Law Enforcement Contacts Policy and Data Review Committee

2009 Annual Report

December 1, 2009

Prepared by:

Criminal Justice Policy Research Institute
Hatfield School of Government
Portland State University

Contents

2009 Annual Report of the Law Enforcement Contacts Policy and Data Review Committee

Executive Summary:

During 2009 the Law Enforcement Contacts Policy and Data Review Committee (LECC) continued its efforts to collect and analyze traffic stop data in an effort to determine if racial profiling, either intentional or unintentional, was occurring within Oregon law enforcement agencies.

In 2009 the LECC performed the following:

- Conducted its sixth Oregon Statewide Public Perception Survey of attitudes regarding racial profiling and public contacts with law enforcement. The latest survey indicates that attitudes of African Americans and Hispanics toward law enforcement are improving, but remain a major concern (see full report on page 18).
- Provided Technical Assistance related to traffic stop data collection to the Oregon State Police, Corvallis Police Department, and the Portland Police Bureau (see page 7 for a summary of these activities).
- Generated two additional research reports, examining racial disparities in traffic stop data (reports can be found on pages 35-48). Since 2001, the LECC has performed analysis of data from five Oregon law enforcement agencies: Beaverton PD, Corvallis PD, Eugene PD, Hillsboro PD, and the Oregon State Police (OSP). All of these agencies, except Eugene, have between five and seven years of data which allows for better data analysis than previously reported.
- Delivered "Perspectives on Profiling" Regional Trainings and In-Services to 612 law enforcement professionals from more than 52 law enforcement agencies (see full report on page 49).
- Due to high demand for "Perspectives on Profiling" training, recruited and trained 15 additional law enforcement trainers, in conjunction with staff from the Simon Wiesenthal Center which created the curriculum.
- Participated in the Governor's Summit on Eliminating Disproportionate Minority Contact in Juvenile Justice by delivering a demonstration of the "Perspectives in Profiling" training. Based on a good response at the 2008 Governor's Summit, the LECC was asked to deliver the demonstration again in 2009 (see page 56 for further information).

- Submitted a proposal to Salem PD to collaborate in the development of a Community Outreach Best Practices Manual (see page 58 for further information).

The introduction and body of this report covers each of these in more detail, including the results of the Public Perception Survey and the Corvallis PD analysis.

Introduction:

The Law Enforcement Contacts Policy and Data Review Committee (LECC) was created by Senate Bill 415 in 2001 and charged with the responsibility to obtain data on law enforcement stops, provide technical assistance in collecting and analyzing that data, and identify and disseminate information on programs, procedures and policies from communities that have forged positive working relationships between law enforcement and communities of color. HB 2102, signed into law in 2007, made the LECC permanent and transferred staffing duties from the Oregon Criminal Justice Commission to the Criminal Justice Policy Research Institute at Portland State University. House Bill 2102, codified as ORS 131.905 *et seq*., can be found in Appendix A of this report.

The LECC, in partnership with the Criminal Justice Policy Research Institute and the Traffic Safety Division of the Oregon Department of Transportation, has received two grants from the National Highway Traffic Safety Administration (NHTSA-2006-23772). These grants will fund the activities of the LECC until 2011. The grant program is called the "Incentive Grant Program to Prohibit Racial Profiling" under section 1906 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (Federal Register, Vol. 71, No. 22, pp. 5727-5729).

The original charge of the LECC was based on the legislative finding that state and local law enforcement agencies can perform their missions more effectively when all Oregonians have trust and confidence that law enforcement stops and other contacts with individuals are free from inequitable and unlawful discrimination based on race, color or national origin, and that data collection can establish a factual foundation for measuring progress in eliminating discrimination.

The LECC recognizes that racially biased policing, whether actual or perceived, impacts relationships between communities of color and law enforcement agencies. Policing in democratic nations is based on principles of procedural justice. In other words, police are expected to be *neutral* in their decision-making, treat the citizenry with *respect*, and seek *fair* outcomes. A review of research on law enforcement-citizen relations indicates that *trust* in and *satisfaction* with police have important ramifications for crime prevention, case investigation, legitimacy of government institutions, and crime itself.

Racially-biased policing clearly violates such principles of justice, and lowers citizen trust and satisfaction with police. However, racially-biased policing and police-citizen relationships are complex and there are no simple solutions. Therefore, in order to foster more positive relationships between law enforcement and the communities they serve, the LECC has taken a multi-pronged approach, led by two regularly convening subcommittees: Data Review and Community

Relations. These two subcommittees have carried out a variety of tasks to address issues that correspond to the intent and goals of ORS 131.905 *et seq*.

The LECC has structured its work around four key areas:

1) Status of Stop Data Collection, Analysis, and Utilization in Oregon;
2) Public Perception of Racially Biased Policing in Oregon;
3) Identification of "Best Practices" for Community Outreach and Law Enforcement Training; and
4) Recommendations for Addressing Racially Biased Policing and Law Enforcement-Citizen Relations in the State of Oregon.

In 2009, the LECC focused on a number of tasks that correspond to all four of its key areas. The specific tasks completed by the LECC to address these areas in 2009 are the following:

1) Statewide Public Perception Survey.
2) Technical Assistance related to traffic stop data collection with the Oregon State Police, Corvallis Police Department, and the Portland Police Bureau.
3) "Perspectives on Profiling" Regional and In-Service Training.
4) Participation in the Governor's Summit on Disproportionate Minority Contact.
5) Development of Community Outreach Best Practices Brochure with the Salem, PD.

The remainder of this introduction reviews each area addressed in 2009, briefly summarizes the tasks undertaken, and lists significant findings and conclusions. This summary includes a broad perspective, including information from other years and other organizations. The introduction ends with the LECC's recommendations for addressing racially biased policing in Oregon based on the LECC's cumulative efforts. More detailed descriptions of the LECC committee, tasks completed in 2009, and data findings follow the introduction.

1. Status of Stop Data Collection, Analysis, and Utilization in Oregon

LECC Findings Regarding Disparity in Stops, Searches, and Search Outcomes

Since 2001, the LECC has received and analyzed traffic data from five Oregon police agencies: Beaverton PD, Corvallis PD, Eugene PD, Hillsboro PD, and the Oregon State Police (OSP). The Criminal Justice Policy Research Institute has also been working with the Portland Police Bureau on analyzing their stop and search data. All of these agencies, except Eugene, have between five and seven years of data collection, which allows for more robust analyses than previously undertaken.

Early analyses of LECC data highlighted the presence of the following disparities in most agencies:

- African American and Hispanic motorists are only slightly more likely to be stopped compared to their percentage of the population aged 16 and older.

- African American and Hispanic motorists are more likely to be searched compared to White motorists. In most cases these differences in search experiences between Minority and White drivers are statistically significant.

- In some instances, African American and Hispanic drivers who are subjected to a search are less likely to be found with illegal contraband than White drivers.

These three findings, consistent with many studies around the country, have a number of qualifications that previous LECC reports in 2005, 2006, and 2007 have noted. The LECC has worked to clarify these qualifications and to make recommendations to law enforcement regarding additional data points that should be collected and analysis techniques that can enhance understanding of apparent disparities.

LECC efforts in 2009 have started to explore the shortcomings of previous LECC research by exploring more complex analytic techniques and using new data points from Corvallis and the Portland Police Bureau that have previously not been analyzed by LECC.

For example, the Corvallis Police Department collects more data points than any other Oregon law enforcement agency. The Corvallis stop data system allows officers to record the reasons behind a search (incident to arrest, consent, weapon pat down), the time of day, number of passengers, police geographic patrol area, and many other data points. With the Corvallis data we could seek

an explanation for *why* African Americans and Hispanics are more likely to be searched in a traffic stop than Whites. In these current analyses, fully presented later in the annual report, we examined the impact of the driver's race, gender, number of passengers, daylight, city residency, and the reason for the stop on the likelihood of one having various types of searches conducted during a traffic stop. These analyses are able to determine which of these factors are related to one having a search and how much of an impact each factor has on increasing the likelihood of one having a search. They can also help us to determine if race is a predictor for experiencing a search, above and beyond, some alternative explanations.

The main findings of the Corvallis Search report presented later are:

- African American and Hispanic drivers are equally likely as White drivers to experience discretionary searches after accounting for other characteristics that increase one's risk of being searched.

- In particular, African American and Hispanic drivers were more likely than White drivers to involve risk factors that increased the odds of drivers of any race being searched. This may explain some of the disparity in searches found for some minority drivers. The risk factors commonly related to drivers being searched during a traffic stop are the following:
    - Male driver (male drivers are more likely to be searched).
    - City residency (city residents are more likely to have a discretionary search).
    - Number of passengers (vehicles with passengers are more likely to be searched).
    - Time of stop (drivers stopped at night are more likely to be searched).
    - Reason for the stop (certain reasons for stops, like whether the officer was dispatched to look for a particularly described person, pre-existing information, or other violation, increase the likelihood of a search).

It is important to recognize that the Corvallis results are based on one agency's data and *may not be applicable to other police departments in Oregon*, thus *we discourage broad generalizations of the findings*. The above analysis shows that the issue of disparity is more complex than perhaps previously understood. The additional data points collected by Corvallis, particularly improved measurement of search justifications and traffic stop contexts, allow for a deeper understanding of search disparity.

The LECC efforts to improve upon data collection and analytic techniques are not intended to enhance our ability to 'prove' or 'disprove' racially biased policing. Our goal is to understand where and how disparities are occurring and use that information to examine law enforcement practices and common assumptions that

may result in disproportionate impacts by race or ethnicity that may be counter-productive.

2. Public Perception of Racially Biased Policing in Oregon

Prior to 2007, the LECC conducted four annual statewide opinion surveys that assessed the public's views of law enforcement contacts and the prevalence of racially-biased policing. In 2005, the survey was supplemented with additional surveys of African-American and Hispanic residents of Oregon. A sixth survey was completed in 2009. The full report of the 2009 survey follows this introductory summary.

These surveys of Oregon drivers have consistently shown that drivers of all races/ethnicities are more likely to be stopped than the national average of 8.8% per year. [1] For example, in 2009 17% of non-hispanic White drivers, 22% of African American drivers, and 29% of Hispanic drivers were stopped. In 2009, there is also some evidence that Minority, African American, and matched White drivers are stopped at equal rates. For example, 18% of statewide minority drivers report being stopped in 2009 compared to 17% of non-hispanic White drivers. In 2007 these differences were 25% Minority compared to 15% non-hispanic White. The 2009 extension sample of African Americans shows that 22% report being stopped in 2009 compared to 18% of matched non-African American drivers from the same neighborhoods. In 2007 these differences were 28% African American compared to 16% non-African American, and were even greater in 2005. The Hispanic extension sample shows that Hispanic drivers are more likely than matched non-hispanic White drivers from the same county to be stopped, (29% Hispanic, 18% non-hispanic White), these differences have gone down over time too. Overall, there is some indication that both African American and Hispanic drivers are less likely to report being pulled over in 2009 compared to all previous surveys.

The surveys continue to indicate a sharp divide between African American drivers and other drivers regarding whether they think racial profiling is frequent. For example, 60% of African American drivers believe that Oregon police often or always allow a person's race, ethnicity, or national origin to unfairly influence their decision to stop someone compared to 23% of non-African American drivers from the same neighborhood. Among African American drivers who are stopped, 78% thought the reasons given by the law enforcement officer for the stop were untrue, compared to 29% of other drivers from the same area who had been stopped. **However, attitudes of African American, Minority, and Hispanic drivers regarding the frequency of racial profiling are consistently improving over time.** Among African American drivers in 2005, 71% felt police were often/always biased in making stop decisions, which fell to

[1] "Contacts between Police and the Public: 2005" Bureau of Justice Statistics, U.S. Department of Justice, 2007 (http://www.ojp.usdoj.gov/bjs/abstract/cpp05.htm)

66% in 2007 and 60% in 2009. Among Hispanic drivers in 2005, 31% felt police were often/always biased in making stop decisions, which fell to 27% in 2007 and 25% in 2009. Similarly, the attitudes of White drivers regarding the frequency of police bias have been improving over time too.

Public opinion about whether Oregon police are becoming more or less fair in not allowing race to influence their decisions to stop someone has remained relatively stable for most groups since the last survey in 2007. There is some improvement noted among African American drivers' perceptions of fairness over time. In 2005, 50% of African American drivers felt police had become less fair over the past year, which fell to 32% in 2007 and 26% in 2009.

African American and Hispanic drivers continue to view Oregon police more positively and less negatively over time. In 2005, 43% of African Americans reported negative feelings toward Oregon police, while only 28% reported negative feelings in 2007, and 21% in 2009. African American drivers still express significantly more negative and less positive views of Oregon police officers than non-African Americans from the same neighborhoods. Since the 2007 survey, Hispanic drivers have not demonstrated statistically significant differences in their overall feelings toward the police than non-Hispanic White drivers.

While the improvement in perceptions toward the police is encouraging, the findings suggest that law enforcement may benefit from further improvement in public relations. Continuing to support efforts in police-citizen relationship building and understanding public perceptions of police may be important to succeed in achieving public safety goals.

3. Identification of "Best Practices" for Community Outreach and Law Enforcement Training

The LECC purchased the **Perspectives on Profiling™ curriculum** designed by the Tools for Tolerance® for Law Enforcement at the Simon Wiesenthal Center's Museum of Tolerance. Perspectives on Profiling is an interactive virtual learning experience that compels users to make critical choices in testing situations. The program is designed for police managers, mid-level supervisors, training officers, and line officers. The interactive video is a cutting edge training tool that is sensitive to the challenges that face law enforcement both in reality and in the management of public perception.

In 2008, the LECC initiated the first series of an ongoing regional training effort and conducted in-service training for the Benton County Sheriff's Department. The LECC trained 113 officers from 14 different Oregon agencies in 2008, using the Perspectives on Profiling curriculum. In 2009, the training has greatly expanded. The LECC delivered this training to 612 law enforcement

professionals from more than 52 law enforcement agencies in 2009. Following the introductory summary a full account of the 2009 training schedule is provided.

Participant evaluations continue to rate the trainers very highly. Over three-quarters of the respondents indicated that they did *not* agree that the training seemed "watered down." The vast majority (90%) of respondents agreed that they would recommend this training to other law enforcement officers, with almost half of respondents indicating that they strongly agreed.

Our experiences in implementing this training effort clearly indicate a statewide interest in law enforcement training regarding issues of race/ethnic bias, profiling, and ethnics in law enforcement. Our training is the most popular and well-received aspect of the LECC effort. As knowledge and exposure to the training increase, the size of the classes and demand for the training will increase too.

The LECC, in cooperation with DPSST, will continue to organize and conduct "Tactical Ethics - Perspectives on Profiling" regional trainings in 2010. The current tentative schedule for the 2010 regional trainings is the following:

Locations	**Month**
Eugene, Salem Metro, Gresham	March
Astoria, Seaside, Newport	April
Klamath Falls, Ashland, Roseburg	May
LaGrand, Redmond	June

4. Recommendations for Addressing Racially Biased Policing and Law Enforcement-Citizen Relations in the State of Oregon.

Below are some key conclusions from the LECC work in 2009.

1) Our training efforts using the Perspectives on Profiling continue to be the most widely accepted and sought after component of the LECC's outreach to law enforcement agencies. Feedback evaluations have been very enthusiastic. 85% of respondents would recommend the training to other officers. Given initial reluctance on the part of the law enforcement community towards training many years ago and the lack of standardized training on this issue in Oregon, the implementation of the Perspectives on Profiling curriculum has been a major advancement and improvement for the State. According to the FBI's Crime in the United States 2005 there are 5,262 sworn law enforcement officers in Oregon, the LECC Perspectives on Profiling training has trained approximately 12% of Oregon's officers.

2) To better understand any racial/ethnic disparities in traffic stops and searches, law enforcement agencies should collect additional data regarding the context of the stop (e.g. location, time, patrol unit type) and initial search motivation (e.g. incident to arrest, weapon pat down).

3) Public perceptions regarding the frequency with which Oregon police are biased in making traffic stop decisions has consistently improved since 2005 for all races and ethnicities. Despite these improvements there are still strong attitudinal differences about the prevalence of police bias especially among African American drivers.

The proposed 2010 work plan for the LECC entails the following:

1) Conduct eleven regional trainings in 2010.
2) Continue training offerings in 2010 to include in-service training and FTO-related training.
3) Encourage law enforcement agencies to collect additional traffic stop data regarding the context of the stop and search justification.
4) Develop a report that illustrates for the law enforcement community the benefits of traffic stop data collection. Send the report to all law enforcement agencies in the state with accompanying conclusions and recommendations of the LECC's total efforts.
5) Develop and implement a follow-up evaluation of trainees that have gone through Perspectives in Profiling.
6) Follow-up with DPSST on the implementation of the LECC's scenario training suggestions related to biased policing in the recruit academy

2009 Annual Report of the Law Enforcement Contacts Policy and Data Review Committee

Statement of Purpose:

"State and local law enforcement agencies can perform their missions more effectively when all Oregonians have trust and confidence that law enforcement stops and other contacts with individuals are free from inequitable and unlawful discrimination based on race, color or national origin.... Demographic data collection can establish a factual and quantifiable foundation for measuring progress in eliminating discrimination based on race, color or national origin…."[2]

The Committee:

The Law Enforcement Contacts Policy and Data Review Committee (LECC) was created by 2001 Senate Bill 415 for a period of six years, ending December 31, 2007. That sunset was lifted with the passage of HB 2102. A copy of ORS 131.905 et seq., which codified HB2102, can be found in Appendix A of this report.

The committee is charged with the responsibility to report annually on its efforts to:

- Solicit demographic data concerning law enforcement stops and other contacts between state and local law enforcement agencies and individuals;
- Publicize programs, procedures and policies from communities that have made progress toward eliminating discrimination based on race, color or national origin during law enforcement stops and other contacts with individuals;
- Provide technical assistance to state and local law enforcement agencies that desire to begin collecting demographic data, including refinement of the minimum data elements as necessary for effective analysis;
- Provide technical assistance to communities and state and local law enforcement agencies that desire to engage in local efforts to involve individuals in the establishment and implementation of programs, procedures and policies that will advance the goal of the act;

[2] ORS 131.905 et seq. (See Appendix A)

- Obtain resources for independent analysis and interpretation of demographic data collected by state or local law enforcement agencies;
- Accept and analyze demographic data collected by a state or local law enforcement agency if requested by a state or local law enforcement agency and if resources are available; and
- Report to the public the results of analyses of demographic data.

The committee is composed of eleven members appointed by the Governor. The current members of the committee, as of December 2009, are:

Edwin Peterson, LECC Chair Senior Judge and Distinguished Jurist in Residence, Willamette University College of Law	
Todd Anderson Tillamook County Sheriff	Annabelle Jaramillo(**) Benton County Commissioner
Gilbert P Carrasco Professor of Law Willamette University College of Law	Timothy McLain Superintendent Oregon State Police
Kevin Díaz Attorney	John Minnis Director Department of Public Safety Standards and Training (DPSST)
Scott Akins* (***) Professor of Sociology Oregon State University	Rosanne Sizer Chief of Police Portland Police Bureau
David Fidanque Executive Director ACLU Oregon	Frank Thompson Superintendent Santiam Correctional Institution

*Appointed in 2009
** Chair of the Community Relations Subcommittee
***Chair of the Data Review Subcommittee

Two members resigned their positions in 2009. The LECC would like to extend their appreciation for the dedication of the following former committee members:

- William Feyerherm, Portland State University, Full Committee member, Data Review Subcommittee Chair
- Captain Gerry Gregg, Oregon State Police, Data Review Subcommittee member

Current LECC staff, consultants, and additional subcommittee members in 2009:

- Dr. Jan Chaiken, Consultant
- Major Craig Durbin, Data Review Subcommittee member, Oregon State Police
- Lt. Henry Reimann, Community Relations Subcommittee member, Hillsboro Police Department
- Angela Hedrick, Community Relations Subcommittee member, Salem Police Department
- Craig Prins, Executive Director, Oregon Criminal Justice Commission
- Dr. Brian Renauer, Director, Criminal Justice Policy Research Institute, Portland State University
- Mike Stafford, Public Safety Coordinator, Oregon Criminal Justice Commission
- Emily Covelli, Research Assistant, Criminal Justice Policy Research Institute, Portland State University
- Michel Wilson, Administrative & Research Assistant, Criminal Justice Policy Research Institute, Portland State University

Background:

Efforts to address charges of racially biased policing on the part of law enforcement officers became a statutory mandate during the 69th Legislative Assembly in 1997. During that session, a top priority of law enforcement agencies was a revision of the statute regulating stops of citizens by police. The debate stirred by that issue resulted in House Bill 2433. That bill included several provisions intended to provide a compromise between law enforcement agencies that sought to make stops more effective and safer for officers, and community groups that sought to protect the civil rights of those stopped.

HB 2433 included several provisions intended to foster the protection of the rights of citizens by requiring:

- All state and local law enforcement agencies in Oregon to adopt policies prohibiting the practice of racially biased policing.
- All law enforcement agencies to adopt means to facilitate the filing of complaints by citizens who felt that their rights had been violated, and to develop a process to resolve those complaints.
- All law enforcement agencies to report to the Asset Forfeiture Oversight Advisory Committee the number and type of complaints filed during the first year after the adoption of HB 2433.
- Initiation of data collection in an effort to move away from anecdotal information.

Implementation of HB 2433 was coordinated by a workgroup under the auspices of the Governor's Public Safety Policy and Planning Council. At its

inception, this workgroup comprised over 60 members from diverse groups and backgrounds who were able to come to agreement on three basic principles:

- All law enforcement agencies should be responsible for their actions.
- No person should be subject to improper law enforcement conduct.
- Every person has the right to a fair and prompt response to a complaint.

The first action of the workgroup was the adoption of a model policy for law enforcement agencies that was distributed to all law enforcement agencies in Oregon. That policy, or one similar to it, was adopted by every Oregon law enforcement agency.

The workgroup identified three purposes for data collection: 1) to evaluate the implementation of the new stop and search law; 2) to ensure the fair and equitable implementation of the law; and 3) to increase public awareness and confidence in the application of the law.

The data collection effort itself focused on three activities. The first was a public perception survey to ascertain how the general public and two specific minority groups viewed the new law and to determine the perceived extent of racially biased policing in Oregon. The second was to collect data on the types of complaints filed against law enforcement officers. The third was to encourage the development of a full traffic stop data collection effort.

In the furtherance of those efforts, the workgroup made its report to the 1999 Legislature along with several recommendations for further work. The Legislature did not act on those recommendations at that time.

In 2001, then-Rep. Vicki Walker introduced HB 2441 which would have required law enforcement agencies to collect traffic stop data and report the data to the state. A broad spectrum of interested parties deliberated on HB 2441. These discussions ultimately resulted in the passage of SB 415, which provided for voluntary data collection by law enforcement agencies and the formation of the LECC. The bill was supported unanimously by all interested parties and passed the Legislature without a dissenting vote.

The LECC officially convened February 5, 2002 and quickly established two subcommittees: Data Review and Community Relations. During the following year, the LECC received testimony and information from a variety of sources, including communities working to address data collection and community involvement issues, entities conducting state and national surveys related to racially biased policing, and agencies working on developing law enforcement training.

The Data Review Subcommittee solicited and received data from law enforcement agencies and did some preliminary analysis of that data. Methods to

merge data contributed by individual agencies into a statewide database were developed and appropriate conclusions were drawn from the combined data. However, due to the lack of data from a broader base of agencies, it was not possible to draw statistically valid inferences from the data.

The Community Relations Subcommittee, which was co-chaired by Commissioner Annabelle Jaramillo and Chief Walt Myers, focused on involving police agencies and communities in discussions on racially biased policing issues. The committee also received information on a variety of approaches to community involvement activities, worked with experts in the field, and began the process of identifying methods and information.

As with many other agencies, budget reductions and the related state employee hiring freeze hindered the Committee's efforts to fulfill its statutory responsibilities. The level of staffing at the Oregon Criminal Justice Commission (CJC) was not adequate to support the work of the LECC. Thus, the LECC suspended its efforts in February 2003. The hiatus lasted until early 2005 when the CJC contracted with the Criminal Justice Policy Research Institute (CJPRI) at Portland State University for staff support. The LECC formally began meeting again on March 2, 2005.

The LECC was scheduled to sunset on December 31, 2007. The LECC in partnership with the Oregon Criminal Justice Commission helped draft House Bill 2102. HB 2102 made the LECC permanent and removed restrictions on data that the committee may receive and analyze. HB 2102 transfers administration of the committee from the Oregon Criminal Justice Commission to Portland State University.

In 2006-2007, the LECC in partnership with the Criminal Justice Policy Research Institute and the Traffic Safety Division of the Oregon Department of Transportation were awarded two grants from the National Highway Traffic Safety Administration (NHTSA-2006-23772). These grants will fund the activities of the LECC until 2011. The grant program is called the "Incentive Grant Program to Prohibit Racial Profiling" under section 1906 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (Federal Register, Vol. 71, No. 22, pp. 5727-5729).

LECC Public Perceptions Survey 2009

Purpose of Survey

The LECC has participated in four public opinion surveys of Oregon drivers about their perceptions of traffic stops from 2002 to 2005. The surveys were part of the Oregon Annual Social Indicators Survey (OASIS) which included questions regarding public perceptions of law enforcement. Because the number of people of color who participated in the statewide survey was so small, a survey extension of minority community perceptions was undertaken in 2005 in an effort to draw reliable conclusions about minority attitudes toward law enforcement.

The OASIS statewide public opinion survey is no longer being conducted. The LECC believes it is important to continue monitoring Oregon citizens' perceptions regarding bias in law enforcement and stop experiences. In 2007 and now in 2009, the LECC continued this survey of Oregon residents regarding perceptions of law enforcement. The results of the 2009 survey are discussed in this section. The LECC's goal in designing this new survey was to replicate, as close as possible, the methodology used in the previous surveys to reliably compare potential changes in citizen perceptions over time. The tables presented in this report involve the same questions analyzed in previous LECC reports to examine possible temporal changes in perceptions.

Survey Methodology

Appendix B contains a more detailed description of the survey methodology along with the full survey questionnaire.

The 2009 survey was conducted by the Portland State University Survey Research Lab (SRL) between April 2 and May 26, 2009. Statewide, 1,402 Oregonians were interviewed; they belonged to the following five sub-samples:

- 665 random statewide surveys from throughout the state. This random sample contained 39 persons who were identified as minorities (i.e. Hispanic, African American, Asian, Native American, or mixed).
- 176 African-Americans ("African American Extension sample");
- 176 non-African-Americans geographically matched to be from the same areas of the state as the African-American sample ("Geo-Matched Non-African Americans");
- 175 persons of Hispanic ethnicity from throughout the state ("Hispanic Extension sample");
- 210 respondents from throughout the state who had reported they had been stopped in the past 12 months.

In addition, 175 non-Hispanic White persons were randomly drawn from the state-wide random sample to match the exact counties that the Hispanic respondents came from.

In the previous survey reports, only respondents who had a driver's license or are frequent drivers are included in the analysis tables, which we continue to do with the 2009 data. The total number of respondents in each table varies, as those who refused to answer a given question or stated "don't know" were not included. Table 1 shows the sample sizes for each racial/ethnic sample group who had a driver's license in 2009 and are used in the analyses presented in Tables 2 through 13.

Table 1. Persons with Drivers Licenses by Racial/Ethnic Sample Type, 2009

	State-wide Minorities	**State-wide Non-Hispanic Whites**
	2009	**2009**
Sample size	39	625
	African American Extension Sample	**Geo-Matched Non-African Americans**
	2009	**2009**
Sample size	172	180
	Hispanic Extension Sample	**Non-Hispanic Whites**
	2009	**2009**
Sample size	175	175

For each key question on the survey we include three different tables. The first table compares responses of Minorities (i.e. any mention of being Hispanic, African American, American Indian, Asian, or multi-racial/ethnic) to non-Hispanic Whites from the state-wide random sample of Oregon residents. The second table compares African American respondents to non-African American respondents from the same census tracks. The data for the second table comes from the African American extension sample. The third table compares the responses of all persons who identify as Hispanic from the random statewide sample and all Hispanics from the Hispanic extension sample to randomly selected non-Hispanic Whites (chosen from the random sample) from the same counties. Each table also includes data for the previous years or year for which the question was asked.

Survey Findings

Frequency of Traffic Stops

In 2009 only Hispanic drivers in the Hispanic extension sample are significantly more likely to be stopped than their comparison group (i.e. non-Hispanic Whites). The findings for Hispanic drivers are similar to the 2007 and 2005 surveys. The results also show that the likelihood of African American, Hispanic, and statewide Minority drivers being stopped by police is going down over time, particularly African American drivers in the extension sample. For the first time the results in 2009 indicate that African American drivers and statewide Minority drivers are equally likely to be pulled over as their matched comparison group of non-minority drivers.

The frequency of minority and non-Hispanic white drivers being stopped in Oregon is still much higher than national averages, which in 2005 showed 8.9% of non-Hispanic White drivers, 8.1% of African American drivers, and 8.9% of Hispanic drivers had been stopped during a 12-month period. (Reference: http://www.ojp.usdoj.gov/bjs/abstract/cpp05.htm.)

Table 2. Frequency of traffic stops in previous twelve months by minority status

	State-wide Minorities			**State-wide Non-Hispanic Whites**		
	2002-2005**	**2007***	**2009 N = 39**	**2002-2005**	**2007**	**2009 N = 625**
None	73%	75%	82%	80%	86%	83%
Once	14%	16%	8%	14%	12%	13%
Twice or more	13%	9%	10%	6%	3%	4%
	African American Extension Sample			**Geo-Matched Non-African Americans**		
	2005**	**2007****	**2009 N = 172**	**2005**	**2007**	**2009 N = 180**
None	59%	72%	78%	76%	84%	82%
Once	20%	17%	13%	18%	14%	13%
Twice or more	21%	12%	9%	6%	3%	6%
	Hispanic Extension Sample			**Non-Hispanic Whites**		
	2005**	**2007****	**2009** N = 174**	**2005**	**2007**	**2009 N = 175**
None	66%	70%	71%	81%	85%	82%
Once	19%	21%	17%	13%	13%	14%
Twice or more	15%	10%	12%	6%	2%	4%

* = the difference between the two races/ethnicities for that year is statistically significant (95% level of confidence).
** = the difference between the two races/ethnicities for that year is statistically significant (99% level of confidence).
Question: “In the past 12 months, how many times have you been stopped by an Oregon police officer?”

Attitudes about the frequency of racial profiling

Respondents were asked “How often, if at all, do you believe Oregon police officers allow race, ethnicity, or national origin to unfairly influence their decision to stop someone - never, rarely, sometimes, often, or always?” The 2009 survey results continue to show improvement in Minority opinions regarding the likelihood that Oregon police officers engage in racial profiling. For example, 29% of statewide minorities between 2002 and 2005 expressed Oregon police officers often or always use race, ethnicity, or national origin to unfairly influence their decision to stop someone, which decreased to 27% in 2005 and 17% in 2009. In 2005 71% of African American drivers expressed Oregon police officers often or always use race, ethnicity, or national origin to unfairly influence their decision to stop someone, which decreased to 66% in 2005 and 60% in 2009. Improvement in the attitudes of Hispanic drivers towards the prevalence of racial profiling has not been as strong but has declined from 31% in 2005 to 27% in 2007 and 25% in 2009. Despite the consistent improvement in perceptions, Minority drivers are still more than twice as likely as their matched comparison group of White drivers to express that police often or always use race/ethnicity unfairly in decisions to stop persons. These differences in opinion were statistically significant in the African American and Hispanic extension samples. For example, 60% of African American drivers feel police use race/ethnicity unfairly compared to 23% of non-African Americans living in the same neighborhoods. African American drivers also hold much stronger opinions about the frequency of racial profiling than Hispanic drivers.

Table 3. Perceptions of the frequency of racial profiling by minority status

	State-wide Minorities			State-wide Non-Hispanic Whites		
	2002-2005**	**2007****	**2009 N = 36**	**2002-2005**	**2007**	**2009 N = 553**
Never/Rarely	33%	35%	36%	42%	52%	54%
Sometimes	38%	39%	47%	42%	38%	38%
Often/Always	29%	27%	17%	16%	10%	8%
	African American Extension Sample			**Geo-Matched Non-African Americans**		
	2005**	**2007****	**2009** N = 167**	**2005**	**2007**	**2009 N =170**
Never/Rarely	3%	11%	8%	28%	27%	29%
Sometimes	26%	24%	32%	45%	48%	48%
Often/Always	71%	66%	60%	27%	25%	23%
	Hispanic Extension Sample			**Non-Hispanic Whites**		
	2005**	**2007****	**2009** N = 167**	**2005**	**2007**	**2009 N = 157**
Never/Rarely	28%	42%	29%	45%	55%	57%
Sometimes	41%	32%	46%	40%	37%	33%
Often/Always	31%	27%	25%	15%	8%	11%

** = the difference between the two races/ethnicities for that year is statistically significant (99% level of confidence).
Question: “How often, if at all, do you believe Oregon police officers allow a person’s race, ethnicity, or national origin to unfairly influence their decision to stop someone – never, rarely, sometimes, often, or always?”

Changes in Fairness Over Time

Public opinion about whether Oregon police are becoming more or less fair over the past year has remained relatively stable since the last survey in 2007.

Table 4. Change in fairness over the past year

	State-wide Minorities			State-wide Non-Hispanic Whites		
	2002-2005	**2007**	**2009* N = 31**	**2002-2005**	**2007**	**2009 N = 503**
More Fair	NA	18%	16%	NA	20%	18%
About the Same	NA	67%	61%	NA	74%	77%
Less Fair	NA	14%	23%	NA	7%	5%
	African American Extension Sample			**Geo-Matched Non-African Americans**		
	2005**	**2007****	**2009** N = 157**	**2005**	**2007**	**2009 N = 155**
More Fair	4%	10%	10%	16%	17%	21%
About the Same	46%	59%	64%	75%	75%	70%
Less Fair	50%	32%	26%	9%	9%	9%
	Hispanic Extension Sample			**Non-Hispanic Whites**		
	2005*	**2007****	**2009 N = 158**	**2005**	**2007**	**2009 N = 140**
More Fair	32%	29%	31%	22%	22%	17%
About the Same	64%	58%	58%	70%	74%	79%
Less Fair	4%	13%	11%	8%	4%	4%

* = the difference between the two races/ethnicities for that year is statistically significant (95% level of confidence).
** = the difference between the two races/ethnicities for that year is statistically significant (99% level of confidence).
Question: "In the last twelve months, do you believe Oregon police officers overall have been more fair, less fair, or about the same in whether they allow race, ethnicity, or national origin to unfairly influence their decision to stop someone?"

Beliefs about Oregon police officers

African American and Hispanic drivers continue to view Oregon police more positively and less negatively over time. Among African American drivers, 21% viewed Oregon law enforcement negatively, which is down 7% from 2007 and half of what it was in 2005 (43%). African American drivers still express

significantly more negative and less positive views of Oregon police officers than non-African Americans from the same neighborhoods. For example, 29% of African Americans view the police positively compared to 55% of non-African Americans from the same neighborhoods. Overall, Hispanic drivers are equally likely as non-Hispanic White drivers to view Oregon police positively.

Table 5. Beliefs about Oregon police by minority status

	State-wide Minorities			**State-wide Non-Hispanic Whites**		
	2002-2005**	**2007**	**2009* N = 39**	**2002-2005**	**2007**	**2009 N = 623**
Positive	55%	59%	51%	67%	69%	71%
Neutral	30%	33%	36%	24%	24%	23%
Negative	16%	7%	13%	9%	8%	6%
	African American Extension Sample			**Geo-Matched Non-African Americans**		
	2005**	**2007****	**2009** N = 171**	**2005**	**2007**	**2009 N = 177**
Positive	18%	26%	29%	58%	53%	55%
Neutral	39%	46%	50%	28%	37%	32%
Negative	43%	28%	21%	14%	10%	13%
	Hispanic Extension Sample			**Non-Hispanic Whites**		
	2005**	**2007**	**2009 N = 171**	**2005**	**2007**	**2009 N = 174**
Positive	52%	65%	65%	65%	69%	68%
Neutral	41%	29%	30%	24%	22%	28%
Negative	7%	7%	5%	11%	9%	4%

** = the difference between the two races/ethnicities for that year is statistically significant (99% level of confidence).
Question: “Overall, when you think about Oregon police officers, are your feelings generally positive, generally negative, or are they neutral?”

Relationship between attitudes toward the police and whether or not the driver had been stopped

Looking at opinions toward police in relation to race and whether the driver had been stopped, there appears to be a relationship between being stopped and holding less positive values of the police, but not necessarily more negative values. However, there are large opinion differences between African Americans who were stopped versus those that were not stopped by police. For example, 34% of African Americans who report being stopped in the previous year have a negative opinion of Oregon police compared to 17% who were not stopped.

Table 6. Beliefs about Oregon police by minority status

	State-wide Minorities						**State-wide Non-Hispanic Whites**					
	2005		**2007**		**2009**		**2005**		**2007**		**2009**	
	NSt	St	NSt	St	NSt N=33	St* N=6	NSt	St	NSt	St	NSt N=523	St N=100
Positive	56%	47%	65%	43%	55%	33%	66%	58%	70%	59%	71%	68%
Neutral	33%	32%	28%	50%	33%	50%	24%	29%	23%	29%	24%	21%
Negative	12%	21%	8%	7%	12%	17%	10%	14%	7%	12%	6%	11%
	African American Extension Sample						**Geo-Matched Non-African Americans**					
	2005**		**2007****		**2009**		**2005**		**2007**		**2009**	
	NSt	St	NSt	St	NSt** N=136	St** N=35	NSt	St	NSt	St	NSt N=146	St N=31
Positive	25%	7%	27%	24%	32%	17%	57%	62%	55%	44%	56%	52%
Neutral	39%	40%	50%	38%	51%	49%	31%	18%	36%	47%	31%	39%
Negative	36%	53%	24%	38%	17%	34%	12%	20%	10%	9%	14%	10%
	Hispanic Extension Sample						**Non-Hispanic Whites**					
	2005**		**2007**		**2009**		**2005**		**2007**		**2009**	
	NSt	St	NSt	St	NSt N=122	St N=49	NSt	St	NSt	St	NSt N=144	St N=30
Positive	52%	52%	67%	60%	72%	47%	66%	57%	70%	66%	68%	67%
Neutral	42%	39%	27%	32%	26%	41%	25%	29%	21%	24%	29%	23%
Negative	7%	9%	6%	9%	2%	12%	10%	14%	9%	10%	3%	10%

** = the difference between the two races/ethnicities for that year is statistically significant (99% level of confidence).
(NSt: not stopped, St: stopped).
Question: "Overall, when you think about Oregon police officers, are your feelings generally positive, generally negative, or are they neutral?"

Believe Reason for Stop was Not Real Reason

Minorities in the state-wide survey, African Americans, and Hispanics who were stopped by police in 2009 were more likely to believe the reason for the stop was not the real reason in comparison to non-Hispanic Whites and non-African Americans. Similar to the previous findings, African American respondents were the most likely to believe that the real reason for their stop was something different. Of the African American drivers who were stopped, 78% believed the reason provided was not the real reason for the stop compared to 29% of non-African Americans living in the same neighborhoods.

Table 7. Believe reason provided for stop was different than the real reason

	State-wide Minorities			State-wide Non-Hispanic Whites		
	2002-2005	**2007****	**2009 N = 6**	**2002-2005**	**2007**	**2009 N = 100**
Yes	31%	54%	50%	21%	12%	22%
No	69%	46%	50%	79%	88%	78%
	African American Extension Sample			**Geo-Matched Non-African Americans**		
	2005**	**2007****	**2009** N = 36**	**2005**	**2007**	**2009 N = 31**
Yes	73%	73%	78%	18%	13%	29%
No	27%	27%	22%	82%	87%	71%
	Hispanic Extension Sample			**Non-Hispanic Whites**		
	2005	**2007***	**2009 N = 51**	**2005**	**2007**	**2009 N =30**
Yes	41%	37%	33%	26%	10%	17%
No	59%	63%	67%	74%	90%	83%

* = the difference between the two races/ethnicities for that year is statistically significant (95% level of confidence).
** = the difference between the two races/ethnicities for that year is statistically significant (99% level of confidence).
Question: “Did you ever believe that the real reason you were stopped was different than the reason the officer gave you?”

Frequency of Being Searched in a Traffic Stop

Statewide Minority drivers, African American, and Hispanic drivers who were stopped are more likely to report being searched than their matched comparison groups. Although a number of these differences do not equate to a statistically significant difference this is due to the low numbers of drivers who are stopped in the first place. The greater frequency of minority drivers being searched is consistent with traffic stop data analyzed by LECC. The national survey figures for drivers' experience of searches also shows that Minority drivers are more likely to be searched than non-Hispanic Whites (Reference: http://www.ojp.usdoj.gov/bjs/abstract/cpp05.htm.)

Table 8. Frequency of search following a traffic stop by minority status

	State-wide Minorities			**State-wide Non-Hispanic Whites**		
	2002-2005**	**2007****	**2009 N = 6**	**2002-2005**	**2007**	**2009 N = 99**
None	88%	79%	83%	94%	98%	97%
Once	6%	14%	17%	5%	1%	1%
Twice or more	6%	7%	0%	2%	1%	2%
	African American Extension Sample			**Geo-Matched Non-African Americans**		
	2005	**2007**	**2009 N = 36**	**2005**	**2007**	**2009 N = 31**
None	76%	91%	81%	87%	91%	100%
Once	12%	2%	6%	7%	9%	0%
Twice or more	12%	7%	14%	6%	0%	0%
	Hispanic Extension Sample			**Non-Hispanic Whites**		
	2005	**2007**	**2009* N = 51**	**2005**	**2007**	**2009 N = 30**
None	82%	83%	82%	93%	97%	100%
Once	11%	14%	10%	6%	0%	0%
Twice or more	7%	4%	8%	1%	3%	0%

** = the difference between the two races/ethnicities for that year is statistically significant (99% level of confidence).
Question: “When you were stopped in the past 12 months, did the officer search you, your vehicle, or someone accompanying you?”

Perceptions of Traffic Stop Experiences

The next grouping of tables (Table 9 through Table 12) contains new questions that were not asked in previous surveys. These questions were only asked of respondents who were stopped by police to learn whether Minorities and Whites perceive different stop experiences.

Table 9. Officer clearly explained why you were stopped

In contrast to the 2007 survey, only African American drivers who were stopped were expressed a significantly different opinion about the clarity of the officer's explanation for why they were stopped. There appears to be some improvement in the opinions of Statewide Minorities and Hispanic drivers regarding how clearly the officer explained the reason for the stops.

	State-wide Minorities		**State-wide Non-Hispanic Whites**	
	2007**	**2009 N = 6**	**2007**	**2009 N = 99**
Disagree	7%	0%	8%	7%
Neutral	21%	17%	2%	5%
Agree	71%	83%	90%	88%
	African American Extension Sample		**Geo-Matched Non-African Americans**	
	2007**	**2009** N = 36**	**2007**	**2009 N = 31**
Disagree	37%	36%	6%	10%
Neutral	11%	14%	9%	7%
Agree	52%	50%	84%	84%
	Hispanic Extension Sample		**Non-Hispanic Whites**	
	2007*	**2009 N = 51**	**2007**	**2009 N = 30**
Disagree	14%	10%	3%	7%
Neutral	12%	6%	0%	3%
Agree	74%	84%	97%	90%

* = the difference between the two races/ethnicities for that year is statistically significant (95% level of confidence).
** = the difference between the two races/ethnicities for that year is statistically significant (99% level of confidence).
Question: "Do you agree or disagree with the following statement: The officer clearly explained why you were stopped?"

Table 10. Officer answered all your questions

African American and Hispanic drivers expressed significantly different feelings about whether the officer answered all their questions compared to a matched White population.

	State-wide Minorities		State-wide Non-Hispanic Whites	
	2007*	**2009 N = 6**	**2007**	**2009 N = 96**
Disagree	33%	0%	6%	11%
Neutral	8%	33%	8%	1%
Agree	58%	67%	86%	88%
	African American Extension Sample		**Geo-Matched Non-African Americans**	
	2007	**2009** N = 36**	**2007**	**2009 N = 29**
Disagree	35%	39%	10%	10%
Neutral	12%	17%	17%	14%
Agree	54%	44%	73%	76%
	Hispanic Extension Sample		**Non-Hispanic Whites**	
	2007	**2009** N = 44**	**2007**	**2009 N = 29**
Disagree	17%	9%	0%	0%
Neutral	11%	7%	10%	0%
Agree	72%	84%	90%	100%

* = the difference between the two races/ethnicities for that year is statistically significant (95%
level of confidence).
Question: "Do you agree or disagree with the following statement: The officer answered all of your questions?"

Table 11. Officer was polite

Statewide Minority, African American, and Hispanic drivers were more likely than matched White drivers to disagree that the officer who stopped them was polite.

	State-wide Minorities		State-wide Non-Hispanic Whites	
	2007	**2009 N = 6**	**2007**	**2009 N = 100**
Disagree	21%	33%	10%	5%
Neutral	14%	17%	11%	7%
Agree	64%	50%	79%	88%
	African American Extension Sample		**Geo-Matched Non-African Americans**	
	2007	**2009 N = 36**	**2007**	**2009 N = 31**
Disagree	22%	28%	9%	13%
Neutral	17%	14%	9%	19%
Agree	61%	58%	81%	68%
	Hispanic Extension Sample		**Non-Hispanic Whites**	
	2007	**2009 N = 51**	**2007**	**2009 N = 30**
Disagree	21%	12%	3%	3%
Neutral	7%	8%	7%	0%
Agree	72%	80%	90%	97%

Question: ”Do you agree or disagree with the following statement: The officer was polite?”

Table 12. Officer was professional

Statewide Minority, African American, and Hispanic drivers who were stopped were more likely than the White comparison group to disagree that the officer who stopped them was professional. This finding is particularly true for the African Americans in the extension sample where almost half disagreed.

	State-wide Minorities		State-wide Non-Hispanic Whites	
	2007	**2009 N = 6**	**2007**	**2009 N = 100**
Disagree	14%	33%	7%	5%
Neutral	7%	17%	10%	7%
Agree	79%	50%	83%	88%
	African American Extension Sample		**Geo-Matched Non-African Americans**	
	2007*	**2009* N = 36**	**2007**	**2009 N = 31**
Disagree	20%	42%	9%	10%
Neutral	22%	3%	6%	16%
Agree	59%	56%	84%	74%
	Hispanic Extension Sample		**Non-Hispanic Whites**	
	2007	**2009* N = 51**	**2007**	**2009 N = 30**
Disagree	11%	12%	0%	0%
Neutral	9%	6%	7%	3%
Agree	81%	82%	93%	97%

* = the difference between the two races/ethnicities for that year is statistically significant (95% level of confidence).
Question: ”Do you agree or disagree with the following statement: The officer was professional?”

Table 13. Demographic information about the survey sample (only persons with drivers license or frequent driver)

	State-wide Minorities		State-wide Non-Hispanic Whites	
	2007	**2009**	**2007**	**2009**
Average Age	45	48	56	58
Male	46%	51%	39%	39%
Female	55%	49%	61%	61%
Less than High School or GED	15%	10%	3.7%	3%
High School or GED	22%	28%	23%	18%
Some College	20%	15%	26%	28%
Associates Degree	11%	15%	11%	14%
Bachelors Degree	25%	18%	24%	21%
Graduate Degree	7%	13%	16%	16%
Employed full-time	56%	36%	38%	29%
Employed part-time	13%	18%	12%	11%
Housemaker or stay-at-home parent	7%	8%	8%	8%
Disabled (not able to work)	4%	8%	5%	5%
Retired	20%	15%	35%	41%
Unemployed or looking for work	0%	15%	3%	7%
Less than $15,000	11%	9%	8%	9%
$15,000 to $25,000	25%	16%	10%	11%
$25,000 to $50,000	23%	38%	31%	33%
$50,000 to $75,000	17%	9%	23%	20%
$75,000 or more	26%	28%	28%	28%

	African American Extension Sample		Geo-Matched Non-African Americans	
	2007	**2009**	**2007**	**2009**
Average Age	56	58	48	53
Male	37%	33%	42%	38%
Female	63%	67%	58%	62%
Less than High School or GED	7%	9%	0%	2%
High School or GED	17%	14%	13%	9%
Some College	42%	36%	22%	26%
Associates Degree	12%	16%	6%	8%
Bachelors Degree	12%	17%	33%	33%
Graduate Degree	9%	8%	26%	21%
Employed full-time	34%	28%	49%	37%
Employed part-time	15%	6%	18%	13%
Housemaker or stay-at-home parent	3%	8%	7%	8%
Disabled (not able to work)	6%	6%	4%	4%
Retired	35%	44%	16%	24%
Unemployed or looking for work	7%	9%	7%	14%
Less than $15,000	17%	16%	8%	7%
$15,000 to $25,000	15%	16%	13%	15%
$25,000 to $50,000	39%	39%	27%	35%
$50,000 to $75,000	13%	12%	30%	22%
$75,000 or more	17%	16%	22%	22%

	Hispanic Extension Sample		Non-Hispanic Whites	
	2007	**2009**	**2007**	**2009**
Average Age	36	38	57	58
Male	47%	55%	40%	37%
Female	54%	45%	60%	63%
Less than High School or GED	37%	47%	3%	2%
High School or GED	35%	29%	23%	17%
Some College	16%	10%	27%	29%
Associates Degree	5%	6%	11%	15%
Bachelors Degree	5%	6%	21%	21%
Graduate Degree	2%	2%	13%	15%
Employed full-time	57%	43%	34%	27%
Employed part-time	14%	21%	9%	10%
Housemaker or stay-at-home parent	17%	13%	8%	10%
Disabled (not able to work)	3%	2%	8%	5%
Retired	3%	5%	38%	37%
Unemployed or looking for work	6%	15%	4%	11%
Less than $15,000	22%	22%	11%	7%
$15,000 to $25,000	31%	39%	10%	13%
$25,000 to $50,000	33%	30%	36%	32%
$50,000 to $75,000	8%	6%	18%	21%
$75,000 or more	5%	3%	25%	27%

Oregon State Police Traffic Stops 2001-2007 (Full Report)

The LECC has previously published analyses of the Oregon State Police (OSP) traffic stop data for calendar years 2001-2005. (See Appendix C of the LECC 2006 annual report http://www.cjpri.ccj.pdx.edu/LECC) In that report, it was noted that some records were lacking data on race/ethnicity. The method of analysis used at that time excluded all records that did not show the race or ethnicity of the driver to be White, African American, Asian/ Pacific Islander, Hispanic, or Native American.

Subsequently the LECC received data from OSP for traffic stops in 2006 and 2007, which contained much more detailed information about the dispositions of traffic stops. By examination of these later records, it became apparent that OSP records which lack information on race/ethnicity do not necessarily indicate that the race/ethnicity data are incomplete. Rather, it was found that the file of records sent by OSP to the LECC contains some records that should not properly be considered traffic stops. Some of the records that lack race/ethnicity information have disposition codes that do not seem appropriate for a traffic stop. For this reason, the analysis reported here excludes records that are not traffic stops (see Appendix C for a list of the disposition codes excluded) as well as any other records that do not have information about the driver's race or ethnicity. In the process of examining the OSP race/ethnicity data, it was determined that records showing the driver was Middle Eastern/East Indian had been excluded from the analysis of data from 2001-2005. For this report, such records are included for the entire period from 2001 to 2007. Consequently, results for traffic stops involving Middle Eastern drivers are reported here for the first time.

The OSP 2006 data contained 202,385 records, of which 5,202 were dropped for lack of race/ethnicity data or for having a disposition code that was not a traffic stop (2.6%). The OSP 2007 data contained 214,059 records, with 6,467 dropped (3.0%). In the total of two years together, 404,775 records of 416,444 were retained for analysis (97.2%). Considering only the 412,458 records whose disposition codes indicated they were traffic stops, 98.1% contained data on race/ethnicity of the driver stopped.

The following tables extend the main findings of the 2001-2005 analysis of OSP traffic stop data to include comparable results from 2006 and 2007.

Table 1. Annual total traffic stops by OSP

2001 310,738
2002 306,994
2003 241,864
2004 202,858
2005 203,211
2006 197,183
2007 207,592

As can be seen, there was a substantial decline in traffic stops in 2003, compared to earlier years. Detailed examination of the monthly number of traffic stops showed that the decline started around October 2002 and continued until January 2004. This decline coincides with budgetary reductions for the Oregon State Police and a resulting decrease in the number of officers on patrol. Thereafter, throughout 2004, 2005, 2006, and 2007, the number of traffic stops has remained essentially flat. As can be seen in Table 1, the annual total number of traffic stops varied by less than 3% from the average over the period from 2004 to 2007.

Table 2. Race/ethnicity of drivers stopped by OSP 2001-2007

	Asian	African American	Hispanic	Native American	White	Middle Eastern
Stops 2001-03	15,234	12,664	66,950	3,785	752,425	4,470
% of all stops	**1.8%**	**1.5%**	**7.8%**	**0.4%**	**87.9%**	**0.5%**
% State Population aged 16 & older	3.0%	1.5%	6.8%	1.1%	87.6%	
Stops 2004-05	6,990	6,907	34,369	1,307	346,982	2,915
% of all stops	**1.8%**	**1.7%**	**8.6%**	**0.3%**	**86.9%**	**0.7%**
Stops 2006-07	6,999	6,788	37,197	1,428	349,406	3,032
% of all stops	**1.7%**	**1.7%**	**9.2%**	**0.4%**	**88.1%**	**0.7%**
% of State Population aged 16 and over	3.6%	1.6%	8.5%	1.6%	84.8%	

Note: US Census population figures for 2000 are shown in comparison with traffic stops for 2001-03. For comparison with traffic stops in 2006-07, population figures for 2005 to 2007 were obtained by analysis of data from the Census Bureau's American Community Survey. Census data do not permit estimating the population of Middle Eastern origin, since such people are included in one or more of the other categories of race and ethnicity.

The OSP data show a general stability in the composition of the stopped population by race and ethnicity, except that stops of Hispanic drivers have gradually become a larger proportion of the total. In general, the proportion of each race/ethnicity group among the traffic stops is close to its proportion of the Oregon state population aged 16 and over.

What constitutes an appropriate benchmark for comparison for traffic stop data is a question of continuing interest for researchers who work on issues related to racial profiling. In general, statewide population figures are not considered to be very good benchmarks, especially for analysis of traffic stops on interstate highways that include substantial proportions of motorists from other states or other countries. Further, as is obvious in Table 2, when a law enforcement agency does not use exactly the same categories of race and ethnicity as the Census Bureau, the figures are not easily compared. Moreover, stops of Hispanic drivers are more likely than stops of other categories of drivers to include non-residents who are not counted by the Census Bureau. Despite all these caveats, the population figures presented in Table 2 do help interpret the increase in stops of Hispanic drivers, because there was a similar increase from 2001 to 2007 in the Hispanic population of Oregon.

Since benchmarking of traffic stop data by use of census figures is regularly criticized by researchers, law enforcement professionals, interested members of the community, and the courts, the Oregon State Police should consider opportunities for better benchmarking that are available through more detailed analysis of existing data or through temporary collection of data specifically intended for benchmarking. During the early years of analysis of traffic stop data (the late 1990s and the early 2000s) most of the accepted methods of benchmarking, such as using trained observers or photography for recording the race and ethnicity of passing drivers, were tedious and expensive to implement and were themselves subject to error. However, in recent years, simpler methods of benchmarking have been developed. Among the methods that can be recommended to OSP are the following:

- The race and ethnicity of drivers involved in traffic accidents handled by OSP can be recorded as an indication of the race/ethnicity of typical drivers in the areas handled by OSP.[3] Such data collection could be undertaken temporarily specifically for the purpose of benchmarking.

3 For example, analysis of race and ethnicity of not-at-fault drivers was shown to provide a valid benchmark in a study by Alpert, G. P., Smith, M. R., and Dunham, R. G. (2003), "Toward a Better Benchmark: Assessing the Utility of Not-at-Fault Traffic Crash Data in Racial Profiling Research," in *Confronting Racial Profiling in the 21st Century: Implications for Racial Justice*, Boston.

A study of traffic stops by the Washington State Patrol[4] concluded that "the *most effective* denominator benchmark is to compare traffic stop data with rates of involvement in roadway collisions. These collision data can be seen as measuring both the quantity and quality of driving in a particular area. Most importantly, traffic collision data constitute a 'blind' measure since state troopers do not know the race of those citizens they will contact in a traffic collision setting prior to arriving at the scene of the collision." The study concluded that the traffic collision data were preferable to collection of race/ethnicity information via digital photography, since "in areas where Latinos constitute a substantial proportion of the population, racially-coded collision data are a *better* indicator of minority driver population than observational studies."

- The OSP could collect data distinguishing traffic stops of drivers who were identified as speeding by radar from traffic stops that did not involve the use of radar. The stops that involved radar presumably minimize the chances of any decision by the officer whether to stop the motorist or not, and these can then be compared with the remaining stops.

The study of Washington State Patrol cited above also included an analysis of stops that were initiated by radar identification of speeders in comparison with other stops. Although the researchers did not specifically study the accuracy of the distribution of race and ethnicity among the drivers stopped after radar observation, they considered this also to be a suitable benchmark. In the WSP study no special data-collection effort was needed to establish the benchmark, because the Washington State Police already recorded whether the stop was initiated by a radar observation.

- The OSP could provide LECC with data that show the date, time, and general location of the traffic stop. This would enable analysis of OSP traffic stop data distinguishing daytime stops from nighttime stops. Presumably officers have greater difficulty at night observing the driver's race or ethnicity prior to making a stop.

An advantage of this benchmarking method is that the OSP would not have to undertake any new data collection if OSP data concerning date and time of stops can be combined with the data already provided to LECC.

A 2006 study by the Rand Corporation[5] not only distinguished stops by whether they occurred at night or during the day, but also took into account the fact that

---

4 Nicholas Lovrich, Michael Gaffney, Clayton Mosher, Travis Pratt, Mitchell Pickerill (2007), "Results of the Monitoring of WSP Traffic Stops for Biased Policing: Analysis of WSP Stop, Citation, Search and Use of Force Data" and "Results of the Use of Observational Studies for Denominator Assessment," Division of Governmental Studies and Services, Washington State University

5 Grogger, Jeffrey, and Greg Ridgeway (2006), *Testing for Racial Profiling in Traffic Stops From Behind a Veil of Darkness*, Santa Monica, Calif.: Rand Corporation. http://www.rand.org/pubs/reprints/RP1253/

the composition of the driving population during the morning or mid-day may be quite different from the driving population at night. For this reason, they concentrated on the hours just before and after sunset, with the exact time span for each date determined from the time of sunset in the location studied (which in the cited report was Oakland, California). They said "In the winter, it is dark by early evening, whereas in the summer it stays light much later. Limiting much of our analysis to stops occurring during the inter-twilight period, we tested for differences in the race distribution of traffic stops between night and day, while controlling implicitly for racial variation in travel patterns by time of day." The cited report also sets out in detail the statistical tests that are to be used to determine whether there were differences between day and night in the proportions of traffic stops attributed to drivers of any particular race or ethnicity.

Table 3. OSP searches after traffic stops 2001-2007

	Asian	African American	Hispanic	Native American	White	Middle Eastern	Total
Searches 2001-03	210	448	2,965	242	16,594	65	20,524
Stops 2001-03	15,234	12,664	66,950	3,785	752,425	4470	855,528
% of stops searched	**1.4%**	**3.5%**	**4.4%**	**6.4%**	**2.2%**	**1.5%**	**1.5%**
Searches 2004-05	129	288	2123	111	10425	59	13,135
Stops 2004-05	6,990	6,907	34,369	1,307	346,982	2,915	399,470
% of stops searched	**1.8%**	**4.2%**	**6.2%**	**8.5%**	**3.0%**	**2.0%**	**3.3%**
Searches 2006-07	119	322	2426	157	11501	70	14,595
Stops 2006-07	6,999	6,788	37193	1,428	349,330	3,031	404,769
% of stops searched	**1.7%**	**4.7%**	**6.5%**	**11.0%**	**3.3%**	**2.3%**	**3.6%**

In general, the percentage of stops leading to a search has been creeping upward during this period. When the total number of stops declined in 2003, it was reasonable to assume that the percent of stops leading to a search would have been higher in the 2004-05 time period than in 2001-03, based on the idea that less productive stops had been eliminated by some kind of policy change at OSP. However, the data show that the percentage of searches continued to

increase into the 2006-07 period, and this increase applied to each racial/ethnic group except for Asian drivers.

The percentage of traffic stops leading to a search was about 50% higher in the 2006-07 time period than in the 2001-03 time period.

In the LECC report annual report that described OSP data from 2001 to 2005, it was observed that Asian drivers were significantly less likely to experience a search than any other category of drivers who were stopped, while Hispanic drivers were significantly more likely to experience a search than any other category of drivers, and African American drivers were significantly more likely to experience a search than white drivers. This report confirms the same patterns in the 2006-07 data, and adds information about searches involving Middle-Eastern drivers: they were somewhat less likely than average to be searched in the 2004-05 and the 2006-07 time periods.

Whether the disproportionate searches involving Hispanic drivers were mandatory or discretionary cannot be determined from the 2001-07 data. However, the OSP has already begun collecting information about reasons for search beginning May 16, 2008, and this information will be included in subsequent LECC analyses. Analysis of search types (mandatory vs. discretionary) is necessary to correctly interpret any search disparities found in stop data.

Because of the size of the remaining two tables, they are presented as pairs: the first table in the pair presents results for calendar years 2001-2005, and the second table in the pair presents the continuation for calendar years 2006-2007

Table 4A. OSP 2001-2005 Results of Searches

	Asian	African American	Hispanic	Native American	White	Middle Eastern	Total
Total Searches 2001-05	339	736	5,088	353	27,019	124	33,659
Found something	126	263	1,751	183	11,656	41	14,020
% of searches something found	**37.2%**	**35.7%**	**34.4%**	**51.8%**	**43.1%**	**33.0%**	**41.7%**
Weapons found	18	22	109	26	1,235	4	1414
% of searches weapons found	**5.3%**	**3.0%**	**2.1%**	**7.4%**	**4.6%**	**3.2%**	**4.2%**
Drugs found	39	119	335	58	5,029	11	5,591
% of searches drugs found	**11.5%**	**16.2%**	**6.6%**	**16.4%**	**18.6%**	**8.8%**	**16.6%**
Alcohol found	56	87	1,070	85	4,345	10	5653
% of searches alcohol found	**16.5%**	**11.8%**	**21.0%**	**24.1%**	**16.1%**	**8.1%**	**16.8%**
Contraband found	13	35	237	14	1,047	16	1,362
% of searches contraband found	**3.8%**	**4.8%**	**4.7%**	**4.0%**	**3.9%**	**12.9%**	**4.0%**

Table 4B. OSP 2006-2007 Results of Searches

	Asian	African American	Hispanic	Native American	White	Middle Eastern	Total
Total Searches 2006-07	119	322	2,426	157	11,501	70	14,595
Found something	45	130	684	96	5,075	11	6,041
% of searches something found	**37.8%**	**40.3%**	**28.2%**	**61.1%**	**44.1%**	**15.7%**	**41.4%**
Weapons found	3	5	59	10	579	1	657
% of searches weapons found	**2.5%**	**1.6%**	**2.4%**	**6.4%**	**5.0%**	**1.4%**	**4.5%**
Drugs found	14	77	163	27	2,387	3	2,671
% of searches drugs found	**11.8%**	**23.9%**	**6.7%**	**17.2%**	**20.8%**	**4.6%**	**18.3%**
Alcohol found	21	30	344	52	1,679	7	2,133
% of searches alcohol found	**17.6%**	**9.3%**	**14.2%**	**33.1%**	**14.6%**	**10.0%**	**14.6%**
Contraband found	7	18	118	7	430	0	580
% of searches contraband found	**5.9%**	**5.6%**	**4.9%**	**4.5%**	**3.7%**	**0.0%**	**4.0%**

As can be seen from Tables 4A and 4B, the enforcement results from searches did not change substantially between the 2001-05 time period and the 2006-07 time period with the following exceptions: (1) the percent of searches of Hispanics that led to finding something, already low in the 2001-05 time period, declined even further in the following two years; (2) Native American drivers who were searched were more likely in 2006-07 to be found with alcohol than in the previous time period. For stops of drivers of Middle Eastern origin, the percent of searches that found anything (especially contraband) declined between the 2001-05 time period and the 2006-07 period.

Table 5A. OSP 2001-2005 Dispositions of Stop

	Asian	African American	Hispanic	Native American	White	Middle Eastern	Total
Total Stops 2001-05	22,224	19,571	101,319	5,092	1,099,407	7385	1,254,998
No Enforcement Action	591	2,116	5,987	257	71,684	1,492	82,127
% of stop no enforce-ment action taken	**2.7%**	**10.8%**	**5.9%**	**5.0%**	**6.5%**	**20.2%**	**6.5%**
Warning	8,821	7,370	42,795	2,457	525,484	3,768	590,695
% of stops warning given	**39.7%**	**37.7%**	**42.2%**	**48.3%**	**47.8%**	**51.0%**	**47.1%**
Citation	12,620	9,796	50,606	2,198	489,998	2,109	567,327
% of stops citation given	**56.8%**	**50.1%**	**49.9%**	**43.2%**	**44.6%**	**28.6%**	**45.2%**
Custody Arrest	84	217	1,623	171	8,568	16	10,670
% of stops custody arrest	**0.4%**	**1.1%**	**1.6%**	**3.4%**	**0.8%**	**0.2%**	**0.85%**

Table 5B. OSP 2006-2007 Dispositions of Stops

	Asian	African American	Hispanic	Native American	White	Middle Eastern	Total
Total Stops 2006-07	6,999	6,788	37,195	1,428	349,334	3031	404,775
No Enforcement Action	133	589	1,170	25	14,424	488	16,829
% of stop no enforce-ment action taken	**1.9%**	**8.7%**	**3.1%**	**1.8%**	**4.1%**	**16.1%**	**4.1%**
Warning	3,584	3,061	16,893	613	136,461	1,401	162,013
% of stops warning given	**51.2%**	**45.1%**	**45.5%**	**42.9%**	**39.1%**	**46.2%**	**40.0%**
Citation	3,248	3,059	18,561	732	195,304	1,134	222,038
% of stops citation given	**46.4%**	**45.1%**	**49.9%**	**51.3%**	**55.9%**	**37.4%**	**54.9%**
Custody Arrest	34	79	571	58	3,145	8	3,895
% of stops custody arrest	**0.5%**	**1.2%**	**1.5%**	**4.1%**	**0.9%**	**0.3%**	**1.0%**

From Tables 5A and 5B it can be seen that the disposition “no enforcement action taken” is recorded less frequently in the 2006-07 data than previously. This is probably due to OSP's decision to include more informative disposition codes, allowing officers to explain what happened in situations where previously they had no appropriate code other than “no action taken”. In about 15% of the cases not needing law enforcement action, the stopped motorist actually required some kind of assistance from the officer (presumably involving the vehicle or a health condition). (This detail is not shown in the table. Note that instances where a motorist flags down the officer for assistance are not included in the traffic stop data.)

Overall, warnings were given to drivers less often in 2006-07 than in earlier years, while citations were given more often. White drivers were less likely to be given warnings than all other groups of drivers. The likelihood of arrest after a traffic stop (1%) did not change substantially from earlier years, nor did the relative levels of arrests for different racial/ethnic groups (with Native American and Hispanic drivers experiencing the highest levels of arrest and Middle Eastern drivers the lowest). Especially in the 2001-05 period, Middle Eastern drivers who were stopped were less likely than others to receive a serious disposition (citation or arrest); this is consistent with the low percentages of searches that occurred when the driver was Middle Eastern.

Factors Predicting Search Decisions During Traffic Stop in Corvallis, OR (Executive Summary)

In previous LECC analyses of traffic stop data collected by four Oregon law enforcement agencies we have discovered that among drivers stopped African American and Hispanic drivers are significantly[6] more likely to be subjected to a search than White drivers (LECC Annual Reports 2007, 2006, 2005). This finding occurs for four different Oregon law enforcement agencies using at least 5 years of traffic stop data collection for each agency.

Although our previous research finds that there are differences in search experiences for African American and Hispanic drivers, compared to White drivers, we cannot conclude that it results from some form of bias or existence of racial profiling. There are several factors that may be contributing to these disparities such as an increase of police attention to high crime and drug areas, a difference of cultural norms in how to interact with authority, or a difference among racial groups' propensity to exhibit characteristics that increase one's risk of being searched. We also cannot rule out the possibility that some disparity is due to conscious or unconscious bias or racial profiling.

The LECC is now conducting more extensive analyses that attempt to *seek an explanation for why African Americans and Hispanics are more likely to be searched in a traffic stop than Whites*. In order to understand what predicts whether a search is conducted in a traffic stop, we begin by using five years of stop data from the Corvallis Police Department. This voluntary data collection effort by Corvallis is unique and should be praised for its comprehensiveness which far exceeds all other Oregon agencies, thus making this analysis possible. However, it is important to recognize that the results of this analysis, based on one agency's data, *may not be applicable to other police departments in Oregon*, thus *we discourage broad generalizations of the findings*. In many respects, this analysis examines the utility of comprehensive traffic stop data collection to unpack more complex issues surrounding police decision-making. In previous research with the Corvallis stop data, we found that certain racial groups were more likely to be searched in a traffic stop than others (LECC, 2007). Hispanics had the highest likelihood of being searched followed by African Americans, Native Americans, Whites, "Other", and Asians. In these current analyses, we examine the impact of the driver's race, gender, number of passengers, daylight,

[6] Our use of the term significant means that the differences between the percentages of African American and Hispanic drivers that are searched in traffic stops, compared to White drivers, are not due to random chance and can be generalized to the full population of interest. Since statistical significance does not actually mean anything unless the data in hand are a sample (whereas our data include all cases of traffic stops for this police department), it is important to look at the magnitudes and explanations of the differences.

city residency, and the reason for the stop on the likelihood of one having various types of searches conducted during a traffic stop. These analyses are able to determine which of these factors are related to one having a search and how much of an impact each factor has on increasing the likelihood of one having a search. They can also help us to determine if race is a predictor for experiencing a search, above and beyond, some alternative explanations. The following offers a brief summary of our main research questions and findings.

RESEARCH QUESTIONS AND KEY FINDINGS

1 – Previous LECC analyses demonstrated that African American and Hispanic drivers were more likely to be searched[7] compared to White drivers in Corvallis, Oregon (LECC, 2007). Although these differences were not large (5.2 percent of the White drivers were searched compared to 7.0 percent of African American drivers and 8.3 percent of Hispanic drivers), these findings require additional analyses to understand why these disparities exist.

2 – This report addresses whether African American and Hispanic drivers are more likely than White drivers to be searched when taking into consideration other characteristics of a stop, such as gender, number of passengers, daylight, city residency, and the reason for the stop? If yes, then the possibility of biased policing being a factor in searches is strengthened, although it still cannot be proven with this data.

- Although we have previously found African American and Hispanic drivers are more likely to be searched than White drivers, our most important new finding is that in searches involving discretion (i.e. consent, weapon pat down, or plain view searches) there is no disparity for African American and Hispanic drivers. In other words, African American and Hispanic drivers are equally likely as White drivers to experience discretionary searches after accounting for other characteristics that increase one's risk of being searched. Discretionary searches may be more susceptible to potential officer biases compared to less-discretionary searches, such as a search that is done because the officer is arresting the driver.
- One analysis did show that Hispanic drivers were more likely than White drivers to be searched incident to an arrest, even when controlling for other factors. Although this relationship was significant, incident-to-arrest searches often involve less discretion and the relationship was very small.[8]

[7] The previous LECC analyses classified a "search" as any non-inventory search, so the "search" category included all discretionary (consent, weapon pat down, and plain view) and incident-to-arrest searches.

[8] Our use of the term very small refers to the odds of a Hispanic driver receiving an incident-to-arrest search compared to a White driver. In this dataset, this would be equivalent to one more Hispanic driver receiving an incident-to-arrest search approximately every two months, than would be expected if no disparity existed.

3 – Is the search disparity by race/ethnicity explained by greater exposure to factors related to being searched or having risk factors that increase the likelihood of being searched (e.g. being male, time of day, number of passengers, residency of the driver, and certain reasons for the stop).

- Our analyses find that stops of African American and Hispanic drivers were more likely than White drivers to involve risk factors that increased the odds of drivers of any race being searched. This may explain some of the disparity in searches found for some minority drivers. The risk factors commonly related to drivers being searched during a traffic stop are the following:
    - Male driver (male drivers are more likely to be searched).
    - City residency (city residents are more likely to have a discretionary search).
    - Number of passengers (vehicles with passengers are more likely to be searched).
    - Time of stop (drivers stopped at night are more likely to be searched).
    - Reason for the stop (certain reasons for stops, like whether the officer was dispatched to look for a particularly described person, pre-existing information, or other violation, increase the likelihood of a search).

CONCLUSION

In sum, our study indicates that the race/ethnicity of a driver, by itself, is not a strong determining factor in search decisions, particularly discretionary search decisions where the possibility of bias is more likely to arise. For instance, knowing someone's race alone does not allow us to accurately predict any of the 3,208 searches in this dataset, at a probability greater than .1. Evidence of conscious or unconscious bias, occurring across officers in this city, in search decision-making is not apparent in the analyses. However, it does appear that African Americans and Hispanics are more likely to exhibit characteristics which are apt to increase any driver's chances of being searched, such as being male, stopped at night, and having passengers in the car. Examining how search risk factors are related to search outcomes (e.g. finding illegal contraband) and common practices or policies for reasonable suspicion during a stop may be beneficial in understanding racial/ethnic search disparities. The reasons why stops of African American and Hispanic drivers are more likely to involve these risk factors cannot be determined from the data and could be examined in future research.

Despite this study's advancement of our knowledge it is still limited because it does not contain data on citizen demeanor during stops, evidence of intoxication, or subtle behavioral and evidentiary cues officers rely on when forming perceptions of probable cause. It also doesn't include any information on the individual officers, which limits the ability to examine whether any disparity is due

to a small percentage of officers making search decisions based on conscious or unconscious biases. The analyses conducted still demonstrate that there is a lot of variation in the search decisions that is not represented in the factors that were analyzed. In other words, there are other important factors that explain search decisions by police officers that are not captured in traffic stop data collection systems. The analyses demonstrate that approximately 26 to 34 percent of the differences found in having a search is attributable to race, gender, number of passengers, daylight, city residency, traffic stop reason, patrol beat, and time. While these analyses are able to provide a much stronger explanation for having a search than race alone, this suggests that there are still other factors that need to be explored.

Being able to examine why racial disparities occur in traffic stops is important for finding viable solutions for improving equality in law enforcement. The data available to do this in Oregon is extremely limited. This initial examination shows some examples of the types of inquiry that can be made. Being able to replicate these types of studies in other cities is important before these results can be generalized to other locations.

"Perspectives on Profiling" Regional Training

The Law Enforcement Contacts Policy and Data Review Committee (LECC) partners with the Simon Wiesenthal Center and the Oregon Department of Public Safety Standards and Training (DPSST) to offer a regional training throughout the state of Oregon called "Tactical Ethics - Perspectives on Profiling".

"Tactical Ethics - Perspectives on Profiling", taught by Oregon Law Enforcement officers, is an interactive virtual learning experience that compels users to make critical choices in testing situations. This program is designed for police managers, mid-level supervisors, training officers, and line officers. It is part of the Tools for Tolerance® for Law Enforcement at the Simon Wiesenthal Center's Museum of Tolerance. This interactive training video is a cutting edge training tool that is sensitive to the challenges that face law enforcement both in reality and in the management of public perception. The presentation involves real life situational choices. This unique training tool confronts a number of complex issues that surround traffic stops. When is race an appropriate factor in a profile? What is the role of probable cause? How can intuitive powers be utilized without unintentional bias? What can be done to avoid escalation in racially-charged stops?

This program began in 2008 and had an immediate impact. Within the first year a total of 113 officers from 14 different law enforcement agencies received the Perspectives on Profiling training through the regional and in-service trainings. In 2008, there were only three active trainers for the Tactical Ethics: Perspectives on Profiling regional training program. On January 26-29, 2009, trainers from the Simon Wiesenthal Tools for Tolerance Program conducted a Train the Trainer training at DPSST in order to increase the amount of trainers available in Oregon. Fifteen law enforcement professionals from around the state of Oregon participated in the training. Eleven of these trainers participated in the 2009 Oregon Regional and In-service Trainings.

In 2009, a total of 612 law enforcement professionals from over 52 different agencies were served through the regional and in-service trainings (see Table 1 below). These training sessions were led by the following Oregon law enforcement personnel: Officer Mike Araiza of the Woodburn Police Department, Lt. Wendi Babst of the Clackamas County Sheriff's Office, Captain Eric Carter of the Albany Police Department, Sgt. Rick Graham of the St. Helens Police Department, Detective Jason Hickam of the Marion County Sheriff's Office, Captain Suzanne Isham of the Department of Public Safety Standards and Training, Sgt. Sam Kamkar of the Eugene Police Department, Officer Ryan Lewton of the Portland Police Bureau, Lt. Jana McCandless of the Tillamook County Sheriff's Office, Deputy Chief Carolyn McDermed from the University of Oregon Public Safety Department, Lt. Terry Moss of the St. Helens Police Department, Officer Bryan Rehnberg of the Corvallis Police Department, Lt.

Henry Reimann of Hillsboro Police Department, Sgt. Marc Shrake of the Troutdale Police Department, Sgt. Clay Stephens of the Benton County Sheriff's Office, Don Thompson of the Marion County Sheriff's Office. These trainings were also staffed by Shafina Fazal, Michel Wilson, and Emily Covelli of Portland State University, Mike Stafford of Oregon Criminal Justice Commission, and Lt. Henry Reimann of the Hillsboro Police Department.

In addition to the trainings for law enforcement, the Corvallis and St. Helens Police Departments are utilizing this training in their citizens' academy. These trainings and community discussions have been very well received and provide an opportunity for the police and community members to discuss the challenges inherent in police decision making and address community concerns.

Table 1. Trainings conducted in 2009.

Date	Location	Number of Training hours	In-Service	Number of Participants
January 7, 2009	Hillsboro	5	Yes	28
February 25, 2009	Central Point	6		10
March 13&16, 2009	Marion County	4	Yes	76
March 24, 2009	Brookings	6		14
March 25, 2009	Coos Bay	6		13
March 26, 2009	Rockaway Beach	6		10
April 8, 2009	Corvallis	2	Yes	13
April 15, 2009	Bend	6		8
April 15, 2009	Corvallis	2	Yes	20
May 8, 2009	Corvallis	2	Yes	30
May 15, 2009	Corvallis	2	Yes	23
May 19, 2009	Ontario	6		28
May 20, 2009	Umatilla	6		12
May 21, 2009	Hood River	6		7
May 26, 2009	St. Helens	3	Yes	22
June 9, 2009	Eugene	6		15
June 10, 2009	Newberg	6		10
June 11, 2009	Hillsboro	6		9
August 12, 2009	Ontario	6		18
August 26, 2009	Salishan	4		57
September 26, 2009	Clackamas	4		30
September 29, 2009	Springfield	4.5	Yes	26
September 29, 2009	Springfield	4.5	Yes	31
September 30, 2009	Springfield	4.5	Yes	12
September 30, 2009	Springfield	4.5	Yes	23
September 14, 2009	Corvallis	4	Yes	8
October 12, 2009	Clackamas	4		28
November 11, 2009	Troutdale	5	Yes	16
November 18, 2009	Troutdale	5	Yes	15

A voluntary written feedback survey was given directly to the attendees after most of the training sessions. So far, the participants have been very willing to provide us with feedback through this survey, as well as verbally and through email. A total of 310 surveys were returned. The feedback from these surveys has been consistently positive overall. This report offers a summary of the feedback that we've received about this training.

TRAINING EVALUATION FEEDBACK

The survey for this training consists of five open ended questions and seven questions with closed ended responses that can be responded to with a 10 point scale. This scale ranges from 1, meaning that the respondent strongly disagrees, to 10, meaning the respondent strongly agrees.

Closed Response Questions

The following offers a brief summary of the feedback for the closed ended questions. The results are also shown in Table 2 below.

1) The trainers engaged us in the subject matter.

Overall, respondents appeared to find the trainers very engaging. Eighty-seven percent of respondents replied with a score of seven or above, on the scale of one to ten. Less than two percent responded with a score below five.

2) The trainers were persons we could relate to.

Most respondents were able to relate to the trainers. Eighty-four percent of respondents indicated a score of eight or above and only two percent responded with a score below five.

3) The trainers had extensive experience in the subject matter.

Most respondents agreed that the trainers had extensive experience in the subject matter, with 81 percent marking a score of eight or above. Only two percent of respondents rated the trainer's experience below a five.

4) The trainers were able to answer participant's questions.

Eighty-eight percent of respondents scored the trainers with an eight or above, on the scale of one to ten, for their ability to answer participant's questions. Less than one percent of respondents scored the trainers below a five for this question.

5) The trainers and content matter challenged my opinions about race and police.

The most variability in responses was found for question five and six. Still, most respondents agreed that the trainers and content was challenging. Approximately fifty-one percent of respondents marked a score of eight or above, on the scale of one to ten. Only nineteen percent responded with a score less than five.

6) The training seemed “watered down”, meaning it didn’t confront the difficult issues of race, police and bias.

Seventy-eight percent of the respondents replied with a score of four or below, indicating that they did *not* agree that the training seemed “watered down”. Less than fifteen percent replied with a score above five, suggesting that they felt the training was at least somewhat “watered down”.

7) I would recommend this training to other law enforcement officers.

The vast majority (90 percent) of respondents agreed that they would recommend this training to other law enforcement officers, with approximately half of respondents scoring a ten, indicating that they strongly agreed.

Table 2. Distribution of Responses from Feedback Surveys

	Strongly Disagree 1	2	3	4	5	6	7	8	9	Strongly Agree 10
1. The trainers engaged us in the subject matter.	.3%	.6%	.3%	.3%	1%	2%	8%	20%	21%	46%
2. The trainers were persons we could relate to.	0%	1%	.3%	.6%	2%	2%	10%	18%	18%	48%
3. The trainers had extensive experience in the subject matter.	.3%	.3%	.7%	.7%	4%	5%	10%	18%	22%	41%
4. The trainers were able to answer participant's questions.	.3%	0%	.6%	0%	2%	2%	7%	17%	27%	44%
5. The trainers and content matter challenged my opinions about race and police.	6%	5%	6%	2%	11%	9%	11%	17%	16%	18%
6. The training seemed "watered down", meaning it didn't confront the difficult issues of race, police and bias.	36%	17%	18%	7%	8%	2%	4%	3%	3%	3%
7. I would recommend this training to other law enforcement officers.	1%	1%	1%	.6%	6%	3%	9%	15%	17%	46%

Open-ended questions

The respondents also had the opportunity to provide written feedback on the following open ended questions: 1) Please tell us the principal reason or reasons you participated in today's training. 2) As you prepared to attend this training today, what did you think the training would be like? 3) What did you like about

the training? 4) What did you dislike about the training? 5) How do you feel about the importance of this training for law enforcement officers? The majority of respondents expressed that they attended the training because they were either mandated to attend, were interested in additional training opportunities, thought the training sounded interesting, or wanted to learn more about ethics and/or racial profiling. They wrote that they liked the interactive nature of the training, the video, class discussions, and found the class thought provoking. Most respondents expressed that they thought this training was essential for law enforcement and appeared grateful for this training opportunity. Very few respondents rated the importance of this training as only "somewhat important" or left their answers blank.

In Summary

The feedback from the participants has been extremely beneficial for gauging whether or not the training has been successful in meeting the needs of law enforcement. Overall, it appears that this training is important for law enforcement and is being conducted in such a way that is appealing to the participants. We also gained feedback regarding how the training could be improved to increase its appeal and effectiveness. For instance, it appears that participants would like the training to become even more interactive, challenging, and involve more choices and deeper discussions. Several people also mentioned that it would be helpful if the training could be longer and/or continued over the years.

Future Plans

The LECC, in cooperation with DPSST, will continue to organize and conduct "Tactical Ethics - Perspectives on Profiling" regional trainings in 2010. We will also continue to assist agencies with meeting their in-service and other training needs upon request. We are currently scheduled to provide in-service trainings for Tillamook County and the Woodburn PD in January of 2010. The current tentative schedule for the 2010 regional trainings is the following:

Locations	**Month**
Eugene, Salem Metro, Gresham	March
Astoria, Seaside, Newport	April
Klamath Falls, Ashland, Roseburg	May
LaGrand, Redmond	June

The LECC is currently discussing plans to conduct a one year follow-up feedback survey from participants, to assess the impact that this training has had on their jobs and how they would evaluate the training in hindsight. This should provide us further feedback about the importance of this training and how it may be improved. The trainers and LECC staff are also exploring ways to expand the

training so that new material can be presented to the participants through the repeated in-service trainings.

