



BSCC ORT PREVENTION GRANT

LOCAL EVALUATION PLAN

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Background

Theft of catalytic converters is a pressing issue in the United States, with alarming statistics indicating a significant rise. According to a USA Today article published on February 21, 2023, catalytic converter thefts have surged by 540% nationwide between 2020 and 2022.¹ The National Insurance Crime Bureau reports an even more staggering increase of 1,215% in catalytic converter thefts across the country between 2018 and 2022. The Orange County Sheriff's Department (OCSD) operational areas are particularly affected, experiencing a higher theft rate than other cities in the state and country. In OCSD's jurisdiction, the number of reported catalytic converter thefts skyrocketed from 46 in 2018 to 1,149 in 2022, representing an increase over five years.²

Catalytic converter theft has been on the rise in the operational areas of OCSD. This increase can be attributed to the accessibility of the vehicles thieves often target, vehicles parked in public areas such as streets, driveways, and parking lots. That accessibility proves the idea of safer neighborhoods avoiding such thefts is a large misconception. Even in the safest cities in California, with six Orange County cities recently being rated in the top ten safest cities by California News (Rancho Santa Margarita, Aliso Viejo, Yorba Linda, Laguna Niguel, Mission Viejo, and Lake Forest), are at risk.^{3,4} This perception makes residents less inclined to take necessary precautions to deter or prevent theft.

Implementing a catalytic converter engraving program through partnerships with local automotive businesses can encourage individuals to place a permanent identifier on each catalytic converter. When stolen catalytic converters are sold to recyclers and cannot be identified as stolen, thieves can profit from selling the inherent precious metals. Such engravings would act as serial numbers, allowing the goods to become traceable, which can significantly deter thieves and recyclers who purchase stolen converters. Improving surveillance systems through enhanced technology and additional equipment can help

OCSD quickly respond to reported thefts and support the prosecution of criminals to enhance the security of our communities and help us combat this problem more effectively.

Catalytic converters can be easily removed from vehicles with simple tools and minimal time. Thieves often target large SUVs and lightweight hybrid cars, such as the Toyota Prius, due to their easy accessibility. Thieves can quickly escape with the stolen converters using the area's road network and freeway access. To address this issue, grant funds would be used to raise awareness about preventing theft and enhance surveillance technology on public roads, making it easier for law enforcement to catch the thieves.

Given California's clean energy initiative (California Senate Bill 100),⁵ OCSD expects vehicles at high risk for theft to continue becoming more common. For example, Statista noted that in 2022, Orange County ranks second in plug-in hybrid electric vehicle sales (5,889 vehicles) in California, making the area a prime target for theft.⁶ Data compiled by the department indicates that catalytic converter theft occurs throughout all OCSD's jurisdiction. As a result, OCSD cannot rely solely on directed enforcement given the wide geographic footprint of theft, is not feasible to increase patrols only in certain areas. Grant funds would be used to implement scalable solutions, such as outreach efforts and surveillance technology, to provide coverage for the entire county.

Project Goals and Objectives

With funding from the BSCC, the Orange County Sheriff's Department is implementing the Real-Time Operations Center (RTOC) to increase awareness by encouraging residents to take action to reduce the opportunity for thieves. This initiative identifies three measurable goal approaches to reduce these crimes and enhance community safety:

1. Implement awareness campaigns and public events.
2. Coordinate and collaborate with government officials in service areas and with the community organization.
3. Collaborate with the District Attorney's Office to support ORT investigations and prosecutions.

The project's objective is to reduce vehicle and vehicle component theft. OCSD plans to achieve this through awareness campaigns and the converter etching program. The RTOC will use equipment such as License Plate Readers (LPR), CCTV, and drones to respond to criminal activity. Grant funds would be used to acquire additional technology, allowing OCSD to quickly locate stolen vehicles and direct law enforcement to the location. The etching program will assist with the traceability of converters and returns to owners, significantly reducing the repair cost to the owner and insurance companies.

