ABSTRACT

Title of dissertation: BUREAUCRAT POLITICKING: AN EXAMINATION OF

LOCAL HEALTH OFFICIALS AND THEIR LOCAL

HEALTH DEPARTMENTS

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Based on a model of bureaucrat politicking, this study investigates how local health officials, as political actors, secure financial resources to ensure their local health departments can meet the needs of their constituents. The model draws from theories of bureaucracies, public administration, and community power and describes administrating, advocating, co-learning, and politicking behaviors bureaucrats employ as leaders of local government agencies.

The model of bureaucrat politicking generates a series of hypotheses that describe how bureaucrat behavior can affect elected official budget appropriations. I hypothesize that politicking will result in more resources for bureaucrats than administrating, advocating, or co-learning. Secondarily, I hypothesize that co-learning will result in more resources than advocating or administrating. Co-learning is predicted to have a greater affect than advocating because a bureaucrat will be

leveraging electoral pressures via constituent engagement. In addition, administrating behavior will result in the fewest resources of the four behavior types.

I examine the behaviors of local health officials to uncover how the model of bureaucrat politicking plays out in practice. Results from in-depth interviews with ten local health officials from around the country illustrate how local bureaucrats demonstrate administrating, advocating, co-learning, and politicking behaviors.

Ordinary least square regression analyses using survey data mainly from the National Association of County and City Health Officials' National Profile of Local Health Departments study support my hypotheses.

BUREAUCRAT POLITICKING: AN EXAMINATION OF LOCAL HEALTH OFFICIALS AND THEIR LOCAL HEALTH DEPARTMENTS

by

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Dedication

My dissertation is dedicated to all the public health professionals who devote their careers to improving the health of communities.

Acknowledgements

I could not have completed this dissertation without the support and encouragement of many people. My parents, Sunny and Yongkeun Joh, have provided unending support through many years of education. They are my cheerleaders, emotional support, and source of healthy perspective along the way. My husband Andrew has been there everyday since we first applied to 18 graduate programs almost 10 years ago in hopes we would be able to live in the same city. Even though he finished law school years ago, he was called into academic duty to help revise and copy edit my dissertation. Andrew meticulously read through every chapter more than once and greatly improved my work. My son, Lawson, while only two years old, has provided me with the much-needed motivation to complete my degree. Lawson also spent afternoons working on his dissertation in solidarity. I must also thank my in-laws, John and Sandy Elligers, who were a source of emotional support, encouragement, and babysitting.

I am also indebted to the people I have worked with at the National Association of County and City Health Officials. It was at NACCHO where I really learned about public health and the important work of local health departments. There are many people who have helped me along the way. I am particularly thankful for Heidi Wilson who allowed me the flexibility to work and be a full-time student and Carolyn Leep and her team who provided the data for my research. It was at NACCHO, that I met my good friend, Tasha Akitobi, who has been pushing me with the perfect level of compassion and directness to complete my degree. I must also thank the local health officials I have worked with over the years who have inspired me, several of whom agreed to be interviewed for this study.

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Chapter 1: Introduction

"A local public health service—that is, a department of health of a community, be it city, county, village, town, or multiple units of similar jurisdiction within a state—has one purpose and two resources. Authority under statute law or local ordinance and the power of education in human biology and the sciences of sanitation and hygiene are the only resources of a health department maintained by local or state governments. Its purpose is to apply the sciences of preventive medicine, prevent disease, develop a healthy population, and safeguard life at all ages so that the optimum of longevity may be attained. This objective is social, and the resources are granted by the expressed will of the people. The health officer, the executive, generally a physician, is employed by civil government to make effective use of both authority and education for the benefit of all people. His patient is the community, not an individual." (Emerson 1951, 19)

Politically Savvy Local Health Officials

A local health official once told me that when he first started his job one of the first things he did was ask everyone in his agency to share with him who they thought was most influential in the community. He met with those individuals and asked them to name people who they thought were influential in the community. He continued to take this snowball approach until he built relationships with all the major players in the community. Throughout his tenure, he used his relationships to support the work of the local health department.

Another local health official often uses the word "collegiality" when talking about her work. Collegiality applied to her work with the mayor, the city council, her agency staff, and community members. When "collegial play" did not work with elected officials, she turned to the community for support.

A veteran in the field espouses the power of marketing and branding public health. He has a local television show that he uses to promote the work of his health department. He markets public health to anyone who listens at the local, state, and national levels. He has a "gang of 12" comprised of local champions who bring visibility to public health.

As a public health professional, I find these anecdotes particularly interesting given that public health is not a profession predicated on the ability to work with constituents and elected officials. Formal public health training focuses on the science of public health and using data to inform evidence-based decision-making. Public health professionals are taught that data should justify resource allocations and inform the design and implementation of interventions.

For over ten years, I have had the privilege of working with local public health professionals from around the country who dedicate their careers to protect and promote the health of communities. These professionals work in local health departments, which are the local governmental agencies or bureaus responsible for public health services. Throughout my tenure, two divergent themes keep emerging. First, many governmental public health professionals do not see themselves as political actors and often feel their fate is at the whim of political forces. Second, public health professionals who are seen as innovators, national leaders, and empowered are politically savvy.

Examining the Politics of Local Public Health

Witnessing the work of politically savvy local health officials led me to the study of political science. Political science offers a strong theoretical and empirical foundation for examining my primary research question: How can local health officials, as political actors, secure financial resources to ensure their local health departments can meet the needs of their constituents? Scholarship on bureaucracies, public administration, and community power offers explanations and a foundation for a new way of thinking about local health officials.

An examination of local health officials, in turn, builds on theories of bureaucracy, public administration, and community power. Through my research of local health officials, I have developed a unifying conceptual model of bureaucrat behavior that may be applicable to bureaucrats other than local health officials.

Bureaucrats are typically described as actors who have expertise in the administration of services (Weber 1978, Wilson 1989) and policy implementation (Pressman and Wildavsky 1984). Bureaucrats are also described as self-interested (Downs 1964, Niskanen 2007), disconnected from constituents (Downs 1964, Niskanen 2007), and agents of elected officials (Moe 2006). By incorporating theories of public administration and community power in a conceptual model of bureaucracy, my dissertation shines light on the potential role of bureaucrats as actors who align their advocacy efforts with constituent interests and elected officials' desires for reelection to maximize bureau resources.

The Model of Bureaucrat Politicking & Hypotheses

I present a model of bureaucrat politicking that describes how bureaucrats can align their interests with those of constituents and elected officials to ultimately increase their budget allocations. The model of bureaucrat politicking is based on a typology of bureaucrat behavior. The typology includes administrating, advocating, co-learning, and politicking behaviors. Bureaucrats who demonstrate administrating behavior focus their energies on managing their bureaus, implementing policies, and providing services. Administrators do not expect any increases in department funding and are generally uninterested in innovation. Bureaucrats who engage in advocating behavior focus their energies on securing resources from elected officials. Bureaucrats who engage in co-learning behavior spend time engaging constituents and connecting them to services, learning about their needs, and educating them about the role of their bureaus. Finally, politicking bureaucrats engage in and leverage colearning to further advance advocacy efforts. Politicking bureaucrats use information they learn about community needs through co-learning to more effectively advocate for resources from elected officials. Politicking bureaucrats also educate their constituents on the value their bureaus bring to communities and encourage constituents to exert political pressure on elected officials on behalf of bureaus.

The model of bureaucrat politicking generates a series of hypotheses that describe how bureaucrat behavior can affect elected official budget appropriations. I hypothesize that politicking will result in more for bureaucrats than administrating, advocating, or co-learning. Secondarily, I hypothesize that co-learning will result in

more resources than advocating or administrating. Co-learning is predicted to have a greater effect than advocating because through co-learning a bureaucrat leverages electoral pressure via constituent engagement. Third, I hypothesize that administrating behavior will result in fewer resources than the other behavior types.

Research Design

I examined the behaviors of local health officials to uncover how the model of bureaucrat politicking plays out in practice. Between October 2011 and January 2012, I conducted ten in-depth telephone interviews with local health officials. The interview protocol was designed to elicit descriptions of budget processes that determine local health department funding and identify factors that influence budget allocations. Results from the interviews provided detail on how local health officials demonstrate administrating, advocating, co-learning, and politicking behaviors. Interviewees also described how their behaviors impacted the success of their efforts to secure resources for their local health departments.

In order to empirically test the hypotheses generated by the model of bureaucrat politicking, I conducted ordinary least squares linear regression analysis to test the associations between bureaucrat behaviors and the amount of per capita local revenue allocated to local health departments. I created a data set using survey data from 2008, 2010, and 2013 National Association of County and City Health Officials'

¹ The University of Maryland Institutional Review Board approved my interview protocol.

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National Profile of Local Health Departments surveys², the United States Census³, and David Leip's Atlas of Presidential Elections⁴. Using data from National Profile of Local Health Departments surveys (NACCHO 2008, NACCHO 2010, NACCHO 2013), I also created indicators for co-learning and advocating based on measures of local health department community health assessment activity and types of engagement with local elected officials, respectively. The regression results support my hypotheses.

Project Scope and Limitations

My dissertation focuses primarily on local bureaus even though the model of bureaucrat politicking may apply to state and federal bureaus. While local health departments may fall under state governance and most receive revenue through state and federal sources, my research investigates the factors that influence local revenue allocated to local health departments. I account for the effects of state governance, which turn out to be significant, but the effects of state governance are viewed within the context of local health official engagement with local elected officials and levels of local revenue.

If studies are ranked on a continuum from exploratory research to causal analysis, this study is closer to the exploratory research end. The interviews were designed to uncover the range of predominant behaviors described by local health

² http://nacchoprofilestudy.org

³ http://census.gov

¹¹ttp.//census.go

⁴ http://uselectionatlas.org

officials and were conducted before I developed the model of bureaucrat politicking. The interview results provide descriptive support to my theoretical model. The quantitative portion of my research supports my theory; however, my quantitative analysis is limited in its ability to demonstrate causal relationships. Further, the indicators I used to represent the concepts of co-learning, advocating, and politicking are based on existing data that were not intended to measure these concepts. However, future studies can use the model of bureaucrat politicking to structure data collection efforts. More discussion on limitations is included in chapter 5.

This study does not connect bureaucrat behavior with improved community outcomes. While my research is motivated by an overarching interest to understand what can advance local health department efforts to serve communities and improve health, this study only looks at local health official behavior and local revenue sources. The study does not link local health official behavior with improved services or improved health. In fact, I recognize more local health department revenue does not necessarily result in better services, efficient use of resources, or better community health.

Study Outline

To ensure readers have sufficient knowledge about local health officials, local health departments, and the practice of governmental public health, I provide a primer in chapter 2. Chapter 2 defines public health and describes federal, state, and local public health functions. The chapter also includes a literature review of and this

study's unique contribution to the emerging field of public health services and systems research.

In chapter 3, I present a typology of bureaucrat behavior and the model of bureaucrat politicking. The model is based on theories of bureaucracy, public administration, and community power. Chapter 3 describes administrating, advocating, co-learning, and politicking behaviors that comprise the typology. The chapter also includes hypotheses generated by the model and how different interactions among local health officials, constituents, and local elected officials can influence the amount of funding local elected officials appropriate to local health departments.

Chapter 4 presents results from interviews with ten individuals who currently serve or previously served as local health officials. The results are organized by the typology of bureaucrat behavior. The chapter illustrates how local health officials express different bureaucrat behaviors. Results from the interviews also uncover structural intervening factors that affect local health official behavior. Descriptions of local health official behavior support the hypotheses that are empirically tested in chapter 5.

In chapter 5, I provide empirical support for the model of bureaucrat politicking. Using ordinary least squares linear regression analysis, I show the relative effects of administrating, co-learning, advocating, and politicking on local health department per capita revenue provided by local sources. Results indicate politicking has a greater effect on per capita local revenue than other types of bureaucrat

behavior. Chapter 6 presents overall conclusions and opportunities for future research.

Chapter 2: A Public Health Primer

On a typical Monday morning, I can count hundreds people who protect my health and promote the health of my community. When I start my day, the local radio station alerts me of the air quality and dangerous traffic conditions. As I eat breakfast, I know that food inspectors ensure the milk, eggs, and fruit I consume will not make me sick. While drinking my coffee and brushing my teeth, I do not have to worry about diarrheal disease because of public health laws and the work of my water utility. As I get into my car, I fasten my seatbelt and know that if I were to get into an accident, I would have a good chance of surviving thanks to public safety advocates and government agencies. On my way to work, the local police ensure my roads are safe by setting speed limits and reminding people not to text and drive. I drop my son at daycare and know he is being taught basic skills necessary for living a healthy life. As my workday gets started, I rely on the social support provided by my colleagues and friends, which helps me maintain good mental health.

Public Health: Prevention, Promotion, Protection

Even though all the people who contribute to my health and the health of my community wouldn't necessarily consider themselves public health actors, the definition of public health includes them all. Public health is defined as "what we as a society do collectively to assure the conditions in which people can be healthy" (Institute of Medicine 1988). While public health is a collective effort, there are

public health professionals who dedicate their careers to prevent disease, protect communities, and promote healthy conditions. Unlike the medical profession, public health focuses on assuring the health of populations as opposed to the treatment of individuals. While everyone contributes to public health, whether they are conscious of it or not, the government has the unique authority and responsibility of providing public health services.

Governmental Public Health

Government public health authority is grounded in the United States Constitution.

"The Preamble to the Constitution reveals the ideals of government as the wellspring of communal life and mutual security: 'We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessing of Liberty to ourselves and our Posterity, do ordain and establish this Constitution." (Gostin 2008, 129)

The government can collect taxes and use public resources for the good of the overall community even if it means restricting individual liberties (Gostin 2008). Gostin explains,

"Public health possesses the power to coerce individuals for the protection of the community and thus does not rely on a near-universal ethic of voluntarism. Although government can do much to promote public health that does not require the exercise of compulsory powers, it alone is authorized to require conformance with publicly established standards of behavior. The degree of compulsory measures necessary to safeguard the public's health is, or course, subject to political and judicial resolution. Yet, protecting and preserving community health is not possible without the constraint of a wide range of private activities. Absent an inherent governmental authority and ability to coerce individual and community behaviors, threat to public health and safety could not be reduced easily." (Gostin 2008, 130)

Federal Governmental Public Health

The federal government can use its powers to promote public health. The federal government can raise revenue and allocate funding to promote and protect the public's health. The federal government provides funding to states under the condition that they comply with federal public health standards. The federal government can also use its power to regulate interstate commerce to enforce laws that promote and protect public health. (Gostin 2000) Federal laws address public health issues such as mitigating and preventing diseases through vaccination, quarantine, and environmental health regulations; reducing fatalities and injuries through motor vehicle safety regulations and occupational health laws; and reducing infant mortality through maternal and child health and infant services (Goodman, Kocher et al. 2007).

Federal public health agencies are organized under the United States

Department of Health and Human Services (Patel and Rushefsky 2005). The mission
of the Department of Health and Human Services is to "to help provide the building
blocks that Americans need to live healthy, successful lives" (DHHS 2013). Agencies
under the auspices of the Department of Health and Human Services include the
Administration for Children and Families, Administration for Community Living,
Agency for Healthcare Research and Quality, Agency for Toxic Substances and

Disease Registry, Centers for Disease Control and Prevention, Centers for Medicare and Medicaid Services, Food and Drug Administration, Health Resources and Services Administration, Indian Health Service, National Institutes of Health, and Substance Abuse and Mental Health Services Administration (DHHS 2013).

Like other federal agencies, the Department of Health and Human Services is a department of the Executive Branch and is led by the Secretary of Health and Human Services, which is a Cabinet level position appointed by the President and confirmed by the Senate. The Department of Health and Human Services programs include

- Health and social science research
- Preventing disease, including immunization services
- Assuring food and drug safety
- Medicare (health insurance for elderly and disabled Americans) and Medicaid (health insurance for low-income people)
- Health information technology
- Financial assistance and services for low-income families
- Improving maternal and infant health
- Head Start (pre-school education and services)
- Faith-based and community initiatives
- Preventing child abuse and domestic violence
- Substance abuse treatment and prevention
- Services for older Americans, including home-delivered meals
- Comprehensive health services for Native Americans
- Medical preparedness for emergencies, including potential terrorism (DHHS 2013)

Congress allocates money to the Department of Health and Human Services to conduct these activities.

State Governmental Public Health

State constitutions and state legislatures determine state-specific public health powers (Goodman, Kocher et al. 2007). States can use police powers "to enact laws and promulgate regulations to protect, preserve, and promote the health, safety, morals, and general welfare of the people. To achieve these communal benefits, the state retains the power to restrict, within federal and state constitutional limits, personal interests in liberty, autonomy, privacy, and expression, as well as economic interests in freedom of contract and uses of property." (Gostin 2000) Examples of state police powers include quarantine, mandatory vaccinations, health inspections, and zoning (Gostin 2000).

State level public health authority typically lies with a state health department. Each state and the District of Columbia have health departments. A little more than half are freestanding or independent government entities while the others are each located within a larger state department of health and human services. About 60 percent of state health departments are governed by boards of health or health councils, which are usually appointed by the governor. Boards and councils develop public health policies and legislative agendas, advise elected officials on public health issues, and promulgate public health rules. (Hyde and Shortell 2012) Most state health officials report to and are appointed by the governor or a state secretary of health and human services. About 50 percent of state health officials must also be confirmed by the state legislature. (ASTHO 2011)

State health departments are responsible for essential public health services as well as financing and oversight of local public health activities (Hyde and Shortell 2012). State health departments also act as a liaison between the federal and local levels and are responsible for implementing federal initiatives such as Title V Maternal and Child Health services, Women Infant and Health services, and Cancer Prevention and Control programs. Implementing federal initiatives involves partnering with, distributing resources to, and providing technical assistance to local health departments. Examples of common state health department activities include workforce recruitment, clinical services, disease screenings, laboratory services, licensing, inspection, epidemiology, and surveillance. (ASTHO 2011)

State health department oversight of local governmental public health is stronger in some states than in others. In 13 centralized states⁵ and the District of Columbia, local health departments are units of state government and are staffed by state employees. The state has authority over many decisions related to policies, budget, and leadership. In 27 decentralized states,⁶ local governments hire local health officials and have primary authority over local health department business. Home rule prevails in the decentralized states. In five states,⁷ the state and local government share authority over health official selection, public health orders, and

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Alabama, Arkansas, Delaware, Hawaii, Louisiana, Mississippi, New Hampshire, New Mexico, Rhode Island, South Carolina, South Dakota, Vermont, and Virginia
 Arizona, California, Colorado, Connecticut, Idaho, Illinois, Indiana, Iowa, Kansas, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Jersey, New York, Nevada, North Carolina, North Dakota, Ohio, Oregon, Texas, Utah, Washington, West Virginia, and Wisconsin

⁷ Florida, Georgia, Kentucky, Maryland, Wyoming

budget. The remaining five states⁸ have a mix of centralized, decentralized, and/or shared governance. (ASTHO 2011) More information about state and local governance can be found in the next section.

State health departments receive funding from a variety of sources. More than half of state health department funding comes from the federal government. Federal funding includes grants, contracts, cooperative agreements, and Medicare and Medicaid funding. State legislatures and governors are typically involved in setting state health department budgets. In 60 percent of states, the state budget office is involved and in 35 percent of states, the secretary of health and human services is involved in the state health department budget process. Fees and fines (seven percent) and other sources like tobacco settlement funds (five percent) also contribute to state health department funding. Total revenue for all U.S. state health departments in fiscal year 2009 was estimated to be \$34 billion. (ASTHO 2011)

Across the country, there is variation in how much states allocate to governmental public health. Per capita expenditures range from \$20 to over \$120 per person with a mean of \$98 per person and median of \$79 per person in 2009.

Centralized states had higher per capita state public health funding (mean=\$186, median=\$116 in fiscal year 2009) than decentralized states (mean=\$69, median=\$68 in fiscal year 2009). (ASTHO 2011)

State health department funding across the country is spent on different types of programs: 24 percent for improving consumer health; 24 percent for Women,

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⁸ Alaska, Maine, Oklahoma, Pennsylvania, Tennessee

Infant, and Children programs; 13 percent for infectious disease; eight percent for chronic disease; six percent for health service quality; five percent for general administration; five percent for all-hazards preparedness and response; and five percent for environmental protection. Less than five percent is allocated to the following types of programs: health data, laboratory services, injury prevention, vital statistics, and other types of services. (ASTHO 2011)

Local Governmental Public Health

State constitutions and laws dictate local public health power and authority (Goodman, Kocher et al. 2007). Local power varies from relatively independent from state government to strongly determined by state government. Some state constitutions explicitly grant powers and authorities to local governments, that is, local governments have "constitutional home rule." In constitutional home rule states, local governments can have local level police power to protect the general welfare of people within their jurisdictions. Other local governments may have "legislative home rule," that is, their home rule power is not explicitly stated in their state constitutions; however, state legislatures enact legislation that describes local government power, which can include police powers and responsibilities for general

⁹ Includes "funds for Indian Health Care, Access to Care, pharmaceutical assistance programs, Alzheimer's disease, adult day care, medically handicapped children, AIDS treatment, pregnancy outreach and counseling, chronic renal disease, breast and cervical cancer treatment, TB treatment, emergency health services, genetic services, state/ territory assistance to local health clinics (prenatal, child health, primary care, family planning direct services), refugee preventive health programs, student preventive health services and early childhood programs." (ASTHO 2011)

community welfare. In other states, the state governments grant local governments a "charter" that details a range of home rule powers. In more restrictive states, local governments have public health powers that are not explicitly granted by state legislation. Dillon's Rule can revoke local government power and authority on issues that are absent or ambiguous in state law. Regardless of the level of local government public health authority, state and federal governments can always preempt local government powers, policies, and laws. In other words, state and federal legislation can limit, restrict, or contradict local action. (Goodman, Kocher et al. 2007)

Local health departments are responsible for delivering public health services to communities. Local health departments are governmental agencies that have the legal authority and responsibility to protect the health of populations, promote healthy behaviors and communities, and prevent adverse health conditions (Institute of Medicine 1988, Institute of Medicine 2003, Gostin 2008, Novick, Morrow et al. 2008). More formally, a local health department, as defined by the National Association of County and City Health Officials (NACCHO 2010), is "an administrative or service unit of local or state government, concerned with health, and carrying some responsibility for the health of a jurisdiction smaller than the state" (NACCHO 2010, 3).

