AD
  - Nomina Villarum – 1316 AD

Gazetteers

- ## Modern gazetteers?
  - Computer based GIS systems
  - Spatially referenced – usually OS National Grid
  - Endless list
    - Statistics – accidents, census, crime
    - Places of interest
    - Historical information – buildings, maps, photographs
    - Addresses – NAG / National Land and Property Gazetteer

  - National Street Gazetteer

E A S T R I D I N G
O F Y O R K S H I R E C O U N C I L

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National Street Gazetteer - NSG

- GeoPlace is a public sector limited liability partnership between the Local Government Association and Ordnance Survey.

- Their role is to maintain the National Address Gazetteer Database and the National Street Gazetteer Database for England and Wales, providing definitive sources of publicly-owned spatial address and street data.

- All highway authorities in England and Wales contribute street data from their Local Street Gazetteer (LSG) to the NSG.

- Statutory requirement for NRSWA – quarterly submissions.

- Contractual obligation as part of the PSMA – monthly submissions.

- Part of the largest shared service across local government providing essential information to utility companies and emergency services.

- Benefit?

Local Street Gazetteer (LSG)

- The Local Street Gazetteer provides the street identifiers and spatial information essential to the recording and use of street data in accordance with BS 7666-1:2006.

- The maintenance of a Local Street Gazetteer is a statutory requirement of:-
  - New Roads & Street Works Act 1991
  - Traffic Management Act 2004

Local Street Gazetteer (LSG)

•BS 7666-1:2006 defines a street as "a way or thoroughfare providing a right of passage on foot, by cycle or by motor vehicle, or access to more than one property."

This includes:		But Excludes:
Roads		Rivers
Public Rights of Way		Waterways
Footpaths	Bridleways	Railways
Cycle ways	Cycle Tracks	Access to single properties
Motorways	Service Roads	
Cycle Tracks	Access Roads	

Local Street Gazetteer (LSG)

Each street has the following geographic information recorded:

Street Authority

Unique Street Reference Number (USRN)

Street Name or Description

Street Type

Geographic Extents

Cross References

Record Review Dates

Record version

Local Street Gazetteer (LSG)

What does it look like?
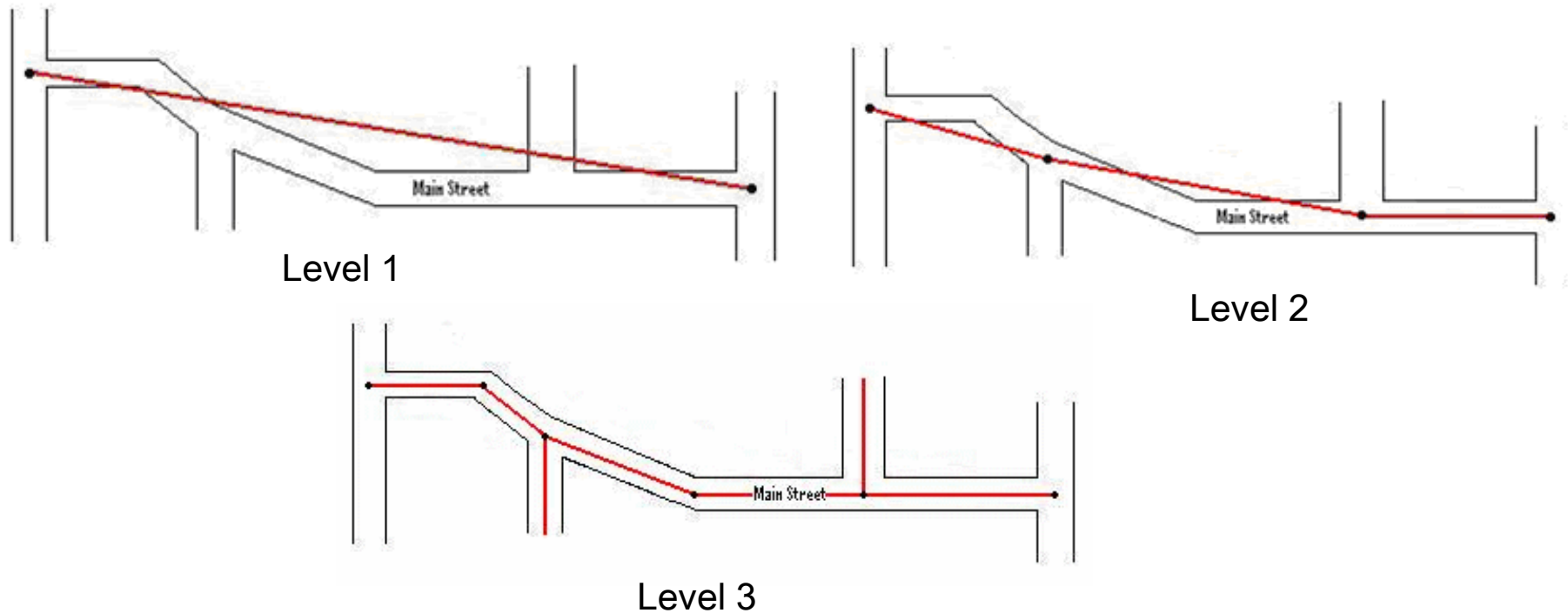
Level 1

Level 2

Level 3

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Local Street Gazetteer (LSG)

Additional information is also recorded to support the NRSWA function :

