Healthy Air for North Denver

CARE Grant Final Report
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Grant # RE-97808701

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SECTION 1: INTRODUCTION

I. Your Partnership

a. What environmental problems does your community face that brought people together?

North Denver area residents, predominantly low-income people of color, live in a highly industrialized community fragmented by three major transportation corridors. The area has been targeted by EPA Region 8 as an area of concern due to disproportionate air quality impacts from industrial and mobile source emissions. Several of the HAND neighborhoods have been classified as Environmental Justice communities.

According to EPA documents and databases, nearly 500 regulated facilities operate in the north Denver area, including over 200 facilities permitted under the Clean Air Act. Major sources of air toxics emissions include two refineries, a bulk petroleum terminal, a coal fired power plant, a furniture manufacturer, and many solvent-based industries. According to the Toxics Release Inventory (TRI), 80216 is the most polluted zip code in Colorado for toxics emissions to all media. One active and two previous Superfund National Priorities List sites also lie within this project area.

Interstates 25, 70, and 270 bound the HAND project area to the west, south and north, respectively. Residences in North Denver are located immediately adjacent to the I-70 viaduct (< 100 feet), which is scheduled for a major expansion over the next decade. I-70 carries approximately 175,000 vehicles per day, and I-25 through Globeville carries over 225,000 vehicles per day.

Finally, local companies house nearly 11,000 diesel trucks. Combined with the proximity to the interstates, the community has expressed concern regarding the nearly 10,000 trucks that pass through the neighborhoods and idle in the industrial sites and two nearby truck stops.

The HAND project area includes the following neighborhoods: Cole, Clayton, Elyria-Swansea, Sunnyside, Highland, Globeville and southern Commerce City.

b. How many individuals and their organizational affiliations were involved? Please review and add to the attached list and please add a contact name for each organization.

Over 100 people participated in planning and implementation of the HAND project from 2004 to September 2008. The core partnering organizations included:

American Lung Association of Colorado (ALA) Stacey Simms
Civic Association of Clayton Anthony Thomas
Colorado Department of Public Health and Environment Lisa Silva
Colorado Department of Transportation Sharon Lipp
Colorado Motor Carriers Association Greg Fulton
Community Research Education and Awareness Results Fernando Pineda
Cross Community Coalition Lorraine Granado
Denver City Councilwoman Judy Montero
Denver Department of Environmental Health (DEH) Greg Thomas
Denver Department of Planning Steve Gordon, Stacey Erickson
Elyria/Swansea Business Association Larry Burgess
FrontRange Earth Force (FREF) Lisa Bardwell
Front Range Economic Strategy Center (FRESC) Robin Kneich

Groundwork Denver, Inc. (GWD) Harry Ford, Fernando Pineda, Wendy Hawthorne
Highland United Neighbors, Inc. Hod Hotson
Northeast Denver Housing Center Wendy Hawthorne?
Regional Air Quality Council Sarah Schmitz
Suncor Dennis Creamer
U.S. EPA Region 8 Deldi Reyes, Karen Kellen

c. Did this project bring any new partners into your work? How did the new partners aid the partnership and project?

There were many individuals, organizations, and businesses that participated in the various projects of HAND that were not official HAND partners. These partners came together to provide community input or expertise on specific HAND projects. These included:

Brownfields: Commerce City Planning Department, Urban Land Conservancy, and Trust for Public Land, Globeville Neighborhood Association, and Colorado Chapter of the American Planning Association. These organizations aided in the identification of Brownfield sites with good potential for redevelopment for public benefit. The Colorado Chapter of APA provided volunteer urban planners to help with the community vision for the Globeville Valley Site.

Elyria Swansea Neighborhood Plan*:* Participants in the Swansea Elementary Summer Scholars program and the Cross Community Coalition youth program participated in Photovoice projects to better communicate community issues to City Planners. Numerous other residents participated in design Charettes to inform and guide the development of the neighborhood plan.

School-Community-Business Partnership: This project brought together Skinner Middle School teachers and students, NCCC youth corps, Clayton residents, and numerous families and businesses. These partners were essential to the community outreach as well as to the environmental improvements resulting from the project.

Diesel Fleet and Auto Repair Shop Pollution Prevention Outreach: Over 45 businesses participated in the pollution prevention outreach. These businesses shared their business practices with the project and accepted information to improve their environmental impacts on the community.

Healthy Indoor Air Program- Promotora Outreach: American Tobacco Association, Colorado Tobacco Education and Prevention Alliance (CTEPA), Breathe Better Foundation, Colorado Asthma Coalition (CAC), Tri-County Health Department, Tar Wars, Commerce City Community Enterprise, and hundreds of residents who participated in the project.

Healthy Indoor Air Program- Earth Force Youth Outreach and Engagement: Denver Water*, Denver Public Works,* University of Colorado at Denver, American Lung Association, EPA, and students and teachers in several schools in the HAND target neighborhoods.

d. ***What role did your organization play in this partnership? What skills were most important from your organization to implement the project?***

The HAND Partnership is a collaboration of people from the community, government and non-government agencies, businesses, non-profit organizations and education groups. The partners brought many different skills and values to the collaboration. Those listed below are the groups that performed the project work and administration of the CARE grant. The value of all the partners cannot be understated though, as they helped craft the focus and final development of the grant and finally the work that was completed.

GWD was the sponsoring organization and fiscal agent for the CARE grant. Charlie Chase was hired by the HAND steering committee and housed within GWD to be the CARE project manager. His duties included responsibility for managing the CARE grant, including grant management, reporting, and as the point person working with the other CARE grantees. He was responsible for the coordination and monitoring of team-based projects to improve environmental quality in northeast Denver, overseeing provision and coordination of technical assistance and resources to those efforts, and ensuring effective outreach to residents and businesses. Finally, this individual was responsible for working with HAND to ensure that it remained a diverse and invested stakeholder group, committed for the long-haul to community-based environmental health protection activities in northeast Denver.

GWD brought sound fiscal and technical grant management to the project as well as being a strong partner in accomplishing the project goals. GWD served on the Land Use committee and brought additional resources to the Brownfields project and the energy outreach project. GWD also served as the supervisor of the Diesel intern.

e. Which partners were most active? How?

Brownfields: The most active partners for the Brownfields projects included: The City of Denver Brownfields Program (Stacey Eriksen), GWD (Wendy Hawthorne, Morgan Landers, Charlie Chase), EPA Brownfields Program (Karen Reed), Civic Association of Clayton (Anthony Thomas), FREF (Lisa Bardwell), and the Globeville Neighborhood Association. This team worked on the identification of potential brownfield sites for assessment. Stacey Eriksen and Karen Reed provided expertise on the brownfield assessment process and rules for utilizing the assessment funds. GWD also performed a brownfield inventory of several neighborhoods and connected with several other organizations that could potentially redevelop some of the sites. Ultimately, GWD worked with a team of residents in the Globeville Neighborhood on creating a vision document for the redevelopment of a former superfund site into an open space and playground.

Diesel Fleet and Auto Repair Pollution Prevention Outreach: The most active partners in the Diesel and Auto Shop Pollution Prevention Outreach projects included: Ray Ribota (GWD), Shaun Per (Premier Fleet Group), Gregg Thomas (Denver Environmental Health), Charlie Chase (GWD/Independent Contractor), Mathew Marshall (Denver Environmental Health), Janet Burgesser (Denver Environmental Health), Regional Air Quality Council, John Helfrich (lawyer). Shaun Per was hired as a contractor to conduct the outreach to the diesel fleet owners. Ray Ribota was hired to conduct the outreach to the auto repair shops. The rest of the team provided guidance, technical support, and oversight for the projects. John Helfrich provided pro-bono legal services to the project.

Elyria Swansea Neighborhood Plan: The most active partners in the development of the Elyria Swansea Neighborhood Plan included: The City and County of Denver Planning Department, GWD, FREF, and numerous community members who participate in design Charettes and Photovoice projects. The City and County of Denver Planning Department hired and oversaw a consulting firm to accomplish the major deliverables for this project including: Business, Industrial, and Public focus groups, City of Denver staff Charrette, Grocery Market Study, Circulation plan, Colorado Blvd. Town Center visioning, and 46th and Steele Model. GWD obtained additional community input to the plan by working with two community groups on Photovoice projects. Through photography, community members were able to communicate their issues about the neighborhood environment to the city planners. Examples of the photos with captions are shown below.

Healthy Indoor Air Program- Promotora Outreach: The most active partners in developing and supporting the promotora outreach efforts included: American Tobacco Association, U.S. Environmental Protection Agency, Colorado Tobacco Education and Prevention Alliance (CTEPA), BBF, Colorado Asthma Coalition (CAC), Tri-County Health Department, Tar Wars and Commerce City Community Enterprise.

