

LOTAMB Skid Training 2012

The London Skid Project: Site Prioritisation

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Session outline

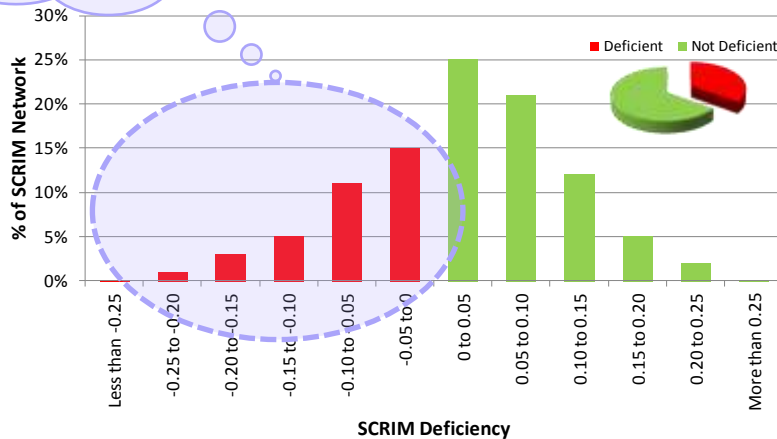


- London deficiency
- Need for prioritisation
- The Deficiency Listing approach
- The Pan-London approach
- Roles and responsibilities to implement the skid strategy

Network SCRIM Deficiency



In London there is typically 40 -50% below IL, so need to prioritise



SCRIM deficiency in London



- There are significant lengths below IL
- The IL is an **investigatory** level – not an **intervention** level
- The key process is to understand how this relates to accident risk on network
- Consensus is that it is not possible to investigate all sites below IL
- Prioritisation is key

Developing a Prioritised Site Listing



- A.k.a. Deficiency Listing
- To identify locations (sites) in the network that may require investigations for skid resistance improvements
- Populate SCRIM Summary Table with the number of accidents at each summary length
- Can incorporate traffic and other conditions to prioritise sites for investigation

Prioritised Site Listings



- Have been produced annually
- Use annual survey data
- Update of accidents from TfL
- Accidents fitted to PMS network using grid reference/ road code
- SCRIM and accidents linked in PMS database

Accidents - Stats 19 Form



- Form used by the Police to record road traffic accidents
 - Accident details
 - Contributory factors
 - Location details
 - Driver/Casualty details
 - Vehicle details
 - Road/Environmental conditions
 - Etc.
- Reasonably good coverage of Injury Accidents
- Only accidents reported to the police are recorded

Uploading Stats 19 into PMS



- Highway authorities can obtain Stats 19 data from the Police
- Location description not in the same format as in PMS
- Accident Management System Software used to fit accidents to the correct locations (uses police recorded Road Code and/or GPS)
- Stats 19 does not record XSP for accidents
- Accident XSP is applied based on a set of rules (based on MSSC, Site Category, and IL)

Prioritisation – Accidents and SCRIM



Assign a priority to each site based on skid resistance and the number of accidents in the past 3 years

Priority 1	At least 1 wet accident and MSSC is $\leq IL$
Priority 2	No wet accidents and MSSC is $\leq IL - 0.1$
Priority 3	At least 1 wet accident and MSSC is $> IL$ and $\leq IL + 0.05$
Priority 4	No wet accidents and MSSC is $\leq IL$ and $> IL - 0.1$
Priority 5	Does not require investigation.

Borough site priority listing



Priority 1	At least 1 wet accident and MSSC is $\leq IL$
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Premise is that sites are below IL and there are 'wet' accidents.

Presumption is that there may be link

Investigate to determine whether there is causation

Borough site priority listing



Priority 2 No wet accidents and
MSSC is $\leq IL - 0.1$

Sites are significantly below IL, but no wet accidents.

