Evaluating Strategies for Plan Coordination in Canadian Communities

Stephen McCarthy
Jill L Grant and M. Ahsan Habib

Dalhousie University School of Planning

Whereas fifty years ago a Canadian city might have had one land-use master plan, today communities tend to have specialized plans on topics from sustainability to active transportation to economic development. With the growing number of plans, communities face the problem of ensuring plans are written and implemented in a coordinated manner. Relatively little research exists on how Canadian communities are dealing with this challenge and how to effectively manage multiple plans (Grant et al., 2013).

This paper contributes to a broad research project on coordinating multiple plans in Canadian communities. Our previous research examined trends in the growth of specialized plans and the context in which these plans are created and coordinated using analysis of planning documents and interviews with planners (Burns & Grant, 2014, Taylor & Grant, 2015). In 2014, we conducted an online survey of Canadian planners to collect quantitative data on how planners perceive the context, challenges and responses associated with the proliferation of plans. We used data from this survey to examine the factors planners see as driving growth in plans (Hall, Grant & Habib, 2017). Here we evaluate the effectiveness of plan coordination and implementation practices and identify opportunities for improving these practices.

Plan proliferation in Canadian communities

Canadian communities have more plans than ever. A study which collected plans from 34 communities of various sizes from across Canada found that the average community had over ten plans (Burns & Grant, 2014). The count only considered plans that covered the entire community, excluding plans for specific neighbourhoods. Comprehensive land use plans were most common, followed by active transportation plans, corporate plans, transportation plans, recreation plans, cultural plans, and downtown plans.

The phenomenon of plan proliferation is driven by a complex set of factors. Hall, Grant and Habib (2017) describe three groups of interrelated factors which may influence the creation of multiple plans, as reported by planners in our survey: community concerns and issues, professional practices, and neoliberal ideologies and practices. While this is not a comprehensive list, planning literature supports the argument for these factors as drivers of multiple plans.

Planning aims to reflect the interest and needs of the community it is practiced in (Kaiser & Godschalk, 1995; Innes, 1996; Grant, 2008; Healey, 2016). The cultural understanding of community interest and needs changes over time, and planners have responded with plans which

fit the paradigm of the day. The trend toward sustainability plans (Conroy & Berke, 2004) and cultural plans (McDonough & Wekerle, 2011) provide examples of this. As governments and planners have increasingly responded to multiple interest groups and agendas (Grant, 2008), it should not be surprising that plans have proliferated.

The trend to create multiple plans may be reinforced by planners' evolving understanding of their professional role. Since the writings of Jane Jacobs (1961), planners have eschewed the grand comprehensive plan in favour of more focused planning contributions (Hall, Grant & Habib, 2017). Hopkins (2001) describes the logic to this view: the decomposition of plans by function allows organizations to deal with reasonably scoped problems and permits experts in each field to write plans concerning their specializations. The demand for and existence of these specialized plans validates the expertise of the plan writers (Hall, Grant & Habib, 2017).

Underlying these changes in planning is a broad shift in Canadian municipal governance driven by neoliberal ideologies at several levels of government. The Canadian federal and provincial governments have since the 1970s been downloading the delivery of social services such as public housing onto municipalities while establishing accountability mechanisms and increasing expectations on municipalities to act with the efficiency of business (Tindal & Tindal, 2009). For example, the federal government required communities to develop sustainability plans to access federal Gas Tax funds (Taylor & Bradford, 2015; Grant, Beed, & Manuel, 2016). Municipalities are encouraged to separate service delivery from policymaking, necessitating an expansion of municipal policies (Tindal & Tindal, 2009). Specialized plans thus represent statements of policy and strategic choices municipalities make to access financial resources (Hall, Grant & Habib, 2017).

Challenges to coordinating multiple plans

Having started multiple plans to respond to community issues, engage expert knowledge and tap into funding, Canadian communities must coordinate the development, implementation and evaluation of these plans—a challenging task. Specialized plans often belong to different agencies or arms-length organizations within the same government (Hopkins, 2001), making the challenge one of interagency policy coordination. While little research has been conducted on contemporary plan coordination (Grant et al, 2013), the literature on coordination between different government agencies may be salient in examining the challenges to coordinating their multiple plans.

The external forces shaping the proliferation of plans may also raise barriers to effective plan coordination. For example, if the perception of community needs shifts or broadens rapidly, planners may struggle to effectively coordinate plans driven by the new needs. Plans created to satisfy programs from higher levels of government may carry legislative requirements or require responsiveness to market conditions. Experts developing plans in their areas of specialization may cause issues of 'siloing': departments with separate functions and poor communication.

