

# LOUD CAR STEREOS IN SAVANNAH, GEORGIA

## A Final Report to the U.S. Department of Justice, Office of Community Oriented Policing Services on the Field Applications of the Problem-Oriented Guides for Police Project

MICHAEL S. SCOTT

JANUARY 2004

---

This project was supported by cooperative agreement #2001CKWXK051 by the Office of Community Oriented Policing Services, U.S. Department of Justice. The opinions contained herein are those of the author(s) and do not necessarily represent the official position of the U.S. Department of Justice. References to specific companies, products, or services should not be considered an endorsement of the product by the author or the U.S. Department of Justice. Rather, the references are illustrations to supplement discussion of the issues.

---

### SUMMARY

This report describes an action research project undertaken by the Savannah Police Department (now the Savannah-Chatham Metropolitan Police Department) to examine, with assistance from a consultant, the problem of loud car stereos. The major findings of the problem analysis were:

- Loud car stereos are a considerable concern to the community, but the problem is underreported.
- The problem is perceived to be concentrated in the downtown area, especially in the

entertainment district during weekend nights.

- Offenders appear to be highly motivated to play their car stereos loudly.
- Loud car stereo offenders tend to have worse driving and criminal histories than the average driver.
- The overwhelming percentage of offenders cited for loud car stereo violations are young, black males.

While the Savannah Police Department had implemented and continued to implement some of the response strategies recommended in the POP Guide, no new responses were developed or implemented as a direct result of this problem analysis.

Because no new responses were actually implemented, no formal impact assessment could be conducted.

Either because the problem of loud car stereos proved to be less acute than first thought, competing priorities for police attention during the project period, or the absence of management systems and habits necessary to manage initiatives over a long time period, this project never garnered significant, sustainable attention within the Savannah Police Department. Nonetheless, in a modest way, the project was successful: the problem-oriented, action research model was applied reasonably effectively and smoothly, the POP Guide proved useful for guiding the problem analysis and the search for viable new responses, interesting lessons were learned about the problem of loud car stereos, and several members of the Savannah Police Department gained greater familiarity the problem-oriented process.

## **BACKGROUND TO THE PROJECT**

This is the final report of a project which applied the information contained in selected Problem-Oriented Guides for Police to actual crime and disorder problems. With technical assistance funded by the US Department of Justice, Office of Community Oriented Policing Services, the Savannah, Georgia Police Department (SPD) explored two community problems using a problem-oriented approach. Work on these problems continues today, but the formal project ran from September 2001 to January 2003. The SPD had two federally-funded resources available to it: Problem-Oriented Guides for Police (POP Guides) on the problems selected for exploration, and technical assistance from one of the principal researchers on the POP Guide project, Mr. Michael Scott. This is a report on one of those two explorations—of the

problem of loud car stereos in Savannah, Georgia.

## **SELECTING THE PROBLEM**

The SPD senior command staff chose to explore loud car stereos after systematic deliberation. In September 2001 a survey instrument was administered to all patrol, investigations, and traffic officers in the SPD (see Appendix A). In the survey officers were presented with a listing of the 19 POP Guides that were either in print or in production. They were then asked to rate how much of a concern each of these problems was in their community and to recommend to the command staff which problems they felt should be addressed in this project.

Mike Scott drafted the survey which was reviewed, revised and administered by the SPD, then tabulated the survey results and reviewed them with SPD senior command staff in October 2001. A total of 181 surveys was completed, representing nearly one-half of the operations staff of the department. The scores and rankings were cross-tabulated by levels of police experience, officer rank, and assignment.<sup>1</sup> They were generally consistent across all categories, with some variation according to assignment.

Chief Dan Flynn, patrol commander Deputy Chief Dan Reynolds, and the SPD planning and research coordinator, Mr. Brian Renner, were briefed on the survey results, as were the remainder of the senior command staff (bureau chiefs, and precinct, investigative, and special unit commanders) at the conclusion of a regularly scheduled Compstat meeting. (Neither Chief Flynn nor the investigations bureau commander was present for the briefing at the Compstat meeting, so they did not participate in the final problem selection.) The command staff were briefed and invited to consider the

following questions in making their selections:

- How necessary do you think it is to change the department's and community's overall response to the problems under consideration?
- How likely do you think it is that conducting a problem-oriented policing study will bring about these changes? Are certain responses preordained or foreclosed by other considerations? Are decision-makers likely to be influenced by data and analysis? Do you think there will be sufficient public and political support for exploring the problems under consideration?
- What impact does the problem have on the community in terms of its scope and costs?
- Are there any life-threatening conditions at issue?
- Are there any threats to Constitutional rights at issue?
- Is there likely to be sufficient community interest and support for both the study and the subsequent recommendations?
- Is there evidence of interest and support among officers for addressing the problem?
- Does the problem adversely affect the relationship between the police and the community?
- How likely is it that studying the problem will lead to some progress in dealing with it?

The following problems were consistently among those perceived to be of serious concern and recommended for exploration:

- burglary of single-family houses
- burglary of retail establishments
- thefts of and from cars in parking facilities

- drug dealing in privately owned apartment complexes.

The commanders gave serious consideration to the thefts of and from cars in parking facilities problem, but rejected it because much of Savannah's problem occurred on public streets. Similarly, while they agreed that drug dealing in privately owned apartment complexes was a significant problem, they thought much of the drug dealing in the city was done in public housing complexes, on the street, and in smaller privately owned apartment buildings.

After discussing the survey findings, the various problems in consideration and the selection considerations, the command staff unanimously selected burglary of single-family houses and loud car stereos as the two problems they wanted to explore in this project (see the report on Burglary of Single-Family Houses for discussion of why that problem was selected). The commanders acknowledged that the problem of loud car stereos was not very highly ranked in the survey, but strongly believed that it bothered the community more than many officers realized. They believed they were in a better position than officers to assess its impact on the community because complaints were more likely to come to their attention via phone calls and community meetings than via dispatched calls for service. The project was assigned to Captain Gerry Long, the commander of Precinct 1, one of four precincts in the city.

## **STRUCTURING THE PROJECT**

Soon after the problem was selected, Capt. Long shared drafts of the Loud Car Stereos POP Guide with several of her junior commanders and supervisors to get their input. Because there were several other high-profile projects and issues demanding commanders' attention at that time, the first

formal project meeting was not held till five weeks later. Capt. Long, Mike Scott, Brian Renner, and the three Precinct 1 watch commanders (Lieutenants Terry Shoop, Herbert Hall, and Dana Brown) were in attendance. Capt. Long selected Lt. Hall to lead the project.

This meeting decided there should be a core project team—Lt. Hall, Mike Scott and Brian Renner—with other key individuals brought into the project as necessary. Initially the officers and supervisor of a Precinct 1 foot patrol unit were to be integral to the project team, but that did not eventuate. Mr. Renner’s role also proved to be more limited than originally anticipated. We considered adding a community representative to the project team, but decided against this. As some of the community leaders who had publicly expressed concern about the problem had commercial interests at stake, we thought this might threaten the appearance of neutrality. As well, Mr. Scott’s role was extended beyond advising the core project team to conducting or assisting with problem analysis tasks as needed.

