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High Visibility Enforcement Programs: California's State and University Traffic Safety Partnership

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## **High Visibility Enforcement Programs: California's State and University Traffic Safety Partnership**

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**ABSTRACT**

Traffic collisions are a leading cause of death and injury in California and the number one cause of death for people between the ages of one and 44.

High-visibility enforcement programs (HVEs) are administered nationwide by the National Highway Traffic Safety Administration, and combine intensive enforcement of a particular traffic safety law with widespread media and public education campaigns. HVE programs have been shown to be effective in reducing alcohol-impaired driving and promoting seat belt use. A major challenge in implementing HVEs, however, exists among local police agencies, which have competing priorities for limited staff and funding. Maximizing the chance that local agencies will participate in HVEs requires a user-friendly, streamlined program that allows these public sector agencies to be accountable, efficient, and effective.

In California, the Office of Traffic Safety fostered a partnership with the University of California, Berkeley Traffic Safety Center to administer HVE campaigns to target impaired driving and non-use of seat belts. Several benefits have resulted from this partnership, including 1) streamlined, electronic administration of HVE grants featuring the use of user-friendly computer and Internet technology to process online applications, grant documents, and administrative processes, which resulted in problematic applications (due to errors) being reduced to zero, 2) planned increase in HVE program effectiveness by targeting high-risk areas and issues, and 3) increased flexibility in program planning and administration.

In addition to improving service delivery for the HVE programs in California, this model will provide useful lessons learned as the State plans automated grant management systems.

## INTRODUCTION

High-visibility enforcement programs (HVEs) are administered nationwide by the National Highway Traffic Safety Administration (NHTSA), and refer to intensive enforcement of a particular traffic safety law, combined with widespread media and public education campaigns (1). HVE programs have been shown to be effective in reducing alcohol-impaired driving and promoting seat belt use (2 and 3). In California, the California Office of Traffic Safety (OTS) funds law enforcement agencies' campaigns addressing alcohol-impaired driving and seat belt use.

These campaigns were part of NHTSA's efforts to reduce injuries, fatalities and crashes on U.S. roadways. In 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act – Legacy for Users (SAFETEA-LU), reauthorized funding for two HVE campaigns: one aimed at reducing the number of alcohol-involved fatalities and injuries, and another aimed at increasing seat belt usage. The programs combined enforcement with statewide and national media campaigns to inform the public and increase awareness. Within the State of California, Strategic Highway Safety Plan efforts, which have been created pursuant to SAFETEA-LU, have identified increased frequency and publicity of sobriety checkpoint operations in regions with the high fatality rates, as well as increased enforcement and education campaigns for occupant protection programs.

Each of the fifty states operates HVE programs. Historically administered in California by OTS through NHTSA, these HVE programs have resulted in increased citations and arrests, increased media coverage, and increased community awareness (2 and 3). As HVE programs are wholly dependent on local police agency participation, a major challenge in implementing HVEs exists due to the fact that local police agencies have competing priorities for their limited staff and funding. Maximizing the chance that local agencies will participate in HVEs requires a user-friendly, streamlined program that allows these public organizations to apply for grants easily, while being accountable, efficient, and effective. In 2006, a new model for implementation of HVE programs across the state was developed. OTS fostered a partnership between state and university by providing funding to the University of California, Berkeley Traffic Safety Center (TSC) to work with the state to administer sobriety checkpoints and seat belt enforcement campaign programs. The state-university partnership makes it possible to pilot and develop new, streamlined programs and administrative operations in order to improve service delivery to local law enforcement agencies. This paper reviews the beneficial administrative and programmatic effects that this partnership has had in California.

## BACKGROUND

Traffic collisions are a leading cause of death and injury in California for all age groups and the number one cause of death for people between the ages of one and 44 (4). In 2006, there were approximately 189,957 collisions in California resulting in injury, and 3,793 collisions resulting in a fatality (5). Between 2002 and 2006, police reports of fatalities from alcohol-related collisions increased (6) after a steady decline since the 1980s (7). An aggressive set of policy interventions enacted since the 1980s have helped to change driver behavior, including a .08 Blood Alcohol Concentration law and a zero

alcohol tolerance policy for drivers under age 21, among others. To improve compliance with these policies, OTS has funded sobriety checkpoint programs, launched statewide drinking and driving prevention media campaigns, and funded numerous other population-based intervention programs to change driver behavior.