Basic challenges to plan coordination may arise from the limits of rationality and presence of politics in planning. Whether it occurs between agencies or plans, coordination is essentially a rational function since it tries to eliminate redundant and contradictory activities to achieve

greater efficiency of action (Peters, 1998). However, organizations that plan are bounded by individual and institutional constraints on rationality: imperfect knowledge, imprecise preferences and limited resources (March, 1991). A limited capacity for decision-making and coordination allows organizations to make inconsistent decisions without collapsing under such inconsistencies (March, 1989), but incoherency in organizational priorities may pose challenges to planners aiming to coordinate policies and plans.

Not only does government decision-making fail to achieve a standard of rationality, it is usually characterized by political and strategic actions rather than rational decisions (March, 1991; Peters, 1998). Political behaviour both internal and external to the planning organization may be problematic to plan coordination. Internal rivalries or power dynamics may sideline coordinating activities. Externally, whether resources for coordination and incentives to coordinate exist may depend on whether coordination is a government priority (Peters, 1998). A study which asked Ontario planners about barriers to implementing sustainable urban development strategies found the lack of political priority to be a common theme among respondents (Filion, et al., 2015).

Organizational behaviour may also be dictated by the protocol, rules, structures and usual practices of an institution, profession or culture (March, 1991). Seen from this perspective, planning decisions may not follow the rational interests of the organization but instead a path deemed appropriate by decision-makers. The rules and structures within an organization that govern appropriate decisions may impede plan coordination, especially if coordinating is not common practice in the organization (March, 1991). A study of cultural planning in Toronto demonstrates this problem, as regulations and the narrow conception of the role of planners within the city hamstrung those hoping to develop robust cultural plans (McDonough & Wekerle, 2011).

Jurisdictional silos have also been identified as barriers to plan implementation (Filion, et al., 2015) and coordination (Taylor & Grant, 2015). Departments within a municipality or teams within a planning organization depend on information shared from other groups to make informed decisions about interrelated future actions (Hopkins, 2001); however, data is often shared imperfectly or not at all (McDonough & Wekerle, 2011). Planning departments may only have responsibility for land-use policies and may not be able to influence actions from other branches of the municipal government or external actors such as school boards (Hopkins, 2001; Tindal & Tindal, 2009). Other agencies may have competing interests, such as a city engineering department set on reducing congestion through road widening, while the planning department wants to increase residents' access to places through transit investments (El-Geneidy, Patterson & St. Louis, 2015). Even when attempting to coordinate policies, agencies may have different aims or levels of commitment, hampering effective coordination (Tornberg, 2012).

Plan coordination may also be challenged by the sheer number of plans to coordinate and the limited resources available to coordinate them. Municipalities face a growing neoliberal imperative to be efficient and accountable to the public while delivering more programs and managing more policies (Tindal & Tindal, 2009). The Ontario study on sustainable urban development found that a lack of funding was a constraint to implementing plans (Filion et al., 2015). The scarcity of resources for plan coordination may include lack of staff, time, money and expertise (Taylor & Grant, 2015).

Strategies for plan coordination

Given the challenges faced, what strategies do Canadian planners use to coordinate plans? To ensure a reasonable scope, we limit ourselves to intentional actions planners and departments may take. We thus omit several factors that may have large impacts on coordination, such as the quality of relationships among municipal government staff or a strong team environment within the planning department (Taylor & Grant, 2015). We also omit actions that may be taken by municipal leaders or higher-level accountability schemes, such as setting a clear mandate for policy coordination (Miller et al., 2004) or establishing a common vision across municipal government (Taylor & Grant, 2015).

Planning agencies may undertake formal mechanisms to facilitate coordination among various organizations and their plans. These mechanisms may be in the form of a group or organization responsible for coordination (Miller et al., 2004), as in the case of regional planning commissions created during municipal amalgamations in western Canada (Tindal & Tindal, 2009). They may include agreed-upon joint coordination processes, as Tornberg (2012) recommends for national-municipal transportation planning projects in Sweden. Communities may use regular comprehensive land use plan review processes to coordinate other plans within their purview (Hopkins, 2001; Taylor & Grant, 2015).