Street Interests

Reinstatement Designation

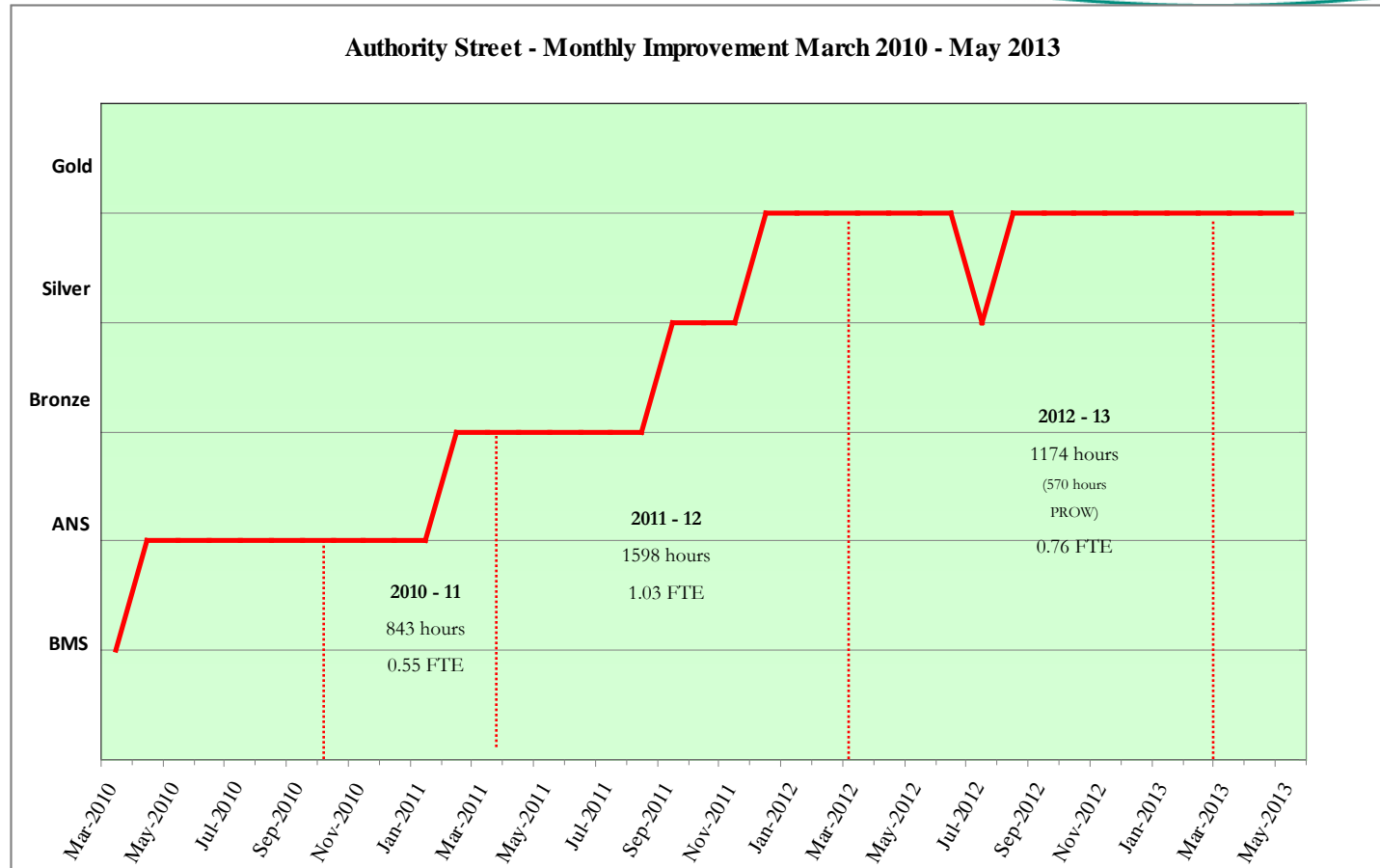Special Designations

Special Designations
- Bridges
- Culverts
- SSSI/VNR/Conservation Area
- Traffic Sensitivity
- Level Crossing Safety Zones
- Pipelines
- Special Surfaces
- Special Events

Local Street Gazetteer (LSG)

Authority Street - Monthly Improvement March 2010 - May 2013

Gold

Silver

Bronze

2012 - 13
1174 hours
(570 hours PROW)
0.76 FTE

ANS

2011 - 12
1598 hours
1.03 FTE

2010 - 11
843 hours
0.55 FTE

BMS

Mar-2010, May-2010, Jul-2010, Sep-2010, Nov-2010, Jan-2011, Mar-2011, May-2011, Jul-2011, Sep-2011, Nov-2011, Jan-2012, Mar-2012, May-2012, Jul-2012, Sep-2012, Nov-2012, Jan-2013, Mar-2013, May-2013

Local Street Gazetteer (LSG)

Ongoing issues!

