

Critical Issues in Justice and Politics

Discussing the present - Influencing the future

Department of Political Science & Criminal Justice

Southern Utah University

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Subscription Information

Critical Issues in Justice and Politics is a refereed (peer-reviewed) journal which contributes to the theoretical and applied nature of justice and politics. We are a scholarly journal that requires all articles to undergo an extensive review process for both content and format. Our emphasis is on the exchange of qualified material in order to generate discussion and extend the often limited boundaries of scholarly exchange.

Critical Issues in Justice and Politics is sponsored by the Department of Political Science and Criminal Justice and the Institute of Policy Analysis at Southern Utah University. The editorial board is comprised of faculty from the department as well as select faculty and practitioners from around the United States.

Published twice a year (Spring and late fall) *Critical Issues in Justice and Politics* focuses on emerging and continuing issues related to the nature of justice, politics, and policy. A special emphasis is given to topics such as policy, procedures and practices, implementation of theory, and those topics of interest to the scholar and practitioner alike.

Nature of Electronic Publication:

Critical Issues in Justice and Politics is considered a serials publication under definitions by the Library of Congress and the International Standard Serial Number (ISSN) system. The ISSN number, along with identifying information for the serial publication, appears on all copies of the journal. The journal may be obtained online or through many of the traditional research databases in academia.

Because we publish online we provide a wider audience than most small, scholarly journals. The cost of other journals can be restrictive; often making purchase and use of the journal difficult for

the average faculty member. Through our electronic format we provide access to the journal at no cost to qualified subscribers. This provides a larger audience with increased opportunity for those who wish to publish.

Copies are distributed via email and online access to subscribers first. Authors receive access to the electronic copy and may purchase print copies.

We are an electronic journal that is published using the Portable Document Format (PDF).

Submission Guidelines

Critical Issues in Justice and Politics welcomes submissions from anyone who can write a high quality scholarly article. We are especially interested in scholarly, critical, and constructive articles that focus on an emerging or continuing issue in justice and politics. We also seek review essays (reviews of recent literature on a given topic), reports of significant justice or political issues, book reviews, and position papers worthy of scholarly review and comment.

It is the editorial policy of *Critical Issues in Justice and Politics* to accept submissions from all disciplines so long as the material relates to justice and politics. We also encourage submissions from practitioners, students, and others who have an interest in the topics.

Simultaneous Submissions

We accept only manuscripts which are not under review by other journals or publications. We endeavor to review all manuscripts in a timely fashion, so simultaneous submissions are not usually necessary. Refereed submissions are submitted within forty-eight hours of acceptance and we generally ask reviewers to complete their

assignment within 10 working days. In most instances an editorial decision may be reached within a month of submission.

Non-refereed materials usually receive attention within the first week of submission. An initial editorial decision is often made within 5 business days.

All papers submitted for refereed publication will be sent to at least two reviewers. We use a blind-review process which submits papers in anonymous format. If there is a clear split between the reviewers then a third reviewer may be used when necessary for clarification or additional comment. We do rely very heavily on our reviewers for insight and recommendations. All of our reviewers hold the appropriate degree and experience to qualify them for the particular project.

Reviewers are asked to evaluate manuscripts on the basis of their scholarly competence as well as the potential contribution to appropriate theory or related areas. Authors may not contact reviewers during the process, and reviewer names are not disclosed unless the reviewer agrees for such disclosure.

Authors who dispute the findings or suggestions of a reviewer may submit their response in writing. Final decisions on publication remain the domain of the editor.

For more information or to submit an article or other material for review please see our webpage.

Journal Webpage: <http://www.suu.edu/hss/polscj/CIJP.htm>

From the Editor

As we end the sixth year of Critical Issues in Justice and Politics' publication, our authors present a diverse set of research agendas that span the editorial mission of the journal. From den Heyer's work on Consolidation of Policing to Heath's and Bowen's work on the relationship of citations and vehicular accidents, our understanding of the intersection of justice, politics, and public policy are explored through a variety of approaches.

As you may have noticed our publication approach has been modified to better reflect our commitment to providing the widest distribution possible for those who publish in CIJP. We are now publishing as an Open Access Journal. While this change in publication has occurred, no change has been made to the peer review process, or our commitment to publishing high quality research, and no submission or publication fees will be charged, unlike many Open Access journals. The continued support of Southern Utah University and the Department of Political Science and Criminal Justice makes this approach possible.

Issues of justice and politics remain a vital and important area of discussion among both the academic scholars and practitioners with an interest in answering the 'big' questions of what is justice, and how do the philosophical ideas of justice translate into the criminal justice and political system. Applying Social Science to these questions remains an area of particular interest to the editors and editorial board of CIJP and we invite both scholars and practitioners to submit their responses to these questions for our upcoming spring edition.

As always the work of our Managing Editor Sandi Levy makes publication possible. Without her tireless efforts there is no doubt that this journal would neither exist nor have arrived at this level of quality, and I thank her for that work. We hope you enjoy the articles included in this edition and invite you to submit your articles to cijp@suu.edu.

Best,

Dr. Ryan M. Yonk

Managing Editor, Critical Issues in Justice and Politics

American Policing In an Age of Austerity and Globalization: An Option to Face the Challenge

Garth den Heyer
Senior Fellow, Police Foundation, Washington DC

This paper argues that police should respond with more significant re-organizational strategies if they are to improve the efficiency and effectiveness of policing in America in an environment of constrained budgets and to counter the increase in the globalization of crime. The paper discusses strategies within the context of decentralisation and identifies that the consolidation of police services, especially the merging of agencies or specific services or the regionalization of agencies, could be one option to increase the efficiency and effectiveness of service delivery. Although police reform, transparency and accountability are important concerns for police agencies when considering methods for maintaining community services with decreasing resources, the implementation of any form of consolidation must be able to take into account local accountability. This article expands the research of police structural strategies and systems reform to meet dynamic environments by reducing organisational duplication and by focusing on the consolidation of police services to increase the effectiveness of service delivery.

Introduction

In late 2007, the United States suffered the worst economic and financial crisis in 70 years (Hilsenrath, Ng and Paletta, 2008). This crisis subsequently placed pressure on state and municipal budgets and resulted in cuts to Police agency budgets (Police Executive Research Forum, 2009; 2011). In the current climate of austerity, with decreasing resources and more public demand, it is important to examine how policing is structured and what different modes of organisation can deliver (Innes, 2011).

The change in the economic operating environment has been viewed by most police agencies and commentators as being temporary, and, therefore, there has been no fundamental strategic change as to how police agencies deliver services. Only short term budgetary savings have been made because the necessary fundamental strategic changes to an agency's service delivery procedures have not been made. The methods of change currently used by agencies do not deal comprehensively with the changing environment and may be perceived as tinkering at the margins rather than being structural in nature.

This article discusses the elements which affect the economic environment in which American police agencies operate. These elements have created the need for police to undertake significant strategic organisational

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change. Organisational change is needed to ensure that the expectations of the public are met and that the current level of service that police agencies offer are maintained within the constrained budgetary environment.

This article takes the perspective that there has been a fundamental shock to the entire economic system and that the rules of the game have changed extensively. American police agencies need to be cognisant of the extensive changes in the economic and wider operating environment and the affect that these changes have had on the delivery of core police services in neighbourhoods, towns and cities. Police agencies need to adapt the core services that they provide to cope with the changes in the economic and operating environment. The nationalisation and internationalisation of gangs, transportation and dealing of drugs, money laundering/financial crime, human trafficking, firearms sales and terrorism all form a new policing operational environment (Police Executive Research Forum, 2009; 2011; Bayley and Perito, 2010; Casey, 2010). A local neighbourhood Police Officer in Kansas City, Missouri may come upon an offence that has linkages to, and may require subsequent follow-up inquiries in Los Angeles, Liverpool, England and Auckland, New Zealand. Conducting extensive and time consuming international investigations consume the resources of local police agencies.

The principle difference between policing in the United States compared to the majority of other countries is its decentralization and its local accountability. Decentralization and local accountability will be discussed within the parameters of how they can be built upon to strengthen organizational service delivery. It is accepted that policing is part of the fabric of the American political dynamic, and decisions about it will inevitably be made within the context of compromise and in light of other political realities (Farmer, 1978). As Farmer (1978) notes, the future of American policing will be made in an incremental and highly politicised fashion. However, the realities of the 21st century exert pressure on previous approaches taken in police reform. Another factor that needs to be considered by police decision makers in any proposed reform plan is the political backdrop.

What should the general shape and character of police agencies and services be to ensure that American policing is flexible and adaptable? In particular, how should police agencies be composed, structured and organised? Tentative answers to these strategic and fundamental questions are offered from the analysis of seven organizational consolidation approaches to improve the efficiency and effectiveness of police agencies in an age of austerity and to counter the globalization of crime. While consolidation may provide benefits in the form of increasing a police agency's service delivery to the public, it can also create a number of sensitive political issues that require extensive negotiation to

provide an equitable resolution (New Jersey Association of Chiefs of Police, 2007).

The New Realities of the 21st Century

The interaction between demographic, social, financial and criminal variables has fundamentally changed. The environment that the police currently face at the local, state and national level did not exist ten or even five years ago. While some researchers agree that these variables have influenced change in policing (Police Executive Research Forum, 2009; 2011), a number of other researchers claim that the tragic events of September 11, 2001, were the catalyst for the changes (Davis, Pollard, Ward, Wilson, Varda, Hansell and Steinberg, 2010). Whilst 9/11 has had a profound effect on American policing (White, 2003; 2004; Cortright and Lopez, 2007), more recent changes are a direct result of policies that were introduced in the late 1980s and early 1990s. The federal funding of the recruitment of community police officers and the internationalisation of the war on drugs has implemented two opposing approaches to the delivery of police services (Kraska and Paulsen, 1999).

While a number of factors have had an effect on the policing environment, two principle factors have created the conditions for the change in how policing is organized and delivered in the United States. The first is the depth of the 2007 financial crisis and the corresponding decrease in police agency budgets, and the second, is the globalisation of crime and the local police response.

It would have been difficult to foresee how deep and far reaching a financial crisis could be, even after the implementation of safeguards following the 1987 share market crash. The current economic downturn has been especially felt by state and local bodies, with a number of United States cities declaring bankruptcy (McKinley, 2008). The current fiscal crisis may exist for the next five years or more, and it may be even longer before budgets return to pre-2008 levels, if ever, in real dollar terms or purchasing power (Cohen McCulloch & Spence, 2012). Given the extent of the financial crisis, simply trying to outlast decreasing budgets is not a long term or viable option (Community Oriented Policing Services, 2011) for police agencies, but has created a situation where police managers need to develop and implement more fundamental and strategic longer term organizational improvements.

According to Wiseman (2011), public administration experts have advised that the maximum budget cut that an agency can sustain is seven per cent in any one year, or 15 per cent over three years. Agencies should be able to absorb these budget cuts, but a greater percentage cut to a budget would require

extensive and fundamental changes in processes, procedures, service delivery levels and resource levels (Gorringer, 2001; Wiseman, 2011).

Decreasing state and local budgets has, and will, continue to focus on the provision of services, and, by implication, the services provided by police agencies. The contraction of state and local budgets and services has had an influence on how police services are delivered in a number of states and cities (Community Oriented Policing Services, 2011). A setting has been created where police managers are implementing short-term organizational changes in an attempt to maintain previous service levels. For example, some police managers have made extensive personnel and operational changes which have included, not giving the priority to, or, not attending non-violent events and non-injury vehicle crashes and by laying off sworn and non-sworn staff.

Reducing the number of police agency staff and the non-delivery of some services may assist in balancing an agency's budget in the short term, but in the longer term, the problems will remain. The weakness of the approaches taken, because agencies are required to maintain services with fewer resources, is that they provide very limited short-term benefits, decrease the agency's capability and capacity, and prove to be both economically and organisationally unsustainable in the longer term (Gorringer, 2001). The expectations of the public for the delivery of police services will not decrease, and in fact, in some neighbourhoods and cities, the financial crisis and the increase in social deprivation may result in an increase in demand for police services (Police Executive Research Forum, 2009; 2011; den Heyer, 2009). Kleiman (2010) noted that the prime social factors which combined to create the crime boom in the latter part of the 20th century were population demographics and deprivation (for an opposing view see Cohen and Felson, 1979; Clarke and Felson, 1993). The responses taken to the change in the economic environment do not improve the efficiency or effectiveness of an agency, or enable resources to be better managed. Rather, they focus on the balancing of budgets through the cessation of existing services and the severance of staff. While there are some examples of agencies reviewing their structures, sharing communications dispatch centres, returning specialist squad members to patrol duties and forming multi-agency SWAT teams, there are limited examples of agencies undertaking extensive organisational structural or procedural reviews, or of agencies merging their support services or merging their entire organisations (The Institute for Public Policy and Economic Development, 2010; see Sheriff King County 2010 for contacting services to increase organisational efficiency).

The second major factor affecting the policing environment is the globalization of crime and the response to its occurrence. For example, according to the National Drug Threat Assessment 2010, of the 20 organised

gangs domiciled within the United States that have significant influence on the US drug market, all but two have affiliations with Mexican drug cartels, and more than half of the gangs are affiliated with more than one organisation (National Drug Intelligence Center, 2010). Very little is known about the link between organized and local crime, but police must be able to respond to both (Hagedorn, 2007). This is important because the globalization of crime has a negative impact on local communities. It no longer makes sense to respond to some crimes in one locality without referring to what is occurring in other localities or internationally. Furthermore, the number of agencies responding to the occurrence of crime has expanded from municipalities and state governments to include private security companies and voluntary organizations.