Healthy Indoor Air Program- Earth Force Youth Outreach and Engagement:
The most active partners in this project included FREF, ALA, EPA..

School-Community-Business Outreach: The most active partners in this project included GWD, FREF, NCCC Youth Corps, Skinner Middle School teachers and students, and various families and businesses. FREF engaged students and teachers at Skinner Middle school in service learning around climate change and greening their school. GWD and FREF worked together to develop a home inventory that would bring the school-based service learning to the families. GWD also conducted outreach directly to the HAND community on energy and climate issues, working with neighborhood residents in Clayton. GWD also developed a resource toolkit and audit methodology for engaging businesses in these same issues.

f. What resources and strengths did each organization bring to the project?

This question is addressed in each section of the report.

g. What efforts did you make to ensure that the most vulnerable community members were included in the partnership?

Different efforts were made by each project. See those sections for details. Overall strategies included:

- Door-to-door outreach was utilized in several projects.
- Holding HAND meetings in the evenings and at various community locations accessible to members of affected communities.
- Utilizing unique strategies, such as Photovoice, to reach community members that typically don't attend community meetings.
- Working through schools, churches, and neighborhood fairs to engage community members.

h. What role did your EPA Project Officer play in the partnership?

Deldi Reyes was instrumental in the original development of the HAND project through the Northeast Denver Environmental Initiative initiated by EPA Region 8. EPA had performed a "situation analysis" and subsequently called stakeholders together to begin discussing solutions to the environmental problems identified in the analysis. As the stakeholders formed a partnership, EPA took more of a supportive role. Throughout the project Deldi Reyes provided continuous support in obtaining resources, contacts and support for the overall process. She kept a steady stream of new information and techniques flowing throughout the grant period, and made special efforts to help develop the leadership capacity within HAND. See within each section the answers for specific projects.

i. What barriers did your partnership experience and how did you overcome them (distrust, unequal power, control over money, differing priorities, process for reaching consensus, etc.)?

The development process involved extensive conversations to find projects that the majority of the group could work on and that were not already better covered by other efforts or venues and overall the partners worked well together to find common ground. However, the partnership experienced some difficulties in managing the dynamic between particular stakeholders with very different agendas. For example, one very vocal resident and leader of a key neighborhood association was most interested in working to shut down the Suncor Refinery. Suncor, however, was also a partner in HAND and was clearly not interested in an agenda that would lead to their closure,. As another example, several community partners were very interested in working on issues surrounding the relocation of I-70, which was undergoing NEPA review. EPA, DEH and others felt that they could not work on this issue within the realm of HAND. The group agreed there were other forums for the I-70 work that were better funded and that almost everyone in HAND who cared about that issue was already engaged in.. Since HAND was framed as a collaborative effort among different stakeholders, the group decided to take these two very important issues off the table for HAND action. As described in Section 3 of this report, this decision had impacts on community participation. Ultimately, the participants brainstormed many project ideas which were narrowed down to the final list that everyone felt they could participate in.

j. How has this partnership improved relationships among those involved? Please describe the working relationship that has improved the most and those that may still need work.

The partnership especially strengthened the relationships between the non-profit and governmental partners who completed the projects under the CARE grant. For example, GWD worked closely with DEH on the auto repair and diesel outreach projects, making connections with various staff and programs in the City department that will help with future projects. FREF built connections with DEH, EPA, and CDPHE that it will continue to rely on to bring technical support to the youth in the HAND neighborhoods. For the community leaders who participated, like the Civic Association of Clayton, lasting relationships were built with EPA and DEH staff that are now seen as resources to the community. Individual HAND partners also developed stronger relationships with residents and neighborhood associations, such as GWD with the Globeville Civic Association, as a result of a HAND-related project.

k. Has your organization engaged in a similar process to CARE in which you had a similar role? Please describe briefly. No.

l. Is there anything else about your partnership that you would like to share?

Please refer to Section 3 on the project challenges and ideas for the partnership.

II. Your Project

The HAND project is actually 6 separate projects under the guidance of HAND partners. We will present the project separately but some overall strategies are described below.

a. What toxic risks did your project address?

The project addressed toxic risks from second hand smoke, diesel pollution, solvents in the auto repair industry, household hazardous waste, and coal-fired electric power plants. Some specific toxics addressed include mercury, carbon monoxide, lead, arsenic, cadmium, and benzene

b. What toxic reduction strategies did you pursue?

HAND decided to implement several discrete projects that would reduce toxics that were of most concern to the HAND members. Using a collaborative approach, projects and approaches were selected that all of the HAND members could support. The projects were split into three main areas of interest: Land Use, Diesel and Point Source Pollution Prevention, and Indoor Air Quality. Strategies within these main project areas included:

1. Utilizing a door-to-door health promotora model to reach populations vulnerable to toxics in the home including second hand smoke, carbon monoxide, and lead.
2. Utilizing a one-on-one approach with small diesel truck fleet managers and auto repair shop owners where resources could be provided directly to reduce the impacts of these operations on the community.
3. Utilizing a civic engagement community problem solving model to engage young people in identifying and addressing environmental issues of concern to them in their community..
4. Providing door-to-door outreach and services to populations that could benefit from energy efficiency improvements while also reducing household hazardous waste and power plant emissions, and increasing solid waste recycling.
5. Utilizing Photovoice and public meeting charettes to encourage community members to express their views about environmental issues to City Planners.
6. Incorporating transportation studies into neighborhood planning to ensure a more systematic and intentional planning effort that would result in reduced toxic releases (primarily related to vehicular use and proximity of industry to residential).

c. How did you reach agreement on implementation decisions

Individual project implementation is covered with the project section.

As described above, EPA convened stakeholders in NE Denver to discuss the situation analysis it had developed. Working with a paid facilitator, the stakeholders determined what types of projects they would work on collectively. In developing the CARE proposal, stakeholders broke into groups based on main interest areas.. Project ideas were generated and narrowed, and a work plan was developed for the grant application, with responsible partners identified for each sub-project. After the grant was awarded, a steering committee was formed to oversee the implementation of the different projects as well as to direct the HAND project overall.
After the grant had been submitted, there were differences of opinion on project focus and approach especially from one community member who was insistent that the group work on the I-70 corridor and Suncor issues even though it had been agreed during earlier meetings that those would not be to focus of HAND.. Unfortunately due to the aggressive manner of this member, several stakeholders permanently left the partnership and much momentum was lost. After the grant was received HAND received assistance from the Consensus Building Institute and was able to develop ground rules and working agreements that allowed the partnership to move forward more effectively..

d. Did you reshape your partnership in any way to address strategy implementation? Please explain.

Individual project implementation is covered with the project section.

e. What outside resources (e.g., people, programs, approaches, etc.) were most important to your project?

We discuss outside resources relative to each of the pieces of the CARE grant in the project sections.

In general, there were a number of additional resources that played important roles in the overall project. Interestingly, over time, many of those "outside" resources became "inside" resources. Often, what started as a consultative role became a partnership. For example Stacey Erikson started as a consultant around Brownfields projects, but became an integral HAND partner. Similarly, Ron Schiller started out as a resource for Tools for Schools audits but took on a much larger role in the project.

Also, CBI was brought in through EPA to help the group strategize and work through some of the team dynamics that challenged the group. That assistance was critical to keeping the group from dissolving due to conflict issues.

***f. W**as there any environmental issue that EPA seemed to lack the tools or means (e.g., Partnership Programs, data tools, other expertise) to address? If so, please describe the situation or need you had.*

See individual sections for details.

Air Quality Data: Much of this data and the development of the public outreach tools for it were not provided by EPA, nor did they need to be. The Colorado Department of Public Health and Environment and Denver's Department of Environmental Health developed some very useful posters explaining air toxics in the Denver area.

g. How did you build momentum over the course of your project? Did you secure any "early wins" to help build momentum? Did you look for additional funding early on? What was acquired?

The HAND stakeholders met for monthly meetings initially to identify issues of importance to the HAND neighborhoods and in particular to the participants of the HAND group. The availability of the CARE grant funding became a motivating factor for the group to focus the huge palette of issues to the specific tasks that were finally targeted. The CARE grant award was a huge "win" for HAND, securing its future for at least two years and ensuring that it would be able to address at least some of the concerns of the neighborhood.

HAND as a whole did not look for additional funding partially in response to the restriction on the program manager that he could not spend his time on fundraising. However, each organization involved in specific project areas did continue to fund raise for those pieces.

h. What were the significant outputs of your project (meetings held, materials developed, people trained, etc.)?

See the individual sections for project level information

i. What were your project's most significant outcomes (changes in policy, behavior, and practice, e.g., auto shops' shift to less toxic materials, ban adopted on school bus idling, change in local agencies' policy or procedures, school district commitment to IPM for pest control, etc.)?

See the individual sections for project level information

j. What specific reductions in environmental risks did your project achieve?

