

SOCIAL MEDIA USE IN LOCAL PUBLIC AGENCIES:
A STUDY OF CALIFORNIA'S CITIES

A Thesis

Presented to the faculty of the Department of Public Policy and Administration
California State University, Sacramento

Submitted in partial satisfaction of
the requirements for the degree of

MASTER OF PUBLIC POLICY AND ADMINISTRATION

by

Christopher Gerard Zimmer

SPRING
2012

© 2012

Christopher Gerard Zimmer

ALL RIGHTS RESERVED

SOCIAL MEDIA USE IN LOCAL PUBLIC AGENCIES:
A STUDY OF CALIFORNIA'S CITIES

A Thesis

by

Christopher Gerard Zimmer

Approved by:

_____, Committee Chair
Mary K. Kirlin, D.P.A.

_____, Second Reader
Edward L. Lascher, Jr., Ph.D.

Date

Student: Christopher Gerard Zimmer

I certify that this student has met the requirements for format contained in the University format manual, and that this thesis is suitable for shelving in the Library and credit is to be awarded for the thesis.

_____, Department Chair
Robert W. Wassmer, Ph.D.

Date

Department of Public Policy and Administration

Abstract
of
SOCIAL MEDIA USE IN LOCAL PUBLIC AGENCIES:
A STUDY OF CALIFORNIA'S CITIES

by
Christopher Gerard Zimmer

Little is known about the extent to which public agencies are using social media to connect with their constituents or how these agencies are using social media as a communication and public engagement tool. Limited information on social media use exists for government agencies at the federal and state level, but almost none is available for local agencies. This thesis studies California cities to determine how widespread social media use is among California municipal governments, for what purposes agencies are using it, how California city governments are managing their social media tools, and what problems or barriers city governments are encountering as they use, or choose not to use, social media.

Data for this thesis comes from a self-developed and self-administered survey sent to city officials throughout California in February 2012 and additional data I collected about the cities that responded to the survey. The survey consisted of twenty-five questions regarding social media use, management of the city's social media tools, and the problems and barriers California cities face in the adoption and use of social media. I collected demographic data and information available on the cities' Facebook pages for all cities that responded to the survey.

My research found five major themes regarding responding California cities' use of social media: most cities are using social media and doing so fairly regularly; cities are generally more interested in information-sharing through social media than constituent engagement; cities

have internal control mechanisms but lack policies that address external issues; cities have encountered few problems with their social media use; and lack of adequate resources is the main issue preventing more cities from using social media. I also found that population size and location appears to affect the rate and sophistication of use of social media by cities, but per capita income of the city appears to have little effect.

_____, Committee Chair
Mary K. Kirlin, D.P.A.

Date

ACKNOWLEDGEMENTS

I would like to thank those friends and family that provided their support and encouragement throughout my graduate education in general and while writing my thesis in particular. A special thank you to my soon-to-be wife for putting up with the late nights and weekends spent at the library. Thank you Mary Kirlin, Ted Lascher, and Peter Detwiler for providing your guidance and input in creating this thesis. Thank you to those classmates that I relied on for support (and the occasional happy hour) throughout the process. Thank you to the city officials who took the time to respond to my survey. Finally, thank you to all of the faculty, staff, and students of the Department of Public Policy and Administration for providing me an amazing opportunity to further my education.

TABLE OF CONTENTS

	Page
Acknowledgments.....	vii
List of Tables	x
List of Figures	xi
Chapter	
1. INTRODUCTION	1
Organization of Thesis	5
What Is Social Media?	5
Why Does Social Media Use Matter?.....	8
2. WHAT WE KNOW ABOUT SOCIAL MEDIA USE IN THE PUBLIC SECTOR	10
General Public's Use of Social Media	10
Public Agencies and Social Media	13
Challenges to Adoption of Social Media by Public Agencies	17
Social Media Users' Interactions with Public Agencies	22
Summary and Areas Where Additional Research is Needed.....	23
3. METHODOLOGY	26
General Information about the Survey	28
Survey Sample Population.....	28
Survey Questions	31
Supplemental Data	33
Data Analysis.....	33
Potential Methodology Limitations and Errors.....	34
Summary	36
4. RESULTS	37
Information on Survey Respondents.....	37
Main Themes of Findings	38
Factors Affecting Social Media Use and Sophistication	48

Summary	54
5. CONCLUSION.....	56
Answers to Research Questions.....	56
Implications of My Findings.....	62
Areas for Further Research	66
Appendix A. Survey Instrument and Aggregate Results	69
Appendix B. Table of Cities that Responded to Survey	84
Works Cited	87

LIST OF TABLES

Tables	Page
1. Table 3.1 Summary of Survey Questions	32
2. Table 4.1 Length of Time Cities Have Been Using Facebook.....	39
3. Table 4.2 Differences between Longest and Shortest Using Cities	40
4. Table 4.3 Type of Information Posted to City Facebook Pages.....	42
5. Table 4.4 Management and Update Access Rights of City Facebook Pages.....	43
6. Table 4.5 Items Contained Within Social Media Policies	44
7. Table 4.6 Methods Cities Review and Evaluate Effectiveness of Facebook Use.....	45
8. Table 4.7 Problems Encountered with Social Media	47
9. Table 4.8 Social Media Differences between Large and Small Cities.....	50
10. Table 4.9 Differences between Bay Area Cities and Other Cities	51
11. Table 4.10 Differences between Southern California Cities and Other Cities.....	52
12. Table 4.11 Differences between Southern California Cities and Bay Area Cities.....	53
13. Table 4.12 Differences between Wealthy Cities and Other Cities.....	54

LIST OF FIGURES

Figures	Page
1. Figure 2.1 Social Media Use by Online Adults.....	11
2. Figure 4.1 Counties in which Respondent Cities are Located	38

Chapter 1

INTRODUCTION

In the decade since its inception, social media has become a powerful tool for communication. As of late 2011, three-quarters of American adults use the Internet, and of those, nearly 80% visit social media sites or blogs, meaning two-thirds of Americans are using some form of social media (Jansen, 2011; Nielsen, 2011). For comparison, that figure is greater than the percentage of Americans who subscribe to cable television (Edwards, 2006). In its short history, social media has gone through several iterations, and only recently have the platforms people use regularly become somewhat standardized. Today, Facebook reigns supreme as the primary social media tool, attracting more than 140 million unique visitors a month in the United States alone (Nielsen, 2011). Social media use is not confined to person-to-person communication; people use it to connect with corporations, civic groups, recreation groups, and government. In fact, Facebook has more “objects” (organization pages, groups, events, and community pages) with which people interact than it does active users. The average Facebook user is connected with 80 organization pages, community pages, groups, or events (Facebook, 2012b).

Clearly, social media has become a powerful tool for organizations attempting to reach a broad swath of the American populace. However, it is less clear what extent public agencies are using social media tools to communicate and interact with their constituents, how they are managing these tools, and what problems or barriers public agencies are encountering with social media. To answer those questions, my thesis examines how widespread and active social media use is amongst municipal government in California, what methods they have employed to manage these tools, and what issues are being seen with their use.

Most simply, social media is defined as the tools and platforms people and organizations use to create, publish, converse, and share content and information online. Originally created to connect people with other people, social media has evolved into a major method organizations connect with consumers and constituents. Such tools allow organizations to reach out to their customers in ways they have not been able to in the past. Prior to social media, large-scale public outreach was often one-sided and difficult: organizations had to rely on conventional advertising methods like television and radio commercials, billboards, and product placement. Such advertising is expensive, so its frequency and scope is necessarily limited, and it does not allow direct engagement with customers. Social media, on the other hand, is low- to no-cost, meaning organizations can reach out frequently to increasingly large or specialized groups of people. It also allows users to interact with the organization directly, meaning the organization no longer has to rely on sales data or polling to receive feedback from customers. Social media is direct, instantaneous, and, often, unfiltered.

These benefits translate well to public agencies. Prior to social media, agencies would communicate with the public through newspaper notices, public postings, radio and television commercials, direct mailings, or other traditional methods. Agencies had little way of knowing if the information was being read or how the community reacted to it. Given the expense of traditional media, communication was necessarily limited. Social media allows public agencies to communicate more frequently and more directly in near real time with constituents at little to no cost. In addition, organizations can immediately receive feedback to the posting from the public's comments, "likes," and frequency of reposting. Additionally, by using social media, organizations are able to communicate with constituent groups that have expressed an interest in receiving information from the agency; this means for more routine communications that do not

have a broad impact on the community, the agency may not have to use significant resources over-communicating in the hope that a particular communication reaches the correct audience.

Social media carries risks and costs for public agencies as well. Social media is largely unfiltered. That means people connected with a public agency through social media can immediately express their viewpoint on certain issues, publically criticize the agency to a mass audience with relative ease, or post potentially offensive content. There are also a number of unresolved legal issues unique to public agencies involving social media, including how much agencies can censor content on their public sites. Social media use also presents opportunity costs. When employees spend time on managing and updating social media sites, those employees cannot use that time to perform other activities in support of the agency or the public.

Still, for many public agencies, the benefits outweigh the risks and costs, so it is not surprising that many have turned to social media to communicate and interact with their constituents. Government agencies have found many uses for social media, such as alerting constituents about evolving emergency situations, increasing public knowledge about agency policies and goals, and soliciting feedback on issues or initiatives before the agency. Facebook has attempted to make using its site easy for government agencies by maintaining a “Government on Facebook” page, which helps public agencies create pages, outlines strategies to help them start connecting with their constituents, and discusses “best practices.” Facebook has become an important communication tool for some public organizations, particularly the federal government, and the company boasts that the top forty United States Government pages are each connected with at least 1.5 million users (Facebook, 2010).

Despite the ease of use and widespread availability of these tools for public agencies, there appears to be significant disparity in the extent of use amongst agencies. For some organizations, their social media footprint is little more than a redirect to their normal webpage, if

they have a footprint at all. Others are actively engaging with constituents on a near-constant basis and developing new ways to interact with the public through social media. It is unknown where on the spectrum the majority of public agencies fall, if they are using social media at all. Because social media is becoming an integral piece of public communication for many organizations, knowing the extent to which public agencies are using it allows for a better understanding of how communication and engagement with the public is changing.

Using California municipal governments, I examine the use of social media by public agencies. California, the most populous state in the country, has nearly five hundred cities ranging in population from a little over one hundred to almost four million. Some cities, like San Francisco and Los Angeles, are major urban centers, while others are small rural communities. California provides for a broad range of city types, allowing me to examine a number of different factors in relation to social media use. However, California may not be representative of municipalities in the rest of the country. The state is home to Silicon Valley, which is where many information technology companies are headquartered, bringing with them an IT-savvy workforce. California city governments may be more prone to use new technologies than other cities in the country because the populace itself may be more comfortable with using them.

I have specifically chosen to examine cities because cities deliver more services to the public than any other level of government (Misczynski & Cuellar Mejia, 2011). As such, cities may have more frequent contact with their constituencies, making social media a possibly potent communication and engagement tool. People often experience government more through their cities than through the county, state, or federal government. The plethora of services cities provide, such as public safety, road maintenance, waste management, land use planning, and utilities, allows ample opportunities for municipalities to interact and engage with citizens on concrete, impactful issues that have significant effects on the daily lives of city residents.

Organization of Thesis

In this thesis, I will provide insight into how and to what extent California city governments are using social media to engage with their constituents. In the remainder of Chapter 1, I will provide insight into what constitutes social media and discuss why learning about cities' use of social media is important. I will describe "what we know" about social media in Chapter 2: how the general population is using social media, how public agencies are using it, the extent to which the public is connecting with government through social media, and what challenges agencies may face. In Chapter 3, I will describe my methodology for collecting and analyzing my data. I will discuss the results of my research in Chapter 4. Finally, I conclude the thesis in Chapter 5 with my overall findings, implications for other public organizations, and future research opportunities.

What is Social Media?

Social media is not one thing; it is a collection of tools and platforms that allow people and organizations to publish information and content online, share that content with the general public or selected users, and converse with others about that content. Social media is constantly evolving and growing to encompass a variety of technologies and functionalities that facilitate sharing and engagement between people and groups in an online setting. It allows people to communicate with a broad array of people and organizations, and then integrate that communication with the communication others are having about the same topic. It allows people to see what others are doing as they are doing it. And it allows people to interact with others instantly without the filter traditional communication provides.

Some see the line between traditional media and social media disappearing and predict that in the near future all media will be social. The Chief Executive Officer of Vimeo, a video sharing website, stated:

The future of social media is the loss of the distinction between media and social interaction online. Mass media and social media will be seamlessly integrated across devices and platforms to offer relevant, dynamic, personalized experiences for people anywhere. Discoverability and the import of editorial curation will not be lost, but rather inherently incorporated into the environments for richer and more customized experiences (Frommer & Ortiz, 2011).

If such predictions are correct, social media may quickly become a principal way people access and respond to information. Organizations that are not using social media may find themselves behind the curve and unable to effectively spread their message.

What constitutes social media varies greatly among the various tools and platforms. Facebook, the most prominent social media service with 845 million active users worldwide, allows users to create a profile detailing information about themselves, connect with “friends,” share information updates and media content with others, and receive comments and feedback from those with which they are connected. Users can also “like” organizations or products, which allows them to receive updates from or about that organization or product on their personal homepage. Upon logging into Facebook users are immediately greeted by all of the information and content their “friends” or “likes” have posted in recent hours. Users can also create specified groups of users and share information and content on a more limited basis with only those users they wish to share that information and content with. Facebook allows users to “tag” friends and organizations in posts and updates, which cross-references those posts with the profile of the person or organization that was “tagged,” creating a dynamic, integrated content- sharing environment.

YouTube, the second most used social media site, is a video sharing site where people upload, watch, and share with others originally-created videos. The videos range from “home

movies” featuring funny cat tricks to professionally-produced films and shows. Many frequent sharers, including some government agencies, have “channels” with a number of different videos on various topics. For example, the City of Santa Clara has a channel with dozens of videos about things like preparing for flooding, properly disposing of Christmas trees, and explaining the city budget (City of Santa Clara, 2012).

Twitter, rounding out the top three most used social media tools, allows users to connect with others by sending, receiving, and sharing short 140-character messages. These messages, called tweets, are distributed instantaneously to anyone who follows that user and can be marked with “hashtags” that will make those tweets accessible to anyone following that topic. For example, anyone wishing to receive live updates of the 2012 State of the Union Address could have followed the hashtag #SOTU leading up to and during the address. The user would then have immediate access to constantly updated information and feedback from users around the world tweeting about the State of the Union Address. Twitter is a tool many people and organizations use to quickly provide quick headline-type information to their followers. For example, on February 6, 2012, the San Diego City Clerk tweeted, “From Chambers: Council denies the appeal of Environ Determination for Neg Dec # 164545 (8490 Whale Watch Way); D1 votes no,” informing followers of a decision made by the city council on a land use issue (San Diego City Clerk, 2012).

Beyond these top three platforms, there are dozens of other social media tools that allow users to interact in other ways. Regardless of the specific tool used, the goal of social media users is to connect and share information and content with other users. It is by definition interactive and dynamic. Social media offers an unprecedented ability for the average person to engage with people around the world and interact with the organizations and institutions that affect him or her. It no longer limits organizational communication to roles of the giver and the receiver; it allows

people to have an ongoing dialogue with organizations and actively contribute to the broader conversation of issues and trends. However, there are costs associated with social media use. Time spent by public employees on managing social media tools is time spent not performing other activities, creating an opportunity cost to heavy use. In addition, recent research suggests that interactions occurring through social media are more passive and provide for less depth than traditional methods of interaction, which could lessen the potency of public agency interaction with the community (Marchie, 2012). Whether social media is truly the future of all media remains to be seen, but it is without a doubt a powerful tool for mass communication.