There are about 2,600 local health departments in the country. Most local health departments, approximately 68 percent, are county health departments as opposed to multi-county (8 percent), city (21 percent), or some other municipal agency (4 percent). A majority of local health departments serve populations less than

50,000. Fifteen percent serve 50,000-99,999 people, 18 percent serve 100,000 to 499,999 people, and about six percent serve more than 500,000 people. Five percent of local health departments serve about half of the population. (NACCHO 2010)

Local health officials lead local health departments. Local health officials are the top executives responsible for managing, leading, and administering public health programs for communities. Local health officials can have a variety of titles including health officer, public health director, health commissioner, or medical officer.

Depending on the local health department governance structure, local health officials can be either employees of local or state government. Local health officials in decentralized and home rule states are often appointed by a local board of health, county commission, county executive, mayor, city manager, or other local entity. Local health officials in centralized states are often employees of the state and are hired through the state health department. (ASTHO 2012)

Local health department governance is determined by state history and statute. Local health departments in Arizona, California, Colorado, Connecticut, Idaho, Illinois, Indiana, Iowa, Kansas, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oregon, Texas, Utah, Washington, West Virginia, and Wisconsin are governed by local authority such as county or city elected officials and/or local boards of health. Local health departments in Arkansas, Mississippi, and South Carolina are units of state government and are governed by the state. Local health departments in Florida, Georgia, and Kentucky are governed by local and state

entities. In Alabama, Louisiana, Maine, Maryland, Nevada, New Mexico, Oklahoma, Pennsylvania, South Dakota, Tennessee, Virginia, and Wyoming, some local health departments are governed by local entities, some are governed by state entities, and others are governed by both. (NACCHO 2010)

A local health department is located in a centralized state if local units of the state government serve at least 75 percent of the state's population. A local health department is located in a decentralized state if local health departments led by local government officials serve at least 75 percent of the state's population. Local health departments are located in states with shared governance if local and state governments split authority over budgetary decisions, taxing authority, and public health orders. The percentage of funding that is provided by a state or local agency and whether the local health official is appointed by local or state officials also determines whether a state has shared governance. (ASTHO 2012)

Most local health departments (about 75 percent) are affiliated with a local board of health. Most local boards of health advise local health departments and elected officials on policies, programs, and budgets (87 percent) and set policies, goals, and priorities for the local health department (81 percent). Most local boards of health also adopt public health regulations (79 percent), approve the local health department budget (74 percent), and set and impose fees (73 percent). Most can also hire and fire the local health official (65 percent). Some can request a public health levy (39 percent) or impose taxes for public health (18 percent). (NACCHO 2010)

Local health department per capita expenditures vary considerably across the country. The median per capita expenditures for all local health departments was \$41 (mean=\$57). Local health departments serving the fewest people (less than 25,000 people) had the highest median per capita expenditures. Excluding the local health departments with the fewest people served, local health departments with larger populations generally had higher per capita expenditures than local health departments with smaller populations, except for local health departments serving more than one million people. The largest health departments had relatively low per capita expenditures as compared to local health departments serving populations greater than 50,000 but less than one million. Per capita expenditures also varied by governance. Local health departments with local governance spent the least on public health (median=\$38 per person); local health departments with state governance spent a little more (median=\$46 per person); and local health departments with shared governance spent the most (median=\$67 per person). (NACCHO 2010)

Local health department funding comes from a variety of sources: 26 percent from local sources; 21 percent from state sources; 14 percent from federal government via state government (i.e., federal pass-through dollars); 6 percent directly from federal government; 16 percent from Medicaid and Medicare; seven percent from fees; and ten percent from other sources. The proportion from each source varies greatly across the country. (NACCHO 2010)

A majority of local dollars for a local health department is in the form of tax contributions from residents and businesses in the community. The local tax base

influences how much could potentially be dedicated to public health services. The amount dedicated to public health services is determined by taxing policies and the extent to which local governments prioritize public health services. Local health officials engage with local legislative and executive branches through formal processes that establish an annual budget for their local health departments. A typical process involves the local health official submitting a budget to an executive branch finance office. Then, the local health official negotiates with the local chief executive (e.g., mayor, county executive) through back-and-forth conversations. Local health officials work to demonstrate justifications for their budgets. (Leviss 2008) "During this period, politicking becomes fierce, and [local health departments] may call on advocates, the research community, or other supporters to lobby their cause" (Leviss 2008, 212). The chief executive submits a final budget to the local legislature for approval. The legislature usually engages with the local health official for more information. The local executive and legislature must ultimately come to consensus and establish a final budget for the local health department. In most cases, the process to determine local public health spending is typically determined by the overall budgeting process for the jurisdictions. (Leviss 2008)

Other local sources of dollars include fees, fines, and private entities. Some local health departments supplement their revenues with regulatory fees and fines, public insurance revenues, and other fees for services (Wall 1998). Examples of revenue-generating services include inspections, permits, licenses, and vital records. Businesses, foundations, and philanthropies have also been known to support local

health departments; however, these sources of funding are usually not stable, are for a specific activity, and do not support basic infrastructure. (Leviss 2008)

Most local health departments receive funding from the state, which includes federal funding passed through the state. Leviss summarizes the seven types of funding mechanisms that distribute state dollars to local jurisdictions.

- Combination funding: The use of more than one funding mechanism to fund [local health departments]. Usually, this involves some per capita funding for basic public health services and specific grants for discrete local activities or staff.
- Contract funding: The use of a negotiated contract to fund the public health services provided at the local level. Usually, [local health departments] submit a funding application annually to the [state health department] to receive funds available through the local health maintenance fund.
- Formula funding: The distribution of funds to local health units based on a formula that incorporates variables that correlate with the health status and the financial resources of the population. The formulas may include different variables, such as per capita income, assessed land value, and disease rates, in an attempt to account for differences in localities' resources and population-level health indicators.
- Local funding: The almost exclusive use of locally collected funds and grants
 to support the public health services provided by the local health department.
 [Local health departments] in these states are usually funded primarily
 through local taxes, inspection fees, and categorical and outside grants.
- Per capita funding: The distribution of state funding to local health units based solely on the population base served by the local health department. In some states, per capita funding is not available to part-time health departments, but full-time municipal health departments are eligible for a sliding level of per capita funding depending on the size of the health department. The goal of the funding differential where most health departments are currently organized at the municipal level is to encourage the consolidation of municipal health departments while simultaneously increasing the capacity of [local health departments].
- Reimbursement funding: [Local health departments] are reimbursed for a specific set of services based on the expenditures associated with providing the services. The types of services that are allowable for reimbursement are usually pre-established by the state, and a complete programmatic and

- financial documentation of expenditures is required in order to process the reimbursement. The [state health department] usually requires the [local health departments] to predefine the set of services and strictly ensures that the localities are performing the said services described in the plan.
- State funding: The [local health departments] are extensions of the [state health departments] and the state is responsible for funding and providing all the public health services at the local level. This usually occurs in smaller or more rural states, where there are less formally organized governmental units. (Leviss 2008, 208-209)

Local health departments also receive federal funding for specific disease prevention programs that are either passed through the state or provided directly to local health departments. (Roper, Baker et al. 1992, Leviss 2008)Local health departments receive funding from the federal government in the form of block grants, formula grants, and categorical programs (Leviss 2008). Some local health departments receive block grant funding via states. Block grants give recipients substantial authority over how they want to use funding with relatively minimal administrative restrictions. (Leviss 2008)

Public Health Core Functions and Essential Services

Federal, state, and local public health governmental agencies and other entities that assure the conditions in which people can live healthy lives comprise the public health system. Examples of other entities include hospitals, community health centers, non-profit organizations, foundations, health insurers, schools, police departments, fire departments, and housing authorities. Governmental agencies are the "backbone" of the public health system and have primary responsibilities for

fulfilling the three core public health functions and providing the ten Essential Public Health Services (Institute of Medicine 2003, National Association of County and City Health Officials 2005).

The three core public health functions are to assess the health needs of communities; develop and support effective public health policies; and assure services and conditions in which people can live healthy lives (Institute of Medicine 1988). The ten Essential Public Health Services, which further detail the three core functions include

- Monitor health status to identify community health problems
- Diagnose and investigate health problems and health hazards in the community
- Inform, educate, and empower people about health issues
- Mobilize community partnerships to identify and solve health problems
- Develop policies and plans that support individual and community health efforts
- Enforce laws and regulations that protect health and ensure safety
- Link people to needed personal health services and assure the provision of health care when otherwise unavailable
- Assure a competent public health and personal health care workforce
- Evaluate effectiveness, accessibility, and quality of personal and populationbased health services
- Research for new insights and innovative solutions to health problems (Institute of Medicine 2003)

Essential Public Health Services do not focus on treatment of disease; rather, they define the types of activities necessary for prevention, promotion, and the protection of health.

Need to Study Public Health

The United States suffers from a serious underinvestment in public health. Public health expenditures represent less than three percent of health spending. In 2004, the U.S. spent \$1.88 trillion on health of which \$56.1 billion was spent on public health. Individuals spend about \$4,000 per year on medical care and about \$44 per year for public health services. (Leviss 2008) Leviss comments, "public health infrastructure... is underfunded and undervalued; yet public health services have added 25 of the additional 30 years to our life spans at the same time that direct medical care services only contributed 5 of these additional years" (Leviss 2008, 192). The Institute of Medicine notes, "dysfunction in how the public health infrastructure is funded, organized, and equipped to use its funding compromises the health of Americans" (Institute of Medicine 2012). Mays and colleagues add, "Strengthening the nation's public health systems requires better information on how to organize, finance, and deliver public health services to achieve improvements in population health" (Mays, Halverson et al. 2004, 183).

Approximately 25 years ago, the Institute of Medicine declared that public health in the United States was in disarray (Institute of Medicine 1988). In response, the public health profession has taken considerable action to formalize the core functions and essential services of public health and clearly define the roles and responsibilities of governmental public health and the larger public health system (Institute of Medicine 2003). The profession is now looking for evidence of effective strategies that result in measurable improvements (Institute of Medicine 2012). The

field of public health systems and services research "has emerged within the last decade primarily because of the need to better understand how the level of development of national public health infrastructure and the multiplicity of organizational arrangements in public health affect health outcomes. There is still a need to fully investigate the diversity of public health agency structures and functions, how resources are used at the state and local levels, how public health performance can affect health status outcomes, and myriad other issues" (Lenaway, Halverson et al. 2006, 410).

Public Health Systems and Services Research

Handler, Issel and Turnock provide a conceptual framework for studying public health systems and services (Handler, Issel et al. 2001). According to the framework, the public health system has five components: (1) mission and purpose, (2) structural capacity, (3) processes, (4) outcomes, and (5) macro context. The first component, mission and purpose, encompasses the professional philosophy, core functions, and goals of public health. Second, structural capacity or infrastructure includes organizational, physical, human, informational, and financial resources. The third component, processes, relates to how the public health system accomplishes its goals and fulfills its responsibilities. Fourth, outcomes represent the effectiveness, efficiency, and equity of the system. These four components of the public health system do not exist in a vacuum and are also affected by external forces or the "macro context." This fifth element includes social, political, and economic factors outside

the public health system such as social values, political agendas, and demand for public health services. (Handler, Issel et al. 2001) The public health systems and services literature can be organized by Handler et al.'s conceptual framework.

Explaining Variability in Mission and Purpose

Public health systems and services research that focus on the first component, mission and purpose, investigates predictors of governmental public health and public health system performance. Most studies investigate structural capacity components to explain variability in the ability to fulfill mission and purpose. Public health performance has been measured in terms of self-reported delivery of essential public health services and core public health functions (Suen, Christenson et al. 1995, Kennedy 2003, Mays, McHugh et al. 2004, Mays, McHugh et al. 2006), health department compliance with state public health statute and rules (Zahner and Vandermause 2003), and fulfillment of state public health performance standards (Mauer, Mason et al. 2004). Studies have found positive associations between public health system performance and structural capacity variables such as health departments led by a full-time as opposed to part-time health officials, number of health department staff, total expenditures, and diversified funding sources. In Washington, Mauer and colleagues measured a positive association between performance and local health department size, as measured by budget and number of employees. They also found that smaller local health departments perform better if there is local priority setting, leadership, staff skills, training, and experience, documentation, and data systems. (Mauer, Mason et al. 2004) In Texas, Kennedy

found that overall system performance was positively associated with greater public health agency capacity and agency contribution to system performance (Kennedy 2003).

A few studies focus on characteristics that can have *process* implications and ultimately affect public health performance. Improved performance is associated with local health department relationships with universities and businesses (Scutchfield, Knight et al. 2004). Performance is also related to participation outside agencies play in the planning and delivery of services (Halverson, Miller et al. 1996). Mays and colleagues found that county and city-county local public health systems have relatively higher performance levels than other types of jurisdictions and performance varies depending on the administrative relationship between the local and state health department (Mays, McHugh et al. 2006). Further, several studies have found jurisdictions with local boards of health that have policy-making authority tend to have higher performance (Scutchfield, Knight et al. 2004, Mays, McHugh et al. 2006, Bhandari, Scutchfield et al. 2010); however, this may not be true for jurisdictions with populations fewer than 100,000 (Bhandari, Scutchfield et al. 2010).

Other studies have found positive associations between public health performance and *macro context* variables such as levels of community need, population size, and socioeconomic status. Suen and colleagues found local health department performance associated with populations greater than 50,000, larger expenditures, and more extensive geopolitical units (Suen, Christenson et al. 1995).

In Texas, Kennedy found that performance was positively related to community size and socioeconomic status (Kennedy 2003).

Population size and public health expenditures explain most of the variability in measures of public health performance. Studies have consistently found that communities with larger populations have better public health performance than communities with smaller populations. (Richards, Rogers et al. 1995, Suen, Christenson et al. 1995, Mays, Halverson et al. 2004, Mays, McHugh et al. 2006) While population size is one of the largest predictors of performance, Mays and colleagues found that performance diminishes among systems with populations greater than 500,000 (Mays, McHugh et al. 2006). Studies also consistently find higher public health expenditures leads to better performance. In particular, public health performance seems to respond more to increases in local sources of funding as opposed to federal and state funding (Gordon, Gerzoff et al. 1997, Mauer, Mason et al. 2004, Mays, McHugh et al. 2004).

Explaining Variability in Structural Capacity

Several studies use public health expenditure as an indicator of structural capacity. Gordon, Gerzoff, and Richards found about 70 percent of variability in per capita expenditures were attributed to population size. The relationship between population and expenditures, however, was not linear. The greatest expenditures were found among health departments serving between 190,000 and 250,000. The number of full-time staff, percent of expenditures from Medicare, and the number of programs provided by the health department were also significantly and positively

associated with per capita expenditures. (Gordon, Gerzoff et al. 1997) In another study, Gerzoff, Gordon, and Richards investigated factors that affect changes in local health department expenditures. The authors found that city, city-county, and town local health departments were more likely to see budget decreases than county local health departments, but multi-county local health departments were more likely to experience an increase in expenditures than county local health departments. The authors also found that the proportion of Medicaid, Medicare, and private health insurance sources (i.e., associated with the provision of personal care services) of funding were positively associated with increases in expenditures, and dependence on Federal funding sources was associated with budget decreases. The authors also found that population size was positively related to likelihood of budget increases. Centralized governance structure did not show an effect on changes in local health department budget. (Gerzoff, Gordon et al. 1996)

Bernet finds that total per capita revenue among local health departments in Missouri initially decreases with increasing population size, but then increases at higher levels of population size. Bernet explains this pattern by offering the following explanation: "Economies of scale may help explain initial drops, with diseconomies setting in at higher levels, as the complexities of coordinating multiple locations impairs efficiency. Alternatively, this pattern could also emerge if the political clout of rural areas and large cities surpassed that of suburbs and small cities" (Bernet 2007, 191). Bernet also finds that local health departments that are successful at securing federal and state funding are also successful in securing local dollars.

(Bernet 2007) Bernet notes, "This is surprising, since [local health departments] have some control over their own revenue generation, yet do not use higher outside funds as an excuse to let their constituents off cheap" (Bernet 2007, 192).

In investigating the demographic, socioeconomic, and institutional characteristics of high-spending and low-spending communities, Mays and Smith found local health departments with the highest per capita expenditures (highest quintile) provided a larger array of clinical, medical, preventive, population, and specialty services than local health departments that spent less per capita. Local health departments with the greatest amount of per capita spending received a larger proportion of funding from reimbursements for clinical services as opposed to local government sources. Decentralized local health departments had about 25 percent more per capita expenditures than local health departments in centralized states, and local health departments governed by a local board of health had approximately 14 percent higher per capita expenditures than those without boards of health. Yet, over time, decentralized local health departments governed by a local board of health experienced fewer reductions in per capita spending than other local health departments. Local health departments with larger populations were also less likely to have reductions in per capita expenditures, but population growth was associated with greater reductions over time. Further, a high proportion of racial minorities was associated with reductions in local public health spending. (Mays and Smith 2009) The authors conclude, "These findings are consistent with the hypothesis that local governance and local administrative control engender political and community

support for public health activities and encourage entrepreneurship in securing resources. Policies to develop and support local governing and administrative bodies may be effective in expanding public health capacity" (May and Smith 2009, 1812)

Explaining Variability in Outcomes

More recently, studies have found associations between public health expenditures and improved health *outcomes*. Two studies measured positive associations between public health performance and county health status indicators (Richards, Rogers et al. 1995, Kanarek, Stanley et al. 2006). Erwin and colleagues found a 10 percent increase in per capita local health department expenditures was associated with a 1.82 percent decrease in morbidity caused by infectious diseases. Per capita full time equivalents (FTEs) were associated with decreased cardiovascular disease mortality. (Erwin, Mays et al. 2012)

In sum, the field of public health systems and services research is still developing and maturing. Because scholars have organized their work around the Handler, Issel, and Turnock conceptual framework, the body of research reflects breadth in terms of the different components of public health performance but lacks depth in theoretical development and methodological sophistication. This study aims to contribute to both breadth and depth by introducing political theories, measures, and factors that impact public health performance.

Political Science and Public Health Systems and Services Research

Some in the profession claim that public health should be apolitical. Emerson most strongly expresses this viewpoint. "The health department is the executive branch of local government charged with protecting the people against disease and assisting them by the persuasive force of scientific truth to develop and maintain the best health which their inherited qualities and their environment permit" (Emerson 1951, 20). "Everyone has a stake in his local health department, and the health services are the most unselfish and nonpolitical of all functions of local government" (Emerson 1951, 24). Further in 1988, the Institute of Medicine attributed inadequacies within governmental public health systems to the "inappropriate politicization" of public health (Institute of Medicine 1988).

Granted, some scholars have acknowledged that politics affects public health. "The political and social environment of a society significantly influences the formulation, adoption, and implementation of public health policies. What types of policy alternatives are considered and adopted as potential solutions to public health problems and how they are implemented takes place in a political arena in the midst of competing political ideologies, cultural and moral values, and private economic interests. Public health needs to recognize the political culture of a society plays a major role not only in defining the meaning of disease but also in setting limits on what the government can do in the name of promoting the public's health" (Patel and Rushefsky 2005, 37). Gostin adds, "a highly complex, politically charged relationship exists between various levels of government regulating for the public's health—

federal, state, tribal, and local" (Gostin 2008, 136-7). In a 2003 update on the future of public health, the Institute of Medicine noted, "The governmental public health infrastructure has suffered from political neglect and from the pressure of political agendas and public opinion that frequently override empirical evidence... [which] leave the nation's health vulnerable" (Institute of Medicine 2003).

Although several public health systems and services studies have pointed to politics as a contributing factor that influences public health, scholars have yet to include measures of the concept in their research. Often, political factors or politics is mentioned in concluding statements pointing to the need to study political factors. For instance, Gerzoff and colleagues contend, "Funding of [local health department] activities is complex and subject to many types of political and fiscal pressures that lead to much uncertainty and instability" (Gerzoff, Gordon et al. 1996, 176). And Gordon and colleagues note that "political constraints, community priorities, and the contributions that local civic and community health care organizations make to public health efforts" are important variables that were not included in their model. They conclude, "any application of this model, one must be mindful of the underlying diversity and consider local political, economic, and health conditions" (Gerzoff, Gordon et al. 1996, 94).

In general, existing public health scholarship largely skirts around the political aspects of public health. Avoiding discussions of the political nature of governmental public health or simply naming and not investigating political constraints does a disservice to the public's health given that most public health protection comes from

governmental entities. This study starts from the premise that governmental public health, and therefore the work of local health departments, is inherently political.

Local health departments are executive branch bureaus and, by design, they are political institutions that engage in politics.

The research presented in subsequent chapters investigates the politics of local public health. Instead of deferring to normative and wishful statements that public health should be or is apolitical, I present a model that describes in what way local health officials engage in political behavior and which types of behavior are rewarded with financial resources. The next chapter outlines the theoretical basis for a model of bureaucrat politicking and hypotheses generated by the model.

Chapter 3: Local Health Officials and a Model of Bureaucrat Politicking

"In democracies... citizens' confidence in their institutions of government is a core criterion, and a challenge is to develop institutions and actors that survive and flourish in the face of changing environmental pressures while maintaining commitment to the primacy of democratic values (March and Olsen 1995, 192)."

Developing institutions and actors that *survive and flourish* in the face of changing environmental pressures while upholding democratic values are challenges local health departments and their executives—local health officials—grapple with every day. I contend that local health officials respond differently to environmental pressures depending on how they view their roles as bureau executives. In this chapter, I present a bureaucrat politicking model based on a typology of bureaucrat behavior. Bureaucrats and therefore local health officials demonstrate administrating, advocating, co-learning, and politicking behaviors. These behaviors, I argue, affect bureaucrats' abilities to secure resources and ensure their bureaus are able to survive and flourish.

Administrators focus their energies on managing their bureaus, implementing policies, and providing services. Administrators are mostly concerned with maintaining the status quo. They do not expect any increases in department funding and are generally uninterested in innovation. Administrators focus their energies on managing their local health departments and following the rules. When forces threaten the status quo, administrators hope that if they wait long enough, things will

return to normal. If forces do change their world, administrators follow the new set of rules and manage their local health departments in the new environment but are not involved in shaping how their environments change. In some cases, the new environment pushes them out of their position. They do not consider themselves political actors and do not actively engage in politics.

Advocates are interested in securing resources for their department by articulating to elected officials and others who allocate funding that their health departments provide important services. While they spend energy managing their health departments, they also spend considerable energy showcasing their agencies in hopes for new funding. They communicate the purpose and benefits of their local health departments to elected officials and other local, state, and federal authorities. They generally do not spend a lot of energy engaging constituents. They see themselves as actors who engage in governmental, as opposed to political, processes.