NHTSA reports that seat belts saved over 75,000 lives in the five-year period between 2002 and 2006 (8). “Primary” seat belt law enforcement, enacted in California in 1993, authorized police to stop and ticket motorists solely for not wearing safety belts. Nationwide, “primary” laws yield higher gains in seat belt use and safety than “secondary” enforcement laws (in place in most other states), which permit ticketing only when there is another traffic violation (9). In California, seat belt use increased from 70 percent in 1992 under secondary enforcement, to 83 percent in 1993 after the primary enforcement law went into effect (10). Collision statistics for the state indicate, however, that there are population groups who have lower than average seat belt use rates, including teenagers, night-time drivers, pick-up truck occupants, and drivers in rural areas (11).

## **High Visibility Enforcement Campaigns**

### *Sobriety Checkpoint Program*

The goal of the statewide sobriety checkpoint program is to reduce the number of people killed or injured in alcohol-related crashes. Sobriety checkpoints, together with media campaigns, are an effective way to deter alcohol-impaired driving and to increase motorists’ perceptions of the risks of being caught and arrested (12). While agencies must announce that they will be holding checkpoints, the location does not need to be announced, contributing to the deterrent effect of the HVE program.

In California, through a competitive grant process, police agencies can apply for sobriety checkpoint mini-grants to pay overtime personnel costs during two “National Impaired Driving Campaign” time periods, also termed mobilization periods. In California, these mobilizations are conducted over a three-week period during the winter holiday season in December and January, and during a two-week period in conjunction with the Labor Day holiday in August and September. Agencies may also receive funding to conduct additional checkpoints outside the mobilization periods.

### *Click It or Ticket Program*

The goal of the Click It or Ticket (CIOT) program is to increase seat belt use statewide through the combined efforts of the California Highway Patrol (CHP), OTS and local law enforcement agencies. Prior to 2008, CIOT was a yearly campaign conducted during a single mobilization period in May and June. In October 2008, California will implement the “The Next Generation CIOT” strategy to focus public information and enforcement efforts during two mobilization periods— in November and May— and to promote sustained enforcement throughout the year. The mini-grants offset overtime costs for enforcement conducted during the year. Grants are awarded on a competitive basis, with the goal of including local law enforcement agencies representing at least 50 percent of

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California's population, or serving geographic subdivisions that account for at least 50 percent of California's unbelted fatal vehicle occupants.

### **California's State and University Traffic Safety Partnership**

OTS and TSC have unique backgrounds and their collaboration offers program development and management expertise, strategic direction, and technical assistance to the state's HVE campaigns.

#### *California Office of Traffic Safety*

The California Traffic Safety Program was created in 1967 by the State Legislature to provide authority for California to carry out the direction of the National Highway Safety Act, passed by Congress in 1966. The mission of OTS is to reduce deaths, injuries and economic losses resulting from traffic related collisions. Annually, OTS mails *Requests for Concept* papers to more than 3,000 eligible agencies outlining the opportunity to compete for available funds. There are eight program priority areas earmarked for grant funding: Alcohol and Other Drugs, Occupant Protection, Pedestrian and Bicycle Safety, Emergency Medical Services, Traffic Records, Roadway Safety, and Police Traffic Services.

Approximately \$70 million was awarded to 136 grantees in 2008. Increased grants were made for education and enforcement of the state's DUI laws, including an increase in the number of sobriety checkpoints, DUI patrols, warrant service operations for multiple DUI offenders, and a variety of programs for California high schools.

#### *University of California, Berkeley, Traffic Safety Center*

The University of California, Berkeley Traffic Safety Center's (TSC) mission is to reduce traffic fatalities and injuries via a multi-disciplinary collaboration with partner organizations in education, research and outreach. Within UC Berkeley (UCB), the TSC works closely with the UCB Institute of Transportation Studies and School of Public Health, and sponsors students from these disciplines, and others including Optometry, Environmental Sciences, City and Regional Planning, Social Welfare, and Statistics. Core activities include teaching courses, conducting student training, sponsoring seminars, disseminating information, and conducting research, technical assistance and evaluation.

