RESPONSIVENESS TO CITIZEN INPUT: TOPIC MODEL ANALYSIS OF PUBLIC COMMENTS TO THE SAN FRANCISCO POLICE COMMISSION

by
Carroll W. Wollard III

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Abstract

Police commissions are uniquely positioned to funnel critical issues raised by citizens to police departments, thereby increasing accountability and potentially improving police/community relations. However, no empirical study to date has analyzed the responsiveness of a civilian policing oversight entity to the voiced needs and concerns of its local community. This paper details a dictionary-based topic model analysis conducted on the minutes from the last 20 years of San Francisco Police Commission (SFPC) meetings. Across the time period, the San Francisco community voiced issues related to crime, accountability, and community most commonly at meetings. Further analysis using a logit regression with a distributed lag model indicated public comment on a topic was strongly associated with the topic being discussed by the SFPC at the same meeting. However, SFPC discussion of the topics voiced by the public waned in subsequent meetings. The results suggest a potential failure of the SFPC to meaningfully act on the concerns raised by the public.

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8. Curriculum Vita
1. Introduction

2014 to 2016 was a particularly tumultuous time between the San Francisco Police Department (SFPD) and the community of San Francisco. Texting scandals by police officers were publicized in 2014\(^1\),\(^2\) and 2016\(^3\) involving racist, sexist and homophobic language, and there were 6 fatal officer-involved shootings in 2015.\(^4\) The events resulted in national news coverage, and in response to the community outcry, San Francisco’s mayor and Police Commissioner requested the assistance of the Department of Justice’s Community Oriented Policing Services (COPS) office. In October 2016, the COPS office released their final report, which analyzed five key components for the SFPD: use of force, bias, community policing practices, accountability, and recruitment/hiring/personnel practices. Ultimately, COPS praised SFPD’s commitment to change, but found it was deficient in all areas, necessitating major changes.\(^5\)

San Francisco presents an interesting opportunity for study of police/community relations, as the city has a robust civilian oversight body in the San Francisco Police

Commission (SFPC). According to their website, the SFPC consists of seven civilian commissioners. The SFPC’s mission and responsibilities are as follows:

**Figure 1: Mission and Responsibilities of the SFPC**

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“The mission of the Police Commission is to set policy for the Police Department and to conduct disciplinary hearings on charges of police misconduct filed by the Chief of Police or Director of the Office of Citizen Complaints, impose discipline in such cases as warranted, and hear police officers’ appeals from discipline imposed by the Chief of Police.

Commissioners are appointed by the Mayor and the Board of Supervisors and they oversee the Police Department and the Office Of Citizen Complaints. The Commission also appoints and regulates Patrol Special Officers and may suspend or dismiss Patrol Special Officers after a hearing on charges filed.”
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The SFPC structurally maintains direct civilian oversight (i.e., the commissioners) of police department policy and discipline, as well as allows non-commissioner citizens (hereafter referred to as the “general public”) to discuss policy and any other police issues. All weekly regular SFPC meetings are open to the public, allowing individuals to comment on the agenda items for that week as well as non-agenda items.

The SFPC’s meeting minutes from 1997 to current are available online, offering the opportunity to analyze for which topics the public advocates at the SFPC meetings and whether the SFPC exhibits responsiveness to the public’s advocacy. A dictionary-based topic model analysis conducted on the minutes revealed the San Francisco community voiced

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6 Los Angeles, Seattle and Milwaukee are other notable major U.S. cities with similar police commissions.  
8 The Office of Citizen Complaints (OCC) is now called the Department of Police Accountability. According to their website, “the mission of the Department of Police Accountability is to promptly, fairly and impartially investigate complaints against San Francisco police officers, make policy recommendations regarding police practices and conduct periodic audits of the San Francisco Police Department. Civilians who have never been police officers in San Francisco staff the Department of Police Accountability…The Department of Police Accountability was originally the Office of Citizen Complaints which was created as a separate city department by an amendment to the San Francisco City Charter (section 4.127) in 1982 and placed under the direct supervision of the Police Commission. [San Francisco Department of Police Accountability. n.d. “Department of Police Accountability.” Accessed December 1, 2017. http://sfgov.org/dpa/]
issues related to crime, accountability, and community most commonly at meetings. Additionally, the public’s advocacy at the SFPC meetings substantially increased over time. Further analysis using a logit regression with a distributed lag model indicated public comment on a topic was strongly associated with the topic being discussed by the SFPC at the same meeting. However, SFPC discussion of the topics voiced by the public waned in the two subsequent meetings after the public discussed a topic. The results suggest a potential failure of the SFPC to meaningfully act on the concerns raised by the public.

2. Literature Review and Theoretical Framework

2.1 Civic Engagement, Public Accountability, and Responsiveness

Long-standing conventional wisdom suggested that improving government entity effectiveness could be achieved through the application of civil society’s ability to exert “exit,” (e.g., leaving one service for another) or “voice” (e.g., advocating for change) market forces. The individual exit and voice decisions are determined by civil society’s perception of the associated costs and potential returns of the respective options. The concept is based on what has subsequently been termed by some as the “great divide” between government and civil society.

