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RESEARCH ARTICLE

Transitioning from planning to implementation: comparing collaborative governance and developmental dynamics in 4 watersheds

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Abstract
Collaboration is a dynamic process where regimes emerge, go dormant or extinct, only to resurface with new members, names, forms, geographic scopes, and new purposes. This paper explores the transitions collaborations make when they move from provision (e.g., problem definition, planning, policy development,) to production (e.g., implementing projects, delivering services, etc.). The paper utilizes the Collaborative Life-Cycle Framework to explore the transitions from provision to production in 31 collaborations that emerged in four watersheds in the United States—Delaware Inland Bays, Narragansett Bay, Tampa Bay, and Tillamook Bay. Our analysis found that some collaborations engaged in what we call mixed services (e.g., planning for the transition to production). While this additional stage took more time, those that did not engage in mixed services had less success in the production phase. It was also clear that some collaborations were clearly involved in "governance", while others were focused only on provision and/or production. The paper concludes with a discussion of the implications for theory and practice.

Keywords Collaboration · Collaborative governance · Network governance · Planning · Implementation · Transitions · Collaborative Life-Cycle Framework

Introduction

Collaboration is a dynamic process where regimes emerge, go dormant or extinct, only to resurface with new members, names, forms, geographic scopes, and new strategies or purposes. This iterative process realigns and restructures collaborations in ways that provide varying degrees of coordination, control, and direction for the members allowing

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them to accomplish tasks or enhance the governance of the interorganizational system in which its members are embedded (Amburgey et al., 1993; Imperial et al., 2016; Ulibarri et al., 2020). Much of the scholarship focuses on collaborations as they form, as well as processes used to develop a policy or plan meant to guide future implementation. Less research focuses on whether collaborations successfully transitioned to implement policies or plans. While making the successful transition from planning to implementation is critical to address the public policy problems motivating their initial activation, collaboration scholarship rarely focuses directly on how collaboratives make the transition or how they navigate the structural changes needed to implement policies. Furthermore, the same scholarship often assumes that governance is associated with all collaborative efforts—yet, in practice, collaborative governance is not always observed and, potentially, not needed for successful outcomes.

This study builds on the Collaborative Life-Cycle Framework utilized by Imperial and his colleagues (Bell & Olivier, 2022; Chen & Sullivan, 2023; Imperial, 2023; Imperial et al., 2016; Siddiki & Ambrose, 2023; Ulibarri et al., 2020; Zhou & Dai, 2023) to better understand how collaborations shift from planning to implementation in the context of collaboration with and without governance. The Collaborative Life Cycle Framework was developed to synthesize the dynamic changes that are frequently noted but inconsistently explored due to different terminology in the collaborative governance literature (e.g., Sydow, 2004; Sydow et al., 2009; Sandström et al., 2015; Habron, 2003; Dwyer et al., 1987; Ring & Van de Ven, 1994; Popp et al., 2014; Waddock, 1989; Wang & Ran, 2023). Despite the variable terminology, researchers seem to agree that the initial stages of collaborations focus on building relationships while the later stages focus on stability and getting things done (Forsyth, 2014; Mandell & Keast, 2008; Popp et al., 2014). The Collaborative Life-Cycle Framework synthesizes these ideas into a four-stage model. The *activation stage* is the turbulent period of network formation. The *collectivity stage* is exemplified by high member cohesion and reliable network processes. The *institutionalization stage* marks the solidification of network processes. The final stage is *stability, decline, re-orientation, or re-creation*, which recognizes the various paths mature networks follow. In addition to these stages, collaborations can be defined by the main activity in which they engage—planning or implementation. Some collaborations remain focused on planning while others remain focused on implementation. Thus, we acknowledge here not all collaborations are meant to transition. Yet, despite being understudied in scholarship, a collaboration's transition from planning to implementation is critical as it represents that practical change from making a plan to executing said plan.

A collaboration's ability to re-orient or re-create is particularly important in environmental collaborations, as many have clear planning phases (i.e., identifying salient problems, evaluating potential solutions, and constructing policy/programmatic plans) which evolve into an implementation phase oriented to action and getting work done (Imperial, 2023; Imperial et al., 2016; Poteete et al., 2010; Sabatier et al., 2005). While widely cited collaboration frameworks expect adaptation as collaborations shift from planning to implementation (e.g., Ansell & Gash, 2008; Emerson & Nabatchi, 2015a), little work focuses on how collaborations make the transition. Thus, we further develop the theoretical understanding of the Collaborative Life-Cycle Framework's institutionalization phase and the re-orientations and re-creations that occur as collaborations transition from provision (i.e., planning) to production (i.e., production). Through this work, we better understand the distinctions between collaborations focused on planning versus those focused on implementation. The analysis further reveals that some collaborations emphasize enhancing governance while others do not. Next, the comparative analysis examines how collaborations

transition from planning to implementation and the importance of transaction costs during the transition. Finally, the study concludes by exploring the implications for theory and collaborative practice.

Background

While the terms collaboration and collaborative governance are ubiquitous in the public policymaking literature and practice (Ansell & Torfing, 2022), the use of the terms often remains broad and ambiguous, and sometimes the terms are used interchangeably. However, the conceptual distinction between collaboration with and without governance is important, as they represent different means for structuring action in collaborations. Furthermore, planning and implementation are represented by different actions with different costs. Thus, not only is the distinction between collaboration with and without governance important, but questions remain as to how collaboration's transition to address changing activities between planning and implementation. The following subsections work to: (1) clarify the distinction between collaboration with and without governance; (2) introduce provision and production services as a means of conceptualizing planning and implementation, as well as discussing their associated costs; (3) situate the concepts in the broader collaboration literature; and (4) align these concepts with the Collaborative Life-Cycle Framework.

Collaboration with and without governance

The use of the term "governance" has broad appeal and is used for varying purposes such as referring to properly functioning public administration, improving performance and accountability, multi-level governance or intergovernmental relations, or network governance (self-steering and non-self-steering) (Klijn & Koppenjan, 2016). We are interested here in the latter two uses of the concept. In the context of an interorganizational network, the concept draws attention to the coordinated actions and practices that emerge when a subset of organizations, in the larger interorganizational field, develop stable relationships that endure for considerable periods of time. Presumably, this allows the subset of organizations to collectively deploy organizational resources more effectively. The concept also recognizes that non-state actors (e.g., private and nonprofit organizations) can be involved in the act of governance. Therefore, *governance* focuses on how relationships between organizations in the larger interorganizational field are "structured" by the formal and informal rules, social norms, and organizational structures that coordinate relationships between organizations (Frederickson, 1996; Lynn et al., 2000; Milward & Provan, 2000).

While governance emphasizes action constrained by institutions and resources, the extant literature on governance and collaborative governance often uses terminology loosely, without much conceptual clarity. We argue that the phenomenon of collaboration does not require the higher order coordination required by governance. Following Phillips et al.'s (2000) suggestion, we join others who define *collaboration without governance* broadly as any joint activity by two or more organizations intended to create public value by working together rather than separately (Bardach, 1998; Imperial, 2005a; Moore, 1995). This definition is inclusive enough to encompass a wide range of relationships between governmental and nongovernmental organizations. For example, Imperial (2005a) identifies a wide range of operational level collaborations that share resources to get projects

done. The focus on 'getting projects done' is important, as the individuals and/or organizations are collaborating to complete an activity that produces public value, but they do not coordinate shared/mutually understood objectives (Ansell & Gash, 2008; Emerson & Nabatchi, 2015a). Furthermore, the critical characteristics of (1) 'joint activity' and (2) 'working together' also distinguish collaboration from other forms of interorganizational activity relying on markets or hierarchical control mechanisms (Imperial, 2005a; Lawrence et al., 2002; Powell, 1990). Collaboration can be used for many purposes—for example, multiple organizations may collaborate to produce an environmental education campaign, complete a habitat restoration project, or work with landowners to install conservation practices. These activities can create public value through joint activity and working together (Imperial, 2005a), but they do not necessarily require shared objectives amongst organizations.

Thus, in contrast to collaboration without governance, we define collaborative governance as *collaboration with governance*, or the joint action by two or more actors for the express purpose of *achieving direction, control, or coordination* of individuals and organizations with varying degrees of autonomy to *advance joint objectives* (Frederickson, 1996; Imperial, 2005a; Lynn et al., 2000). Thus, the actions observed in collaboration without governance are similarly performed, but collaboration with governance necessitates the higher order expectations of governance, namely: (1) achieving direction, control, or coordination and (2) advancing joint objectives. Returning to the earlier examples, a group of actors may collaborate to complete a habitat restoration project or work with landowners to install conservation practices that advance a set of shared policies or goals that were established to steer and coordinate actions over some period (Imperial, 2005a).

Since governance is viewed as the institutions or structures used to achieve direction, control, or coordination across individuals or organizations, a collaboration's structure will influence its capacity for governance. Pragmatically, the collaboration's structure does not guarantee the higher order outcomes (i.e., direction, control, or coordination), rather it creates the *capacity* for some level of governance. Fundamentally, collaborative governance appears to require regular interactions among some subset of actors involved in making shared decisions that shape the act of governing within the interorganizational system. While more research is needed, some obvious manifestations of collaborative governance based on the data described later in this study include: new programmatic structures; shared financial resources; changes to administrative rules, routines, or service delivery systems; shared policies, priorities, performance measures, or other mechanisms that provide means for steering, setting joint direction, coordinating, or controlling individual and joint actions (Imperial, 2005a, 2005b, 2023).