See the individual sections for project level information

k. Were there differences between your original plan and what actually occurred in your project? Did you achieve your objectives? Please explain. What objectives were not met and why?

There were several adjustments to specific projects which are detailed in the project level sections.

l. What other resources (not already covered in your discussion of your partnership or outside resources above) did your project mobilize, both financial and in kind?

Details in specific project sections.

John Helfrich with Brownstein | Hyatt | Farber | Schreck, LLP provide pro-bono legal services to Hand from May 2006 through present for the HAND project. His services included reviewing documents, contracts, reviewing the HAND structure document and advising on liability issues.

The Air Group developed the Air Toxics presentation material as part of a collaborative effort between HAND, CDPHE, City of Denver and US. EPA. This presentation material was used during HAND meetings, as part of a presentation to Globeville neighborhood association and is being used by Denver Public Schools and the University of Colorado College of Architecture and Planning in the education programs.

SECTION 2.1: INDOOR AIR QUALITY

2.1.1: Promotora Outreach and the Breathe Better Bus

The Indoor Air Sub-group began with two primary project ideas: *The Healthy Indoor Air Education and Outreach Project (HIAP*) and the *Breathe Better Bus.*

The Healthy Indoor Air Education and Outreach Project (HIAP) had two components:

1) Reaching monolingual Spanish speaking residents and English speakers in the northeast Denver area. HIAP emphasizes issues of immediate health concern that can be addressed at the individual level, such as proper disposal of household chemicals, carbon monoxide poisoning and prevention, fire safety, pesticide and poison prevention. HIAP employed the visiting nurse model (*promotora* in Spanish) commonly used and accepted in Mexico. The HIAP *promotora* conducted a general inventory of the home, checking for and educating the mother about household hazards such as carbon monoxide, lead based paint, and proper handling, storage, and disposal of household chemicals.
2) Outreach through schools by engaging the youth directly in learning about and addressing environmental issues in their community. We used the Tools for Schools and Environmental Tobacco Smoke-free Pledge materials and training, as well as the FrontRange Earth Force Community Action and Problem Solving (CAPS) curriculum. (Information on this part of the project is covered in Section 2.1.2 of this report).

The Breathe Better Bus is a mobile classroom for indoor and outdoor air pollutants, non-smoking education, and asthma. This 40-foot natural gas bus carries six interactive learning stations to schools, health clinics, community events and corporate health fairs. Evaluation of the Breathe Better Bus, programs and staff, by children and adults has been overwhelmingly positive. The Bus has been featured in EPA's national report highlighting successful community-based activities. This project would happen in two phases:

- Phase I (1st year) – modify engineering and education at the six learning stations to also include Spanish; produce necessary educational materials in Spanish; and produce two educational videos aboard the Bus in Spanish.
- Phase II (following phase I through 2nd year)– Use the bus for outreach at schools, churches, housing projects, workplaces, and special events. The Bus can accommodate 130 students per day at a school site along with 25 teachers, school personnel, and parent volunteers. Workplace, special events, and church functions have accommodated between 75-200 adults.
- The outreach efforts were primarily conducted in support of the promotora outreach efforts described above.

HIAP: Promotora Outreach

a. What toxic risks did your project address?

The focus for the Promotora outreach was indoor air toxic issues and included:

- Second-hand smoke

- carbon monoxide
- mold
- solvents
- cleaning materials in the home
- fires in the home

b. What toxic reduction strategies did you pursue?

Using the *promotora* model we conducted detailed home visits and interviews with families including educational presentations and materials such as EPA's Smoke Free Pledge and "Hogar Sano". Primarily mono-lingual Spanish speaking families were the participants in the outreach efforts. CREA Results, with founding members Fernando Pineda-Reyes and Diana Pineda-Ford, conducted the project in the HAND area training the promotores and conducting many of the interviews and interventions. The promotores were all Spanish speaking residents of Denver and Commerce City and were trained to provide education and outreach for the families. Initial contacts were made during public events, meeting with church participants, referrals and door-to-door contacts. A subsequent home visit would be scheduled and two promotores would visit the family at a time when convenient for the family. The majority of visits were conducted during daytime hours when mothers were home, often with children present during the interview. In some cases other family members (relatives) would be present during the visit. Additional follow-up phone calls or visits would be conducted as needed. As part of the visit, smoke alarms, outlet plugs, door latches and literature associated with indoor air toxics were given to the families and their use and value explained. The home visits ranged from 30 minutes to over an hour with the longer visits of approximately an hour being more typical. The overall strategy to toxic reduction.

The strategy for the HAND outreach efforts was developed during projects in 2005 and 2006 in Commerce City supported three additional grants (an EPA Collaborative Problem Solving grant, a HUD Healthy Homes grant, and a State Tobacco Education & Prevention Partnership (STEPP) grant). Under these other grant projects, several promotores worked in the Hanson neighborhood doing detailed home visits, providing families with information about second hand smoke, lead, carbon monoxide, mold, and other health and safety issues, and referring them to the Quitline for smoking cessation. Families were also given the opportunity to declare their home a smoke free place. The work on these projects helped establish a group of trained promotores and aided the design of impactful canvassing strategies that were then used in accomplishing the goals set out under the CARE grant.

c. How did you reach agreement on implementation decisions?

The HAND indoor air subcommittee developed the original work plan with Fernando Pineda-Reyes and Diana Pineda-Ford (who originally worked for Groundwork Denver but later started CREA Results), and oversaw the implementation of the outreach efforts. The model, outreach efforts, and performance measures were developed by CREA Results and the CARE project manager. Regular reviews were conducted through the project with adjustments as needed.

The original indoor air group was originally comprised of:

Fernando Pineda-Reyes (Groundwork Denver/CREA Results Chair)
Lisa Bardwell (FrontRange Earth Force)
Jennifer Wieczorek (Denver Public Health)
Anthony Thomas (Civic Association of Clayton)
Stacy Simms (American Lung Association)
Robin Wilson (Breath Better Foundation)

d. Did you reshape your partnership in any way to address strategy implementation?
No.

e. What outside resources (e.g., people, programs, approaches, etc.) were most important to your project?

This CARE project built upon the successful model developed for EPA CPA, HUD HHI, and STEPP funded projects. Many of the promotores who worked on the CARE project were originally trained under these other projects and many of the materials developed were utilized by the CARE project. Throughout the project American Lung Association played a significant support role for second hand smoke issues and funded additional outreach efforts beyond the HAND project with CREA Results. The indoor air group pursued an opportunity to apply for a State Tobacco Education Prevention Partnership (STEPP) grant to reach the monolingual Spanish and English speaking community in Commerce City and provide them with information and services about Indoor air quality, second hand smoke and smoking prevention and cessation. On behalf of HAND, Groundwork Denver was awarded a grant ($20,000) to implement a project for six months in the Hanson neighborhood of Commerce City. Other partners in this grant were the ALA, Colorado Tobacco Education and Prevention Alliance (CTEPA), BBF, Colorado Asthma Coalition (CAC), Tri-County Health Department, Tar Wars and Commerce City Community Enterprise.

c. Was there any environmental issue that EPA seemed to lack the tools or means (e.g., Partnership Programs, data tools, other expertise) to address? If so, please describe the situation or need you had.

Overall EPA was able to provide resources and technical assistance to cover the issues defined in the scope of the CARE project. However, as the communities developed a level of trust with the promotores, many requests for additional information and materials were made. Many of the topics of concern were outside of the scope of HAND or EPA resources, such as drugs, neighborhood security, or immigration issues. Other topics were very localized, like removal of garbage from a particular alley or drinking water quality in Commerce City. Local city agencies, neighborhood organizations, and church organizations were able to provide some of the more localized information that was distributed by CREA Results, such as where to recycle or who to call if garbage is not picked up.

d. How did you build momentum over the course of your project? Did you secure any "early wins" to help build momentum? Did you look for additional funding early on? What was acquired?

As noted above, the momentum for the promotora outreach was built during the years preceding the CARE work under other grant funded projects. The promotores also attended festivals and church functions where they provided information and items for the community, such as school supplies and bike helmets, to engage the community and sign up families for the home visits. The Breathe Better Bus was a huge success with this aspect as many people asked for return visits from the bus.

e. What were the significant outputs of your project (meetings held, materials developed, people trained, etc.)?

1. Over 1500 people were contacted through Church meetings, festivals such as the Salud and Clayton Picnic Events, door-to-door visits and referrals. This led to the 200 detailed home visits. As an example, a secondhand smoke sponsored festival on November 5, 2006 at Our Lady Mother Church in Commerce City included over 250 participants. At this event, participants received information about the indoor air home visits and indoor air health issues. During this same event, the Breathe Better Bus had 250 visitors and over 100 children received a bike helmet and a personal fitting.

