Building a Regional Voice for Environmental Justice

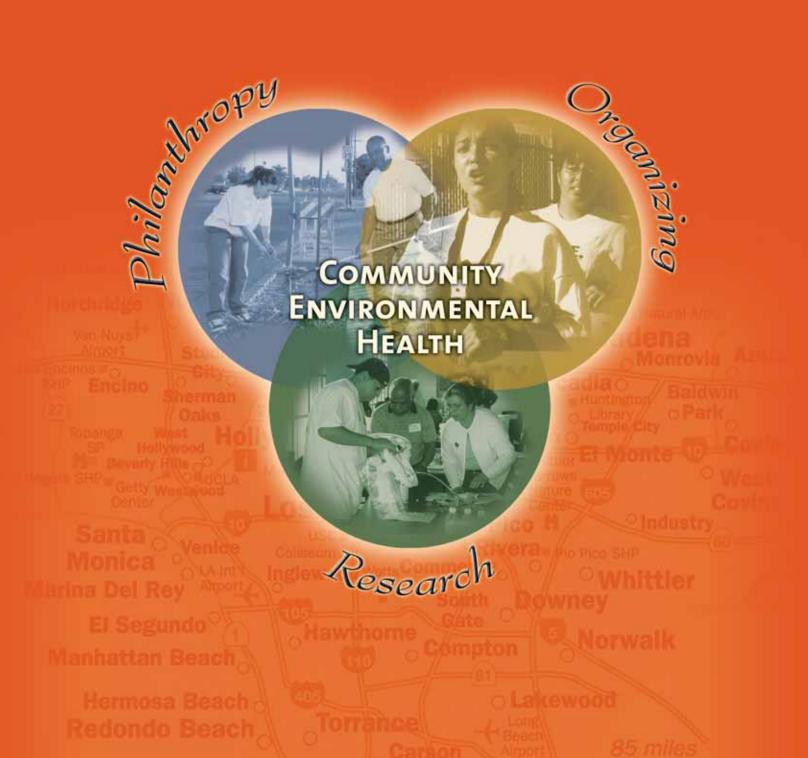




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LETTER FROM THE COLLABORATIVE

y name is Ester Guzmán. Today, I've come to demand that you make the regulations for locating new facilities stricter. My children are sick. One of them had to have sinus surgery at just two years old. You've sent around mobile asthma clinics that hand out Claritin and inhalers, but the problem itself never goes away."

Testimony delivered to the California Environmental Protection Agency (CalEPA) Advisory Committee on Environmental Justice on September 29, 2003

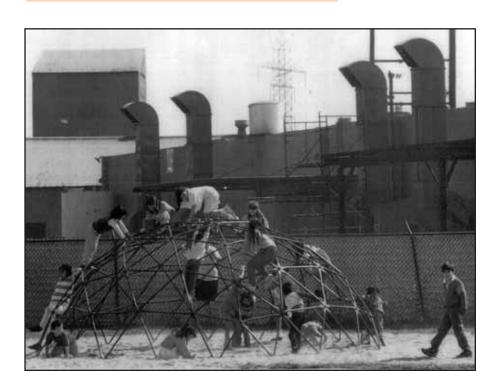
Ester Guzmán's personal story, along with powerful comments from dozens of other California residents, helped the State of California become the first in the nation to adopt a set of "environmental justice" policies in September of 2003.

DEFINITION

"Environmental justice" recognizes that people of color, particularly low-income people, are far more likely to live near sources of pollution (such as hazardous waste sites and factories with dangerous emissions), have less access to the public decision-making process, and are subject to weaker enforcement of environmental laws. The environmental justice movement asserts that the health and political concerns of these communities be part of California's policymaking and regulatory processes.

More than 250 community residents – including Laotian elders, young Latino mothers and African-American homeowners – had traveled from San Diego, Riverside, Los Angeles, the Central Valley and the greater Bay Area. They had gathered at the Elihu M. Harris State Building in Oakland to tell government advisors of their personal struggles with respiratory disease, cancer, birth defects and infertility. And they had come to express their concern about the proliferation of industrial pollutants in their neighborhoods.

This diverse group was there to address the problem of "environmental injustice" – and to create a new vision for California based on equal protection for environmental health for all people, regardless of race or ethnicity. The *Oakland Tribune* called the recommendations "perhaps the most far-reaching set of environmental justice policies in the nation, establishing guidelines that could color every California permit, regulation and program dealing with the environment and rewrite how the state assesses pollution."



Yet the victory for environmental justice that culminated on September 30, 2003 had been many years in the making. It was built upon the work of countless individuals working in grassroots community-based organizations, university research departments, governmental agencies, and environmental advocacy groups.

This report highlights one of these efforts – a partnership between Communities for a Better Environment, the Liberty Hill Foundation and a university-based research team – that contributed to turning California into an epicenter of the environmental justice movement over the past several years and helped add to the momentum for major policy reform.

LETTER FROM THE COLLABORATIVE

Our partnership has combined expertise in scientific research, community organizing, litigation, seed funding, public education and policy advocacy to focus public attention upon the stark racial disparity of environmental health risks in Los Angeles. We have helped improve environmental health in numerous local communities and create new standards and environmental policies that promote fairness and public health at the local, regional and state levels.

Just as importantly, we have helped to nurture a growing movement of concerned residents and community leaders who promise to reinvigorate our public institu-

"From lung-searing fumes, to half-inch thick toxic dust on windows, to vapor plumes that drift by their homes from nearby facilities and industry - residents in low-income, communities of color are on the front lines of our increasingly industrialized economy."

tions. By speaking for themselves – just like Ester Guzmán - they are helping to rekindle our society's commitment to civic engagement and democratic ideals.

We thank The California Endowment for providing early support to our Building a Regional Voice for Environmental Health Collaborative at a time when the health impacts and health disparities caused by environmental pollutants were just beginning to gain visibility within the health foundation community. Their generous and long-term support created the stability which allowed us to focus on the work at hand, rather than the constant need to raise funds.

While "environmental justice" is first and foremost about ending the inequity faced by communities of color, we all benefit from eliminating toxic hazards, finding safe alternatives, and creating more opportunities for community voices to be central in public decision-making.

The Building a Regional Voice for Environmental Justice Collaborative September 2004



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WHY L.A.? WHY NOW?

os Angeles' geographic sprawl, poor air quality, multi-ethnic diversity and growing disparity between rich and poor place it at the forefront of American cities grappling with the social and economic turmoil brought by globalization.

Yet as one of the largest manufacturing regions in the country, and a regional nexus for oil refineries, plastics and paper processing, metal plating and other heavy industry – Los Angeles is also at the cutting edge of regions wrestling to define the intricate balance between economic growth, the environment, social equity and human health.

The problem of environmental injustice became increasingly apparent throughout the 80s in Los Angeles, and by the 90s, was reaching a state of emergency in many local communities. Latino and African-American residential neighborhoods, many of them decades old, seemed to be regular targets for siting industrial facilities, hazardous waste operations and other potentially hazardous land uses. This trend of concentrating environmental hazards in communities of color drew the attention of Communities for a Better Environment, a statewide environmental health and justice organization, the Liberty Hill Foundation, a local public foundation, and three university researchers working in fields as diverse as geographic mapping, statistical analyses and public health.

In 1998, with a keen interest in working together and with substantial support from The California Endowment, this unusual mix of partners agreed to join together in the Los Angeles "Building a Regional Voice for Environmental Justice" Collaborative. A guiding principle was that our combined efforts could yield more far-reaching results than each of us working alone.

This report shares how the Los Angeles Collaborative worked together, what our research discovered, and how our individual and collective efforts quietly and steadily contributed to a fundamental shift in the policy framework.

Of course, recent statewide environmental justice successes, as well as numerous local interventions, could not have been accomplished without the diligent, creative and tireless work of an extended network of collegial organizations. Appendix I includes a full list of the Liberty Hill Foundation's Environmental Justice Fund grant recipients, many of whom provided indispensable leadership in shaping the debate and helping to advance environmental justice policy at various regional and state agencies. In addition, environmental justice organizations outside of Los Angeles, such as San Diego's Environmental Health Coalition, the Silicon Valley Toxics Coalition, the Asian Pacific Environmental Network and People Organizing to Demand Environmental and Economic Rights in the Bay Area played pivotal roles in the adoption of the new policy recommendations.

In these pages, we hope to share how the Los Angeles Collaborative worked together, what our research discovered, and how our individual and collective efforts quietly and steadily contributed to a fundamental shift in the policy framework.

Our goal in producing this report is to tell our story, and to help others understand this promising "organizing-philanthropy-research" model for creating broadbased social policy reform. We hope to encourage others to form joint endeavors in other geographic regions, as well as in other policy fields.

In the past year, several excellent reports about environmental justice have been published. Confronting Toxic Contamination in Our Communities: Women's Health and California's Future by the Women's Foundation of California, details the impact of toxic pollutants on women's health and reproduction. Building Healthy Communities from the Ground Up: Environmental Justice in California, a report by several California-based environmental justice organizations, documents the disproportionate impact of toxic chemicals on people of color, and recommends a series of

policy actions. This report is a complement to these earlier reports in which we focus less on environmental justice per se, and more on our model of collaboration.

The report begins by describing the individual partners and how we integrated our efforts into a collaborative model. We review key highlights of our accomplishments, and analyze the benefits – to us individually, as well as to the work – of the collaborative model. The report also shares the lessons we have learned from working together, and some of the challenges we faced. Lastly, we include a user-friendly supplement that shares the key findings of the research team's investigations into environmental justice issues in Southern California.

We hope that the experience of The Los Angeles Collaborative will provide valuable insight and inspiration for future practitioners, researchers, foundations and community organizations, and that it might open new horizons for collaboration.



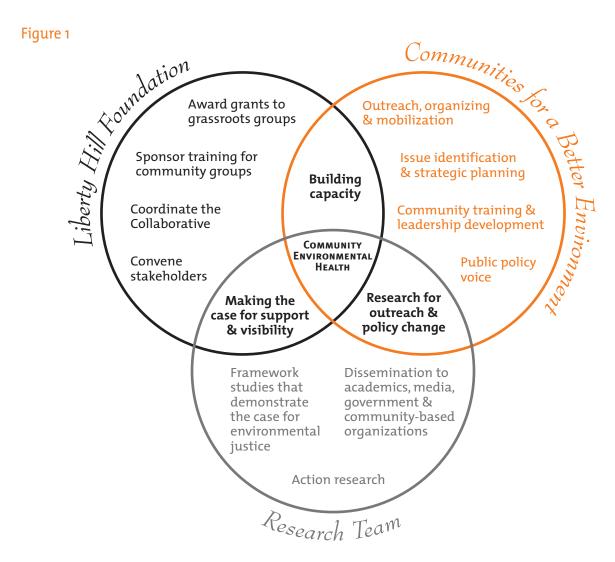
INTEGRATING ORGANIZING, PHILANTHROPY & RESEARCH: CIRCLING TOWARD CHANGE

he Collaborative's model is best conceptualized as three interlocking circles as shown in Figure 1. Each of the three partners – the research team, the statewide environmental health and justice organization and the public foundation – performs a distinct function, yet activities intersect and build upon each other in numerous ways.

Through this unique relationship between organizing, philanthropy and research, the Collaborative has contributed toward pioneering research that has informed policy actions, expanded capacity within the environmental justice movement, and brought new vis-

ibility and support for the environmental health and justice field.

The individual components of the Collaborative are:



Communities for a Better Environment

Communities for a Better Environment (CBE) is a statewide membership organization with a strong base in the low-income, immigrant communities of Southeast Los Angeles, Wilmington and Santa Fe Springs, that assists neighborhood residents in responding to toxic health hazards in their midst. Beginning in 1993, with a growing awareness of the disproportionate exposure of low-income communities of color, CBE began to pioneer a surprisingly simple model of environmental justice advocacy. Coined the "triangle approach", it has produced lasting changes for local communities facing health risks posed by industrial sources, especially in Southeast Los Angeles County.

The Triangle Approach

Three major tools are typically employed by individuals and organizations working for broad social change:

- (1) community organizing which informs, educates and engages affected residents or constituents to address social inequities through collective action;
- (2) science-based advocacy which conducts independent scientific analyses to understand the consequences of policy actions; and
- (3) legal intervention which uses the power of laws and courts to change the behavior of private and public entities.

CBE's unique contribution is the integration of the three disciplines into a single organizational strategy. In combination, they represent a powerful strategy for policy reform. A skilled team of environmental and public interest lawyers, community organizers, and environmental researchers work alongside concerned community members. Together, they figure out the most effective way to build a multi-pronged, comprehensive campaign to address a toxic health hazard in a local community.

The Triangle Approach in Action

In 1997, CBE found that oil companies were unleashing a toxic assault on the low-income and minority residents of Wilmington, exposing them to concentrated chemical fumes. The South Coast Air Quality Management District's (SCAQMD) Rule 1610 allowed oil companies operating marine loading facili-

ties to avoid installing vapor recovery equipment, otherwise required by regulation, and offset those emissions by scrapping older cars in the four-county air basin. While this scheme was purported to result in a net reduction in air pollution throughout the region, it clearly was adding to pollution in the local community.

CBE confronted the SCAQMD and the State of California under Title VI of the Civil Rights Act for dangerous practices in the ports. While the lawsuit was

One of the fundamental principles of environmental justice is that the public must participate as an equal stakeholder in environmental health decision-making.

working through the courts and administrative channels, CBE's organizers were going door-to-door, distributing information and convening more than 200 community residents at Town Hall-style forums with SCAQMD officials.

The lawsuits brought by CBE resulted in an unprecedented moratorium on pollution credit trading plans in the State of California, secured agreements to use proper equipment at the port, reduce pollution at refineries, and fund an asthma clinic. Most importantly, it demonstrated the discriminatory impact of this regional policy, leveraging an even more far-reaching agency response. In an unprecedented move, the SCAQMD adopted a ten-point "Environmental Justice Initiative", which had a significant impact on the State of California's regulatory and legislative response. Just one provision, a requirement that mandated the agency to become more accessible to community concerns, has resulted in over 60 Town Hall meetings in diverse communities throughout the four counties of the South Coast Air Basin. This reform has gone a long way toward realizing one of the fundamental principles of environmental justice - that the public must participate as an equal stakeholder in environmental health decision-making.

Liberty Hill's Grantmaking Approach

There are several elements of Liberty Hill's grantmaking that have contributed to the momentum for better environmental health protections. Our experience holds important lessons for how foundations can expand the voice of underrepresented communities in public decision-making, and have a democratizing and meaningful impact on public policy:

- Commitment to community voices: With the belief that people who experience social problems first hand should have a voice in solving them, grants go to organizations which engage community residents in changing institutional practices. Public agencies and elected leaders are most responsive when community residents are organized to represent and articulate their own interests.
- Community-based grantmaking: The Environmental Justice Fund is governed by a "community funding board" that draws upon the knowledge and insight of a diverse group of community leaders. They bring experience in environmental law, public health, civil rights, land use, and the art of community organizing.
- Willingness to take risks: Liberty Hill invests in new and emerging issues, even when controversial and facing significant odds. Particularly in the environmental justice field, community groups are usually posed against polluters with far greater access to resources. Yet, the savvy and tenacity of community residents often prevails with just small amounts of money at the right time.
- *Multi-year grants:* Two-year grants enable better organizational planning, and support community campaigns that can take two to six years to complete.
- *Unrestricted general support:* Grants are given to finance the general operating budgets of small to medium-size organizations, providing flexibility to adapt to changing circumstances.

Liberty Hill Foundation

The Liberty Hill Foundation is a 28-year old public foundation that provides grants and technical assistance to community organizations in Los Angeles County working for social, economic and environmental justice.

As early as 1980, the Liberty Hill Foundation provided "seed" grants - small awards of between \$2,500 and \$8,000 - to help communities in South and East Los Angeles respond to several dangerous projects – including a proposed municipal waste incinerator and a proposed oil pipeline - that were to be built within their densely populated residential neighborhoods. In 1992, Liberty Hill provided a grant to Communities for a Better Environment to launch a door-to-door campaign throughout several neighborhoods in Southeast Los Angeles. By 1996, the Environmental Justice Fund was founded with mitigation monies resulting from successful CBE litigation. It has since provided a major, consistent stream of financial support to grassroots environmental justice organizations, with grants ranging up to \$35,000.

F U N D I N G

A study by Professor Danny Faber of Northwestern University showed that of the \$200 billion given to charity in 2001, only 3% went to environmental organizations. Moreover, only 1/10 of that was directed to environmental justice work.

Liberty Hill realized early on that grants were just one necessary ingredient for waging a successful community campaign. Just as key is the need for community residents to be empowered with the skills to effectively challenge business practices and intervene in the regulatory process. As a result, Liberty Hill created the *Environmental Justice Institute* in 1999.

The *Environmental Justice Institute* offers training in the fundamental aspects of organizing for environmental justice, providing concerned community members with a working knowledge of the basics of environmental law, toxic pollutants, regulatory responsibilities, public health standards and computer research tools.

Other sessions focus on the basics of community organizing, including grassroots fundraising, media outreach and working with volunteers.

In the sprawling and far-flung geography of Los Angeles, perhaps the most valuable contribution of Liberty Hill's *Institute* – even more than the training itself – has been its ability to bring people together over time: to learn side-by-side, to debate and analyze strategy, and to build relationships with one another. And, at critical moments this network of allies has come together to push for positive and lasting policy change.

LEARNING

Selected topics from Liberty Hill's Environmental Justice Institute

- Classroom Crunch: The Environmental Health Risks of LAUSD's New and Existing School Sites
- How the Precautionary Principle Became Public Policy: The San Francisco Story
- California EPA Meets the Environmental Justice Movement: Setting a Model for the Nation
- The ABC's of Children's Environmental Health
- Expanding the 710 Freeway: Is There a Better Road to Take?

In addition, Liberty Hill serves as the administrator for the Collaborative and also spearheads the effort to bring more foundation resources into the field of environmental health and justice.

Research Team

The research team is composed of Professors Manuel Pastor of the University of California, Santa Cruz; James Sadd of Occidental College; and Rachel Morello-Frosch of Brown University, who all share a scholarly interest in the geographic and socioeconomic patterns of environmental health risk.

One of the unique aspects of the partnership is that the academic team is truly interdisciplinary, spanning the fields of economics, regional planning, public health, epidemiology, environmental science and geography. Such an interdisciplinary approach constantly

Technical Assistance Best Practices

As a funder, Liberty Hill has learned some important lessons about how a technical assistance program can best meet the needs of community organizations, and how it can significantly complement our grantmaking:

- Address grantee needs in curriculum design: Staff members use grantee feedback to guide the selection of curriculum topics, speakers and other training resources.
- Respond to emerging issues: Training workshops are typically planned only a few months in advance to allow for urgent or emerging issues to be addressed, which has led to timely mobilizations on policy and regulatory issues.
- Emphasize peer learning: While the Institute draws upon experts, participants have often found the greatest value in learning from their peers, with veteran organizers and experienced community leaders offering their insights to newer leadership.
- Make learning accessible to community members: To address the practical needs of diverse and low-income communities, Institute sessions are held on Saturdays, with child care, simultaneous translation and even transportation.
- Supplement with mentoring: Above and beyond workshops, expert advice and intervention is often needed. Liberty Hill meets this need by providing stipends to support mentoring "partnerships" between larger environmental organizations and experienced leaders, and grassroots groups.

challenges us to "think outside the box" in how we approach projects to holistically address environmental justice issues. This flexibility helps us tackle challenging research questions from a variety of angles and encourages broader thinking as the Collaborative works together to develop effective policy solutions to promote environmental justice.

The research team approaches its endeavors in two ways: first, it conducts "fundamental" research that requires data analysis to answer broad questions around demographic, historical and regional trends; and sec-

By using graphics and maps to display data in a way that the lay public can understand, we enable community organizers to conduct "data judo" in the regulatory and policy arenas.

ond, it conducts "action" research that meets more short-term inquiries about the impacts of a specific project upon a community. The team also provides training to community-based organizations to enable them to more effectively organize and advocate for policy changes.

The research team:

- Improves environmental health in low-income communities of color in Southern California by conducting relevant and rigorous research on air quality that supports advocacy and organizing; and
- (2) Provides necessary training to help communitybased organizations understand the scientific information that drives the regulatory process and shapes policy-making.

A major component of this Collaborative supports research that examines potential patterns of environmental inequities in Southern California. We have consistently prioritized rigorous environmental health research and risk assessment in order to address some of the persistent methodological challenges in the field of environmental justice research. Thanks to strong Rightto-Know laws that make air pollution data publicly available, major advances in air emissions inventories, such as the Toxic Release Inventory, and national exposure data on outdoor air pollution, the research team

Transforming Traditional Approaches for Researching Community Environmental Health

From an academic perspective, the Collaborative is unique because it has worked to transform traditional approaches to research on community environmental health. We promote new approaches to community-based collaborative research on environmental justice in three ways (see Figure 2):

1. Moving "upstream": Rather than emphasizing "downstream" issues related to improving treatment for environmentally-mediated diseases, such as asthma, our research focuses on "upstream" factors that point to disease prevention.

This upstream/downstream analogy takes its title from a metaphor about preventive health: Villagers notice helpless people floating downstream and develop increasingly sophisticated ways to rescue them, yet the real breakthrough occurs when leaders venture upstream to find out why people are falling into the river in the first place.

Using data on pollution exposures and combining it with cancer toxicity information, allows us to look upstream and understand how improved regulation,

policy changes, and better organizing capacity can improve community health by reducing exposures to environmental hazards.

- 2. Promoting an "eco-social" outlook: Our research focus is broad and looks beyond individual or lifestyle factors, such as smoking and diet. Instead, we look toward the environmental and socioeconomic factors that shape distributions of people and pollution. This more holistic view of the relationship between environment and populations, along with the multi-disciplinary backgrounds of the researchers, has enabled research results to inform people working in diverse fields such as transportation planners, public health officials, economic development experts and social scientists.
- **3.** Ensuring active community involvement: CBE is the final arbiter of our priorities based on their understanding of the current policy framework and community organizing needs. This ensures that the type of research questions are relevant to the communities and regions being studied.

has conducted numerous studies that have built up the evidence for environmental inequity in Southern California.

The research team has used graphics and maps to display data in a way that the lay public can understand and actually use. With this approach, we can reach a broad array of environmental justice organizations and enable community organizers themselves to conduct "data judo" in the regulatory and policy arenas. Data judo is a process in which communities leverage scientific evidence to engage with industry stakeholders and policymakers to push for regulatory change and tighter environmental enforcement.

Putting it All Together

At the center of the model's interlocking circles (see Figure 1) lies the heart of this unique partnership. Through integrated efforts, we have contributed to raising the visibility of community health issues and fashioning new solutions that grow from the

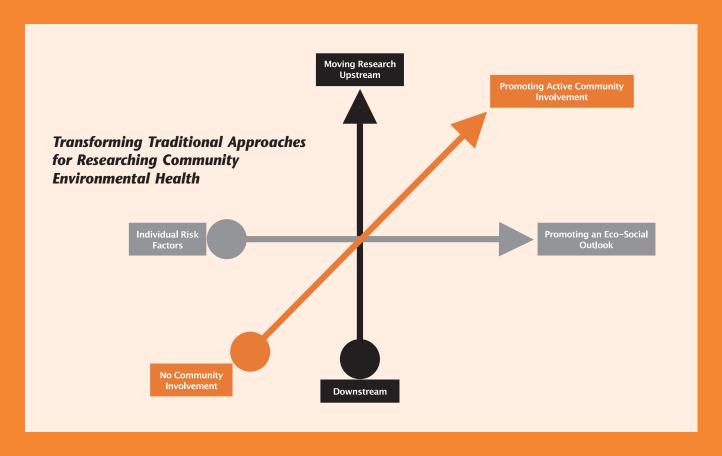
complementary perspectives of community experience and university research.

We have expanded the field, by bringing new resources to grassroots organizations, and strengthened their capacity to use scientific evidence to reinforce and

This model has renewed our collective imagination about what is possible when diverse partners unite around a common vision and use their different skill sets and networks to make a lasting difference.

validate community knowledge. Most importantly, this model has renewed our collective imagination about what is possible when diverse partners unite around a common vision and use their different skill sets and networks to make a lasting difference.

Figure 2



MAKING A DIFFERENCE

oving the environmental justice agenda forward has required tremendous breadth and diversity of activities and strategies. From local community organizing campaigns, to regional policy advocacy, to research on environmental inequities that could impact regulatory agency decisions, the Collaborative partners have contributed both individually and collectively to this progress. This section highlights a few of the major accomplishments of each of the partners, along with the key achievements of the Collaborative as a whole.

Changing Regional Policy

Reducing Cancer Risks from Industrial Emissions

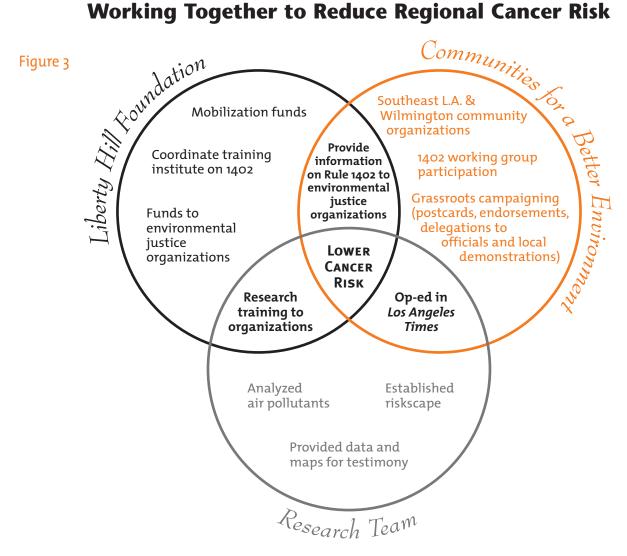
In the early 1990s, the South Coast Air Quality Management District (SCAQMD) adopted a health risk standard that environmental justice advocates found sorely lacking. The standard was 100 cancer risks per million people exposed to air emissions from an existing facility. In other words, each existing industrial facility could emit toxic pollutants as long as its cancer risk fell under this level. For non-cancer risk hazards, the rule set the Hazard Index at five times what was considered "safe" by many health experts.

This standard, codified in Rule 1402 of the SCAQMD, did not make any allowance for cumulative impact, the problem of human exposure to multiple sources of toxic chemicals. This, of course, is the chief problem faced by disproportionately impacted communities who suffer from the proliferation of polluting factories and industries in their midst. After years of advocacy by CBE and other organizations, the SCAQMD passed 10 Environmental Justice Initiatives in 1997 and pledged to reopen the debate on 1402.

The research team tackled this issue by analyzing the concentration of 148 hazardous air pollutants emitted from large and small stationary facilities in Los Angeles, Ventura, Orange and San Bernardino counties. They estimated and mapped potential increases in lifetime cancer risk associated with these emissions. The resulting "riskscape" was startling. Predictably, cancer risks associated with stationary source emissions were much higher for poorer communities. Yet differences by race held across income levels: African Americans, Latinos and Asians were found to face a higher-than-average estimated lifetime cancer risk.



Working Together to Reduce Regional Cancer Risk



By March of 2000, CBE, along with allies who were growing in capacity and number in the Los Angeles area as a result of Liberty Hill's funding and community education, mobilized nearly 500 residents to speak out on these sorely inadequate health standards. With extra financial support from Liberty Hill, CBE and its allies organized several buses to transport community residents to the public hearing at the SCAQMD headquarters in Diamond Bar, California. As the SCAQMD Governing Board meetings are typically inaccessible to many due to the distance and Friday morning schedule, the Board members had never seen this level of community participation. CBE and its allies organized a wide coalition of people from community residents, researchers, engineers, doctors, teachers, school children, and advocates to demand a cancer risk of one in a million (99% reduction) and a non-cancer Hazard Index of one. As a result of community pressure the AQMD Board slashed the cancer-risk standard by 75%

and set the non-cancer Hazard Index at three. This regulatory change significantly reduced the risk of health problems for the entire four-county air basin, and helped to launch a series of environmental justice policy reforms discussed below.

This major CBE regional victory was complemented by a number of local interventions taking place during the same years:

- In Walnut Park, CBE was able to halt the open-air operation of two glass recyclers who were spewing glass shards into the air of the predominantly Latino community.
- In Huntington Park, CBE worked to stop the operations of a concrete processing facility, named La Montaña (or "the mountain") for its sheer size, which was causing respiratory problems in the neighborhood.

- In Bell Gardens, CBE worked with community residents to shut down a chrome-plating facility emitting hexavalent chromium, a dangerous carcinogen that was suspected in the deaths and health maladies of a number of students and teachers at a nearby school.
- In Carson, CBE worked with local residents and allied groups to block the permit extension of a pesticide manufacturing facility adjacent to residences.
- In South Gate, CBE educated residents who rejected the siting of a power plant which would have added more pollution to the already overburdened community.
- In Santa Fe Springs, through the triangle approach of litigation, community organizing and sciencebased advocacy, CBE revoked the permit of a defunct and polluting oil refinery threatening to be re-opened.
- Most recently, CBE worked with community residents in the port city of Wilmington to phase-out a deadly chemical, hydrogen-fluoride, used in oil refining.

Funding in Action

Liberty Hill Grants & Technical Assistance Pay Off

In the eight years since it was started in 1996, the *Environmental Justice Fund* has awarded \$2,155,000 to 48 organizations in amounts ranging from \$3,000 to \$70,000. This funding has enabled groups to make permanent changes in their communities, such as removing a hazardous waste facility, or strengthening zoning codes that govern land use. It has also enabled some organizations to mount major campaigns that have won policy and regulatory reforms at both the regional and state levels.

Most community residents are drawn into environmental justice work because they are concerned about the health effects of facilities and industries near their homes. From lung-searing fumes, to half-inch thick dust on windows, to vapor plumes that drift by their homes – residents in low-income, communities of color are on the front lines of our increasingly industrialized economy.

Reaching throughout Los Angeles County into dozens of immigrant, African-American and Latino

communities that face industrial plants, transportation projects, landfills and dilapidated housing conditions, this steady funding stream combined with community education has spawned a growing and successful move-

When the burdens of doing business can be put on others, the recipe is complete for more, not less, waste and pollution. Recognizing and addressing the problem of environmental inequity is key to improving the environment for all of us.

ment for public health and environmental protection. What follows is just one story – out of dozens – that we chose to illustrate the impact of these groups.

Cleaning Up a Neighborhood: A Case Study of Local Intervention

"A little money at the right time can make all the difference to a grassroots campaign," reflects Deborah Milligan, co-founder of the Community Coalition for Change (CCC) in Athens Park, a neighborhood located in Los Angeles County near Compton and Watts.

Hazardous waste transfer facilities, chemical manufacturing plants, and auto-wrecking shops are buttressed against single-family dwellings and public housing complexes in this community where 65% of the residents are African-American. Residents live in a five to seven mile danger zone with pollutants including benzene, DDT, arsenic, medical waste, lead paint and rat poison being stored and transported.

Just one of these facilities, Statewide Environmental Services (SES), regularly released toxic plumes as its workers mixed liquid chemical waste. A Head Start day-care center, located just 150 yards downwind, routinely rounded up children and brought them indoors to avoid breathing the air for fear of damaging their developing lungs and respiratory systems.

Beginning in June of 1994, a small group of neighborhood residents began to fight for the closure and clean-up of SES. Their first task was to research the proper local authorities to contact about their concerns, a daunting task in itself, and to carefully document neighborhood complaints about the noxious practices

of the company. When the owner became aware of the community's growing concern, his response was to raise the fence surrounding the facility to better conceal plant activities.

With a Liberty Hill grant in 1996, their very first source of outside support, the Community Coalition for Change was able to establish a telephone line with an answering machine, and to produce leaflets and bulletins that could be distributed throughout the community. Subsequent grants helped the Coalition to pay stipends to its lead organizers so they could take time off from their "day jobs", and eventually to open an office that served as the hub for community meetings and outreach. When the *Environmental Justice Institute* began offering workshops, CCC brought its most active members, increasing their understanding of their local battle, and giving them hope that they were not alone.

By writing letters, knocking on more than 4,000 doors, and sending delegations of concerned community members to meet with elected officials, the residents were able to get the attention of regulatory agencies to investigate. In the process, residents learned to conduct their own research, and even presented their own testimony to the County Board of Supervisors, the Department of Toxic Substance Control (DTSC) and the Los Angeles Regional Planning Commission.

"We did not have an easy road to victory, but our persistence paid off. Now, we're continuing to take on other polluters and their illegal practices that threaten our community's health and our children's future."

Rahman Shabazz,
 President of the Community
 Coalition for Change

In August of 1999, after more than five years of countless hearings and neighborhood delegations to meet with agency personnel and politicians, the DTSC ordered the closure of SES and required a clean-up plan. For its part, the County of Los Angeles issued an

enforcement order stating that SES had violated the limits of their conditional use permit, and down-zoned the facility's property from "heavy" to "light industrial" use. This change in land-use policy helped set a precedent for the many communities that lie in unincorporated areas of Los Angeles County.

In Appendix I there is a list of the environmental justice organizations, working in local communities and at the regional level, that have been supported by Liberty Hill's *Environmental Justice Fund*.

Research in Action

Making the Case for Policy Reform

The combination of shared goals, effective internal organization and shared decision-making process used by our Collaborative has allowed the research team to explore and quantitatively test a wide variety of questions related to environmental health and justice. Our studies were regional in scope, and focused on understanding and quantifying broad patterns of disparity, their origins, and their relationship to the policy debate. Rather than conducting case-by-case research on specific communities and sites, this regional approach enabled our research to be much more effective in assisting CBE and the environmental justice movement as a whole in making the case for policy reform.

While the research team was committed to conducting studies which were both timely and relevant to the environmental health and justice debate, all Collaborative members insisted that this research be rigorous and at the cutting edge methodologically, so that it would pass the tests of peer review and scrutiny by others. Toward this end, all of our initial research was published in a variety of academic journals spanning the fields of social science, urban planning, political science, and environmental health. See Appendix III for a list of academic publications produced by the research team.

The insert in this report provides an overview of the key research findings, along with colorful maps and graphs, to help display the stark patterns of racial inequity, toxic exposure and health risk in Southern California.

Sharing the Research Results

The research team disseminated their findings through articles in scholarly journals, presentations to government agencies and editorials in popular newspapers. To learn more, see Appendix III.

Research findings have appeared in the following academic journals:

- Annals of the American Academy of Political and Social Science
- Economic Development Quarterly
- Environment & Planning C
- Environmental Health Perspectives
- Journal of Urban Affairs
- Social Science Quarterly
- Urban Affairs Review

Collaborative members have made presentations to the following government agencies:

- Advisory Committee on Environmental Justice to the California Environmental Protection Agency
- California Air Resources Board
- California Integrated Waste Management Board
- Department of Health Services
- Public Health Association
- South Coast Air Quality Management District
- Southern California Association of Governments

Articles have appeared in the following newspapers:

- Los Anaeles Times
- Sacramento Bee
- San Jose Mercury News
- Wall Street Journal

Our work has extended well beyond maps and charts, seeking to shape the broader public debate. The Collaborative partners have co-authored numerous opinion page editorials in major newspapers such as the Los Angeles Times, San Jose Mercury News and the Sacramento Bee. The opinion pieces have often been timed to affect upcoming decisions by regulators where

This regional approach enabled our research to be much more effective in assisting the environmental justice movement in making the case for policy reform.

both CBE and Liberty Hill grantees are organizing for impact. For instance, we released an opinion piece on the racial dimensions of air toxics as the SCAQMD was reconsidering its pollution emission standards for new facilities. We released a different report about the environmental justice implications of the expansion of the Los Angeles airport just in time to influence a nearly finalized environmental impact report on that topic. The research team was also available to the press as resources, both to local stations and to *Univision* (the major Spanish-language national network) carrying the message to new audiences.

Through interviews and the strategic publication of opinion page editorials in mainstream press outlets, the Collaborative has successfully brought statewide attention to the research and its implications for organizing and advocacy.

Contributing to Statewide Change

Environmental Justice Becomes State Policy

All of this work has helped catapult a series of far reaching regulatory reforms that have propelled California into the national forefront on environmental justice policy. As environmental justice organizations throughout the state push for real, systemic change, at least eight new environmental justice bills have been signed into law in the last five years. One of these mandated the California Environmental Protection Agency (CalEPA) to create the Advisory Committee on Environmental Justice to assist the newly created CalEPA Interagency Working Group in developing a strategy to identify and address environmental justice gaps in CalEPA programs.

From 2002 to 2003, the Advisory Committee debated and negotiated in a multi-stakeholder process, hammering out a set of comprehensive recommendations for how CalEPA should integrate environmental justice into its regulatory programs and policies. This process followed the California Air Resources Board's adoption of the "Environmental Justice Policy and Action" plan in December of 2002, at the urging of CBE and other environmental justice organizations.

But after 18 months of diligent and patient committee work, the mobilization of dozens of community residents and testimony from the research team, CBE - working alongside other environmental advocates and community organizations - ushered in an unprecedented and path-breaking new set of recommendations. In September 2003, the CalEPA Advisory Committee on Environmental Justice adopted the comprehensive integration of environmental justice goals that applies to all California EPA member agencies, including the Air Resources Board, the Department of Toxic Substances Control, the California Integrated Waste Management Board, the Department of Pesticide Regulation, the Office of Environmental Health Hazard Assessment and the State Water Resources Control Board.

This new policy breaks ground in several key areas that are fundamental to the environmental justice movement, and shifts the policy framework toward actions that are required to protect public health from environmental pollution:

The Precautionary Principle: The precautionary principle requires that environmental and public health decisions emphasize avoiding or preventing harm, even in instances where statistical certainty or definitive scientific proof is not available.

Cumulative Impact Analysis: Health risk and impacts in a given area from pollution result from the combined and cumulative effects of all pollution

exposures in that area. The cumulative impact approach requires that all sources of pollution and their effect on public health are considered when making a permitting or regulatory decision for a particular community or a particular project. This approach is more comprehensive and realistic than the chemical-by-chemical or facility-by-facility analysis now in use.

Pollution Prevention: Placing priority on cleaner technologies and less toxic alternatives in industrial production, pollution prevention seeks to avoid the problem of cleaning-up after the fact. This approach can avoid expensive mitigation measures, and is far more protective of public health and the environment while allowing for technological innovation and growth.

The next step for the Collaborative, along with other community partners, is to work with CalEPA to implement the recommendations into its day-to-day practices.

Community activism, supplemented by sophisticated research, is now poised to hold agencies and industries accountable for responsible public health protection.

WHY WORK TOGETHER?

ather than simply coming together around a particular environmental justice issue or crisis, the Collaborative has developed a long-term, sustainable strategy to build a foundation for social change through organizing, research, and advocacy to promote environmental justice. The model has resulted in a unique kind of synergy between the three partners that has benefited our work individually, and which has also produced a "whole" greater than the "sum of the parts".

The satisfaction that flows from knowing that you've both understood the world and helped to change it is enormous.

Rules for Collaboration

The Liberty Hill Foundation serves as administrative coordinator of the Collaborative and as the key contact with our primary funder, The California Endowment. In addition, Liberty Hill oversees work with the project evaluator.

During the first year of working together, the Los Angeles Collaborative met bimonthly to develop our decision-making mechanisms and scope of work. During these early months, the project evaluation team helped to provide clarification and analysis about our working relationships. As we have gained experience in teaming with one another on multiple projects, we have transitioned to quarterly meetings, using teleconferencing during the interim to stay updated and make decisions.

The Collaborative has developed some important mechanisms and processes for determining priorities, advancing new strategies, evaluating our work, securing funding and maintaining communication.

Decision-Making

Much of the Collaborative's work is executed by the individual partners, with joint decisions reached through a process of careful discussion with a strong commitment to reaching consensus. A high degree of

mutual respect, willingness to engage in debate and dialogue and long-term trust between the partners has enabled decision-making to occur smoothly and promoted a process of principled and transparent communication.

Project Activities

While the work of individual partners is informed and supported by participation in the Collaborative, we have also undertaken a number of joint activities. These have included:

Toxic Tours: One of the most effective and powerful tools in reaching stakeholders concerned with environmental justice has been to offer "toxic tours". Policymakers, agency representatives and donors are taken to impacted communities to meet with residents and hear their personal stories of chemical exposure, health problems, and efforts to seek redress. By showing the "human face" of environmental injustice, along with the rigorous research and policy recommendations of the Collaborative, we have presented a compelling case for regulatory action and lasting solutions. CBE, Liberty Hill and the research team participate jointly in organizing and conducting Toxic Tours.

Stakeholder Briefings: The research team and CBE have cooperated many times to conduct presentations before various regulatory agencies and government agencies, including the California Air Resources Board, the Southern California Association of Governments and the Los Angeles County Maternal and Child Health Division.

Funder Briefings: Through Liberty Hill's leadership, we have made joint presentations to the foundation community, including meetings of the Council on

SPECIAL PULL-OUT

Environmental Justice - Is There Really a Problem?

hen the "Building a Regional Voice for Environmental Health" Collaborative first came together, one of the researchers proudly told his aunt, Tía Dalia, that he had become part of a team investigating environmental inequity in Southern California. After smiling with pride and congratulating the researcher, the aunt asked a straightforward question: what is environmental inequity?

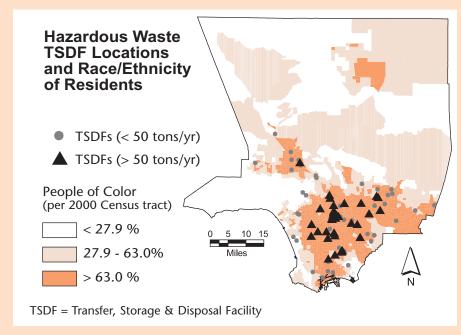
Ah, the researcher explained, it is the fact that environmental hazards are disproportionately located in low-income communities of color. Tía Dalia's beaming smile slowly gave way to a quizzical look. She looked sadly but directly into the researcher's eyes. As though letting him on to a long-held secret – and perhaps quietly warning that he would soon be found out to be wasting his time – she remarked: "*Mi hijo*, everyone knows that."

While communities do sense the disparities, some in the academic and policy worlds have questioned whether environmental differences are more felt than real, more the fruits of an

imagined oppression than the recognition of documented inequity. Adding fuel to the fire of doubt has been a series of national level studies employing sophisticated statistical techniques that question whether environmental racism occurs in all places at all times.

Part of what the Collaborative has sought to do is document the Southern California riskscape in ways that are both analytically rigorous and empirically compelling to residents, researchers, and policymakers alike. Using an array of mapping techniques and our own advanced statistical studies, we have found that:

African Americans in Los Angeles County are about 50% more likely and Latinos are two times more likely than Anglos to be living in neighborhoods directly proximate to hazardous waste treatment storage, transfer and disposal facilities. These differences diminish but do not disappear when we control for population density, income levels, percent of residents working in manufacturing, and even local land use, all factors that should explain hazard location.



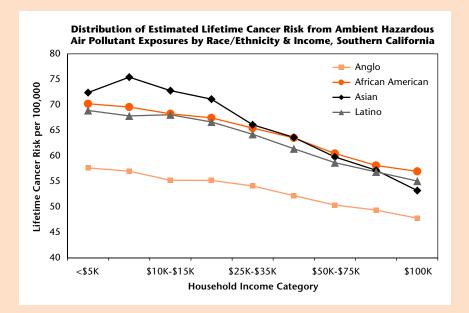
While some say that this is because minorities move to cheaper, but higher-risk, neighborhoods, the evidence suggests otherwise – that racially uneven siting dominates rapidly changing demographics as an explanation. In Los Angeles County, for example, areas that received new hazardous waste facilities over the 70s and 80s were two-thirds more minority than those neighborhoods that did not. These newly toxic neighborhoods did indeed

become more minority but the gain in percent minority was no faster than in the rest of the county. The basic result holds even when we account for the other factors that might determine facility siting as well the dynamics that drive neighborhood demographic change.

Disproportionate proximity to air toxics is

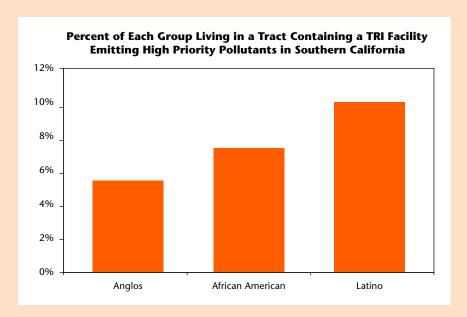
also an issue. In Southern California, African-Americans are a third more likely and Latinos are nearly twice as likely to be living in a census tract that contains a facility that emits high-priority pollutants as listed in the national Toxic Release Inventory (TRI). The racial differences

in exposure persist even when we control for income, land use, and manufacturing presence. The racial chasm is also larger when the emissions are carcinogenic or otherwise designated by the national Environmental Protection Agency as a priority pollutant – the more dangerous the facility, the higher the likelihood that minorities are concentrated nearby.



Businesses argue that it is unfair to single out

facilities, rightly noting that mobile sources, such as cars and trucks, contribute even more to airborne pollutants. But including mobile and smaller sources, such as dry cleaners, does not improve the picture. When we rank census tracts by estimated cancer risk from airborne toxics, we find that roughly two-thirds of the population in the least risky third of tracts in Southern California in 1990 were Anglo; in the riskiest third of tracts, two-thirds of the population was African American, Asian, or Latino.



Income makes a difference,

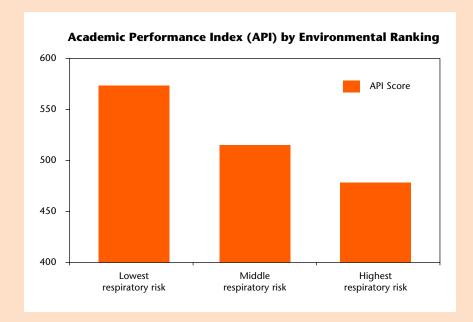
with the estimated risk of cancer from airborne toxics declining as neighborhood wealth rises. But across any band of income, African-Americans, Latinos, and Asians in Southern California generally face a 15 to 25% higher risk of cancer from airborne toxics. As with the other parts of our analysis, the differences across race and class persist even when we control for other factors like home ownership, manufacturing presence, and even percent land

use devoted to industry, transportation, and commerce.

Schoolchildren are also affected by the unequal distribution of airborne toxics. In the Los Angeles Unified School District, African American and Latino children face a respiratory risk associated with air toxics near their school that is 25% higher than the risk faced by Anglo children. Racial disparities in exposure at school exist even when we control for local land use, income, and population density.

The elevated risks for schoolchildren of color

may be affecting academic performance. Even when we control for students living in poverty, parent education, teacher credentials, and percent of children learning English, we find that schools in areas of higher respiratory risk score lower on the state's Academic Performance Index. Up to a tenth of the score difference between Anglo and African American children could be attributed to this environmental disparity.

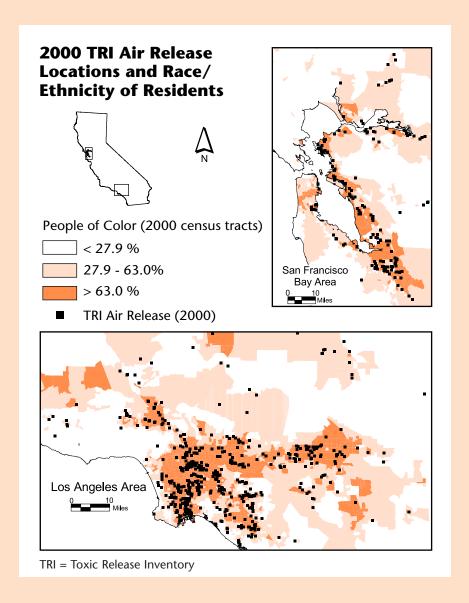


Patterns statewide have not yet been moved

significantly by the growing environmental justice movement. Comparing demographics from the 2000 census to the Federal Toxic Release Inventory of the same year, we find that African-Americans are one-third more likely and Latinos two-thirds more likely than Anglos to be living within one mile of a facility reporting air emissions. Disparity persists even when we control for home ownership, population density, and whether the community is rural or urban – and even after we try to account for the fact that industries naturally cluster in similar locations.

The methods we have employed in this work are complex, involving the use of computer-based mapping technology, sophisticated multi-variate analysis, and the cross-fertilization of the fields of economics, geography, and public health. But the punch line of the whole effort is simple: the evidence clearly shows that California in general, and Southern California in particular, is wracked by environmental inequity.

It is said that the first step of any twelve-step program to address addiction is admitting that you have a problem. In a nation and state addicted to excess consumption, we have become used to placing hazards in someone else's backyard. When the burdens of doing business can be put on others, they tend to rise - and the recipe is complete for more, not less, waste and pollution. Because of this, recognizing and addressing the problem of environmental inequality is key to improving the environment for all of us.



The Los Angeles Building a Regional Voice for Environmental Health Collaborative

For more information about the work of the Collaborative, see http://cjtc.ucsc.edu/environmentalJustice.html, or contact one of the Collaborative partners:

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Toxic Tours

In March 2004, California's newly appointed **Environmental Protection Agency chief Terry** Tamminen came to L.A. with several top EPA staff to take one of the Collaborative's famous "toxic tours." After a detailed research presentation outlining the scope and scale of environmental inequity in the region and the state, Tamminen and the EPA staff hit the road and learned about the devastating impact of a DDT waste site from a member of the Del Amo Action Committee. Local residents suffer high rates of cancer and other serious illnesses. The organization is pushing for the highly polluted area to be cleaned up and rezoned for commercial use only. The EPA staffers, who have the power to use recently adopted environmental justice guidelines to help impacted communities, also heard from California Environmental Rights Alliance, Communities for a Better Environment and East Yard Communities for Environmental Justice – all Liberty Hill grant recipients.

"We appreciated the opportunity to see firsthand the environmental and public health concerns in the area, and to meet directly with community members and environmental justice leaders who are so committed to addressing these problems. The conditions and issues that we saw only reaffirmed our commitment to environmental justice. It was truly an eye-opening and instructive tour."

- Terry Tamminen, Secretary, CalEPA



California Environmental Protection Agency chief Terry Tamminen (on right) on a "toxic tour" to learn about environmental justice work with Collaborative and community members.

Foundations, Grantmakers in Health, Grantmakers for Children, Youth and Families, The Funders' Network for Smart Growth and Sustainable Development and the National Network of Grantmakers.

Media Outreach: As described earlier, the Collaborative has produced several opinion pieces and obtained other news coverage in mainstream news outlets. We have also reached out to print and electronic journalists to join the Toxic Tours, many of whom have used the information for background research to news stories.

Evaluation

The Collaborative has a strong commitment to evaluation. Our independent evaluator, Julie Solis, Ph.D., consistently focuses the team members upon the project's overall goals and monitors its day-to-day activities in that context, pointing out gaps and/or potential conflicts. This has involved a significant time commitment from the project evaluator, including attending all meetings and reviewing all project documents. In addition, Ms. Solis surveyed a broad range of foundations, community organizations, environmental advocates, government and regulatory personnel and environmental health researchers with the goal of helping the Collaborative approach its work in a more strategic manner. These results have helped to inform our current work, while sharpening decisions and future direction.

Benefits of Collaboration

There are three primary benefits that the individual partners have seen because of their involvement with the Collaborative:

Improving Our Work

Each partner has seen real enhancements in the quality and effectiveness of their work. On the research side, some outsiders worry that academics engaged with community organizations will eschew sophisticated science in favor of simple answers that confirm the prejudged or prior beliefs of the community partner. Rigor, objectivity, and vision, all central to the research mission, might be sacrificed. They worry that the topics chosen in such partnerships might reflect immediate concerns and not the "fundamental" and long-term work that is necessary to advance a field.

By contrast, this three-way partnership has greatly improved the rigor of academic work. CBE and Liberty Hill have an organic sense of what topics are important

Promoting Rigor, Relevance and Reach in Research

One aspect of the Collaborative that is unusual in the worlds of academic research and grassroots organizing, is our process for deciding research priorities. The Collaborative places a premium on two issues related to research:

- 1. Strategically using the financial resources allocated for research to support organizing and advocacy; and
- 2. Ensuring objective, careful analysis and interpretation of study results.

We also concur that occasionally we may need to respond to periodic requests for vital "action-oriented" research when a timely and important environmental justice event demands our expertise. If not carefully balanced, these two competing demands have the potential to overwhelm the research team and halt ongoing initiatives.

To balance these demands we have developed a simple decision-making process: any Collaborative partner can bring a research idea to the table, but the community partner, CBE, has the ultimate say on questions of research project timing, design and priorities.

This decision-making process derives from a collective sense that CBE has its finger on the pulse of the overall organizing and policy agenda, and is therefore the best judge of the potential impact of a given research initiative. While all the Collaborative members contribute to the discussion to help make these difficult decisions, we agree that CBE is in the best position to decide which action-oriented research projects would be most useful and timely, and can best balance the trade-offs involved. At the same time, CBE understands that the research results may turn out differently than they may have expected and that their organizing work benefits from this independent research

As most university scholars know, it is highly unusual for academic researchers to relinquish this level of control on setting the research agenda. But shared commitment to the Collaborative goals and mutual trust in one another has made this decision-making process workable and fruitful.

...because of the overwhelming evidence produced by the research team about the systemic problem of environmental injustice, Liberty Hill has remained committed to this field as a grantmaking priority over a period of eight years.

- both what might be most responsive to community concerns but also what is relevant to advancing the general framework of environmental justice. Because of this, researchers are forced to be even more careful about techniques and statistical strategies because the results will have to face multiple tests, including academic reviews, policy presentations, and community wisdom.

For CBE, working directly with researchers has given its organizers access to sophisticated maps, data and statistical analysis that make a compelling case for environmental justice. The quality of CBE's materials is now so advanced that the South Coast Air Quality Management District now includes the Collaborative's slide presentation in the basic curriculum for employee training on environmental justice issues. Working alongside Liberty Hill, CBE has also expanded its relationships with other neighborhood-based environmental justice groups, enhancing their knowledge of the barriers faced by disenfranchised communities at the neighborhood level.

For Liberty Hill, working with the research team and a statewide community organization has helped to inform, strengthen and improve grantmaking. Participation in the Collaborative has helped keep Liberty Hill abreast of emerging issues, debates and policy changes, allowing the Foundation to allocate scarce resources for the most impact. In addition, because of the overwhelming evidence produced by the research team about the systemic problem of environmental injustice, Liberty Hill has remained committed to this field as a grantmaking priority over a period of eight years.

Building Capacity and Expanding Community Voice

For Liberty Hill, the Collaborative has been instrumental in inspiring the creation of the *Environmental Justice Institute*. Nationally recognized for contributing to the growing strength of the environmental justice

The Collaborative is a long-term, sustainable strategy to build a foundation for social change through organizing, research, and advocacy to promote environmental justice.

movement in the region, it serves as a model for other efforts. The partners have provided substantial support and guidance in selecting topics, framing issues and providing research assistance. Our partnership has also enabled the *Institute* to offer timely sessions, some of which have even served as the "launching pad" for new, joint efforts to address environmental health hazards.

For CBE, the partnership with Liberty Hill has helped to connect smaller, more locally-based environmental justice organizations (the Foundation's grantees) to significant policy campaigns at the regional and state levels. In turn, these local groups are able to bring their unique voices to environmental health debates, expanding the base of communities that are represented. For instance, Liberty Hill grantees provided testimony and support around the campaign to toughen the rules on acceptable cancer risk.

And, Liberty Hill's responsive grantmaking has enabled this network of grassroots organizations to participate more fully in key policy decisions. The Foundation paid for transportation of community representatives to participate in CalEPA's recent deliberations on an environmental justice policy in Oakland. More than 50 individuals representing a dozen environmental justice organizations traveled to present testimony about the effects of pollution on their own, their families' and their neighborhoods' health.

Were it not for the alliance with community partners, the research team's efforts might end with academic publications. But the partnership has provided ongoing incentives to translate study results into a format that communities and policymakers can actually use and to ensure that environmental justice communities – and the general public – hear about and understand the implications of our research.

Transforming Policy

The research team sorts through the tea leaves of contemporary politics and social movements hoping to discover where our work might have a real impact and improve people's lives. The Collaborative helps tailor our work to the needs of campaigns where it can be immediately used to push for policy changes. We strategize together on how best to approach a particular issue, decide which partner should take the lead, and develop presentations and publications that give us flexibility in deciding which partner should deliver our message in various venues.

For example, technical research on the distribution of air toxics and cancer risk in Southern California was used to tighten emission standards and allowable cancer risks (see page 11 for more information).

Research connecting respiratory risk from ambient air pollution to student academic performance in schools was used to persuade a school district to take a more cautious approach to cleaning up a school site in Bell Gardens, and then to the formation of an AQMD working group to set new standards for the chrome plating industry. This is real change – the sort of effect on the world academics often want but seldom achieve.

For CBE, working with the research team has helped to gain credibility among diverse stakeholders and to open up new frameworks for developing sound public policies. Specific regulations have emerged from our joint efforts including new chrome plating standards, more comprehensive refinery rules and better public participation procedures. The work of the research team demonstrating the patterns of cumulative exposure helped make the case for a precautionary approach in public policymaking, and gave ammunition to those seeking to urge CalEPA to adopt a more preventive approach to protecting environmental health.

For Liberty Hill, the partnership has helped the Foundation to live its mission of "Change, Not Charity." Facts about environmental inequity have been placed in the hands of numerous grantees, organizing tips and techniques have been passed on, and real regulatory reform has been initiated. The Collaborative has educated others in the funding world about these issues and demonstrated leadership. We have shown that, rather than cleaning up community-by-community, it is more effective to invest time and money in contributing to a movement that is dramatically altering the riskscape facing communities of color in Southern California.

Challenges of Collaboration

The overall experience of the Los Angeles Collaborative has been overwhelmingly positive for the individual partners, and produced results that none of us could have achieved single-handedly. Yet, we would be remiss to overlook a discussion of the few challenges we faced – and that are likely, in one form or another – to face any collaborative effort involving diverse partners and ambitious goals.

The Significance of Project Coordination

Reflecting back, it is clear that we underestimated the amount of time, effort and skill required to run the Collaborative. We were fortunate in that the Liberty Hill Foundation was able to contribute both the time

...it is clear that we underestimated the amount of time, effort and skill required to run the Collaborative.

and expertise to plan and document regular meetings, maintain communications with our key funder, and stay abreast of the rapidly changing developments in the environmental health and justice field.

The Collaborative depended not only on this competent and generous administrative capacity, but also on the political insight and intellectual leadership that Liberty Hill was able to provide. As the coordinator of the Collaborative, the Liberty Hill Foundation brought a keen understanding of the dynamics of grassroots organizing, a familiarity with the foundation community, and an appreciation for the different strengths of each of the partners.

We recommend that any collaboration of this scale be clear that the coordinating role is both intrinsic to success, as well as labor-intensive. It is common in project collaborations to assume that economies-of-scale can be achieved and total costs reduced. We caution against this practice, and recommend financial support for the coordinating function. The more ambitious the collaborative effort, the more involved and crucial is the project leadership and coordination.

The Limits of Action Research

Although our research was very effective in making the case for policy reform and helping to inform organizing efforts, we were unable to build or transfer similar research capacity to CBE staff to the degree that we had hoped. In many cases, it was simply more time-and resource-efficient for the researchers to focus on the analytical work and solve specialized problems, letting CBE focus on its formidable organizing tasks.

We also experienced some disappointment from a few Liberty Hill grantee organizations who anticipated that our research team could address their concerns with specialized and local studies. Because the research team was focused on the fundamental research questions about regional exposure and health disparity, we simply did not have the capacity to take on localized inquiries. While it would have been very helpful to some specific communities, we believe our regional work has benefited all community organizations by providing evidence to support their experiences, and by raising the visibility of environmental justice issues within the public debate.

In retrospect, a mechanism for more grantee input into research planning and design and more frequent updates on the research progress for grantees would have added even more value to our Collaborative. We plan to incorporate both these goals into our future work.

The Special Role of a Foundation Partner

The Collaborative was unique not only in that it brought together three diverse partners, but was also distinguished by the rather unusual inclusion of a foundation as an equal member with a community-based organization.

Maintaining open communication with all of the partners is paramount so that any issues that arise can be addressed quickly and in the spirit of mutual support.

We have earlier discussed the rarity of universitybased researchers taking so much of their direction from community-based interests. But just as unusual was the fact that the Liberty Hill Foundation was able to work on an equal basis with Communities for a Better Environment, one of the Foundation's grantees.

At times this arrangement created special challenges for Liberty Hill, particularly with regard to the perception by other community organizations that CBE had an "inside track" and special privileges not afforded to other environmental justice organizations.

As a formalized project, the Collaborative did, of course, place CBE in a special relationship with Liberty Hill. Thus, the Foundation paid careful attention to creating and monitoring an independent and fair process for decision-making around grant funds. Liberty Hill's community funding board, in addition to providing a community voice in all grant decisions, also provided a measure of independence and objectivity that may have proved more challenging for Foundation staff who had developed close and day-to-day working relationships with CBE staff. In fact, during one grantmaking cycle over the course of the Collaborative, the community funding board actually turned down CBE's request for funding, creating an awkward situation for Liberty Hill and CBE staff alike. But, because of the historic and trusting relationship between the Collaborative partners, we were able to talk about the decision, clarify misunderstandings, and move on.

Our advice to any foundation who may consider becoming involved in collaborative efforts is to be aware of the perceptions that are created by a special relationship with a grantee partner. It is critically important to implement, and even expand, due diligence procedures in grantmaking, and to share information openly with other grantees about the goals, and the limits, of the collaborative project. Similarly, maintaining open communication with all of the partners is paramount so that any issues that arise can be addressed quickly and in the spirit of mutual support.

Communicating with Popular Audiences

By most standards, the Collaborative succeeded in getting the research, organizing, and policy into the realm of media. However, our early plans were more ambitious. We had intended, for example, to develop a *fotonovela* – that is, a sort of comic-book style document (with photographs and maps) that could have been accessible to those less literate in English or

Spanish. This *fotonovela* would have documented a particular community campaign, and shown how research, organizing, and policy change came together.

We were similarly interested in developing a document which would have been used for local targeted organizing: it would have agglomerated multiple hazards by geography in order to allow individuals to com-

Experience suggests the power of longrange investments and collaborations in producing new language and new visions that ultimately allow coalitions for change to be more sustainable over time.

pare their neighborhood to more affluent and less toxic areas in Southern California. Both of these products could have been critical tools for organizing and we hope we will be able to produce them in the future.

We also could have done a better job in website development and Internet deployment. As it turns out, this project was launched right at the time that widespread use of web browsing for information access was beginning to take root. In this early phase, some of the more sophisticated uses we hoped to deliver to communities were technically problematic as Internet-based services would have required computing power well out of the reach of most community groups. Instead, we embarked on a strategy of creating a user-friendly CD that contained a modest mapping program and Southern California data, and conducted initial training in its use in both English and Spanish at the Environmental Justice Institute. We did not offer a central web-based location for communities to conduct their own preliminary work but, with hindsight, think this may have been more helpful to communities in the long run.

Despite these challenges, the Collaborative did learn to utilize the media in its work, coupling research credibility with accessible language truth-tested by the organizers in order to "frame" issues in ways that appealed to a broad range of society. Indeed, the experience suggests the power of long-range investments and collaborations in producing new language and new visions that ultimately allow coalitions for change to be more sustainable over time.

The Resource Challenge

We have earlier commented that the substantial support which the Collaborative received from The California Endowment was crucial to success. It provided the stability that allowed us to tackle complicated research questions and undertake a long-term organizing strategy that could build from year to year. The individual partners were also successful in attracting financial support from other major foundations, including The Ford Foundation and The California Wellness Foundation, in part because of our involvement in the Collaborative.

This success contributed to a perception by some organizations that the Collaborative had a "monopoly" on foundation grants and was crowding out grassroots organizations which desperately needed support. This perception, combined with the inability of the research team and CBE to respond to every request for technical assistance, caused some groups to feel placed in a dilemma – unable to secure funding and unable to access the technical support they needed from the Collaborative partners.

We would like to offer the alternative perspective that grassroots-level work has been strongly supported by the Collaborative. First, a significant share of The California Endowment's award to the Collaborative was re-granted to neighborhood-based and emerging groups through Liberty Hill's *Environmental Justice Fund*. Second, grassroots organizations were the primary beneficiaries of the *Environmental Justice Institute* which was also a product of the Collaborative's fundraising success.

Most importantly, the Collaborative helped to raise visibility and understanding of environmental justice issues, not just within the world of policymakers and regulators, but also in the funding world. The Collaborative partners invested much time and energy in sharing the results of the research, organizing and policy advocacy work throughout the funding community. We believe our efforts have actually increased the amount of financial resources coming into the environmental health and justice field, especially in the Los Angeles region, and created an innovative model that can serve grassroots work for many years into the future.

"Our decision at The California Wellness Foundation to focus resources on environmental health was strongly influenced by the work of the Los Angeles Collaborative. Their research and knowledge of affected communities made a convincing case that Latino, African American and Asian Pacific Islander communities suffered disproportionate health risks as a result of exposure to pollutants".

Fatima Angeles, Program Director,
 The California Wellness Foundation

On another note, we want to highlight and commend the funding partners who surmounted their traditional grantmaking categories to find a connection to the environmental justice field. Over the years, we have received support from grantmakers working in a variety of disciplines, including health, the environment, children, youth and families, civil rights and social justice. In this way as well, we think our Collaborative is a testament to how grantmakers can creatively define and conceptualize their funding priorities, and in so doing, contribute to finding new solutions for complex social problems.

Building Bridges, Protecting Community

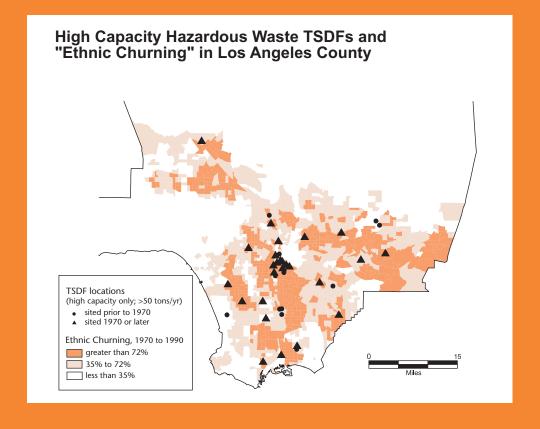
Environmental justice activists have long stressed the need for communities to work together across the usual divides of race and geography. That this is based in concrete need and not just idealistic values was driven home when researching patterns of hazardous waste facility siting in Los Angeles County.

Combining the dates such facilities were sited with data on demographic change, we discovered a striking fact: communities had the highest probability of receiving a facility when they were about 44% African-American and 48% Latino. Since these bi-racial communities also seemed to be undergoing rapid demographic change, we developed a measure of ethnic "churning." Figure 4 shows the striking correlation between facility siting and such transition.

While we cannot be sure of all the reasons why, one thing seems clear: communities that are more homogenous – whether all African-American, Latino, or Asian – may have a better chance of finding common political ground and collective power to resist the siting of waste facilities. But the Los Angeles of the present and the future is a patchwork of different people and traditions, and longing for homogeneity is no solution.

The task, it seems, is to constantly build bridges across ethnic and neighborhood lines. It is a tough challenge but what's riding on the outcome is both our civic integrity and the health of our communities.

Figure 4



LESSONS FOR FUNDERS, LESSONS FOR THE FIELD

or all three partners, this is among the best work we do. It has improved understanding, contributed to community voice, and changed policy for the better. It has enriched our own work lives, allowed us to form more authentic relationships with partners in other projects and holds valuable lessons for anyone interested in advancing the field.

We are eager to share lessons that go beyond environmental health and inform the very nature of productive alliances between funders, organizers, and the academy.

The First Lesson is to Focus on a Frame for Change.

While some of the research undertaken by the Collaborative has been specifically related to campaigns, much of our work has been focused on establishing the broad case that environmental inequity exists, persists and matters in real ways to real people.

Demonstrating that there is a "community of disparity" in Southern California has allowed us to have a platform for specific actions such as changes in air quality

Environmental inequity exists, persists and matters in real ways to real people.

rules, the adoption of cumulative exposure strategies by the state, and the push for cleaner, safer schools – but it is our investment in the big case for change that often sets and reinforces the stage for community victories.

The Second Lesson is to Build the Base to Move Policy.

There is a temptation when progress has been made and government officials begin to call, to abandon the work of organizing and instead play an insider's game to change policy. Yet the only reason one is invited to the table – regardless of the quality of research, ideas, or policy suggestions – is a community base that is demanding their needs be addressed.

The partnership has been careful to continue to nurture community voice, putting time into the *Environmental Justice Institute*, seed-funding nascent organizations, and mobilizing communities to participate in public action and debate. Investments in experts are, we think, not enough; investments in organizing are essential. Funding to keep neighborhoods involved in debates will be especially critical as the state begins the challenging process of implementing the environmental justice guidelines our work has helped to inform.

LESSONS

- 1. Focus on a frame for change
- 2. Build the base to move policy
- Keep the community voice central in decision-making
- 4. Build organic relationships between partners
- 5. Make long-term investment in change

The Third Lesson is to Keep the Community Voice Central in Decision-making.

In any situation of scarce resources, one has to figure out how to deploy time and money. When determining which research projects will occupy our time, CBE has the ultimate authority on questions of research timing, design and priorities. CBE allows the research team to do its work, gather evidence, and reach conclusions independently, accepting those results even if they do not support or validate CBE's own goals and projects. While it is unusual for academic researchers to relinquish this level of control on setting the research agenda, the researchers have maintained the integrity in methods and standard that is central to the scientific enterprise.

It is a powerful balance, one that favors long-term framing over short-term reports, and enhances the rigor and relevance of our efforts.

The Fourth Lesson is to Build Organic Relationships Between Partners.

Part of the reason we have been able to continue in our efforts together is our collective commitment to the goals of this Collaborative and our trust in one another as partners, rooted in respect for our professional talents and abilities. Over many years, we have had ups and downs, sticking together as a team both when funding was abundant and when funding was dry.

Indeed, we came together when we were all just getting started in this work, CBE making its initial efforts around environmental justice in Southern California,

Developing New Metrics of Success

One of the most formidable challenges we have faced in working for environmental justice has been determining how to evaluate our impact on the public health of communities. How can we demonstrate the public health value of reducing individual plant emissions, and how do we measure the public health value of regulatory changes at the regional and statewide levels?

Traditionally, assessing positive outcomes would simply entail measuring improvements in health, such as a decline in childhood asthma incidence or a reduction in the number of cancer cases that are connected to pollution reductions. Unfortunately, collecting definitive data to make such a causal connection poses enormous challenges. Many of the diseases caused by pollution exposures are also caused by a number of other socioeconomic and individual-level factors and may take several years to manifest themselves after the period of exposure. Moreover, environmental justice advocates have argued persuasively that in the never-ending quest for perfect data linking pollution exposures with disease, public health practitioners can lose sight of one important objective: disease prevention.

With these issues in mind, we propose metrics of success that are transparent, relevant to

policy-making, and connected to the promotion of public health.

First, it's crucial to assess whether advocacy efforts have indeed changed regulatory behavior and policy-making in ways that ultimately reduce community exposures to pollution with known health effects.

Second, these policy and regulatory impacts need to be examined at various levels, including the neighborhood, regional, and statewide levels. For example, the collective organizing efforts of many local communities were leveraged at the regional and statewide levels to compel the CalEPA to adopt environmental justice guidelines. Similarly, many local organizing struggles have eliminated major sources of pollution exposure throughout diverse neighborhoods in Southern California.

Finally, policy reforms that tighten emission standards will ensure pollution reductions that better protect public health over the long-term in the Southern California region.

Using these immediate "metrics of success" connects evaluation more directly with the ultimate goal of pollution reduction and disease prevention.

Liberty Hill just getting engaged with the issues and the organizations working on them, and the researchers fresh from a first look at inequity in the region. We were not brought together by a Request for Proposal; we formed our relationships slowly and around the

We formed our relationships slowly and around the work, not the funding.

work, not the funding. This is not something that can be easily replicated, particularly by foundations interested in scaling up, but it does suggest the need to be patient about partnerships and to look for those that are authentic and potentially long-lasting.

The Fifth Lesson Flows From This: Make Long-term Investment in Change.

There is a tendency among many foundations to think in terms of short-term progress, particularly given the pressure to measure outcomes and to achieve a quick transition to sustainability. That can lead to opportunistic partnerships, uncompleted projects, and an over-emphasis on grantsmanship.

Our partnership has had the benefit of multi-year investments by several foundations, especially The California Endowment, but also The Ford Foundation and The California Wellness Foundation. This has allowed us to think beyond the immediate and try to

We have shown that, rather than cleaning up community-by-community, it is more effective to invest money and time in contributing to a movement that is dramatically altering the riskscape facing communities of color in Southern California.

build a framework for change. It has helped us to nimbly respond to new opportunities, shifting directions and resources in step with the times. And it has forced us to build in evaluation, flexibility and evolution as a constant part of our work.

What Does All This Mean for Environmental Justice Work?

In our view, we stand at a unique juncture in California's history. The state has seen a series of recent legislation requiring state agencies to include environmental justice considerations in their regulatory actions. In order for policymakers to make wise decisions, more research will be necessary – and in order for them to decide at all, communities will need to continue to tell their story and speak for themselves.

New community-academic collaboratives can help ensure that such work remains sensitive to, and animated by, community concerns. Patient investment of community time, research expertise, and foundation wherewithal can help create, build and sustain the framework for change.

At immediate stake is the health of particularly vulnerable populations. But the charge to activists and policy makers is broader than that: the ultimate goal of environmental justice is not simply to equitably reallocate environmental hazards to higher income white neighborhoods, but rather to envision a future in which industry, government and society at large are compelled to adopt viable strategies for pollution prevention that benefit everyone.

In the years to come, universalizing the message and securing an ever larger constituency that understands the connections between justice and the environment will be key to achieving both racial equity and environmental sustainability.

Appendix I

Environmental Justice Fund Grant Recipients

Since 1996, the Liberty Hill Foundation has given grants totaling \$2,155,000 to 48 organizations with a primary focus on environmental justice. The following is a partial list of grant recipients.

Clean-up of Toxic Sites

Association of Community Organizations for Reform Now To organize parents from the 28th Street Elementary School to reduce serious industrial and environmental hazards surrounding the school.

Community Coalition for Change

To expand their ability to educate and empower South L.A. residents to protect a community over-burdened with toxic pollution.

Concerned Citizens of South Central Los Angeles To fight the development of a mass waste incinerator in their neighborhood and to get chromium-contaminated sites cleaned up.

Del Amo Action Committee

For ongoing work to inform residents about the health impacts of toxic DDT contamination, to secure permanent relocation for affected residents and to thoroughly clean-up the area.

Dignity Santa Fe/ LA CAUSA

To educate and organize the community to prevent the reopening of a refinery next to a senior citizens' complex and a chemical company next to an elementary school.

LAXT Action Committee

To remediate the petroleum coke and coal stockpiles at the Los Angeles Export Terminal, which pollute the air in the surrounding community.

Los Angeles Metropolitan Churches For outreach to African-American churches to challenge the U.S. and California Environmental Protection Agencies to clean-up 132 toxic sites in South Central Los Angeles.

Madres del Este de Los Angeles, Santa Isabel To work with the L.A. Environmental Affairs Department and members of the community to close and clean-up a toxic dump site.

Unión de Residentes para la Protección Ambiental de Val Verde To monitor pollution caused by the nearby Chiquito Canyon Landfill through air sampling and community health surveys.

Decrease Multiple Sources of Pollution

California Communities Against Toxics

To involve local residents in ensuring the effectiveness of Title V federal operating permits, which improve compliance with existing air quality regulations.

Coalition for a Safe Environment For a broad coalition of community organizations and residents reducing air emissions caused by port and refinery operations in the Wilmington area.

Pacoima Beautiful

For a Community Inspectors Program, training residents to document environmental hazards and report their findings to regulatory agencies.

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Pesticide Watch Educational
Fund

To monitor the implementation of the toughest pesticide reform policy in the nation, phasing out the use of highly hazardous chemicals on school grounds.

Residents for a Better Alhambra

To prevent construction of a large auto painting and body shop, stopping the release of volatile organic compounds.

Residents of Pico Rivera for Environmental Justice

To require auto body shops to upgrade to the latest, cleanest technologies, and to ensure enforcement of existing environmental standards.

South Los Angeles Community and Economic Development Corporation To promote awareness of the dangers of household and industrial hazardous waste through public education and direct action recycling programs.

The California CoastKeeper Alliance

For a comprehensive survey of the overburdened sewer system in L.A. County, resulting in massive spills, primarily in communities of color.

Committee to Bridge the Gap

To block the dumping of low-level radioactive waste in L.A. County municipal landfills.

Transportation-Related Sources of Pollution

Boyle Heights Mejoramiento

To decrease diesel exhaust and noise pollution from commercial trucks using neighborhood streets to access the I-5 freeway by re-routing traffic and creating access restrictions.

Bus Riders Union

For the "Clean Air, Clean Lungs, Clean Buses" campaign, upgrading the bus system with the nation's largest fleet of environmentally-sound, natural-gas buses.

Community Partners Council

To reduce diesel and other toxic emissions in Long Beach by promoting health-protective alternatives for the expansion of the 710 freeway.

East Yard Communities for Environmental Justice

To reduce the release of diesel truck and train exhaust each year into a local residential community of East Los Angeles.

LAX Expansion No!

For Inglewood residents to learn about the environmental health problems resulting from their close proximity to the L.A. airport, and to stop further airport expansion.

Los Angeles Alliance for a New Economy

To link economic and environmental justice with plans to expand and modernize the Los Angeles International Airport (LAX).

Unión de Vecinos

For health promotoras to educate Boyle Heights residents about environmental problems related to redevelopment plans of the Housing Authority and the MTA.

Housing-Related Sources of Pollution

Healthy Homes Collaborative

To train tenant leaders who will identify and report lead poisoning in apartment buildings.

Inner City Law Center

To train tenant leaders and assist residents in accessing healthcare for problems stemming from slum living conditions.

APPE<u>NDICES</u>

Inquilinos de Maywood Pro Justicia Ambiental To distribute community health surveys and pursue litigation to help impacted tenants in South L.A.

Strategic Actions for a Just Economy

For lead poisoning prevention and intervention, including a training program for local residents to become certified lead abatement inspectors in low-income neighborhoods.

Education and Advocacy

The Blazers Youth Services Community Organization, Inc. For environmental education programs that connect youth and senior residents to one another and their South L.A. neighborhood.

California Environmental Rights Alliance

To provide technical assistance to environmental justice organizations on public policy and regulations.

California League of Conservation Voters Education Fund

To convene environmental health and justice organizations for education on current environmental issues.

Coalition L.A.

For the Neighborhood Oasis Project, a public education campaign to challenge local government to convert city-owned vacant land into green space and parks.

Communities for a Better Environment

For the "LA CAUSA" project, educating and empowering people of color in low-income neighborhoods throughout L.A. County.

Community Coalition

For the "Clean and Safe Schools Initiative" to create a meaningful role for the community in the site selection, planning and design of new schools in south L.A.

Friends of the Los Angeles River

For a campaign with residents in Southeast L.A. to reclaim the river and organize for green space in an area that is heavily industrialized and has the lowest park space per capita in the nation.

Korean Youth and Community Center

To educate Korean owners of small dry-cleaning businesses about the dangers of dry-cleaning chemicals and introduce them to the environmentally safer "wet cleaning" method.

Philippine Action Group for the Environment

To develop environmental awareness within the Filipino community by organizing workshops for students and community leaders.

Physicians for Social Responsibility, Los Angeles To educate low-income women of color about exposure to reproductive and developmental toxins, in conjunction with three community clinics in L.A. County.

Local is Global

Action Resource Center

To produce educational materials for a campaign to revoke the corporate charter of UNOCAL for its worldwide environmental devastation and human rights abuses.

Burma Forum, Los Angeles

To mobilize religious organizations, community groups and labor unions to pressure the City of L.A. to end business dealings with Burma until adequate environmental regulations are put in place.

Santa Monica BayKeeper

For a campaign to improve Los Angeles' antiquated sewer system that overflows in several low-income neighborhoods and pollutes the Santa Monica Bay and Pacific Ocean.

Appendix II

Communities for a Better Environment

Using the Triangle Approach for Real Change

CBE has employed its "triangle" approach – community pressure, scientific information and the law – in many local communities throughout Los Angeles County. Here are a few of the more significant victories that have reduced exposure to health hazards and demonstrated the power of a unique model:

1996: Settling the Dust in Huntington Park

In 1994, a huge mountain of concrete appeared across the street of concerned residents in the predominantly Latino community of Huntington Park – the remnants of the Santa Monica Freeway that collapsed during the Northridge earthquake. It was literally referred to by residents as *La Montaña* because it towered over adjacent two-story apartment buildings. Irritating and toxic concrete dust was found everywhere – in gardens, in homes and in the lungs of children and adults. This clearly incompatible land use decision brought *La Montaña* to a residential neighborhood for recycling purposes. Responding to requests for help, CBE organized with local residents to put pressure on city officials to address this immediate health threat. Grassroots organizing finally paid off in 1996 when the facility was deemed a public nuisance and operations were ordered to stop.

1997: Cleaning Up Chrome Plating in Bell Gardens

A teacher from Suva Elementary School in the Latino immigrant community of Bell Gardens called to CBE's attention the death of a 14-year-old school athlete from an unusual form of cancer. In talking with community members, CBE learned that more than twenty local students and teachers had died since the 80s from various forms of cancers.

