

Guidebook for Building Regional Networks for Urban Sustainability 2.0

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A product of

The Urban Sustainability Directors Network and The Innovation Network for Communities

Supported by the Summit Foundation

June 2012

EDITION 2.0

This updated Guidebook 2.0 contains new lessons learned from regional networks of local government sustainability directors since the first edition was released in September 2011. At this time, USDN is supporting the development of eight regional networks with nearly 100 cities, helped by financial support from the Summit Foundation. As these networks mature and evolve—moving out of the start-up phase and growing in size—they face new challenges and are becoming more sophisticated about organizing and sustaining themselves as peer-led decentralized entities. And they are able to contribute even more practical knowledge to the emerging field of networks for environmental and social change.

INTRODUCTION

Networks are present everywhere. All we need is an eye for them.

Albert-Laszlo Barabasi

In mid-2011 Maggie Ullman, the energy coordinator of Asheville, North Carolina decided she wanted to help other cities in the southeast obtain valuable know-how about setting up effective local government sustainability initiatives and offices. Within a few months, about 20 sustainability directors from five southern states had agreed to attend a kick-off meeting, and Maggie and Susanna Sutherland, the Knoxville, Tennessee sustainability manager and cofounder of the network, were booking a conference center, lining up a facilitator and trying to figure out an agenda for the meeting.

Also in 2010 Dennis Murphey, chief environmental officer of Kansas City, Missouri had reached a similar conclusion: Cities in a half-dozen surrounding states would benefit from access to information and expertise about sustainability efforts across the nation. Seventeen sustainability directors came to the first network meeting in 2011 — and by the second session in May 2012 new leaders for the network were stepping forward.

At about the same time in 2011, seven local government sustainability directors in New England had gathered in Boston to discuss precisely the same topic: How to spread throughout their region the emerging knowledge about place-based sustainability. By mid-2012 the network had 24 member cities from seven states and a supportive partnership with Region 1 of the U.S. Environmental Protection Agency.

Meanwhile, government sustainability directors in six western cities – from Tucson to Salt Lake City – that had tackled climate adaptation planning together because they share an arid climate, decided they wanted to keep learning and collaborating with each other and even expand the group. "We're getting so much value from working

together," explains Vicki Bennett, the Salt Lake sustainability director. In April 2012, the network brought together 70 city officials – teams from its 10 member cities – to spread knowledge about adaptation planning into other city agencies.

In each case, the first step taken was the same: Start to build an effective network of local government sustainability leaders in the region. Deciding to use a network model for organizing was a no-brainer. Each of the sustainability directors had already experienced the powerful impact of being part of a national network of sustainability professionals. They were among the roughly 100 members of the three-year-old Urban Sustainability Directors Network (USDN), and the learning, camaraderie, and project collaborations they had gotten out of participating in and contributing to USDN was what they wanted for other cities in their regions.

But wanting to build a network is not the same thing as knowing how to do it. Even being a skilled or natural networker—as many of the USDN members are—is not enough. Network building is a *practice* of applied knowledge, and tested processes and tools; much has been learned from the experiences of network builders themselves and the experiments and insights of researchers in mathematics, physics, anthropology, and other disciplines. Michael Armstrong, senior sustainability manager of Portland, Oregon and an organizer of the Cascadia Network, recalled his own learning about the practice: "At the first USDN annual meeting, we did a little 'state of the network' report about the network's health, what we were learning about the network, how the network might evolve. It was the first time I'd heard that sort of conversation and I didn't have a frame of reference to make sense of it and engage with it. Over time, working in USDN and building the regional network, it's become very relevant to me."

This Guidebook is part of a broader effort by USDN to support the emergence of strong regional networks of sustainability directors. It seeks to deliver practical know-how about network building to the developers of regional sustainability networks, based mostly on the questions and experiences of USDN and a half-dozen emerging regional networks. Divided into three sections, it addresses fundamental issues in early-stage network building.

Network organizing taps into the power of "distributed systems" in which many autonomous "moving parts" act in concert, in productive relationship with each other, even though no one is fully in charge. USDN offers an example of this: Started in 2009 by a small group, it now covers North America. It has built strong, highly valued and satisfying connections among its members, despite the great distances between them and their busy work schedules. The network initially focused on peer sharing and learning, but is becoming a force for innovation, professional and policy development in the sustainability field, and has obtained several millions of dollars in funding. Yet, no one runs USDN. It has a coordinator, but no board of directors, no executive director or CEO, no legal entity to receive funder's checks, no employees. All it really has are members—volunteers—who direct and adapt the network through their dialogue and

actions. How else to get scores of independent cities to collaborate and amass to address common problems? "As the networked approach to governance proliferates," write Stephen Goldsmith, former mayor of Indianapolis, and William Eggers in *Governing by Network*, what becomes important is "learning how to manage a government composed more and more of networks instead of people and programs."

There is an even deeper rationale for network building on behalf of sustainability. It lies in the underlying nature, the paradigm, of sustainability, which both presents an imperative and offers an approach for integrating environmental, economic, and social systems; bundling the branches of disciplinary knowledge; and bridging the local and the distant/global. The Earth, economy, and society are highly distributed systems—and networks for sustainability mimic and align with them.

A General Pattern of Network Development

Based on our work with regional networks, here's a (slightly too) linear flow of what unfolds:

- 1. A champion gets interested in building a network.
- 2. Contact with several potential network members to discern their interest. (Usually the response is favorable for mutual support and information sharing—with little consideration of what it would take to do this well.)
- 3. Survey of potential members to identify priorities for the network, top issues, etc. May also use survey to gather personal/professional information about the potential members.
- 4. Creation of a network directory, coordination by email, maybe a Web site.
- 5. Face-to-face retreats of members to set agendas, build connectivity, conduct learning.
- 6. Setting up of working groups to start addressing specific topics within urban sustainability
- 7. Development of partnerships with organizations to support the network's efforts. Gathering of funding (membership dues, grants, volunteer time) to support coordination and activities.
- 8. Establishment of informal governance (steering or planning committee).
- 9. Expansion of membership and activities.

About the Authors

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The Summit Foundation supported creation of the *Guidebook* with a grant to the Innovation Network for Communities.

Portions of the *Guidebook* were drawn from Plastrik and Taylor's *Net Gains* and some of their other writing about networks.

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REGIONAL LOCAL GOVERNMENT SUSTAINABILITY NETWORKS

(Supported by USDN)

CASCADIA NETWORK

Eugene, OR

Pierce County, WA

Portland, OR

San Francisco, CA

Saanich, British Columbia

Seattle, WA Tacoma, WA

Vancouver, British Columbia

Victoria, British Columbia

HEARTLAND LOCAL GOVERNMENT

SUSTAINABILITY NETWORK

Branson, MO

Columbia, MO

Dubuque, IA

Fairfield, IA

Grand Forks, ND

Iowa City, IA

Johnson County, IA

Johnson County, KS

Kansas City, MO

Lawrence/Douglas County, KS

Lincoln, NE

Omaha, NE

Sioux Falls, SD

Springfield, MO

St. Louis, MO

Wichita, KS

NEW ENGLAND MUNICIPAL SUSTAINABILITY NETWORK

Albany, NY

Amherst, MA

Boston, MA

Bridgeport, CT

Burlington, VT

Cambridge, MA

Chelsea, MA

Concord, NH

Cranston, RI

Dedham, MA

Groton, CT

Keene, NH

Medford, MA

Middlebury, VT

Montpelier, VT

New Haven, CT

Northampton, MA

Portland, ME

Portsmouth, NH

Providence, RI

Quincy, MA

Salem, MA

Somerville, MA

Warwick, RI

MICHIGAN GREEN COMMUNITIES NETWORK

Ann Arbor, MI

Dearborn, MI

SOUTHEAST NETWORK

Asheville, NC

Cary, NC

Chapel Hill, NC

Charlotte, NC

Chattanooga, TN

Chattanooga/Hamilton County, TN

Columbia, SC

Durham City-County, NC

Fayetteville, NC

Franklin, TN

Knoxville, TN

Lexington County, SC

Miami Dade County, FL

Nashville, TN

Nashville/Davidson County, TN

North Little Rock, AR

Orange County, FL

Orlando, FL

Raleigh, NC

Winston-Salem, NC

WESTERN ADAPTATION ALLIANCE

Aspen, CO

Boulder County, CO

Denver, CO

Flagstaff, AZ

Ft. Collins, CO

Las Vegas, NV

Park City, UT

Salt Lake City, NV

I. NETWORK BUILDING 101

You could spend a lifetime studying theories, research, and other writing about networks. But most network builders are doers; they want to know what they need to know to succeed, not everything they could know. Still, lessons about the practice of network building are built on several basic ideas about networks: what they are and why they are valuable.

- Network Benefits describes the unique and impressive difference that networks can make.
- The Connectivity-Alignment-Production Progression describes three fundamental types of networks and an evolutionary progression through which many networks proceed.

With these ideas in mind, the practical advice offered in Parts II and III will make more sense.

NETWORK BENEFITS

What can a network produce? What are the benefits of organizing activities in this distributed way? In just four years, the Urban Sustainability Directors Network has generated each of five major effects that networks are known to produce.

- USDN has experienced *rapid growth*, one of the most prized effects. From a
 handful of founding members, USDN expanded to more than 100 members (core
 and associate). More recently, USDN has supported development of regional
 networks, increasing the network's links to sustainability directors (although not
 its formal membership) by an estimated 40 percent with perhaps more to come.
- USDN also produces *rapid diffusion* of ideas and feedback. Information about best practices in urban sustainability move quickly through USDN's membership. At the same time, USDN's far-flung membership responds to two or three detailed surveys each year, readily providing data that is aggregated into unique information about what is happening in urban sustainability throughout North America.
- Many USDN members use the network to efficiently find and connect with members and other people they would not normally be able to contact. This is called "small-world" reach and is perhaps the most distinctive power of networks. In a 2011 survey more than 80 percent of USDN members said the network was "delivering very well for me" when it came to "Getting to know many colleagues who have similar jobs to me and with whom I can share" and "Getting reassurance that there are others out there facing similar challenges."
- At the same time, the USDN network has achieved greater resilience. Because
 many members are well connected to each other, the departure of a wellconnected member has not seriously disrupted the network's connectivity and
 effectiveness. In fact, even though there has been turnover in USDN
 membership, connections among network members have increased.
- Finally, USDN has developed noticeable *adaptive capacity*. It has moved quickly to exploit opportunities to create value for members or to enhance the urban sustainability field, even when doing so required members to adopt new and more difficult ways of collaborating with each other.

The table below describes each of these five major network effects.

Five Network Effects

Rapid Growth	The network can expand rapidly and widely, because its members benefit from		
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	adding new links and, therefore, they seek to make new linkages.		
Rapid Diffusion	As more nodes are added, the network diffuses information and resources mo		
	and more widely through its links. This diffusion effect allows networks to		
	spread ideas and generate feedback rapidly.		
"Small World"	The network can bring people together efficiently and in novel combinations,		
Reach	because it provides remarkably short "pathways" between individuals		
	separated by geographic or social distance. When two people in a network		
	create a "bridge" across distance or social category, the connection is available		
	to other nodes in the network.		
Resilience	The network can withstand stresses, such as the dissolution of one or more		
	links, because its nodes quickly reorganize around disruptions or bottlenecks		
	without a significant decline in their functionality.		
Adaptive	The network can assemble capacities and disassemble them with relative ease;		
Capacity	it adapts nimbly. Links among people or organizations can be added or severed,		
	or they can become "latent"—maintained at a very low level of connectivity—or		
	more active.		

