

## **Working with the State: Exploring Collaboration between State and Local Agencies**

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### **Abstract**

The shift in regulatory policy from a top-down system of rules and penalties to more participatory, incentive-based approaches has increased scholarly interest in collaborative relationships among government agencies, communities, and the private sector. Our understanding of collaboration among government agencies lags behind, even though the new models of regulation take a broader view of public problems that recognizes how problems can cross agency boundaries and expertise. If, as is widely believed, collaboration can result in more effective and comprehensive problem solving, then understanding the determinants and likelihood of interagency collaboration is fundamental for improving public policy interventions. This paper examines what factors prompt localities to invest time and staff resources in collaborating with state agencies. We combine primary and secondary data to evaluate the relative importance of objective and perceived problem conditions, local agency resources, political context and professional incentives on collaborative activities. Results indicate that professional incentives are consistently related to high levels of collaboration between state and local agency personnel.

## **Working with the State: Exploring Collaboration between State and Local Agencies**

Increasingly, state and local government agencies are forging collaborative relationships to address complex public policy problems that cannot, and have not, been solved successfully by any single organization. This pattern holds true in a variety of substantive policy settings ranging from environmental to economic development policy. Concurrently, scholars are dedicating growing attention to the dimensions and antecedents of collaborative relationships and the impacts of these relationships on public policy (for example: Agranoff 2007; Beierle and Cayford 2002; Butterfoss et al 1996; Koontz and Thomas 2006; Leach et al 2002; Lubell 2003; 2004; Roussos 2000; and Zahner 2005). Much of this work has focused on public–private partnerships and other forms of collaboration between government and non-governmental organizations. We know less about collaborative relationships between government agencies that share legal authority to implement public programs.

Shared policy responsibility may exist horizontally, across agencies at one level of government, or vertically, across levels of government between agencies with either overlapping or distinct functional responsibilities. It is critical that we understand these vertical relationships, given the long term trend of devolving policy responsibility to state and local governments. Much of the existing literature treats intergovernmental relationships as idiosyncratic and shaped by characteristics of the specific policy issue; as Ostrom and Ostrom (2006, pg 138) argue, there is a distinct need to explore “the complex relationships among government units and abandon the assumption that all of these relationships are unique or random.”

A key premise underpinning devolution is that local institutions are in the best position to respond to local conditions. However, devolution can challenge notions of equity and fairness embedded in a democratic society. How can state governments cede decision making authority to local government units *and* maintain consistent standards and enforcement? We contend that collaboration between state and local public agencies can be an effective tool for states trying to strike this balance. Collaborating with local bureaucratic agencies allows states to take advantage of local expertise and implement programs that address local needs. At the same time, it protects state authority over programmatic direction and does not jeopardize state compliance with federal mandates. Collaboration also may offer efficiency benefits by reducing overlap in policy effort and providing the information necessary to direct state resources to communities with the greatest need.

Collaborative vertical relationships provide clear benefits to state agencies but may impose substantial costs on their local partners. Local agencies could have divergent goals, and they may perceive state involvement as interference rather than assistance. Collaboration also may involve significant opportunity costs for agencies with limited staff and revenue. Local actors may perceive time spent in communication with state personnel as a resource that would be better allocated to programmatic tasks that directly address local need.

Our goal in this paper is to identify the factors that prompt localities to invest time and staff resources in collaborating with state agencies. Finding out what factors encourage local agencies to collaborate could help states to design incentive structures that facilitate higher levels of collaboration, both within and across traditional issue

boundaries. We compare collaborative relationships between nested institutions (specifically, between state and local public health departments) with the relationships that exist between agencies with separate, but overlapping, missions (state environmental agencies and local public health departments). The research centers on five issue areas that tend to cross agency boundaries and areas of expertise: groundwater management; fish consumption advisories; lead poisoning; air quality and respiratory illness; and emergency preparedness.

Our analysis draws on primary data from a 2005 web-based survey of local public health agencies in Wisconsin. We supplement the survey with local-level secondary data that report on environmental and public health conditions, financial and human capital resources, and overall political environment. This allows us to test several possible explanations for local participation in collaborative activities, including local agency resources, political context, professional incentives, and the real and perceived status of local problems. Using seemingly unrelated regression analysis, we find that the strongest and most consistent determinant of collaboration is the existence of professional incentives for individual bureaucrats. In addition, local health departments that perceive more severe problem conditions are likely to work more frequently with their state counterpart agency; in contrast, problem conditions have no effect on interagency collaboration across issue boundaries. Our findings suggest that states seeking to enhance their working relationships with local agencies should consider using consistent management strategies to help achieve their goals.

