Institutional collective action (ICA) dilemmas arise from the division or partitioning of authority in which decisions by one government in one or more specific functional area impacts other governments and/or other functions. The focus on externalities of choice in fragmented systems integrates multiple research traditions into a conceptual system to understand and investigate collective dilemmas ubiquitous in contemporary governance arrangements. The mechanisms for mitigating ICA dilemmas are classified according to their scope and enforcement. Incentives to participate in a mechanism are hypothesized to favor mechanisms that provide the greatest gain for the least cost under different conditions of collaboration risk as determined by the nature of the underlying ICA problem, the compositions of affected jurisdictions, and institutional contexts. After reviewing empirical applications of the framework, an agenda to advance the theoretical and empirical development of the ICA approach is advanced.

KEY WORDS: collective action, collaboration, local governance, transaction costs, regional governance
diseconomies of scale, positive and negative externalities, and common property resource problems. If local actors pursue strategies based on their short-term interests, then the collective action problem dictates that the outcomes of individual decisions will be collectively inefficient in the absence of mechanisms to integrate decisions across policies and/or jurisdictions.

As a framework to study and understand policy and governance, ICA focuses explicitly on externalities of choice in fragmented systems. The ICA framework compares the impact of alternative mechanisms introduced to mitigate these collective action problems and how these mechanisms evolve, are selected, or are imposed. In most general terms, the problem is how to provide and produce a multitude of public goods and services that have different economies of scale and that are demanded by citizens at different levels of quantity and quality.

ICA dilemmas have horizontal, vertical, and functional manifestations. A horizontal collective action problem arises if the governments are too small (or large) to efficiently produce on their own a service each government wishes to provide, or if production of the service produces externalities that spill across jurisdiction boundaries. Vertical collective action problems occur between actors at different levels of government when organizations at more than one level of government pursue similar policy objectives simultaneously such as in economic development or environmental management. Functional collective action problems reflect fragmentation by specific functions and policy areas. Functional collective action problems are defined by the connectedness of services, policies, and resource systems as externalities occur between functional areas and policy arenas as well as governmental units. For example, the development decisions in Orlando will have consequences for natural resources, transportation, land use regulation, economic development, and other specialized policy arenas across the region. Although functional coordination has long been a concern within public administration, these issues are not emphasized in contemporary policy theories.

This essay describes the ICA framework, outlines its basic assumptions, reviews empirical applications of the framework, and draws implications for governance. The next section describes the mechanisms for mitigating institutional collective action dilemmas and classifies them according to two dimensions that define both the transaction costs of participating in the mechanism, and the capacity of the mechanism to effectively resolve the dilemma: the extent to which they are broad and encompassing in scope or focused on a specific function and relationships, and on the integration and enforcement mechanism that they rely upon. We then advance a general proposition that incentives to participate will favor the type of mechanism that provides the greatest gain for the least cost under different conditions of collaboration risk. The risks of collaboration are shaped by the nature of the underlying ICA problem, the composition of affected jurisdictions, and the institutional contexts under which they operate. The next sections review empirical applications of the ICA framework, focusing on transaction cost barriers to the emergence of these mechanisms and the methodological approaches used to investigate mechanism choices and impacts. The concluding discussion maps out an agenda to advance the theoretical and empirical development of the ICA approach.
Purpose and Conceptual Foundations

The ICA framework provides a conceptual system to understand and investigate the variety of ICA dilemmas ubiquitous in contemporary societies and governance arrangements. As a research approach, it integrates multiple research traditions and theoretical approaches under the same research program umbrella to better understand how ICA dilemmas are resolved. It also informs theory and practice by providing specific hypotheses about what mechanisms are chosen and their anticipated effectiveness in addressing complex ICA dilemmas.

This framework can be applied to a wide range of policy dilemmas in which local governing units can potentially achieve better outcomes collectively than acting individually by reducing barriers to mutually advantageous collaborative action as represented by the transaction costs required for achieving joint projects. The ICA framework integrates elements of collective action theories, transaction cost theories of organizations, the public economy framework, network theories of social embeddedness, and theories of policy design in political markets.

The theoretical framework builds directly on an extensive and well-known collective action literature concerned with situations in which individual incentives lead to collective outcomes not desired by any of the individuals and extends the approach to composite actors defined by institutionally determined position, authority, and aggregation rules (Ostrom, 1990, 2005). Composite actors include collective entities dependent on and guided by the preferences of members (e.g., coalitions, clubs, movements, and associations) and more autonomous corporate actors (Scharpf, 1997), but our focus is primarily on government units and their constituencies. Position and authority rules grant individuals the right to act in the name of an organization. The capacity for strategic action by composite actors in collective choice situations depends on preference integration among members and capacity for conflict resolution when preferences diverge (Andrew & Kendra, 2012; Feiock, 2007; Feiock & Scholz, 2010).

Transaction theories of organizations focus on uncertainty and transaction costs as barriers that prevent authorities from reaching coordinated decisions: Information costs limit the range of options being considered by boundedly rational actors, negotiation costs limit actors from reaching agreement for the limited options they know, external decision costs limit autonomy in conforming to collective decisions, and enforcement costs limit the ability to make credible commitments. Transaction cost analysis provides a systematic means to consider the barriers to resolving ICA dilemmas. Because the institutional mechanisms to address ICA dilemmas range from bilateral exchange relationships to establishment of authorities to make collective decisions binding all participants, the ICA framework draws upon transaction cost theories of contracts (Brown & Potoski, 2005; Whitford, 2010; Williamson, 1985) and of collective organization (Feiock & Scholz, 2010; Maser, 1998; Miller, 2000). Transaction costs are viewed as a primary barrier to mitigating ICA dilemmas.

The ICA framework also draws from theory of local public economies (LPEs) advanced by Vincent and Elinor Ostrom (McGinnis, 1999; Ostrom, Bish, & Ostrom, 1988; Ostrom, Tiebout, & Warren, 1961). The public economies approach is also
grounded in economics, but not transaction cost economics. Rather LPE’s starting point is industrial organization. From the LPE perspective, trade-offs for addressing spillover effects are not among risks and transaction costs; rather, they are among control, efficiency, political representation, and self-determination (McGinnis, 1999; Oakerson & Parks, 2011; Ostrom et al., 1988). In the LPE framework there is no attempt to predict the adoption of a specific form of integration mechanism; rather, the explanation is limited to identifying and accounting for different service industries, how they are assembled, the strengths and weaknesses of different forms, and their relative performance. The public economies approach identifies metropolitan service provision as an action arena in which positive and negative externalities are exacerbated by the polycentric pattern of governments that provide customized mixes of specialized public goods. The ICA framework draws from this approach to specify: (i) the nature of the dilemma; (ii) the authorities directly or indirectly involved in the policy arena; (iii) the potential risks associated with action and inaction; and (iv) the incentives explaining the motivation of the actors.