While our differentiation between collaboration with and without governance focuses on structure, it echoes the practical distinction between participation (i.e., incorporating many people to increase the input of information or resources) and inclusion (i.e., the formation of connections between participants resulting in the co-production and co-implementation of policies and programs) made by Quick and Feldman (2011) as well as Arnstein's (1969) ladder of participation. For example, collaboration without governance represents cases where the group's structure promotes stakeholders to participate, with information or resources, but does not give real decision authority to influence the interorganizational system. In this case, stakeholders might be consulted in a citizen round table, but decision-making authority is retained by the agency hosting the event. In another case, stakeholders bring their time, resources, and machinery to implement a habitat restoration project, but decisions of location, ecological design, and plan were already made by a single non-profit group. In both cases, many individuals participate to create public value, but they are not

given authority in decision-making. In contrast, collaboration with governance represents cases where the group's structure allows stakeholders to be included in co-planning and/or co-implementation and have substantive involvement in decision-making. For example, stakeholders included in collaborative fora have a real stake in the outcome but also are given authority to make shared decisions that influence the outputs and outcomes of the collaboration. This distinction is not binary, as collaborative processes can be structured with a low or high capacity for governance that promotes or excludes inclusive, shared decision-making.

Provision and production as different forms of collaboration

The central objective of this study is to better understand the distinction between collaborations used for the purpose of planning and implementation, as well as the transition between these phases (Ostrom et al., 1993). *Provision* (i.e., planning) includes decisions that include: (1) the kinds of goods and services that actors want to be supplied, (2) the quality and quantity of these goods and services, and (3) how to arrange the production of goods and services. Thus, provision is understood as a process of deciding what needs to be done, how it should be done, and who will undertake these actions. *Production* (i.e., implementation) is defined as the more technical or tangible tasks of converting inputs into outputs and thus making a product or rendering a service. Ostrom et al. (1993) argue it is important to consider both provision and production because: (1) collaboration becomes a vehicle for both initiating policy planning and implementation (Innes & Booher, 2003; Leach et al., 2014; Siddiki & Goel, 2017), and (2) each phase is associated with different costs and benefits.

While the costs are less frequently identified, the benefits of collaboration are commonly discussed in literature. For provision, collaborations are said to foster understanding and build relationships among stakeholders (Resh et al., 2014), facilitate joint problem-solving (Doberstein, 2016), and develop contextually appropriate policy solutions (Leach et al., 2014; Muro & Jeffrey, 2006; Ostrom, 1990). For production, collaborations provide flexibility to client and jurisdictional needs (Milward & Provan, 2000; Provan & Kenis, 2008), reduce costs (Ostrom & Ostrom, 2019), and improve innovation in service delivery (Agranoff & McGuire, 2001).

Yet, the tangible or intangible costs of collaboration should be acknowledged. Ostrom et al. (1993) identify two types of costs associated with provision and production: (1) *transformation costs*, or the costs of transforming inputs into outputs, and (2) *transaction costs*, or the costs incurred due to coordination activities (i.e., time, capital, and personnel invested), information searches, and strategic behavior while producing the service. Transformation and transaction costs are associated with different activities in provision and production. Transformation costs associated with provision are: (1) transforming stakeholder preferences and willingness-to-pay for outcomes into demands for packages of service and goods; (2) arranging new financing; (3) monitoring performance; (4) regulating the use patterns of stakeholders; and (5) enforcing compliance with taxation and other resource mobilization measures. Transformation costs for production are more narrowly defined as the costs associated with transforming inputs (i.e., labor and capital) into outputs (i.e., the good or service) (Ostrom et al., 1993). While there are similarities in transaction costs associated with coordination and information across provision and production, the strategic costs vary (Ostrom et al., 1993). While provision must deal with free riding, rent seeking, and corruption behaviors due to information asymmetries, production activities can

suffer from shirking, corruption, adverse selection, and moral hazard. Consequently, while collaboration provides benefits for provision and production, there are real (or perceived) transaction costs associated that influence performance (Imperial, 1999).

A Conceptual framework and link to broader literature

Figure 1 places these two comparisons (e.g. provision and production; collaboration with and without governance) in concert. In doing so, we argue that the distinctions forming the quadrants help explain schisms found in collaboration scholarship that are similar to the politics-administration dichotomy in the field of Public Administration (Frederickson et al., 2018; Kettl, 2000; Mosher, 2016). Admittedly, the authors use different terminology, and some will not view all this scholarship as "collaboration". Yet, the phenomena examined in these research streams fit the definitions of collaboration used in this paper.

Figure 1 notes that collaborations are involved in provision (planning or policy/direction setting) and production (implementation and service delivery). When the policy planning or decision-making side of collaborative governance is emphasized in literature (Ansell & Gash, 2008; Bryson et al., 2006; Emerson & Nabatchi, 2015a) the implementation of the policy decisions is broadly deemphasized or ignored all together. In fact, numerous scholars have called for greater emphasis on the production phase and the need for a greater understanding of the outputs and outcomes of collaborative governance (Avoyan, 2022; Emerson & Nabatchi, 2015b; Koontz & Newig, 2014; Koontz & Thomas, 2006; Rogers & Weber, 2010).

Quadrant I is focused on provision with an emphasis on the importance of collaboration with governance. This includes: numerous collaborative governance case studies (e.g., Gray & Wood, 1991; Emerson & Nabatchi, 2015a; Bingham & O'leary, 2008); research focused on thick forms of public participation (Nabatchi & Leighninger, 2015; Nabatchi, 2012; IAP2, 2007); scholarship focused heavily on the importance of stakeholder participation in decision-making (e.g., Arnstein, 1969; Bingham et al., 2005; Quick & Feldman, 2011); and some notable theory building efforts (e.g., Ansell & Gash, 2008; Bryson et al., 2006; Emerson & Nabatchi, 2015a). This literature often has a strong normative orientation

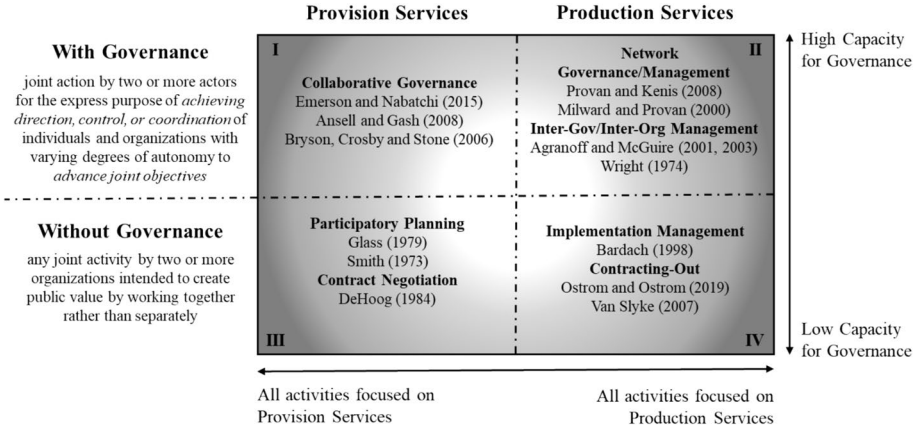

Fig. 1 Theoretical framework and streams of collaboration scholarship

towards broad stakeholder inclusion in decision-making given that governance is a central focus for researchers.

When the production phase (i.e., implementation) is emphasized (network governance, cross-jurisdictional service agreements, etc.) (Agranoff & McGuire, 2001, 2003; Milward & Provan, 2000; Provan & Kenis, 2008), how policy decisions were made is often deemphasized. By way of contrast, Quadrant II represents notable examples that focus rigorously on production with governance while deemphasizing provision. This scholarship is largely the outgrowth of earlier research on implementation and implementation structures (Imperial, 2021) and emphasizes the work done by collaborations and networks. Notable streams of scholarship include: interorganizational collaboration (Agranoff, 2012; Imperial, 2005b); network governance and management (e.g., Milward & Provan, 2000; Provan & Kenis, 2008; Provan & Milward, 2001); and inter-governmental and inter-organizational management (e.g., Agranoff & McGuire, 2001, 2003; Wright, 1974). The focus of this scholarship is often more pragmatic and emphasizes the complexities of the governance structures needed to produce and deliver goods and services.

Figure 1 also notes the difference between collaboration with governance and without governance. Quadrant III in Fig. 1 includes scholarship focused primarily on provision that relies on decision-making structures limiting the ability to enhance the governance system or constrain stakeholders' ability to engage in shared decision-making. Notable examples include the scholarship on traditional forms of public participation (e.g., use of advisory committees) and participatory planning (e.g., Glass, 1979; Newig et al., 2018; Smith, 1973) where organizations collaborate and contribute to the development of a plan, but decision-making authority remains in the hands of a single stakeholder. Contract negotiation would be another stream of research that fits in this quadrant (e.g., DeHoog, 1990). Quadrant IV focuses primarily on production and includes scholarship where the primary focus is on collaboration and getting things done (e.g., Bardach, 1998), contracting out (e.g., Ostrom & Ostrom, 2019; Van Slyke, 2007), and other forms of interorganizational policy implementation that focus primarily on service delivery. In these instances, collaborations are focused primarily on accomplishing joint tasks rather than reconfiguring or enhancing the broader governance of the interorganizational system.

