

Case Study



Company	Industry	Application	Benefit
Nottinghamshire Police	Emergency Services	Incident Response	Improved Public Service

Nottinghamshire

Nottinghamshire Police’s vision of ‘A Safer Nottinghamshire For All’ is driven by a commitment to reducing crime and anti-social behavior across the area, in line with strict government performance goals. Thanks to WITNESS from Lanner, it was able to live up to this mantra, make improvements to performance and ensure that the public are receiving the best service the police service can provide.

As a provincial Force of 2,400 officers and 1,100 police staff Nottinghamshire has a difficult task dealing with the highest recorded crime rate (relative to population and police officer strength), drugs related firearms incidents, and the anti social behavior associated with 60,000 evening visitors to Nottingham City centre.

A major re-structure of the organisation in 2002 introduced new business processes and resulted in significant reductions in reported crime. Performance in meeting response targets to recorded incidents was not showing the same improvement and response resources were often operating at 100% capacity with Local officers regularly used to assist. Targets were not being achieved.

This had a knock-on effect with LACs being unable to cope with the demand for the lower grade incidents within their area.

Nottinghamshire Police were able to collect and collate historical incident data for the process including:

- Location
- Time and day of week
- Duration of attendance (including arrest)
- Number of vehicles required to attend
- Distance travelled

Lanner used their expertise to develop the model using their WITNESS simulation package to simulate the response of officers to incidents.

“Using this approach we could consider our capability to respond to incidents within target, the capacity of Response Teams to deal with Priority and Attend Now incidents as well as focusing on the use of resources,” Superintendent Moore continues.

Once the initial model was developed and validated, Nottinghamshire police were in a position to optimise existing resources and forecast the very best that could be achieved within current resource constraints.

Superintendent Joanne Moore of Corporate Development said, “We wanted to make improvements quickly. Safety of the public and confidence in our service were uppermost in our thoughts. We needed to make a real difference and needed to achieve this within existing resources. Short of using a crystal ball, we had no way of evaluating the options available to us. Fortunately we had seen the WITNESS simulation technology being used successfully by our colleagues in Derbyshire”.

Working in partnership, Lanner Group and Nottinghamshire Police combined to develop a simulation model of the whole ‘Incident Response’ process for the two highest type of incidents (i.e. the ‘Priority’ and ‘Attend Now’ grades). These incidents were meant to be dealt with by the Response Team resources but in reality, due to resource constraints, many were dealt with by the LACs (Local Area commands).



“Our work with WITNESS is ongoing so that we can continually assess and enhance performance. Results are already significantly higher than anticipated...we’re responding to around 80% of all incidences within the target times laid out by the government,”

*—Superintendent Moore
Head of Corporate
Development*

This enabled them to look at team shift patterns, the single or double crewing of vehicles at different times of the day and the effects of a proposed programme of demand reduction. In addition, they were able to examine the impact of increasing the resources available in the Response area. Ultimately, the model provided a means to not only test and compare scenarios but also to quantify the impact of the proposed changes on costs and performance within the organisation.

Some of the initial results highlighted that:

- The current resource allocation to response was insufficient to cope with the demand
- Travel times, particularly with reference to the rural nature of some of the divisions, limited the ability to achieve the response targets for Priority incidents in particular
- Whilst demand reduction would help, it is unlikely to be a solution in its own right
- A significant resource increase would be required to enable targets to be achieved

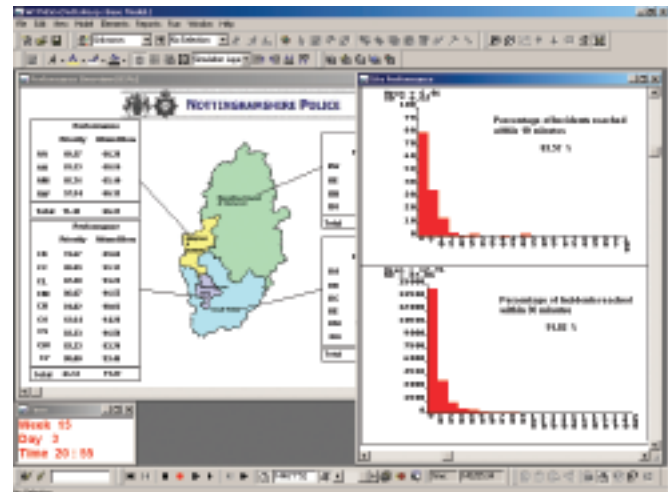
Despite introducing a number of changes that clearly enabled them to manage resources so much better, such as improving the existing shift system, transferring resources from one area to another so that the LAC weren’t used for ‘Attend Now’ incidents, using additional vehicles, etc, they were improving response times but not quite hitting targets.

However, the modeling exercise had also identified one other key factor which was preventing Nottinghamshire from achieving their targets. They realised the main problem lay with the targets themselves—the target vehicle response time was 10 minutes but the average time to travel to an incident was nearly 8 minutes across the force (and nearer 10 minutes in one division) leaving very little time to process the call and allocate an appropriate response vehicle. This led to the conclusion that the target just wasn’t feasible for the way in which Nottinghamshire’s divisions were dispersed. Despite the improvements to the processes involved, the time it took to respond because of distances between operation centres were limiting the ability to achieve the targets for Priority incidents in particular.

Superintendent Moore says, “Ultimately, we were being held back by geography, which was actually a tremendous relief to everyone. We had united together in all departments to get things moving in a timeframe of just six months and it could have been extremely disheartening to discover we still weren’t on a par with our national colleagues.

We were supported by both senior management and the staff association, who were extremely impressed with WITNESS’ evidence based findings and our ability to engage change so quickly.”

Following the initial study, the model has continued to be used to facilitate continuous improvement e.g. to examine the impact of changing shift patterns and relocation of response bases.



Results from Witness Incident Model

About Lanner

Lanner helps organisations achieve rapid and effective business change. Based in the UK with subsidiaries and partners in Europe, the Americas and the Far East, Lanner works with more than 3000 top multi-national companies.

Americas Headquarters
Lanner Group, Inc.
11000 Richmond Avenue
Suite 680
Houston, TX 77042
Tel: 713.532.8008
fax: 713.532.3732
e-mail: vsamuel@lanner.com

European and Asian Pacific Headquarters
Lanner Group Limited
The Oaks, Clews Road,
Redditch, Worcestershire
B98 7ST UK
Tel: +44 (0) 1527 403400
fax: +44 (0) 1527 404452
e-mail: agann@lanner.co.uk

Lanner Group SARL
Tour Galliéni II
36 Avenue du Général
de Gaulle
93175 Bagnolet Cedex
Paris, FRANCE
Tel: +33 (0) 1 43 62 90 30
Fax: +33 (0) 1 43 62 90 39
info@lanner.fr

Lanner Group GmbH
Hansaallee 201
40549 Dusseldorf
Germany
Tel: +49 (0) 211 530 63000
Fax: +49 (0) 211 530 63022
info@lannergroup.de