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Strategies for megaregion governance: Collaborative dialogue, networks and self organization

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Working Paper 2010-03



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Strategies for Megaregion Governance

Collaborative Dialogue, Networks
and Self Organization

**Judith E. Innes, David E. Booher, and
Sarah Di Vittorio**

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**STRATEGIES FOR MEGAREGION GOVERNANCE
COLLABORATIVE DIALOGUE, NETWORKS, AND SELF ORGANIZATION**

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WEBSTRACT

The Problem:

Metropolitan areas in the U.S. are increasingly growing together into megaregions with many linkages and interdependencies in their economies, infrastructure, and natural resources, but they are not linked well in terms of governance. Hundreds of jurisdictions, federal and state sectoral agencies, and regulatory bodies make independent and conflicting decisions with no entity focusing on the region's overall welfare.

The Purpose of the Research:

The Purpose of the research is to investigate potential governance strategies for such megaregions. As we have noted elsewhere, collaborative and networked processes can do many of the needed tasks for regional governance, as they fill gaps where government fails to operate, cross jurisdictional and functional boundaries, engage public and private sector actors on common tasks, and focus on the collective welfare of a region. Our goal is to identify strategies that allowed such processes to have some success in planning and managing resources, in adapting to unique conditions, and in mobilizing key players in joint action.

Methodology:

We rely on our own in-depth research in California on two major water planning cases, CALFED and the Sacramento Water Forum, and on two cases of regional civic voluntary organizations known as Collaborative Regional Initiatives. We use two interrelated analytical perspectives, complexity theory and network analysis, to develop our findings.

Results and Conclusions:

These largely successful cases shared the following features: diverse, interdependent players; collaborative dialogue; joint knowledge development; creation of networks and social and political capital; and boundary spanning. They were largely self organizing, building capacity and altering norms and practices to focus on questions beyond the parochial interests of players. They created new and often long term working relationships and a collective ability to respond constructively to changes and stresses on the system.

Takeaway for Practice:

Planners have important roles to play in megaregion governance in designing processes, creating, supporting and managing networks, creating arenas for strategy formation, nourishing strategic understanding and a vigorous public realm. Some can be visionaries, others advocates, providers of technical assistance, or skilled facilitators. Without the potential for traditional hierarchical government planners, cannot hope to control outcomes, but they can help to create self-organizing sustainability. The biggest challenge will be to design institutional settings where planners can do these tasks.

Keywords: Megaregion, governance, collaboration, networks, urban complexity, climate change, sustainability.

MEGAREGIONS AS COMPLEX SYSTEMS: THE GOVERNANCE PROBLEM

Metropolitan areas across the U.S. are increasingly growing together into megaregions, with interdependencies in their economies, infrastructure, natural resources, and the welfare of their citizens. These regions, however, have few linkages in terms of governance. Hundreds of jurisdictions, federal, state, and regional sectoral agencies and regulatory bodies make independent and conflicting decisions. The result is a complex system without a public entity that focuses on the overall welfare even of the smaller metropolitan regions, much less the megaregion. A myriad of public and private players whose actions have large and small impacts have neither incentive nor opportunity to work together to address shared problems. The result is megaregions unable to build synergies among diverse components, adapt to changing conditions in a productive way, or address region-wide issues (Booher & Innes, Forthcoming).

I. Purpose and Theory

The purpose of this article is to identify principles and strategies for designing and implementing a system of megaregion governance. In this article we are bricoleurs, identifying practices that have been tried with some success across jurisdictions, sectors and interests to plan and manage complex social and ecological systems. In our view a formal megaregion government is unlikely to be feasible, given the limited success thus far of metropolitan governments. Instead we take the view that a megaregion is made up of many overlapping and intersecting natural, political, social, and economic systems (Innes & Booher 1999b). Each of these can be largely managed by different clusters of public and private players, who also interact across systems on intersecting issues and tasks. Formal government must play a critical role, whether state, federal or some new megaregion entity to steer these networks and collaborations toward public purpose, to evaluate and monitor their work, and to legitimize those outcomes that serve that purpose.

The defining of a specific megaregion will require multidimensional analyses of many types of data. Economies, watersheds, airsheds, housing and labor markets all are part of a megaregion and equity issues from poverty to the distribution of environmental hazards often need to be addressed at a megaregion scale. Statistics alone however are not enough to define a megaregion, which is a socially constructed phenomenon. It matters whether people perceive the megaregion (Lang & Nelson, 2009). Healey, in her study of three European city regions contends that a region is less a physical, bounded reality than a shared idea and a place where many people are linked though relational webs (Healey,

2007). She contends the idea that a region must be “summoned up.”¹ In any case, what we have to say in this article is not dependent on any specific definition of a megaregion. Our examples and theory are pertinent to any scale or sector where issues cross boundaries and solutions depend on participation by many players.