Integrating concepts of interests into the collaborative life-cycle

While collaborative scholarship often focuses on activities within one of the quadrants in Fig. 1 or ignores the distinctions as collaborations move from one quadrant to another, these distinctions are important and interrelated. Mainly, governance, by definition (see Table 1), represents the institutions and resources that structure action (Frederickson, 1996; Lynn et al., 2000; Milward & Provan, 2000). Thus, varying degrees of collaboration with and without governance manifest as more or less structure in the coordination of joint activities across autonomous actors (Frederickson, 1996; Imperial, 2005a; Lynn et al., 2000). Furthermore, as Ostrom et al. (1993) argue, it is important to distinguish between provision and production as these stages represent different activities associated with different costs and benefits. At the minimum, the transition between provision and production represents a change in the nature of collaboration activities. At the maximum, it requires different structures with different distributions of the costs and benefits among actors (Imperial, 1999).

Changing the structure of collaborations as they transition from planning to implementation dovetails well with the Collaborative Life Cycle Framework (Bell & Olivier,

Table 1 Terms & conceptual focus

Term	Definition	Conceptual Focus
Governance	The institutions and resources used to achieve direction, control, and coordination between individuals (and organizations) who possess varying degrees of autonomy to advance joint objectives across the group of organizations	Action constrained by institutions and resources
Collaboration without Governance	any joint activity by two or more organizations intended to create public value by working together rather than separately	Joint activity without joint objectives
Collaboration with Governance	joint action by two or more actors for the express purpose of *achieving direction, control, or coordination* of individuals and organizations with varying degrees of autonomy to *advance joint objectives*	Joint activity with direction, control, or coordination and joint objectives
Provision	the decisions made through collective choice mechanisms that include but are not limited to: (1) the kinds of goods and services that actors want to be supplied, (2) the quality and quantity of these goods and services, and (3) how to arrange the production of goods and services	Planning Activities
Production	the more technical or tangible tasks of converting inputs into outputs and thus making a product or rendering a service	Implementation Activities

2022; Imperial et al., 2016; Ulibarri et al., 2020), particularly the final stages of re-orientation and re-creation. *Re-orientations* in collaborative groups represent a modification of activities to: (1) alter communication patterns or mechanisms for making decisions, or (2) establish other new processes (Imperial, 2023; Imperial et al., 2016; Ulibarri et al., 2020). Re-orientation returns the group to the second stage of the framework, collectivity, where actors largely focus on establishing internal processes. *Re-creations* shift the core values or purposes of the collaborations requiring not only new activities but potentially new members, institutions, and resources (Imperial, 2023; Imperial et al., 2016; Ulibarri et al., 2020). Re-creations represent a more dramatic cycling, shifting collaborations back to the first stage of the framework, activation. Since the shift from planning (i.e., provision) to implementation (i.e., production) signifies a fundamental shift in activities, it likely necessitates changes in process (i.e., re-orientations) and likely also involves changes in structure (i.e., re-creations) as described by the Collaborative Life-Cycle Framework.

It is important to make two points. First, while one might expect re-orientation or re-creations when transitioning from provision to production, it is unclear to the authors given their review of literature, whether the transitions should necessarily result in more or less structure—i.e., more or less governance. Nor is there reason to believe that more or less structure results in better collaborative performance. Second, collaborations can re-orient and re-create without making the transition from provision to production. In fact, nascent Collaborative Life-Cycle Framework literature often focuses on groups adjusting activities or structure around either planning or implementation rather than necessarily transitioning from one to the other (seeBell & Olivier, 2022; Siddiki & Ambrose, 2023). This appears to be particularly true on the production side where collaborations may have multiple re-orientations or re-creations to improve the delivery of services (Imperial, 2023). Our focus here is to identify collaborations that attempted to make the transition from planning to implementation to add further depth to the Collaborative Life-Cycle Framework.

Data and methods

This study builds on data compiled for previous research focused on the Collaborative Life-Cycle Framework (Imperial, 2023). The data set includes 31 collaborations that emerged over time to help address environmental problems in 4 watersheds in the United States: Inland Bays (DE); Narragansett Bay (RI, MA); Tampa Bay (FL); and Tillamook Bay (OR) [See Table 4]. Each watershed was also a participant in the Environmental Protection Agency's (EPA's) National Estuary Program (NEP), which required participants to use a collaborative, consensus-based decision-making process to develop a Comprehensive Conservation and Management Plan (CCMP), which used a collaborative arrangement to implement. Some of the collaborations preceding NEP participation focused solely on provision or production, while others did transition. All the NEP collaborations attempted to make the transition with varying degrees of success. Accordingly, the comparative analysis allows us to explore these transitions.

The initial data collection focused on developing four detailed case reports examining watershed governance for the National Academy of Public Administration (Imperial & Hennessey, 2000). Data was collected from field interviews with 160 individuals, archival records, and the direct observation of events and meetings during site visits. Field interviews and initial data collection occurred soon after the participants made the transition from planning to implementation. Detailed case reports were developed and reviewed by

multiple principal informants in each watershed. Periodic interviews with key informants and supplemental collection of archival materials (e.g., by-laws, annual reports, strategic plans, budgets, meeting minutes, websites, etc.) in subsequent years were then used to continue monitoring the case histories (Imperial et al., 2017; Imperial, 2005b). Examining these different data sources allows for triangulation to improve the validity of these results (Yin, 1994). Systematic qualitative techniques such as coding were used to analyze these data. Codes were derived deductively from a start list derived from previous research and inductively based on the emergent themes within the data. Comparisons across the 31 collaborations helped deepen the understanding of collaborative processes as well as for examining generalizability of observed dynamics, resulting in an approach focused on synthesizing interpretations and looking for themes that explain differences (Miles & Huberman, 1994).

The initial analysis reported in Table 4 identifies the wide range of developmental trajectories that occurred across the 31 collaborations (see Imperial, 2023 for further analysis of the developmental dynamics of each collaborative). For this analysis, we examined the data used to develop the developmental dynamics for each collaborative to determine how much capacity for advancing "governance" existed based on its membership, decision making process, structure, and its objectives. We then analyzed each collaboration to determine if the focus was on provision (i.e., planning) or production (i.e., implementation) and explored the transformation and transaction costs associated with these activities. Finally, each of the NEP collaboratives was expected to make the transition from provision to production. We then looked for factors that helped enable smooth transitions from provision to production. The following sections present the results of this analysis.

Results

Table 2 places each of the observed 31 collaborations into a quadrant based on the distinctions drawn in Fig. 1 with respect to the services provided (i.e., provision or production) and the capacity for governance based on its structural arrangement and decision-making processes. When reading Table 2, two identifications are important. The first letters identify the bay in which the collaboration operates—Inland Bays (IB); Narragansett Bay (NB); Tampa Bay (TB); and Tillamook Bay (Till). Each observation represents a collaboration with its own distinct life-cycle (See Imperial, 2023) where changes in the number represent a new collaboration (i,e., new program or partnership to address watershed problems) with the trailing letters representing re-orientations or re-creations. For example, IB1- IB6 represent different collaborations in the Inland Bay estuary. For IB 1–4, these collaborations ended with no reorientations or recreations. When the collaboration experienced a re-orientation or re-creation letters were added to keep track of the shifts that signify life-cycle transitions (IB5a-b and IB6a-d).

Table 2 makes clear that collaborations exist in all four quadrants. A wide range of collaborations emerged with a capacity for governance that focused on developing some sort of plan or policy document with no expectation that there would be a transition to implementation (e.g., Inland Bays Study Group (IBSG) (IB3), Tampa Bay Study Commission (TB2)). For these collaborations, there was no expectation that the collaboration would extend to the implementation phase. They left that work to others. Their objective was to highlight problems and suggested possible solutions. Other collaborations focused primarily on the provision side to coordinate actions with limited engagement of production.