Co-learners are primarily interested in meeting the needs of their constituents. They spend time engaging constituents, learning about their needs, and educating them about public health. Co-learners consider the local health department a community partner and dedicate resources to facilitate communication and education between the local health department and constituents they serve. Instead of spending energy on securing more resources for their individual agencies, they might spend more time pooling resources and partnering with other community organizations to meet their constituent needs. Co-learning also involves local health department employees working together with constituents toward some common understanding

of improved health. Co-learners view themselves more as public servants than as government officials or political players.

Politickers engage in and leverage co-learning to further advance advocacy efforts to garner greater support for their local health departments. Politickers use information they learn about community needs to advocate for more local health department resources. Politickers also educate their constituents on the value local health departments bring to communities and encourage constituents to advocate on behalf of local health departments. Co-learning between constituents and local health officials increases political pressures felt by elected officials. Local health officials not only request resources from elected officials for services, they also make compelling arguments that constituents value, expect, and need their local health departments' services. Their arguments are stronger as a result of the information and insights they gain through co-learning. Local health officials' efforts are augmented when constituents, independent from the local health official, communicate to elected officials they value, expect, and need local health department services. Elected officials, in turn, may be more likely to respond to political pressure from constituents and local health officials by allocating more resources to local health department.

This typology is of course more rigid than reality. All local health officials administer, advocate, learn, and educate to some degree. Local health official behavior may also change over time. An inexperienced local health official might be careful and focused on administration until he feels he has enough experience to engage in more advocacy or politicking. Alternatively, a new local health official

might start out energized, enthused, and ready to politick only to be burned resulting in more cautious behavior and focus on administration. Behavior could also vary by topic area. One health official may be passionate about maternal and child health programs and politick in that arena while ignoring emergency preparedness. Behavior could also vary based on what is happening in the external environment. In times of crises, some might focus on managing and less on politicking. For others, times of crises might be considered opportunities to politick and secure new resources. Even though this typology oversimplifies what occurs in practice, it offers useful structure for investigating which behaviors help local health officials ensure their local health departments' survive and flourish.

While this typology is informed by my work with local health officials, scholarship on bureaucracies, public administration, and community power provide theoretical support and offer explanations for variation in bureaucrat behavior. Public administration scholars offer theories on how local health officials manage their agencies and administer services to their constituents. Political science theorists describe the interplay between bureaucrats and elected officials. Community power scholars describe strategies for mobilizing people and securing resources to implement policies and provide services that reflect community interests. While the literature describes these behaviors, scholars have not offered a unifying theory that describes how these different behaviors help bureaus secure resources.

Literature Review

Administrating

Early writings by Woodrow Wilson argue the public administration of laws, typically conducted by bureaus, is independent from the political process that creates laws. In delineating the field of public administration from the study of politics, Wilson claimed, "administration lies outside the proper sphere to politics.

Administrative questions are not political questions." (Wilson 1887)

According to Max Weber, bureaus are effective institutions for public administration and are led by political appointees who have technical expertise. The characteristics of bureaucracies provide rationalism to government because bureaucracies are structured by norms, rules, and hierarchy. (Weber 1978) Bureaus demonstrate the following functions:

- 1) "The regular activities required for the purposes of the bureaucratically governed structure are assigned as official duties.
- 2) The authority to give the commands required for the discharge of these duties is distributed in a stable way and is strictly delimited by rules concerning the coercive means, physical, and sacerdotal, or otherwise, which may be placed at the disposal of officials.
- 3) Methodological provision is made for the regular and continuous fulfillment of these duties and for the exercise of the corresponding rights; only persons who qualify under general rules are employed." (Weber 1978, 956)

Local health departments match Weber's description of bureaus in that local health departments have official duties, authorities, and responsibilities they must meet in accordance with laws. Local health department official duties include but are not limited to providing public health services, promoting healthy communities,

protecting the health of communities, and enforcing and implementing public health statutes. Local health departments have formal authority to fulfill their duties. Public health authority, however, is delimited by rules that ensure the balance between coercion and liberty. (Weber 1978)

Bureau administration is primarily defined by legislation passed by elected bodies and bureaucratic norms and rules. Elected bodies pass legislation while bureaucratic agencies monitor, implement, and evaluate programs. (Ross and Levine 2001) Bureaus develop norms, regulations, and decision-rules in order to serve municipal functions (Dye and Garcia 1978, Pelissero 2003). According to Lineberry, "Bureaucratic decision-rules are the minutiae of public administration" (Lineberry 1977).

The Weberian view of bureaucracy supports the notion of local health officials as administrators. Administrators are primarily interested in using their authority to fulfill their duties. They establish norms, regulations, and decision-rules that influence how policies are implemented. Administrators use their technical expertise to fulfill their duties, and they are generally uninterested in venturing beyond their administrating role. They do not see themselves as political players; rather, they work to implement the policies of political players.

Advocating

Theories on bureaucracy offer explanations for local health official advocacy behavior. Building on his description of bureau characteristics, Downs offers a theory of bureaucrat behavior that contends bureaucrats are utility maximizers. Downs notes that bureaucrats are motivated by a variety of goals. Bureaucrats can be "climbers" who work to maximize their personal power, income, and prestige. "Conservers" resist change in an effort to preserve their individual security and convenience. "Zealots" work for narrow policies they are personally loyal to. "Advocates" support a wider set of policies than zealots, but are loyal to their agenda and protect it against others. "Statesmen" are dedicated to society overall. While zealots, advocates, and statesmen work to advance policies that benefit at least a portion of society, they are all self-interested and seek power and prestige that allow them to advance their policy interests. (Downs 1964) In sum, bureaucrats advocate for more resources to satisfy their self-interest.

Niskanen follows in Downs' footsteps and presents a model of budgetmaximizing bureaucrats, which argues bureaucrats advocate for the maximum
resources from their sponsors to satisfy their self-interests. Bureaucrats and elected
officials engage in a principal-agent relationship where the agent has more
information about unit costs for services than the principal. This information
asymmetry, according to Niskanen, results in bureaus functioning like monopolies
that charge too much for services. Bureaucrats use their information advantage to
maximize their budgets even though their budget requests exceed what is required to
meet need. Bureaucrats request more funding than they needs as a means to promote
their personal self-interest. Elected officials support the monopoly because they are
not incentivized nor have the opportunities to have information about the cost for

services. Sponsors will also not seek another service provider because they are best served by a monopoly. (Niskanen 2007)

Niskanen asserts that the benefits of budget maximization such as "salary, perquisites of the office, public reputation, power, patronage, output of the bureau, ease of making changes, and ease of managing the bureau" outweigh a bureaucrat's expressed commitment to serving the public interest. (Niskanen 2007, 38) In fact, Niskanen asserts that bureaucrats cannot act in the public interest. He argues,

It is *impossible* for any one bureaucrat to act in the public interest, because of the limits on his information and the conflicting interests of others, regardless of his personal motivations. This leads even the most selfless bureaucrats to choose some feasible, lower-level goal, and this usually leads to developing expertise in some narrow field. The development of expertise usually generates a sense of dedication, and it is understandable that many bureaucrats identify this dedication with the public interest. (Niskanen 2007, 39)

Niskanen contends that bureaus are directly engaged with their sponsor and not the constituents they serve. In the case of local health departments, sponsors include elected officials, boards of health, and state health departments. The relationship between a bureau and sponsor is what distinguishes a bureau from other types of organization. Niskanen asserts that bureaus do not concern themselves with constituents unless constituents influence sponsor support for the bureau. Further, bureaus generally do not know constituent preferences and do not have the ability to know constituent preferences. (Niskanen 2007) He states,

In any case, the population demands for services are never directly revealed to a bureau. A bureau may appeal to the constituents of its sponsor organization in an attempt to increase the sponsor's demand for the bureau's services, but it is not the preferences of the constituents that are important to the bureau, but rather their influence on the revealed preferences on the bureau's sponsor. (Niskanen 2007, 27)

Niskanen asserts that this relationship between bureau and sponsor results in increased budgets that do not result in efficient service delivery or achievement of goals that serve the public's interest. The bureaucrat is incentivized to increase the budget by the desire to appease bureau employees and sponsors because they ensure the bureaucrat remains in her position. Niskanen writes, "A bureau's employees... indirectly influence a bureaucrat's tenure both through the bureaucrat's personal rewards and through the real and perceived performance of the bureau." (Niskanen 2007, 40) And, sponsors "lack the time, the information, and the staff necessary to formulate new programs. They depend on the bureau to seek out and propose new programs and to make a case for larger expenditures in old programs." (Niskanen 2007, 40) Budget maximizing behavior is incentivized by those for whom the bureaucrat works and those who work for the bureaucrat. Ultimately the budget and the size of the bureau are limited by its ability to deliver output expected by the sponsor. In sum, "Bureaucrats maximize the total budget of their bureau during their tenure, subject to the constraint that the budget must be equal to or greater than the minimum total costs of supplying the output expected by the bureau's sponsor." (Niskanen 2007, 42)

Others disagree with Niskanen's assertion that bureaus maximize their budgets and receive appropriations that exceed need. According to Wilson, legislators have the strategic advantage and can easily constrain bureaucratic inputs. Legislators are motivated by keeping taxes low while increasing services. Consequently, Wilson argues, "there are many lavish programs in this country administered by modestly paid bureaucrats working on out-of-date equipment in cramped offices." (Wilson 1989, 119)

Peters argues bureaucrats are motivated by policy goals. Bureaus tend to have their own ideology that reflect policy preferences and desired policy innovations, and bureaucrats advocate for policy innovation. To order to achieve their policy goals, bureaucrats must actively compete for resources. (Peters 1981) Peters writes,

Bureaucrats already have office, and are unlikely to lose it. What they do not have is money. Thus, while the currency of partisan competition is votes, the currency of bureaucratic competition is currency. The competition for budgets among agencies may provide many of the same benefits at an organizational level that partisan competition is assumed to provide in democratic politics. Just as partisan competition allows a voter to select among alternative governments, which in turn are supposed to be related to alternative policies, bureaucratic competition allows political and administrative personnel to choose more directly among alternative policies. (Peters 1981, 70-71)

Even though scholars have differing views of what motivates and the power of bureaucrat advocacy, several themes about advocacy emerge from the literatures.

First, advocacy is typically between bureaucrats and elected officials. Constituents are not main players in advocacy, at least as it is defined here. Second, some bureaucrats

are often motivated by self-interest, which may or may not discount the public's interest. Advancing self-interest includes achieving policy goals, serving communities, and seeking power and prestige. Third, in presenting a case to elected officials for more resources, bureaucrats may benefit from information asymmetry as an agent with more knowledge about cost-benefit than their principal elected officials.

Co-Learning

In contrast to the self-interested bureaucrat, Wilson believes bureau executives must focus on the public they serve. Wilson acknowledges that executives are responsible for organizational maintenance, which requires ensuring their bureaus have adequate resources. Unlike Niskanen, Wilson argues the power of constituency, as opposed to information asymmetry between bureaucrats and elected officials, helps bureau executives secure resources for their agencies (Wilson 1989). Wilson writes, a bureau executives' "principle source of power is a constituency" (Wilson 1989, 204).

Local bureaucrats can build constituency through co-learning. Co-learning occurs when bureaucrats work with community stakeholders to develop a shared understanding of community needs and then leverage bureau authority and resources to provide services that meet community needs. New Public Service, urban regimes, and public value theories support the notion of co-learning.

New Public Service principles uphold that bureaucrats and constituents should work together to build shared values, shared responsibility, shared leadership, and shared goals, which involves building relationships and trust (Denhardt and Denhardt 2000). Further, the "public interest is better advanced by public servants and citizens"

committed to making meaningful contributions to society rather than by "bureaucrats" acting as if public money were their own" (Denhardt and Denhardt 2000, 556).

Co-learning involves facilitating dialogue with constituents to achieve a shared understanding of what is needed in a community. Roberts describes a process that leads to mutual understanding between public officials and constituents (Roberts 2002).

Participants in a dialogue work toward mutual understanding. They listen to find strength and value in one another's position. They reexamine their own and others' assumptions and positions. They acknowledge they can learn from each other to improve thinking on both sides. Through their co-learning, they evolve a sense of trust and shared identify, such that transformations in views, perspectives, and actions have been known to occur. (Roberts 2002, 661)

Urban regime theory provides insight into how bureaucrats can use colearning to secure resources. Stone defines urban regimes as "the informal arrangements through which public bodies and private interests function together to make and carry out governing decisions..." (Stone 1989). Regimes mobilize around common interests and pool resources to accomplish collective goals (Eisinger 1997). While entities that make up regimes still have their private agendas, collective action allows them to have opportunities and achieve goals they would not have been able to do accomplish alone (Stone 2006).

Urban regimes help achieve collective benefits or what Stone refers to as "social production" (Stone 1989, Stone 2006). Urban regime theory upholds that the

formal authority of a local government, that is its "power over" resources, is not sufficient to address major community issues. Instead community problems can only be resolved when the local government works in concert with other public and private entities. In other words, collaboration results in a "power to" achieve collective goals. (Stone 1989, Stone 2006)

[R]egime theory explains the linkages between private capital and political power and the potential synergies that can be exploited between these spheres of urban society... it highlights the differences between urban government (the reliance on political structures in governing the local state) on one hand and governance (the process of coordinating and steering the urban society toward collectively defined goals) on the other hand. Thus, urban regime theory offers one a theoretical model of American urban governance and the role of government in such governance. (Pierre 2005, 447)

Regimes pool resources and capacities from different entities, which are then used to assist local government and influence policy (Stone 1998). Three factors shape policies in urban regimes: "(1) the composition of a community's governing coalition, (2) the nature of the relationships among members of the governing coalition, and (3) the resources that the members bring to the governing coalition" (Stone 1993). Some entities are valued higher than others based on their resources. According to Stone, government officials form strategic alliances with entities that have more resources. Consequently, business entities have greater value to governing regimes than public or non-profit entities because businesses have greater investment resources. Stone argues, "public officials form their alliances, make their decisions and plan their futures in a context in which strategically important resources are

hierarchically arranged—that is, officials operate in a stratified society. The system of stratification is a motivating factor in all that they do; it predisposes them to favor upper- over lower-strata interests." (Stone 1980) Still, non-business entities play important roles in governing regimes (Mossberger and Stoker 2001).

Stone argues that variability in the success of regimes can be explained in terms of whether there is a common, concretely defined agenda; whether the entities that comprise the regime have adequate resources; whether the regime partners works in cooperation; and whether the strength of the regime is supplemented by other means such as interpersonal networks. (Stone 2004) Stone emphasizes, "The study of urban regimes is thus a study of who cooperates and how their cooperation is achieved across institutional sectors of community life. Further, it is an examination of how that cooperation is maintained when confronted with an ongoing process of social change, a continuing influx of new actors, and potential break-downs through conflict or indifference." (Stone 1989)

According to Moore, co-learning is part of an approach to create public value. Moore does not view bureaucrats simply as agents tasked with implementing the laws and policies established by elected officials. Rather, bureaucrats should actively create public value, which in turn influences bureau policies, services, and actions. (Moore 1995) Governments create public value when they address the collective concerns of citizens (Benington and Moore 2011). Moore argues bureaucrats can achieve outcomes the public values by building coalitions that involve elected officials, private, and public stakeholders, defining public value, and securing internal

and external resources (Moore 1995). Creating public value contributes to representative democracy by reflecting what constituents need. Public value is rooted in citizen preferences, aspirations, and expectations and can be created through "public sector production" (Moore 1995).

Co-learning is necessary to understand what constituents value and how to work with constituents to create public value. Examples of how local health officials and their agencies engage in co-learning include building partnerships with community organizations, conducting community health assessments and improvement plans, and community outreach. By engaging in these co-learning activities, local health officials mobilize constituents, educate constituents on local health department functions, assess what constituents need, ensure local health departments adapt to changing needs, and work with constituents to meet a shared understanding of improved health.

Politicking

In order to create public value, as defined by Moore, bureaucrats must engage in political management (Moore 1995). Political management allows bureaucrats to achieve their organizational missions and meet the needs of constituents. Effective political management and creating public value involves three strategies that comprise Moore's "strategic triangle". First, bureaus must ensure their efforts are operationally and administratively feasible. Second, bureaus must define their organizational mission and make sure the public values their work. Third, bureaus must ensure their efforts are politically and legally supported. The third strategy

"offers an account of the sources of support and legitimacy that will be tapped to sustain society's commitment to the enterprise" (Moore 1995, 71). The third strategy, to ensure political and legal support, involves politicking.

Local health officials who politick use both advocacy and co-learning to exert political pressure on elected officials to provide resources to local health departments. Through co-learning, constituents gain an appreciation for local health department services because they see how the local health department is working with the community to achieve shared goals. Co-learning improves the effectiveness of local health official advocacy efforts because local health officials can demonstrate that their services benefit voting constituents. Local health officials who are successful in demonstrating public value and working with their communities to meet their communities' needs will create advocates for their local health departments.

Consequently, constituents who see the value of local health departments will be more inclined to put pressure on elected officials to allocate funding to public health services. Politicking works because it takes advantage of elected officials' motivation to be reelected.

Politicking can change the political environment to favor local health departments, particularly in how constituents and, in turn, elected officials perceive the costs and benefits associated with local health department services. Through politicking, local health officials can change the perceived benefits relative to costs. Borrowing Wilson's language, local health officials can use politicking to create client politics where constituents consider public health services to have high per

capita benefits and low per capita costs (Wilson 1989). To use Peterson's language, politicking can result in constituents and elected officials supporting public health for its developmental value, as opposed to redistributive value, because politicking provides mechanisms for communicating how public health benefits an overall community as opposed to a disadvantaged group (Peterson 1981).

Entrepreneurial bureaucrats practice politicking. Teske and Schneider define bureaucratic entrepreneurs as "actors who help propel dynamic policy change in their community. Like other entrepreneurs, they engage in the act of 'creative discovery' by creating or exploiting new opportunities to push forward their ideas" (Teske and Schneider 1994, 331). Entrepreneurial bureaucrats use their technical expertise to bargain with external constituents and elected officials and secure coalition support for bureau policies. Entrepreneurial bureaucrats can also affect agendas and change preferences of people who try to constrain them. Bureaucratic entrepreneurs use creative discovery to secure financial resources for their agencies. (Teske and Schneider 1994)

Local health officials can use politicking to leverage constituent political action to benefit the local health department. Moe acknowledges the principal-agent relationship between elected officials and bureaucrats noted by Niskanen; however, Moe argues the ability of elected officials (as principals) to control bureaucrats (as agents) is less than what is typically suspected. Moe argues that in most principal-agent research on bureaucrats and elected officials the focus is on information asymmetry as the source of agent power. Moe contends that agents have an additional

source of power—political action—that gives them an upper hand and prevents or undermines the strategies elected officials can use to control bureaucrats (Moe 2006). Moe explains, "when agents have a measure of political power over them, the principals may not *want* to exercise much control, and may make choices—on policy, on structure, on funding—that are much more favorable to the agents than the theory now recognizes." (Moe 2006, 2) According to Moe, research on the principal-agent relationship between elected officials and bureaucrats ignores politics and is only political in that players and the context occur in government. Moe writes,

In particular, it ignores the crucial fact that the principals are elected—and thus that if bureaucrats are able to exercise power through the electoral process, they can help determine who their principals are and what objectives the latter pursue in office. The more electoral power the bureaucrats are able to wield, the more their principals have incentives to act as "agents of the agents" by doing what their subordinates want them to do. When this is so, all the basic outcomes of top-down political control—the structure of agencies, their levels of funding, their personnel systems, the range of acceptable performance—are likely to be much more favorable to public employees than the standard principal-agent framework would lead us to expect. (Moe 2006, 4)

Pluralist theory also supports the notion that local health officials can leverage constituent power through politicking. Pluralism upholds that individuals both inside and outside the political system have resources and influence, which they can use to exert power. According to Dahl, people inside the "political stratum" primarily have direct influence whereas people outside the stratum primarily have indirect influence. Individuals in the political stratum, however, do not have concentrated power, and

people in the apolitical stratum can readily join the political stratum. Apolitical and political individuals work together in reciprocal relationships. (Dahl 1961) The political stratum represents the values and goals of the apolitical stratum and society overall; and the apolitical stratum "can be said 'to govern' as much through the sharing of common values and goals with members of the political stratum" (Dahl 1961, 92). If the political stratum fails to reflect the values and goals of society, individuals can use resources to influence members of the political stratum and change policy (Dahl 1961).

Pluralism, according to Dahl, is based on the nature of resources available in a political system. Resources are used to influence others in the political system. The availability of resources is limited, but not fixed. Examples of resources include time, money, prestige, votes, and control over processes and information. There is variability in how, when, and the extent to which people use resources to influence the political system. People do not always use the resources available to them to influence politics and policy. Thus, resources in the system are "slack." A relatively small proportion of political professionals use their political resources regularly whereas a majority of groups and individuals use slack resources only when a conflict or issue prompts them to do so. (Dahl 1961) Bureaucrats can use co-learning to identify resources in a community and mobilize slack resources to influence elected officials through advocacy. Constituents can also mobilize slack resources to exert political pressure on elected officials. Politicking occurs when bureaucrats and constituents coordinate their use of slack resources to influence elected officials.

Politicking can help local health officials ensure their agencies survive and flourish while upholding democratic values. Regardless of whether local health officials are solely self-interested, through politicking they end up meeting the needs of constituents and increasing their budget allocations. Politicking is possible because local health officials can mobilize slack resources and constituents and use them to exert political pressures on elected officials. In turn, elected officials support services that meet the needs of constituents. Politicking requires local health officials to act beyond their administrative role and engage in both advocacy and co-learning.

In sum, I present the typology of bureaucrat behavior (table 3.1) based on two types of strategies: advocacy and co-learning. Some local health officials focus their energies on advocacy while others focus on co-learning. Some local health officials do not engage in either and focus on administrating. Those that spend considerable energy on both co-learning and advocacy engage in politicking.

Table 3.1: Typology of Bureaucrat Behavior

	Engages in Advocacy	
Engages in Co-Learning	No	Yes
No	Administrating	Advocating
Yes	Co-Learning	Politicking

Model of Bureaucratic Politicking

The model of bureaucrat politicking describes political actions bureaucrats can take to increase the resources they receive from elected officials. According to the model, bureaucrat politicking is a deliberate bureaucrat-initiated effort that involves the following actions:

- 1) Bureaucrat engages constituents.
- Bureaucrat increases constituents' understanding of what the bureau can do to meet community needs.
- 3) Bureaucrat learns what constituents need.
- 4) Bureaucrat adjusts how the bureau provides services to better meet the needs of constituents.
- 5) Bureaucrat encourages constituents to talk with other community members and elected officials about how the bureau addresses community needs and the importance of funding the bureau.
- 6) When advocating for greater budget allocations, bureaucrat promotes the benefits of bureau services, as understood by the community, to elected officials.