However, globalization is the over-arching variable in a large number of elements that have had, or are having, an influence on the way that policing is undertaken or delivered in neighbourhoods or cities. Changes in crime patterns have created a moving panorama of criminal opportunities, threats and risks that have an impact on public demand for police services (Ratcliffe, 2008). Although the occurrence of crime has decreased in most developed nations and is increasing in undeveloped and under-developed nations, it is the type of crime that is changing in the international space (United Nations Office of Drugs and Crime, 2011). As these crimes include significant amounts of money and drugs, they create a challenge to co-ordinate law enforcement activities across nations (United Nations Office of Drugs and Crime, 2011). Table 1 presents a number of the conditions and elements that are influencing the need for significant change in American policing. A number of these conditions and elements are fundamental, and when taken together, form a compelling argument for examining the structure of police agencies and their service delivery procedures.

Table 1: Factors Creating Conditions for Significant Change in American Policing

	Condition	Element
1	Economic	<ul style="list-style-type: none"> - The seeking of organisational efficiency - The seeking of organisational effectiveness - Doing more with less
2	Expanding role	<ul style="list-style-type: none"> - Counter Terrorism since 9/11 - National security - Homeland security - Emphasis on covering all risks
3	Environment/social	<ul style="list-style-type: none"> - Changing demographics - ethnicity, more educated, y generation - The increasing concentration of economic and financial capital controlled by a minority - The increasing income gap and growing income inequality - Different patterns of urban development - Fragmentation of families and communities - New patterns of social mobility - Perception or need for accountability - More whole of government approach to social and emergency issues - The advent of fast communications and the increased use of social media
4	The form of crime	<ul style="list-style-type: none"> - Nationalisation - Internationalisation - Drug trafficking - Terrorism - Cybercrime - Human trafficking - Public protests - Violence of offenders

Source: Author

Current Structure of American Policing

The history of the United States has influenced how policing has developed to the point where it is today (Treverton, Wollman, Wilke, and Lai, 2011). American policing is geographically based and is structured as local, state and federal entities and is a legacy of the incremental acceptance and

introduction of bureaucratic, but local policing. In regard to service delivery, this structure has been identified as having a number of strengths and weaknesses (Maguire, 2003; New Jersey Association of Chiefs of Police, 2007). The perceived strength of decentralization is that local police are part of the community, and will, therefore, be responsive to their community (Maguire, 2003). Local police will also have a vested interest in the level of crime within the community and the level and quality of service provided. The large number of agencies that are replicated across the country, and the large number of agencies that are not able to offer a full range of services because of their small size are the weaknesses of a decentralized structure (Farmer, 1978; New Jersey Association of Chiefs of Police, 2007).

In comparison to other Five-Eyes¹ member countries, with the exception of Canada, American policing is extremely decentralized with nearly 18,000 federal, state, local and tribal law enforcement agencies (Reaves, 2011) for approximately 309 million people (US Census, 2011). Table 2 presents the number of police agencies and the number of sworn police officers (publicly funded law enforcement agencies with the full-time equivalent of at least one sworn officer with arrest powers) for the Five-Eye countries and for three of the larger European countries. The number of agencies and the number of sworn officers presented in the Table can be compared to those of the United States. As the Table illustrates, the United States has the largest number of Police agencies by a significant factor and the second largest number of sworn officers. The number of Police agencies in the United States, when compared to other Western democracies on a population basis, as noted by Farmer (1978), 'has an Alice-in-Wonderland quality' (p. 32).

¹ The expression Five-Eyes is from the international intelligence sharing arrangement between the USA, the UK, Canada, Australia and New Zealand. The countries are referred to as the 'Five-Eye Partners'.

Table 2: Number of Police Agencies and Sworn Police Officers for Sample Countries

	Country	Country Population (in millions)	Number of Police Agencies ²	Number of Sworn Police Officers
1	United States of America ¹	309	17,985	861,000
2	United Kingdom ¹	62	56 ³	162,875
3	Australia ¹	22.5	8	47,201
4	Canada ¹	34.5	205	64,134
5	New Zealand ¹	4.5	1	8,200
6	France	66	3	238,478
7	Germany	82	23	250,353
8	Russia	143	2	1,100,000

¹ English speaking (though Canada includes a bi-lingual state)

² Federal, State and Local Agencies

³ Includes England, Wales, Scotland and Northern Ireland and Special Police Forces

Source: US information gathered from Department of Justice, UK information gathered from the Home Office, Canada information gathered from RCMP, Australia information was gathered from the Department of Prime Minister and Cabinet, New Zealand Police information was gathered from the Department of Statistics, France information was gathered from <http://www.gouvernement.fr/>, Germany information was gathered from http://polis.osce.org/countries/details?item_id=17, Russia information was gathered from http://en.wikipedia.org/wiki/Police_of_Russia.

The information contained in Table 2 may be reformatted in order to compare the average number of sworn officers per agency and the number of sworn officers per 100,000 population to the other countries presented in the Table. The results of this comparison have been presented in Table 3. Although the figures are only an indication, as the United States figures include all the big city police forces such as the NYPD, LAPD, Chicago PD, Philadelphia PD and Houston PD, the United States, has on average, the lowest number of sworn officers per agency, but the highest number of sworn officers per 100,000 population of the Five-Eyes countries. The fact that America has a large number of smaller police agencies means that it has the largest potential to make significant organizational efficiency and effectiveness gains from the examination of the options available from consolidation (Krimmel, 1997).

Table 3: Number of Police Agencies and Sworn Police Officers for Sample Countries

	Country	Average Number of Sworn Officers per Agency	Number of Sworn Police Officers per 100,000 population
1	United States of America	48	277
2	United Kingdom	289	263
3	Australia	5,900	210
4	Canada	313	186
5	New Zealand	8,200	182
6	France	79,493	361
7	Germany	10,885	305
8	Russia	550,000	769

Source: Author

Weaknesses of Current Structure of American Policing

The history of American policing has had an impact on the structure and the decentralized nature of policing practice in the United States. The decentralized nature of American policing does not enable it to adapt rapidly to the current economic crisis or to the trend of globalization of crime (Treverton, et. al., 2011). A decentralized structure, owing to its nature, is fragmented and is not effective, as globalized crime does not respect the presence of borders or the imposition of legal jurisdictions (Treverton, et. al., 2011). According to Treverton, et. al. (2011) the organisation of policing by jurisdictions makes little sense as it matches the occurrence of “crime in fewer and fewer respects” (p. 44). Furthermore, due to the level of decentralization, police structures cannot, other than in the big city agencies, absorb large budget cuts without making extensive changes to the organization, their processes, or their structures (Gorringer, 2001).

While police agencies have attempted to minimize the weaknesses of decentralization by establishing task forces and fusion centers and by sharing information on specific offences, routine information sharing is rare (Ratcliffe. & Guidetti, 2008). It is even more uncommon for agencies to share their resources, their assets or their support services. This approach to the delivery of police service has created gaps in enforcement which criminals are using for their benefit (Treverton, et. al., 2011). For example, during the shooting of US congresswomen Gabrielle Giffords in Tucson, Arizona, more than a dozen police agencies responded, none of which were able to communicate with each other, creating issues in deploying SWAT teams, investigators and patrol officers (Bailer, 2011). Possibly the most catastrophic example of failure in communi-

ation interoperability is between the policing agencies that responded to the terrorism event of the Twin Towers during 9/11.

The lack interoperability is not only prevalent between local or city agencies, but creates a vacuum between local and federal agencies. Ineffective communications may create opportunities that allow criminals to take advantage. The US-Mexico border is one such example. Although there are a number of examples of excellent working relationships between local police agencies and federal law enforcement, there are numerous examples of the non-sharing of information and the guarding of individual jurisdictions (see Olsen, Shirk, & Slee, 2010). The shortcoming in the sharing of information at the national borders has resulted in the trafficking of people and drugs which has enabled locally based gangs to continue, and in some cases, expand their criminal activities, which influences crime at the local level (Hagedorn, 2007). For example, the MS-13 has developed from being a Los Angeles-based street gang to a gang which is loosely organized, with cells across the nation, to an increasingly efficient and dangerous organization that has become known in recent years for home invasion robberies, drug dealing and machete attacks on its enemies (Johnson, 2006).

The final point to be made in regard to the weakness of policing structures is that there is no national or co-ordinated voice for policing and law enforcement. While the Department of Justice and its satellite organisations fund and research aspects of policing, and that there are a number of Washington DC based police research agencies, universities, and institutes throughout the country that undertake elements of police research or deliver courses in policing, there is no national, political police representative.

Measuring Police Agency Effectiveness

In response to the economic crisis and the constraints on police agency budgets, police managers have attempted to increase the efficiency of their agency by reducing costs and to increase effectiveness of their agency by improving performance without increasing resources.² However, as performance measures or methods to measure performance have not been agreed upon, the problem remains as to how to measure an agency's performance and how to identify what the measures should be based upon. Very few service delivery matrices exist, and the majority of police agencies rely on quantitative performance measures such as the number of calls for service, the number of

² Effectiveness can be defined as the extent to which a particular resource is accomplishing its purpose, often assessed without regard to costs or other inputs. Efficiency measures, on the other hand, indicate the degree to which police hours, or other input resources designated to perform particular activities, in fact do so.

crimes reported and the number of crimes cleared to measure their performance.

In economic literature, productivity is generally measured in terms of output obtained for a given input and is widely defined as encompassing both effectiveness and efficiency (Hatry, 1975; Cloninger and Sartorius, 1979). However, the terms effectiveness and efficiency are frequently misused in relation to police work, with police officers attempting to prove their effectiveness by pointing to their efficiency in specific areas (den Heyer, 2009).

Distinguishing between effectiveness and efficiency is necessary when examining a police agency's service delivery performance, as the organization may indeed be efficient but unless its activities accomplish the desired output or outcome it cannot be regarded as being completely effective. Similarly, an organization may be deemed effective but it may not be operating at minimal cost, or if its inputs are wasted on conversion to output, it cannot be regarded as being efficient (den Heyer, 2009).

The second area where confusion exists in regard to effectiveness is the difference between 'police effectiveness' and 'crime control effectiveness' (Skogan & Frydl, 2003). The term 'police effectiveness' includes measures of performance that pertain to those areas of police productivity which are capable of being measured, for example, recorded crime, number of arrests and resolution rates (Skogan & Frydl, 2003). On the other hand, 'crime control effectiveness' includes those less tangible areas of activity, which are difficult, if not impossible, to measure, such as crime prevention, social assistance and the maintenance of public order (Fisk, 1974). A situation could arise in which apparent increases in police effectiveness occur without a commensurate increase in crime control.

The fact that there is not an agreed upon methodology of measuring performance should not stop police managers from considering how to maintain or improve their agency's service delivery or to be able to respond to crime more effectively. The majority of police forces in the United Kingdom that changed their management structures in response to a decrease in the number of police officers, were able to maintain their level of services to the public (Her Majesty's Inspectorate of Constabulary, 2013).

Organizing American Policing for Sustainable Effectiveness

There are two options available when increasing the effectiveness of police agency service delivery in the United States of America. The first option is the status quo. In other words, do not think about improving policing or the delivery of services, but continue to respond to shrinking budgets in the historical manner of laying off staff, forcing leave and the non-attendance of officers at non-violent events. The second option is to view the dynamic environment as an

opportunity to examine the structure and the organization of policing. The second option tests the reasoning of the structures of American police organizations and allows the question to be asked ‘why is policing conducted in this fashion?’ The second option does not need to be radical or threatening to individuals, communities, or agencies. It is simply presenting a case for police agencies to think more strategically when looking for ways to become more efficient and to maintain effectiveness with fewer resources. This approach is often encapsulated in the expression ‘do more with less’. The expression is often viewed as negative, especially by those who do not have an understanding of the institutional economics of New Public Management (NPM) (den Heyer, 2011). The expression to do more with less is one aspect of a government’s philosophy of ‘value for money’ when delivering public services. The expression is not negative, but is an illustration of the steps that need to be taken to re-engineer the structures and processes of public sector agencies to maintain community and political outcomes (Gorringer, 2001).

To non-Americans, police agencies in the United States, until the 2007 economic crisis, appeared to be immune from the realities of the changes that had taken place in policing. Although, the NYPD developed and implemented the Compstat management process in the mid-1990’s (Bratton, 1998) and a number of agencies (Weisburd, Mastrofski, Greenspan and Willis, 2004) had followed suit in order to improve their agency performance, police agencies in the United States had not undertaken the extensive fundamental management, structure and process changes experienced since the 1980’s by police in the United Kingdom, New Zealand and Australia.

Operating costs have been forecast to rise (Police Executive Research Forum, 2009, 2011; Crank, Kadleck and Koski, 2010; Wiseman, 2011) over the next five to ten years, and police agencies will be challenged to maintain services at their current levels. Agencies must develop new ways of delivering services and administration processes with current or decreasing levels of resources in order to continue to achieve objectives or required outcomes. According to Wiseman (2011), research has shown that where budget constraints have been applied for more than three years, organizations have created new financial and accounting procedures, and have targeted their use of resources. These new procedures are more comprehensive and embody an organisational strategic management approach to agency processes and service delivery (Wiseman, 2011). This holistic total agency approach to the police organization ensures that any proposed structural or procedural change is systematic and can be incorporated to improve the agency’s efficiency and effectiveness and is a good model for agencies to use as they deal with new challenges.

The second option in this discussion comprises of two alternative approaches that can be used to analyse how the structure of American policing could be changed to maintain effectiveness within an environment of constrained budgets and to respond to the increasing level of the globalization of crime. The first alternative, is to view police agencies from a more theoretical or fundamental perspective, and the second view, takes a more operational perspective.

One theoretical organisational perspective proposed by Kettl (2002; 2008) and Daniels, Kettl and Kunreuther (2006), is that public sector organizations may be set-up to fail. However, Kettl (2002, 2008), subsequently notes that organizations are not set-up to fail, but they require constant observation to identify internal and external procedure and process gaps to ensure that the agency remains efficient and effective in the production of its outputs.