However, the great divide is now widely viewed as an over-simplified concept. The “state-society synergy” framework contends that civic engagement and government entity cooperation can be mutually reinforcing and ultimately improve government accountability.

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Synergy exists in two distinct instances: complementarity and embeddedness. Complementarity occurs when the public and private functions are distinct, but interact to perform supportive functions. Embeddedness encompasses instances of connectedness between public and private entities, often via organizational structure. Despite the distinction between complementarity and embeddedness, in practice, state-society synergy often occurs as a mix of both.\textsuperscript{12}

Co-governance and coproduction are very similar concepts which expand the idea of embeddedness within the state-society synergy framework. Co-governance contends that exit/voice options are insufficient measures to take to improve accountability and governance. Ultimately, John Ackerman argues, “the opening up of the core activities of the state to societal participation is one of the most effective ways to improve accountability and governance.”\textsuperscript{13} The theory of coproduction contends citizens should have a role in producing public goods and services.\textsuperscript{14} The two concepts are essentially the same idea, but have slightly different levels of focus (oversight versus production/service level).

“Hybrid” forms of accountability (also known as “diagonal accountability”) are a specific form of the co-governance/coproduction models in which civil society is integrated within oversight and accountability entities of government organizations. Hybrid accountability entities bridge the gap between the “vertical” capabilities of civil society to exert accountability measures (e.g., voting), and the “horizontal” responsibility of public entities to conduct sufficient oversight of their own actions and actions.\textsuperscript{15}

\begin{itemize}
\item \textsuperscript{13} Ackerman, John. "Co-governance for Accountability: Beyond ‘Exit’ and ‘Voice.’”. \textit{World Development} 32, no. 3 (2004): 447-463.
\item \textsuperscript{14} Ostrom, Elinor (1996).
\end{itemize}
great example of a hybrid form of accountability, as civilian commissioners directly oversee the SFPD through both policy and discipline decisions.

Ultimately, the role of civil society in relation to the government has shifted over time from citizen to customer to partner, but civil society still maintains all three roles simultaneously.\(^ {16}\) Social accountability is a relatively new term that encompasses a wide array of strategies for increasing civic engagement within government entities and functions, with the goal of increasing transparency, responsiveness and effectiveness. The term encompasses many different areas, including citizen oversight functions, information transparency, and citizen participation in government decision-making (e.g., participatory budgeting). The range in measures which fall under social accountability fall under two distinct categories. First, “tactical” approaches are focused on local citizen action, largely based on “ground up” actions premised on information access and citizen voice. However, these actions lack the direct control over decision making, and tend to be directed toward symptoms, rather than underlying issues. The second category of measures are “strategic,” which combine the ability to not only voice concerns but bolster the government’s ability to take corrective action in response. Unsurprisingly, strategic approaches to social accountability are more promising than tactical approaches in their ability to yield positive results.\(^ {17}\) The SFPC design combines both “tactical” (i.e., the general public commenting at the meetings) with “strategic” (i.e., the commissioners) measures of social accountability.

Responsiveness is then a form of accountability within government entities, as those entities which are responsive to the voiced needs of the community are held more

\(^{16}\) Thomas, John Clayton. "Citizen, Customer, Partner: Rethinking the Place of the Public in Public Management." *Public Administration Review* 73, no. 6 (2013): 786-796.

accountable for their actions. Responsiveness can take on many forms. For example, the concept of “notice and comment” in agency rule and policy creation is an effective means of gaining input from affected citizens and ultimately driving agency responsiveness.\textsuperscript{18} The SFPC publishes meeting agendas ahead of time, essentially serving as an informal form of notice and comment because the general public can choose to then attend the SFPC meeting to verbally comment during the policy discussion.

At a state level, government responsiveness has been shown to be higher in areas where the populace is more informed through mass media coverage of policy issues, likely due to political officials being incentivized by the potential for reelection.\textsuperscript{19} And information and communication technology platforms have provided the ability for government managers and policy makers to directly respond and interact with citizens. However, the empirical evidence to date indicates no corresponding increase in willingness to respond to citizen feedback.\textsuperscript{20}

2.2 Civilian Oversight of Police

A direct academic study of the SFPC has never occurred; however, the premise of civilian review of police departments has been studied extensively. Civilian review as it exists today began sporadically in the 1920s, but really took root after the Civil Rights Movement in response to police treatment of African Americans.\textsuperscript{21} As of a 1991 survey, 30

of the 50 largest U.S. city police departments had some form of civilian review of the police. A 1992 update to that study increased the number to 34. However, the forms of civilian review varied by the roles of sworn officers in the investigation and recommendation phases of misconduct investigations. As of the 1991 survey, none of the civilian bodies had the ability to discipline a police officer directly.