The internal structures and processes of planning agencies may also provide strategies for coordination. Research on decision-making and knowledge-sharing within governments has investigated the effects of organizational hierarchies on collaboration and coordination among agencies. Some models suggest that hierarchies allow effective coordination by higher-up individuals or agencies who have the information needed to direct coordinated action and the power necessary to enforce it (Peters, 1998). However, strong vertical hierarchies may inhibit informal horizontal information-sharing and collaboration among different groups (Peters, 1998; Willem & Buelens, 2007), potentially reinforcing the jurisdictional silos found in municipal governments. Canadian planners have identified horizontal processes such as interdepartmental meetings and committees as strategies for plan coordination within otherwise hierarchical organizations (Taylor & Grant, 2015).

Planners often define their role as one of collaboration with multiple stakeholders to build consensus around decisions (Innes, 1996; Healey, 2006). Consensus-building may work as an approach to coordination by building social capital and trust among stakeholders (Innes 1996). High levels of trust within an organization lead to more knowledge-sharing (Willem & Buelens, 2007) and may temper political or strategic decision-making that strips decisions of their rational meaning (March, 1991). Consensus-building may also work since it imbues coordination deliberately in the plan creation process, requiring the participation of all stakeholders and conscious consideration of diverse points of view (Healey, 2006). The Toronto study on cultural planning highlighted planners' collaboration with the arts community and developers as crucial for implementing their cultural planning objectives (McDonough & Wekerle, 2011). While not specifically about plan coordination, the study found that collaboration worked by allowing the coordination of objectives across jurisdictional silos. Recent research suggests that a collaborative approach to plan coordination is popular among Canadian planners (Dalton, 2016).

We can also imagine that the myriad challenges noted above could overwhelm a planning department. As noted, many have insufficient resources to implement their broad mandates (Tindal & Tindal, 2009; Taylor & Grant, 2015), and organizations in general have a limited capacity for things they can attend to (March, 1989). Planners have also traditionally focused few resources on plan monitoring and evaluation (Talen, 1996). It would not be surprising, therefore, if plans lapsed, given changing conditions and priorities. While we suspect that allowing plans to lapse is unlikely to be effective, planners may believe that it would affect plan coordination.

The literature reviewed above suggests various strategies by which municipalities may be coordinating multiple plans. It offers suggestions to their efficacy as plan coordination strategies which are not yet supported by specific empirical research in a Canadian context. Based on data from a survey of planners from across Canada, we investigate which strategies are being used, their perceived effectiveness, how they correlate with effective plan coordination in communities, and how they interact with various challenges to plan coordination identified above.

Survey of Canadian planners

The analysis that follows uses data from our 2014 survey of Canadian planners. The survey comprised a non-random sample of 468 complete responses. To find respondents, we collected planners' emails from local government websites and used the mailing lists of the Canadian Institute of Planners, the Intergovernmental Committee on Urban and Regional Research, and the Dalhousie School of Planning alumni. We encouraged recipients to invite other planners to participate. We received responses from every province and territory except Nunavut, and from communities ranging in size from rural villages to cities of more than 500,000 people. Most cities had at least one respondent, and large cities such as Toronto, Vancouver and Halifax had several respondents. Based on our knowledge of planning in Canada, we believe the survey constitutes a reasonable cross-section of Canadian planners.

We focus here on a section from the survey where we asked respondents to identify and rate potential plan coordination strategies. We asked, "What strategies or approaches are planners using to coordinate plans?" and "Please rank the effectiveness of each of these as potential strategies for coordinating plans and policies". Table 1 shows the list of options given for both questions. Respondents selected from a five-point ordered scale for each option, from 'strongly disagree' to 'strongly agree' to identify strategies in use, and from 'very ineffective' to 'very effective' to rank efficacy.

Table 1: Options for "What strategies or approaches are planners using to coordinate plans?" and "Please rank the effectiveness of each of these as potential strategies for coordinating plans and policies"

Collaborating, sharing data, and consulting with others facilitate consensus-based decisions when policies may conflict.
Policies are coordinated when the comprehensive plan is revised.
Champions are appointed to facilitate coordination around critical issues.
Communities have a clear organizational hierarchy that facilitates choices.
Processes or organizations are created to deal with particular coordination challenges.
Communities allow plans to lapse because priorities and conditions change.
Interdepartmental meetings provide opportunities to coordinate priorities.