Another objective is to increase public awareness by launching social media campaigns on the most commonly stolen vehicles and converters to identify ways to prevent thefts. The final aim is to hold offenders accountable. The RTOC will provide investigators with better information through Flock cameras and other data collection to increase the opportunities of apprehending criminals before they sell the converters.

OCSD's proposed plan aims to address the issue of catalytic converter theft through a comprehensive approach. This includes community awareness campaigns, implementing technology to trace components through an etching program collaborating with recyclers, and law enforcement efforts to apprehend criminals.

Evaluation Method and Design

The proposed project aims to reduce catalytic converter theft in the susceptible areas of the county by implementing flexible initiatives that can be rolled out thoughtfully. The project will focus on three main initiatives, implemented through active, community policing approaches. The target population for this project will encompass all OCSD operational areas that are susceptible to catalytic converter theft based on crime statistics collected by our department. While this crime occurs across the service area, the department will strategically direct grant funds to initiatives and areas where we determine the resources can benefit most. To ensure a comprehensive and unified effort, OCSD will build on existing relationships with relevant entities such as public agencies, community organizations, and retailers to coordinate and collaborate on the project.

The project proposes a range of activities, services, and interventions to increase community awareness. Along with the etching program, there will be education on recycling, which will be delivered through workshops and informative campaigns. Furthermore, the project aims to enhance the apprehension capabilities of law enforcement personnel through training programs. The duration and length of these activities will vary based on the project's specific goals and requirements.

The project will focus on the target area and population that experiences the highest number of theft incidents. This selection is based on prioritizing areas with the most significant incidents and de-emphasizing pockets where theft is lower, such as remote or gated communities that are more difficult for thieves to access. The etching resources may be based on the location of substations or partners engaged in performing this service. This project will also analyze theft patterns and identify the most used roads where cameras should be installed.

The proposed activities, services, and interventions will effectively address the project needs and align with the intent of the grant program. The OCSD will raise awareness about

theft without causing panic or promoting the perception of widespread crime. By highlighting that theft can happen to anyone and occur in all neighborhoods, the activities will encourage residents to take preventive measures. In addition, focusing on specific vehicle types most susceptible to catalytic converter theft will provide valuable information to residents. Furthermore, the implementation of traceable stolen parts will aid in identifying thieves and enable law enforcement to concentrate their efforts on recovery and prosecution.

The process evaluation will document and measure the degree to which grant activities will be implemented as intended. The process evaluation is structured around the project's objectives as follows:

Goal 1: Etching program and recycler education to increase community awareness

Objective 1A: Empower the community and create a sense of ownership in preventing crime by providing individuals with the knowledge and tools to protect their vehicles from theft.

- Analyze theft patterns
- Identify the most common used roads for theft crews

Goal 2: Implementing traceable stolen parts through etching program

Objective 2A: Identify thieves and facilitate law enforcement efforts in recovery and prosecution.

- Coordinate and collaborate with various entities to enhance the project
- Reach a wider audience and maximize community participation

Goal 3: Hold offenders accountable

Objective 3A: Collaborate with the District Attorney's Office to facilitate the provision of admissible evidence, identify victims, and streamline the legal response to catalytic converter theft.

- Number of FTE staff assigned to ORT-related activities

- Number of grant-funded trainings attended by ORT RTOC members
- Number of cases worked by the ORT RTOC

OCSD's Technology Division, in close collaboration with the Investigation Division's RTOC, has the necessary staffing resources to implement, operate, and manage the technology associated with this grant program. The project management group and the dedicated technology team will work together to ensure the project's success. The Technology Division will handle equipment contracts, hardware, software, and licensing, providing seamless connectivity between technology and RTOC staff. This collaborative approach ensures that all aspects of the project are well managed and aligned with our goals.