The only prior direct study of a police commission was a 1994 study of the Milwaukee Fire and Police Commission (MFPC), one of the SFPC’s institutional peers. The study determined the MFPC facilitated citizens filing complaints against the police department and the MFPC had greater credibility because it had the ability to discipline police officers. However, the study found the commissioners lacked investigative experience to process the complaints because they were civilians, and the union backing of police officers fighting a complaint often gave the police officers a legal advantage. Other studies have focused on participatory policing efforts with engagement from the public in policing strategies, but this is distinct from the oversight role of a police commission.

Evaluation of the effectiveness of civilian review of police departments poses a unique challenge for researchers, largely due to the range of civilian oversight entities and the challenge in defining effectiveness. A recent attempt to define performance metrics for

27 Ackerman (2004).
civilian oversight entities focused entirely on the complaint investigative and resolution processes, which has minimal relevance for police commissions with policy or disciplinary missions. ²⁹ Within the SFPD oversight structure, complaint investigations are the role of San Francisco’s Department of Police Accountability, not the SFPC. ³⁰

A 2016 assessment study conducted for the National Association for Civilian Oversight of Law Enforcement found that, among 97 U.S. civilian oversight boards of various sizes, their common goals were improving public trust, ensuring accessible complaint processes, promoting thorough, fair investigations, increasing transparency, and deterring police misconduct. Even almost 20 years after Walker and Bumphus’ work declaring the challenge of studying oversight entities, the assessment by the National Association for Civilian Oversight of Law Enforcement found that to date, still very little empirical research has been done on the effectiveness of civilian oversight. ³¹

2.3 Current Gaps in Literature

The SFPC, as a civilian entity charged with policy and disciplinary oversight of the SFPD, falls squarely in line with existing theory regarding the need for social accountability, both at a tactical and strategic level. It is a clear example of the championed concepts of co-governance and “hybrid” accountability serving as a bridge across the great divide between government and civil society.

In addition to governance from the appointed civilian commissioners, the weekly meetings also provide a unique opportunity for the general public to voice opinions regarding policy and the SFPD as a whole. As a result, the SFPC has the potential for very quick responsiveness by its design of integrating public comment into its meetings. Public comment at SFPC meetings directly parallels the public comment solicitation for federal agency rules and regulations, albeit on a much smaller scale.\textsuperscript{32}

Research regarding police commissions is very limited, likely due in part to the limited number of police commissions in major United States cities. However, police commissions sit at a critical intersection between tactical and strategic social accountability. The diagonal positioning between the citizens and police department should allow them to funnel the critical issues of community concern to the police department and enact corresponding policy. Yet no empirical study to date has analyzed the responsiveness of a civilian policing oversight entity to the voiced needs and concerns of its local community.

3. Data and Methods

3.1 San Francisco Police Commission Minutes Data

The SFPC makes available the last twenty years of meeting minutes on its website, with a modern interface for the minutes from 2015 to current\textsuperscript{33} and an archive containing all the minutes from 1997 to 2014.\textsuperscript{34} The minutes are in three distinct formats: (1) searchable PDFs (constituting a majority of the minutes), (2) Word documents, and (3) HTML

\textsuperscript{32} West (2004).
webpages. The archive contains some substantial gaps, indicating either the SFPC didn’t 
meet, or the minutes were not published. Additionally, for the proposes of this study, some 
meeting minutes were not usable, due to data issues including non-searchable PDFs and 
inoperable website links.

After removing duplicates and excluding “special meeting” minutes,35 the corpus, or 
collection of documents, consisted of 686 regular meeting minutes. The minutes in the 
corpus ranged from 22 January 1997 to 21 June 2017. However, for reasons listed above, the 
time period 2009 to 2013 was missing a substantial number of minutes and years outside 
2009 to 2013 contained sporadic data issues as well. In addition to the unavailability of some 
minutes for analysis, the SFPC simply started to meet with less regularity in approximately 
2012. By 2015, the cadence of the meetings appeared to change to once every two weeks, 
despite the website currently indicating the SFPC “meets every Wednesday.”36,37 Figure 2 
displays the yearly totals of the 686 SFPC meeting minutes, showing the decline in minutes 
starting in 2009 due to data issues and less frequent meetings.

35 Special meetings were excluded from analysis because they were often closed to the public, typically 
consisted of a single topic disciplinary meeting, and were held in addition to a regular weekly meeting. 
37 The layout of the 2015 to 2017 data explicitly lists weeks without meetings, verifying the lack of minutes is 
not due to a technical glitch or oversight.
All SFPC meeting minutes contained public comment sections which provided short summaries of the topics discussed by members of the general public who attended the meeting. To compare the topics discussed within the public comment portion of SFPC to the SFPC meeting writ large, the minutes were split and converted into two separate searchable PDFs for each meeting – one PDF contained all the public comments for that meeting and the other PDF contained all remaining text from the minutes.38 As a result, the individual measurement of the analysis was a single SFPC meeting, and all variables were dummy variables created with value 1 if a topic was discussed, or 0 if a topic was not discussed at a given meeting. All PDFs were dated, creating a time series to analyze topic discussions.