Theories of social embeddedness have increasingly informed the study of economic and political relationships (Axelrod, 1984; Jones, Hesterly, & Borgatti, 1997; Putnam, 1993; Uzzi, 1997). Intergovernmental relationships are embedded in larger social, political, and economic structures. Within these structures, dense tightly clustered network relationships reduce shirking and enhance credible commitment (Berardo & Scholz, 2010; Uzzi, 1997). Regions depend heavily on relational communities that arise from long-term reciprocal linkages among co-located organizations. Thus, social embeddedness provides another basis for creating mechanisms to mitigate ICA dilemmas.

Theories of policy instruments (Salamon, 2002) and political markets (Dixit, 1996; Feiock, Lubell, & Lee, 2006) inform our understanding of the dynamics of mechanism choice and configurations of multiple mechanisms to integrate collective action dilemmas. The design of mechanisms to address ICA dilemmas emerges through a dynamic political contracting process among local authorities as reflected in bargaining and negotiation among the officials of affected entities (Lubell, Feiock, & Ramirez de la Cruz, 2005). Each weighs the utility that they expect to receive cooperatively with the utility that they gain when acting noncooperatively, but the joint gains produced may not be sufficient to stimulate the collective action necessary for local actors to create these mechanisms. For example, the consolidation of multiple units and functions in a highly encompassing imposed governmental authority may mitigate the ICA dilemma by eliminating independent authorities, but the costs of centralization include uncertainties about the balance of authority among actors, disruption of ongoing governance activities, and the potential transformation of the interorganizational dilemma into an intraorganizational ICA dilemma that can be just as difficult to resolve (Whitford, 2010). The concept of policy multiplexity captures the reality of interrelated policy arenas and service functions that create ICA dilemmas that may require encompassing solutions (Bae & Feiock, 2012; Lubell, Henry, & McCoy, 2010; Shrestha & Feiock, 2009).

ICA dilemmas are not confined to governmental policies and authorities, but examples of governmental policy dilemmas in metropolitan areas are used in the
Local actors have available to them a variety of collaborative mechanisms that they can participate in to address the institutional collective action dilemmas they confront. Table 1 identifies generic mechanism types as defined in the U.S. context and provides brief descriptions of each. Collaboration to resolve ICA dilemmas begins with recognition of interdependencies among governments in which actions of one government affect the actions of others. Feiock and Scholz (2010) suggest that the range of mechanisms that has emerged to mitigate ICA dilemmas can be best understood as falling on a single dimension according to the degree of autonomy the mechanisms afford local actors. Yet these mechanisms also vary with regard to whether they focus on collective multilateral relationships or on individual bilateral exchanges.

Table 1 and the paragraphs that follow define a formal taxonomy of the mechanisms for resolving ICA dilemmas. Figure 1 arrays them along two dimensions. First, according to whether the mechanism relies primarily on political authority, legal or contractual arrangements, or social embeddedness; and second, by how encompassing the solution mechanism, ranging from bilateral agreements on a single policy dimension to multilateral solutions to more complex problems to ultimately multiplex policy arrangements for collective choice by a larger set of actors. The first nine cells rely on voluntary participation in the mechanism by the individual authorities facing the dilemma, with the extent of collaborative challenges rising to the right and upward. The last three cells in the right-hand column constitute mechanisms that are imposed on local actors by a higher authority, and therefore are not necessarily a product of collaboration.

Integration Mechanisms

Network embeddedness, mutually binding contracts or agreements, delegated authority, and imposed authority provide four general mechanisms available to integrate decision making (Feiock, 2009) and define the horizontal dimension of Figure 1. The nature of these mechanisms makes them more or less costly for individual governments to enter into or exit from the collaboration. The transaction costs of entering or exiting a relationship are highest with collaborative arrangements mandated through governmental authority and lowest with collaborative arrangements based on voluntary relationships and social constraints.

Under embedded relations, agreements among local units are coordinated and enforced through a network of social, economic, and political relationships rather than formal authority. Self-organizing policy networks that rely on this mechanism offer potential advantages over more formal solutions by avoiding rancorous political conflicts and enhancing the search for mutually advantageous resolution of ICA
Table 1. Collaborative Mechanisms for Addressing ICAs

Informal networks
Network interactions provide the greatest local autonomy and can foster norms of trust that help participants identify partners where defection is less likely. Repeated face-to-face interaction is especially important in order for norms of reciprocity to develop and cooperative agreements to form (Axelrod, 1984). Policy network structures emerge unplanned from interactions among local actors. Informal networks are often preferred by local actors not only to preserve local autonomy and power but also to ensure local variation.

Contracts
Contracts link individual units through joint ventures and service contracts that require the consent of those involved. This set of governance tools preserves local autonomy while providing a formalized mechanism for resolving externalities and other issues of concern to the parties. Contract networks link local governments in legally binding agreements. Mutual aid agreements for emergency management are perhaps the most prominent example; they emerge to address a variety of issues (Andrew, 2009a).

Mandated agreements
Mandated agreements require two or more public authorities to enter into service agreements. They specify the nature, scope, and some of the terms of agreements. In mandated agreements, the higher-level authority may provide funding, but it also mandates the formation of collaborative relations among specified local governmental actors. Single-purpose special districts provide a less obtrusive means of internalizing unconsidered impacts over a broad geographic area for a specific function (Farmer, 2010).

Working Groups
Working groups or councils are voluntary associations of elected or appointed public officials that meet on an informal basis to share information and coordinate service activities. Informal group decisions can take the form of collectively reinforced shared understandings and expectations that, although only socially enforced, are binding. Working-group coordination can also take the form of routine interactions through professional associations or community conferences (LeRoux, 2007).

Partnerships
Partnerships and other multilateral interlocal agreements are entered into voluntarily by local units. They generally require participants to accept common terms of agreement and obligations for action. Partnerships often include both public and private organizations and take on a broad-based area. For example, regional economic development partnerships have become an increasingly popular approach to organizing regional economic development efforts (Feiock et al., 2009; Olberding, 2002). Watershed partnerships are another example of regional partnership institutions that collectively address a wide variety of water-related issues (Lubell et al., 2002).