Governor's Summit

The Oregon Youth Authority (OYA) invited the LECC to give presentations on their work at one of the sessions of the Governor's Summit on Minority Over-Representation on November 16, 2009. The Governor's Summit on Minority Over-Representation is an annual event that has the long-term goal of reducing minority over-representation in the juvenile justice system through strategic partnerships that develop a sustainable, ongoing effort to address over-representation. It is also a celebration of progress made by many committed state and community based groups and organizations. The 2009 Summit marked the 11th Anniversary of this annual event. The 2009 summit focused on Eliminating Disproportionate Minority Contacts in the Juvenile Justice and Child Welfare System.

This will be the second year that the LECC has participated and held a session at the Governor's Summit. The attendees of the 2008 session had such positive response that the LECC was invited to be a part of the Summit again in 2009.

The LECC session at the Summit, entitled "Understanding the Impacts of Racial Profiling: Training for Oregon Law Enforcement," was held on November 16, 2009. This presentation was conducted by Lt. Henry Reimann of the Hillsboro Police Department, Superintendent Frank Thompson of Santiam Correctional Institute, and Mike Stafford of the Oregon Criminal Justice Commission. Two other LECC staff members were present for the session: Emma Covelli and Michel Wilson.

The goal of the presentation was to provide an introduction, overview and sample of the "Tactical Ethics – Perspectives on Profiling" regional training that the LECC partnered with the Simon Wiesenthal Center and the Oregon Department of Public Safety Standards and Training (DPSST) to implement in Oregon.

The Simon Wiesenthal Center "Perspectives on Profiling" training is a program that includes an interactive virtual learning experience segment. It compels trainees to make critical choices in testing situations. Unique to this program is the ability to see the outcome of the user's choices and evaluate their consequences. This training tool moves officers into a new paradigm of thought on the subject of racial profiling. It is sensitive to the challenges that face law enforcement both in reality and in the management of public perception. The product is founded on a robust ethical perspective projected into real life situational choices. The objective of this training is to allow law enforcement officers to confront a number of complex issues that surround the debate on racial profiling.

Lt. Reimann and Superintendent Thompson described the LECC's involvement in the implementation of this regional training, the development of scenarios for the DPSST Academy for new recruits, and interactively demonstrated a segment of the training with the audience. Approximately 25 representatives of law enforcement and social services attended this presentation. Discussion topics brought up by audience members included the importance of law enforcement personnel developing relationships with communities of color, interactions between drivers and officers at traffic stops, and officers avoiding de-policing in controversial situations.

Community Outreach Plan (Salem, PD)

Over the last year, the LECC has become familiar with the Hispanic community outreach efforts of Salem Police Department (PD) through attending one of their events, a Plática con la Policía group, and having the addition of a new Community Relations Subcommittee member, Angie Hedrick of Salem PD. The LECC respects the efforts and successes that the Salem police department has had in building trust and communication with their Hispanic communities. We understand that these efforts have many benefits, including the reduction of crime problems through collaborative relationships, an increase in job satisfaction and safety for officers, and the reduction of racial and other tensions between the police and citizens.

To meet the requests for further community outreach, the LECC seeks a collaborative relationship with Salem PD to learn from their experiences and create a guidebook for police-citizen relationship building. Although each department is unique, we believe that it'd be valuable to other departments to learn from the experiences of the Salem PD and others' efforts, rather than each department having to use their limited resources to explore effective strategies on their own. The LECC seeks to create a resource to offer police departments to help meet requests for reducing racial tensions and building stronger community relations. The Criminal Justice Policy and Research Institute (CJPRI) has submitted a proposal to Salem PD to collaborate on community building efforts. Included in this proposal are the following LECC related goals and requests:

Key Goals

- Learn from the experiences and successes of Salem PD's efforts with their Hispanic communities.
- Create a resource for law enforcement agencies that want to build stronger relationships with their minority communities.
- Fulfill a request from the Oregon Minority Commissions for the LECC to assist them in making a police-citizen interaction brochure.

Deliverables and Timelines

The following offers a brief description of the current proposed activities and timelines. These timelines and descriptions are flexible.

Minority community relationship building for law enforcement guidebook. CJPRI would like to collaborate in creating a guidebook that will identify key factors for successful minority community relationship building for law enforcement (for example, what support structures need to be in place for an agency's efforts to be successful, the importance of choosing a location for community meetings, where and how to advertise these community events to reach certain community members, etc.). Under each key factor examples from Salem PD's efforts with their Hispanic communities will be provided and then recommendations or

examples applicable for reaching out to other types of minority communities. We propose that this process begin with Salem PD's expertise and experiences and then CJPRI and LECC staff will complete the effort by consulting with other community relations specialists as well as reviewing the literature on this topic. We would like to begin this process as soon as possible and suspect that it will take approximately 12 months to have a near complete draft.

Police-citizen interaction brochure. In the fall of 2008, the Oregon Minority Commissions on African American and Hispanic affairs requested that the LECC assist them with creating a police-citizen interaction brochure. Over the last year, CJPRI has researched existing police-citizen interaction brochures, what additional information may be valuable for citizens, and their effectiveness. CJPRI plans on meeting with the Oregon Chiefs of Police and Sheriffs association to gain their feedback on this brochure and we would welcome any feedback from Salem PD as well. In conversation with Angie Hedrick, it seemed apparent that the police brochures do not get used frequently on their own but more so in combination with community events. CJPRI would be willing to provide this brochure to Salem PD for their community events, if desired. We plan on having a nearly completed draft of the brochure by summer of 2010.

The complete proposal is currently under review by the Salem Police Department.

Conclusions, Recommendations and Future Tasks

Below are some key conclusions from the LECC work in 2009.

1) Our training efforts using the Perspectives on Profiling continue to be the most widely accepted and sought-after component of the LECC's outreach to law enforcement agencies. Feedback evaluations have been very enthusiastic. 85% of respondents would recommend the training to other officers. Given initial reluctance on the part of the law enforcement community towards training many years ago and the lack of standardized training on this issue in Oregon, the implementation of the Perspectives on Profiling curriculum has been a major advancement and improvement for the State. According to the FBI's Crime in the United States 2005 there are 5,262 sworn law enforcement officers in Oregon, the LECC Perspectives on Profiling training has trained approximately 12% of Oregon's officers.

2) To better understand any racial/ethnic disparities in traffic stops and searches, law enforcement agencies should collect additional data regarding the context of the stop (e.g. location, time, patrol unit type) and initial search motivation (e.g. incident to arrest, weapon pat down).

3) Public perceptions regarding the frequency with which Oregon police are biased in making traffic stop decisions has consistently improved since 2005 for all races and ethnicities. Despite these improvements there are still strong attitudinal differences about the prevalence of police bias especially among African American drivers.

The proposed 2010 work plan for LECC entails the following:

1) Conduct eleven regional trainings in 2010.
2) Continue training offerings in 2010 to include in-service training and FTO-related training.
3) Encourage law enforcement agencies to collect additional traffic stop data regarding the context of the stop and search justification.
4) Develop a report that illustrates for the law enforcement community the benefits of traffic stop data collection. Send the report to all law enforcement agencies in the state with accompanying conclusions and recommendations of LECC's total efforts.
5) Develop and implement a follow-up evaluation of trainees that have gone through Perspectives in Profiling.
6) Follow-up with DPSST on the implementation of LECC scenario training suggestions related to biased policing in the recruit academy

Appendix A: ORS 131.905 et seq.

ORS 131.905 Legislative findings.

The Legislative Assembly finds and declares that:

1) Surveys of the trust and confidence placed by Oregonians in state and local law enforcement indicate that there are Oregonians who believe that some law enforcement officers have engaged in practices that inequitably and unlawfully discriminate against individuals solely on the basis of their race, color or national origin.
2) State and local law enforcement agencies can perform their missions more effectively when all Oregonians have trust and confidence that law enforcement stops and other contacts with individuals are free from inequitable and unlawful discrimination based on race, color or national origin.
3) Representatives of community interest groups and state and local law enforcement agencies agree that collecting certain demographic data about contacts between individuals and state or local law enforcement officers will provide a statistical foundation to ensure that future contacts are free from inequitable and unlawful discrimination based on race, color or national origin.
4) Demographic data collection can establish a factual and quantifiable foundation for measuring progress in eliminating discrimination based on race, color or national origin during law enforcement stops and other contacts with individuals, but data collection alone does not provide a sufficient basis for corrective action. Proper analysis of the demographic data and enactment of meaningful reforms in response to the results of that analysis require careful consideration of all relevant factors including the context of the community in which the data has been collected.
5) It is the goal of this state that all law enforcement agencies perform their missions without inappropriate use of race, color or national origin as the basis for law enforcement actions. This goal may be achieved by providing assistance to state and local law enforcement agencies and the communities that they serve.
6) This state shall foster, encourage and support the collection and analysis of demographic data by state and local law enforcement agencies. [2001 c.687 §5]

ORS 131.906 Law Enforcement Contacts Policy and Data Review Committee; duties; report.

(1) There is created the Law Enforcement Contacts Policy and Data Review Committee consisting of 11 members appointed by the Governor.
(2) The purpose of the committee is to receive and analyze demographic data to ensure that law enforcement agencies perform their missions without inequitable or unlawful discrimination based on race, color or national origin.
(3) To achieve its purpose, the committee shall collect and analyze demographic data to:

(a) Provide information to assist communities and state and local law enforcement agencies in evaluating the policies, training and procedures of law enforcement agencies regarding the treatment of individuals during stops and other contacts with law enforcement;
(b) Inform state and local law enforcement agencies and communities about law enforcement practices; and
(c) Provide opportunities for communities and state and local law enforcement agencies to work together to increase public trust and confidence in law enforcement and to enhance the capacity of communities and law enforcement agencies to provide more effective public safety services.

(4) The committee shall:
(a) Solicit demographic data concerning law enforcement stops and other contacts between state and local law enforcement agencies and individuals;
(b) Publicize programs, procedures and policies from communities that have made progress toward eliminating discrimination based on race, color or national origin during law enforcement stops and other contacts with individuals;
(c) Provide technical assistance, including refinement of the minimum data elements as necessary for effective analysis, to state and local law enforcement agencies that desire to begin collecting demographic data;
(d) Provide technical assistance to communities and state and local law enforcement agencies that desire to engage in local efforts to involve individuals in the establishment and implementation of programs, procedures and policies that will advance the goal of ORS 131.905;
(e) Obtain resources for independent analysis and interpretation of demographic data collected by state or local law enforcement agencies;
(f) Accept and analyze demographic data collected by a state or local law enforcement agency if requested by a state or local law enforcement agency and if resources are available; and
(g) Report to the public the results of analyses of demographic data.

(5) In carrying out its purpose, the committee may request and receive data files from participating law enforcement agencies and may analyze data for each reported contact. These data files should contain as many of the following items of information as are collected by the participating law enforcement agency:
(a) The reason for the law enforcement stop or other contact;
(b) The law enforcement officer's perception of the race, color or national origin of the individual involved in the contact;
(c) The individual's gender;
(d) The individual's age;
(e) Whether a search was conducted in connection with the contact, and if so, what resulted from the search;
(f) The disposition of the law enforcement action, if any, resulting from the contact; and
(g) Additional data as recommended by the committee that state and local law enforcement agencies should collect and submit.

(6) Data received by the committee for analysis under this section may not identify a particular law enforcement officer or a particular individual whose demographic data is collected by a state or local law enforcement agency.

(7) Members of the committee shall appoint a chairperson from the members of the committee. Members of the committee are not entitled to compensation or expenses and shall serve on the committee on a volunteer basis.
(8) Portland State University shall provide administrative support staff necessary to the performance of the functions of the committee.
(9) All agencies of state government, as defined in ORS 174.111, are requested to assist the committee in the performance of its duties and, to the extent permitted by laws relating to confidentiality, to furnish such information and advice as the members of the committee consider necessary to perform their duties.
(10) The committee shall make findings and issue recommendations for action to achieve the purpose of this section. The committee shall submit a report containing its findings and recommendations to the appropriate interim legislative committees annually on or before December 1.
(11) After completion of the analysis of the data from at least two state or local law enforcement agencies, the committee may recommend the collection of additional data elements.
(12) This section does not prohibit a state or local law enforcement agency from collecting data in addition to the information listed in subsection (5) of this section. [2001 c.687 §6; 2007 c.190 §2]

ORS 131.908 Funding contributions.

Portland State University may accept contributions of funds from the United States, its agencies, or from any other source, public or private, and agree to conditions thereon not inconsistent with the purposes of the Law Enforcement Contacts Policy and Data Review Committee. [2001 c.687 §8; 2007 c.190 §3]

ORS 131.909 Moneys received.

All moneys received by Portland State University under ORS 131.908 shall be paid into the State Treasury and deposited into the General Fund to the credit of Portland State University. Such moneys are appropriated continuously to Portland State University for the purposes of ORS 131.906. [2001 c.687 §9; 2007 c.190 §4]

ORS 131.910 Measuring progress.

The Law Enforcement Contacts Policy and Data Review Committee shall assist the Oregon Progress Board in the creation and adoption of goals as provided in ORS 284.622 to measure progress toward the purpose of the committee under ORS 131.906. [2001 c.687 §10]

Appendix B. LECC Public Perceptions Survey Methodology & Questionnaire

Survey Methodology

Before conducting the survey, SRL finalized all questions with CJPRI. The finalized survey instrument was then programmed in Voxco Virtual Call Center (VCC)[9] software. Live pilot testing was conducted with 9 respondents to ensure the appropriate wording of questions, the correct functioning of all skip patterns, and data accuracy and reliability.

To prepare for the Latino over-sample, the survey instrument was translated into Spanish. The translation was done by a bilingual translator and then reviewed by three other SRL bilingual interviewers to ensure that the survey was truly in the language of Spanish speakers in Oregon. We were careful throughout to ensure that the Spanish instrument remained true to the original English instrument while allowing for differences in nuance that could make a direct literal translation too awkward or unclear.

A total of 20 interviewers were then trained on conducting the survey. The project training included CJPRI staff, the SRL Research Assistant, the SRL Interview Coordinators, and all scheduled interviewers. CJPRI staff gave an overview of the background and purpose of the survey to provide the interviewers with the context within which the survey was being conducted. This was followed by a round-table review of the entire survey in order to review the survey items, discuss idiosyncratic issues related to the population being surveyed, and clarify the investigator's data needs. Interviewers also had the opportunity to ask the client specific questions about the meaning of the items. Finally, interviewers participated in on-line practice of the survey before going live.

Survey calling across the five primary samples was conducted in a stepwise fashion. Survey calling on the statewide random sample began on April 2nd and concluded April 16th, 2009. On April 8th, calling began on the African-American respondent over-sample, the geographically-matched non-African-American sample, and the Latino respondent over-sample. Interviews for the non-African-American sample were completed on April 16th. We then focused on completing the African-American respondent sample until May 8th. Interviews for the Latino over-sample were completed on May 26th.

Calls were made during afternoon and evening hours, Monday through Sunday. Interview Coordinators provided on-site monitoring and supervision during all calling hours to ensure the highest quality data collection, as well as accurate data entry. For quality assurance purposes, the interview coordinators frequently monitored interviewers, with the level of monitoring varying depending upon the

[9] http://www.voxco.com

individual needs of each interviewer. The interview monitoring was live and involved the coordinator patching into the telephone conversation to listen to the interviewer conducting the survey, as well as viewing interviewer's input of the data being collected. The CATI software allowed the Coordinators to pull up the live interview on their computer screen to view the real-time typing, away from the interviewer's view for reduced distraction. Additional quality assurance checks were conducted repeatedly throughout survey calling, with a higher frequency at the beginning of calling. These included the Research Assistant reviewing the collected data and the Interview Coordinators continuously monitoring the data collection process. Any issues that came up during the survey were quickly resolved with CJPRI staff.

Sampling

To ensure that the sample would be representative of each population of interest required some estimates and assumptions. The estimated sample size is based on: (1) the level of accuracy a researcher desires to have in the results (i.e., an estimate of the *sampling error*); (2) the *confidence* a researcher would like to have that the data gathered from the sample is representative of the entire population; and (3) *how varied* the population is thought to be related to a characteristic of interest, gathered by a two-answer question in the survey (e.g., a yes/no item) (Kraemer & Thiemann, 1987[10]; Dillman, 2000[11]; Fowler, 1993[12]). The commonly accepted value for *sampling error* is plus or minus 5 percent (denoted ± 5%). A typical *confidence interval* used in survey research is 95%. The *maximum variation* in a yes/no item is 50/50; whereas less variation would be 80/20 or 90/10.

For the statewide random survey, a lower expected amount of variation (i.e., 70/30) based on data from the 2007 survey was used to calculate the sample size for a sampling error of ± 3.5%. A total sample size of at least 658 respondents was needed to be 95% confident that the overall results are those we would expect to find across the state of Oregon. Given the difficulty in screening for oversample populations based on race or ethnicity, a higher sampling error of ± 6.8% was used. A total sample of at least 174 respondents for each oversample group (African-American, Non-African-American, and Hispanic) was needed to be 95% confident that the results are representative.

Table 2 summarizes the goals and the actual number of completed surveys for each group. In all areas, the goals were successfully reached.

[10] Kraemer, H.S. & Thiemann, S. (1987). How many subjects? Newbury Park, CA: Sage.
[11] Dillman, D.A. (2000). Mail and internet surveys: The tailored design method. NY: Wiley.
[12] Fowler, F.J.,Jr. (1993). Survey research methods (2nd ed.). Newbury Park, CA: Sage.

Table 2: Survey Goals and Actual Frequencies

Sample	Goal	Actual
Random Statewide Survey	658	665
African-American Oversample	174	176
Non-African-American Oversample	174	176
Hispanic Oversample	174	175

Before calling began, phone numbers were ordered from Marketing Systems Group (MSG)[13]. Once the sample was received, numbers were randomly selected for calling by the CATI software.

Random Statewide Survey

The random statewide survey included 665 respondents. To assure that the statewide sample would be truly representative, the goal of 658 completed surveys was broken down into targets for each of three regions: Metro, Willamette Valley and Coast, and Southern and Eastern Oregon. Table 3 lists the counties that were included in each region and Figure 1 displays a map of the regional counties.

Table 3: Regions and Counties

Metro Region	Willamette Valley & Coast Region	Southern & Eastern Region
Clackamas	Benton	Baker
Multnomah	Clatsop	Coos
Washington	Columbia	Crook
	Lane	Curry
	Lincoln	Deschutes
	Linn	Douglas
	Marion	Gilliam
	Polk	Grant
	Tillamook	Harney
	Yamhill	Hood River
		Jackson
		Jefferson
		Josephine
		Klamath
		Lake
		Malheur
		Marrow
		Sherman
		Umatilla
		Union

[13] http://www.m-s-g.com

		Wallowa
		Wasco
		Wheeler

An estimated 42% of Oregon's population6 lives in the Portland tri-county Metro area (Multnomah, Washington, and Clackamas counties); therefore, 277 surveys were conducted in this region (with a goal of 276 surveys). An estimated 32% of Oregon's population lives in the Willamette Valley or on the coast; therefore, 212 surveys were completed with residents in this region (with a goal of 211 surveys). Finally, given that an estimated 26% of Oregon's population resides in the Southern and Eastern regions of the state, 176 surveys were conducted with residents of these regions (with a goal of 171 surveys).

Given the proportions of surveys completed across the regions, SRL is confident that the 665 statewide surveys are representative. Additionally, as shown in Table 4, the random statewide survey achieved adequate statewide coverage in comparison to the 2000 Census. Overall, the survey included respondents from 34 of Oregon's 36 counties.

Table 4. Statewide Random Sample, by County

	Statewide Random Sample		2000 Census
County	**Count**	**Percent**	**Percent**
BAKER	4	0.6	0.5
BENTON	12	1.8	2.3
CLACKAMAS	74	11.1	9.9
CLATSOP	8	1.2	1.0
COLUMBIA	9	1.4	1.3
COOS	10	1.5	1.8
CROOK	5	0.8	0.6
CURRY	6	0.9	0.6
DESCHUTES	24	3.6	3.4
DOUGLAS	16	2.4	2.9
GILLIAM	0	0.0	0.1
GRANT	5	0.8	0.2
HARNEY	1	0.2	0.2
HOOD RIVER	2	0.3	0.6
JACKSON	31	4.7	5.3
JEFFERSON	3	0.5	0.6
JOSEPHINE	10	1.5	2.2
KLAMATH	11	1.7	1.9
LAKE	1	0.2	0.2
LANE	60	9.0	9.4
LINCOLN	17	2.6	1.3
LINN	24	3.6	3.0

MALHUER	25	3.8	0.9
MARION	37	5.6	8.3
MARROW	5	0.8	0.3
MULTNOMAH	118	17.7	19.3
POLK	13	2.0	1.8
SHERMAN	-	-	0.6
TILLAMOOK	13	2.0	0.7
UMATILLA	11	1.7	2.1
UNION	6	0.9	0.7
WALLOWA	2	0.3	0.2
WASCO	2	0.3	0.7
WASHINGTON	82	12.3	13.0
WHEELER	-	-	0.5
YAMHILL	18	2.7	2.5
Total	**665**	**100.0**	**100.0**

As seen in Table 5, the random statewide sample is primarily Caucasian, which is similar to the statewide distribution of race[14]. Additionally, 19 respondents (3%) said that they are Spanish, Hispanic, or Latino, which is somewhat similar to the 2000 Census figure of 8%.