### **Collaboration & Bureaucratic Behavior**

The broader literature on collaboration suggests that multiple factors are important in creating and maintaining well functioning working relationships between organizations. One consistent finding suggests that individuals are more likely to collaborate when issues are salient (Leach et al 2002; Lubell et al 2005). Bryson et al. (2006) contend that cross sector collaboration is more likely to emerge when agencies have been unable to deal with a public problem successfully. This relationship is implicit in much of the recent literature on collaboration, which suggests that “wicked problems” require the attention of multiple agencies working in partnership (McGuire 2006; O’Toole 1997; and Thomson and Perry 2006). In other words, we should expect higher levels of interagency collaboration when confronting more difficult public problems. Lubell et al. (2002) demonstrate the importance of problem conditions in explaining the emergence of multi-actor collaborative institutions for watershed protection; problem severity indicates failure of existing policy approaches, prompting action to protect an increasingly scarce resource. The effects of problem conditions on collaboration between government agencies have not received the same empirical attention, especially in the intergovernmental context where problem conditions may vary across communities within a state.

Institutional context or standard operating procedures within an agency may moderate the extent to which problem conditions predicts bureaucratic behavior. A significant body of research suggests that institutional context is pivotal in predicting agency behavior (Agranoff 2001; 2004; Bardach 1998; Brehm and Gates 1997; Ostrom 1990; Ostrom et al 1994; and Wilson 1989). Institutional context can either promote or inhibit collaborative working relationships. On the one hand, collaboration often requires

discretion and flexibility. Yet, at the same time, public agencies tend to value accountability, which can create challenges in terms of fostering interagency collaboration (Page 2004). Case study research indicates that agencies with high levels of collaborative capacity (Bardach 1998), tend to have institutional rules that are structured to reward and encourage innovative collaborative relationships. However, standard operating procedures and notions of accountability embedded in bureaucratic culture can impede collaborative behavior.

Recent research exploring performance management may contribute to our understanding of collaborative capacity within a public agency. There is a strong and vibrant literature in public administration that examines the relationship between management practices and the performance or effectiveness of public agencies (Lynn, Heinrich, and Hill; 2000; Moynihan and Pandey 2005; O'Toole and Meier 2003; and Rainey and Steinbauer 1999). Indeed, widely adopted reforms such as benchmarking, managerial flexibility, and performance measurement are based on the notion that institutional management can directly impact agency performance (Moynihan and Pandey 2005). For our research, we are interested in understanding the extent to which professional incentives within an institution, such as performance evaluations, can be used to facilitate interagency coordination.

While the performance management literature indicates that institutional rules can be used to shape agency behavior, it also demonstrates that external factors outside of agency control also influence behavior and performance. One of the more commonly cited external factors is the existence of a political principal or strong political support (Meier 2000; Moynihan and Pandey 2005; and Wilson 1989). This suggests that agency

performance can be influenced by political oversight (McCubbins and Schwartz 1984; Rainey and Steinbauer 1999). It also may be influenced by public demand for more effective policy implementation.

Finally, the resources available to a local agency may have an important influence on its willingness to collaborate with the state. Past work indicates that resources are an important factor in understanding public–private partnerships (Zahner 2005).

Collaboration can involve high transaction costs, so low levels of financial and human capital resources may act as a constraint limiting agencies' ability to invest time sharing information and reaching agreement. However, collaboration may provide an opportunity for small local agencies to fill gaps in their technical capacity and issue expertise. In that case, we may see a negative relationship between an agency's financial and staff resources and its collaborative activity, because large local bureaucracies would have less demand for state assistance.

### **Model & Data**

Data on collaborative activity come from the web-based Environmental Health Survey conducted by Dorothy Daley in the fall of 2005. The survey collected information from the environmental health officers in Wisconsin's local public health departments.<sup>1</sup> Wisconsin has 87 local public health departments. Using a variant on Dillman's (2000) total response method, Daley obtained responses from 60 departments, for a response rate of 68.9%.<sup>2</sup> The survey included questions about the extent of

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<sup>1</sup> The full survey also collected information from personnel in Wisconsin's state environmental agency (the Department of Natural Resources) and the state public health agency (Department of Health and Family Services). For this research, we are only examining survey responses from the local public health departments.

