

LOTAMB Skid Training 2012

Initial Investigations Exercise

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Introduction

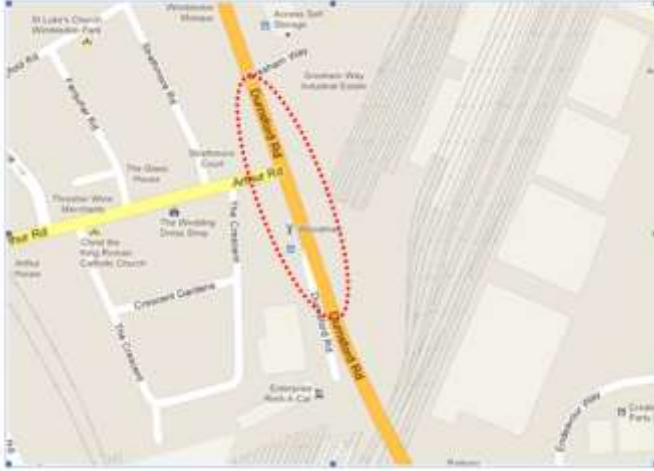


- Four sites from London boroughs
- Priorities 1, 2, and 3
- Preliminary investigation to select sites for a secondary field visit
- Latest SCANNER surveys usually collect videos
- Do authorities have access to network videos?

Site 1



The Site (Locality Plan and Images)



Priority 1 (SCRIM Deficient with Wet Accidents)

Series of Approaches to Junctions

218m long

3 SCRIM Summary Lengths

South to North

Site 1 Details



Details from the Prioritised Site Listing Table

Site ID	AA-117
Site Priority	1
Site Length	218
Road Name	A218
Site CSC	0.40
Site SD	-0.05
Wet Accidents (Site)	3
Dry Accidents (Site)	0
SCRIM Investigatory Level	0.45
SCRIM Site Category	Approach to Junction
TOTAL AADF	16182

Details from the Site Grouping Table

A	E	F	G	H	I	J	K	L	N	P	AF	AG	AH	AI	AM	AU
Site ID	Road Name	Section Code	XSP	Start M	End M	Survey Date	CSC	Length	SCRIM Def	SCRIM IL	Site Length	Site CSC	Site SD	Wet Acc (Site)	Dry Acc (Site)	Priority
AA-117	A218	22102232/10	CL1	840	940	20/09/2010	0.4	100	-0.05	0.45	218	0.40	-0.05	3	0	1
AA-117	A218	22102232/10	CL1	940	968	20/09/2010	0.48	28	0.03	0.45						
AA-117	A218	22102232/20	CL1	0	90	20/09/2010	0.37	90	-0.08	0.45						

Image 1: Approach to First Junction



- Low Skid Resistance on Coloured Surfaces



Image 2: Approach to First Junction



- First junction is concealed and there is poor sight distance from that approach



Image 3: First Junction



- Poor visibility at junction



Image 4: Approach to Second Junction



- Bus Stop/Pub/Seating = Lots of people movement
- No crossing facilities except at the next junction



Image 5: Second Junction



- Old HFS Surface



Image 6: Pedestrian Crossing Beyond Junction



- Approach to Crossing was not included in the PMS as a separate site category



Image 7: Approach to Third Junction



- Poor location for disabled parking bays



Image 8: Third Junction



- Disabled parking bays by the junction, queuing hazard



Image 9: Approach to Second Junction from the Side Road



- Bevelled crossing only on one side



Site 1: Accident Details



Accident 1	
Accident Date	16/10/2010
Accident Time	0120
Light Conditions	DARKNESS: STREET LIGHTS PRESENT AND LIT
Road Surface Condition	WET / DAMP
Vehicle Location	ON MAIN CARRIAGEWAY
Accident Description	V1 TRIED TO OVERTAKE V2 WHO WAS STATIONARY WAITING TO TURN RIGHT BUT HIT V2 & LOST CONTROL HITTING RAILINGS
Severity	SLIGHT
Contributory Factor	POOR TURN OR MANOEUVRE FAILED TO LOOK PROPERLY LOSS OF CONTROL CARELESS/RECKLESS/IN A HURRY
Skidding and Overturn	NO SKIDDING/JACK-KNIFING