We draw ideas from the burgeoning literature on networks, collaboration and new forms of governance as well as from four in-depth case studies Innes and colleagues have conducted since 1996. These, which include the Sacramento Area Water Forum, CALFED, and two Collaborative Regional Initiatives, each took from 3 to 5 years to complete and involved in-depth interviews with dozens of stakeholders, experts, and staff, along with extensive review of documents, reports, web sites, and media accounts. Working papers and other articles referenced below provide more explanation of the methodology and details of findings for each study.

II. What has Been Said about Megaregions

The literature on megaregions is thin, offering no clear definition and only fuzzy boundaries for particular megaregions. Though the concept dates back to Gottman’s *Megalopolis*, which focused on the U.S. Northeast Corridor from Boston to Washington (Gottmann, 1961; Pell, 1966; Regional Plan Association, 1967), there was a 40-year hiatus before the megaregion idea emerged. Today scholars have identified megaregions across the globe, each with multiple major cities, connected by a skein of suburbs, daily commuting, and economic linkages, along with a range of other interdependencies.² Writings on megaregions largely consist of unpublished reports and opinion pieces. These have addressed defining and identifying megaregions statistically, demographically and in economic terms (Lang & Dhavale, 2005; Teitz & Barbour, 2007). Others have raised questions about the value of the megaregion analytically (Dewar & Epstein, 2007), the potential need for coordination (Glaeser, 2007), the ways a megaregion may be better or worse than smaller settlements (Sassen, 2007), and methods for studying megaregions (Delgado et al., 2006). Authors in a recent edited volume (Ross, 2009) explore demographic, economic, spatial and infrastructure aspects of megaregions. Some pieces talk about specific megaregions (McGee & Robinson, 1995; Metcalf & Terplan, 2007; Ocampo, 1995). Very few address governance of megaregions. Zeigler (2008) makes the legal case for “megalopolitan” growth management and a handful of articles look at actual governance in large regions (John, Tickell, & Musson, 2005; Laquian, 2005; Zhang, 2006). None that we have discovered propose strategies toward a new model.

III. The Northern California Megaregion



Figure 1: The Northern California megaregion includes five major cities, along with suburbs, rural communities, farms and a vast Delta. It stretches at least from Healdsburg in the north to Salinas in the south and from San Francisco to Reno in the east.

To illustrate the governance problem we offer the example of northern California.³ This megaregion stretches more than 200 miles from San Francisco to Reno and 300 miles from Cloverdale in the north to Salinas in the south (See Fig. 1), and it is deeply interconnected in many dimensions. Water flows from the Sierra through Sacramento and the California Delta on to San Francisco Bay, while water agencies along the way tap into the system for homes, agriculture, and business. Sacramento absorbs spillover high technology companies from crowded and expensive Silicon Valley. San Francisco is the financial capital of the megaregion. People commute from affordable housing in Manteca to Palo Alto, where the jobs are. Second homes and exurban dwellers are found in Tahoe. Amtrak's Capital Corridor

stretches from San Jose to Auburn in the foothills, running three dozen heavily used trains a day for most of the route. Air pollution from Bay Area freeways makes its way to the Central Valley, blown by steady westerly winds. Population clusters in relation to infrastructure and housing type and quality, producing a patchwork of socioeconomic enclaves, within which job opportunities, transit access and environmental quality vary widely (Benner & Pastor, 2008). Accordingly revenue raising capacity varies and, with it, the ability to provide for local needs. Local decisions about major housing developments reverberate through other jurisdictions, just as metropolitan scale highway projects affect the megaregion. These interdependencies create complex and unpredictable dynamics in spatial, economic, social and environmental conditions.

Within the megaregion, formal government decisions are made at different scales, typically without consultation with those who will be affected and usually without coordination, much less an effort to achieve joint gain. Federal and state agencies follow narrow mandates to manage and regulate resources such as water, while exacerbating conflicts between environmentalists and agricultural interests. They typically operate in bureaucratic style, following standard procedures rather than adapting to unique circumstances. Local governments make general plans independently and jealously guard their prerogatives around land use and development. Dozens of special district governments also make decisions about schools, transit, water, and parks. Typically there is neither incentive nor forum for these players to work together. This situation is complicated by the many ways that decisions of private players such as businesses, nonprofits, environmental groups, and civic organizations also affect the region's welfare. Objectives like implementing smart growth, managing water for competing needs, economic development or addressing climate change will require megaregion governance.⁴

