

Social Media and Trust in North American Local Government law Enforcement

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Abstract: This paper examines the continuing use of social media by local law enforcement agencies in the United States and Canada as a vehicle to ensure public trust and to establish a system of transparency, public participation, and collaboration. It describes the social media response employed by law enforcement agencies in two U.S. and two Canadian cities to significant police incidents, including a terrorist act, an officer death, a sports riot, and a natural disaster. Information was gathered from publicly available sources to develop a social media profile for each police department. Then at least one major event impacting each city was identified by scanning traditional news media and by studying the comments posted to the official police department Facebook page related to that incident. Tweets from the official police department Twitter accounts were captured and a sentiment analysis was performed to determine whether the sentiment expressed was positive or negative during the same timeframe. The content of the messages posted by law enforcement, whether sharing good news or informing citizens of potential or real threats, the content of the tweets by the visitors to the official police department Twitter accounts, and specific community events surrounding noticeable spikes in participation were analyzed. The incidents investigated include the Boston Marathon bombing in April 2013 and the flooding that devastated the City of Calgary in June 2013. The contention that the use of social media can increase the level of trust citizens have in local law enforcement is not definitive but is supported by evidence in the form of increased participation on the social media sites reviewed and the positive comments of participants. Public administrators can use lessons learned from these examples to refine their own social media strategies in order to engage and support the public in the event of similar occurrences.

Keywords: law enforcement, local government, police, social media, trust

1. Introduction

In June of 2013, InterPARES Trust, a multi-national, interdisciplinary research project funded by a 5-year Partnership Grant (2013-2018) from the Social Sciences and Humanities Research Council of Canada (SSHRC) was launched to explore issues concerning digital records and data entrusted to the Internet. A number of studies were approved to investigate different facets of the larger research agenda, among them the *Social Media and Trust in Government* research project. The authors of this paper are members of this project team. The larger study focuses on the question, "Can social media be used by government to increase citizen trust?" During the research project, the authors became especially interested in how social media is used by local law enforcement agencies in the United States and Canada.

2. Theoretical foundations

The theoretical foundation for the overall study, and consequently for the study of social media use by law enforcement, is adapted from archival and diplomatic theory related to trusted records and the following four theories.

- Behavioral Trust Theory. Lewicki, Tomlinson, and Gillespie (2006) studied how trust relationships evolve and concluded, "the operational level of trust is often deduced from either the proportion of cooperative choices or the long-term behavior patterns of those who chose to cooperate" (p. 996). In this study, we examine the behavioral patterns of government and citizens as exhibited through participation in social media.
- Resource-based Theory (RBT). RBT is a holistic approach for leveraging components available to management of a firm to achieve maximum profits (Kozlenkova, Samaha, & Palmatier 2014). For our purposes maximum profits equates to maximum trust. Grant (1991) noted a firm's resources should be utilized strategically for the common good of the firm: "first, internal resources and capabilities provide the basic direction for a firm's strategy, second, resources and capabilities are the primary source of profits for the firm" (p. 116). An e-government's internal resources include those available for outreach to the public, including social media initiatives.

- Social Capital Theory. The term “social capital” encompasses the “norms and networks facilitating collective actions for mutual benefits” (Woolcock 1998, p. 155). If members discover something that supports or hurts a group’s social capital, they contribute in a cooperative manner to a realignment of behaviors that strengthen the social trust bonds among members of the group. This can be observed, for example, in citizen posts to social media accounts that result in a change in policy on behalf of the government account owner.
- Social Network Theory. This theory views social relationships in terms of nodes and ties (as between citizens and government). Abbasi, Wigand, and Hossain (2014) see these nodes and ties as “crucial in the building of trust among individuals” (p. 68) in socially linked groups. Chow and Chan (2008) found that “a social network and shared goals significantly contributed to attitudes toward knowledge sharing” (p. 463). Mutual trust that leads to interpersonal trust relationships in a group setting is supported in a cyclical manner by the social capital produced. This type of behavior can be observed when the government employs social media tools during emergency situations.

3. Methodology

During the initial phase of the project, an iterative approach was taken to identify twenty North American local governments for study. Since the goal of the study is discovery of best practices, the review focused on cities with extensive online presences, including an official website, Facebook account, three Twitter accounts (city, mayor, police), and at least one other social media account. At the conclusion of the selection process, it was found that the 10 US cities identified were among the 61 largest in the US and that 9 of the 10 Canadian cities were among the 25 largest in Canada, suggesting cities must be of a certain size to support a sustained social media effort.