Constructed networks
Constructed networks encompass mechanisms designed or coordinated by third parties such as higher-level government to structure multilateral relationships across related policy areas. A higher-level authority provides funds and incentives for actors to participate in collaborative service arrangements. Typically, a higher-level government designates a lead organization with responsibility for developing, managing, and coordinating intergovernmental service provision (Provan & Kenis, 2008). An extensive literature focused on these managed service implementation networks has been developed (Agranoff & McGuire, 2003; Bardach, 1998; Grady & Chen, 2006; Mandell, 2001; Meier & O'Toole, 2002; Milward & Provan, 2000).
Multiplex self-organizing systems
Multiplex self-organizing systems rely on embeddedness for policy coordination across various policies and functional areas. Agreements that are difficult to negotiate individually may be more feasible when embedded in a set of relationships for a related policy. Multiple relationships between a pair of actors signify more trust and, therefore, greater chances for future exchanges. Likewise, cross-policy reciprocal relationships can provide both parties greater assurance for much more stable exchange than if the relationships are one directional. Because agreements often overlap, they may also be supported by norms of reciprocity (Thurmaier & Wood, 2002). Andrew (2009a) argues that ties developed locally produce general patterns of regional integration as bilateral ventures, agreements, and contracts create a unique formation of contractual ties at the macro-level.

Councils of governments
Councils of governments and other regional institution organizations are focused on collective and multipolicy relationships among local actors. Structure and responsibilities are statutory, rather than negotiated, often based on federal and state laws. They take a variety of forms. The most common form in the United States are regional councils of governments and metropolitan planning organizations, designed to manage federal transportation issues in metropolitan areas by allocating federal funds (Kwon & Feiock, 2010).

Centralized regional authorities
Regional authorities with sufficient functional and geographic scope can “internalize” the externality and scale problems. One example is uniting multiple local governments into a consolidated metropolitan general purpose government. Despite this efficiency rationale, efforts at city-county consolidation in the United States have been mostly unsuccessful. The failures of consolidation efforts can be attributed to political conflict and the availability of alternative, less costly coordination mechanisms (Carr & Feiock, 2004). The political and administrative costs of creating regional governments limit the scope of consolidation and special district solutions to a narrow range of institutional collective action problems. Existing agencies and government units generally resist any loss of authority. The larger units gain efficiencies in production, but frequently at the cost of reducing the ability of local units to vary the provision of services to reflect heterogeneous local preferences (Carr & Feiock, 2004).
dilemmas. By ensuring rule flexibility and the ability to decide and adjust procedures locally, mechanisms enforced by embedded social relations allow actors to customize informal rules of conduct to best fit the local conditions and specific characteristics of the ICA situation. To the extent that self-organizing mechanisms contribute to social capital, the resolution of one ICA dilemma provides the basis for resolving related and unrelated dilemmas affecting the same actors as well.

Informal policy network structures emerge from interactions among institutional actors without central planning. Even formal authority structures in political systems rely on informal, self-organized relationships for performance and stability to buffer the system from changing demands. Network interactions that tie responses to actions in one functional area to those in other policy areas or across time may help members identify partners who are less likely to defect and build enforcement structure to reduce transaction costs.

Under contracting, local actors legally bind themselves to mutual action. Contractual relationships require the consent of those involved, so mechanisms based on contracts preserve the autonomy of local actors while providing a more formalized mechanism for resolving externality issues of concern to all parties. To the extent that enabling legislation minimizes the transaction costs involved in developing, negotiating, and enforcing agreements, the Coase (1960) theorem suggests that contracting can resolve diverse externality problems. Contractual agreement networks are described as an outcome of purposive activities of individual actors to forge relationships and solve problems by discovering or creating solutions within a given set of constraints including knowledge, time, resources, and competition (Agranoff & McGuire, 2003). The ability to make legally binding agreements can be quite flexible, involving bilateral agreements between two units, or collective agreements among multiple units that bind local actors to some degree, but rely on mutual consent. These arrangements are formally constituted, but voluntary in the sense that members participate at will and must approve activities. Voluntary organizations generally have limited authority to force members to do what they do not want to do,
and the forces of both cooperation and competition remain within the arrangements (Gerber & Gibson, 2009).

Under delegated authority the local actors delegate power to an authority or district that can take action directly. Under imposed centralized authority a higher level authority creates a new governmental unit or intervenes to consolidate authority and direct the actions of the underlying units in order to internalize ICA dilemmas. Higher-level governments often have authority to resolve fragmentation problems by expanding the geographic or functional jurisdiction of government. For example, the political consolidation of general purpose local government unites multiple governments into a consolidated metropolitan city government. Higher-level governments can also design and mandate special districts or networks to internalize impacts over a broad geographic area for specific functions. The political and administrative costs of relying on centralized mechanisms, such as these examples, limit the scope of their use. Existing government units generally resist their loss of autonomy, and production efficiencies are achieved at the cost of reducing the ability of local units to vary the provision of services to reflect different local preferences.

**Institutional Scope**

Governance mechanisms for addressing ICA dilemmas also vary in term of the encompassingness of the scope of relationships addressed by the solution mechanism. Scope combines two elements—the number of actors and the number of policy functions involved. Scope defines the vertical axis of Figure 1. Along the bottom row are mechanisms that focus on individual relationships such as exchanges of information, resources, and commitments among a pair of actors related to single-service function. These more narrowly targeted exchanges range from informal networks of dyadic relationships to service contracts to mandated agreements or externally imposed special purpose districts.

At the other extreme, multiplex collective relationships address multiple functions or services simultaneously and are applied collectively to all affected actors. Mechanisms with the most encompassing scope can sometimes operate informally, but as the complexity of interactions increases, they generally involve collective governance through decision bodies representing all or most of the affected entities. The public administration literature has traditionally looked to this type of governance body with sufficient authority as the mechanism to effectively mitigate ICA dilemmas (DeHoog, Lowery, & Lyons, 1990; Lowery, 2000). Along the middle row are mechanisms between these extremes that include a more limited set of policies or functions and are multilateral in that they encompass multiple actors but not everyone is affected.

**Matching Mechanisms to ICA Dilemmas: Collaboration Risk and Transaction Costs**

We exclude externally imposed mechanism from the analysis (cells 10–12), thus when confronted with an ICA dilemma the actors choose among some or all of the
nine collaborative mechanisms in Figure 1. Successful collaboration can resolve the ICA problems and provide benefit to participating actors, but the actors also face collaboration risks. The concept of collaboration risk reflects the actor’s assessments of the likelihood that collaboration efforts will fail to hold together or fail to effectively resolve the collective dilemma. In the ICA framework it manifests in three categories: risks of incoordination, unfair division, and defection.

Because we are interested in the links between specific ICA issues and the governance mechanisms applied to resolve the dilemma, we wish to evaluate their effectiveness in mitigating the underlying dilemma as well as the transaction costs they impose on participants. In any given policy arena, externally imposed rules combine with the underlying collective problem to determine the specific incentives facing each actor. The preference of local actors for specific mechanisms to mitigate ICA dilemmas will depend on collaboration risk that reflects the nature of the problem, the preferences and alignments of the actors, and existing institutions that influence the transaction costs local actors face.