IV. Why Not Megaregion Government?

The history of Western efforts to establish and maintain broad purpose metropolitan governments does not offer promise for megaregion government. Many regional leaders in have argued that some type of metropolitan/regional government is needed, but actual efforts have often foundered on the shoals of urban/suburban rivalries, partisan politics, and internecine fiscal competition (Friskin, 2001; Herrschel & Newman, 2002; Salet & Thornley, 2003; Stephens & Wickstrom, 2002, p. 4). Experiments like those in Miami (Stowers, 1996) and the Twin Cities (Altshuler, Morrill, Wolman, & Mitchell, 1999) address only limited objectives. Toronto's efforts to regionalize have been subjected to

alternating waves of support, resistance, and reorganization over 50 years (Friskien, 2001). The Greater London Council lasted for 20 years until it was dismantled by a conservative government for political reasons, and later revived by Labour government. Four attempts to establish metropolitan government for the San Francisco Bay Area have failed since 1970 (Jones & Rothblatt, 1993). The notable U.S. exception to the pattern, Metro in Portland, Oregon has succeeded to a considerable degree in managing growth patterns, maintaining mixed use neighborhoods, and implementing transit-oriented development (Abbott, 1997). After 20 years however, no similar government has emerged. The relative homogeneity and small size of the Portland region, along with its visionary leadership and agreement on environmental issues were major factors in this success. These ingredients are not normally found in larger, more complex metropolitan areas, much less in megaregions.

Metropolitan Councils of Government in the U.S. are notoriously weak, unable to take strong positions that might be seen as harming any of their members (Jones & Rothblatt, 1993). In the meantime other regional agencies focus on sectoral mandates typically working neither with one another nor with the localities responsible for the land use decisions that interact with their investment and regulatory decisions.⁵ Many public organizations have responsibility for multifaceted, non-routine problems, but lack the authority or capability to address these (Kettl, 2000). Kettl contends “The current conduct of American government is a poor match for the problems it must solve” (2005, p. 4).

V. Our Theory and Argument

Megaregions will require more than formal government. They will need systems of governance, now emerging in many regions, involving not only governments and public agencies, but also profit and non-profit entities, civic organizations and representatives of a larger public. These are unlike the traditional model of coalitions which work together to advance a common interest, typically by lobbying government decision makers. Rather these new forms of governance engage a much larger range of groups and public agencies with differing though interdependent interests, in working through and acting on public problems. They often operate in a largely self organizing and decentralized way, responding to the complexity that cannot be fully grasped, much less managed by a single entity. Governance will require building of such linkages across the fragmented, multi-scale decision system⁶ and development of capacity of agencies to act outside formal mandates (Innes & Booher, 2003). Whatever is done must be

tailor-made to the unique characteristics of each megaregion, building on its strengths, and addressing its challenges (Innes & Rongerude, 2006).⁷

We approach our task with insights from the field of complexity science. This field emerged from the work of computer scientists, mathematicians, physicists, and others who have observed the dynamics of complex, nonlinear systems over time through simulations (Gleick, 1987; Waldrop, 1992). The complexity view sees the world, not as predictable so we can intervene to “fix” problems, but as nonlinear, with interacting elements, unpredictable dynamics, and varying patterns of stability or instability (Capra, 2004). Complex systems can self organize and adapt if they have certain characteristics (Berkes, Colding, & Folke, 2003). Axelrod and Cohen (1999) suggest three characteristics are needed to make a complex social/political system adaptive: 1) diversity; 2) interaction; and 3) selection. The diversity requirement demands that many types of agents, perspectives, knowledges, and interests, including relevant scales from national to neighborhood, be engaged in policy making. It also demands the fostering of diverse activities. The interaction requirement allows agents to be informed about one another’s activities and to learn from others’ experiences. Face to face interactions, moreover, build social capital and shared understandings among agents, who need to be networked among themselves so information, social capital, and power can flow through the system rapidly (Booher & Innes, 2002). In an adaptive system agents must be able to select effective strategies and end those with low value outcomes.

Megaregion governance has to be flexible, experimenting, and learning. It needs to respond in a timely way to change and to innovate if the situation demands. It needs to be well networked so that feedback from actions is timely. It needs to be populated by many players with shared understandings. A megaregion is too multifaceted and far flung for anyone to comprehend it as whole. Its governance depends on agents acting on the basis of their own interests, direct knowledge of their proximate environments, and the information that flows to them. It has to be possible for effective practices to catch on as players learn about them from one another. Government often interferes with this natural selection process, as it continues to fund some approaches because powerful politicians support them. It may not support promising practices for fear of failure. We offer in the next sections examples of adaptive governance processes that have successfully addressed complex and controversial tasks in ways that use collaboration and networks across agencies and interests. Each offers lessons for the development of broader systems of governance.