Governments and councils have developed public agencies that have clear missions and strict accountability regimes, but they manage problems by constructing procedural and geographic boundaries. However, in a policing context, agencies and communities face problems that do not take cognisance of boundaries. Unless police agencies can find effective strategies to bridge those boundaries, they will struggle to solve the problems they face. The current economic crisis exacerbates the need to find strategies to maintain agency effectiveness. The new policing environment calls for moving beyond the traditional approach to diminishing budgets and requires strong leadership and new methods of delivering services. If agencies fail to adapt to the new environment, or, if they try to rely principally on short-term remedies and the laying off of staff to solve these problems, police organizations are setting themselves up to fail.

The intentional decentralization of police agencies in the United States ensures that important checks and balances in a government are provided, but it also means that there is a greater need for agencies to collaborate. Collaboration between agencies is a mature and sophisticated bureaucratic response to incidents and events. However, centralizing an organizational structure requires an acceptance of the greater good and eliminates the territorial or silo agency perspective.

Police agencies typically face two variables when considering any form of organizational restructuring. The first is for the agency to governmentalize the organization, and the second, is to remain accountable to local citizens. Centralizing organizations is an effective method to reduce costs through economies of scale.³ However, the need to balance centralisation and local

³ The long-term reduction in average (or unit) costs that occurs as the scale of an agency's output is increased.

accountability places conflicting demands upon police agencies. The pressure to introduce centralization normally comes about because of a need or at least an opportunity to reduce costs by reducing the number of agency locations or by centralizing all operations or administrative support services in one location (New Jersey Association of Chiefs of Police, 2007). When centralizing an agency, establishing the administrative or support services at the most favourable low cost location would reduce duplication. Conversely, for an agency to be accountable to its local community it must maintain its services across its community and accommodate niche civic demand.

When re-organizing policing to increase the efficiency and effectiveness of service delivery at the local, city and state level, there are seven alternative structural approaches that could be considered. The use of such a structural approach is often referred to by economists as process, procedure or organizational 'consolidation' and includes the sharing of services between agencies, local mergers, regionalization, the contracting of services, outsourcing, civilianization and internal consolidation (Pass, Lowes, Davies & Kronish, 1991; New Jersey Association of Chiefs of Police, 2007). Table 4 presents the definition of each of the alternative consolidation approaches. As the Table identifies, these approaches can comprise of very little or extensive/comprehensive change to organizations or systems and processes.

Table 4: Definitions of Approaches to Organisational Consolidation

Form of Consolidation	Definition
Shared Services*	Two or more agencies combine specifically defined administrative or functional services or units. These could be human resource services, accounting, communications, dispatch, specialist squads, the use of buildings or the administration and storage of records.
Local Merger*	Two or more separate police agencies join to form a single larger or new organisation.
Regionalisation*	A number of jurisdictional based agencies combine to form one large agency which is geographically based.
Contracting Services*	A formal contract to pay for law enforcement services provided by one jurisdiction to another or others.
Outsourcing	A formal contract for administrative or support services provided by non-law enforcement agencies.
Civilianisation	The replacement of sworn officers by non-sworn staff in non-operational technical or administrative positions.
Internal consolidation	The internal combining or elimination of operational or support units.

* (adapted from New Jersey State Association of Chiefs of Police, 2007)

Consolidation of police agencies may take place at a number of different levels within an organisation or may include the entire agency (Pachon & Lovich, 1977; New Jersey Association of Chiefs of Police, 2007). For example, the agency may share its SWAT team with a neighbouring agency yet still be a part of a regional dispatch network. This means that an agency may adopt a number or a combination of the seven consolidation approaches. For example, the agency may outsource the management of its records and merge with a contiguous agency.

These seven consolidation approaches provide a phased process framework to re-organising police agencies. Using a phase approach would enable an agency to be cautious in how it undertakes and implements any fundamental strategic change to its structure or processes. A phased approach may consist of an agency initially merging with a contiguous police agency and then, three years later, that joint police agency merging with another contiguous agency, or, owing to a number of agencies merging across a region they all merge to form a regional institution. The approach may also apply to an internal or external police agency service. For example, two agencies may merge their communications and dispatch centres, and eventually either merge or provide services to other police agencies in the region or the state.

The consolidation of police services or agencies may offer a number of realizable organizational financial and systems benefits (Pachon & Lovrich, 1977; Loveday, 1995a, 1995b, 2006; Krimmel, 1997). The principle benefits by consolidation type that may be realized are presented in Table 5. The benefits presented in the Table include decreases in administrative overheads and the improved efficiency of the management of resources. Table 6 expands the analysis of the possible benefits by presenting the before and after impact of consolidation on individual elements of a police agency.

Table 5: Realizable Benefits of Consolidation

Form of Consolidation	Principle Form of Reliable Benefits
Shared Services Contracting Services Outsourcing	<ul style="list-style-type: none"> ● decrease in support staff and systems ● rationalization of building and equipment ● rationalisation of information and technology support systems ● decrease in administration ● decrease in payroll and benefits costs ● decrease in Human Resources activities e.g. Recruitment and appointments ● reduced capital outlay

Table 5 (continued)

Form of Consolidation	Principle Form of Reliable Benefits
Local Merger Regionalisation Civilianisation Internal Consolidation	<ul style="list-style-type: none"> ● decrease in support staff and systems ● rationalization of building and equipment ● Increase in purchasing power ● decrease in senior management and executive officers ● reduction of the duplication of work processes ● rationalisation of information and technology support systems ● decrease in administration ● decrease in payroll and benefits costs ● reduced capital outlay ● decrease in Human Resources activities e.g. Recruitment and appointments ● centralization of training structures

Source: Author

All of the approaches presented in Table 6 should enable savings to be made and allow agencies to concentrate on their core activities (Cordero, 2011). Mergers or regionalization may however, provide better options (New Jersey Association of Chiefs of Police, 2007). These forms of consolidation need to be balanced with local accountability, but can enable agencies to make saving by decreasing duplication in administrative support services and systems, and increase organizational flexibility and effectiveness through the availability of more operational staff (Her Majesty's Inspectorate of Constabulary, 2013). Street (2011) claimed that in the first year of the merger of two United Kingdom police forces, Bedfordshire and Hertfordshire, \$4.5 million in annual year-on-year savings were made, with an increase in police service to both communities. These savings were achieved without decreasing the number of police officers (Street, 2011).

Table 6: The Impact of Organisational Consolidation

Element	Before	After
Structure	Functional silos	Service delivery oriented
External relationships	Independent; many territorial agencies	Interdependent
Organizational integration	Vertical	Virtual – Information Technology and other mechanisms permit integration without ownership
Flow of information	Little or no information management	Information real time – forms basis of strategic and operational decisions
Processes	In-house	In-house for key processes, others out-sourced for flexibility, integrated and synchronised to match organizational demand
Management	Reactive, defined by unit specialization, no or little forecasting	Proactive, flexible
Resources	High, bureaucratic	Targeted use
Deployment	Inflexible	Flexible, capacity to target
Operations	Separate agencies	Single agency with resourcing

Source: Author

The current economic environment presents a unique opportunity for examining how police agencies allocate resources and undertake service delivery (Cordero, 2011). According to Community Oriented Policing Services (2009), there has been an increase in the number of agencies “combining efforts and resources through consolidation, shared services, and regionalization” (p. 35). The benefits of consolidation provide compelling reasons and mutually persuasive incentives for exploring new solutions to improve police agency productivity, efficiency and effectiveness.

While merging and regionalizing police agencies to the extent of establishing a national police force can be excluded, the merging and regionalization of agencies does provide a potential foundation to further professionalize American policing. Even though steps have been taken in this direction in

the past, further professionalization can be achieved through the standardization of training, procedures, performance measures and information systems (Her Majesty's Inspectorate of Constabulary, 2013). However, any progression towards state or regional standardization would need to include a robust local accountability framework (Cordero, 2011).

Reorganizing American policing is a long term objective, and the future of local policing depends largely upon how local, city and state governments, in conjunction with police leaders, adapt to the new environment without eroding the level of local service delivery. As noted by Cordero (2011), the new environment has created the need for a more focused effort in maintaining productivity with the resources that are available. As a result, police leaders need to ensure that they understand their agencies' objectives and how these objectives are to be measured.

The final point relates to the raising of the profile of policing at the central/national government political level. Policing is currently under-recognised at this level and police do not have input into making policy decisions. Although various aspects of policing are represented via the Attorney-General and the Secretary for the Department of Homeland Security, there is no individual or organization that represents police per se, at the national level, who can advise on local, tribal, city or state policing.

A National Police Advisor would become the center for policing issues and would be able to advise Cabinet members on crime policy and legislation which affect police and police operations. An Advisor could also sponsor the restructuring of police agencies, standardize police training and establish performance methodologies to increase police service delivery across the United States.

Conclusion

In a survey undertaken by the International Association of Chiefs of Police in April 2011, 94 per cent of the respondents answered that there is "a new reality in American policing developing" (International Association of Chiefs of Police, 2011). According to the Community Oriented Policing Services (2011), the 50 year old police service delivery model currently in use is already starting to change. However, the pressure for policing to change is likely to become more intense in the next three to five years to meet the pressure to balance budgets and to meet service delivery levels (International Association of Chiefs of Police, 2011).

American policing is facing a new reality where agencies are confronted with a changing crime environment and there is a need to "develop new and innovative ways to leverage resources and maximize productivity in the face of

diminishing financial means” (Community Oriented Policing Services, 2011, p. 34). However, any new method developed must also be sustainable and cost-effective, and be able to take into consideration local accountability.

One strategy that police agencies may consider in response to the changing environment is the consolidation of their organizations or the provision of services. Of the seven approaches to consolidation presented in this article, the merging or regionalization of agencies presents the most opportunities for decreasing costs and for increasing organizational capability to improve service delivery and to adapt to the transformation of crime. However, before consolidation can take place, new processes may need to be found to ensure that centralized resources are managed equitably. Although it may be tempting to dismiss ideas such as the introduction of consolidation to increase police agencies effectiveness due to the possibility of undermining local accountability, such approaches may help to challenge the perceived wisdom about how policing is delivered, and inspire further thinking about how American “policing is configured for the future” (Innes, 2011, p. 10). The challenge for police leaders and decision makers is to be able to adapt approaches such as those discussed in this article to maintain agency delivery levels in a time of austerity and of increasing globalization while balancing the needs of the community.

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Traffic Citation Issuance and the Relation with Crashes: Is There Really a Reduction of Crashes Based On The Number Of Citations Issued?

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A common practitioner belief is that the number of citations issued has a direct impact on the overall number of reported crashes in given localities. Reportedly, concepts of high visibility regarding traffic enforcement tend to have a general deterrent effect on passing motorists. This research project sought to determine if these assumptions of general deterrence had a significant impact on the number of reported crashes in a town in Texas. The numbers of citations issued and traffic stops performed compared to the number of reported crashes reported during a six-year period provided a basis for the project. Correlations between the three categories examined available data to determine if traffic stops, citation issuance, and crashes had commonalities. Enforcement only does not seem to be the answer to reducing crashes. Other methods, including traffic enforcement, may provide the best alternative to combating such a problem.

Introduction

For many years, there has been a common belief in the law enforcement community regarding correlations between citations issued and the number of crashes reported. The belief stipulates citations are a key aspect to public safety. While there is no argument regarding the necessity of traffic enforcement, there seems to be a question regarding the relationship between the issuance of traffic citations and crash rates in a given area. This research intends to evaluate that relationship and see if general deterrence works for reducing crashes by examining the correlation between the numbers of citations issued over a given period and determine if the number of citations issued influences crashes.

Background

To pinpoint the first occasion of issuance of a traffic citation as a form of deterrence may be lost to time. Speculation of the origin of summons for court regarding traffic violations could have coincided with the invention of the automobile. Motorists of the early automobile days faced few regulations of vehicular travel. Laws regulating vehicles were minimal and deemed unneeded in the beginning days of automobile travel, as high speed was nonexistent during

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horse and buggy days. Nevertheless, with the advent and rapid improvement of the internal combustion engine, motor vehicle speeds steadily increased over the decades. Society began to recognize the importance and demand a set of norms intended to regulate the dangerous roads. In addition to faster speeds, vehicles became more affordable and available for the public. With an eventual increased mass of vehicles on the roadways, it seemed inevitable to establish punitive rules to deter reckless and risky behaviors associated with the automobile.

The increased amount of traffic crashes are an unfortunate consequence of the amount of traffic on the roads today. In Texas, there were a reported 211,006 injuries and 1 reportable crash that happened every 83 seconds in Texas in 2011 (TXDOT, 2011). An injury-involved crash occurred every 2 minutes 29 seconds during the same period in Texas (TXDOT, 2011). Fatal crashes in rural areas accounted for 56.8% of the number of statewide fatalities. This resulted in 1,712 deaths in rural areas (TXDOT, 2011). In addition, Texas has 225,544 miles of rural patrol areas, and 2119 commissioned Troopers to patrol these rural areas (TXDPS, N.D.).

Possibly, the reason for greater fatality instances in rural Texas areas may account for higher average speeds in rural areas, and limited availability of traffic enforcement. Of course, there are many rural Texas police and sheriff's departments patrolling the vast landscape, but those agencies respond to other calls of service, too. Thus, the effective amounts of officers patrolling the rural areas are small in comparison to larger metropolitan agencies.

Contemporary Issues

There seems to be a common belief of those stopped for traffic violations believe there is a form of quota an officer must meet. According to the Texas Transportation Code ("Texas Transportation Code enforcement of traffic laws, miscellaneous provisions," 2011), this common misconception appears to be irrelevant. This does not imply officers may engage in a competitive contest to see who writes the most citations in a given period. It does mean quotas are impermissible under the penalty of dismissal from their position as the agency administrator ("Texas Transportation Code enforcement of traffic laws, miscellaneous provisions," 2011).

However, another common belief among motorists seems to allege fines are placed into local general funds, which seems to be correct. Essentially, a traffic citation is another form of revenue for a jurisdiction. Section 542.402 of the Texas Transportation Code ("Texas Transportation Code vehicles and traffic disposition of fines," 2011) specifies fines collected as a result of traffic violations can be utilized for road maintenance, to enforce laws regarding motor vehicles, and to offset the expense of traffic officers. Municipalities with a

population less than 5,000 may retain an amount “equal to 30 percent of the municipality’s revenue for the preceding year” (“Texas Transportation Code vehicles and traffic disposition of fines,” 2011).

Revenue generated by citations could raise some questions regarding the validity of using traffic citations as a measure for the purposes of reducing crashes. One could question, is the deterrent fact negated by a desire to increase revenue for a municipality or county. Several small cities have received labels as being “speed traps.” This income may explain the reason behind smaller townships labeled as such, and it may explain a reason behind the encouragement of traffic citation issuance. With a higher number of citations issued in the rural areas, the number of crashes should reflect a reduction according to the belief of increased citations reduce traffic crashes.

It seems many chief agency administrators and practitioners believe the underlying concept of general deterrence used for patrol methods as a key factor in reducing the number of crashes. Therefore, the way general deterrence was approached in this project assumes that the primary belief involves other motorists’ view of the highly visible police officer on traffic stops or actively working traffic enforcement. Imagine when a motorist passes a police officer on a traffic stop. It could be argued that the passing motorist may think to himself or herself, the stopped motorist received a citation for a traffic infraction. Whether or not the violator received a citation, passing motorists may assume a citation was issued to the violator.

The administrator’s belief of general deterrence’s effectiveness may be conceptualized by such actions of the passing motorists viewing the stop and generating the idea. The idea of general deterrence effectiveness stems from the visualization of the officer on a traffic stop or working traffic enforcement. This belief could cause future ramifications for public officials, too. Should a town receive a stigma of a ‘ticket trap’ or practice in perceived unfair practices of traffic enforcement, the legitimacy of the public officials could be seriously negated. The perceptive political official could utilize concepts and unconventional tactics suggested to provide the public a sense of legitimacy, and provide a necessary function of law enforcement. This project could help those gain public favor in their respected communities.

Previous Research and Its Limitations

Beccaria (1819) believed punishment was designed to prevent the criminal from doing more harm, and to prevent others from committing the same crime. The same principals could be associated with traffic citations. The purpose of the citation is to attempt to instill behavior modification by imparting a monetary punishment. The punishment was not designed to ‘punish the mind’

by incarcerating people into penal institutions. This principal would be problematic on many different levels. Arguably, the method of deterrence imparted by citation's intent was to deprive one of hard-earned money and/or a loss of certain driving privileges.

Focusing on specific crime problems has shown some promising aspects of reducing the number of violent felonies. Braga and Weisburd (2012) found by engaging in a variety of tactics and partners, crime can be effectively controlled. They reinforced the fact of a marginal deterrent effect by allocating police officers and other related partners to increase the perceived risk of apprehension, crime could effectively reduce. By implementing similar strategies, it could be possible for law enforcement agencies to see reductions of traffic violations. Certainty of punishment plays a more central role to deterrence than the punishment itself (Ratcliffe, Taniguchi, Groff, & Wood, 2011).

High enforcement utilizing deterrent effects have tendencies to decay over time. Sherman (1990) found out of ten researched long-term police 'crackdowns,' seven of the programs showed signs of decay within two years of cessation of the program. Decay, as explained, was defined as the period after residual deterrence had occurred (Sherman, 1990). Decay looks at when a target area returns back to its pre-crackdown levels of criminal activity (Sherman, 1990). Application of neighborhood decay theories to high enforcement of areas known for having increased levels of crashes could indicate problems with increased levels of crashes. After the initial enforcement period ends, the problem tends to resurface or increase. The amount of time decay has many variables. To continue traffic crackdowns for extended periods would be very resource intensive and could neglect problems in other areas of the city. Strategic implementation and allocation of resources may provide the best way to reduce the eventual decay of the program.

Ritchey and Nicholson-Crotty (2011) examined relationships between speed limits and the number of miles patrolled by highway patrol troopers. Most states have an average of one trooper for every 36 miles of highways (Ritchey & Nicholson-Crotty, 2011). Their research suggested each additional trooper per mile of roadway patrolled showed a hypothetical reduction of deaths by 19 (Ritchey & Nicholson-Crotty, 2011). This tends to reinforce the idea that deterrence-based theories may have the best application to examine the current research, and if deterrence alone is effective.

Cincinnati, Ohio implemented a program called Crash Analysis Reduction Strategy (CARS) (Corsaro, Gerard, Engel, & Eck, 2012). The CARS system was a policing strategy designed to identify key areas of increased crashes in Cincinnati by analyzing data from crash reports and calls. The CARS system was an all-encompassing approach. Cincinnati took an analytical

approach by examining persistent causes of crashes at these hotspot areas, for example roadway conditions, speed limits, impaired drivers, etc. (Corsaro et al., 2012).

Previous research analyzed the relationships between driving under the influence (DUI or DWI) and crashes. One consideration of increased traffic enforcement could lead to deterrent decay over time. Short-term enforcement policies tend to retain minimal residual effects of crime. Even long-term high intensity traffic enforcement will eventually have a decaying effect. The exact effect of residual deterrence or decay would be difficult to evaluate. It could be certain, as evidence from previous research, that decay will occur eventually.

Decay is the period after residual deterrence has lost its initial effects on the population. The problem had resumed its pre-crackdown patterns of problematic activities. This period may vary based on numerous different factors. One-day or two-week target periods with several patrol units was not found to be statistically significant for initial or residual deterrent factors (Sherman, 1990). Initial deterrence was proven to be successful in fifteen of eighteen researched police crackdowns from various municipalities (Sherman, 1990). The lengths of the crackdowns varied from a short period of weeks, to over a two-year span (Sherman, 1990). For crackdowns to have successful results, they should have continuous enforcement and lengthy periods of random enforcement.

Piquero, Piquero, Gertz, Bratton, and Loughran (2012) examined data from 400 adults to determine the perceptions of deterrence of DUI arrests. The research looked at how the public perceives the likelihood of arrest for DUI. The researchers also evaluated the concepts of certainty and severity of punishment. One key finding was the tendency for previously cited traffic violators viewing the chances of being stopped at a lower value than DUI detection (Piquero et al., 2012). For deterrence to be effective, three components must be involved: certainty, swiftness, and severity of punishment. However, people tend to over-estimate the certainty and severity of punishment (2012). Piquero (2012) found most people do not understand the true chances of being caught for DUI by the police. In addition, people are likely to forget the detection likelihood to a reduced level after being caught and punished (Piquero et al., 2012). This may indicate people tend to forget the intended lesson of the court system after punishment assessment against the offender. The forgetfulness could cause the previous learned behavior to resurface; hence, the chance of a previous speeding violator being stopped for a violation again. As noted earlier, certainty of apprehension is more important than the result of punishment.

Blais and Gangé (2010) observed the Quebec City, Canada Police Department. The police department began a protest against their administration

by significantly reducing the number of citations issued for moving violations. Between November 2003 and July 2005, Quebec City stopped issuing citations as a pressure tactic to bring the city to the negotiating table. During this period, crashes with injuries increased by 3.73 percent and crashes with damage estimated to be over \$1,000 increased by 7.02 percent. The authors took into account potentially skewed data due to seasonal effects and pre-intervention trends (Blais & Gagné, 2010).

The research period began in November, which is the beginning of the winter season. It is entirely possible the increase of crashes resulted from treacherous road conditions, and not a direct result of a reduction of citation issuance. Road conditions tend to play an important factor into the causation of crashes. In Texas, it is uncommon for an extended time of inclement weather occurrences, such as ice and snow. Wet road conditions and heavy fog may be more of a factor for weather related issues than snow and ice, as encountered more frequently in Canada.

As Lawpoolsri, Jingly, and Braver (2007) found, those who received a single citation did little to change their driving habits. The chances of one receiving another traffic citation increased during their reporting period. Lawpoolsri et al. (Lawpoolsri et al., 2007) found the drivers in the study group had more than twice the risk of receiving another speeding citation, as compared to those who had not received one. Younger males were significantly more likely to receive more citations and be arrested for intoxicated driving offenses, as compared to those who did not receive a citation (Lawpoolsri et al., 2007).

Long-term high enforcement of areas known to have large numbers of crashes may lead to a decay of deterrence. Sherman (1990) evaluated several long term intense police actions to reduce various criminal activities. Predominately, the criminal issue targeted by these programs involved drug dealing. Sherman (1990) found the deterrent approaches lost their effect over a length of time for long-term crackdown programs. The effect of decay varied on the amount of time spent of intense enforcement procedures during the crackdown. The decay lasted between a time of nine months to two years, despite constant and continued police presence (Sherman, 1990). This seems to explain the complacency developed over time as one becomes more accustomed to the routine daily activities associated with increased enforcement. Sorg, Haber-man, Ratcliffe and Groff (2013) conducted a similar experiment regarding deterrence decay. Their model tended to agree with Sherman regarding lengthy, localized enforcement tending to be the least effective (Sorg et al., 2013). One could adapt their methods to minimize the chances of detection, such as for this research model, an increased number of radar detectors encountered during traffic stops. Sorg et al. (2013) found randomly rotated concentrations of foot

patrols provided the most effective deterrent factor. The optimal time spent in a hotspot to maximize initial deterrence was 14 to 15 minutes (Koper, 1995). After this initial period, deterrence decay began to occur (Koper, 1995).

As evidenced by effects of deterrence decay, the same could be inferred for motorists. Once a violator believes they are out of sight of a police unit, they resume their previous behavior of speeding, texting while driving, removal of a seat restraint, etc. This seems to have strong ties to effects of deterrence decay.

This project fills in the gaps involving previous research. Deterrence on its own has been shown to be inconsequential in reducing crime. This project sought to show that the same applies to traffic violations, which are a minor crime. Previous research has indicated how analyzing “hot spots” or other proactive measures could reduce criminal activity. Traffic enforcement relates, in a sense, to other criminal actions. They involve violations of the law, violators frequently attempt to minimize the certainty of being caught, reaction upon seeing a police unit while they are violating the law, and some form of punitive sanction. Previous research also indicated that simply sitting on the side of the road has minimal effect in reducing other traffic issues. Therefore, it could be inferred the notion of general deterrence would be minimally effective in reducing traffic crashes.

Theoretical Significance

Many practitioners in law enforcement seem to believe the idea of deterrence, alone, is effective. Most time spent on routine patrol seems to reinforce the deterrence belief as effective. However, the question could arise, are patrol methods intended to deter criminals or be seen by the public as doing something. Maybe department administrators use patrol methods not to deter crime, but as a way for the public to have a sense of security. As a patrol officer works the streets, the actual intended goal may be to show the community the police are doing something.

The goal of the research project was to determine if the concept of general deterrence (swiftness, certainty, and severity) of traffic enforcement proved to be a successful method alone in reducing traffic crashes. The purpose of the project was to analyze data from a rural Texas town to see if current methods of traffic enforcement have been effective. One could infer, increasing the number of traffic citations would involve more of a specific deterrent function versus a general deterrent belief. However, general deterrence methods seem to be the most commonly cited basis for increasing traffic stops and citation generation. These beliefs of the decision makers may have beliefs of a combination of inclusion of specific and general deterrence: specific deterrence

involves the citation itself, and general deterrence would be the visibility of the officer working traffic.

For effectiveness to occur, the beginning step would be for the agency administrator to assign importance to the mission of conducting traffic stops. Assigning importance of traffic enforcement begins at the top level of an agency (Johnson, 2006). Importance of traffic enforcement needs dissemination down the chain of command to line officers. An incentive, such as some form of reward for making the most traffic stops, not necessarily the most citations, could help promote the value of increased traffic enforcement. Immediate supervisor modeling played a key role of promoting officer productivity (Johnson, 2006).

Johnson (2006) found police management played a vital role in promoting the importance of traffic enforcement. Johnson (2006) suggested police management should ensure officers have sufficient equipment to enforce violations, continued training, and opportunity to engage in traffic enforcement. Continued training in traffic enforcement may have the by-product of promoting the importance to patrol officers of the value placed on traffic enforcement (Johnson, 2006). Immediate supervisor modeling proved to be a significant factor of promoting traffic enforcement (Johnson, 2006). This could negate the excuse that may be encountered, "my supervisor does not do it, why should I?" An informal sense of shame imparted against the lackadaisical officer may increase productivity in traffic stops.

Another tactic could be the use of local media to promote the use of increased traffic enforcement. Publicizing higher than normal instances of traffic enforcement could add to public perception of legitimacy for the agency (Telep & Weisburd, 2012). Legitimacy of the police mission by the public may have an added effect of voluntary compliance behavior. Citizens will view the enforcement action as fair and acceptable if properly promoted by the law enforcement agency (Telep & Weisburd, 2012). Community involvement with a law enforcement agency is a necessity to further the legitimacy of the program. Agencies should train and continue to promote professionalism among the ranks of officers. Most general police encounters with the public originate at a traffic stop. By adding legitimacy, the offender may focus blame upon his or her own actions, and not focus blame on the officer because of the officer's conduct during the stop. A sense of fairness could be effective to a traffic violator. The violator may focus on his or her own actions, instead of believing the officer was attempting to complete a 'quota.' Professionalism is a key function to add to legitimacy of law enforcement models, and it has the capability of increasing compliance.

Traditionally, police function as a reactive entity and wait for calls. Measures that have shown reduction of crime and disorder by making proactive,

medium length stops on a random, intermittent basis are very effective (Koper, 1995), (Telep & Weisburd, 2012). Changing traditional mindsets of reactive policing could potentially foster a safer community.

Methodology

A convenience sample from a rural Texas town was analyzed to determine if the concept of issuing citations was effective, alone. The town was chosen due to the relationship between the location of the university of the researcher's employment and location inside the town. Other towns of similar size and similar economic structure were not analyzed in this project, as data were unavailable. Data to indicate the number of drivers involved in multiple crashes or those with high numbers of citations were not analyzed for this project either. This project looked at the relationship between the number of crashes reported, number of traffic stops made, and number of citations issued. The data was obtained from a rural town located in Central Texas. The population for the town is approximately 18,000 people.

The police department in the rural town used for this study provided statistical data, through an email open records request (*Year Stats 2007-2012*, 2013) to the department. The department honored the request and sent data in a timely manner to complete the project. Specifically, data requested included the yearly statistical data from 2007 through 2012. Data of previous years were also requested. However, it was learned that while the task was possible, it would take a significant amount of manual computation. The town changed record keeping software in 2006. Due to time constraints of the project, it was determined to utilize instantly available data for analysis. Although, a six-year sample of data obtained for processing for correlation, the data was limited to the years beginning in 2007 and ending in 2012.

Traffic citation data included all moving, speeding, and non-moving categories. Other obtained statistical data fell beyond the scope of this project, as it was unnecessary for this project.

Selection of the town was driven by the location and convenience of data for research. The university where the research was conducted was located within the jurisdictional limits of the town evaluated.

Results

When one examines 2007 data and compares it to the following two years, a large decline occurred in the citation and traffic stop categories. This phenomenon had attributes to the town having a full-time traffic officer employed. A transfer occurred and the officer was reassigned to another division in 2008. The town did not have a full time traffic officer in place again until

2010. Moreover, in August 2010, the Police Department's former chief retired and a new one took the helm. The changing of the chiefs noted an increased issuance of citations issued and traffic stops conducted in 2011. Accuracy of the data was dependent on how the individual officer categorized the stop and/or how the different chief wanted data entered into the record management system (RMS).

Calculations of means of crashes reported, traffic stops, and traffic citations reported by the rural Texas town were used to obtain the average number of crashes during the observation period. Calculations of standard deviation from the mean were used for evaluation purposes to determine if there were any statistical numbers outside one standard deviation.

Standard deviation ($n=5$) was determined for the number of crashes, citations, and the number of traffic stops performed by the rural Texas town between 2007 through 2012. Table 1, the corresponding dates include the number of reported crashes for that year. The bars represent standard deviation bounds. Statistical analysis indicated the standard deviation from the mean was 45 for Table 1.

Table 1: Reported Crashes by Year – Rural Texas Town

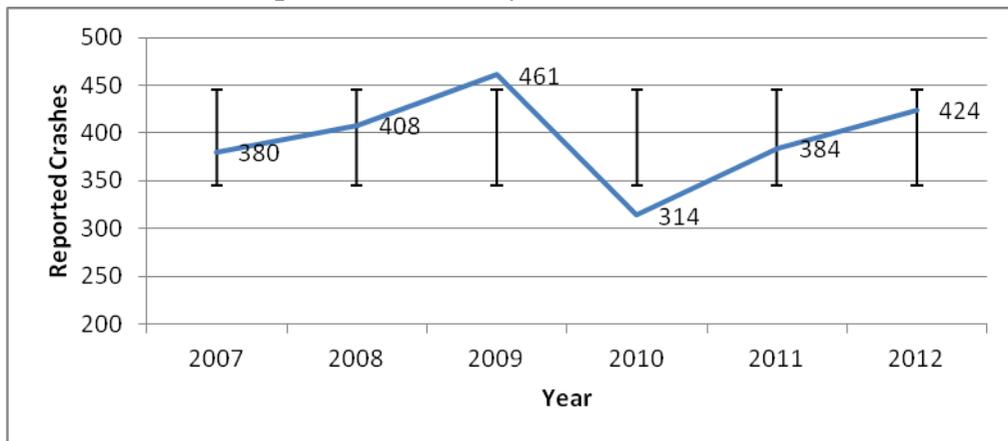
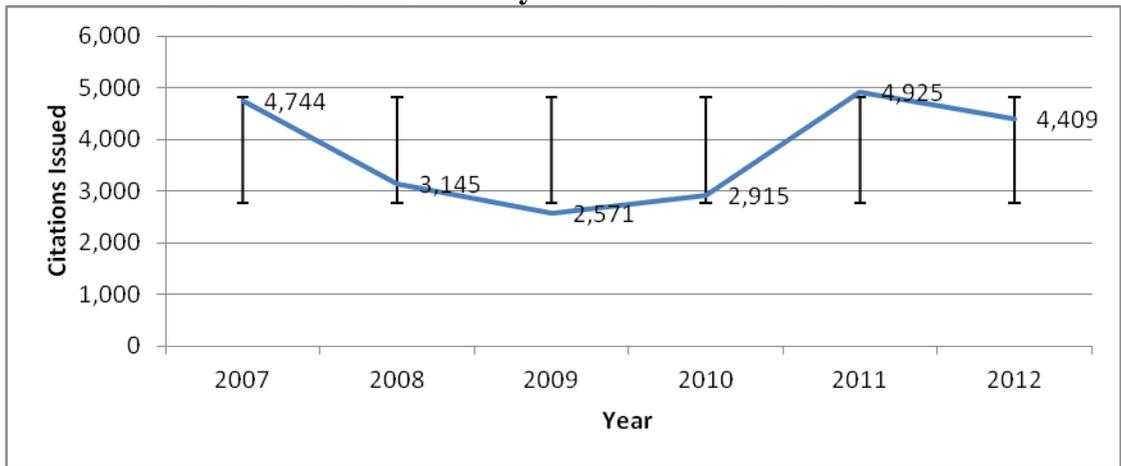


Table 1 shows the number of crashes reported to the rural Texas police department between the years 2007 to 2012 (*Year Stats 2007-2012, 2013*). Individual numbers corresponding to the year show the number of reported crashes during the calendar year, beginning in January and ending in December of the year. The average number of crashes during the 2007 to 2012 time was 395. The rural Texas town experienced the largest number of crashes in 2009 at 461 reported crashes. In 2010, the fewest number of reported crashes occurred at

314. Those two years fell outside of one standard deviation from the mean of 395. The lower limit of standard deviation was 350, while the upper limit was 440.

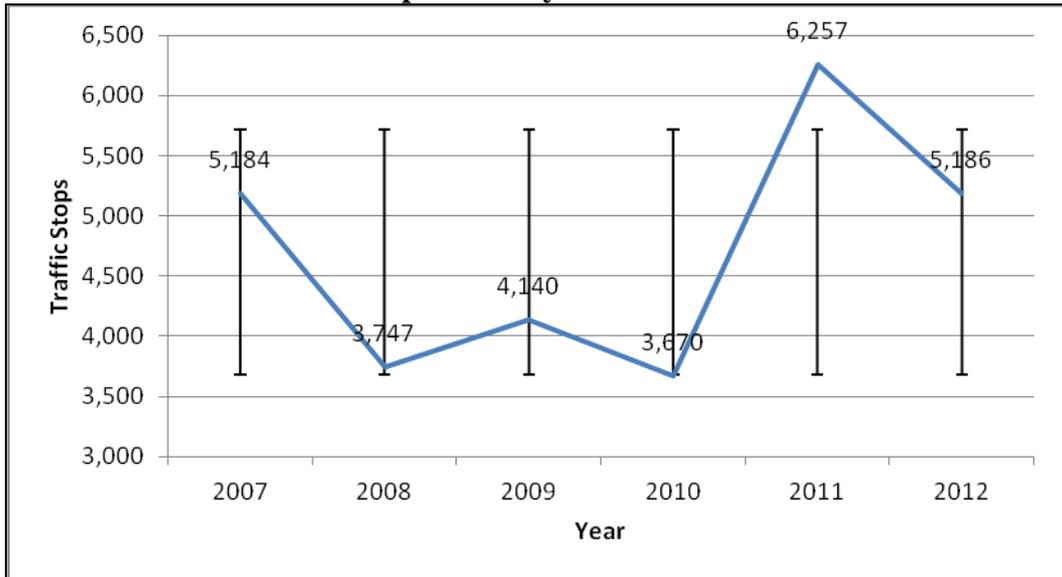
Citation issuance by the rural Texas police agency for standard deviation ($n=5$) was calculated in a similar manner. The largest number of citations issued occurred in 2011, which coincides with the arrival of the new chief of police. Reports reflect the data for 2011 citations was 4,925. While the lowest number of citations issued occurred in 2009, with only 2,517 reported citations issued. Table 2 reflects the number of citations issued during 2007 through 2012. The standard deviation for Table 2 was 935.

Table 2: Citations Issued by Year – Rural Texas Town



In table 2, the continuous line represents the number of citations issued by the rural Texas town between 2007 and 2012 (*Year Stats 2007-2012, 2013*). Vertical bars represent the limits of one standard deviation from the mean. Table 2 reflects two years were outside one standard deviation – 2009 and 2011. The mean calculated to be 3,785. Therefore, the lower limit was 2,850, and the upper limit for one standard deviation was 4,720. Provided data obtained from the rural Texas police department was the source of citation category.

The rural Texas town’s traffic stops standard deviation was analyzed for comparison, too. Similar to Table 2, the highest reported number of traffic stops occurred in 2011 at 6,257. While, interestingly the lowest number of traffic stops conducted by rural Texas town was in 2010, with a reported 3,670 stops. Table 3 reflects the standard deviation ($n=5$) during the observation period.

Table 3: Traffic Stops Made by Year – Rural Texas Town

In table 3, the continuous line represents the number of traffic stops during a given year. Bars represent the range of one standard deviation from the mean. Table 3, unlike the previous two graphs, shows three years were outside one standard deviation. The standard deviation was calculated to be 929, and the mean was 4,697. The upper limit for one standard deviation was 5,626 and lower limit was 3,768. This indicated 2008, 2010, and 2011 fell outside of one standard deviation, but were within two standard deviations from the mean. Data obtained from the rural Texas police department for the traffic stop category (*Year Stats 2007-2012, 2013*).

Using a statistical decision flow chart indicated the best form of statistic to utilize was the Pearson correlation. This statistical decision was chosen because the measure of relationship was between two variables. Since the data had a definite zero point, the data were categorized as a ratio scale. As indicated by the decision map, data involved ratio, numerical scores measured in a linear relationship. Thus, Pearson correlation seemed the best method to analyze the variables. Comparison of two sets of variables to determine if there was a positive, negative, or no correlation at all formulated the basis of the statistical analysis. The first set was the number of citations issued, and the number of crashes reported in the rural Texas town (*Year Stats 2007-2012, 2013*). Both one-tailed and two-tailed tests were analyzed to determine if any correlations

existed for the research. The dependent variables were the number of reported traffic crashes in the rural Texas town. The independent variables were the number of citations issued and number of traffic stops conducted in the rural Texas town.

After completing a correlation test, there were no significant findings to indicate a negative correlation of citations and reported crashes. Neither test indicated the hypothesis was true. One could speculate the number of issued citations had negligible influence on the number of crashes reported in rural Texas town during the examination period.

Table 4: Correlations Two-Tailed

		Crash SPD	Citation SPD	Traffic Stops SPD
Crash SPD	Pearson Correlation	1	-.106	.094
	Sig. (2-tailed)		.842	.859
	N	6	6	6
Citation SPD	Pearson Correlation	-.106	1	.907*
	Sig. (2-tailed)	.842		.013
	N	6	6	6
Traffic Stops SPD	Pearson Correlation	.094	.907*	1
	Sig. (2-tailed)	.859	.013	
	N	6	6	6

* Correlation is significant at the 0.05 level (2-tailed).

Table 4 reflects a Pearson correlation two-tailed test. Only the relationship between traffic stops and citation issues indicated a significant correlation at 0.907 at the 0.05 level. This phenomenon was not surprising to indicate a high probability of relation, simply because citation issuance begins with a traffic stop. Therefore, expectations of high correlations were not surprising. If one were to examine Tables 1 and 2, one could see the similar relationships on a graph for traffic stops and citations. Data for traffic stops was included since traffic stops and citations indicated a high correlation for both analysis.

Table 5: Correlations One Tailed

		Crash SPD	Citation SPD	Traffic Stops SPD
Crash SPD	Pearson Correlation	1	-.106	.094
	Sig. (1-tailed)		.421	.429
	N	6	6	6
Citation SPD	Pearson Correlation	-.106	1	.907**
	Sig. (1-tailed)	.421		.006
	N	6	6	6
Traffic Stops SPD	Pearson Correlation	.094	.907**	1
	Sig. (1-tailed)	.429	.006	
	N	6	6	6

** Correlation is significant at the 0.01 level (1-tailed).

Table 5 contains a Pearson correlation with a one-tailed test. Again, as in table 4, a significant correlation occurred between citations and traffic stops. Table 5 indicated less probability of correlation between citations and crashes than Table 4.

Problems in utilizing the Pearson correlation may not provide the most accurate representation of crashes and citations. Correlation does not account for if one variable changes, so should the other change (Berk & Carey, 2010). In addition, Pearson correlation can be susceptible to influences of outliers, as evidenced for 2009 crashes (Berk & Carey, 2010).

Spearman correlation was not utilized due to less ability to detect significant correlations in parametric assumptions (Berk & Carey, 2010). Nonparametric tests, as used by the Spearman correlation, tend to be based on ranks and not actual data values (Berk & Carey, 2010). The data used for this project are actual values as reported by the rural Texas police department.

Comparisons of Tables 1 and 2 show crashes reached a maximum point of 461 in 2009, and traffic citations reached a minimum of 2,571 during the same year. However, in 2010 traffic crashes reached a minimum of the examined data at 314. Citations issued in 2010 showed a minimal increase to 2,915, as compared to 2009. Traffic stops for this period were 4,140 in 2009 and 3,670 in 2010, with 2010 being the minimal amount examined. This seems to pose a problem in utilizing the Pearson correlation coefficient. It does not examine what may have caused a spike in one year and lead to a low the following year. One may assume, crashes should continue to rise during the 2010 year, but the range of crashes fell outside one standard deviation from the mean.

To explain why 2009 and 2010 crashes experienced such fluctuations was beyond the scope of this project. A detailed analysis of the years could provide explanations why this occurred. Future projects may wish to examine the data for these two years to obtain a better understanding of why there was such a discrepancy. Assumptions would indicate crashes were on the rise from 2007 to 2009. Then a significant decrease occurred in 2010. However, the number of traffic stops and citations during the same period were at a minimal. It could be possible with the fewer number of traffic citations and stops in 2008 led to the spike in crashes in 2009.

Discussion

There were several limitations to this project. To begin, this project analyzed data from a rural Texas town. Results of this project provided inconclusive findings to support or reject the hypothesis suggesting traffic citations reduce the number of crashes. However, it did appear the number of reported crashes over the analyzed timeframe has remained relatively consistent. Reported crashes did not seem to be dependent on the number of citations or traffic stops.

Differences of enforcement levels may change the significance of the correlations. This project evaluated a smaller rural Texas town. Similar sized towns may show different relationships between crashes and citation issuance. A shortcoming of the project did not analyze crashes and citations from other jurisdictions or municipalities. Future projects may wish to incorporate several towns of similar size or evaluate a larger area with more data to compare.

Metropolitan areas experience different levels of traffic congestion and enforcement. Therefore, it was believed that these areas were so dissimilar; an effective evaluation would not be achievable. Highly congested traffic areas present unique challenges for enforcement. One could infer that areas of great congestion will have lower numbers of traffic enforcement versus higher numbers of traffic crashes. Especially, areas experiencing major construction renovations, traffic flow tends to create situations which may be unavoidable for the motorist. The town analyzed has periods of increased traffic flow, but the ability to enforce traffic laws tend not to be as restrictive as metropolitan areas.

Evaluation of jurisdictions with officers assigned to dedicated traffic units may experience different results than the data analyzed from the rural Texas town's findings. The town analyzed had one officer assigned as a traffic enforcement officer. One could surmise if the town had more dedicated traffic enforcement officers, the data may reflect different results about the effectiveness reduction of crashes through the issuance of traffic citations.

Other factors, such as weather conditions during the timeframe were not included in the results. This could possibly explain fluctuations of crashes. The evaluated town had a relatively mild climate. The number of inclement days involving ice, snow, rain, or other weather conditions was not included in the evaluation. Weather phenomenon seems to have significant impacts on the number of reported crashes. Areas with more days of inclement weather may experience more crashes due to the conditions.

Undoubtedly, how a roadway has been engineered could play a significant role on the amount of reported crashes for a given area. Other factors such as engineering of roadways or intersections were not examined to determine if there was a relationship. As the number of cars increase, one could assume traffic congestion may explain increased crashes in a given area. This phenomenon could be the result of increased population versus inability or speed of construction projects to relieve congestion in the jurisdiction to expand or improve infrastructure.

The town evaluated has a university within its jurisdictional boundaries. The university, during semesters, increases the population of the town. In addition, the town has grown over the past few years. The size of the town has increased approximately 3,000 residents over the past ten years. The university has experienced increases in enrollment over the evaluated years. Nevertheless, the number of traffic crashes has remained relatively stable over the years evaluated. Other towns with similar demographics were not used to compare data. This project simply looked to determine if the belief of increased citation issuance had an impact on the reported crashes in the town, and to determine if the current enforcement methods were effective.

Future research may wish to conduct a survey of people who regularly travel in and through the rural Texas town and who have been stopped by police. Surveys could indicate the level of deterrence obtained through traffic enforcement. This process probably would incur levels of qualitative data to be included with the current quantitative data obtained to provide a better understanding of the deterrent factor. Recidivism was not taken into account for the number of those who have received multiple citations and had been involved in a crash. Correlations between the repeat offender and instances of traffic crashes were beyond the scope of this project. However, future research may wish to examine the variables to determine if such a relationship exists. Recidivism may provide a more accurate analysis of the effectiveness of issuing traffic citations. Agencies tend to discretely publish the numbers of citations issued to comply with oversight concerns. However, agencies tend not to regularly publish the numbers of citations in mass media outlets.

Specific deterrence probably would provide a better indication for effectiveness of citation issuance. However, the generalities of some agency administrators involve simply promoting the notion that issuing more citations for traffic violations will reduce crashes. Specific deterrence effects of increased citation issuance may explain why the number of crashes remained relatively stable over the years analyzed. However, there was no relationship that could be established to support the general idea that the more citations issued, the fewer crashes occur.

Another shortcoming of the research was the limited number of years available for evaluation. Data were evaluated from 2007 to 2012. More years of comparison could provide a clearer evaluation of the effectiveness of enforcement actions. It would be interesting to review data prior to 2007 to determine if there were any correlations to construe over an extended period. Processing this data could show if the trend of crashes remained consistent for a lengthy period of time. According to the recent findings, there should be no correlations represented over a greater amount of time.

Conclusion

Traffic enforcement should continue to be a high-level priority, as it helps ensure safety and proper procedures while navigating the public road systems. One could justifiably infer, if no traffic enforcement occurred, chaos probably would rule the roads. Traffic enforcement is a vital function of the policing system to provide the general deterrent effect needed to keep roads safe. This project design had no intentions to negate the importance of traffic enforcement or justify reduced enforcement, but only to examine if there was a correlation between citations, traffic stops, and reported crashes. However, this project did seek to understand if the common practitioner beliefs of traffic enforcement only were effective.

Traffic enforcement has been in existence since the early 1900's. One can view video recordings of the time to see the chaotic behaviors of early motorists. Should traffic enforcement be non-existent, the same would probably be true today. Lack of deterrence could create treacherous transportation conditions. The need of traffic enforcement could be more important in modern times, as technology of vehicles has greatly improved and speeds are faster.

Texas Department of Transportation is the purveyor of statewide statistical data regarding traffic crashes. This data can help one understand the dynamics associated with the numerous reported crashes in the state. Many conditions have direct impact on traffic crashes. Most people seem to attribute a crash to excessive speed or some other citable traffic violation.

Traffic enforcement also has significant political impact. Increased traffic crashes over a given time could give the impression law enforcement may not be doing their job effectively. Those administrators who firmly believe general deterrence was an effective tool to reduce traffic crashes may find their political career short-lived. In essence, the chief administrator should develop other effective, proactive ways to combat the problem. If something as simple as media promotion of high traffic enforcement times provides the sense of fairness to the public, trust and legitimacy to the overall mission could be achieved. This could promote the political career of the official, as the population would develop the sense of fairness in their community.

In reality, environment, engineering, vehicle maintenance, and experience of the driver have major impacts as contributing factors for crashes, too. While these factors contribute to crashes, the concept of traffic enforcement should be included to act as an influence to attempt to prevent crashes. The study of simply writing citations to reduce crashes showed no substantial significance to support the belief. From a policy standpoint, agencies may wish to reevaluate ways to effectively reduce traffic crashes. Crashes are not just the result of law violations, but several other factors should be incorporated into the equation.

Identifying collision 'hot spots' could point to other problems at dangerous sections of roadways. Re-engineering of identified sections of problem areas could be a significant way to reduce the overall number of crashes. Other extraneous problems could exist at the identified problem area. Something as simple as an object blocking visibility could be a contributing factor for increased crashes.

Common beliefs of traffic enforcement involve an officer attempting to achieve a quota. Texas law strictly prohibits the implementation of a quota system. However, the officer could be encouraged to increase the number of traffic stops made. The municipality receives a portion of the fines assessed to supplement the general operating fund of the jurisdiction. Issuing citations to supplement the general fund, while acceptable, may cause pressure on chief administrators to generate more revenue for the jurisdiction. Typically, municipalities with such procedures receive the label of a 'speed trap.' The officer may feel inclined to issue citations based on a lower threshold than a non-compelled officer.

Deterrence theories seem to have the best explanation for the phenomenon examined in this project. Deterrence, while commonly applied to felonious actions, has merit for a simple traffic citation. Importance was placed on the certainty of being stopped by law-enforcement to reduce risky driver actions and behaviors, such as speeding, disregarding traffic control devices, etc.

Deterrence theories had the best applicative properties to explain the relations examined in this project.

It also appears that the reliance of visible enforcement methods have minimal impact on reducing the number of crashes. Deterrence decay could explain why the process is ineffective in the reduction of crashes. Other methods involving a proactive approach may yield favorable results. This does not suggest that complete removal of traditional approaches to traffic enforcement should be deleted. However, it does suggest that citation issuance alone has minimal effect.

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The Ripple Effect

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There has been a long-standing debate in the academic literature concerning whether citizen attitudes or social-cultural characteristics are more or less apt for explaining citizen confidence and trust in government. Recent research on citizen perceptions of the police has cast new light on this debate with increasing empirical support for the social-psychological concept of procedural justice. Procedural justice has been found to bolster citizen perceptions of police legitimacy as well as overall levels of citizen satisfaction. Procedural fairness variables, such as the perception of racial profiling, tend to have a more powerful effect upon police legitimacy and citizen satisfaction than traditional social-cultural variables such as race and ethnicity. There has been little in the academic literature in the way of testing social-cultural variables (such as social capital) against specific attitudinal variables (such as attributions of police legitimacy and the perception of racial profiling) to determine which has the greatest explanatory power in assessing citizen confidence in government as a whole. Using statewide mail survey data and official state voting records, this research assesses the degree to which the attitudes of active state voters regarding racial profiling and police legitimacy affect the perceived legitimacy of municipal, county, and state government. Multivariate analysis found evidence of a ripple effect in which the perception of racial profiling and police legitimacy tended to influence citizen confidence in government.

Introduction

A growing body of literature suggests that the attribution of adherence to procedural justice has great potential for generating and sustaining citizen satisfaction with the police (Tyler 1998; Cheurprakobkit and Bartsch 2001; Reisig and Chandek 2001; Tyler and Wakslak 2004), enhancing police legitimacy (Tyler 1990; Wycoff et al. 1985; Skogan 1994; Strang 1996) and bringing about crime control benefits (Tyler 1990; Skogan 1996; Paternoster et al. 1997). A study by Lee et al. (2007) found that the perception of racial profiling can mitigate the influence of race in determining levels of public satisfaction with the police. This would suggest that procedural justice – in the form of the perception of racial profiling – has a potentially powerful effect on enhancing police legitimacy. Wilson (1963, 1968) has argued that local law enforcement agencies are an integral component of local political and civil

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institutions, and that any attempt to understand the police “cannot be considered apart from the desirability of these institutions as a set. . .” (Wilson 1963, 213). What remains to be seen is whether procedural justice thusly conceptualized through attitudes regarding racial profiling can actually serve to influence the attribution of legitimacy to other major governmental institutions.

The research literature does point to evidence of a potential relationship between citizen satisfaction with the police and attributions of institutional legitimacy. In their study of an unnamed Western state, Albrecht and Green (1977) reported evidence of a statistically significant relationship between political alienation with the federal government and citizen dissatisfaction with the police. Marenin and Carter (1977) noted strong correlations between attributions of government legitimacy and police legitimacy among Nigerian citizens. The authors of a comparative study of policing practices in Latin America and in the U.S. suggest that an empirical relationship exists between attitudes toward the national government and citizens’ attitudes toward their police (Cao and Solomon Zhao 2005). In a study focusing on U.S. society, Lafree (1998) has argued that the spatial distribution of U.S. crime rates could be explained at least in part by a perceived lack of institutional legitimacy – in particular, a lack of faith in government – among minority populations.

These findings, coupled with the insights featured in the procedural justice literature, suggest the existence of a potential noteworthy relationship between attributions of adherence to procedural justice, satisfaction with police, and the according of governmental legitimacy by citizens. At present, no studies of U.S. police agencies have tested the proposition as to whether or not there is a relationship between attributions of police legitimacy and attributions made toward other government institutions (such as local, state, or county government).

The current study represents an exploration of the concept of institutional legitimacy. It seeks to gain a more thorough understanding of police and governmental legitimacy. In order to accomplish this exploration the study will test which types of variables (contextual or attitudinal) have the greatest explanatory power in determining attributions of governmental legitimacy on the part of citizens. In particular, this study will examine whether there is a *ripple effect* present among government institutions where citizens’ perceptions of legitimacy in one component of government affect the perception of government as a whole.

The purpose of this study, therefore, is to test more fully this link between citizens’ perceptions regarding racial profiling by police and citizen satisfaction with and trust in their police and other governmental institutions. Using two large-scale statewide surveys of Washington State residents conducted in 2003

and 2007 as the primary source of empirical data, this study assesses the degree to which perceptions of racial profiling and police legitimacy affect the legitimacy of other social institutions among citizens.

Review of the Literature

Overview of Citizen's Trust and Confidence in Government and Institutional Legitimacy

A government that lacks its citizen's basic confidence and trust is one that is in danger of losing its most important trait – namely, its legitimacy. While citizen confidence in government (e.g., perceptions of competence and good intentions) and institutional legitimacy are not necessarily the same thing, citizens' basic trust and belief in their government provides a principal benchmark indicator for the health of the body politic. For example, respondents in a 1978 General Social Survey were asked to explain what they had in mind when responding to a series of questions eliciting their “confidence” in a number of institutions. Over two-fifths of all valid responses included the word *trust* or some variation thereof (Jennings 1998).

There is debate within the literature concerning just how interchangeable the concepts of trust and confidence actually are. Some research suggests trust and confidence have subtly different meanings. According to Glanville and Paxton (2007), “trust can be described as an expectation that people will behave with good will, that they intend to honor their commitments and avoid harming others” (p. 231). The literature disagrees on what forms trust exactly (Cook & Gronte, 2005). One opinion views trust as a product of early socialization that operates as a moral worldview. The other contends trust stems from life experiences that create a set of interests in the individual (Cook & Gronte, 2005). Regardless of what forms trust in the individual, social trust is a necessity in a democracy. Trust acts as a social lubricant that allows for the conduct of everyday life (Cook, 2005). Ongoing relationships are grounded in trust as individuals must act in a trustworthy manner in order to be trusted by others. These ongoing relationships create networks of reciprocity which form the backbone of social capital (Cook, 2005). Trust in government is based upon this reciprocity; citizens expect the government and its agencies to operate in a manner that encourages ongoing relationships. Similarly, confidence in institutions is related to a citizen's approval of the institution, specifically if the leaders of that institution operate in a manner in which the citizens approve (Cook & Gronte, 2005). Newbold (2011) notes that “the citizenry's confidence in government is directly proportional to the quality of that government's administration” (p. S49). Confidence then reflects citizen beliefs that the institution's leaders are indeed operating in a manner that promotes ongoing

relationships. Due to the fact that the difference between trust and confidence is so subtle, this paper posits that the two concepts can be used interchangeably as indicators of citizen perceptions of governmental legitimacy.

Weber (1947) defined legitimacy (or authority) as the “probability that certain commands (or all commands) from a given source will be obeyed by a given group of persons,” and noted that a basic criterion for the exercise of legitimate power is a “minimum of voluntary submission.” As a democratic society, we in the United States place our trust and confidence in democratic institutions to exercise legitimate power. If these public institutions are not seen to be behaving in their expected fashion, citizens are much less likely to accept their decisions. Parsons (1963) argued without citizen faith and confidence in the political system, the government is unable to attain the society’s collective goals. According to Parsons, when citizens lose confidence in their government this leads to a breakdown of government functioning and increases the potential for social disorder. This led Parsons to conclude that legitimacy represents the “highest normative defense against the breakdown of social order” (Parsons 1963, 57).

O'Connor (1973) reached a similar conclusion to Parsons (1963). Working from a neo-Marxist perspective, he argued that the survival of American capitalism was contingent upon maintaining public confidence in the political system with the maintenance of legitimacy becoming a major preoccupation of American government. In O'Connor’s view, government expenditures on welfare and other social services were only undertaken by government in order to placate the dangerous classes thereby engendering confidence in the political and economic systems to “maintain social harmony” (O'Connor 1973, 7).

Institutions act as the “patterned, mutually shared ways that people develop for living together” (LaFree 1998, 71). They encompass what are considered to be proper, legitimate and expected modes of behavior (Parsons 1940; LaFree 1998). Institutions then channel human behavior into socially acceptable norms. These norms and patterns of behavior work to increase the predictability of everyday life and contribute to the sense of well being of members of society. Confidence in government institutions works to increase predictability among citizens based upon their expectation that government employees are likely to perform their duties in expected ways, which reinforces the likelihood of their continued acceptance of institutional authority.

Numerous studies have reported evidence that citizens within the major industrialized democracies are becoming increasingly dissatisfied and progressively disillusioned with the democratic institutions of their respective central governments (Miller 1974; Niemi et al. 1989; Dogan 1994; Nye 1997; Nye and Zelikow 1997, 1997; Norris 1999). In the United States, this loss of

confidence is particularly disheartening as the nation has seen confidence in government dip markedly since the 1960s and 1970s (Lafree 1998; Ladd and Bowman 1998). Ladd and Bowman (1998) found that confidence in Congress, the federal government, the executive branch, and the presidency has all fallen significantly since the 1970s. In addition, they found that in terms of public confidence in the competency of the main branches of our federal government (Executive, Judiciary, and Legislative) now rank near the bottom of lists that include both public and private institutions.

The Influence of Citizen Attitudes and Perceptions on Attributions of Trust and Confidence in Government

Luhmann (1979) contends that trust can be thought of as the level of confidence that an individual has in another (person or thing) to act in a fair, ethical or predictable manner. Similarly, Carnavale and Wechsler (1992) have argued that trust is the expectation of “ethical, fair, and non-threatening behavior, and concerns for the rights of others” (pg. 473). This conception of trust has direct implications for the current study. If citizens perceive that their police force acts in an unfair manner, as would be the case with the belief that racial profiling is an established practice, they would be much less likely to attribute feelings of trust and confidence to governmental authority figures or public institutions (such as a police agency or their local government). Trust and confidence can be seen as being primarily a basic personality trait. A trusting predisposition is learned in early childhood and becomes part of an individual’s core personality. The noted psychologist Erikson (1950) argues that feelings of trust in others and oneself, a sense of optimism, and feelings of altruism occur through the mother-child bonding experience and are formed in the very first stages of psychological development. The prominent social psychologist Morris Rosenberg (1956,1957) contends that feelings of alienation, trust in others, and people’s willingness to help and cooperate with others combine to form a single “trust in people” scale. An individual’s psychological history and early life experiences will then cause them to be either alienated from society or optimistic about it. Once these core traits are established, trust (or lack thereof) will persist largely unchanged throughout an individual’s lifetime, unless challenged by major trauma (Uslaner 2002). According to this school of thought, trust is but one part of a larger set of personality characteristics which would include feelings of optimism and cynicism, having control over one’s life, and beliefs about the possibility of successful cooperation with other members of society (Erikson 1950; Allport 1961; Rosenberg 1956, 1957; Uslaner 1999, 2000, 2002).

People can be seen as being either optimists or cynics in their dealings with others (Gabriel 1995). Trust operates primarily as a fixed belief, and such

beliefs can be transferred from the interpersonal relationship realm to government institutions. The perception of racial profiling and lack of basic procedural fairness would be important to these individuals for determining levels of confidence in government. However, these perceptions would serve more as a proxy indicator for their overall level of generalized trust. If people were naturally optimistic, they would not believe that their government would allow a practice such as racial profiling, but if they were naturally cynical and alienated the perception of racial profiling likely would be quite important to them. As Easton (1965) observes, “the presence of trust would mean that members would feel that their own interests would be attended to even if the authorities were exposed to little supervision or scrutiny” (Easton 1965, 447). Gamson (1968) sums up this view succinctly; optimists expect the political system to work as they wish “even if left untended” (Gamson 1968, 54). In short, society is made up of trusting people and cynics who simply carry their political perceptions around with them with little thought to the specifics of government performance.

Research has taken a more nuanced and less deterministic approach to explaining the phenomenon of citizen trust. It argues that everyday experiences taking place later in life can have a profound effect on determining citizen levels of trust. One key area emphasized by these researchers is the importance of norms and institutions in creating and maintaining trust (Rothstein 2000; Rothstein and Stolle 2002). If citizens come into contact with corrupt government officials, then they will infer that corruption is the norm for government. Citizens will then believe that not only are their government representatives corrupt but other people must be as well and cannot be trusted. The perception of racial profiling could then prove highly significant. If citizens believe that their local police are engaging in corrupt behavior such as biased policing, they would be highly likely to believe that all government officials would be engaging in corrupt behavior as well. This set of inter-related beliefs could lead to a ripple effect where perceptions of corruption in one government institution would spill over into others.

Another key experience is citizen perceptions of institutional fairness and evenhandedness. Knight (2001) argues this is especially important for socially or ethnically diverse societies such as the United States. When citizens perceive a lack of imitational fairness, underprivileged groups will infer that institutions mainly serve the interests of the majority group and will become less inclined to act in accordance with these institutions. A democratic country such as the United States should afford *all* of its citizens the same rights and privileges; this basic fairness should encourage feelings of trust among society’s members (Levi and Stoker 2000).

As Szompka (1998) argues, democratic institutions contribute by creating conditions that are favorable to trust, such as maintaining transparency in operations and assuring accountability for those goals and purposes of government established by public mandate. When these conditions are violated (or perceived to be corrupted) by public agencies and/or their agents, citizens will no longer view their government as being legitimate and worthy of their confidence. Research by Tyler (1990,1998) confirms this chain of events in democratic countries. When citizens in an established governmental setting view their legal institutions as being procedurally fair and evenhanded, they are much more likely to confer legitimacy upon them by obeying the law regardless of the outcome and even despite the need to bear direct personal costs. Given this set of background considerations, the perception of racial profiling should have a significant effect upon citizen attributions of confidence in government.

The purpose of this study is to test more fully this likely important link between citizens' perceptions regarding racial profiling by police and citizen satisfaction with and confidence in their police and in their municipal, county, and state government institutions. In particular, this research will assess the degree to which citizens' attitudes attributions of procedural justice and fairness, influence perceptions of governmental legitimacy. In particular, the current study will examine whether there is a "ripple effect" between citizen attributions of legitimacy in one government agency (such as the police or schools) to government as a whole. The specific research hypotheses the research will seek to test is as follows:

H1:

Perceptions of racial profiling have a negative impact on citizens' perceptions of trust and confidence in government.

H2:

Police and public school legitimacy influence citizen's perceptions of trust and confidence in government as a whole.

Data

The current study utilizes two primary data sets in order to gain a deeper understanding of the relationship between citizen satisfaction with the police, procedural justice, and citizen confidence in government. The first data set is composed of merged samples from the 2003 and the 2007 Washington State Citizen Survey of Public Attitudes toward the Washington State Patrol (WSP). These data sets were part of a larger series of periodic public mail surveys conducted by Washington State University's Division of Governmental Studies

and Services (DGSS), which sought to gauge citizen perceptions of WSP agency and officer performance. In 2003, DGSS was commissioned by the WSP to conduct a study on the extent to which racial profiling was occurring among its officers. In addition to an analysis of traffic stop data, a key component of this study was the citizen survey conducted by DGSS which analyzed citizen perceptions of the WSP.

The other primary data set utilized in the study comes from official Washington State voting records provided by the Office of the Washington Secretary of State. This data set includes the voting history of all registered voters within the state and consists of over three million records. Citizen birth date, gender, registered zip code, political party affiliation (if any), and number of times voted are all reflected in this data set. In order to gain a deeper understanding of how citizen civic participation and political party affiliation might influence confidence in government, the voting records of survey respondents were merged with the WSP survey data. The merging process between the two datasets resulted in 1,012 observations for the 2003 data and 775 for the 2007 data, for a combined total of 1,787 observations. Multivariate analysis reduced that number to 1,430. Demographic indicators can be found in Table 1.

Table 1: Demographic Characteristics of OLS Model (n=1430)

	Variable	Number of Observations
<i>Gender</i>	Male	1101
	Female	329
<i>Education</i>	Grade School	18
	Some High School	36
	High School Graduate	178
	Some College	527
	College Graduate	409
	Advanced Degree	262
<i>Age</i>	18-29	129
	30-65	884
	65 and over	417
<i>Race</i>	White	1266
	Non-white Minority	164

Methodology

Dependent Variable

The models used in the analysis seek to test citizen perceptions of trust and confidence in government. The dependent variable *Citizen Confidence in Government* is a composite measure that consists of three seven-point scale items with responses ranging from “Little Confidence” to “Great Confidence.” The survey question posed asked respondents how they would rank the level of confidence they have in their municipal, in their county, and in state government. This scale yielded high reliability, producing a robust Cronbach’s alpha of .93.

Variables of Interest

The model employed in this study tests how citizen perceptions of procedural justice and institutional legitimacy influence trust in government.

The social-psychological variables consist of four separate measures. The remaining measures gauge citizen perceptions of fairness and cynicism in regards to government employees, specifically police officers and public schools. The dummy coded *perception of racial profiling* – which asked respondents if they believe the WSP engages in racial profiling. Finally, in order to determine if there is indeed a ripple effect connecting attitudes toward the police to trust in government, two separate measures were added to the foregoing array of measures. First, the level of *Public School Legitimacy* which is a seven-item scale of citizen confidence in local schools with 1 = “Little Confidence.” Secondly, the level of *Police Agency Legitimacy*, which is a composite measure of citizen confidence in city, county, and state law enforcement. This measure yielded high reliability, with a robust Cronbach’s alpha of .87.

The remaining variables serve as controls. These include demographic variables such as *education, age, gender, political party affiliation, and respondent race*. As social capital tends to form a significant part of citizen trust, two distinct but related measures were employed to control for its effects. As participation in the political franchise acts as a key indicator of social capital, survey respondents were assigned a *Civic Participation Grade*. This was measured by dividing the total times a respondent voted by the total times they were eligible to vote, multiplied by 100. Social capital has also been measured with broad attributions of general trust, this was accomplished using the aforementioned classic Rosenberg (1956, 1957) scale of *Generalized Trust*, which measures citizen perceptions of non-acquaintance strangers (1=Can’t be too careful trusting people and 5=Most people can be trusted).

Results

The problem of racial profiling has been at the forefront of many discussions on police misconduct. However, little is known about its potential connection to the general public's confidence in their governmental institutions. Police agencies are the only governmental institutions that are open to the public 24 hours a day, seven days a week, fifty-two weeks a year. It can be argued that for many people, police officers represent their most frequent form of contact with a government employee throughout the course of their lifetime. Work by other scholars has noted a strong correlation exists between attributions of police legitimacy and confidence in national governmental institutions (Albrecht and Green 1977; Cao and Solomon Zhao 2005; Marenin 2005). Indeed, Wilson (1963, 1968) has argued rather convincingly that local law enforcement agencies are an integral component of the political and civil institutions of local communities. Police legitimacy, as well as perceptions of police misconduct, should then have a powerful effect in shaping citizen confidence in their local, county, and state governmental institutions.

In order to test the research hypotheses, an OLS model was constructed and tested with the merged data between the WSP citizen survey and the voting records provided by the Office of the Washington Secretary of State. The analysis allowed the study to more fully test citizen confidence in government by providing the data necessary to construct a significant control variable: civic participation which is one of the key elements of the social capital argument. Results from this analysis can be found in Table 2.

Table 2
Citizen Confidence in City,
County, and State Government

	Slope (β)	SE
Perception of Racial Profiling (1=Yes, 0=No)	-0.470** (-0.052)	0.171
Police Legitimacy Scale	0.383*** (0.362)	0.023
Confidence in Local Schools	1.097*** (0.435)	0.052

Table 2 (continued)

Citizen Confidence in City,
County, and State Government

	Slope (β)	SE
Generalized Trust Scale	0.267*** (0.082)	0.064
Education Level	0.160* (0.046)	0.069
Age	-0.001 (-0.005)	0.006
Male (1=Yes, 0=No)	-0.487** (-0.054)	0.172
Non-White Minority (1=Yes, 0=No)	-0.981*** (-0.081)	0.228
Political Party: Democrat (1=Yes, 0=No)	-0.582*** (-0.046)	0.169
Constant	22.751***	0.598
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Observations	1482	
F	140.093	
R ²	0.49	

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The results reported in Table 2 indicate that the model predicting Washington state citizens' confidence in their local, county, and state government were quite robust and enjoyed great explanatory power ($R^2=.49$). The final model resulted in 1,482 observations. In order to test whether the null hypothesis could be rejected, one-way ANOVA tests were conducted. The ANOVA tests resulted in a quite large F-statistic (127.789) and achieved statistical significance ($p < .001$), well above the conventional $p < .05$ threshold. These findings suggest that the null hypothesis of chance observation could be rejected.

As the results displayed in Table 2 indicate, a majority of variables

included in the multivariate analyses were statistically significant. The only indicators that failed to attain any conventional level of statistical significance were age and civic participation. The results tended to support the hypotheses that citizen perceptions of racial profiling and institutional legitimacy influence broader attributions of trust and confidence in government (H1 and H2). Indeed, all of the attitudinal measures in the model achieved statistical significance. Washington state voters who were more trusting of others (Slope = .267, Beta=.082, $p < .001$) and had greater confidence in their local schools (Slope = 1.097, Beta= .435, $p < .001$) or police departments (Slope = .383, Beta=.362 $p < .001$) were more likely to report greater confidence in their local, county, and state governments. Citizens who believe the WSP engages in racial profiling were found to be more likely to express a lack of confidence in their local, county, and state government (Slope = -.470, Beta=-.052, $p < .01$). Surprisingly, civic participation failed to achieve any level of conventional statistical significance in the model. As noted previously, while generalized trust did attain statistical significance ($p < .001$), the lack of significance for civic participation *at all* makes it difficult to assume that the social capital explanation for trust in government is an entirely viable one, at least in this analysis.

A number of demographic variables did show evidence of contributing to the model's explanatory power. Men (Slope = -.487, Beta=-.054 $p < .01$), Non-White minorities (Slope = -.981, Beta=.081, $p < .001$) and non-Democrats as measured by the Political Party: Democrat variable (Slope = -.582, Beta=-.046, $p < .001$) tended to be less likely to express confidence in their local, county, and state government. Washington state voters with higher levels of educational attainment were more likely to express greater confidence in their local, county, and state government (Slope = .160, Beta= .046, $p < .05$).

In sum, attitudinal indicators (perception of racial profiling, police and public school legitimacy, and generalized trust) appeared to enjoy significant explanatory power in the model. The analysis also pointed to evidence of a potential ripple effect in the data. For every increase in confidence among Washington state citizens' perceptions of their municipal, county, and state law enforcement agencies ($p < .001$) as well as of their local schools ($p < .001$) there is a corresponding increase in citizen attributions of confidence in state and local governmental institutions as a whole. Also, the perception of racial profiling does have a statistically significant effect in this model – citizens who believe the WSP engages in racial profiling tend to express a lack of confidence in their respective municipal, county, and state governments. These findings are highly important for two key reasons: first, there is evidence that suggests a ripple effect is present in regards to citizen views of their local schools and their municipal, county, and state police forces and secondly, the results indicate that citizen

perceptions of police misconduct apply not only to their local police agencies but to their perceptions of state and local government as a whole.

Discussion and Conclusions

Earlier it was hypothesized that police legitimacy and the perception of racial profiling would be powerful influences in determining citizen confidence in their governmental institutions. The results reported in Table 2 present rather compelling evidence in support of Hypotheses 1 and 2. The analysis suggest that citizen's confidence in their police agencies and their beliefs regarding racial profiling do tend to influence the overall level of confidence they reported in their local, county, and state government. Indeed, the high level of explanatory power for citizens' confidence in local schools and police agencies strongly suggest the possibility of a ripple effect. The performance (or perceived performance of) other government institutions appears to have an impact on perceptions of government as a whole among citizens. These findings indicate problems that afflict criminal justice agencies, such as the police, could potentially have a poisoning effect and spread to citizen's perceptions of their entire government. Criminal justice agencies clearly do not work in a vacuum, and the evidence presented in the current study has potentially troublesome implications for democratic institutions.

Legitimacy and confidence in government are the bedrocks of any healthy democratic society. While some might contend that the actions of a few government representatives would have little influence on governmental legitimacy, the current study strongly suggests otherwise. When the public sees or perceives its police force as acting unfairly (through patently unfair and undemocratic practices such as racial profiling), it appears that they are inclined to question not only the legitimacy of their local police department, as previous work by Lee et al. (2007) suggests, but also that of their local, county, and state governments as well. If the country's citizenry views the uniformed law enforcement agents of its government as being lawless in some important respects, there can be profound adverse consequences for our society. Without the attribution of legitimate authority to government, citizens are less likely to obey its laws and less likely to respond to the entreaties of its representatives, a state of affairs which can potentially lead to increased crime and even civil unrest.

There is a growing consensus among scholars that citizens perceptions of trust and legitimacy tend to increase the public's willingness to comply with the law and cooperate with the police (Paternoster et al. 1997; Stoutland 2001; Sunshine and Tyler 2003; Tyler 1990; Tyler and Huo 2002). Procedural justice, though, has implications far beyond the criminal justice system; it also has the

potential to build and foster social capital in disadvantaged communities. Social capital consists of “features of social organizations, such as networks, norms, and trust, that facilitate action and cooperation for mutual benefit” (Putnam 1993, 35) and results in high levels of interpersonal trust and interaction, and norms of aid and reciprocity, and high rates of civic participation (Putnam 1993, 2000).

The most significant finding of this study is the evidence of a demonstrable ripple effect – namely, a problem (even the mere perception of a problem) in one agency, whether local schools or the police, can adversely affect the legitimacy of our entire system of government institutions. Public agencies clearly do not operate in a vacuum, and criminal justice agencies are no exception. Problems such as racial profiling are not the sole province of the police, and as such are not merely “a police problem;” such problems are profoundly governmental problems. The policy implications of this finding are quite profound, indeed.

Racial profiling is typically thought of as a problem solely afflicting law enforcement agencies. However, as the results of this study demonstrate – a problem in one agency can work its way through the entire body of government like a cancer invading a healthy body. Racial profiling is likely but one example of this process. The results of this study suggest that any attempt to combat racial profiling should be implemented not only by individual police departments but by related local and state governments as well. Governmental bodies such as state legislatures, city councils, county commissioner boards, governors, mayors and tribal councils must make a strong concerted effort to address this problem. Police departments and local governments must actively engage their local communities, minority and non-minority alike, and show that they take the scourge of racial profiling seriously.

This task can be accomplished in considerable measure through greater community outreach on the part of local government and state and local law enforcement. It could include a wide variety of approaches, such as: neighborhood meetings, the sponsorship of regional conferences, the use of mass media and public service announcements, community newsletters, citizen surveys, and door-to-door visits on the part of individual police officers. It is instructive for government agencies to keep in mind that citizens tend to view problems such as racial profiling as symptomatic of the health of the system as a whole. If nothing visible and publicly acknowledged is being done about racial profiling or other forms of police misconduct (even if the problem is nothing more than a misplaced perceived concern by the public), citizens’ faith in their elected leaders and governments ability to provide essential services will continue to dissipate. As noted, if citizens fail to view their police and government as being legitimate authorities, they are much less inclined to obey the law and respond to

appropriate directions and reasonable appeals to collective action (Lafree 1998; Tyler 1990).

The results of this study also carry profound implications for police reform efforts such as the promotion of community oriented policing. Community policing emerged in the 1970s as scholars, police administrators, and the general public took a critical look at what the proper goals of the police in a democratic society should be (Zhao et al. 1999). Community policing advocates argued that what was needed was a reprioritization of police functions by which police address the “root causes” of crime, such as social disorder and inequality, rather than merely react to solitary criminal incidents (Capowich and Roehl 1994; Eck and Spelman 1987; Goldstein 1990; Eck and Rosenbaum 1994). Similarly, Kelling and Wilson (1982) argued that order maintenance rather than crime control should be the primary function of the police. Social disorder, it was argued, generally sows the seeds of crime and produces a climate favorable to its development in blighted urban neighborhoods; this is a claim with considerable empirical evidence to support it (Kelling and Coles 1996; Sampson et al. 1997; Skogan 1990). In particular, community oriented policing advocates argue that police departments should also be concerned with building and fostering partnerships with a variety of social groups and public and non-profit agencies with the goal being the improvement of citizen satisfaction with law enforcement and overall police legitimacy.

Police departments operating within the framework of the traditional professional model of policing were not only instructed to remain at arm’s length from the general public in order to preserve the appearance of neutral authority, but also police officers and administrators were instructed to maintain a distance from other government agencies that deal with the consequences of “wicked” problems such as crime and civic disorder. Community policing sought to reverse this inclination toward separation from citizens and other public agencies via the concept of proactive partnership building. Ross et al. (2004) found that such community policing partnerships tend to fall into two broad categories: problem-solving partnerships and community partnerships. Problem-solving partnerships are formed between the police organization and other service providers (public agencies and non-profit organizations) and allow the police to work together with others to “identify, analyze, and solve problems, often using collective resources (Ross, et al. 2004, 9).” By contrast, community partnerships are formed between police and neighborhood residents, community groups, and local businesses. This type of partnership involves information sharing, coordination of activities, and collaboration over the gathering of resources and the initiation of proactive actions to promote public safety. Community oriented policing tends to focus on crime prevention, citizen engagement, and problem

solving as opposed to the largely reactive approach of arresting individual perpetrators (Ortiz et al. 2007). A law enforcement agency operating with a strong community policing orientation would then be less likely to favor a strict crime control approach and would place a high premium upon service provision and order maintenance. The fundamental assumption of this approach is that by emphasizing proactive citizen engagement and addressing community concerns, police departments would be more effective in generating public safety and be viewed as more legitimate in the eyes of the public (Sherman and Eck 2002; Skogan and Hartnett 1997; Skogan 2006).

The adoption of community policing practices has been shown in many studies to lead to the improvement of citizen satisfaction with their law enforcement agencies and the police officers serving them (Sherman and Eck 2002). This is not too surprising of course, inasmuch as that is one of the chief goals of the program (Fisher-Stewart 2007; Nicholl 1999; Scrivner 2006). What has been somewhat disheartening to many advocates of community oriented policing however, is that like most other community crime prevention programs community policing appears to be most successful in more affluent neighborhoods and less successful in the nation's disadvantaged communities where it is perhaps most needed. Skogan (2006) has lamented that for all the successes of the community policing effort in Chicago, sadly enough the city's most disadvantaged neighborhoods saw the least relative benefit from the city's highly regarded community oriented policing program.

While community oriented policing appears to work best in neighborhoods that need it the least, the results of the current study suggest that the perception of procedural justice could be the true culprit behind these failures. If citizens have a preconceived notion that their police tend to act undemocratically, such as whether they engage in racial profiling, they would be less likely to trust police officers no matter how many neighborhood meetings were conducted or how often the police got out of their patrol cars to "meet and greet" community residents. This line of reasoning would suggest that for community policing to work, all levels of government as well as the local police departments involved should engage in a coordinated and targeted effort to let citizens know that they will be treated fairly and that practices such as racial profiling are not tolerated by the police agencies serving them. Police administrators and law enforcement officers alike should not just be concerned with the quantity of their partnerships and non-enforcement contacts with citizens, but they should pay attention to the quality of those partnerships and contacts as well. Officers should be aware that citizens are judging them before they even get out of their patrol car, and how they present themselves to citizens can irrevocably alter a citizen's perception of all government agencies.

In conclusion, local and state governments should be extremely concerned with the evidence of a ripple effect suggested by this study. When citizens view one government agency, whether it is the local police or the local school system as being either corrupt or not worthy of their confidence, that sentiment has the potential to permeate the entire body politic. The results suggest that public agencies do not operate in a vacuum, but rather they likely are all interconnected; it appears that what happens in one key agency such as the police can send shockwaves throughout the entire system of governance. It is instructive to recall that there is good evidence that if citizens view their government as being essentially illegitimate, there is a significant potential for lawlessness (Kane 2005; Lafree 1998; Savolainen 2000; Perez 2003). Consequently, local governments need to take citizen criticisms about public agencies seriously, even if the problem is one of perception based on misinformation. Government needs to assuage citizen fears and concerns that their public servants are acting with only *the public's* best interest at heart.

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