Why Does Social Media Use Matter?

With two-thirds of the American public using social media and the average Facebook user being connected with more than 80 events, organizations, community groups, or product pages, social media is at the forefront of modern organizational communication. Social media allows organizations to move beyond one-way communication toward customer or client engagement. Many public agencies are interested in increasing constituent contact and engagement, and using social media may be an effective tool to increase the level of interaction they have with their constituencies. Engagement with the public will become increasingly important to the citizenry as their interactions with non-public organizations become increasingly socialized. If I can interact with corporate giant Coca-Cola through the Internet, why can't I interact with my city government, which has far more impact on my daily life than Coca-Cola? Currently, it is largely unknown how broad social media adoption is among public agencies, particularly municipal governments.

To measure and study government interaction with citizenry in the 21st century, one must have an understanding of how technology is influencing it. Determining if and how cities are using social media tools provides a framework for analyzing how communication and

engagement is changing and if that engagement is having an effect on the way cities interact with their residents. While there are dozens of case studies about how individual public organizations are implementing social media, there are few studies demonstrating how broadly governments are adopting these technologies. Is engagement through social media a nice addition to or a critical component of modern public communication engagement strategies? What is preventing public agencies from adopting social media as a tool? Do people even want to interact with their city online?

Knowing how cities are using these communication tools may also help develop an understanding of how government interaction with the public is changing. Government has long been associated with red tape and mindless bureaucracy; social media has the potential to cut away much of that red tape while developing more efficient, responsive governments, assuming that the opportunity cost of time spent on social media use does not correspond to decreased responsiveness elsewhere in the organization. For example, the City of San Francisco has developed a Facebook-integrated application that allows residents to submit city 311 service requests directly through Facebook. The city then replies to the request to the resident's email address listed in Facebook (City and County of San Francisco, 2012). This is far more responsive and convenient of a model than requiring residents to locate an individual city department to email or wait for an operator on a general 311 telephone line. Such innovations are ways municipal governments are changing the nature of how government provides its services. By providing a comprehensive view of how cities in California are using social media, researchers and public administrators will have a more solid foundation for beginning to assess the ways social communication is affecting constituent communication and interaction.

Chapter 2

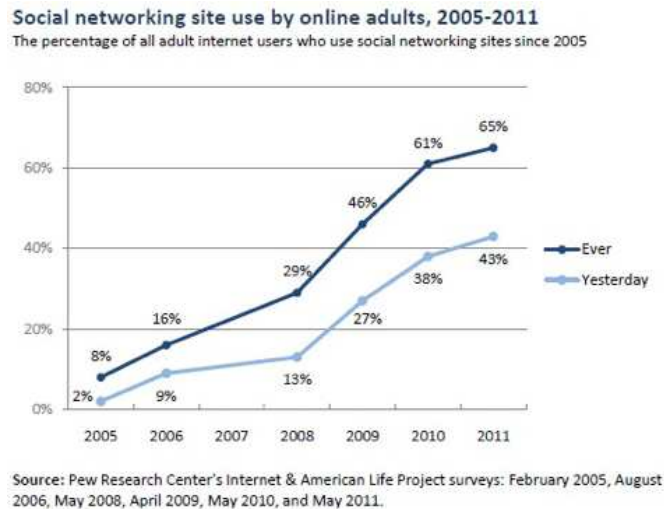
WHAT WE KNOW ABOUT SOCIAL MEDIA USE IN THE PUBLIC SECTOR

There is little academic research available regarding the use of social media, and I could find even less on public sector use of social media. However, in the last few years, a number of professional organizations have begun researching and documenting the demographic trends of social media users. Without a doubt, who is using social media has changed in the decade since its inception. Today, two-thirds of Americans use some form of social media (Jansen, 2011). When looking only at adults, roughly half of Americans use social media, which is double the percentage it was in 2008. When comparing farther back to 2005, the year after Facebook first launched, use by adults has increased 900% (Madden & Zickuhr, 2011).

General Public's Use of Social Media

For Internet users, social media is near ubiquitous. As of late 2011, between 65 and 80% percent of Internet users used at least one social media tool (Jansen, 2011; Madden & Zickuhr, 2011), and close to half of those use some form of social media on a daily basis, as shown in Figure 2.1. Compared to other online activities, social media is only surpassed by email and search engines (Madden & Zickuhr, 2011). Given the high percentage of users and frequency of use, some trend-watchers believe social media may have reached a saturation point among Americans and growth will slow considerably in the coming years (Shankland, 2011 ; RICG, 2011).

Figure 2.1 Social Media Use by Online Adults



Still, use continues to grow, even if at a slower pace than a few years ago. Much of the growth in the last few years has come from increased use by those over age 35. From 2008 to 2011, the growth rate for over age 35 Internet users was about 150%, while adult users under 35 only increased by about 30% (Madden & Zickuhr, 2011). Such growth patterns have changed the average age of social media users considerably. Pingdom, an Internet usage monitoring company, used Google Ad Planner data to estimate that today 60% of social media users are aged 35 and over, and the average social media user is 37 years old (Pingdom, 2010). Pew's 2011 survey reached a similar conclusion. However, this average age does not fully represent the impact middle aged adults are having on the social media landscape. The "average age" statistic is somewhat skewed by some social media sites that are used almost exclusively by younger people. When looking at the larger social networks, the average age increases: Facebook's average user is 38; Twitter's average user is 39; and LinkedIn, a social media site aimed at professionals, has an average user age of 44 (Pingdom, 2010).

Despite the rising average age of social media users, the oldest adults are still the least likely to use social media sites. While more than 80% of the youngest online adults use social

media, only about half of online adults aged 50-64 use it. This further declines to only about one-third of online adults when looking at those aged 65 or more. Still, despite its less frequent use by the oldest adults, social media continues to grow at its fastest rate among this age group (Madden & Zickuhr, 2011).

Looking at other demographic factors, social media use is surprisingly consistent, hovering around two-thirds of online adults regardless of the factor examined. Pew's 2011 study of adult Internet users found no statistically significant difference among social media users for any other demographic factor other than age. Race, income, education level, and geographic location seem to matter little as to whether Internet users use social media.

However, when looking at the entire population, not just Internet users, disparity among the demographic factors becomes apparent. While the two-thirds use statistic is consistent among Internet users, examining demographic factors about who is an Internet user reveals inconsistency among groups. Internet use is markedly higher among the young, whites, men, college graduates, and those with high incomes. For example, 94% of adults under 30 are Internet users, while only 41% of those over 65 use the Internet. Ninety-seven percent of those earning over \$75,000 per year are users; only 62% of those with an income under \$30,000 use the Internet. Ninety-four percent of college graduates use the Internet, while only 43% of those without a high school diploma do so. (Pew Research Center, 2011). Given these statistics, social media use among the entire population of the poor, older adults, and the less educated is far lower than their younger, wealthier, more educated counterparts. A Public Policy Institute of California study found that those with disabilities are also about 20% percentage points less likely to use the Internet than those without (Baldassare, Bonner, Petek & Shrestha, 2011). When examining the impacts of social media and how public agencies can use it to effectively communicate and interact with

their constituents, an understanding of this disparity is critical for formulating effective outreach strategies that reach the entire population.

Public Agencies and Social Media

Adoption of Social Media by Public Agencies

Public interaction with the government through online tools of all sorts is quite common. A 2010 Pew Internet survey found that 82% of American Internet users, or 61% of the population, had looked up information or completed a transaction on a government website in the preceding twelve months (Smith, 2010). Given the overwhelming use of the Internet to connect with government and the large number of people using social media, many public agencies have embraced social media as a tool for communicating and interacting with their constituents. In 2009, the research firm Human Capital Institute (HCI) found that nearly a quarter of the American government agencies they surveyed are using a social media tool like Facebook or LinkedIn (HCI, 2010). However, this figure may be high because the survey sample included only those agencies for which the HCI had the email address of an employee of the agency in their databases. HCI is an organization focused on talent management and strategic human resources, so the sample only includes those who have taken an active interest in those areas and, therefore, may be more likely to use social media tools than the typical agency in the furtherance of those goals.

The United States federal government has become increasingly involved in social media. Beginning with the Open Government Directive issued on the first day of the Obama Administration, as part of the push for open government, the General Services Administration (GSA) hosts the website HowTo.gov whose primary audience is federal agencies wishing to deliver better services to citizens. One of the website's main focuses is how federal agencies can successfully use social media. The site provides guidance on implementing social media tools in

agencies and offers examples of agencies that have been successful with its use (GSA, 2012). In addition to HowTo.gov, the GSA runs apps.gov, which provides federal agencies with guidance on how to use various types of applications with their social media tools to enhance the experience for users and provide the agencies with more powerful tools for connecting with constituents.

The attention to social media use has paid off. In 2010, the director of information security for the Government Accountability Office stated that twenty-two of the twenty-four major federal agencies have a social media presence (Lipowicz, 2010). ForeSee, a web analytics company, conducted a study in 2011 of cabinet-level agencies and their use of social media. The study found that all fifteen of these agencies were using Facebook, Twitter, and YouTube, and almost half of the agencies have more than one profile on an individual site (ForeSee, 2011). In addition to the major agencies, use by agencies at all levels of the federal government is strong, as demonstrated by the Federal Social Media Index (FSMI), which tracks the use of Twitter by 125 distinct federal departments (FSMI, 2012).

In addition to the large number of federal agencies using social media, these agencies have shown tremendous success in connecting with massive groups of constituents. The top forty U.S. government Facebook pages each have more than 1.5 million supporters (Facebook, 2010). NASA, the most followed federal agency, has almost two million Twitter followers. The top fifteen federal agencies on Twitter each have more than 100,000 followers (FSMI, 2012).

State governments as a whole are not as sophisticated with social media as the federal government. While all state governments who responded to a survey by the National Association of State Chief Information Officers are using some form of social media, more than a third of them are operating by “default,” or without any form of policy guidance at the state, agency, or program level, and less than a quarter of them consider themselves to be advancing “full speed

ahead” into increased social media use. As of late 2010, 35% of states were not encouraging broader use of social media tools by their agencies (NASCIO, 2010).

While states in general have been more hesitant to embrace social media than the federal government, some states are more advanced than others. California, for example, has adopted a statewide social media framework and formerly encourages state agencies to use social media to “to engage their customers and employees where appropriate,” though the state provides no additional publically-available tools to help guide agencies that choose to use social media (Office of the [California] State Chief Information Officer, 2010). The state’s Office of the Chief Information Officer operates a California-wide Facebook portal that provides aggregate Facebook updates of all California agencies using the site. Even for a state as connected to the technology sector as California and with formal encouragement to adopt the technology, fewer than half of state agencies have a presence on any social media platform (State of California, 2012).

There is little research on the extent to which local public agencies as a whole are using social media tools; however, some research indicates large cities are using it quite extensively. In March 2012, the University of Chicago published a study about the social media usage of the 75 largest cities in the United States. The study found that 87% of large cities are using Facebook, and 87% are using Twitter; those figures are up from 13% and 25%, respectively, from 2009. The same study found that of the 20 largest cities in Illinois, about half were using Facebook, Twitter, or YouTube (Mossberger & Yonghong, 2012). Outside of this recent study and its 2009 predecessor, there is little information available about how widespread social media use is in local government. Much of the lack of research regarding municipal use of social media may have to do with the number and diversity of local governments nation-wide. This thesis will provide for more comprehensive data in this area.

How Public Agencies are Using Social Media

Little research seems to exist as to how public agencies are typically using social media, particularly at the local government level. One study of North Carolina local Parks and Recreation departments using social media showed that the most common reason is for providing general information and engaging constituents on a variety of topics, second to marketing the services offered by the departments (Barriga, 2011). The 2010 HCI survey found that of agencies using social media tools, the most common uses are communication and public outreach, with 44% of respondent agencies using social media for this purpose, and recruitment at 38% of respondent agencies (HCI, 2010).

While little data exist demonstrating typical use of social media by public agencies, there are many examples of agencies that have particularly novel or successful uses of social media. For example, Bay Area Rapid Transit (BART) uses Twitter to alert riders of service delays or changes, prompting more than 10,000 people to follow BART on Twitter. While planning for an extension of its subway system, the Los Angeles Metropolitan Transportation Authority used Facebook to solicit public comments during the environmental planning stage. The agency spokesperson stated they received thousands of comments (Cotey, 2011).

The City of Eugene, Oregon began using Facebook to notice residents of public meetings and inform them of public surveys regarding city services. Soon after launching the page, the city quickly had a few hundred “fans”, had over 50 people participating in public meetings that were announced on the site, and received more survey responses than they ever had before (Funk, Levis, and Associates, n.d.).

The police department of Queensland, Australia successfully used Facebook and Twitter to reach its populace during a flooding emergency in late 2010. The flood, which affected over 200,000 Queenslanders, put three-quarters of the territory into a state of disaster. Within two

weeks of the beginning of the flooding, the police department's Facebook fans grew from 8,000 to 160,000, and became the go-to place for information about the flooding. The police department also used social media to dispel rumors about the flooding and evacuations, which seemed to quell panic among the community (Sherman, 2011).

A police agency in the United Kingdom used social media services to monitor the activities and movements of local rival gangs. By observing what the gangs were posting to their Facebook and Twitter accounts, the jurisdiction was able to learn about violence between the gangs that had not been reported. It also used its social media accounts to dispel false reports of violence, which it believed helped prevent retaliatory attacks by the other gang (Ali, 2010).

The City of San Francisco has integrated its 311 City Services service into Facebook and Twitter. Using the applications, city residents can either Tweet or post to Facebook their city service requests, which the city then monitors and to which it responds. Such a use allows residents to use the 311 service from their smartphones or anywhere else they can access social media (Howard, 2011).

Challenges to Adoption of Social Media by Public Agencies

Public agencies face challenges not shared by private organizations when using social media. Because public agency social media sites are operated by governments, they are subject to laws and rules regarding transparency and free speech not encountered by their private counterparts. The most prominent of these issues include First Amendment considerations, public records retention and disclosure, and open meeting laws.

First Amendment Issues

The Institute for Local Government's "Social Media and Public Agencies: Legal Issues to Be Aware of" offers an extended discussion of the First Amendment quandary many public agencies find themselves in when using social media. When establishing social media tools to

communicate with the public, agencies often have little control over the public's ability to comment or respond to posts made by the agency. For example, there is no way an agency can turn off the public's ability to comment when using Facebook. When an agency operates a social media site, the Institute believes a credible argument can be made that the agency has essentially created a “designated public forum,” wherein the rights of the public to speak their mind must be upheld. Because a Facebook page, for example, is a “designated public forum” instead of a fully open “public forum” like a sidewalk, the agency can require the public to maintain a certain level of decorum and behavior that does not distract from or disrupt the forum's purpose. However, agencies cannot remove comments or content posted by the public just because they are not to the organization’s liking. This means “that the agency must allow posts that are critical of the agency, misinformed, or otherwise may cause heartburn to agency officials.” Such content may include profanity, as the Supreme Court has ruled that profanity in and of itself is not an adequate reason to remove or limit speech. (Institute for Local Government, 2010). The Terms of Use of various social media sites may ban certain types of content on the site as a whole, limiting public agency exposure in that area. For example, Facebook bans hateful or threatening content, pornography, graphic violence, bullying, intimidation, and harassment (Facebook, 2012c).