A profile was created for each city selected, documenting the history, demographics, online development, social media approach, best practices, key events, and awards. During this phase, the website and social media accounts were reviewed to understand each city’s online activities. In addition, a sentiment analysis was performed of the official Twitter accounts created for the cities, mayors, and police departments for the period of January 2, 2013, through August 24, 2014. During the course of the larger investigation, the authors became aware of interesting examples of local law enforcement use of social media and saw value in documenting them.

The social media initiatives of four of the law enforcement agencies were selected for this paper based on their employment in response to a specific police event. Reports provided by traditional media were used as the basis for crosswalks between the events, the Facebook and Twitter posts, and the sentiment expressed by participants in the official police department Twitter accounts.

4. Boston, Massachusetts Police Department and the 2013 Boston Marathon Bombing

Boston is the capital of Massachusetts and in 2013 was ranked the 21st largest city in the U.S. with an estimated population of 636,479. The history of American law enforcement began in Boston in 1631 when a night Watch comprised of six watchmen, one constable, and several volunteers was established. The Boston Police Department grew to 1,000 patrolmen, and 2,241 police officers by the beginning of 2009. Each page of the official Boston Police Department (BPD) website contains links to Facebook, Twitter, and BPD Media Relations, the official YouTube channel. The Bureau of Public Information, which functions as part of the Office of the Police Commissioner, manages social media accounts. Social Media statistics as of January 27, 2015, are shown in Table 1.

Table 1: Boston Police Department social media accounts

Statistics for BPD Social Media Accounts		
Platform	Launch Date	Engagement
Twitter	January 2009	305,000 followers 9,612 tweets
Facebook	January 29, 2010	131,867 likes
YouTube – RPD Web	July 30, 2009	170 subscribers 369,788 views
YouTube – Crime Video	August 21, 2009	163 subscribers 62,718 views

At 2:49 p.m. on April 15, 2013, two bombs were detonated during the Boston Marathon, resulting in three deaths and approximately 280 injuries. At 3:39 p.m. Cheryl Fiandaca, the bureau chief of public information for

the BPD, confirmed the explosion and injuries with a tweet on @bostonpolice made from the Northshore Mall where she was shopping with her niece. She dictated a second message for her niece to Tweet while driving to the station (Bindley 2013).

On April 18th @bostonpolice announced that two suspects had been in a firefight with police in Watertown and one was dead. An April 19th Tweet included the picture of the surviving suspect, 19 year-old Dzhokhar Tsarnaev, classified as armed and dangerous. Another tweet, #MediaAlert, warned citizens to avoid compromising officer safety by broadcasting tactical positions of homes being searched.

The message shown in Figure 1 went out on April 19th to 300,000 Twitter followers (up from 40,000 the day of the bombing).



Figure 1: Official announcement of capture of suspect

Activity on the @bostonpolice account spiked from 25 tweets in March to 911 tweets in April and then dropped to 158 the following month. An analysis of April tweets using a lexicon of terms to indicate positive sentiment was only slightly higher (25.69%) than those indicating negative sentiment (21.41%). However, when the entire Tweets were read, it was found that some posts containing terms identified as negative expressed the opposite emotion.

BPD's Official Facebook posts chronicled the ways in which the citizens of Boston paid tribute to the victims, survivors, police officers, and community through pictures, including one of a candlelight vigil held to honor the memory of 8 year-old Martin Richard, a victim of the attack.

A post on Mashable(Bar-tur 2013) suggested two reasons for the success of the @bostonpolice Twitter information campaign during the crisis: "Boston PD entered the conversation immediately because they knew chatter about the investigation would happen with or without them" and "True engagement does not arise in a time of crisis but through preparation well ahead of the crisis."

The story of the BPD's use of Social Media during the days following the incident reveals important lessons, including:

- An on-going social media strategy must be in place in order to leverage social media in times of crisis.
- Not all social media is equal. Twitter was the right tool for disseminating text messages rapidly. Facebook provided a means to share images, both in seeking assistance from the public to identify the bombing suspects and in memorializing activities that helped in the healing process.

For effective use of social media for emergency management immediately following the Boston Marathon bombings, the BPD was ranked second by MPHProgramsList.com on a list of the 50 Most Social Media Friendly Police Departments in America's Largest Cities in 2013. In addition, the Boston Police Department was named *Boston Social Government Technology's* 2014 Top 25 Winner. The recipients of this award are recognized for the use of technology to improve government, empower citizens and transform communities.