Table 2 Assignment of case collaborations to theoretical types

	Provision	Production
Collaboration with Governance	Inland Bays Study Group (IBSG) **(IB3)** Governor's Task Force on the Inland Bays (GTFIB) **(IB5a)** Delaware Inland Bays Estuary Program (DIBEP) **(IB6a)*** New England Interstate Water Pollution Control Commission **(NB1)** New England River Basins Commission **(NB2)** RI Areawide Water Quality Management Plan Section 208 Comprehensive Plan **(NB3)** Tampa Bay Regional Planning Council (TBRPC) **(TB1a)** TBRPC's Agency on Bay Management (ABM) **(TB1b)** Tampa Bay Study Commission **(TB2)** Tampa Bay National Estuary Program (TBNEP) **(TB3a)*** Bay Sanitation Technical Advisory Committee (BSTAC) **(Till2)** Tillamook Bay National Estuary Program (TBNEP) **(Till3a)***	Inland Bays Monitoring Committee (IBMC) **(IB5b)** Center for the Inland Bays (CIB) **(IB6b)*** Center for the Inland Bays (CIB) **(IB6c)*** Center for the Inland Bays (CIB) **(IB6d)*** Tampa Bay Nitrogen Management Consortium (NMC) **(TB5)** Tampa Bay Estuary Program (TBEP) **(TB4a)*** Tampa Bay Estuary Program (TBEP) **(TB4b)*** Tillamook County Performance Partnership (TCPP) **(Till3b)*** Tillamook Estuaries Partnership (TEP) **(Till4)*** Tillamook Estuaries Partnership (TEP) **(Till5)***
Collaboration without Governance	*Environmental Study of Rehoboth, Indian River and Assawoman Bay* **(IB1)** *Coastal Sussex Water Quality Program* (CWA Section 208) **(IB2)** *Decisions for Delaware: Sea Grant Looks at the Inland Bays* **(IB4)** Narragansett Bay Project (NBP) **(NB4a)***	Narragansett Bay Project (NBP) **(NB4b)*** Narragansett Bay Estuary Program (NBEP) **(NB4c)*** Narragansett Bay Estuary Program (NBEP) **(NB4d)*** USDA Rural Clean Water Project **(Till1)** Tillamook Estuaries Partnership (TEP) **(Till3e)***

*Participant in the EPA's National Estuary Program (NEP)

Examples include the Bay Sanitation Technical Advisory Committee (BSTAC) (Till2), the New England Interstate Water Pollution Control Commission (NB1), New England River Basins Commission (NB2), and the Tampa Bay Regional Planning Council's (TTRBPC) Agency on Bay Management (ABM) (TB1b). There were also examples of collaborations with a limited capacity for governance that primarily focused on developing some sort of

plan to highlight the bay's water quality problems (e.g., *Decisions for Delaware: Sea Grant Looks at the Inland Bays* (IB4).

There are also collaborations focused solely on implementation (i.e., production) with no precursor planning process. One example with a clear governance component is the Tampa Bay Nitrogen Management Consortium (NMC)(TB5), which was formed to specifically coordinate implementation around the nitrogen reduction goals for Tampa Bay. Others had little capacity for governance and were organized primarily to execute a set of sustained implementation efforts. The best example is the USDA Rural Clean Water Project (Till1) in Tillamook Bay that was organized to implement a series of best-management-practices funded by the USDA.

Table 2 also identifies that there were many collaboratives that made the transition from provision to production with varying degrees of success. In some cases, the transition and corresponding structural change was imposed externally. In Delaware, an Executive Order created the Governor's Task Force on the Inland Bays (GTFIB) (IB5a) that produced a report with 41 high priority recommendations. The Governor then used an Executive Order to create the Inland Bays Monitoring Committee (IBMC) (IB5b) with a modified structure focused on implementation. While the transition was smooth, it was externally imposed (Imperial, 2023). The transitions for the four NEPs occurred with varying degrees of success and are discussed below in the main analysis of this paper.

A Refined model: mixed services

In the Inland Bays, Tampa Bay, and Tillamook Bay, provision activities, in practice, were split between (1) constructing a policy and plan and (2) preparing for the transition to production services. During the latter stages of the planning process, the collaborations started to shift away from focusing purely on planning and began engaging in two distinct types of activities to help make the transition to production. First, they started to pilot implementation strategies at a smaller scale to demonstrate "proof of concept" and build support for the plan. Second, the members engaged in a process to determine the implementation structure for the collaboration.

These two activities represent distinct collaboration with and without governance activities during the period of mixed services. More specifically, the proof of concept projects were distinctly focused on 'getting the job done' as a means to foster further support, representing collaboration without governance activities. In contrast, high level decisionmakers engaged in collaboration with governance activities focused on developing a new collaborative structure intended to achieve direction, coordination, and control for the joint objectives that would guide production activities. In terms of the collaborative life-cycle, these two activities represent the activation stage for production while completing the provision phase activities. However, both sets of activities were missing from the Narragansett Bay process. For this reason, we believe there is empirical and theoretical reason to add a new *mixed services* phase to help explain the transition from provision to production noted in Fig. 2.

With the addition of mixed services, *provision* now focuses narrowly on the transaction costs associated with identifying and aggregating stakeholder preferences and their willingness to pay for the package of services and goods they demand. In practical terms, this is identified as stakeholders coming to the table to develop goals and/or action items in the form of a policy or plan. While plans are being developed, the act of testing implementation strategies while identifying the resources and structures needed to execute such a plan

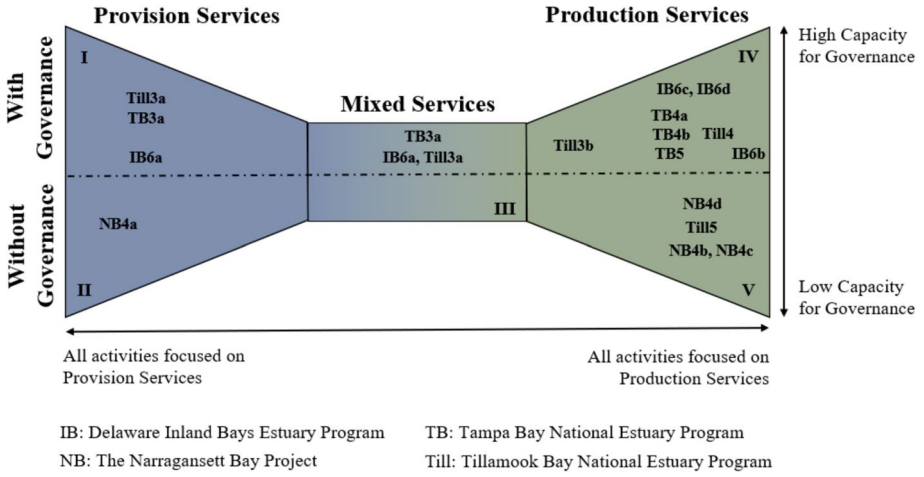

Fig. 2 Results mapped to the refined theoretical framework

before transitioning more fully to production services was not always present. Thus, *mixed services* draws attention to the transaction costs associated with arranging new financing to pay for implementation, constructing a structure to monitor performance and coordinate activities during implementation, as well as developing a means of enforcing compliance with resource mobilization measures. Again, this represents the final activities of the provision stage as well as early activation of the production stage. More practically, the collaboration can learn from early and small-scale implementation efforts before finalizing policy documents and planning agreements.

Across our cases, actions associated with the mixed services stage facilitated the transition to production. Figure 2 represents a refinement of Table 2 given the patterns observed across cases. Furthermore, Fig. 2 focuses more narrowly on the collaborations that were part of the EPA's NEP program, as these were the collaborations that were intended to transition from provision to production.

This refined framework still conceptualizes the distinction between provision and production as well as collaborations with and without governance as occurring along a continuum, with the addition of the new mixed services stage. If a group was placed in the top left corner in Fig. 2, it would represent a group where all activities were focused on provision services with high governance. As such Till3a, or the original Tillamook Bay National Estuary Program (TBNEP) established by NEP in 1993, represents the most provision focused group with the highest capacity for governance in our sample. In contrast, NB4c, or the Narragansett Bay Estuary Program, which was re-created in 1995, represents the most production focus collaboration with the lowest capacity for governance.

Collaboration with and without governance across phases

Provision with governance

During the provision phase, the Inland Bays (IB6a), Tampa Bay (TB3a), and Tillamook Bay (Till3a) embody collaboration with governance. They all had key stakeholders, including government agencies, participate in the planning process because they were motivated

to solve shared problems. They also had some subset of stakeholders involved in governance: (i) directing staff, (ii) setting the overall direction and coordinating the planning process, and (iii) jointly making key decisions based on input from a broader range of stakeholders. Finally, they collectively engaged in a shared decision-making process to negotiate the final set of shared goals, policies, and priorities contained in the plan (Frederickson, 1996; Imperial, 2005a; Lynn et al., 2000).

Inland Bays (IB6a) represents an interesting case which falls within collaboration with governance, but its process was less focused on inclusion than Tampa Bay and Tillamook. While the Inland Bays provision stage was time consuming, like Tampa Bay and Tillamook, this was because the first draft of the plan was written without a few key stakeholders—particularly the poultry industry. The delayed process was associated with the stakeholders' late participation in the planning process. More specifically, this late engagement focused on rewriting a controversial section in the plan with the addition of the new stakeholders. In Tampa Bay and Tillamook, the process was also time-consuming but was more inclusive as they focused on engaging key stakeholders in the planning process early, as well as offering broad authority to the wide range of stakeholders in deciding the plans' central recommendations. The early and broad inclusion of autonomous stakeholders, in the latter two cases, allowed for greater governance which achieved direction, control, or coordination of these individuals and organizations to advance a plan that aligned and worked towards joint objectives.