CASE STUDY 1: The Sacramento Area Water Forum: A Stakeholder-based Collaborative Dialogue⁸

In the early 1990s disputes over the waters of the American River created policy paralysis as Sacramento County fought the expansion of the City of Sacramento's water treatment plant, while the East Bay's water district, EBMUD, was unable to get its entitlement due to a court decision requiring minimum flows. Environmentalists fought water districts that tried to develop new water supplies, and politicians demanded a dam that was anathema to environmentalists. In the meantime a growing population was putting pressure on water supply. It was a classic case of stalemate, with competing powers and rights, lawsuits, and everyone in conflict with one another. In 1993 the City and County decided to establish and fund a stakeholder-based collaborative dialogue to address conflicts and to move forward on water governance through the agreements reached.

This process turned out to well illustrate the governance benefits that can emerge from a well managed and funded collaborative process. It engaged 41 entities during the course of its existence, including water purveyors and relevant local, state, and federal agencies, as well as key stakeholders representing development, agriculture, environment, and community—the stakeholders that could make or break any decision. The Center for Collaborative Policy⁹ designed and intensively facilitated this six-year dialogue in cooperation with city and county staff. It provided ample opportunity for interaction, with a large collaborative oversight group and task groups made up of diverse interests. Hostile players learned to work together, developing nuanced understanding of each other's situations and in many cases forming new professional and personal relationships. In an education phase they developed shared knowledge and shared meanings about the water problem. In later phases jointly selected technical experts provided trusted information on water flows, fish populations, water demand and much more. In the planning phase diverse task groups worked out principles and best practices for such things as groundwater management, water conservation and restoration of fish habitat (Connick & Innes 2003).

The Water Forum agreement, signed in 2000, included a plan to increase surface water diversions for purveyors in wet years and cut back in dry years; assure a water flow better matched to fish needs; and integrate surface and groundwater management. It also established a "Successor Effort" a smaller collaborative group which continues today, monitoring and adapting implementation activities. Lawsuits no longer dominate the region's water policy. EBMUD was finally able to negotiate a water supply for its customers. Sacramento's water treatment plant was built. The dam proposal is no longer on the table.

Forum members in an effort to resolve seemingly intractable conflict among fish needs developed an innovative solution creatively using technology to allow some fish cooler water than others. The new relationships, collaborative heuristics (known as the Water Forum Way) and shared knowledge have affected planning and decision processes on other matters. Members built a diverse working network, allowing later water negotiations in the region to start from a broader level of agreement and a larger stock of shared knowledge. The Water Forum's outcomes even included a copycat Sacramento Transportation and Air Quality Collaborative designed to develop long range strategy for land use and transportation.

CASE STUDY 2: CALFED: Informality as a Strategy¹⁰

CALFED was¹¹ the most prominent and largest scale example of collaborative governance thus far in California, establishing new governance practices, many of which continue today. Both its establishment and operation were largely informal. It was not established by legislation nor directed by a higher authority. Its outcomes were possible, paradoxically, because much of its approach was informal and ad hoc, though with high-level support from federal and state governments (Innes, et al. 2007).

Drought and court decisions requiring releases of water for fish had made it clear by the early 1990s that there would not be enough to meet the needs of diverse users without dramatic change. A dizzying array of water rights, contractual obligations, water management practices, and far flung infrastructure made the water system complex and challenging to understand. Agencies had conflicting mandates—protecting fish, managing water quality, or supporting agriculture for example—so they worked at cross purposes, while stakeholders brought lawsuits and went to the legislature to protect their interests. In response to this long term policy stalemate, a group of 10 public entities, backed by powerful stakeholders in business, environment and agriculture, signed a Memorandum of Understanding¹² (MOU) in 1994 to create CALFED. The MOU spelled out broad objectives and an agreement to work together. The structure, agenda, and tasks emerged from the process thus set in motion.

Federal and state agency directors formed a Policy Group, which met for staff reports and conducted private, informal conversations among themselves, building mutual understanding, shared knowledge, and social capital in the process of setting policy direction. A Management Group of deputy directors collaboratively worked through how to implement the policies, many of which cut across their

missions. Task groups of diverse stakeholders and staff from relevant agencies did much of the work of developing projects. With no authority to create a plan, much less an entity to adopt it, participants by 2000 created a road map for working together, a record of agreements they had reached, and targets for the future. They called this the programmatic Record of Decision (ROD), which is often part of a document produced under state and federal environmental impact laws. This decision allowed the “plan” to have some legal standing, and it remains the defacto guideline.