Advice for Regional Start Ups: The most important benefits of the network model are likely to be rapid growth and diffusion and small-world reach—in short, the ability to connect to people and resources that help members. Resilience and adaptive capacity tend to emerge later in a network's life.

THE CONNECTIVITY-ALIGNMENT-PRODUCTION PROGRESSION

All networks are built on a foundation of connectivity, obviously. *Connectivity* links people and organizations to each other. Some networks end there; their "mission" is simply to connect. Others, however, develop alignment among their linked nodes. *Alignment* occurs when network members strongly share a sense of identity and/or a value proposition. Alignment can be an end in itself for some networks. But it is also an essential element, along with connectivity, in the development of a production network. *Production* is what networks do when their members want to accomplish something specific in collaboration, not just connect with each other or align around an identity.

These three general types of networks have different attributes. The differences are important, because they present network builders with different challenges. At the same time, these three types of networks form a progression that a network's evolution is likely to follow. Most network builders for social change build production networks—so first they must pay a great deal of attention to building connectivity and alignment.

Differing Characteristics of the Three Networks

	Connectivity	Alignment	Production
Definition	Connects people to	Aligns people to	Fosters joint action
	allow easy flow of and	develop and spread	for specialized outcomes
	access to information and	an identity and network	by aligned people
	transactions	value propositions	
Desired Network	Rapid growth and	Adaptive capacity,	Rapid growth and
Effects	diffusion, small-world	small-world reach,	diffusion, small-world
	reach, resilience	rapid growth and	reach, resilience, adaptive
		diffusion	capacity
Key Tasks of	Weaving—help people	Facilitating—helping	Managing—
Network Builder	meet each other, increase	people to explore	helping people plan and
	ease of sharing and	potential shared identity	implement collaborative
	searching for information	and value propositions.	actions.

USDN has followed the progression from connectivity to alignment to production. In its first year, the network focused mostly on peer sharing and learning, which requires strong connections among members. Connectivity was built mainly through the face-to-face annual meeting and the monthly Idea Sharing conference calls. In its second year, USDN organized five working groups of members on different topics: professional development, innovation development, policy development, social behavior change, and regional networks. In each working group it was necessary for members not just to share information but to converge—agree—upon some basic definitions, goals, and strategies. This is alignment, which requires good connections among the people

seeking to align. Once groups become aligned they may also seek to produce something together. As an example, USDN members have designing an Urban Sustainability Innovation Fund, and they collaborate on selecting proposals to fund.

Advice for Regional Start Ups: Building connectivity among members is the first "must do" step. But it's useful to consider that the network's development is not likely to end with connectivity and the peer sharing that comes with it. If the USDN experience is a guide, once sustainability directors in a region get to know, share with, and learn from each other, they will set the network's sights on even more ambitious targets.

II. IN THE BEGINNING: 9 CHALLENGES OF STARTING A NETWORK

In one way, starting a network is simple: Just do it! But right away questions will start to pop up. What exactly is the network's purpose? Who will be in the network? What will the network actually do? And there are many others.

Starting a network is a design problem. You have to thoughtfully design the initial network by answering a set of related questions. Different answers can lead to different networks. Some answers may stymie a network's emergence. Others can energize it.

In this section we discuss 9 design challenges that every start-up network is likely to face and offer analysis and advice for starting your network.

ESTABLISHING THE NETWORK'S PURPOSE

A network's purpose starts with the passion of its organizer or organizers. The initial question to answer is, "What do I want to do that I will ask others to join me in doing?"

As Asheville's Maggie Ullman was mulling over starting a network, she reflected on what she was getting out of being a member of USDN: "I have access to an amazing national network, with a few other North Carolina folks. But there are a lot more people coming up in North Carolina and Tennessee and the rest of the southeast. We could easily have 20 people hired as sustainability people in North Carolina cities alone. What I want is a way of giving what I get from USDN to others in the region, and a time for us to hang out and share ideas." She called another USDN member, Susanna Sutherland in Knoxville, Tennessee to see if she shared this passion. They clicked. "We both feel aligned to the same big picture goals of creating a space for less connected communities to participate in the bigger sustainability efforts," Maggie Ullman recalled. It would be a way of "replicating the USDN national success with more communities in the southeast."

Peer-to-peer exchange and learning is a typical initial reason for forming a sustainability network. The impetus behind the formation of USDN was a desire to connect local government sustainability directors—create a "safe space"—so they could share and learn together. But there are other possible purposes for a regional sustainability network, and, in any case, a network's purpose is likely to evolve as the network matures. The Western Adaptation Alliance has focused on capacity building of its members so they can implement climate adaptation planning in their communities. The fledgling Texas Network is exploring ways its members can collaborate to support new state policies for energy efficiency.

For many networks—in sustainability or any other field—peer learning is the prelude to tackling more difficult purposes. Learning requires establishing a certain level of connection and trust among network members, and orchestrating opportunities to learn together in the form of meetings, conference calls, document repositories, etc. Do it well and members may get interested in trying collaborations that meet other needs they have or discover, such as acquiring more resources, or inventing solutions that don't exist, or influencing state and federal policymakers. But these sorts of collaborations require more of members than just sharing information. To achieve these goals, members must align with each other—agree on ideas, strategies, messages, for example—and produce things together—funding proposals, innovations, or policy proposals—to achieve their goals. Compared to learning together, there is a much greater risk of failure.

USDN's purpose statement, crafted in 2009, went beyond having members learn together:

To build a North American network of city sustainability directors that enables us to easily exchange information, collaborate to advance our practice, and more quickly find solutions to our sustainability challenges.

But the first year of USDN's life was spent mainly on peer-to-peer sharing and learning (and building the network's infrastructure). In the network's second year, some members began to collaborate on more difficult projects, and this picked up steam in the third year. The USDN *statement* of purpose still held true, but the network's purposeful *activities* were evolving. As network members got good at and benefitted from peer learning, their confidence and ambitions increased. Peer learning remains a foundation of the network, but other purposes are being implemented.

Examples of Regional Sustainability Network Purposes

New England Municipal Sustainability Network

- Foster peer to peer communication amongst and between municipal sustainability practitioners in New England
- Identify topics for regional collaboration amongst municipalities and create working groups focused on tangible outcomes for the same
- Connect local efforts to Federal initiatives
- Collectively identify resources to assist with local sustainability efforts

Heartland Local Government Sustainability Network (March 2010)

Sustainability staff from the various heartland communities would likely benefit from participating in a network of their peers to share information, experiences, and lessons learned in creating, implementing, and maintaining sustainability initiatives/programs within their own organizations. Also, a regional network of local government sustainability staff could create additional momentum for promoting sustainability in additional communities in the heartland.

Green Cities California

Green Cities California (GCC) is a coalition of thirteen local governments that have implemented groundbreaking environmental policies. Our mission is to accelerate the adoption of sustainability policies and programs through collaborative action.

Michigan Green Communities

MGC is a network of local government and university staff in the state of Michigan that will collaborate with one another, through peer learning and information sharing, to promote innovative solutions and move sustainability initiatives forward at the local, regional, and state level.

Advice for Regional Start Ups: Peer-to-peer sharing and learning is probably the easiest starting point for the network's purpose. That's because, as USDN demonstrates, there's a real hunger among local government sustainability leaders for contact with likeminded, like-positioned people in other communities. They want to share war stories and lessons learned. A second reason is that the sharing and learning is easier to organize in the network than many other purposes may be; it requires less investment by members and less network infrastructure to coordinate.

CREATING "VALUE PROPOSITIONS" THAT ATTRACT/MOTIVATE MEMBERS

A value proposition is the potential benefit that attracts people or organizations to participate in the network. A network's collective value proposition is a benefit that is broadly desired by members of the network. As goes the collective value proposition, so goes the network. It is what makes a network greater than the sum of its parts. It is a commitment to joint value creation by network members.

In 2011 USDN asked its members what they valued most about participating in the network and how satisfied they were with the value the network was generating. It's a simple question—but a fundamental one. Whatever may be the passion of the network's founders, what really matters is what the network's members want to give and get, and how they feel about what they are giving and getting. If they are satisfied, they will continue to engage and perhaps even strengthen their participation. If they are not, they will fade away.

It's not unusual for members to have different value propositions that matter to them. Many members are likely to hold several value propositions dear. And what's most important to some members may shift over time, as, say, their job demands change or they reach a new stage in their careers. So tracking value propositions and satisfaction is an essential way to monitor a network's health.

USDN found that the 92 members responding to its survey collectively held four value propositions as their top priorities:

- Get to know many colleagues who have similar jobs to me and with whom I can share
- Have access to trusted information about urban sustainability issues, models, solutions, etc.
- Keep abreast of what other cities are accomplishing
- Participate in peer-to-peer learning and problem-solving processes

How's Your Value Proposition Doing?

When it comes to testing members' satisfaction with their value propositions, it helps to give them a range of responses from which to choose. USDN's survey asks respondents about each priority value proposition whether the network is...

- Delivering very well for me
- Delivering but could be improved
- Not delivering
- I see the opportunity, but am not using it
- Does not apply to me

Creating Value for Network Members

In a network, members can exchange four kinds of tangible value: their connections, knowledge, competencies, and resources.

	Ask Yourself	Discussion/Examples
Connections	Can you connect others in the network to people that may be able and willing to help them?	We all know many other people, but none of us knows everyone. The others we know can connect us to the people they know and sometimes these people can be quite helpful to us. This happens all the time as we develop our personal networks: the friend of a friend who becomes a friend. Connecting this way may yield delightful and valuable "smallworld" surprises, because we usually don't know who is known by the people we know. Find out who others in the network want to connect with and then see if anyone in the network can help to make the connections—often there is someone!
Knowledge	Do you know something that may be valuable to others in the network?	You may have deep knowledge about a particular subject, such as the history of sustainability efforts in your community—what worked and didn't work—or information about a type of sustainability program. You may have expertise about a technical matter, such as state regulations covering energy efficiency or the mechanics of the legislative process for making a new law. Often, we don't remember all of what we know or consider it to be valuable, until we realize that it might help someone else. Sometimes, when what you know is added to what someone else knows, a new picture emerges and that is valuable. Build an inventory of knowledge about sustainability that network members have—so that other members know who they can ask for specific kinds of help.
Competencies	Are you able to do something that may be of value to others in the network?	What do you have the capacity to do that others in the network also need done? Could you do it for them instead of them having to build the capacity to do it? Have network members identify the sorts of processes they are involved in—strategic planning, collaboration facilitation, etc.—and have other members share what they know about how to do these processes, or offer to help with the process.
Resources	Do you have access to funds or other resources that may be useful to others in the network?	Money and staff, the two great tangible resources of organizations, are hard to come by. But it's not unheard of for one organization to lend to another, with whom it has a close or strategic relationship, a staff person to work on a short-term project. And some organizations band together to each share a portion of a staff position so that together they will have enough money to hire someone fulltime. Or members can share information about funding opportunities or collaborate on developing funding proposals.