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Local Street Gazetteer (LSG)

What it looks like now

Underpinning business processes
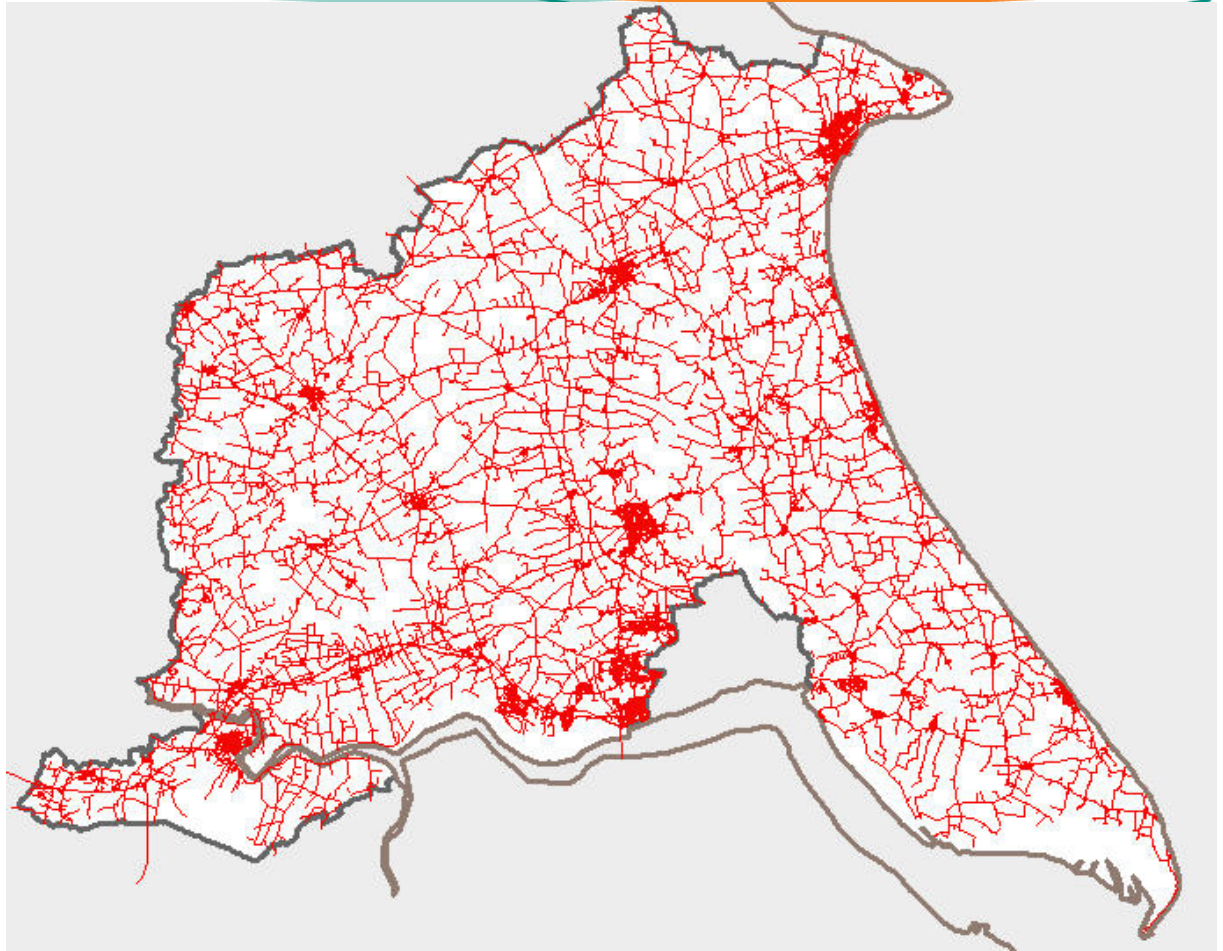
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LSG – Street Works

- LSG – fundamental reference for EToN
  - Mobile working since 2004 – task list only
  - Coordinates optional - little or no spatial data
  - Published on council website from 2006
    http://mergis.eastriding.gov.uk/Map.aspx?Map=StreetWorks,503458,%20439474
  - Coordinates became mandatory on notices 2008
  - Spatial representation improved
  - 2nd generation devices with background mapping
  - Published on ELGIN website 2012
    http://roadworks.org/ or http://www.elgin.org.uk

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LSG – Street Works on the web

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LSG – Supporting Service Transformation

•Integration

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LSG – Supporting Service Transformation

