When virtual networks meet physical networks
Web Science and Transport Systems

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The importance of location…..
In virtual networks (of people or systems) physical location is not important
In transport networks however precise physical location is often critical

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Question 1 – What is going on ?
The best source of real time traffic conditions is the vehicles that are actually experiencing it
The problem is that one vehicle does not represent typical conditions
But it is NOT just a big-data number crunching question

Question 2 – What do people THINK is going on ?

© Google Maps

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#Congestion

The GOOD ....
@RHALtd
Overnight closures on A1 at Black Cat starting 17 October 2014 #Roads #Congestion

The BAD ....
@atrojuskmun
Busy watching tail-lights #congestion #trafficjam

The Just Strange ....
@SinusBuster
To help clear your #congestion, try this Grilled Stuffed Jalapeno Chiles with Grilled Red Pepper-Tomato Sauce recipe http://buzz.mw/bcz1o_f

#delays / #delayed

The GOOD ....
@TheProspect
Everyday this week @crosscountryuk the 18.16 Taunton to Exeter has been #delayed

The BAD ....
@jenwilsonTO
Hey commuting friends, the subway is super, super broken this morning #delays

The Just Strange ....
@keepingsupwithsky
OMG! I want to freak out and be all, "I KNOW #WHOKILLEDSAM!" but...I'm on dvr. So you guys all freaked out a half hour ago. #delayed
@JonnyMcGarrigle
Based on a car ride with mum earlier she approves of the new @ThoseGhosts EP #delays and the @WonderVillains debut #rocky

Question 3 – What can we do about it?

If we can get the right information to the right people at the right time, we can minimise disruption both to individual journeys and to the transport system as a whole.

For travel information to be helpful to network managers or individual travellers it needs to be....

Accurate, Reliable, Timely and Relevant

Context remains key
Warning : ⛉ ⛉ ICE ⛉ ⛉ zoom ahead
Warning : M27 CLOSED Eastbound between junctions 7-8

And finally.....