Residents suspected the cause to be a large chrome plating facility, Chrome Crankshaft, adjacent to the playground of the elementary school, which CBE helped to investigate. Records showed that previous air sampling in 1987 had detected the highest ambient air concentrations of hexavalent chromium (a highly toxic metal) ever recorded in the region. However, these results were largely ignored by the media, the South Coast Air Quality Management District and the L.A. County Health Department. Not until CBE escorted a White House delegation to Bell Gardens in 1998 did the community get any redress. A probe uncovered extensive contamination, and found ongoing air concentrations of the toxic metal. Within a matter of months, the chrome plating facility was shut down and clean-up measures undertaken.

2001: Protecting Community Health in South Gate

During the electricity crisis that faced California in mid-2001, a 550-megawatt power plant was proposed for the City of South Gate, a working-class Latino community. Over 100 schools and 22 hospitals and medical centers lay in the proposed Nueva Azalea plant's impact zone. The project received wide support: local, regional and state officials perceived it as a much-needed answer to the purported energy shortage; mainstream environmental organizations viewed its use of the latest technology as a "clean" alternative to old, polluting plants; and local labor unions desired the jobs promised by the new construction. However, the residents of South Gate – already

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surrounded by industrial facilities, waste treatment plants and recyclers – opposed the plant, which would have emitted an additional 150 tons of pollution annually to the area.

CBE's community organizers, members, staff scientists and legal department worked tirelessly with concerned residents of South Gate to inform the public of the threat to their health, and the unfairness of yet another industrial land use in their community. Despite the massive infusion of money into a ballot referendum, the voters of South Gate defeated the proposed plant by a two to one margin.

2002: Clearing the Air in Santa Fe Springs

An old and defunct oil processing facility, purchased by televangelist Pat Robertson in 1998, obtained operating permits from the City of Santa Fe Springs and the SCAQMD. The permits were a clear violation of the California Environmental Quality Act and the Federal Clean Air Act. Community residents in this predominantly Latino area were strongly opposed to the reopening of the refinery because it stood adjacent to a senior citizen housing complex and an elementary school. They contacted CBE, and a lawsuit was filed on behalf of the People of Santa Fe Springs vs. the City, owner Pat Robertson, and the SCAQMD.

CBE pounded the pavement, going door-to-door to talk with community residents and inform them about the plans to start up the facility. After three years of legal battles, and \$75 million invested in the attempt to reopen the refinery, CBE won a federal court order revoking the permits. A settlement permanently eliminated oil refining as a permitted use on the properties. The project was abandoned. CBE is now working with the community to develop alternative uses for the site.

2003: Promoting Community Safety in Wilmington

CBE worked with the low-income residents of Wilmington to find an alternative to hydrogen-flouride gas used at a local oil refinery. With nine different refineries and several other manufacturing and petrochemical facilities nearby, the Wilmington Elementary School sits within 2,000 feet of the Ultramar Refinery fence line, and just 1,000 feet from the Texaco refinery fence line. In 2000, CBE succeeded in stopping a major expansion of the Ultramar Refinery, and convinced the state Air Resources Board to install air-monitoring equipment by the school.

But while all other oil refineries throughout the state had ceased to use the deadly hydrogen-fluoride (HF) in their production processes without a safety modification, it was still used in Ultramar's Wilmington (now owned by Valero) refinery. HF is a volatile, corrosive chemical that can cause severe tissue damage and death upon exposure. It forms dense acid clouds that remain at ground level and can travel several miles before dissipating into the air. Through organized community action, the SCAQMD unanimously adopted an environmental justice plan in the summer of 2003 with one of the provisions directing the agency to phase-out the use of unmodified HF in the South Coast Basin. Following the approval of this measure by the Board, Ultramar signed a memorandum of understanding requiring them to phase out the use of unmodified HF in the refinery.

Appendix III

The Research Team

Data in the Service of Community

During the course of the Collaborative, the research team developed and published several manuscripts in respected peer-reviewed journals and books representing a variety of academic disciplines. The Collaborative has pursued an interdisciplinary publishing strategy in order to maximize the impact of the work in the academic community and to encourage researchers in different disciplines to engage in similar work on these and related environmental health and justice questions. The research team's intent has been to disseminate research addressing the various methodologies employed in environmental health and justice research, and their viability and limitations.

All research studies use a number of different data sources, some provided by a government agency and others from private industry. Although we employ a variety of error-checking and validation procedures for some of this data, all of this information has limitations which are detailed in the specific published articles. It is noteworthy, however, that the results of all of these studies, with their different data sets and sources, support the pattern of disproportionate exposure and environmental "injustice."

Academic Publications

"Waiting to Inhale?: The Demographics of Toxic Air Release Facilities in 21st Century California": Social Science Quarterly, 2004, 85(2): 420-440.

"Reading, Writing and Toxics: Children's Health, Academic Performance, and Environmental Justice in Los Angeles": Environment & Planning C: Government and Policy, 2004, 2: 271-290

Environmental Inequity in Metropolitan Los Angeles": Chapter in Wasting Away: Environmental Justice, Human Rights and the Politics of Pollution: Sierra Club Books, Robert D. Bullard, editor (in press).

"'Everyone Knows That':

This study on California examines whether patterns of environmental and health injustice that were documented in Southern California are present statewide. Consistent with earlier work, the study found that people of color are disproportionately affected by Toxic Release Inventory facility proximity in California, with Latinos the most affected. This residential disparity holds up in multivariate regression analysis, and the pattern of disparity persists after controlling for the presence of spatial dependence.

This work examines whether there is evidence for the impact of air quality at schools on academic performance. Demographic disparities and health risks associated with ambient air toxics also appear to represent significant barriers to school-based academic performance as well. Environmental hazard and health risk indicators within the Los Angeles Unified School District are significantly associated with diminished school performance as measured by the Academic Performance Index, even after controlling for covariates that generally explain much of the variation in student scores.

This book chapter reviews the literature and methodological challenges inherent in environmental justice research and then summarizes the research conducted by the Collaborative in Southern California, emphasizing its impact in the field and in policymaking.

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"Integrating Environmental Justice and the Precautionary Principle in Research and Policy-Making: The Case of Ambient Air Toxics Exposures and Health Risks Among School Children in Los Angeles": Annals of the American Academy of Political and Social Science, 2002 v. 584, p. 47-68.

This paper examines evidence linking air toxics to children's environmental health and its implications for environmental justice. The paper then examines the foundations of both environmental justice and the precautionary principle, and proposes ways in which these two concepts might be integrated to better protect public health, particularly for vulnerable populations, by reshaping environmental health policy.

"Environmental Justice and Regional Equity in Southern California: Implications for Future Research":

Environmental Health Perspectives, 2002, 110/2, 149-154.

"Who's Minding the Kids? Pollution, Public Schools, and Environmental Justice in Los Angeles": Social Science Quarterly Special Issue: Social Science and the Environment, 2002, 83/1, 263-280

"Environmental Justice and Southern California's 'Riskscape': The Distribution of Air Toxics Exposures and Health Risks Among Diverse Communities": *Urban Affairs Review*, 2001, 36/4, 551-578.

"Which Came First? Toxic Facilities, Minority Move-in, and Environmental Justice": *Journal of Urban Affairs*, 2001 23/1, 1-21.

This paper discusses research on environmental inequality in Southern California in terms of the location of potentially hazardous facilities and the distribution of cancer and non-cancer health risks associated with ambient air toxics exposures. The paper proposes a framework for understanding the persistence of environmental inequalities related to air pollution in the South Coast region. This framework charts a new direction in our research to address two overarching issues: the political economy of environmental inequality (how institutional discrimination interacts with structural forces, such as economic and regional development, occupational and residential segregation), and a proposed social inequality framework (based on race, class and income) that can enable researchers to better understand the complex dynamics of environmental inequality.

This paper focuses on environmental hazards and children's health, and was a featured article in a special edition of this social science journal. Instead of following the lead of most previous environmental justice research, the majority of which has focused on analyses of the disproportionate burden of environmental hazards on residential populations, we chose to examine the relationship between variations in air pollution related health risk and the demographic characteristics of children.

This paper examines patterns of environmental inequality related to cancer risks associated with ambient air toxics exposures in the South Coast Air Basin. The paper finds racial inequalities in cancer risk burdens that persist across economic strata. These inequalities persist even after controlling for other demographic variables such as income, wealth and land use.

This milestone paper sought to assess the causal sequence of hazardous facility siting, that is, whether treatment, storage and disposal facilities (TSDFs) were sited in communities of color or whether minority residents moved into neighborhoods after facility siting decreased property values and neighborhood desirability. To examine the siting versus minority- move-in hypothesis, we compiled longitudinal data on the siting and location of TSDFs from 1970 to 1990. Results showed that the proportion of minority residents living within a one-mile radius of a TSDF increased significantly more during the 20-year study period than for white residents. Multivariate analysis showed that there was little evidence of so-called minority move-in into areas where TSDFs had been previously sited. Finally, the study found that neighborhoods that had undergone drastic demographic transitions in their ethnic and racial composition

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were more vulnerable to TSDF siting, possibly due to weak social and political networks that could undermine a community's capacity to influence or resist siting decisions.

"'Every Breath You Take ...': The Demographics of Toxic Air Releases in Southern California": Economic Development Quarterly, 1999, 13/2, May. Our second locational study broadened its regional scope by including the South Coast Air Quality Management District (which includes Ventura, Los Angeles, Orange, San Bernardino, and Riverside counties) and examining the distribution of facilities required to report air emissions to the industrial facilities listed under US EPA's Toxic Release Inventory (TRI). Study results indicated that compared with Anglo residents, Latinos, followed closely by African Americans, have twice the likelihood of living in a tract with a TRI facility with air pollution releases that include chemicals designated by EPA as "high priority" for emissions reduction, due to concerns about their health effects.

"Is There Environmental Racism? The Demographics of Hazardous Waste in Los Angeles County": Social Science Quarterly, 1997, v. 78/4 793 -810. December 1997. Our first study in Southern California examined the location of treatment, storage and disposal facilities (TSDFs) in Los Angeles and found significant demographic differences between tracts with TSDFs versus tracts without. Tracts hosting a TSDF or located within a one-mile radius of a TSDF had significantly higher percentages of residents of color (particularly Latinos), lower per capita and household incomes, and a lower proportion of registered voters. Logistic regression results indicate that communities most impacted by TSDF location are working-class communities of color located in predominantly industrial areas. The study also found that the relationship between income and TSDF location is curvilinear in which extremely poor tracts have fewer facilities because of less economic and industrial activity, whereas wealthier residents tend to live in tracts with fewer TSDFs, most likely because of their political power to resist pollution generating activities.

"It's Always Greener on the Other Side: Race, Space, and Air Toxics Exposures in California": In process

The research team is currently working on a manuscript describing work-to-date addressing the patterns of health impact and their possible association with the statewide hazards distribution described in the previous paper. This study is our most methodologically ambitious and sophisticated study to date. We employ the newest version of an EPA toxic air emissions inventory that captures both stationary and mobile sources to examine the relationship between health risk from ambient air toxics and residential demographics throughout the state of California.

"Citizens, Science, and Data Judo: Leveraging Secondary Data Analysis to Build a Regional Community-Academic Collaborative for Environmental Justice in Southern California" Forthcoming, Fall 2004.

This chapter will be published in a forthcoming book on community-based participatory research edited by scholars at the University of Michigan School of Public Health. The chapter discusses the development of the Los Angeles Collaborative and its strategy of linking research, organizing and advocacy to promote environmental health and justice in low income communities of color. Policy victories, challenges, lessons learned, and ways in which the work of the Collaborative can be used as a model to build other academic-community partnerships to promote public health are discussed.

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Change, Not Charity