Accident 2	
Accident Date	22/01/2010
Accident Time	1920
Light Conditions	DARKNESS: STREET LIGHTS PRESENT AND LIT
Road Surface Condition	WET / DAMP
Vehicle Location	ON MAIN CARRIAGEWAY
Accident Description	V2 DID SEE V1, V2 PULLED OUT INFRONT OF V1
Severity	SLIGHT
Contributory Factor	POOR TURN OR MANOEUVRE FAILED TO LOOK PROPERLY
Skidding and Overturn	NO SKIDDING/JACK-KNIFING

Site 1: Accident Details



Accident 3	
Accident Date	20/02/2010
Accident Time	2240
Light Conditions	DARKNESS: STREET LIGHTS PRESENT AND LIT
Road Surface Condition	WET / DAMP
Vehicle Location	ON MAIN CARRIAGEWAY
Accident Description	V2 HIT TURNING V1, BOTH DRIVERS STATE ATS WAS GREEN
Severity	SLIGHT
Contributory Factor	DEFECTIVE TRAFFIC SIGNALS FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED
Skidding and Overtum	NO SKIDDING/JACK-KNIFING

Accident 4	
Accident Date	09/12/2006
Accident Time	00:00
Light Conditions	DAYLIGHT: STREET LIGHTING UNKNOWN
Road Surface Condition	WET / DAMP
Vehicle Location	
Accident Description	V1 TURNED IN PATH V2
Severity	SLIGHT
Contributory Factor	
Skidding and Overtum	

Site 1: Summary of Observations



- First junction is concealed and there is poor sight distance from that approach
- Low Skid Resistance on Coloured Surfaces
- Bus Stop/Pub/Seating = Lots of people movement: but no crossing facilities except at the other side of junction
- Old High Friction Surfacing
- Bevelled crossing only on one side
- Approach to Crossing not Site Categorised
- Poor location of disabled parking bays
- All accidents occurred in wet/damp conditions

Site 1: Outcome



- Set up Approach to Crossing site category in the PMS
- Recommendation is to undertake the secondary field investigation

Site 2



The Site (Locality Plan and Images)



Priority 2
(Significantly
SCRIM Deficient
but no Wet
Accidents)

An Approach to a
Crossing

50m long

1 SCRIM Summary
Length

East to West

Site 2



Details from the Prioritised Site Listing Table

Site ID	AA-177
Site Priority	2
Site Length	50
Road Name	A219
Site CSC	0.37
Site SD	-0.18
Wet Accidents (Site)	0
Dry Accidents (Site)	0
SCRIM Investigatory Level	0.55
SCRIM Site Category	Approach to Crossing Etc
TOTAL_AADF	30939

Details from the Site Grouping Table

A	E	F	G	H	I	J	K	L	N	P	AF	AG	AH	AI	AM	AU
Site ID	Road Name	Section Code	XSP	Start M	End M	Survey Date	CSC	Length	SCRIM Def	SCRIM IL	Site Length	Site CSC	Site SD	Wet Acc (Site)	Dry Acc (Site)	Priority
AA-177	A219	22103306/10	CL1	220	270	20/09/2010	0.37	50	-0.18	0.55	50	0.37	-0.18	0	0	2

Image 10: Driveways, End of HFS Surface



- Surface appears to be relatively new
- HFS section before the approach to crossing



Image 11: Approach to a Junction



- A busy section with lots of events/hazards



Image 12: Junction and Contaminated Surface



- Temporary surface contamination evident
- Temporary surface condition could be the reason for low Skid Resistance



Image 13: Crossing and Contaminated Surface



- No HFS on approach to the crossing



Image 15: Stables



- Stable/Horses the likely source of contamination
- Is temporary contamination the reason for low SR?



Image 14: Contaminated Surface, Temporary



- Is this a regular occurrence?



Site 2: Accident Details



Site 2: Summary of Observations



- A busy section with lots of events/hazards
- Surface appears to be relatively new
- HFS section before the approach to crossing
- No HFS on approach to the crossing
- Temporary surface contamination evident
- Stable/Horses could be the source of contamination
- Temporary surface condition could be the reason for low Skid Resistance
- Is this a regular occurrence?