5. Riverside, California, Police Department and the 2013 Officer Shooting

The City of Riverside was founded in 1870 as a colony dedicated to furthering education and culture. The California navel orange industry began in the City in 1873, making it the wealthiest U.S. city per capita by 1895. In 2013, the City of Riverside with a population of 316,619 was ranked 61st on a list of the 101 largest cities in the United States.

Founded in 1896, the Riverside Police Department (RPD) transformed from a small frontier town police force to a large metropolitan police department. The current Chief of Police, Sergio G. Diaz, oversees approximately 345 sworn police employees and 206 non-sworn employees. The RPD’s 2010-2015 mission statement supports the department’s dedication to using Web 2.0 technology and Social Media to promote openness and transparency.

RPD social media accounts include Facebook, Twitter, and two YouTube accounts, one for public service videos and one to host crime videos. Social media statistics as of January 31, 2015, are shown in Table 2.

Table 2: Riverside, CA Police Department social media accounts

Statistics for RPD Social Media Accounts		
Platform	Launch Date	Engagement
Twitter	October 2, 2009	4,392 followers 318 tweets
Facebook	April 10, 2009	14,361 likes 830 visits
YouTube – RPD Web	May 23, 2007	63 subscribers 27,880 views
YouTube – RPD Crime Video	August 21, 2009	163 subscribers 62,730 views

The official RPD Twitter account, @RiversidePolice, is used to share text and images with the public. Tweets and retweets related to the RPD were captured for the period between January 1, 2013, and August 24, 2014. A sentiment analysis revealed that messages containing negative comments outweighed those containing positive comments in nine of the 20 months under review, including February 2013. Plotting the volume of activity on the Twitter account revealed a spike during February 2013.

On February 7, 2013, Riverside Police Officer Mike Crain was shot and killed during an early-morning ambush while on routine patrol; the first Tweet to address this issue is shown in Figure 2.



Figure 2: First Tweet announcing the killing of a Riverside Police Officer

Our research team captured 164 additional Tweets or Retweets related to the incident. They shared news about the shooting, the manhunt, the capture of the suspect, and the memorial service for the slain officer. Today the Tweet in Figure 2 has been removed from the @RiversidePolice account. All that remains is a tweet by the Riverside Police stating the intersection is once again open and a post asking why the original tweet was deleted.

The City social media policy places the responsibility to ensure that information disseminated via social media is accurate on the individual department. A comment by a supervisor with the Police Department said the original post, which was later deleted, was not wrong--just posted prematurely (Joyce 2013).

The only mention of the shooting posted on the RPD’s Facebook on April 14 announced that Team RPD was running in the Baker to Vegas Challenge Cup relay race and that the race was dedicated to the shooting victim, Officer Mike Crain.

By contrast, the City of Riverside's Facebook page still contains an official post announcing the continued search for the suspect, a \$1 million award leading to his capture, and an image of the slain officer, Michael Crain. The story of the RPD’s use of Social Media reveals some important lessons for other law enforcement agencies, including the observation that care must be taken not only to post accurate information but also to refrain from deleting information unless that deletion conforms to a published social media policy.

Aside from the example of a deleted post, the RPD has been recognized for their excellence in the use of social media. The RPD ranked 22 on the 2013 list of 50 Most Social Media Friendly Police Departments in America’s Largest Cities for its use of Facebook, Twitter, and YouTube. Of special note was their use of Twitter to post traffic updates for commuters who check for road closures and other traffic-related announcements. They were also congratulated for their use of Nixle to share advisory alerts with the community by text message, through email, and over the web.

6. Vancouver Police Department and the 2011 Vancouver Hockey Riot

The coastal City of Vancouver is the eighth largest municipality in Canada, with a population of 603,502 in 2011. The Vancouver Police Department (VPD) is an independent force of approximately 1,300 officers and 400 civilian employees, governed by the Vancouver Police Board.

The VPD launched social media initiatives in 2008 and adopted a social media policy in 2012 that aligns with the International Association of Police Chiefs’ model policy.

Table 3: Vancouver Police Department social media accounts (February 4, 2015)

Statistics for VPD Social Media Accounts		
Platform	Launch Date	Engagement
Twitter	October 2010	60,800 followers 9,175 tweets
Facebook	August 2008	11,994 likes
YouTube	April 2008	1,065 subscribers 638,465 views
Flickr	February 2011	439 photos

The VPD was the first police force in North America to investigate a sports riot covered live on social media. On June 15, 2011, the Vancouver Canucks hockey team lost the Stanley Cup final to the Boston Bruins. Following the game, 450 police faced over 150,000 disappointed fans who rioted for much of the night (Furlong and Keefe 2011). While the riot occurred in 2011, its shadow was felt through 2013 when the 300th suspect was charged.