**Collaboration Risk**

Coordination, division, and defection issues create risk for participation in any of the mechanisms classified in Figure 1 that seek to address the fragmentation of jurisdiction or function that underlies ICA dilemmas (Andrew & Kendra, 2012; Feiock, 2007, 2009; Maser, 1998). The nature of the specific problem is important in shaping the level of risk that particular ICA issue imposes on the actors. If the problem is simply one of coordination, then everyone is better off by acting together or adopting a common standard. For example, the sequencing of traffic signals, or the adoption of joint purchases arrangements are close to pure coordination problems. In these cases, risk does not involve division or defection because any equilibrium or joint standard is acceptable to all. In game theoretic terms, it is like a matching game where the problem for the players is securing information to avoid an uncoordinated outcome. Local authorities may seek to coordinate their decisions around central actors through participation in mechanisms such as informal networks, regional organizations, or formal and informal or contractual networks that link to key actors that possess critical information or form “weak-tie” relationships (Feiock, Lee, & Park, 2012; Shrestha, 2010, 2012).

Coordination problems arise when local governments attempt to organize interjurisdictional activities. Coordination is necessary when the tasks at hand are complex and the interconnectedness of activities and policies is critical for success. If coordination is necessary but a broad array of activities is to be undertaken, the risks of incoordination are higher and hence more authoritative or encompassing mechanisms may be required (Andrew & Kendra, 2012; Maser, 1998).

Division problems occur when there are mutual gains from joint action and local authorities agree on general goals but they encounter difficulty in dividing and distributing the benefits among themselves (Steinacker, 2004). Incentives are aligned because everyone is better off if they collaborate than if they do not, but there are multiple equilibria that vary in their distribution of costs and benefits among the
actors and thus their perceived fairness. This is analogous to the “battle of the sexes” in game theory. Agreements are difficult to establish and maintain, given the anticipated costs associated with the negotiation and deliberation process. Disagreement on the distribution of joint benefits or perception of unequal or disproportionate benefits to some participants at the expense of others, pose barriers to collaboration. Division problems are especially problematic when relationships are based only on a single function, and bargaining across policy is not possible. Without reliable information, potential participants have incentives to underrepresent their capacities and seek to free ride. Thus, bargaining and negotiation over the process to allocate benefits and costs may be extensive (Steinacker, 2010; Ugboro, Obeng, & Talley, 2001).

Defection risk is also a barrier to application of self-organizing mechanisms. Defection risk is fundamentally different than coordination and division risk because the parties have conflicting interests. Thus, defection problems emerge when the decision of one participant in an agreement can result in a worse condition for the other participants. This is similar to the prisoner’s dilemma game in which it is in the individual actor’s interest to defect from a collaborative agreement. Policy decisions are particularly risky when governments are faced with limited information, uncertainty about the future, and the prospect that people or organizations behave opportunistically (Brown & Potoski, 2005). Studies of prisoner’s dilemma situations reveal that the credibility of commitments to a collaborative arrangement is critical in overcoming defection risks. More authoritative mechanisms with third-party enforcement may then be necessary to establish credible commitments and resolve the collective contracting and collective action difficulties created by fragmentation. In dilemmas for which defection might be in the interest of some or all participants, local actors may seek mechanisms that are more encompassing and based on contracts or delegated authority.

Transaction Costs

Transaction costs associated with the various integration mechanisms to address ICA dilemmas include the standard information, bargaining, and enforcement costs of putting together collective action, as well as the loss of autonomy to the individual actors. Buchanan and Tullock (1962) refer to this transaction cost as the imposition of “external decision costs” that result when collective choice resulting from participation in a given mechanism deviate from the actor’s preferred choice. In Figure 1, the diagonal dimension defines both the effectiveness of a mechanism in addressing collaboration risk and the cost to local actors of participating in the proposed mechanism. The costs will be minimal when the scope of collaboration is narrow and enforcement is based on embedded social relations. The costs will be highest when mechanisms involve a collective decision process encompassing multiple policies and actors and delegated authority (Figure 2).

Mechanisms that are more encompassing and authoritative are more effective in addressing difficult ICA problems, but also impose higher transaction costs on
participants. The relationship between transaction costs and effectiveness in dealing with complex ICA dilemmas defines the diagonal in Figure 2. A general proposition to help integrate the descriptive research currently available on these mechanisms is that “Incentives to participate will favor the type of mechanism that provides the greatest gain for the least cost.” Low transaction cost mechanisms toward the lower left in Figure 2 will tend to emerge in low-risk ICA dilemmas, while higher-cost mechanisms will be favored as coordination, division, and defection risks increase.

I assume that participation incentives are determined by the net expected benefits from the mechanism. Net benefits reflect the difference between the transaction costs of adopting and continuing to participate in a particular mechanism and the expected gains as determined by its effectiveness in mitigating the dilemma for participants. Costs capture the current value of all current and future transaction costs, and the gain represents the current value of all benefits provided by participation in the mechanism.

Collaboration risk in the underlying ICA dilemma reflects the risks of not being able to coordinate on a course of action (incoordination); not being able to agree to a division of costs despite agreeing on the action (division); or risk that once action is agreed upon, others may renege or free ride (defection). As the overall risks imposed by a dilemma increase, transaction costs required to achieve optimal effectiveness for a given mechanism will increase. In Figure 2, as we move on the diagonal from lower left to upper right, mechanisms impose higher costs, but maintain effectiveness at higher risks. For example, informal policy networks impose the lowest transaction cost and can readily coordinate activities when the situation is well understood by the actors and there is little incentive for members to cheat. Without division or defection risk, this is a relatively simple coordination problem. More collective or more formal contractual relationships may be required as parties to an agreement have somewhat different preferences or face greater temptations to cheat. Moving up and to the right, the higher transaction costs of governance mechanisms
would not be warranted unless the risks involved are sufficiently high that a lower cost mechanism would not be effective.

Figure 3 illustrates this hypothesis by comparing two mechanisms that differ in their transaction cost and effectiveness profiles. The horizontal axis represents risk of incoordination, inequity, or defection in collaboration efforts and the vertical axis represents both the transaction costs and the expected gains from resolving the dilemma. In order to provide a zero-one scale to compare across different dilemmas, both costs and gains are divided by the current value of the highest attainable gain from the (pareto optimal) resolution of the dilemma. Thus, gains represent the efficiency of the mechanism in terms of the proportion of the optimal resolution that is achievable for a given level of risk.