Advice to Regional Start Ups: Don't assume you know which value propositions the network's members hold dear. Ask them, and keep asking them, and ask them whether they are satisfied with the value they are getting. There are likely to be important nuances and even surprises—and the network has to take these into account. And remember—an important value that a network creates is not just what members *get* from the network, but also what they *give* to the network. A strong network has a healthy blend of giving and getting.

ESTABLISHING MEMBERSHIP ELIGIBILITY AND STANDARDS

In network formation, who is in and who is out of the network matters a great deal. Networks have boundaries, but their borders may be "soft"—easy to penetrate—or "hard"—impossible to penetrate. In an *open* network, most anyone can become a member, the more the merrier. In a *closed* network, on the other hand, membership is more tightly controlled and limited. In designing membership there are five key questions:

- Who is eligible to become a member?
- What criteria must a potential member meet?
- How many members should there be?
- Should all members have the same benefits and responsibilities, or should there be different classes of members?
- What "participation standards" should there be for members? Does it make sense to have membership dues as a "market test" of someone's interest in participating in the network?

Answering these questions poses difficulties because the range of potential answers is large while the answers of a particular network have to be precise.

Eligibility

USDN started by saying that its members would be "city sustainability directors." The Heartland Local Government Sustainability Network identified "local government sustainability staff" as its members, which opened the network to county officials as well as cities. The Southeast Network found that few of the region's cities had sustainability directors taking the lead, so it started with a broader definition of who could become a member. While USDN invites individuals—not cities—to join the network, the New England Municipal Sustainability Network defines its members as communities whose mayor/manager then designates a representative to participate in the network.

In most cases, government sustainability networks have sought to bring together people who play the *role* of a sustainability director in local government, whether they have that job *title* or not.

However a network defines what a sustainability director is, it still must decide whether the individual or the organization is the member. The benefit of designating an individual is that she will want to become a member because of a personal interest in participating in the network, rather than because her boss assigned her to join the network. For an early-stage network, this may produce the sort of energy—a willingness to go the extra mile for the network--that is essential for getting started. The disadvantage is that if a member leaves the network there's no assurance of continued

participation by someone in their community. On the other hand, an appointee from a government entity may or may not have a passion for contributing to a network of peers, and if they don't they won't be much help in starting a network.

Advice for Regional Start Ups: For USDN it made sense at the outset to focus on individuals, rather than city governments, but for regional networks perhaps the opposite is true. Regional networks must grow within a relatively small "market"—six or seven states at most, not all of North America--so they probably do want as many members and as much member continuity as possible. The greater the network's market penetration, the more powerful the potential impact is likely to be within the region when members act in concert.

Pros and Cons of Member Diversity

The more similar a network's members, the easier it is for them to find common ground for learning and working together; they tend to have had common experiences, concerns, ideas, and language. This suggests that regional networks should limit their membership to just local government sustainability leaders rather than also including, say, advocacy organizations or business community leaders. But diversity in a network helps to promote new ideas, because people bring different perspectives to the network and this can lead to innovative thinking. It may take longer for diverse people to figure out how to relate and talk with each other; and sometimes it just doesn't work.

Our advice is that regional networks should start with local government sustainability leaders; why increase the difficulties of starting up? But as they mature they could start multi-sector projects in the members' communities. This will help them learn how to bring sectors together into productive relationships, and might lead to a practical way of introducing other types of members into the network.

Criteria for Membership

The more closed the network, the more attention is paid to criteria for membership. The experience of the International Institute for Sustainable Development's Heather Creech¹ with several policy and knowledge-creation networks is useful for identifying some of the main criteria for membership.

¹ Heather Creech, "Form follows Function: Management and governance of a formal knowledge network," version 1.0 (Winnipeg, Canada: International Institute for Sustainable Development, 2001). Available at www.iisd.org.

Shared	All network members should be on the same page when it comes to the network's		
commitment to	purpose. "Fundamental conflict between missions works against the efficiency and		
network's goals	effectiveness of the network," Creech explains. "Partners need to understand the		
	motivations of their colleagues for participating in the network." A summary of		
	research on networks concludes that members "must consider the priorities of the		
	network as their own." Ask potential members how their government's		
	commitment to sustainability aligns with the networks' commitment.		
Acknowledged	Networks often exist to assemble the capacities of members in new ways. Each		
expertise or	member, says Creech," has to have more than just an interest in the focus area of		
competence in	the network; [the network] has to have real strength to do quality" work. Make		
work of the	sure members identify (and share) the range of expertise they bring into the		
network	network.		
Connections that	Members should have linkages to other organizations or individuals that may be		
matter	important for the network to influence or otherwise connect to. This means more		
	than knowing others. The links, Creech says, should amount to "a proven capacity		
	to influence" others. Have members identify the links they have in the urban		
	sustainability field—and the quality of those linkages.		
Capacity to	Members should have evident willingness and, preferably, capacity to collaborate,		
collaborate	and experience in working in networks. As part of the network they will have to be		
	good communicators with other nodes. They will also have to be able to		
	participate effectively in the network's processes for "cross-fertilization" of ideas.		
	Look for those, Creech suggests, that already have "an ease of working across		
	internal boundaries and high concern for people." Other researchers say network		
	participants should be "open, willing and able to learn from each other."		
	Therefore, they "must have confidence in their work and 'dare to share' it with		
	others." Ask members about their previous experience as a network member, and		
	why they think they will be able to benefit from and contribute to collaborations.		
Being a good	Members will have to give enough of their time and attention to the network's		
network citizen	activities; being in the network should be a priority for them. Otherwise, they are		
	likely to do less and less of the network's time-consuming tasks. The risk, says		
	Creech, is that you will end up with "sporadic information sharing rather than real		
	collaboration with partners." Be clear about what sort of time commitment is		
	necessary for a member to contribute/benefit effectively from the network, and		
	ask members to commit to at least that level of participation		
	and the second s		

Number of Members

It may seem pointless at the start of building a network to worry about how many members it should have. After all, the point is to grow the network. But as that happens, the network's size can matter in practical ways. Having more members—say, 50 members rather than just 25—may substantially increase the need for network infrastructure and coordination. If membership grows faster than the network's capacity to support them, members and coordinators may get frustrated and dissatisfied. Another concern is that as membership grows it can become more difficult to forge and maintain strong connections among members. Some members may feel the

network is losing its value as a setting in which they know and trust most other members. This is one reason that USDN's members decided to cap that network's membership at around 100 members.

As regional sustainability networks grow they may find that if they expand beyond 20-25 members, some of these network management challenges will arise.

Classes of Members

Most networks start with just one class of members — everyone has the same deal, the same benefits and responsibilities; they are "core" members. But as networks mature and find there's more demand for membership, it's not unusual for them to create other categories of membership to serve the demand without fully expanding the network. What they do is offer limited access to network benefits to new members, often called "associate" members. The reasoning is that some network activities (e.g., annual meetings) won't be effective if too many people participate or that increasing overall membership will put too much additional burden on the network coordination and infrastructure. After little more than a year in existence, USDN created an Associate Member category with fewer network benefits and responsibilities. By restricting associates' access to certain network activities, the network hoped to increase the number of members doing some things but not others.

Other networks have tried other "yes, but..." approaches to membership:

- *Affiliate* members are asked to participate in a particular network project, but are members of the network only for the project's duration.
- *Learning* members participate in a network's learning activities, but not in other activities.
- Observer members may attend meetings and monitor network internal communications, but they do not participate in work of the network. Some networks make observers pay their own costs of participation.

Standards for Member Participation

Start-up networks often minimize their demands on members out of fear that serious requirements will deter people from joining the network. This can be a mistake, because it means that there are no expectations for members. Instead of actively promoting a culture of contributing to the network, there is a vacuum. And when it turns out that some members are not participating much—which is almost always the case—then there's no basis for telling them to "shape up or ship out."

Among the participation standards that sustainability director networks have used:

- Attend/contribute to the network's annual meeting.
- Respond to the network's surveys of members.

- Participate actively in the network's Work Groups and other activities, such as peer-learning conference calls.
- Contribute to the network's online communications and information repository.
- Participate in governance of the network (e.g., member of Steering or Planning Committee)

In USDN's case, members are expected to contribute to the network by completing surveys, answering peer questions, speaking on calls, and participating in user groups.

There's another type of participation standard that some networks use to weed out membership: the "market test" of membership dues. Imposing dues tests how serious someone is about participating in the network. It also can be part of a network's revenue strategy. It's pretty unusual for a start-up network to charge anything more than a nominal membership fee, because at the outset it's hard for prospective members to decide whether or not an unproven network will really be worth paying for. But as a network matures and proves its worth, a membership fee is not a bad participation hurdle. Green Cities California has an annual membership fee of \$3,000-\$11,000 paid by its 10 founding cities. For 2012 USDN started using a sliding-scale fee based on city population, with a scholarship fund for cities unable to afford the fee.

Q. Are networks of organizations different from networks of individuals?

No and yes. No, because an organization is usually represented in a network by one or more individuals who are part of the organization; the "node" that makes the connection is still an individual. Yes, because the individual representing the organization usually needs permission from superiors in the organization's chain of command—the board of directors or the executive director, for instance—before committing to taking specific actions within the network.

Organizations tend to negotiate their participation in networks and want formal agreements with the other the nodes (organizations) that spell out expectations, commitments, and behaviors of the network's members; they are less willing to go with the flow. As a practical matter, attending to these needs of organizations means it will take a great deal of discussion by the organizations before they form a functioning network.

SETTING UP NETWORK DECISION-MAKING PROCESSES (INITIAL GOVERNANCE)

Networks are self-governing; the members rule.

It's crucial from the outset to be clear about whose network it is. It's easy to say that it belongs to the members, but sometimes network founders or funders feel it's theirs, that they must exercise lots of control. That may be necessary during the early organizing stage, but there's a risk that founders or funders will dominate the network for too long. And even when that's not a problem, there's still the question of precisely how the network's members exercise self-governance.

At the outset, network governance tends to be quite informal. Typically, the network's founders form a steering or planning committee that, usually operating through consensus, makes some of the early organizing decisions for the network: What the purpose is; who will be invited to join the network and what the membership rules are. And then they convene the network membership in an organizing meeting.

In undertaking these early organizing activities, governance involves enabling the network to come to life. There's a tricky balance to achieve, between not concentrating decision-making authority into too few hands (and working like a top-down organization), while not having authority so broadly distributed (like a community) that it takes forever to decide anything at all. USDN's governance started with two people who decided to start the network, but they quickly reached out to five more local sustainability directors to be founders, a way to build early buy-in to a shared agenda. And then a larger Planning Committee was formed to make governing decisions.

In a network's early days, however much you may try to formalize the governance structure, what really matters is trust between the founding members. If they trust each other and operate through dialogue and consensus—talking through the issues and forging agreements—they will be able to get the network going.

There is no standard formula for the design of network governance. But there are choices to make about three basic elements of governance: Who decides? What is decided? How is it decided?