### ***The Scope of the Project***

Initially loud car stereos was to be addressed as a citywide problem—commanders believed that the problem was felt citywide and that it was unlikely to vary much geographically—however, at the first project meeting Capt. Long limited its focus to Precinct 1, and more specifically, to the downtown area of the precinct (see Figure 1 below). This was done because the area included a popular entertainment district, and the SPD was trying to address complaints there relating to crowds and traffic around nightclubs late at night when the bars were closing. A plan was already being developed to address the several facets of that problem, including loud car stereos.

We considered narrowing the target area to this entertainment district (the W. Congress St./Broughton St. area) where complaints were most obvious, but decided not to do so until it was clear where the complaints were coming from.

### ***A Project Analysis Plan***

We realized from the outset that data collection would require some effort and imagination because, in contrast with some other crime and disorder problems, it was unlikely there would be many official records relating to this problem. Questions from the POP Guide shaped our analysis plan. Several different methods were used to analyze the problem and responsibility for these analysis tasks was apportioned to the members of the core project team. The major analysis tasks are described in Table 1 below.

### **ANALYSIS TASKS, FINDINGS & RECOMMENDATIONS**

The following section summarizes the major analysis tasks, findings and recommendations of the project.

### ***Major Findings of the Analysis***

**Finding 1: Loud car stereos are a considerable concern to the community, but the problem is underreported.**

One-half of merchants and citizens surveyed said they were annoyed by loud car stereos and most of them reported feeling highly annoyed. The most common complaint was that loud car stereos disrupted people’s sleep. Police officers, commanders, and dispatchers all perceived that loud car stereos complaints were more prevalent than official records indicated. Dispatchers, for

example, perceived that they received several complaints every shift, yet CAD records revealed only about seven loud car stereo complaints per month. Only 14% of all officially recorded noise complaints were about loud car stereos. Merchants reported that they rarely filed complaints even though the noise bothered them. As citizens who did call the police were reluctant to give their names, follow-up contact was limited. The problem appeared to be addressed more by proactive police enforcement than in response to specific citizen complaints.

Finding 2: The problem is perceived to be concentrated in the downtown area, especially in the entertainment district during weekend nights.

SPD commanders elected to assign this project to the precinct containing the downtown area (Precinct 1) because they thought the problem was most prevalent there. According to the citizen survey, however, about one-half of citizens in all six of the city's electoral districts said they were bothered by loud car stereos. In fact, the percentage was slightly higher (54%) in the city's eastside and midtown districts than it was downtown (47%). Perhaps the problem seemed more acute downtown because it was partly related to cruising around bars late at night on weekends. Police enforcement levels confirmed that the problem was centered on the downtown: during a sample period, Precinct 1 officers issued nearly one-half (46%) of all loud car stereo citations in the city, most in the entertainment district. Much of Precinct 1's enforcement activity occurred during a crackdown on the problem in August 2001.

75% of loud car stereo citations were issued during nighttime hours (between 8:00 p.m. and 4:00 a.m.) and 75% were issued on Fridays, Saturdays, and Sundays.

Finding 3: Offenders appear to be highly motivated to play their car stereos loudly.

Many offenders spent considerable sums of money on their car stereo system, typically between \$200 and \$2000. Most stereos were specially installed rather than factory installed. Some enthusiasts entered their stereo systems in sound competitions in which louder was better. Car stereo dealers reported that most of their customers were well aware of the noise laws, but seemed unconcerned. They said some customers saw a citation for a loud car stereo as a badge of honor, confirmation that their system was having the desired effect. Most offenders who received citations paid the fines, typically about \$60 per offense. Offenders tended to say they liked playing their music loud and did it to attract women.

Finding 4: Loud car stereo offenders tend to have worse driving and criminal histories than the average driver.

Loud car stereo offenders were more likely to have prior criminal arrests and traffic citations than were randomly selected traffic violators; in fact they were over three times as likely as a randomly selected traffic violator to have a driving record. A significant number had extensive driving and criminal histories. This suggested that playing car stereos loudly may have been only one of a range of anti-social and illegal behaviors for some people.

**Finding 5:** The overwhelming percentage of offenders cited for loud car stereo violations are young, black males.

About 90% of citations for loud car stereos were issued to males; 83% to African-Americans; and 76% to African-American males. The median age of persons receiving citations was 24 years. All of these figures were disproportionate to the general city population (which is roughly 47% male, 57% African-American, and 27% African-American male; and the median age is 32). Undoubtedly, some of this disparity was due to the fact that Precinct 1 officers had given a higher priority to enforcing loud car stereo violations than had officers in other precincts. Moreover, in Precinct 1, much of the loud car stereo problem was linked by police to cruising around bars in the entertainment district during late night weekend hours, an activity that appeared to be especially popular among young, black males in Savannah. Car stereo dealers admitted that it was primarily young males who were interested in stereo systems capable of producing heavy bass sounds.

## **UNDERSTANDING THE LOCAL PROBLEM**

This section describes what we learned about the problem of loud car stereos from our problem analysis. Those questions for which we were able to gather some information are presented below.

### ***The Scope of the Problem***

#### **How many complaints had been registered about loud car stereos?**

Nearly all dispatchers and 72% of Precinct 1 officers said they had handled complaints

about loud car stereos. Dispatchers perceived a much higher volume of complaints—several per shift—than were recorded in the CAD data, which showed only 21 complaints registered in a three-month sample from 2001. The disparity could be explained by the fact that not all incoming calls about loud car stereos were given an incident number. Dispatchers may have broadcast some loud car stereo complaints to patrol officers without recording them as official incidents. Given the relative low priority of the complaint and the improbability that patrol officers would be able to locate the offenders, this practice would have made good sense, but dispatchers might have been reluctant to admit to it because they believed the practice deviated from standard operating procedures, even though it did not.

According to the business survey, merchants bothered by loud car stereos were unlikely to file an official complaint with the police department; in fact, the overwhelming majority said they had never filed a formal complaint.

With whom were the complaints registered (police, environmental protection officials, elected officials)? Complaints were filed with the police department, both via the central dispatcher and through telephone calls to and community meetings with the precinct commander. Patrol officers said they received complaints from dispatch, from citizens on the street, and on view. There was no indication that complaints were filed with any other government agency, probably because there was no other noise enforcement agency in Savannah. We did not ask elected and appointed city officials' offices if they received complaints (SPD officials were hesitant to make such inquiries for reasons that were not entirely clear).

Were complaints substantiated by either decibel measurements or officers' judgments?

It was not clear from their survey whether police officers perceived loud car stereos to be a significant problem. No decibel measurements were taken for this study. Police did not routinely take decibel readings because neither state law nor city ordinance required them for enforcement.

How frequent were complaints (daily, weekly, episodic)?

According to CAD data, only a couple of loud car stereo complaints were logged per week, though dispatchers perceived that they received several complaints every shift.

What percentage of all noise complaints were about loud car stereos?

Only 14% of all noise complaints recorded as CAD incidents in three-month sample were about loud car stereos.

Typically, were complaints about loud car stereos in general, about individual cars, or about a gathering of cars?

According to the officer survey, many complaints related to vehicles cruising around downtown bars around closing time.

Were offenders usually driving when playing car stereos loudly, or were they parked (e.g., at a street party, in a park, in a parking lot)?