TSC focus areas include: pedestrian and bicycle safety, traffic safety policy analysis and evaluation, geographical analysis of traffic crash data, safety among vulnerable populations, identification of high concentrations of crashes on state highways, and safety of the state's Department of Transportation employees.

### **NEW MODEL FOR MANAGING MINI-GRANTS**

Responding to emerging best practices to streamline operations and service delivery, and to use innovative approaches to reduce the increasing number of deaths on California roads, OTS funded the UC Berkeley TSC in 2006 to administer the Sobriety Checkpoint Mini-grant Program for law enforcement agencies. This grant concept enabled OTS to

provide more grants to local agencies without creating additional stress on fiscal and staff resources (13). The following year, OTS provided a similar umbrella grant to UC Berkeley to administer the CIOT mobilization to increase seat belt use.

This partnership model is unique in the United States. By joining the state's vast resources and experience with the UCB's academic and technical expertise, California's high visibility enforcement programs have been strengthened and streamlined in both administrative and programmatic operations. Furthermore, the state has access to advanced data analysis tools and methods to leverage funding. The model gives the university-based Traffic Safety Center grounding in "real-life" programming, and opportunities to apply research and statistical analysis directly to community safety needs.

## **Benefits to Administrative Operations**

### *Using Computer Technologies to Streamline Operations*

Governmental organizations at the federal and state levels have been moving from paper- to computer-based grant management systems. For example, the U.S. Department of Health and Human Services manages a web site (grants.gov) for applicants to apply electronically for over 1,000 federal grant programs. The state of Georgia Governor's Office of Highway Safety requires applications be submitted via their online electronic grant system, eGOHS (14).

One OTS objective for the TSC, therefore, was to evaluate the feasibility of an online HVE mini-grant application process. In the first year of mini-grant administration, TSC handled applications in the conventional, paper-based manner. Over 400 paper applications were processed, each checked for arithmetical errors (15 calculations per application), omissions, errors, and inconsistencies. Questions required follow-up contacts with applicants, with resolution taking up to a week.

After award letters were sent to grantees, grant documents were generated for grantee signatures. Data provided by applicants and documentation from the award decision process (some awards were less than the requested amounts) had to be reflected accurately in each of the several hundred grant documents. The need for accurate transfer of grant information was countered by the need to meet deadlines. Contracts were required to be mailed out within a week of the award letters being sent. The TSC used Filemaker Pro software to create a database containing the 2006 application information and the award decisions. The database was also able to generate the grant documents from a template.

After the first year's experiences, TSC, with OTS approval and input, expanded the scope of the feasibility analysis to include a computer-based mini-grant management system, which accepts online applications and reports, tracks grantee status, and stores important documents (see Figure 1). TSC piloted use of user-friendly computer and Internet technology to process online applications, grant documents, and grant administrative processes. The first "deliverable" of the grant management system was an online application process for the 2007 cycle of mini-grants. Applicants entered staffing, hourly rates, and operational parameters directly into a database maintained by the TSC on a secure server.



**FIGURE 1 Mini-Grant Database Management System**

Calculations were automatically performed, eliminating arithmetical errors. Computer prompts helped applicants to complete, modify (if necessary), and then submit the online applications (see Figure 2). Any numbers that exceeded pre-set limits led to messages that helped applicants correct their information immediately. The TSC was able to observe data being entered in real-time. Thus, assistance could be provided to applicants as they completed their applications. Every effort was made to avoid—by using computer programming—common errors observed in the first year’s grant applications.

The computer and human assistance provided for the online applications resulted in the number of problematic applications (due to errors) being reduced to zero. Grantees described the first year’s online application in 2007 as the “easiest” application they had completed. For the TSC, the online application process eliminated the need to handle paper, manually check each calculation on an application, or delay processing an application while waiting for corrected data from an applying agency. Automating data entry, reporting, emailing (rather than mailing) grant documents, development of contracts, and compilation of enforcement results saves the TSC approximately 616 person hours per year. At the yearly salary rate of \$58.45/hour for a program analyst, the State saved \$36,005 in 2007.