<sup>2</sup> Missing data on survey items reduces our sample size to 58.



collaboration with state agencies and various factors that might influence the level of collaborative activity.

Our analysis examines two different types of intergovernmental agency collaboration. First, we seek to explain cooperation between a local agency and its state counterpart. Holding constant a state's regulatory requirements, why do some local public health departments report more frequent collaboration with state public health personnel? Second, we investigate collaboration that crosses levels of government and functional authority. Many policy issues cross the boundaries of formal agency jurisdiction. Monitoring and educating the public about levels of mercury and other toxins in fish, for example, requires expertise about fish and their habitat as well as expertise about the diet and risk profile of human populations. These sources of expertise are likely to be found in different bureaucratic agencies. We examine whether the same forces that promote collaboration between nested agencies also influence collaborative behavior that crosses both level of government and functional jurisdiction.

Our dependent variables come from survey questions asking local environmental health officers to report how frequently during the previous year they collaborated with personnel from two state agencies: the Division of Public Health within the state Department of Health and Family Services (DHFS), and the Department of Natural Resources (DNR). The closed-ended question offered responses on a 7-point scale ranging from "Never" to "Daily." Not surprisingly, local public health officials reported more regular interaction with DHFS than with DNR: the mean and mode for DHFS is 4, indicating collaboration "a few times per month," while the modal score for DNR is 2, "a few times per year." Moreover, all environmental health officers collaborate with DHFS

at least a few times per year, but officers in four local agencies report that they never interact with DNR. Summary statistics for all variables appear in Table 1.

[Table 1 about here]

The first set of independent variables assesses the impact of local problem conditions on collaborative activity. Local agencies may be more likely to invest time and resources in collaborating with state officials if local problem conditions are severe. Severe conditions might reduce the confidence of local agency personnel that they can address the problem without information and expertise from the state. Problem severity also may heighten the salience of the policy problem among the local population, who then demand a stronger bureaucratic response. Finally, it is possible that state agencies compare problem conditions across communities and direct their attention and resources to seeking out collaborative opportunities with local departments serving populations with the greatest need.

In measuring the effect of local conditions, we focus attention on five issues that have attracted significant policy attention from Wisconsin state and local officials: groundwater management; fish consumption advisories; lead poisoning; air quality and respiratory illness; and emergency preparedness. Collaborative relationships across agencies and levels of government have long been a core element in the state's approach to groundwater management. A formal institutional structure supports collaboration on groundwater issues, including shared budgeting among agencies. Interagency collaboration on the remaining four issues occurs less formally and to varying degrees. Selection of the five issue areas was based on informal interviews with DNR and DHFS

staff members, who indicated that collaboration between state and local authorities played at least a minimal role in management of all five issues.

Our first measure of problem status uses secondary data obtained from state and federal government sources to characterize the severity of local conditions in the five issue areas.<sup>3</sup> We collected county-level data on the status of problems in order to determine whether intergovernmental collaboration would be most likely to emerge where environmental health risks are most severe or widespread. As an indicator of groundwater quality, we used the percentage of private wells sampled between 1990 and 2006 meeting the health-based drinking water limit for nitrate-nitrogen.<sup>4</sup> Nitrate contamination is most likely to occur in regions dominated by agricultural activity. Our indicator of urban water pollution problems is the current number of open status sites with contaminated groundwater or soil, normalized by county population.<sup>5</sup> To measure the local public health threat posed by mercury contamination in fish, we used information from the DNR's fish contaminant database on the average mercury level in fillet samples collected from gamefish and panfish in the county's water bodies during the period 1985-2005.<sup>6</sup>

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<sup>3</sup> All of the problem data is measured at the county level. The jurisdiction of Wisconsin local public health departments typically covers the entirety of one county. The most populous counties have multiple departments, in which case we applied the same county-level data to all departments within the county.

<sup>4</sup> Data were compiled by the Protecting Wisconsin's Groundwater through Comprehensive Planning project using reports from the Wisconsin Department of Natural Resources, the Wisconsin Department of Agriculture, Trade and Consumer Protection, and the Central Wisconsin Groundwater Center. Accessed in April 2008 at <http://wi.water.usgs.gov/gwcomp/index.html>.

<sup>5</sup> Data were obtained from the Protecting Wisconsin's Groundwater through Comprehensive Planning website.

<sup>6</sup> Results are robust to looking at gamefish only. We are grateful to Candy Schrank at the DNR for providing this data.