• Financial challenges

• Do more for less / Invest to save

• Innovation

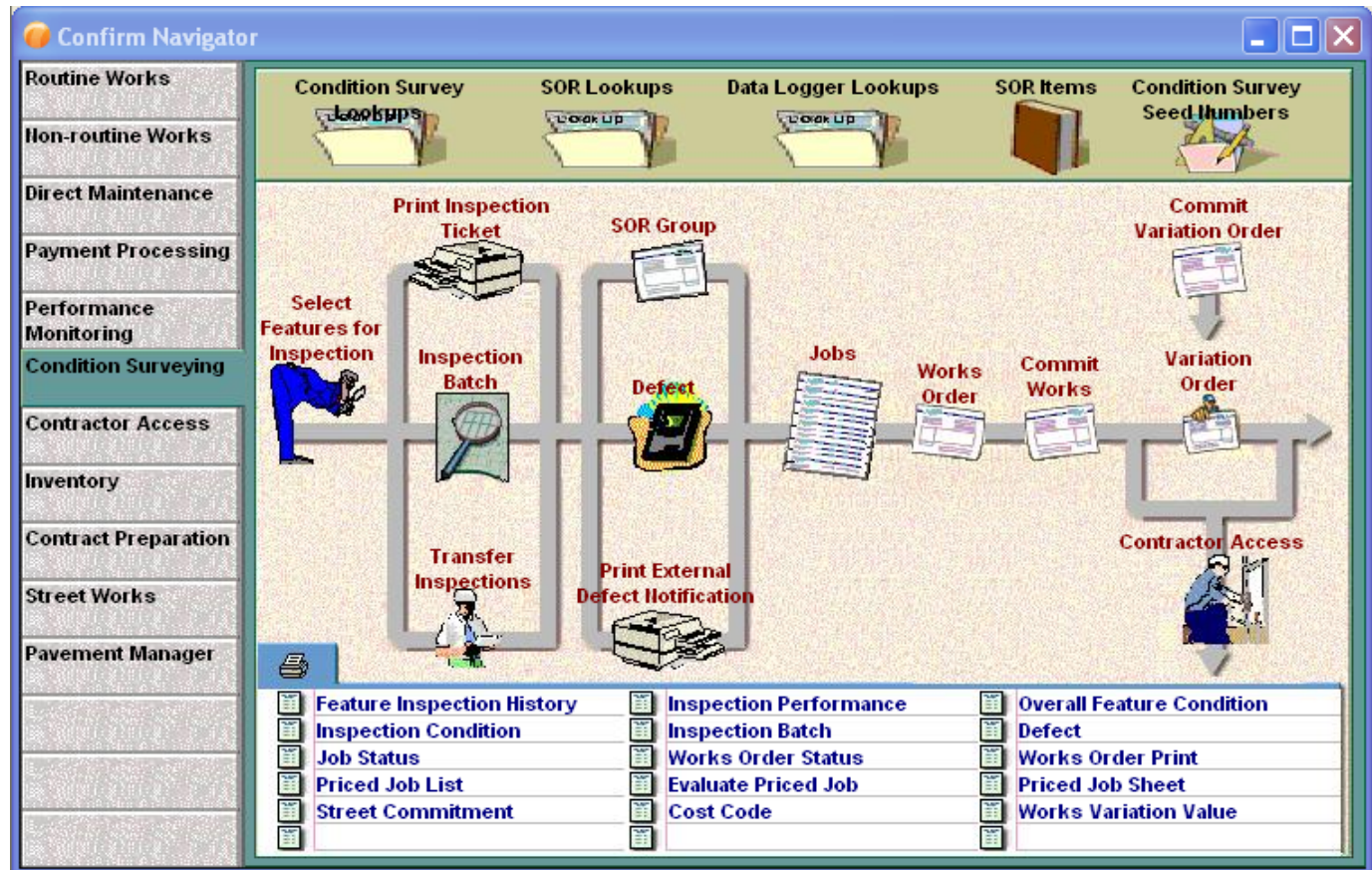• National initiatives

• Reputation

• Back office integration

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LSG – Highway Asset Transformation

Principal Roads   348km

Non-Principal Roads 1250km

Unclassified Roads 1765km

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LSG – Highway Asset Transformation

2010 - why change?

Lack of information

Historic cost based approach no longer sustainable for assets with long life duration like highways

Government requested a review of all transport infrastructure assets in 2008
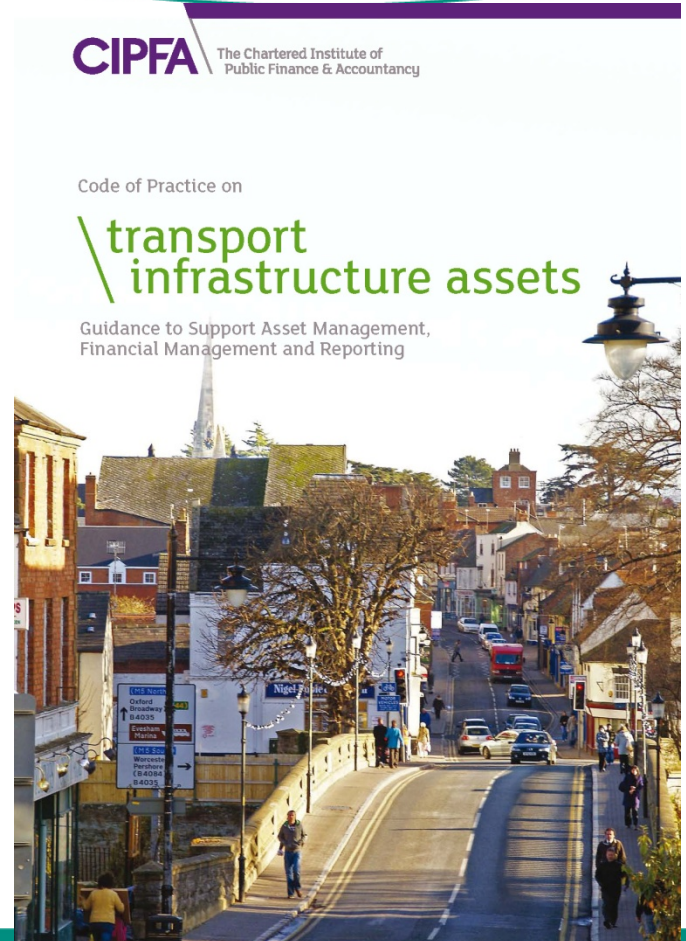
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2008 CIPFA CoP

Different approach to financial information and life cycle planning.