Who Decides

In some networks, all members have equal power to make decisions about the network. In others, different "classes" of members have different power in governance; some may have none. The larger a network grows, the more likely it is to create classes of

membership, or to turn to a representative system of governance in which members select other members to participate in governance decisions.

At USDN, the Planning Committee has functioned as the governing body. It has no formal authority, other than the continuing (implicit) consent of the governed. It started with the network founders, but has expanded and brought in newer members. The committee determines its own membership. Every year at least two of the committee's 10 seats are taken by someone new, invited and appointed by the committee. The committee looks for members who have become active in the network, are well connected to other members, and are ready to commit the time needed to participate in the committee's work.

What is Decided

What does a network really have to decide? It depends — the answers range from "everything" to "as little as possible." Some networks assign a big list of decisions to governance that resembles the elements of a strategic plan for an organization. These could include:

- Purpose of the network mission, vision, operating principles
- Objectives/goals
- Values and beliefs of the network
- Membership arrangements of the network
- Responsibilities of members
- Plans of the network
- Distribution of network resources (budgeting)

Other networks are less inclined to make long-term plans and arrangements; they try to minimize formal governance in favor of maximizing the freedom of network members to decide on their own.

Not all decisions have to be subject to the same governance arrangements. The design of a network's annual meeting may rest in the hands of a small committee, while a network's position on a particular policy issue may require support of the network's governing body or a vote of the membership. The first organizing meeting of the Heartland Network was led by its founder, Dennis Murphey, and a few members who served on a planning committee. But the network's second meeting had other hands: "I was not even on the planning committee for the annual meeting this year," Dennis notes, "and it worked out really well. We had four people that stepped up and took a leadership role."

At USDN, the Planning Committee sets the direction and activities of the network, hires and directs the Coordinator, develops/submits funding proposals on behalf of the network, and adopts an annual budget. Most importantly, though, the committee and coordinator set network direction/activities <u>after</u> the USDN annual meeting, during which members have opportunities to nominate potential activities and collectively identify their priorities for the coming year.

How Decisions Are Made

We have seen network decisions made in four different ways: by imposition, community, democracy, or "emergence."

By imposition—	The network organizer or a big funder of the network simply makes certain	
conditions set by	decisions. A funder might, for instance, decide who will be members of the	
others.	network at the outset. The funder's decisions are embedded in the funding	
	agreement for the network. An organizer might decide what the collective value	
	proposition of the network is or what the rules of communication among members	
	might be.	
By community—	All of the members with governing authority discuss, deliberate, and decide.	
consensus of the	Decisions may require unanimous consent or some majority of the members.	
members or	Many users of consensus arrangements find that this method can get bogged	
representatives	down when there are enduring disagreements among members. Some networks	
	start with consensus governance, but when they run into trouble they add rules for	
	deciding by majority vote if consensus cannot be reached.	
By democracy—	A time-honored governance mechanism, this has potential risks in small networks	
majority vote of	since it may mean that members whose positions lose in the voting may become	
members or	alienated from the winning members; it threatens to erode trust between	
representatives	members and lead to network fragmentation.	
By "emergence"—	Sometimes networks "decide" not by making a formal decision through consensus	
actions of	or majority, but by simply letting members do what they want to do. Let's say that	
members.	a small production network is offered funding to take on a new task. Several of the	
	members want to do it, but they are in the minority. The network could seek a	
	consensus on what to do or it could vote. But it can also decide to let each member	
	do what it wants, as long as it doesn't take negatively affect the existing work of	
	the network. In other words, it lets "decisions" emerge as the aggregated actions	
	taken by members, what might be called "coalitions of the willing."	

Beware of "Lock Step" Thinking. Because we are habituated to organization life, it's easy to fall into the trap of thinking that a network's members must all agree on everything the network should do; that they must march in lock step (like an organization's employees). This is a mistake that sacrifices the great advantage of decentralized systems, the energy voluntarily provided by autonomous members. On some matters, such as network purpose, it's essential that members agree, but on others,

such as which activities to undertake during the year, it's more important that individual and clusters of members engage in activities they want to do than that they all agree on all activities.

At the Cascadia Network's 2012 meeting, reports Portland's Michael Armstrong, some of the member cities wanted to focus collaborative work on rising sea levels, but it wasn't a concern for other cities. "We said this won't necessarily involve all the cities, and everyone was good with that."

Advice to Regional Startups: In designing network governance, network organizers should be careful when entering into funding agreements. A funder may intentionally or inadvertently try to influence the governance model of the network. But, given the range of choices in governance design, is what the funder wants the best model for the network?

Building a Member-Owned Network from the Outside

The origin story of the New England Municipal Sustainability Network illuminates the way a member-driven network can be built by a non-member.

In the spring of 2010 Joel Sonkin had left his job with the City of Newark, in economic development, to work as a senior policy advisor to the U.S. Environmental Protection Agency's New England Regional Administrator. His top priority was to figure out how the EPA could work more effectively with municipalities in the six-state and 10 tribal-nation region. The Regional Administrator, Curt Spalding, emphasized establishing and nurturing networks, and creating connections between networks. Armed with that mandate, Sonkin started making the rounds of cities. "I went out and met with mayors and town managers and, to a lesser extent, sustainability managers, and asked what they needed from EPA Region 1. I heard two things consistently. They at times felt overwhelmed by all the information they got about being sustainable, and yet felt they didn't get enough useful information. And they felt they were operating in a vacuum; they were not aware of what other cities were doing."

Early on Sonkin met Jim Hunt, Boston's Chief of Environmental and Energy Services, and heard for the first time about USDN (Hunt was a founding member) and how it linked sustainability officers across the nation—in person, through conference calls and the Internet—to share their problems, solutions, and ongoing learning. "It seemed like a great idea, but membership in USDN was capped." Sonkin also talked with USDN Coordinator Julia Parzen. "She provided early, crucial guidance about what the network could be." A network approach appealed to Sonkin and his EPA colleagues. "It got us thinking: why not take the USDN model and replicate it on a regional level?"

Sonkin talked with more sustainability directors in the region, especially those active in USDN, and found strong interest in developing a regional network as long as it provided real benefits to members and didn't replicate what they already could get through USDN. He thought that an initial benefit might be the opportunity to work together to address a regionally shared issue, like climate-change planning, since the cities felt it "bled over into other cities." Sonkin had an intern find out how many New England municipalities had a sustainability position. "It was a high number, about 130. But I think having us ask the question caused some municipalities to identify someone." He estimated the number of sustainability directors who would "bring content to the table" was 30-40. And he discovered that most of these people did not know each other. "Some had good awareness of the practitioners in the cities immediately abutting theirs, but not more than that. There was not a great sense of who all was working in the region."

From his experience working on inter-city networks in New Jersey, Sonkin realized that he/EPA would have to play a carefully crafted role to help spark a regional network into existence. "The EPA and other federal agencies often produce tools for cities presuming there's an audience for them. When I worked in Newark the federal and state governments would provide support in the vicinity of what we needed, but not quite the right assistance." When Sonkin first raised the idea of building a network, some of his colleagues assumed that EPA would be setting the network's agenda. "But I sold the regional administrator (Curt Spalding) on the notion that we would be engaging the group but not owning it. He immediately grasped the importance of the network being peer led. My instinct was that if the network was going to be valuable to the municipalities, it needed to be theirs." This meant that when, at Jim Hunt's suggestion, Sonkin met in September 2010 with the USDN members in the region he played a facilitating role at the session—listening to others and offering the EPA's help, trying to align with the network members, not trying to direct them. "You have to let the group set the agenda." In other words, Sonkin would serve as a steward for the network—advancing all of its members' interests, not just those of the EPA. And EPA would not even be a member of the network; that was reserved for cities.

DEVELOPING THE NETWORK'S AGENDA AND FUNCTIONS/ACTIVITIES

When the founders of the New England and Heartland networks were designing the first meetings of their new members, they had a simple question: Once we're all agreed on the purpose of the network and know what value propositions matter, how do we organize the actual work—the functions/activities—of the network?

Start with *content* — the "what" of the work, not the "how." Both networks surveyed their members about what topics in urban sustainability they most wanted to learn about or collaborate on. They started with fairly long lists and used some of the meeting time to find out what the members' priorities were. New England's steering committee of founders came up with six potential topics for the network to consider:

- 1. Climate change adaptation: flooding and infrastructure resilience, including stormwater
- 2. "Green and Healthy Homes," an energy-efficiency and public health initiative of multiple federal agencies
- 3. Urban forestry
- 4. Composting
- 5. Transportation, especially street guidelines
- 6. Regulatory levers for sustainability, such as building codes

But the leading topics on this list were clear: climate change adaptation and energy efficiency.

Covering Many Topics to Ensure Each Member Finds Something of Interest

Heartland's first network meeting—a day-and-a-half gathering—organized presentations, discussions, and learning about a wide range of topics, including:

- How three federal agencies—Environmental Protection Agency, Housing and Urban Development, and Transit Administration—were working together on the new federal Sustainable Communities initiative, and how they proposed to work with the network members
- Regional planning grants and partnerships
- Exploration of the Sustainable Communities Institute Website
- Each member's most exciting and challenging sustainability project
- GHG reduction actions members were undertaking
- Internal Sustainability in Government Operations and Funding
- Sustainability planning

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As a network homes in on its priority topics, it also has to decide what it wants to do about — how it wants to function concerning — each topic. Is it about learning about the topic? Is it about taking collaborative action? Is it about convincing someone else — a federal agency, say — to take certain action? It's important to get clear about the desired functions, because each type of function may pose very different requirements of the members. For instance, if peer-to-peer exchange and learning is what's wanted, it requires a "safe space" for members to share learning, problems, and solutions. But if collaborative planning is what's wanted, that requires much more alignment and detail among the members: clarity about what will be planned and a work plan for the planning process.

Several start-up regional sustainability networks organized around climate adaptation planning, because it was a pressing matter that their members had in common. The Western Adaptation Alliance is a set of cities in similar arid and semi-arid climates, so they tend to be working on similar sustainability issues. "We developed a vision for the region for adaptation planning," explains Stephanie Smith, Sustainability Specialist of Flagstaff, AZ. "And we agreed on the goal we share in the region to make climate adaptation a priority at the local level and the rationale behind adaptation planning."

One way that regional networks can identify learning/work their members want to do together is to survey what the members are working on and what their priorities are for the next year. USDN has done this annually—and then organized workshops at the annual meeting and monthly learning conference calls around the topics with the most demand. In 2011, a USDN survey presented members with more than 100 innovation topics and asked which ones were priorities for the next two years. About 30 of the topics received votes from a third to half of the members, and those became workshop topics at the next annual meeting.

The menu of member-driven activities that USDN has developed during the past three years illustrates how different functions can be implemented:

Function	Activities	Description
Peer sharing and	Workshops and plenary	Selected members present information about
learning	sessions at Annual Meeting	specific topics, then discuss, and identify
		potential follow-up steps for group learning
	Monthly Idea Sharing Calls	Members sign up for calls to learn about specific
		topics; coordinator organizes calls and facilitates
		discussions. Typically, 30 or more members sign
		up per idea.
	Small Group Discussion	Smaller groups of members conduct a deeper
	Marketplace	study of a particular idea.
	User Groups (e.g., Pay as	Members working on specific topic sign up to
	You Throw, Bike Sharing,	share practices/questions and adapt their
	Fostering Behavior Change)	implementation.