Site 2: Outcome



- Check SCRIM data from previous surveys and check if it is a big drop
- Is the material achieving the required IL for Approach to Crossings
- Check the performance of the particular material at this site as well as other sites installed with the same material
- Recommendation is to monitor the site

Site 3



The Site (Locality Plan and Images)



Priority 3 (Slightly above IL, but with Wet Accidents)

Single Non-Event section, One-way

90m long

1 SCRIM Summary Length

North to South

Site 3



Details from the Prioritised Site Listing Table

Site ID	AA-41
Site Priority	3
Site Length	90
Road Name	A217
Site CSC	0.45
Site SD	0.05
Wet Accidents (Site)	1
Dry Accidents (Site)	2
SCRIM Investigatory Level	0.40
SCRIM Site Category	Single Non-Event
TOTAL_AADF	26387

Details from the Site Grouping Table

A	E	F	G	H	I	J	K	L	N	P	AF	AG	AH	AI	AM	AU
Site ID	Road Name	Section Code	XSP	Start M	End M	Survey Date	CSC	Length	SCRIM Def	SCRIM IL	Site Length	Site CSC	Site SD	Wet Acc (Site)	Dry Acc (Site)	Priority
AA-41	A217	22103995/10	CL1	0	90	20/09/2010	0.45	90	0.05	0.4	90	0.45	0.05	1	2	3

Image 16: Approach from North



- Speed of straight-through traffic could be high, but no advisory sign for traffic to slow down



Image 17: Approach from North



Image 18: Exclusive straight through lanes, hence Non-Event



- Traffic merging



Image 19: 3-lane One way



- New pedestrian crossing installed
- Needs to be entered into PMS



Image 20: New Pelican Crossing



- New pedestrian crossing location
- High risk of pedestrian collisions



Site 3: Accident Details



Site 3: Accident Details



Accident 1	
Accident Date	09/08/2008
Accident Time	00:00
Light Conditions	DAYLIGHT: STREET LIGHTING UNKNOWN
Road Surface Condition	WET / DAMP
Vehicle Location	
Accident Description	IT IS UNCLEAR HOW ACCIDENT HAPPENED BUT V1 SPUN INTO SOME BOLLARDS AFTER THE COLLISION
Severity	SLIGHT
Contributory Factor	
Skidding and Overturn	

Accident 2	
Accident Date	30/11/2007
Accident Time	00:00
Light Conditions	
Road Surface Condition	DRY
Vehicle Location	
Accident Description	PEDESTRIANS CROSSED IN PATH V1
Severity	SERIOUS
Contributory Factor	
Skidding and Overturn	

Accident 3	
Accident Date	26/03/2010
Accident Time	11:30
Light Conditions	DAYLIGHT: STREET LIGHTS PRESENT
Road Surface Condition	DRY
Vehicle Location	ON MAIN CARRIAGEWAY
Accident Description	V1 TURNING RIGHT TO JOIN MAIN FLOW OF TRAFFIC HITS REAR OF M/C V2.
Severity	SLIGHT
Contributory Factor	FAILED TO LOOK PROPERLY FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED CARELESS/RECKLESS/IN A HURRY NERVOUS/UNCERTAIN/PANIC
Skidding and Overturn	NO SKIDDING/DACK-KNIFING

Site 3: Observations



- Speed of straight-through traffic could be high, but no advisory sign for traffic to slow down
- Traffic merging
- New pedestrian crossing installed
- High risk of pedestrian collisions

Site 3: Outcomes

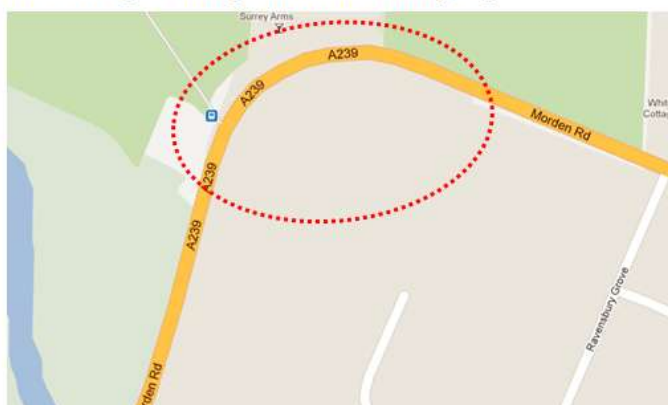


- Recommended to add the new Approach to Crossing into the PMS and reassess priorities
- Site will be divided into two parts – the first part would remain as Non-Event and may not be SCRIM deficient
- The Approach to Crossing (50m) could then be SCRIM Deficient, but with no accidents, therefore very likely Priority 2
- Undertake Secondary Investigation if necessary

Site 4



The Site (Locality Plan and Images)



Priority 1
(SCRIM Deficient
with Wet
Accidents)

Single <100m
Bend

120m long

2 SCRIM
Summary
Lengths

SW to SE

Site 4



Details from the Prioritised Site Listing Table

Site ID	AA-337
Site Priority	1
Site Length	120
Road Name	A239
Site CSC	0.34
Site SD	-0.16
Wet Accidents (Site)	1
Dry Accidents (Site)	0
SCRIM Investigatory Level	0.50
SCRIM Site Category	Single <100m
TOTAL_AADF	19570

Details from the Site Grouping Table

A	E	F	G	H	I	J	K	L	N	P	AF	AG	AH	AI	AM	AU
Site	Road No	Section Co	X	Start	End	Survey Dt	C	Len	SCRIM C	SCRIM	Site Len	Site C	Site	Wet Acc (SI)	Dry Acc (SI)	Prior
AA-337	A239	22104542/20	CL1	360	460	20/09/2010	0.35	100	-0.15	0.5	120	0.34	-0.16	1	0	1
AA-337	A239	22104542/20	CL1	460	480	20/09/2010	0.28	20	-0.22	0.5						

Image 21: Approach from South, Slippery Road Sign



- Slippery Road sign already in place



Image 22: Approximate Start of Site



- Surface appears to be worn
- Site is SCRIM deficient in both directions



Image 23: Smallest Radius



- Bend <100m radius



Image 24: Approximate End of Site



Site 4: Accident Details



Locations of Accidents and their Details



Site 4: Accident Details



Accident 1	
Accident Date	17/07/2009
Accident Time	2053
Light Conditions	DARKNESS: STREET LIGHTS PRESENT AND LIT
Road Surface Condition	WET / DAMP
Vehicle Location	ON MAIN CARRIAGEWAY
Accident Description	DRIVER LOST CONTROL V1 HIT ONCOMING V2 CAUSING IT TO HIT STATIONARY V3 AND V4
Severity	SLIGHT
Contributory Factor	TRAVELLING TOO FAST FOR CONDITIONS
Skidding and Overturn	SKIDDED

Accident 2 – Outside Site	
Accident Date	20/02/2008
Accident Time	00:00
Light Conditions	
Road Surface Condition	WET / DAMP
Vehicle Location	ON MAIN CARRIAGEWAY
Accident Description	POLICE VEHICLE SKIDDES ON POOR ROAD SURFACE COLLIDES WITH CENTRAL ISLAND , BOLLARD & LAMP POST
Severity	SLIGHT
Contributory Factor	
Skidding and Overturn	

Site 4: Observations



- Slippery Road sign already in place
- Both wet accidents involved skidding
- Surface appears to be worn
- Site is SCRIM deficient in both directions
- Accident details showed one skidded vehicle was travelling on SE to SW direction which is CR1, but the accident has been assigned to the CL1 direction because CL1 is more deficient

Site 4: Observations and Outcome



- Check Skid Resistance in both directions – both directions deficient
- Recommendation is to undertake a Secondary Investigation

Key messages



- High priority in deficiency listing does not mean a treatment is necessary
- High priority in deficiency listing does not necessarily mean a site investigation is necessary
- Network changes such as new pedestrian crossings, junction layout changes, etc. needs to be updated in the PMS
- Latest network layout needs to be incorporated in the deficiency list preparation
- At site investigation level, accidents need to be validated, and sites need to be reassessed to ensure a skidding issue exists
- Very difficult to investigate everything - Lock-in to the policy and prioritisation criteria



WORKS END

THANK YOU