Bureaucrat actions may result in the following constituent actions:

- Constituents share with bureaucrat what the bureau can do to meet community needs.
- 2) Constituents learn the ability of the bureau to meet constituents' needs is constrained by limited funding provided by elected officials.

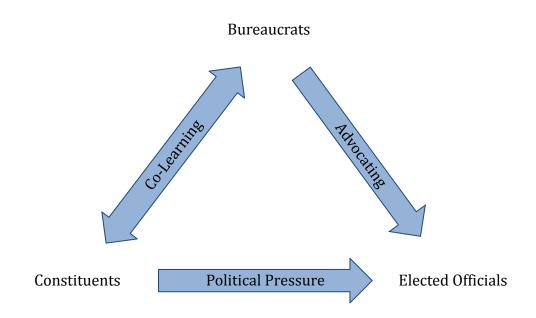
- 3) Constituents have a greater appreciation for and assign a higher value to the services provided by the bureau.
- 4) Constituents share their understanding of the benefits of bureau services with other constituents and elected officials.
- 5) Constituents demand that elected officials allocate funding to the bureaus that offers services that meet the needs of the constituents.

Elected officials, in turn, may demonstrate the following behaviors:

- Elected officials may change their perceptions of the benefit of bureau services.
- Elected officials may connect constituency support for a bureau with reelection support.
- 3) Elected officials may provide more funding to the bureau.

Figure 3.1 below summarizes three types of interactions among bureaucrats, elected officials, and constituents involved in politicking.

Figure 3.1: Politicking Interactions Among Bureaucrats, Elected Officials, and Constituents



First, bureaucrats and constituents engage in co-learning that enhances the understanding of benefits that a bureau can provide to a community. Second, bureaucrats demonstrate benefits and public value of their services as part of their advocacy efforts to secure more funding. Third, constituents use their new information to exert political pressure on elected officials to fund bureau services that meet their needs. The model emphasizes that co-learning informs bureaucrat advocacy efforts and constituent action—typically considered independent actions—that puts political pressure on elected officials to provide more funding to a bureau.

The model is based on four assumptions. First, bureaucrats strive to maximize their budgets either to advance their self-interest (Niskanen 2007) and/or the public's

interests (Wilson 1989). Second, elected officials' primary interest is reelection (Mayhew 1974). Third, constituents expect their tax dollars are used to provide services that meet their needs (Tiebout 1956). Fourth, the details about costs of services remain relatively unknown to elected officials and constituents (Niskanen 2007), and bureaucrats can change perceptions about benefits of bureau services.

Bureaucrat Politicking in a Principal-Agent Frame

The model of bureaucrat politicking changes the principal-agent frame that many scholars use in investigating bureaucracies. Instead of thinking about bureaucrats as agents and elected officials as principals, the model of bureaucrat politicking considers constituents as principals and bureaucrats and elected officials as agents. Using the definition of principal as the "buyer of goods" and the definition of agent as the "provider of goods," (Waterman and Meier 1998) the constituent buys services from the government. From the constituent's perspective, government includes both elected officials and bureaucrats. Elected officials allocate funding and define a bureau's authority while a bureau uses technical expertise to deliver services. The preferences of all three actors differ: the constituent's goal is to have his tax dollars used in a responsible way to meet his needs; the elected official's goal is to be reelected; and the bureaucrat wants to maximize his budget. These different goals result in shirking, or actions that do not align with constituent goals. It is costly for constituents to police elected officials and bureaucrats particularly given the informational advantages elected officials and bureaucrats have over constituents.

The model of bureaucrat politicking suggests that bureaucrats who play an active role in empowering constituents as principals will be more likely to maximize their budgets. Constituents that are empowered to be principals, in a principal-agent relationship, can use their power to vote to influence how their tax dollars are allocated. Co-learning provides a mechanism for bureaucrats to educate constituents so they do not become victim to information asymmetry typically seen in principal-agent relationships. If bureaucrats and constituents agree on the public value they would like to see the government produce, then bureaucrats can craft their advocacy efforts and bureau activities to align with constituent interests. Ultimately, bureaucrats are rewarded for demonstrating they do not intend to shirk and demonstrate they will act as proper agents if they have sufficient resources.

Influencing the Benefits Side of the Cost-Benefit Equation

Empowering constituents as principals will result in more funding for a bureau if constituents and elected officials believe benefits exceed costs. Unlike theories of bureaucracy that focus on costs of services, the model of bureaucrat politicking primarily focuses on benefits for four reasons. First, information asymmetry related to costs will always exist. Bureaucrats will always have more information about how much it costs to operate their organizations and provide services, and it is in their best interests to preserve the information asymmetry on costs. (Niskanen 2007) Second, it is too costly for elected officials and constituents to obtain accurate information about costs if bureaucrats are not willing to share it. (Niskanen 2007) Third, while it is not in a bureaucrat's best interest to bring

transparency to costs, it is advantageous to raise elected official awareness of benefits because elected officials seek opportunities for credit claiming (Mayhew 1974).

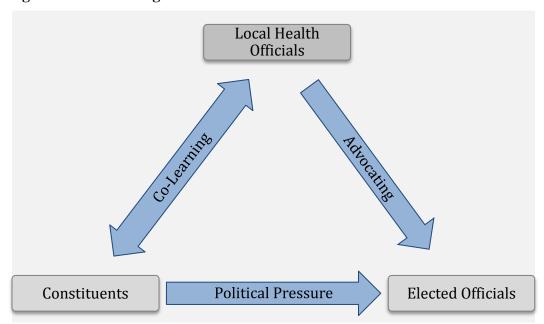
Fourth, as is the case with information about costs, elected officials do not have complete information about benefits and as a result they may underestimate the benefits of government services. In the case of public health, those in power to invest in public health consistently underestimate its benefits, (Mays, Halverson et al. 2004, Leviss 2008, Institute of Medicine 2012) and public health remains underfunded despite substantial return on investment (Leviss 2008). Since elected officials underestimate the benefits of public health, and given the profound benefits of public health are profound in terms of years of life and money saved (Leviss 2008), local health officials who effectively bring attention to benefits should be able to advocate for and justify a larger allocation of financial resources. Consequently, focusing on benefits as opposed to costs is a better strategy for influencing the perceptions of cost-benefit that inform budget decisions.

Bureaucrat Politicking Hypotheses

The model of bureaucrat politicking generates a series of hypotheses that describe the potential effects of bureaucrat political action on budget allocations provided by elected officials. The main hypothesis is bureaucrats who engage in bureaucrat politicking will have greater budget allocations than bureaucrats who do not engage in bureaucrat politicking. Figure 3.2 reflects how bureaucrats engage elected officials and constituents in politicking. Bureaucrats engage and coordinate

advocating and co-learning efforts to demonstrate the importance of budget allocations to elected officials. Constituents use political pressure to support the allocation of resources to a bureau based on what they learn through co-learning. Elected officials, in turn, understand that allocating a larger budget to a bureau will result in satisfied constituents and potentially positive electoral results.

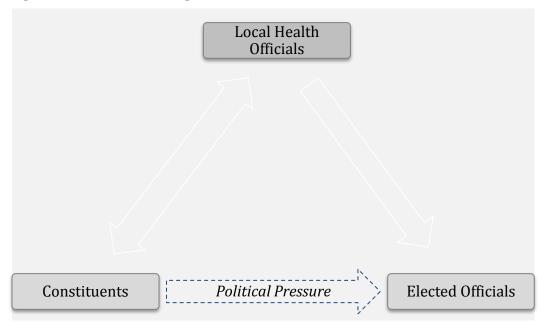
Figure 3.2: Politicking



In contrast, administrating bureaucrats (figure 3.3) do not engage in colearning and advocacy behaviors. Their budgets will likely reflect elected officials' preferences as opposed to the interests of bureaucrats. Budget allocations might reflect constituents interests if constituents apply political pressure to influence the budget process. The line in figure 3.3 is dotted because constituents will always have

mechanisms for exerting pressure on elected officials; however, in the case of administering, the bureaucrat does not influence if or how constituents exert pressure on elected officials, and the pressure that may be placed on elected officials might not be in the best interest of a bureaucrat.

Figure 3.3: Administrating



Bureaucrats who engage in co-learning (figure 3.4) have a mechanism for encouraging constituents to use political pressure to advocate for their bureau resources. I hypothesize that bureaucrats who only engage in co-learning will be more effective in securing resources from elected officials than those who only engage in advocacy (figure 3.5) because elected officials are more accountable to constituents than to bureaucrats. Bureaucratic dissatisfaction with budget allocations does not

have direct electoral consequences like constituent dissatisfaction with support for valued services. Further, in the case of advocacy, constituents may exert political pressure on elected officials that undermine the interests of a bureaucrat. Without colearning, an advocating bureaucrat does not spend energy ensuring constituent interests align with bureau interests.

Figure 3.4: Co-Learning

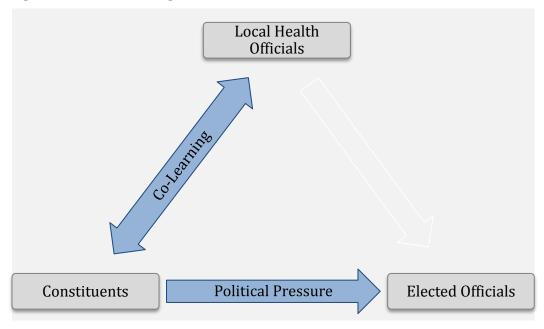
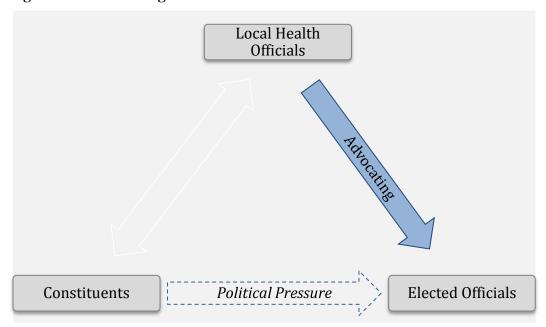


Figure 3.5: Advocating



In sum, I hypothesize that politicking will result in more resources for a bureaucrat than administrating, advocating, or co-learning. Secondarily, I hypothesize that co-learning will result in more resources than advocating and administrating. Co-learning is predicted to have a greater affect than advocacy because a bureaucrat will be leveraging the electoral pressures via constituent engagement. Administrating behavior will result in the fewest resources. The table below depicts relative budget allocations predicted by the model.

Table 3.2: Relative Budget Allocations by Bureaucrat Behavior Type

	Engages in Advocacy		
Engages in Co-Learning	No	Yes	
No	\$ Administrating	\$\$ Advocating	
Yes	\$\$\$ Co-Learning	\$\$\$\$ Politicking	

Contributions to the Literature

The model of bureaucrat politicking connects and builds upon scholarship on how bureaucrats can maximize their budgets and how bureaucrats can work with and be more responsive to their communities. The model describes strategies for satisfying public interests and defining public value. It also provides insight into why bureaucrats should engage in political management and why the three segments of Moore's strategic triangle are important. Further, the model of bureaucrat politicking describes how bureaucrats can help constituents mobilize their slack resources to influence issues that are meaningful to them. It can also be the foundation for building urban regimes that pool resources for social production. It connects the importance of community engagement with bureaucrat interests to maximize budgets. It acknowledges the principal-agent dynamics and cost-benefit calculations that influence elected officials' budget allocations. Most importantly, it describes a

process that can potentially maximize bureau budgets and result in more responsive and democratic government.

By engaging constituents, bureaucrats can enhance the democratic process by enhancing constituents' abilities to directly influence government functions. The relationship among constituents, elected officials, and bureaucrats is not linear in this model. That is, constituents do not merely elect representatives who pass laws that are then implemented by bureaucrats. Communication among all three parties and articulation of common goals and input from constituents on the design of services helps elected officials understand the return on their investment in the form of services and constituent loyalty. The goals of elected officials and bureaucrats do not necessarily change; however, they can align around providing government services that meet constituent needs. This model suggests even the most self-interested bureaucrats can ultimately serve the public's interest by engaging the public in a democratic process that results in more responsive government. Further, bureaucrat politicking brings greater government transparency and accountability in a way that rewards both bureaucrats and elected officials.

Chapter 4: Local Health Officials Expressions of Bureaucrat Behavior

Haven Emerson, a "Statesman of Public Health," was the health commissioner of the New York City Health Department in the early 1900s and was a staunch advocate for public health and the role of local health departments (Bolduan 1950). Emerson wrote, "The health department is the executive branch of local government charged with protecting the people against disease and assisting them by the persuasive force of scientific truth to develop and maintain the best health which their inherited qualities and their environment permit" (Emerson 1951, 20). "Everyone has a stake in his local health department, and the health services are the most unselfish and nonpolitical of all functions of local government" (Emerson 1951, 24). While the world has changed since Emerson's time, the way he viewed public health still reflects how public health professionals perceive their work as nonpolitical public service grounded in science. Over 60 years later, scholars are wondering why there is an "absence of a politics of health" (Bambra, Fox et al. 2005).

Emerson offers an idealistic and doctrinaire view of local health departments. Emerson implies that health services are superior and unique compared to other local government functions like education, public works, fire, and safety. Even if everyone agreed with Emerson, it remains unclear how public health could remain "unselfish and nonpolitical" when local health departments have to compete with other municipal services for a proportion of finite resources dedicated to local

services. Because public health is a government function, by design it will be political.

When I have asked local health officials to define what they do, they usually do not describe themselves political actors who engage in politics. They tend to describe how they work to ensure core public health functions and essential services are provided in their communities. However, when you discuss with them what they do to ensure their employees continue to have jobs, the health needs of their constituents are met, and they are able to implement advances in public health science, they often describe political actions.

The typology of bureaucrat behavior presented in chapter 3 offers a lexicon for analyzing the political actions of local health officials, and local health official behavior provides focus for empirical study of bureaucrat behavior. Thus far I have offered an overview of public health and introduced a model of bureaucrat politicking. In this chapter, I present findings based on key informant interviews that provide insight into administrating, advocating, co-learning, and politicking behaviors expressed by local health officials.

Methods

I conducted ten telephone interviews with local health officials between October 2011 and January 2012. The interview protocol was designed to elicit descriptions of budget setting processes and factors that influence local health department funding. The interviews were 60 to 90 minutes in duration, were

recorded, and were professionally transcribed. All interview subjects provided informed consent. I received prior approval from the University of Maryland Institutional Review Board to use the interview protocol and overall research methods described below.

I used purposive sampling to select a pool of interview subjects that reflected variation in geography, governance structure, political ideology, partisanship, and jurisdiction size and type. Four interview subjects were current local health officials and six interview subjects were national public health leaders who had knowledge about variability in public health expenditures and who had previously served as local health officials. Subjects were asked a series of questions that were designed to identify factors that influence local health department budgets. Current health officials were asked the following questions:

- How would you describe your current position?
- How long have you been in that position?
- What are your roles and responsibilities?
- How would you describe the jurisdiction you serve?
- How is your local health department organized?
- Who governs your local health department?
- How would you describe the process for determining your health department's funding?
- Who are the primary actors involved in the process?
- What interests or goals typically drive your funding process?
- In what ways are these interests or goals competing?
- In what ways are these interests or goals complementary?
- Describe a year when you were particularly successful in achieving your funding goals?
- Was there a year when you were unsuccessful at obtaining your funding goals? If yes, describe the major barriers that prevented you from attaining your goal.
- Over your tenure, how has the funding process changed?
- Over your tenure, what has remained constant about your funding process?

• If you had to pick one, what factor or actor has had the most influence on determining public health funding?

National public health leaders who were once local health officials were asked the

• When were you a health officer?

following questions:

- How would you describe your previous health officer position?
- How long were you in that position?
- What were your roles and responsibilities?
- How would you describe the jurisdiction you served?
- How was your local health department organized?
- Who governed your local health department?
- How would you describe the process that was in place for determining your health department's funding?
- Who were the primary actors involved in the process?
- What interests or goals typically drove your funding process?
- In what ways were those interests or goals competing?
- In what ways were those interests or goals complementary?
- Was there a year when you were particularly successful in achieving your funding goals? If yes, describe what happened.
- Was there a year when you were unsuccessful at obtaining your funding goals? If yes, describe the major barriers that prevented you from attaining your goal.
- Over your tenure, how did the funding process change?
- Over your tenure, what remained constant about your funding process?
- If you had to pick one, what factor or actor had the most influence on determining public health funding in your jurisdiction?
- What is your current position?
- How long have you been in that position?
- What are your roles and responsibilities?
- How do processes for determining funding differ across the country?
- What commonalities do you see in how public health funding is determined across the country?
- Across the country, what factor or actor has the most influence in explaining variability in public health funding across the country?

The interview questions were designed to uncover factors that influence how much revenue a local health department receives. The questions did not mention any

specific types of behavior such as the ones listed in the typology; rather, the questions elicited descriptions of behavior generated by the interviewee.

I used the bureaucrat behavior typology as a framework for analyzing interview data. I analyzed each interview transcript and manually coded descriptions of behavior as administrating, advocating, co-learning, or politicking. I classified each local health department by the predominant behaviors described by the interviewee. I then identified themes that emerged among local health officials who expressed the same predominant behaviors. The results are organized by type of bureaucrat behavior and describe how behaviors were expressed; the context in which they were expressed; and the interviewees perceived effectiveness of the behavior in securing resources.

Local Health Department Characteristics

Table 4.1 displays characteristics of local health departments represented by local health officials interviewed in this study. Values for population size, jurisdiction type, governance, number of FTEs, total per capita revenue, and local per capita revenue are from the 2013 National Profile of Local Health Departments study. There is no known source of reliable data that describe characteristics of all ten local health departments during the specific time period during which each local health official served. Therefore, the characteristics of the ten local health departments in table 4.1 do not necessarily represent the characteristics of a local health department during a local health official's tenure particularly for those who were in national leadership

positions at the time of the interview. Local health official tenure was self-reported by interview subjects. The average tenure was 13.1 years with a range from three to 23 years.

The purpose of table 4.1 is to show variability in the interview pool. In 2013, the local health departments represented by the interview subjects served populations that ranged from 31,229 to 699,893 people. The number of FTEs employed by the local health departments ranged from seven to 1,040. The total per capita revenue ranged from \$30.15 to \$209.27, and the local per capita revenue ranged from \$0.04 to \$74.25 (there were several missing data points). Eight local health departments served counties, one served a multi-county district, and one served a city. Six local health departments had local governance—five had county governance and one had city governance. One local health department was an extension of the state health department and another local health department had shared governance. Two local health departments had independent local governance but were located in centralized states. Two local health departments were located in metropolitan areas; however one metropolitan local health department also served the surrounding county.

Table 4.2 compares the characteristics of the interview sample with all local health departments surveyed in the 2013 National Profile of Local Health Departments study. The types of jurisdictions and governance structures represented in the interview sample resemble what is seen in across a majority of local health departments. However, the interview sample has larger median population, more FTEs, greater total and per capita revenue, and more local health official experience

that have greater per capita revenue, more capacity, and more experienced leadership was deliberate. I selected local health officials who have been recognized at the national level as exceptional local health officials because I believed interviews with them would more likely uncover characteristics of bureaucrat behavior that leads to greater local health department revenue than interviews with local health officials who are not high performers.

When asked what types of services their local health departments provide, most of the interviewed local health officials listed infectious/communicable disease, chronic disease, public health nursing, epidemiology and surveillance, maternal and child health services, immunization, public health regulatory enforcement, and emergency preparedness services. Some local health departments, but not all, provided environmental health, mental health, health planning, family planning, health education, primary care, school health, correctional health¹⁰, laboratory, homeless health, substance abuse, and developmental disability services.

Almost all the interviewed local health officials said their daily activities involved personnel management, setting strategic directions, financial management, and meetings with staff, elected officials, and community representatives.

Interviewees also mentioned grant writing, working with media, writing white papers, and attending community events.

 $^{^{10}}$ Correctional health refers to health services provided to incarcerated populations.

Table 4.1: Characteristics of Local Health Departments (LHD) Represented by Local Health Official Interview Subjects

	Population Size (2013 Data)	Number of FTEs (2013 Data)	Per Capital Total Revenue (2013 Data)	Per Capital Local Revenue (2013 Data)	Jurisdiction (2013 Data)	Governance (2013 Data)	Local Health Official Tenure (Interviewee Self-Report)
LHD 1	256,591	68	\$32.53	\$6.02	county	local	23
LHD 2	635,475	437	Missing	\$20.90	county	local in centralized state	11
LHD 3	31,229	7	\$30.15	Missing	multi-county	local	12
LHD 4	106,038	53	\$61.30	\$46.21	city	local	5
LHD 5	125,815	69	Missing	Missing	county	state	3
LHD 6	216,004	172	\$90.24	\$62.22	county	local in centralized state	18
LHD 7	297,999	118	\$67.61	\$0.04	county	local	17
LHD 8	748,031	1040	\$209.27	\$74.25	county	local	6
LHD 9	422,080	100	\$38.23	Missing	county	local	22
LHD 10	699,893	364	\$46.73	\$6.04	county	shared	14

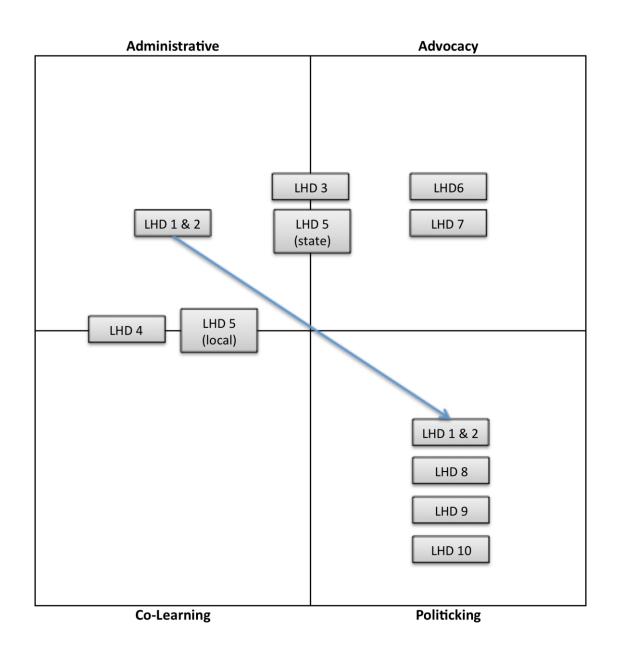
Table 4.2: Characteristics of All Local Health Departments (LHDs) Included in the National Profile of Local Health Departments Study in 2013 Compared to Those Represented by Local Health Official (LHO) Interview Subjects

	Population Size	Number of FTEs	Per Capital Total Revenue	Per Capital Local Revenue	Jurisdiction	Governance	Local Health Official Tenure
All LHDs	Median=38,896	Median=18.11	Median=\$38.91	Median=\$8.18	City=13.6% City-County= 0.2% County=73.4% Multi- City=3.7% Multi- County=9.2%	State=19.7% Local=71.5% Shared=8.9%	`Mean=8.7 years
LHDs Represented by Interviewed LHOs	Median=277,29 5	Median=108.75	Median=\$46.73	Median=\$13.47	City=10% City- County=0% County=80% Multi-City=0% Multi- County=10%	State=10% Local=80% Shared=10%	Mean=13.1 years (Self-Reported by Interviewee)

Applying the Typology of Bureaucrat Behavior

The typology of bureaucrat behavior presented in chapter 3 provides structure for analyzing results from the ten interviews. The typology includes administrating, advocating, co-learning, and politicking behaviors. When asked how they engaged in the budget setting process, interviewees described behaviors included in the typology. I have classified interviewees by predominant behaviors they expressed when asked to describe their agencies' budget setting processes (figure 4.1). The interviewees have been de-identified and are associated with one of ten local health departments (LHDs 1-10). In two cases, the predominant behavior expressed by the local health officials shifted from administrating to politicking over the course of their tenures. Four local health officials expressed more than one behavior. In one of the four cases, a local health official located in a centralized state described behaviors from two points of view: as a state employee and as a local health official. More detailed results from all ten interviews are organized below according to the typology.