2. The Breathe Better Bus was refurbished and materials and display signs were translated. The Bus conducted 8 field visits as part of the HAND project, in conjunction with the promotora outreach efforts. A typical visit was conducted over ½ to a full day. Events included:

• Clayton Annual Picnic 2006	228 visitors
• Clayton Annual Picnic 2007	330
• Montessori School	110
• Salud Health and Safety Fair	150
• Our Lady of Guadalupe Church	130
• Our Lady Mother of the Church	250
• Hanson Elementary School 2006	228
• Hanson Elementary School 2007	65
• Allsup Elementary School	110
Total visitors	1601

Results of the CARE-funded promotora home visits.

- Home visits conducted by the promotores 200
- Mono-lingual homes 183
- Bi-lingual homes 17
- Number of family members involved 992
- Smoke Free pledges signed 196
- Smoke Alarms delivered 178
- Safety Door Latches 107
- Outlet Plugs 115
- Hogar Sano book distributed 200

Distribution of homes within the HAND neighborhoods:

- Commerce City 83
- Highland 10
- Clayton 31
- Sunnyside 4
- Cole 42
- Globeville 2
- Swansea 28

f. What were your project's most significant outcomes (changes in policy, behavior, and practice, e.g., auto shops' shift to less toxic materials, ban adopted on school bus idling, change in local agencies' policy or procedures, school district commitment to IPM for pest control, etc.)?

An evaluation survey was conducted of 50 out of the 200 homes that received the indoor air quality home visit. The list of participants was randomized and phone calls were made to set up the appointments. In the end, in order to get the 50 follow-up participants, every household was called at least two times and invited to participate. The following results were compiled from the evaluation surveys:

Answer	#	%
Your home is smoke-free now - Smoke Free Pledge	48	96
Person who used to smoke stopped smoking or stopped smoking in the house or in the car	8	16
Installed a smoke alarm	40	80
Installed a carbon monoxide alarm	3	6
Installed safety plugs and cabinets latches	24	48
Person who smokes reduced the number of cigarettes	5	10
Family has a fire escape plan	30	60
Read the "Hogar Sano"book	43	86
Other	2	4

When asked about what of the information the family received, residents reported that they remembered:

Answer	#	%
Prevention of household fires	40	80
Dangers of carbon monoxide	29	58
Dangers of second hand smoke	39	78
Dangers of household toxics	31	62
Other	4	8

g. What specific reductions in environmental risks did your project achieve?

96% of the homes receiving a follow up assessment still have the smoke free pledge in place. Many families have implemented safety features to reduce risk from fire, access to toxic household cleaners and solvents, installed a smoke alarm and developed a fire escape plan. While many acknowledged the need for carbon monoxide monitoring, very few could afford the monitors. This would be a significant item to add to future outreach efforts.

h. Were there differences between your original plan and what actually occurred in your project? Did you achieve your objectives? Please explain. What objectives were not met and why?

The project was implemented very close to the original plan. We met all of our primary goals including 1500 community members receiving information, 200 follow up detailed family visits. Over 300 smoke free pledges including 196 from the family visits and 104 from community fairs and other outreach events.

i. What other resources (not already covered in your discussion of your partnership or outside resources above) did your project mobilize, both financial and in kind?

As noted above.

II. Reflection on Promotora Outreach

a. How likely is it that the progress achieved could have been made without your CARE partnership?

The CARE partnership created the synergy to improve and extend the early promotora programs developed under the other grant-funded projects. It also provided CREA Results with the opportunity to expand its work into other Denver neighborhoods and to evaluate the impact of its projects, which has ultimately led to its ability to partner with other organizations and bring similar services to new communities.

b. What do you consider your project's greatest achievement?

The greatest achievement of this project is that it was able reach this vulnerable population with a wide range of information and resources in a way that can really create change. The home visits and follow-ups by the promotores created relationships that have continued in this community building capacity and serving as a conduit for other important health and environmental information. The model used was successful as demonstrated by the evaluation results and ongoing community involvement.

c. What was your greatest challenge and how did you deal with it?

To be responsive to the community participants, CREA results and the promotores felt that they needed to be able to respond to the broad range of requests for information on issues such as drug use, mental health, garbage, collection and crime. Many of these issues were put forward by community people once they gained enough trust to openly participate. Achieving that trust was the key to this work but resulted in this challenge to respond to many needs. CREA Results dealt with this challenge by putting together resources and information to refer participants to other resources, such as local churches, other community organizations, or City agencies.

The current political environment associated with immigration issues also made it more difficult to approach some of the community members. CREA Results addressed this by working from referrals by one community member to another and by training trusted community members as promotores.

Another challenge was that the physical size of the HAND neighborhoods made it difficult to get a good sampling of the issues in each neighborhood. The Indoor Air subcommittee wanted this resource to be offered across the HAND neighborhoods rather than focusing in one area. While this resulted in strong impacts to the individual participants, it resulted in low community-wide impact.

d. What would you do differently next time in terms of organizing and structuring your partnership to achieve your project objectives?

The partnership could have had better internal and external communications on the findings, challenges, resources, and successes of the indoor air project as well as the other projects.

e. How might you have been more strategic in designing or implementing your project?

We would have either increased the number of home visits if funding allowed, or focused all of the home visits in one neighborhood. This would have increased the ability to address community-wide problems.

We also would have built a policy discussion and a community organizing strategy into the project. On the agency end, it would have been useful to engage all of the HAND partners in understanding the environmental and health issues experienced by this population and to discuss ways to address these issues. On the community end, it would have been beneficial to have some funds available to bring the participants together to discuss ways that the community could address some of their common problems.

f. If you chose to create one, did you find using a logic model or other goal-driven model helpful? Please explain. Did the model change over time? If so, how? NA

g. what extend did your CARE community communicate or engage with other CARE communities and how was that interaction helpful? NA

h. Did media coverage play a role in your project? If so, please explain.

Yes. Fernando conducted 2 radio broadcasts on 1150 AM around indoor air toxic issues and participated in 3 shows on Univision around second hand smoke issues. These broadcasts were used to increase the awareness of the program and increase participation by soliciting people to participate. Churches in Cole, Clayton, 5 Points, and Commerce City published information about participation in the HAND promotora outreach that was critical to bring new families to the program.

i. In what ways did you rely on EPA for assistance (assessing risks in your community, conflict resolution, partnership support, voluntary programs, such as Tools for Schools or Pollution Prevention)?

Materials used in the home visits was the primary EPA assistance for this project

Materials distributed during detailed home visits include:

1. TIPS to protect Children from Environmental Risk
2. Collaborative Problem Solving
3. Proteja a Su familia en Contra del Plomo en Su Casa
4. Los Niños Crecen Mejor en Ambientes Saludables
5. Smoke Free Pledge

j. What role did your Project Officer and other EPA staff play in your work? What would you have liked more of or less of?

The EPA staff at the Region-8 library was extremely helpful in providing us with materials in Spanish. The Project Officer provided general oversight and input on the project.

k. To what extent do you think that this project increased the capacity of your organization? Your partnership? Your community? Please provide examples.

This project allowed one of the partner organizations, CREA Results, to become an independent company providing various levels of communication and education to the Spanish-speaking community. With the CARE project completed, CREA Results is moving forward with additional projects as a private business venture that grew in part out of the CARE project.

See Section l below for additional information.

l. Did your project produce any new "community leaders?" Please describe.

Padres Latinos of Commerce City (PLCC) started as a result of the EPA CPS project and was sustained through the work of CARE. It continues as a strong group that includes over 200 community members. The group spearheads community health events and educates the community about health and environmental issues. Throughout the CARE and preceding projects, 18 promotores were trained from the various neighborhoods. The project allowed many of the promotores to develop the confidence to do additional work with other organizations including the City of Denver, the University of Colorado, and Denver Health. One person became a board member of local organization.

m. What advice would you offer to other communities undertaking similar work?

The development of relationships in these communities is critical and trust is difficult to gain and hold. Working through trusted networks and referrals is one way to overcome this. Responding to the community needs and following through with promises and resources is also essential.

III. What Next?

a. Will members of your partnership continue to work on these issues?

CREA Results will continue to work in the Spanish speaking community to provide health and environmental information. As a direct result of CARE, CREA Results is working with FrontRange Earth Force and the City of Denver on the Mercury outreach program, conducting focus groups to assess the effectiveness of the materials, and providing Spanish translation and access to Spanish outlets for the work.

b. How will this work be sustained?

CREA Results has created a model for community outreach and education. This model develops capacity and moves people into action. They will continue to seek partners and funding to continue similar work and will continue to support the relationships developed under the CARE project. Groups like Padres Latinos of Commerce City have become self-sustaining.

c. If neither your organization nor the members of the partnership plan to continue the work, please describe why. NA

d. Please describe a continuing or next source of funding you have for your work or other groups in your community that have continued the work and have found funding.