Mechanism A represents mechanisms such as an informal network that impose minimal transaction costs on the actors when collaboration risk is low. As the degree of collaboration risk increases, the optimal gain achievable by this mechanism requires added investments in design elements that increase transaction cost, as reflected in the increasingly steep upward-sloping solid line. Even with the optimal design for a given risk scenario, the expected gains cannot be maintained as risk increases, as indicated by the increasingly steep decline in the dotted line representing expected gain in Figure 3. In the policy network example, more investment in relationships would be necessary as collaboration risk increases, but even the strongest informal bonding relationships may be insufficient to keep partners participating as the temptation to defect increases.

Mechanism B in Figure 3 might be a multilateral interlocal agreement which imposes considerably higher transaction costs on participants even if collaboration
risks are low, but the costs increase more slowly and expected gain decays more slowly in response to higher risk when compared with mechanism A; formal contractual relationships require more effort to establish than informal relationships or agreements, but the availability of third-party enforcement can provide more effective commitments in moderately risky collaboration dilemmas.

The incentives for participation in either mechanism for a dilemma with a given level of risk will depend on the net benefits, as determined by the difference between the expected gains and costs. Mechanism A has positive net benefits in the example for all risks below 1.4, as indicated by the gray area in the graph. Mechanism B has net benefits for higher levels of risk than mechanism A, as the costs increase more rapidly while the benefits drop more rapidly for mechanism A than B at higher levels of risk. Once the level of risk exceeds the intersection of cost and gain curves, neither mechanism provides positive net benefits and there would be no incentive for voluntary participation in either mechanism. Because the costs are so much less at lower risk for mechanism A than mechanism B, A would be preferred over B until net returns are equal (e.g., the same distance between cost and benefit curves) as indicated by the line at risk = 1 in Figure 3.

**Accounting for Collaboration Risk**

This general proposition and its assumptions offer a simple unified perspective linking ICA dilemmas and mitigating mechanisms. Applying the framework to real-world cases is more complicated because we need to diagnose three sources of collaboration risk: (i) the specific nature of the underlying ICA dilemma; (ii) the distribution of preferences within and across the jurisdictions or organization affected by the dilemma; and (iii) the higher-level rules, local political institutions, and existing ICA mitigation mechanism in place.

**Types of ICA Dilemma**

An initial step in applying the ICA framework is to identify the nature of the dilemma that local actors face. The nature of the ICA dilemma is critical to the emergence and effectiveness of the governance mechanism in Table 1. There are a multitude of potential ICA issues, but the most common in practice involve: (i) coordination gains from matching service delivery activities across jurisdictions; (ii) economies of scale in the production of infrastructure; (iii) minimizing common pool resource problems; or (iv) internalizing externalities imposed by other local authorities. With each problem, local entities confront a different set of incentives which then influence the likelihood that they will cooperate (Steinacker, 2010).

The achievement of coordination gains and scale economies in service production has long been seen as a primary motivation for interlocal collaboration in metropolitan areas (Kwon & Feiock, 2010). Cost savings or economic efficiencies are possible simply by coordinating ongoing activities with other jurisdictions to reduce redundancy or take complementary action (Bel, Fageda, & Mur, 2012; Kwon & Feiock, 2010). For a relatively simple coordination or matching problem, the
informal mechanisms to the left on Figure 1 have the potential to solve the coordination problems without imposing costs on each jurisdiction.

Coordination to achieve scale economies is more complex for urban services, especially those that involve large-scale, capital-intensive investments. Organizational economists argue that the specificity of assets employed in an exchange and the difficulty of measuring the outcomes and performance create risk for potential partners (Williamson, 1985). Transaction-specific durable investments that cannot be redeployed to other uses create risks arising from mutual dependencies. If an agreement requires governments to make long-term specific commitments it limits their options if the other party reneges.

Coordination produces a lower average cost for all the affected governments because they will not duplicate the expensive infrastructure within their smaller geographic areas, creating compatible incentives (Bel et al., 2012). However, large investment in a specific fixed asset puts the government that commits to its provision at risk because it needs the contribution of other governments to help pay for the service in order to cover what would otherwise be unused capacity built into the system. Measurement difficulties increase search costs and make coordination, monitoring, and enforcement more difficult when outcomes of services are not easily disaggregated (Ferris & Graddy, 1986; Hefetz & Warner, 2012; Warner, 2012).

The largest government in the area may take the lead and provide the service but only commit to the larger scale if there is a legally binding guarantee of payment from the smaller governments. The risks associated with building excess capacity may require solution mechanisms depicted more to the right on Figure 1 that rely on contractual enforcement or governmental authority such as a special district or long-term service contracts with all the participating governments. As each government service achieves economies of scale at different levels and only a handful experience extreme scale effects, these issues will be handled as single issues, falling in the bottom row of Figure 1 with a narrow scope.

Common pool resource (CPR) problems have partially compatible incentives for most units. Cooperation will lead to greater preservation of the underlying resources; however, while there is an incentive to preserve the good, there is also an incentive to extract as much of the resource as possible while others continue to constrain their use. Even if risk in a CPR is moderate, it continues across time, so each participating government decides if they will honor the lower demand placed on the CPR in each time period. Where future benefits from continued cooperation remain high, embeddedness and contractual authority may be adequate to sustain the effectiveness of the governance mechanism. Embeddedness in networks or working groups provides the mild reinforcement of continued working relationships and greater information about the participants. As the individual gain from defection increases, stronger structures are needed. This could take the form of more formal arrangements, such as movement to legal contracts or partnerships, or an increase in connectivity or scope of policy relationships so that the cost from defecting in the CPR arena may jeopardize benefits gained in another policy arena.

Negative externality problems create the hardest case because incentives of local authorities are directly opposed. The governmental entity that imposes a negative
externality on its neighbors has no incentive to alter its behavior. Each jurisdiction directly benefits from oversupplying the negative externalities or undersupplying the positive ones. Both establishing an initial agreement and maintaining it over time is problematic. If the costs of the continuing externality situation are extremely high, the resolution is likely to require a single authority with the capacity to integrate the impacts across a larger geographic area such as the governance arrangements on the right-hand side of Figure 1.

Preference Distribution Within and Across Units

In order to empirically capture the relationships underlying our framework, we need to understand the extent to which the interests of participants in the ICA dilemma diverge. In a previous work, Feiock (2007, 2009) links the extent of social, economic, structural, and political diversity or homogeneity within and across composite units such as organizations and governments, to collaboration preferences and the costs of aggregating those preferences.

Community homophily in terms of the racial, economic, partisan, and ideological composition of citizens in a jurisdiction reduces decision costs in aggregating preferences. Homophily also facilitates accountability. It is easier for local officials to speak for the jurisdiction in bargaining and negotiating with other organizations and governments when they represent more homogeneous communities.