As the riot began, Twitter responses included situational reports and expressions of dismay that turned to anger and blame, with urgings to bystanders to film events. While 13,000 Vancouverites joined clean-up efforts on June 16, others posted photographs and videos of riot participants on “name and shame” websites (Nash and Fredericks 2013). After the VPD issued warnings against vigilantism, attention turned to the VPD’s Integrated Riot Investigation Team’s (IRIT) effort to collect evidence.

Following the riot, the VPD’s Twitter following grew to over 16,000 and Facebook “likes” increased 2000 percent (Longley 2011), reflecting the public’s support for VPD officers who had acted heroically and with restraint in the face of danger. Importantly, police actions in 2011 contrasted with the 1994 Hockey Riot, when tear gas, batons, and force were used (Schneider and Trottier 2012). In the week after the riot, the VPD received 344 text emails, 676 with YouTube links, 1011 with links to social media, 708 with photographs, 53 with videos, and 280 Crime Stoppers tips. Furthering this crowd-sourced effort, the IRIT launched the Vancouver Riot 2011 website in August. Within three days, the site saw 100,000 visits; nine suspects were identified, six people turned themselves in, and 225 tips were received (Nash and Fredericks 2013).

Given the public’s response, the VPD faced two challenges: the volume of materials requiring processing and the public’s expectation that rioters face swift punishment. In response, the 70-person IRIT partnered with the Law Enforcement and Emergency Services Video Association (LEVA) in Indianapolis to convert and tag files using commercial editing suites (Garrison 2012). This effort was possible through \$2.0 million in city funding and \$3.2 million from the Province of British Columbia (City of Vancouver 2011). The VPD also began a campaign to advise the public on the prosecution process, which, unique to British Columbia, requires that police provide reports to Crown Counsel who lay charges. While this perceived delay remained a contentious point in the months following the riot, over the next three years 300 people were charged with 908 offences, 260 pled guilty, 3 were convicted, and 226 were sentenced (Talmazan 2014).

In terms of best practices, the VPD developed a process to authenticate crowd-sourced electronic evidence to meet admissibility requirements. Since the *Canada Evidence Act* s.31.1 requires that, “A person who wants to admit an electronic document as evidence has the burden of proving its authenticity,” the IRIT interviewed each

witness and obtained a statement verifying the authenticity of “sourced” records. These verified records were used to authenticate “open source” records from websites and social media (Nash and Fredericks 2013). Lessons learned by the VPD related to the immediacy and volume of photos and videos submitted, the “social justice” aspect of public shaming, the out-pouring of support, and the significant growth in social media followers (Longley 2011).

In recognition of their efforts, the VPD was awarded the International Association of Chiefs of Police’s 2012 Award for Excellence in a Criminal Investigation and the August Vollmer Excellence in Forensic Science Award for “exceptional achievement in managing or conducting a criminal investigation” (International Association of Chiefs of Police 2013).

7. Calgary Police Service and the 2013 Calgary Flood

The prairie City of Calgary is the third largest municipality in Canada, with a population of 1,096,833 in 2011. The Calgary Police Service (CPS) is an independent police force of 1,900 officers and 700 civilian employees, governed by the Calgary Police Commission.

The CPS launched social media accounts in 2008 with significant participation on their Twitter, Facebook, and YouTube accounts. In 2014, eight percent of survey respondents indicated interaction with CPS’ social media accounts, up from two percent in 2011.

Table 4: Calgary Police Service social media accounts (February 4, 2015)

Statistics for Calgary Police Service Social Media Accounts		
Platform	Launch Date	Engagement
Twitter	January 2008	82,900 followers 18,700 tweets
Facebook	August 2008	39,444 likes
YouTube	April 2008	1,678 subscribers 555,900 views
Flickr	July 2008	359 photos

In June 2013, southern Alberta experienced heavy rainfall, triggering catastrophic flooding along the rivers which converge within city limits. Following the declaration of a state of local emergency, 26 neighborhoods were placed under evacuation orders affecting over 100,000 citizens. When the floods dissipated two weeks later, four people were dead and damages exceeded five billion dollars.