CREA Results continues their work in the Denver and Boulder area with funding support from STEPP, CDPHE, ALA, Colorado Education Tobacco and Prevention Alliance, Senior Latinos and Diabetes, and Tri-county Health Outreach Campaign. Last year, they worked with construction workers on smoking cessation and are beginning a new project with Boulder Public Health to train Hair stylists as health promoters.

SECTION 2.1: INDOOR AIR QUALITY

2.1.2: Youth Outreach and Engagement

The HAND group identified youth outreach as an important component of its work through the CARE grant. Several of the HAND partners, specifically Cross Community Coalition and FrontRange Earth Force (FREF) had a history of working with schools and young people around social and environmental issues in the HAND neighborhoods. While CCC staff had been deeply involved up through application for the Level 2 grant, subsequent staffing changes precluded continuing involvement although CCC provided access to young people for a number of aspects of the CARE efforts (e.g., around the small area plan).

FREF, which was already working in several schools in the HAND area, continued and extended its programming through the CARE grant. FREF trains and supports adults to facilitate a process whereby young people apply their emerging leadership and civic skills to address issues affecting their communities. A critical component of the Earth Force process focuses on youth understanding the importance of considering the root causes of and different perspectives on an issue and working together to develop long-lasting, win-win, rather than quick-fix solutions to those issues. Young people find themselves challenged to become civic actors, and to work as a team and develop the life-skills they need to be able to make a difference. The result of young people going through the Earth Force process is a community project that the young people have developed and implemented.

The program rollout of this portion of the CARE grant included:

Professional Development: Teachers attend a Summer Institute or school year training in the Earth Force process and local environmental issues so that educators can help their students design and implement a community-based environmental project. They receive learning materials (available in Spanish and English) that help students learn how to interview, assess their community, conduct surveys, research on the Internet, write business letters and work with the media.

Ongoing Support: Educators received on-going support – both throughout the planning process and in the classroom. Program staff link teachers to technical expertise and help teachers build supportive networks with other educators.

Youth Leadership Training: In collaboration with Denver Public Schools' (DPS) Office of Intentional School Culture, interested students in the HAND area received leadership training needed to create Youth Councils at their schools, thus, giving students a voice in both their school and the surrounding community.

Student Service-Learning Projects. As noted above, the outcome of the Earth Force process is a student-driven service-learning project that addresses a real community need. Each spring, over 800 service learning students attend the Youth Summit at the Denver Zoo to showcase their project and the positive outcomes achieved.

The opportunity the CARE grant presented for this outreach was tremendous. HAND included a number of partners with expertise and resources to support young people as they develop their projects. The youth-oriented perspective brought by Earth Force helped the team focus on how to adapt some of the EPA resources to support the initiative of young people.

For example, Tools for Schools is a voluntary program that provides a school's administration and facility manager a way to assess factors in the school that affect the indoor "health" of the school. Many of the measures suggested by the inventory results are ones that students could both identify and implement. Working with EPA and the American Lung Association, the HAND group was able to adapt the Tools for Schools process to include young people in both the inventory and in taking on some of the changes suggested by the inventory.

Classroom visit as part of Tools for Schools program

a. What toxic risks did your project address?

Over the two years of the CARE grant, young people addressed a wide range of toxic risks in their community including:

- Exposure to household hazardous wastes
- Exposure to chemicals (through improper storage at school)
- Second hand smoke
- High levels of CO2 (through Tools for Schools inventories)
- Mold
- Air pollution (indoor and outdoor)

b. What toxic reduction strategies did you pursue?

As noted above, using the Earth Force process means that the students develop the strategies they think will address the environmental issues they identify. As a result, their strategies varied quite a bit. The following table outlines the primary issues and strategies followed by students at the schools involved in the CARE grant.

SCHOOL	**STRATEGY**						
	Messaging	**Policy change**	**Family education**	**Peer education**	**Engagement**	**Data collection**	**Remediation**
Horace Mann	Storm drain stenciling/door hangers						
Bruce Randolph		Recycling at school					
CLA	Develop campaign around School safety						
DCIS				Water quality	School garden (healthy living)		
Gilpin	Messaging to remind Park litter		Water conservation		Sign residents up for recycling service	Tools for Schools (no problems found)	
Mitchell			Water conservation	Feral animals	School gardens	Water quality monitoring	Tools for Schools
Lake		Recycling at school & in community					

Skinner			Water conservation Energy				improve air quality/ aesthetics – gardens/tree planting
Scott Carpenter				Recycling		Tools for Schools	
Pinnacle							Tools for Schools; Remediate an old parking lot into outdoor classroom
Harrington						Tools for Schools	
Valdez						Tools for schools (no problems)	
Park Hill	Global warming prevention tips		Global warming prevention tips	Trash		Tools for Schools (no problems)	
Berkeley Gardens						Tools for Schools (no problems)	

c. How did you reach agreement on implementation decisions?

The Earth Force process has a very intentional process for supporting democratic decision-making within the group of students as they decide on their project. It is based on having the group set and apply criteria that are important to them. They then apply those criteria to the specific issues they need to agree on.

d. Did you reshape your partnership in any way to address strategy implementation? Please explain.
NA

e. What outside resources (e.g., people, programs, approaches, etc.) were most important to your project?

Each project engaged different partners and resources. Again, part of the Earth Force process focuses explicitly on encouraging young people to identify stakeholders, call in technical experts to help them, and to build on what has been effective in addressing their specific issues in the past. To name a few: HAND partners such as the American Lung Association, EPA, Groundwork Denver, the Civic Association of Clayton, University of Colorado at Denver, Department of Environmental Health provided expertise and information to the students on their projects. Denver Water provided water use kits (focused on conservation) for use in the classrooms, and worked with FREF to develop a curriculum for 6th grade science students across Denver Public Schools.

f. Was there any environmental issue that EPA seemed to lack the tools or means (e.g., Partnership Programs, data tools, other expertise) to address? If so, please describe the situation or need you had. No.

We utilized a vast range of EPA materials. EPA had already translated many of these materials translated into Spanish, which was extremely useful in many of the HAND schools.

g. How did you build momentum over the course of your project? Did you secure any "early wins" to help build momentum? Did you look for additional funding early on? What was acquired?

Because the youth outreach focused on schools, the timeframe of the school year really drove the momentum of the project. The way the Earth Force process is structured also "pushes" the students and their educator to closure. Having to present at the Youth Summit in the spring also provides an exciting, public crescendo to the project.

The HAND partners participating in the youth outreach portion of the CARE grant had additional funding already in place when the program started, so that was not a primary concern. One of the most exciting "early wins" was having the partnership with American Lung Association to help with the Tools for Schools inventories. The ALA staff person was bilingual and has had extensive experience working with young people. She initially accompanied the EPA expert on the actual Tools for Schools inventories, and interacted with the students at the schools. Later in the program, she was trained by the EPA expert to do the inventories on her own.

h. What were the significant outputs of your project (meetings held, materials developed, people trained, etc.)?

- 14 schools
- 25 educators trained
- 20 educators supported throughout the 2 year process
- 19 projects accomplished by young people
- 2 Youth Summits (2,000 students total) held to celebrate student projects`

Students at Summit with the Mayor

i. What were your project's most significant outcomes (changes in policy, behavior, and practice, e.g., auto shops' shift to less toxic materials, ban adopted on school bus idling, change in local agencies' policy or procedures, school district commitment to IPM for pest control, etc.)?

We conduct pre and post evaluations on young people participating in Earth Force projects. According to the surveys of Earth Force students:

- 85% report a better understanding of environmental issues.
- 75% report that their Earth Force experience makes them want to learn more about environmental issues.
- 65% report an increase in the skills needed to effect changes in their community.

According to the surveys of Earth Force educators:

- 100% would recommend Earth Force to others.
- 87% said it increases their belief in the ability of young people to make a difference in the community.
- 81% said Earth Force increases their use of community issues and resources in the classroom.

Student and educator surveys consistently show that taking part in Earth Force enhances student's civic skills, attitudes, and knowledge. They learn to identify local environmental issues, collaborate, conduct

research, and express their views. They also develop increased confidence, efficacy, belief in the value of long-term solutions to environmental problems, and understanding of diverse viewpoints. The survey results suggest that participating in Earth Force programs affects students by increasing:

- their problem-solving, civic action, and decision-making skills
- their ability to work for changes to policies or community practices to improve the environment
- the likelihood that they will collaborate with adults to address community problems
- their ability to develop and communicate positions on public issues

The educator surveys measure the program's impact on educators as well as on their students. Participating in Earth Force increases teachers' levels of environmental knowledge (90%), their emphasis on environmental issues in their teaching (87%), and their commitment to improving the environment (79%). It also makes educators more aware of resources in the community that can be used to improve their teaching (81%) and increases their use of student-led projects in the classroom (82%). Finally, educators say Earth Force increases their satisfaction with teaching (74%), and their professional confidence (72%). Equally important, it increased their belief in the ability of young people to make a difference in the community (87%).