The database enabled agencies to know, on a real-time basis, how funding decisions will affect performance indices (total amount, % safety performance index). For example, one database feature that OTS observed and subsequently identified as a need was the ability to evaluate immediately (in real-time) the impact of alternative award strategies. This was particularly helpful since the total amount requested by all applicants exceeded the available funding by 100%.



The next deliverable of the pilot management system (database) was to generate the grant documents based on the application information and award decisions already residing in the database. As a result, all grant documents contained correct grantee and award information. Since the TSC was able to use the new system to email the grant documents instead of mailing paper documents, the generation and transmittal of grants were accomplished concurrently, within a matter of seconds. Ultimately, the time period between sending award letters and the issuance of grant documents was reduced from two weeks to a matter of days, where most of the effort was devoted to assuring data quality in the database.

ID: 1790 Grant No: Created: 07/03/08 By: JGu  
Modified: 07/25/08 By: JGu

OTV View Add Delete Find List ⏪ ⏩

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Location: Anytown	Name: David Smith	<b>Application</b>	<b>Adjusted/Final</b>
Conducted By: Anytown Police Department	Prefix: Mr.	Max No. <input type="text" value="2"/>	Max No. <input type="text" value="2"/>
Street (1): 123 Main St	Title/Rank: Sergeant	Max Cost \$5,495.21	Max Cost \$5,495.21
Street (2):	Telephone: (510) 643-1774 Ext: <input type="text"/>	Total Amt. \$10,990.42	Total Amt. \$10,990.42
City/Zip: Anytown 94720	Fax: (510) 643-9922		
County: Alameda	Email: d.smith@anytownpd.com		

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Checkpoints	Hours & Rates	Adjustments	Issues	Status	Printing/Emailing	Contract Data	Storage Documents	Reporting	Claim Status		
Personnel	Average No. Personnel/Checkpoint (a)	Avg. No. of OT Hrs./Per Person Per Checkpoint (b)	Max. Hr. OT Rate Without Benefits (c)	Total OT Cost Without Benefits (a x b x c) (d)	% OASDI (e)	% Workers Comp (f)	% Medicare (g)	% Other Benefits (h)	% Other Benefits (i)	Total % Benefits (e+f+g+h+i) (j)	Total Benefit Amount (d x j/100) (k)
Supervisor	<input type="text" value="2"/>	<input type="text" value="4.0"/>	<input type="text" value="\$98.97"/>	<input type="text" value="\$791.76"/>	<input type="text" value=""/>	<input type="text" value="6.200"/>	<input type="text" value="1.450"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="7.650"/>	<input type="text" value="\$60.57"/>
Officer Category (1)	<input type="text" value="6"/>	<input type="text" value="6.0"/>	<input type="text" value="\$80.78"/>	<input type="text" value="\$2,908.08"/>	<input type="text" value=""/>	<input type="text" value="6.200"/>	<input type="text" value="1.450"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="7.650"/>	<input type="text" value="\$222.47"/>
Officer Category (2)	<input type="text" value="1"/>	<input type="text" value="6.0"/>	<input type="text" value="\$79.78"/>	<input type="text" value="\$478.68"/>	<input type="text" value=""/>	<input type="text" value="6.200"/>	<input type="text" value="1.450"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="7.650"/>	<input type="text" value="\$36.62"/>
CSO	<input type="text" value="1"/>	<input type="text" value="6.0"/>	<input type="text" value="\$44.45"/>	<input type="text" value="\$266.70"/>	<input type="text" value=""/>	<input type="text" value="4.450"/>	<input type="text" value="1.450"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="5.900"/>	<input type="text" value="\$15.74"/>
Dispatcher	<input type="text" value="1"/>	<input type="text" value="6.0"/>	<input type="text" value="\$38.78"/>	<input type="text" value="\$232.68"/>	<input type="text" value=""/>	<input type="text" value="4.450"/>	<input type="text" value="1.450"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="5.900"/>	<input type="text" value="\$13.73"/>
Clerical	<input type="text" value="1"/>	<input type="text" value="3.0"/>	<input type="text" value="\$34.78"/>	<input type="text" value="\$104.34"/>	<input type="text" value=""/>	<input type="text" value="4.450"/>	<input type="text" value="1.450"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="5.900"/>	<input type="text" value="\$6.16"/>
Criminalist	<input type="text" value="1"/>	<input type="text" value="3.0"/>	<input type="text" value="\$42.71"/>	<input type="text" value="\$128.13"/>	<input type="text" value=""/>	<input type="text" value="3.200"/>	<input type="text" value="1.450"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="4.650"/>	<input type="text" value="\$5.96"/>
Other (1)	<input type="text" value="1"/>	<input type="text" value="6.0"/>	<input type="text" value="\$18.97"/>	<input type="text" value="\$113.82"/>	<input type="text" value=""/>	<input type="text" value="3.200"/>	<input type="text" value="1.450"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="4.650"/>	<input type="text" value="\$5.29"/>
Other (2)	<input type="text" value="1"/>	<input type="text" value="6.0"/>	<input type="text" value="\$16.64"/>	<input type="text" value="\$99.84"/>	<input type="text" value=""/>	<input type="text" value="3.200"/>	<input type="text" value="1.450"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value="4.650"/>	<input type="text" value="\$4.64"/>