Provision without governance

The provision stage in Narragansett Bay (NB4a) stands in stark contrast. The design choices during the early stages of provision resulted in a structure where key stakeholders (including future members of the executive committee) had little control and authority over the staff and the plan's content. While the collaboration from the outside was oriented around 45 stakeholder members, provision was largely driven by a small group of staff. Stated differently, while Narragansett Bay looked like collaboration with governance, in practice it was collaboration without governance, and functioned much more like an advisory committee where staff developed the plan around their priorities and policy choices—analogous to a traditional advisory committee structure (Arnstein, 1969; Quick & Feldman, 2011). Eventually, near the end of the planning process two prominent state agencies were added to the high-level executive committee and a period of subsequent bargaining and negotiation occurred to reach agreement on the final plan. While this small dose of "governance" saved the plan, little substantive agreement was achieved to advance 'joint objectives', the governance of the broader network of agencies, and specific programs given how the planning process unfolded (Imperial, 2023). Accordingly, most agencies returned to business as usual because they never found productive ways to coordinate nor develop a shared set of policies or priorities that would steer future implementation efforts. This resulted in an inability to develop shared motivation for individual or collective action in the production phase.

Mixed services

Two major activities were observed in the mixed services stage—(1) developing and executing proof-of-concept projects and (2) reorganizing the structure of the collaborative

group. While we still observe variation across collaboration with and without governance, this variation is significantly reduced compared to other stages given two reasons.

First, given that collaborative projects are proof-of-concept, they are often smaller in nature and focus purely on delivering public value. Less emphasis is placed on developing systems of direction, control, or coordination and joint objectives among project participants. For example, when Tillamook Bay shifted to a mixed service stage (Till3a), some of the early projects were implemented by individual organizations while others were subsets of organizations from the larger collaborative. While the 'amount of governance' was restricted, the less inclusive structures allowed implementing organizations to focus on delivering that proof of concept's public service. This proved to be a useful strategy for building support for the plan (and planning process) and the types of activities that would occur on a larger scale during the production phase.

Second, during the mixed services phase, we observed that a small subset of actors was responsible for identifying and proposing the new collaboration structure used in production. For example, in 1998, members of Tillamook's policy committee began exploring different structures for implementation (Till3a). They decided upon the Tillamook County Performance Partnership (TCPP) in 1999 (Till3b), which was modeled after the performance partnership concept being advocated by the National Performance Review. Similarly, during the mixed services phase in Tampa Bay, several options were explored before agreeing to form an independent alliance of government entities, which required developing an interlocal agreement (Khator, 1999) (TB3a). The development of the interlocal agreement was largely legal in nature rather than the consensus-oriented decision-making often advocated for in the collaborative governance literature. The interlocal agreement was negotiated among the eight voting members and includes binding commitments of resources and the goals and priorities established during the planning process. Finally, it is important to note in Fig. 2 that re-orientation/re-creation in these three cases occurred after the mixed services stage, not before. For example, in Tampa Bay (TB3a), the same structure and major activities are consistent in 1990 (provision) and 1994–1996 (mixed services). Only after the mixed services phase does Tampa Bay re-create given the interlocal agreement (TB4a). Thus, the advantage of the mixed services phase is that it facilitates making the transition to production once the plan is complete, after being informed by proof of concept projects, and resources for implementation are more secure.

Production with governance

In contrast to provision, there was much greater variation among the production collaborations with and without governance across our cases. Tampa Bay (TB4a and TB4b) and Inland Bays (IB6b–IB6d) produced stable structures that provide a subset of stakeholders with the capacity to engage in governance by creating routine opportunities to communicate, set priorities, coordinate actions, and set direction for actions taken individually or collectively. In Tampa Bay, this produced a wide range of implementation projects (e.g., nutrient reduction, habitat restoration, environmental education) initiated by the collaboration (TB4a and TB4b), its partners, as well as individual stakeholders that advance the TBEP's collective goals and priorities. The Inland Bays has access to fewer resources than the Tampa Bay, so the Inland Bays (IB6b–IB6d) focuses more on coordination and information sharing while facilitating a somewhat smaller range of collaborative projects focused on environmental education and habitat restoration. Tillamook Bay (Till3b–Till4) tried to do something like Tampa Bay with much lower success until shifting to a nonprofit

governed by a board of appointed individuals (Till5), losing its capacity for governance and becoming a collaboration without governance.

These examples illustrate the public value generated by collaboration with governance. Rather than simply using the collaboration's structure to facilitate a series of projects, collaborative governance allows for the emergence of shared policies, priorities, and processes that enable a more systematic and sustained approach to problem solving that improves the utilization of resources within the interorganizational network (Frederickson, 1996; Imperial, 2005a, 2005b; Lynn et al., 2000). For example, the key partners in Tampa Bay had a long history of doing habitat restoration both individually and collaboratively. However, the projects often focused on what was cheap and easy to restore rather than what was important from an ecological standpoint. By setting a unified set of restoration priorities (i.e., joint objectives) through direction, control, or coordination, the stakeholders utilize their individual and collective resources to achieve a greater ecological return on their investment (Imperial, 2005b).

Production without governance

The collaboration with the least amount of governance during the production stage was Narragansett Bay. During production, key stakeholders in Narragansett Bay (NB4b and NB4c) were rarely involved in direction, control, or coordination until EPA threatened to terminate the program. Even then, rather than transitioning to collaboration with governance, the staff simply changed the location of the collaboration to a new agency and retained a limited role in shared decision-making (NB4d). While Narragansett Bay has been unable to set priorities or coordinate actions among a wider range of actors within the interorganizational field, it has engaged in collaborative implementation projects over the years.

As alluded to above, Tillamook provides an interesting example of how collaboration can evolve during the production phase. The Tillamook production collaborations (Till3b–Till4) were largely ineffective but had some capacity for governance given their structures. However, when the collaboration recreated to its latest iteration (Till5) it fundamentally changed its governing structure. Its current board consists entirely of individuals appointed by the board rather than a set of stakeholders involved in governance within the interorganizational network. Thus, while the latest iteration of the Tillamook collaboration initiates and participates in collaborations, it has very limited capacity to direct, coordinate, and/or align objectives across the bay's stakeholders, shifting to a collaboration without governance. Yet, this might be the most effective implementation structure in terms of getting projects done.

Transaction and transformation costs across phases

Provision costs

During the provision phase, collaborations incur transaction costs associated with coordination activities (i.e., time, capital, and personnel invested), information searches, and strategic behavior; while addressing transformation costs associated with transforming stakeholder preferences about outcomes and their willingness-to-pay into demands for packages of service and goods. Given the NEP's objectives, all four watersheds had high information costs during the provision phase given their investment in science.

However, they experienced very different returns on these investments. Narragansett Bay never identified a clear set of priority problems, so their investment was least beneficial. The early years of The Narragansett Bay Project (NB4a) were oriented around a heavy investment in information costs yielded little benefit and concluded that the bay suffered from a "low-grade fever" resulting from many smaller interrelated problems. As a result, the plan's scope and the contents became unmanageable with a wide range of problems and, consequently, a very large group of affected stakeholders. Compounding this problem was the lack of staff supervision, which allowed staff to drive the planning process seeking approval for their own objectives in the proposed plan. This became problematic when staff advocated positions that countered those of key stakeholders and became party to ongoing disputes rather than working to broker agreements and reach consensus. The failure to include key stakeholders in the executive committee during much of the planning phase further exacerbated conflicts and transaction costs (coordination and strategic) while hindering the ability to enhance governance in any meaningful way (Imperial & Hennessey, 2000). Finally, the late and unexpected choice by the staff to include hundreds of highly specific recommendations as a component of the *State Guide Plan*, forced additional protracted negotiations among members to modify wording in a manner acceptable to key stakeholders, further exacerbating coordination costs. While relatively high information and coordination costs are expected during the provision stage, the dysfunctional nature of the provision process exacerbated coordination costs in Narragansett Bay.

Conversely, Tampa Bay and Tillamook Bay used their research investments to build support for clear goals, performance measures, and other actions needed to address environmental problems in the watershed (Imperial, 2005b). This reduced coordination and strategic costs during plan development. More specifically, Tampa Bay's (TBa) early technical work examined gaps in research, synthesized technical information about the bay's problems, and developed measurable goals for nutrient reduction, seagrass restoration, and habitat restoration. This provided a clear means for the collaboration to individually and collectively engage in coordinated implementation efforts while also enhancing accountability by collectively monitoring performance. In Tillamook Bay (Till3a), the planning process was lengthy and involved considerable coordination costs, but the investment paid off and most stakeholder comments on the plan were supportive in nature. In both instances, there was broad agreement on the shared problems and associated priorities for action during the provision phase. The wording in the Tampa Bay and Tillamook Bay plans' goals and recommendations was also much broader than Narragansett Bay, with recommendations serving more as guidance than a specific accountability mechanism. This lowered coordination costs by reducing the amount of bargaining and negotiation among stakeholders since the measurable shared goals, targets, and performance measures were most important (Imperial, 2005b).

Most respondents in Tampa Bay and Tillamook Bay felt that despite delays and the "endless meetings", the time spent was crucial to a widely agreed upon plan. This highlights that, despite doing so in different ways, Tampa Bay and Tillamook Bay made significant efforts in the provision stage to address the two major costs: (1) transformation costs associated with aligning stakeholder preferences about outcomes and their willingness-to-pay, and (2) transaction costs associated with coordination and information. More specifically, Tampa Bay used technical work and the associated information to drive stakeholder alignment. In contrast, Tillamook Bay addressed the same costs by leveraging information through extensive community engagement and consensus building. In both cases, the groups directly addressed the expected costs of provision.