Single set of financial management information:
- Robust
- Consistent between transport / highway authorities

Largest capital asset in public sector

East Riding Highways £3.5 bn (GRC)

CIPFA The Chartered Institute of Public Finance & Accountancy

Code of Practice on

transport infrastructure assets

Guidance to Support Asset Management, Financial Management and Reporting

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21

LSG – Highway Asset Transformation

Implementation

- Project Board appointed January 2011
- Highway Asset Strategy, CES & Streetscene, Finance, Audit, Insurance Team & Corporate ICT
- Changes to corporate ledger included in asset management system
- Works ordering and treatments recorded to street and feature level
- Major change management issues – technology shock!
- Change to highway inspection procedures

LSG – Highway Asset Transformation

- ## Safety Inspections – old method

- All paper based records
- Works orders input by hand
- Record keeping and record retrieval for court = time consuming
- Inconsistencies 5 teams
- Poor records regarding repair times
- 80 – 85% coverage
- Change required

LSG – Highway Asset Transformation

- ## Safety Inspections – new method

- Developed 2011 – 2012
- Fully implemented 2012 – 2013
- 350 Inspection Routes
- Average 70 Routes / month
- > 700 inspections 2012 / Feb 2013
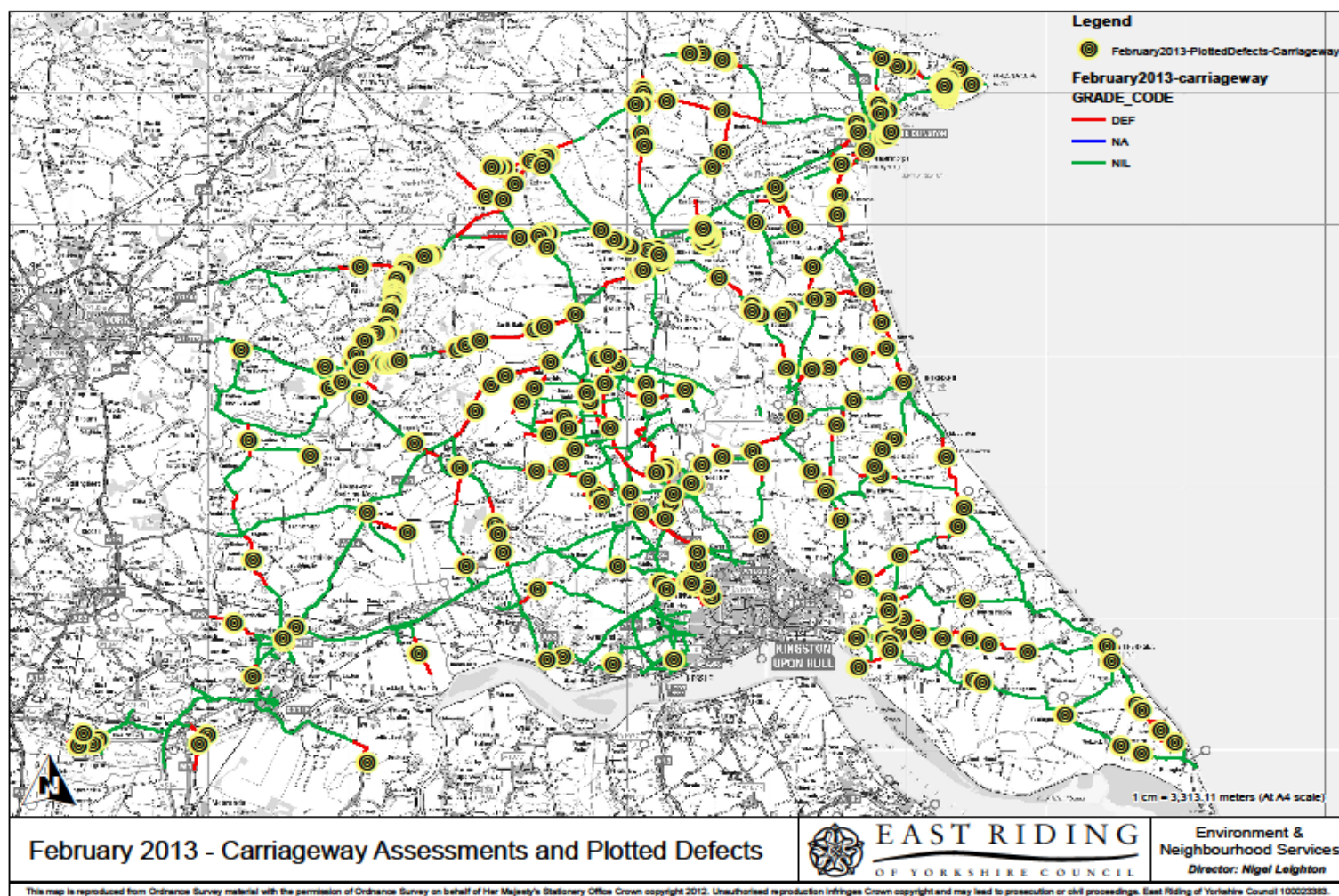- 96% coverage
- Fully auditable

LSG – Highway Asset Transformation

- ## Geo-data

- 55,000 mapped defects
- 93 % mapped by GPS
- Actions date / time stamped
- Full audit trail
- Cost known per defect
- Insurance records – identified and repaired data to exact minute
- Intelligence across the network
- Professionalism in court

Highway Assessment - Bridlington Road, Barmston - October 2011
Defects Found

Legend

DEF

NA

NIL

DEF
HM Whole Street Carriageway
NHodgson JFoster -overcast & light rain- 27-10-2011
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BARMSTON

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February 2013 - Carriageway Assessments and Plotted Defects

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LSG – Highway Asset Transformation