In addition to asking respondents to rate the effectiveness of each plan coordination strategy, we included general questions about plan coordination. We asked, "To what extent is policy and plan coordination a priority in the community where you most frequently work?" (Five-point ordered scale from 'very low priority' to 'very high priority') and "Based on your experience, do you agree or disagree with the following? Coordination is not a problem in our community: we can coordinate implementation across multiple plans effectively" (Five-point ordered scale from 'strongly disagree' to 'strongly agree'). To go beyond respondents' perceptions of effectiveness and measure how coordination strategies may impact the prioritization and implementation of plan coordination in communities, we correlated responses to these questions to whether respondents believed planners were using each strategy.

To understand why certain strategies might be more effective at facilitating plan coordination, we examined the relationships between the use of coordination strategies and another survey question, "What do you see as some of the challenges to coordinating plans and policies?" Table 2 shows the options for this question. Respondents were asked to rate each option on a five-point ordered scale from 'strongly disagree' to 'strongly agree'.

Table 2: Options for "What do you see as some of the challenges to coordinating plans and policies?"

Category	Survey option
External forces	Depends on legislative requirements
	Depends on market conditions
	Reflects changing needs in the community
Politics in planning	Difficult to change past practices
	Depends on political priorities
	No established hierarchy of priorities
	Professional rivalries affect outcomes
Jurisdictional silos	Competing interests among departments
	Insufficient data availability
	Plans don't apply to outside agencies
Insufficient resources	Insufficient staff expertise
	Insufficient staff time
	Too many plans

We studied the relationships between the use of plan coordination strategies and the existence of coordination challenges by generating a set of ordered logistic regression models. We hypothesized that these variables would interact in two ways. In one case, proactive coordination strategies taken by a planning department would act to ameliorate challenges to plan coordination. For these strategies, we would expect that the presence of the strategy would make the challenge less likely to be observed. In the second case, the presence of certain challenges would prompt planning departments into reactive strategies. For these strategies, we would expect the presence of the strategy would make the challenge more likely to be observed. We predicted that the proactive strategies would dominate and so made coordination challenges dependent on each coordination strategy in our regression models. Our desire to look at the effects of each strategy independent of the other strategies reinforced this decision. We included community size and respondents' years of experience as independent variables to examine their impact on coordination challenges and separate their effects from the impacts of the coordination strategies.

Measuring the effectiveness of coordination strategies

Table 3 reports the measures of effectiveness for each plan coordination strategy, including the percent of respondents who perceive the strategy to be either effective or very effective, and the Pearson's correlation between the use of each strategy and measures of coordination efficacy in the respondent's community. A wide range existed in the percent of those who felt each strategy was effective, though most strategies were judged effective by between 63% and 73% of respondents. A full 82% of respondents felt that collaborating and sharing data for consensus-based decision-making was effective, whereas only 26% agreed that allowing plans to lapse because of changing conditions was effective.

Table 3: Effectiveness of strategies for plan coordination

Coordination strategy	Percent agreeing strategy is effective	Correlation between strategy use and statement:	
		My community coordinates plans effectively	Plan coordination is a priority in my community
Collaborate for consensus	81.8	0.27	0.28
Coordinate policies when revising plan	72.7	0.22	0.33
Appoint coordination champions	67.5	0.23	0.17
Clear organizational hierarchy	64.5	0.29	0.39
Create processes or organizations	63.0	0.08	0.13
Allow plans to lapse	26.3	-0.09	-0.22
Interdepartmental meetings	[Unasked]	0.09	0.12

Correlations between strategy use and coordination effectiveness generally aligned with respondents' perceptions of efficacy, with a few exceptions. Only 65% of respondents identified having a clear organizational hierarchy as an effective plan coordination strategy; however, that strategy most highly correlated with effective and prioritized community coordination. A similar number of respondents agreed that creating processes or organizations to deal with specific coordination challenges was effective, but that strategy barely correlated with effective coordination. It is possible that respondents dismiss organizational hierarchies as coordination efforts, whereas they see creating a special process or organization as a highly visible attempt at plan coordination.

Most respondents agreed that allowing plans to lapse due to changing priorities and conditions was not an effective strategy for coordinating plans. The negative correlations between allowing plans to lapse and measures of effective coordination supports this view. Where communities allow plans to lapse, respondents are less likely to agree that their community effectively coordinates plans and especially less likely to see plan coordination as a priority in their community.

While the survey asked whether respondents believed that planners had opportunities for priority coordination at interdepartmental meetings, due to an oversight it did not ask whether these meetings constituted an effective plan coordination strategy. Correlations between this strategy's use and the measures of effective coordination suggest that it may be rated as effective by a similar percentage of respondents as the 63% who agreed that planners create special processes or organizations to deal with coordination issues.