During the two years of the CARE project, we had tremendous cooperation from the school administrators and facility managers around the Tools for Schools Inventories. Most of the schools that worked with HAND during this time are still working with Earth Force, and are committed to supporting young people working on environmental projects.

j. What specific reductions in environmental risks did your project achieve?

As noted in the table in b, most of the projects focused on policy or behavior change. The Tools for Schools Inventories probably resulted in the most specific reductions, with C02 and mold being the issues most frequently identified in the inventory. Likewise, students who worked with their families to sign Smoke Free Pledges helped reduce exposure to tobacco smoke in their homes.

k. ***Were there differences between your original plan and what actually occurred in your project? Did you achieve your objectives? Please explain. What objectives were not met and why?***

The primary change related to the focus of the youth projects, which shifted early on from the more targeted focus on indoor air and secondhand smoke to supporting any environmental issue the students chose to address.

l. What other resources (not already covered in your discussion of your partnership or outside resources above) did your project mobilize, both financial and in kind?

One of the most long-lasting partnerships we have is with the Denver Zoo, which hosts an Annual Youth Summit with Earth Force each year. This event provided a great opportunity for young people from across the HAND area to share their environmental projects. We received support from Regis University to do a student-centered summer outreach program the first year of the grant as well.

II. Reflection

a. How likely is it that the progress achieved could have been made without your CARE partnership?

The HAND partnership was able to take advantage of an exciting program and partnership through Earth Force. Having said that, though, the CARE partnership brought some tremendous resources to that effort, and helped shape and improve the programming support FREF was able to provide to schools in the

HAND area. Furthermore, it gave the partners common areas of overlap which will continue long after the CARE funding is gone.

b. What do you consider your project's greatest achievement?

Hands-down, the greatest achievements of any youth outreach effort are the projects the young people design and implement.

c. What was your greatest challenge and how did you deal with it?

The greatest challenge is one that almost any group faces in trying to work with schools and young people – transitions. The Earth Force program is a challenging one to implement. Ideally, the HAND partnership would have had the same teachers at the same schools, year after year and could develop the program with each of them. Turnover, especially in schools in the HAND area, is quite high. And, during the time of the CARE partnership, several of the schools underwent dramatic "reorganization." We dealt with it by offering trainings as needed, building strong partnerships with administrators, the district, teachers and the community partners that work in these schools, and know that these kinds of transitions are inherent in public schools, so roll with the changes.

d. What would you do differently next time in terms of organizing and structuring your partnership to achieve your project objectives? NA.

e. *How might you have been more strategic in designing or implementing your project?*

The challenge of doing Earth Force is that, in its truest form, the young people decide what issues they will work on. One of the changes to the program planning was to support any environmental issues the young people selected, rather than insist that they focus on indoor air issues. Having said that, the educator and resource experts can have a great deal of influence on what issues the students actually notice and address in their community. A more strategic approach would have been one that FREF is now doing across the city – creating a "buzz" around a Green School initiative. In addition to creating this sense of a campaign, having such an initiative helps develop a network of educators and schools who can share across specific content. While the Tools for Schools outreach could have accomplished this, the challenges of scheduling audits all around the same time would have been logistically very difficult.

f. If you chose to create one, did you find using a logic model or other goal-driven model helpful? Please explain. Did the model change over time? If so, how?

The most useful part of the logic model was having a document that allowed us to easily identify our targets and the assumptions we had made for getting there. We did not adjust it over the course of the grant. That would have been a good use of it, however, because the project had a number of additional activities and metrics added over time.

g. To what extend did your CARE community communicate or engage with other CARE communities and how was that interaction helpful? Most of our interaction was at the CARE gatherings.

As a partner on the grant, we (Earth Force) did not reach out or interact much with other grantees. In hindsight, that would have been great – especially with communities working on integrating youth outreach into their planning.

h. Did media coverage play a role in your project? If so, please explain.

One of the elements of an Earth Force article is ensuring that young people have opportunities to "demonstrate" their projects and to share their work with the public. We had some media hits, primarily in local neighborhood newspapers that described the students' projects.

i. ***In what ways did you rely on EPA for assistance (assessing risks in your community, conflict resolution, partnership support, voluntary programs, such as Tools for Schools or Pollution Prevention)?***

EPA was very helpful in our project – providing Tools for Schools audits, and supplying a wide array of materials used by students and educators in the classroom. The "lifecycle" posters (e.g. of a soccer ball) were very popular!

j. ***What role did your Project Officer and other EPA staff play in your work? What would you have liked more of or less of?***

Our Project Officer and other EPA staff were instrumental in our project. As mentioned above, we relied on EPA for the Tools for Schools audit. Our Project Officer connected us to people, resources, and provided insight around some of our challenges during the year.

k. To what extent do you think that this project increased the capacity of your organization? Your partnership? Your community? Please provide examples.

This project increased the capacity of Earth Force in particular by bringing us into programmatic partnership with a number of different organizations. It pushed us to integrate our programs. As noted above, the project helped Earth Force rethink how it puts together some of its programmatic offerings in Denver area schools.

l. Did your project produce any new "community leaders?" Please describe.

The outcome of the HAND youth outreach was to impact communities through student projects AND to build leadership skills in young people living in those communities. As our evaluation data shows, a high percentage of young people participating in these programs gain leadership and civic skills. There are some young people that distinguish themselves in that way. In particular, through this project, we had several young people go on to participate in other youth leadership venues in the city. This includes joining Earth Force's Youth Action Board, the city's Child Youth Friendly Initiative, and Project VOYCE.

m. What advice would you offer to other communities undertaking similar work?

Earth Force's key to success has been our commitment to authentic youth voice, and our willingness to partner with schools and educators who want to support that at their school. By partnership, we mean that the relationship goes beyond doing a training – it means building relationships, finding additional resources, going the extra mile (like bringing a teacher a cup of coffee for a morning meeting.) It's also important that you enter humbly – open to learning about the culture of the school and aware of and adept at working with issues of race and class, especially if you are not of the same cultural, racial or socio-economic group.

II. What Next?

a. ***Will members of your partnership continue to work on these issues?***

Absolutely. The HAND partnerships have immeasurably enriched youth and school outreach in the HAND area. In addition to adding to the list of technical resources available to educators doing this kind of youth engagement, the partnership has also resulted in some ongoing collaborations, for example between GWD and FREF, and FREF and CREA. Several new partnerships, for example with NCCC Jr. (National Conservation Civilian Corps, Jr), which provides a 3-week NCCC type service experience for 14-18 year olds, will hopefully continue to be available to HAND partners going forward.

b. ***How will this work be sustained?*** The youth outreach work will continue through efforts of FREF.

c. ***If neither your organization nor the members of the partnership plan to continue the work, please describe why.*** NA

d. ***Please describe a continuing or next source of funding you have for your work or other groups in your community that have continued the work and have found funding.***

FREF: continues to work in the schools and to hone its youth leadership/engagement model. In part due to CARE funding, FREF has embarked on a "green school" initiative that includes health issues. Many of the partners are folks who were in HAND (e.g., Suncor, the City and County of Denver, EPA, CDPHE), but not in the same spirit as was generated through HAND. The funding though is more for FREF's work, not as part of a collaborative effort with the other partners, and this is true for most of the partners.

SECTION 2.2: LAND USE

2.2.1: Small Area plan for Elyria-Swansea

a. What toxic risks did your project address?

The Elyria-Swansea neighborhood area faces many environmental challenges related to land use and transportation. Its four residential enclaves are each surrounded by either incompatible industrial uses, freight railroad tracks, or an elevated interstate highway. The mobility challenges presented by this fragmented land-use pattern make walking or biking challenging at the least and potentially even dangerous (e.g., conflicts with trucks making local deliveries or accessing services), making the automobile the mode of choice in a low-income minority area that can least afford the expense. The proximity of manufacturing facilities to residential uses and the traffic passing through the area on I-70 have contributed to it having the worst air quality of any neighborhood in the entire state of Colorado.

The project sought to plan future uses that mitigate and reduce the conflicts between industrial and residential uses, recommend more efficient uses and densities in appropriate areas to attract more local services and reduce the need to travel outside the area for basic goods and lower vehicle miles traveled, and identify future infrastructure investments to better connect the area and promote a greater share of non-auto local trips.

b. What toxic reduction strategies did you pursue?

The area plan is an implementation tool for Blueprint Denver, the City's adopted plan to achieve more efficient land use and transportation patterns that result in more choice and enhanced quality of life (www.denvergov.org/blueprint). Area plans (along with corridor plans) provide a detailed examination of existing conditions and the future outlook for land use, circulation, transportation and other infrastructure, economic development, parks and environmental issues, and other relevant community development concerns in neighborhood areas or transportation corridors for a planning horizon of about 20 years. Area and corridor plans include implementation recommendations that frequently call for regulatory, investment and management actions. Once adopted by a vote of City Council, these plans become amendments to the Comprehensive Plan and Blueprint Denver, and are the policy basis for any future actions such as zoning changes, new infrastructure or code enforcement.

There are significant opportunities to catalyze the integration of land use and transportation in the area due to three concurrently occurring environmental impact studies: the I-70 EIS (considering the future alignment of I-70 in the middle of Swansea), the East Corridor EIS (determining the alignment and station locations for a new commuter rail corridor through the southern portion of Swansea), and the North Metro Corridor EIS (determining the alignment and station locations for a new commuter rail corridor through the western portion of Elyria).

The potential realignment of I-70 viaduct would remove a major barrier in the heart of Swansea and create significant opportunities for new development and street connections in the neighborhood, while the creation of two new rail stations are also likely to result in significant changes in adjacent land use as residential developers become attracted to sites within a 10-minute walk of transit.

c. How did you reach agreement on implementation decisions?

Community Planning and Development (CPD) staff worked closely with a community representative and the Healthy Air for Northeast Denver (HAND) group in preparing the CARE application including formulating the scope of services. CPD staff typically attended the HAND meetings, provided updates on planning efforts, and obtained information on other programmatic aspects of the CARE grant and the other efforts related to the HAND program. CPD staff worked closely with GWD in implementing the Photovoice projects.

Four public meetings were held with various stakeholder groups. One with representatives of the industrial uses in the area, a second with members of the local business association, a third with a youth group that documented threats in the neighborhood through a Photovoice project, and a final meeting with the public at-large to allow small groups to describe and illustrate their visions for the future of the area.

An inter-departmental design charrette was also held among city staff representing community planning, public works, parks & recreation, and economic development to synthesize the community input and ground-truth concepts based on City plans. As typically occurs with public workshops, the participants had differing goals, some of which focused on personal needs and desires. The staff charrette provided the opportunity to synthesize these goals and weigh which ones had broader community benefits. Also, some of the assumptions made at the time of the public workshop (such as the expected location of the North Metro line commuter rail station) had changed do to the ongoing independent environmental processes, which had implications for some of the public input provided earlier.

d. Did you reshape your partnership in any way to address strategy implementation? Please explain. NA

e. What outside resources (e.g., people, programs, approaches, etc.) were most important to your project?

The CARE grant provided the opportunity to contract with consultants to provide additional expertise and resources that were not available from City staff. PB PlaceMaking, among the most respected and experienced transit-oriented development planners in the nation, was able to bring their expertise to bear on the two future station areas, as well as call on the traffic engineering expertise of their parent company, the transportation consulting firm Parsons Brinckerhoff. They were also able to facilitate the public workshop, which provided significant resources beyond the capacity of City staff. It can be challenging for a community to envision the opportunities offered by dramatic changes (such the tearing down a highway viaduct) when they have been living with present conditions for several decades. PB provided an architect/urban designer for the public workshop to sketch people's ideas in real-time as they were describing them so we could create visuals from which to base the final products developed using professional design software tools.

The Photovoice project was an especially valuable exercise because it engaged the youth and the monolingual Spanish speaking residents in the community in the civic process of neighborhood planning. In this instance, the two participating groups were able to talk about their neighborhood concerns together as a group and took the empowering step of documenting these conditions (as well as some of the things they value in the neighborhood).

Elyria and Swansea are among the more challenging neighborhoods in which to do public outreach due to the need for multi-lingual presentations and material and the daily demands of its residents. For example, it can be difficult to get good turnout at an evening event. Also, there are some strong personalities within the neighborhood that tend to dominate the public discussion and deter others from participating. These stakeholders sometimes need special attention to prevent the public process from being hijacked by their personal desires.

f. Was there any environmental issue that EPA seemed to lack the tools or means (e.g., Partnership Programs, data tools, other expertise) to address? If so, please describe the situation or need you had. No

g. *How did you build momentum over the course of your project? Did you secure any "early wins" to help build momentum? Did you look for additional funding early on? What was acquired*?

The City was able to obtain three grants to continue the work begun with the CARE grant. One is a planning grant for $120,000 awarded by the Denver Regional Council of Governments (for which the City will provide an additional $30,000 in matching funds) to do a more detailed study of how the National Western Stock Show station area, which comprises about 80 acres along the South Platte River adjacent to the future commuter rail station, could redevelop over time to be supportive of a transit station and how to provide quality multi-modal access from the nearby Elyria neighborhood. This more detailed planning effort is expected to get underway in 2009.

Two implementation grants were also awarded by the state for pedestrian infrastructure improvement projects. One is for the construction of a signaled pedestrian crossing of the Union Pacific RR alignment that separates the residential section of Elyria from the residential section of western Swansea (which includes an elementary school and a neighborhood park). The desire for pedestrian movement through this barrier is so great that many trespass through the UP tracks and railyard under dangerous conditions. The second is a set of pedestrian improvements that will be made around the Swansea Elementary School, which was awarded under the state's Safe Routes to School program.

h. What were the significant outputs of your project (meetings held, materials developed, people trained, etc.)?

Four stakeholder meetings and one internal staff meeting were held, as described in the answer to question c above. A total of nearly 100 individuals participated in these meetings. These identified the greatest needs, desires, opportunities and challenges in the neighborhood area. Some of the greatest needs and desires identified were providing more and safer connections from the residential sections of the neighborhood through barriers like railroad tracks and dealing with the conflicts caused by delivery trucks on local streets and industrial uses so close to residential, better maintenance of public and private property that is not cared for or allowed to be dumped on, doing something (relocating or burying) I-70 because of the barrier it creates in the community and its noise and pollution impacts, and getting more neighborhood serving retail—especially a grocery store—that could be walked to by residents.

There are several opportunities for change because of the new transit stations that will be built by 2015 and the transitions for land use that is likely to accompany that investment—with

supportive public policy. Also, the I-70 EIS provides an opportunity to plan for the eventual relocation of that facility to remove its most immediate impacts to the community. There are also small, more immediate opportunities like enforcement of truck delivery routes and working with local industry to educate drivers. Some of the challenges include the plans for several major industrial sites to remain in the neighborhood (or in some cases expand) which would preclude a change in land use in the near term. (Although these are also a source of local jobs, which is a benefit.) The neighborhood will continue to be divided by railroad tracks, even if more connections and crossings are made. And the market perception of the area is not strong, which is a challenge to attracting private investment for new development and services such as a grocery store.

The deliverables of the project were:

- A technical memo describing as well as a map of the framework and future land use and transportation concepts for the area
- Photovoice projects by neighborhood youth and monolingual Spanish speaking residents documenting threats and opportunities posed by the human and built environments in Elyria Swansea. The photos plus captions provided information on neighborhood problems and strengths that have been displayed and will be utilized in the neighborhood planning process.
- Memorandum to the Department of Community Planning and Development with recommendations to mitigate conflicts posed by local truck traffic in the area
- Three-dimensional illustrations for a cross-section, oblique and ground-view of redevelopment concepts for 46th Avenue if the I-70 viaduct is removed that will go into the area plan
- Detailed circulation for pedestrian, bus, and auto access and land-use concept map for the future Colorado Boulevard commuter rail station area
- A grocery store feasibility market study

i. What were your project's most significant outcomes (changes in policy, behavior, and practice, e.g., auto shops' shift to less toxic materials, ban adopted on school bus idling, change in local agencies' policy or procedures, school district commitment to IPM for pest control, etc.)?

All of the above products will be used in the development of the final Elyria-Swansea small area plan, which is expected to be adopted by the City in 2009. This plan will establish the adopted vision for the future of the Elyria and Swansea neighborhoods, which will be used to guide future development, infrastructure investments, and other implementation tools such as zoning. Area plans typically have 20-year time horizons. The last adopted plan for this area was in 1983.

There is a serious policy change implicit in the above-listed products: the potential to relocate the I-70 viaduct around the area rather than expand it through the neighborhood. The City has not yet taken a position of which alternative it would endorse in the EIS, in part because the community planning implications to date were unknown. The timing of this plan's adoption process is intended to provide the maximum leverage to the community on this decision. If adopted with this recommendation, the plan could result in major air-quality improvements not

only due to the removal of emissions from hundreds of thousands of autos and trucks going through the neighborhood each day, but also as new opportunities for residential and commercial development result from the removal of the viaduct infrastructure and existing industrial uses respond to the realignment of the highway by relocating as well.

Furthermore, City Economic Development staff are currently meeting with representatives of the Azteca supermarket chain, which is interested in a potential location in the area, using the grocery store feasibility study to help attract them to the area. With a grocery store within walking distance, accessible by bus or bicycle, or within a short drive, local residents would incur less auto trips and shorter ones to provide their basic needs.

j. What specific reductions in environmental risks did your project achieve?