Burton Fleming Road, Wold Newton - Defects plotted
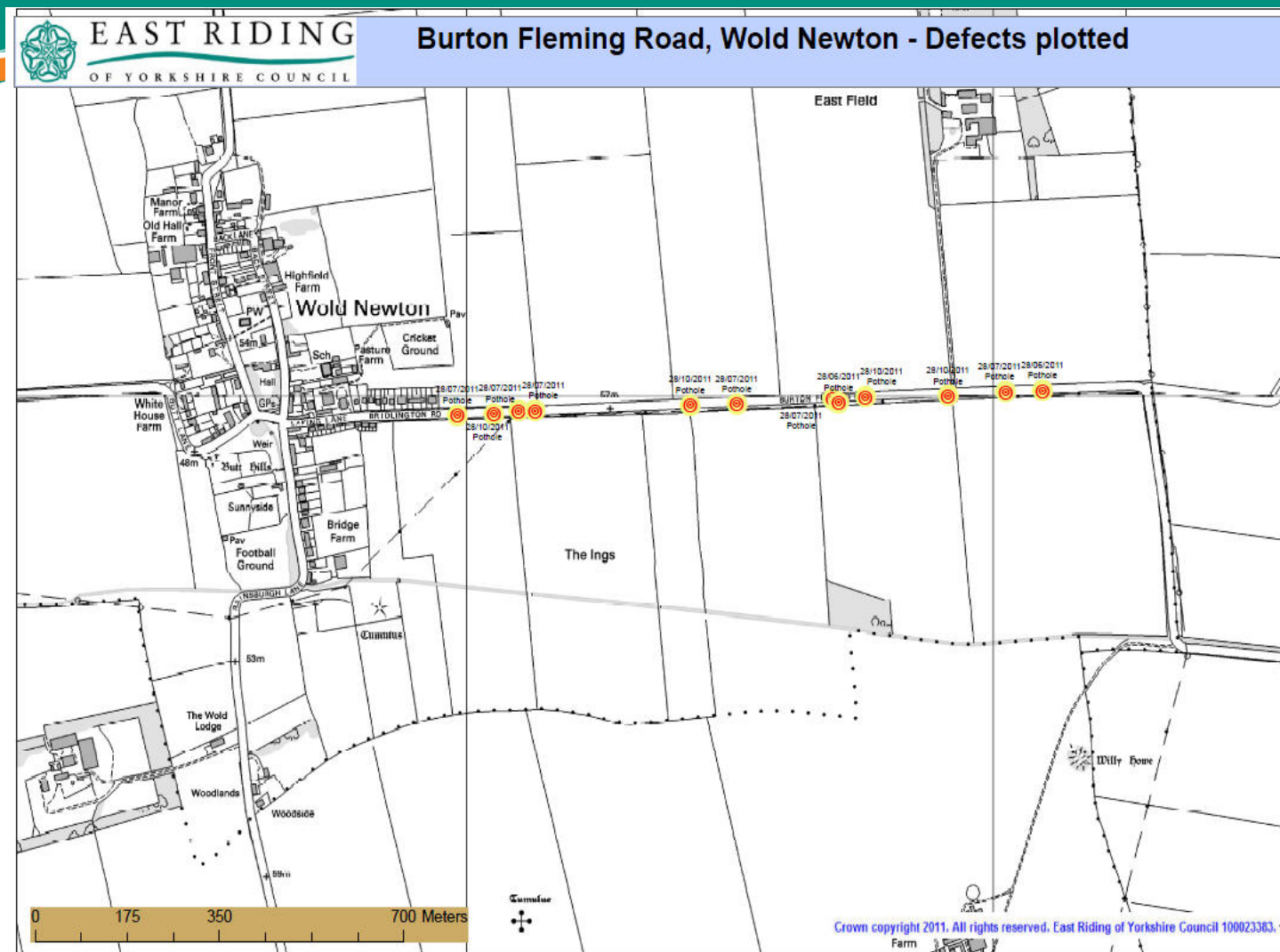
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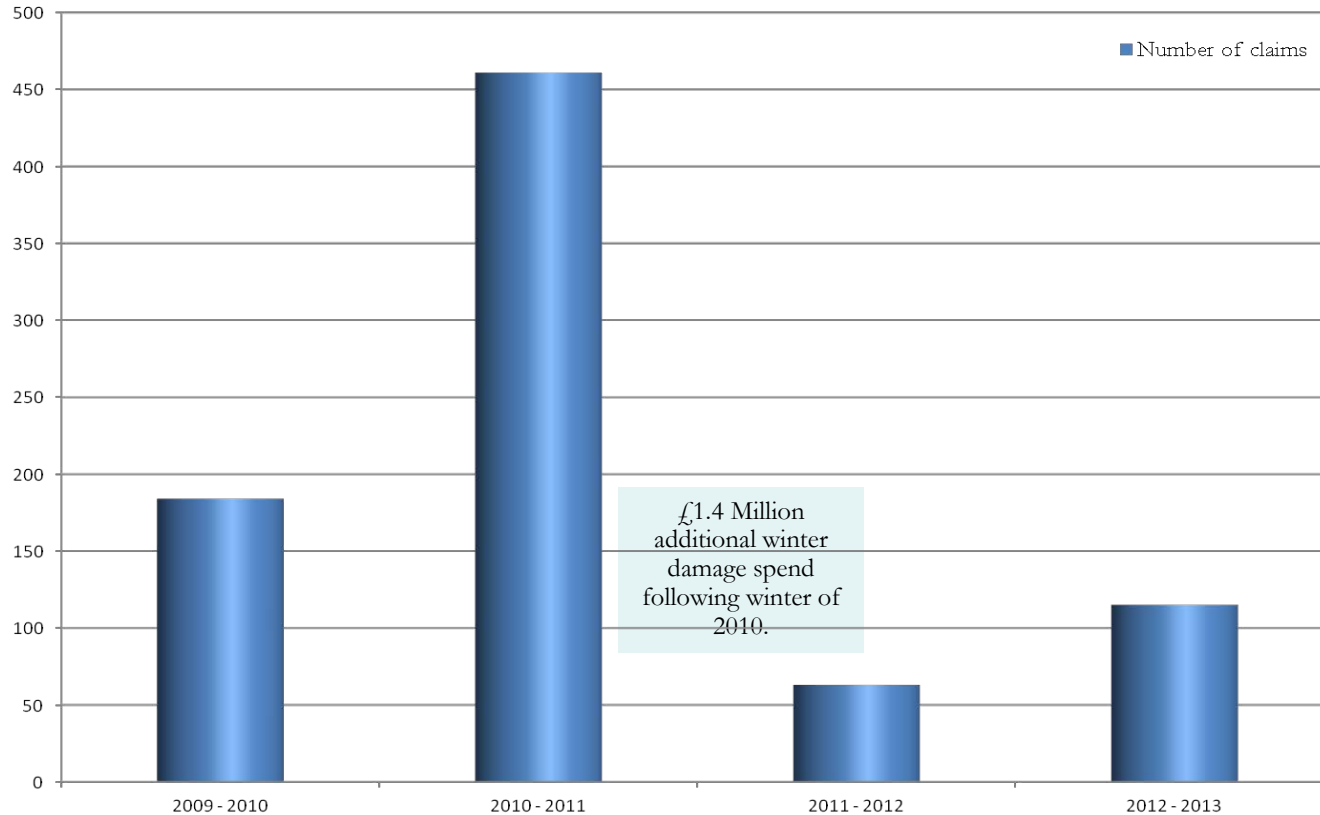www.eastriding.gov.uk