Figure 4.1: Local Health Official Bureaucrat Behavior Expressed When Working to Secure Local Health Department Resources¹¹



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¹¹ Location of LHD name within each quadrant does not have a numerical value on an x-y axis. Placement of LHD is by dominant behavior. LHDs located on a line in between two behavior types reflect two dominant behaviors.

Administrating Local Health Officials

Administrators are primarily interested in using their authority to fulfill their duties. They establish norms, regulations, and decision-rules that influence how policies are implemented. Administrators use their technical expertise to fulfill their duties, and they are generally uninterested in venturing beyond their administrating role. They do not see themselves as political players; rather, they work to implement the policies of political players.

None of the ten interviewed local health officials described purely administrative behaviors. Two local health officials from LHD 1 and LHD 2 described a tendency toward more administrative behavior early in their tenures. Over time, these local health officials learned how to engage in and coordinate advocacy and co-learning efforts. The local health official from LHD 3 shared administrative information with local elected officials but engaged in advocacy with state elected officials. The local health official from LHD 3 did not receive any local dollars.

Local health officials from LHD 4 and LHD 5 demonstrated administrative behaviors because their funding sources and amounts were relatively secure. LHD 4 and LHD 5 also demonstrated co-learning behaviors. Based on the interviews, I suspect co-learning occurred before the local health officials started their positions and contributed to why they benefited from relatively secure funding. However, while LHD 5's local funding was relatively secure, its state funding did fluctuate and in order to mitigate budget cuts, the local health official engaged in advocacy at the state level.

LHD 1: Moved Beyond Administration and Found a Constituency

LHD 1 served a county in a northwest state. The county was comprised of rural, suburban, and urban areas. During his tenure, LHD 1 served approximately 250,000 people, most of who were well-educated, economically stable, liberal or libertarian, and primarily white.

During the local health official's tenure, LHD 1 was a department of county government and part of an umbrella human services agency. The local health official managed a workforce of 150 employees and was responsible for administrative functions, community awareness, and community engagement.

The county commissioners appointed the local health official and also served as the board of health. According to the law, the county commission and board of health were two separate bodies comprised of the same people. Local government had a statutory responsibility for providing funding to LHD 1, but there was no equation or set amount.

LHD 1 received local, state, and federal dollars. Thirty percent of LHD 1 funding was from local sources in the form of tax dollars and fees for primarily environmental health services. County millage for public health supported LHD 1's general operation. LHD 1 also received federal grants and federal dollars passed through the state. LHD 1 received some state grants and state dollars based on a population-based formula. The state formula was not sophisticated in that it did not distribute funding based on public health need or risk. The exact formula was unknown to the local health official.

At one point in the local health official's tenure, LHD 1 received a share of the state motor vehicle excise tax, which was particularly valuable because the funds were not categorical and could be used to support any aspect of LHD 1 operations. The state motor vehicle excise tax was graduated based on the quality of a person's car and high compared to other states; however the state did not have a state income tax. A referendum, part of an anti-tax movement (not an anti-public health movement), decreased the excise tax to a fixed, low fee and eliminated the share LHD 1 received. The local health official was not able to find a replacement for the funds lost through the motor vehicle excise tax referendum.

Each year, the local health official would compete with other county department heads for funding through the county budget process. The local health official's annual request for county funding was not tied to specific deliverables, purchases, or services; rather his budget underwrote the cost of delivering categorical services mostly funded by state and federal grants. The county commissioners tended to view the local health official's request in relation to the previous year's budget as opposed to the "value added". Because county funds were used to underwrite programs, the county commissioners never understood what a dollar would pay for in terms of public health. Consequently, the local health official believed the county commissioners did not allocate money to LHD 1 based on their commitment to what the health department provided to the community.

The county commission's incremental approach to budgeting was not the same for all county agencies. Elected executives of county agencies could lobby the

public to support their budgets; and as a result, they were more effective in receiving budget increases. For instance, the elected sheriff would ask for a 100 percent increase in his budget. The county commissioners would give the sheriff a 50 percent increase, and he would go to the public and tell them the police department got a 50 percent decrease in funding. The sheriff was able to receive more than an incremental increase in his budget because he could play upon the public's desire for more safety. As an appointed agency head, the local health official was not allowed to use the same strategy.

The local health official learned through his tenure that he needed to create a constituency that understood and valued public health. The local health official shared, "It took time for me to realize we didn't have an external constituency that spoke to the need or desire for public health services. [Constituency] was out of sight out of mind. The public did not see the effects of decreased public health funding." Even though the local health official was not allowed to directly lobby the public, he could engage the community in public health planning. Through a process that engaged the community in assessing public health issues and creating a plan for action, the local health official was able to increase the community's awareness of public health and the role of LHD 1. County commissioners were not supportive of LHD 1 engaging community residents in the process because they feared that if the community identified a problem then the county would own the problem.

The local health official struggled with demonstrating the value of public health services to the county commissioners who were always looking for ways to cut

LHD 1's budget. When LHD 1 managed its money well, the more difficult it would be for the local health official to get more money in the future. The local health official shared, "From a management standpoint, it made arguing for an increase in the subsequent year's funding awfully difficult." Towards the end of his tenure, the local health official developed a new strategy for limiting LHD 1 budget cuts. One year, the local health official was asked to cut his budget by \$200,000. Because county dollars underwrote grant-funded programs, he was able to show that a \$200,000 savings for the county resulted in a \$1.8 million cut in public health services. When the county commissioners saw how the budget cut would reduce services, they reduced the amount that was cut from the LHD 1 budget.

Early in his tenure, the local health official from LHD 1 demonstrated administrative behavior in dealing with years of incremental budgeting by elected officials who did not understand the value of public health. The local health official did not engage in advocacy or co-learning focused on preventing the motor vehicle excise referendum. Over time, the local health official learned the value of developing a constituency. While he was not allowed to use his position as a bully pulpit like the sheriff, he was able to engage in co-learning through community health assessment and planning. His elected officials felt threatened by his community engagement efforts because they did not want to own the problems identified by their constituents. Constituents' increased knowledge about public health and engagement through co-learning coupled with the local health official's revamped advocacy efforts that

showed how cuts to general operating expenses resulted in fewer services helped the local health official secure more resources for LHD 1.

LHD 2: From Obligatory Budget Cuts to Mother of Health

LHD 2 was located in a southern state, east of the Mississippi River. LHD 2 was located in a city that serves both the city and surrounding county. The local health official described her community as racially diverse and conservative. During the local health official's tenure, LHD 2 served over half a million residents with a workforce of about 600 employees and a budget over \$60 million.

Sixty percent of LHD 2's budget came from city-county tax dollars and fees for services. The remaining funding was from foundation grants, federal grants, or the state in the form of federal pass through dollars or state grants. Although most of the local health departments in the state were part of the state public health system, LHD 2 was independent from the state. As a result, LHD 2 did not receive a lot of state dollars unless the funding was part of a statewide initiative. Federal dollars were mostly for well-established communicable disease programs, the funding for which did not fluctuate much from year to year.

Even though LHD 2 served both the city and the surrounding county, local elected official influence came from the mayor, city council, and the mayor-appointed local board of health. The mayor and city council decided the amount of local dollars LHD 2 would receive each year. The mayor also appointed the board of health. The board of health included a nurse, a business sector representative, a psychologist, and three other community representatives. The board of health selected the local health

official, and unlike other local government department heads, the local health official did not report to the mayor but rather to the board of health. The board of health was responsible for passing local public health rules and policies, and had the power to enact policies independent from the mayor's office. However, the mayor and the city council could pass policies that could counteract board of health policies.

Each spring, the local health official presented a budget to the mayor and the city council. Early in her tenure, when the local health official prepared her annual budget, she would prepare for a two to five percent reduction in LHD 2's budget. All LHD 2 service areas were eligible for budget cuts except for animal control, homeless services, and correctional health because the three programs were "politically charged programs." The local health official struggled each year to find ways to reduce LHD 2's budget because the largest programs, with more than a million dollars, were the protected programs, so she had to find budget savings in program areas that did not receive a lot of funding support. Powerful advocacy groups protected animal control and homeless services, and the fear of lawsuits against the government protected correctional services.

The local health official from LHD 2 worked under two mayoral administrations. The first mayor did not understand the full scope of public health and regularly cut LHD 2's budget. The first mayor's main priorities were fire, police, and education. The second mayor understood the role of public health and spearheaded a few public health initiatives. During the second mayor's term, the LHD 2 budget grew. The second mayor focused on how his city compared to other cities and the

quality of life in the city neighborhood. He wanted his city to be on the cutting edge and did not want to be embarrassed by what happened in his city.

Throughout the local health official's tenure, city council members were generally supportive of the local health official but were also influenced by advocacy groups who did not support LHD 2 policies. The local health official noted that while the integrity of LHD 2 held up against the claims of some advocacy groups, "loud protesters [influenced] council members that [didn't] have strong convictions."

The local health official used several strategies to maximize LHD 2's budget. Throughout the local health official's tenure, she helped the board of health realize its full authority and made the board of health her ally. The board of health, in turn, advocated for LHD 2 funding and policies when the local health official deliberated with the mayor and city council. The local health official also developed the reputation as a good manager and steward of local funding. The mayor knew the local health official managed money well, so "when there was a hiccup in another department, [the mayor] would temporarily give [the money] to the local health department." LHD 2 also used its success in securing grant funding in negotiations with the city council and mayor. The local health official would say, "Given what we brought in [through grants], this is all [the funding] we're asking for." The local health official would also show that the money she was requesting aligned with LHD 2's strategic plan.

The two main strategies the local health official believes were the most effective were to show measurable improvements and engage community residents.

The local health official's short-term strategy was "to show benefit, value, and show results." The local health official's long-term strategy was to cultivate relationships with community stakeholders who in turn advocated on behalf of LHD 2. During the first mayor's administration, the local health official realized she would not be able to change the mind of the mayor, so she began reaching out to the public. LHD 2 engaged the community-at-large to create a collaborative plan to improve health in the city. Through the process, the community-at-large began recognizing greater value in LHD 2. The public started to attend city council meetings and demand that it support LHD 2. The local health official recalls,

I told you about the first mayor and he cut our budget every year; he was there eight years... in his fifth or sixth year, I knew that he would cut so did the community. And I had community members call me and say... this is our fight too. And they went to the council and they stood up in council and they said, don't cut my budget; after all, she is the mother of health; she calls us to wash our hands, and of course the mayor got mad with me but that's the process. The mayor presents his budget, the cut, the council has to deliberate and the community went before and the council and restored my budget from the mayor's budget. And of course the mayor thought I had put him up but I didn't, I just engaged the community like public health is supposed to do to understand what is health, what's our strategic direction, how do we come to it together, and here is how we support that, and here is your part.

The local health official's administrative behavior demonstrated early in her career involved managing LHD 2 while experiencing seemingly obligatory annual budget cuts. She managed LHD 2 so well that she developed a reputation as a good steward of taxpayer money. While a new mayor did support public health more than the previous administration, the local health official's efforts to educate her governing local board of health

and create structure for co-learning between LHD 2 and constituents helped the local health official secure more resources. The local health official shifted from predominantly administrating behavior to politicking by coordinating community engagement and planning and advocacy efforts.

LHD 3: Local Administration and Competitive State Advocacy

LHD 3 was located in a Midwest state west of the Mississippi River. LHD 3 served a very rural, agricultural four county district. At the time of the interview, LHD 3 served approximately 31,000 people. The population was predominantly white with small Hispanic and Asian populations.

The local health official reported to the board of health. The board of health was comprised of a county commissioner from each county in the district, one "public-minded citizen," one physician, one dentist, and representatives from county hospitals. The board of health hired the local health official; approved LHD 3 policies and procedures; oversaw LHD 3's budget; and approved LHD 3's strategic plan. While the board of health had the authority to pass regulations, the local health official noted that it was weak in this area and hesitated to use its authority.

LHD 3 had four sources of funding: federal grants for public health programs; state legislature earmarked funds for disease tracking and investigation, infrastructure, and disparities; state tobacco master settlement funding; and fees, donations, and miscellaneous sources of revenue. LHD 3 did not receive any local taxpayer dollars. Because LHD 3 did not receive local tax dollars, the local health official spent a lot of time writing grant proposals. The local health official explained,

We have always strived to have a balance between hard and soft money. So generally the grants that we go after are long-term grants, grants that are going to be continuously funded... trying to continually diversify any income coming in. In some ways it would be nice to have county funding, local tax dollars, but in some ways, we can certainly move faster, and we can respond to opportunities. We have more flexibility, I think, because we don't have to go before a county board.

While some county commissioners approved the LHD 3 budget as members of the board of health, they did not get involved in the details and were essentially approving the budget to be passed to the state legislature. The local health official kept county commissioners not on the board of health aware of LHD 3 services by providing status reports to county commissioners in each county. The local health official noted that some of the county commissioners were frustrated they could not control the LHD 3 budget.

A portion of LHD 3 funding came from the state tobacco master settlement agreement funds. When master settlement dollars became available, academic institutions, public health and health care stakeholders formed a coalition that lobbied the state legislature to invest the funds into public health. In forming the coalition, the different interest groups worked hard not to fight with one another and present a united front and message. After the master settlement dollars were dedicated to public health, the different interest groups began competing with one another again for pieces of the master settlement pie. Backroom conversations with state legislatures influenced how the master settlement dollars were distributed among the interest

groups. The local health officials in the state formed a separate non-profit organization that lobbied the state legislature.

Local health officials in the state were continuously fighting for state funding. What was considered public health services, and thus eligible for master settlement dollars, kept expanding. Other priorities, such as road infrastructure, competed for state dollars. Further, attitudes toward immigration reduced state funding for minority health programs and severely cut prenatal care to Hispanic women.

The local health official from LHD 3 demonstrated administrating behaviors when working with the county commissioners and local board of health and advocating behaviors when engaging the state legislature. Even though LHD 3 did not receive local revenue, the local health official from LHD 3 was accountable to local elected officials and their appointed board of health. The local health official described planning and communicating with the local board of health, but did not describe advocacy behaviors with local elected officials. The local health official described advocacy efforts aimed at the state legislature, which allocated a significant amount of funding to LHD 3. Politicized public health services and competition among different types of service providers supported by state funding affected the success of LHD 3's advocacy efforts.

LHD 4: Local Administration and Established Commitment to Health

LHD 4 was located in a progressive, ethnically and racially diverse, very densely populated, northwest city. LHD 4 was located in a home rule, decentralized state. LHD 4 served approximately 100,000 residents with a budget of \$6.5 million.

The city had large income inequality and one-third was foreign born. The city also had a large population of university students and a prominent biotechnology sector.

The city established a commission that oversaw hospitals, ambulatory care, and public health services. The commission hired the local health official as the director of the municipal health department, and the local health official reported to the chief executive officer of the commission. On paper, the local health official reported to the commission's chief executive officer (CEO) who in turn reported to the city manager. In practice, the local health official reported directly to the city manager like the other city department heads. The city had a mayor, but the city manager made all the operational decisions. The city had an agreement with the commission whereby the commission provided public health services and the city in turn provided a yearly appropriation that underwrote the majority of the local health department operational expenses. While the commission oversaw public health, the city council and mayor had the ability to discontinue LHD 4's yearly appropriation.

LHD 4 also had a board of health that was comprised of one commission board member and three residents. The residents were the only voting members of the board of health. The board of health had the power to create ordinances, veto the promulgation of a regulation, and set overall direction for LHD 4. The board of health also worked to ensure LHD 4 was not under capacity although the board of health did not have the power to redirect funds. However, the board of health could request additional funds from the city council on behalf of LHD 4.

The local health official also worked with a community health advisory council comprised of city residents. The local health official presented data to the community health advisory council members who provided feedback on the effectiveness of local policies. There were also a number of other advisories, coalitions, and groups that met on different public health topics. There were multiple mechanisms for city residents to interact with city council members, the local health official, and other LHD 4 employees and influence public health policies.

Local players influenced LHD 4 expenditures because the city appropriation supported 80 percent of LHD 4's operating budget. LHD 4 received some federal dollars passed through the state and grant funding but did not receive any funding appropriated by the state. Each year the local health official analyzed the past year expenses, looked for variances and determined if there were staff vacancies. Ninety-three percent of the operating budget was for personnel, so in a tight fiscal environment, vacancies could be a source of savings. The local health official worked with the commission CEO, board of health, and LHD 4 employees to determine how the budget would be spent the following year. Then, the local health official presented the budget to the city council detailing how LHD 4 would spend the city appropriation. The city council wanted to know what would be produced as a result of their appropriation to the city. Every year, the local health official presented an annual report to the city manager and city council on what occurred and what was achieved the previous year.

I suspect having an established appropriation for a majority of local health department operating expenses that did not have to be negotiated each year and was more or less guaranteed is an anomaly. When asked why the city dedicated an appropriation specifically to LHD 4, the local health official responded that the city is committed to support health efforts around the city, which is consistent with the city's support for social services, public safety, community development, and road and building infrastructure. The local health official explained, "there is something in the DNA of the [city]."

The local health official described administrative behaviors associated with accounting for how funding was spent. Because LHD 4 was guaranteed a certain level of funding, the local health official did not have to employ advocacy strategies to secure local dollars. The local health official's administrative behavior was a function of institutional structures. The local health official also described structures that fostered co-learning through community advisory committees, coalitions, and other community groups. Further, the city valued health as exhibited by the checks and balances that ensured the agencies and elected officials were accountable to constituents. Residents were the only voting members of the board of health. The city's commitment to social services, public health, and its progressive ideology supported a culture of co-learning and reduced the need for advocacy and therefore politicking. I speculate the city's commitment to co-learning contributed to the creation of the city's set appropriation to LHD 4.

LHD 5: Competing State and Local Identities

LHD 5 served a mostly rural county in a Southern state west of the Mississippi River. During the time of the interview, the population was socioeconomically, ethnically, and racially diverse and included Army personnel and Native Indian populations. The local health official described his state as ideologically conservative and Republican.

LHD 5 is located in a centralized state. Even though LHD 5 is a county agency, the county government did not have formal authority over LHD 5. All the employees working at LHD 5 were state employees. The state board of health had oversight over the operation of LHD 5. The governor appointed the state board of health, which served as the state health commissioner's planning authority. The state board of health, as opposed to the governor, hired the state commissioner of health. The state commissioner of health was different from the secretary of health, the latter of whom was a governor-appointed position. The state board of health established and approved the LHD 5 strategic plan, budgets, and fees. The local health official made recommendations to the state commissioner and state board of health. While the state board of health and state health department strongly influenced the work of LHD 5, local officials and community interests are represented in LHD 5's strategic plan.

The county commissioners and the state health commissioner jointly appointed individuals to serve on the local board of health. The state commissioner appointed two members, the county legislature appointed two members, and a district

judge appointed one member. The five-member local board of health was comprised of county commissioners, educators, and members of the health profession. The local board of health had statutory responsibility over the portion of the LHD 5 budget that was based on a local millage, which meant the board of health signed off on how much LHD 5 would receive from the millage. The board of health did not have authority over how the funding was used by LHD 5.

Local tax dollars were provided to LHD 5 through a public health millage. The public health millage was established by state statute and was a function of property values in the county. In LHD 5's state, in order for a local health department to be recognized as part of the centralized state public health system, there must be a local public health millage in place. The millage provided about 50 percent of the LHD 5 operating budget. Constituents voted to have the maximum millage rate allowed by state law. The millage rate was fixed, so LHD 5 did not have to negotiate for local funding like other county agencies. As a result, LHD 5 did not compete financially with other county agencies. While the county government managed financial transactions like purchase orders and competitive bids, the local government did not dictate how local dollars were used.

About half of LHD 5 funding came from the state. The state determined the LHD 5 budget by local demand for services. State funding mostly covered personnel. However, local and state funding both supported personnel costs even though all LHD 5 personnel were state employees. The state could access local dollars if there were extra local funds by charging LHD 5 for more personnel costs. By charging the

local government for personnel, the state was able to free up state dollars by shifting personnel costs to the county. In general, the process for determining the budget was very administrative in nature. The local health official described

The budget is generally driven by need and accountings so a lot of times that is based on population within a county. For the county, most of our costs are personnel costs so often times it's based on what that county needs in way of personnel to meet the requirement in the county, the demand of services in the county, that's how much we make an adjustment on our staffing based on that; how to request, how to submit numbers, how many people we see. With every nurse you'd probably see 170 people or have 170 encounters a month, we use a bit of formulation on that to make the argument that I need more nurses.... Now in addition to the demand for services, we have our community-based programs and such. Decisions are made on how to staff based on those particular program requirements.... If the state agrees to add another position, they may need to know that they're going to have to absorb that cost through state funds. Or I can give them more money of my local budget if you approve this position and they'll take that into consideration, that's where they'll approve a position.