Among CALFED’s outcomes were, in addition to the ROD, working networks and shared knowledge similar to those produced by the Water Forum although over a broader range of interests and agencies and a geographic area extending well into southern California. Stalemate ended and agencies began taking cooperative action--for example pooling funds to offer competitive grants for regional watershed management. Agencies changed some practices and consulted on actions with others. Innovations emerged that would have been impossible without the collaboration and the trust it created. Most notably participants established a cooperative, informal monitoring approach to guide the operation of dams, gates, and channels in the Delta in response to ever changing weather and health of fisheries. Team members from across the state met online on a few hours notice to share information about levels of streams or fish kills. Prior to CALFED, agencies could take six months to institute a new rule, by which time conditions would have changed. An Operations Group set up mixed stakeholder/agency teams to provide input on modeling and forecasting and to gather data around the state. The networked procedure allowed CALFED to make nearly real-time responses to conditions, while also satisfying competing stakeholders that the data were accurate and the process transparent. A related innovation in CALFED was the Environmental Water Account, a water banking system that allowed real-time sharing of water for agriculture and the environment.

CASE STUDY 3: Collaborative Regional Initiatives (CRIs): Civic Leaders Fill Governance Gaps

Collaborative Regional Initiatives, voluntary organizations made up of networked civic leaders, sprouted across California in the 1990s to help fill gaps in the work of government on a wide variety of issues.¹³ Experience with these suggests both the potential and limits of networks created by nonprofit and civic organizations. Business and environmental interests often have been the leaders, along with social equity or labor interests. The efforts were self organized and designed to respond to the needs and

strengths of their regions. Foundations provided most of their funding and pushed them to focus on sustainability and the three E's.¹⁴ They were all collaborative, included diverse players, involved dialogue, and most had methods for getting feedback and adapting. They built social, intellectual, and political capital in their regions. Participants learned about the issues and each other's interests, and developed commitments to improving their regions. These relationships and networks allowed participants to act cooperatively in many arenas. Each related to formal governments in different ways.

CASE STUDY 4: Joint Venture:Silicon Valley

High technology business leaders established Joint Venture:Silicon Valley (JV:SV)¹⁵ in 1993 in response to an economic downturn and then reached out to government, education, and community leaders (Saxenian & Dabby, 2004). It had strong executive leadership from a former State Senator and a board made up of business executives, government, and education leaders. JV:SV's reach today incorporates dozens of cities, parts of 4 counties and runs from just south of San Francisco through San Jose over to Santa Cruz and around the Bay to Fremont. Its strategy for creating a resilient region began with a scan of conditions, and an indicator report (Joint Venture: Silicon Valley Network & Silicon Valley Community Foundation, 2008). It then sought ideas from staff, the community, and board members on activities that could address issues like infrastructure, education, and ways to support business growth. They reached out to others, and if a group could be put together to address a topic, the board gave it seed funding. This group then would be on its own to garner additional funding. This was the venture capital model, encouraging innovative ideas, while allowing some to die and others to flourish if the environment gave back positive signals.

During the 18 years of its existence JV:SV became an important institution for the region, albeit one that was adaptive and involved distributed, self-organizing activities. Among JV:SV's achievements was to help build an identity for this dynamic high tech region, as well as to establish practices of cooperation among the many public and private players whose efforts create the synergies that have made it a global success (Saxenian, 1990). Its further outcomes have been many, though it is difficult to track all of them because of its decentralized, networked approach. The annual Silicon Valley Index is thoroughly researched and used by many constituencies to assess progress toward regional goals (Saxenian & Chinoy Dabby 2004 p. 15). JV:SV instigated innovation, engaged high level leadership from public and private sectors, and attracted investment in problem solving around dozens of issues, ranging

across economic development, land use, transportation, education, climate change, workforce preparedness and more. Some initiatives that had an impact included the Smart Valley Initiative, designed to develop the infrastructure for an advanced electronic community. Working with local jurisdictions JV:SV created a Smart Permit program, which reduced amendments to state building codes across the region, saving millions in construction costs and contributing to an economic upturn. A recent initiative built a collaboration among more than 30 cities and public agencies to upgrade and make better use of Silicon Valley's El Camino Real. Organizations like the Environmental Partnership and the Enterprise Network spun off. JV:SV shifted priorities to adapt to new needs like workforce retraining and invited in new types of leaders from the nonprofit and labor sectors. Perhaps the most important outcome of their work has been a cultural change in how decisions are made and how leaders work together.