Public Records Retention and Disclosure

Public records retention and disclosure is also a critical issue of public agencies using social media. Under California law, agencies must retain, for specified periods of time, “a thing which constitutes an objective lasting indication of a writing, event or other information, which is in the custody of a public officer and is kept either (1) because a law requires it to be kept or (2) because it is necessary or convenient to the discharge of the public officer’s duties and was made or retained for the purpose of preserving its informational content for future reference” (Institute for Local Government, 2010). As of the writing of this document, it is unclear whether California

law requires public agencies to retain copies of their social media activities on their own servers. The Institute for Local Government argues that agencies likely do not have to do so because social media is not “kept” by the agency and is not necessary for the discharge of the agency’s duties. While agencies control their content and social media pages, generally the social media provider (e.g., Facebook) is the custodian of the material, as it is maintained and stored on the provider’s computer servers, not the agency’s servers. The argument becomes a little less clear on the point regarding the necessity of the information in discharge of the agency’s duties. If an agency is using a social media tool to solicit public feedback or comments, those records may have to be preserved.

Records disclosure laws are also unclear when it comes to social media. The Institute argues that in theory the tools are already public, meaning no additional public record disclosure is needed. However, it also recognizes that not everyone may have access to the Internet and may request records. The Institute again argues that social media records may not be retained by the agency, but by the provider, therefore not subject to disclosure. Still, there is a concern that if public comments are reviewed and used by the organization, they may be subject to disclosure under a Public Records Act request. The federal government has taken the stance that federal agencies must retain and disclose social media content that is not otherwise publically available specifically because not everyone has access to the Internet (Institute for Local Government, 2010).

Other jurisdictions, too, have recognized social media content as a public record. A 2009 Florida Attorney General Opinion stated that, under Florida law, content posted to a city’s social media sites is public record and must, therefore, be retained and disclosed. Because the pages are meant for agency, not personal, use, “the placement of material on the city’s page would presumably be in furtherance of such purpose and in connection with the transaction of official

business and thus subject to the provisions” of Florida statute governing public records retention and disclosure (Florida Attorney General’s Office, 2009).

The City of Seattle has taken a similar view and stated that all communication through social media is subject to the State of Washington’s public records law. As such, the City periodically saves an electronic copy of their Facebook page to a city server and warns users that any comments made may be subject to disclosure under the state’s public records disclosure laws (Institute for Local Government, 2010).

Open Meeting Laws

Open meeting laws may also prove a concern to public agencies. California’s Brown Act governs open meetings in California, and, among other things, prohibits a group of decision-makers from engaging in private meetings or conversations that informs or leads to a decision on a matter before the body. This prohibition includes “serial” meetings wherein two officials engage in a conversation about agency business, and one of the officials engages in a similar conversation with another official, and so on, for the purpose of reaching concurrence among the body (California Attorney General’s Office, 2003). The California Attorney General has stated this prohibition against “serial” meetings extends to electronic communication. As such, agencies who use social media may be opening decision-makers to possible Brown Act violations. For example, if a city posts content to Facebook that the public then begins to discuss through comments on Facebook, and members of the city council also engage in the conversation, an argument may be made that these officials violated the “serial” meetings provision of the Act (Institute for Local Government, 2010)

A Florida Attorney General issued an opinion in 2008 specifically warning public agencies and officials to be careful of the use of Internet tools, as they may facilitate violations of Florida’s version of the Brown Act, called the Sunshine Law. The opinion states:

While there is no statutory prohibition against a city council member posting comments on a privately maintained electronic bulletin board or blog, . . . members of the board or commission must not engage in an exchange or discussion of matters that foreseeably will come before the board or commission for official action. The use of such an electronic means of posting one's comments and the inherent availability of other participants or contributors to act as liaisons would create an environment that could easily become a forum for members of a board or commission to discuss official issues which should most appropriately be conducted at a public meeting in compliance with the Government in the Sunshine Law (Florida Attorney General's Office, 2008).

Given that this issue requires public officials to act in a manner contrary to open meeting laws and is not inherently a problem with social media itself, potential legal issues can be mitigated by advising members of decision-making bodies about the Brown Act and its relation to electronic communication of any type, including social media.

Response by Public Agencies to Legal Concerns

There are no data to suggest that these legal concerns are an impediment to public agencies adopting social media on a broad basis. However, these issues have given some jurisdictions pause. For example, in 2010 the City of Redondo Beach deleted its city Facebook page citing concerns over First Amendment issues and control over public comments, record retention and disclosure, and open meeting laws. The city attorney stated that the issues have not been settled by the judiciary yet, and the city would rather not have its name attached to a potential piece of future case law (Devall, 2010).

Other agencies have adopted robust policies to prevent issues from occurring, such as the aforementioned City of Seattle. The city has developed a broad social media policy that specifically defines what public comments can be posted to the city's social media tools and

states that any comments in violation of those provisions will be deleted by the city. The policy also requires retention and disclosure of social media posts (City of Seattle, 2009a). In addition to the general social media policy, the city has developed platform specific standards for each of the tools it uses. For example, the Facebook Standard discusses appropriate uses and policy issues that apply specifically to Facebook (City of Seattle, 2009b). For agencies that are using social media, the best course of action is to develop policies and guidelines that clearly address how the agency, staff, and the public are to use these tools (League of California Cities, 2010).

Social Media Users' Interactions with Public Agencies

As with many aspects of social media use as it relates to public agencies, there is very little research to indicate to what extent and how social media users are connecting with public agencies, and what they want and expect when they do so. The only available studies occurred before the recent surge in social media use among the general population.

In late 2008, Captura Group, a social media strategy company, conducted a survey to discover what social media users wanted from the federal government's social media tools. The survey was distributed through social media, was done prior to broader adoption of social media by the general public, and only captured 385 complete responses, so may contain considerable bias. With that said, the survey found that the majority of respondents were interested in interacting with the U.S. government through social media, and their preferred platform for doing so was Facebook. Respondents were very interested in using social media to have conversations with government officials, receiving emergency alerts, finding civic and event information, learning ways to protect the environment, and being alerted to consumer goods recalls (Captura, 2009).

A Pew Internet study from 2010 found that only 5% of Internet users at that time had become a "fan" or "friend" of a public organization or official on a social media site, and even

fewer (1-2%) of Internet users had posted a comment on a social media site or blog of a government agency or official. Of those that follow an agency or official on social media, 20% had posted a comment on the agency's or official's page. Given that social media has become far more broadly adopted since the time of the study, it is probable that a far higher percentage of the population is today using social media tools to interact with public agencies and officials (Smith, 2010).

Summary and Areas Where Additional Research is Needed

The general public is using social media quite extensively, and the level of social media use among older age groups is on the rise. Among Internet users, demographic factors matter little when observing who uses social media and who does not; however, when looking at how different demographic groups use the Internet, the rate of use is lower among the older, poorer, and less educated population. This translates to, demographically speaking, social media users as a group being more likely to be wealthier, more educated, and younger than the general population, though use is fairly high among all demographic groups.

Not surprisingly given the high rates of use, public agencies have begun using social media as a way to provide information to and engage with their constituents. Federal agencies seem to be using the tools quite extensively. How state agencies are using social media is less understood, but the little research available suggests that most state governments are using some form of it. Municipal use is largely unknown. A recent study of the 75 biggest cities in the United States found a high percentage of use, and the same study found about half of the largest cities in Illinois are using social media. However these studies only examined a narrow swath of cities, and results are probably not representative of all cities given that only more populated cities were sampled. I was unable to find any information about how cities as a group are using social media, if at all. Given the lack of information as to if cities are even using social media

broadly, there was no information available suggesting how city governments are typically using these tools. The lack of data suggests an underdeveloped understanding of how cities are adapting to public information and engagement in an environment that increasingly relies on social media as a communication and engagement platform.

The literature also does not suggest how agencies are handling social media from an organizational standpoint. I was unable to find any literature discussing how social media is typically managed, who in an organization is authorized to use it on an agency's behalf, and if most agencies are operating with formalized policies to internally regulate the use of the tools in a largely unregulated environment. This leaves many questions about the level of oversight agencies are placing on their social media use and if they view social media as a centralized platform requiring strict control or take a more laissez-faire approach. This question is particularly important given the potential risks agencies take when using social media, such as protecting First Amendment rights of commenters, retention and disclosure of public records, and compliance with open meeting laws.

Lastly, the literature did not provide much insight into the barriers that public organizations contend with that prevent them from using social media. Without an understanding of what barriers agencies are facing, it is difficult to propose effective solutions that may encourage more organizations to use social media to engage with their constituents. Also, while the literature points out the potential problems public agencies may encounter, it does not provide context to those problems. It is unknown how frequently organizations actually encounter these or other issues. If reluctance to use social media is due partly to fear of these issues, understanding what problems organizations are actually encountering on a regular basis may help cities determine whether or not they should adopt a social media strategy.

Given the general lack of information, more research is needed to provide perspective into these areas. Questions remain not just about who is using social media, but what these agencies are doing with it, how they manage it, and what barrier and problems they are facing. Answers to these questions will give better context to the social media landscape municipal government are operating in, particularly given that many may not have the resources of larger federal and state government agencies. If data suggest many local agencies have found ways to overcome the barriers inherent in social media, manage their resources effectively, and largely prevent problems through adequate oversight, organizations that have been reluctant to adopt social media may be more likely to do so. Similarly, if information shows that public agencies are encountering many problems with their social media use, or at least similar problems as one another, organizations that support local governments, like the League of California Cities, will have better insight as to what problems need the most attention and support. My research intends to provide this information with regard to California cities.

Chapter 3

METHODOLOGY

The primary purpose of my research is to determine the extent to which California city governments are using social media to connect with their constituents. My literature review found that there is little understanding of how broadly city governments are using social media, why agencies have chosen to adopt it or not, for what purposes they are using it, how they are addressing the challenges presented by such an open communications platform, and what barriers or problems they have or are concerned about encountering. These issues are somewhat better understood at the federal and state level, but have not been researched with much depth at the local level. My research hopes to begin to overcome the lack of data and develop a basic understanding of what is “typical” for California cities. It should be noted that California cities might not be representative of cities in other states. Silicon Valley, which is home to many of the companies that develop social media platforms and other information technology tools, is located in the state’s San Francisco Bay Area. Such proximity to the “home” of information technology, and the accompanying comfort with information technology in general, may encourage the adoption and use of such tools at a higher rate than cities in other states.

The literature also pointed to a number of potential issues public agencies face with social media such as protection of First Amendment rights, records retention and disclosure, and open meetings laws. My research examines what cities are doing to address these problems, if they have considered them at all. By developing this understanding, I hope to provide some context as to how local agencies are coping with public communication and constituent interaction in today’s technological landscape.

To accomplish this, I developed a survey designed to elicit information directly from city officials. I chose to use a survey because I wanted to get an understanding of not only who is

using social media and what they are doing with it, but also why organizations have chosen to use it or not and what, if anything, they are doing to prevent potential problems. It would have been difficult to collect information about internal organizational decisions or policies through any other data collection method. Because there are a number of popular social media tools, much of the survey is limited to agencies' Facebook use. I chose to use Facebook instead of any other social media platform because it is the most popular, and asking questions about more than one tool would have made the survey too lengthy. I have included the full survey in Appendix A.

The survey examined three factors:

1. How widespread is social media use by California city governments and for what purposes are agencies using it? Questions in this category pertain to whether city governments are using social media, how long they have been using it, how often they use it, and what they typically post to it.
2. How are social media tools being administered, managed, and overseen by city governments? Questions in this category involve who is authorized to use the tools, what the city does with public comments on their Facebook pages, if they evaluate the effectiveness of their use, and the types of policies they have in place to govern the agency's use of social media.
3. What problems or barriers are city governments encountering as they use, or choose not to use, social media? Questions in this category involve determining why cities not using social media have chosen not to do so and what problems, if any, agencies who do use it have encountered.

To supplement the survey data, I used census data to gather population figures, county affiliation, and per capita income to examine trends associated with these factors. I also visited the Facebook pages of respondent cities indicating they use Facebook to record how many

“friends” or “fans” respondent cities currently have as a measure of the success they have had with their Facebook profiles.

General Information about the Survey

My study of social media use by California city governments is based on a self-administered survey to city officials. I developed the survey after reviewing literature, visiting the Facebook pages of many public agencies to examine ways these agencies are using the site, consulting with my thesis advisors, and seeking input from a social media consultant who has worked with public agencies but is not affiliated with any public agency. For full disclosure, the social media consultant is a family member who offered to review the survey based on her professional expertise.

Once completed, I submitted the survey to the California State University, Sacramento’s Human Subjects Review process. The survey was deemed to have no risk to respondents and was approved for distribution. The survey was developed and administered in Survey Monkey, an online survey tool.

Survey Sample Population

This survey was intended to be distributed to city officials by email in all incorporated California cities and towns. State law does not differentiate between cities and towns, so all cities and towns are referred to as cities in this paper (California Government Code sections 34502 and 56722). I developed the list of cities using United States Census Bureau data. Any place designated as either a “city” or “town” was used; any place designated as a “Census Designated Place” was excluded (US Census Bureau, 2010). There were 481 incorporated cities listed by the Census Bureau.

To develop an email contact list of city officials in all California cities, two primary methods were used. First, I used contact information for city Public Information Officers (PIOs)

available to registered members of the website of the California Association of Public Information Officers. Only PIOs with a website join date of January 1, 2011, or later were used to reduce the chance of collecting email addresses of officials who may no longer be with the city or no longer hold such a position. I collected contact information for PIOs in 75 cities through this method. For the remaining 406 cities, I visited the website of each city and browsed for contact information. Cities that did not have a website were excluded. Because not all cities have a PIO or list contact information for the position, I used the email address of the City Manager as a substitute when no PIO information was available. If contact information for neither the PIO nor the City Manager was available, I used the email address of the City Clerk, if available. If an email address was not available for any of the three positions, I excluded the city. For reference, some cities allowed the public to contact city officials via email, but required the email be submitted through the website and, as such, email addresses were not provided. For example, the City of Los Angeles's website did not have a direct email address for any of the positions, and I was unable to find one through a web search. Instead, people wishing to contact city officials were directed to the contact form embedded within the website. Cities that only provided this method of contact were excluded because I would have been unable to efficiently distribute the survey through the website contact forms. Because I excluded cities that did not have a website, there is potential for bias. This issue is discussed later in this chapter.

The City of Los Angeles did not have email addresses for city officials on its website. However, given that Los Angeles is by far the biggest city in the state and one of the biggest in the country, I went to additional effort to find appropriate contact information. I found that the city's administration is largely decentralized due to its size. There is no central Public Information Office because each city department handles their own public information. The city's Chief Administrative Officer is in charge of finance, not the full realm of administrative

duties; as such, that office would not be able to provide the information I sought. The City Clerk's Office did not provide any email contact information and does not handle any of the city's social media tools. I visited the city's central Facebook page in hope of finding the contact information of the person that supports it. Unfortunately, the page stated that is rarely monitored and directed visitors to the city's website for contact information; however, the city's website only provide phone numbers. I then called the Mayor's Office central line to find out if someone could provide me with the name or contact information of someone who could complete the survey. I was advised that public information is handled by each department individually, so I could not be directed to an appropriate contact person unless I wished to speak with one of the departmental PIOs. Since the focus of my survey is on how cities as a whole manage social media, results from individual city departments could bias my results. For this reason, the City of Los Angeles was excluded from the sample group.

Overall, I obtained email addresses of officials for 380, or 79%, of California cities, all of which were sent the survey. One hundred and one cities, 21%, did not have a website or did not provide appropriate contact information on their website. I did not contact these cities. The mean population of cities contacted is 59,744, and the median is 29,698. The mean population of those cities I did not contact is 80,722, the median is 25,446. The mean population for those cities not contacted is high because the City of Los Angeles is included. Excluding Los Angeles, the mean population of those cities is 43,603. The mean population for all California cities is 64,149 and median is 29,247.