Table 5. Race/Ethnicity of Random Statewide Sample

	Statewide Survey		**2000 Census**
Race	**Frequency**	**Percent**	**Percent**
White/Caucasian	637	95.8	86.6
American-Indian/Alaskan Native	9	1.4	1.3
Asian/Pacific Islander	7	1.1	3.2
African-American	3	0.5	1.6
Mixed Race	3	0.5	3.1
Other	4	0.6	4.2
Don't Know	2	0.3	-
Refused	-	-	-
Total	**665**	**100.2**	**100.0**

African-American and Non-African-American Geographical Match Samples

According to the 2000 U.S. Census[15], African-Americans constitute only 1.6% of Oregon's population statewide, or 55,662 out of 3,421,399 residents. Additionally, African-American individuals are not spread evenly throughout the

[14] U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 94-171) Summary File, Matrices PL1 and PL2

[15] U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 94-171) Summary File, Matrices PL1 and PL2

state: more than two-thirds (37,434) reside in Multnomah County, comprising 5.7% of that county's population.
Because of the geographical concentration of African-Americans in Portland, it would not be appropriate to compare their responses to the survey questions to non-African-Americans drawn from a statewide population. Therefore, working with our sample provider, Marketing Systems Group (MSG)[16], we purchased phone numbers for census block groups in which at least 15% of households are African-American. Using this sample, we conducted surveys with non-African-American respondents to ensure that the two samples came from the same geographic area. This approach also ensured that the two samples were from neighborhoods with similar law enforcement and crime experiences.
Once the 176 surveys with non-African-American respondents were completed, we added a screening question to identify African-Americans to complete the survey. A total of 176 surveys were completed with African-American respondents with an additional 317 non-African-Americans screened out. Overall, SRL made 16,700 phone calls, or an average of 40 phone calls per completed interview.

As seen in Table 6, the non-African-American sample is primarily Caucasian, which is similar to the statewide distribution of race (87% of Oregonians are Caucasian[17]).

Table 6. Race/Ethnicity of Non-African-American Sample

Race	Frequency	Percent
White/Caucasian	162	92.0
American-Indian/Alaskan Native	5	2.8
Asian /Pacific Islander	4	2.3
Mixed Race	1	0.6
Other	4	2.3
Total	**176**	**100.0**

To determine the extent to which the two samples are geographically comparable, we can compare what zip codes respondents were actually from. Table 7 provides a breakdown of zip codes, ranging from smaller to larger populations. A total of 88% of respondents in the African-American sample and 71% of the respondents in the non-African-American sample come from only four zip codes: 97230, 97212, 97217, and 97211. Therefore, the geographic distributions of the two samples are fairly comparable.

[16] http://www.m-s-g.com

[17] U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 94-171) Summary File, Matrices PL1 and PL2

Table 7. A Comparison of Zip Codes, African-American and non-African-American Samples

	Sample				Total	
	African-American		Non-African-American			
	Count	Percent	Count	Percent	Count	Percent
97224	0	0.0	1	0.6	1	0.3
97035	0	0.0	1	0.6	1	0.3
97045	0	0.0	1	0.6	1	0.3
97213	0	0.0	1	0.6	1	0.3
97216	0	0.0	1	0.6	1	0.3
97266	0	0.0	1	0.6	1	0.3
97223	0	0.0	1	0.6	1	0.3
97112	1	0.6	0	0.0	1	0.3
97206	1	0.6	0	0.0	1	0.3
97207	1	0.6	0	0.0	1	0.3
97236	1	0.6	1	0.6	2	0.6
97292	0	0.0	2	1.1	2	0.6
97225	0	0.0	2	1.1	2	0.6
97103	0	0.0	2	1.1	2	0.6
97214	0	0.0	2	1.1	2	0.6
97220	2	1.1	4	2.3	6	1.7
97232	2	1.1	7	4.0	9	2.6
97227	5	2.8	4	2.3	9	2.6
97203	1	0.6	12	6.8	13	3.7
97218	7	4.0	8	4.5	15	4.3
97230	4	2.3	14	8.0	18	5.1
97212	29	16.5	17	9.7	46	13.1
97217	33	18.8	32	18.2	65	18.5
97211	89	50.6	62	35.2	151	42.9
Total	**176**	**100.0**	**176**	**100.0**	**352**	**100.0**

Latino Sample

According to the 2000 U.S. Census[18], Latino individuals constitute 8% of Oregon's population statewide, or 275,314 out of 3,421,399 residents. Unlike the African-American population in Oregon, they are much more widely dispersed throughout the state.

Prior to the 2007 survey, household surnames and geographical matching had been used to identify a sample of Hispanic residents. To ensure that the two over-samples were identified in a similar manner, SRL was asked for both the 2007 and 2009 surveys to change the sampling approach for the Hispanic population such that only geographical matching was used. Therefore, working

[18] U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 94-171) Summary File, Matrices PL1 and PL2

with our sample provider, Marketing Systems Group (MSG)[19], we purchased phone numbers for census block groups in which at least 15% of households are Hispanic.
A total of 175 surveys were completed with Latino respondents, with an additional 919 non-Hispanic/Latino individuals screened out. SRL made a total of 17,492 phone calls, or an average of 87 phone calls per completed interview. Overall, 125 (71.4%) of these interviews were conducted in Spanish, and 50 (28.6%) were conducted in English.

As shown in Table 8, the Latino respondent over-sample survey achieved adequate statewide coverage, including respondents from 21 of Oregon's 36 counties. The distribution not spanning more counties is largely due to the small sample size of 175 respondents. For comparison purposes with the Latino over-sample, a non-Latino geographically matched sample would subsequently be selected from the statewide random sample

Table 8. Latino Sample, by County

County	Count	Percent
CLACKAMAS	5	2.9
CLATSOP	2	1.1
DESCHUTES	2	1.1
HOOD RIVER	5	2.9
JACKSON	11	6.3
JEFFERSON	5	2.9
KLAMATH	3	1.7
LAKE	1	0.6
LANE	2	1.1
LINCOLN	3	1.7
LINN	1	0.6
MALHEUR	15	8.6
MARION	42	24.0
MORROW	3	1.7
MULTNOMAH	21	12.0
POLK	1	0.6
TILLAMOOK	1	0.6
UMATILLA	10	5.7
WASCO	2	1.1
WASHINGTON	33	18.9
YAMHILL	6	3.4
DON'T KNOW13	1	0.6
Total	**175**	**100.0**

[19] http://www.m-s-g.com

Public Perceptions Survey Questionnaire

Introduction and Screening Questions

Intro1: Hello, my name is _____, and I'm calling from Portland State University on behalf of the Oregon Legislature to conduct a brief survey about police services in Oregon. I assure you I'm not selling anything. May I please speak with a household member who is 18 years of age or older?

Intro 2: This voluntary survey will take only 10 to 15 minutes. The purpose is to understand your opinions and experiences with Oregon police. You do not have to answer any question you don't want to and we can stop the survey at any time. I want to assure you that this survey is anonymous and confidential. Do you have time to answer a few questions?

Elig1: I would first like to ask you a few quick questions to see if your household is eligible to do the survey.

S3: What county do you live in?

S5: I would now like to determine what part of the state you live in. May I have your zip code?

LIC1: Next, I would like to ask you some questions about your driving habits. Do you currently have a drivers' license?

DRV1: Have you driven a car, truck, van, motorcycle, or moped at all in the past 12 months?

DRV2: On average, how many miles do you drive each week in Oregon?

$E 1 995

=> /INT20 if NOT(LIC1=1 OR DRV1=1)	
R drives too infrequently to give a weekly estimate	000
996 miles or more each week	996
******	
Don't know	998
Refused	999

S1: For demographic purposes only, would you describe yourself as any of the following: Spanish, Hispanic, or Latino?

If participant refuses S1:

S1A: It is common for people we survey to prefer not to provide their race or ethnicity. However, this survey is, in part, intended to determine whether

individuals of different backgrounds have differing experiences or perceptions of the way public safety services are provided. Therefore, I do need to know the ethnic group most appropriate for categorizing your answers. Would you be willing to provide this information in this special instance? As I said before, all of your responses are confidential. Would you describe yourself as any of the following: Spanish, Hispanic, or Latino?

S2: Which of the following groups best identifies you?

White	1	
American Indian or Alaskan Native	2	
Asian or Pacific Islander	3	
Black or African-American	4	
******		
Other	7O	
Don't know	8	=> /S2A
Refused	9	=> /S2A

If participant refuses S2:

S2A: It is common for people we survey to prefer not to provide their race or ethnicity. However, this survey is, in part, intended to determine whether individuals of different backgrounds have differing experiences or perceptions of the way public safety services are provided. Therefore, I do need to know the racial group most appropriate for categorizing your answers. Would you be willing to provide this information in this special instance? As I said before, all of your responses are confidential. Which of the following groups best identifies you?

=> +1 if NOT(S2=8,9)	
White	1
American Indian or Alaskan Native	2
Asian or Pacific Islander	3
Black or African-American	4
******	
Other	7O
Don't know	8
Refused	9

Key Questions

SECT1: Now I would like to ask you about Oregon police officers. By Oregon police officers, I am talking about Oregon state troopers, county sheriff's deputies, and city police officers, but not federal officers, such as FBI or immigration officers.

GDJB1: Overall, when you think about Oregon police officers, are your feelings generally positive, generally negative, or are they neutral?

Positive	1
Negative	2
Neutral	3
******	
Don't know	8
Refused	9

RP1: How often, if at all, do you believe Oregon police officers allow a person's race, ethnicity, or national origin to unfairly influence their decision to stop someone - never, rarely, sometimes, often, or always?

Never	1
Rarely	2
Sometimes	3
Often	4
Always	5
******	
Don't know	8
Refused	9

RP2: In the last 12 months, do you believe Oregon police officers have been more fair, less fair, or about the same in whether they allow race, ethnicity, or national origin to unfairly influence their decision to stop someone?

More Fair	1
Less Fair	2
About the Same	3
******	
Don't know	8
Refused	9

STP1: In the past 12 months, how many times have you been stopped by an Oregon police officer? This includes being stopped or questioned for a suspected traffic violation or a suspected crime. It does not include times you were a passenger in a car that was stopped, unless you were also questioned.

If stopped once:

STP1A: When you were stopped by a police officer in the past 12 months, were you driving a car, truck, van, motorcycle, or moped? This does not include a situation when you were a passenger or a bicyclist.

STP2A: When you were stopped in the past 12 months, did the officer search you, your vehicle, or someone accompanying you? This includes any stop, not just motor vehicle stops.

STP5A: At any time during this stop, did you believe the real reason you were stopped was different than the reason the officer gave you?

STP6A: I am now going to ask you some questions about when you were stopped by a police officer. Please answer each question using a scale from 1 to 5 where 1 means you Strongly Disagree and 5 means you Strongly Agree. The officer clearly explained why you were stopped.

STP6B: The officer answered all of your questions.

STP6C: The officer was polite.

STP6D: The officer was professional.

If stopped more than once:

STP1C: Of the *STP1* times you were stopped by a police officer in the past 12 months, how many times were you driving a car, truck, van, motorcycle, or moped? This does not include a situation when you were a passenger or a bicyclist.

STP2D: Of the *STP1* times you have been stopped in the past 12 months, how many times did an officer actually conduct a search? This includes any stop, not just motor vehicle stops.

STP5D: Of the *STP1* times you have been stopped in the past 12 months, did you ever believe that the real reason you were stopped was different than the reason the officer gave you?

STP6E: I am now going to ask you some questions about the last time you were stopped by a police officer. Please answer each question using a scale from 1 to 5 where 1 means you Strongly Disagree and 5 means you Strongly Agree. The officer clearly explained why you were stopped.

STP6F: The officer answered all of your questions.

STP6G: The officer was polite.

STP6H: The officer was professional.

Demographics

AGE: May I please have your age?

SEX: Record R'S gender, as observed. If you can't tell, ask:

"Because the quality of phone connections sometimes makes it difficult to tell, I have to ask you your gender. Are you male or female?"

EDUC: What is the highest level of education you have completed?

Elementary school or less	01
Some high school (6-12 years), without a diploma	02
High school graduate or GED	03
Associates Degree or Technical Degree (example: AA or AS)	04
Some college, but no degree	05
Bachelors Degree (example: BA, AB, BS)	06
Some graduate study, but no degree	07
Graduate or Professional Degree (example: MA, MS, PhD, law, medicine)	08
******	
Other	77O
Don't know	88
Refused	99

EMPLY: What is your current employment status? Are you...

Employed full-time	0
Employed part-time	1
Housemaker or stay-at-home parent	2
Disabled (not able to work)	3
Retired	4
Unemployed (not looking for work)	5
Looking for work	6
******	
Other (please specify)	7O
Don't know	8
Refused	9

INCM2: I'm now going to read you a list of income ranges. Please stop me when I reach the category that describes your estimated total annual household income in 2008.

Less than $15,000	1
$15,000 to less than 25,000	2
$25,000 to less than 35,000	3
$35,000 to less than 50,000	4
$50,000 to less than 75,000	5
$75,000 to less than 100,000	6

$100,000 or more	7
******	
Don't know	8
Refused	9

Appendix C. Methodological details for OSP report

OSP records excluded from analysis of traffic stops

The following disposition codes found in data for 2006 and 2007 provided to the LECC by the Oregon State Police were excluded from the analysis because they are not records of traffic stops.

code	description
10	unfounded complaint
13	civil matter, no further action
14	no patrol vehicle available
20	referred to ODOT
24	O/S agency assist
25	obstruction removed
26	crash investigation
28	abandoned vehicle tagged
29	abandoned vehicle towed
31	DRE evaluation (this is a secondary record; another record contains the traffic stop information)
33	hunting enforcement
34	angling enforcement
5G	State Fair gang contact
06	No report
07	log only
08	UTL/ gone on arrival
09	field interview
CN	cancel the report
FO	[code not documented]
TR	telephone report – no vehicle dispatched
WA	warrant served

How missing values were handled in tables

Although there were very small percentages of missing or uninterpretable information in the OSP data, the sum of items in one table may not agree exactly with the corresponding total shown in another table, because the particular records omitted from a tabulation differ according to the variables being tabulated. Technically, the method used in the analysis is called table-wise deletion of missing values.

APPENDIX D – Factors Predicting Search Decisions and Outcomes of Traffic Stops in Corvallis, OR (Full Report)

INTRODUCTION

In previous LECC analyses of traffic stop data collected by four Oregon law enforcement agencies we have discovered that among drivers stopped African American and Hispanic drivers are significantly more likely to be subjected to a search than White drivers (LECC Annual Reports 2007, 2006, 2005). This finding occurs for four different Oregon law enforcement agencies using at least 5 years of traffic stop data collection for each agency. Our use of the term significant means that the differences between the percentages of African American and Hispanic drivers that are searched in traffic stops, compared to White drivers, are not due to random chance and can be generalized to the full population of interest. Since statistical significance does not actually mean anything unless the data in hand are a sample (whereas our data include all cases of traffic stops for this police department), it is important to look at the magnitudes and explanations of the differences.

Although our previous research finds that there are differences in search experiences for African American and Hispanic drivers, compared to White drivers, we cannot conclude that it results from some form of bias or existence of racial profiling. There are several factors that may be contributing to these disparities such as an increase of police attention to high crime and drug areas, a difference of cultural norms in how to interact with authority, or a difference among racial groups' propensity to exhibit characteristics that increase one's risk of being searched. We also cannot rule out the possibility that some disparity is due to conscious or unconscious bias or racial profiling.

The analysis presented here attempts to *seek an explanation for the disparity that we're finding in search rates*. The goal of this report is to present some preliminary theory and analyses which attempt to explain the disparity in search experiences and stop outcomes across race/ethnicity. It is important for the reader to know that the findings in this report are based upon data from one law enforcement agency in Oregon and therefore may not be representative of the state.

In order to develop a better understanding of disparity in search experiences we need to first understand factors that may increase the likelihood of a driver being searched. To this end, the first section in this report examines theories that attempt to explain decision-making processes of law enforcement officers. A second requirement for this research is acquisition of data that can measure (or approximate) the theoretical factors related to search decisions. This second requirement is more difficult to achieve because the data typically collected by law enforcement agencies on the characteristics and contexts of traffic stops/searches is very limited. However, the focal agency in this study, Corvallis

PD, has collected a broad array of contextual and descriptive information about the traffic stop and search, which can be aligned to theories of search decision-making.

Three Theories of Search Decision-Making

Empirical analysis of traffic stop data has often been conducted without developing a clear theoretical framework to guide both the analysis and interpretation of the findings. Academic research on police decision-making, particularly Engel, Calnon, & Bernard (2002), has noted three dominant theoretical perspectives related to racial/ethnic disparity in search experiences. These theories serve as the framework for our research although we do not have the data to test all three theories rigorously.

Theory A. Law enforcement officers have biased attitudes and social norms making racial/ethnic disparity in searches more likely. One theory to explain individual police officers decisions is that decisions are driven by officer attitudes and social norms of departments. If officers carry beliefs that minorities are more likely to carry contraband or engage in criminal activity (an attitude), search rates of minorities should be higher. If some officers believe that their fellow officers or leaders encourage searches of minorities or aren't concerned about profiling issues (social norms), then search rates of minorities should be higher.

Theory B. Subsets of drivers act differently from other subsets of drivers during traffic stops which explains search disparities. This theory is based on the notion that a decision to search results from social dynamics of officer-citizen interactions. For example, drivers of different races/ethnicities, or age groupings, or gender may act differently towards police or drive in areas and times that put them at greater risk for experiencing a stop and search. The social dynamics of the interaction can entail the following:

- Citizen demeanor: If a subset of drivers is more antagonistic, hostile, and disrespectful than other driver subsets during traffic stops, they are more likely to be searched for challenging officer authority and politeness norms.
- Suspect characteristics: If a subset of drivers is more likely than other driver subsets to be male, or younger, or intoxicated, they are more likely to be searched.
- Situational characteristics: If a subset of drivers is more likely than other driver subsets to be stopped at night, stopped in high crime areas, or have more passengers in the car, they are more likely to be searched.
- Legal characteristics: If a subset of drivers is more likely than other driver subsets to be stopped for serious traffic infractions or have

more evidence of suspected criminal activity apparent during their traffic stops, they are more likely to be searched.

Theory C. Police target more proactive strategies in high-crime areas, which tend to have higher minority populations, making racial/ethnic disparity in searches more likely. If officers perceive that their supervisors expect them to be aggressive on the streets by stopping vehicles, searching citizens, and producing arrests and that this behavior is highly rewarded in their organization, they are more likely to perform these activities (DeJong et al., 2001; Engel & Worden, 2000). Such a proactive expectancy of officer behavior may be heightened in neighborhoods and shifts that are believed to have higher drug, gang, and gun crime activity. These neighborhoods typically have higher minority populations, thus resulting in stop and search disparity.

Data Requirements to Test the Three Theories of Search Decision-Making

The first theory presented above (Theory A) proposes that police attitudes and social norms regarding minority populations or neighborhoods influence their search decisions. Linking police attitudes and social norms with officers' search decisions *is not possible* with traffic data collection systems. Without social-psychological measures of individual officer attitudes and a link between attitude measures and officer behavior, we can never tell whether some of the disparity we find in search outcomes are the direct result of individual and social biases of law enforcement officers. However, by using multivariate techniques, we can indirectly test this theory in part. If race/ethnicity, by itself, produces a very weak model in predicting searches and/or minority drivers are no more likely to be searched than White drivers, when controlling for other factors, the likelihood of systemic conscious or unconscious bias by the officers is weakened.

The second theory presented above (Theory B) proposes that search disparity could result from behavioral or circumstantial differences between different subsets of drivers during traffic stops. Testing parts of Theory B would require traffic stop data collection systems to record contextual information regarding the stop and behaviors of drivers during the stop. Previous LECC reports and academic research have lamented the limited data points in traffic data collection systems related to the contextual factors of traffic stops. The law enforcement agency that is the focus of this study happens to collect a variety of contextual information regarding the stop including time of day, patrol beat, number of passengers, and residency of the driver. Even so, this data does not record more subtle interactions, cues, and behaviors during stops that could vary by race/ethnicity. For example, type and condition of cars, suspect demeanor, responses to questions, and evidence of intoxication are not recorded in this dataset and may vary by race/ethnicity of the drivers. Thus, this study can only partially examine Theory B above.

The third theory presented above (Theory C) proposes that search disparity could result from a higher likelihood of proactive policing strategies being implemented in minority neighborhoods. In order to test this theory we would ideally obtain data describing patrol deployment practices of the police department, neighborhood crime and calls for service, and any formal or informal approaches to neighborhood policing. In the absence of such data, this study can only indirectly test Theory C by assessing whether the most aggressive patrol beats for stops and searches also exhibit disproportionate stops of African American or Hispanic drivers compared to White drivers.