Challenges associated with coordination strategies

Table 4 shows the odds ratio parameter estimates for the ordered logistic regression of coordination challenges on strategies, community size and respondents' experience. The results support the hypothesis that the strategies may help mitigate coordination problems or may be influenced by a community's challenges.

The strategies of collaborating for consensus decisions and having a clear organizational hierarchy both correlated highly with effective and prioritized plan coordination. These strategies also related significantly to several coordination challenges. In our sample, respondents who observed clear organizational hierarchies were less likely to label several issues as challenges: too many plans, insufficient staff time and expertise, difficulty of changing past practices and the lack of an established hierarchy of priorities. Those who said planners collaborate, share data and consult for consensus-based decisions were less likely to see the independence of outside agencies as a problem. Where respondents observed these strategies, they were also more likely to see changing community needs as a challenge for plan coordination. It is possible these strategies are effective since they ameliorate challenges communities experience coordinating plans, helping focus coordination efforts on community needs.

Table 4: Regression parameter (odds ratio) estimates between coordination challenges and strategies (p values in parentheses)

	Strategies for plan coordination							Other variables	
	Collaborate for consensus decisions	Coordinate policies when revising plan	Appoint coordination champions	Clear organizational hierarchy	Create processes or organizations	Allow plans to lapse	Inter-departmental meetings	Community size	Years of experience
Dependence on legislation	1.01 (0.929)	1.17 (0.104)	0.87 (0.174)	0.97 (0.760)	1.16 (0.152)	0.92 (0.334)	1.06 (0.580)	0.86 (0.018)	1.06 (0.582)
Dependence on market conditions	0.99 (0.925)	0.85 (0.093)	0.93 (0.464)	1.20 (0.064)	1.00 (0.984)	1.50 (<0.001)	1.19 (0.122)	0.99 (0.834)	1.09 (0.362)
Reflects changing community needs	1.60 (<0.001)	0.98 (0.833)	1.13 (0.266)	1.38 (0.002)	0.88 (0.230)	1.33 (0.001)	1.00 (0.984)	0.85 (0.016)	1.06 (0.604)
Difficulty of changing practices	1.03 (0.807)	0.88 (0.209)	1.00 (0.974)	0.80 (0.025)	0.99 (0.889)	1.32 (<0.001)	1.03 (0.764)	1.07 (0.299)	1.21 (0.050)
Dependence on political priorities	0.97 (0.808)	0.85 (0.108)	1.02 (0.855)	1.00 (0.966)	0.92 (0.439)	1.53 (<0.001)	1.06 (0.608)	1.18 (0.017)	1.26 (0.024)
No established priority hierarchy	0.97 (0.761)	0.96 (0.637)	0.98 (0.830)	0.81 (0.030)	1.05 (0.646)	1.30 (0.002)	1.01 (0.960)	1.05 (0.404)	0.86 (0.128)
Professional rivalries	0.80 (0.054)	0.84 (0.066)	0.98 (0.839)	0.87 (0.166)	1.29 (0.011)	1.39 (<0.001)	1.01 (0.938)	1.14 (0.042)	0.98 (0.843)
Competing department interests	0.92 (0.443)	0.98 (0.793)	0.89 (0.264)	0.82 (0.052)	1.06 (0.539)	1.40 (<0.001)	0.98 (0.858)	1.34 (<0.001)	1.13 (0.200)
Insufficient data availability	1.27 (0.039)	1.47 (<0.001)	1.08 (0.433)	0.97 (0.767)	0.94 (0.536)	1.26 (0.005)	0.76 (0.016)	0.87 (0.027)	1.19 (0.071)
Plans don't apply to outside agencies	0.79 (0.032)	1.04 (0.699)	0.96 (0.685)	1.03 (0.751)	1.13 (0.239)	1.25 (0.006)	0.92 (0.473)	0.94 (0.303)	0.99 (0.909)
Insufficient staff expertise	0.90 (0.349)	1.37 (<0.001)	1.02 (0.880)	0.76 (0.006)	1.06 (0.573)	1.21 (0.019)	0.77 (0.021)	1.01 (0.835)	0.96 (0.662)
Insufficient staff time	0.97 (0.827)	1.63 (<0.001)	1.06 (0.579)	0.74 (0.005)	0.83 (0.079)	1.27 (0.005)	1.07 (0.556)	1.12 (0.105)	1.13 (0.253)
Too many plans	1.10 (0.415)	1.07 (0.498)	1.02 (0.839)	0.78 (0.015)	1.07 (0.529)	1.04 (0.643)	1.00 (0.982)	1.22 (0.003)	1.21 (0.051)

Challenges associated with plan coordination

Holding interdepartmental priority coordination meetings also appears to ameliorate certain coordination challenges. Respondents who said this strategy is used were less likely to see insufficient data availability and staff expertise as problems than those who indicated the strategy is not used. While interdepartmental meetings do not appear to make coordination much more effective or a priority in respondents' communities, they may help planning staff gain access to information and expertise they need.