Specify Additional Benefits:

**FIGURE 2 Online Application Process for Tracking Report Submittals Status, Contracts, and Claims**

The online reporting feature, the original impetus for the management system, was also successful. Grantees were required to report the results of their HVE programs for ultimate OTS reporting to NHTSA (e.g., the number of sobriety checkpoints, the number of seat belt citations). In the first year, the TSC collected hundreds of paper report forms, each of which had to be entered by staff into a spreadsheet for compiling summary statistics. For online reporting in the next year, each grantee was assigned a user name and password and directed to a website where they could enter HVE campaign information directly into a database. As with the online application process, the TSC could quickly identify errors and gaps for immediate follow-up with grantees. Summary statistics were immediately calculated. The online reporting feature was well received by the grantees and extremely useful for timely reporting of the summary statistics to OTS.

In addition to improving service delivery for the HVE programs in California, this model will provide useful lessons learned as OTS explores development of an automated grant management system.

*Flexibility in Developing New Organizational and Administrative Processes*

By developing this partnership with UCB, the State has been able to conduct oversight on a high policy level to ensure overall consistency with the California's Strategic Highway Safety Plan (SHSP). For instance, for the fiscal year 2009, OTS decided to specially target 32 cities with disproportionately high levels of alcohol-related fatalities. OTS and the TSC worked closely to issue individualized grant announcements to these cities to help increase funding allocations to the neediest areas. Ensuring that the proposals were of sufficient quality, each one of the 32 cities that applied for a grant received one (in addition to the dozens of other cities that received grant awards).

Funding decision criteria are re-evaluated annually by OTS to reflect budget, federal and state priorities. At the mini-grant awards level, OTS is now able to test the use of different criteria to award mini-grants, since the historical HVE results are now available and easily retrievable from the database. Criteria for awards include costs per mobilization, data regarding past effectiveness and current needs; e.g., DUI or seat belt rates, and comparison of each jurisdiction's crash rates against other localities of similar population size. Further, for the 2009 grants, the underlying criteria for awarding grants was that a city had at least one alcohol-related or unbelted fatality (depending on the grant program). The criteria for awarding grants are aimed to affect the fatality rate in the State.

Moreover, the award decisions made for alternative funding strategies are archived in the database, and can therefore be retrieved for re-consideration in the awards decision process. In summary, OTS and TSC now have a tool to apply strategies for optimizing mini-grant funding; that is, ensuring that mini-grants go to agencies that have a demonstrated need and efficient operations. While these strategies have always been applied, the database allows for substantially more efficient analysis. Project staff are able to develop different funding scenarios with a click of the mouse, rather than through hours of manual computations.

**Benefits to Program Development and Delivery***Application of Best Practices*

Using University resources under the new model for conducting HVE programs in California, OTS was able to begin implementing methods of targeting alcohol-impaired driving and seat belt enforcement programs in order to increase effectiveness. UCB, while a state agency, is not held to the same hierarchical decision-making process and, therefore, staff is able to be more flexible in effecting organizational change with regard to program development and operations.