Research Questions

Previous analyses of traffic stop data from this department discovered that African American and Hispanic drivers are significantly more likely to be searched than White drivers. However, these analyses only utilized bivariate techniques, which can be misleading and difficult to make any conclusions off of when used alone. As noted above, a certain racial/ethnic group may be more likely to be searched for many legitimate and illegitimate reasons; the bivariate analyses cannot control for any of these possibilities. Our research goal is to probe this finding further by examining other contextual information surrounding the stop and search that may explain this disparity. We do this by using both bivariate and multivariate techniques that are similar to the work of others in the field of analyzing searches in traffic stop data (Lovrich et al., 2007; Schell et al., 2007). The specific research questions we will address in this report are the following:

1 – Are African American and Hispanic drivers more likely than White drivers to be searched when taking into consideration other characteristics of a stop, such as gender, number of passengers, daylight, city residency, and the reason for the stop? If yes, then the possibility of biased policing being a factor in searches is strengthened, although it still cannot be proven with this data.

The other possible explanations of being searched that we examine in this study include the following:

a. Gender: Male drivers, who are more prevalent in crime and arrest statistics, may be more likely to raise an officer's perception of suspicious behavior and lead to an increased likelihood of a search compared to female drivers.
b. Number of passengers: More passengers in a vehicle may increase an officer's perception of suspicious behavior and lead to an increased likelihood of a search. It may also create a bystander effect where the officer feels more compelled to exercise his/her authority.
c. Daylight stop: During daylight hours, traffic flow increases and criminal events are typically less common, thus vehicles stopped in the daylight hours are less likely to arouse suspicions of criminal wrongdoing.

d. City Resident: City residents are less likely to be viewed suspiciously than persons traveling through a town, city, or state.
e. Police Beat: Police officers are more likely to conduct searches in geographical areas of a city that are perceived to have more crime, drugs, and guns or where such proactive behavior is expected and rewarded.
f. Year: Controls for any yearly fluctuations in proactive policing that may be based on policy changes. For example, a department may change its search practices based on a new crime problem in the area, new training protocols, an increase or decrease in staff, or a change in the laws regarding their rights to certain search practices. Controlling for year may also help identify key research questions if large differences in search rates are found between years.
g. Reason for stop: More serious violations, such as someone being pulled over due to being a crime suspect is more likely to be searched than someone pulled over for speeding.

It is also important to examine these differences across various search types:

Search types: There are different types of searches law enforcement officers perform in the field which we're able to differentiate with this data set. Some searches are discretionary and some are based on policy or are mandatory. If an officer has any conscious or unconscious biases they are more likely to manifest in discretionary search decisions like asking for a driver's consent to search. The traffic stop data collection system for this department has officers filling in a search reason/justification code if a search was conducted, which is rare for departments to collect. The different reasons or justifications for a search allow us to differentiate discretionary from non-discretionary types of searches. The following types of searches are examined in this report:

a. All searches: any mention of a search during a traffic stop, including a vehicle inventory search, is examined. This search category includes searches of persons and vehicles.
b. Incident-to-arrest searches: It is common practice to search suspects during the arrest process to ensure officer safety. Incident-to-arrest searches are therefore less discretionary in nature and less likely to involve conscious or unconscious bias.
c. Discretionary searches: These types of searches have a long legal history justifying their use and typically require an officer to have reasonable suspicion and act in good faith based on the officer's perception that the suspect is a threat to the officer/public or involved in the commission of a crime. They include consent searches, weapon pat downs, and plain view searches. Consent and plain view searches can be a search of the person or the vehicle. A weapon pat down is a search of the person.
d. Multiple search reasons: Although this department's collection of search justification data allows for more sophisticated inquiry into

officer decision making, the data recording process did present one challenge. Officers were allowed to record multiple search justifications. It was not uncommon to find officers recording that a consent search, incident-to-arrest search, and vehicle inventory search occurred in a single stop. In this instance we could assume that the consent search came first and was followed by an arrest which was also coded. We could equally assume that this is evidence of data entry error. Our approach to dealing with multiple search reasons being coded is to treat such searches as a separate category and worthy of its own analysis.

2 – Is the search disparity by race/ethnicity explained by greater exposure to factors related to being searched or having risk factors that increase the likelihood of being searched (e.g. being male, time of day, number of passengers, residency of the driver, and certain reasons for the stop).

This final research question is an attempt to examine Theory B presented above, which proposes search disparity could result from contextual and behavioral differences between minority drivers and non-minority drivers during traffic stops.

METHODOLOGY

Data

This dataset contains five years of traffic stops from Corvallis PD, a medium size police department. The approximate racial proportions for Corvallis, Oregon are 1.1 percent African American, 0.7 percent American Indian and Alaskan, 6.6 percent Asian, 5.0 percent Hispanic, 84.4 percent non-Hispanic White, and 2.4 percent of other races (U.S. Census, 2000).

The 52,262 stops in this dataset were conducted over a period of 5 years (2002-2006). There were a total of 3,208 searches conducted. The proportions of stops and searches by the race of the driver were the following:

- African American: 1,093 (2.1 percent) stops and 96 (3.0 percent) searches
- American Indian: 77 (.1 percent) stops and 6 (.2 percent) searches
- Asian: 1,535 (2.9 percent) stops and 60 (1.9 percent) searches
- Hispanic: 2,498 (4.8 percent) stops and 276 (8.6 percent) searches
- White: 45,598 (87.2 percent) stops and 2,704 (84.3 percent) searches
- Other: 1,461 (2.8 percent) stops and 66 (2.1 percent) searches

The following offers a brief description of the other factors (or independent variables) being examined or controlled for in these analyses:

1) Gender
    - 36 percent of all drivers stopped were female and 64 percent were male.

- 17 percent of Hispanic drivers, 21 percent of African American drivers, 27 percent of American Indian drivers, 31 percent of "other" drivers, 36 percent of Asian drivers, and 38 percent of White drivers were female.

2) Number of Passengers
   - 68 percent of stops in the entire dataset had 0 passengers and 22 percent had 1 passenger. An additional 10 percent had more than 1 passenger.
   - 52 percent of American Indians, 55 percent of Hispanics, 63 percent of "other" race and African Americans, 65 percent of Asians, and 69 percent of Whites had 0 passengers.
   - 48 percent of American Indians, 45 percent of Hispanics, 37 percent of "other" race and African Americans, 35 percent of Asians, and 31 percent of Whites had at least one passenger.
3) Daylight Stop
   - 65 percent of stops occurred in the daylight hours, 35 percent of the stops did not.
   - In daylight hours, the percentages of stops by race were: .1 percent American Indian, 1.6 percent African American, 2.6 percent other, 2.7 percent Asian, 4.3 percent Hispanic, and 88.7 percent White.
   - In non-daylight hours, the percentages of stops by race were: .2 percent American Indian, 3.0 percent African American, 3.1 percent other, 3.4 percent Asian, 5.6 percent Hispanic, and 84.5 percent White.
4) City Resident
   - 61 percent of the drivers in the entire dataset are residents of the city.
   - 59 percent of the White drivers were residents compared to approximately 70 percent for all the other races.
5) Patrol Beat
   - 26 percent of the stops occurred in the NW sector, 26 percent in the CE sector, 15 percent in the CW sector, 13 percent in the SW sector, 12 percent in the SE sector, and 8 percent in the NE sector.
   - There is some difference in the proportion of racial groups stopped among different sectors but these differences are very small and each sector tends to follow the general trend of racial proportions in the dataset as a whole.
6) Year
   - 22 percent of the stops occurred in 2002, 17 percent in 2003, 19 percent in 2004, 17 percent in 2005, and 25 percent in 2006.
7) Reason for Stop

   The data contained the following reasons for the stop:

Reason for the Stop	Examples
Moving violation	Speeding, running a red light
ORS criminal violation	Driving while suspended, warrants
Call for service follow-up	Officer dispatched to look for a particularly described person
Preexisting information	Previous knowledge of the subject, on a lookout/wanted list
Equipment violation	Tags expired, headlight out
City ordinance violation	Noise violation, alcohol consumption in public

Other violation	Miscellaneous circumstances that do not fit into the categories

- The most common reasons for the stops were: a) Moving violation (32,531 cases), b) Equipment or registration violation (16,094 cases), and c) Violation of ORS (7,816 cases).
- 5,041 of the cases (10 percent) were listed as being stopped for more than one reason.
- 148 cases in the entire dataset listed no reason for the stop.

The following offers a brief description of the outcome, or dependent, variables used in these analyses:

1) Any Search: This is whether or not any type of driver, passenger, or vehicle search was conducted during a traffic stop.
   - 3,208 cases (6.1 percent of all stops) had some type of search.
2) Incident-to-arrest Search: This is whether or not an incident-to-arrest search was conducted, that was not performed in conjunction with a discretionary or inventory search.
   - 279 cases (0.5 percent of all stops) had a search in this category.
3) Discretionary Search: This is whether or not a discretionary search was conducted, that was not performed in conjunction with an incident-to-arrest or inventory search.
   - 1300 cases (2.5 percent of all stops) had a search in this category.
4) Combination Search: This is whether or not more than one search type was performed during the stop.
   - 1117 cases (2.1 percent of all stops) had a search in this category.

Analysis

Appendix A provides a more detailed description of the methodology and analyses utilized.

RESULTS

We use the term “significant” to focus our discussion on the factors that were found to be statistically significant and appear relevant to being searched or not searched during a traffic stop. Our use of the term “significant” means that the influence of a particular factor, while taking into consideration the effects of all other factors, is not due to random chance. As noted above, this has limited meaning for datasets that include all of the stop data for a particular police department over a number of years. Therefore, in addition to being significant or not, we will often note the size of the effect of a factor. These effect sizes may be large, small, or so trivial that the effect may not be “socially significant”, although it’s statistically significant. Particularly in large datasets, a factor could be “significant” but still be considered unimportant because the impact of that factor on the outcome is so small. For instance, a difference could be found in the search rates between out-of-state drivers and in-state drivers but if the odds

increase for out-of-state drivers is only .5 percent higher than that of in-state drivers, then one may argue that this finding does not deserve much attention.

Data tables for the results can be found in Appendix B and are numbered Table B1 to Table B4.

All Searches

Significant Factors Related to Any Searches (includes vehicle inventory searches): see Table B1 in Appendix B.

1) The odds of a Hispanic driver being searched were 46 percent greater than for a White driver, holding other factors constant.
2) Asian drivers and drivers classified as "other race" were less likely than White drivers to be searched, holding other factors constant. The odds of an Asian driver having a search were 50 percent less than for a White driver. Drivers classified as "other race" were 37 percent less likely to have a search than White drivers.
3) The odds of a female driver being searched were 45 percent less than for male drivers, holding other factors constant.
4) Vehicles with more passengers were significantly more likely to be searched, holding other factors constant. Having a passenger increased the odds of one being searched by 38 percent.
5) The odds of a driver being searched in the daytime were 80 percent less than being searched at night, holding other factors constant.
6) The strongest predictors of being searched were among the reasons for the stop. If the reason for the stop was related to an officer following up on a call for service (for example, an officer being dispatched to look for a particularly described person), preexisting information, other violation, city ordinance violation, or missing a violation code, the driver or car was more likely to be searched than those stopped for moving violations, holding other factors constant. ORS criminal violations and equipment violations were significantly less likely to lead to a search compared to moving violations, holding other factors constant. The odds of having a search when being stopped due to an officer following up on a call for service, preexisting information, or an "other" violation, were increased by over 500 percent than for those being stopped for a moving violation.

Factors not Related to Any Search (includes vehicle inventory searches):

1) African American drivers and American Indian drivers were not significantly more likely than Whites to experience a search, holding other factors constant.
2) Whether the driver was a city resident was not significantly related to searches, holding other factors constant.

Incident-to-arrest Searches

Significant Factors Related to Incident-to-arrest Searches: see Table B2 in Appendix B.

1) The odds of Hispanic drivers experiencing an incident-to-arrest search were 97 percent greater than for White drivers, holding other factors constant.
2) The odds of "other race" drivers having an incident-to-arrest search were 77 percent less likely than White drivers, holding other factors constant.
3) Female drivers had 48 percent lower odds than male drivers to experience incident-to-arrest searches, holding other factors constant.
4) Drivers stopped in the daytime were 86 percent less likely to experience incident-to-arrest searches, holding other factors constant.
5) The reasons for the stop are the strongest predictors of being searched. If the reason for the stop was related to an officer following up on a call for service, preexisting information, other violation, or missing a violation code, the driver was more likely to experience an incident-to-arrest search than those stopped for moving violations. Equipment violations were significantly less likely to lead to an incident-to-arrest search compared to moving violations. Being stopped for a call for service follow-up or preexisting information increased one's odds of having an incident-to-arrest search by over 500 percent, compared to those stopped for a moving violation.

Factors not Related to Incident-to-arrest Searches:

1) African American drivers, American Indian drivers, and Asian drivers were not more likely than Whites to have an incident-to-arrest search, holding other factors constant.
2) The number of passengers in a vehicle was not related to incident-to-arrest searches, holding other factors constant.
3) Whether the driver was a city resident was not significantly related to incident-to-arrest searches, holding other factors constant.
4) Drivers being stopped for an ORS or city ordinance violation were not more or less likely to be searched than those stopped for a moving violation.

Discretionary Searches (consent, plain view, weapon pat down)

Significant Factors Related to Discretionary Searches: see Table B3 in Appendix B.

1) Asian and "Other race" drivers were significantly less likely than White drivers to experience discretionary searches, holding other factors constant. The odds of an Asian driver experiencing a discretionary search

were 39 percent less than for White drivers. The odds of an "other race" driver having a discretionary search were 38 percent less than for White drivers.
2) American Indian drivers did not have any discretionary searches.
3) Female drivers were 43 percent less likely than male drivers to experience discretionary searches, holding other factors constant.
4) Having more passengers in the vehicle, increased the likelihood of experiencing a discretionary search, holding other factors constant. Having a passenger increased the odds of having a discretionary search by 44 percent.
5) Drivers stopped in the daytime were 86 percent less likely to experience discretionary searches, holding other factors constant.
6) The odds of a city resident having a discretionary search were 19 percent greater than for non-city residents, holding other factors constant.
7) The other strong predictors for discretionary searches were found in the reason for the stop. If the reason for the stop was a related to following up on a call for service, preexisting information, other violation, city ordinance violation, or missing a violation code, drivers were more likely to experience discretionary searches than those stopped for moving violations. ORS and equipment violations were significantly less likely to lead to discretionary searches compared to moving violations. Being stopped for preexisting information or a city ordinance violation increased one's odds of having a discretionary search by over 300 percent, compared to those stopped for a moving violation.

Factors not Related to Discretionary Searches:

1) African American drivers and Hispanic drivers were not more likely than Whites to have discretionary searches, holding other factors constant.

Combination/Multi-Searches (stops with more than one type of search performed)

Significant Factors Related to Multi-Searches: see Table B4 in Appendix B.

1) The odds of Asian drivers receiving a multi-search was 57 percent less than for White drivers, holding other factors constant.
2) Female drivers were 45 percent less likely than male drivers to receive a multi-search, holding other factors constant.
3) Drivers of vehicles with more passengers were significantly more likely to receive a multi-search, holding other factors constant. Having a passenger increased the odds of having a multi-search by 34 percent.
4) Drivers stopped in the daytime were 88 percent less likely to receive a multi-search, holding other factors constant.
5) The strongest predictors of multi-searches were among the reasons for the stop. If the reason for the stop was related to following up on a call for service, preexisting information, or other violation, a multi-search was

more likely reported. ORS criminal violations and equipment violations were significantly less likely to entail multi-searches. The odds of having a multi-search conducted when being stopped for a call for service follow-up, preexisting information, or an “other” violation, were increased by over 400 percent than for those being stopped for a moving violation.

Factors not Related to Multi-Searches (includes vehicle inventory searches):

1) African American, Hispanic, American Indian drivers, and other race drivers were not more likely than Whites to experience multi-searches, holding other factors constant.
2) Whether or not the driver was a city resident was not significantly related to multi-searches being utilized, holding other factors constant.

Evidence for Research Questions

1 – Are African American and Hispanic drivers more likely than White drivers to be searched when taking into consideration other characteristics of a stop, such as gender, number of passengers, daylight, city residency, and the reason for the stop? If yes, then the possibility of biased policing being a factor in searches is strengthened, although it still cannot be proven with this data.

- Although we have previously found African American and Hispanic drivers are more likely to be searched than White drivers, our most important new finding is that in searches involving discretion (i.e. consent, weapon pat down, or plain view searches) there is no disparity for African American and Hispanic drivers. In other words, African American and Hispanic drivers are equally likely as White drivers to experience discretionary searches after accounting for other characteristics that increase one's risk of being searched. Discretionary searches may be more susceptible to potential officer biases compared to less-discretionary searches, such as a search that is done because the officer is arresting the driver.
- One analysis did show that Hispanic drivers were more likely than White drivers to be searched incident to an arrest, even when controlling for other factors. Although this relationship was significant, incident-to-arrest searches often involve less discretion and the relationship was very small. For instance, the odds of a Hispanic driver receiving an incident-to-arrest search were found to be 97 percent greater than for a White driver. In this dataset, this would be equivalent to one more Hispanic driver receiving an incident-to-arrest search approximately every two months, than would be expected if no disparity existed.

2 – Is the search disparity by race/ethnicity explained by greater exposure to factors related to being searched or risk factors that increase the likelihood of being searched (e.g. being male, time of day, number of passengers, residency of the driver, and certain reasons for the stop).

Although race/ethnicity were not strong predictors of being searched in traffic stops when taking into consideration other factors that could explain search decisions, we find that the other factors related to search decisions are more common in stops of African American and Hispanic drivers compared to White drivers. We refer to these other factors related to search decisions as search "risk factors".

Before examining whether African American and Hispanic drivers are more prone to these "risk factors" than Whites, we examined whether these "risk factors" increase the likelihood of a driver being searched across all races and ethnicities of drivers (marginal and discrete change results not shown). The risk factors that we examined are: 1) driver is a city resident, 2) stop occurred at nighttime, 3) there was one or more passengers in the vehicle, 4) driver was male, and the stop reason was based on 5) preexisting knowledge, 6) a call for service follow-

up, 7) labeled as other, or the 8) stop reason was missing. The results indicated that the referenced risk factors significantly increase the probability for being searched for all races and ethnicities.

Even though these risk factors increase the likelihood of being searched for all races and ethnicities, it is still possible that stops of African American and Hispanic drivers contain a significantly higher proportion of these risk factors compared to stops of White drivers. The analysis of this question (see Table 1 below) does confirm that search risk factors are more prevalent in stops of African American and Hispanic drivers versus White drivers.

Stops of African American drivers were more likely to contain 5 out of the 8 risk factors compared to stops of White drivers (see Table 1 below). The risk factors more common in stops of African American drivers were being a city resident, stop occurred at nighttime, there were one or more passengers in the vehicle, driver was male, and the stop reason was based on following up on preexisting information.

Stops of Hispanic drivers were more likely to contain 7 out of the 8 risk factors compared to stops of White drivers (see Table 1 below). The risk factors more common in stops of Hispanic drivers were being a city resident, stop occurred at nighttime, there was one or more passengers in the vehicle, driver was male, the stop reason was based on preexisting knowledge, an officer following up on a call for service, or labeled as other.

The finding that a higher proportion of African American and Hispanic stops are at nighttime, involve male drivers, and more passengers compared to White stops could mean that among African American and Hispanic drivers a greater proportion drive at night, are male, and travel with more passengers compared to all White drivers. However, we have no data to examine this possibility and it likely doesn't exist. On the other hand, it could mean that stop incidents involving the combination of these risk factors and an African American or Hispanic driver creates a greater sense of suspiciousness (or bias) on the part of law enforcement officers compared to stops of White drivers that involve these risk factors. The presence of these risk factors does, however, increase the likelihood of drivers being searched across all races and ethnicities.

Table 1. Comparison of search risk factors between African American and Hispanic drivers that were stopped to White drivers that were stopped

Risk Factors for Being Searched	African American Drivers	Hispanic Drivers
1) City resident	YES. A larger proportion of African American drivers stopped compared to White drivers are city residents. (70 percent of African Americans drivers were city residents versus 59 percent of White drivers)	YES. A larger proportion of Hispanic drivers stopped compared to White drivers are city residents. (69 percent of Hispanic drivers were city residents versus 59 percent of White drivers)
2) Night-time stop	YES. A larger proportion of African American driver stops compared to White driver stops occur at night. (51 percent of African American drivers were stopped at night versus 34 percent of the White drivers)	YES. A larger proportion of Hispanic driver stops compared to White driver stops occur at night. (41 percent of Hispanic drivers were stopped at night versus 34 percent of the White drivers)
3) One or more passengers in vehicle	YES. A larger proportion of African American vehicles stopped compared to White vehicles stopped have one or more passengers. (37 percent of African American drivers had one or more passengers versus 31 percent of the White drivers)	YES. A larger proportion of Hispanic vehicles stopped compared to White vehicles stopped have one or more passengers. (45 percent of Hispanic drivers had one or more passengers versus 31 percent of the White drivers)
4) Male driver	YES. A larger proportion of African American drivers stopped compared to White drivers stopped are males. (79 percent of the African American drivers were male versus 62 percent of the White drivers)	YES. A larger proportion of Hispanic drivers stopped compared to White drivers stopped are males. (83 percent of the Hispanic drivers were male versus 62 percent of the White drivers)
5) Stop reason –	YES. A larger proportion	YES. A larger proportion

preexisting knowledge	of African American drivers stopped compared to White drivers were stopped for a call for service follow-up. (1.6 percent of African American drivers were stopped for preexisting knowledge versus 0.6 percent of the White drivers)	of Hispanic drivers stopped compared to White drivers stopped were stopped for preexisting knowledge. (1.2 percent of the Hispanic drivers were stopped for preexisting knowledge versus 0.6 percent of the White drivers)
6) Stop reason – following up on a call for service	NO. No difference between African American and White drivers.	YES. A larger proportion of Hispanic drivers stopped compared to White drivers were stopped for a call for service follow-up. (1 percent of the Hispanic drivers were during following up on a call for service versus 0.4 percent of the White drivers)
7) Stop reason – other	NO. No difference between African American and White drivers.	YES. A larger proportion of Hispanic drivers stopped compared to White drivers were stopped for "other" reason. (0.6 percent of the Hispanic drivers were stopped for an "other" reason versus 0.3 percent of White drivers)
8) Stop reason – missing stop reason	NO. No difference between African American and White drivers.	NO. No difference between Hispanic and White drivers.