The Inland Bays experience was more mixed. The six-year planning process was time-consuming and involved countless committee meetings, educational seminars, vision workshops, and public meetings. Research in the Inland Bays (IB6a) identified agriculture as being a driving source for some water quality problems. This necessitated the introduction of a new set of stakeholders later in the process, which increased coordination and strategic costs during the latter portion of the provision phase. The failure to work directly with agricultural stakeholder groups early in the process increased both strategic and coordination costs at the end of the process. Yet, this late engagement did not decrease the efficacy of the provision stage as in the Narragansett Bay Project; rather, it just meant the process was more resource intensive than Tampa Bay and Tillamook Bay comparatively. The new group of stakeholders, which included agricultural interests, was able to craft an implementation structure and path forward even though the plan ended up lacking agreement on shared priorities. In effect, the provision process helped them identify where it would be possible for the collective group of stakeholders to work together moving forward.

Mixed services costs

The mixed services stage includes two clusters of activities—(1) developing and executing proof-of-concept projects and (2) reorganizing the structure of the collaborative group for the production phase. First, proof-of-concept projects can be seen as an early transition to the transformation costs associated with production—i.e., transforming inputs (i.e., labor and capital) into outputs (i.e., the good or service) (Ostrom et al., 1993)—while minimizing transformation costs associated with provision (i.e., transforming stakeholder preferences into a plan). Indeed, this was often how they were discussed by collaborations. Tampa Bay secured nearly $1 million for demonstration projects, and by 1996 (TB3a), many 'test-cases' of production occurred, offering a small-scale blueprint for what could be accomplished collectively before any of the parties agreed to the final plan. Tillamook Bay similarly demonstrated, through small pilot projects, that production activities could effectively be focused on the priorities and performance measures developed during the provision phase (Till3a). These projects represented test cases where the viability of transforming inputs into outputs could advance the aims of the plan while leveraging the performance measures developed during the provision stage.

Second, the transition from provision to production in all four watersheds ended up requiring changes in the collaborations' structures. The Inland Bays, Tampa Bay, and Tillamook Bay cases all transitioned to mixed services addressing transformation costs associated with: (1) arranging new financing; (2) monitoring performance; (3) regulating the use patterns of stakeholder; and (4) enforcing compliance. Tampa Bay went through the most drastic restructuring, as it became clear to members the measurable goals necessitate a means for coordinating action and monitoring performance during the production phase (TB3a). Tampa Bay did this with two different structures. The first was through an interlocal agreement to re-create the collaboration (TB4a). While this aspect of the mixed services phase required a "painstaking consensus-building process" with relatively high coordination costs due to the nature of the negotiations and corresponding resource commitments, the stakeholders felt the process was necessary. The interlocal agreement commits the signatories to the collaboration's goals, all of which are to be achieved collectively. Partners are required to make fiscal contributions to support the collaboration, and there is also a monitoring and reporting component to enhance accountability (Imperial, 2005b). The second collaboration focuses

more specifically on nitrogen reductions. Since the number of stakeholders is much larger than the membership of the TB4a collaboration, they formed a second collaborative focused specifically on coordinating implementation efforts to achieve the nitrogen goals (TB5).

The investment in the additional transaction costs associated with mixed services facilitated the smooth transition to their new production structures and plan implementation. The resources Tampa Bay spent to address and formalize (1) new financing; (2) monitoring performance; (3) regulating stakeholder involvement; and (4) enforcing compliance in the mixed service phase reduced the coordination and strategic costs during the production phase by reducing strategic behaviors during implementation, like shirking, and ensuring the partners are individually and collectively pulling their own weight.

The Inland Bays also engaged in a mixed services phase. During the latter half of the planning process, they funded several demonstration projects to test different best-management-practices. These projects helped identify the types of projects that could be accomplished during the production phase. Despite the conflict that emerged near the end of the provision process when the agricultural interests were introduced, the key stakeholders formed an "Implementation Council" to identify a suitable implementation structure. The group met three times to develop legislation for a state-chartered nonprofit organization as well as to set by-laws for the governing board to guide implementation and oversee staff during the production phase. Thus, the Inland Bays made a smooth transition to the production phase.

Tillamook Bay eventually shifted to a mixed service phase focused primarily on collaboration (Till3a) while technical work in the provision stage progressed. For example, new financial resources were identified, as the Oregon Department of Forestry (ODF) spent over $21.4 million with expenditures by the other partners being more modest. Much like Tampa Bay, the new funding and proof-of-concept projects helped build support for the plan and demonstrated production activities that could result from implementation. However, Tillamook Bay was less successful than the Inland Bays and Tampa Bay when identifying a new production structure. In 1999, they decided on the Tillamook County Performance Partnership (TCPP) (Till3b) as their implementation structure. Its unwieldy size included at least one stakeholder from more than 46 organizations, many of which did not have a major role in the provision phase, resulting in the introduction of new priorities. It also had a 13-member executive board. It was relatively informal with general by-laws, but decision-making relied primarily on personal relationships, and the leadership consisting of a few political and agency leaders. While investing in the transformation costs during the mixed services phase, the resulting structure had high coordination costs due to their design choices. The structure was also a poor fit given the resource constraints facing the community and was a dramatic departure from how prior collaborations in the bay functioned. As a result, the TCPP's structure had relatively high coordination costs and it struggled to function effectively—failing quickly.

By way of contrast, Narragansett Bay is the only case that did not engage in a mixed services stage, as they did not spend resources finding new financing or negotiating a structure for production, assuming its inclusion in the *State Guide Plan* would be sufficient. This created new concerns, as this decision near the end of the planning process further increased strategic behavior as various stakeholders sought to protect their interests. Thus, the transition to the production stage without a mixed service stage increased in rent seeking, coordination, and information asymmetries. As a result, the group went dormant for about a year, only to reemerge with a minor reorientation as a new line-item program in the Rhode Island Department of Environmental Management. This collaboration failed quickly

as the conflict and corresponding transaction costs were never resolved at the end of the provision phase—in this case the new structure even exacerbated prior transaction costs.

Production costs

Similar to the provision phase, transaction costs in the production phase are associated with coordination activities (i.e., time, capital, and personnel invested), information searches, and strategic behavior. In contrast, transformation costs for production are more narrowly defined as the costs associated with transforming inputs (i.e., labor and capital) into outputs (i.e., the goods or service). Thus, the level of transformation costs rises or lowers in proportion with the amount of collaborative activity during the implementation process.

During the production phase, all the collaborations incurred information costs. They continued to fund information and data acquisition projects to understand the problems of concern, monitor progress, and provide information to inform decision making (e.g., "state of the bay" reports). The strategic costs appeared to be relatively low. The collaborations in the Inland Bays and Tampa Bay were institutionalized from the early days of production and continue to enjoy broad support. While Tillamook Bay had trouble developing an effective collaboration structure (Till5), there was little strategic behavior given the lack of resources to engage in sustained implementation efforts. Similarly, the general lack of support for the different Narragansett Bay structures limited strategic costs among key stakeholders.

However, the coordination costs varied significantly. Narragansett Bay experienced low coordination costs because there was little to coordinate given their collaboration without governance structure. The production phase of Narragansett Bay had no driving issue or problem, so there was no real motivation for stakeholder involvement. Given the high coordination costs during the provision process, stakeholders perceived that the initial collaboration structure for the production phase would also have high coordination costs, thus many felt there was little incentive to become involved in this new collaboration structure. After a period of time, the stakeholders also moved on to focus on new shared issues and problems. As a result, the different iterations of the Narragansett Bay collaboration (NB4b—NB4d) met infrequently and engaged few stakeholders during much of the production phase resulting in low coordination costs.

The Inland Bays (IB6c–IB6d) and Tampa Bay (TB4a–TB5) had higher coordination costs because their governing boards meet much more frequently and there is a high capacity for governance. There is also a much higher level of collaborative activity, which further increases the level of coordination costs. However, both have well-designed structures that fit their respective missions. In Tampa Bay, key stakeholders broadly support the shared goals for nutrient reduction and habitat restoration which helped lower coordination costs and limit strategic behavior (TB5). The resource commitments and monitoring required by the interlocal agreement also helped limit strategic behavior (TB4a–TB4b). In the Inland Bays, avoiding controversial policy issues (e.g., residential development and poultry farms) by focusing on coordination, education, and habitat restoration helped minimize coordination costs and limited strategic costs (IB6c -IB6d). Stated differently, the activities that would have required the most coordination were avoided, which also limits strategic behavior. Consequently, both collaboration structures produced benefits that met or exceeded the coordination costs, and the collaborations continue to enjoy broad support.

Tillamook Bay provides an instructive counter example. The initial collaboration (Till3b) had a large unwieldy structure and added new objectives and stakeholders that

were not part of the original planning process, which generated high coordination costs in the production phase. Given that the watershed is rural and lacked resources to address the problems identified in the provision stage, the structure was a poor fit with the local context and it failed quickly. The stakeholders then decided to shift to a nonprofit organizational structure because many other NEPs were using similar structures (Till4). While the formal membership was scaled back, it was still large and involved stakeholders that did not play an active role in the provision phase. While this lowered the coordination costs, the coordination costs remained high. Given the membership and decision-making process, the structure was still collaboration with governance. However, the general lack of resources for sustained implementation efforts and the high coordination costs did not produce a corresponding level of real or perceived benefits. The eventual shift to the current collaboration structure (Till5) changed the board's membership and eliminated its capacity for governance, however, it also lowered the level of coordination costs to a level that is more consistent with the needs of the local context and resource availability.

