

The Transport Resilience Review 2014: highways- related issues and recommendations

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Introduction

- Background of last winter's extreme weather; many storms and high rainfall
- Much flooding, damage and disruption – worst impact in the southern half of England and parts of Wales
- Terms of Reference covered roads, rail, airports and ports, and all extreme weather (except snow and ice)
- Report required by Recess, to allow early action and to allow input to next Spending Review
- Panel (Richard Brown, John Curley, Brian Smith) supported by team from Met Office, HA, Network Rail and DfT
- Approach: invited evidence, visits, detailed discussions

The weather and its impacts

- Record number of storms
- Tidal surge in early December
- Periods of heavy rain, Dec to Feb, frequently with high winds
- Coastal flooding and damage
- High groundwater levels
- Local flooding and fluvial flooding
- Landslips, earthwork problems



Looking forward

- Nothing certain, but likelihood of future extreme weather events.....BUT WHERE?
- Important to prevent problems wherever possible, especially on critical and high capacity parts of network
- Cannot avoid all disruption (too expensive, unrealistic), but key issue of how disruption is managed
- Key judgement about economic and social importance
nb many roads vital to economic activity

Highways Agency Roads

- Generally coped well with winter weather; main issue was high winds and need for closures
- Some run-off problems
- M2 sinkhole problem
- Most problems on trunk roads; picture is A303 near Ilchester in Dec
- Trunk roads often linked to local roads/drainage



HA – outline recommendations

- Getting better wind forecasts with Met Office; and consulting with haulage groups about possible restrictions when high winds forecast
- More work needed to identify possible flood risk locations
- Complete drainage inventory
- Review of messages on variable message signs and other communication channels
- Newco: performance indicators should include network availability and asset condition

Local Roads(1)

- The scale and variety of local roads – from key A roads, which include critical links to other modes and locations to the very large C and unclassified network – with great geographical diversity
- The network includes large numbers of bridges, many not obvious, and other structures eg retaining walls, embankments, cuttings
- Many local roads hit hard, by coastal storms, high winds, (fallen trees) and flooding
- Very high groundwater levels in many areas

Local Roads(2)



Local Roads(3)

- Parts of East Coast hit hard with tidal surge in Dec
- Thereafter, the worst effects this winter were in the south and south-west
- Much short-term disruption
- Issue of public expectations



Local Roads(4)

- Overall, authorities responded well where trees had to be cleared and roads became impassable because of flooding (requiring road closures and diversions). nb remember that the focus is often life and property
- There was generally close and effective working with local resilience fora
- BUT, the flooding and water movement caused a lot of damage, and had local economic & social impacts



Local Roads(5)

- Context of increasing maintenance backlog, and reducing revenue budgets for maintenance
- Backlog has left more roads prone to degradation of surfaces, potholes and other damage
- Flooding and high groundwater last winter has compounded problems with erosion/water ingress into sub-bases
- Emergency funding helpful, but not enough, and problems of rules/bureaucracy

Local Roads(6)

- Many drainage issues: variable knowledge, problems of joint sewers
- Run-off from surrounding land; maintenance part of problem, but also farming practices
- With limited funds, importance of Asset Management Plans, drawing on best practice, especially Highways Efficiency Maintenance Programme (HEMP)
- Looking forward, need to consider climate change adaptation plans and design standards

Local Roads(7) – outline recs

- LEPs should consider bidding for funding to support resilience of local transport networks
- DfT: need up-to-date road condition stats and work through UKRLG to review monitoring and maintenance of bridges and structures
- All LHAs must be ready to respond to uncertain, but extreme weather events in the future
- Govt should consult on a “Bellwin-type” scheme for emergency highway repair funding
- LHAs must follow asset management principles

Local Roads(8) – outline recs

- More focus needed on drainage assets, and these should be an integral part of Asset Management Plans
- Each authority should identify a “resilience core network” for priority attention
- With stretched resources, collaboration makes sense, and vital that all authorities make full use of guidance and good practice in Highways Maintenance Efficiency Programme
- Update of “Well-Maintained Highways” should incorporate findings of this Review

Rail, Ports and Airports

- Clearly, any disruption affects large numbers of people; user perspective of end-to-end journeys
- Learning points for all sectors, but note particularly
 - Improving resilience plans
 - Vegetation and Drainage management for rail
 - Issue of embankments and cuttings for rail
- Importance of basic maintenance, extreme weather adds to deterioration of assets, increasing reliance on IT and need for effective communications with users

In Conclusion

- Be prepared for extreme weather, with greater prospect of future extreme events (high public expectations)
- Basic maintenance is vital, both for performance of the asset and to prevent deterioration
- With limited resources, there has to be effective targetted expenditure using AMP principles and full use of best practice; inevitable decline of some minor roads?
- Issues for Government – from funding to information
- Be aware of climate change – and continuing need for adaptation