

THE EVOLUTION OF PUBLIC POLICY DISPUTE RESOLUTION

Lawrence E. Susskind
Sarah McKearnan

This article traces the history of public dispute resolution from its earliest days in the 1970s to the present, documenting the introduction of innovative practices into many of the arenas where policy is made. It argues that the first stirrings of the field can be traced to the confluence of four separate but related experiments: 1) a handful of successful attempts to resolve multi-party environmental disputes through the use of mediation; 2) a series of dialogues bringing federal, state, and local officials together to negotiate public investment strategies; 3) attempts by a few federal agencies like EPA to supplement conventional rule-making with a consensus based approach called negotiated rule-making; and 4) the advent of community dispute resolution centers. The development of these four strands of activity is followed, showing how practitioners associated with each spurred further innovation, extended emerging dispute resolution techniques into new areas, and supported the founding and maturation of new dispute resolution networks and organizations. Some of the "best practices" that have emerged as the field has grown are described, along with potential ways in which institutionalization and the use of technology are likely to influence the further evolution of public dispute resolution.

INTRODUCTION

Only two decades ago, American citizens enmeshed in heated public policy disputes had few options. It did not matter whether disputants were members of a citizens group fighting the actions of a government agency, angry neighbors confronting each other, or officials unable to agree on important policy decisions. All had limited choices when traditional legislative and administrative options for settling their differences did not work. The vast majority carried their disagreements to court. Others opted for protracted political confrontations involving demonstrations, contentious public hearings, or angry media volleys. Meanwhile court dockets overloaded, litigation dragged on, and the machinery of government stalled. Gridlock appeared to be epidemic in the public policy arena.

Beginning in the mid-1970s, this began to change. A growing number of Americans experimented with creative new approaches to dealing with conflict. In the private sector, attention focused on ways of resolving disagreements between private firms and individuals without resorting to expensive litigation. Such dispute resolution techniques as the minitrial, private judging, and mediation began to be seen in greater numbers. In the public sector — and at the intersection of private-public disputes — interest grew in such processes as facilitation and mediation to help disputing parties move beyond impasse to settlement. A few individuals also began to use consensus building as a means of harmonizing conflicting interests and building agreement before full-scale public disputes crystallized.

A field that was barely discussed or even noticed twenty years ago is now capturing the attention of the American public. Dispute resolution centers are inundated with requests for mediation assistance. In 1975, there were only twelve neighborhood justice centers scattered around the country. Now there are over 400. As of 1993, twenty-six states were either offering or exploring the possibility of providing a range of dispute resolution options through local courts. Elected and appointed officials at every level of government are actively seeking to avoid political gridlock by using consensual approaches to formulating public policy. And across America, academic institutions are adding curricula in negotiation and dispute resolution in their schools of law, public policy, urban planning, and business administration (NIDR, 1993).

To illustrate just how fast public dispute resolution has gained legitimacy, we can compare two meetings of dispute resolution specialists, separated by a decade. In 1982, a handful of pioneers gathered in Florissant, Colorado, to talk about recent experiments in mediating environmental disputes. The novelty of their efforts was apparent to all in attendance. They struggled to develop useful terminology and to reach a shared understanding of just what they were trying to do. Despite the stories they shared about their work, concerns about the continuation of limited foundation support and distrust of potential competitors produced a cloudy view of the future. The participants predicted turf battles over what they thought would be a small number of requests for mediation assistance; some expressed skepticism that public dispute resolution would ever be more than a passing fad (Carpenter, 1994).

Ten years later in 1992, many of the same practitioners, plus an additional 40 to 50 colleagues (from among many others who indicated a desire to attend) gathered for a conference in Charlottesville, Virginia. The atmosphere was markedly different: environmental mediators were now joined by a broad range of conflict management experts working throughout the public sector. There were at least four organizations present with annual budgets of between \$500,000 and \$1,000,000, and five that had pushed above \$1,000,000. Moreover, the focus of the discussion had shifted. People were no longer talking about surviving the challenges of limited funding. Instead, they debated different ways of handling the burgeoning opportunities in the field (Carpenter, 1994).

Today public dispute resolution encompasses a range of innovative techniques and practices which aim to generate agreement among differing elements of society. These techniques and practices aim to supplement rather than replace the decision-making processes characteristic of representative democracy, and they take account of scientific and technical knowledge in new and different ways.

Experience with public dispute resolution in the United States indicates that consensual approaches to handling conflict in the public sector can yield outcomes that are fairer, more efficient, wiser, and more stable than traditional methods, at least some of the time (Susskind and Cruikshank, 1987). Moreover, consensual approaches consistently seem to do better than conventional approaches in generating public confidence in government and empowering citizens to take greater responsibility for meeting the needs of all segments of society.

In this article, we sketch a portrait of the past, present, and possible future of public dispute resolution in the United States. Figure 1 illustrates the timeline of key events described in this portrait.

THE EVOLUTION OF PUBLIC DISPUTE RESOLUTION

Early Developments

In the late 1970s, there were a few experiments with dispute resolution in the public sector. While each broke new ground in a different way, they all reflected a shared belief that conventional conflict management methods sapped financial resources, took an unreasonably long time to produce agreement, and did little or nothing to improve relationships among disputing parties.

The efforts of these early experimenters to craft new approaches to resolving disputes represented the first stirrings of an emerging field. At that time, they were dispersed around the country, testing ideas in relative isolation from one another (Bingham and Haywood, 1986). These public dispute resolution pioneers worked in four activity areas: 1) environmental dispute resolution, 2) negotiated investment strategies, 3) negotiated rule-making, and 4) community dispute resolution.

Environmental disputes provided one of the first arenas for individual dispute resolution practitioners (i.e., mediators). Mediation was tested as a means of avoiding protracted court battles over actual or potential environmental degradation. Environmental mediation was designed to bring people face-to-face, where they could begin to educate each other about their real interests and search out mutual gains (Susskind and Weinstein, 1980). One of the first disputes to undergo mediation was a long-standing controversy over a proposed flood control dam on the Snoqualmie River in Washington. Project proponents (including farmers in the valley) were pitted against environmental stakeholders concerned about the survival of the river's ecosystem (Adler, 1983). Two of the first environmental mediators, Gerald Cormick and Jane McCarthy, acted in the absence of precedent when they initiated and then facilitated a dialogue among the opposing parties. After a year of mediation, an agreement was forged around plans for the construction of the dam, additional flood control initiatives, recommended land use controls, and a basin-wide coordinating council (Bingham, 1984).

The Snoqualmie River story, of parties reaching an agreement over contentious environmental issues through mediation, has been repeated hundreds of times since. Three years after the agreement was signed in Washington, at least nine other major environmental disputes had been successfully resolved through the use of dispute resolution techniques, and this number has multiplied exponentially with each new year (Bacow and Wheeler, 1984). Gradually, a small group of individuals began to amass skills and experience as they applied dispute resolution strategies to diverse environmental conflicts. Initially, their work focused primarily on assisting communities in resolving site-specific disputes, such as selecting a location for a new hazardous waste facility, and apportioning costs and responsibilities for an environmental clean-up.

At the same time as dispute resolution was being introduced in the realm of environmental conflicts in the late 1970s, officials at the Kettering Foundation decided to explore ways to improve the difficult and often acrimonious process of allocating intergovernmental financial transfers. They were motivated by the fact that cities were struggling to promote development in the face of competing demands from federal and state agencies — all of whom were attaching "strings" of various kinds to grants for social and economic development. Elected and appointed officials were hampered by these

EARLY DEVELOPMENTS

Mid 1970s

Gerald McCormick and Jane McCarthy successfully mediate the Snoqualmie River Dam dispute

Other practitioners gradually begin mediating multi-party environmental disputes

Department of Justice funds start-up for 3 pilot Neighborhood Justice Centers

The Kettering Foundation funds first NIS process in Gary, Indiana

NIS agreements reached in Minnesota, Connecticut and Ohio

Administrative Conference of the U.S. recommends federal agencies use negotiation to resolve regulatory issues

Early 1980s

First national practitioner meeting in Florissant Colorado

EPA launches first negotiated rulemaking

Other federal agencies begin launching reg negs

GAINING MOMENTUM

Mid 1980s

National Institute of Dispute Resolution (NIDR) opens its doors

First books describing public dispute resolution are published: *Environmental Dispute Resolution* and *Environmental Dispute Resolution: A Decade of Experience*

NIDR gives grants to five states to establish state offices of dispute resolution

Consensus, a quarterly news publication on public dispute resolution, begins publication

Some Neighborhood Justice Centers begin mediating highly visible, multi-party disputes

SPIDR Environmental and Public Policy Sector is formed

Early 1990s

A decade after Florissant, practitioners gather once again in Charlottesville, Virginia

Fourteen states have state offices of dispute resolution

Five national associations form the Program for Community Problem-Solving

The Negotiated Rulemaking Act and Administrative Dispute Resolution Act are passed by Congress

FIGURE 1. Timeline of key events in the history of the public dispute resolution field.

conflicting requirements, the lack of coordination among levels of government, and the difficulties that arose in synchronizing public and private investment. "Negotiated investment strategy" (NIS) was the term coined for an innovative process originally designed to bring together federal, state, and local officials with a stake in the allocation of public resources to make decisions on difficult budgetary and development decisions (Kettering Foundation, 1984).

At the core of the NIS model was the idea that cities should develop long range investment strategies reflecting the ideas and concerns of a broad array of urban interests. According to Carl Moore (1988), one of its theoretical architects, "It was hoped that such a plan would set forth coherent, coordinated strategies to guide and target the investment of time and resources by all public and private interests." One of the first places to host an NIS process was Gary, Indiana, a midwestern city laboring to address persistent social and economic difficulties. In 1979, a neutral facilitator helped to convene teams of negotiators representing governmental interests at the federal, state, and local level. For 18 months the participants met to discuss differences, engage in joint fact-finding, and work towards consensus. In 1980 an agreement was signed that laid out a comprehensive strategy for dealing with Gary's problems and allocated specific funding and action responsibilities to all the parties around the table. Similar successes were realized in the early 1980s in Columbus, Ohio, and Minneapolis, Minnesota. In Connecticut, stakeholding groups from state and city government as well as private social service agencies were convened to make decisions about how to allocate the state's diminishing federal block grant for social services. Here, NIS was used at the state level as a creative way to engender coordination and cooperation among the many agencies and organizations competing for limited funds.

Meanwhile, at the federal level, a new approach to dealing with contentions federal agency rulemaking was being developed. For decades, the process of regulatory rulemaking had been losing credibility among government officials, businesses, citizen groups, and critics of administrative law. These groups were frustrated by the lengthy delays, high costs, and frequent litigation that arose during the conventional process of drafting regulations to implement new legislation. Compounding this problem was the lack of legitimacy surrounding many rules — particularly those involving complex scientific and technical tradeoffs — after they were formulated. While federal agencies had been granted broad discretionary powers by the courts, the participation of groups most likely to be affected by agency decisions consisted of the right to submit formal statements to the rulemaking "record" on which the agency was required to ground its decisions. This formal trial-like process did not allow stakeholder groups a means of providing input into key policy choices and technical judgments that agencies inevitably made as they developed controversial regulations.

In the early 1980s, mounting dissatisfaction with federal rulemaking propelled the Administrative Conference of the United States (ACUS)¹ to recommend that agencies try new rulemaking procedures based on the principles of negotiation. The Conference envisioned a process by which a new rule would be developed through direct negotiation and collaborative fact-finding among all groups likely to be affected. This approach aimed to reduce the time, cost, and acrimony associated with conventional rulemaking by taking account of conflicting interests throughout the development of rule specific provisions. By creating avenues for groups to participate at every step of regulatory decisionmaking, negotiated rulemaking held out the promise of producing rules with far greater legitimacy in the eyes of the public, thereby eliminating the endless cycles of litigation that bogged down agency action.

One of the first agencies to experiment with the negotiated rulemaking process was the Environmental Protection Agency. In early 1984, the agency announced that it would use negotiated rulemaking to develop a rule governing noncompliance penalties for classes of heavy duty vehicles or engines that exceeded allowable air quality emissions levels. There was resistance to the experiment from within the EPA itself as well as from some of the stakeholding groups. However, after four months of productive negotiation and joint fact-finding facilitated by a neutral conflict resolution expert, the participating stakeholders reached consensus. Following on the heels of this successful demonstration, the EPA again used negotiated rulemaking to develop standards governing the procedures for

registering new pesticides. Spurred on by EPA's success, other federal agencies soon followed suit (Susskind and van Dam, 1986).

The fourth arena where new approaches to managing differences were developed and tested was community dispute resolution. The practice of facilitating dialogue between two or more members of a community to assist them in resolving interpersonal conflicts was certainly not invented during the last two decades. What was novel was the effort to *institutionalize* this kind of assistance in neighborhood-based centers that were staffed by volunteer mediators specially trained in the use of emerging conflict resolution techniques.

Neighborhood Justice Centers (NJs) were among the first organizations dedicated to managing conflict among members of the same community. Founded by the U.S. Department of Justice in 1978, NJs operated on the principle that new ways of resolving disputes were needed to relieve overburdened and backlogged courts. By recruiting community volunteers to mediate civil cases before they became mired in the court system, the program aimed to empower communities with an ethic of communication that could transform the quality of relationships among community members. The theoretical architect of the program, Professor Frank E.A. Sander of Harvard Law School, said:

Take, for example, a dispute between two neighbors ... about a dog of one that keeps trespassing on the land of the other This kind of problem is not likely to be effectively resolved by the criminal adversary process, for the ultimate issue is not who hit whom, but rather how this degenerating relationship can be constructively restructured. For that type of relationship between interdependent individuals, a mediative process seems far more apt than a coercive process.

(Primm, 1992-1993).

With start-up funding from the Law Enforcement Assistance Administration (LEAA), pilot neighborhood justice centers opened in Kansas City, Atlanta, and Los Angeles in 1978. All three centers recruited and trained volunteers from a wide range of socio-economic backgrounds in an effort to assemble staffs that reflected the full diversity of the communities they were serving. Each center adopted a different model to guide the delivery of their dispute resolution services. The Atlanta program maintained close ties to the court system, which provided the center with a source of volunteers and the majority of its case referrals. In Los Angeles, the NJC opted to remain independent of the court system, and instead focused on developing strong ties to well-defined neighborhoods. The Kansas City program was established as a department of the city government, with a mandate to work closely with police and prosecutors (Adler, 1983). As these programs grew and expanded their services, other communities across the country followed suit and inaugurated their own neighborhood justice centers (Abel, 1982).

Gaining Momentum

At first, these experiments received hardly any notice. While a group of dispersed theorists and practitioners tested new ways of managing society's conflicts, most individuals and institutions continued to use political confrontation and the courts to resolve conflicts in the public sector. However, the early successes of mediation and consensus building gradually began to attract attention. As the pioneers began to share information, reflect on their experiences, and publicize their efforts, dynamic synergy was activated.

Signs of this synergy began appearing in the mid-1980s. Individuals and institutions that had been working in relative isolation began to meet and plan collaborative projects designed to strengthen the new foundations of public dispute resolution. Five initiatives illustrate the growing development of the field.

First, several authors published books describing recent efforts to apply mediation and consensus building and offering a new body of theoretical and empirical analysis to demonstrate the value of these experiments. Prominent examples include *Resolving Environmental Disputes: A Decade of Ex-*

perience (Bingham, 1984); *Environmental Dispute Resolution* (Bacow and Wheeler, 1984); *Breaking the Impasse: Consensual Approach to Resolving Public Disputes* (Susskind and Cruikshank, 1987); and *Managing Public Disputes* (Carpenter and Kennedy, 1988).

Second, as an expanding group of individuals honed their skills as neutral facilitators and mediators, they found their services increasingly sought after. Soon groups of professional practitioners like the Center for Dispute Resolution (Boulder, Colorado), The Mediation Institute (Seattle, Washington), and Endispute, Inc. (Boston and Washington) were able to survive and grow. Their early efforts to communicate with each other and to foster an informal network led to the establishment of a Public/Environmental Dispute Resolution Section of the Society for Professionals in Dispute Resolution (SPIDR) in 1985.

Third, a half-dozen foundations and corporations, some of which had been funding community and environmental dispute resolution programs for over ten years, joined together to form an organization with the mission of supporting growth and innovation in the field. The National Institute of Dispute Resolution (NIDR) was officially inaugurated in 1983, with a large block of funds to support researchers and practitioners who wanted to analyze the progress of dispute resolution or carry its methodologies into new arenas. One of NIDR's most significant contributions in its early years was facilitating and funding the founding of five new state-sponsored offices of mediation in Massachusetts, New Jersey, Hawaii, Wisconsin, and Minnesota (Susskind, 1986).

Fourth, growing public interest in processes for managing disagreement produced a demand for training in conflict management skills. In just a few years, courses, workshops, and seminars mushroomed across the country. In academic settings, students and professors worked together to create new programs specifically geared towards training a cadre of public dispute resolution professionals (Dinell and Goody, 1987; Collins and Dotson, 1986; Dotson, Godschalk, and Kaufman, 1989). The Program on Negotiation at Harvard Law School as well as similar university-based programs in Virginia, Georgia, Hawaii, New Jersey, and Minnesota provided impetus to these academic efforts.

Finally, the desire among researchers and practitioners to have regular access to the wealth of information about new developments in the field led to the creation of newsletters like *Consensus*, published by the Public Disputes Network at the Program on Negotiation. By documenting new projects and programs, offering profiles of organizations specializing in public dispute resolution, and presenting a comprehensive listing of organizations and solo practitioners in all regions of the United States, *Consensus* has helped to foster an informed "demand" for public dispute resolution services. For the past seven years, more than 30,000 elected and appointed officials across the U.S. have received this newspaper four times a year at no charge.

Recent and Current Trends

The nexus of activity that characterized the mid-1980s transformed dispute resolution and consensus building in the public sector. Consequently, each of the four arenas where public dispute resolution was first introduced also underwent dramatic change. These changes coalesced into major trends that are still unfolding today. By reflecting on how each of the early strands of public dispute resolution were shaped by developments in the field, we may be able to shed some light on where current trends are headed.

Some community dispute resolution centers responded to the growing legitimacy and public interest in conflict management by significantly broadening the scope of their objectives. Initially, these centers were conceived as mechanisms for alleviating pressure on the court system, by providing an alternative forum where minor misdemeanor cases and civil suits could be settled by trained volunteers. However, a few centers entered new territory when they expanded their activities to include settling highly visible and controversial policy disputes, and facilitating consensus building processes aimed at forging agreement among multiple parties on major issues of public policy. While these centers continued to focus on interpersonal disputes between neighbors or among several community

members, they have also embraced opportunities to enhance community participation in complex decision-making processes.

Clear examples of this development can be seen in the evolution of the neighborhood justice center movement. For instance, the early success of the Justice Center of Atlanta in settling small scale disputes led a court to recommend its services for resolving a protracted battle over a proposed four lane highway in the metropolitan Atlanta area. With the assistance of an out-of-state facilitator, the Center convened a dialogue among representatives of the City of Atlanta, the State of Georgia, and twenty-four neighborhood coalitions to develop a consensus on the fate of the proposed \$27 million project (Primm, 1992-1993). Similarly, the Neighborhood Justice Center of Honolulu began by offering Hawaiian communities trained volunteer mediators to settle disputes between family members, neighbors, tenants and landlords, and consumers and merchants. After several years, the Center expanded its scope to include a "Conflict Management Program," which utilized trained volunteers to help government agencies, community groups, and private developers build agreement on contentious policy decisions. In one case, the Center helped build agreement on the siting of a controversial geothermal energy plant.

Organizations and individuals applying mediation to environmental disputes also responded to the nexus of activity in public dispute resolution by broadening their mission. While these practitioners had originally focused on applying mediation skills to site-specific environmental disputes, their widespread recognition soon produced requests to facilitate negotiations involving increasingly complex and geographically far-reaching environmental conflicts such as the adoption of regional and statewide growth management policies. For example, the Environmental Institute at the University of Virginia initiated the "Chesapeake Bay Roundtable," which was credited with forging a consensus that led to passage of the Chesapeake Bay Preservation Act by the Virginia Assembly. They also convened a consensus building process to study and build agreement on a set of coordinated measures to protect surface water quality in Virginia watersheds (Collins and Dotson, 1990).

Increasingly, these practitioners ensured the sustainability of their practices by charging fees for their services. Their success led to a dramatic proliferation of new service providers. Many organizations that began with a mission to solve environmental disputes have broadened the scope of their efforts to include public dispute resolution more generally. These decisions were motivated by the tremendous upswing in demand for experienced practitioners. Resolve, a Washington-based group that began as part of the Conservation Foundation in 1977, is an example of an organization that has broadened its focus from environmental to public dispute resolution.

Negotiated investment strategy became a springboard for the evolution of organizations dedicated to fostering ongoing cooperation and problem solving among various levels of government. These organizations institutionalized the process of using dialogue to ensure that difficult policy decisions reflected a melding of the many conflicting interests with a stake in governmental policy making. For example, in 1991, five national associations (including the League of Cities and the National Civic League) founded the Program for Community Problem Solving. The mission of this Washington-based organization was to explore ways of bringing together stakeholders to solve community-based problems collaboratively. The Program sought out diverse case studies of collaborative decision making at the community level, and then used educational tools such as videos, conferences, and training programs to share these successes with public officials in other towns and cities. The goal was to document and publicize cases illustrating the full gamut of municipal policy areas where consensual approaches had been tested, including economic development, housing, and education. The Program provides an example of one organization built on the momentum of the early efforts to develop negotiated investment strategies in the mid-1980s (Carpenter, 1994). There are many more.

Finally, negotiated rulemaking earned growing legitimacy and acceptance as greater numbers of people became familiar with the value of involving representatives of the public in agency decision making. As the EPA and other federal agencies began implementing a negotiated approach to developing highly technical rules, governmental organizations at the state, federal, and local level

turned their attention to the successes of these pilot projects. In the latter 1980s, many agencies began replacing their "behind closed doors" traditions with collaborative decision making processes that aimed to build consensus among the spokespeople for all affected stakeholder groups. Congress enacted the Negotiated Rulemaking Act (Public Law 101-648) in 1990 to legitimize this "alternative" approach to regulatory decision making.

Examples of states and localities that have experimented with negotiated approaches to regulation abound. Many public utilities commissions have worked with citizen groups, businesses, and other agencies to negotiate new utility rates or draft plans to moderate "rate shock" when rates are expected to skyrocket (Richardson, 1991). Some state legislatures have enacted statutes that require builders of hazardous waste sites to enter into assisted negotiations with communities that are under consideration as potential facility hosts (Wheeler, 1994). One state used consensus building to formulate a fair share allocation of affordable housing responsibilities (Susskind and Podziba, 1990). Facilitated negotiation has also been marshaled by city governments. One municipality brought together members of the city council with representatives of neighborhood groups and scientists to explore a technical controversy over the risks posed by a proposed trash-to-energy plant. Other city and local governments have used mediation programs to supplement adjudicatory processes for managing zoning disputes (NIDR, 1993).

Today, the signs of a flourishing market for public dispute resolution are abundant. As each strand of public dispute resolution has gained legitimacy and added to the lists of its successes, the field as a whole has made great strides. The institutions and individuals who have made it their life's work to contribute new research, innovations, and projects to this field are now part of a well-established network of professionals, with vehicles for promoting their ideas, sharing information and lessons learned among themselves, and disseminating skills and knowledge to others who want to join their ranks (Kolb and Associates, 1994). The newsletter *Consensus* is entering its seventh year. The four state offices of mediation sponsored by NIDR have multiplied to eighteen, and proposals to add new offices are always in development. A quick scan of the organizations in the Resources Directory of *Consensus* reveals a tremendous growth in the number and regional diversity of public dispute resolution practitioners. NIDR has estimated that the 5,000 volunteer mediators in 1980 had been joined by 15,000 new volunteers by 1990, and 79 community justice centers mushroomed into 300 in the same decade (NIDR, 1990). Finally, SPIDR's membership grew by 70 percent from 1980 to 1990, and continues to increase substantially every year.

These signs show that the piecemeal efforts of a few individuals experimenting with new ways to manage conflict have grown into a dynamic field. This field is supported by the efforts of a burgeoning group of theorists and skilled mediators and facilitators, and the spiraling public interest and demand which their work catalyzes.

THE PRESENT: "BEST PRACTICES" IN PUBLIC DISPUTE RESOLUTION

It is possible to identify a number of "best practices" in the dispute resolution field. These include: 1) procedural innovations; 2) applications to new policy arenas; 3) strategies for ensuring high standards of quality; 4) approaches to consolidating lessons learned from experience; and 5) techniques for managing and sustaining growing service-providing organizations.

Procedural Innovations

If the field of public dispute resolution has one distinctive characteristic, it is the capacity to design new processes tailored to solving problems, building enduring agreements among people locked in impasse, and improving policy making. While all of these processes share a common foundation (i.e., the principles of "mutual gain" negotiation and consensus building), each has its own unique characteristics. Some bring together large groups of self-selected negotiators in short informal interactions while others involve formal extended exchanges among official representatives. Some use

joint fact-finding to build a common pool of technical information while others focus more on getting the parties to articulate and dovetail their underlying interests. Every dispute resolution process now in use was created within the last fifteen years, and thus the field abounds with innovations.

Reviewing the efforts of a single organization, the Army Corps of Engineers, to work with conflict management techniques gives a glimpse into the breadth of these innovations. The Corps oversees more than \$9 billion a year in construction projects. It is the world's largest construction company and manages such projects as massive water resource construction, granting permits for construction in navigable waterways and wetlands, assisting other agencies with environmental clean-ups, and disposing of toxic substances on sites formerly owned by the Department of Defense. These functions create a web of complicated relationships with a great many contractors, and lead inevitably to disputes over contract performance. Sources of disagreement often include pricing, contract ambiguities, or changed conditions.

For years the Army Corps settled claims before agency boards of contract appeals (BCAs) established in the early 1900s. But these panels were burdened in many of the same ways as the courts, including expensive "discovery" procedures and overcrowded dockets that caused lengthy delays. In the early 1980s, the Army Corps began introducing a number of strategies for improving relationships between the Corps and its contractors, and dealing with disputes when they did arise (Consensus Building Institute, 1995).

First, the Corps introduced "partnering" as a way to reverse decades of adversarial interactions with its contractors and prevent expensive and time-consuming claims. Partnering is a purposeful effort to structure a collaborative, problem-solving relationship with a contractor during the performance of a construction project. It involves a series of planned, team-building meetings which bring together key management staff from both organizations at regular intervals during the execution of a contract. These meetings provide an opportunity for staff to become better acquainted, to communicate on a regular basis, and to work through problems before they escalate. The most important session is usually a facilitated, off-site partnering workshop which occurs before any work is undertaken. This workshop sets the stage for future cooperation, by inviting senior management and field staff from the Corps and the contractor to negotiate a partnering agreement that articulates shared goals and targets for the project, lays out respective roles and responsibilities, and identifies mechanisms for managing disagreements before they necessitate a formal administrative procedure. Partnering was an important innovation for preventing conflict. The measurable signs of its success include a dramatic reduction in the number of claims filed by contractors, and savings amounting to millions of dollars. In addition to being a regular feature of all major construction projects, partnering was used to improve the Corps' relationships with other government agencies and local project sponsors. But partnering did not prevent all disputes. In the mid-1980s the Corps began developing a comprehensive dispute resolution program. Staff at all levels of the organization were encouraged to use a variety of dispute resolution techniques, including structured negotiations, mediation and facilitation, non-binding arbitration and mini-trials.

For example, the Corps first used a mini-trial to settle a six-year-old, \$55.6 million claim against its Ohio Division by Ten Tom Constructors. Working with an outside consultant, the disputants designed a mini-trial procedure. Each side chose a principal from their organization, and then both sides chose a neutral to preside over the discussion. Attorneys presented their cases to the principals and the neutral, who asked questions. Then, assisted by the neutral, the principals set about negotiating a rapid settlement. It took only three days in a marathon face-to-face negotiation to reach agreement on a sum of \$17.25 million. The settlement saved the Corps the substantial time and money that would have been involved in resolving the dispute through the conventional claims handling process (Endispute, 1989).

New Applications

Supported by federal and state legislation and promoted by those who have witnessed the capacity of these processes to produce fair, stable and efficient solutions, dispute resolution processes are being extended to many new organizational settings and policy arenas. For example, in Virginia, a statute passed in 1979 which made it possible to introduce mediation into highly political and emotional annexation disputes between county and city governments. The statute established an agency called the Virginia Commission on Local Government which designated mediators to guide contending governments through face-to-face negotiations (Richman and Wilkinson, 1986).

In another extension of mediation to a new domain, special masters have been designated by federal and state judges to mediate complex civil litigation. For example, the senior author was asked to serve as a special master in a major New Jersey dispute over the construction and financing of a new regional sewage plant. The more than 30 urban and suburban communities who were against the project and a multitude of regional and state agencies were suing each other in what had evolved into a litigation free-for-all. There were no guidelines in place in New Jersey regarding the use of special masters as mediators. Our mediation team (under the auspices of the Office of Dispute Resolution in the Public Advocate's Office) facilitated a multi-party agreement among more than 100 parties. To overcome the adversarial use of facts and forecasts, our team commissioned an independent organization to prepare an analysis of alternative designs and financing strategies. Then we worked with the parties to build agreement on a set of principles for allocating costs fairly among communities with sharply different demographic profiles. Like all mediators, special masters must innovate as they go along. In this instance, we also had to find a way of making mediation work within the context of the Superior Court's operating rules and the guidelines imposed by the state Supreme Court (Susskind, 1985).

In another innovative application, facilitated negotiation was used to forge consensus on a set of sophisticated technical decisions about how best to handle the part of New York Harbor known as "the Bight." Historically, this shallow and ecologically sensitive area had been the dumping ground for sewage and industrial waste. The impacts of pollution on the Bight generated heated debates about the best approach to restoring the environmental health and economic viability of the area. The New York Academy of Sciences designed a process for bringing together representatives from a broad cross-section of private groups, agencies, and scientists organizations to make joint decisions about how to dispose of PCB-contaminated sludge in Bight waters. Facilitators used an array of techniques and processes including interviews with key stakeholders to identify and recruit participants, joint fact-finding to develop a shared base of technical knowledge, small group drafting sessions, and larger scale problem-solving meetings. The process culminated in the development of a "single text" — something like a treaty — outlining agreements on complex and controversial scientific choices, pinpointing areas of uncertainty, and calling for collaborative research and policy action aimed at reducing PCBs in the Bight. This document stood in sharp contrast to the usual morass of competing scientific claims and conflicting policy recommendations made by various stakeholder groups. It also helped to illustrate how public dispute resolution methods could improve "science-intensive" policy making in the public sector (McCreary, 1989).

Ensuring Quality

In a field that evolves and expands so quickly, one persistent challenge is to find ways of ensuring that new work meets consistently high standards of quality. For example, there is currently a lively discourse about how to help potential consumers of public dispute resolution services evaluate the skills and experience of providers. Every year the number of people offering such services continues to grow (see Figure 1). Any elected official, business manager, agency bureaucrat or private citizen who wants to find a qualified, professional neutral must sort through an enormous universe of candidates. The difficulties of this task are compounded by the ad hoc and decentralized way in which new processes and techniques are trademarked or copyrighted by enterprising providers. Because the field has not one but thousands of wellsprings of innovation, it has been difficult to develop any

formal set of standards to evaluate the services that practitioners offer. Those seeking professional assistance may find themselves greeted by a host of claims they cannot evaluate.

Recently, there has been an upsurge in efforts to transform potential users of public dispute resolution into "educated consumers." Several state programs have set standards for measuring the skills and experience of practitioners. For example, Florida and Hawaii have opted to assemble approved rosters of experienced professionals to streamline the selection process state officials must go through when they are seeking professionals trained in public dispute resolution. Hawaii's Center for Alternative Dispute Resolution sponsors a panel of carefully selected mediators. To sit on this panel, candidates must fill out a comprehensive application describing their most difficult cases and giving details about their experiences designing and facilitating "a policy round table or large public forum involving emotional policy matters." After the first round of screening, promising candidates are interviewed by a selection committee. In Florida, people seeking professional services are provided with a roster and a list of carefully designed questions to ask potential candidates (Field, 1994).

Other states have also developed innovative mechanisms for defining and ensuring the quality of dispute resolution service. In Minnesota, the State Office of Dispute Resolution used a consensus-building process to prepare a short, "user-friendly" guide to mediation services. Representatives of law schools, organizations and firms, as well as state and county bar associations were invited to participate in defining mediation and developing tips on preparing to participate in the process. The Ohio Commission on Dispute Resolution and Conflict Management published a consumer guide. By offering in-depth descriptions of the advantages of different kinds of dispute handling processes, the guide helps readers move through the maze of marketing claims that have sprung up in the last decade. In simple language, it explains the procedural ins-and-outs of conflict assessment, process design, process management, conflict resolution systems design, coaching, training, and team-building (Field, 1994).

Another strategy that has been adopted for maintaining quality is to insist on minimum or standardized training for all mediators who participate in state-sanctioned programs. The Massachusetts Office of Dispute Resolution established mediation programs to supplement traditional ways of dealing with conflict for two Superior Courts as well as the state Department of Environmental Protection. The State Office designed a combined selection and training program that would ensure a cadre of high caliber mediators. First, it developed a performance evaluation structured around six skill-based criteria, to be applied to written applications and a short mediation simulation observed by experienced mediators. Candidates who made it through this initial screening process went on to complete a standard training course involving lectures, discussions, skill-building exercises and role plays. Finally, successful graduates were paired with experienced colleagues already working in the courts so that they could observe real mediations and ask questions (Honoroff, *et al.*, 1990).

Consolidating Lessons Learned

The lessons produced by fifteen years of experiments in public dispute resolution have provided the raw material for improving approaches to managing public conflict. Without knowledge from both successes and painful failures, the pioneer practitioners and institutions in the field may well have faded away. It was their ability to develop a sense of what works and what does not that enabled them to gain skills, continually enhance their reputations, and search out new areas of application.

Consolidation is necessary to ensure that these lessons are not lost. First, time and reflection are needed to sharpen understanding of the lessons yielded by the work of current practitioners. Second, institutions must learn how to use the byproducts of reflection to improve practice. And third, the benefits of this learning must be made available to others engaged in the field.

In recent years, several organizations have worked to improve the capacity of the public dispute resolution field as a whole to collect, teach, and apply lessons learned from prior experience. At the national level, NIDR has searched for ways of enhancing the flow of ideas among providers and users

of public dispute resolution services. Its Clearinghouse serves as a repository for publications about the conflict resolution movement in the United States and abroad. By collecting these sources under one roof, NIDR hopes to stimulate the exchange of information among practitioners. NIDR has also sponsored conferences and workshops bringing together solo practitioners, stakeholder groups, and institutions to discuss their experiences and take stock of what they have learned.

Managing Growing Organizations

When the field of public dispute resolution was first getting underway, its practitioners were a handful of individuals scattered around the country. Usually these individuals were originally involved in facilitating labor-management negotiations or working with neighborhoods and communities to involve citizens in government decision-making. As they successfully applied their skills to more complex, multi-party conflicts in new policy arenas, their reputations as experts in conflict management spread. Soon they found that their services were in great demand, and many decided to found organizations and hire staffs so they could manage their growing workloads.

At the time of the Florissant conference for environmental mediators in 1983, organizations of professional practitioners were still small and unstable. New projects came in one by one, and budgets were small. In most cases, organizations relied on foundations like Ford and Hewlett for the bulk of their day-to-day financial support. But fierce competition for this support left many practitioners wondering if their organizations would survive.

Since Florissant, there has been a phenomenal increase in the demand for mediation and facilitation in court systems, public agencies, neighborhoods, elected bodies of government, schools, and a host of other institutions and policy arenas. This demand has, in turn, spurred rapid growth in the budgets and staffs of organizations offering these services. As organizations expand, they confront an array of new management challenges. Decisions must be made about how to craft institutional structures sufficient to handle the particular characteristics of each organization's workload. New systems must be designed to manage budgeting, employee relations, and internal training. And strategies have to be formulated for maintaining organizational stability, developing quality control, and marketing services in new areas.

A number of organizations have developed sophisticated and creative ways of handling these challenges. For example, some organizations (such as the Mediation Institute in Washington and California) have pursued maximum flexibility by structuring themselves as a loose affiliation of independent providers. Others, like the Institute for Environmental Dispute Resolution in Virginia, have grown up within academic institutions. Other organizations, like Resolve in Washington, D.C., have replaced their foundation funding with professional fees for the services they offer. There is substantial diversity in the models that these organizations have adopted, and each one has distinct advantages.

Consider, for example, the Northwest Renewable Resources Center in Washington, which grew out of an 18-month-long consensus-building process to build agreement on strategies for managing a watershed under ecological stress. The center was founded by a natural resource attorney who helped to facilitate the process and was interested in exploring new opportunities for using consensus building to solve environmental disputes. Gradually the center began working with representatives of industry, government, environmental organizations, and Native American tribes to help them arrive at consensus on natural resource questions. In 1987, the Center hired Amy Solomon as its new executive director. With a background in the management of not-for-profit organizations, Solomon was able to bring management skills which had previously been absent in the organization. As the full-time manager, she designed management systems, developed multi-year fundraising plans, and standardized administrative and financial procedures. She also concentrated on business development, seeking ways to enhance the stability of the organization by supplementing foundation support with new sources of revenue (Solomon, 1994).

THE ROAD AHEAD — THE NEXT TEN YEARS

What does the future hold? To date, the pace of change in the field of dispute resolution has been remarkable. What began twenty years ago as a handful of experiments in mediating community and environmental conflicts headed for litigation has mushroomed into a field that has supplemented conventional approaches to managing conflict in almost every corner of society. Where is this field headed now? What will shape its future growth and development? We believe four trends will significantly influence the context for public dispute resolution over the next decade. These are: 1) a surge in both demand for dispute resolution services and the supply of practitioners ready to provide them; 2) development of individual skills, and a corresponding shift in societal norms for handling conflict; 3) increasing institutionalization; and 4) use of technological tools. Each trend poses challenges for practitioners.

Growth in Demand and Supply

The climbing demand for professional dispute resolution services will be a major force shaping the future development of the field. In the days of early experiments, it was self-proclaimed specialists in public dispute resolution who themselves created the demand for their services, by persuading parties that they should try sitting down at the same table together rather than battling out their disputes in administrative courts or in the press. Gerry Cormick and Jane McCarthy, for example, had to work hard to persuade parties that they should try mediating their disagreements about the construction of the proposed Snoqualamie dam.

But the demand for dispute resolution services has since taken on a life of its own. Greater and greater numbers of Americans are participating in mediated or facilitated dialogues, or hearing about the successes of such dialogues from others. The growing awareness of the availability and effectiveness of dispute resolution services, combined with a new commitment at all levels of government to create a more responsive approach to governance, is generating a steady increase in demand. Whether disputants are small neighborhood businesses, community groups and town governments or international non-profit organizations, multi-national industries and federal agencies with staffs numbering in the thousands, they are actively seeking out dispute resolution services when they find themselves enmeshed in contentious public policy disputes.

At the time of the landmark practitioner meeting in Florissant, Colorado, in 1983, there were perhaps 50 people across the country who were full-time professionals working in the public dispute resolution field. Primarily, these professionals were the staff of non-profit and for-profit dispute resolution firms, or free-lance consultants. Today, we estimate that this number has swelled to two hundred and fifty, and it includes not only staff of dispute resolution firms, but also the staff of the 18 state offices of dispute resolution, and ADR coordinators hired by federal and state agencies. We expect that ten years from now, this number will have grown by at least five times, to 1250 practitioners providing services across the country. Moreover, the number of new people entering the field each year is likely to expand, as more academic programs in colleges and graduate schools seek to prepare students for careers in conflict resolution.²

Along with the growth in the number of professionals in the field, there is likely to be a corresponding growth in the number and size of organizations that provide dispute resolution services. At the time of the Florissant meeting there were approximately twenty organizations in the field, with average annual revenues of \$100,000 each. Annual budgets were largely dependent on foundation support, with some revenue from the fees they were able to charge for their facilitation services. Times have changed. There are now at least five dispute resolution organizations in this country that have surpassed annual revenues of \$1.5 million, with the bulk of their revenue derived from professional fees. Meanwhile, smaller non-profit and for-profit organizations have continued to proliferate, growing to almost thirty organizations nationally, with revenues of \$100,000 each. Given current trends in the demand for dispute resolution services, we expect that ten years from now, there will be

at least 15 organizations with revenues of \$2 million each, and about 75 organizations with revenues of \$250,000 each.

As demand for dispute resolution services continues to grow, there are likely to be other kinds of institutions that organize themselves to provide these services. A good example is engineering and planning firms. Recognizing that land use planning, environmental impact analysis, and approval processes for engineering projects will inevitably generate disagreements among parties with different or conflicting interests, a number of firms have already begun to self-consciously build their capacity to resolve disputes. Some have simply opted to hire one or two new staff with demonstrated skills and experience in dispute resolution; others have gone so far as to establish a separate branch of their firm dedicated to providing conflict management services. The firm Dudek and Associates based in San Diego, California, offers an example of the latter phenomena. In 1996, the firm created its own Environmental Planning and Conflict Management Division. In the future, we expect that more and more firms providing planning and engineering services will offer dispute resolution services. They may well be joined by other private and public sector organizations which recognize the market value of these services.

The Development of Individual Skills and Social Norms

At practitioner gatherings, it is common to hear people debate what they believe to be competing visions of the future of the field. One of these visions emphasizes its growing professionalization, marked by the trends we describe above. The other vision emphasizes the dispersion of dispute resolution skills to larger and larger numbers of people who work in a wide variety of settings, with a resulting change in the prevailing norms for managing conflict in society.

These two visions are not mutually exclusive; they both capture emerging realities. While there will be ever greater numbers of professional organizations bringing highly developed skills to the management of conflicts in the public sector, there will also be ever greater numbers of people who bring to the conflicts they encounter in their everyday lives new techniques for reaching agreement.

One reason for this stems from the sheer number and range of institutions that are offering training in dispute resolution. Opportunities to learn basic skills include everything from one day training courses designed for corporate executives, to full semester-long courses for college or graduate students headed for careers in business or law, from grade school programs to adult education seminars. These educational programs are reaching an enormous number of people who have no intention of becoming professionals in the field of dispute resolution, but will apply their new skills in managing conflict in their personal and professional lives.

Moreover, two decades of public dispute resolution have surely had an effect on people's values and behaviors during disputes. The dissemination of success stories from this field has generated a growing awareness throughout society that it is possible to resolve conflicts in ways that benefit all parties and enhance the relationships between them. This awareness will prompt all kinds of organizations and individuals to construct agreements using the principles of mutual gain (without seeking the help of a trained professional) rather than battling out their differences in adversarial forums such as the press or the administrative court system. In the long-run, we expect that this dispersion of skills and experience in conflict management will produce a cultural shift in values, away from a celebration of victories won at the expense of others, and towards a celebration of mutual gain and amicable settlement.

This development will in turn shape the professional field of practice. As large numbers of people learn dispute resolution skills, whether through participation in a dispute resolution process, formal training or mere trial and error, they will become far more sophisticated consumers of professional services.

Institutionalization

Another notable trend that will shape the development of the field is the widespread institutionalization of dispute resolution practices in public and private sector organizations. This institutionalization is likely to be spurred on by a growing body of laws, regulations, and model rules at the federal and state levels. At the federal level two landmark pieces of legislation enacted in 1990 — the Negotiated Rulemaking Act and the ADR Act (which were permanently reauthorized in 1996) — have already played a significant role in encouraging public agencies to experiment with new approaches to resolving the disputes that inevitably arise in the conduct of governmental business. These laws endorse the use of mediation, facilitation and other more formal procedures; and they require agencies to pave the way for the use of these processes, by taking steps such as hiring ADR specialists and offering training programs to their employees. While the use of dispute resolution has so far fluctuated both within and across different agencies, we believe that many federal agencies — especially those with committed leadership and the ability to set aside funds — will seek to weave dispute resolution into the fabric of their organizational practices.

State governments will be equally active in institutionalizing dispute resolution. Some states have already followed in the footsteps of the federal government, by enacting their own Negotiated Rulemaking or ADR Acts, as well as laws encouraging the use of mediation for facility siting disputes or disputes on hazardous waste management. State agencies such as the Oregon Department of Justice are also developing detailed model rules which seek to guide agencies on how and when to use dispute resolution. As mentioned earlier, eighteen states have also launched their own state offices of dispute resolution. The next decade will witness a continuation and expansion of this movement towards institutionalization.

The Use of Technology

The astoundingly rapid development of electronic communication technologies is having a profound impact on the way that people everywhere interact and do business. The field of public dispute resolution is certainly no exception. But exactly how will these technologies shape the public dispute resolution field? Obviously, computers will become indispensable to individual practitioners for professional tasks, from sending e-mail to word-processing documents. The harder question concerns how practitioners might begin using computers and computer networks to actually assist them in managing multi-party dialogues.

Computers will become a powerful tool for assisting parties in gathering the technical information they need to jointly assess problems and develop solutions. Parties will literally pull their chairs around the same computer screen, to share and analyze technical information together. Imagine, for example, how a CAD system might be used by agencies, neighborhood groups and local businesses working together to assess different design alternatives for a new public facility, or how a jointly created spreadsheet might be harnessed to help environmental organizations and industries scrutinize the costs of different approaches to remediating pollution.

Where limits will emerge is in the capacity of computers, and in particular electronic communication networks like the Internet, to change the dialogue process itself. There is enthusiasm among some practitioners for exploiting the Internet to conduct negotiations in cyberspace. Moreover, some organizations are now customizing electronic conferences where practitioners can manage dialogue, either in real time or asynchronously. But we suspect that experiments in electronic versions of facilitated dialogue are likely to be a passing fad. Electronic networks do not permit the subtle expression and exchange that supports the efforts of parties to fully articulate their interests, learn about the interests of others, and brainstorm mutually beneficial agreements. Face to face interactions are far superior. Moreover, some theorists maintain that the distance created by electronic communication may encourage parties to adopt negotiating styles that are counterproductive to reaching agreement. For example, MIT professor Sherry Turkle has suggested that people communicating via electronic networks tend to offer more extreme and controversial statements than they would in the

context of a face-to-face interaction. All of this leads us to believe that dispute resolution processes are not likely to take place often in the rarefied world of the World Wide Web; parties and their facilitators will continue to meet in real rooms, sit on real chairs and engage in real conversation.

It is important to mention, however, that electronic networks will function as a ubiquitous resource for communication among parties between their face-to-face meetings. Participants in a dispute resolution process will be able to hop onto the Internet to discuss and compare their reactions to their last meeting, exchange documents, or simply build rapport and trust through the frequent exchange of e-mail messages, despite the fact that they may live and work in distant places. In addition, some negotiating groups may design chat rooms or electronic conferences that they can use between sessions to explore topics in greater depth. While these tools will not and should not supplant face-to-face communication managed by a skilled mediator or facilitator, they may enhance the capacity of parties to communicate on the sidelines.

INVENTING RATHER THAN DISCOVERING THE FUTURE

The four trends we have described are likely to shape the public dispute resolution field of the future. They point to a steady growth, characterized by broad shifts in our cultural values and norms about the best ways to resolve disputes, growing institutionalization of programs and policies that encourage public agencies to incorporate public dispute resolution into the way they do business, increasing demand for the professional services of experienced facilitators and mediators, and more and more skilled participants coming to the table.

Should practitioners simply await this growth and reap its benefits, or are there important steps that they should take to ensure the development of a fully mature and stable field? We offer two suggestions for how practitioners ought to prepare for the anticipated growth in this field. First, it is essential for practitioners to document and evaluate the success of these efforts. There have been few systematic efforts to take stock of what has happened over the last twenty years. In a burgeoning field, practitioners are always rushing ahead to the next project, before they have documented the last one. Moreover, evaluation techniques are still in their infancy — theorists and practitioners are just beginning to grapple with the task of developing a comprehensive set of criteria for assessing success.

At the request of the Lincoln Institute for Land Policy, the Consensus Building Institute and the University of Colorado are creating a comprehensive database on the use of mediation and facilitation to resolve land use disputes. Other organizations need to follow the lead of the Lincoln Institute, and support similar efforts to catalogue and assess the wide array of innovative efforts to resolve disputes in the public sector. Evaluation is critical for several reasons. First, it provides the individual participants in dispute resolution processes and the organizations they represent a framework for evaluating their own experience. Second, it is essential to the long-term viability of the dispute resolution field as a whole. Claims about the merits of this ad hoc approach to decision-making will not withstand public scrutiny if there is no sound research to back them up. The field needs to articulate and then continually refine the standards that can be applied to its work.