Law enforcement activity— both in periodic high-visibility campaigns and in sustained year-round operations— is central in promoting and ensuring traffic safety. Objective and reliable measures of law enforcement activity, however, are challenging to identify and collect. Measures based on counts of activities such as checkpoints can be ambiguous, since variations exist in the scale and impact of these events. Further, counts of enforcement hours are complicated by difficulty in identifying the actual time spent on

a specific enforcement activity. Measures based on jurisdictions or specific populations covered by an enforcement operation do not necessarily include the level of enforcement intensity.

In their March 2007 report, “Audit of the National Highway Traffic Safety Administration’s Alcohol-Impaired Driving Traffic Safety Program” (15), the Office of the Inspector General of the U.S. Department of Transportation emphasized the need for state annual plans and reports to be expanded to include more information. In addition to featuring performance measures—such as the number of sobriety checkpoints conducted, or on the overall performance goal of reducing the alcohol-impaired fatality rate—plans and reports should also address the overall performance of key strategies such as sustained enforcement, in which sobriety checkpoints may be an element supporting this strategy. To do so, it was recommended that states link more meaningful performance measures to the key program strategies.

In the 2009 fiscal year, to promote sustained enforcement for California’s statewide “Sobriety Checkpoint” program, local law enforcement agencies will conduct checkpoints at least quarterly. California’s 2009 Annual Performance Report will report the degree to which the sustained enforcement strategy was carried out and the results of the enforcement operations.

To promote sustained enforcement with the “Next Generation – Click it or Ticket,” local law enforcement agencies will carry out one to four days and/or nights of intensified seat belt enforcement each month. California’s 2009 Annual Performance Report will report the degree to which the sustained enforcement strategy was carried out and the results of the enforcement operations.

#### *Using Traffic Collision Statistics to Target Programs*

In addition to the general annual solicitation for proposals for fiscal year 2009 grant award decisions, OTS notified the 32 cities that were eligible to receive funding to conduct additional sobriety checkpoints. These cities were ranked by OTS according to the number of alcohol-related collisions as recorded in the Statewide Integrated Traffic Records System (SWITRS). While many of these cities had been conducting at least several checkpoints each year, the OTS offer of additional funding was designed to specifically target sites where additional checkpoints could ultimately save more lives (See Figure 3).

STATE OF CALIFORNIA  
GOVERNOR  
BUSINESS, TRANSPORTATION AND HOUSING AGENCY

**OFFICE OF TRAFFIC SAFETY**

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(916) 262-0990  
(800) 735-2825 (T/TDD-Referral)  
(916) 262-2860 (FAX)

ARNOLD SCHWARZENEGGER,  
DALE E. BONNER, SECRETARY



June 26, 2008

Dear

The Office of Traffic Safety (OTS) is proud to announce your department is eligible to receive additional overtime funding to conduct "monthly" sobriety checkpoints, beginning October 1, 2008. This effort will involve 32 police departments statewide. In some cases, OTS staff has already been discussing this additional funding opportunity with your staff. Cities with DUI grants that are active in 2009, have the option of increasing grant funding to reflect additional checkpoints. Other cities may apply for funding as part of the Statewide Sobriety Checkpoint program that U.C. Berkeley has been administering for OTS the past few years. You should have recently received an announcement for a new round of checkpoint grants through U.C. Berkeley.

Your department was chosen for this program because OTS developed "alcohol crash rankings" indicates your city would benefit greatly from frequent sobriety checkpoints. As you know, sobriety checkpoints have been proven to be highly effective. In fact, the combined results of 23 scientific studies from around the world found that sobriety checkpoints consistently reduced alcohol-related crashes, typically by about 20%. While OTS realizes many of the 32 cities being solicited have been conducting at least some checkpoints, we hope the offer of additional funding may translate into more checkpoints and ultimately more lives saved.

I sincerely hope you are able to take advantage of this funding opportunity. If you have any questions, please do not hesitate to call me and if your staff has questions, please ask them to call their OTS Regional Coordinator. If your department is interested in submitting a mini grant for checkpoint funding, please visit our website for application submittal instructions.

Thank you for your interest in traffic safety.