The city officials were sent an email from my personal email address explaining the purpose of the survey and requesting their participation. The email contained a link to the survey, which was hosted on the Survey Monkey website.

After sending the survey, I found some contact information was out-of-date or could not be delivered. Thirteen city email systems returned the email as undeliverable, five contacts replied with automated “out-of-office” messages stating the contact was on long-term leave, and an additional five city email systems required I take some form of action to prove my email was sent from a safe source. I excluded all twenty-three from the sample population, bringing the number of contacted cities to 357.

I emailed the survey to city officials on February 22, 2012. Officials were asked to respond to the survey by March 2, 2012. However, the survey was left open through March 14, 2012, to allow those who could not meet the March 2 date to respond. One hundred respondents started the survey and eighty-four completed it. Two of the completed surveys were submitted by the same city; the two surveys gave different answers to various questions so was therefore excluded from the results of the survey. Excluding this city, 82 cities completed the survey for a response rate of 23% of successfully contacted cities.

Survey Questions

The full survey consisted of twenty-five questions, but respondents could only respond to between seven and twenty-four questions because the questions posed depended on how respondents answered prior questions.

Table 3.1 Summary of Survey Questions

Question Number	Summary of Question
1	Consent
2	Name of city
3	Use of any social media tool
4	Reasons for not using social media
5	Use of Facebook by city
6	Use of Facebook by individual city departments
7	Length of time using Facebook
8	Frequency of updates to Facebook page
9	Management of Facebook page
10	Access to use Facebook on behalf of city
11	Type of information posted to Facebook page
12	Review of public comments on Facebook page
13	Response to public comments on Facebook page
14	Evaluation of effectiveness of Facebook page
15	Ways Facebook's effectiveness evaluated
16	Reasons for social media use
17	Establishment of social media policy
18	Length of time city has had social media policy
19	Contents of social media policy
20	Position dedicated to managing social media
21	Problems encountered with social media use
22	City executives aware of social media use
23	City executives happy with social media use
24	Consent to identify city in paper
25	Request of aggregate results of survey

Four of the questions (1, 2, 24, and 25 in Table 3.1) were used to establish consent, learn the name of the city, ask if the city agrees to be identified in this paper, and if the city would like the aggregate results of the survey. The remaining twenty-one questions (3 through 23 in Table 3.1) pertained to the city's use or non-use of social media. Many of the questions were specific to the city's use of Facebook. Had I attempted to gather data on more than one social media tool, the survey would have become too lengthy. Facebook was chosen because my literature review revealed it is by far the most popular social media tool.

Supplemental Data

In addition to the survey, I gathered supplemental data to help inform the survey responses. I used Census Bureau information to establish 2010 population estimates for all cities, identified the county within which the city resides, noted the per capita income of the cities that responded to the survey, and found the number of “friends” or “fans” of the city’s Facebook page as a method of measuring its success. The number of “friends” or “fans” was gathered by visiting the Facebook page of the respondent cities one time between March 19, 2012, and March 30, 2012.

The number of “friends” or “fans” of a city’s Facebook page changes frequently based upon Facebook users’ activities. Any time a user adds the page as a “friend” or “likes” the page, the number increases. Any time a user removes the page from his or her “friend list” or “unlikes” the page, the number decreases. As such, the number of “friends” or “fans” is impossible to keep accurate over time, but serves to establish a general number of “friends” or “fans.” As a percentage of total population, the number of “friends” or “fans” may represent how successful the city has been in reaching constituents through Facebook.

Data Analysis

Survey responses are presented in both narrative form and visually in tables in the following chapter. I reviewed and analyzed the data to report trends in the use and management of social media tools by city governments, as well as report what problems city governments have encountered while using the tools and the barriers to use for city governments not currently using the tools. To provide a more thorough analysis of the survey’s finding and the supplemental data I collected, I used limited quantitative analysis tools including the cross-tabulate feature available in Survey Monkey. I also used basic formula and data analysis tools in Microsoft Excel to find

the ratio of “friends” or “fans” to total population and create pivot tables that allowed me to examine the data across multiple variables.

Potential Methodology Limitations and Errors

I have identified the following areas where methodological limitations or errors may have introduced bias or impacted the validity or reliability of my data and results: use of websites to collect contact information, use of a personal email address for distribution, use of Facebook as a proxy for all social media use, the lack of “none of the above” as a pre-programmed response option in one question, and the “point-in-time” nature of the data collection.

I used websites as the principle method of gathering city official contact information. Because I excluded cities that did not have a website, there is potential for bias in the sample population. It is likely those cities who have not embraced the World Wide Web as a means to connect with the public also do not use social media tools. As such, the sample population, all of whom are already using the Internet in some form, may be more likely to use social media than the population as a whole. The sample population may also have been impacted by excluding cities for which I could not find contact information or required the use of an in-website contact page to contact city officials. For example, Los Angeles, which uses a plethora of social media tools including Facebook, uses an in-website contact tool and did not provide email addresses, and therefore was not surveyed.

Use of my personal email address to distribute the survey may have also contributed to sample bias. I chose not to use my @csus.edu email address because I am not as familiar or comfortable with the platform as I am with Gmail. Because the distribution email came from a Gmail address, city email servers may have been more likely to designate the email as spam, preventing it from reaching the intended recipient or being quarantined in the recipient’s spam folder. Cities with more active spam filters may be technologically more advanced;

technologically more advanced cities may also be more likely to use social media tools.

Conversely, cities with more active spam filters may be more wary of security issues, so may be less likely to use social media tools to decrease risk of exposure. Finally, some of the officials contacted may have been less likely to read and take action upon an email from a personal email address, as opposed to one from an academic or professional email address.

For many of the questions in my survey, I focused on Facebook to keep the survey relatively short. My literature review revealed it is by far the most popular social media tool and would allow me to generalize social media use without including questions about the use of all popular social media tools. However, there may be cities that use social media tools such as Twitter or LinkedIn that do not use Facebook. These cities were able to provide answers to some of the survey questions, but could not respond to questions regarding specific uses of the tools. My survey included a question about general social media use and a question about Facebook use, so I will be able to determine if cities that are not using Facebook are using other tools.

Question 21 asked respondents if they had encountered any problems with their use of social media and listed categories of problems that they could choose from, including an “other” option, which would allow them to type a response. However, I neglected to include a “none” or “none of the above” option. Through the “other” option, some respondents indicated they have had no problems. The highest percentage of possible respondents skipped this question compared to any other, leading me to believe those that had no problems were likely to skip the question. Unfortunately, I cannot know that a skipped answer necessarily indicates that, so the question and resultant data is flawed. Because this is one of the few questions posed to answer my research question of problems and barriers with social media use, my ability to provide insight in to this problem is limited.

Lastly, my data only represents social media use by cities during the months of February and March 2012. Social media use is dynamic and growing; unfortunately, my research can only respond to the conditions of this time period. While it allows me to identify trends of use that will be applicable for a longer period of time, the specifics of the data will be out-of-date more quickly.

Summary

This chapter has provided an overview of the research methodology I employed while developing this thesis, provided an overview of my survey population, gave a summary of my survey and supplemental data collection efforts, and discussed potential limitations and errors. The following chapter will discuss the results of my data collection in detail, and the final chapter will provide the implications of my work.

Chapter 4

RESULTS

The chapter discusses the basic findings and main themes I found from my research. Specifically, I identify who completed the survey, the composite responses to the survey questions and my supplemental data gathering, the major trends elicited from my findings, and some of the factors I identified that affect social media use. The final chapter will provide more in-depth analysis and respond to my major research questions.

Twenty-two percent of the cities I contacted completed the survey. I omitted two responses because they came from the same city and had differing responses to many questions. I omitted one response because the respondent skipped the initial consent question. All told, I used the responses of 81 cities out of the 380 (21%) that were sent the survey.

Information on Survey Respondents

The 81 cities that responded to the survey have a total population of about 3.5 million, or approximately 10% of the population of the state as a whole. The difference between the population percentage of the respondent cities and the response rate is likely due to large cities like Los Angeles, San Diego, San Francisco, and San Jose not being included in the response group. The mean population of the respondent cities is 50,256, and the median population is 29,413. The mean population of cities contacted is 59,744, and the median is 29,698. The mean population for all California cities is 64,149, and the median is 29,247. Based on average population, the respondent cities are fairly representative of those cities contacted to complete the survey. The largest city that responded is Sacramento with a population of 466,488. The smallest is Biggs, located in Butte County, with a population of 1,707.

Figure 4.1 Counties in which Respondent Cities are Located



Respondent cities are located in 32 of California's 58 counties, as shown in Figure 4.1. Counties that did not have at least one respondent city are mostly located in the Central Valley, along the eastern border, or in Northern California. This is likely due to these counties having relatively few cities compared to the more populated areas of the state. Almost half (46%) of respondent cities are located in just five counties: Alameda, Contra Costa, Los Angeles, Orange, and San Mateo. Again, this is fairly representative of the contacted population, as approximately half of the state's total population lives in these counties, and approximately 45% of the state's cities are located within these five counties. Appendix B lists all cities that completed the survey, the county within which they are located, their population, and their per capita income.

Main Themes of Findings

My research found five major themes regarding responding California cities' use of social media: most cities are using social media and doing so fairly regularly; cities are generally more interested in information-sharing through social media than constituent engagement; cities have internal control mechanisms but lack policies that address external issues; cities have

encountered few problems with their social media use; and lack of adequate resources is the main issue preventing more cities from using social media. A summary of the survey results is in Appendix A.

Most Cities are Using Social Media

Most of the respondent cities are using social media tools. More than three-quarters (76.5%) of respondents stated their city has an account on at least one social media platform. Of those using social media, three-quarters have a central Facebook page for the city, and 55% of those cities have individual departments that have Facebook pages separate from the city's central page. One city responded that it had a central Facebook page, but I was unable to find it; I was only able to locate Facebook pages for individual departments of that city.

Table 4.1 Length of Time Cities Have Been Using Facebook

Length of Time Using Facebook	Percentage of Respondents (N=48)
More than 2 years	41%
Between 1 year and 2 years	35%
Six months to one year	13%
Less than six months	8%
I don't know	2%

The majority of cities using Facebook have been using it for more than a year. Forty-one percent of cities that use it have been doing so for two or more years, and another 35% have been using it between one and two years. Only four (8%) of the respondent cities began using Facebook less than six months ago. Cities that have been using Facebook the longest are the most likely to have departments that have Facebook pages separate from the city's central Facebook page. Of cities that have been using Facebook for two years or more, 75% have departments that are using Facebook separately. Two-thirds of cities that have been using Facebook for less than one year do not have individual departments with separate Facebook pages.

Most of the cities that use Facebook update it with relative frequency. Ninety percent of cities post to their Facebook at least once a week and 38% post to it at least daily. Only the City of Mission Viejo responded that it posts on Facebook on an hourly basis. Half of cities responded that they update their page on a weekly basis. The cities that have been using Facebook the longest update it with the most frequency. Half of cities using Facebook for two or more years update it at least daily; none of the four cities that began using Facebook in the last six months post on a daily basis.

Table 4.2 Differences between Longest and Shortest Using Cities

	Using Facebook for 2 Years or More	Using Facebook 6 Months or Less
Number of Respondents	20	4
Individual City Departments Have Facebook Pages	75%	0%
Update Facebook Page At Least Daily	50%	0%
Average Ratio of Followers to Population	3.93%	0.47%

Most cities had relatively few “friends” or “fans” compared to their total population. All but eight cities (79%) had a followers-to-population ratio of less than 5%. More than half had less than 2%. By far the greatest ratios occurred in two smaller cities, Sebastopol and Jackson. These cities had ratios of 41% and 35%, respectively. The frequency with which the city updates their Facebook page does not seem to correlate to the number of followers the city has. The length of time the city has used Facebook does seem to correlate, as all of the top-followed cities have been using it for at least one year. Those cities with a ratio of less than 1% are much more likely to have been using Facebook for less than one year. Appendix B lists cities that responded to the survey and includes the followers to residents ratio.

Cities are More Interested in Information-Sharing than Engagement

All cities that stated they are using at least one social media tool were asked what reasons they considered when deciding to use social media. Nearly all respondents (94%) stated one reason was to provide a convenient way constituents can get information and news about the city. Eighty-seven percent responded that they wished to market city programs, services, or events. Less than two-thirds (63%) stated they were interested in pursuing social media to engage constituents in city affairs and issues. Only 37% stated they considered social media as an additional method for constituents to contact the city to ask questions or resolve issues. Other considerations included marketing local businesses or commercial interests (15%), recruiting and hiring (10%), and networking (10%). One respondent city stated they wished to reach out to a younger demographic, and one respondent city stated they pursued social media based upon a councilmember request.

What respondent cities are actually using Facebook for is similar to the reasons they considered social media use in the first place. Nearly all respondents stated they use Facebook to post general updates about the city or city services (96%) or market events put on by the city (94%). Nearly 70% of cities post their public meeting notices on Facebook, and 60% of cities market events not hosted by the city but occurring within the city. Only one-third of cities responded saying they use Facebook to post requests for feedback on various city issues such as linking to surveys or soliciting comments.

Table 4.3 Type of Information Posted to City Facebook Pages

Type of Information Posted to Facebook Page	Percentage of Respondents; respondents could select multiple (N=48)
General information or announcements about the city or city programs or services	96%
Events coordinated or hosted by the city	94%
Public meeting notices	69%
Information generally otherwise managed by individual city departments for wider promotion	67%
Events happening in the city, but not coordinated or hosted by the city	61%
Requests for feedback on various city issues, such as links to surveys or soliciting public comments	33%
Links to third-party information, such as newspaper articles or research studies	33%
Job Opportunities	29%
General updates not connected with city business	25%
City policy information	21%
Promotion of local businesses or other commercial interests	19%
Other	6%
I don't know	2%

Even though the primary reasons for using Facebook are information-based as opposed to engagement-based, most cities take an active interest in the comments posted to their Facebook page. More than 81% of respondents stated that they actively review and manage comments left by members of the public on their page, and 83% of respondents stated they take action, provide information, or attempt to resolve issues based upon comments left by members of the public.

Cities Have Internal Control Mechanisms, But Lack Policies that Address External Issues

My research found that cities that use social media have put mechanisms in place to control and oversee the use of social media by the agency. Eighty-five percent of cities reported that their Facebook pages are centrally managed by their Public Information Office (54%) and/or

their city's executive office (30%). Other cities reported that their pages are managed or administered by information technology staff or designated staff members in other parts of their organizations. Few have non-employees managing their pages; only one city reported its page is managed by a consultant and two stated it is managed by interns. Slightly more than half of respondent cities had a staff person whose primary responsibility is the management of their social media tools.

Table 4.4 Management and Update Access Rights of City Facebook Pages

	Manages or Administers Page (N=46)	Access to Update or Modify Page (N=48)
Public Information Office staff	54%	54%
City executive office staff	30%	38%
Information Technology (IT) staff	15%	17%
Designated staff member(s) outside the PIO, executive office, HR, or IT	26%	25%
Designated manager(s) or supervisor(s) outside the PIO, executive office, HR, or IT	7%	13%
Staff within individual city departments' communication offices	N/A	15%
Human Resources (HR) staff	4%	6%
Contract or consulting agency or worker	2%	2%
Student Assistant(s) or Intern(s)	4%	2%
Any staff member	N/A	0%
Other	11%	6%
Volunteer(s)	N/A	0%

Whom cities provide with access and authority to update or post to their pages on the behalf of the city follows a similar trend. More than half of cities provide Public Information Office staff with authority to post on behalf of the city, and more than a third provide executive office staff with such authority. Only two cities reported allowing non-employees to post or update their page. Interestingly, of the three cities that have their page managed or administered

by a non-employee, only one reported allowing a non-employee (intern) to post or update the page.