Coordinating policies when revising a community's comprehensive plan was a highly-rated coordination strategy and correlated highly with measures of effective coordination. However, respondents who agreed that planners coordinated policies when revising comprehensive plans were more likely to identify insufficient staff time, staff expertise and data availability as challenges to plan coordination. This strategy may be an effective coordination measure that planning departments resort to when managing limited resources.

The regression results help explain why allowing plans to lapse due to changing conditions was not positively correlated with effective plan coordination. Respondents who experienced plans lapsing in practice were more likely to identify almost all survey items as challenges, including dependence on political priorities and market conditions, competing interests among departments, professional rivalries, and difficulty of changing past practices. Practitioners are unlikely to make conscious decision to allow plans to lapse. We find it rather more likely that the presence of any of such challenges creates conditions in which planners cannot muster political resources to update plans. Allowing plans to lapse could thus indicate a level of dysfunction within local government.

Our two other coordination strategies—creating processes or organizations for coordination and appointing champions to facilitate coordination—had few or no significant associations with coordination challenges. While appointing coordination champions significantly correlates with effective coordination, the regression provides no clues as to why. It is possible that the presence of coordination champions ameliorates challenges the survey did not cover.

Effects of community size and respondents' experience

Community size was significantly associated with several challenges to plan coordination. Respondents from larger communities were more likely to identify too many plans, competing interests among departments, dependence on political priorities and professional rivalries as challenges. Those from smaller communities were more likely to recognize insufficient data availability, changing community needs and dependence on legislative requirements as challenges. These results support the intuitive idea that bigger towns and cities have larger planning departments and higher-stakes professional and political arenas, while small towns have fewer resources but a more direct connection to constituents. Respondents with more years of experience in planning were more likely to identify planning's dependence on political priorities as a challenge to plan coordination. Amount of experience was not significantly associated with any other challenges.

Final notes

What then can we conclude about effective strategies for coordinating multiple plans? Our analysis examined the potential effectiveness of plan coordination strategies from two perspectives: asking planners whether they are effective, and measuring the association between the use of each strategy and planners' views of effective planning in their communities.

The results from each of these perspectives largely reinforce each other. Planners viewed collaborating to build consensus, coordinating policies when revising comprehensive plans, and appointing coordination champions as effective strategies, and these also significantly correlated with measures of effective coordination. One respondent explained how these strategies may work together to help planners coordinate multiple plans:

> *A best practice is to take the team approach where the planner takes the lead on circulating applications and sits down with other managers/staff responsible for other affected areas to coordinate comments and work through conflicting policy to provide an overall recommendation or policy direction that balances competing interests so that the planning policy remains in the overall public interest.*

Allowing plans to lapse due to changing priorities and conditions was neither viewed as effective by planners nor correlated positively with effective plan coordination.

However, results from the two perspectives on effectiveness did not agree on all strategies. Planners especially seemed to undervalue clear hierarchical structures relative to their high correlation with effective plan coordination. It is possible that planners place higher value on popular paradigms such as collaborative planning than ideas about hierarchical structures. The survey data also suggest that planners' faith in their own efficacy may influence their views of which strategies are effective. For each plan coordination strategy included in the survey, we found a statistically significant positive correlation between respondents believing the strategy is in use and judging it effective. It may be that fewer respondents viewed having a clear organizational hierarchy as effective for plan coordination since only 41% of respondents agreed their community had a clear hierarchy, the lowest of all strategies included in the survey.

At first glance, it may seem contradictory to find that consensus-building through collaboration and clear organizational hierarchies are both likely to help planners coordinate multiple plans. In practice, however, planners must find ways to bridge departmental differences, local politics, community demands, and expectations from other levels of government. Having the skills to develop consensus while working in organizations that employ hierarchical structures to manage decision-making has become part of what planners see as their jobs.

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