Implications for theory & practice

Making the distinctions between provision and production and collaboration with and without governance has implications for theory and practice. The structure of collaborations clearly matters. Table 4 includes a variety of collaborations focused only on provision or production. However, there were also instances where the goal was to make a successful transition from planning to implementation. In all instances, the structures used for provision were changed in significant ways when transitioning to production. While there are likely exceptions, this finding makes sense from a theoretical perspective. At its core, the provision phase requires some sort of collective choice mechanism to aggregate preferences and make choices about the goods and services provided, their quality and quantity, and how they will be delivered. In the context of this study, these activities require reaching agreement on coordinated action reflected in shared priorities, performance measures, goals, policies, or a set of recommended actions that can be used to frame future individual and collective actions. Typically, this agreement is reflected in some sort of plan or report that is agreed to by a set of shared decision makers. Production is about the tangible task of delivering services by converting inputs into outputs that advance the collective priorities or policies reflected in the plans or reports developed during the provision phase. Given these distinctly different actions, a transition from provision to production likely imposes different requirements in terms of the collaboration's structure.

Structures influence the capacity for governance

The results also suggest that collaborations focused on fostering a high capacity for governance will likely need to have different structures compared to other collaborations less focused on governance. Stated differently, governance imposes some structural prerequisites in terms of membership and decision-making rules to achieve direction, control, or coordination. Consequently, various structures are expected to produce different capacities for shared decision-making, which at its core is critical to collaboration with governance. Intuitively, it also makes sense that the collaboration structure should also reflect the activities in which the collaboration is engaged (Prentice et al., 2019) and whether the objective is to facilitate collaboration with or without governance. Table 3

Table 3 Examples of different types of collaborative activity

	Provision	Mixed Services	Production
Collaboration with Governance	• Problem Framing • Use committee structures to enhance coordination & aggregate preferences • Develop shared priorities • Develop shared goals, targets, & performance measures • Develop plan and priorities for action • Facilitation/dispute resolution • Applying for grants or securing resources to support the NAO	• Negotiation • Develop institutional structure for the production phase	• Problem framing • Monitoring member commitments • Measure performance and reporting progress towards goals • Coordinating actions among members • Sharing resources • Facilitation/dispute resolution • Updating shared goals, targets, performance measures, plans • Determining on membership of new partners • Using committees, task forces, & consortiums to coordinate actions among network members that advance shared goals of the NAO • Participating in or organizing new collaborations
Collaboration without Governance	• Convenor • Share information • Education • Demonstration projects • Mini-grants • Efforts to build capacity of network members • Technical assistance • Research on problems • Applying for grants or securing resources to do collaborative projects	• Projects that advance shared policies & priorities	• Convenor • Projects that advance shared policies & priorities • Share information • Education • Mini-grants • Efforts to build capacity of network members • Technical assistance • Research on problems

provides examples of the wide range of general collaborative activities that the case collaborations were engaged in based on the distinctions between provision, mixed services, and production as well as collaboration with and without governance (Imperial, 2005a; Imperial & Hennessey, 2000). However, rarely does any collaboration perform all these different functions.

For example, the involvement of key agency stakeholders in shared decision-making is likely a prerequisite for achieving effective collaborative governance during provision or production—particularly in the provision stage where the main transaction costs are associated with aggregating stakeholder preferences. However, more stakeholder involvement is not necessarily better, especially when brought into the process late, as it could exacerbate coordination and transaction costs and cause a well-intended effort to fail (e.g., Till3b). Similarly, if the goal is to use collaboration to initiate a series of implementation projects (e.g., restore wetlands, public education, install best management practices), governance might not be needed at all. The only partners needed are those required to transform inputs into outputs. Including additional partners might just serve to increase transaction costs with no corresponding benefits—especially if the members' goals and performance measures are identified in the provision phase. For example, the Tillamook Bay collaboration that was the most successful in terms of

converting inputs into outputs in the production stage was Till5—the collaboration with the lowest capacity for governance given its structure.

The distinctions between provision and production and collaboration with and without governance matter a great deal when it comes to theory building and providing advice to practitioners. For example, while building trust may be important during provision, particularly during the activation and collectivity stages, it likely matters much less once the collaboration structure is institutionalized. Moreover, once policies and priorities are established during provision, and production activities have occurred for an extended period, trust may not matter at all as actors continue to implement the plan and monitoring structures enforce compliance. Similarly, it is important to determine whether capacity for governance is important with respect to achieving the goals and purposes of the collaboration in the provision or production phase. Including additional capacity for governance when it is not needed to achieve one or more of the functions included in Table 3 can unnecessarily exacerbate transaction and transformation costs with little corresponding benefit. Theory building should reflect these subtle but important distinctions to provide better advice to practitioners tasked with building and managing collaborations.

Mixed services

The results also suggest that mixed services may be a useful strategy for bridging the gap from provision to production. It helps link the planning, policy, and goal development with the implementation capacities of the collaboration before the shared priorities, policies, and recommended actions are finalized. Stated differently, it allows the stakeholders to develop a collaboration structure for the production phase that can do what they planned to do. Provision without a focus on what is useful or needed for the production side can produce unrealistic shared goals, priorities, or plans, which ultimately shifts coordination and strategic costs from the provision phase to the early stages of the production phase. This shift may reduce the likelihood that the collaboration can successfully navigate the difficult and critical activation and collectivity stages of the provision phase. The failure to confront and plan for these realities can also cause frustration for stakeholders when funding and other resources needed to deliver the desired services is lacking during the production phase.

Tampa Bay illustrates the value of successfully engaging in mixed services. In Tampa Bay, the stakeholders designed a collaboration that addresses all four of the costs associated with mixed services: (1) arranging new financing; (2) monitoring performance; (3) regulating the use patterns of stakeholders; and (4) enforcing compliance. Furthermore, Tampa Bay chose to implement an interlocal agreement formalizing the structures that addressed and minimized these costs. Meanwhile, the Inland Bays lacked clear goals or priorities but designed a collaborative structure with a capacity for governance that was consistent with the level of resources available to implement environmental education and habitat restoration efforts. In both instances, mixed services allowed for a seamless transition to the production phase, as production structures matched the activities being produced.

However, despite engaging in mixed services, you can still get the structure wrong as was the case in Tillamook Bay, (i.e., Till3b), which transitioned to a structure that failed almost immediately due to unnecessarily high coordination costs. It failed to reflect the realities of funding sources and the resources available to support the collaboration structure. This result also reinforces the observation that change is risky—even when you engage in mixed services—and lends further support to the "liability of newness"

hypothesis (Amburgey et al. 1999, 53; Singh et al., 1986, 589; Hannan & Freeman, 1984, 160; Stinchcombe, 1965). Tillamook Bay provides an instructive example. Participants considered several institutional structures but settled on the notion of mimicking the performance partnership approach due to an influential local leader (Imperial & Hennessey, 2000; DiMaggio & Powell, 1983). While the need to re-orient was recognized during the mixed service phase, the poor design choices led to a structure with high transaction costs. This effectively nullified the investment in transaction costs associated with their mixed services phase.

Summary

The value of the Collaborative Life-Cycle Framework is that it embraces the notion that collaboration is the product of a set of developmental dynamics that gives rise to a stable structure. If the structures continue to secure the necessary resources, they can endure for a considerable time even if they are unhealthy and unproductive (e.g., NB4d) (Imperial, 2023). However, the stable structures often undergo periods of rapid change where new structures emerge. One contribution proffered by this study is that a frequent driver for structural change is the need to transition from provision to production. The findings also suggest that a period of mixed services helps facilitate the structural change by allowing participants to navigate the design challenges associated with transitioning to production during the institutionalization phase of the provision life-cycle. This allows participants to leverage the trust and relationships built during the provision phase, thus lowering the transaction costs associated with developing the implementation structure used during the production phase. Clearly, more research is needed to understand the transitions associated with structural change and the corresponding risks.

The other goal of this study was to better understand the distinctions between provision and production as well as collaboration with and without governance embodied in Fig. 1. We argue that the distinctions matter as much to theory building as the developmental stages associated with the Collaborative Life-Cycle Framework (e.g., Bell & Olivier, 2022; Imperial, 2023; Imperial et al., 2016; Ulibarri et al., 2020). Simply put, the structure of a collaborative focused on governing in the provision phase may be very different than those in the production phase. It remains an open question whether insights drawn from research on the provision phase are equally valid when it comes to the production phase. However, the failure to make these distinctions is likely one of the main reasons why there are so many paradoxical findings (Wang & Ran, 2023), and so much conflicting advice offered to practitioners.