Can be considered higher risk due to likelihood of future accidents

Borough site priority listing



Priority 3 At least 1 wet accident and
MSSC is $> IL$ and $\leq IL + 0.05$

Sites are marginally above IL with wet accidents

Methodology available to assign different IL's to a site

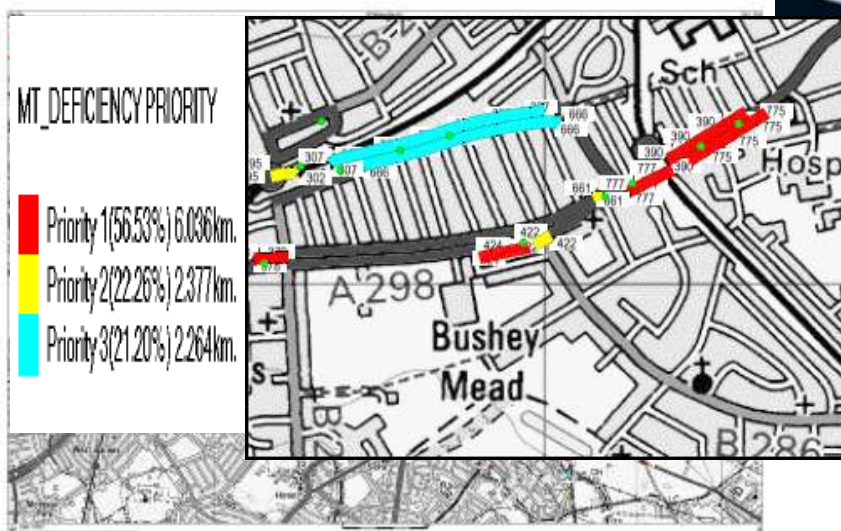
These may be sites where this should be considered

Deficiency listings



	Survey Date	Accident Dates	Def Listing
1	2008	2006 -2008	April 2009
2	2009	Apr 2006 -Apr 2009	Nov 2009
3	2010	Sep 2007 - Sep 2010	Mar 2011
4	2011	2008 - 2010	Jan 2012
5	2012	2009 - 2011	In progress...

Deficiency plan



Prioritised sites in London



- Not all deficient sites are 'high risk'
- Some accidents have definitely nothing to do with road surface or its condition
- Need to drill in to individual accident details
- There may be cases where the low skid resistance is due to temporary surface conditions (contamination, etc)
- Preliminary investigations to identify high-risk sites to visit (Investigation Handbook)

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Site listing by priority



- Concern about number of sites
- Priority 1 sites with 1 wet accident
- Some priority 2 may be major concern
- Ability to compare Boroughs
- Development of 'Pan London' ranking methodology

Pan London theory



- To rank sites by factors
 - SCRIM deficiency
 - No of wet accidents
 - Total number of accidents
 - Severity of accidents
 - Site length
 - Traffic
- Various combinations trialled

Pan London ranking



Def Listing	Option 1	Option 2	Option 3	Option 4	Option 5
site 1	site 16	site 16	site 16	site 2	site 39
site 2	site 2	site 2	site 2	site 39	site 2
site 3	site 39	site 39	site 39	site 16	site 16
site 4	site 61	site 61	site 61	site 6	site 24
site 5	site 6	site 6	site 6	site 61	site 6
site 6	site 58	site 66	site 164	site 24	site 1
site 7	site 35	site 200	site 15	site 15	site 61
site 8	site 66	site 15	site 66	site 3	site 3
site 9	site 168	site 3	site 69	site 200	site 9
site 10	site 177	site 24	site 165	site 164	site 200
site 11	site 15	site 204	site 174	site 35	site 35
site 12	site 62	site 44	site 200	site 66	site 15
site 13	site 169	site 74	site 7	site 69	site 23
site 14	site 200	site 35	site 36	site 9	site 69
site 15	site 74	site 62	site 35	site 1	site 44
site 16	site 43	site 23	site 204	site 23	site 66
site 17	site 204	site 69	site 62	site 44	site 164
site 18	site 171	site 58	site 8	site 204	site 26
site 19	site 56	site 9	site 58	site 7	site 37
site 20	site 3	site 43	site 3	site 36	site 204

