

## **Criminology Section - 2013**

## A60 An In-Depth Look: 412 Property Crime Cases From the Low-Country Region of South Carolina

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After attending this presentation, attendees will understand what constitutes a property crime according to South Carolina legislation and will be introduced to potential patterns and trends noted in this study of 412 cases and 879 questioned samples. Questioned samples and sample types will be explored as to which resulted in profiles and/or CODIS hits.

This presentation will impact the forensic science community by highlighting the questioned samples and sample types that produced DNA profiles. The types of samples analyzed (blood, saliva, and touch) as well as whether the crime was against a residence, public building/business, person, or vehicle will be discussed.

The low-country region is a geographical region that includes Charleston, South Carolina and the surrounding counties. The four agencies that submitted cases for this project included: the Mount Pleasant Police Department, the Charleston Police Department, the Charleston County Sheriff's Office, and the North Charleston Police Department.

According to South Carolina Legislature, Chapter 11, Offenses against Property, a property crime includes arson, burglary, housebreaking, robbery, and robbery of a person operating a motor vehicle. The distinction between burglary and breaking and entering will also be noted.

In total, 879 questioned samples were processed and analyzed as part of this project. Of the questioned samples 378 were blood, 151 were saliva, and the remaining 350 samples belonged to the category "touch." A brief description of items in this category will be explained. Of the blood samples 94% produced DNA results, additionaly, 64% of the saliva samples and 25% of the touch samples resulted in DNA results.

Of the cases submitted, 36% of the cases were crimes against a residence, 30% of the cases were crimes involving a public building or business, and 33% of the cases were against a vehicle. Less than one percent of the cases submitted were committed against a person. Although all three major categories of crimes had roughly the same number of cases, the types of samples collected (blood, saliva, and touch) differed greatly. Those samples that produced a DNA profile and/or a CODIS hit will be discussed and compared in each of the three categories.

The results were surprisingly variable. One may anticipate that similar percentages of blood, saliva, and touch samples would be collected at a crime against a residence, public building/business, person, and vehicle, but that does not appear to be the case. Hypotheses will be discussed as to why those differences may have occurred.

This presentation will be followed by a comparison presentation regarding the property crimes cases analyzed from different states. In total, the project will involve three locations and over 1,800 cases. A snapshot of an additional future study will also be noted in this poster. It will briefly address what percentage of each case resulted in a conclusion in the adjudication process.

The trends noted across these 412 cases will be presented. It is recommended that persons in the field, especially individuals involved with the collection of evidence and those involved in DNA analysis should become familiar with the patterns visible in this study.

Property Crime, South Carolina, DNA