During the flood peak, the CPS posted updates on Twitter and Facebook and responded to 22,000 posts (Connected Cops 2013). The sentiment analysis reflects this increase, with 4,780 tweets harvested for June, over 3306 in May. Hashtags were important in reaching the widest audience; the #yycflood hashtag was tweeted 324,322 times from June 20 to 30, and #yychelps appeared 31,119 times (Marketwired 2013). The CPS also posted a helicopter video of the flood’s impact, viewed 77,000 times on YouTube (Connected Cops 2013).

The CPS’ social media effort became increasingly important as the city braced for the rivers to crest and the public looked for evacuation information. The CPS used Twitter and Facebook to provide updates, information, safety tips, and answer inquiries and clarify rumors. Twitter was helpful in keeping emergency dispatch lines open, although the public had to be reminded not to tweet emergencies. Twitter provided a real-time, alternative channel where the CPS didn’t “need to wait until a newspaper publishes, [or] the next edition of the TV news or even the next radio bulletin” (Wright 2014).

In terms of best practice, the CPS was well equipped for the emergency, with trained staff in place and a well-developed technical infrastructure. When confined to “Twitter jail” for exceeding an anti-spam tweet limit, the CPS merely switched to another account and worked with Twitter to unfreeze the main account within an hour. Similarly, when the City of Calgary’s website experienced traffic outages, the CPS posted screen snapshots of evacuation maps on Flickr (Bogart 2013). As the communications lead noted, “We were prepared. We deal with crisis communication a lot and so we were able to get out information extremely quickly” (Huffington Post Alberta 2013). At the same time, traditional media and existing approaches were not overlooked—“You can’t discount the ability to fly a helicopter over a community with loudspeakers and door-to-door knocking” (Wright 2014).

The CPS demonstrated best practices in correcting misinformation. In April 2013, a CPS inspector participated in a national news story on social media posts of police scanner information, noting that the lack of gatekeepers in social media can result in the spread of misinformation which can put officers or witnesses at risk or identify the wrong people as suspects (Canadian Broadcasting Corporation 2013). The CPS' monitoring of social media was key during the emergency.

For the CPS, the lesson learned was that preparation pays. With four constables routinely posting prior to the flood and a resilient network, the CPS was familiar with social media and overcame technical challenges with relative ease. As a result, the CPS became the most reliable source of information during the flood, building significant public trust in the process. Their calm response to the "Twitter jail" crisis had longer term results; Twitter began "working on changing their policy for first responders specifically because of this situation" (CBC 2013) and launched a new "Twitter Alerts" service three months later (Pena 2013).

As a result of their outstanding social media effort during the flood, the CPS was awarded the 2013 Connected Cops Award for Social Media Event Management (City of Calgary 2013).

8. Observations

The four law enforcement examples suggest that social media can be used by government agencies to increase citizen trust. In each example, the events under study resulted in a spike in social media interactions between the police and citizens and increased awareness of the forces' online presence. Membership in the social media accounts experienced incremental growth in the months that followed, reflecting the cyclical interplay suggested by social network theory.

Since selection criteria required each police force have an existing social media presence, the examples studied had a framework in place to support increased traffic, including active social media accounts, trained staff, and policies and procedures. All were able to respond effectively to the event and assign additional resources where required. The examples show the importance of advance preparation and suggest how such efforts might be justified in line with resource-based theory. In some ways, social media engagement has become a requirement for law enforcement; if police do not join the conversation, it will take place without them.

The interplay between offline and online behaviors is apparent. In keeping with social capital theory, police appear to be "rewarded" for exemplary behavior by increased positive public engagement and "reprimanded" for actions the public does not agree with by increased negative engagement. As crowd surveillance of police continues, public trust becomes an added incentive for police to act with care in situations where they believe force is required. By extension, law enforcement must consider how to address problematic aspects of public use of social media, including publication of incorrect or personal information or information that places officers or others at risk.

Social network theory suggests some of the ways social media supports new relationships and engagement between nodes. In each of the four examples, law enforcement's use of social media became part of the stories reported on in traditional media. These stories often quoted city officials, university professors, and other analysts when reporting were posted or retweeted online, creating a widening ripple of information out from the initial police event.

Finally, while we focused on discovering best practices supporting trust, we became aware of other topics suitable for future research, including law enforcement's use of social media in investigations and the challenges associated with situational information in emergencies.

9. Conclusion

Lessons can be learned from both effective and ineffective use of social media. Each of the Police Departments reviewed in this paper are recognized for their use of social media to help them achieve their mission and goals. Some have greater resources than others. Some are more closely integrated into the larger local government social media strategy than others. Regardless of the stage of the social media strategy, improvements can be made that will increase citizen participation and attitude toward law enforcement.

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