Sincerely,

CHRISTOPHER J. MURPHY  
Director

cc:

## FIGURE 3 OTS Notification of Additional Sobriety Checkpoint Funding

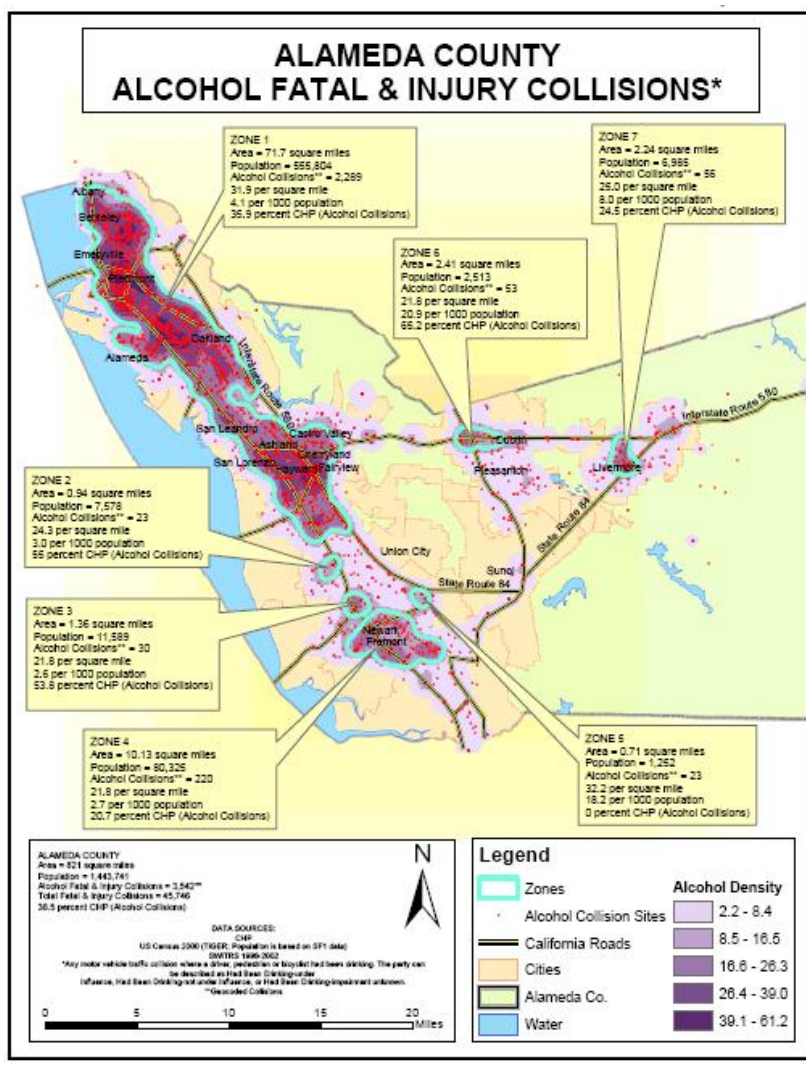
### *Using Geocoded Data to Enhance Sobriety Checkpoints*

TSC is completing an extensive project of geocoding the data gathered by the Statewide Integrated Traffic Records System (SWITRS), the primary source of state-level crash data for California agencies. The goal of this effort is to enhance substantially the crash data's usefulness in targeting traffic safety programs and evaluating safety measures' effectiveness.

The efforts of OTS and TSC are focused on directing activities of the Sobriety Checkpoint program in California. In order to improve identification of the areas where DUI prevention programs could have the greatest effect, OTS and TSC will be distributing maps of counties or regions showing collision clusters to police agencies with checkpoint mini-grants. These maps will enable agencies to target checkpoints in regions that have disproportionately high DUI levels. Figure 4 presents an example of a county-

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wide map showing geocoded alcohol collisions. Further, TSC will provide technical assistance to agencies in using these maps.