LSG – Highway Asset Transformation

- ## Invest to Save

- Preventative treatment is the key

- Reduction in defects

- Reduction in claims

- Increased capacity to undertake inspections

- Prevention is better than cure

- Invest now save later

LSG – Highway Asset Transformation

Bar chart showing the number of claims per financial year

£1.4 Million additional winter damage spend following winter of 2010.

Legend: ■ Number of claims

X-axis: 2009 - 2010, 2010 - 2011, 2011 - 2012, 2012 - 2013

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LSG – Street Lighting

- APSE - Best Street Lighting Performer 2007
  - \> 40,000 lit assets
  - Predominantly paper based system
  - Continual improvement
  - 2008 – implemented integrated ICT solution in Confirm
    - Night time inspections record data onto mobile GPS device
    - Full record rather than by exception
    - Removed multiple data handling – data entry errors?
    - Improved work ordering
    - Jobs on mobile devices – details updated and data transferred
    - Removed multiple data handling – data entry errors?

LSG – Forestry Asset Transformation

- Project commenced January 2012
  - 28,000 trees? Unknown liability!
  - Capture all highway trees / Private being a danger to the highway
  - £150k investment 2012 - £50k hardware/software
  - 3 months June – August 2012
  - Initial routes based on LSG – adopted highway
  - Completed in 9 weeks!
  - Extended to off street sites – schools, parks – further gazetteer?
  - >400,000 assets captured
  - Approx. 9,000 'Dead' or requiring further inspection
  - Still ongoing - paper system being replaced by integrated ICT solution July 2013
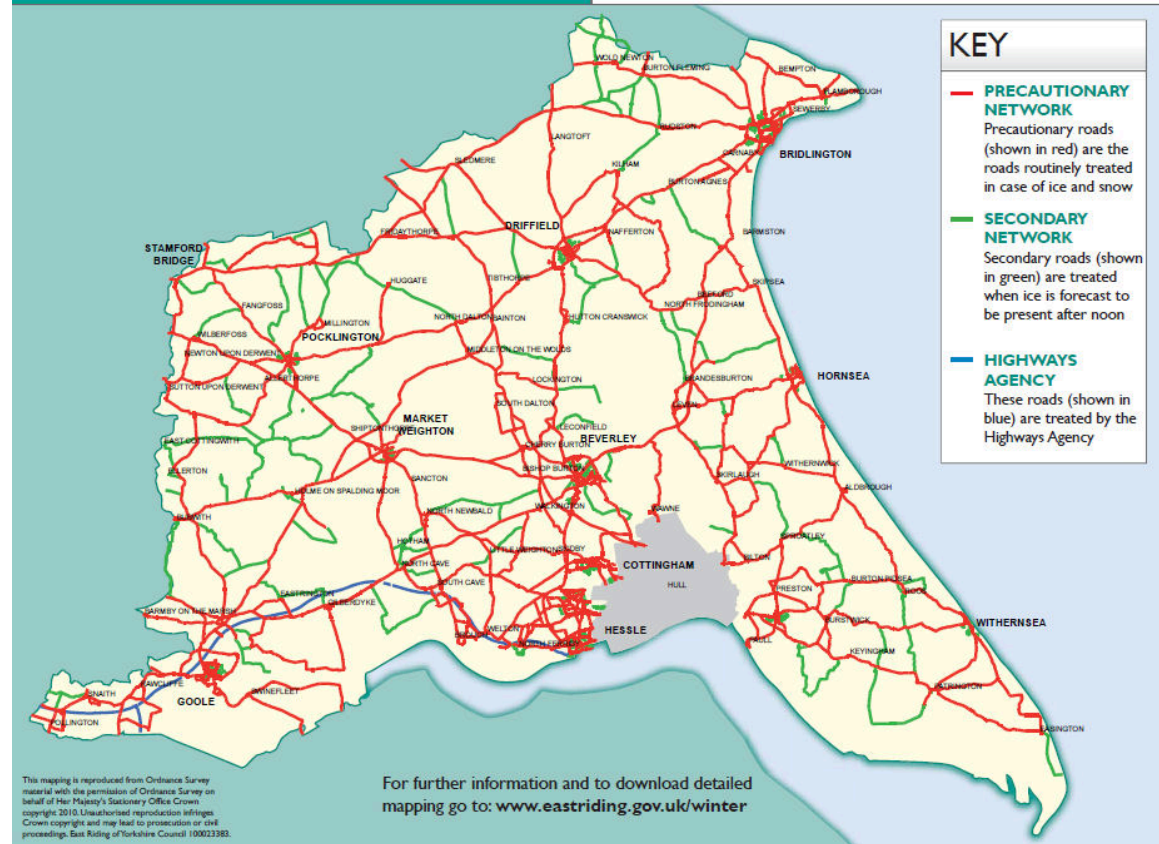
LSG – Winter Services