The severity of the risk from lead exposure is measured as the number of children found to be lead poisoned in the county in 2004, normalized by county population.<sup>7</sup> The number of hospital emergency room visits for asthma in 2002 indicates the status of respiratory health in the county.<sup>8</sup> Finally, in 2006 Wisconsin completed a statewide infrastructure assessment and subsequently directed resources to facilities considered to be at high risk for terrorist attack. These facilities included stadiums, water systems, and chemical facilities. Guided by that assessment, to capture terrorism risk we use the number of stadiums per county seating over 40,000, the number of water systems serving a population over 50,000, and the number of archived waste sites that do not qualify for the federal Superfund program.<sup>9</sup> We calculated z-scores for all of these measures, averaged across the multiple measures of groundwater contamination and terrorism risk to create a single indicator for each of the five issues, and summed across the issue indicators to create a single variable measuring the severity of environmental health threat in Wisconsin's counties. The *Problem status* variable in our analysis is an index of the z-scores for all five issues in the DHFS analysis. Because DNR has little involvement in policy addressing air quality and lead poisoning, the *Problem status* variable in the analysis predicting cooperation with the resources agency includes only conditions related to the three remaining issues.<sup>10</sup>

Recognizing that local public health officials' perceptions of problem severity may not match our measures of conditions, we also included a variable for local officials'

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<sup>7</sup> Data were collected by the Wisconsin Childhood Lead Poisoning Prevention Program of the DHFS. Accessed in April 2008 at <http://dhfs.wisconsin.gov/lead/Data/index.asp>.

<sup>8</sup> Data were collected by the Division of Public Health, DFHS. Accessed in April 2008 at <http://dhfs.wisconsin.gov/eh/asthma/pdf/boawi04.pdf>.

<sup>9</sup> Data on water systems come from the U.S. Environmental Protection Agency's Safe Drinking Water Information System. Accessed in April 2008 at <http://www.epa.gov/enviro/html/sdwis/>.

<sup>10</sup> Scale reliability for the five-issue index, as measured by Cronbach's alpha, is .84. For the three-issue index, reliability is .67.

assessments of these problems. Data come from the Environmental Health Survey. Respondents rated a series of environmental and public health issues on a 7-point scale according to how serious a problem they pose in Wisconsin. Our *Perceived problem status* variable is an average of responses across all five issues in the DHFS analysis and across the three relevant issues in the DNR analysis.<sup>11</sup> The correlation between real and perceived problem conditions is surprisingly low: .24 for the five-issue indexes, and .15 for the three issues that DNR addresses.

Professional incentives targeted at individual agency personnel also might help create conditions that promote collaboration with the state. A guiding theme of the literature on new public management is the importance of building accountability into policy implementation processes as a means to achieve programmatic goals. We examine the impact of *Professional incentives* using an item from the Environmental Health Survey that asks respondents to indicate on a 7-point scale the importance of collaboration with various actors, including DNR and the Division of Public Health at DHFS, as a factor in the respondent's annual performance evaluations.

The next pair of variables measures *Local agency capacity* in terms of public health departments' financial and staff resources. These resources might operate either to promote or to suppress collaboration. It may be that local agencies only can engage in collaboration if they have sufficient revenue and staff to carry out their required duties. Alternatively, high levels of local capacity may reduce the need for state assistance. We measure capacity of local public health departments with variables on total staffing levels

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<sup>11</sup> Scale reliability is .71 for the five-issue index and .61 for the three-issue index.

and total revenue. Data come from the 2005 Local Health Department survey administered by the state of Wisconsin.<sup>12</sup>

The remaining variables address political pressures on the local public health department. *Political structure* notes the type of organization of the county government that oversees the health department. Wisconsin's counties employ diverse structural forms: half the counties in our analysis directly elect a county executive, much like a mayor, while the other half have either a council-administrator or a commission form of government. The direct election of a local executive clarifies the lines of accountability in county government and may improve oversight of individual departments. The political structure variable is dichotomous, scored 1 for a county executive form of government. Data on county governing structure come from the 1987 Census of Governments. In addition, the model includes two county demographic measures—per capita income and the percentage of the county's population that lives in an urban area—that may affect the *Local demand* for different types of public health outcomes.