CONCLUSIONS

LECC studies of traffic stop data from around Oregon have consistently found disparities in search rates between African American and Hispanic drivers when compared to White drivers. African American and Hispanic drivers are more likely to be searched than White drivers. Whether to interpret this disparity as evidence of racial/ethnic bias on the part of law enforcement is the critical question raised by this consistency in findings.

This report attempts to develop an understanding of the racial/ethnic disparities found in search rates after a traffic stop in one medium-sized city. To reach this goal a theoretical framework of possible explanations for racial/ethnic disparity in search rates is developed. Three theoretical perspectives are discussed in the report.

Theory A. Law enforcement officers have biased attitudes and social norms making racial/ethnic disparity in searches more likely.
Theory B. Subsets of drivers act differently from other subsets of drivers during traffic stops which explains search disparities.
Theory C. Police target more proactive strategies in high-crime areas, which tend to have higher minority populations, making racial/ethnic disparity in searches more likely.

The traffic stop data from our test city does provide some data points that allow this research to examine other possible factors related to search decisions. These data points are associated with Theories B and C, and indirectly allow us to test Theory A (see page 7 above).

Key Findings:

- Across analyses African American and Hispanic drivers are not more likely to be searched compared to White drivers when other characteristics of a traffic stop are considered and when different types of searches are examined. Another way of stating this is that when we test for Theory B and Theory C described above, the evidence for Theory A or systemic police bias is weak.
    - Across all four analyses African American drivers were not more likely to be searched compared to White drivers when other factors of a stop are taken into consideration and when different search types/reasons are examined (e.g. all searches, discretionary searches, searches incident-to-arrest, multi-reason searches).
    - Hispanic drivers were more likely than White drivers to be searched when other factors of the stop are examined in two of the four analyses. However, the greater search likelihood of Hispanic drivers compared to Whites appears to be principally related to Hispanic drivers being searched incident to an arrest, which is a less-discretionary search decision.
    - African American and Hispanic drivers were not more likely to experience discretionary searches (i.e. consent, weapon pat down, or plain view searches) compared to White drivers when other factors of the stop are considered. Through contingency table analyses, we also find that African American and Hispanic drivers were not more likely to experience discretionary searches, even when not controlling for other factors. Theoretically speaking, these

types of discretionary searches may be more susceptible to potential officer biases compared to non-discretionary searches, such as a search incident to an arrest.

- The other factors that are commonly related to drivers being searched during a traffic stop, which we refer to as search "risk factors", are the following:
  - Male driver (male drivers are more likely to be searched).
  - City residency (city residents are more likely to have a discretionary search).
  - Number of passengers (vehicles with passengers are more likely to be searched).
  - Time of stop (drivers stopped at night are more likely to be searched).
  - Reason for the stop (certain reasons for stops, like whether it was a follow-up on a call for service, pre-existing information, or other violation, increase the likelihood of a search).

- The above search risk factors increased the likelihood of searches for drivers of all race and ethnic categories. However, traffic stops of African American and Hispanic drivers were more likely to contain these risk factors compared to stops of White drivers, which may explain some of the search disparity typically found for minority drivers. The importance of this finding and its link to potential biases is difficult to determine with the limited data.

In sum, our study indicates that the race/ethnicity of a driver, by itself, is not a strong determining factor in search decisions, particularly discretionary search decisions where the possibility of bias is more likely to arise. For instance, knowing someone's race alone does not allow us to accurately predict any of the 3,208 searches in this dataset, at a probability greater than .1. Evidence of conscious or unconscious bias, occurring across officers in this city, in search decision-making is not apparent in the analyses. However, it does appear that African Americans and Hispanics are more likely to exhibit characteristics which are apt to increase any driver's chances of being searched, such as being male, stopped at night, and having passengers in the car. Examining how search risk factors are related to search outcomes (e.g. finding illegal contraband) and common practices or policies for reasonable suspicion during a stop may be beneficial in understanding racial/ethnic search disparities. The reasons why stops of African American and Hispanic drivers are more likely to involve these risk factors cannot be determined from the data and could be examined in future research.

Despite this study's advancement of our knowledge it is still limited because it does not contain data on citizen demeanor during stops, evidence of intoxication, or subtle behavioral and evidentiary cues officers rely on when forming

perceptions of probable cause. It also doesn't include any information on the individual officers, which limits the ability to examine whether any disparity is due to a small percentage of officers making search decisions based on conscious or unconscious biases. The analyses conducted still demonstrate that there is a lot of variation in the search decisions that is not represented in the factors that were analyzed. In other words, there are other important factors that explain search decisions by police officers that are not captured in traffic stop data collection systems. The analyses demonstrate that approximately 26 to 34 percent of the differences found in having a search is attributable to race, gender, number of passengers, daylight, city residency, traffic stop reason, patrol beat, and time. While these analyses are able to provide a much stronger explanation for having a search than race alone, this suggests that there are still other factors that need to be explored.

Being able to examine why racial disparities occur in traffic stops is important for finding viable solutions for improving equality in law enforcement. The data available to do this in Oregon is extremely limited. This initial examination shows some examples of the types of inquiry that can be made. Being able to replicate these types of studies in other cities is important before these results can be generalized to other locations.

References

DeJong, C., Mastrofski, S., and Parks, R. (2001). Patrol officers and problem solving: An application of expectancy theory. *Justice Quarterly, 18* (1), 31-61.

Engel, R., Calnon, J., and Bernard, T. (2002). Theory and racial profiling: shortcomings and future directions in research. *Justice Quarterly, 19*, 201-225.

Engel, R. and Worden, R. (2003). Police officers' attitudes, behavior, and supervisory influences: An analysis of problem solving. *Criminology, 41*, 131-166.

LECC Annual Reports (2005-2007). http://www.cjpri.ccj.pdx.edu/LECC/index.php#leccAnnRep

Lovrich, N.; Gaffney, M.; Mosher, C.; Pratt, T.; and Pickerill, M. (2007). *Report to the Washington State Patrol:Results of the Monitoring of WSP Traffic Stops for Biased Policing: Analysis of WSP Stop, Citation, Search and Use of Force Data and Results of the Use of Observational Studies for Denominator Assessment.* Washington State University: Division of Governmental Studies and Services.

Schell, T.; Ridgeway, G.; Dixon, T.; Turner, S.; and Riley, J. (2007). *Police-Community Relations in Cincinnati Year Three Evaluation Report*. Santa Monica, CA: RAND Corporation.

CORVALLIS RESULTS TABLES: Factors Predicting Search Decisions and Outcomes of Traffic Stops

Table B1. Factors Predicting Any Search (including all inventory searches)
significant factors in bold

	Coef.	Robust Std. Err.	z	P>z	Percent Change in Odds
African American driver	-0.055	0.116	-0.470	0.636	-5.4
Hispanic driver	**0.379**	**0.073**	**5.230**	**0.000**	**46.1**
American Indian driver	-0.095	0.449	-0.210	0.833	-9.0
Asian driver	**-0.690**	**0.139**	**-4.980**	**0.000**	**-49.8**
Other race driver	**-0.463**	**0.134**	**-3.470**	**0.001**	**-37.1**
Female	**-0.593**	**0.045**	**-13.070**	**0.000**	**-44.7**
Number of passengers	**0.325**	**0.019**	**17.430**	**0.000**	**38.3**
Daylight stop	**-1.612**	**0.044**	**-36.640**	**0.000**	**-80.0**
City resident	0.050	0.041	1.220	0.222	5.1
ORS criminal violation	**-0.695**	**0.090**	**-7.740**	**0.000**	**-50.1**
Call for service follow-up	**1.902**	**0.155**	**12.270**	**0.000**	**569.9**
Preexisting information	**2.349**	**0.145**	**16.190**	**0.000**	**947.7**
Equipment violation	**-0.285**	**0.045**	**-6.320**	**0.000**	**-24.8**
City ordinance violation	**1.237**	**0.184**	**6.710**	**0.000**	**244.4**
Other violation	**2.497**	**0.183**	**13.650**	**0.000**	**1114.5**
Missing violation code	**0.649**	**0.265**	**2.450**	**0.014**	**91.4**
Constant	-2.260	0.094	-23.950	0.000	

N = 52262
Reference categories: Male, White driver, NE sector, Year 2002, Moving violation
Controlled for patrol beat/sector (6) and years (5)[20]

[20] Reference categories are listed only for interpretation purposes. Data from these categories have not been removed from these analyses.

Variance Explained/Postdictions for Factors Predicting Any Search

Table C1. Postdictions and Explained Variance for Any Search

Model Predicting Any Search		No Search	Search	Totals
Probability < 0.25	Observed Frequency	48,150	2,698	50,848
	Row Percentage	94.69%	5.31%	100%
	Column Percentage	98.16%	84.10%	97.29%
	Cell Percentage	92.13%	5.16%	97.29%
Probability 0.25 - 0.50	Observed Frequency	785	390	1,175
	Row Percentage	66.81%	33.19%	100%
	Column Percentage	1.60%	12.16%	2.25%
	Cell Percentage	1.50%	0.75%	2.25%
Probability > 0.50	Observed Frequency	119	120	239
	Row Percentage	49.79%	50.21%	100%
	Column Percentage	0.24%	3.74%	0.46%
	Cell Percentage	0.23%	0.23%	0.46%
Totals	Observed Frequency	49,054	3,208	52,262
	Row Percentage	93.86%	6.14%	100%
	Column Percentage	100%	100%	100%
	Cell Percentage	93.86%	6.14%	100%

McKelvey & Zavoina's $R^2 = 0.259$

The postdictions provide the estimated probability that an event will occur (in this case, having any search) for each individual in the dataset, given the regression model. After the postdictions were calculated for each case, the variable was re-coded categorically according to having a probability of being searched less than .25, between .25 and .50, or greater than .50. A contingency table analysis was then conducted to assess the relationship between one's probability of being searched as predicted by the model and whether one was actually searched. This analysis can help us to determine how accurately this model could be used to determine an individual's likelihood of being searched. Table C1 shows the results of this analysis as well as McKelvey & Zavoina's R^2 value, which provides us an overall estimate of the model's fit. The "observed frequency" represents the actual number of cases that demonstrates that cell's characteristics while the "cell percentage" represents the percentage of all cases fitting within that cell. The "row percentage" demonstrates the percentage of cases that had an actual search and those that did not, within the specified predicted probability level. The "column percentage" demonstrates the distribution of predicted probability levels for those who were not actually searched and those that were.

Approximately 26 percent of the differences found in having any search is explained by race, gender, the number of passengers, daylight, city residency, the reason for the stop, sector, and the year, McKelvey & Zavoina's $R^2 = 0.259$. The postdictions demonstrate that the complete model can be used to increase one's likelihood of predicting an individual's risk of being searched but this

relationship is weak. The model as a whole can predict very few of the cases (approximately 4 percent) that had a search at a probability greater than .50. The model predicts approximately 16 percent of the cases that had a search accurately at a probability of .25 or above.

Table B2. Factors Predicting Incident-to-arrest Searches

significant factors in bold

	Coef.	Robust Std. Err.	z	P>z	Percent Change in Odds
African American driver	0.026	0.347	0.070	0.941	2.6
Hispanic driver	**0.680**	**0.192**	**3.540**	**0.000**	**97.4**
American Indian driver	1.366	0.745	1.840	0.066	292.1
Asian driver	-0.548	0.455	-1.210	0.228	-42.2
Other race driver	**-1.481**	**0.713**	**-2.080**	**0.038**	**-77.3**
Female	**-0.649**	**0.155**	**-4.200**	**0.000**	**-47.8**
Number of passengers	0.082	0.064	1.280	0.200	8.5
Daylight stop	**-1.973**	**0.159**	**-12.420**	**0.000**	**-86.1**
City resident	-0.073	0.128	-0.570	0.572	-7.0
ORS criminal violation	-0.183	0.216	-0.850	0.396	-16.7
Call for service follow-up	**2.360**	**0.265**	**8.920**	**0.000**	**959.5**
Preexisting information	**1.903**	**0.362**	**5.250**	**0.000**	**570.9**
Equipment violation	**-0.605**	**0.164**	**-3.690**	**0.000**	**-45.4**
City ordinance violation	0.700	0.593	1.180	0.238	101.3
Other violation	**1.620**	**0.405**	**4.000**	**0.000**	**405.4**
Missing violation code	**1.175**	**0.597**	**1.970**	**0.049**	**223.7**
Constant	-4.816	0.354	-13.610	0.000	

N = 52208
Reference categories: Male, White driver, NE sector, Year 2002, Moving violation
Controlled for patrol beat/sector (6) and years (5)

Variance explained/postdictions for Factors Predicting Incident-to-arrest Searches

Table C2. Postdictions and Explained Variance for Incident-to-arrest Search

Model Predicting Incident-to-arrest Search		No Search	Search	Totals
Probability < 0.25	Observed Frequency	51,922	276	52,198
	Row Percentage	99.47%	0.53%	100%
	Column Percentage	99.99%	98.92%	99.98%
	Cell Percentage	99.45%	0.53%	99.98%
Probability > 0.25*	Observed Frequency	7	3	10
	Row Percentage	70.00%	30.00%	100%
	Column Percentage	0.01%	1.08%	0.02%
	Cell Percentage	0.01%	0.01%	0.02%
Totals	Observed Frequency	51,929	279	52,208
	Row Percentage	99.47%	0.53%	100%
	Column Percentage	100%	100%	100%
	Cell Percentage	99.47%	0.53%	100%

*None above 0.50

McKelvey & Zavoina's $R^2 = 0.305$

Approximately 31 percent of the differences found in explaining incident-to-arrest searches is due to race, gender, the number of passengers, daylight, city residency, the reason for the stop, sector, and the year, McKelvey & Zavoina's $R^2 = 0.305$. The postdictions demonstrate that the model can be used to predict an individual's risk of incident-to-arrest search but this relationship is extremely weak. The model as a whole can predict very few of the cases (approximately 1 percent) that had an incident-to-arrest search at a probability greater than .25.

Table B3. Factors Predicting Discretionary Searches

significant factors in bold

	Coef.	Robust Std. Err.	z	P>z	Percent Change in Odds
African American driver	-0.256	0.178	-1.430	0.152	-22.6
Hispanic driver	-0.179	0.127	-1.420	0.157	-16.4
Asian driver	**-0.489**	**0.186**	**-2.630**	**0.009**	**-38.7**
Other race driver	**-0.472**	**0.202**	**-2.340**	**0.019**	**-37.6**
Female	**-0.555**	**0.069**	**-8.090**	**0.000**	**-42.6**
Number of passengers	**0.365**	**0.026**	**13.930**	**0.000**	**44.0**
Daylight stop	**-1.954**	**0.076**	**-25.600**	**0.000**	**-85.8**
City resident	**0.172**	**0.063**	**2.730**	**0.006**	**18.8**
ORS criminal violation	**-0.886**	**0.148**	**-5.990**	**0.000**	**-58.8**
Call for service follow-up	**1.000**	**0.246**	**4.060**	**0.000**	**171.8**
Preexisting information	**1.578**	**0.236**	**6.680**	**0.000**	**384.7**
Equipment violation	**-0.172**	**0.067**	**-2.580**	**0.010**	**-15.8**
City ordinance violation	**1.440**	**0.231**	**6.240**	**0.000**	**322.1**
Other violation	**1.007**	**0.257**	**3.920**	**0.000**	**173.7**
Missing violation code	**0.795**	**0.358**	**2.220**	**0.027**	**121.4**
Constant	-3.926	0.164	-23.870	0.000	

N = 52131
Reference categories: Male, White driver, NE sector, Year 2002, Moving violation
Controlled for patrol beat/sector (6) and years (5)

Variance explained/postdictions for Factors Predicting Discretionary Searches

Table C3. Postdictions and Explained Variance for Discretionary Search

Model Predicting Discretionary Search		No Search	Search	Totals
Probability < 0.25	Observed Frequency	50,728	1,279	52,007
	Row Percentage	97.54%	2.46%	100%
	Column Percentage	99.80%	98.38%	99.76%
	Cell Percentage	97.31%	2.45%	99.76%
Probability 0.25 - 0.50	Observed Frequency	99	20	119
	Row Percentage	83.19%	16.81%	100%
	Column Percentage	0.19%	1.54%	0.23%
	Cell Percentage	0.19%	0.04%	0.23%
Probability > 0.50	Observed Frequency	4	1	5
	Row Percentage	80.00%	20.00%	100%
	Column Percentage	0.01%	0.08%	0.01%
	Cell Percentage	0.01%	0.00%	0.01%
Totals	Observed Frequency	50,831	1,300	52,131
	Row Percentage	97.51%	2.49%	100%
	Column Percentage	100%	100%	100%
	Cell Percentage	97.51%	2.49%	100%

McKelvey & Zavoina's $R^2 = 0.337$

Approximately 34 percent of the differences found in having only a discretionary search is explained by race, gender, the number of passengers, daylight, city residency, the reason for the stop, sector, and the year, McKelvey & Zavoina's $R^2 = 0.337$. The postdictions demonstrate that the model can be used to increase one's likelihood of predicting an individual's risk of being searched but this relationship is weak. The model as a whole can predict very few of the cases (approximately 1 percent) that had a discretionary search at a probability greater than .50. The model predicts approximately 2 percent of the cases that had a discretionary search accurately at a probability of .25 or above.

Table B4. Factors Predicting Combination Searches

significant factors in bold

	Coef.	Robust Std. Err.	z	P>z	Percent Change in Odds
African American driver	-0.310	0.200	-1.550	0.121	-26.6
Hispanic driver	0.179	0.121	1.470	0.141	19.6
American Indian driver	-0.297	0.734	-0.400	0.686	-25.7
Asian driver	**-0.850**	**0.246**	**-3.460**	**0.001**	**-57.3**
Other race driver	-0.397	0.212	-1.880	0.060	-32.8
Female	**-0.598**	**0.075**	**-7.930**	**0.000**	**-45.0**
Number of passengers	**0.290**	**0.029**	**10.010**	**0.000**	**33.7**
Daylight stop	**-2.131**	**0.083**	**-25.780**	**0.000**	**-88.1**
City resident	-0.070	0.066	-1.060	0.287	-6.8
ORS criminal violation	**-0.996**	**0.172**	**-5.800**	**0.000**	**-63.1**
Call for service follow-up	**1.666**	**0.210**	**7.930**	**0.000**	**429.2**
Preexisting information	**1.843**	**0.235**	**7.860**	**0.000**	**531.7**
Equipment violation	**-0.560**	**0.078**	**-7.190**	**0.000**	**-42.9**
City ordinance violation	0.188	0.373	0.500	0.614	20.7
Other violation	**2.449**	**0.198**	**12.380**	**0.000**	**1057.6**
Missing violation code	0.553	0.431	1.280	0.199	73.9
Constant	-2.912	0.150	-19.360	0.000	

N = 52208

Reference categories: Male, White driver, Patrol beat 1, Year 2002, Moving violation

Controlled for patrol beat/sector (6) and years (5)

Variance explained/postdictions for Factors Predicting Discretionary Searches

Table C4. Postdictions and Explained Variance for Combination Searches

Model Predicting Multisearch		No Search	Search	Totals
Probability < 0.25	Observed Frequency	50,971	1,048	52,019
	Row Percentage	97.99%	2.01%	100%
	Column Percentage	99.77%	93.82%	99.64%
	Cell Percentage	97.63%	2.01%	99.64%
Probability 0.25 - 0.50	Observed Frequency	99	46	145
	Row Percentage	68.28%	31.72%	100%
	Column Percentage	0.19%	4.12%	0.28%
	Cell Percentage	0.19%	0.09%	0.28%
Probability > 0.50	Observed Frequency	21	23	44
	Row Percentage	47.73%	52.27%	100%
	Column Percentage	0.04%	2.06%	0.08%
	Cell Percentage	0.04%	0.04%	0.08%
Totals	Observed Frequency	51,091	1,117	52,208
	Row Percentage	97.86%	2.14%	100%
	Column Percentage	100%	100%	100%
	Cell Percentage	97.86%	2.14%	100%
McKelvey & Zavoina's R^2 = 0.341				

Approximately 34 percent of the differences found in having a combination search is explained by race, gender, the number of passengers, daylight, city residency, the reason for the stop, sector, and the year, McKelvey & Zavoina's R^2 = 0.341. The postdictions demonstrate that the complete model can be used to increase one's likelihood of predicting an individual's risk of being searched but this relationship is weak. The model as a whole can predict very few of the cases (approximately 2 percent) that had a discretionary search at a probability greater than .50. The model predicts approximately 6 percent of the cases that had a discretionary search accurately at a probability of .25 or above.

The postdictions for predicting Any Search are stronger than for the individual search types. This may be somewhat related to the reality that multiple search types occur in the original coding and were altered to fit mutually exclusive categories.