The RTOC comprises six well-trained, full-time research analysts and a supervisor on the equipment and platforms. The Captain from the RTOC and the Technology Division will manage and oversee the outcome evaluation of this grant program. The analysts assigned to the RTOC will monitor calls related to component theft in real time. They will use license plate reader cameras and additional technology to locate suspects involved in these crimes. The RTOC will be further augmented by investigators and deputies in the future. The RTOC Captain and the Technology Division will oversee this grant project's design and outcome evaluation method. A Chief Information Officer leads the Technology Division with subordinate management staff and technical resources. These specialized technical teams will procure, implement, and manage all new technology resources and programs.

OCSD has plans to utilize outcome measures to assess the success of a project that aims to reduce catalytic converter theft. This involves quantifying the number of reported catalytic converter theft incidents within a specific period, known as the vehicle component theft rate. The goal is to observe a reduction in thefts compared to historical data, indicating the effectiveness of the project in deterring, and preventing catalytic converter theft. Furthermore, OCSD personnel will measure the clearance rate to determine the percentage of vehicle component theft cases successfully resolved by law enforcement. A higher clearance rate demonstrates the effectiveness of the project in identifying and apprehending

offenders, leading to increased recovery of stolen vehicles and components. Lastly, public perception and satisfaction will also provide a feedback mechanism to assess the overall opinion of the targeted areas regarding the efforts of the OCSD in combating vehicle component theft. Receiving positive feedback indicates that the project has been successful in increasing public trust and confidence in law enforcement's ability to address the issue. By monitoring this improvement, OCSD can evaluate the project's progress, identify areas for improvement, and determine the overall success in reducing vehicle and component theft.

The outcome evaluation will assess the extent to which the project successfully achieved the outlined goals below:

Goal 1: Etching program and recycler education to increase community awareness

- Number of ORT-related monitor calls for service
- Number of ORT-related cases using grant-funded equipment
- Number of ORT RTOC investigations with local organizations

Goal 2: Implementing traceable stolen parts through etching program

- Number of ORT-related social media posts and community events
- Number of ORT-related educational campaigns
- Number of impacts for ORT-related community participation

Goal 3: Hold offenders accountable

- Increase in response time
- Increase in ORT-related cases filed
- Number of ORT-related reported calls
- Number of ORT-related cases referred to the District Attorney's Office

The outcome measures will be assessed in three measures. The first would be the vehicle component theft rate. This measure quantifies the number of reported catalytic converter

theft incidents within a specific period. The goal is to observe a reduction in thefts compared to historical data, indicating the effectiveness of the project in deterring and preventing catalytic converter theft. The second measure is the clearance rate. This measure indicates the percentage of vehicle component theft cases successfully resolved by law enforcement. A higher clearance rate demonstrates the effectiveness of the project in identifying and apprehending offenders, leading to increased recovery of stolen vehicles and components. The third measure, public perception and satisfaction, is equally important. This measure involves feedback mechanisms to assess public perception and satisfaction regarding the efforts of the OCSD in combating vehicle component theft. Positive feedback indicates that the project has successfully increased public trust and confidence in law enforcement's ability to address the issue, demonstrating our dedication to community engagement. By monitoring these measures, the OCSD can evaluate the project's progress, identify areas for improvement, and determine the overall success in reducing vehicle theft and component theft.

Input/Resource/ Activity/Output	Data Element(s)	Data Source(s)	Frequency of Data Collection
Personnel	Number of staff assigned to the Real-Time Operations Center (RTOC) for monitoring	Scheduling database, and project management records	Quarterly
Vehicles Engraved	Number of vehicles etched	Internal Database	Quarterly
Equipment Installed	Number of surveillance equipment (PTZ, CCTV, Axon cameras, etc.)	Internal Database	Quarterly
New Technology	Number of new technology platforms or software installed	Internal Database, Invoice records	Quarterly
Task Force Operations	Number of MVT/MVAT task operations	Reports Management System	Quarterly

Arrests and Prosecutions	Number of arrests related to MVAT	Report Management System, Automated Jail Booking System, DA Case Management System	Each time an individual is arrested. Compiled quarterly.
Public awareness Campaigns	Number of social media posts and community outreach events.	Public Affairs Data	Quarterly

Process Evaluation Research Design

The process evaluation will use a mixed-methods approach incorporating quantitative and qualitative data. Quantitative data will include metrics such as the number of thefts, arrests, task operations, and equipment installed. Qualitative data will be gathered through interviews with key stakeholders, including law enforcement personnel, community partners, and project managers. This will allow for a comprehensive project implementation analysis, including facilitators and barriers.