We estimate a seemingly unrelated regression model that accounts for potential correlation between the errors in the equations for collaboration with DHFS and with DNR. Seemingly unrelated regression improves the efficiency of our estimates by exploiting information contained in the residuals about unobserved factors that affect a local health department's level of collaboration with either state agency (Zellner 1962). Because our dependent variable is ordered and not continuous, we also estimate independent ordered probit models. All the models produce similar substantive results.<sup>13</sup>

## **Results & Discussion**

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<sup>12</sup> Data accessed in April 2008 at <http://www.dhfs.state.wi.us/localdata/LHDsurvey.htm>.

<sup>13</sup> Future versions of the paper will employ a bivariate probit model that simultaneously accounts for the correlated disturbances between our equations and the ordered dependent variables.

Models showing the determinants of collaboration between state and local agencies appear in Table 2. Results are generally consistent across estimation strategies. The analysis reveals that the most significant and consistent determinant of interagency collaboration is the existence of strong professional incentives, measured as the importance given to collaboration with specific state agencies in respondents' annual performance reviews.<sup>14</sup> Performance incentives boost collaboration both within the local agency's issue area and across issue boundaries. A shift from the 25th to the 75th percentile value on the importance of collaboration with DHFS on a respondent's performance review—a shift from 2 to 6 on the 7-point scale—produces an increase of .76 points on the 7-point collaboration scale. Collaboration with DNR is less highly valued in the performance assessment of local health department personnel: the 25th percentile health department scores a 1, indicating that working with DNR is not a factor in reviews, and the 75th percentile department scores a 4. However, providing a professional incentive to collaborate with DNR has an even more important impact on bureaucratic behavior: a shift from the 25th to 75th percentile values yields a .9-point increase in collaboration.

[Table 2 about here]

The variable representing professional incentives is the only factor in our analysis that has a significant effect on collaboration both within and across issue boundaries. Other factors influence a local health department's willingness to work with either the state health agency or the state environmental agency, if they have an impact at all. Local

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<sup>14</sup> Because this variable is drawn from the survey, the causal ordering is not certain. It could be that people who believe their performance evaluation includes collaboration performance also say that they frequently collaborate. While the survey data cannot rule this out, every effort was made to address this in survey design. The performance evaluation questions were placed at the end of the survey, several sections removed from asking respondents about the frequency of their collaborative activity.

health departments appear not to respond to objective environmental and public health conditions when making decisions about collaborating with the state. However, perceptions of local conditions do have an effect on local collaboration with DHFS. Respondents whose average assessment of local environmental health problems scored in the 75th percentile scored nearly half a point higher in the frequency of collaboration with the state health agency than respondents whose perceptions of local conditions scored at the 25th percentile. Issue salience seems to matter for collaboration among personnel from nested institutions: local public health officials who perceive that problems are severe spend more time working across levels of government to try to solve them. However, problem perceptions do not affect collaborative behavior across issues.

Agency capacity also makes a difference only within the issue area. Local health departments that have bigger budgets spend less time interacting with their state counterpart. A shift in total revenue from the 25th to the 75th percentile produces a .85 point decline in frequency of collaboration with DHFS. It appears that state personnel working within the same issue area can help fill in gaps in expertise for small local agencies; local departments with larger budgets do not have the same demand for state resources.<sup>15</sup>

The determinants of interagency collaboration within the sphere of public health all come from within the local agency. In contrast, external forces appear to exert some influence over local decisions to collaborate with DNR. The presence of an elected county executive has a sizeable and weakly significant positive effect on collaborative activities across issue boundaries. Stronger lines of political accountability may prompt

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<sup>15</sup> We also tested the impact of per capita measures of agency staff and revenues. These had no significant effect on collaborative outcomes; it is the overall budget of the agency that matters.



public health agencies to think more broadly about their mission. In addition, local health departments serving urban populations are less likely to collaborate with the state environmental agency. Health departments at the 75th percentile of urban composition scored .8 points lower on collaboration with DNR than departments at the 25th percentile. On its face, this seems like an intuitive result: urban areas may have fewer natural resource issues that require attention from the state. However, in Wisconsin, this doesn't hold true. Urban areas are rich with natural resources, if only from the location of the great lakes in relation to the state. It may be that transaction costs in urban areas are higher than in other areas. Most local health departments operate at the county level within the state. But more populated urban areas have both city and county level health departments, along with both city and county level governments. These additional institutions may erode benefits from interagency collaboration because of the additional time and effort required to navigate a more complex political environment.