Slightly more than half (52%) of cities using social media reported having no formal, documented policy about their use of social media, and one respondent indicated he did not know if the city had a policy. Half of cities who have a policy have only introduced it within the last year, even though more than three-quarters of cities using Facebook have been using it for more than a year. This indicates that even among cities who have formal social media policies, there was likely a gap of time between when they first began using social media and when they adopted a formal policy to regulate its use.

Table 4.5 Items Contained Within Social Media Policies

Contents of Social Media Policy	Percentage of Respondents Indicating Item is Contained in Policy (N=29)
Purpose of the city's use of social media	90%
Definition or examples of social media	79%
The way employees should behave when using social media on the city's behalf	79%
What information is considered inappropriate and can be edited or removed by the city)	76%
Who is authorized to use social media on the city's behalf	72%
Type of information that can be posted	72%
Who manages or administers the city's social media tools	69%
Record retention	59%
The extent to which the city monitors and responds to the public's comments or posts to the city's social media tools	55%
Restrictions or rules on the public's use or interaction with the city's social media tools	55%
I don't know	3%

Among cities that have policies to govern their use of social media, the policies tend to be more focused on internal controls than addressing external concerns. Table 4.5 summarizes the percentage of cities that have various items contained within their social media policies.

Respondents are least likely to identify how record retention applies to their social media tools (59%), the extent to which the city monitors and responds to public comments (55%), and rules and restrictions on the public's use or interaction with the city's social media tools (55%). However, a high percentage of cities (76%) indicate that its policy contains provisions about what information is considered appropriate and can be removed by the city. The most identified items within the policies are provisions that govern internal use of the tools: the purpose of the city's use of social media (90%), the way employees should behave when using social media on the city's behalf (79%), what constitutes the city's definition of its social media tools (79%), and who is authorized to use the tools on the city's behalf (69%).

Almost two-thirds (65%) of respondents who stated they use Facebook review or evaluate the effectiveness of their use. Those who indicated they review and evaluate their use were asked to an open-ended question as to how they do so. Table 4.6 summarizes their answers.

Table 4.6 Methods Cities Review and Evaluate Effectiveness of Facebook Use

Method	Percentage of Respondents Indicating Use of Method (N=27)
Statistics of use supplied by Facebook	63%
Number and type of questions and comments posted to page by public	30%
Number of "friends" or "fans"	22%
Surveys or other direct feedback	15%
Other web statistics tools	11%
Other methods	15%

The most commonly cited method of evaluating Facebook is the use of statistics supplied by Facebook, called Facebook Insights, used by 63% of respondents who evaluate use. Facebook Insights supplies information to the administrators of government Facebook pages and includes

the total number of site views, the number of view for each “tab” or component of the site, how people were referred to the site, and the level of consumption of media, such as how often videos or pictures were viewed (Facebook, 2012a). Almost a third (30%) evaluate how effective their use is based on the number and/or type of comments members of the public leave on their Facebook page. While many use the standard Facebook Insight tool and view comments, other cities are more sophisticated in their approach. For example, Suisun City reported:

Every attempt is made to make items posted to the Facebook trackable in at least one format: link analytics, web analytics, and Facebook Insight stats. At least once a month, we do an analysis of how many people are engaged with the Facebook, the types of information that resonates with them, and how much that information is shared. Each Facebook link has some objective (e.g. drive people to look at a specific blog post or web site page). Depending on the sensitivity of that outcome, we may analyze the results daily so we can adjust the strategy to maximize the results.

Given the care Suisun City puts into its Facebook use, it is unsurprising that the city has a relatively high resident to follower ratio of 10%.

Cities Encounter Few Problems with Social Media Use

Overall, respondents did not indicate that they have had substantial problems with their use of social media tools. Table 4.7 summarizes the problems cities reported to have had. Eighteen cities, 56% of respondents to the question, indicated that they have encountered inappropriate commenting or posting, including “spamming” the page by members of the public. Other than that, few problems have been encountered. One city indicated they have had a number of problems, including unauthorized use by staff members, complaints by citizens of lack of use or too infrequent of updates by the city, complaints by citizens of too frequent use or “spamming” of information by the city, inappropriate commenting or posting by members of the public, and

“hacking” or other unauthorized use of the city’s tools by a member of the public. Another city indicated it had encountered inappropriate use by a staff member authorized to use the tools on the city’s behalf, complaints of lack of use or too infrequent of update by the city, and inappropriate commenting or posting by members of the public. One city indicated an unknown and unauthorized individual had made a Facebook page for the city and was posting the city’s press releases to the page. The respondent stated the page was only kept up for a few months then disappeared.

Table 4.7 Problems Encountered with Social Media

Problem Encountered	Percentage of Respondents Indicating Encountering Problem (N=32)
Inappropriate commenting or posting (including “spamming”) by members of the public	56%
Complaints by citizens of a lack of use or too infrequent use	6%
Unauthorized use of the city’s official social media tools by staff members not authorized to use them	3%
Inappropriate use or use inconsistent with the city’s social media policy of the city’s official social media tools by staff members authorized to use them	3%
Complaints by citizens of overuse of “spamming” of information by the city	3%
“Hacking” or other unauthorized use of the city’s social media tools by members of the public or other unknown entities	3%
I don’t know	25%
Other problems	6%

Unfortunately, this question can only provide limited insight into the problems cities have faced. The question asked respondents if they had encountered any problems with their use of social media and listed categories of problems that they could choose from, including an “other” option which would allow them to type a response. However, I neglected to include a “none” or

“none of the above” option. Through the “other” option, some respondents indicated they have had no problems. The highest percentage of possible respondents skipped this question compared to any other, leading me to believe those that had no problems were likely to skip the question. Unfortunately, I cannot know that a skipped answer necessarily indicates that, so the question and resultant data is flawed. Because this is one of the few questions posed to answer my research question of problems and barriers with social media use, my ability to provide insight in to this question is limited.

Lack of Resources is the Main Barrier to Broader Adoption

Cities that indicated they are not using social media were asked why not. Eighty-three percent of the eighteen respondents indicated that a lack of resources is one of the barriers preventing adoption. Between 30% and 40% indicated they had no perceived need for social media, concerns with record retention, concerns over legal issues, and/or security concerns. Two cities indicated they plan to begin using social media soon, but are in the process of developing a policy first. Only one city indicated they have not considered using social media.

Factors Affecting Social Media Use and Sophistication

California’s cities are quite diverse, so examining some of the factors that may influence or affect use of and sophistication with social media is necessary to understand the significance of my findings. Specifically, the section looks at population, location, and wealth as demographic factors that may impact usage rates and sophistication. I used four factors to measure sophistication: whether or not cities have documented social media policies, whether they evaluate the effectiveness of their use of Facebook, whether they actively review comments posted to their Facebook, and whether they take action or respond to members of the public based on comments posted to their Facebook.

Due to the limited number of cities that responded to the survey and the correspondingly small number of responses in each category for which I am making comparisons, I am not using *chi*-squared calculations to test statistical significance of differences. The small sample size resulted in small *chi* values, so I am unable to determine with a high level of confidence the extent to which the differences are due to random variation. As such, my findings about the differences in social media use and sophistication between various categories of cities should be viewed as tentative.

Population

The population of respondent cities affects both social media usage and sophistication. The mean population for all survey respondents is 50,256, and the median population is 29,413. When differentiating between cities that are using social media and those that are not, average populations differ greatly. For cities that use social media, the mean population is 55,889, and the median is 31,473. Cities not using social media are far smaller with a mean population of 31,883 and a median of 20,246. On average, cities using social media are 50% larger than those that are not.

The difference in use appears stark when comparing the largest cities, those with a population over 75,000, to the smallest cities, those with a population of less than 25,000. Overall, 76.5% of cities stated they use some form of social media. The largest cities use social media at an almost 90% rate, compared with only 70% of the smallest cities. The larger cities have also been using Facebook longer than the smallest cities. Forty percent of the largest cities have been using it for more than 2 years, and only 13% have been using it for less than one year. Less than 20% of the smallest cities have been using Facebook for at least 2 years, and nearly a third of them just adopted it within the last year.

Table 4.8 Social Media Differences between Large and Small Cities

	Cities with Population of Less than 25,000	Cities with Population of More than 75,000
Use of Social Media	70% (N=33)	89% (N=18)
Use of Facebook for 2+ Years	19% (N=16)	40% (N=15)
Use of Facebook for Less than a Year	31% (N=16)	13% (N=15)
Formal Social Media Policy	36% (N=22)	63% (N=16)
Evaluate Use of Facebook	50% (N=16)	71% (N=14)
Actively Review Comments	69% (N=16)	86% (N=14)
Take Action on Comments	69% (N=16)	100% (N=14)

The level of sophistication with social media is also greater in the largest cities. Sixty-two percent of the largest cities have a formal, documented social media policy, while only 36% of the smallest have one. Almost three quarters of the largest cities review the effectiveness of their Facebook use compared to half of the smallest cities. Cities with populations over 75,000 also take are more engaged with their social media tools, on average. All but two of the largest cities (86%) stated they regularly review the comments of their Facebook page, and every city said they respond or take action based upon the comments left on their page members of the public. For cities under 25,000, 69% of cities regularly review comments left on their page, and the same percentage respond or take action based upon those comments.

City size appears to be a factor that affects use and sophistication with social media. The biggest cities are more likely to use social media, have been doing so for longer, and are more sophisticated with its use.

Location

Because of California's geographic diversity, examining how location affects the use of social media is an important factor to consider. To compare usage based on location, I looked at

the social media use rates and sophistication of two geographic locations: the San Francisco Bay Area and Southern California. I chose to use the San Francisco Bay Area because it is home to Silicon Valley, home of many information technology companies. For the purpose of my analysis, I defined the Bay Area as all cities within the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. Thirty cities from these counties responded to my survey. I chose Southern California because it is where the bulk of California's population resides and, as a whole, it is more urbanized than the rest of the state. For the purpose of my analysis, I defined Southern California as all cities within the ten counties below the sixth standard parallel, which includes the counties of Kern, Imperial, Los Angeles, Orange, Riverside, San Diego, San Luis Obispo, Santa Barbara, San Bernardino, and Ventura. Thirty cities from these counties responded to my survey.

Table 4.9 Differences between Bay Area Cities and Other Cities

	Bay Area Cities	Other Cities
Use of Social Media	73% (N=30)	78% (N=51)
Use of Facebook for 2+ Years	36% (N=14)	56% (N=33)
Use of Facebook for Less than a Year	7% (N=14)	24% (N=33)
Formal Social Media Policy	24% (N=21)	58% (N=40)
Evaluate Use of Facebook	57% (N=14)	67% (N=33)
Actively Review Comments	71% (N=14)	85% (N=33)
Take Action on Comments	79% (N=14)	88% (N=33)

I was surprised to discover that respondent cities in the Bay Area are using social media less than the rest of the state and are generally less sophisticated with their use. While 78% of cities outside the Bay Area reported using some form of social media, only 73% of Bay Area cities reported doing so. Forty five percent of non-Bay area cities have been using Facebook for

more than 2 years, while only 36% of Bay Area cities have been. In all four measures of sophistication with social media use, Bay Area cities came up less sophisticated than the rest of the state. Only 24% of Bay Area cities have a documented social media policy, compared with 58% of other cities. Bay Area cities are also less likely to evaluate their use of Facebook (57%) than non-Bay Area cities (67%). Seventy one percent and 79% of Bay Area cities actively review the comments posted to their Facebook and respond to or take action based upon the comments posted by members of the public, versus 85% and 88% for the rest of the state. Overall, my results indicate the Bay Area lags behind the rest of the state in their social media usage.

Table 4.10 Differences between Southern California Cities and Other Cities

	Southern California Cities	Other Cities
Use of Social Media	83% (N=30)	73% (N=51)
Use of Facebook for 2+ Years	50% (N=22)	36% (N=25)
Use of Facebook for Less than a Year	36% (N=22)	8% (N=25)
Formal Social Media Policy	69% (N=26)	31% (N=36)
Evaluate Use of Facebook	70% (N=23)	60% (N=25)
Actively Review Comments	83% (N=23)	80% (N=25)
Take Action on Comments	78% (N=23)	88% (N=25)

Southern California appears to be using social media at a higher rate than the rest of the state and is more sophisticated in its use than the rest of the state in most categories. Overall, 83% of cities in Southern California are using social media, compared with 73% of other cities. Half of Southern California cities have been using Facebook for at least two years, while only 36% of other cities have been doing so. Southern California also evaluates its use of Facebook at a higher rate, 70% versus 60%, and is more likely to actively review comments posted to the city's page the rest of the state, 83% versus 80%. However, cities in Southern California are

slightly less likely to respond to or take action based upon comments left on the city's page than cities in other parts of the state, with 78% versus 88% of cities stating they do so.

Table 4.11 Differences between Southern California Cities and Bay Area Cities

	Southern California Cities	Bay Area Cities
Use of Social Media	83% (N=30)	73% (N=30)
Use of Facebook for 2+ Years	50% (N=22)	36% (N=14)
Use of Facebook for Less than a Year	36% (N=22)	7% (N=14)
Formal Social Media Policy	69% (N=26)	24% (N=21)
Evaluate Use of Facebook	70% (N=23)	57% (N=14)
Actively Review Comments	83% (N=23)	71% (N=14)
Take Action on Comments	78% (N=23)	79% (N=14)

When comparing use and sophistication between respondent cities in the Bay Area and Southern California, Southern California cities show a higher rate of use and sophistication in all but one category.

Wealth

Because my survey found that lack of adequate resources was the principal barrier to broader adoption of social media, I wanted to find out if wealthier cities, who may have more resources, are more likely to use social media, and, if so, if their use is more sophisticated than other cities. To measure wealth, I used per capita income as reported by the 2010 US Census. I classified a city as wealthy if it has a per capita income of more than \$35,000 per year. Nineteen cities that responded to my survey met this per capita income threshold. Overall, I found that wealthy cities are less likely to use social media, but those that do are generally more sophisticated in their use than other cities.

Table 4.12 Differences between Wealthy Cities and Other Cities

	Wealthy Cities	Other Cities
Use of Social Media	68% (N=19)	79% (N=62)
Use of Facebook for 2+ Years	78% (N=9)	34% (N=38)
Use of Facebook for Less than a Year	0% (N=9)	26% (N=38)
Formal Social Media Policy	58% (N=12)	44% (N=50)
Evaluate Use of Facebook	67% (N=9)	67% (N=42)
Actively Review Comments	100% (N=9)	77% (N=39)
Take Action on Comments	89% (N=9)	82% (N=39)

Wealthy cities stated they use at least one form of social media at a lower rate than other cities, at 68% versus 79%. However, wealthy cities that do use social media are more likely to have used it longer. Seventy eight percent of wealthy cities have used Facebook for at least two years, and none have been using it for less than one year. Conversely, only 34% of non-wealthy cities have used Facebook for more than two years, and 26% have been using it for less than a year. Wealthy cities are also more likely to have a formal social media policy, with 58% of wealthy cities having a policy compared with 44% of other cities. Two thirds of both groups evaluate their use of Facebook. All wealthy cities which use Facebook responded that they actively review and manage comments posted on their page, compared with 77% of non-wealthy cities, and 89% of wealthy cities take action based upon those comments, compared to 82% of non-wealthy cities. Wealth appears to make little difference in social media use rates, but may contribute to a higher level of sophistication among those who do use it.

Summary

California cities use social media at a high rate, and most cities that use it have been doing so for at least a year. Cities also update or post to their Facebook pages fairly often. Most

cities have a relatively small proportion of followers as compared to residents; nearly 80% had a followers to residents ratio of less than 5%. Respondent cities are much more likely to view social media as principally a one-way communication tool instead of a tool that can be used to interact constituents, but most cities are also active with reviewing and responding to comments posted on their Facebook pages indicating they are comfortable using it to interact. Most cities have put process and procedures in place to internally control the organization's social media tools. The most common methods are limiting access to update their social media sites to certain employees, and many have a designated staff person whose primary responsibility is managing the city's tools. A slight majority of cities that use social media do not have a formal, documented social media policy, however. For those with policies, the policies are most likely to be focused on internal controls; though a majority of respondents also indicated that their policies have provisions allowing them to exercise some control over external factors. Generally, few cities indicate that they have had significant problems with their social media use; the most cited issue is posting of inappropriate information by members of the public. For those cities that are not using social media, the most common reason is a lack of adequate resources.

Population and location affect the rate and sophistication of use of social media by cities. Larger cities and cities in Southern California use social media at a higher rate, have been using it for longer, and are more likely to have a formal policy, evaluate their use of Facebook, and review and take action based on comments made by members of the public than smaller cities and cities outside of Southern California. Wealth appears to have little effect on social media usage, but wealthy cities that do use social media appear to be more sophisticated in their use than less wealthy cities.

The concluding chapter will apply the findings to my research questions, discuss the broader implications of my work, and suggest areas for further research.

Chapter 5

CONCLUSION

Generally, my research found that a majority of California cities are using social media, those using it are more interested in information-sharing than direct engagement, have put in place internal controls on their social media tools, have had relatively few problems, and a lack of resources is the principal barrier to broader adoption of social media.

Answers to Research Questions

Based on my literature review, I developed three principal research questions: 1) How widespread is social media use by California city governments and for what purposes are agencies using it?; 2) How are social media tools being administered, managed, and overseen by city governments?; 3) What problems or barriers are city governments encountering as they use, or choose not to use, social media? Through my survey and the additional data I collected, I am able to provide preliminary answers to these questions.

How widespread is social media use by California city governments and for what purposes are agencies using it?

As reported in Chapter 4, as a whole, California city governments are using social media quite extensively. More than three quarters of respondent cities have a profile on at least one social media platform, and three quarters of those have a central Facebook page for the city. That equates to about half of cities having an active central Facebook page for the city. As described above, cities with a higher population, cities outside the Bay Area and cities in Southern California are more likely to use social media. In my literature review, I discussed one of the few studies I was able to find regarding municipal use of social media. That study found that of the twenty largest cities in Illinois, only about half had an account on one of the main three social media platforms: Facebook, Twitter, or YouTube. While my research did not study Twitter or

YouTube usage, it appears that, overall, California cities use social media more frequently than cities in Illinois, particularly when looking only at larger cities. However, my findings may contain bias in that cities that did not have websites or did not post email contact information on their webpage were excluded from the sample group. It is likely that these cities, which did not show a propensity for using information technology, do not use social media. Further, cities that do not use social media may also have been less likely to take the survey even if they were contacted.

Use patterns are also fairly typical across California cities. The majority of respondent cities stated they use their Facebook pages to provide general information updates about the city, market events coordinated by the city or happening within the city, public meeting notices, and post information generally managed by individual city departments for wider promotion. Only a third stated they use their Facebook pages for direct engagement by requesting feedback on city issues, including links to surveys or requests for comments. These uses are consistent with the principal reasons the cities adopted social media in the first place.

However, while cities seem to view their social media sites as communication tools instead of a way to engage with constituents, many are, in fact, interacting with their constituents through them. More than 80% of respondents stated they actively manage the comments left on their Facebook pages and take action, provide information, or attempt to resolve issues based upon comments left by members of the public. Cities are not treating their social media tools as one-way communication devices; instead, in addition to providing information to the public, they are allowing and, by responding, encouraging the public to communicate with them, too.

This is a different model of communication than in the past. Previously, residents had to take direct action to interact with the city: attend public meetings, make a phone call, or write a letter. Today, many people are logging into their social media profiles daily and, if they have

followed their city, receiving information from their city government in a fairly passive manner. Instead of having digest that information and then make an additional effort to contact the city through other means, the public can immediately respond to that information with little effort, and expect the city to read that response and take some level of action. Such a platform provides the public with a much more direct line to their local government, and perhaps encourages those who would not otherwise be involved in city affairs to provide input to the city. Unfortunately, my research found a fairly small percentage of people are currently connecting with their cities through social media, as the vast majority of cities who responded to my survey have Facebook follower to resident ratios of less than five percent.

Some cities had much higher follower to resident ratios, though. Interestingly, the way the city uses and manages its Facebook seems to have little impact on how many followers it has. Six cities who responded to my survey had a ratio of over 5%: Sebastopol, Jackson, Suisun City, San Carlos, South Pasadena, and an Orange County city that requested its name not be used in connection with its survey results. Sebastopol and Jackson had by far the highest ratios, with 41% and 36% respectively. The other four cities had ratios ranging from 5 to 11%. None of these six cities particularly stand out with their social media usage, and Sebastopol, the city with the highest ratio, has a fairly undeveloped social media program compared to the others.

Excluding Sebastopol, all these cities shared some key traits. All five cities have been using Facebook for at least a year, with half of them using it for over two years. All of the cities except for one stated they update their Facebook at least weekly, and half of them stated they do so daily. All of the cities stated they actively manage the comments left by members of the public, take action based upon those comments, and evaluate the effectiveness of their Facebook use. I visited the Facebook sites of each of the cities to determine if their use was particularly novel or interesting compared to how other cities are using Facebook, and I found that they are all

quite active and post a variety of different types of information. For example, Suisun City, which, as discussed in Chapter 4, has a well-developed social media program, posts items ranging from pictures taken by members of the community to requests for bids, as well as more typical updates like public meeting notices. The Orange County city, the largest of this group by far with a population of over 100,000, also frequently posts similar kinds of updates, including upcoming traffic closures and requests for applicants for various citizen committees.

Sebastopol is the exception to each one of these. With a population of more than 7,000 and more than 3,000 followers, the city's ratio of followers to residents stands at over 40%. Yet the city does not post very frequently (only six times from January through April 2012), does not actively review or manage comments left on the site, does not take action based upon comments left on their profile, does not evaluate their use of Facebook, and does not have a documented social media policy. In visiting its profile, I could find nothing that suggests why its ratio is so much higher than all other cities. Sebastopol is a small city, though, as is Jackson, the city with the second highest ratio of 36%. One hypothesis is that the small town atmosphere of the city has created a sense of community around the Facebook page, encouraging residents to follow it. Or perhaps the city held a major event that stirred interest in their Facebook page or encouraged residents to follow the city. However, a number of small cities responded to my survey, and that ratio pattern is not consistent with the others. Interestingly, of the five cities, Jackson and Sebastopol are the least active on their sites, which suggests something other than use is driving how many followers cities can expect on their social media sites. My research was not able to determine what drives large number of people to their city's Facebook page.

How are social media tools being administered, managed, and overseen by city governments?

All cities have some sort of internal controls in place to manage and oversee their Facebook accounts. None allow unfettered access to a wide variety of staff to post to the city's

profile, and only two allowed non-employees permission to use the site on the city's behalf. However, a majority of cities are lacking formal policies to guide their use of social media. My literature review found that formal policies are the most powerful tool cities have for regulating their social media use, particularly in how they cope with potential legal issues such as First Amendment rights of public commenters and record retention and disclosure. Even among cities that have formal policies, only slightly more than half have addressed the issues of record retention or placed rules and restrictions on the public's interaction with their sites. The policies tend to focus instead on internal issues, such as who has access to post on the city's behalf and how employees using the social media tools should behave. This leaves many cities, including many of those with formal policies, with potential legal issues should challenges arise in these areas.

For many cities with a policy, there is a gap between when the city first began using Facebook and when they adopted a social media policy. About 60% of cities had some gap between when they first started using the site and when they developed the policy. Nearly half of those had a gap of more than one year, and the rest had a gap between six months and one year. Those who have been using Facebook for less than six months (75%) or more than two years (65%) are the most likely to have a policy. This may indicate, for the longest users, that their sophistication and need for oversight has grown as they have become accustomed to the tools and potential problems. For the cities who have just recently begun using Facebook, perhaps the recommendation from organizations like the Institute for Local Governments that cities adopt policies has encouraged cities who have not yet adopted social media to develop a policy before they do so. No cities indicated they had a policy before they began using Facebook.

Overall, cities reported they have had few issues with their social media use, which may make adoption of a policy seem less than necessary to city officials. Still, the potential for

problems continues to loom, as many of the legal issues surrounding public agency use of social media have not been resolved in the courts. As the City of Redondo Beach alluded to when they discontinued their use of Facebook, these legal challenges may result in a city having its name attached to a court decision.

What problems or barriers are city governments encountering as they use, or choose not to use, social media?

For cities using social media, more than half reported they have encountered inappropriate comments or posts by members of the public. The Town of Apple Valley is the only city that elaborated on this issue, stating that the most frequent problem occurs when members of the public post commercial or political content, which is in violation of their policy. Only three other cities reported any problems with their usage. The most interesting problem of these three happened to the City of Beaumont, which reported that an unidentified person created a Facebook page for the city, posted the city's press releases to it, and then disappeared after a few months.

The lack of significant issues may be one reason why cities have not adopted policies extensively. Of the three cities that reported problems other than inappropriate posting, two have formal policies. However, a sample of three is too small to draw any conclusions between if a city has encountered significant problems and whether or not they have adopted a formal policy. When examining all cities that reported problems, including inappropriate commenting or posting, 42% also reported having a social media policy. This figure is lower than the 47% overall who reported having a policy, but there is a lack of information to conclude if the small difference is at all correlated.

Cities which are not using social media identified a lack of resources as the predominate reason for their non-use. This is consistent with my findings regarding the correlation between a

city's population and use, but not the city's wealth and use. Cities with larger populations presumably also have more staff than smaller cities, potentially making it easier for these cities to devote resources to social media. Wealthier cities, similarly, may have additional resources, but do not use social media at a higher rate than non-wealthy cities.

Between 30 and 40% of cities not currently using social media identified other or additional reasons they have not yet adopted it: no perceived need (39%), concern over legal issues (39%), record retention concerns (33%), and security concerns (39%). Two cities commented that they are in the process of drafting policies to address these concerns and will then begin using social media. The seven cities that stated they have no perceived need for social media are all fairly small with a median population of just 3,400. Security concerns are standard when using information technology and a policy may not be able to adequately address those concerns. However, my literature review suggests the other issues can be addressed through adoption of a strong policy, even though the issues have not yet been addressed in the judiciary. Few cities using social media are actually encountering any of these problems, indicating that the concern over the problems may be greater than the incidence of them.

Implications of My Findings

California cities are using social media at a high rate. More than three quarters of respondents to my survey indicated they are using some form of it. Many of the larger California cities did not respond to my survey; however, I found a higher rate of use in California cities regardless of population than did the study of the twenty largest cities in Illinois, which found that about half were using one of the three largest social media tools. My literature review found that social media use among the general population is growing increasingly prevalent; as it does so, more cities will likely adopt social media as a means of communicating and interacting with the public. Those cities that stated they have no perceived need for using social media may find that

residents, as they becoming increasingly reliant on social media as a source of information, create a need for the city to being using it. Broader adoption is also likely to occur as some of the potential issues with social media use are resolved in the courts. Many cities not using social media cited legal issues such as First Amendment concerns and records retention concerns as barriers to adoption. Until the there is a more definitive answer as to how well policies can protect public agencies, these concerns remain valid and will likely discourage some organizations from adopting social media.

Resource barriers will continue to exist regardless of the outcome of any future legal decisions. Cities are increasingly facing tight budgets, and some cities have not prioritized social media as an appropriate place to distribute their scarce resources. This may change if people continue to use social media regularly and become accustomed to interacting with their governments through social media; if that occurs, agency priorities may shift toward this method of citizen interaction particularly given its low cost and low barrier to entry. Given that most cities have relatively low proportions of their residents connected with their social media pages, it is understandable that many cities have not felt a need to shift resources toward its use.

The generally small number of people that connect with their cities through social media limits the ability of social media to become a powerful tool for popular engagement. Even though cities are generally interacting with the public through social media by reviewing and taking action based on comments left by member of the public, its impact is limited to the few who have chosen to connect with the city. If cities wish to encourage broader citizen engagement, social media is a natural way to do so. However, they will first have to devise strategies to bring people to their social media sites in the first place, and then ensure those who visit the city's site choose to follow it. My findings reveal that relatively few have been very successful at doing so on a broad scale. While the cities that have been successful share some

common traits, many less successful cities also share those traits, indicating that it is not those traits alone that are encouraging people to connect with the city. The city most successful in attracting followers, Sebastopol, posts with relatively little frequency and is not overly sophisticated with their social media use. I have been unable to identify any specific uses, traits, or trends that encourage higher percentages of people to connect with their local government through social media.

From an organizational management standpoint, the lack of formal, documented social media policies among a majority of cities using social media presents concern. This is particularly true given the overwhelming percentage of cities that actively review and manage comments and respond or take action based upon those comments. Cities are not just using social media tools for one-way communication, but interacting with a range of constituents through these tools. I presume few cities allow content deemed overly offensive or inappropriate to remain on their profile. Without a policy, how can the city make consistent determinations about what should be removed and what should remain? Because citizens have a right to free speech under the First Amendment, the line between clearly inappropriate speech and protected speech may be fine.

My literature review suggests that by clearly defining what is appropriate on the site and what can be removed provides a city with more discretion and authority than it may have otherwise. The Town of Apple Hill stated it has had problems with members of the public posting commercial and political content to its Facebook page, but has removed that content because it is in violation of their policy. If a city without a policy did the same and the poster maintained that they had a right to post it, would the city lose a court battle because it did not make the rules clear from the outset? The answers to these questions are unknown until such a problem occurs and is vetted through the court system. Luckily, few cities have reported

problems with their social media use, meaning that the likelihood that a city finds itself in legal trouble over social media is relatively low. However, if more residents chose to connect with their city and the city interacts regularly with those residents, the likelihood of problems may grow. Clear documented policies are the best tool that cities have to protect themselves from legal problems, and they will become increasingly important as cities expand their use of social media.

The research process for this thesis presented two interesting cases that are interesting to note, particularly if they are at all indicative of other cities. The City of Walnut Creek responded to my survey twice, each with different answers on a number of questions. The City of Los Angeles, the largest in California, did not have an active Facebook page for the city as a whole. Neither of these cities was included in the final results of the survey.

The City of Walnut Creek responded to my survey twice, and the responses were provided one day apart. I sent the survey to the city's Public Information Officer. Based on the varying responses to some of the questions and the different IP addresses of the respondents' computers, two different people within the city likely responded to the survey. Responses to the survey questions varied on nine of the questions including key questions, such as how often the city updates its Facebook page, if the city takes action based on comments posted to the city's page, and whether the city evaluates the effectiveness of its use of Facebook. Assuming the two different people within the city supplied the answers, the differing results indicate that there is not a shared understanding of how the city is using their social media tools, even among people that are presumably familiar with them.

The City of Los Angeles maintains a central Facebook page for the city, but it is largely inactive. On the top of the page, the city has posted the message, "This page is not monitored regularly. If you need assistance, please call 311 or visit the City of Los Angeles online at

<http://www.lacity.org/>. For Official information regarding the City of Los Angeles, please visit <http://www.lacity.org/>.” When I contacted the city to find a central communications person, I was informed that each department manages its communications separately. Unsurprisingly, many city departments have their own Facebook pages that are not synced with the city’s main page. This creates difficulties for residents that wish to receive general information from the city, as they would have to follow each of the city departments on Facebook to do so. Such a system is overly bureaucratic and not conducive to broad engagement with the public on general issues. Even though large cities are more sophisticated with their use of social media, the case of Los Angeles may indicate that once a city reaches a certain size, social media use becomes less coherent than with smaller cities due to the bureaucratic challenges large cities face.

To compare the case of Los Angeles with other large cities, I reviewed the Facebook pages of San Diego, San Jose, and San Francisco, even though none of the three responded to the survey. All three maintain a central Facebook page for the city as a whole and post to it with some frequency. To compare outside the state, I looked for the City of Chicago’s central Facebook page but was unable to find one. New York City, however, does have a central Facebook page that is regularly maintained and updated. My limited research into this issue may indicate that once a city government reaches a certain size and complexity, similar to many organizational management issues, central communication coordination likely becomes more difficult.

Areas for Further Research

My research showed that cities are connected with a relatively small proportion of their residents; in most cases, less than 5%. Some, however, are connected with far more than that. My study was not able to discover why some cities are more successful at attracting follower on their social media sites than others. If social media is becoming a tool for engagement with the

citizenry, and cities want to encourage broader engagement, then understanding what attracts social media users to a public agency's sites is important. Why does Sebastopol, which is not particularly aggressive or sophisticated with their social media use, have multiple times the proportion of followers that most cities have? Why does the City of Sacramento, the largest respondent city, which updates its site daily, provides a plethora of information to followers, and is fairly sophisticated in its use, have a ratio of followers to residents of less than two percent? My study was unable to provide a clear answer, and none of the information I encountered for my literature review provided such insight. Research in this area will be valuable to cities wishing to use social media more broadly with a higher percentage of their population.

Due to the limited number of respondents, I was unable to determine if differences in social media use and sophistication between cities in various categories are statistically significant. To better determine the level to which population, location, and wealth affects social media usage among cities, additional research with a larger sample size would be desirable. This would allow the researcher to perform *chi*-squared tests and evaluate differences at various confidence levels. To increase the sample size, future researchers may wish to assess use in cities in multiple states or across the country, or use a methodology that does not rely on city officials to complete a survey.

Now that my research has established a basic understanding of how California cities are using social media, future public administration research can focus on what makes social media sites successful for cities and other public agencies. While my study discovered that many cities are evaluating their use of Facebook, it provides limited insight into how successful cities feel they have been with their use, how they define success, and what future goals they may have for social media use. Gathering an understanding of what constitutes successful use of social media from the organizational point of view and contrasting that with sites that attract a high number of

followers would provide an interesting case study of how organizational success with social media translates to how well-followed the agency's social media sites become.

As stated throughout this thesis, public agency use of social media is not well understood. Through my thesis, I provide some insight into the issue as it relates to the use, management, and problems of social media use in California cities. Further research is necessary to understand how to encourage broader constituent engagement through social media, how to attract residents to public agency social media sites, and what fairly constitutes successful use of social media by public agencies.

APPENDIX A

Survey Instrument and Aggregate Results

Text of Email Sent to City Officials

Date: February 22, 2012

Subject: Social Media Survey for California Cities

My name is Christopher Zimmer, and I am a graduate student at California State University, Sacramento working towards my Masters of Public Policy and Administration. As part of my thesis, I am surveying California city officials about their city's use of social media. I hope to gain a better understanding about how cities are using social media to connect with their constituents. I would very much appreciate your participation in the (up to) 25-question survey by Friday, March 2, 2012.

The survey can be taken at: <https://www.surveymonkey.com/XRLDHNQ>.

Should you choose to participate, please be advised that at the end of the survey you may elect whether or not to have your city's name disclosed in connection with your responses to the questions. Should you elect not to allow your city's name to be disclosed, your responses will remain anonymous.

<https://www.surveymonkey.com/XRLDHNQ>

If you have any questions about the survey or my thesis, please do not hesitate to contact me at this email address or by phone at [redacted]. Thank you in advance for your participation.

Christopher Zimmer

Survey with Aggregate Results for all Valid Responses

1. You are being asked to participate in research conducted by Christopher Zimmer as a thesis requirement for the Master of Public Policy and Administration program at California State University, Sacramento. The purpose of this short survey is to gather basic information on the way and extent to which California cities are using social media to interact with their constituents. This research is funded in its entirety by the researcher. You will not receive compensation for participating in this study. The research will be published as a thesis and may be publicly accessible in digital or print formats. You may decline to answer any question if you wish. Your participation in the survey is entirely voluntary. There is no expected risk or harm to those participating in the survey. You will be asked at the end of the survey if the researcher may disclose the name of your city in connection with your survey responses. If you select “no”, your responses will remain confidential. You may change your request at any time after the survey by emailing the researcher.

If you have any questions regarding this survey or my research, you may email me at cgzimmer@gmail.com or my primary thesis advisor at California State University, Sacramento at kirlinm@saclink.csus.edu.

Your participation in this research is entirely voluntary and you may withdraw from participation at any time. By clicking “Yes” below, you acknowledge that you have read this consent form and agree to participate in the research.

Have you read the above consent form and agree to participate in this survey?

Answer Options	Response Percent	Response Count
Yes	100.0%	81
No	0.0%	0
<i>n</i> =		81

2. What is the name of the city for which you work?

Text Box	Response Count
See Appendix B for list of cities	81
<i>n</i> =	81

3. Does the city have an official account on any social media platform?

Answer Options	Response Percent	Response Count
Yes	76.5%	62
No	23.5%	19
I don't know	0.0%	0
<i>n</i> =		81

4. Why is the city not using social media? (check all that apply)

Answer Options	Response Percent	Response Count
Have not considered it	5.6%	1
No perceived need	38.9%	7
Lack of adequate resources	83.3%	15
Concerns over legal issues such as 1st Amendment rights or public records laws	38.9%	7
Concerns over record retention	33.3%	6
Security concerns	38.9%	7
I don't know	0.0%	0
Other (please specify)		2
<i>n</i> =		18

Other responses:

- We are currently developing a social media policy. Once the policy is finalized, departments will begin using social media outlets.

- In process of drafting a policy to address concerns.

5. Does the city have a central Facebook page for the city as a whole? (ex: Official City of Chicago Facebook page)

Answer Options	Response Percent	Response Count
Yes	75.8%	47
No	24.2%	15
I don't know	0.0%	0
<i>n</i> =		62

6. Do individual departments within the city have Facebook pages separate from the city's central Facebook page?

Answer Options	Response Percent	Response Count
Yes	55.3%	26
No	42.6%	20
I don't know	2.1%	1
<i>n</i> =		47

7. How long ago did the city start using Facebook?

Answer Options	Response Percent	Response Count
0-6 months	8.3%	4
7-12 months	12.5%	6
1-2 years	35.4%	17
2+ years	41.7%	20
I don't know	2.1%	1
<i>n</i> =		48

8. How often is the city's central Facebook page updated?

Answer Options	Response Percent	Response Count
Hourly	2.1%	1
Daily	37.5%	18
Weekly	50.0%	24
Bi-Weekly	4.2%	2
Monthly or less	2.1%	1
I don't know	4.2%	2
<i>n</i> =		48

9. Who manages or administers the city's central Facebook page? (check all that apply)

Answer Options	Response Percent	Response Count
Public Information Officer (PIO) or PIO staff	54.3%	25
City executive office staff	30.4%	14
Human Resources (HR) staff	4.3%	2
Information Technology (IT) staff	15.2%	7
Designated manager(s) or supervisor(s) outside the PIO, executive office, HR, or IT	6.5%	3
Designated staff member(s) outside the PIO, executive office, HR, or IT	26.1%	12
Contract or consulting agency or worker	2.2%	1
I don't know	0.0%	0
Other (please specify)		5
<i>n</i> =		46

Other responses:

- Webmaster
- Each participating department will have two assigned users. Additionally, two analyst in the City Manager's Office will have access.
- Interns
- Interns
- Various team members, Recreation Staff, Admin Staff etc.

10. Who has access to update, modify, or post to the city's central Facebook page on behalf of the city? (check all that apply)

Answer Options	Response Percent	Response Count
Public Information Office (PIO) staff	54.2%	26
City executive office staff	37.5%	18
Human Resources (HR) staff	6.3%	3
Information Technology (IT) staff	16.7%	8
Staff within individual city departments' communication offices	14.6%	7
Designated manager(s) or supervisor(s) outside information offices, executive office, HR, or IT	12.5%	6
Designated staff member(s) outside information offices, executive office, HR, or IT	25.0%	12
Any staff member	0.0%	0
Student Assistant(s) or Intern(s)	2.1%	1
Volunteer(s)	0.0%	0
Contract or consulting agency or worker	2.1%	1
I don't know	0.0%	0
Other (please specify)		3
<i>n</i> =		48

Other responses:

- IT Director and Webmaster
- City Manager or PIO
- Currently: Community Services Director, Community Services Supervisor, Community Services Coordinator, Community Services Secretary all have access to update. However, the ONLY people who actually update are interns.

11. What type of information does the city post on its central Facebook page? (check all that apply)

Answer Options	Response Percent	Response Count
General information or announcements about the city or city programs or services	95.8%	46
Events coordinated or hosted by the city	93.8%	45
Events happening in the city, but not coordinated or hosted by the city	60.4%	29
Public meeting notices	68.8%	33
Job Opportunities	29.2%	14
Information generally otherwise managed by individual city departments for wider promotion (Parks and Recreation updates, traffic updates, etc)	66.7%	32
City policy information	20.8%	10
Requests for feedback on various city issues, such as links to surveys or soliciting public comments	33.3%	16
General updates not connected with city business (ex: congratulating a local sports team on a recent victory or posting general questions like “What are you doing this weekend?”)	25.0%	12
Promotion of local businesses or other commercial interests	18.8%	9
Links to third-party information, such as newspaper articles or research studies	33.3%	16
I don’t know	2.1%	1
Other (please specify)		3
<i>n</i> =		48

Other responses:

- Because we have not launched our social media sites, these responses are not yet set.
- Chamber and Business Association sites
- We do not allow comments

12. Does the city actively review and manage comments or questions left by members of public on the city's Facebook page?

Answer Options	Response Percent	Response Count
Yes	81.3%	39
No	16.7%	8
I don't know	2.1%	1
<i>n</i> =		48

13. Does the city take action, provide information, or attempt to resolve issues based upon comments left by members of the public on the city's Facebook page?

Answer Options	Response Percent	Response Count
Yes	83.3%	40
No	14.6%	7
I don't know	2.1%	1
<i>n</i> =		48

14. Does the city review or evaluate the effectiveness of its use of Facebook?

Answer Options	Response Percent	Response Count
Yes	64.6%	31
No	27.1%	13
I don't know	8.3%	4
<i>n</i> =		48

15. If yes, how does the city review or evaluate the effectiveness of its use of Facebook?

Text Box	Response Count
<i>n</i> =	27

Responses:

- Survey
- Evaluate the of number of Friends, Likes and Visits.

- We are currently reviewing the use of comments. As of right now, we will likely turn the comment feature off.
- Review and evaluation of the effectiveness has not yet been determined since we have not launched our social media program.
- Facebook statistics, types of comments and questions
- Klout, Google Analytics, Facebook Insights
- Facebook Insights
- Number of postings and visits and input gathered from the public on important issues and topics.
- Monitor likes, impressions, activities, etc.
- The current evaluation is done manually based on feedback.
- Reviewing Page feedback on www.engagecanyonlake.com
- Facebook provided statistics
- Every attempt is made to make items posted to the Facebook trackable in at least one format: link analytics, web analytics and Facebook insight stats. At least once a month, we do an analysis of how many people are engaged with the Facebook, they types of information that resonates with them, and how much that information is shared. Each Facebook link has some objective (e.g. drive people to look at a specific blog post or web site page). Depending on the sensitivity of that outcome, we may analyze the results daily so we can adjust the strategy to maximize the results.
- Very loosely - we will post "Facebook fan" specials for events, to see how many people saw a post then came up to our booth at the event. I review the

stats provided by Facebook and watch which posts seem successful. It is all very anecdotal.

- Review - PIO scans regularly for effective message length, format, links, etc.
- Evaluate - Change in event participation and ability to satisfy constituents' inquiries or concerns.
- Observation of feedback left in response to posts.
- Review weekly stats sent by Facebook
- Depending on the comments or articles that are posted and the interaction with the face book network of people who comment on the articles.
- We review and compare the weekly updates that are sent by Facebook, also by the number of followers on twitter, and using Flickr stats.
- Number of hits
- Review Facebook metrics to determine if people are using/viewing the information.
- We review the statistics provided by the site.
- Comparing FB stats to attendance numbers, comments, etc
- We review comments and cross check them with out Facebook policy. If they are in violation of the policy we delete them.
- Public comments, anecdotal information, number of friends
- We use the Insights feature and we monitor referrals to our website from FB using Google Analytics.
- By tracking activity, number of followers, comments.
- Feedback reports, number of fans, reader comments.

16. What reasons did the city consider when deciding to use social media? (check all that apply)

Answer Options	Response Percent	Response Count
Providing a convenient way constituents can get information and news about the city	93.5%	58
Updating constituents during emergencies	50.0%	31
Engaging constituents in city affairs and issues	62.9%	39
Providing an additional method of contacting the city to ask questions or resolve issues	37.1%	23
Marketing city programs, services, or events	87.1%	54
Marketing local business or commercial interests	14.5%	9
Recruitment and hiring	9.7%	6
Networking	9.7%	6
I don't know	1.6%	1
Other (please specify)		2
<i>n</i> =		62

Other responses:

- Reaching out to the younger demographic
- Councilmember request

17. Does the city have an official, documented social media policy?

Answer Options	Response Percent	Response Count
Yes	46.8%	29
No	51.6%	32
I don't know	1.6%	1
<i>n</i> =		62

18. How long ago did it adopt the social media policy?

Answer Options	Response Percent	Response Count
0-6 months	34.5%	10
7-12 months	17.2%	5
1-2 years	27.6%	8
2+ years	17.2%	5
I don't know	3.4%	1
<i>n</i> =		29

19. Which of the items listed below are contained within the city's social media policy?

(check all that apply)

Answer Options	Response Percent	Response Count
Definition or examples of social media	79.3%	23
Purpose of the city's use of social media	89.7%	26
Who manages or administers the city's social media tools	69.0%	20
Who is authorized to use social media on the city's behalf	72.4%	21
The way employees should behave when using social media on the city's behalf	79.3%	23
Record retention	58.6%	17
Type of information that can be posted	72.4%	21
What information is considered inappropriate and can be edited or removed by the city)	75.9%	22
The extent to which the city monitors and responds to the public's comments or posts to the city's social media tools	55.2%	16
Restrictions or rules on the public's use or interaction with the city's social media tools	55.2%	16
I don't know	3.4%	1
Other (please specify)	3.4%	1
<i>n</i> =		29

Other responses:

- Visit the City of Elk Grove policy on Facebook/Twitter

20. Does the city have a person or persons whose primary responsibility is managing the city's social media tools?

Answer Options	Response Percent	Response Count
Yes	56.5%	35
No	43.5%	27
I don't know	0.0%	0
<i>n</i> =		62

21. To your knowledge, has the city ever had any of the following problems with its use of social media? (check all that apply)

Answer Options	Response Percent	Response Count
Unauthorized use of the city's official social media tools by staff members not authorized to use them	3.1%	1
Inappropriate use or use inconsistent with the city's social media policy of the city's official social media tools by staff members authorized to use them	3.1%	1
Complaints by citizens of a lack of use or too infrequent use	6.3%	2
Complaints by citizens of overuse of "spamming" of information by the city	3.1%	1
Inappropriate commenting or posting (including "spamming") by members of the public	56.3%	18
"Hacking" or other unauthorized use of the city's social media tools by members of the public or other unknown entities	3.1%	1
I don't know	25.0%	8
Other (please specify)	18.8%	6
<i>n</i> =		32

Other responses:

- No
- No such issues

- We have a posted comment policy, and the most frequent violation is posting of commercial content on our wall and (now, during an election year) political content - though not by our own electeds.
- None of the above
- Someone made their own city of Beaumont Facebook page and started posting our own press release to it. it was only kept up for a few months and then disappeared.
- The city has not encountered any problems

22. To your knowledge, are city executives generally aware of the way and extent to which the city is using social media tools?

Answer Options	Response Percent	Response Count
Yes	81.0%	51
No	7.9%	5
I don't know	11.1%	7
<i>n</i> =		63

23. To your knowledge, are city executives generally happy about the way and extent to which the city is using social media tools?

Answer Options	Response Percent	Response Count
City executives are happy with the way and extent to which the city uses social media tools	46.0%	29
City executives would like to see an increase in the city's use of social media tools	31.7%	20
City executives would like to see a decrease in the city's use of social media tools	0.0%	0
I don't know	22.2%	14
<i>n</i> =		63

24. May the researcher identify your city when discussing the survey results in the final thesis?

Answer Options	Response Percent	Response Count
Yes	80.2%	65
No	19.8%	16
<i>n</i> =		81

25. Would you like to receive the aggregate results of this survey?

Answer Options	Response Percent	Response Count
Yes	92.6%	75
No	7.4%	6
<i>n</i> =		81

APPENDIX B

Table of Cities that Responded to Survey

Cities that Agreed to be Identified

<i>City Name</i>	<i>County</i>	<i>Population</i>	<i>Per Capita Income</i>	<i>Ratio of Followers to Population</i>
American Canyon	Napa	19,454	18,440	N/A
Apple Valley, CA	San Bernardino	69,135	17,830	3.80%
Atherton	San Mateo	6,914	112,408	N/A
Atwater	Merced	28,168	15,162	N/A
Beaumont	Riverside	36,877	14,141	4.42%
Beverly Hills	Los Angeles	34,109	65,507	2.63%
Biggs	Butte	1,707	12,386	N/A
Canyon Lake	Riverside	10,561	29,646	0.91%
Carlsbad, Calif.	San Diego	105,328	34,863	0.51%
Carmel-by-the-Sea	Monterey	3,722	48,739	N/A
Cathedral City	Riverside	51,200	16,215	N/A
Claremont	Los Angeles	34,926	28,843	N/A
Colusa	Colusa	5,971	15,251	2.45%
Commerce	Los Angeles	12,823	11,117	0.50%
Coronado	San Diego	24,697	34,656	0.46%
Dana Point	Orange	33,351	37,938	N/A
El Centro	Imperial	42,598	13,874	11.10%
Elk Grove	Sacramento	153,015	20,916	1.06%
Fairfield	Solano	105,321	20,617	0.48%
Folsom	Sacramento	72,203	30,210	N/A
Fountain Valley	Orange	55,313	26,521	N/A
Gilroy, CA	Santa Clara	48,821	22,071	1.11%
Half Moon Bay	San Mateo	11,324	37,963	N/A
Hughson	Stanislaus	6,640	13,636	2.45%
Huntington Beach	Orange	189,992	31,964	0.76%
Irvine	Orange	212,375	32,196	1.52%
Jackson	Amador	4,651	21,399	35.63%
Lafayette	Contra Costa	23,893	54,319	N/A

<i>City Name</i>	<i>County</i>	<i>Population</i>	<i>Per Capita Income</i>	<i>Ratio of Followers to Population</i>
Lemon Grove	San Diego	25,320	17,002	0.23%
Lodi	San Joaquin	62,134	18,719	0.97%
Los Gatos	Santa Clara	29,413	56,094	N/A
Mission Viejo	Orange	93,305	33,302	1.30%
Mt. Shasta	Siskiyou	3,394	20,629	N/A
Newark, California	Alameda	42,573	23,641	N/A
Newport Beach	Orange	85,186	63,015	2.05%
Norwalk	Los Angeles	105,549	14,022	0.21%
Ojai	Ventura	7,461	25,670	N/A
Orinda	Contra Costa	17,643	65,428	N/A
Oroville	Butte	15,546	12,345	1.34%
Pacifica	San Mateo	37,234	30,183	N/A
Patterson	Stanislaus	20,413	14,746	N/A
Pleasant hill	Contra Costa	33,152	33,076	2.33%
Portola	Plumas	2,104	14,734	N/A
Portola Valley	San Mateo	4,353	99,621	N/A
Redwood City	San Mateo	76,815	34,042	N/A
Roseville, CA	Placer	118,788	27,021	1.06%
Sacramento	Sacramento	466,488	18,721	1.77%
San Anselmo	Marin	12,336	41,977	0.00%
San Carlos	San Mateo	28,406	46,628	10.11%
San Pablo, CA	Contra Costa	29,139	14,303	0.43%
Santa Maria	Santa Barbara	99,553	13,780	N/A
Santa Monica	Los Angeles	89,736	42,874	
Seaside	Monterey	33,025	15,183	N/A
Sebastopol	Sonoma	7,379	22,881	41.04%
Sierra Madre	Los Angeles	10,917	41,104	3.33%
Sonora	Tuolumne	4,903	19,248	1.47%
South Pasadena	Los Angeles	25,619	32,620	9.51%
Stanton	Orange	38,186	14,197	N/A

<i>City Name</i>	<i>County</i>	<i>Population</i>	<i>Per Capita Income</i>	<i>Ratio of Followers to Population</i>
Suisun City	Solano	28,111	20,386	10.27%
Truckee	Nevada	16,180	26,786	N/A
Tulare	Tulare	59,278	13,655	N/A
Upland	Alameda	73,732	23,343	N/A
Villa Park	Orange	5,812	53,103	N/A
Waterford	Stanislaus	8,456	13,933	N/A
Yountville	Napa	2,933	30,721	N/A

Cities That Requested Not to be Identified

An additional sixteen cities responded to the survey and requested that they not be identified in connection with the survey results. These cities are located throughout the state, have a mean population of 52,815, a median population of 32,613, and an average ratio of followers to population of 2.2%.

WORKS CITED

- Ali, T. (2010, May 19). How Social Media is Changing Government Agencies. *Mashable Social Media*. Retrieved from <http://mashable.com/2010/05/19/government-agencies-social-media/>.
- Baldassare, M., Bonner, D., Petek, S., & Shrestha, J. (2011, June). Just the Facts: California's Digital Divide. Public Policy Institute of California. Retrieved from http://www.ppic.org/content/pubs/jtf/JTF_DigitalDivideJTF.pdf.
- Barriga, A. (2011, February 22). Using Social Media in Public Organizations: Promising Practices from North Carolina's Parks and Recreation Departments. University of North Carolina at Chapel Hill. Retrieved from <http://www.mpa.unc.edu/sites/www.mpa.unc.edu/files/AshleyBarriga.pdf>.
- California Attorney General's Office. (2003). Introduction to the Brown Act: Open Meetings for Local Legislative Bodies. Retrieved from http://ag.ca.gov/publications/2003_Intro_BrownAct.pdf.
- Captura, Inc. (2009). Social Media Users' Expectations of the US Government: Survey Results. Retrieved from <http://www.slideshare.net/jedsundwall/social-media-survey-results>.
- City and County of San Francisco. (2012). City and County of San Francisco Facebook Page. Retrieved from <http://www.facebook.com/SF>.
- City of Santa Clara. (2012). City of Santa Clara. Youtube. Retrieved from <http://www.youtube.com/cityofsantaclara>.
- City of Seattle. (2009a, October 2). City of Seattle Social Media Use Policy. Retrieved from <http://www.seattle.gov/pan/SocialMediaPolicy.htm>.
- City of Seattle. (2009b, October 2). City of Seattle Facebook Standard. Retrieved from http://www.seattle.gov/pan/SocialMedia_Facebook.htm.

Cotey, A. (2011, January). Social media: Transit agencies connect with riders in new ways.

Progressive Railroading. Retrieved from

<http://www.progressiverailroading.com/pr/article/Social-media-Transit-agencies-connect-with-riders-in-new-ways--25447#>.

Devall, C. (2010, August 23). City of Redondo Beach drops Facebook page after concerns about open meeting. *Southern California Public Radio*. Retrieved from

<http://www.scpr.org/news/2010/08/23/18624/city-redondo-beach-drops-facebook-page-after-conce/>.

Edwards, C. (2006). Exploring the Consumer's Relationship with cable TV: Arbitron cable viewing report. Arbitron Cable. Retrieved from

<http://www.arbitron.com/downloads/cabletvstudy.pdf>.

Facebook. (2010). Connecting with your Constituents with Facebook. Facebook. Retrieved from <https://facebook-inc.box.com/shared/idnp0hs026>.

Facebook. (2012a). About Facebook Insights. Retrieved from

<http://www.facebook.com/help/?page=122407381175085>.

Facebook. (2012b). Facebook Fact Sheet. Retrieved from

<http://newsroom.fb.com/content/default.aspx?NewsAreaID=22>.

Facebook. (2012c). Statement of Rights and Responsibilities. Facebook. Retrieved from

<http://www.facebook.com/legal/terms>.

Federal Social Media Index. (2012). Expert Labs: Federal Social Media Index. Retrieved from

<http://reports.expertlabs.org/fsmi/>.

- Florida Attorney General's Office. (2008). Advisory Legal Opinion - AGO 2008-65. Retrieved from <http://www.myfloridalegal.com/ago.nsf/Opinions/5C83D6BB0CF399DC8525751C005E15C2>.
- Florida Attorney General's Office. (2009). Advisory Legal Opinion - AGO 2009-19. Retrieved from <http://www.myfloridalegal.com/ago.nsf/Opinions/25F14F90483F3901852575A2004E46CB>.
- ForeSee. (2011, October 25). ForeSee Study Highlights Social Media Best Practices for the Federal Government. ForeSee. Retrieved from <http://www.foreseeresults.com/news-events/press-releases/social-media-study-highlights-best-practices-for-the-government-2011-foresee.shtml>.
- Frommer, D., & Ortiz, J. (2011, November 01). The Future Of Social Media Is.... *Business Insider*. Retrieved from <http://www.businessinsider.com/future-of-social-media-2011-11?op=1>.
- Funk/Levis & Associates. (N.D.). Social Media for Public Agencies. State of Oregon. Retrieved from http://www.oregon.gov/ODOT/PT/TECH_ASSIST/FUN-249_Social_Media_for_Public_Agencies.pdf?ga=t.
- General Services Administration. (2012). HowTo.Gov: Helping Agencies Deliver a Great Customer Experience. General Services Administration. Retrieved from <http://www.howto.gov/>.
- Howard, A. (2011, February 28). San Francisco integrates city services, 311 and Facebook. gov20.govfresh. Retrieved from <http://gov20.govfresh.com/san-francisco-integrates-city-services-311-and-facebook/>.

- Human Capital Institute. (2010, January). Social Networking in Government: Opportunities and Challenges. Human Capital Institute. Retrieved from http://www.hci.org/files/field_content_file/SN%20Govt_Part1FINAL.pdf.
- Institute for Local Government. (2010, June 23). Social Media and Public Agencies: Legal Issues to be Aware Of. Retrieved from <http://www.csac.counties.org/images/users/1/Social%20Media%20Paper%202-23-11%20Rev.pdf>.
- Jansen, J. (2011, December 23). The civic and community engagement of religiously active Americans. Pew Research Center. Retrieved from http://www.pewinternet.org/~media/Files/Reports/2011/PIP_The_social_side_of_the_religious_pdf.pdf.
- League of California Cities. (2010, June). Social Media and Public Agencies: Legal Issues You Should Know About. *Western City*. Retrieved from <http://www.westerncity.com/Western-City/June-2010/Social-Media-and-Public-Agencies-Legal-Issues-You-Should-Know-About/>.
- Lipowicz, A. (2010, July 22). Nearly all major federal agencies use social media, GAO says. *Federal Computer Week*. Retrieved from <http://fcw.com/Articles/2010/07/22/Nearly-all-major-federal-agencies-now-using-social-media-GAO-says.aspx?Page=1>.
- Madden, M., & Zickuhr, K. (2011). 65% of online adults use social networking sites. Pew Internet. Retrieved from <http://www.pewinternet.org/~media/Files/Reports/2011/PIP-SNS-Update-2011.pdf>.
- Marchie, S. (2012, May). Is Facebook Making Us Lonely? *The Atlantic*. Retrieved from <http://www.theatlantic.com/magazine/archive/2012/05/is-facebook-making-us-lonely/8930/>.

- Misczynski, D. & Cuellar Mejia, M. (2011, October). The State-Local Fiscal Relationship. Public Policy Institute of California. Retrieved from http://www.ppic.org/main/publication_show.asp?i=998.
- Mossberger, K & Yonghong, W. (2012). Civic Engagement and Local E-Government: Social Networking Comes of Age. University of Illinois. Retrieved from <http://www.uic.edu/cuppa/ipce/CELocalEGovSMExSum2012.pdf>.
- National Association of State Chief Information Officers. (2010). A National Survey of Social Media Use in State Government: Friends, Followers, and Feeds. NASCIO. Retrieved from <http://www.nascio.org/publications/documents/NASCIO-SocialMedia.pdf>.
- Nielsen. (2011). State of the Media: The Social Media Report Q3 2011. Nielsen. Retrieved from <http://blog.nielsen.com/nielsenwire/social>.
- Office of the California State Chief Information Officer. (2010, February). Social Media Standard. Retrieved from http://www.cio.ca.gov/Government/IT_Policy/pdf/SIMM_66B.pdf.
- Pew Research Center (2011, May). Who's Online: Internet User Demographics. *Pew Internet & American Life Project*. Retrieved from <http://pewinternet.org/Trend-Data/Whos-Online.aspx>.
- Pingdom. (2010, February 16). Study: Ages of Social Media Users. *Royal Pingdom*. Retrieved from <http://royal.pingdom.com/2010/02/16/study-ages-of-social-network-users/>.
- RICG. (2011, March 22). Social media reaches saturation point among American consumers. RICG. Retrieved from http://www.ricg.com/marketing_articles/digital_marketing/social_media_reaches_saturation_point_among_american_consumers/.

San Diego City Clerk. (2012, February 6). City of San Diego Twitter Status Update. Retrieved from <http://twitter.com/#!/SDCityClerk/status/166667556151762944>.

Shankland, S. (2011, December 8). Social networking's salad days are ending, Forrester says. C|Net News. Retrieved from http://news.cnet.com/8301-30685_3-57339165-264/social-networkings-salad-days-are-ending-forrester-says/.

Sherman, A. (2011, August 31). How Law Enforcement Agencies Are Using Social Media to Better Serve the Public. *Mashable Social Media*. Retrieved from <http://mashable.com/2011/08/31/law-enforcement-social-media-use/>.

Smith, A. (2010, April 27). Government Online: The internet gives citizens new paths to government services and information. Pew Research Center. In Retrieved from http://www.pewinternet.org/~media/Files/Reports/2010/PIP_Government_Online_2010.pdf.

State of California. (2012). Agency Directory. Retrieved from <http://www.ca.gov/CaSearch/Agencies.aspx>.

United States Census Bureau. (2010). Population, Housing Units, Area, and Density: 2010. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_GCTPH1.ST10.