Similarities and differences across potential collaborators also have important implications. Buchanan and Tullock (1962) introduce the concept of external costs to describe the risks individuals bear from agreeing to accept decisions that might deviate from their own preferences. Homophily provides a safeguard against political and economic power asymmetries that would advantage one of the parties and create problems for negotiating fair divisions of benefits (Gerber, Henry, & Lubell, 2013). Proximity matters because neighbors have incentives to cooperate based on the costs of sharing services (Minkoff, 2013). Shared borders create repeat play among neighboring jurisdictions that constrains opportunism and provide opportunities for mutual commitments to common goals.

Existing Institutions

In order to empirically capture the relationships underlying the general proposition depicted in Figure 3, we also need to identify the institutional structures under which local actors interact including higher-level rules, local political institutions, and extant ICA mitigation mechanisms (Feiock, 2007; Post, 2004; Zeemering, 2012).

Hierarchically imposed rules shape the strategies available to each of the actors in their individual efforts to capture the benefits and minimize the costs of collaboration. In the United States, incentives and constraints vary tremendously across states, some facilitating but others impeding the effectiveness and availability of various mechanisms (Feiock, 2008; Krueger & Bernick, 2010). For example, restrictions on new municipal incorporations are likely to increase existing cities’ bargaining power (Feiock & Carr, 2001).
The incentives that motivate the actions of public officials who participate in these decisions are shaped by the institution structures at the local level (Bae & Feiock, 2013; Choi, Feiock, & Bae, 2013; Clingermayer & Feiock, 2001; Zhang & Feiock, 2010). Many scholars study the influence of selective interests and incentives on policy decision making and the design of public agencies based on a transaction cost theory (Burns, 1994; Dixit, 1996; Epstein & O’Halloran, 1999; Feiock, Jeong, & Kim, 2003; Frant, 1996; Miller, 2000). Both executive and legislative institutions are linked to interlocal cooperation. Understanding the consequences of different institutions has been a major theme in this literature (Carr & Karuppusamy, 2009; Feiock et al., 2012; Frederickson, Johnson, & Wood, 2004). To the extent that these institutions shape the motivations and strategies of local actors, common structure reduces uncertainty and risks in collaboration.

The existing set of mechanisms for resolving collective problems also influence the risks of participation in new ones. For example, regional organizations might complement and support self-organizing mechanisms by providing critical resources such as information, administrative capacities, and social capital to member governments that reduce risks for encompassing mechanisms such as bilateral and multilateral contacting and informal network information sharing (LeRoux, Brandenburger, & Pandy, 2010). Highly encompassing institutional mechanisms might also encourage exchanges among members by playing a “network broker” role (Provan & Milward, 2001).

Alternatively, centralized authorities and regional entities might substitute for more voluntary self-organizing mechanism cooperation through their centralized structure and activities. The ICA framework provides an integrated view of the roles of centralized and encompassing mechanisms and their influence on narrowly focused and self-organizing mechanisms by taking into the account interactions among multiple integration mechanisms. For example, councils and districts can be the product of collective action among decentralized governmental units as “creatures of local governments.” Alternatively, regional organizations can be mandated through consolidations or creation of regional districts by higher-level governments. In the latter case, they are regarded as “creatures of the state” and have broad obligations that are at least partially imposed by central authorities. Decentralized relations may complement self-organizing efforts among local governments for solving common problems, but more centralized and encompassing structures and solutions sometimes crowd out voluntary self-organizing collaboration efforts (Brooks, 2000; Kwon, Feiock, & Bae, 2012; Lubell, Schneider, Scholz, & Mete, 2002).

Highly encompassing collective mechanisms such as regional multipurpose governments, special districts, and multilateral mechanisms are fundamentally different from more narrow and individualistic mechanisms such as agreements that a single organization enters into with one or more other local authorities because they apply to all affected stakeholders (Andrew, 2009a; Feiock, 2009). Nevertheless, collaborative agreements between individual local governments are often formed within the boundaries of a larger collective institution. Thus, it is important to understand how the degree to which an actor participates in the regional organization and the level of
activity of the regional organization influence individual-level collaborative exchanges occurring among member governments. Sources of collaboration risk related to preference distribution and existing institutions are summarized in Table 2.

Empirical Applications of ICA Framework

In the last few years the ICA framework has gained considerable traction because it provides a rigorous and theoretically informed framework for understanding and integrating the large descriptive and historical literatures on the administrative design of centralized and decentralized governance structures and the rapidly evolving literatures on network governance and network management. It has also stimulated a substantial body of empirical research that examines assumptions and tests hypotheses generated from the framework. This section provides an overview of this literature and research to highlight important findings and their implications for further development of the ICA framework.

The ICA approach has been applied in a number of policy arenas. The largest bodies of empirical work have focused on resource management especially water resources (Berardo, 2009; Berardo & Scholz, 2010; Schneider, Scholz, Lubell, Mindruta, & Edvardsen, 2003; Scholz, Berardo, & Kile, 2008) and on local economic development (Feiock et al., 2012; Feiock, Lee, Park, & Lee, 2010; Lee, Feiock, & Lee, 2012; Minkoff, 2012, 2013). The ICA framework has also been applied to the study of regional planning (Gerber et al., 2013), public safety (Andrew, 2010), emergency management, land use and service delivery in metropolitan areas (Krueger & Bernick, 2010), and other areas. Recent work has expanded the focus of the ICA framework to examine service multiplexity (Shrestha & Feiock, 2009) and complex interactions among policy arenas (Lubell et al., 2010). While each of the mechanisms for resolving ICA dilemmas has been subject to previous work, a rich literature linking them to specific problems, risks, and transaction costs has been developed in recent years. The literature on informal networks to address local dilemmas in particular has expanded rapidly.

