



# Imagine Workshop 29<sup>th</sup> August 2005

## Case Study

# Road Traffic Data for the **B**irmingham **U**dated noise **M**apping **P**roject

**‘BUMP’**

John Hinton, Chair - WG-AEN



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## The PRISM Model

The road traffic model being used for the BUMP is the so - called PRISM model which covers the West Midlands area of the UK.

It is primarily a strategic traffic model for managing changes in traffic flow. It was not designed with environmental noise modelling in mind.

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Issues with the PRISM model and noise mapping

- It is not geographically accurate





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Issues with the PRISM model and noise mapping (continued)

- Simplification of complex road layouts



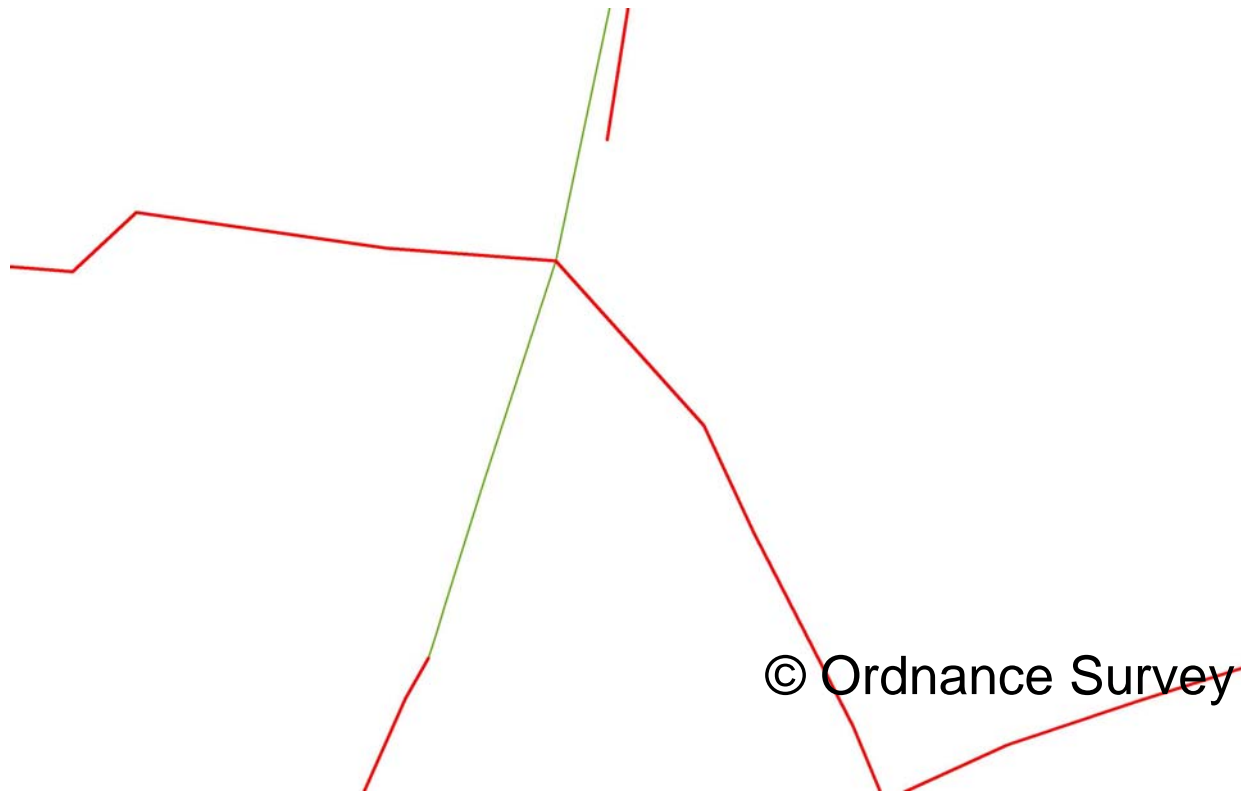
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Issues with the PRISM model and noise mapping (continued)

- Gaps in data





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## Issues with the PRISM model and noise mapping (continued)

- Only predicts flows and speeds etc. in terms of peak hours and inter-peak hours. Therefore, day, evening and night data must be derived from limited detailed surveys.