- Quantitative Data: Descriptive statistics will be used to summarize and report the frequency of activities for LPR installations, task operations, and theft arrests.
- Qualitative Data: Thematic analysis will be used to identify common themes from interviews and observations about the effectiveness of the activities and challenges encountered during implementation.

Project Oversight Structure

The RTOC Captain and Technology Division Chief will oversee the project implementation, ensuring that all activities align with the project's goals. They will lead the project team, which includes a research analyst, sworn deputies, and external partners. The project management group will coordinate the procurement and deployment of equipment, manage staffing, and ensure compliance with grant requirements.

- Project Leadership: The RTOC Captain will be the primary decision-maker in conjunction with the Technology Division to ensure smooth operations.

- External Collaborators: Collaboration with the District Attorney's Office and local automotive businesses will be critical to successfully implementing the catalytic converter etching program.

Monitoring and Adjustments

To ensure the project is implemented as planned, monthly meetings will be held with the RTOC team, Technology Division, and key stakeholders to review progress, challenges, and outcomes. The RTOC Captain and Technology Division will track the installation of surveillance equipment, task force operations, and arrest rates to determine if any adjustments are necessary. If barriers arise, such as delays in equipment procurement or staffing shortage, these will be documented and reported in quarterly evaluations. Adjustments will be made in real time to address challenges and capitalize on project facilitators.

Project Fidelity

Procedures to ensure fidelity will include:

- Continuous training of RTOC and law enforcement personnel on best practices for using surveillance technology and implementing the etching program.
- Tracking the usage of new technology to ensure it is being used effectively in theft investigations and improving efficient delivery of information to field operations.
- Consistent data collection through internal database and management systems to track outputs and assess the program's reach and effectiveness.
- Documenting facilitators and barriers of the overall project outcomes to include barriers and facilitator of progress.

The process evaluation will provide a comprehensive understanding of whether the project was implemented as expected, identify challenges or deviations from the original plan, and allow for adjustments to improve the project's overall effectiveness. By tracking inputs, activities, and outputs, the OCSD will ensure the catalytic converter theft prevention project meets its objectives.

Project Logic Method

Inputs	Activities	Outputs	Outcomes	Impacts
<p>Funding Grant Award: ORT Prevention financial resources for the project.</p> <p>Additional Funding Sources: The Real-Time Operation Center General Fund will cover any expenses not funded by the grant.</p> <p>Etching program and recycler education to increase community awareness.</p> <ul style="list-style-type: none"> • Law enforcement personnel and partnership with local organization. • Investigators and District Attorney Office. 	<p>Implement ORT Task Force: Develop an Action Plan and conduct regular meetings.</p> <p>Train Personnel: Increase team member's knowledge of skills and methods for ORT operations</p> <p>Procure and deploy equipment</p> <ul style="list-style-type: none"> • Catalytic converter etching services • MVT/MVAT operations • Improve surveillance – Enhance technology • PTZ, Flock, and CCTV cameras • Axon cameras with license and support • Peregrine, Fusus, Briefcam license and support bundle • 1Gb and 10Gb circuits • License plate readers • Drones • Organize community awareness campaigns 	<p>Organization</p> <p>Directed Enforcement Team (DET) surveillance, stings, and bait car operations (OCATT) 2-3 times a month.</p> <p>RTOC activities – monitor radio traffic and search LPRs for leads, analyze record queries, and relay finding to patrol.</p> <p>Once a quarter social media posts.</p> <p>Number of Automated license plate readers – Flock expansion.</p> <p>Number of arrests.</p> <p>Number of referrals to DA.</p>	<p>Decreased crime related to ORT</p> <p>Increase in response time and increase in ORT cases filed due to evidence from surveillance equipment.</p> <p>Provide the community with the knowledge and tools to protect their vehicles from theft.</p> <p>Analyze theft patterns and identify the most used roads for theft crews.</p> <p>Collaborating with government officials in service areas and with community organizations.</p> <p>OCSD and District Attorney's office will work hand in hand to ensure a seamless transition from investigation to prosecution.</p>	<p>Safer Community Environment</p> <p>Use surveillance equipment to aid in locating suspects involved in theft crimes and return stolen property.</p> <p>Etching services are accessible across the county, reaching a wider audience and maximizing community participation in theft prevention.</p> <p>To strengthen its effectiveness in combating catalytic converter theft by working together.</p>