A small sample of CAD calls showed that 62% were mobile and 38% were at a fixed location. Many officers perceived the problem as emanating from vehicles cruising around downtown bars around closing time.

## **Complainants**

**Who complained about loud car stereos? Residents? Merchants? School or hospital officials? Park users? Other motorists?**

From a small CAD sample, it was clear the vast majority (95%) of complainants were residents. According to the business survey, very few merchants filed formal complaints; only about half (52%) of merchants said loud car stereos bothered them. Dispatchers overwhelmingly said that residents were the primary complainants.

Were there persistent complainants?

Only one individual's name surfaced from the dispatcher survey: a man who repeatedly complained about loud car stereos at a car wash near Bull Street and DeRenne Avenue. The CAD call analysis showed one recurrent complainant on Dodge Ave., which may indicate an ongoing neighbor dispute.

Were there any noticeable demographic patterns among victims (age, gender, race, ethnicity, etc.)? As the vast majority of complainants who called police dispatch refused to give their names, little was known about them.

How many people were annoyed by loud car stereos? How annoyed did they claim to be? Only about half (52%) of merchants surveyed said they were annoyed or bothered by loud car stereos. Of those who were bothered, 74% expressed high annoyance (7 or higher on a scale of 1-10). Similarly, 50% of city residents claimed to be bothered by loud car stereos with a mean level of annoyance at 7.15 on a scale of 10.

What were their specific complaints? That they were awakened? Could hear their televisions? Could not hear conversations? Were offended by music lyrics? Were made physically uncomfortable by the noise? Were intimidated by the noise? Of the merchants bothered by loud car stereos, 79% named the vibrations and 77% the noise level. Only 34% said the lyrics bothered them. Dispatchers also said complainants were bothered mainly by the sound level and vibrations and less by the lyrics. According to the citizen survey, the most common complaint (42%) was that loud car stereos disrupted sleep. What activities were disrupted by loud car stereos (e.g., sleep, commerce, education, recreation)?

According to the business survey, loud car stereos disrupted the following activities for those who said they were bothered by loud car stereos: business activity (74%), conversation (49%), listening to TV or other stereo (19%), and sleep (15%). For city residents the activity most commonly disrupted was sleep (42%), followed by all (sleep, conversation, TV watching, and listening to own music) at (30%).

What percentage of people disturbed by loud car stereos filed official complaints? Space precluded us from including this question on the citizen survey. In the business survey, only one respondent claimed to have complained to a police officer on the street and another claimed to have complained at a city meeting. The overwhelming majority had never filed a formal complaint.

## **Offenders**

**Were there any noticeable demographic patterns among offenders (age, gender, race, ethnicity, etc.)?** The dealer survey suggested that customers were of varying ages, races, and musical tastes, although some dealers said that their typical customer was between 17 and 25 years old and that younger customers favored a heavy bass sound. The citation analysis indicated that most people who received citations were young (the median age was 24, although 21% were 30 or older). The majority of people cited were African-American (83%)—only 17% were white—and 92% were male. The citation analysis suggested that the typical profile of a person receiving a citation for a loud car stereo in Precinct 1 was a young, black male.

Were there different types of offenders (e.g., car stereo enthusiasts, teenagers, street cruisers, drug dealers)? Did the various types of offenders create problems at different times and in different places? Precinct 1 officers perceived the offenders to be mainly young males cruising around bars at night.

Were offenders aware of legal restrictions? Nearly all respondents in the business survey believed their customers were well aware of sound laws, but said most of them “don’t care” and seldom asked sales people about the noise laws. They further indicated that many of their customers had either been pulled over by police for noise violations or knew someone who had. Several respondents said their customers were not very concerned about the prospect of paying fines. Some respondents said that many customers

viewed being fined as a “badge of honor” that confirmed to them that they had a loud stereo system. Several indicated that their customers generally knew when and where they needed to turn down the volume on their systems to avoid disturbing the peace and getting stopped. One respondent said military customers were acutely aware of noise regulations because they were strictly enforced on the military bases. Another said customers were more worried about being stopped by police in Garden City (a suburb of Savannah) than in the City of Savannah because they believed Garden City police would make them dismantle their stereo equipment on the spot.

The offender survey revealed that 65% of offenders claim not to know the law; but as this question was being asked by the police officer stopping them, their answers might not have been entirely truthful.

To whom were car stereo owners trying to appeal when they played their stereos loudly? Other car stereo owners? Friends? Members of the opposite sex? Judges in organized competitions? Potential customers for illegal drugs? Themselves? In the offender survey 35% said they were trying to attract women.

What did car stereo owners say would discourage them from playing their stereos in violation of the law? In the offender survey 35% cited higher fines; 30%, loss of their driver’s license; 30%, the knowledge that it would damage their hearing; and 20%, impounding their car.

Where did car stereo owners buy and have special stereo equipment installed (e.g., local car stereo dealers)? There were about a dozen car stereo dealers in Savannah, and some people installed their own systems.

How much money had car stereo owners spent on their equipment? According to dealers, at the low end customers spent \$200 to \$600; at the high end from \$1500 to \$15,000. Typically, they spent from \$200 to \$2000. The offender survey revealed that 55% paid less than \$2000 for their system—most appeared to be in the \$500 to \$2000 range.

## ***Locations and Times***

**Where were complaints about loud car stereos concentrated?** According to Precinct 1 officers, the problem was concentrated around downtown bars, especially from Broughton St. to River Sts., from MLK to E. Broad St., but some officers said the problem was citywide. The Krenson St./Tuten St. area was also mentioned. CAD data was too limited to reveal a pattern, although there were a couple of calls in the Krenson/Tuten St. area and a few in the downtown entertainment district. Merchants thought the problem centered on the downtown area. (This is to be expected since these were downtown merchants surveyed.) Dispatchers perceived the problem to be distributed throughout the city, with some concentration in certain apartment complexes and at some car washes.

An analysis of citations issued by SPD officers in a three-month sample revealed that a high proportion of citations were issued in the entertainment district (Bull St. west to MLK Blvd.; River St. south to York St.). This provided indirect evidence that the problem was concentrated in this area of the precinct. A significant number of citations were also issued on the west side of the precinct (in the Cloverdale and Carver Heights neighborhoods).

From where did complainants hear loud car stereos (e.g., homes, businesses, vehicles)? Merchants heard the noise while in their home, office or shops (55%) or on the sidewalk (36%).

When were complainants most annoyed by loud car stereos (daytime, nighttime, weekends)? Merchants said the problem was concentrated in the daytime (41%) and evenings (38%). Weekends (Thursday to Saturday) were the problem days. Officers mentioned several times of day, mainly late nights and after school let out. The small CAD sample showed a concentration on Sundays and complaints were evenly distributed throughout the day, other than daytime before noon when there were few complaints. Dispatchers perceived the problem to be concentrated in evenings and nights.

The overwhelming percentage (75%) of citations issued in Precinct 1 were issued between the hours of 8:00 p.m. and 4:00 a.m. and on weekends (Friday, Saturday, and Sunday) (75%).

Did complaints correspond with any particular events (e.g., closing time for bars, during street cruising events, when schools let out)? Some officers mentioned when schools let out and when bars closed.