Unlike funding from the local millage, state funding fluctuated. Overall reductions in state tax revenue led to reductions in LHD 5 funding. The state health department had a legislative liaison that worked with the state health commissioner to educate legislators on the value of public health and to preserve health department funding. In the interview, the local health official was explicit in saying he did not engage in lobbying. He noted that the state health commissioner set priorities, which were heavily influenced by what was mandated. At the same time, the local health official noted that he tried to use state priorities and poor health rankings to preserve

and direct funds to public health. This type of advocacy behavior was crafted to align with the political ideology of the state. The local health official shared,

Our health rankings are very poor... so you can bet that goes into much of the negotiation for preserving our budget. Also, using our state improvement plan, trying to isolate health priorities for the state, those are all used to help influence the legislators to preserve funds in our budget or direct funds into our budget. It's basically looking at educating them on the health climate within the state to... make public health a priority. [My state] is a very conservative state, I mean we're about as red as you can get on the political map. So there's always a lot of hesitancy to take federal funds. There was some taken but it's not without its political fall-out if you're not careful there. So the conservative nature of the state and the push for decreasing the size of government does compete somewhat with, you know, our efforts at ensuring that we get a strong public health system.

In addition to the advocacy behaviors aimed at the state legislature, the local health official from LHD 5 also described co-learning efforts at the local level. Given the conservative political environment and the resistance to expand government services, the local health official focused "as many efforts as [he could] on trying to leverage resources in the community." The local health official was careful about what he promised to his community and encouraged coalitions to work on things that would not be funded by the state legislature. Further, the local health official spent time educating his community on the role of LHD 5. Despite the conservative nature of his state, the local health official shared, "we are in a conservative state but overall the state is pretty supportive of public health...The county health department has always traditionally been viewed... as part of the landscape... we're real good at

working with the community and providing technical assistance, helping with coalitions and you know we don't ask for anything in return for that." The local health official believed his constituents saw the value of LHD 5 because of the work it did in the community. The fact that people in his community voted for the largest allowable public health millage despite their conservative ideology and dislike of "big government" suggests that the local health official employed effective co-learning strategies.

Administrating Themes

In sum, although none of the interviewees described purely administrating behaviors, what they shared provides insight into how local health officials demonstrate administrating behaviors. Interviewed local health officials described being good managers and stewards of money. In one instance, the local health department was financially penalized when money was managed well. When describing administrating, several local health officials mentioned how data on demand and need informed budget planning. The local health officials described their funding as level, incremental, and in some cases subject to obligatory budget cuts. In some cases, structures diminished the need for advocacy because funding was secured. In other cases, local health officials described their elected officials and constituents as not valuing public health.

Advocating Local Health Officials

Local health officials who spend energy on advocacy as a strategy do so to secure larger budget allocations from elected officials as a means to satisfy their self-interest or the public's interest. Local health officials from LHD 3 and LHD 5 exhibited advocating behaviors. LHD 3 and LHD 5 directed their advocacy efforts at their state legislatures. Local health officials from LHD 6 and LHD 7 spoke predominantly about advocating behaviors.

LHD 6: Demonstrating and Reframing Benefits of Public Health

LHD 6 was located in a state on the Eastern seaboard. LHD 6 served a county in a highly concentrated urban area. During the local health official's tenure, LHD 6 served approximately 200,000 people in a 26 square mile area. The local health official described the county population as liberal, progressive, and very racially, ethnically, linguistically, and socioeconomically diverse.

LHD 6 was located in a centralized state where the state health department and state health commissioner set local public health standards of practice. The community where LHD 6 was located had higher standards and more rigorous mandates for public health services than what was prescribed by the state and provided local funding to LHD 6 so it could meet higher standards. Thus, unlike many other local health departments in the state, "a large proportion of what [LHD 6] did... [was] driven at the local level not just the state level."

The local health official reported to an umbrella county health and human services director who reported to the county commissioners. While the county had a board of health, the board served as a token advisory group. According to the local health official, the county commissioners were "enlightened." They understood the long-term benefits of funding public health services and were dedicated to preventing adverse health conditions. The local health official noted,

They were willing to listen [to me] when I said if we can prevent one single child from needing to have special education for 12 years, we are going save you this much money. So they didn't get stuck in oh my god we're providing services to undocumented, they were willing to say you know this is a high risk group and special education is both a personal crisis and physical crisis. So we are willing to fund this investment to prevent... you know, to have better outcomes for this community...this was a very unbigoted [county commission].

The county, state, and federal governments provided funding to LHD 6. The state required LHD 6 to match a proportion of state dollars with local dollars. About 30 to 40 percent of LHD 6 funding came from local taxpayers; 55 percent of funding came from the state, which includes federal pass through grants; and a small percentage of funding came directly from the federal government. LHD 6 had programs that were mandated by the state and jointly funded by the state and county. LHD 6 also had programs that were entirely funded by the county and state and federal programs that were subsidized by the county. The state distributed funds to local health departments based on a formula, which was usually a combination of population size and identified need based on population health indicators.

County support for public health services was decided program. To receive county funding for programs, the local health official would have to demonstrate to the county health and human services director the legitimate need for the service; how the service aligned with county goals; the deficit that would be addressed; and the value added if the program was implemented. If the county health and human services director approved the request, then the health and human services director would submit a request to the county commission for consideration. To ensure LHD 6 continued to receive county funding, the local health official had to document how county funding supported workload and resulted in outcomes. Trends in workload and outcomes over a period of three years would inform budget requests and amount granted. In general, LHD 6 received level funding year-to-year because the local health official was able to demonstrate that county dollars were effectively used to support adequate workload and outcomes. The county used a sophisticated evidencebased and performance-based system that informed allocation of county dollars. The local health official shared, "It was a sophisticated system... I was fortunate that I learned management at one of the best structured local governments in the country."

In deciding what programs to support, the county commissioners tended to support programs to which they could relate. For instance, they easily supported transportation to health services for the elderly because every one of them had elderly family members. However, they could not relate to dental care as a core medical need "because they never had to live with tooth pain that affected their nutrition," and they could not believe that children were at risk of being bit by rats when they slept. The

local health official noted, "compelling needs for poor people [felt] like marginal needs for people who are middle class."

For public health services that did not have supporting metrics or for services that did not seem important to the county commissioners, the local health official would reframe the issue to align with the commissioners and the community's values. For instance, the commissioners were not convinced they should invest in a rat control program when the local health official connected rats to health effects; however, they were convinced when the local health official showed the effects of rats on property damage and threats to property values. The local health official also found community advocates who had personal relationships with commissioners, and she would ask them to talk with their commissioner friends about the issue so these commissioners could consider it before the local health official brought it to the commission.

The local health official's efforts to demonstrate effectiveness and frame public health issues according to community values were sometimes undermined by conservative state ideology. She remembers a few years where the state budget was very tight because of ideology as opposed to economic downturn. The state also prohibited all local health departments from initiating any tobacco control programs because it conflicted with the tobacco interests in the state.

The local government culture financially rewarded local agencies that administered services efficiently and effectively. If the local health official could demonstrate the return on investment, then she was better able to secure resources. If

local elected officials did not recognize the value of a public health service, the local health official would employ advocating strategies such as reframing the importance of the public health service or asking individuals who were good at influencing elected officials to assist in securing the support of the elected officials.

LHD 7: Advocating in a Partisan Environment

LHD 7 was a county department in a northeast state near a major metropolitan area. At the time of the interview, LHD 7 employed about 140 people and served a population of 300,000 over 800 square miles. The county included rural and suburban communities. The state health department, state sanitary code, county elected officials, and county law all dictated LHD 7's authority and the type of services it provided.

The county executive appointed the local health official although the state department of health had the authority to approve the appointment. As a department of the county executive, LHD 7 priorities had to be county executive priorities in order for LHD 7 to receive county funding. The county executive prioritized services that were considered cutting edge in the national arena and services that aligned with LHD 7's strategic plan and state and federal priorities. The local health official kept abreast of the county executive's spheres of influence, such as other county executives in the state and across the country, to anticipate what the county executive and therefore LHD 7's priorities would be.

The county also had a nine-member board of health. The board of health included two city representatives, three doctors, three at-large members, and a county

legislator. The chair of the county legislature appointed board of health members. The board of health's main authority was overseeing the county sanitary court, which upheld public health regulations. The board of health established public health regulations; however, the county legislature had the power to override board of health regulations. The local health official explained, "the board of health can primarily pass any regulation they want, which has the same effect as law, as long as it's not controversial... the board of health has a lead role in regulation but the county can overrule if the issue is controversial."

LHD 7 received about 20-25 percent of its budget from the county. Each year, the local health official worked with the county executive and county budget office to create a budget for LHD 7. The county executive then presented his entire budget, which included the LHD 7 budget, to the county legislature. The county executive and county legislature negotiated the final budget through the legislative process. The county legislature voted on a budget. The county executive had line-item veto authority. If the county executive vetoed portions of the county legislature budget, the legislature could override the veto with a two-thirds vote.

LHD 7 received about 50 percent of its funding from the state. The state provided funding to LHD 7 in the form of a 35 to 40 percent reimbursement on certain services funded by county dollars. Programs and services supported by fees or grant dollars were not reimbursed. In addition, the state did not like to reimburse for services that did not neatly fit under the purview of public health. For instance, LHD 7 and the state health department disagreed over whether the medical examiner fit

under the purview of public health or criminal justice. The types of reimbursable services and the reimbursement rate were contingent on how much state money was available.

Partisanship and ideology affected how LHD 7 services were framed and funded. The local health official noted, when

The Democrats were in charge of the county legislature... they had a fundamentally different philosophy than the Republican Conservatives... for the most part Republican Conservatives want to not raise taxes and they want to try to reduce the size of government. But they also want to make sure critical services are... provided, like the 911 center, making sure that we have a health department that can respond to public health problems. So I guess really it's an evolving philosophy.

In general, the local health official noted that issues that went against Republican and Conservative ideology did not get traction in the community.

Recognizing the effect of partisanship and ideology, the local health official worked to frame public health issues so they did not seem controversial to Republican and Conservative constituents and elected officials. Some issues, however, went under the radar and did not elicit a partisan or ideological response because constituents did not take notice sufficient to motivate them to call their elected officials. In those instances, the board of health could more easily pass a regulation even though Republicans and Conservatives were generally against regulation. The local health official learned, "you really need to understand the philosophy of the community and... elected leadership and whether you're going to be able to put forth something controversial. You can still try to do it anyway but sometimes trying to put

forth something that backfires puts you in a worse place than you were in when you started."

In addition to bipartisan framing of public health issues, the local health official employed other strategies to ensure support for LHD 7. The local health official worked to develop partnerships with other local health departments and advocates for local health department funding. He supported the public health accreditation process as a means to develop a language for understanding of public health. Common language and partnerships were foundational for generating support for LHD 7. He also engaged with the state association of local health officials, which advocated on behalf of local health departments at the state level.

Advocating Themes

The local health officials from LHDs 3, 5, 6, and 7 who engaged in advocacy frequently referenced the political environment in which they functioned. The local health officials referred to politically charged issues and how ideology either supported or created obstacles for public health. Competition among other government agencies for a finite set of resources and the need to counteract the influence of interest groups fueled the need for advocacy. Local health officials demonstrated advocacy behaviors by reframing issues and making connections between public health and the priorities of elected officials. Advocacy also involved ensuring elected officials were not embarrassed, showing measurable results, and pooling other sources of revenue so that elected officials could be associated with measures of success.

Co-Learning Local Health Officials

Co-learning creates reciprocal relationships between local health departments and constituents. It involves the local health official and his agency employees learning about constituent needs and educating constituents about the importance of the local health department. Through co-learning, local health officials understand what has changed in their environment and how that impacts constituent needs and the role of the health department in the community. Co-learning involves local health department employees working together with constituents toward some common understanding of improved health. Local health officials who engage in co-learning are motivated by the desire to lead a government agency that is responsive to community needs.

None of the interviewed local health officials demonstrated co-learning as the only predominant behavior. Local health officials from LHDs 1, 2, 4, 5, 8, 9, and 10 described co-learning. Local health officials from LHDs 1, 2, 8, 9, and 10 exhibited co-learning as part of a politicking strategy, which will be described in the next section. Local health officials from LHDs 4 and 5 demonstrated co-learning independent from advocacy efforts.

Several themes emerged from interviews of local health officials who described co-learning behaviors. Co-learning often was in the form of community engagement, coalition building, and community health assessment and improvement planning. The local health officials described how co-learning helped their constituents understand the role of their local health departments and see the value of

public health. Local health officials described building constituencies that could speak on behalf of local health departments. In the cases of LHD 4 and LHD 5, colearning efforts may have led to relatively secure and stable funding sources for those local health departments.

Politicking Local Health Officials

Politicking involves creating political pressure on elected officials so they provide resources to local health departments. Politicking works because it takes advantage of elected officials' motivation to be reelected. Local health officials who politick impose political pressures on elected officials by engaging in both advocacy and co-learning. Co-learning improves the effectiveness of local health official advocacy efforts by leveraging constituents' ability to exert political pressure.

Through co-learning, constituents gain an appreciation for local health department services especially if a local health department uses co-learning to design services that meet constituent needs. Local health officials who are successful in demonstrating public value and working with the community to meet its needs will create advocates for the local health department. Local health officials from LHDs 1 and 2 shifted from administrative to politicking behaviors during their tenures. Local health officials from LHDs 8, 9, and 10 described predominantly politicking behaviors.

LHD 8: Demonstrating Need and Political Clout

LHD 8 was a county health department located in a West Coast state. The county included one of the largest cities in the state. The county was relatively diverse with Asian, Black, Hispanic, and foreign-born populations. During the local health official's tenure, the health department served approximately 550,000 people.

LHD 8 was governed by a county commission, which also served as the board of health. As the board of health, the county commission reviewed and approved the LHD 8 budget and statutory changes in public health ordinances. The county commissioners "were uncharacteristically interested in health." The chair of the county commissioners had a medical background and advocated for access to care and public health. The county commissioners felt responsible for core public health services.

The majority of LHD 8 funding came from county tax dollars. In general, the county commissioners would typically provide funding to LHD 8 based on what was allocated the previous year. However, the local health official believes "need, competition, and politics" were the three factors that influenced the LHD 8 budget. The local health official based his budget justifications on evidence-based analysis of data to demonstrate need for services. In deciding whether to fund public health services, the county commissioners would try to avoid duplication of services and competition among different providers in the county. If another entity was providing a public health service, the county commissioners were reluctant to fund similar LHD 8 services. The county commissioners also appreciated when the local health official

was able to pool local, state, and federal funding to provide "visible and appreciated services" in the community. Politically, pressures for and against government also influenced the budget. For some services, the community's vested interest and emotional response to the provision of services resulted in continued support. Further, county commissioners worked to ensure services were provided to their districts irrespective of demonstrated need.

The county had strong interest groups that worked on behalf of the underserved. The interest groups were successful in giving a voice to the underserved and redirecting services in the community. While the interest groups did not always align with the interests of LHD 8, the local health official believed it was important for them to share their views even if they contradicted evidence-based need. He would respond to contradictory advocacy group claims and found that more often than not the county commissioners sided with his recommendations.

The local health official created an external advisory board that provided community input on LHD 8 activities. The community advisory board did not have formal authority; however, it did balance the views of the county commissioners and worked to hold LHD 8 and county commissioners accountable to the public. The advisory board could comment on and criticize the LHD 8 budget and request specific services from the county.

The local health official made budgeting decisions based on what elected officials could relate to. For instance, the local health department public health nursing services were eliminated because county commissioners could not relate to

the generalist care the nurses provided. In a year when the local health official had to cut the local health department budget, he chose to eliminate the public health nursing program because it was seen as soft and not politically sellable. He eliminated an entire service area instead of imposing across the board cuts.

Even though LHD 8 was located in a decentralized state, it received nonearmarked state grant-in-aid for categorical programs. The state distributed funding to counties based on a formula. However, as the local health official explains, "the state was very clever in keeping us locals from ever really understanding the formula although they promised us there was one... [The state] was marching to a political drummer the way we all in the public sector have to do and recognized that if anyone actually saw the explicit formula, they'd be in more trouble, so they kept it private." Further, the local health official believed the state distributed funding based on the political clout counties had. The local health official noted, "Counties had their own political clout, and the state responded to that through the state association of counties, which was a successful lobbying group—larger counties had more representation." At the same time, the state recognized the richer counties needed less state money because everyone needed the same public health services. The local health official believed a combination of political clout and financial need demonstrated by each county influenced how much state funding local health departments received, and haggling for state dollars occurred behind closed doors with elected state officials.

LHD 9: Backroom Dealings

LHD 9 was located in a county in a mid-west state. The city center was mostly black and the surrounding suburbs were mostly white. The county used to be an industrial hub that eroded over a 30-year period. During the local health official's tenure, approximately 430,000 people lived in the county of which about a quarter lived in the city center.

LHD 9 received local, state, federal, and foundation funding. LHD 9 received about 20 percent of its funding from the county general fund. County funding was flexible—the local health official had discretion on how he wanted to use those dollars. The largest source of LHD 9 funding was "cost sharing dollars." According to state public health code, counties had responsibility for public health services, and states would share that responsibility by sharing the costs for certain types of public health services. Costs for state mandated local public health services were shared at a higher rate than non-mandated services. The state health department director decided what services were eligible for cost sharing. The amount of state money eligible for cost sharing varied depending on which political party was in power.

County commissioners and the county comptroller determined how much county funding LHD 9 would receive. The county commissioners appointed a board of health, but the board of health was not involved in the LHD 9 budget process. As a county department head, the local health official would engage in a four to six month process with the county commissioners and county comptroller to prepare the LHD 9 budget. The amount LHD 9 requested in the form of county general funds would be

compared to what was available. Every year, the county commissioners would notify the local health official that his requests for county general funds exceeded what was available. The local health official would make adjustments based on what he and his LHD 9 staff deemed priorities.

Even though the county commissioners worked to balance their budget, in practice, what was spent exceeded what was proposed. The county commissioners hated to cut budgets because budget cuts would lead to lost jobs and union protests. The county commissioners would pass an unrealistic balanced budget and then through private conversations they would encourage department heads to play along, complain, and wait for money to be put back into department budgets. Even though this practice occurred, all departments did not benefit equally. The sheriff's department and criminal justice system were the county commissioners' highest priorities. Further, while the county commissioners generally supported public health and knew that people wanted improved access to care, they were also cognizant of constituent resistance to higher taxes.

The local health official used several strategies to increase county funding dedicated to public health. The local health official would secure general public support for LHD 9. He shared, "if you could generate political support, get community people to come in and talk about your budget and talk about why you were important... [The county commissioners] hated that... they hated to disappoint people." He also knew that getting state health or state elected officials to encourage county commissioners to fund LHD 9 was also effective. In addition, the local health

official worked with other individuals in the county to create a non-profit organization that lobbied for a public health millage. The millage passed and the revenue was passed through LHD 9 to the non-profit organization and was used to increase access to primary care. The local health official would also work with other local health officials in the state to lobby for the state funding dedicated to local public health cost sharing and the proportion of federal categorical money that was passed through the state. The local health official summarized

It was very much like Congress at the federal level. If you had state elected officials who wanted to support you they would often throw in an earmark or be talking with the state health department to make sure that somehow you managed to get more money than somebody else. So on the surface of it, it worked in a standard fashion, but one step below the surface, it was the usual political machinations going on.

LHD 10: Working Around Advocacy Rules

LHD 10 serves a county that includes a major southern city. The county is urban and suburban. During the local health official's tenure, LHD 10 served about 700,000 people. Fifty-five percent of the population was black, and the county was culturally and socioeconomically diverse.

The local health official served as both the state district health officer and the local board of health chief executive officer. The state health commissioner together with the local board of health jointly appointed the local health official. State statute established the dual authority of the state and the local board of health over LHD 10. Local board of health members included the county executive, school superintendent, a physician, city mayor, county elected officials, and representatives at large. The

dual authority of the state and the local board of health created tensions. The local health official commented, "When I was a state health officer, I thought the district health officer worked for me. When I was a local health officer, I thought I worked for the board of health. In fact, I worked for both."

LHD 10 was supported by federal, state, local, and grant funding. Thirty percent of LHD 10's funding came from federal sources including dollars that were passed through the state. About 10 to 15 percent of the budget was from general grant-in-aid from the state. Even though state grant-in-aid was a small percentage of the budget, these dollars were highly valuable because they were unrestricted dollars. The state distributed grant-in-aid based on a formula that favored rural districts. Thirty to 50 percent of the LHD 10 budget was from county money. County funds were not earmarked, however, there were expectations that some of the county dollars would be used for restaurant inspections and environmental health services.

Each year the local health official would compete with other county agency heads for county dollars. The county executive would meet with the finance director of each agency. The county council would also meet each agency. The local health official was not allowed to go to the community to advocate for policies and resources. He could not go outside the internal bureaucratic process to get external support for county dollars.

The local health official felt he was at a disadvantage compared to other county agency heads because the county executive did not have the same level of ownership over the local board of health as he did for the other county departments

because the LHD 10 received money from state and federal sources. When the local health official first started his tenure "It was clear [LHD 10] was second sister to the other [county] departments." The local health official worked hard to change this through communication strategies. He spent a lot of time briefing and building relationships with county council members and the county executive. He was dedicated to this strategy because he needed unrestricted county dollars. "The amount of money you have isn't as important as how that money can be used... it makes a difference in developing effective programs."

Even though the local health official had strict advocacy limitations, he was allowed to develop coalitions that could in turn advocate for LHD 10 funding. One of the first things he did as local health official was lead a community health assessment process, which created community awareness of LHD 10. The result from the community health assessment helped people understand that LHD 10 assured conditions in the community that helped them live healthy lives. The assessment results helped educate county elected officials about community priorities and key health issues. The assessment also helped LHD 10 focus more on prevention than treatment. A coalition advocated for a \$32 million bond referendum to implement improvements identified in the assessment. To get community support, the coalition emphasized that it would cost \$9 for every \$100,000 household each year for the next 30 years to pay for the health improvements.

The local health official developed several strategies to overcome competing interests. Conservative views on the role of government and anti-tax advocates were

the main competing interests against local public health. The local health official also had to compete with medical care providers who took a larger proportion of local dollars dedicated to health. To overcome these challenges, the local health official worked hard to develop community partnerships and coalitions, develop relationships and trust with county elected officials, and improve understanding of public health and the importance of prevention throughout the community.

Politicking Themes

Several themes emerged among the local health officials who described politicking behaviors. First, elected officials responded to pressures to address constituent needs. Although elected officials might have expressed resentment when local health officials increased constituent scrutiny on an issue, they tended to respond positively to constituent demands. A few local health officials explicitly mentioned that advocacy or lobbying is not allowed and in some cases strictly forbidden, and as a result, local health officials had to be creative with how they educated constituents and encouraged them to support public health. Local health officials facilitated co-learning through community health assessments, community advisory groups, and inviting community members to speak to elected officials about the value of public health.