Collaborative projects for building the sustainability field	Working Groups for Strategy Development (e.g., professional development, innovation development, SCI Web site)	Members volunteer to participate in Working Group which develops strategies for USDN future projects. Working Groups last for 6-12 months, are supported by Coordinator and consultants, then present recommendations to USDN membership, who decide which, if any, projects they want to participate in.
	 Working Group for Tool/Event Design (e.g., Urban Sustainability Leadership Academy) 	Members co-develop with a partner entity a specific tool or event designed to serve needs of USDN members and other local sustainability leaders.
	Working Group for Planning and Coordination (e.g., USDN Planning Committee and Regional Networks Coordinating Committee)	Members engage in planning network activities (e.g., Annual Meeting, coordination of regional and USDN network schedules)
	USDN Innovation Funds	Selected members participate in governance of grant-making funds supporting urban sustainability

Advice for Regional Start Ups: The test of the network's agenda and functions/activities is whether they mobilize/engage members. Always ask the members what they are willing to do together because they perceive value in it. And, at least at the beginning, try to keep activities fairly simply. A monthly conference call for learning on a specific topic requires effective preparation, but it's not a high-difficulty event.

A Getting Started Survey – Heartland Local Government Sustainability Network

- 1. What is your position title?
- 2. Where is your position located within your city or county government organization?
- 3. How does your organization define the term "sustainability"?
- 4. How is your position funded?
- 5. If your position is funded via an Energy Efficiency & Conservation Block Grant (EECBG) formula grant, is there a specific expectation that you need to meet in order for your position to continue after the EECBG funding is exhausted? If so, what is that expectation?
- 6. Do you believe that participating in a network of your local government peers in the four-state region of Kansas, Nebraska, Missouri, & Iowa would be beneficial to you?
- 7. How formal or informal an organizational structure do you think the network should have?
- 8. What functions would you like the regional network to serve?
- 9. What services would you like the network to provide?
- 10. What media (email, conference calls, other) would work best for you to participate with your peers in the network?
- 11. How frequently would you like to schedule conference call meetings among the network participants?
- 12. Would you be interested in rotating the responsibility among the participants (including yourself) for convening the conference calls and developing the agendas?
- 13. Does your current budget situation limit your travel funding to participate in semi-annual or annual face-to-face network meetings?
- 14. If funding could be secured for travel (from EPA or other sources), would you be interested in semi-annual or annual face-to-face meetings of the network?
- 15. If so, what frequency of face-to-face meetings do you think would be most appropriate and beneficial?
- 16. A preliminary list of regional local government sustainability staff is attached. Do you know of others who should be included in the Heartland Local Government Sustainability Network? If so, please provide name(s) and contact information.
- 17. Do you have another name you would like to suggest rather than "Heartland Local Government Sustainability Network"?
- 18. Has your city/county developed an energy efficiency & conservation strategy, a climate protection plan, a sustainability plan, or some other policy document that provides a basis for sustainability efforts in your community?
- 19. Are you familiar with the STAR Community Index project initiated by ICLEI-Local Governments for Sustainability and the U.S. Green Building Council?

BUILDING CONNECTIVITY AMONG MEMBERS

The first meeting of the Heartland Network started with an optional visit to Johnson County, Kansas' LEED® Gold office building near Kansas City and proceeded on to their wastewater treatment cogeneration plant. Then participants dined at Los Tules restaurant and after dinner toured a one-block area with urban food gardens, renewable energy, storm water BMPs (which import storm water runoff & store it for irrigation), and other sustainability initiatives. "Green tours" may never catch on as a tourist attraction, but they are a great way to connect network members to each other; as they tour, they learn and share an experience in informal settings.

The Nature of Connectivity

Weaving networks is about building relationships. Productive relationships in networks are built on trust. Trust is the glue that holds networks together. Just because you are connected with each other does not mean you trust each other. Trust, a sense of confidence and reliance on the intention, integrity, and ability of another person or organization, facilitates the efficiency and quality of the information and transactions that flow between network members.

Trust between people is built on information and experiences. Most people don't trust strangers. And usually just getting information about a stranger, even a full dossier about them, is not enough to build trust. It takes more — shared experiences that allow you to see how the stranger acts in situations, which allow you to "look them in the eye." The two ways to build trust in a network are to increase the bandwidth of information and the experience of reciprocity in the network.

Bandwidth refers to the types of information that can be shared among network members. Network members can exchange printed information about each of their organizations, missions, programs, and so on. They can do telephone conference calls to share personal information about themselves. They can make site visits to each other's organizations. All sorts of different information delivered in different ways: this provides substantial bandwidth for members to make judgments about each other. The more types of information shared between members, the more they know about their network partners, the more confidence they will have in each other. When it comes to building bandwidth, social science research emphasizes, you cannot overestimate the power of in-person information sharing. There is no substitute for meeting face-to-face.

At the Cascadia Network's April 2012 annual meeting, members made unexpected personal connections that helped strengthen their bonds. "We did ice-breakers and it was fun to watch people stumbling across personal connections they didn't know were

there. Two people realized they had gone to the same high school in a tiny town in Quebec — and here they were as sustainability directors in big cities on the West Coast."

Sometimes it is useful to have an outsider facilitate meetings of members when sensitive subjects, such as racial differences or a history of conflict, are being explored. A facilitator can ensure that the conversation doesn't break down and that members reflect carefully about what they are learning about each other.

Reciprocity refers to episodes of give-and-take and mutual support among members of the network. Karen Stevenson, an astute network analyst, describes the power of reciprocity as "the alchemy of mutual give and take over time turning to a golden trust." When members do something together, they inevitably have to work through differences and build on the commonalities they discover. They may develop more respect and understanding for each other. The same may happen when one member helps another member get something done. For instance, you can connect a member of the network to someone you know who can help them. Even just helping each other plan a meeting of the network can build more trust between members.

It takes time to build trust. Some of the smaller networks we know — with no more than a dozen organizations in the mix — have taken a year or more to launch themselves. What they're doing during all that time is meeting and talking, sharing their stories and values, checking to see if there's a good fit among them, deciding if they want to work together.

To Build Trust in Your Network

- Build bandwidth—increasing the types of information and contact between network nodes.
- Engage in more give and take—sharing values and passions of the members, and simply helping each other out, which creates reciprocity and cooperation.
- Strengthen existing bonds and build bridges between people connecting with each other personally and reaching out to others.

Designing Network Meetings and Other Connectivity Opportunities

Every network meeting, whether it's face-to-face, on the phone, or over the Internet, is an opportunity to increase and strengthen connections. But you have to design that into the meeting plan. Don't just march through the agenda, take the time to encourage people to share updates about their work — the highs and lows — and about themselves.

A network's activities should be producing "aha" moments for members, in which they realize that a benefit they got would not have been possible without the network. Maybe it's someone who posts a question online about a program she is designing and right away receives useful advice from three other members. Or someone who joins a conference call, describes his city's experience with a particular policy, and realizes that other cities are benefiting from those lessons learned. At the end of USDN's first annual meeting, participants were asked how many ideas they were taking back home—and nearly everyone said they had found several they could use. In other words, there were many aha moments.

To help members realize that the network is making a difference, it's important to make the aha moments of one member visible to other members. At the second USDN annual meeting, individual members stood up and offered testimonials about how participating in a USDN activity had made a difference to them.

Because building connectivity is so important in a network's early days, consider having more than one face-to-face meeting a year, perhaps every six months for the first year or two.

Advice to Regional Start Ups: Don't short change connection-building in the network. You'll be tempted to focus mostly on work, and working together does strengthen connections between people. But it's also important—at meetings, on the phone—to encourage more informal, personal connecting. Some members (and funders) may complain that the network is too "process-y," but strong connectivity actually makes the network more efficient in the long run, because when members trust each other they transact with each other more easily.

DEVELOPING ESSENTIAL NETWORK CAPACITIES

As a network takes shape, it needs to build two types of capacities: a variety of network-building roles/skills and an operating infrastructure—called a "backbone" by some—that enables member collaborations.

Network Building Roles

Organizing is the first role needed for building a network, but other roles and skills are needed quite soon after the initial spark starts the network. A network leader—whether a founder, a governing body member, a very active or well-connected member—worries about the well-being of the network and acts on its behalf. This may involve taking on one or more roles: weaver, funder, facilitator, coordinator, coach, or steward for the network. It is not the same as being the executive director/CEO, who *directs* the organization, commanding its resources. Instead, a network leader *enables* members to collaborate.

Organizer	Establishes purpose and value propositions of the network. Establishes first
	members of network and connects them to each other. Attracts initial
	resources for the network.
Weaver	Works to increase connections among nodes, both the number of links and
	the bandwidth quality of links. Also may focus on growing the network by
	connecting to new nodes.
Funder	Provides initial and ongoing resources for organizing the network, supporting
	development of connections, alignment, and production, and coordination
	for the network. May play role of initial organizer of network.
Facilitator	Helps network members to establish collective value proposition and
	negotiate collective action plans for production.
Coordinator	Helps nodes to undertake collective action for production, by ensuring the
	flow of necessary information and other resources, development and
	implementation of agreements among nodes. (See next section in
	Guidebook)
Coach	Advises organizers, weavers, facilitators, and coordinators about how best to
	perform their roles in building networks.
Steward	Informally helps to build the network, but as a member of the network,
	not as a formal position-role within the network

Network Weaving

In a network's early days, weaving is a most critical task. A weaver's role is to bring members into relationship. Weavers can simply introduce people to each other, which might produce some low-intensity engagement between them, or they can undertake a higher-intensity effort aimed at building deeper bandwidth/engagement among the nodes. Weavers:

- Connect members with each other.
- Serve as the "on-the-ground eyes and ears" of the network, picking up information as they connect with people.
- Help network members to develop new knowledge and skills that will allow them to connect with others more easily.

Weaving, says Lawrence CommunityWorks' Bill Traynor, a veteran network leader, is a new form of leadership that is crucial in a network. "It requires curiosity, caring, the ability to get information and then share it, the ability to hook people up to opportunities that you know exist." Most effective weavers are natural connectors; they like bringing people together and know how to do it. But the weaver must have or develop two essential and quite different competencies. One is an understanding of how to build networks—making connections that enhance trust and understanding among members. The other is an understanding of the specific context of the network that is being built. If, for instance, it is a network of organizations that provide after-school programs, the weaver must know something about after-school programming since that is the "currency" of the nodes. A weaver must be able to step into and operate within the world of those that are to be connected—and this means knowing something about that world.

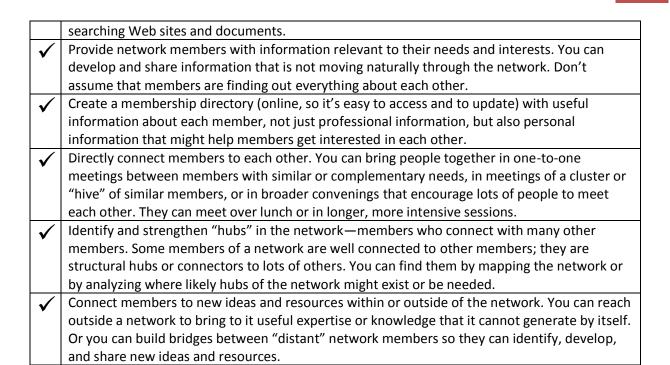
A network weaver is likely to face a number of other challenges. It may be difficult for network members to understand what the weaver is doing or why "more connectivity" will benefit them. In similar vein, it can be hard for a weaver to sell members who already have plenty on their plates on the notion that they should put more time and resources into connecting with others. For a time, a network weaver may find that he/she becomes a dominant hub in the network; after all, the weaver is also building links to many nodes. But a weaver's role is to help members build connections to each other, not to become a control point in the network.

