Reducing theft of catalytic converters

A problem-solving plan for catalytic converter thefts across Surrey (Operation Blink).

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Key details

Does it work?	Promising
Focus	Prevention
Topic	Crime prevention Intelligence and investigation Neighbourhood crime Operational policing
Organisation	Surrey Police
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Region	South East
Partners	Business and commerce Private sector Voluntary/not for profit organisation
Stage of practice	The practice is no longer being implemented.

Key details

Start date	April 2021
Scale of initiative	Local
Target group	Adults General public Offenders Victims

Aim

To prevent and reduce the number of catalytic converter thefts in Surrey.

Intended outcome

- 1. Increase awareness of the signs of catalytic converter theft (car jacked up on one side, someone underneath, sound of metal being cut) and what to do if you notice it (call 999).
- 2. Increase the rate of catalytic converter thefts being reported via 999.
- 3. Increase the number of suspect vehicles identified for catalytic converter thefts.
- 4. Increase the number of arrests for catalytic converter thefts.
- 5. Decrease the rate of catalytic converter thefts to less than two per day in Surrey.

Description

Awareness-based responses

- 1. Presentation to partners and the public about the signs of catalytic converter theft.
- 2. 1,000 signs demonstrating what a catalytic converter theft looks like, placed on lampposts in key locations.

- Flyers distributed explaining basic crime prevention advice and the signs of catalytic converter theft.
- 4. Interviews held with radio stations, local news outlets, and magazines about the signs of catalytic converter theft.
- 5. A short video created with Toyota demonstrating what a catalytic converter theft looks like.
- 6. A three-day advertising van campaign alongside Crimestoppers, Toyota, and Neighbourhood Watch. This explained to people what catalytic converter thefts are and what they look like.
- 7. The introduction of a dedicated force education page for what catalytic converter theft is.
- 8. A complete change of social media usage to focus on words and images relating to the signs of catalytic converter theft.

Other responses

- 1. Forensic marking we purchased 2,160 SelectaDNA kits for the key targeted vehicles to have their catalytic converters marked. Toyota also provided 500 SmartWater kits. We sent letters to vehicle owners to advertise this free scheme with garages. These letters also highlighted the signs of catalytic converter theft.
- 2. Scrap yard visits to ensure compliance.
- 3. We provided Automatic Number Plate Recognition (ANPR) camera training for colleagues. This included an improved technique to identify vehicles using false registration plates.
- 4. We improved internal data recording through the creation of a specific occurrence type in NICHE.

Costs

We spent £12,363.60 on signs, flyers and forensic marking kits.

Evaluation

The practitioner looked at the:

- percentage of catalytic converter thefts reported via 999
- percentage of catalytic converter thefts that had a suspect vehicle linked to it
- number of persons recorded as being arrested for catalytic converter thefts
- number of catalytic converter thefts

All this data was taken from police systems.

To assess the impact of the responses, we re-measured the baselines associated with the objectives. Firstly, we measured the percentage of thefts reported via 999. Comparing 2020 figures with the response rollout period (18 April 2021 to 30 June 2021), there was a 171.32% increase (from 5.30% to 14.38%).

We then measured the effect of this on the rate of incidents with a suspect vehicle recorded, with a 119.70% increase in the same timeframe (from 8.73% to 19.18%).

During the response rollout, Surrey Police arrested 13 people for catalytic converter theft. This was a significant increase on one arrest in the previous five and a half months. It was a direct consequence of people recognising and reporting the crime in progress, with pursuits and investigations then following.

In the year leading up to Operation Blink, there were 3.52 catalytic converter thefts per day in Surrey. In the three months after the responses had concluded (1 July 2021 to 30 September 2021), we experienced 1.27 thefts per day. This was a reduction of 63.92% (207 fewer thefts than anticipated).

We believe we created a substantial deterrent for thieves through:

- helping more people to recognise and report the crime
- a higher level of immediate police attendance
- a higher volume of arrests led to an increase in risk

The public were directly reducing the prevalence of this crime by completing informal surveillance for the force.

Comparison with other forces

It was important to compare these results with other forces, to identify how effective the education-led response was. In April 2021, numerous UK police forces, including Surrey, took part in a national week of action to tackle catalytic converter theft. This intensive focus led to successes around the country, with OPAL recording a national catalytic converter theft reduction of 39%. Surrey's 63.92% reduction was significantly higher than this and was a notable contributor to the national reduction.