**FIGURE 4 Map of Alameda County with Geocoded Crash Data**

### *Using research to enhance CIOT*

Surveys of seat belt use in cities that were awarded grants to conduct annual seat belt enforcement campaigns indicate that use declines in the months between campaigns. To mitigate traffic collision fatalities and injuries, more strategic intervention is needed, and should focus on high risk groups in order to maintain increases in seat belt use the year. Consequently, in response to two main challenges—the lower rates of seat belt use during night time hours and the need to promote sustained use of seat belts throughout the year following the mobilizations—OTS is requesting that agencies conduct a second seat belt enforcement campaign in November, ongoing (monthly) enforcement efforts in the months outside the two mobilization periods, and night time enforcements, where feasible. The new electronic grants tracking system will allow OTS to monitor progress, and will allow TSC to analyze program results.

## CHALLENGES

Given the effectiveness of high-visibility enforcement, there is much focus, both nationally and in California, on promotion of Sobriety Checkpoints and Click It Or Ticket programs. This requires participation from local law enforcement agencies, which are often under-staffed and faced with competing priorities and limited budgets. Even the “carrot” of overtime pay can pale in view of stretched police resources.

In response to this challenge, the State of California has streamlined the mini-grant program. The University provided assistance by piloting the use of an electronic grants management system, recommended as a best practice by the US DOT “Best Practices for Improving Oversight of State Highway Safety Programs” (16). The state is working toward electronic grants management for all of its programs, yet the bureaucratic steps necessary to effect this change exceed those required by the University. Hence, California was able to explore electronic grants management systems on a smaller scale first, and provide lessons learned to the state.

While ultimately this program resulted in widespread support from police agencies, the shift from paper to online systems had originally posed a challenge to some agencies. To address this, TSC staff invests time in training and providing technical assistance to local agencies to ease the transition to the web-based grants management program.

## CONCLUSION

Tens of thousands of motor vehicle deaths each year require that governmental programs maximize effectiveness, while limited federal and state resources require that programs maximize efficiency. It is incumbent, therefore, that sound performance measures are used to ensure progress toward these goals. As California works to implement best practices to promote traffic safety, this paper proposes three performance measures be used to monitor progress.

First, programs must be effective. Millions of dollars are spent on safety, and without adequate performance measures, it is difficult to understand the impact programs have. With implementation of the HVE program in California, the new emphasis on targeting high collision density areas, along with electronic tracking, can help to identify hopeful progress toward goals. Performance measures can highlight any change in crash rates in high density areas.

Further, focusing on high-risk drivers or particular time-of-day, can help measure progress. One important reason for targeting populations or time-of-day is due to the fact that, while California currently has an overall seat belt use rate of 94.6 percent, many high-risk drivers continue to ride unrestrained, particularly young males, late-night drivers, alcohol-impaired drivers, and drivers with violations and previous crashes on their records (17). In particular, the night time fatality rate for vehicle occupants is approximately three times greater than the daytime rate. With implementation of the “Next Generation CIOT” including night time use, it is our goal to be able to measure and compare use by time-of-day.

Second, grants management should be efficient, accurate, and timely. Given that police agencies have competing priorities and limited resources, it is imperative that the grants management systems be accessible and user-friendly. Performance measures that the state has already begun to use—and can build on—include surveys of agencies in order to get feedback on the systems and ideas for ways to enhance its efficiency.

California is one of a handful of states that have implemented the best practices of web-based grants management for HVE programs. Using results and feedback from this program can help inform the next steps in the State's Office of Traffic Safety efforts to implement electronic grants management for all grants.

Finally, facilitating collaborative and cooperative relationships with local agencies is critical. Without police participation, there can be no HVE. Given competing resources for police agencies, in addition to the importance of a straightforward and streamlined process, the role of customer service to the agencies must be a priority. Measuring this level of satisfaction is key to ensuring a successful program, and can be accomplished through surveys of police agencies inquiring about different aspects of the program—technical, customer service and training.

HVE is gaining prominence both nationally and statewide as a key strategy in preventing needless deaths and injuries. California provides a model for ways to create partnerships that 1) streamline administration of HVE grants, and 2) increase HVE program effectiveness by using traffic collision data and GIS analysis to target these programs. Further, the state-university partnership provides flexibility in program planning and administration. Having a solid partnership allows for mutual goals to be achieved in the most effective and efficient way possible and, thus, holds substantial promise for raising the level of safety in the State of California.

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