A weaver has to be humble, says Matt Naud, Ann Arbor, Michigan's sustainability director and cofounder of the Michigan Green Communities Network. "When you think about the other network members, don't assume you know what they need. Go into it with a real sense of learning. What's worked best for us is to not have Ann Arbor take a front and center role. You have to create opportunities for other members in other communities to tell their stories. Sometimes you have to coax them, you have to work with them. I tell them, 'This is a great story. You need to tell other communities about it.'"

Strategies for Effective Weaving



You have to know the network—get to know the players you want to connect. Find out what connections they already have. Find out what they think they need. Find out what they are good at doing. To find out, you have to ask them—by surveying or interviewing them, by



Whatever strategies you use, it's likely that it will take time for the connections you help others make to form fully and for collaborations to grow out of the connectivity. Some links take quickly, others take more time.

Network Infrastructure

Networks don't just happen; they need infrastructure that helps members connect and collaborate. This is especially important for networks whose members are not in close proximity to each other, which limits the number of meetings that will occur. Because a network coordinator is the most essential element of network infrastructure, we discuss this role at length in the next section of the *Guidebook*. The next most essential element is capacity for internal communications among members.

Internal network communications involve capacities that enable:

- Individual members to find/communicate with/alert other individual members.
- Members in an identified cluster (e.g., a working group) to communicate with each other
- Members to share, access, archive, retrieve, and work on (edit, comment on) documents.
- Members to schedule meetings (phone, Internet, face to face) and to know what meetings/events have been scheduled (calendaring).

Members to build, add to, and access data bases (e,g., member directories; inventories of members' best practices)

All of this is easier to accomplish online. While a network is still small and not very active, it's possible to do most of this communicating through email and listservs and the occasional telephone conference call. But it may not be long before there are so many members, so many activities, and so many logistical details to manage, that emailing becomes cumbersome and ineffective. That's when turning to more sophisticated Internet tools — Web sites, collaborative workspace, communications software (e.g., Huddle or Base Camp) — will make more sense. It will cost money, but it will keep the network from stumbling.

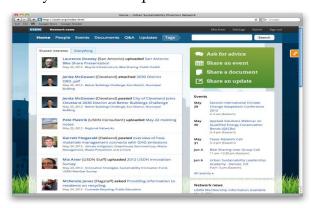
It takes time to build a robust online community, since people have different familiarity, comfort, and skills working online. One way to jump-start the process is to put the network's business—calendars, meeting agendas, documents—online and nowhere else. That helps to drive members to the online communications system and build the habit of using it.

USDN was lucky not to have created a website early in its development. When it did

create one, it was built around the way members already communicated. Members immediately began to use the website, which probably would not have happened if there were not already powerful relationships in place. Many great looking networking websites see very little use.

The new website is built around four ways USDN members communicate: asking for advice, setting up meetings together, sharing documents, and sharing updates.

The website also is set up to support group activity for both USDN user groups and regional networks.





The <u>Green Cities California</u> network augmented its online communications with a public Web site that is chockfull of information about best practices identified and used by its member cities.

Some Ways to Build Network Capacities

Weekly emails to	Regularly providing information about member activities helps
Members	members to see/find/connect with each other.
Working Groups	Provides members with facilitation and group leadership
	opportunities, and connects members more deeply because they
	have to align their thinking and work closely together.
Face to Face	The most powerful way to build strong connections among
Meetings	members, this also provides facilitation and leadership
	opportunities for members.
Orientation for	When conducted by a more veteran member, helps to build
New Members	instant connections for the new member, and also provides the
	veteran with a coaching opportunity.

Advice for Regional Start Ups: The more intentional you are about planning for network capacities and building network infrastructure, the more rapidly and more effectively your network will evolve. Too many network organizers discover, rather than anticipate, the necessity of this work. Instead, develop 3-6 month plans for implementing the essential weaving, internal communications, coordination, and other capacities the network will inevitably need.

What to Look for in a Network Consultant

Building an effective network is not the same as building an effective organization, so helping people to build a network—being a network consultant—is not the same as helping people build an organization. Based on our experiences working with networks, here are some capabilities a network should look for—and expect to find—in a network consultant.

- 1. A clear understanding and an easily understood explanation—an overarching framework—about how network-based social change is different from organization-based social change. This includes clarity about the various benefits of using network models, as well as when to use them and when not to use them.
- 2. An ability to differentiate between the way to build networks for different results; e.g., for service provision, learning, policy development and advocacy, innovation, or branding. Different goals require networks of differing characteristics (e.g., openness, membership, governance).
- 3. An understanding of the potential evolutionary pathways or developmental stages of particular networks—how networks naturally change over time (e.g., they tend to become more conservative as "group think" emerges); what a network's likely "transition points" will be; and how a network's evolution can be managed.
- 4. A set of support tools and processes that help a network to identify its members' "value propositions" for the network; listen for "resonance" in the network; recognize and analyze its existing and emerging connectivity structures; assess/evaluate the health of the network at any given time; and to anticipate network management challenges and opportunities.
- 5. Strategies for helping a network's members to increase their connectivity, establish enduring alignment among members, and/or develop member collaborations to produce particular results.

COORDINATING THE NETWORK

Every network needs coordination — from basic logistical support like setting up meetings and conference calls to "high end" tasks like supporting governance, raising funds, and tracking members' activities. But for many start-up networks, coordination is the Achilles Heel. It doesn't get done or doesn't get done well — and therefore the network struggles to get running.

Although local government sustainability leaders from four Pacific Rim cities — Portland, San Francisco, Seattle, and Vancouver — had met several times to work on specific topics, such as climate change planning, the effort had not materialized into a sustained network. "We have a history of gathering informally every year or so," says Michael Armstrong, Portland's sustainability director. "It's been enormously valuable and we say we'll do it more frequently and routinely, say quarterly or every six months. But we hadn't managed to formalize it even a little."

The hitch was that no one took responsibility for bringing the network together more regularly, whether in-person or by phone. The purpose and membership of the potential network was clear. But there was a "coordination gap." Someone has to conduct the basic operations of the network—and for a start-up network that mostly means coordinating the efforts of members so they connect and share with each other around a common agenda.

Armstrong was able to overcome this barrier in 2012 — by using his own time and staff to organize the details of a face-to-face meeting of the network. It was a temporary solution for coordination, but helped to kick the network into a higher gear.

Network Coordinator - Job Description

A coordinator's role may span from performing fairly linear network logistics, such as arranging meetings and conference calls, to undertaking very complex activities such as planning and fundraising. What type of coordination a network needs depends on its purpose and the complexity of its activities. But it's inevitable that coordinators will spend a lot of time simply "herding cats" — keeping network members on track, moving in the same direction and meeting their commitments; reaching out to "stragglers" to help them back into the fold; and sometimes prodding leaders to move the network. In our experience with networks, the work of coordinators may fall into five general categories.

USDN's coordinator is always looking for opportunities to promote member collaboration. When a consulting firm wanted names of USDN members to survey for a performance management benchmarking report for Boston, USDN instead brokered an ad hoc committee of members to provide input on the report, contribute to it, and then make it available to the full membership. When USDN provides a new member

with an orientation session, it's with six members participating—and half of the session involves them talking to each other. Early on in USDN's life, members were not answering each other's questions (online) so USDN paid a nonprofit to answer them. Now the member-to-member responsiveness is so strong that it's no longer necessary to hire an outside entity to perform that role.

Network	 Support network goal setting and the development of plans
Development	 Monitor and promote progress with network plans
	Maintain Network member database
	 Identify opportunities to create and strengthen network
	connections (network weaving)
	 Orient new members (including coaching on healthy network
	practices)
Internal	 Organize, convene, and schedule network meetings (develop
Communications	agendas, assist with goal setting, minutes recorded and shared)
	 Provide written updates and reports of all activities to Network
	members on a regular basis
	 Maintain network online capacities (Directory, Web site,
	collaborative site, etc.)
External	 Respond to all requests for updates and reports from funders
Communications	• Serve as liaison with other organizations and networks to promote coordination of efforts.
	Promote activities and goals of the Network and those of its
	members
Network	Facilitate data collection necessary for assessing and evaluating
Research/Data	network health and effectiveness of network activities
Collection	Support creation of white papers/ reports
Network	Review and monitor budget
Finances	 Identify and pursue funding and in-kind opportunities to support
	network goals

Roles of the USDN Coordinator

- Staffing the Planning Committee
- Supporting the efforts of members to learn from each other and work together
- Brokering the sharing of information
- Staffing sub-groups and committees
- Managing partnerships
- Staffing the Innovation Opportunity Fund
- Supporting planning and evaluation
- Budgeting and fundraising and reporting to funders

At the outset, a network founder usually plays the coordination role. That may work for a while, but as the network takes off it will involve too much work for someone to add to their full-time job. Some networks rotate or share coordination work among several members. That, too, may work for a while, but as coordination becomes more complicated (e.g., when there are multiple activities with many members), it gets difficult to maintain consistency and quality of coordination; instead, there may be a lot of variation in the performance of the coordinators, and the coordination among the coordinators suffers. Some networks find an intern or student to handle coordination, but these less experienced/skilled staffers are not likely to be able to handle the more challenging roles of a coordinator. Of course, the more experienced/skilled a coordinator, the higher their salary will be. To keep initial costs down, many start-up networks start with a less costly but less experienced coordinator. They also try to minimize how much time they need a coordinator to spend-preferring a part-time coordinator, also to hold down costs. How much time coordination requires depends on which coordination tasks are being done. USDN's large membership and many activities require a great deal of coordination, so it has a full-time coordinator supported by a network assistant and consultants who work with working groups. But USDN is three or four times larger than most regional networks are likely to be and is a fairly mature network with many more activities than a start-up network.

The New England network developed a partnership with the regional leadership of the U.S. Environmental Protection Agency (EPA), which agreed to provide a part-time staffer to perform coordination duties for the network.

Advice to Regional Start Ups: Sooner or later, a network that wants to grow, take on more difficult tasks, and sustain itself over the years, will need to have a dedicated coordinator, at least part time. It will have to find someone with the competencies to perform the coordinator role. And more than likely it will have to find the means to pay that person to do the work.

PLAYING WELL WITH FUNDERS

Networks for social change often turn to philanthropic funders to cover the costs of starting up. To succeed in raising capital the network organizers have to make a strong case for the network—and they have to avoid some of the pitfalls inherent in relationships with grant-makers.

Making the Case

What if the philanthropic funders you approach don't understand or believe in network approaches?

Although the logic of the network business case may seem quite powerful, emerging networks often find that potential funders—foundations, individual donors, corporations, and others—are used to funding single organizations and have trouble understanding why and how to fund a network.

