Traffic Modelling
The Northampton Strategic Transport Model (NSTM) has been used to predict traffic flows in 2021 and 2031. This board presents the model results for 2021, when the NWRR would be open and developments predicted to be complete in that period occupied.

Traffic Flows
The traffic flow comparisons show the difference in predicted flows between the with and without (do minimum) NWRR in 2021. You will see on the next board (NNOR) that the traffic benefits will be more significant once the NNOR has been constructed. Until NNOR is built, the main advantages resulting from the construction of NWRR include significant reduction in traffic flows and congestion along:

- Mill Lane through Dallington,
- Roads to and from the Bramptons, including Back Lane in Chapel Brampton,
- The A428 Harlestone Road north of Dunston and,
- Other roads in the vicinity of Chapel Brampton and Pitsford.

Environmental Issues
As part of the future stages of both schemes’ planning and development, we will carry out environmental surveys and assessments to ensure we fully understand and take account of the impacts of the roads on the environment. These studies will help us to develop designs that are sympathetic within the environment, and will be required to obtain planning permission. Assessment and Appraisal will include:

- Biodiversity
- Landscape and visual
- Water and flood risk
- Noise
- Air quality
- Geology
- Heritage

Flow Difference Plots
The flow difference plots compare the traffic flows for the ‘with NWRR’ against the ‘without NWRR’ scenario.

With NWRR vs Without NWRR - Morning (AM Peak hour)

With NWRR vs Without NWRR - Evening (PM Peak hour)

Network Improvements
The Traffic Model Network Summary Statistics demonstrate the impacts of the NWRR on a cordoned area around Northampton. These show the impacts over a wider area, demonstrating that the new road will improve congestion, delays, journey times etc over a far wider area than simply between two ends of the road. However, it should be noted these impacts will be small depending on the location. These impacts will improve again once the NNOR is constructed.

Delays and Journey Time
At present and until the NWRR is built, traffic wishing to travel between the A428 and A5199 or further to the east must use routes towards the town or a route through Church Brampton and along Brampton Lane, which causes interaction with other traffic movements and congestion in local villages and disturbance to residents. Aside from the improved quality of life within the villages and in other locations, it is predicted that NWRR will significantly reduce journey times particularly at peak times between New Sandy Lane and Boughton Crossing.