CASE STUDY 5: The Sierra Business Council

The Sierra Business Council (SBC) introduced itself into what was becoming a non-adaptive region with a dying industrial and lumbering sector where long time residents and industry resisted the growing recreation economy. Battles between growth and environmental interests were increasingly bitter, with an influx of new residents from cities strengthening the opposition to growth. This 400-mile long region had few connections among its communities, which had little sense of themselves as part of a region. SBC was started by an environmental advocate who gathered a volunteer board of local business leaders, developed its agenda collaboratively and eventually sought foundation funding.¹⁶ The core idea behind SBC was that businesspeople should become environmentalists. Business in the Sierra, the argument was, would have its greatest success if it recognized the environment as its major asset, rather than trying to bring back an earlier time (Innes & Sandoval, 2004).

SBC began with an index showing how the region was doing on the three E's (Sierra Business Council, 2006). Staff selected topics and indicators in consultation with leaders and then took the report around the region to well-attended workshops for dialogue. Workshops and conferences demonstrated through case examples how business and the environment were connected. These linked civic leaders, staff, and government players into a working network that allowed participants to learn from one another and work together. SBC worked with Placer County to develop that county's habitat conservation program, with Mono County to create design guidelines for tourist-impacted rural communities, and brought into being the Sierra Nevada Conservancy. In each case SBC moved on, allowing governments

to take ownership. A Working Landscapes program helps in the conservation of ranches and farms. SBC's website¹⁷ today lists 17 different initiatives and projects in which it has been working cooperatively with public and private players. It has intensively trained hundreds of people to become the collaborative leaders needed in a complex, uncertain and constantly changing context.

VI. Networked, Collaborative Governance

While each of these examples is unique, countless others can be identified around the world.¹⁸ These are part of a pattern of institutional change, where players from inside and outside government are creating new practices of governance to deal with the growing complexity and uncertainty in urban regions (Kettl, 2005). They seek to fill the interstitial spaces where public agencies lack authority or where they have conflicting mandates. While much of the work is done informally without legislative or bureaucratic authority, the practices, which typically involve collaboration and the building of networks among diverse actors, are tolerated and often encouraged by formal government. They are largely self-organizing once set in motion; they are task-oriented and often place-based;¹⁹ they are made up of interdependent agents who recognize the possibility of joint gain from working together (Aldrich, 1979); and they often rely on small, diverse task groups and dialogue to accomplish their purposes. Such networks can build sensitivity to local realities often not recognized by governments (Hajer & Wagenaar, 2003) and they can increase coordination and understanding across jurisdictional boundaries, public agencies, levels of government, experts from different disciplines, and opposing ideological camps (Schneider, et al. 2003). After participants have crafted a plan, each can draw on external linkages to access and mobilize a larger range of resources and people (De Rynck & Voets, 2006). Finally, networks can learn and adapt through experimentation, monitoring, and responding to feedback. Networks do not eliminate conflict, but network nodes like CALFED's working groups can serve as sites of creative energy for finding mutually beneficial ways to move forward (Klijn & Koppenjan, 2000 p. 140).

Our notion of collaborative, networked governance is only one perspective on the broader idea of governance (Hughes, 2010; Rhodes, 1997) but it is one that we believe is promising for planning and managing in metropolitan areas and megaregions.²⁰ This form of governance is not a panacea, nor does it exclude the exercise of traditional bureaucratic regulation or legislative decision making—indeed these are both needed ultimately to assure funding and legitimacy for what emerges from collaborative networks. Many participants in these networks are elected officials and civil servants. But in conditions of great

complexity, controversy and uncertainty, harnessing the power of networks connecting people, ideas, and knowledge in changing combinations across organizations and problems, may be necessary (Sørensen & Torfing 2007; Booher & Innes 2002).

VII. Institutional Issues

The greatest obstacle to effective use of collaborative network governance in megaregions is our current set of governing institutions, which interfere with collaboration, boundary spanning, and inclusion of diverse players. Government will have to play an active role that differs in key respects from current practice and that will happen at best gradually over time. A focus on governance shifts the role of government away from single-handedly developing and implementing plans and programs and toward steering or metagovernance (Bogason & Musso, 2006; Peters 2010; Sørensen, 2006). The public sector has access to resources, budgets, personnel, authority, and democratic legitimacy that are all essential to network governance. It can set targets and direction; it can offer incentives for cooperation; it can create forums for dialogue around actions by multiple agencies and private players; and it can design and provide indicators to give timely feedback on actions (Klijn & Koppenjan, 2000; Innes & Booher, 2000).

Megaregion governance will rely heavily on self organization and dispersed activities. Its effectiveness will depend on diversity of participants and activities, interaction and feedback, and collective selection of preferred actions. Some entity sanctioned and supported by government is needed to create incentive structures and forums and provide resources. It could be a large scale public-private partnership like Envision Utah. It could be an evolution, expansion, or merger of large scale sectoral bodies like metropolitan planning organizations,²¹ air quality districts and councils of government. A large state like California could sponsor an entity for each of its megaregions, but some megaregions would require multistate compacts or even multinational ones. Such an entity's task would not be governance, but metagovernance, steering, incentivizing, enabling and managing.

VIII. Planners' Roles in Megaregion Governance

Planners have key roles to play in megaregion governance, but they will have to step away from designing and controlling outcomes. A megaregion is too far flung and complex for these to be feasible. Healey demonstrates, however, that planners have major leadership roles at this scale-- "Imagining the urban; creating arenas for strategy formation and review; creating frames of reference and specific

strategies; generating mobilizing force; nourishing strategic understanding; and nourishing a vigorous public realm” (Healey, 2007, p. 283-7). The creator of SBC imagined a new concept of a Sierra region, held regional conferences designed to build networks and shared knowledge across the region, mobilized civic leaders, and trained local leaders in facilitation and managing dialogue. The executive director of CALFED created arenas in which new strategies were created and nourished the development of shared understanding among hundreds of networked participants. Planners who seek to promote particular issues can work for sectoral agencies or advocacy groups and represent them in networks and dialogues, as they notably did in CALFED and the Water Forum. Others should take the lead in designing forums and arenas for deliberation and decision (Bryson & Crosby 1993), as did JV:SV staff in sponsoring and supporting task groups to seek innovative solutions to problems in the region. The Sacramento city and county staff designed and supported the Water Forum with the help of professional mediators. Planners and others with substantial technical knowledge should work with collaborative groups to help them build high quality shared knowledge, as they did in the Water Forum and CALFED. Many planners have to become skilled in negotiation and mediation and learn to work in and with networks, as many participants did in CALFED and the CRI projects. Others may need facilitation skills, like the civic leaders and planners who learned in SBC’s leadership training.

Little detailed research has been done as yet on how planners and others are adapting to network governance. Healey’s research (1997, p. 309) shows that the traditional planner in many cases has transformed into a knowledge mediator and broker, making information available in a digestible fashion to the dialogical processes of policy development. Sehested, who studied planners in 10 Danish municipalities (2009, p. 252), found that comprehensive planning departments were moved to new organizational locations closer to the mayors and city councils in response to the more complex demands being placed on planning and the broader set of considerations that had become important. She concluded after in-depth interviews that communication with many more kinds of people had become crucial to planners’ work and that their roles had come to involve collaboration and dialogue among many types of actors, coordination and communication between projects, network regulation, and sparring over political goals. She classified these planners into four hybrid roles: professional strategist; manager; market planner; and process planner. The technical expert planners had evolved to become professional strategists, more cooperative with elected officials and more respectful of their political responsibilities. Some planners had moved into roles more like public administrators as they built and

managed networks. Others found themselves in working partnerships with developers and the private sector rather than in adversarial stances. Finally some tried to design and manage dialogue and collaboration, but found they lacked the competencies to do this effectively. While a comparable study remains to be done in the U.S., Sehested's findings are suggestive of the dynamics that may be at work in American regions.

IX. Limitations to the Network Governance Approach

Network governance is not a panacea. There will continue to be regional problems around growth, planning, and development that cannot be solved through self-organizing networks, but must be referred to courts, legislatures, or executive decision. Similarly, network governance is time and resource-intensive, and many issues will not be critical enough to attract and maintain participants' commitment (Scharpf, 1978). The use of networks carries risks such as the emergence of groupthink, lack of transparency in decision making, insularity, and exclusion of the disempowered (Klijn & Koppenjan, 2000). It also raises questions about accountability and adherence to democratic principles (Klijn & Skelcher, 2007; Torfing, Sorensen, & Fotel, 2009). Diversity in participation and transparency in decisions and activities can go some way to address these issues, but little theory or institutional arrangements as yet reconcile network governance with democracy. On the other hand network governance may be the only approach to large megaregion scale problems like climate change,²² large scale watershed management, economic competitiveness, and social/environmental justice.

X. Recommendations for Planning Education and Research

Planning education should do more to prepare students for these emergent planning roles. Planners need skills in facilitation, negotiation, mediation, and network building and management. Even the most technically oriented planners need to be well versed in the workings of urban and regional politics and to become savvy in working with elected officials as well as with developers, and other regional players. They need knowledge of a broad range of urban issues, as those who overly specialize will be at a disadvantage in the future.