Evaluation Tools

Data collection tools and standardized processes will be used to track and monitor the project's success. The RTOC staff will have access to the new technology and will receive informal on-the-job training on best practices for using the system. The RTOC staff will log progress, including information on tools and techniques, personnel from other agencies, and referrals to the Orange County District Attorney's Office. At the end of the grant period, the evaluation team will conduct key stakeholder interviews with primary project staff. These interviews will help assess whether the project was carried out as planned and will identify successes, challenges, and lessons learned.

Data Collection Tools

The Department uses two separate software platforms for data aggregation and analysis. The first platform is Peregrine, which aggregates the Department's Computer Aided Dispatch (CAD) and Automated License Plate Reader (ALPR), among others, for easier analysis and visualization. The second platform is used in the new Real-Time Operations Center called Fusus. This platform aggregates a variety of live data into one system to increase operational awareness and improve efficiency for responding units to active calls for service. Data collected from these platforms will be used to obtain information for the Quarterly Progress Reporting and other reporting purposes.

The OCSD Financial Division will determine the number of FTE personnel assigned to various ORT activities. The Public Affairs and Community Engagement (PACE) will maintain data on social media posts, paid advertisements, and press releases related to ORT and the Real-Time Operations Center.

Data Analysis

The Orange County ORT project data will be compiled quarterly or annually to ensure accurate and consistent data entry. We will develop and submit quarterly progress reports and a Final Local Evaluation Report to the BSCC. The Final Local Evaluation Report will summarize the activities funded by the grant and assess the extent to which the goals and

objectives were met. This report will be submitted to the BSCC by June 1, 2027. These regular reports will establish a formal process for monitoring the project's progress and support a formative evaluation approach.

Outcome	Definition	Data Source(s)	Frequency of Data Collection
Increase in response time efficiency	Decrease in the amount of time it takes for OCSD to be present at an ORT incident that is reported/called in	Computer Aided Dispatch (CAD) records.	Quarterly
Increase in ORT cases filed	Increase in the number of ORT cases filed	Reports Management System, Case Management System, DA's Internal System	Quarterly
Reduction in catalytic converter theft incidents	Decrease in the number of catalytic converter theft incidents in OCSD's jurisdiction	CAD/RMS	Quarterly
Increase in ORT-related arrests	Increase in the number of arrests made related to ORT activities	Automated Jail Booking System, Reports Management System	Quarterly
Increase in public awareness	Increase in community participation in etching programs and theft prevention campaigns	Social media metrics, Public Affairs data	Quarterly
Increase in investigative leads	Increase in the number of ORT-related investigations and leads	Internal Investigations Database, Peregrine Platform	Quarterly

The outcome evaluation will assess whether the Orange County Sheriff's Department (OCSD) Real-Time Operations Center (RTOC) led project, funded by the BSCC ORT Prevention Grant, achieved its intended short-term and medium-term outcomes in reducing catalytic converter theft and vehicle-related crime. This evaluation will track the project's effects on crime trends, law enforcement efficiency, and public awareness. Given the limited grant period, long-term impacts may not be observable within the project's timeline.