### **Conclusion**

This paper examines vertical collaboration in two settings: nested institutions with parallel missions and institutions with separate, but overlapping missions. We contend that collaborative working relationships between state and local institutions could be an effective tool for state governments to capitalize on local knowledge and respect local autonomy, while maintaining consistent standards and enforcement in an era of devolution. By and large, states stand to benefit from increased collaboration with local agencies. The benefits to local agencies are less clear. Local agency personnel may have goals that diverge from those of their state counterparts and significant constraints on

their resources forcing them to consider opportunity costs associated with collaborative relationships.

Our analysis suggests that management techniques, in particular performance evaluations that are tied to collaborative efforts, are consistently important in predicting more frequent levels of vertical collaboration in both nested and overlapping institutions. If collaboration is indeed a pivotal element required to address some of the more persistent and difficult public policy issues, then this analysis suggests an administrative lever that could be engaged to promote interagency collaboration: evaluating, and rewarding, collaborative performance on a regular basis. This finding reinforces much of the theoretical and empirical literature focused on institutional rational choice: individuals respond to both rules and incentives. But it extends the boundaries of this relationship to indicate how incentives can be used to foster collaboration among government agencies. No other factor in our analysis influences local collaboration as clearly or consistently as the provisions of professional incentives.

Surprisingly, objective problem conditions do not motivate increased interagency collaboration. This result contradicts much of existing literature in collaborative environmental management that suggests collaborative action, often between government and non-governmental actors, stems from problem severity. More research is needed to understand the relationship between bureaucratic culture, problem conditions, and agency behavior. Perceptions of problems do seem to matter within nested institutions, but not between overlapping institutions. Finally, our analysis also indicates that political context may be important in facilitating vertical collaboration across institutions with

overlapping missions, but not critical for motivating collaboration among nested institutions.

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Table 1. Summary Statistics

	Mean	Std. Dev.	Min.	Max.
Cooperation with DHFS	4.22	1.26	2	6
Cooperation with DNR	3.07	1.25	1	6
Problem status (DHFS: 5 problems)	.07	2.73	-2.93	10.34
Problem status (DNR: 3 problems)	.02	1.16	-2.42	5
Perceived problem status (DHFS: 5 problems)	4.29	.83	2.60	6.60
Perceived problem status (DNR: 3 problems)	4.02	.91	2.33	6.67
Performance incentives (DHFS)	4.09	2.07	1	7
Performance incentives (DNR)	2.79	1.68	1	6
Local agency capacity: total revenue (in \$10,000s)	60.75	48.09	2.16	233.02
Local agency capacity: total staff	21.53	15.53	1	72
Political structure: county-executive government	.50	.50	0	1
Local demand: per capita income (in \$1,000s)	28.09	5.31	18.45	47.53
Local demand: percent urban	49.84	32.09	0	100



Table 2. Determinants of Interagency Cooperation

	Seemingly Unrelated Regression		Ordered Probit	
	DHFS	DNR	DHFS	DNR
Problem status	-0.037 (0.073)	-0.149 (0.128)	-0.064 (0.071)	-0.116 (0.133)
Perceived problem status	0.357* (0.185)	0.176 (0.157)	0.305* (0.179)	0.170 (0.163)
Professional incentives	0.189*** (0.069)	0.301*** (0.083)	0.103 (0.071)	0.290*** (0.092)
Local agency capacity: revenue	-0.013** (0.007)	-0.005 (0.006)	-0.014** (0.007)	-0.004 (0.006)
Local agency capacity: staff	0.0136 (0.020)	0.017 (0.019)	0.015 (0.020)	0.017 (0.019)
Political structure	0.166 (0.344)	0.582* (0.321)	0.157 (0.328)	0.518 (0.324)
Local demand: income	0.025 (0.045)	0.039 (0.041)	0.016 (0.044)	0.036 (0.041)
Local demand: urban	-0.002 (0.008)	-0.015** (0.007)	0.000 (0.008)	-0.015** (0.007)
Constant	1.743 (1.379)	0.810 (1.199)		
Cut 1			0.457 (1.355)	0.380 (1.248)
Cut 2			1.005 (1.342)	1.799 (1.238)
Cut 3			2.107 (1.350)	2.573** (1.259)
Cut 4			2.672* (1.371)	3.451*** (1.285)
Cut 5				4.269*** (1.334)
$\chi^2$	19.18**	25.00***	12.10	18.40**

Table presents coefficients from seemingly unrelated least squares regression and ordered probit models predicting local agencies' frequency of collaboration with DHFS and DNR. Number of local agencies = 58. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .