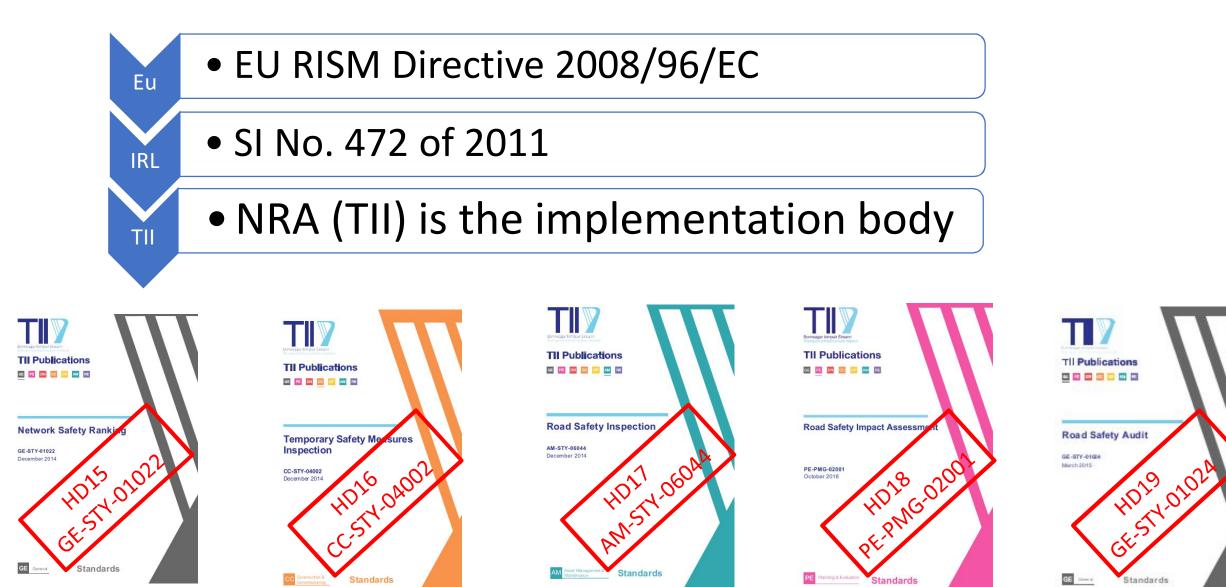
Implementation of the RISM Directive to Date.

National Roads Conference, 29th September 2017

Norman Bruton

EU, Road Infrastructure Safety Management (RISM)



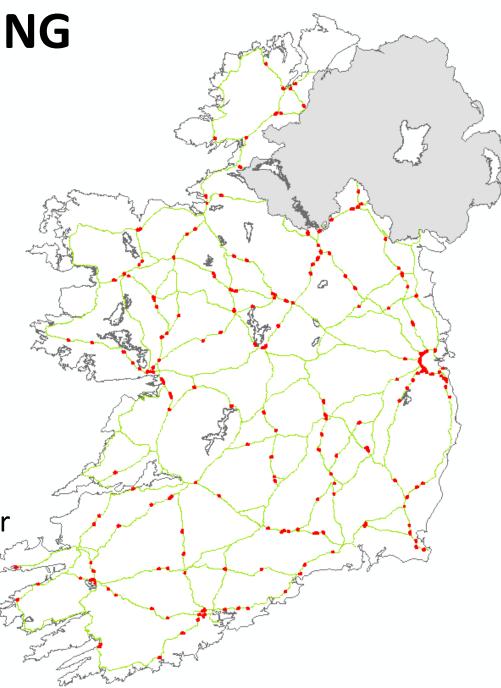
Download as Microsoft Excel (.csv) - 13 documents	13 [Ocuments found
AllRevised standardGENERALqualifications for eachImage: GE-Sthis year/ear	to be published later	Published
 GE-STY-01023 - NRA HD 15 Network Safety Ranking - Site Assessment Qualifications 	Jul 2012	Published
STY) Specification for Works (SP	W) Standard Construction Details	Strategio M

GE-STY-01022 (HD 15)

- Reactive approach
- Collision history over 3 year period
- Well established procedure
- Latest analysis period is 2014-2016

Findings;

3,265 injury collisions across 5,300km of national road
234 (7.1%) High Collision locations or cluster sites
34 Fatal, 73 Serious, 821 Minor injury collisions at cluster sites



GE-STY-01022 (HD 15)

The sites have been analysed by the Regional Road Safety Engineers;

110 sites have been identified as having Engineering interventions40 sites have identified Education and Enforcement plus Engineering84 sites have identified no engineering solution.

71 successive cluster sites (2012-2014)

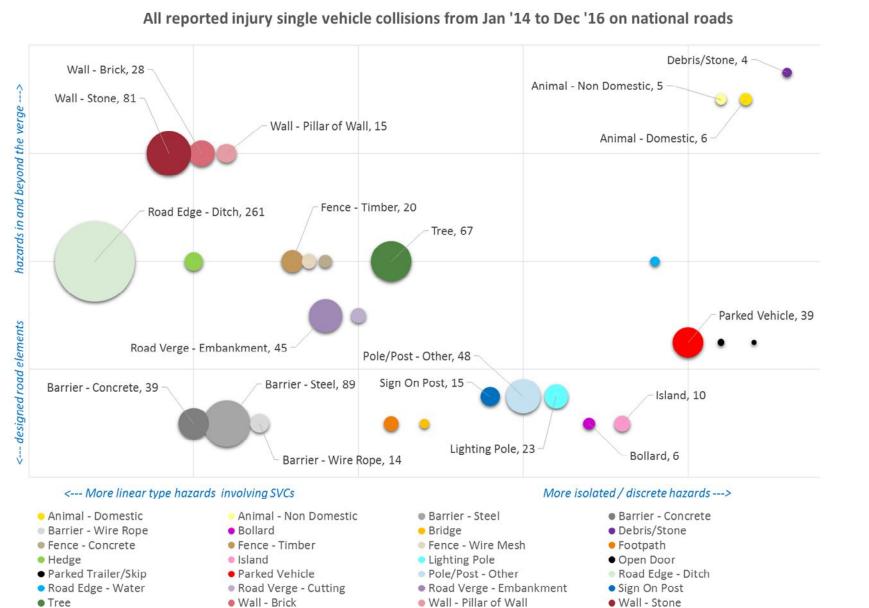
New Analysis;

Material damage data now available % chance of an injury occurring for each Primary Collision Type.

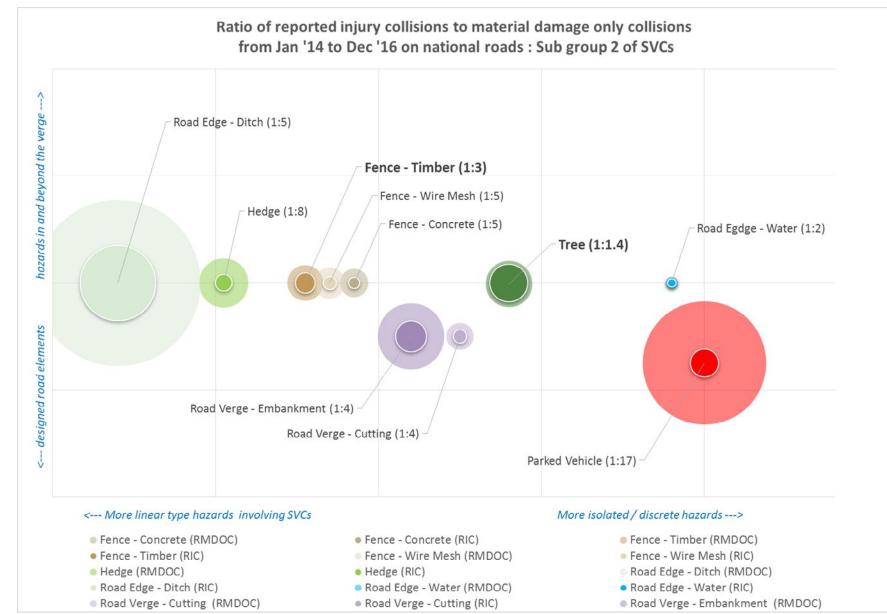
GE-STY-01022 (HD 15)

Primary Collision Type		Per Cent Chance of Injury (All NR)		y (All NR)	Per Cent Chance of Injury (HCL)	
Pedestrian	n		91%		93%	
Cyclist			77%		75%	
Head-On			58%		68%	
Parked Trailer/Skip			50%		N/A	
Tree		1	42%		67%	
Road Edge - Water			40%		N/A	
Wall - Pillar of	Wall	36%			25%	
Head-On, Right	tTurn	3 3%			26%	
Wall - Stone	25%		25%		36%	
Fence - Timber	5	24%			30%	
Lighting Pole		23%			20%	
Road Verge - Cutting			22%		50%	
Barrier - Concrete	14%		14%			
Other	14%		15%			
Hedge	12%		33%	-		
Rear End, Straight	11%		15%			
Barrier - Steel Angle, Left Turn	11%		16%			
Side Swipe	9%		12%			
Sign On Post	9%		8%			
Rear End, Left Turn	9%		11%			
Bollard	9%		17%			
Barrier - Wire Rope	8%		25%			
Bridge 8%			15%			
Debris/Stone 6%			33%			
Parked Vehicle 6%			9%			

GE-STY-01022 (HD 15)



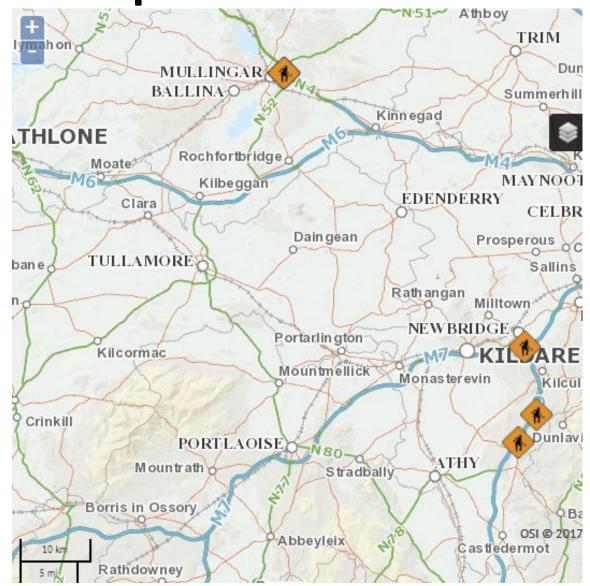
GE-STY-01022 (HD 15)

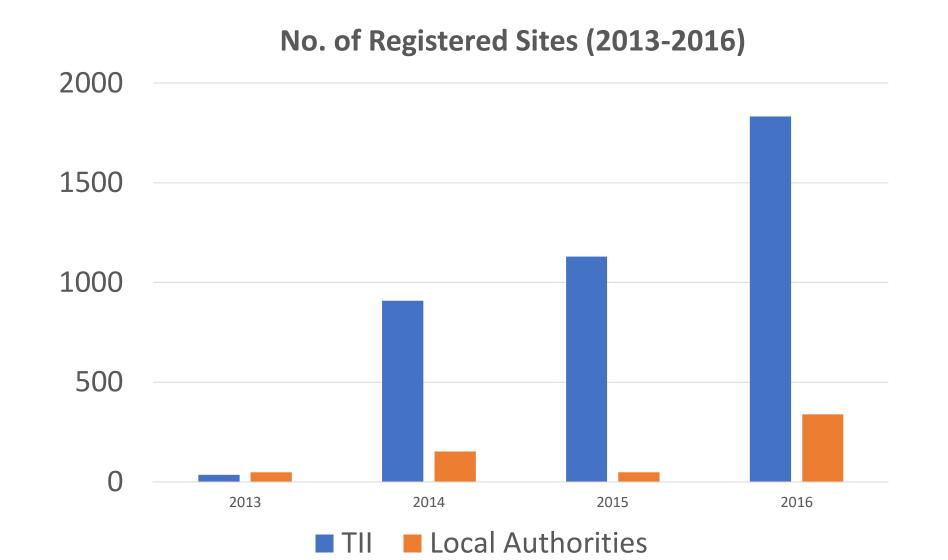


Inspections of Temporary Safety Measures at Roadworks sites

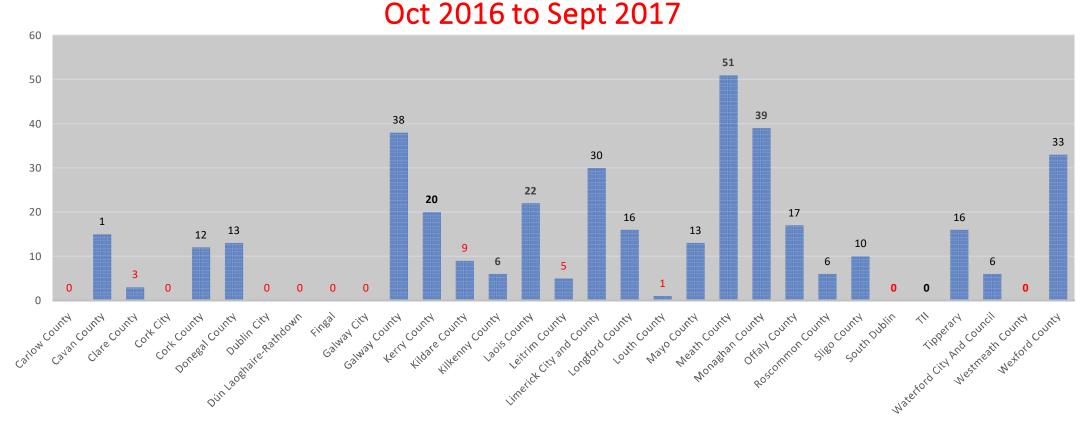
Public Portal www.tiitraffic.ie

Inet/maps





HD 16 Registered Roadworks *Last 12 Months*



County Example - Activity in Last 12 Months



Website Users;

280 Registered users of the Website

Lat 12 Months

382 Registered sites – Local Authorities1915 Registered sites - TII (not incl. MMaRC)

Increased uptake

- All counties met over last 14 months
- Most revisited
- Feedback taken on board
- Website developments in progress

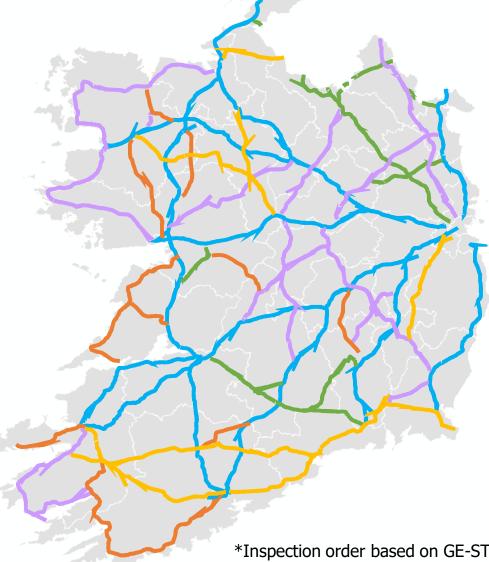
Road Safety Inspections CC-STY-04002 (HD 17)

Road Safety Inspection

Proactive approach to identifying potential safety issues



Road Safety Inspections CC-STY-04002 (HD 17)



RSI Where and when

2012: TEN-T network inspected

2012: Non- TEN-T routes inspected*

2013: Non- TEN-T routes inspected*

2014: Non- TEN-T routes inspected*

2015: Non- TEN-T routes inspected*

2016/17: Review of all RSIs

2014/15/16/17 MMaRC High risk issues implemented

2016/17/18: Implementation of RSI Recommendations

*Inspection order based on GE-STY-01022 (HD15) Network Safety Ranking Results

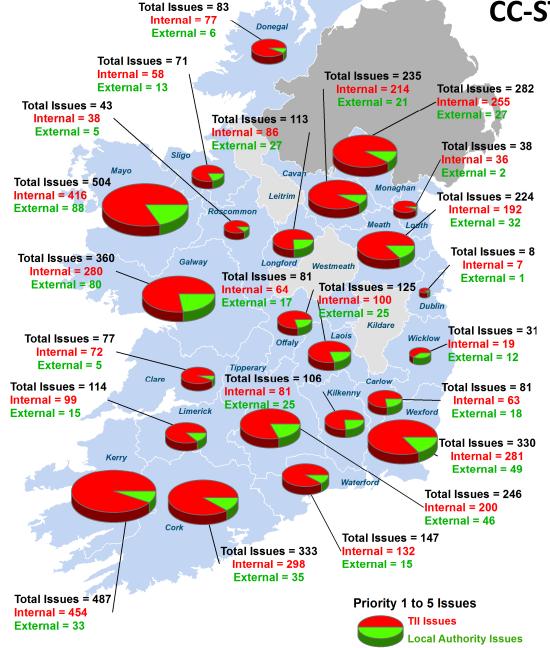
Road Safety Inspections CC-STY-04002 (HD 17)

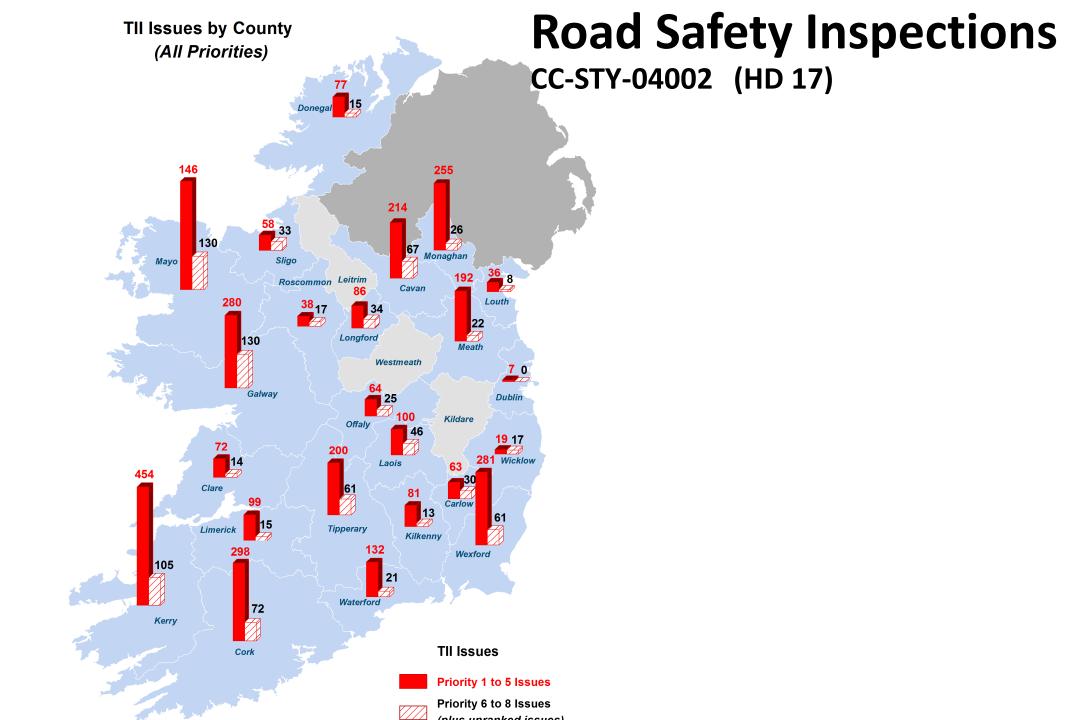
2016/2017 Developments

- Consistency between RSI teams
- Development of recommendations
- Routine Maintenance issues removed (Includes renewal schemes)
- Priority ranking based on combination of risk reduction and cost using Collision Modification Factors
- 90% of network now complete
- Separation of issues into TII/Local Authority
- Issue for implementation (Priority 1-5 in 2017& 2018)
- Wexford pilot, followed by Carlow and Waterford
- Others to follow
- MMaRCs High risk items complete, 2018 commence new round of inspections.