Second, practitioners should enter the next decade of public dispute resolution having jointly distilled and codified from their prior experiences a set of best practices for the field. This article offers a few preliminary ideas. More importantly, the Public and Environmental Disputes Sector in the Society for Professional in Dispute Resolution (SPIDR) took a major step towards this goal when it recently released its "Best Practices for Government Agencies. Guidelines for Using Collaborative Agreement Seeking Processes." But this is just a beginning; now best practices are needed for practitioners themselves, as a benchmark against which they and others they work with can monitor their performance. In a world where the demand for assistance from professional dispute resolvers is ever on the rise, best practices will play a key role in enabling the field as a whole to maintain and improve the quality of the services that it offers.

NOTES

1. ACUS served as the federal government's "watchdog" agency until 1995, when it went out of existence as the result of budget cuts. This agency, whose staff was appointed directly by the President, was charged with eliminating waste and encouraging efficient management in all federal agency operations.
2. These trend estimates were first proposed by the senior author at a talk given at the annual meeting of SPIDR's Public Policy and Environmental Disputes Sector on July 3, 1996.

REFERENCES

- Abel R (1982) *The politics of informal justice*. New York: Academic Press.
- Adler P (1983) Mediation and lawyers the Pacific way: A view from Hawaii. *Hawaii Bar Journal* 18.
- Bacow L, Wheeler M (1984) *Environmental dispute resolution*. New York: Plenum Press.
- Bingham G (1986) *Resolving environmental disputes: A decade of experience*. Washington, DC: Conservation Foundation.
- Bingham G, Haywood L (1986) Environmental dispute resolution. The first ten years. *The Arbitration Journal* 41/4(December):3-14.
- Carpenter S, Susan Carpenter and Associates (1994) Interview. March.
- Carpenter SL, Kennedy WJD (1988) *Managing public disputes: A practical guide to handling conflict and reaching agreement*. San Francisco: Jossey-Bass.
- Collins R, Dotson BA (1986) *Negotiating public policy issues*. Washington, DC: National Institute for Dispute Resolution.
- Collins RC, Dotson BA (1990) Sharing the pain in Virginia. New laws to protect instream flow. *Consensus* 7(July):5,7.
- Collins R, Goldman RB (1980) *Roundtable justice: Case studies in conflict resolution*. Boulder, CO: Westview Press.
- Consensus Building Institute (CBI) (1995) *Partnering, consensus building, and alternative dispute resolution: Current uses and opportunities in the U.S. Army Corps of Engineers*. Fort Belvoir, VA: Office of Counsel and Institute for Water Resources, U.S. Army Corps of Engineers.
- Dinell T, Goody J (1987) *A source book on dispute resolution in planning school curricula*. Washington, DC: NIDR.
- Dotson BA, Godschalk D, Kaufman J (1989) *The planner as dispute resolver: Concepts and teaching materials*. Washington, DC: NIDR.
- Endispute (1989) *Ten Tom Constructors, Inc.* (Case study No. 1 in the alternative dispute resolution series). Fort Belvoir, VA: Office of Counsel and the Institute for Water Resources, U.S. Army Corps of Engineers.
- Field P (1994) Quality dispute resolution: How can you be assured of quality service? *Consensus* 22(April):4-5.

- Honoroff, *et al.* (1990) Putting mediation skills to the test. *Negotiation Journal* 4(1):37-46.
- Huelsberg NA, Lincoln WF (1985) *Successful negotiating in local government*. Washington, DC: International City Management Association.
- Kettering Foundation (1994) *Public decision making: Using the negotiated investment strategy*. Dayton, OH: Charles F. Kettering Foundation.
- Kolb and Associates (1994) *When talk works*. San Francisco: Jossey-Bass.
- Madigan D, McMahon G, Susskind LE, Rolley S (1990) *New approaches to resolving local public disputes*. Washington, DC: NIDR.
- Mathews D (1994) *Politics for the people. Finding a responsible public voice*. Urbana and Chicago: University of Illinois Press.
- McCreary S (1989) *Resolving science intensive public policy disputes: Lessons from the New York Bight Initiative*. Ph.D. dissertation, Massachusetts Institute of Technology, Cambridge.
- Moore CW (1986) *The mediation process: Practical strategies for resolving conflict*. San Francisco: Jossey-Bass.
- National Institute for Dispute Resolution (1990) *Overview and accomplishments*, March 1. Washington, DC: NIDR.
- National Institute for Dispute Resolution (1993) *A decade of progress*. Washington, DC: NIDR.
- Primm E (1992-93) The neighborhood justice center movement. *Kentucky Law Journal*.
- Pritzker D, Dalton D (1990) *Negotiation rulemaking sourcebook*. Washington, DC: Administrative Conference of the United States, Government Printing Office.
- Richardson JR (1991) Overcoming obstacles to negotiating electric utility industry regulations. *Negotiation Journal* (January).
- Richman R, White O, Wilkinson M (1986) *Intergovernmental mediation: Negotiations in local government disputes*. Boulder, CO: Westview Press.
- Solomon A (1994) (formerly of Northwest Renewable Resources Center) Interview. March.
- Susskind L (1986) NIDR's state office of mediation experiment. *Negotiation Journal* 2(4)(October):323-327.
- Susskind LE (1985) Court appointed masters as mediators. *Negotiation Journal* (October).
- Susskind LE, Cruikshank J (1987) *Breaking the impasse: Consensual approaches to resolving public disputes*. New York: Basic Books.
- Susskind LE, McMahon G (1985) The theory and practice of negotiated rulemaking. *Yale Journal of Regulation*.

- Susskind LE, van Dam L (1986) Squaring off at the table, not in the courts. *Technology Review* (July):39-40.
- Susskind LE, Weinstein A (1980) Toward the theory of environmental dispute resolution. *Boston College Environmental Affairs Law Review*.
- Talbot AR (1983) *Settling things — Six case studies in environmental mediation*. Washington, DC: The Conservation Foundation.
- Wheeler M (1994) Negotiating NIMBY's: Learning from the failure of the Massachusetts Siting Law. *Yale Journal on Regulation* 2(2)(Summer):241-291.

Additional information may be obtained by writing directly to Professor Susskind, Department of Urban Studies and Planning, Massachusetts Institute of Technology, 9-332, 77 Massachusetts Avenue, Cambridge, MA 02139, USA.

AUTOBIOGRAPHICAL SKETCHES

Lawrence Susskind is Ford Professor of Urban and Environmental Planning at the Massachusetts Institute of Technology and Director of the MIT/Harvard Public Disputes Program at Harvard Law School. He is also President of the Consensus Building Institute, an action-research organization committed to evaluating and implementing innovative dispute resolution practices in complex institutional settings. His most recent book is *Dealing with an Angry Public*, published by Free Press. Along with Sarah McKearnan, he is currently preparing *The Consensus Building Handbook*, a comprehensive reference guide on the consensus building process due to be published by Sage Publications in the winter of 1999.

Sarah McKearnan is a Senior Associate at the Consensus Building Institute, where she facilitates multi-party consensus building processes and designs and presents courses on consensus building for public agencies and non-profit organizations. She was Deputy Editor of *Consensus*, a quarterly news publication on public dispute resolution in the United States, for five years.