38 At times within the public comment section of the minutes, the minutes would indicate a commissioner directly responded to a comment given by a member of the public. If the commissioner’s comment was short (e.g., the commissioner thanking the individual or quickly agreeing with the comment), the commissioner’s comment was considered part of the public comment portion of the meeting and included in the public comment PDF. However, if the public comment spurred substantial discussion by one or multiple commissioners, the text of the commissioners’ comments was included in the SFPC PDF for that respective meeting.
3.2 Dictionary-Based Topic Model Analysis

A dictionary-based topic model analyzes a corpus using a dictionary (i.e., a set of terms established to define individual topics) to determine if, and how often, topics are present within the individual documents of the corpus. Each corpus (i.e., the public comment corpus and the SFPC discussion corpus) of 686 documents was individually analyzed using the Quanteda and Text Mining (tm) packages within R. A document frequency matrix for each corpus was created based on a dictionary created to define 21 critical policing topics. Use of the dictionary-based topic model method was appropriate for the analysis because of the brevity of the public comments, as the minutes often summarized the comments of an individual with a single sentence. Thus, a single occurrence of a term indicated that an individual brought up a respective topic at a meeting.

The document frequency matrices indicated on a per-meeting basis, whether each of the 21 policing topics were discussed. The 21 topics were then binned into six specific topic categories (e.g., bias, community) largely reflecting the COPS office report categories plus an additional category for crime. The dates of the minutes were used to analyze the frequency of meetings at which the topics and categories were raised over time.

39 Appendix Table 1 details the list of dictionary terms. Terms which could have multiple meanings were specifically avoided. For example, “conduct” was a possible term for the Accountability topic, but was excluded because of its potential use as a verb (i.e., “conduct an investigation”).

40 Analysis of each corpus was first attempted using the Latent Dirichlet Allocation (LDA) algorithm topic modeling method. However, the results of the LDA analysis, despite numerous iterations of the number of topics, number of words within each topic, and elimination of irrelevant words, did not yield results with meaningful topics. This was likely because the public comments were often written in a rote and standardized manner, and the SFPC minutes writ large contained vast procedural language.

41 Appendix Figure 1 lists excerpts from the public comments given during the 15 April 2015 SFPC meeting, showing the brief nature of the comments and singular use of key terms.

42 A limitation with the dictionary-based topic model method employed was the inability to identify the proportion of how these topics were discussed in relation to each other and the other topics not defined by the dictionary.
3.3 Logit Regression with Distributed Lag Model

The document frequency matrix for each corpus represented the data at time \( t \).

Additional dummy variables to represent the public comment at the previous meeting \((t-1)\) and two meetings prior \((t-2)\) were then created to use as inputs into a logit regression with a distributed lag model. The distributed lag model used is as follows:

\[
SFPC_t = \beta_0 + \beta_1 PublicComment_t + \beta_2 PublicComment_{t-1} + \beta_3 PublicComment_{t-2} + u_t
\]

Consequently, the logit regression using the distributed lag model, indicating the probability that a topic was discussed by the SFPC, is as follows:

\[
P(SFPC_t = 1) = \frac{1}{1 + e^{-(\beta_0 + \beta_1 PublicComment_t + \beta_2 PublicComment_{t-1} + \beta_3 PublicComment_{t-2})}}
\]

The results of the logit regression indicate the potential correlative relationship between an individual policing topic’s discussion by the public at time \( t, t-1 \) and \( t-2 \) (independent variables) on whether that topic was discussed by the SFPC at time \( t \) (dependent variable). Thus, the SFPC’s responsiveness was measured by the lagged effects of the public comments on the SFPC’s discussion of a topic.

4. Results

4.1 General Characterization of the Public Comments

The public exhibited strong involvement in SFPC meetings, particularly after 2003. Overall, a member of the public commented during 85.7\% of the SFPC meetings. The majority of meetings without public comment (83 of the 98) occurred between 1997 and 2003. Since 2007, a member of the public commented during 96.6\% of the meetings.
The meeting minutes were often written in a manner which summarized the public comments with the same short phrases, such as “Selma Johnson discussed concerns,”43 or “Unidentified…complained about actions of police.”44 These summary statements lacked context but generally characterized the style of the public’s interaction with the SFPC. Since 2007, concern from the public regarding a topic was expressed at 77.7% of meetings. However, the public also expressed gratitude at the meetings, with at least one individual expressing thanks or commendation in 60.8% of the meetings since 2007. Thus, while the public utilized the SFPC meetings to advocate for change and bring issues of the concern, the public voiced appreciation for the SFPD as well. Figure 3 shows the general characterization of public comments over time.

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4.2 Policing Topics Discussed by the Public

Figure 4 details the frequency of SFPC meetings where the public discussed the 21 individual topics.\textsuperscript{45} Gun violence was the most frequent topic across the meetings, with discussion occurring at 222, or 32.4\%, of the total SFPC meetings. Officer misconduct issues were raised by the public at 27.3\% of meetings, indicating a strong public interest in ensuring potential improper actions committed by officers were addressed by the SFPC. Overall, as expected, general topics (e.g., misconduct, youth) were brought up at more meetings than specific social issues (e.g., racial bias) or police tactics (e.g., non-lethal force weapons). The lower comment frequency of specific issues is likely due, at least in part, to the generalized nature of the comment synopses in the minutes.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4}
\caption{Frequency of Public Comment Topic Discussion}
\end{figure}

\textsuperscript{45} For comparison, appendix Figure 2 shows the frequency of SFPC meetings where the SFPC discussed the 21 individual topics.
To simplify the temporal analysis of the public comments, the 21 individual topics were aggregated into six distinct topic categories: Use of Force, Crime, Accountability, Bias, Community, and Budget/Personnel. As shown in Figure 5, advocacy by the public generally was consistent across topic categories. The temporal trends were very similar across categories, with some variation in the frequency with which categories were discussed. Despite the decline in overall SFPC meetings from the peak of 44 meetings each in 2003 and 2004, the public responded with increased advocacy when the SFPC did meet.

![Figure 5: Public Comment Topic Categories](image)

Table 1 below details the topic category discussion by percentage of meetings across four time periods of approximately five years. The top row, No Public Comment, shows the decline in meetings where there was no public comment. The public advocated with greatest frequency for the categories of Crime (306 meetings), Accountability (232 meetings), and
Community (215 meetings) with greatest frequency. All topic categories increased over time in their percentage of the total meetings where the categories were discussed, providing further evidence of the increase in advocacy by the public at the SFPC meetings over time.

The most recent time period, 2012 through 2017, exhibited substantial increases in advocacy by the public across all categories. The public’s increase in discussion of the issues exposed by DOJ COPS suggests the public was aware of the issues at the ground level, and consequently provided forewarning to the SFPC.

**Table 1: Topic Categories Discussion by Percent of Meeting Minutes**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No Public Comment (98)</td>
<td>31.6%</td>
<td>14.3%</td>
<td>5.2%</td>
<td>1.4%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Use of Force (125)</td>
<td>4.8%</td>
<td>19.7%</td>
<td>12.3%</td>
<td>40.4%</td>
<td>18.2%</td>
</tr>
<tr>
<td>Crime (306)</td>
<td>23.0%</td>
<td>44.3%</td>
<td>45.8%</td>
<td>72.3%</td>
<td>44.6%</td>
</tr>
<tr>
<td>Accountability (232)</td>
<td>15.0%</td>
<td>37.4%</td>
<td>31.6%</td>
<td>56.0%</td>
<td>33.8%</td>
</tr>
<tr>
<td>Bias (162)</td>
<td>7.0%</td>
<td>23.6%</td>
<td>22.6%</td>
<td>46.8%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Community (215)</td>
<td>19.3%</td>
<td>33.5%</td>
<td>29.7%</td>
<td>46.1%</td>
<td>31.3%</td>
</tr>
<tr>
<td>Budget/Personnel (132)</td>
<td>5.3%</td>
<td>16.3%</td>
<td>23.9%</td>
<td>36.9%</td>
<td>19.2%</td>
</tr>
</tbody>
</table>

The increase in advocacy by the public is likely due to multiple reasons. First, the public potentially feels empowered by the meetings, and thus, the increase reflects the public’s confidence that their voice is heard and valued by the SFPC. Secondly, as previously noted, the SFPC experienced multiple high-profile scandals from 2014 to 2016. It is likely
the public was motivated to voice to the SFPC their dissatisfaction with the SFPD and their
desire for reform. Both instances show the value of the SFPC, as the meetings offer the
general public the opportunity to voice concerns regarding the police in a manner not offered
in many other cities. However, the utility of giving the public a voice is limited if the entity
receiving the feedback does not exhibit responsiveness to the concerns, suggestions, and
commendations.

4.3 Responsiveness of the SFPC to Public Comment

Table 2 details the results of 21 logit regressions – one for each policing topic. In
each regression, SFPC discussion of a topic at time $t$, was the dependent variable, with public
comment at the contemporaneous meeting ($t$), the prior meeting ($t-1$) and two meetings prior
($t-2$) as the independent variables. Ultimately, the distributed lag shows whether a correlative
relationship exists between a topic’s discussion by the SFPC and the public voicing the topic
at the contemporaneous meeting and two prior meetings. However, the existence of a
relationship only shows correlation, not causality. Additionally, due to the logit regression,
the public comment coefficients listed do not have a logical interpretation. The first two
meetings, 22 and 29 January 1997, were omitted from the analysis because they lacked at
least two prior meetings to create the $t-1$ and $t-2$ public comment variables. As a result, each
regression was conducted against a corpus of 684 meetings, instead of the 686 in the full
corpus. In the case of the Religion and LGBTQ topics, the two topics with the least number
of SFPC meetings with public comments (22), the $t-2$ variable was omitted to avoid the
dummy variable trap.
### Table 2: Results of Logit Regression Analyses - Relationship Between Policing Topic Discussion by SFPC and Lagged Public Comments

<table>
<thead>
<tr>
<th>Topic Category</th>
<th>Individual Topic</th>
<th>Public Comment t (SE)</th>
<th>Public Comment t-1 (SE)</th>
<th>Public Comment t-2 (SE)</th>
<th>Constant (SE)</th>
<th>N</th>
<th>Pseudo R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer-Involved Shootings</td>
<td>2.42*** (.35)</td>
<td>.93*** (.32)</td>
<td>0.68** (.32)</td>
<td>-1.42*** (.11)</td>
<td>684</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>Non-Lethal Force Weapons</td>
<td>2.55*** (.40)</td>
<td>1.02** (.45)</td>
<td>.13 (.49)</td>
<td>-3.51*** (.24)</td>
<td>684</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>Use of Force</td>
<td>2.04*** (.36)</td>
<td>1.86*** (.37)</td>
<td>1.57*** (.38)</td>
<td>-3.19*** (.20)</td>
<td>684</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>Gun Violence</td>
<td>1.40*** (.20)</td>
<td>.45** (.21)</td>
<td>.52*** (.20)</td>
<td>-1.04*** (.11)</td>
<td>684</td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>Gangs</td>
<td>1.36*** (.41)</td>
<td>.92** (.45)</td>
<td>.14 (.56)</td>
<td>-2.43*** (.15)</td>
<td>684</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Narcotics</td>
<td>.57** (.28)</td>
<td>.48* (.29)</td>
<td>.09 (.31)</td>
<td>-2.01*** (.14)</td>
<td>684</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Prostitution</td>
<td>2.00*** (.67)</td>
<td>.74 (.87)</td>
<td>.47 (.91)</td>
<td>-4.23*** (.33)</td>
<td>684</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>1.86*** (.31)</td>
<td>-.27 (.41)</td>
<td>.82** (.35)</td>
<td>-2.59*** (.16)</td>
<td>684</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>Misconduct</td>
<td>.50** (.25)</td>
<td>.50** (.25)</td>
<td>.29 (.24)</td>
<td>1.13*** (.12)</td>
<td>684</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Cameras</td>
<td>1.94*** (.32)</td>
<td>.60* (.36)</td>
<td>.89** (.35)</td>
<td>-2.54*** (.16)</td>
<td>684</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>Racial Bias</td>
<td>1.82*** (.29)</td>
<td>.32 (.35)</td>
<td>.38 (.35)</td>
<td>-2.22*** (.14)</td>
<td>684</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.95*** (.23)</td>
<td>.42* (.24)</td>
<td>.60** (.24)</td>
<td>-1.74*** (.13)</td>
<td>684</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td>1.44** (.58)</td>
<td>-.18 (1.04)</td>
<td>(omitted)</td>
<td>-2.94*** (.18)</td>
<td>662</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>LGBTQ</td>
<td>.88 (.64)</td>
<td>.37 (.76)</td>
<td>(omitted)</td>
<td>-2.67*** (.16)</td>
<td>662</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Community-Based Policing</td>
<td>1.62*** (.29)</td>
<td>.79** (.32)</td>
<td>-.30 (.40)</td>
<td>-2.08*** (.13)</td>
<td>684</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>Homelessness</td>
<td>1.23*** (.40)</td>
<td>.87** (.43)</td>
<td>-.23 (.57)</td>
<td>-3.00*** (.20)</td>
<td>684</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Activism</td>
<td>1.19*** (.39)</td>
<td>.51 (.43)</td>
<td>.46 (.44)</td>
<td>-1.76*** (.11)</td>
<td>684</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Youth</td>
<td>.55*** (.20)</td>
<td>.29 (.20)</td>
<td>.06 (.20)</td>
<td>-6.24*** (.10)</td>
<td>684</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Budget</td>
<td>.86** (.36)</td>
<td>-.22 (.32)</td>
<td>-.79** (.32)</td>
<td>.40*** (.08)</td>
<td>684</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Hiring</td>
<td>.02 (.35)</td>
<td>.89*** (.32)</td>
<td>.29 (.34)</td>
<td>-1.00*** (.09)</td>
<td>684</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>.58** (.25)</td>
<td>.73*** (.25)</td>
<td>.76*** (.25)</td>
<td>-.79*** (.09)</td>
<td>684</td>
<td>0.04</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Standard error in parentheses
* denotes 90% confidence level; ** denotes 95% confidence level; *** denotes 99% confidence level
The SFPC exhibited strong contemporaneous responsiveness to comments voiced by the public. As shown in Table 2, across nearly all topics, public comment on a topic was strongly associated with discussion of the topic by the SFPC during the same meeting ($t$). Specifically, 14 of the 21 topics exhibited a relationship statistically significant at the 99% confidence level at time $t$. However, the relationship between the prior meeting’s public comment ($t-1$) and the SFPC discussion at time $t$ was not as strong (10 of the 21 topics exhibited at least 95% confidence level, with an additional three topics at the 90% confidence level). And finally, the relationship between public comment two meetings prior ($t-2$) and the SFPC discussion at time $t$ was even weaker, with only 8 of the 19 topics exhibiting a relationship statistically significant at the 95% confidence level or higher.

Six of the 21 topics exhibited a strong relationship between the SFPC meeting and each public comment time variable: Officer-Involved Shootings, Use of Force, Gun Violence, Cameras, Ethnicity, and Training. These topics ranged from a high volume of public comment discussion (Gun Violence at 222 meetings) to relatively low (Use of Force at 53 meetings), and indicate that these issues received strong, consistent attention by the SFPC.\textsuperscript{46}

The findings indicate a strong contemporaneous relationship between a topic discussed by the public and whether that topic was specifically addressed by the SFPC. Thus, the SFPC exhibited strong initial responsiveness to public comments. However, the nature of the public comments in the minutes suggest the public increasingly commented on specific SFPC meeting agenda items (i.e., a particular policy up for discussion), in addition to

\textsuperscript{46} In 2016, the SFPC revised the SFPD Use of Force policy, prompting discussion of use of force and officer-involved shooting at nearly all meetings. This likely influenced the strong relationship between these topic’s discussion by the SFPC and the public comment time variables.
commenting on non-agenda items. The construct of the analysis did not allow for comment directionality to establish which party (i.e., the SFPC or the public) initiated the topic and which explicitly responded to it. However, in general, the observation regarding the public’s increased comment on specific agenda items is likely indicative of the increased validity and value the public perceived from attending SFPC meetings. Alternatively, it is also possible the increased public comment on specific agenda items could reflect a structural change to the SFPC meetings or minutes (e.g., increased emphasis by the SFPC to solicit public comment, improved publicity of agenda items ahead of SFPC meetings, improved specificity in how the minutes were written).

The weakened relationship between the lagged public comments and the SFPC discussion suggests that the attention given topics by the SFPC waned. The subsequent discussion by the SFPC was particularly weak with the topics in the categories of Crime, (except for Gun Violence), Bias (except for Ethnicity), and Community. Some decline in attention given to the topics is expected, as the SFPC cannot perfectly address all topics. However, the results suggest a potential failure of the SFPC to meaningfully act on many of the concerns raised by the public. The minutes themselves are a catalog of topics raised by the public, but SFPC utilizes no other apparent mechanism to track the comments over time. Thus, the SFPC may not be fully leveraging the potential value of the on-the-ground issues the public is flagging for their attention. The SFPC could further capitalize on the public’s comments by tracking them over time, with particular emphasis on comments which are not in direct response to an existing SFPC agenda item. Identified trends in the public comments could alert the SFPC to over-the-horizon issues, which if addressed in a timely manner, could prevent larger issues from later occurring.
5. Conclusion

The analysis of the last 20 years of SFPC meeting minutes showed that the public increased their advocacy across all policing topic categories over time, and most frequently advocated for crime, accountability, and community issues. Additionally, the SFPC exhibited strong contemporaneous responsiveness to the topics voiced by the general public, however, the SFPC responsiveness waned as lagged effects of the public comments showed a diminished correlative relationship with SFPC topic discussion.

The public’s increased advocacy indicated that they perceived their participation in the SFPC meetings was valuable. SFPC’s construct allowed the public to comment on both agenda items and non-agenda items, structurally creating an opportunity for the public on a weekly basis to discuss policing matters directly with decision-makers. However, providing the public a voice is a hollow gesture unless the feedback can truly influence decision making. SFPC’s waned responsiveness to the public comments highlights the need for the SFPC to track and analyze the public comments given at their meetings so that they can fully capitalize on their value.

As highlighted earlier, this study does have some limitations. The dictionary-based topic model used for the text analysis was contingent upon term selection, an inevitably subjective exercise. Additionally, the model did not provide the relative proportion of topics, so the occurrence of a topic on a per-meeting basis was used as the unit of analysis rather than a proportionality measure. And finally, the subsequent responsiveness measure derived from the topic model data did not indicate directionality to determine which group (i.e., general public versus the SFPC) initiated discussion on a topic.
The public nature of the SFPC lends itself well to additional future research. Such research could use the SFPC meeting minutes to analyze the effectiveness of the public in influencing policy outcomes by comparing the public comments to policy subsequently enacted by the SFPC. Additionally, scholars could study the meeting participants from the general public to identify their motivations for attending the meetings. The study could also seek to measure the public’s perceptions regarding the value of their contributions to the SFPC and their ability to influence the SFPD. Finally, the SFPC could be studied as part of an analysis comparing large city police departments with police commissions to those without police commissions.

The SFPC affords the general public the ability to voice feedback regarding the SFPD in a manner that is relatively unique across major U.S. city police departments. However, improved responsiveness to the public’s involvement would likely foster greater public participation, initiating a positively reinforcing cycle with the potential to benefit both the public and the SFPC.
6. References


Thomas, John Clayton. "Citizen, Customer, Partner: Rethinking the Place of the Public in Public Management." Public Administration Review 73, no. 6 (2013): 786-796.


### 7. Appendices

#### 7.1 Dictionary Used for Topic Model Analysis

Appendix Table 1 below details the individual terms defining the dictionary used in the topic model analysis.

**Appendix Table 1: Dictionary Used for Topic Model Analysis**

<table>
<thead>
<tr>
<th>Topic Category</th>
<th>Topic</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer-Involving shooting</td>
<td>ois, officer involved, officeri*, officer-involve*</td>
<td></td>
</tr>
<tr>
<td>Non-Lethal Force Weapons</td>
<td>taser*, energy weapon*, energy device*, electric control weapon*, ecw*, pepper, carotid, ced*</td>
<td></td>
</tr>
<tr>
<td>Use of Force</td>
<td>use of force, brutality</td>
<td></td>
</tr>
<tr>
<td>Gun Violence</td>
<td>homicid*, shot*, shooting*, kill*</td>
<td></td>
</tr>
<tr>
<td>Gangs</td>
<td>gang*</td>
<td></td>
</tr>
<tr>
<td>Narcotics</td>
<td>drug*, narcot*, marijuana, cocaine, cannib*, heroine</td>
<td></td>
</tr>
<tr>
<td>Prostitution</td>
<td>prostitut*</td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>accountab*, transparen*</td>
<td></td>
</tr>
<tr>
<td>Misconduct</td>
<td>complaint*, disciplin*, misconduct, suspend*, suspension*, fire*, firing*</td>
<td></td>
</tr>
<tr>
<td>Cameras</td>
<td>bwc**, &quot;body worn&quot;, &quot;body camera**&quot;, &quot;footage&quot;, &quot;video*</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>race, raci*, prejudic*, gentrif*, profiling, bias*, frisk*</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>black*, afric*, afro*, asian*, hispanic*, latino*, latina*, white*, ethnic*</td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td>muslim*, jewish, mosque*, christian*, church*, temple*, faith-based</td>
<td></td>
</tr>
<tr>
<td>LGBTQ</td>
<td>homosexual*, gay*, lesbian*, transgender*, lgbt*</td>
<td></td>
</tr>
<tr>
<td>Community-Based Policing</td>
<td>community based, community-based, community policing, cpab</td>
<td></td>
</tr>
<tr>
<td>Homeless</td>
<td>homeless*, panhandl*</td>
<td></td>
</tr>
<tr>
<td>Activism</td>
<td>outreach, advoc, activis*</td>
<td></td>
</tr>
<tr>
<td>Youth</td>
<td>youth, school*, juvenile*, children</td>
<td></td>
</tr>
<tr>
<td>Budget</td>
<td>budget*, financ*</td>
<td></td>
</tr>
<tr>
<td>Hiring</td>
<td>recruit*, hire, hir*, diversity</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>train*</td>
<td></td>
</tr>
<tr>
<td>Concerns</td>
<td>concerns</td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>action*</td>
<td></td>
</tr>
<tr>
<td>Gratitude</td>
<td>thank*, commend, gratitude</td>
<td></td>
</tr>
</tbody>
</table>
7.2 Excerpts of Public Comments from 15 April 2015 SFPC Meeting

Appendix Figure 1: Excerpts of Public Comments from 15 April 2015 SFPC Meeting

<table>
<thead>
<tr>
<th>Tom Silhorst complained of the commission’s behavior and asked for body cameras for officers and spoke of corruption by the city attorney.</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Elliot Lewis commented that the commission and the police have a very difficult job and spoke of the upcoming CIT Awards and thanked the Commission and the Chief for their contribution.</td>
</tr>
<tr>
<td>Clyde spoke in regards to bias and spoke of arrest of 34 African-American drug dealers.</td>
</tr>
<tr>
<td>Shari Taylor addressed the issue of badge cameras and asked for an independent agency to look at footage of badge cameras to enforce what is seen on the badge camera.</td>
</tr>
<tr>
<td>Betty Jones discussed concerns that she is not happy of how the commission spoke to Reverend Brown.</td>
</tr>
<tr>
<td>Oshana Thomas, Third Baptist Church, spoke on how officers drive around her neighborhood and racial profile on individuals.</td>
</tr>
<tr>
<td>Dede Hewitt discussed her concerns about oversight committee and asked for training and more oversight and that there should be justice for everyone and asked that the OCC’s capacity be increased.</td>
</tr>
</tbody>
</table>

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7.3 SFPC Topic Discussion Frequency

Appendix Figure 2 below details the frequency of SFPC meetings where the 21 individual policing topics were discussed by the SFPC.
8. Curriculum Vita

Carroll W. Wollard III was born on 25 January 1990 in Hagerstown, Maryland. He graduated with Distinction in May 2012 from the University of North Carolina at Chapel Hill with a Bachelor of Science in Business Administration from the Kenan-Flagler Business School. Wollard earned the graduation distinction of Buckley Public Service Scholar, awarded for completing a public service program (skills trainings, coursework, 835 hours community service logged) and exhibiting high academic achievement. He is pursuing a Master of Science in Government Analytics from Johns Hopkins University with an anticipated graduation date of December 2017.