Priority 1 to 5 Issues by County

Road Safety Inspections CC-STY-04002 (HD 17)





Road Safety Impact Assessment PE-PMG-02001 (HD 18)

Road Safety Impact Assessment

"road safety impact assessment" means a strategic comparative analysis of the impact of a <u>new road</u> or a <u>substantial modification</u> to the existing network on the safety performance of the road network.

Road Safety Impact Assessment PE-PMG-02001 (HD 18)

Implementation to Date:

45 Schemes have been enquired about (August 2012- to date)16 of which did not require RSIA as they were mostly on-line

For advice email infosafety@tii.ie

RSIA Vs Stage F Road Safety Audit

RSIA	RSA Stage F
RSIA is carried out by the Design Team	RSA is independent of the Design Team
RSIA looks at road safety benefits/dis- benefits	RSA identifies potential problems

Refer to presentation by Eileen Mc Carthy, Arup TII Road Safety Seminar 2016

http://www.tii.ie/tii-library/conferences and seminars/TII road safety audit seminar/2016/04-E-McCarthy-RSIA-v-RSA.pdf

Road Safety Audit

PE-PMG-02001 (HD 19)

Well established procedure.
231 Registered Auditors since 2009
52 currently with Leader status
Average 125 audits approved per year

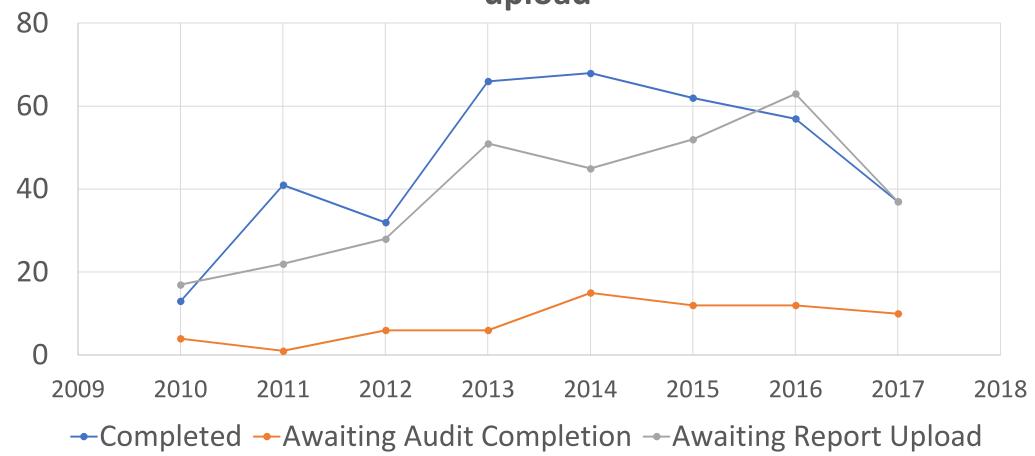
However....

Compliance rate of 31%

Road Safety Audit

PE-PMG-02001 (HD 19)

No. of Audits Completed/incomplete/Awaiting upload



Road Safety Audit

PE-PMG-02001 (HD 19)

Key points

- 1. Auditor/Designer/Employer-Signoff
- 2. Auditors Recommendations
- 3. Designers Standards
- 4. Auditors/Designers Embrace Exception Report route
- 5. No post and rail fence, regardless of speed



END THANKYOU

National Roads Conference, 29th September 2017

Norman Bruton