New lines of research and theory building are very much called for. We need research to identify planning networks that already exist and understand how they function. Healey's study of city regions in Europe (2007) is a prime example demonstrating the painstaking ethnographic research that has to be

done at a large scale on the fine grain of planning activity in a networked region. Another is the work of the Macarthur Foundation-funded “Building Resilient Regions” project which has been pushing the boundaries of our understanding of regional dynamics.²³ Studies of planners should look at how planners’ practices, norms and attitudes are evolving in relation to the growing complexity of urban regions. Other research should examine emerging institutional arrangements that allow networks and collaboration to play useful roles in planning and in governance of large scale, complex and changing places. Theory development will have to go hand in hand with empirical research, particularly theory about how and why such systems do or do not work. Finally conventional systems of public choice may not be fully accountable or democratic in practice, but they at least are supported by theory that legitimizes them. A new system will need its own theory about how it can meet such key social values.

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NOTES

¹ This evokes Kevin Lynch's idea in his book *Managing the Sense of a Region* (1976).

² Richard Florida for example puts the number at 40 across the globe, arguing that these are the drivers of much of the economic activity worldwide (Florida, 2008). America 2050 identifies 11 emerging megaregions in the U.S. <http://www.america2050.org/megaregions.html> . (accessed March 14, 2010)

³ Although Northern California's megaregion is one of the smaller ones, it is typically included (Florida, op. cit; Lang & Nelson 2009)

⁴ A recent collection from the Urban Land Institute, for example, documents the relationships between regional spatial patterns and climate change (Ewing, 2008).

⁵ This is gradually changing. In the San Francisco Bay Area for example a Joint Policy Committee of the four major regional sectoral agencies, meets regularly to consider issues of growth, climate protection, and implementing SB 375. See <http://www.abag.ca.gov/jointpolicy/>

⁶ Brenner (2002) contends that a new politics of scale is already underway in metropolitan regions, redefining the geographies of urban governance in the advanced capitalist world.

⁷ A large and growing international literature coming largely out of political science and public administration has been documenting and theorizing about these new practices and the new meanings of governance.

⁸ See Connick (2006) for the early details of this story and Innes and Booher (2010: p 43-52) for the updated version.

⁹ This is at California State University Sacramento <http://www.csus.edu/ccp/>. (accessed March 14, 2010)

¹⁰ For more detail and updates on this case see Innes and Booher (2010) Chapter 3; Innes, et al. (2006); Connick and Innes (2003); and Innes et al. (2007).

¹¹ At the present writing its activities have been folded into a new Delta Stewardship Council and related entities focusing on the California Delta, through which the majority of California's water is

funneled.

¹² This did not have the force of law but was a voluntary agreement.

¹³ The story of this program and comparison of four CRIs is found in Innes and Rongerude 2006. More detailed reports on the CRIs are referenced below.

¹⁴ economy, environment, and equity

¹⁵ <http://www.jointventure.org/> (accessed June 29 2010)

¹⁶ This CRI was the brainchild of Lucy Blake, who later won a MacArthur “genius” award in recognition of her accomplishment.

¹⁷ <http://www.sbcouncil.org/>

¹⁸ For example the U.S. Environmental Protection Agency’s National Estuary Program has created incentives and conditions enabling key players in 28 major estuaries to collaborate on developing formal plans for prioritizing and implementing management actions (Schneider et al. 2003). In Ghent Belgium a collaborative network has linked tiers of government, the private sector and citizens in reconciling interdependent spatial, economic and environmental issues, developing a vision, and implementing urban change (De Rynck & Voets, 2006). Three state and federal agencies initiated a major collaborative effort to reclaim wetlands from 15,000 acres o salt ponds in San Francisco’s south bay, for purposes ranging from ecosystem restoration, flood management, recreation and education. http://www.csus.edu/ccp/Salt_Ponds/index.stm . Its stakeholder leadership group, which included participants from local cities, water districts, public parks agencies, environmental advocacy groups, and relevant big businesses, developed a restoration plan. Today collaborative working groups are managing the plan’s implementation.

¹⁹ Much of the scholarship in network governance comes from the public management literature and focuses on service delivery. In planning these types of practices often emerge from the desire to manage shared places (Healey, 2010). Another exception is Nyseth (2008), who writes of contested urban landscapes.

²⁰ Klijn’s overview of governance networks (Klijn 2010) explores in more depth how these can work

to produce innovations and outcomes.

²¹ In the U.S. these regional entities are responsible for preparing transportation plans and distributing funding.

²² California has passed legislation known as AB 32, setting statewide targets for reducing greenhouse gas emissions, and SB 375, providing that state funded infrastructure investments will be made only where communities are acting in accord with a regional plan designed to reduce emissions.

California's governor made the case to the Copenhagen Climate Conference that climate change actions start at the local and state level.

²³ <http://brr.berkeley.edu/> This massive collaborative research program has built large data sets and produced many relevant working papers and articles, particularly Weir, et al. 2009, which reports on extensive interview research on network governance in transportation in Chicago and Los Angeles.



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