Hourly flows:

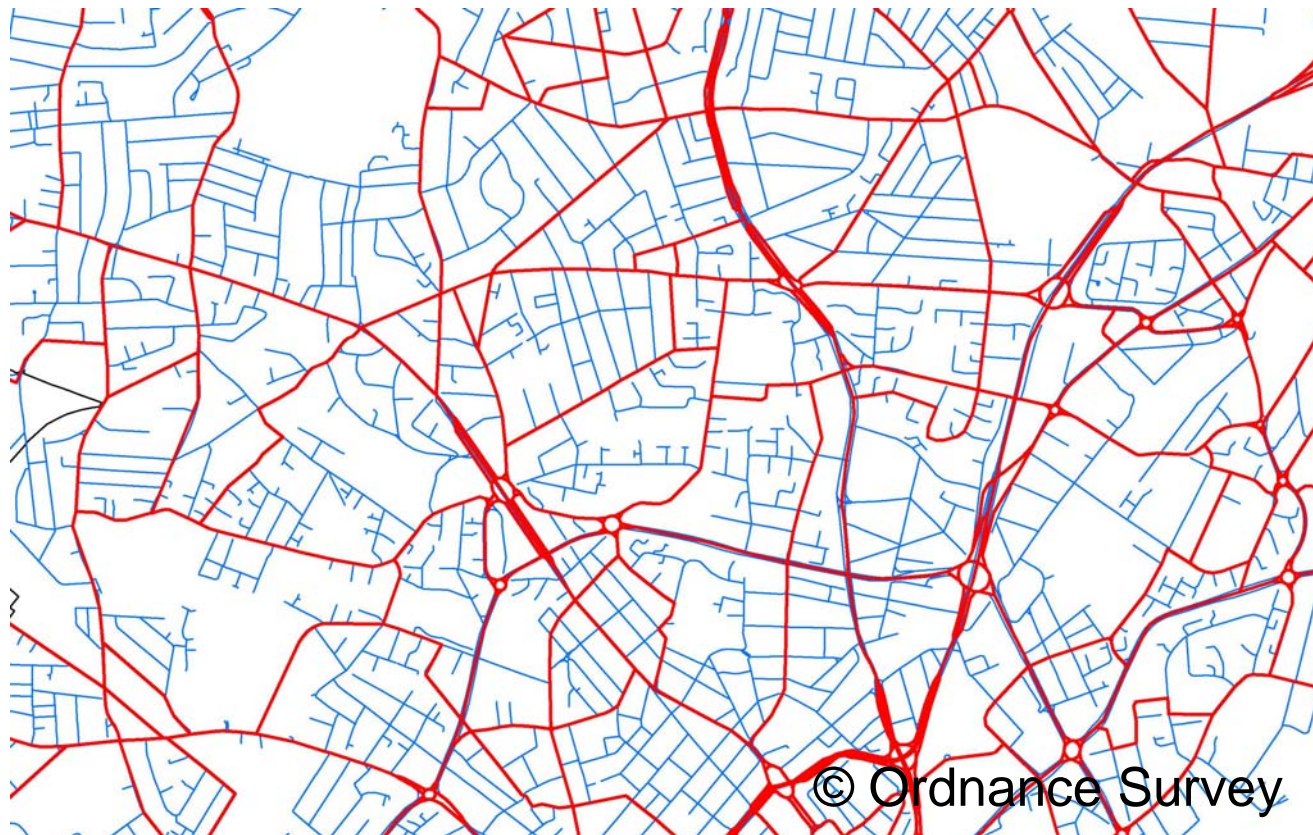
Link ID	AM peak	PM peak	Inter peak	Off peak	Bus AM peak	Bus off peak
4612_2891	378	391	178	44	15	6
2891_2992	347	322	164	37	14	9



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Issues with the PRISM model and noise mapping (continued)

- Only contains data on a limited road network





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Issues with the PRISM model and noise mapping (continued)

- Not intended to accurately predict flows below 1000 vehicles/day. Therefore, other data needs to be acquired.





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Issues with the PRISM model and noise mapping (continued)

- The model base year is 2001. Therefore, the data has had to be factored to our 'freeze date' for the BUMP project of 2004.



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Issues with the PRISM model and noise mapping (continued)

- The model has had limited validation to date.