Efforts at voluntary creation of a consolidated metropolitan general purpose government most often fail. The ICA framework accounts for this as a result of political conflict and the availability of alternative, less costly integration mechanisms (Carr & Feiock, 2004). The political and administrative costs of creating regional governments limit the scope of consolidation and special district solutions to a narrow range of ICA dilemmas. An extensive literature focused on these managed service implementation networks has been developed (Agranoff & McGuire, 2003; Bardach, 1998; Grady & Chen, 2006; Mandell, 2001; Meier & O’Toole, 2002; Milward & Provan, 2000; Provan & Kenis, 2008). Regional authorities can be created and imposed by higher-level governments to integrate overlapping functions. For example, many states use regional-level multipurpose special districts to mitigate the horizontal problem of metropolitan service provision for geographic consolidation of services like planning, resource management, schools, or emergency services (Andrew, 2009a; Mullin, 2009). Kwon et al. (2012) examined how transaction costs...
Table 2. Actor and Institutional Sources of Collaboration Risk

<table>
<thead>
<tr>
<th>Preference distributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference divergence across units</td>
</tr>
<tr>
<td>Economic, demographic, and ideological similarity among authorities</td>
</tr>
<tr>
<td>Similarity in preferences in public goods provides information and signals common interests that minimize external decision cost of acceptance of collective choices contrary to internal preferences.</td>
</tr>
<tr>
<td>Community homophily</td>
</tr>
<tr>
<td>Economic, demographic, and ideological similarity among citizens of a governing authority</td>
</tr>
<tr>
<td>Homophily in the socioeconomic and ideological political basis for valuing public goods produces common interests and reduces agency problems and the cost of aggregating preferences.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher-level rules</td>
</tr>
<tr>
<td>The existing set of statues and case law—the externally impose rules</td>
</tr>
<tr>
<td>The powers and responsibilities delegated to local units or retained by higher-level governments determine the specific authority of each venue in each arena and shape the strategies available to each of the actors in their individual efforts to avoid negative externalities and capture positive externalities.</td>
</tr>
<tr>
<td>Political structure</td>
</tr>
<tr>
<td>Forms of government, electoral representation, and other political system structures</td>
</tr>
<tr>
<td>Electoral systems and the structure of executive authority of individual shape the information available and the incentives faced by leaders of individual authorities. Common structures across authorities constrain risks of opportunistic behavior.</td>
</tr>
<tr>
<td>Existing local institutions integrating institutional collective action problems</td>
</tr>
<tr>
<td>The interaction among various mechanisms for integrating fragmentation</td>
</tr>
<tr>
<td>One integration mechanism may complement another and reduce the transaction costs of its adoption. Alternatively, one mechanism may substitute or crowd out another by increasing its cost.</td>
</tr>
</tbody>
</table>
influence the performance of regional districts. Tavares and his associates report similar results for Portuguese local governments and confirm the importance of transaction costs in collaboration decisions (Rodrigues, Tavares, & Araújo, 2012; Tavares, 2010; Tavares & Camões, 2007).

Single-purpose special districts provide a less obtrusive means of internalizing unconsidered impacts over a broad geographic area for a specific function. Farmer (Farmer, 2010; Carr & Farmer, 2011) examines transaction cost effects of state legal constraints on local boundary choices and their consequence for efforts to form single-function districts.

Councils of governments (COGs) and other regional organizations are focused on collective and multipolicy relationships among local actors. They take a variety of forms (Carr, Gerber, & Lupher, 2008). The most common form in the United States are regional COGs and metropolitan planning organizations (MPOs), designed to manage federal transportation issues in metropolitan areas by allocating federal funds. Gerber and Gibson (2009) examine dilemmas arising in MPOs from each city’s incentive to pursue local rather than regional interests.

Partnerships and other multilateral interlocal agreements are entered into voluntarily by local units. Some obligations may be negotiable but they generally require participants to accept common terms of agreement and obligations for action. Partnerships often include both public and private organizations and take on a broad functional area. For example, regional economic development partnerships have become an increasingly popular approach to organizing regional economic development efforts (Feiock, Steinacker, & Park, 2009). Development partnerships are an “alliance formed by local governments, often with the help of private sector firms and nonprofit organizations, which has a mission of enhancing the economy of a multijurisdictional area” (Olberding, 2002, p. 483). Watershed partnerships are another example of a regional mechanism that collectively addresses a wide variety of water-related issues at the watershed level, relying on collaborative participation by governmental and nongovernmental actors (Lubell et al., 2002). A growing literature based on the ICA framework links the formation and performance of partnership organizations to the transaction costs of collaborative actions (Andersen, 2011; Andersen & Pierre, 2010; Lee & Park, 2007; Park & Feiock, 2007; Pierre, 2011).

Contract networks link individual units through joint ventures and service contracts that require the consent of those involved (Kwon & Feiock, 2010; Zeemering, 2012). This set of governance tools preserves local autonomy while providing a formalized mechanism for resolving externalities and other issues of concern to the parties (Bel et al., 2012; Warner, 2012). The work of Manoj Shrestha (Shrestha, 2010; Shrestha & Feiock, 2009, 2011) investigates pay-for-service contracts and how local governments reduce risk by embedding relationships within a larger set of contractual agreements. Christopher Hawkins and his associates have investigated the influence of various transaction costs on participation in joint ventures (Hawkins, 2009, 2010; Hawkins & Andrew, 2010, 2011; Hawkins & Feiock, 2011).

Multilateral agreements link multiple actors through self-binding agreements. Carr, LeRoux, and Shrestha (2009) use data describing service production arrangements of cities in Michigan to examine the proposition that service production
decisions are conditioned by the communication networks created through institutional linkages in addition to the transaction characteristics of services. Mutual aid agreements for emergency management are perhaps the most prominent examples of multilateral agreements (Andrew & Hawkins, 2013). Andrew (2010) explores how interlocal agreements can be structured to provide adaptability to address various ICA issues faced by local actors. He finds that interdependent risks posed by the opportunism of contracting partners can best be controlled by mutually reciprocating, overlapping relationships within closed subgroups that are associated with the development of trust and social capital. This is also supported in transportation and economic development (Minkoff, 2013).

Multiplex self-organizing systems rely on embeddedness for policy coordination (Bae & Feiock, 2012; Shrestha & Feiock, 2009). Agreements that are difficult to negotiate individually may be more feasible when they are embedded in a set of relationships for a related policy. Multiple relationships between a pair of actors signify more trust and, therefore, greater chances for future exchanges. Likewise, cross-policy reciprocal relationships can provide both parties greater assurance for much more stable exchange than if the relationships are one directional. Because agreements often overlap, they may also be supported by norms of reciprocity (Thurmaier & Wood, 2002). Andrew (2009b) argues that ties developed locally produce general patterns of regional integration as bilateral ventures, agreements, and contracts create a unique formation of contractual ties at the macro level.

Working groups or councils meet regularly on an informal basis to share information and coordinate service activities. Working-group coordination often takes the form of routine interactions among professionals or community conferences (LeRoux & Carr, 2007). In the Tampa Bay, Florida area, city managers in the coastal communities meet monthly over lunch to share ideas, information, and informally coordinate actions through mutual consent without any formal authority or enforcement mechanism. Andrew and Carr (2012) examine participation by officials from 73 local governments in regional emergency preparedness planning committees in the Dallas–Fort Worth metropolitan area. Their analysis supports the proposition that bonding structures within these groups produce more active participation.