Pan London listing



- Pan London Weightings: final

SCRIM deficiency	35
Wet accidents (no per km)	30
Dry accident (no per km)	10
KSI	25
Traffic	5

Pan London listing



Boroughs + TfL

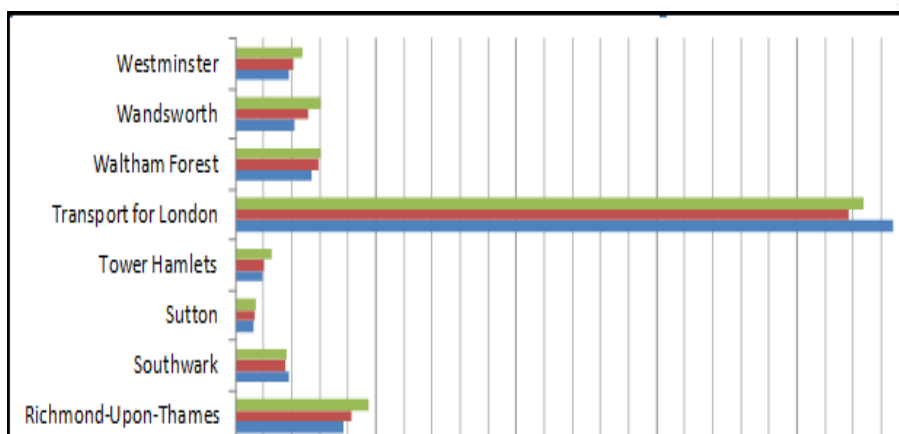
- Uses all the data from the boroughs and TfL
- Applies a site ranking score to every site on TLRN and BPRN
- Over 40000 sites
- Helps establish priorities/ need across London
- Issued to board, with borough lists prioritised using methodology

Pan London Listing



- Top 300 sites
- 234 are at approaches to crossings
- 736 wet accidents, 1655 dry accidents
- 341 KSI's
- Potential to reduce accidents
- Sites will require investigation, and may not be identified for treatment

Pan London ranking



Standards



- Review annually
- Lock in to service statement
- Consider adjoining sites/ different sides of road
- Define roles
- Timescale

Skid strategy: suggested roles



- Investigator
 - Undertaking site investigation and assess the risk of a wet skidding accident occurring.
 - Confirming the investigatory level and the site category or recommending changes.
 - Recommending treatments and setting Priorities
 - Recommending appropriate aggregates and/or PSV.

Skid strategy: suggested roles



- Highway manager
 - Approving changes to the investigatory levels and site categories
 - Approving treatments to improve skid resistance
 - Sharing information on Site Investigations with the Accident Investigation and Prevention Manager
 - Collating data on accident rates and accident densities for the roads that are affected by the skid policy and providing results to the Council Members

Skid strategy: suggested roles



- Road safety manager
 - Providing advise on accident data/ studies
 - Supporting policy
 - Identifying 'synergy' with corridors and neighbourhood schemes

Purpose of investigation



- The objective is to determine whether a surface treatment is justified to reduce the risk of vehicles skidding or
- Other actions
- Do nothing

Which site listing?



- Decision for each Borough
- Probably need to 'draw line'
- 'Lock in' to policy/ service statement
- At preliminary stage work through listing
- Consider how to link sites
 - Adjoining
 - Opposite sides of road
- At secondary take pragmatic view to undertaking investigation work

Annual review



Statement of intent

- Delegations – update list
- Investigation priorities:
 - How many
 - Which priority system
- Timetable
 - Key milestones
- Treatment priorities
- Signing policy



**The 4th International Safer Roads
Conference
Cheltenham UK, 18 – 21 May, 2014**

***Saving lives through safer roads
is no accident!***