Funders will notice that networks have limited ability to develop long-range plans (e.g., 3-5 years) because they are not centrally controlled — and usually should remain "open" to the surprises and opportunities generated by members; that networks use "business models" for financing their activities that are less proven and predictable — they are emergent, rather than designed — and depend a great deal on the "voluntary labor" of members; and that they may take a long time to develop into effective entities with impact, because of the need to build connections and alignment.

What's a network to do when its potential source of capital is behind the learning curve? The simplest answer is this: sell the prospective *results*, not the network model. A funder that is skeptical or uninformed about networks nonetheless cares about achieving certain outcomes. Pitch what the network can uniquely achieve, not how it will be done. For instance, if the network has prioritized climate adaptation planning by members, then describe to potential funders the collective impact that successful planning would have on cities in the region.

Anticipate, though, that if the "what" is compelling enough, then funders will have many questions about the "how." They may wonder, for instance: Who will be accountable for the use of the money, when so many organizations/individuals are involved? Or, why should funds be used to cover the overhead costs of building and operating a network, such as communications and coordination? But these are more technical questions about network design. You can show funders living examples in the

field (like USDN), as well as tap the literature about networks (including this *Guidebook*) to explain how the network will function and what its financial needs are.

Philanthropy Catches on to Networks

(From the Monitor Institute's "What's Next for Philanthropy")

Simply stated, philanthropists operate today in a stressful, rapidly evolving, networked, and interdependent world. Although the individual grant is the typical unit of analysis for most foundations, the success of any grant or organization is rarely sufficient to move the needle on a complex problem. We have all felt the irony when successful programs are lauded while the system they aspire to change continues to fail. Funders are well positioned to support connectivity and to coordinate and knit together the pieces of a network of activity that can have impacts far beyond the success of any one grant, grantee, or donor. And advances in network theory and practice now allow funders to be much more deliberate about supporting and participating in networks and in thinking about how the collective impact of a coordinated portfolio of grants can produce more significant change.

Pitfalls

When a single source of money invests in a network of distributed control there is a tendency, of course, for network members to defer to the source of funds. So the funder may have the power to organize the network initially in whatever way the funder thinks best. It can operate as a "dominant hub," setting most of the rules by which the network operates. But sooner or later—and sooner is better—the control has to be in the hands of members. Will the funder be able to let go of control?

A second challenge lies in the uncertainty of a network's evolution. It is hard to put a network's development on a production schedule. It is hard to be sure just how a network will evolve; surprises emerge. Will the funder be patient enough with the network to allow it to forge its own direction, rather than trying to impose a plan from the outside? A network is not a "widget factory" and cannot be judged by the number of widgets it produces, but many funders need a widget count to feel their money is well invested.

Advice to Regional Start Ups: Cultivating relationships with local/regional funders that care about sustainability—of the community, of the environment—takes time, but is often worth the effort. It's not about asking for money, at least not at first; it's about building a strong connection, just like within the network, which allows the network and funder to align around shared goals. And a trusting relationship will help a funder work through uncertainties about what networks are and how they work. Start by seeking small short-term grants, so the network can prove its value.

III. PEEKING AHEAD: MANAGING NETWORK GROWTH AND EVOLUTION

As a network matures, new design issues arise and old decisions may need to be revisited and revised. In this section we briefly discuss an array of topics likely to come along as regional sustainability networks move out of the start-up stage:

- ♦ Developing a Growth Strategy
- ♦ Evolving the Network's Purpose
- ♦ Adapting Network Structures to Enable Members
- ♦ Monitoring the Network's Health
- Developing a Sustainability Plan, Including Network Finances
- ♦ Building Relationships with Other Networks and Organizations (The Periphery)
- ♦ Evolving the Network's Governance

DEVELOPING A GROWTH STRATEGY

It's hard to know how big a network *should* be, but at the outset at least, more is not always merrier. The New England network started with seven communities and expected to expand to 25-30 members. That's a pretty big, but manageable step when it comes to network operations and decision-making. It would be much more difficult to expand to 50 or 100 members next. The process of expansion should be guided by clarity about what sort of members the network is looking for (eligibility could be based on narrow or broad criteria) and what the obligations of members will be to participate and contribute to the network, not just take/benefit from the network.

Another constraint on a network's size is its capacity to woo and support members. When Maggie Ullman and Susanna Sutherland were starting up the Southeast Network they initially thought about having as many as 40 members at the beginning. "I kept wanting to expand into states that aren't working much on sustainability so anyone starting to work on this had some support. But it takes a lot of outreach to do that. It was a tension for us: Do we start with the willing or do we recruit? We decided to start with the willing. I hope that in a year we can demonstrate enough value and cultivate leaders who will want to bring others along."

There are various theories about the optimal size of a group before its dynamics become dysfunctional or too hard to manage. For instance, as a network gets larger it becomes more difficult to get everyone in the same room at the same time, even though periodic face-to-face time is critical for the network's well-being. In *The Tipping Point* Malcolm Gladwell describes social science findings about the challenges of having more than about 150 people in tight connectivity. Facilitators of meetings will tell you that when the group size tops 20-25, the dynamics change and it's harder to manage the meeting. When USDN has considered increasing the size of the network beyond 75 core members, some members said they worried about losing some of the intimacy/trust/easy sharing that had been built among members.

A larger network will likely have a more diverse membership and that poses challenges. The Michigan Green Communities Network has been working with about 100 communities in the state. "Our biggest challenge has been the diversity of network members," says network coordinator Jamie Kidwell. It means that network activities such as conferences or conference calls have to be designed for a great breadth of topics. "Not everybody is at the same level or has the same interest," Jamie explains. "So we always have an array of topics. We do short presentations at conferences —4 or 5 minutes each — and then let people choose which breakout session they want so they can connect to the speaker they are interested in."

But the real standard for the network's size is this: What does it take for the network to be successful? Will growing increase opportunities and the potential for success or will it alter something that is fundamental about the network and should not be lost? Most of the regional networks that are forming might grow to have 25-30 members across 6-7 states. That seems a reasonable number to manage.

Advice to Regional Start Ups: Grow the network deliberately — with clear membership eligibility and requirements. Don't be lured into wanting to have "big numbers" to show funders or others. Effectiveness matters more than size, and slowly building relationships can pay off with greater long-term effectiveness.

EVOLVING THE NETWORK'S PURPOSE

Sometimes a network finds it should revise its purpose. It may outgrow the purpose, as network members become interest in collaborating for reasons that were not originally contemplated. Or it may find that its original purpose is not feasible, but other purposes may be quite appealing to members.

At USDN's second annual meeting members spent most of their time doing the peer-to-peer sharing and learning that attracted them to the network from the beginning. But they also took other steps that started to evolve the direction of the network — deciding to work on professional development, innovation development, policy development, and regional network development. Working groups formed around each of these topics and a year later, at the third annual meeting, various new collaboration projects were proposed or already underway. The network's purpose is evolving; as members become more experienced and effective in collaboration, they are becoming more committed to and ambitious for the network's impact.

The Green Cities California network started in 2007 with the main purpose of "accelerating the adoption of sustainability policies and practices." One strategy was to work together on developing and advocating for state policies favorable to sustainability. But, with just a few exceptions, it proved too difficult for the network to get 10 different city councils to agree on policies. Instead, the network focuses mostly on sharing/learning/implementing local policies and best practices for sustainability.

Advice for Regional Start Ups: It's important from the outset to be clear and specific about the network's purpose, as described in an earlier section. But as the network evolves, don't become dogmatic about purpose; see/hear what is really motivating to network members and repurpose the network to enable them to pursue their interests.

ADAPTING NETWORK FUNCTIONS/ACTIVITIES TO ENABLE MEMBERS

USDN has multiple structures or mechanisms to help members collaborate. In its first year it organized monthly conference calls for members to share information about particular topics; this delivered on peer learning. In a survey members said they wanted more opportunities to dive deeper into topics in small groups, which is why USDN created its Small Group Discussion MarketPlace. In its second year, USDN added a set of Working Groups, basically a task force of volunteers to develop a particular strategy for USDN to consider (e.g., professional development, innovation development). A working group has about 10-15 members, meets at least monthly on a one-hour conference call, and has a facilitator and consultants to carry out research and other tasks the Working Group identifies. The annual meeting is yet another structure that USDN uses to enable members; over the course of three years, the meeting formats have been quite similar — because the members' evaluations of the meetings were so positive.

The development of new structures has been in response to member feedback and to what the network was trying to accomplish. In most cases, the introduction of a new structure is considered to be an experiment — see how well it works for members and only then expand its use. At the same time, get clear about what makes the structure work well and improve the structure's performance.

Testing and adapting the network's structures is an important part of starting up, because you can't be absolutely sure what will work for the members. Just because it works for USDN does not mean it will—or should—work for a regional network. It's all about experimenting to find the right way to enable the network.

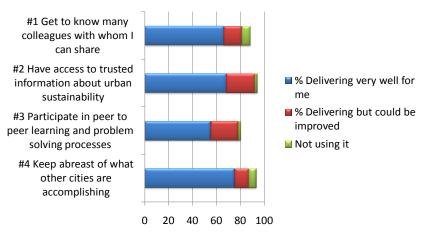
Advice to Regional Start Ups: Whatever structures you start with—learning groups, working groups, retreats, etc.—be thoughtful about how to use them to build stronger connections among network members, not just get work done. As the work is getting done, forge new and deeper connections too, since this is the real glue of the network. At meetings, for instance, use ice-breakers and unstructured "open space" to let people connect with each other beyond the work agenda at hand.

MONITORING THE NETWORK'S HEALTH

How do you know how well your network is doing? For starters, ask the members. At the 2011 USDN Annual Meeting, members saw the following survey data about their network's performance:

1) What members said their top value propositions for the network were and how well the network was delivering on each of those value propositions.





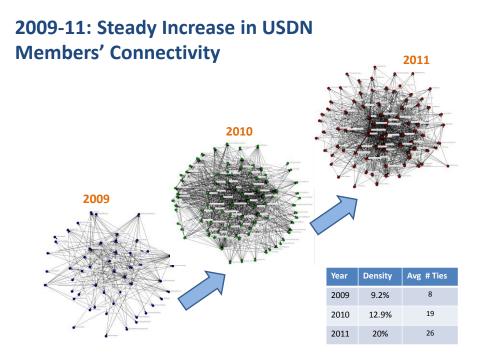
USDN Member Survey July-August 2011

2) How much members were participating in various network activities.

USDN Engagement (By the Numbers)

65	% of Core members participating in a Working Group
77	% of Core members who participate in Small Group Discussion Marketplace
76	% of Core members who have posted to a Forum
89	% of Core members registered for 2011 Annual Meeting
80+	# of members responding to 3 surveys in 2011
80	Average # of members who open up Weekly USDN Newsletter
30	Average # of members who participate in Monthly Idea Sharing calls

3) What the amount of connectivity among members was, based on which members they said they connected with.



All of this data—about satisfaction, engagement, connectivity—provides signals about how the network is doing. And it's pretty easy to get it and to track it over time. In the first chart above, "Delivering on Top Value Propositions," nearly 70% of network members said the network was delivering very well for them on the top value proposition. Imagine if only 15% of members had said so. Wouldn't that lead you to wonder what the problem is, do further examination, and change things? If you believe that trust between members is a critical ingredient for the network to succeed, don't you want to know how trust-building is going?

What's important is to recognize that there are some things that are real "factors for success" in building a network, and then measure how well those are going. By the way, as USDN has found, tracking some of these network dynamics is one way to help funders understand how the network is developing.

Advice for Regional Start Ups: USDN has developed pretty sophisticated ways to monitor the network's health. But that's after three years of operation; it's not a starting point. Instead, keep it simple: Make sure you track participation in network activities. At the end of network meetings, get participants to fill out a meeting evaluation. Start collecting data and be consistent about it; make performance data the "culture of the network."

DEVELOPING A NETWORK FINANCIAL STRATEGY

At birth, a network doesn't need much money. It lives on the volunteer energy of its initial members. If only things could stay that way! But as the network evolves and grows—sometimes very quickly—it needs more than voluntary contributions to function well. It needs money to pay for a coordinator, or communications software and a Web site, or a facilitator at a network meeting, or for research for a project, or to cover travel expenses of members whose budgets won't. And as the network starts to get traction with its members and they like what they give/get in the network, they will start to wonder how it will be sustained.

There are four basic ways to fund a network:

- 1. **Philanthropic donors.** For three years, the lion's share of USDN's costs has been covered by foundations. The Summit Foundation has provided two grants that allow some start-up costs of regional networks to be covered. In general foundations prefer to support projects that may have impact out in the world rather than operational or capacity-building costs of a network, which don't have a direct link to impact. A high-potential target for regional sustainability networks would be foundations that define a grant-making territory similar to that of the network. This could include community foundations, some of which operate statewide and in collaboration with other community foundations.
- 2. Member dues. The Green Cities California network requires member cities to pay dues. The 10 founding members pay between \$3,000 and \$11,000; newer members pay other amounts. USDN has introduced a member-dues structure to cover up to 50% of its annual costs eventually, blended with foundation grants. But USDN structured its dues so that members have several ways of paying them, including a straight dues payment or covering some of the costs of attending the USDN annual meeting. (And it offers scholarships.) Some networks start with a nominal membership fee, just to start the habit; USDN did this. But many networks fear that charging dues large enough to cover a network's costs will stymie growth of the network's membership.
- **3. Sponsorships or in-kind services.** The New England EPA is paying for one of its staffers to serve as coordinator for that region's urban sustainability network. However, when arranging or accepting sponsorships, especially from corporations, think carefully about whether it may create the perception—rightly or wrongly—that the network has been co-opted by an outside entity that, for instance, is also interested in selling its products to the member cities.

4. Fees for services. When a network starts to produce value that non-members might want, it can consider whether or not to charge—earn revenue—for its information, services, and products. Not that many networks seem to turn to this approach, probably because it takes the focus away from serving its members; seems like something of a contradiction to its noble mission; and requires the network to think like a business, at least to some extent.

Advice to Regional Start Ups: First, know what your costs are and keep them as low as you can for as long as you can, without stunting the network. Second, if you will have to seek philanthropic funding, recognize that it can take time — 6 months to a year, perhaps — to cultivate a relationship with a funder that will get you a positive response to a grant proposal. Third, when seeking outside funding, pitch the impact you intend to have and be clear about who in the communities (not just the network participants) will benefit from the work. Finally, when seeking philanthropic funding, it's wise to have even a nominal amount of membership dues and to account for the financial value of all of the voluntary energy members provide the network; this shows a potential funder that there is real "local effort" behind the work.

BUILDING RELATIONSHIPS WITH OTHER NETWORKS AND ORGANIZATIONS (THE PERIPHERY)

The Michigan Green Communities (MGC) network started by Matt Naud, environmental coordinator for Ann Arbor, MI, and David Norwood, sustainability director for Dearborn, MI, with Jamie Kidwell, sustainability associate for Ann Arbor, linked immediately with several partners--the Michigan Municipal League and the University of Michigan's School of Natural Resources and the Environment — as it set out to build a peer network of local governments and universities (MGC is the kernel of a Midwest regional sustainability network.) The municipal league cosponsored the network's first conference in December 2010, which attracted 60 participants from 40 communities. The Municipal League developed the Michigan Green Communities Challenge, and MGC and League are collaborating on updating the Challenge, which has involved more than 80 communities in committing to sustainability and measuring progress. And the League started a model ordinance database. At the same time, MGC works with a U-Michigan masters-degree project group to support the network's outreach, update the Challenge, and develop information for workshops and webinars.

It's fairly rare for early-stage networks to build these sorts of partnerships. Start-up networks focus on themselves; to get going, they have to. But as they mature, they may find that other networks or organizations want to have a relationship with them. Or that they themselves want to have relationships with others (at the periphery of the network). The trick is to figure out which relationships could create value for the network and make sense given the network's purpose. MGC's partnerships extend its capacity—to reach other local governments and to develop information that others will find useful. Eventually some of these beneficiary cities may want to join the network.

From its origin USDN saw itself as a *catalyst* that would stimulate others to take action, rather than as wanting to own and operate things by itself. It used relationships with other organizations and networks to broker change that seemed useful for the urban sustainability field, not to capture operational space in the field for itself. This is a very good model for a network; taking on too much operating responsibility will start to change the network into an organization.

Advice to Regional Start Ups: Early on, choose your partners carefully to ensure that they don't just see the network as an extension of their organization or as a "market" for what they do. Look for real allies for what the network seeks to accomplish. Don't worry if you don't have any "suitors" early on. As the network delivers for its members and grows, the word will get out demand will grow for access to and partnering with the network.

EVOLVING THE NETWORK'S GOVERNANCE

When in a network's life does it become important to make governance more formal? Should governance become a representative democracy?

As a network evolves—changing its functions—it has to consider how to evolve its governance so that it remains an enabling force, rather than a bottleneck or a dominator or irrelevant. At USDN, two adjustments in the governance structure were made. It first expanded the Planning Committee by two seats as a way of allowing more members of the network to participate and to allow the committee to be even more connected to the membership. With 10 members on the committee out of a total core membership of 75, the committee has 13 percent. Connectivity mapping reveals that the committee is well connected to many more members.

The second adjustment was also structural. As USDN began creating working groups of members to collaborate on longer-term projects, it organized the leadership of the working groups to be co-chairs of planning committee members. This allowed leadership but it also meant that the planning committee would be the nexus of information about what was happening in working groups, and an informed decision point.

As the New England network expanded — from 7 founding members to about 25 members — it evolved from loosely organized governance to a somewhat more formal governing model: A small Steering Committee, which meets monthly by phone, with two co-chairs. "Susanne Rasmussen (the Cambridge, Massachusetts sustainability director) and I volunteered to be co-chairs," explains Christine Eppstein-Tang, the sustainability director in New Haven, Connecticut. "The network decided to have the steering committee make decisions and communicate with the larger group. We had to strike a balance between central decision making and having everyone involved."

Network governance is not all about establishing formal structures. It's also about getting network members to step up into leadership positions. Dennis Murphey, who founded the Heartland Network, says one secret to developing network leadership is to give it room to grow: "I've made a conscious effort to back off and let others step up. We've got some very talented, motivated people who are willing to be leaders in the network. I want this network to continue well beyond the time I am here so I've been quietly cultivating that."

The Western Adaptation Alliance has cultivated new leadership by creating different leadership roles and filling them with different people. "A leadership group is emerging," says Salt Lake City's Vicki Bennett. She used to be involved in most of the

leadership's work, but now is focused on being the regional network's liaison back to the USDN network and other regional networks.

Advice to Regional Start Ups: The purpose of governance is to enable the network members. If governance, however informal it may be, is not causing bottlenecks and not trying to dominate/dictate to the network, then it's probably working well. Don't be in a hurry to formalize governance for the sake of formalizing it. But make sure that information about what network members are doing flows into the governance structure from all corners of the network.

RESOURCES FOR BUILDING NETWORKS

Albert-Laszlo Barabasi, **Linked: The New Science of Networks** (Cambridge, Massachusetts: Perseus Publishing, 2002). An illuminating exploration of the science of networks for the lay reader by a participant in the research. Especially strong in its explanation of how networks do what they do.

Heather Creech and Terri Willard, "Strategic Intentions: Managing knowledge networks for sustainable development," International Institute for Sustainable Development (2001), www.iisd.com, An enormously useful analysis of the many tasks in organizing networks—with clear frameworks and advice. Somewhat limited because it is based exclusively on Creech and Willard's experiences with knowledge-creation and innovation networks, but well worth the attention. Includes excellent chapters on network management and governance, forming and working within virtual teams, and network monitoring and evaluation.

Stephen Goldsmith and William D. Eggers, **Governing by Network: The New Shape of the Public Sector** (Washington, D.C.: The Brookings Institution, 2004). Focusing on the public sector, Goldsmith, a former mayor of Indianapolis, and Eggers use a network framework to examine collaborations and partnerships in government — and the breakdown of traditional bureaucracies.

Heather McLeod Grant, "Transformer: How to Build a Network to Change a System — A Case Study of the RE-AMP Energy Network," (Monitor Institute, 2011) at www.monitorinstitute.com/reamp/. The story of the development of RE-AMP, a Midwest multi-state network of advocacy NGOs and funders focused on climate change.

Fay Hanleybrown, John Kania, & Mark Kramer, "Channeling Change: Making Collective Impact Work," Stanford Social Innovation Review, 2012. A description of how foundations can use networks—collective action—rather than individual organizations to generate substantial social impact.

June Holley and Valdis Krebs, "Building Smart Communities by Network Weaving," 2002-2006, PDF at www.orgnet.com. Basic network concepts are explained in this accessible introduction to mapping and analyzing inter-organizational and community networks. Research is based on work with the Appalachian Center for Economic Networks (ACEnet). Easy-to-interpret maps describing a typical network's evolution illustrate the advantages of "knowing your network" and "knitting your network."

Peter Plastrik and Madeleine Taylor, "Net Gains: A Handbook for Network Builders Seeking Social Change." At www.networkimpact.org.)

Diana Scearce, Gabriel Kasper, and Heather McLeod Grant, "Working Wikily 2.0: Social Change with a Network Mindset," (Monitor Institute, 2009), at www.monitorinstitute.com/documents/.

William J. Traynor and Jessica Andors, "Network Organizing," ShelterForce, March/April 2005. Drawing on their experiences building the Lawrence CommunityWorks network, Traynor and Andors offer important advice for developing large-scale, grassroots networks that connect community residents to opportunities and each other.

Duncan Watts, **Six Degrees: The Science of A Connected Age** (New York: Norton and Company; 2003). Perhaps the most reader-friendly of the books explaining network science, filled with fascinating stories about a wide range of networks and clear explanations about the scientific analysis of network phenomena.

Mary Wissemann and Kristina Egan, "Building a Multi-Interest Movement for Smart Growth: The Massachusetts Smart Growth Alliance Story of What Works and How We're Facing Our Challenges," May 2006. After three years as a network of organizations, the Alliance took stock of how it was doing. A smart, readable, in-depth look at the key design issues for a policy advocacy network and how they have been handled.