- Facts & Figures
  - Precautionary Routes 38%
  - Reactionary Routes 12%
 - Footpath network 2.56%
  - Salt bins >900

- Self-help
  http://www2.eastriding.gov.uk/winter/

EAST RIDING ROAD SALTING MAP — TREATED WINTER ROADS IN YOUR AREA

KEY
- **PRECAUTIONARY NETWORK** Precautionary roads (shown in red) are the roads routinely treated in case of ice and snow
- **SECONDARY NETWORK** Secondary roads (shown in green) are treated when ice is forecast to be present after noon
- **HIGHWAYS AGENCY** These roads (shown in blue) are treated by the Highways Agency

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LSG – Winter Services
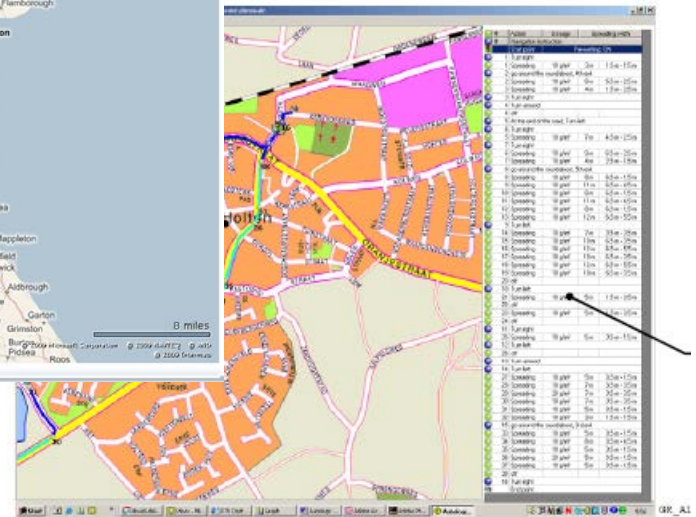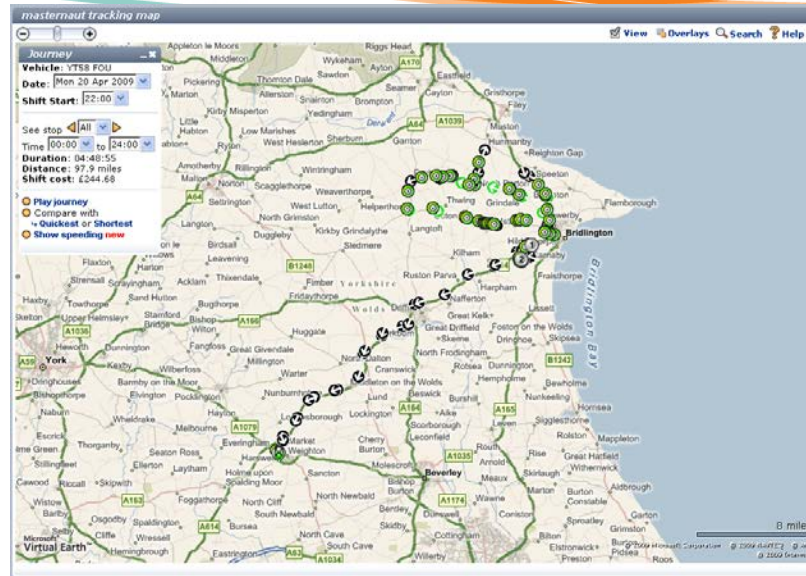
- All winter vehicles are fitted with advanced tracking
- Many have auto salting systems

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- What next?

- Hardware & software developments
- Enhanced back office integration
- Ensure data is contemporary
- Embrace national and local initiatives - TER and mobile working
- Digital by default - reduce customer transactional costs
- Automated customer engagement and feedback
- Continue to innovate / share Best Practice
- Expect the unexpected!

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35

Thank you for listening.

Are there any questions?

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