Policy network structures emerge unplanned from interactions among local actors. Informal networks coordinate complex decisions within the formal structure. They preserve full local autonomy and require no formal authority, although higher-level government can influence their development (Schneider et al., 2003). The overall structure of a network often emerges from simple, but prominent, structural network components, which, in turn, can be used as building blocks to succinctly describe the network (Lubell et al., 2010; Robins, Pattison, Kalish, & Lusher, 2007; Snijders, Pattison, Robins, & Handcock, 2006). Informal policy networks and their structures are expected to reflect both coordination problems among potential partners and cooperation dilemmas (Berardo, 2013; Berardo & Scholz, 2010; Scholz et al., 2008). The ICA framework informs the partner selection problem by providing cues to decide with whom to build relational ties (Feiock & Scholz, 2010). The structure of interorganizational networks can be viewed as a macro phenomenon that emerges from the micro-level decisions of organizations seeking to gain access to resources
and to minimize the uncertainty associated with choosing collaboration partners. In high-risk situations, trustworthiness and credible commitments become more important than information in guiding the selection of network partners (Berardo & Scholz, 2010; Scholz et al., 2008). Therefore, actors seek relationships to monitor others’ activities (Feiock et al., 2012).

This work has informed the development of the taxonomy of mitigation mechanisms. Taken together, these studies support the applicability of frameworks across a variety of types of ICA dilemmas and confirm the predicted differences across problems of coordination and cooperation. This work provides strong support for the hypothesis that as collaboration risks increase, the structure of collaboration mechanisms incorporates safeguards to protect participants from these risks.

The relationships and interactions among mechanisms have also been explored. Thurner (2010) identified how the formal structure of the European Union facilitated informal interactions among ministry chiefs to address collective problems. Thurner’s analysis suggests that characteristics identified from the self-organizing informal systems contribute to more efficient design of central authority. On the other hand, Kwon et al. (2012) find that regional authorities can crowd out informal networks and interlocal agreements.

There have also been attempts to extend the ICA framework to additional contexts and international settings. Several studies have applied the ICA framework in international contexts including investigation of integrative mechanisms for policy collaboration in Korea (Park, 2012), Portugal (Tavares & Camões, 2007), Norway (Andersen & Pierre, 2010), and the EU (Thurner, 2010). In each of these settings, the ICA framework proved useful for describing the alternatives for addressing the ICA dilemmas and testing predictions of mechanism choice.

Most recently, the framework has been extended to examine contracting and collective action by nonprofit service delivery organizations and nongovernmental organizations to address local ICA dilemmas through voluntary sector action or partnerships with governmental organizations. Jang (2012) examines the ICA dilemmas faced by nonprofit service delivery organizations and how choices of integrating mechanisms are shaped by transaction costs (Jang, 2012; Jang, Feiock, & Saitgalina, forthcoming). Lee, Lee, and Feiock (2012) examine interorganizational collaboration networks in economic development that link public, for-profit, and nonprofit organizations in efforts to address issues of functional and organizational fragmentation in local development policy. These applications of the ICA framework across different countries and sectors have produced findings consistent with the studies of local governance in the United States and lend support for the taxonomy of mechanism presented here.

**Discussion**

The purpose of this essay is to map the general relationship between ICA dilemmas and the array of mechanisms that have evolved to mitigate these dilemmas. The emphasis has been on matching the potential gains and transaction cost profiles of different mechanisms with the collaboration risks faced by decision
makers defined by the nature of the problem, the composition of the actors, and existing institutions. The next phase of development needs to focus on interactions and dynamics that we have mentioned but not elaborated here. The concepts of risk, gains, and transaction costs in this simplified perspective aggregate many factors that can interact in important ways that require more disaggregated analysis. For example, the costs and benefit curves of each mechanism can be examined in relation to the different types of collaboration risk that are combined in this analysis.

Furthermore, different mechanisms and different rules within each mechanism affect not only the expected gains, but the distribution of these gains over different sets of actors. Incentives to participate are influenced by distributive as well as the efficiency consequences of the mechanism, and the particular nature of the ICA dilemma may induce other incentives as well. For example, local and central actors may seek centrally imposed solutions such as when a local government surrenders authority over a troublesome policy dilemma in order to avoid being blamed for unsatisfactory outcomes or being pressured by powerful interests, as when municipal governments transfer healthcare functions to counties and special districts.

Similarly, powerful constituencies that are most affected by a dilemma may oppose efficient mechanisms if they can more readily influence decision making under an alternative mechanism. Thus, the anticipated redistributive aspects of these mechanisms are important to understand not only for normative concerns about the benefits from self-organizing governance but also for understanding the incentives of those involved in developing them. Instead of assuming that the structure of the mechanism is exogenously determined by some statutory authority and analyzing only on the effects of that mechanism, we need to examine the forces that generate solutions to the ever-changing problems of fragmentation and centralization in policy systems.

The mechanisms available for dealing with local ICA dilemmas vary considerably from state to state and country to country. They also vary across different specialized policy areas and functions. Their existence underscores the extensive task awaiting scholars analyzing the ability of any given mechanism to resolve a given ICA problem. The comprehensive investigation of the evolution of mechanisms to address ICA dilemmas over time must account for differences in service types, local conditions, political institutions, and the structure of relational networks. Such an undertaking might start by mapping the structure of intergovernmental institutions, organizations, agreements, and networks across a small set of metropolitan regions. The broader research agenda would need to investigate governance arrangements in multiple states or countries to account for variation in higher-level government rules and examine a broad set of public goods and services.

The public administration debate between centralized and decentralized governance mechanisms is now being played out across the social science and applied policy fields (Hooghe & Marks, 2003). Many scholars have addressed the importance of different governance arrangements for solving collective problems (Gulick, 1957; Walker, 1987). The ICA framework provides a road map and analytic tools to continue this journey.
Richard C. Feiock is the Augustus B. Turnbull Professor of Public Administration at the Askew School of Public Administration and Policy and holder of the Jerry Collins Eminent Scholar Chair. He directs the Center for Sustainable Energy and Governance, and he was the founding director of the Local Governance Research Program and Laboratory program at Florida State University. His research and teaching interests are in urban and regional governance and policy networks. He has published widely on issues of local government and governance.

Note

I wish to thank John Scholz, Annette Steinacker, and the symposium editors for sharing their ideas and insights that greatly improved this paper. Helpful comments were also provided by Simon Andrew, Ramiro Berardo, Jayce Farmer, Quian Hu, Hee Soun Jang, Scott Minkoff, Megan Mullin, Hyung Jun Park, Manoj Shrestha, Antonio Tavares, and the symposium participants.

1. Institutional collective action dilemmas can also arise within a single decentralized organization where specific programs policies or function is the responsibility of individual subunits.

References