## ***Current Responses to the Problem***

**How were loud car stereo complaints handled?** Dispatchers claimed they dispatched officers to the locations of complaints (although there were not many dispatched calls for loud car stereos). Only one dispatcher mentioned broadcasting a general lookout to patrol officers, although this seemingly reasonable response might be done more often than is acknowledged. The average response time to this complaint was

19 minutes (which does not seem excessive, considering the priority). About half (52%) of calls dispatched were cleared as unfounded. Officers most often mentioned issuing citations and/or warnings and extra patrol as their responses. One officer mentioned that he/she tended to mediate complaints that emanated from residences, and cited for complaints from vehicles. One officer mentioned towing the vehicle. Several officers indicated that no current responses seemed to be very effective. Most officers said warnings were particularly ineffective. Precinct 2 developed a program to encourage citizens to record information on loud car stereos on a log and give the log to the Precinct. Police would then send out a warning letter to registered owner of vehicle. They also developed an information flyer about laws regulating loud car stereos that was to have been distributed through dealers (although none of the dealers said they had seen it).

What existing legislation pertained to the problem? Did that legislation give police and other officials adequate authority to address it? Ga. Stat. 40-6-14 is a “plainly audible at 100 feet or more” law. City of Savannah ordinance 9-2036 is a “plainly audible to anyone other than the operator” law.

Were existing laws adequately enforced? According to court data, there were 525 city ordinance citations and 210 state charges processed in a 13-month period. SPD officers issued 72 citations for loud car stereos in a three-month sample (August, November, February), with most of those issued in August 2001. This might reflect some extra emphasis on enforcement during that summer, perhaps by the newly created Aggressive Driving Unit. About half of the citations issued by officers in Precinct 1 were written under the city ordinance (53%)

and half under the state statute (46%). In 7% of stops in which a citation form was completed, the officer issued it as a written warning only.

The citation analysis revealed that some officers were more likely than others to issue citations for loud car stereos. This may have been attributable partly to their unit assignment and mission and partly to their personal discretion. The following officers issued three or more citations in a three-month sample:

Name	No. Issued
Officer A	14
Officer B	5
Officer C	5
Officer D	3
Officer E	4
Officer F	3
Officer G	3
Officer H	3
Officer I	3

67% of the citations were issued by officers assigned to Precinct 1, 19% by officers in the Traffic Unit, 7% by officers from Precinct 2, 4% by an officer assigned to Precinct 4, and 3% by an officer in CIB.

Were enforcement actions adequately prosecuted and adjudicated? According to court data, about 70% of city ordinance and state charges resulted in a guilty finding or plea, and about 14% of city ordinance and 20% of state charges in failure to appear, but many of those receiving a failure to appear notice ultimately paid the fine. Only between 2 and 5% of the charges resulted in dismissal. Court officials estimated that the majority of fines were about \$60, the minimum traffic citation fine.

How did other jurisdictions handle this problem? The dealers surveyed perceived that Garden City police were strict in their

enforcement. Other responses listed in the POP guide not known to be used in Savannah included:

- enhanced fines in specified zones
- impounding vehicles
- citing vehicle owners (owner onus principle)
- nuisance abatement orders
- sentencing offenders to listen to unpleasant music
- written warnings
- requiring dealers to give customers health and legal information
- posting warning signs (there is one on Victory Dr. in Thunderbolt)
- holding public demonstrations to educate car stereo enthusiasts.

From the officer survey, there were several suggestions for new responses:

- post more warning signs
- suspend or revoke drivers licenses of habitual violators
- confiscate stereo equipment
- community service sentences for youthful offenders
- educate students about problem and laws
- increase fine amount
- rezone downtown to commercial only (unclear)
- encourage off-duty police officers working nightclubs to control problem
- tow vehicles
- make Historic District a special enforcement zone
- increase enforcement levels
- educate business owners (unclear)
- educate public.

Merchants emphasized the need for enforcement of laws. Dealers did not seem to think their customers would be easily deterred from playing their stereos loudly. One dealer endorsed confiscating the equipment as a solution; another said a more positive appeal to being courteous would be more effective than legal warnings. Dispatchers, too, emphasized enforcement as the preferred option.

## IMPLEMENTING RESPONSES

As of the date of this report, this project did not lead to the implementation of any responses to the loud car stereo problem nor any concrete recommendations for implementation.

The POP Guide on Loud Car Stereos lists the following responses as potentially effective for addressing loud car stereo problems:

- enforcing laws that prohibit plainly audible car stereos
- enforcing laws that establish specific decibel limits for car stereos
- enhancing penalties or lowering tolerance levels for loud car stereo violations that occur in specified zones
- enhancing penalties for repeat offenders
- impounding cars with loud stereos as evidence
- holding car owners liable for loud car stereo violations
- obtaining nuisance abatement orders against loud car stereo owners
- sentencing offenders to listen to music they do not like
- issuing written warnings
- requiring car stereo dealers to provide customers with warnings about the health and legal consequences of playing car stereos loudly
- posting warning signs in areas where loud car stereos are common
- holding public demonstrations regarding loud car stereo violations.

Several of these were being employed in Savannah. As the SPD enforced both city and state laws that prohibited plainly audible car stereos, we felt that the existing laws governing the noise itself were satisfactory and required no changes. Police officers did have the ability to issue written warnings in lieu of citations, and some officers clearly had been doing so.

Officers in SPD's Precinct 2 had several years earlier developed some innovative responses to the problem, several of which were mentioned in the POP Guide. Among them was encouraging citizens to record vehicle information about offending vehicles and submitting that documentation to the local police precinct, whereupon a written warning letter would be mailed to the registered vehicle owner (see Appendix J for the log sheet and warning letter). Precinct 1 did not follow this procedure. Precinct 2 officers also developed an informational flyer (see Appendix K) that was to be distributed to car stereo dealers, and in turn to customers; however, from our survey of car stereo dealerships we learned that the flyer was not widely known or available.

When we presented our project findings to a group of local community leaders and officials, the new responses generating the most enthusiasm were enhanced penalties (e.g., stiffer fines, impounding vehicles, reporting failure to pay to credit services, enhanced penalty zones), and public education (e.g., flyers about legal and health consequences, improved signage, presentations at schools and through churches and neighborhood associations). The group encouraged us to

carry the project forward and to implement several new responses.

## **MEASURING EFFECTIVENESS**

At the outset of the project we identified the following indicators to measure the effectiveness of our responses to loud car stereos:

- the number of official complaints about loud car stereos filed with police and other agencies
- the level of annoyance or concern expressed in opinion surveys
- the percentage of survey respondents who were highly annoyed by loud car stereos
- the decibel levels at problem locations (It may, however, be difficult to separate the noise from loud car stereos from background noise.)
- the number of problem locations (if the problem is concentrated at certain locations)
- the percentage of offenders who were repeat offenders
- the sales revenues of and changes in consumer purchases reported by car stereo dealers.

Because no responses were actually implemented as a result of this project, no formal impact assessment could be conducted.

## **ASSESSING THE IMPACT OF THE POP GUIDE**

The principal project participant from the SPD, Lt. Hall, reported that he read the POP Guide and referred to it at various times during the project period. He said he found it generally useful, particularly for guiding data collection, but less useful for guiding analysis of that data (see Appendix L for the

Police Participant Survey used to capture the final observations of project participants). He did not recommend any substantive changes to the guide, but did recommend that the type font be bolder to make for easier reading. The POP guide was probably used most extensively by the project consultant, Mike Scott, who used it to recommend certain lines of inquiry or actions to the rest of the project team. The local problem proved to be similar to the typical profile described in the POP Guide.

The POP Guide was useful also for generating potential new responses to the problem, even though no responses were actually implemented.

## **OBSERVATIONS ON THE PROBLEM-ORIENTED/ACTION RESEARCH PROCESS**

### **Participation in the project**

Four individuals were extensively involved throughout most or much of the project period: three SPD members and the consultant, Mike Scott. Those four played the following roles:

Major Dan Reynolds. As the commander of the Patrol Bureau, Maj. Reynolds provided the senior-level authority and support for the project.

Captain Gerry Long. As commander of the precinct in which the target area was located, Capt. Long assumed an oversight role, assigning personnel to the project and authorizing them time and resources to work on it. She attended some, but not all project meetings, having delegated its management to Lt. Hall.

Lieutenant Herbert Hall. Lieutenant Hall was assigned by Capt. Long to coordinate this project. He attended all project meetings, gathered and analyzed data,

supervised other data collection efforts, presented project findings, and generally participated in all phases of the project.

Mr. Michael Scott. As one of the consultants in the Field Applications project (and author of this report), Mike Scott played several roles in the project. He assumed a number of project management duties—calling meetings, preparing meeting agendas, maintaining a project file, and chronicling progress; as well as substantive duties such as summarizing information from the POP guide, recommending analysis tasks and suggesting response alternatives, presenting portions of project briefings, and conducting a number of analysis tasks. He attended all project meetings and briefings and maintained contact with Maj. Reynolds about the project's progress and needs. Mr. Scott was the recipient of the funds from the US Department of Justice, and consequently, responsible for the successful completion of the terms of that award, including this burglary project. Owing largely to his obligations under that award agreement, his interest in the project was somewhat different from that of other team members. When interest in the project among SPD members seemed to wane, it was Mr. Scott who moved it forward.

The members of the project team appeared to work well together, and communication seemed smooth. There were no apparent conflicts. Mr. Scott had a longstanding professional association and friendship with Maj. Reynolds, which helped facilitate his working relationships within the SPD. If anything, that association could have inhibited any criticism of the project, but there was no evidence that was the case. He had also known Capt. Long prior to this project, having instructed a college course in which she was a student.

Most decisions concerning the project were made by consensus, and for the most

part, individuals volunteered to perform tasks without need of assignment. There was no need for a formal written agreement specifying roles and responsibilities.

The team met 11 times over the course of the project, excluding meetings with others to collect data. Six of those meetings were general project meetings, and five were for preparation for upcoming project briefings. Work on the project was suspended for a few weeks in December 2001 because the key police project participants were heavily involved in planning for a proposed merger of the city and county police departments. Four project briefings were conducted—one for the police chief, one for the Field Applications cluster meeting of all project sites, one for the SPD command staff and affected agency representatives, and one for the annual POP Conference. These were an effective way to move the project ahead, as they motivated team members to complete various tasks and to consolidate and reflect upon information gathered to that point.

Especially in light of the busy and rotating work schedules of police officials, electronic mail proved an effective and efficient way to communicate. For the most part, those project tasks that could be completed were completed, although they often took longer than anticipated owing to competing priorities in the department.

As a whole, the core project team possessed the requisite knowledge, skills and abilities to conduct a problem-oriented project of this sort. Each member, while not restricted to a narrow role, brought special resources to the project. Lt. Hall and Capt. Long brought the command authority necessary to allow the project to proceed. Mike Scott brought familiarity with the POP guide, knowledge about the problem-oriented research process, and the time and capacity to organize the project and help manage it over a long period of time. The

team was able to draw on special survey resources and skills at two local universities and specialized expertise among other staff members of the SPD.

## **Data**

We encountered a few obstacles to obtaining reliable data. Our attempt to obtain computer-aided dispatch (CAD) data was slowed because only one person in the SPD (Mr. Gary Nesbit) knew how to do this, and he was out sick for a while and busy with other duties. He was finally able to tell us that the CAD data did not distinguish among noise complaints, and that all were assigned the same signal code (Signal 29). He also informed us it was not possible to do a key word search on the comments screen of the CAD data, leading us to draw only a three-month sample of noise complaints and manually sort through the CAD comments to determine which calls were related to loud car stereos. Mr. Nesbit said that in the future he would recommend amending the call codes so that noise complaints were distinguishable by noise source.

We had hoped to be able to take some decibel readings and perhaps videotape the loud car stereo conditions in the target area, but ultimately abandoned this plan. Getting accurate decibel readings would have been difficult because of the other sound sources in the area, which contained many pedestrians, night clubs, live bands, and vehicle traffic. We also abandoned the idea of video recording vehicles with loud stereos because videotape has no objective sound standard.

Mr. Scott's suggestions that the police ask the city's elected and appointed government officials about complaints they received regarding loud car stereos were not followed up by SPD commanders for reasons that were never entirely clear. This reluctance may have reflected a broader

tension between the SPD and elected officials about how citizen concerns ought to be processed and prioritized. We also hoped to interview judges to get their perspectives on the problem, but our requests for interviews produced no responses from the judges' offices.

Our need for information about how citizens perceived the problem was fortuitously met when we learned that the City of Savannah commissioned an annual telephone survey of 2200 randomly selected households to gauge citizen concerns and levels of satisfaction with local government services. The City consented to add several of our questions about loud car stereos to the survey instrument and provide us with the findings. This was done at no extra cost to the project, whereas conducting our own separate survey would likely have cost several thousand dollars. Though it sacrificed some thoroughness (only four of our nine questions were added to the city's survey), this proved to be a cost-effective means of gathering important data.

Gathering data from traffic citations proved to be somewhat labor intensive because it was not computerized in the SPD. Consequently, we elected to draw only a sample of citations, from which Officer Magwood hand-pulled loud car stereo violations, photocopied them, and reviewed them to extract the data we needed. These photocopies of these were invaluable when we later decided to collect additional data from the citations.

We were presented with an interesting question relating to the administration of the offender survey. Our plan called for patrol officers to make traffic stops of vehicles violating loud car stereo laws and administer a short survey to the drivers. We considered offering offenders an incentive to respond to the survey questions, such as instructing police officers to issue only a warning rather than a citation, but ultimately decided to

leave that judgment to each officer's discretion. Lt. Hall merely directed all patrol officers in his command to conduct a minimum of two offender surveys.

Obtaining driving and criminal arrest histories for the offender analysis put some strain on the SPD's resources, but the task was completed with the cooperation and assistance from SPD commanders and records supervisors. A records clerk put in some extra hours to complete the task. We also came to appreciate that merely reading and interpreting printouts of driving and criminal histories requires specialized knowledge, without which one could easily misinterpret important data.

### ***Working Arrangements***

Most project meetings were held at Precinct 1 in a separate building from headquarters on the west side of town. Some were held during evening hours to accommodate the watch commanders' normal work schedule. The consultant was assigned an office only a few miles from Precinct 1 so there was no need for him to use SPD office space. While not a major issue, this physical proximity made the working arrangement easier. Project data were stored both at SPD on police participants' office computers and on Mike Scott's computer and in his office. Data could be transmitted among the project participants relatively easily via computer, with one notable exception—the SPD, at the time of the project, used Corel office software for most of its computing needs, whereas the consultant used Microsoft products, meaning that some files, particularly slide presentations, would not properly convert from one program to the other. After many frustrating attempts at conversion, the consultant eventually was forced to purchase an entire Corel office software package, at a cost of several hundred dollars. Without that conversion, it

would have been necessary to recreate the slide presentations, which would have been time consuming and costly. These sorts of computer compatibility issues, while seemingly minor, can be a significant inconvenience and obstacle to a smooth internal/external working relationship.

### ***Impact of Project on the Department***

The total amount of police department resources devoted to this project was modest, despite its scope and duration. The key police participants probably spent no more than a couple of hours per month working on the project, whereas the consultant spent about three to four days per month on it. Other than personnel time, no other significant SPD resources were expended.

To an even greater extent than the Burglary of Single-family Houses project, this project never seemed to become a high priority, either within the precinct, the department or the city. This may have been because the problem of loud car stereos was not as acute as first imagined, at least not compared to the many other crime and disorder problems that confront the SPD and the city, but there were other possible reasons. Most significantly, soon after the project began, the terrorist attacks in New York and Washington and the nationwide anthrax scare consumed a great deal of public and police attention. Violent crime, always a major concern in Savannah, became especially acute in 2002, putting great pressure on the SPD to respond. As a result, a major crackdown was implemented in the latter part of 2002 and early part of 2003. As well, for most of the project period a proposal to merge the SPD and the Chatham County Police Department demanded much of the attention of the SPD

police chief and his senior command staff and research staff.

But it is probable that the reason goes beyond a simple matter of priorities and community concern. By most accounts, the scope and duration of this project was considerably greater than that of typical "POP projects" conducted in the SPD. The Department's responses to crime and disorder problems are typically much faster and less deliberative than those required in a problem-oriented approach. Consequently, it is easy for slower moving projects to lose steam and be forgotten in the more frenzied environment that requires police to shift their attentions and priorities on an almost daily basis. Without high-level insistence that attention be paid to a particular concern over a long period, most problems receive only fleeting deliberation and attention. And, to be fair, there were many other community and organizational concerns affecting the SPD during this project period that objectively warranted greater time and attention than loud car stereos. Nevertheless, it would be disappointing if no further action were taken to improve the Department's response to loud car stereos, because the knowledge gained from this problem analysis did seem to point the way to a few promising new approaches to loud car stereos in particular, and noise problems in general.

Without the external impetus provided by this project, it is unlikely the SPD would devote a similar amount of time and level of resources to analyzing a community problem. Lt. Hall in particular seemed engaged in the problem and the study of it throughout the project period, however, and seemed to enjoy the process of collecting and interpreting data to test conventional wisdom about the problem with factual information. There is some reason to believe that the SPD benefited

from the process, if not from any tangible outcomes.

## APPENDIX A: PROBLEM SELECTION SURVEY

Problem Type	Questions			
	<p><b>How much of a concern is this problem in your community?</b></p> <p>(On a scale of 1-10 with 1 being the lowest concern and 10 the highest concern.)</p>	<p>How necessary do you believe it is to change and improve the overall response to this problem in your community?</p> <p>(On a scale of 1-10 with 1 being least necessary and 10 the most necessary.)</p>	<p>How likely do you think it is that conducting a problem-oriented study of this problem can bring about these necessary changes and improvements?</p> <p>(On a scale of 1-10 with 1 being the least likely and 10 the most likely.)</p>	<p>Rank order the problems you recommend for this project.</p> <p>(1=highest rank, 19=lowest rank)</p>
Assaults in and Around Bars				
Street Prostitution				
Speeding in Residential Areas				
False Burglar Alarms				
Drug Dealing in Privately Owned Apartment Complexes				
Thefts of and from Cars in Parking Facilities				
Graffiti				
Disorderly Youth in Public Places				
Robbery at Automated Teller Machines				
Loud Car Stereos				
Shoplifting				
Bullying in Schools				
Panhandling				
Rave Parties				
Burglary of Retail Establishments				
Acquaintance Rape of College Students				
Clandestine Drug Labs				
Burglary of Single-Family Houses				
911 Hang-ups				

## **APPENDIX B: OFFICER SURVEY**

### **Loud Car Stereos POP Project Savannah Police Department Officer Interview Protocol**

1. Have you handled any complaints about loud car stereos?
2. If yes, about how often?
3. How do you receive the complaints?
4. Who is complaining?
5. Describe the problem as you see it.
6. Where are the problem areas?
7. When do the complaints occur?
8. What options do you have for handling the complaints?
9. How do you typically handle the complaints?
10. What response have you used that seems to work well?
11. What does not seem to work?
12. What else might be done to address the problem?

## APPENDIX C: BUSINESS SURVEY

### Loud Car Stereos POP Project Savannah Police Department, Precinct 1 Citizen/Business Survey

The Savannah Police Department is conducting a study of the use of car stereos. Some people complain about the noise they make and we want to learn more about this problem. We would like to ask you a few questions about car stereos.

You may remain anonymous, if you wish.

BUSINESS NAME -----

ADDRESS -----

PHONE -----

Contact person/MGR -----

1. Are you bothered or annoyed by the sounds of car stereos?
  - A. Yes
  - B. No
  
2. Is there any particular time of the day or day of week that is a problem?
  - A. Time of day
    - i. 12:00 AM to 8:00AM
    - ii. 8:00 AM to 4:00 PM
    - iii. 4:00 AM to 12:00AM
  - B. Day of week
    - i. Monday, Tuesday or Wednesday
    - ii. Thursday, Friday or Saturday
    - iii. Sunday
  
3. When do you usually hear the car stereos?
  - A. While you are driving
  - B. While you are in your home, business or office?
  - C. While you are walking or standing on the sidewalk?
  
4. Where in the City are car stereos most bothersome to you?
  
5. On a scale of 1 to 10, with 1 being a mild annoyance and 10 being the worst annoyance, how do loud car stereos annoy you?
  
6. What specifically is it about loud car stereos that annoy you?
  - A. The vibrations
  - B. The noise level

C. The music lyrics

7. Does the noise disrupt any of your activities?
  - A. Sleep
  - B. Conversation
  - C. Listening to the TV or personal stereo
  - D. Business activity
8. Have you ever made a complaint to the police or other government official?
9. What, if anything, would you like the police or city officials to do about the problem?

## **APPENDIX D: DISPATCHER SURVEY**

Savannah Police Department  
Loud Car Stereos POP Project  
Dispatcher Survey  
January 2002

1. Have you handled any complaints about loud car stereos?
2. If yes, about how often do you receive them?
3. What percentage of all noise complaints you receive are about loud car stereos in your estimation?
4. Who is complaining typically? (e.g., merchants, motorists, residents)
5. Are you aware of any individuals who complain regularly? If yes, who?
6. What, specifically, do complainants complain about? (e.g., the noise, the vibrations, the music lyrics)
7. Where in the city do the complaints typically occur?
8. When do the complaints typically occur?
9. What options do you have available for handling the complaints?
10. How do you typically handle the complaints? (e.g., dispatch an officer, general broadcast, refer to another agency, refer to the precinct, inform complainant that no action will be taken)
11. How are loud car stereo complaints coded? (e.g., signal 22, signal 29)
12. Do you have any suggestions for what else might be done to better address the problem?

## APPENDIX E: PROPOSED CITIZEN SURVEY

### Loud Car Stereos POP Project Savannah Police Department Citizen Survey

The Savannah Police Department is conducting a study of the use of car stereos. Some people complain about the noise they make and we want to learn more about this. We would like to ask you a few questions about car stereos. We don't need to know or to record your name.

Respondent Information:

Gender:        M        F

2. Is there any particular time of day or day of the week that the problem seems especially bad?
3. Where do you usually hear the car stereos?
  - a. while you are driving?
  - b. while you are in your home, store or office?
  - c. while you are walking or standing on the sidewalks?
4. Where in the city are car stereos most bothersome to you?
5. On a scale of 1 to 10, with 1 being a mild annoyance and 10 being the worst annoyance, how much do loud car stereos annoy you?
6. What specifically is it about loud car stereos that annoy you?
  - a. the vibrations
  - b. the noise level
  - c. the music lyrics
7. Does the noise disrupt any of your activities?
  - a. sleep
  - b. conversation
  - c. listening to television or own stereo
  - d. other

8. Have you ever made a complaint to the police or other government official?
9. What, if anything, would you like the police or city officials to do about the problem?

Date of survey \_\_\_\_\_

Surveyor \_\_\_\_\_

**APPENDIX F: ACTUAL CITIZEN SURVEY (AS MODIFIED AND ADMINISTERED BY THE CITY OF SAVANNAH AND THE SURVEY RESEARCH CENTER)**

CAR STEREO NOISE

39. Are you ever bothered or annoyed by the sounds of car stereos?
1. No
  2. Yes

If respondent answered “1”, interviewer skipped to question 43. If the answer to question 39 was 2, respondent was asked questions 40-42.

40. Is there any particular time of day or day of the week that the problem seems especially bad? Would you say it is during the day on weekdays, during the evening on weekdays, during the day on weekends, during the evening on weekends, all the time, or no special time?
- 1 Yes, during the day on weekdays.
  - 2 Yes, during the evening on weekdays.
  - 3 Yes, during the day on weekends.
  - 4 Yes, during the evening on weekends.
  - 5 No, all the time.
  - 6 No, no special time.
41. On a scale of 1 to 10, with 1 being a mild annoyance and 10 being the worst annoyance, how much do loud car stereos annoy you?
42. How does the noise from car stereos affect your activities? Would you say that the noise disrupts sleep, disrupts conversation, disrupts television viewing, disrupts your stereo listening, or disrupts your activities in some other manner?
- 1 Disrupts Sleep
  - 2 Disrupts Conversation
  - 3 Disrupts Television Viewing
  - 4 Disrupts Your Stereo Listening
  - 5 Other

## APPENDIX G: CITIZEN SURVEY RESULTS

The following report excerpt was prepared by research staff at Armstrong Atlantic State University, based on survey data collected by the Survey Research Center at Savannah State University.

### SECTION 10. GENERAL AREAS

Several questions in the 2002 Citizen Satisfaction Survey pertained to general areas, including attitudes toward car stereo noise; availability of information about City services; Internet use; satisfaction with overall quality of life in Savannah; overall customer service; level of government service, and the relationship between local taxes paid and services received.

#### CAR STEREO NOISE

Four new questions in the 2002 CSS related to citizens' attitudes toward car stereo noise. Survey participants were asked, "Are you ever bothered or annoyed by the sounds of car stereos?" About half of City residents (50.3%) are bothered or annoyed by car stereo sounds, while about 49 percent are not bothered, and one percent are undecided or did not answer this question. Those residents who are bothered by sounds of car stereos were then asked to identify when the problem seems especially bad. "No special time" was the reason given most frequently, with 25 percent choosing this option. "During the evening on weekends" was given by 23 percent of residents who are bothered by car stereo sounds, while 21 percent stated that the problem seems bad all of the time. The following table depicts all of the responses to this question.

Table 10.1: Time of Day Car Stereo Noise Is Worse (N=531): 2002

<u>Time of Day</u>	<u>n</u>	<u>%</u>
During day on weekdays	22	4.1
During evening on weekdays	97	18.3
During day on weekends	40	7.5
During evening on weekends	122	23.0
All the time	113	21.3
No special time	135	25.4
Refused/no answer	2	.4

Respondents were next asked, "On a scale of 1 to 10, with 1 being a mild annoyance and 10 being the worst annoyance, how much do loud car stereos annoy you?" The majority of respondents answered between 5 and 10, with a mean level of annoyance of 7.15. The following table shows the absolute and relative frequencies of responses to this question.

Table 10.2: Annoyance Ratings of Loud Car Stereos (N=531): 2002

Rating of Annoyance	n	%
1	12	2.3
2	10	1.9
3	23	4.3
4	27	5.1
5	83	15.6
6	42	7.9
7	70	13.2
8	86	16.2
9	38	7.2
10	140	26.4

The final question regarding car stereo noise addressed how the noise affects activities of City residents. Respondents were asked, “Would you say that the noise disrupts sleep, disrupts conversation, disrupts television viewing, disrupts your stereo listening, or disrupts your activities in some other manner? Of those respondents who were annoyed by car stereo noise, 42 percent said that it disrupts their sleep, while another third stated that it disrupts their activities in some other manner. How car stereo noise affects City residents is shown in the following table.

Table 10.3: Effects of Car Stereo Noise (N=531):2002

Effects	n	%
Disrupts sleep	222	41.8
Disrupts conversation	57	10.7
Disrupts television viewing	39	7.3
Disrupts own stereo listening	15	2.8
Other*	176	33.1
Refused	22	4.1

\*Residents in the “Other” category typically mentioned all of the effects as disruptive.

# APPENDIX H: OFFENDER SURVEY

## Precinct 1 Loud Car Stereos POP Project Offender Survey

Date \_\_\_\_\_  
Officer \_\_\_\_\_

Time \_\_\_\_\_

1. Why do you play your car stereo so loud?
  - I like it loud
  - To attract women
  - To compete with other guys' stereos
  - Other \_\_\_\_\_
  
2. Where do you like to go to play your car stereo loudly?
  - Downtown
  - In the neighborhood where I live
  - Organized car stereo competitions/events
  - Anywhere
  - Other \_\_\_\_\_
  
3. Are you concerned about damaging your hearing?
  - Yes
  - No
  - Didn't know it would damage my hearing
  - Other \_\_\_\_\_
  
4. Do you think your car stereo bothers other people?
  - Yes
  - No
  - Don't care
  - Other \_\_\_\_\_
  
5. Do you know what the law says about playing your car stereo?
  - Yes
  - No
  - a. (Officer only) If yes, was the respondent correct in his/her understanding of the law?
    - Yes
    - No
    - Pretty close

6. Have you received citations before for loud car stereo violations?
- Yes
  - No
- a. If yes, how many? \_\_\_\_\_
7. When do you turn your car stereo up especially loud?
- When I'm in traffic that's moving
  - When I'm stopped in traffic
  - When I'm cruising around downtown
  - When I don't think anyone else will hear it
  - When I want other people to hear it
  - All the time
  - Other \_\_\_\_\_
8. When do you turn your car stereo down?
- When I see the police
  - When I drive through a residential area
  - When I'm stopped in traffic
  - When people look at me disapprovingly
  - Other \_\_\_\_\_
9. Is your car stereo factory-installed or specially-installed equipment?
- Factory-installed
  - Specially-installed
10. If specially installed, how much did the stereo system cost?
- Less than \$500
  - \$500 to \$999
  - \$1,000 to \$1,999
  - \$2,000 to \$2,999
  - \$3,000 to \$3,999
  - \$4,000 to \$4,999
  - Over \$5,000 Actual amount = \_\_\_\_\_
11. What would discourage you from playing your car stereo loudly?
- Higher fines
  - Loss of driver's license
  - Car impounded
  - If I knew it was damaging my hearing
  - Nothing

Other \_\_\_\_\_

## **APPENDIX I: CAR STEREO DEALER SURVEY**

### **Loud Car Stereos POP Project Savannah Police Department Dealer Survey**

1. How much money do customers typically spend on car stereo systems?
2. What are the different types of customers?
3. Do customers seem aware of noise laws? If so, do they seem concerned about them?
4. Do you provide them with information about noise laws?
5. Are you aware of organized car stereo competitions in the area? If so, do your customers participate in them?

# APPENDIX J: SPD PRECINCT 2 VEHICLE NOISE LOG AND WARNING LETTER

## VEHICLE NOISE LOG

DATE: \_\_\_\_\_  
 TIME: \_\_\_\_\_  
 LOCATION: \_\_\_\_\_

### VEHICLE DESCRIPTION

MAKE: \_\_\_\_\_  
 MODEL: \_\_\_\_\_  
 COLOR: \_\_\_\_\_  
 TAG #: \_\_\_\_\_

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**CITY OF SAVANNAH - DEPARTMENT OF POLICE**  
 Patrol Division • P.O. Box 8032 • Savannah, GA 31412

Captain Gerry Long  
 Precinct One Commander  
 102 E. Lathrop Avenue  
 912-451-4990

Captain James Barnwell  
 Precinct Two Commander  
 1512 Bull Street  
 912-451-6021

Captain Dean Fagerstrom  
 Precinct Three Commander  
 1464 E. Victory Drive  
 912-451-4820

Captain David LaGrange  
 Precinct Four Commander  
 Oglethorpe Mall  
 912-351-3400

Date:

To Whom It May Concern:

Your vehicle was observed being operated with loud unnecessary noise. This violates Savannah City Ordinance 9-2036, Loud unnecessary noise, and Georgia State Code 40-6-14, Excessive volume from a radio of a motor vehicle. This information is being sent to inform you that your vehicle could be stopped and cited for such if this practice continues. Residents in the below listed area are complaining of this type of violation. Please control the excessiveness of the noise being produced from your vehicle.

If you have any questions or concerns, please contact your neighborhood Crime Prevention Officer at one of the numbers above.

Thank You.

Time	_____
Date	_____
Location	_____
Vehicle Type	_____
Tag #	_____

\* If you no longer own this vehicle, please disregard this notice.

## APPENDIX K: SPD INFORMATIONAL FLYER

**LOUD MUSIC**

**INFORMATION**

**SAVANNAH POLICE DEPARTMENT**

The City of Savannah is experiencing problems with loud stereo's in vehicles. The Savannah Police Department and other local law enforcement agencies in an effort to eliminate this problem are strictly enforcing the Local and State laws below. Please take the time to familiarize yourself with this information.

**City Ordinance**

9-2036 → Regulation of sound equipment and sound amplifying equipment.

No person shall play any radio which creates a noise which is plainly audible to any person other than the operator of the device, when operated on a common carrier, or public right-of-way or public place or space.

**Georgia State Code**

40-6-14 → Limits to sound volume produced by radio, tape player, or other sound making device.

It is unlawful for any person operating or occupying a motor vehicle on a street or highway to operate or amplify the sound produced by a radio, tape player, or other mechanical sound making device or instrument from within the motor vehicle so that the sound is plainly audible at a distance of 100 feet or more from the motor vehicle.

So to prevent yourself from being cited with the above violations be considerate of others and turn down the  
**"VOLUME"**

## **APPENDIX L: POLICE PARTICIPANT SURVEY**

### **Field Applications of the Problem-Oriented Guides for Police Police Participant Survey**

#### **The POP Guide**

1. How would you describe your role in the project?
2. Did you read the POP Guide?
3. If so, did the guide improve your understanding of the problem type?
4. Are there any changes to the content of the guide that you would recommend?
5. Are there any changes to the format of the guide that you would recommend?
6. What, specifically, did you learn from the guide that influenced any action you took with respect to the problem?
7. Which stage of the problem-solving process do you think was most aided by the guide?
8. Which stage was least aided by the guide?
9. How, if at all, was your local problem different from the general description of that problem type in the guide?

#### **The Project**

10. Did you find the project to be worthwhile? Why or why not?
11. What about this project differed from the routine way in which problems of this type have been addressed in your agency?
12. To your knowledge, were any of the project recommendations actually implemented? If so, what was implemented?
13. What aspects of the project do you think were most successful?
14. What aspects were least successful?
15. To the extent the project failed to meet any of your expectations, what do you think accounted for that?
16. Did lessons learned from the project result in any changes to the agency's practices?

## APPENDIX M: TABLES AND FIGURES

**Figure 1. Target Area**  
**Table 1. Major Analysis Tasks**

<b>Analysis task</b>	<b>Description</b>	<b>Person(s) Responsible</b>	<b>Related Appendices</b>
Business survey	Merchants in the downtown area were personally surveyed.	Lt. Hall	Appendix C
Dispatcher survey	A written survey was administered to police dispatchers.	Mike Scott	Appendix D
CAD call analysis	CAD records for a three-month sample were analyzed.	Capt. Long/Mike Scott/PO Magwood	
Citation analysis	Citations for loud car stereos for a three-month sample were analyzed.	Capt. Long/ Lt. Hall/PO Magwood	
Citation case disposition analysis	Court case dispositions for loud car stereo charges for a one-year sample were analyzed.	Lt. Hall	
Officer survey	A written survey was administered to Precinct 1 officers.	Lt. Hall	Appendix B
Interview with other SPD experts	A Precinct 2 officer with expertise in the problem was interviewed.	Lt. Hall	
Car stereo dealers survey	All car stereo dealerships in the city were personally surveyed.	Mike Scott	Appendix I
Citizen survey	A random sample of households in the city was surveyed by telephone.	Mike Scott, Savannah State University, Armstrong Atlantic State University	Appendices E, F, G
Offender survey	Offenders stopped by police for loud car stereo violations were personally surveyed.	Lt. Hall	Appendix H

<b><i>Analysis task</i></b>	<b><i>Description</i></b>	<b><i>Person(s) Responsible</i></b>	<b><i>Related Appendices</i></b>
Offender driving and criminal history	Driving and criminal histories on a sample of loud car stereo violators and on a comparison sample were analyzed.	Lt. Hall	

---

<sup>1</sup> Basic statistical analyses of the mean, median, mode, and standard deviations were conducted. Median scores were used as the best reflection of central tendencies.