SOLVING ENVIRONMENTAL INJUSTICES IN MASSACHUSETTS:
Forging Greater Community Participation
in the Planning Process

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ABSTRACT

In the Commonwealth of Massachusetts, ecologically hazardous sites and facilities, ranging from highly polluting power plants to toxic waste dumps, are disproportionately located in communities of color and working-class communities. In fact, 9 of the 15 most environmentally overburdened towns in Massachusetts are low-income communities (where median household income is less than $30,000). Likewise, 9 of the 15 most environmentally overburdened towns in the state are of "higher-minority" status (where 15% or more of the population are people of color). In fact, citizens residing in a community of color in Massachusetts are 19 times more likely to live in one of the 25 most environmentally overburdened communities in the state. Striking inequities in the distribution of these sites and facilities are placing lower-income families and people of color at substantially greater risk of exposure to environmental health hazards. In response to these disparities, a vibrant environmental justice movement has emerged in Massachusetts. Aimed at organizing and mobilizing community residents to "act and speak for themselves," these environmental justice organizations are playing a pivotal role in organizing and mobilizing residents to be active participants in the planning and regulatory process. This article will highlight key lessons for planners around making community participation an effective tool for equity struggles, focusing on the role of Alternatives for Community and Environment (ACE) in the Boston neighborhood of Roxbury.

"The people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment; and the protection of the people in their right to the conservation, development, and utilization of the agricultural, mineral, water, air and other natural resources is hereby declared to be a public purpose."

– Constitution of the Commonwealth of Massachusetts

While the quality of life for all citizens in the United States is currently compromised by a number of serious environmental and human health problems, not all segments of the citizenry are impacted equally. As reported by Boone and Modarres (1999) in California, "Environmental hazards, like minority populations, are not distributed evenly in cities. Often, poor and minority communities are burdened with a disproportionate share of environmental problems" (p. 164). And Greenberg, Lowrie, Solitare, and Duncan (2000) report about the imbalanced environmental quality of life in New Jersey's cities and brownfields: "Strong differences exist with regard to socioeconomic status and race ... municipalities with the most severe TOADS (Temporarily Obsolete Abandoned-Derelict Sites) have the poorest populations, the least expensive housing, and the lowest proportion of white residents" (p. 726).

One explanation for this situation is that, in order to bolster profits and competitiveness, industries adopt pollution strategies which are not only more economically efficient but that also offer the path of least political resistance. In the United States, it seems the less *control capacity* (or political power) a community possesses, the fewer resources a community has to defend itself from potential abuses, the lower the level of community awareness and mobilization against potential ecological threats, and the more minimal the processes of genuine citizen participation in community planning and regulatory decision-making processes – the more likely they are to experience arduous environmental and human health problems at the hands of government and industry (Gould, 1998; Faber, 1998). A 1984 report prepared by the consulting firm Cerrell Associates for the California Waste Management Board, for instance, openly recommended that industries and the state locate hazardous waste facilities in "lower socio-economic neighborhoods" because those communities had a much lower likelihood of offering political opposition (Cerrell Associates, 1984). As a result, environmentally hazardous sites and facilities – ranging from toxic waste dumps to polluting industrial plants, incinerators, power stations, landfills, etc., – are disproportionately located in marginalized communities of color and lower-income communities across the nation (Bullard, 1994; Faber, 1998).

Residents of these communities must therefore live each day with substantially greater risk of exposure to environmental health hazards than

the general citizenry. This is not to say that white and middle-to-upper-income communities have been bypassed by industrial pollution. But in contrast to the types of economic and social constraints confronting people of color and white working-class families, higher-income salaried and professional workers can often afford access to ecological amenities and a cleaner environment in non-industrial urban, suburban, and rural areas. In fact, working-class families and people of color face a "triple unequal exposure effect" to toxic pollution and other environmental hazards in comparison with higher-income residents. For lower-income communities and communities of color, this takes the form of exposure to: (1) greater concentrations of polluting industrial facilities and power plants; (2) greater concentrations of hazardous waste sites and disposal/treatment facilities, including landfills, incinerators, and trash transfer stations; and (3) higher rates of "indoor" exposure to pollutants inside the factory, as well as deteriorating schools and substandard housing (Bullard, 1994; Faber, 1998). Government enforcement and cleanup efforts are also typically uneven (Lavelle & Coyle, 1992). [1] Unequal exposure to environmental hazards is thus experienced by low-income and people of color populations in terms of where they *work, live, and play* (Alston, 1991).

Environmental disparities are pronounced in the Commonwealth of Massachusetts. For instance, there are over 21,038 hazardous waste sites in Massachusetts, including 3,389 of the more serious Tier I-II sites and 32 Superfund sites, according to March 2000 Department of Environmental Protection (DEP) data (Faber& Krieg, 2002). For residents living near Superfund and other major toxic waste sites, the National Research Council has found a disturbing pattern of elevated health problems, including heart disease, spontaneous abortions and genital malformations, and death rates, while infants and children are found to suffer a higher incidence of cardiac abnormalities, leukemia, kidney-urinary tract infections, seizures, learning disabilities, hyperactivity, skin disorders, reduced weight, central nervous system damage, and Hodgkin's disease (National Research Council, 1991). Elevated rates of leukemia (especially among children) have been linked to the industrial chemical trichloroethylene found in the Massachusetts town of Woburn's drinking water (as portrayed in the film *A Civil Action*), as well as tetrachloroethylene in drinking water on Upper Cape Cod (Aschengrau et al., 1993, pp. 284-292).

As documented in Faber and Krieg's recent report *Unequal Exposure to Ecological Hazards: Environmental Injustices in the Commonwealth of Massachusetts*, communities of color and low-income communities experience a far more profound exposure rate to DEP hazardous waste sites than do higher-income and/or white communities, indicating that race and class appear to be significant factors in determining the location of both serious (Tier I-II) and less serious (Non-Tier) hazardous waste sites (Faber & Krieg, 2002). Low-income communities average nearly 14 hazardous waste sites per square mile. In contrast, higher-income communities,

where the household median income is $30,000 or greater, average 3.1 to 4.1 hazardous waste sites per square mile. "High-minority" communities, where 25% or more of the population are represented by people of color, average 27.2 DEP hazardous waste sites per square mile. "Low-minority" (<5% minority) communities average 2.9 hazardous waste sites per square mile. "High-minority" communities average more than nine times the number of hazardous waste sites per square mile than "low-minority" communities.

Working-class communities and communities of color also bear a significantly greater portion of the pollution emitted by large industrial facilities. According to data collected under the Massachusetts Toxics Use Reduction Act (TURA) Program from 1990-98, some 1,029 distinct TURA facilities statewide produced 164,385,598 pounds of chemical waste byproduct (pollution) that was *released* on-site directly into the environment (discharged into the air, ground, underground, or adjacent bodies of water in the communities in which they were located). This is an amount equivalent to the weight of the *Titanic* ocean liner (Faber & Krieg, 2002). Low-income communities (average household median income of less than $30,000) averaged some 73,061 total pounds of chemical emissions per square mile. This contrasts sharply with higher-income communities (average household median income of $40-49,999 or more), which averaged 10,937 to 12,502 pounds of chemical emissions per square mile.

Communities of color are also overburdened by industrial pollution. Higher-minority status communities (where 25% or more of the population are people of color) averaged 110,718 to 123,770 pounds of chemical emissions per square mile, compared to 22,735 pounds of chemical emissions per square mile for "low-minority" communities (Faber & Krieg, 2002). Thus, in comparison to "low-minority" communities, higher-minority communities average roughly 3 to 3.5 times as many pounds of chemical emissions released into the environment from local TURA facilities; and 4.86 to 5.44 times as many pounds of chemical emissions per square mile. Thus, it would appear that the racial composition of a community is once again a significant factor for level of exposure to pollution.

As documented by Faber and Krieg (2002), places in Massachusetts that have high proportions of working-class people, or Black, Latino, or Asian people, are disproportionately impacted by incinerators, landfills, trash transfer stations, power plants, and other environmentally hazardous sites and facilities. In fact, "high-minority" communities face a cumulative exposure rate to all of these environmentally hazardous facilities and sites which is nearly nine times greater than for "low-minority" communities. There is a consistently sharp increase in the cumulative exposure rate to these hazardous facilities/sites that directly corresponds to increases in the size of the minority population in all communities. Without question, it would appear that communities of color are greatly

overburdened in comparison to predominantly white communities, and are unequally exposed to environmental hazards of almost every kind. Likewise, low-income communities face a cumulative exposure rate to environmentally hazardous facilities and sites that is 3.13 to 4.04 times greater than all other communities in the state. Fourteen of the 15 most intensively environmentally overburdened towns in Massachusetts are of lower-income status (median household income of less than $40,000); and 9 of the 15 towns are classified as low-income communities (where median household income is less than $30,000). Likewise, 9 of the 15 most intensively environmentally overburdened towns in the state are of "higher-minority" status (where 15% or more of the population is people of color); and 6 of the 15 towns are "high-minority" (where people of color represent 25% or more of the population).[2] This is significant, given that there are only 20 out of 368 communities (towns and Boston-area neighborhoods) in the entire state where 15 percent or more of the population consists of people of color – and nearly half are among the fifteen most intensively overburdened communities. Thus, if a person lives in a community of color in Massachusetts, chances are 19 times higher that this person also lives in one of the 25 most environmentally overburdened communities in the state (Faber & Krieg, 2002).

ROOT CAUSES OF ENVIRONMENTAL INJUSTICE IN MASSACHUSETTS CITIES

While disproportionate environmental impacts can be explained universally by the unequal capacity of communities to defend themselves politically, various forms of environmental injustice must be explained by factors historically specific to a particular region. The causes or factors explaining the existence of environmental injustice can be political, economic, or historical, and can be intentional or unintentional. As noted above, the majority of the environmentally overburdened communities in Massachusetts are located in urban centers where one also finds concentrations of lower-income people and people of color. In Massachusetts, cities like Boston, Chelsea, Lowell, Lawrence, and New Bedford do not suffer so much from environmental problems generated by current industrial production facilities or natural resource extraction. Rather, environmental injustices in these areas are a legacy of decades of de-industrialization and disinvestment, especially since World War II, as well as more recent siting of incinerators, trash transfer stations, and waste disposal and other various state-permitted toxic storage and disposal facilities (TSDFs). [3]

After World War II, the dramatic growth of the suburbs, driven by federal highway expansion and housing policies, was paralleled by the decline of inner cities. As demonstrated by Kasarda (1985), the accompanying demographic and economic transformations resulted in urban places becoming more populated by people of color. [4] At the same time, there

was an accompanying decline in blue-collar jobs that in earlier periods represented a key economic venue for achieving middle-class status. As industry and wealth left the inner cities, once-thriving city neighborhoods became riddled with vacant lots, abandoned buildings, and brownfields. Often, this was also a result of government inaction or corporate irresponsibility regarding the potential impact of their decisions on the quality of public health. Those residents who left the city were predominantly white and middle-class. Those who stayed and/or moved in were predominantly low-income and people of color.   As a result, the concentration of poverty in the inner cities became more severe. Nationwide, between 1970-1990, the number of neighborhoods where 40% or more of the population were poor (below federal poverty levels) doubled (Jargowsky, 1997, pp. 9-40).

In Greater Boston, explicit racial lending policies, known as redlining, further concentrated people of color in the inner city. [5]   From a peak population of just over 800,000 in 1950 (when the city was only 5 percent nonwhite), the number of people in the City of Boston declined to approximately 560,000 in 1980, a loss of almost 240,000 people. However, the number of poor people and those representing communities of color who moved into the city greatly offset the exodus of middle-class whites. As a result, the 2000 census shows that, for the first time, people of color have become the majority of Boston's current population of 589,141 residents (United States Bureau of Census, 2000). [6] Today Blacks comprise approximately 25% (149,202 persons) of the population; Latinos comprise 14% (85,089 persons); and Asians comprise 8% (44,284 persons). Non-Latino whites comprise 49% of the population, or 291,561 persons. Accompanying this loss of white middle-class residents and businesses and the influx of poor people of color has been a decline in the city's tax base and public services, from sanitation and schools to transit and housing (Jennings, 2002).

Within this broad context, and over the past four decades, neglected inner city neighborhoods have become the target for unwanted and noxious land uses, such as trash transfer stations, junkyards, truck and bus depots, incinerators, and auto body shops. Decrepit housing and schools contribute to indoor environmental hazards such as lead paint, asbestos, and mold. The *cumulative impact* of these relatively smaller and more dispersed sources of pollution contributes to, and further exacerbates, poor health conditions. Residents must also deal daily with hazards from midnight dumping of chemical wastes on vacant lots, toxic air and water pollution from the old "dirty" industries that do remain behind, close proximity to highly polluted roadways and bus terminals, as well as a lack of green space and parks and inadequate mass transportation systems. It is no wonder that many of these neighborhoods have been cited by the Massachusetts Department of Public Health as suffering from the highest asthma rates in the state (Massachusetts Department of Public Health, Division

of Health Care Finance and Policy [DHCFP], 1997). Typically, these neighborhoods possess few political-economic resources with which to confront these threats.

CASE STUDY: THE BOSTON NEIGHBORHOOD OF ROXBURY

A dual process of inner city decline and environmental injustice is well illustrated by the case of Roxbury, a low-income neighborhood in Boston comprising 4.2 square miles. [7] Based on the federal census count for 2000, approximately 95% of the 56,349 residents of this neighborhood are people of color. Roxbury is also among the poorest communities in the entire state, with a per capita income of only $13,915 in the year 2000. Based on the 1990 census, about 30 percent of the population lives in poverty, as do 45 percent of all children (including 62 percent of all Latino children). In 2000 there were 22,134 housing units in this neighborhood and only 21% were owner-occupied. Disinvestment devastated this neighborhood after World War II. In Roxbury, the manufacturing job base declined from more than 20,000 in 1947 to 4,000 by 1981. The number of businesses in the heart of the community around the Dudley Street area declined from 129 in 1950 to only 26 in 1980 (Medoff & Sklar, 1994). Along with the economic decline came the flight of white residents. Redlining denied home loans to people of color, while "block busting" by realtors scared whites into leaving. Arson became an increasingly common means for some residents to "escape" the neighborhood. In 1987, the elevated Orange Line discontinued service, cutting off the heart of Roxbury from the region's rapid transit system and the higher paying jobs in the growth areas of Greater Boston. This helped to create a change where a once predominantly white, economically vibrant immigrant neighborhood quickly transformed into a low-income community of color that was neglected by government and exposed to corporate-based environmental dangers.[8]

In 1996, residents found more than 1,000 vacant lots in their 1.5 square mile area. Noxious and polluting land-uses filled the void. In 1999, the Boston Office of Environmental Health found that more than 64% of Boston's 79 trash transfer stations, dumpster storage lots, and junkyards were located in Roxbury and adjoining North Dorchester (Office of Environmental Health, 1998). A 1997 survey by Alternatives for Community and Environment (ACE) found that there were more than 15 bus and truck depots within 1.5 miles of Dudley Square in Roxbury, utilized by more than 1,000 diesel vehicles (including half of the public transit bus fleet). Overall, Roxbury now ranks as the eighth most environmentally overburdened community in the state, with an average of 48 hazardous waste sites per square mile. Roxbury residents have also been exposed to over 37,000 pounds of chemical emissions per square mile (psm) from large industries between 1990-98 (Faber & Krieg, 2002). As suggested above, the

prevalence of environmental pollutants such as these is largely responsible for asthma hospitalization rates in Roxbury that are more than 5 1/2 times the state average (DHCFP, 1997).

EMERGENCE OF THE ENVIRONMENTAL JUSTICE MOVEMENT

In response to these environmental inequities a growing environmental justice movement has emerged in Massachusetts. Though communities have been fighting against environmental threats such as lead poisoning and highway expansion for many years, it was not until the early 1990s that communities in Massachusetts began to frame their efforts explicitly in terms of environmental justice. The First National People of Color Leadership Summit in 1991 in Washington DC was a pivotal event for the national environmental justice movement. Following this Summit, which adopted 17 Principles of Environmental Justice, more than 500 delegates from across the country returned to their home communities in order to build a grassroots movement. Rather than form a national entity immediately, delegates envisioned building regional networks of community-based, people of color-led organizations (Faber & McCarthy, 2001; Bullard, 1993). Following the 1991 Summit, planning meetings began for the Northeast Environmental Justice Network (NEJN), which sought to bring together groups from Washington DC through New England. Delegates from Massachusetts, including representatives of the Greater Roxbury Neighborhood Authority, not only took part in NEJN planning, but undertook efforts in Boston. Two organizations were established with environmental justice missions: the Environmental Diversity Forum (EDF) and Alternatives for Community & Environment (ACE), based in Roxbury.

Both EDF and ACE sought to fill the gaps left by mainstream environmental organizations in addressing the challenges of low-income communities and communities of color. EDF, founded by James Hoyte, the first African-American Secretary of Environment in Massachusetts, attempted to bring more people of color into environmental groups and government agencies and provide assistance to community groups across Boston. ACE, founded by two lawyers, Charles Lord and William Shutkin, sought to provide direct assistance and capacity building to neighborhood groups through an "empowerment practice." ACE was committed to building local leadership and capacity as well as winning tangible environmental and public health victories. As part of ACE's long-term vision to become of and not just for the community, its co-founders stepped down in 1998 and transitioned the organization to a leadership of color that was grounded in the community.

ACE's "empowerment practice" was explicitly designed to go beyond the corporate-like advocacy models adopted by many mainstream environmental groups. As stated by Shutkin (2000), there is a "tendency for many

non-profit environmental organizations to treat members as clients and consumers of services, or volunteers who help the needy, rather than as participants in the evolution of ideas and projects that forge our common life" (pp. 120-126). Furthermore, the mainstream movement in Massachusetts and the U.S. gravitated toward a greater reliance on law and science conducted by professional experts, in an attempt to maintain legitimacy in increasingly hostile neo-liberal policy circles (Faber, 1998). Focusing on technical-rational questions and solutions, at the expense of examining issues of political power and democratic decision-making, contributed to a decline in participation in community planning and environmental politics at the neighborhood level (Dowie, 1995; Gottlieb, 1993). While these dimensions are not, *ipso facto*, contradictory, the latter issues touch upon race and class in a manner often overlooked by advocates of progressive planning theories and models. [9]

In spite of these tensions, a growing body of literature documents the significance of community participation as an important element in strategies for urban development, including neighborhood revitalization (Shutkin, 2000; Dreier, 1996; Friedman, 1998; Grengs, 2002). Community participation is also a key component of innovations in urban planning such as "smart growth" and "new urbanism" (Jennings, 2002). Interestingly, in many instances it is local government that is taking the lead in calls for community participation in decision-making about physical development. For example, the Boston Redevelopment Authority published a pamphlet in May 1997 titled *Boston 400: Guide to Community Participation*. This guide describes how residents can become more involved in neighborhood issues. But these calls can prove innocuous in terms of influencing corporate and government decisions and actions that might be harmful to neighborhood conditions if not reflective of critical lessons arising from earlier community-based struggles (Shutkin, 2000). *One* lesson is that residents have important insights that should be respected in the planning process. A *second* lesson is that "expertise" should not be the only driving force in determining how best to respond to various problems. A *third* lesson is that planning should be comprehensive in that it approaches the neighborhood holistically by linking policy arenas such as housing, transportation, clean air, economic development and employment, and so forth. And yet a *fourth* lesson, and one that is most obvious in light of the problem of environmental injustice, is that the mobilization of political power is critical for maintaining neighborhood interests on the public agenda.

Together, ACE, EDF, and dozens of community groups have built an infrastructure for the environmental justice movement in Greater Boston and Massachusetts that reflects these earlier lessons. This movement is premised on community empowerment through grassroots organizing and base building over traditional forms of environmental advocacy. Under the traditional advocacy model, professional activists create organizations

that speak and act on behalf of a community. In contrast, the grassroots organizing approach by the environmental justice movement emphasizes the mobilization of community residents to push through the systemic barriers that bar residents from directly participating in identifying problems and developing solutions – so that they may, as stated by the late Dana Alston, "*speak and act for themselves*" in planning and regulatory processes (Alston, 1991). Base-building implies creating accountable, democratic organizational structures and institutional procedures which facilitate inclusion of ordinary residents, especially dispossessed people of color and low-income families, in the public and private decision-making practices affecting their communities. This suggests a model that is actually built on earlier theories of planning, sometimes referred to as "equity" or "advocacy" planning. [10]

Many activists and observers who are part of the environmental justice movement propose that decades of job flight, disinvestment, and ecological abuse have depleted the natural resources and environmental amenities that could generate new economic opportunities and livelihoods. These *natural assets* – which include open space, urban greenbelts, and parks, as well as clean air, access to transportation and services, and the nexus of buildings and streets that all come together to help determine the quality of life and the social fabric of neighborhoods – along with other assets like financial wealth and social capital – can be part of a comprehensive planning strategy to reduce poverty and promote community development. Expanding these kinds of assets requires investing in "natural" capital, ensuring that the poor can expand ownership and obtain a fairer share of the benefits generated by natural assets in the community. This requires the adoption of an asset-building approach that focuses on improving the stock of wealth available to poor residents in many forms, including financial, human, social, and physical capital as part of a broader democratic planning strategy for environmental sustainability, equitable economic development, and community empowerment. In this respect, planning processes should be evaluated for the extent to which they (a) improve the quality and enlarge the quantity of natural assets, (b) democratize rights of access so that poor residents can expand their share of these resources, and (c) provide opportunities to leverage these processes in order to foster and sustain other forms of asset-building (Boyce & Pastor, 2001, pp. 1-7).

One of the most important mechanisms by which the stock of natural assets can be appreciated is by helping communities gain access to land, especially vacant or dilapidated properties. In 1985, Roxbury residents formed the Dudley Street Neighborhood Initiative (DSNI). The Dudley Street area was the center of the Roxbury community (and the current location of ACE), but had come to be plagued by numerous abandoned properties used for the dumping of chemical wastes, trash, and other debris. That year, DSNI was highly successful in mobilizing the com-

munity under the "Don't Dump on Us" campaign, to resist further dumping and clean up (with assistance from municipal authorities) the neighborhood's worst sites. Still, vacant properties remained after the cleanups, and continued to serve as a source of blight upon the community. In response, DSNI launched a new campaign in 1987 called "Take a Stand, Own the Land," initiating a community planning process that created a master plan for revitalizing the neighborhood through development of affordable housing, retail shops, and attractive public spaces. The campaign resulted in city officials transferring ownership of many publicly owned properties (acquired after owners defaulted on back taxes) and granting DSNI the power of eminent domain over abandoned private properties. As a result, DSNI became the first community-based organization in the country to achieve the power to compel owners of such properties (who often hold such land as a speculative investment in case of gentrification) to sell land at fair market price. In the ensuing years, DSNI has teamed with ACE to organize the clean-up of many other waste sites and promote their redevelopment for affordable and quality housing (ACE currently has a "Healthy Homes" initiative), playgrounds, parks, and community gardens where residents grow food for themselves and the local farmers' market (Boyce & Pastor, 2001, pp. 16-17; Medoff & Sklar, 1994).

Seven years after the initiation of these campaigns, the first high-profile "environmental justice" struggle in Boston emerged in 1994 with a proposal to build an asphalt plant in the South Bay, an area at the crossroads of four neighborhoods. An historic *Coalition Against the Asphalt Plant* crossed traditionally rigid racial and ethnic divides to bring together groups from Roxbury, Dorchester, South Boston, and the South End. Though the plant had received a zoning variance and an air pollution permit, residents argued that to bring any additional pollution into an area already termed a "zone of death" by public health experts was unacceptable (Shutkin, 2000, pp. 1-13). One of the largest environmental groups in Boston, the Conservation Law Foundation, was unwilling to pursue litigation against the owners of the proposed plant. Though ACE worked with the Coalition on various legal challenges, the fight was won by the hundreds of residents, including mobilized mothers and children, putting pressure on the Mayor and the Boston Public Health Commission through rallies, petitions, and letter-writing campaigns (Shutkin, 2000, pp. 1-20). The Health Commission finally rejected the siting of the facility in 1996.

The fight against the asphalt plant was only the beginning of a number of long-lasting partnerships among various community and environmental groups. ACE, EDF, DSNI, Bowdoin Street Health Center, and Massachusetts Campaign to Clean Up Hazardous Waste (now known as Toxics Action Center) launched a Neighborhoods Against Urban Pollution (NAUP) initiative in 1995, with backing from the U.S. EPA. NAUP developed a model of resident-led organizing to identify, map, prioritize, and

clean up environmental hazards that spread to dozens of neighborhood groups. In 1996, NAUP held the first "Environmental Justice in the Hood" conference, designed for residents to share their experiences and learn from each other. As this annual event grew larger, ACE facilitated the planning for a Greater Boston Environmental Justice Network (GBEJN), which was launched in 1999. Today, GBEJN now brings together more than 25 groups from across Boston and Chelsea to share resources, to support mutual interests, and to help in developing regional planning and organizing initiatives.

We are not suggesting that this kind of community participation is a panacea for resolving issues related to environmental injustice, or other kinds of neighborhood inequities. As observed by Dreier, "Community organizations have won many neighborhood-level victories...[but...for] every group that succeeds, there are many that do not" (Dreier, 1996, p. 125). Even with this caveat, the strong community participation component that is evident in the overall strategies of these groups is now recognized widely as a key for successful and positive community change. This is proposed by a growing number of planners and urban scholars. Recently, Joe Grengs (2002) argued that this was a key dynamic, for example, in successful struggles on behalf of transit equity in Los Angeles. And in a review of successful efforts aimed at a range of neighborhood revitalization initiatives, Keating and Krumholz (1999) observe that "where there are strong community-based organizations, there is hope for the betterment of the neighborhood" (p. 199).

The call for community participation, furthermore, is not simply an abstract urging. In Boston many neighborhood efforts to improve living conditions are founded on the belief in and positive experiences of community participation. In September 1997, with the support of a HUD "Community Partnership and Outreach" grant, numerous community-based organizations gathered at Roxbury Community College under the auspices of the Trotter Institute, the Gaston Institute, the Asian-American Institute, and the College of Public and Community Service at the University of Massachusetts to discuss "Boston's Urban Revitalization Agenda." Presentations and discussions by participants identified several specific contributions that emerge from broad community participation in the city's urban revitalization strategies. These include the enhancement of collaboration and cooperation across neighborhood boundaries, but also the encouragement of comprehensive designs that incorporate both short- and long-range benefits for the city, including tendencies not to ignore poverty and racial and ethnic divisions. [11]

In addition to GBEJN, community mobilization around transportation issues further stimulated the environmental justice movement in Greater Boston. By 1997, high asthma rates had become a leading concern of many community groups, particularly ACE's Roxbury Environmental

Empowerment Project (REEP). Youth who were organized by REEP mapped and found a high concentration of diesel bus and truck facilities in Roxbury. Several community health centers in Dorchester were working on the issue of a new commuter rail line bringing more than 80 diesel train trips a day through the neighborhood but providing no service. These groups, along with several other environmental and community organizations, came together in 1997 to form the Clean Buses for Boston coalition. Though the initial focus was on converting the public diesel bus fleet to cleaner alternatives, it quickly expanded to deal with a whole range of transit injustices faced by lower-income communities and communities of color. The coalition, which is facilitated by ACE, launched a T Riders Union (TRU) in 2000, as a direct effort to organize riders and influence state transportation decision-making. The TRU now has more than 450 members.

CURRENT CHALLENGES

The grassroots environmental justice movement in Massachusetts has achieved much over the past decade. However, significant challenges confront the movement, including moving from a reactive, local case-by-case mode of operation to a more proactive and integrated regional approach to planning and environmental problem solving. Another challenge is building the appropriate scale of political power and models of public participation necessary to achieve lasting regional solutions. While facing these challenges means strengthening the base-building capabilities of community groups, it also requires local and grassroots groups to develop effective strategies and an organizational capacity to take part in processes of regional planning and environmental problem solving. These are fundamental challenges, according to some planning theorists and writers. As noted by John Friedman, "the biggest problem we face in theorizing planning is our ambivalence about power" (1998, p. 249). And again Grengs: "If planners do not learn how to take action in political settings, they risk failing to make constructive change" (2002, p. 165). In terms of the importance of developing regional strategies, one need but note that the problems faced by the residents of Roxbury are similarly experienced in other low-income communities across Massachusetts.

Though almost all grassroots community groups are initially mobilized against an imminent threat, greater attention needs to be afforded to promoting development alternatives which are economically and environmentally sustainable. In other words, reactive organizing efforts against planning procedures that result in an unequal distribution of environmental problems (distributional inequity) cannot ultimately succeed unless environmental justice activists and community planners alike are proactive in addressing the procedures by which environmental problems are produced in the first place (procedural inequity) (Faber, 1998, p. 15). Note

an earlier example involving environmental issues: community mobilization to prevent the building of an asphalt plant was successful, but after that reactive win, the land that was proposed for the development remained vacant and unproductive. Even without high-profile threats like an asphalt plant, the existing environmental conditions in lower-income neighborhoods and neighborhoods of color are *already* unacceptable.

A model for the approach proposed here, and one utilized by ACE, is offered by residents involved in the initial plans for developing a "Roxbury Master Plan" between 1999 and 2001. Started as a community-participatory process (but not now considered such by many residents and local activists), the Roxbury Master Plan initially provided a systemic critique of the assumptions associated with a "top-down" economic development vision for the city. The Roxbury Master Plan provided alternative approaches that would result in economic development activities and ensure the social well-being of the residents of Roxbury and other neighborhoods as well. The Roxbury Master Plan generated community-level discussions in its early formulation that showed serious weaknesses in the assumptions and expected benefits of pro-growth economic development in terms of the well-being of local neighborhoods. Specifically, residents wanted assurances that economic and community development would be based on the identification of neighborhood assets, but also that such assets would be utilized holistically and for the benefit of residents and other neighborhoods. Residents identified the following as significant resources that should be incorporated into a master plan: the location of the neighborhood in terms of the city and region; the land and open spaces encompassed in the neighborhood; the housing stock; the youth who live and work in Roxbury; the history and lessons of struggles aimed at improving living conditions in the neighborhood; the community's increasing racial and ethnic diversity; and, perhaps most importantly, the commitment of Roxbury residents and community organizations. But rather than build a plan that utilizes these assets, the city's planning for this neighborhood continues to grow out of "trickle-down" assumptions. In other words, the public subsidization of efforts to attract big business will eventually translate into jobs for residents. Alas, it is precisely this kind of traditional pro-growth model that has encouraged institutional behavior contributing to environmental injustices.

According to observations by one of the authors, who participated in many of the community meetings for the development of a Roxbury Master Plan, long-time residents and community activists believed they were engaged in a process to build a vision and strategy for both economic and community development. The concerns expressed, as well as the ideas for responding to social and economic problems in Roxbury, reflect a broader and more holistic approach compared to the city's narrowly-focused arguments about economic development and the role (and implied benevolence) of big institutions. On one hand, activists are con-

cerned about ways to increase economic opportunities, but they seek to balance these concerns with the well-being of residents and the youth living in the neighborhood. Another example reflecting a more progressive framework: residents are concerned about the impact of transportation on air quality and inefficiency in moving people and cars; but they also raised questions about the relationship (or lack thereof) between planning for transportation and its impact on housing, employment and training for adults, and the strengthening of small businesses located in the neighborhood through contracts in the areas of construction and professional services. In other words, transportation is not simply a physical process for moving people. It is also a venue for the generation of jobs, the training of youth and adults in apprenticeable trades, the generation of wealth through neighborhood businesses, and an opportunity to socially link youth across the neighborhood.

Based on several GIS maps generated by James Jennings, residents could see how public transportation lines served to segregate youth from each other in terms of the many parks in the neighborhood. This exercise allowed residents to approach transportation in ways that represented circular and connecting patterns, rather than lines that merely transported people from the southern end of Roxbury into the northern end, ignoring the needs of people in other parts of the neighborhood. Residents also expressed concerns about feeling comfortable in public spaces that are clean and healthy, but that are also oriented to youth, families, and all residents, rather than "public spaces" that are associated with biotechnology parks, for instance, that make residents and youth feel unwelcome. The focus of residents involved with the initial phases of the Roxbury Master Plan, in other words, was not on a single issue, or reacting to such, but developing a comprehensive package of community development strategies that reflect a more just and equitable distribution of costs and benefits of urban and environmental development. It is clear in this example that residents are not only reacting to injustices, but also proposing a vision of social justice. This example reminds one of the argument proposed by Agyeman, Bullard, and Evans (2002): that environmental justice, equity, and citizen participation are not contradictory, but represent elements essential to economic sustainability.

The major challenge, then, as suggested from community-based struggles described here, is to build a movement that enables residents to achieve healthy, livable, and sustainable communities. This positive vision of environmental justice includes safe, family-supporting jobs in clean industries; pure air, water, and soil; healthy and affordable homes; quality schools; affordable and efficient public transit; green space and abundant recreational opportunities. Here, we can borrow some lessons from a sector in organized labor that proposes proactive actions in generating jobs that pay decent living wages. But, as stated by Waxman (2000), "physical proximity to jobs does not guarantee that people living

near jobs will have the skills or the connections to get those jobs" (p. 38). This is why, rather than merely react to the decisions of corporate executives and managers, some labor activists are becoming involved in planning and decision-making that helps to mold the kind of economy that empowers and protects workers, but at the same time, makes good business sense (Goodno, 2001). That means attracting businesses that connect community residents to jobs while improving quality of life within a neighborhood. In turn, that requires affordable housing developments, good social services (such as affordable childcare), and schools that support household stability and make area residents attractive to business, as well as rent controls and home ownership programs to prevent gentrification and stem the migration and displacement of existing community residents (Waxman, 2000, pp. 31-57).

Based on a review of select community-based struggles for neighborhood equity, movement from a reactive to a proactive mode of public participation requires two key strategies. First, the movement must fill the gaps in existing environmental protection regulations and enforcement. One example is the recent effort to pass an environmental justice bill in Massachusetts, which would allow the state to develop regulations to protect environmentally at-risk communities by means similar to those used to protect natural areas designated as "Areas of Critical Environmental Concern" (Faber & Krieg, 2002). In Massachusetts, the state's Areas of Critical Environmental Concern (ACEC) program helps protect fragile natural resource areas. It is overdue, however, for this same concept to be applied to urban areas where the critical concern arises out of a legacy of environmental insult and neglect. The environmental justice movement in Massachusetts is advocating for the state to create a new designation - *Areas of Critical Environmental Justice Concern* (ACEJC) - to protect overburdened areas from further degradation. The proposed legislation simply amends the duties and responsibilities of the Executive Office of Environmental Affairs (Chapter 21A, Section 2) and calls for development of statewide policies regarding the protection and use of areas of critical environmental justice concern to the Commonwealth. Criteria for determining potential environmental justice concerns contained in the Act include: demographics; disproportionate environmental burden; and disproportionate environmental health impacts in the community. The Act could serve as a powerful tool for community activists, planners, policymakers, and regulators in forging a more sustainable and equitable planning process. Furthermore, if the state were to incorporate environmental justice criteria into other existing regulations, including the environmental reviews conducted under the Massachusetts Environmental Policy Act (MEPA), planners, regulators, and community advocates would be given additional tools to guard against disproportionate impacts on low-income communities and communities of color.

Another example of this broad approach can be found in the actions of

the Boston Public Health Commission, which passed stricter regulations around solid waste facilities in 1998 (Shutkin, 2000). Groups had been fighting trash transfer facilities one by one and winning, but each fight took one to two years. In the Dudley Street neighborhood alone, there were more than a dozen such facilities, many of which were operating illegally. By 1998 many community groups had come together through GBEJN to support stricter regulations overall, including an environmental justice provision in the siting of these facilities which requires consideration of their cumulative environmental health impacts. This strategy recognizes that changes in the overall rules must supplement political struggles within the current policy framework, which allows and sometimes promotes disproportionate environmental burdens.

Perhaps even more important, planners and regulators could effectively pursue an environmental justice agenda by adopting a "precautionary principle" approach. The Precautionary Principle posits that if there is a strong possibility of harm (instead of a scientifically proven certainty of harm) to human health or the environment from a substance or activity, precautionary measures should be taken (Raffensperger & Tickner, 1999). Given standard approaches to risk assessment, environmental policy is oriented to determining whether the dispersion of pollution from various sources leads to what are considered safe levels of public exposure. However, if pollution is highly concentrated in certain communities, then this approach can be inadequate. Overburdened communities must be granted additional protections as offered by the Precautionary Principle, which includes: promoting additional study of activities of concern; shifting the burden of proof so that a chemical/activity must be proven safe; providing incentives for preventive behavior; and/or enacting measures such as bans or phaseouts of substances suspected of causing harm (Raffensperger & Tickner, 1999; O'Brien, 2001). A statewide coalition of environmental, labor, consumer product safety, women's and public health groups, and environmental justice organizations has only recently joined hands under the umbrella of the *Alliance for a Healthy Tomorrow* to help forge a Precautionary Principle approach to environmental policy in the Bay State.

The second strategy is to develop a visionary planning process that cultivates the environmental "goods" necessary for a healthy community. To carry out this strategy, community groups need to develop expertise in urban planning and economic development policy. For example, ACE has been working with its partners in Roxbury to engage in the regional "smart growth" debate, recognizing that simply pushing development into urban centers and "enterprise development zones" over the suburban fringe is not enough – particularly if this involves attracting dirty industries and facilities. ACE has organized residents in ten public housing developments in Roxbury into a new group known as the Safety Net to develop their vision for development and hold the City of Boston account-

able. In fall 2001 they convened a series of meetings among residents to discuss the draft Roxbury Master Plan by the Boston Redevelopment Authority (BRA), and then moved the BRA to incorporate their vision for more affordable housing and light manufacturing in the Melnea Cass Boulevard area. When the Mayor publicly announced intentions to invite area universities to develop biotechnology research facilities in the area, the Safety Net staged protests demanding a moratorium on new development until completion of the Roxbury Master Plan. [12]

CONCLUSION

In recent years, the social networks which integrate citizens into environmental organizations and other civic institutions have been weakened in many local communities. The resulting decline in social capital inhibits genuine citizen participation in the affairs of civil society and engagement in the realm of planning and politics, including the ability to tackle environmental problems in an equitable and effective fashion (Borgos & Douglas, 1996). As social interactions and trust erode, more people in local settings become increasingly cynical about their ability to collectively produce meaningful ecological and social change in their communities. Instead, a growing number of people retreat into *civil privatism*, with an emphasis on personal lifestyle issues such as career advancement, social mobility, escape to the suburbs, and/or conspicuous consumption (Habermas, 1973). When social and environmental problems are confronted, increasingly individualized or "privatized" solutions become the favored response. As a result, the various racial, ethnic, class, and religious divides in American society become accentuated, fomenting a mass social psychology antithetical to social justice and democratic social planning. Sadly, the "haves" disregard the needs of the "have-nots," and attack affirmative action, the social safety net, labor rights, consumer safeguards, and ecological protection in favor of reduced taxes, fiscal conservatism, increasingly harsh punishments for criminal misconduct, and less governmental regulation of industry. And, unfortunately, too many individuals involved with private and public planning initiatives do not resist these developments and instead adopt, without question, corporate-like organizational models which further inhibit broad-based citizen involvement in environmental problem-solving.

In order to overcome this crisis and reinvent more just and sustainable planning processes requires the reinvigoration of an active environmental citizenship dedicated to the *principles of ecological democracy*, which include: (1) *grassroots democracy and inclusiveness* - a commitment to the vigorous participation of people from all walks of life (especially more disenfranchised communities of color) in the planning and regulatory decision-making processes of business, government, and other social institutions that impact their lives, as well as civic organizations and

social movements which represent their interests; (2) *social and economic justice* – meeting all basic human needs and ensuring fundamental human, economic, and civil rights for all members of society; and (3) *sustainability and environmental protection* – ensuring that the integrity of nature is preserved for both present and future generations of all citizens through the promotion of clean industry, the precautionary principle, and sustainable development. These three pillars on which the concept of ecological democracy rests provide a meaningful vision for building a more socially just and ecologically sound planning process for urban America (Faber, 1998).

The environmental justice movement is at the forefront of the effort to democratize community planning in America. No other force within the broader context of grassroots citizen politics in the U.S. currently offers the same potential as the environmental justice movement for: (1) bringing new constituencies into the planning process, particularly in terms of oppressed peoples of color, the working poor, and other populations who bear the greatest ecological burden; (2) broadening and deepening our understanding of ecological impacts of community planning, particularly in terms of linking issues to larger structures of state and corporate power; (3) constructing and implementing new grassroots organizing and base-building strategies over traditional forms of advocacy, as well as developing new organizational models, which rebuild social capital and maximize democratic participation by community residents in decision-making processes; (4) connecting local and regional (and national) layers of citizen activism around planning initiatives; (5) creating new pressure points for policy change; (6) building alliances, coalitions, and coordinated strategies with other progressive grassroots networks around planning initiatives; and (7) bringing more innovative and comprehensive approaches to community and regional planning and environmental problem-solving, particularly in terms of linking sustainability with issues of social and economic justice.

As suggested earlier, planners and policy makers are beginning to recognize and act upon the importance of community building, promoting more active forms of citizen participation in planning and regulatory decision-making processes, and forging stronger partnerships with other community organizations in order to build a more vibrant and democratic civil society. As stated by Gerzon (1995), "strengthening the capacity of communities for self-governance – that is, making the crucial choices and decisions that affect their lives" – is the most critical task confronting planners in rebuilding social capital and a vibrant participatory democracy (pp. 190-191). It is becoming increasingly evident that the environmental justice movement in Greater Boston (and throughout the United States) is central to this task. In Boston, because environmental justice advocates emphasize base-building strategies which take a multi-issue approach, they often function as *community capacity builders* to organize

campaigns which address the common links between various social and environmental problems (in contrast to isolated single-issue-oriented groups, which treat problems as distinct). In this respect, the movement has *enlarged the constituency* of the environmental movement as a whole by incorporating poorer communities and oppressed peoples of color into strong, independent organizational structures capable of influencing the planning process. The movement has also created mechanisms for *spanning community boundaries* by crossing difficult racial, class, gender-based, and ideological divides which weaken and fragment communities, so that more proactive regional approaches to planning and development can be undertaken. Finally, the movement is facilitating *community empowerment* by emphasizing *grassroots organizing and base-building* activities over traditional forms of environmental advocacy which have not proven optimally effective in mobilizing people with low income and communities of color (Faber & McCarthy, 2001).

To effectively move from a locally reactive approach to a regionally proactive approach to community planning, the environmental justice movement needs to build its strength so that it can exercise power with the appropriate scale and scope. Shutting down an illegal trash facility in one neighborhood requires a well-organized neighborhood group. But passing new regulations for the entire City requires connecting groups from across neighborhoods. Similarly, developing a regional vision of environmental justice requires uniting groups from diverse racial and ethnic backgrounds. Passing an environmental justice bill for the state requires an even broader base of support. Environmental planners and policy scholars can play an instrumental role by providing analytical prescriptions of the types of fundamental social and institutional changes needed to simultaneously address environmental and social injustices. If planners continue to conceive of the ecological crisis as a collection of unrelated problems, and if the reigning paradigm is defined in technocratic terms, then it is possible that some combination of regulations, incentives, and development schemes can keep pollution and resource destruction at "tolerable" levels for many people of higher socio-economic status. But this means that poorer working-class communities and people of color who lack political and economic resources to defend themselves in the planning process will continue to suffer the worst abuses. On the other hand, if interdependency of issues is emphasized, so that environmental devastation, ecological racism, poverty, crime, and social despair are all seen as aspects of a multi-dimensional web within a larger structural crisis, then a more transformative environmental planning process can be invented (Rodman, 1980).

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ENDNOTES

1 Although data on Massachusetts are not available, federal governmental enforcement actions appear to be uneven with regard to the class and racial composition of the impacted community. According to a 1992 nationwide study which was reported in the *National Law Journal*, Superfund toxic waste sites in communities of color are likely to be cleaned 12 to 42 percent later than sites in white communities. Communities of color also witness government penalties for violations of hazardous waste laws which are on average only one-sixth ($55,318) of the average penalty in predominantly white communities ($335,566). The study also concluded that it takes an average of 20 percent longer for the government to place toxic waste dumps in minority communities on the National Priorities List (NPL), or Superfund list, for cleanup than sites in white areas. See Lavelle & Coyle (1992, pp. 2-12).

2 These nine communities include: Downtown Boston; Chelsea; East Boston; Cambridge; Roxbury; Allston/Brighton; Boston (all neighborhoods combined); Dorchester; and Lawrence.

3 Older cities in Massachusetts have long ago lost much of their traditional industrial base. For example, the percentage of jobs in the manufacturing sector in greater Boston declined from 32% in 1950 to 17% in 1990. See Bluestone & Stevenson (2000).

4 A number of writers and historians have documented this process that occurred throughout the national urban landscape. Several essays in a recent anthology by the historian Michael B. Katz (1992) include case studies that cover various facets of this development.

5 Medoff & Sklar (1994, pp. 24-25); also see Hillel Levine and Lawrence Harmon, *The death of an American Jewish community* (New York: The Free Press, 1992), as a case study of the Mattapan neighborhood in this city. The authors show how policies and practices of banks directly contributed to racial transition, but also to the economic deterioration of this neighborhood.

6 The proportions reported here include only those persons who chose "One Race" in the census; approximately 96% of all persons counted in Boston chose this category.

7 The Boston Redevelopment Authority has utilized two sets of boundaries for demarcating this neighborhood. One is known as the Roxbury *planning district*, which incorporates the street boundaries that most city agencies use to describe the neighborhood. But different boundaries were utilized to demarcate Roxbury for purposes of the Roxbury Master Plan initiated in 1999. The figures reported here pertain to the former boundary lines for Roxbury.

8 For a review of the lack of government services and inattention to Black neighborhoods in the 1970s and early 1980s, see the report published by the Trotter Institute at the University of Massachusetts in 1985, and edited by Phillip Clay, *The Emerging Black Community*; also see the collection of essays by James Jennings and Mel King in their anthology, *From Access to Power: Black Politics in Boston* (Cambridge, MA: Schenkman Books, 1986).

9 See Alice O'Connor, "Historical Perspectives on Race and Community Revitalization" (Unpublished Paper Commissioned by the Aspen Institute's Roundtable Project on Race and Community Revitalization; the paper can be obtained from www.aspenroundtable.org).

10 See "The Theory and Practice of Equity Planning: An Annotated Bibliography" in *Journal of Planning Literature*, August 1996, 112-126; and Paul Davidoff, "Advocacy and Pluralism in Planning," *Journal of the American Institute of Planners*, 31, November 1965: 331-338.

11 One of the participants at this forum, Lydia Lowe from the Chinese Progressive Association, published an op-ed in the *Boston Globe* (September 14, 1997) titled, "A grassroots group in Chinatown is making the invisible visible," suggesting and illustrating how community participation of neighborhood residents points to greater collaboration across sectors and neighborhoods, but also increases the social capital of the city to meet its economic challenges.

12 One of the Safety Net's chief objections to biotechnology is that few jobs are generated for people without a college degree, or a professional degree, and therefore biotechnology employment would largely exclude community residents. For instance, in June 2002 the Massachusetts Biotechnology Council published a list on its website of job openings available in numerous biotechnology-related companies across the state. A review of this list indicates that the openings overwhelmingly are for people with advanced degrees.