Data Sources and Frequency of Collection

All data will be sourced from existing internal systems such as the Computer Aided Dispatch (CAD), RMS, Automated Jail Booking System, Fusus, and Peregrine platforms. The OCSD already uses these systems and will provide consistent and reliable data for the evaluation. New data sources, such as social media engagement metrics and community participation in etching programs, will be tracked by the Public Affairs and Community Engagement (PACE) team. Data will be collected and reviewed at intervals ranging from monthly to quarterly.

Outcome Evaluation Research Design

The research design for the outcome evaluation will utilize a mixed-methods approach, combining quantitative data from the various law enforcement databases (e.g., CAD, RMS, and Fusus) with qualitative data gathered through interviews and community feedback. This allows for a comprehensive evaluation of the project's effectiveness in both measurable outcomes (e.g., reduction in thefts) and community impact (e.g., public perception and engagement).

1. Quantitative Data: Descriptive statistics will be used to measure changes in crime rates, arrests, response times, and community participation over time. Chi-square analysis may be employed to assess whether observed changes in theft rates or arrest figures are statistically significant compared to baseline data.
2. Qualitative Data: Thematic analysis will be applied to interview transcripts with law enforcement personnel, community partners, and project managers to identify recurring themes about the project's success or areas for improvement.

Evaluation Questions

1. Did the project reduce catalytic converter theft in the county areas?
 - o Indicator: Number of theft incidents reported before and after project implementation.
2. Did the project improve law enforcement's ability to track and apprehend suspects?

- Indicator: Number of investigative leads, arrests, and prosecutions related to catalytic converter theft.
- 3. Did public awareness initiatives lead to increased community participation?
 - Indicator: Participation rates in the catalytic converter etching program and social media engagement metrics.
- 4. What were the most significant factors contributing to the success of the project?
 - Indicator: Feedback from key stakeholders (e.g., law enforcement officers, community partners).

Criteria for Determining Activity Completion

Each activity outlined in the logic model will be considered successfully completed when the corresponding milestones are achieved. These milestones include:

- Installation/use of new ALPRs, CCTV cameras, or drones.
- Completion of catalytic converter etching events.
- Completion of law enforcement training sessions.
- Execution of MVT/MVAT task force operations.
- Cases referred to the District Attorney's Office for prosecution.

The expected number of activities and task force operations will be outlined in the project timeline, with progress monitored regularly to ensure alignment with goals.

Strategy for Determining Causality

To determine whether the outcomes are directly attributable to the project, the evaluation will:

1. Compare Baseline Data: Outcome data will be compared to baseline data collected prior to project implementation. This will help determine if the project led to measurable changes.
2. Track Contributing Factors: The evaluation will track key variables such as the number of task force operations and the amount of equipment installed. If outcomes

such as increased arrests are observed, they can be linked to these contributing factors.

3. Control Group or Comparison: If possible, data from neighboring jurisdictions that did not implement similar interventions will be used as a control group to differentiate between project outcomes and broader trends.

Limitations

There may be external factors, such as policy changes, crime trends, or resource availability, that influence the outcomes independent of the project. To account for this, the evaluation will document any significant events or policy shifts during the grant period that could have impacted the results.

Data Analysis Methods

- Quantitative Data: Data from CAD, RMS, and Peregrine will be analyzed using descriptive statistics and, where applicable, inferential statistics to assess significance.
- Qualitative Data: Themes will be identified through content analysis of interviews and feedback to understand perceptions about the project's effectiveness.

The outcome evaluation will assess whether the project achieved its expected results in reducing catalytic converter theft, improving law enforcement efficiency, and raising public awareness. The use of mixed methods will provide both quantitative evidence of success and qualitative insights into the factors that contributed to or hindered the project's impact. By carefully tracking data and comparing outcomes with baseline measures, the evaluation will ensure that any observed changes can be reliably attributed to the project.

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