For example, in Huxham's (1996) excellent book *Creating Collaborative Advantage*, her colleagues draw important generalizations about collaboration but with little consideration as to whether their observations are directed at provision or production, the life-cycle stage examined, or the extent that governance was desired or achieved. This approach is common. Collaboration scholarship often assumes the distinctions between the provision and production do not matter. As a result, many collaboration scholars are critical of the lack of attention to whether collaborations implement the plans they develop (i.e., transition to production) (Avoyan, 2022; Emerson & Nabatchi, 2015b; Koontz & Newig, 2014; Koontz & Thomas, 2006; Rogers & Weber, 2010)**.** Collaboration scholarship needs to be more nuanced in terms of the advice offered to practitioners.

Further complicating theory development is the terminological confusion and fragmentated scholarship depicted in Fig. 1. Important concepts like collaboration and collaborative governance are utilized without consistent meaning. Similarly, there is a tendency for researchers to develop new labels for similar interorganizational phenomena with little aggregation of the findings. Consequently, it is easy to see why researchers observe that collaboration scholarship lags behind its practice (Prentice et al., 2019; Bryson et al., 2017; McGuire, 2002). Our hope is that recognizing the nuances and distinctions between lifecycle stages, provision and production, and whether governance is a central component of the collaboration will facilitate theory building that leads to sound advice to practitioners.

The distinctions between provision and production combined with the distinctions between collaboration with and without governance also opens new avenues for research and theory building. First, Fig. 1 provides a roadmap for scholars to bridge gaps in the different streams of research. This could lead to important new insights. Second, while the transition between provision and production and the importance of mixed services are highlighted, more research is needed to understand the developmental dynamics that lead to the transitions and the risks associated with changing structures (DiMaggio & Powell, 1983; Hannan & Freeman, 1984; Pfeffer & Salancik, 1978). More importantly, while the mixed services phase may facilitate the transition, it does not guarantee success as evidenced by Tillamook Bay. A clearer examination of this critical phase may help explain why collaborations often produce plans but do not implement them successfully if at all.

Third, while we draw the distinction between collaboration with and without governance and provide examples of different ways governance is enhanced in Table 3, greater conceptual development of specific structures and practical mechanisms is needed (Huang & Provan, 2007; Imperial, 2005a; Provan & Kenis, 2008). Moreover, while current scholarship often has a normative bias that collaborative efforts are beneficial, Narragansett Bay offers a cautionary tale of the dark side of collaboration and the conflicts that can emerge. Since collaboration is simply a tool used for provision or production (Prentice et al., 2019), understanding negative experiences might be more important for theory building than highlighting successful collaborations. Furthermore, this paper focuses on how collaboration structures create the capacity for some level of governance. Yet, an important gap remains between how collaborations are structured and how they act. Stated differently, collaborations might be structured in a manner that creates the capacity to engage in governance but fails to achieve it in practice. This is another area of collaboration scholarship where more research is needed.

Fourth, our focus on transaction costs makes clear that the design choices associated with the "structure" of a collaboration matter a great deal to their durability and effectiveness. The results suggest that different structures may be needed for provision and production. Similarly, if a collaboration is intended to enhance governance, that will likely have structural implications as well. Researchers could make greater use of the transaction cost logic when examining the structure of collaborations and the relative merits associated with changing governance arrangements.

Finally, this work and the Collaborative Life-Cycle Framework shed light on why collaboration scholarship has difficulty articulating how to "evaluate" the value generated by collaborations (Koebele, 2015). Much research focuses on provision and particularly on the "process" of provision phase collaboration (e.g., Biddle & Koontz, 2014; Emerson & Nabatchi, 2015b). While a few notable studies focused on the performance (i.e., outputs and outcomes) of collaborations (e.g., Imperial, 2005b; Lee & Liu, 2024; Scott, 2015), scholars clearly recognize that a greater focus on the production side is warranted (Emerson & Nabatchi, 2015b). This study highlights that whether the focus is on the provision

or production, or collaborations with or without governance, researchers must consider the distinct challenges associated with each stage and phase of the developmental process (Imperial et al., 2016). Moreover, while more theoretical and conceptual attention on the outputs and outcomes on the production side is clearly warranted (Emerson & Nabatchi, 2015b; Koebele, 2015), the importance of transaction costs highlighted in this study suggests that it may be advisable to utilize a wide range of criteria to analyze the performance of collaborative structures and not just whether they achieve the desired outputs and outcomes (Imperial, 1999; Imperial & Yandle, 2005; Ostrom et al., 1993).

Appendix

See Table 4.

Table 4 Collaborative serve and level of governance efforts in the four watersheds

Collaborative Governance Effort	Begin	End	Initialization	End Stage	Services	System Governance
Inland Bays (DE)						
Environmental Study of Rehoboth, Indian River and Assawoman Bay **(IB1)**	1969	1969	External: Mandate	Work Complete	Provision	No
Coastal Sussex Water Quality Program (CWA Section 208) **(IB2)**	1972	1981	External: Mandate	Death	Provision	No
Inland Bays Study Group (IBSG) **(IB3)**	1981	1983	Self-Initiated	Untimely Death	Provision	Low
Decisions for Delaware: Sea Grant Looks at the Inland Bays **(IB4)**	1982	1983	Self-Initiated	Work Complete	Provision	
Governor's Task Force on the Inland Bays (GTFIB) **(IB5a)**	1983	1984	External: Mandate	Recreation: IBMC	Provision	Medium
Inland Bays Monitoring Committee (IBMC) **(IB5b)**	1984	1988	External: Mandate	Untimely Death	Production	Medium
Delaware Inland Bays Estuary Program (DIBEP) **(IB6a)**	1988	1995	External: Incentive	Recreation	Provision	Low
Center for the Inland Bays (CIB) **(IB6b)**	1994	1995	Self-initiated: Constraints	Reorientation	Production	Low
Center for the Inland Bays (CIB) **(IB6c)**	1995	2015	Self-initiated: Constraints	Reorientation	Production	Medium
Center for the Inland Bays (CIB) **(IB6d)**	2015	Ongoing	Self-initiated: Constraints	Stable	Production	Medium
Narragansett Bay (RI. MA)						
New England Interstate Water Pollution Control Commission **(NB1)**	1948	Ongoing	External: Mandate	Slow Decline	Provision	Low
New England River Basins Commission **(NB2)**	1967	1981	External: Mandate	Untimely Death	Provision	Medium
RI Areawide Water Quality Management Plan Section 208 Comprehensive Plan **(NB3)**	1972	1981	External Mandate	Death	Provision	Low
Narragansett Bay Project (NBP) **(NB4a)**	1985	1993	External: Incentive	Reorientation	Provision	No
Narragansett Bay Project (NBP) **(NB4b)**	1993	1995	Self-initiated: Constraints	Recreation: NBEP	Production	No
Narragansett Bay Estuary Program (NBEP) **(NB4c)**	1995	2012	Self-initiated: Constraints	Recreation	Production	No
Narragansett Bay Estuary Program (NBEP) **(NB4d)**	2013	Ongoing	External: Incentive	Stable	Production	No
Tampa Bay (FL)						
Tampa Bay Regional Planning Council (TBRPC) **(TB1a)**	1962	Ongoing	Self-initiated	Reorientation: ABM	Provision	Low
Tampa Bay Study Commission **(TB2)**	1983	1984	External: Mandate	Work Complete	Provision	Low

Table 4 (continued)

Collaborative Governance Effort	Begin	End	Initialization	End Stage	Services	System Governance
TBRPC's Agency on Bay Management (ABM) **(TB1b)**	1985	Ongoing	Self-initiated: Constraints	Slow Decline	Provision	Low
Tampa Bay National Estuary Program (TBNEP) **(TB3a)**	1990	1998	External: Incentive	Re-Creation: TBEP, NMC	Provision	Medium
Tampa Bay Nitrogen Management Consortium (NMC) **(TB5)**	1996	Ongoing	Self-initiated: Constraints	Stable	Production	Medium
Tampa Bay Estuary Program (TBEP) **(TB4a)**	1998	2015	Self-initiated: Constraints	Reorientation	Production	High
Tampa Bay Estuary Program (TBEP) **(TB4b)**	2015	Ongoing	Self-initiated: Constraints	Stable	Production	High
Tillamook Bay Watershed						
USDA Rural Clean Water Project **(Till1)**	1981	1996	External-Incentive	Work Complete	Production	No
Bay Sanitation Technical Advisory Committee (BSTAC) **(Till2)**	1987	1993	External: Mandate	Untimely Death	Provision	Medium
Tillamook Bay National Estuary Program (TBNEP) **(Till3a)**	1993	1999	External: Incentive	Recreation: TCCP	Provision	Medium
Tillamook County Performance Partnership (TCPP) **(Till3b)**	1999	2002	Self-initiated: Constraints	Recreation: TEP	Production	Low
Tillamook Estuaries Partnership (TEP) **(Till4)**	2002	2004	Self-initiated: Constraints	Reorientation	Production	Low
Tillamook Estuaries Partnership (TEP) **(Till5)**	2004	2008	Self-initiated: Constraints	Recreation	Production	Low
Tillamook Estuaries Partnership (TEP) **(Till3e)**	2008	Ongoing	Self-initiated: Constraints	Slow Decline	Production	No

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Declarations

Conflict of interest I report no potential conflict of interest.

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