Beyond the Typology

The interviews revealed institutional factors, independent from the bureaucrat behaviors described above, which influenced the local health department budget

setting process. The functions, authority, and structure of boards of health and how they related to local health departments seemed to influence the budget process. Local health departments in centralized states or in states where the state government provided substantial funding through matching or general funds changed the political dynamic of the budget process. In some cases, statutes, policies, and structures that guaranteed a certain level of funding to a local health department seemed to depoliticize aspects of the budget setting process.

Ideology and the level of political support for governmental public health affected local health official budget strategies. In politically conservative communities and states, local health officials tried to reframe public health issues to align with ideology. For example, the local health official from LHD 6 reframed a public health issue as one that affected property values as opposed to the health of community. In other situations, the local health official avoided seeking elected official support all together. The local health official from LHD 7 was keenly aware of which issues would set him back if brought to the attention of elected officials and which ones he could reframe to align with conservative interests. The local health official from LHD 5 encouraged non-governmental entities to take on issues that would not be supported by his conservative legislature. Some local health officials benefited from elected officials who offered political support whether it was in the form of a set yearly appropriation, an intellectual understanding of governmental public health, or a philosophical commitment to access to care.

Elected officials did not want to be embarrassed and wanted to look good relative to peer communities and states. Local health officials noted that their elected officials wanted to be on the cutting edge and wanted to look favorably compared to peers. Health rankings indicating poor health motivated elected officials to fund health departments. Elected officials also responded to those who made the most noise. In the case of LHD 2, three public health services were protected against budget cuts by vocal interest groups. The elected officials in LHD 9's community were so afraid to disappoint their agency heads and their constituents that they had two budgets: a balanced budget and overspent backroom agreed upon budget.

Set Up for Empirical Investigation

Thus far, I have provided an overview of governmental public health and role of local health departments and local health officials, and I presented and provided qualitative support for a model of bureaucrat politicking and typology. The model and typology provide structure for thinking about bureaucrat behavior and variability in local health official strategies for securing funding for their agencies. The interviews offer insight into how local health officials express administering, advocating, colearning, and politicking behaviors; however, the qualitative descriptions do not test the hypotheses associated with the bureaucrat politicking model. As noted in the previous chapter, I hypothesize that politicking will maximize resources for a bureaucrat more than administrating, advocating, or co-learning. Secondarily, I hypothesize that co-learning will result in more resources than advocating or

administrating. Administrating behavior will therefore result in fewer resources than the other behavior types. In the next chapter, I test these hypotheses and provide empirical support for my model.

Chapter 5: Politicking for Local Dollars

The voices from the field presented in chapter 4 illustrate how some local health officials express bureaucrat behavior. While the previous chapter provides descriptions to support the model of bureaucrat politicking, the qualitative findings do not empirically test the associations between bureaucrat behaviors and local health department funding. This chapter builds on the interviews presented in the previous chapter and tests the hypotheses generated by the model of bureaucrat politicking.

Hypotheses

The model of bureaucrat politicking generates a series of hypotheses that describe the potential effects of bureaucrat behaviors on budget allocations provided by elected officials. The main hypothesis is that bureaucrat politicking will result in more resources for a bureau than will co-learning, advocating, or administrating. Bureaucrats who politick engage and coordinate advocating and co-learning activities. Secondarily, I hypothesize that co-learning will result in more resources than advocating or administrating. Co-learning is predicted to result in more resources than advocating because co-learning provides a means to influence if and how constituents exert political pressure on elected officials. Advocating involves only bureaucrats and elected officials and does not involve constituent engagement. I also hypothesize that administrating behavior will result in the fewest resources of the four behavior types.

To test my hypotheses, I use local health departments to represent bureaus and per capita local revenue to represent resources. Table 5.1 depicts relative budget allocations predicted by the model, and table 5.2 lists the three hypotheses tested in this chapter. I test my hypotheses using ordinary least squares linear regression and STATA 13.1 software.

Table 5.1: Relative Budget Allocations by Bureaucrat Behavior Type

Engages in Co. Learning	Engages in Advocating		
Engages in Co-Learning	No	Yes	
No	\$ Administrating	\$\$ Advocating	
Yes	\$\$\$ Co-Learning	\$\$\$\$ Politicking	

Table 5.2 Hypotheses

1.	Politicking Hypothesis	Politicking behavior will result in more per capita local revenue for local health officials than will co-learning behavior, advocating behavior, or administrating behavior.
2.	Co-Learning Hypothesis	Co-learning behavior will result in more per capita local revenue for local health officials than will advocating behavior or administrating behavior.
3.	Administering Hypothesis	Administering behavior will result in less per capita local revenue than co-learning, advocating, or politicking behaviors.

Data and Methods

Dataset

I created a data set using information from 2008, 2010, and 2013 National Association of County and City Health Officials' National Profile of Local Health Departments (Profile) surveys, the U.S. Census American Community Survey, and David Leip's Atlas of Presidential Elections. The Profile surveys are developed, fielded, and analyzed by the National Association of County and City Health Officials. The Profile surveys are disseminated to all local health officials across the country. A local health official or designee typically answers Profile surveys. The Profile surveys have a response rate of about 80 percent. The Profile surveys collected data on local health department revenue, co-learning, advocating, politicking, and characteristics of local health departments such as governance structure and population served. I used data from the American Community Survey to control for income level. In addition, I used the percent of individuals in a county that voted for Obama in 2012, from the Atlas of Presidential Elections, as a proxy measure for partisanship and ideology. More details about the variables and data sources are presented below. 12

The unit of analysis is the local health department. Seventy-three percent of local health departments are agencies of county government. I merged data from

¹² There are no identifiable human subjects in the dataset.

different sources using state and county Federal Information Processing Standards (FIPS) codes. For local health departments that serve jurisdictions located within counties, such as towns or cities, I used the county FIPS code in which the smaller jurisdiction existed. For multi-county local health departments, I averaged the values for a particular variable across the counties covered by a given local health department. After merging data from different sources, I had 513 local health departments with complete information.

Dependent Variable

The dependent variable in all my empirical models is per capita local revenue reported in the 2013 Profile study. In the 2013 Profile survey, local health officials were asked the following question: "For your most recently completed fiscal year, what were the total revenues (provide actual revenue figures and enter whole number in dollars)?" The survey lists categories of revenue including local sources. Local revenue was defined as "revenue originating from county, city, or town government, e.g. allocations from city, county, School Boards, taxing districts, property tax millage, etc." To create a per capita measure, I divided the reported dollar amount of local revenue by the number of people served by the local health department.

Population served by each local health department is included in the 2013 Profile study. Out of 1550 observations, per capita local revenue in 2013 ranged from zero dollars to \$2,452.76. The median per capita local revenue was \$8.19, and the mean revenue was \$14.35 with a standard deviation of \$64.39 (table 5.3).

Table 5.3: Per Capita Local Revenue in 2013

Range	\$0-\$2,452.76	
Median	\$8.19	
Mean	\$14.35	
Standard Deviation	\$64.39	
n	1550	

Measuring Co-Learning

I created a measure for co-learning based on responses to questions posed in the 2008, 2010, and 2013 Profile surveys related to community health assessment.

According to the Public Health Accreditation Board,

Community health assessment involves a process of collecting, analyzing, and using data to educate and mobilize communities, develop priorities, garner resources, and plan actions to improve the public's health.... It involves the systematic collection and analysis of data in order to provide the health department and the community it serves with a sound basis for decision-making. It should be conducted in partnership with other organizations in the community and include collecting data on health status, health needs, community assets, resources, and other community or state determinants of health status.

A local health official who ensures its health department conducts a community health assessment engages in co-learning by collecting information about constituents and working with constituents to use the information for decision-making. As described in several interviews presented in chapter 4, the community health assessment not only provides a mechanism to learn about constituents, it also provides a forum for constituents to learn about the local health department.

Although the dependent variable is based on per capita local revenue data reported in 2013, I use data reported in three surveys to create a measure of colearning. The 2008, 2010, and 2013 Profile surveys all ask local health officials whether their health departments conducted community health assessments. I combined responses from all three surveys to create a new variable for community health assessment over time. I wanted to capture a commitment to co-learning. I expect co-learning through community health assessment takes time, and the 2013 measure for community health assessment alone would likely not explain changes in revenue in the same or subsequent year. Further, community health assessments require a certain amount of local health resources, expertise, and leadership commitment (Roussos and Fawcett 2000, Byrne, Crucetti et al. 2002, Curtis 2002). Therefore, a measure of commitment to community health assessment over time is a more reliable measure of co-learning than a single indicator of community health assessment.

Table 5.4 shows the community health assessment questions and answers from the 2008, 2010, and 2013 Profile surveys. I created a new variable for colearning over time that classifies a local health department as conducting a community health assessment once, twice, three times or never. Because the Profile

surveys ask respondents whether they conducted a community health assessment within the last three years, some community health assessments might have been double counted. For instance, in 2008, a local health official might have indicated that his health department completed a community health assessment because they just finished one in 2007. In the NACCHO 2010 survey, the same local health official might have responded yes again to the community health assessment question, but he could have been referring to the same assessment. For the 2010 and 2013 Profile data, I only counted individuals who responded they completed a community health assessment in the last three years, as opposed to the last five years, to minimize double counting.

Table 5.5 displays descriptive statistics for the co-learning variable. Out of 1,606 observations, 13 percent of surveyed local health officials indicated their health department did not conduct a community health assessment. Approximately 26 percent responded to one Profile survey that their health department conducted a community health assessment within the last three years; 36 percent responded to at least two Profile surveys that their health department conducted a community health assessment within the last three years; and about 24 percent responded to all three Profile surveys that their health department conducted a community health assessment within the last three years.

Table 5.4: Profile Survey Community Health Assessment Questions and Response Options by Year

Year	Survey Question	Survey Response Options	
		Yes, developed primarily by the local health	
		department	
		Yes, developed by coalition with local	
		health department as lead organization	
		Yes, developed by coalition with local	
		health department as equal partner	
	Has a community health	Yes, developed by coalition with some local	
	assessment been	health department involvement	
	completed within the last	Yes, without involvement of local health	
	three years? (select only	department	
2008	one)	No	
	Has a community health	Yes, within the last three years	
	assessment been	Yes, more than three but less than five years	
	completed for your local	ago	
2010	health department's	Yes, five or more years ago	
&	jurisdiction? (select only	No, but plan to in the next year	
2013	one)	No	

Measuring Advocating

I created a variable to measure advocating behaviors based on data collected in the 2013 Profile survey. The survey instrument asked local health officials to indicate whether their health department "prepared issue briefs for policy makers," "gave public testimony to policy makers," or "communicated with legislators, regulatory officials, or other policymakers regarding proposed legislation, regulations, or ordinances." Respondents were able to indicate whether they engaged in these activities at the local, state, or federal levels. The advocating variable I created is a count of the number of local advocating activities in which a local health department engaged. For instance, if a local health official indicated he prepared

issues briefs and gave public testimony, his advocating value was two. Out of 1,907 observations, 23 percent of respondents indicated they did not engage in any of the three advocating activities. Twenty-two percent engaged in one activity, 21 percent engaged in two activities, and 33 percent engaged in all three types of advocating activities (table 5.5).

Table 5.5: Community Health Assessment (Co-Learning) and Advocating Categories

CHA Categories	Frequency (Percentage)	Advocating Categories	Frequency (Percentage)
No CHA	216 (13%)	No Advocating	448 (23%)
1 CHA	423	1 Advocating	417
	(26%)	Behavior	(22%)
2 CHAs	575	2 Advocating	404
	(36%)	Behaviors	(21%)
3 CHAs	392	3 Advocating	638
	(24%)	Behaviors	(33%)
n	1,606	n	1,907

CHA=Community Health Assessment

Measuring Politicking

Politicking involves both co-learning and advocating. In the ordinary least squares linear regression models presented below, I measure politicking in two ways: as an interaction variable and as a separate independent variable. Table 5.6 displays the results of a cross tabulation of co-learning and advocating. Based on the crosstabulation of community health assessment and advocating, I created a new variable

for politicking. The politicking variable is a three category measure representing local health departments with the lowest values of community health assessment and advocating behavior, the highest level of community health assessment and advocating, and everyone in between.

I created these categories based on the extreme values for three reasons. First, when I ran regression analysis with the community health assessment, advocating, and an interaction between the two variables, the model would not work due to collinearity among different categories. Second, my measures of co-learning and advocating are count variables and are limited in their explanatory power. There are only four categories for each variable, and I do not have a strong theoretical explanation for why conducting one community health assessment and conducting one type of advocating activity would be statistically significant from conducting one community health assessment and two types of advocating behaviors. Given these limitations, I have classified politicking activity in terms of the extreme values to increase my ability to measure the unique effect of politicking.

My politicking variable is comprised of the following categories: local health departments that conducted no or one type of advocating and no or one community health assessment; local health departments that conducted 3 types of advocating and reported to have conducted a community health assessment in all three Profile surveys; and the remaining local health departments that fall in between the two extreme categories. The lowest category does not represent no advocating and no community health assessment because when I ran my regression models, there were

no observations in that category. About eight percent of local health departments fall in the no or low politicking category; about 88 percent fall in the some politicking category; and 4 percent fall in the high politicking category (Table 5.7).

 $\begin{tabular}{ll} Table 5.6: Cross-Tabulation of Community Health Assessment (Co-Learning) \\ and Advocating \end{tabular}$

	No Advocating	1 Type of Advocating	2 Types of Advocating	3 Types of Advocating	Total
No CHA	85	52	31	42	210
	(5.48%)	(3.35%)	(2%)	(2.71%)	(13.53%)
1 CHA	101	90	97	118	406
	(6.51%)	(5.8%)	(6.25%)	(7.6%)	(26.16%)
2 CHAs	105	130	122	202	559
	(6.77%)	(8.38%)	(7.86%)	(13.02%)	(36.02%)
3 CHAs	65	82	74	156	377
	(4.19%)	(5.28%)	(4.77%)	(10.05%)	(24.29%)
Total	356	354	324	518	1,552
	(22.94%)	(22.81%)	(20.88%)	(33.38%)	(100%)

CHA=Community Health Assessment

Table 5.7: Politicking Categories

Politicking Categories	Frequency (Percentage)
No or Low Politicking	328 (8%)
Some Politicking	3721 (88%)
High Level of	156
Politicking	(4%)

Governance Variables

The local health officials interviewed in chapter 4 often refer to their governance structure when describing what influences their budgets. The interviews suggest that local health officials who express administrating behaviors do so because of governance structures. To account for the potential effects of governance, I included two types of governance controls in my regression models.

First, I include a control variable that accounts for state, local, or shared governance. A local health department is located in a centralized state if local units of the state government serve at least 75 percent of the state's population. A local health department is located in a decentralized state if local health departments led by local government officials serve at least 75 percent of the state's population. Local health departments are located in states with shared governance if local and state governments split authority over budgetary decisions, taxing authority, and public health orders. The percentage of funding that is provided by a state or local agency and whether a local health official is appointed by a local or state official also determine whether a state has shared governance. (NORC, 2012) Almost 20 percent

of local health departments are located in states with centralized governance.

Approximately 71 percent of local health departments are located in states with decentralized governance, and 9 percent of local health departments have shared governance. Centralized, decentralized, and shared governance is a variable included in the 2013 Profile dataset.

Second, I include a control for local board of health taxing authority. According to the 2013 Profile survey, 70 percent of local health departments have a local board of health. Local boards of health can vary in their roles and authority. Types of authority include the ability to hire or fire local health officials; approve the local health department budget; adopt public health regulations; set and impose fees; impose taxes for public health; request a public health levy; advise local health officials or elected officials on policies, programs, and budgets; and set policies goals, and priorities that guide the local health department (2013 Profile). Since the dependent variable is per capita revenue, I decided to include a control variable that focused on the local board of health's taxing authority. While I could have added other variables for local board of health governance, the regression models would have suffered from collinearity issues. According to 2013 Profile data, 82 percent of local health departments do not have a local board of health with taxing authority while 18 percent do work with local boards of health with taxing authority. It is important to note, that in some cases, the local government legislative body serves as the board of health.

Partisanship and Ideology

Several local health officials interviewed in chapter 4 described how partisanship or ideology affected their behaviors, how people perceived public health, and the overall environment in which local health departments function. Unlike what is available at the national level, I did not have access to county level data on partisanship and ideology. To account for partisanship and ideology, I include a measure for the percent of people living in the county who voted for Obama in 2012. I merged 2012 data from David Leip's Atlas of Presidential Elections with the 2013 Profile dataset using state and county FIPS codes.

Contextual Variables

To account for economic conditions that may influence per capita local revenue, I control for median household income. County-level data for household income are from the 2008-2012 American Community Survey. These variables were merged with Profile data using FIPS codes.

Other Control Variables

In addition to the main explanatory variable, I also control for 2008 per capita local revenue, population, and outliers. To account for the fact that government budgets tend to be incremental in nature (Lindblom 1959), I include a control for local health department 2008 per capita local revenue, which was collected in the 2008 Profile study. I also control for population size given that several public health services and system research studies have demonstrated associations between

population size and local health department performance or funding levels (Richards, Rogers et al. 1995, Suen, Christenson et al. 1995, Gordon, Gerzoff et al. 1997, Mauer, Mason et al. 2004, Mays, Halverson et al. 2004, Mays, McHugh et al. 2004, Mays, McHugh et al. 2006). Further, I control for outliers that have per capita local revenue expenditures plus or minus two standard deviations from the mean.

Results

To test hypotheses generated by the model of bureaucrat politicking, I estimated the following ordinary least square regression models. ¹³ The first model (table 5.8) includes measures of advocating, co-learning, governance structures, partisanship, and control variables. Results indicate local health departments that engage in three types of advocating activities receive on average \$1.79 more in per capita local revenue than local health departments that engage in one type of advocating activity, ceteris paribus (p=0.03). The presence of two types of advocating activities, compared to the presence of one type of advocating activity, does not result

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I also ran the three models with measures of white population, unemployment, poverty, and local health official tenure. None of these variables helped explain variability in local per capita revenue and were omitted from the models.

¹³ I conducted regression diagnostics to confirm these models did not violate ordinary least square regression assumptions. Dummy variables for outliers and robust standard errors address heteroskedasticity. Tolerance statistics confirm models do not have collinearity issues. I also confirmed there is no correlation between independent variables and the error term.

When I estimated the models without dummy variables for outliers, the coefficient values were similar; however, some were not statistically significant.

in statistically significant differences in per capita local revenue for the local health department. Local health departments that engage in three community health assessments, an indicator of co-learning, over a seven to 10 year period receive on average \$2.37 more in per capita local revenue than local health departments that do not conduct any community health assessment in the same period of time, ceteris paribus (p=0.04). Conducting one or two community health assessments over a seven to 10 year period does not result in statistically significant differences in per capita local revenue as compared to local health departments that do not conduct any community health assessments.

While a few dollars increase in per capita local revenue might not seem like very much, when compared to the median per capita local revenue that local health departments receive the increase is substantial. The median local health department per capita local revenue is \$8.19. Thus, \$1.79 and \$2.37 represent 22.86 and 28.94 percent of median per capita local revenue, respectively.

Table 5.8: Model 1—Advocating and Co-Learning Effects on 2013 Local Health Department Per Capita Local Revenue

			One-tailed
	Coefficient	Robust S.E.	p-values
Advocating (Legislative Communication, Issue Brief, and			
Testimony)			
2 types of advocating (compared to 1 type)	-1.12	0.82	0.09
3 types of advocating (compared to 1 type)	1.79	0.92	0.03
Co-Learning (Community Health Status Assessment (CHA))			
1 CHA over 7-10 year period (compared to no CHA)	1.16	1.51	0.22
2 CHAs over 7-10 year period (compared to no CHA)	0.92	1.34	0.25
3 CHAs over 7-10 year period (compared to no CHA)	2.37	1.36	0.04
Governance			
Local (compared to state)	5.64	0.77	0.00
Shared (compared to state)	6.05	1.94	0.00
Local board of health tax authority	2.15	1.03	0.02
Partisanship			
Percent vote for Democratic Party presidential candidate	-0.05	0.03	0.08
Controls			
Median household income (in 10,000s)	-0.46	0.28	0.05
Population (in 100,000s)	-0.31	0.11	0.01
Per capita local revenue in 2008	0.63	0.06	0.00
Outliers with residuals +2 standard deviations from mean	51.53	5.10	0.00
Outliers with residuals -2 standard deviations from mean	-38.59	9.77	0.00
Constant	3.20	1.75	0.04
N=513			
$R^2=0.76$			
Adjusted R ² =0.76			

Results from the first model suggest governance structures influence per capita local revenue. Local health departments with local governance have on average \$5.64 more in per capita local revenue than local health departments with state governance, ceteris paribus (p=0.00). Local health departments with shared governance have on average \$6.05 more in per capita local revenue than local health departments with state governance, ceteris paribus (p=0.00). Further, local health departments that have local boards of health with taxing authority have on average \$2.15 more in per capita local revenue than local health departments without local boards of health with taxing authority, ceteris paribus (p=0.02). Partisanship, as measured by percent vote for Democratic Party presidential candidate Obama, did not have a statistically significant effect on local health department per capita local revenue.

Median household income, population size, and per capita local revenue in 2008 are associated with local health department per capita local revenue. A \$10,000 increase in median household income is associated with an on average \$0.46 decrease in per capita local revenue for local health departments, ceteris paribus (p=0.05). This suggests local health departments that serve households with higher incomes spend less on public health services perhaps because the need for public health services decreases as income increases. A 100,000 persons increase in population is associated with a \$0.31 decrease in per capita local revenue for local health departments, ceteris paribus (p=0.00). Consistent with the idea that budget allocations are informed by previous funding levels, per capita local revenue in 2008 predicts per capita local

revenue in 2013. A one-dollar increase in 2008 per capita local revenue is associated with an on average \$0.63 increase in 2013 per capita local revenue for a local health department, ceteris paribus (p=0.00).

The dummy variables that control for outliers with residuals greater than plus or minus two standard deviations from the mean were statistically significant. The 21 local health departments with residuals greater than plus two standard deviations have on average \$51.53 more in per capita local revenue than local health departments with residuals within two standards deviations, ceteris paribus (p=0.00). The three local health departments with residuals greater than minus two standard deviations from the mean have on average \$38.59 less in per capita local revenue than local health departments with residuals within two standard deviations from the mean, ceteris paribus (p=0.00).

The second model (table 5.9) is a conditional model that includes a politicking variable that measures the interaction between advocating and co-learning. The second model includes the same measures for governance structures, partisanship, and control variables seen in the first model. Results indicate local health departments that engage in highest level of politicking (i.e. three types of advocating activities plus three community health assessments in seven to 10 years) receive on average \$4.62 more in per capita local revenue than local health departments that do not engage in politicking, ceteris paribus (p=0.03). Lower levels of politicking do not have a statistically significant effect on local health department per capita local revenue.