Figures obtained from local forces identified that despite typically having a far greater problem, Surrey recorded fewer offences than the neighbouring Hampshire and Sussex after the response rollout. Both these other forces did see reductions, but these were far more modest than in Surrey. It may have also been that a diffusion of benefits occurred, with the perceived risk from Operation Blink's work filtering out to neighbouring forces.

Cost benefit analysis

£12,363.60 was spent on signs, flyers, and SelectaDNA marking kits. It's difficult to measure operational costs, with various teams involved. It's important to note that many responses (for example, interviews and social media content) did not result in additional force costs and that Crimestoppers paid for the ad van campaign.

To calculate total public savings, we estimated the cost of an average catalytic converter theft at £1,500 (using Admiral's valuation). With the estimated reduction of 207 thefts in a three-month period, this saved the public £310,500, resulting in a net saving of £298,136.40.

Additional savings can be considered through:

- ineffective police patrols being discouraged
- fewer police investigations being required
- the reduced emotional impact on victims
- a steadier reduction in offences in the months after this

It's important to review the most expensive response utilised, the SelectaDNA catalytic converter marking kits (£8,553.60), as many other forces have also used this response. The cost of 379 kits

equates to one theft, suggesting it is a cost-effective way of reducing thefts.

However, there is no formal way to confirm how many thefts they prevented, so it's difficult to fully endorse them. For future use, we recommend that they form part of the wider response, as this operation did by using them as a tool to engage with the public about the signs of catalytic converter theft.

Overall impact

A significant increase in the public's awareness of catalytic converter thefts and how to report them. This increased opportunities for arrests, the number of arrests, and perceived risk for thieves. This in turn decreased the rate of thefts because it was not as easy as it previously was for thieves.

In the year before Operation Blink, Surrey averaged 3.52 catalytic converter thefts per day. In the three months before Operation Blink, Surrey averaged 4.49 per day (it was getting worse). In the six months post-response, Surrey averaged 1.75 thefts per day. In the 26 months post-response, Surrey averaged 2.08 thefts per day. This 26-month figure was a slight increase but was still considerably lower than previous rates. The long-term reduction is thought to be due to the capable guardianship created by Operation Blink, without any further resource-intensive campaigns having to be used, therefore providing a cost-effective and sustainable solution.

This increase in capable guardianship was maintained and improved over time. Pre-response, 5.3% of catalytic converter thefts were reported via 999, during the intensive campaign this rose to 14.38%, and in the 26 months post-response this rose to 25.75%. Therefore, the long-term findings were that approximately 1 in 4 were being reported via 999, compared to approximately 1 in 20 before Operation Blink.

Theft rates were compared with two other local forces where we could acquire full datasets using the statistic of thefts per 10,000 persons, as a six month average. Surrey averaged 5.26 thefts per/10,000 persons as a six month average in the 15 months before Operation Blink, while Sussex averaged 1.03 and Hampshire averaged 1.81 (Surrey had a far greater problem). In the six months after Operation Blink, Surrey averaged 2.68 thefts per/10,000 persons, while Sussex averaged 1.74 and Hampshire averaged 2.4. Surrey had decreased significantly, while other local areas had more significant problems. There is always the possibility of displacement from Surrey to other areas, but this is incredibly difficult to ascertain in these circumstances.

This project won a Tilley Award in the Neighbourhoods category in 2022 and was a finalist for the 2023 Goldstein Awards.

Learning

- 1. Buy-in from partners at an early stage of the operation made it much smoother when we reached the response phase. Partners bought into the idea that we needed to promote the signs of catalytic converter theft and understood the impact that this would have on perceived risk to thieves. They didn't view it as 'just some awareness raising' they knew why we were doing it the way that we were.
- 2. It's unclear whether the forensic marking had any effect. It was difficult to measure the effect of this and it was the most expensive part of the operation. We might not do this again if we were to replicate the work.
- 3. We should have run a survey for awareness of the signs of catalytic converter theft before and after our response. We knew that people generally didn't recognise the crime, but doing a survey before and after would have helped to provide measurable change here.
- 4. For people looking to replicate what we did, we'd advise against implementing the awareness-raising resources without doing some research first. Find out if you have a problem with awareness. If you do, consider your target audience and what medium of communication would best influence them. For example radio, TV, letter, newspapers, social media, magazines, billboards, signs, emails, newsletters, ATM adverts and petrol pump adverts. Then consider how you will measure the success of this campaign.

Learning and materials have been shared with numerous forces, including local forces in United States, Police Service Northern Ireland, British Transport Police and Cyprus Police. Surrey Police's serious organised crime unit now review learning from every operation, feeding it back to a force organisational learning board.

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