

- 1. The Lincolnshire County Council (A15 Lincoln Eastern Bypass)
(Classified Road) (Side Roads) Order 2014**
- 2. The Lincolnshire County Council (A15 Lincoln Eastern Bypass)
Compulsory Purchase Order 2014**
- 3. Application In Relation To Proposed Compulsory Purchase Of
Land Held By The Canal & River Trust**

Department for Transport Reference: NATTRAN/EM/LAO/0084

Analysis of Historic Peak Period Traffic Data

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1. Response to Query from the Inspector

1.1 During the presentation of Lincolnshire County Council's evidence, the Inspector asked whether there had been any peak spreading within Lincoln over recent years. This note provides a response to that query following analysis of historical traffic data.

2. Lincoln City Centre Screenline Traffic Data

2.1 Lincolnshire County Council monitors traffic flows at a number of sites across the Lincoln urban area on an annual basis to enable an understanding to be gained of changing traffic patterns on a long term basis.

2.2 12-hour classified link surveys are undertaken on a comparable weekday each October at five sites which provide a north-south screenline across the Lincoln urban area. The five sites include:

- A46 between the A57 and Skellingthorpe Road
- B1273 Brayford Way
- B1003 Brayford Wharf East
- N1262 High Street
- A15 Pelham Bridge

2.3 The screenline surveys capture all north-south traffic movements passing through Lincoln city centre and on the western bypass.

2.4 The last 11 years' screenline data (2004 to 2014) has been analysed to assess the level of traffic growth in the AM and PM peak hours (08:00-09:00 to 17:00-18:00). In addition, the AM and PM peak periods (07:00 to 10:00 and 16:00 to 19:00) have been analysed to assess whether any peak spreading has occurred.

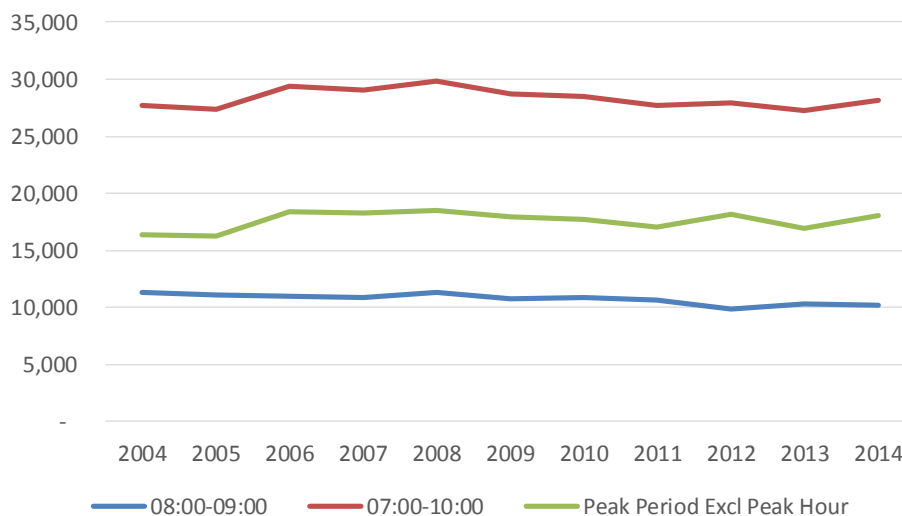
2.5 The following table and chart presents, for each year since 2004, total two-directional traffic flows passing through the cordon during the AM Peak hour, peak period as well as the peak period excluding the peak hour (i.e. 07:00-08:00 plus 09:00-10:00). In addition, the table presents, for each year, the percentage change in those three sets of flows since 2004.

Table 1 – AM Peak Traffic Flows

Year	Traffic Flow			Change in Flow Since 2004		
	08:00-09:00	07:00-10:00	Peak Period Excl Peak Hour	08:00-09:00	07:00-10:00	Peak Period Excl Peak Hour
2004	11,314	27,691	16,377	0%	0%	0%
2005	11,132	27,367	16,235	-2%	-1%	-1%
2006	10,943	29,370	18,427	-3%	6%	13%
2007	10,821	29,058	18,237	-4%	5%	11%
2008	11,335	29,830	18,495	0%	8%	13%
2009	10,769	28,741	17,972	-5%	4%	10%
2010	10,871	28,531	17,660	-4%	3%	8%

Year	Traffic Flow			Change in Flow Since 2004		
	08:00-09:00	07:00-10:00	Peak Period Excl Peak Hour	08:00-09:00	07:00-10:00	Peak Period Excl Peak Hour
2011	10,642	27,671	17,029	-6%	0%	4%
2012	9,818	27,921	18,103	-13%	1%	11%
2013	10,273	27,229	16,956	-9%	-2%	4%
2014	10,131	28,146	18,015	-10%	2%	10%

Figure 1 – AM Peak Traffic Flows



- 2.6 The data shows that, overall, traffic flows over the 11 year period vary significantly between individual years. The AM peak flows have shown a gradual decrease over the 11 years while the peak period initially showed a significant percentage increase on 2004 flows but this has reduced in latter years. Traffic flows in the AM peak period excluding the peak hour have shown the most significant percentage increases since 2004 and the growth in these flows has not decreased to the same extent as they have in the AM peak hour. The trends shown in this data would indicate that there has been some peak spreading from the peak hour into the surrounding adjacent hours. However, the spreading occurred in the earlier years in period, with the extent of spreading diminishing over the remaining years.
- 2.7 The following table and chart present the equivalent data for the PM peak hour, peak period and peak period excluding the peak hour. Again, the data shows significant variation between individual years across all three data sets. Whilst there has been growth in traffic flows in all periods analysed, that growth has somewhat reduced in latter years. In general, however, growth has been higher in the two hours either side of the peak hour than in the peak hour itself; this would indicate some peak spreading but the extent of the spreading, similarly to the AM peak, has diminished somewhat in latter years.

Table 2 – PM Peak Traffic Flows

Year	Traffic Flow			Change in Flow Since 2004		
	17:00-18:00	16:00-19:00	Peak Period Excl Peak Hour	17:00-18:00	16:00-19:00	Peak Period Excl Peak Hour
2004	9,979	26,266	16,287	0%	0%	0%
2005	9,979	26,650	16,671	0%	1%	2%
2006	9,171	26,970	17,799	-8%	3%	9%
2007	11,267	29,802	18,535	13%	13%	14%
2008	10,738	29,565	18,827	8%	13%	16%
2009	10,497	28,831	18,334	5%	10%	13%
2010	11,128	28,610	17,482	12%	9%	7%
2011	10,641	28,807	18,166	7%	10%	12%
2012	10,128	28,599	18,471	1%	9%	13%
2013	9,794	26,000	16,206	-2%	-1%	0%
2014	10,524	28,029	17,505	5%	7%	7%

Figure 2 – PM Peak Traffic Flows