Table 5.9: Model 2—Politicking Effects (Interaction Between Advocating and Co-Learning without Main Effects) on 2013 Local Health Department Per Capita Local Revenue

			One-tailed
	Coefficient	Robust S.E.	p-values
Politicking (Advocating x Co-Learning)			
1 type of advocating & 1 CHA	1.67	2.34	0.24
1 type of advocating & 2 CHAs	0.95	2.20	0.33
1 type of advocating & 3 CHAs	1.60	2.21	0.24
2 types of advocating & no CHA	-2.74	2.79	0.17
2 types of advocating & 1 CHA	-0.80	2.35	0.37
2 types of advocating & 2 CHAs	0.65	2.29	0.39
2 types of advocating & 3 CHAs	0.79	2.24	0.37
3 types of advocating & no CHA	2.59	3.08	0.20
3 types of advocating & 1 CHA	3.12	3.00	0.15
3 types of advocating & 2 CHAs	1.95	2.27	0.20
3 types of advocating & 3 CHAs	4.62	2.38	0.03
Governance			
Local (compared to state)	5.69	0.77	0.00
Shared (compared to state)	6.22	1.93	0.00
Local board of health tax authority	2.09	1.04	0.03
Partisanship			
Percent vote for Democratic Party presidential candidate	-0.05	0.03	0.08
Controls			
Median household income (in 10,000s)	-0.45	0.28	0.06
Population (in 100,000s)	-0.31	0.12	0.01
Per capita local revenue in 2008	0.62	0.06	0.00
Outliers with residuals +2 standard deviations from mean	51.44	5.15	0.00
Outliers with residuals -2 standard deviations from mean	-38.02	9.62	0.00
Constant	3.32	2.14	0.06
N=513			
$R^2=0.76$			
Adjusted R ² =0.75			

As compared to the first model, the second model shows almost identical effects of governance structures on local health department per capita local revenue. Local health departments with local governance have on average \$5.69 more in per capita local revenue than local health departments with state governance, ceteris paribus (p=0.00). Local health departments with shared governance have on average \$6.22 more in per capita local revenue than local health departments with state governance, ceteris paribus (p=0.00). Further, local health departments that have local boards of health with taxing authority have on average \$2.09 more in per capita local revenue than local health departments without local boards of health with taxing authority, ceteris paribus (p=0.03). Partisanship, as measured by percent vote for Democratic Party presidential candidate Obama, did not have a statistically significant effect on local health department per capita local revenue.

The coefficient values for median household income, population size, and per capita local revenue in 2008 in the second model are also very similar to the first model. A \$10,000 increase in median household income is associated with an on average \$0.45 decrease in per capita local revenue for local health departments, ceteris paribus (p=0.06). A 100,000 persons increase in population is associated with a \$0.31 decrease in per capita local revenue for local health departments, ceteris paribus (p=0.00). Consistent with the idea that budget allocations are informed by previous funding levels, per capita local revenue in 2008 predicts per capita local revenue in 2013. A one-dollar increase in 2008 per capita local revenue is associated

with an on average \$0.62 increase in 2013 per capita local revenue for a local health department, ceteris paribus (p=0.00).

The coefficients for the outlier dummy variables in model 2 are also very similar to those of model 1. The 21 local health departments with residuals greater than plus two standard deviations have on average \$51.44 more in per capita local revenue than local health departments with residuals within two standards deviations, ceteris paribus (p=0.00). The three local health departments with residuals greater than minus two standard deviations from the mean have on average \$38.02 less in per capita local revenue than local health departments with residuals within two standard deviations from the mean, ceteris paribus (p=0.00).

Model 2 excluded major effects of co-learning and advocating as separate independent variables to avoid collinearity issues. When advocating and co-learning measures were added to a model with the interaction variable, tolerance statistics indicated collinearity among some of the co-learning, advocating, and politicking categories. I suspect advocating and co-learning categories may have limited precision and are unable to detect the effects of incremental changes in bureaucrat behavior on per capita local revenue. Despite these limitations, it is promising that high levels of advocating, co-learning, and politicking show statistically significant effects on per capita local revenue. Recognizing the potential limitations of a politicking interaction variable, I created another measure of politicking and ran a third model.

The third model (table 5.10) excludes measures of advocating and co-learning. However, these concepts are reflected in the politicking variable. The politicking variable in model 3 is comprised of three categories. One category includes local health departments that conducted no or one type of advocating activity and no or one community health assessment, that is, the lowest level of politicking. Another category includes local health departments that conducted three advocating activities and three community health assessments, that is the highest level of politicking. The remaining local health departments were classified in the third category representing moderate politicking. Similar to the results in model 2, the highest levels of politicking in model 3 are associated with increases in per capita local revenue. Local health departments that engage in the highest level of politicking have on average \$3.42 more in per capita local revenue than local health departments that engage in the lowest level of politicking, ceteris paribus (p=0.02).

Table 5.10: Model 3—Politicking Effects on 2013 Local Health Department Per Capita Local Revenue

			One-tailed
	Coefficient	Robust S.E.	p-values
Politicking			
Some politicking (compared to little)	0.11	1.17	0.46
A lot of politicking (compared to little)	3.42	1.58	0.02
Governance			
Local (compared to state)	5.77	0.74	0.00
Shared (compared to state)	6.27	1.94	0.00
Local board of health tax authority	2.04	1.07	0.03
Partisanship			
Percent vote for Democratic Party presidential candidate	-0.04	0.03	0.10
Controls			
Median household income (in 10,000s)	-0.46	0.28	0.05
Population (in 100,000s)	-0.26	0.11	0.01
Per capita local revenue in 2008	0.62	0.06	0.00
Outliers with residuals +2 standard deviations from			
mean	51.52	5.25	0.00
Outliers with residuals -2 standard deviations from mean	-37.64	9.54	0.00
Constant	4.08	1.57	0.01
N=513			
$R^2=0.76$			
Adjusted R ² =0.75			

As compared to the first two models, the third model shows similar effects of governance structures on local health department per capita local revenue. Local health departments with local governance have on average \$5.77 more in per capita local revenue than local health departments with state governance, ceteris paribus (p=0.00). Local health departments with shared governance have on average \$6.27 more in per capita local revenue than local health departments with state governance, ceteris paribus (p=0.00). Further, local health departments that have local boards of health with taxing authority have on average \$2.04 more in per capita local revenue than local health departments without local boards of health with taxing authority, ceteris paribus (p=0.03). Partisanship, as measured by percent vote for Democratic Party presidential candidate Obama, did not have a statistically significant effect on local health department per capita local revenue.

The coefficients for median household income, population size, and per capita local revenue in 2008 in the third model are also very similar to those of the first two models. A \$10,000 increase in median household income is associated with an on average \$0.46 decrease in per capita local revenue for local health departments, ceteris paribus (p=0.05). A 100,000 persons increase in population is associated with a \$0.26 decrease in per capita local revenue for local health departments, ceteris paribus (p=0.01). Consistent with the idea that budget allocations are informed by previous funding levels, per capita local revenue in 2008 predicts per capita local revenue in 2013. A one-dollar increase in 2008 per capita local revenue is associated

with an on average \$0.62 increase in 2013 per capita local revenue for a local health department, ceteris paribus (p=0.00).

The coefficients for the outlier dummy variables in model 3 are also very similar to those of the other models. The 21 local health departments with residuals greater than plus two standard deviations have on average \$51.52 more in per capita local revenue than local health departments with residuals within two standards deviations, ceteris paribus (p=0.00). The three local health departments with residuals greater than minus two standard deviations from the mean have on average \$37.64 less in per capita local revenue than local health departments with residuals within two standard deviations from the mean, ceteris paribus (p=0.00).

Limitations

There are several limitations worth noting. First, although chapters three and four focus on local health official behavior, the measures included in the regression models in this chapter focus on general bureaucratic activity that may not have been conducted by the local health official per se. Local health officials or their designees responded to the National Profile of Local Health Departments survey questions that serve as measures of advocating and co-learning. I assume that while a local health official may not be the one actually conducting community health assessments or advocating activities, the local health official does provide the leadership support that ensures these activities are conducted.

Second, I use a secondary data source for measures of co-learning and advocating that were not designed to test bureaucrat politicking hypotheses.

Consequently, the measures of co-learning and advocating are not ideal. While I am confident that conducting community health assessments conceptually aligns with co-learning, there may be other indicators of co-learning that do not involve community health assessments. It would have also been better to have measures of advocating that are more precise and capture frequency of advocating activity. Moreover, the politicking measures do not confirm that co-learning and advocating efforts are coordinated.

Third, I rely on the theoretical foundations offered by the model of bureaucrat politicking to support causal relationships described in my hypotheses. It is reasonable to suspect that per capita local revenue is positively associated with the ability to conduct co-learning and advocating. Even if greater per capita local revenue does increase the likelihood of co-learning and advocating, this does not negate the possibility that co-learning and advocating create a positive feedback loop, which would support the work of Bernet who found "money begets money" (Bernet 2007).

Discussion

Despite the limitations, the models support the hypotheses generated by the model of bureaucrat politicking. Table 5.11 displays the coefficients and statistical significance of all three models. The three models support the politicking hypothesis that local health officials who engage in politicking will have more per capita local

revenue than local health officials who do not engage in politicking. Model 1 provides indirect support in that it includes measures of co-learning and advocating as separate independent variables. The politicking variables in the second and third models support the hypothesis although the results suggest the effects of politicking are seen when relatively higher levels of co-learning and advocating take place.

Predicted mean per capita local revenue generated by the three models also support the politicking hypothesis (table 5.12). The predicted mean per capita local revenue for politicking is approximately \$22, which is greater than the predicted mean per capita local revenue of local health departments that demonstrate administrating, advocating, or co-learning, whose predicted mean estimates equal about \$15, \$18, and \$18, respectively.

Table 5.11: Summary of Coefficients from All Three Models

	Model 1	Model 2	Model 3
Advocacy			
2 types of advocating (compared to 1 type)	-1.12		
3 types of advocating (compared to 1 type)	1.79*		
Co-Learning			
1 CHA over 7-10 year period (compared to no CHA)	1.16		
2 CHAs over 7-10 year period (compared to no CHA)	0.92		
3 CHAs over 7-10 year period (compared to no CHA)	2.37*		
Politicking (Advocating x Co-Learning)			
1 type of advocating & 1 CHA		1.67	
1 type of advocating & 2 CHAs		0.95	
1 type of advocating & 3 CHAs		1.60	
2 types of advocating & no CHA		-2.74	
2 types of advocating & 1 CHA		-0.80	
2 types of advocating & 2 CHAs		0.65	
2 types of advocating & 3 CHAs		0.79	
3 types of advocating & no CHA		2.59	
3 types of advocating & 1 CHA		3.12	
3 types of advocating & 2 CHAs		1.95	
3 types of advocating & 3 CHAs		4.62*	
Some politicking (compared to little)			0.11
A lot of politicking (compared to little)			3.42*
Governance			
Local (compared to state)	5.64***	5.69***	5.77***
Shared (compared to state)	6.05***	6.22***	6.27***
Local board of health tax authority	2.15*	2.09*	2.04*
Partisanship			
Percent vote for Democratic Party presidential candidate	-0.05	-0.05	-0.04
Controls			
Median household income (in 10,000s)	-0.46*	-0.45	-0.46*
Population (in 100,000s)	-0.31***	-0.31***	-0.26**
Per capita local revenue in 2008	0.63***	0.62***	0.62***
Outliers w/residuals +2 standard deviations from mean	51.53***	51.44***	51.52***
Outliers w/residuals -2 standard deviations from mean	-38.59***	-38.02***	-37.64***
Constant	3.20**	3.32	4.08***
*p<0.05, **p<0.01, ***p<0.001			

The first model supports the hypothesis that local health officials that predominantly engage in co-learning will have more per capita local revenue than local health officials who predominantly engage in administrating activities. The co-learning coefficient in the first model indicates local health departments that engage in high levels of co-learning have significantly more per capita local revenue than local health departments that do not engage in co-learning. Predicted mean per capita local revenue of local health departments that engage in co-learning is about \$18 whereas the predicted mean per capita local revenue of administrating local health departments is about \$14.

The hypothesis that local health officials who predominantly engage in colearning will have more per capita local revenue than local health officials who primarily engage in advocating activities is somewhat supported. In the first model, the co-learning coefficient for the highest level of co-learning is greater than the coefficient for the highest level of advocating, and both coefficients are statistically significant. However, because co-learning and advocating are categorical variables, the coefficients describe an effect on the per capita local revenue relative to other categories as opposed to other independent variables. The predicted mean per capita local revenue estimates suggest the effects of co-learning might not be greater than the effects of advocating on per capita local revenue. The predicted mean values generated by the first two models are about the same. The third model, however, does suggest that co-learning may result in more per capita local revenue than advocating.

The predicted mean per capita local revenue estimated by the third model for colearning is \$18.29 whereas the mean value for advocating is \$17.74.

The three models also support that local health officials who predominantly demonstrate advocating behaviors will have more per capita local revenue than local health officials who predominantly express administrating behaviors. The advocating coefficient in the first model indicates local health departments that engage in high levels of advocating have significantly more per capita local revenue than local health departments that engage in one type of advocating. Predicted mean per capita local revenue of local health departments that engage in advocating is about \$18 whereas the predicted mean per capita local revenue of administrating local health departments is about \$14.

Table 5.12: Predicted Mean Per Capita Local Revenue by Bureaucratic Activity and Governance Structure Generated by Each Model

	# of Obs	Model 1	Model 2	Model 3
Administrating	44	\$14.86	\$15.26	\$15.26
Advocating	225	\$18.43	\$18.43	\$17.74
Co-Learning	147	\$18.30	\$18.30	\$18.29
Politicking	72	\$22.31	\$22.87	\$22.87
Local Governance	452	\$16.14	\$16.14	\$16.14
State Governance	25	\$3.05	\$3.05	\$3.05
Shared Governance	36	\$22.63	\$22.63	\$22.63
LBOH with Taxing Authority	103	\$19.55	\$19.55	\$19.55
No LBOH with Taxing Authority	410	\$15.06	\$15.06	\$15.06
Local Governance & Administrating	39	\$16.34	\$16.74	\$16.75
Local Governance & Advocating	203	\$18.46	\$18.46	\$17.79
Local Governance & Co-Learning	130	\$19.14	\$19.16	\$19.17
Local Governance & Politicking	66	\$22.49	\$23.03	\$23.02
Shared Governance & Administrating	0			
Shared Governance & Advocating	20	\$19.46	\$19.54	\$18.70
Shared Governance & Co-Learning	10	\$17.55	\$17.79	\$17.85
Shared Governance & Politicking	6	\$20.40	\$21.06	\$21.14
State Governance & Administrating	5	\$3.32	\$3.70	\$3.66
State Governance & Advocating	2	\$4.63	\$4.43	\$2.92
State Governance & Co-Learning	7	\$3.65	\$3.03	\$2.61
State Governance & Politicking	0			
LBOH w/ Taxing Authority & Administrating	16	\$19.93	\$20.26	\$20.28
LBOH w/ Taxing Authority & Advocating	42	\$20.23	\$20.18	\$19.21
LBOH w/ Taxing Authority & Co-Learning	20	\$21.42	\$21.48	\$21.41
LBOH w/ Taxing Authority & Politicking	11	\$22.73	\$23.29	\$23.18
No LBOH w/ Taxing Authority & Administrating	28	\$11.96	\$12.41	\$12.39
No LBOH w/ Taxing Authority & Advocating	183	\$18.01	\$18.03	\$17.40
No LBOH w/ Taxing Authority & Co-Learning	127	\$17.81	\$17.80	\$17.80
No LBOH w/ Taxing Authority & Politicking	61	\$22.24	\$22.79	\$22.81

All three models show consistent effects of governance on per capita local revenue. Not surprisingly, local health departments with local governance are likely to get more money from local sources than local health departments with state governance. Local health departments with shared governance receive more funding than local health departments with local governance. When I reran the models with local government as the comparison category, the results indicated that local health departments with shared governance receive \$0.40-\$0.53 more in per capita local revenue than local health departments with local governance, ceteris paribus. Local health departments with shared governance may be benefiting from greater local and state sources of funding than local health departments with local or state governance. This is contrary to the notion that local health departments that receive funding from local sources are less likely to secure funding from state sources and vice versa.

Even more interesting are the predicted per capita local revenue estimates by bureaucratic activity and governance structure. ¹⁴ The predicted per capita local revenue of local health departments with local governance by bureaucrat behavior type has values expected by the model of bureaucrat politicking. That is, politicking results in the largest amount of per capita local revenue followed by co-learning,

¹⁴ I ran conditional models that included interactions between bureaucrat behavior and governance structure. Tolerance statistics indicated significant collinearity among interaction variable categories. Because the conditional models do not directly align with my theory and hypotheses, I did not pursue alternative ways to measure interactions between bureaucrat behavior and governance structure. Instead, I presented predicted mean values based on the models that did align with my theory and hypotheses.

advocating, and administrating. Local health departments with local boards of health with taxing authority also align with the model of bureaucrat politicking.

The predicted per capita local revenue estimates also indicate that local health departments with shared governance and local health departments with no local board of health with taxing authority benefit from politicking more than the other behavior types. However, the effects of advocating and co-learning are reversed. That is, in cases of shared governance or no local board of health with taxing authority, advocating seems more effective than co-learning in increasing per capita local revenue.

The predicted per capita local revenue estimates suggest that state governance greatly inhibits the effects of co-learning, advocating, and politicking. In fact, there are no local health departments with state governance in the sample that exhibits politicking activities. This might be a function of the limited funding that local health departments with state governance receive from local sources. Local health departments with state governance receive, approximately six percent of their revenue from local sources. Even though the percent of revenue from local sources is low, I still expected to see greater effects of advocating, co-learning, and politicking than administrating. State governance seems to trump the effects of bureaucrat behavior anticipated by the model of bureaucrat politicking.

Chapter 6: Conclusion

Local Health Officials as Political Actors

Politicking local health officials do not just practice the science of public health. They facilitate co-learning with constituents and advocate for funding from elected officials to ensure their local health departments have the resources they need to create healthy communities. Securing sufficient resources are necessary to apply public health science to implement policy and deliver public health services. Local health officials who engage in politicking can better compete for their share of finite resources available in a community.

Over their distinguished tenures, the local health officials from LHD 1 and LHD 2 realized the limitations of administering and learned to politick. The local health official from LHD 1 noted, "It took time for me to realize we didn't have an external constituency that spoke to the need or desire for public health services. [Constituency] was out of sight out of mind. The public did not see the effects of decreased public health funding." When reflecting on her mayor's discomfort with community demands to restore LHD 2's budget, the local health official said, "I just engaged the community like public health's supposed to do." These local health officials transformed their practice to leverage their relationships with their communities to secure resources from elected officials.

Local health officials interested in politicking may have to work against structural constraints. In some states and localities, the formal title for local health officials is administrator, which may implicitly and explicitly hinder local health officials' abilities to demonstrate co-learning, advocating, and politicking behaviors. Among the sample examined in chapter 5, local health officials with state governance do not engage in politicking, and if they did, the effects would likely be small given the minimal effects of co-learning and advocating on the amount of local resources local health departments with state governance receive. For LHD 4 and LHD 5, while both local health officials did not have to negotiate every year for their relatively secure annual appropriation, they also did not or could not advocate for a greater appropriation. Politicking might be particularly difficult for some local health officials in jurisdictions with structural and institutional constraints.

Implications for Public Health Practice

Over the past 25 years, the public health profession has put increasing emphasis on the importance of community health assessment, which will help local health officials with their co-learning efforts. In 1988, the Institute of Medicine identified assessment as a public health core function (Institute of Medicine, 1988). In response, the public health community created tools and processes to help local health departments facilitate community health assessments (Lenihan 2005). More recently, the Public Health Accreditation Board required that accredited health departments

mobilize community and conduct community health assessments (Shah, Beatty et al. 2013).

Emphasis on public health advocacy has not been as strong as co-learning.

Advocacy could fall under the other two public health core functions to develop policy and assure services and condition in which people can live health lives (Institute of Medicine, 1988); however advocacy is not an explicit focus. Formalizing the role of advocacy in public health could help support its practice and alignment with co-learning efforts.

If co-learning, advocating, and politicking result in more resources for local health departments than administering, then the public health profession should reassess how it trains its leaders. The competencies required for co-learning and advocating are different from public health science competencies. Emerging and current governmental public health leaders should develop skills in community engagement, community health assessment and planning, coalition building, effective communication, public relations, and navigating political environments. Efforts to build co-learning and advocacy competencies should take into account potential effects of state governance and board of health authority.

Future Research

The model of bureaucrat politicking provides a theoretical foundation for future research. The model can inform more precise measures of co-learning, advocating, and politicking and data collection efforts that could track changes in

behavior and resources over time. Further, the model can be used to test the effects of state and federal-level co-learning, advocating, and politicking on public health funding.

Future studies could examine the effects of state dynamics on local health department funding. Research could uncover why politicking is not generally seen among local health departments with state governance. Perhaps local health departments with state governance are politicking for state dollars. If so, perhaps local health officials are spending time co-learning and advocating with state-level stakeholders than with stakeholders in the community. It would also be interesting to understand how state level co-learning, advocating, and politicking affects locally-focused behavior and vice versa.

Future studies could also look into whether co-learning, advocating, and politicking could result in periods of administering. LHDs 4 and 5 demonstrated administrative behaviors because they benefited from relatively secure sources of local revenue. I suspect that co-learning, advocating, or politicking behaviors resulted in these relatively secure sources of funding. Research could identify if and under what conditions bureaucrat behavior changes over time.

Additional studies could be conducted to determine if bureaucrat behavior results in better community outcomes. Politicking should theoretically result in better-funded services that meet constituent needs. It would be worthwhile to assess whether politicking results in more than additional resources and whether communities are achieving better health from the services provided by their local health departments.

Researchers could also use the model of bureaucrat politicking to investigate bureaucrat behavior in other types of government agencies. The model may apply to local, state, and federal bureaucracies focused on areas such as education, transportation, justice, defense, and social welfare. It would be interesting to learn how bureaucrat behaviors vary by government sector and level.

The model of bureaucrat politicking provides a useful example of how other disciplines can provide theoretical support for empirical public health study. I would like to see the public health systems and services field build on the theoretical foundations of other disciplines. Too often public health systems and services research are atheoretical hunts for correlations between variables.

Local health officials and public health professionals in general have not been studied as political actors. I hope this study starts a trend in public health systems and services research towards investigating the politics of public health. Identifying ways public health professionals can capitalize on their roles as political actors can help increase the overall investment in public health.

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