The two pedestrian infrastructure improvement projects described in the answer to section g above.

k. Were there differences between your original plan and what actually occurred in your project? Did you achieve your objectives? Please explain. What objectives were not met and why?

The timing was delayed due to delays in the three environmental impact statements in process in the neighborhood over which the City had no control: RTD's North Metro Corridor and East Corridor EISs and CDOT's I-70 EIS. The objectives were achieved through the completion of the deliverables. This allows moving forward with completing the plan as well as initiating early actions like the pedestrian improvements that received funding as described in the answer to Section g.

II. Reflection

a. How likely is it that the progress achieved could have been made without your CARE partnership?

The CARE grant was instrumental in developing the deliverables for this project. This is a very challenging area to conduct public outreach and involvement, and the resources of the consultant were extremely helpful in making these meetings successful, as insufficient City staff were available. Furthermore, the level of technical expertise provided by the consultants were beyond available City resources. Typical area planning efforts would not have included analyses such as the truck routing memo and the grocery store feasibility market study. Without the CARE grant, the planning effort would have been significantly smaller, outreach would have been less successful, and there would be less analysis to incorporate into the final plan. This neighborhood has been identified for years as one with special challenges. The added focus related to the EIS for both I-70 and the East Corridor and the extensive discussion of the environmental impacts associated with these projects heightened the need to engage the Elyria-Swansea community in a broader planning effort. This is important because it places I-70 and the East Corridor and their potential impacts in the context of overall neighborhood needs and a variety of challenges including environmental challenges. The CARE grant and the HAND effort were an excellent fit to provide the appropriate context and obtain needed additional resources.

b. What do you consider your project's greatest achievement?

There are several significant conclusions that will come out of this plan. One of the biggest is the demonstrating of the advantages of the future relocation of the I-70 viaduct, which is the single biggest change that could occur for the benefit of this area, both in terms of environmental quality and quality of life.

However, that change is likely at least 10 years away due to the state fiscal conditions of the Colorado Department of Transportation's capital budget. Some other important conclusions will come out of this plan with a much nearer implementation period. One is to attract a large-format grocery retailer to the neighborhood, which is desperately underserved and lacks convenient access to low-cost fresh foods. This would have significant health benefits as well as reduction in vehicle miles traveled. Another is to ensure safe, convenient and attractive pedestrian connections to the Colorado Boulevard commuter rail station, which will be operational in less than 7 years.

c. What was your greatest challenge and how did you deal with it?

Community outreach is the greatest challenge in this area. Forming several groups of stakeholders to solicit their input (industrial uses, local businesses, children) were successful ways to get a variety of viewpoints beyond the public meeting that was held. Also, the use of community facilitation provided by the consultant was very successful. The professional facilitators were able to use both their skills and provide the staff power to enable new participants to participate in the process to provide their input and ideas without feeling threatened.

d. What would you do differently next time in terms of organizing and structuring your partnership to achieve your project objectives? NA

e. How might you have been more strategic in designing or implementing your project?

There were many "moving parts" managed by entities outside the partnership as well as outside City jurisdiction that had serious implications for future land use and transportation in the area. For a long time, planners were somewhat paralyzed by the lack of certainty provided by the three EIS's described above. In hindsight, the timing of the project might have been a bit optimistic based on the uncertainty of those studies, however, with the 1-year extension it is now well positioned to give the community a potentially more powerful voice in the I-70 location decision. The year extension was needed so that more realistic assumptions could be made for the plan.

f. If you chose to create one, did you find using a logic model or other goal-driven model helpful? Please explain. Did the model change over time? If so, how? NA

g. To what extend did your CARE community communicate or engage with other CARE communities and how was that interaction helpful? None for this project

h. Did media coverage play a role in your project? If so, please explain. No

i. In what ways did you rely on EPA for assistance (assessing risks in your community, conflict resolution, partnership support, voluntary programs, such as Tools for Schools or Pollution Prevention)?

Other HAND partners participated in the Photovoice and neighborhood charettes, but we did not use EPA assistance directly for this project.

j. What role did your Project Officer and other EPA staff play in your work? What would you have liked more of or less of?

Overall support as a member of the HAND steering committee.

k. To what extent do you think that this project increased the capacity of your organization? Your partnership? Your community? Please provide examples.

This project improved the ability and capacity to complete a plan for a neighborhood with severe air-quality and other environmental issues. It identified citizens to participate in the planning process who will be in a position to provide leadership in their community and to partner with the City and other organizations. Perhaps the best example of this was the Photovoice project, which engaged the youth and monolingual Spanish speakers from the community in a more meaningful way than we typically experience in an area plan. It is certainly an approach that can be emulated in other planning areas and parts of the city. Following up on our initial findings, the City will now be reporting back to the community and engaging civic leaders about the opportunities identified in the grocery feasibility market study.

l. Did your project produce any new "community leaders?" Please describe.

No, but many people participated in the process who typically would not have responded to meeting announcements and other traditional engagement strategies. .

m. What advice would you offer to other communities undertaking similar work?

The relationship between land use, transportation and environmental quality is inherent, but because these issues tend to be regulated by different agencies (sometimes at different levels of government) public coordination occurs far less frequently than it should. (These relationships are even clearer in Elyria-Swansea than most other neighborhoods because of the problems they have caused.) It is the unique role of the urban planner in society to identify these connections and make them plain to stakeholders in the planning process, engage those who do have the authority or influence to affect change, and make recommendations for the good of the community. I would strongly urge the CARE program to include land use in its future projects because of these connections and to exploit the ability of planners to help the stakeholders better understand both their implications about their community today and what they mean for its future.

III. What Next?

a. ***Will members of your partnership continue to work on these issues?*** City staff will absolutely continue to work on this project. As described in the answer to question 2.g, leveraging the CARE grant, the City was able to win another $120,000 federal grant from the Denver Regional Council of Governments (with a $30,000 local match) to conduct more detailed planning in 2009 around the other planned commuter rail station in the area, at the National Western Stock Show in Elyria. That planning project will be folded into the products developed with the CARE grant to create a very detailed small area plan for Elyria-Swansea that is slated to be brought before City Council for adoption in 2009.

b. How will this work be sustained?

After the plan is adopted, city planners will work on zoning and development issues and continue to look for opportunities to implement new infrastructure recommended by the plan. The FasTracks project (in which the City is a partner with the transit agency, RTD) will begin construction of the two commuter rail stations in about two years. Furthermore, as the I-70 EIS makes a recommendation on a final alignment through the area, this plan will inform the City's position.

Photovoice – speaking out through photography

Employed throughout the world, Photovoice is an effective methodology used to give voice to marginalized communities. According to its founders, Caroline Wang and Mary Ann Burris, "Photovoice is a process by which people can identify, represent, and enhance their community through a specific photographic technique. It entrusts cameras to the hands of people to enable them to act as recorders, and potential catalysts for social action and change, in their own communities."

The Technique
Multiple sessions are conducted with an identified group of between10 to 15 people wherein the group learns about the technical aspects of taking photos and then engages in a discussion as to the strengths and issues in their community. They are then given cameras in order to take photos reflecting these strengths and concerns. In subsequent sessions, the group discusses and chooses the photos that most accurately convey their message, each telling stories about the photos they have taken and what they mean. Captions are then written for each photo and an exhibit produced that is presented by the group to appropriate policy makers.

Tapping into What Matters
Photovoice allows communities to tap into what matters in their neighborhoods, encourages discussions of issues in a safe environment, and allows a group to come to a collective vision based on shared experience. It is therefore very conducive to being adapted towards engaging communities on issues of environmental health, environmental justice and environmental quality in their neighborhoods.

In dealing with a population where speaking out is a primary concern, Photovoice also gives people the ability to have the photos speak for them, preserving their anonymity if needed or giving them something to 'hide behind' if they are fearful or uncomfortable with public speaking. Photovoice provides an effective medium through which to empower individuals because if conducted properly, it allows everyone to participate in the process and present at least one of the photos they have taken.

The Challenge: HAND had a concern that the Spanish-speaking residents of Elyria Swansea would not participate in the design Charette and public meetings that would be held by the City

Planners. Although the City always provides translation services, turnout from this community is typically very low.

Employing Photovoice in the Development of the Elyria Swansea Area Plan

In response to this concern, HAND partners suggested that the City set aside a small amount of its outreach funding to conduct two Photovoice projects. The City Planners agreed, and GWD took on the task of identifying appropriate groups to accomplish this task. Partnerships were built with the Swansea Elementary Summer Scholars program and the Cross Community Coalition's youth program to undertake the project. Through these two Photovoice projects, immigrant women in a Summer Scholars English-as-a-Second-Language (ESL) course and teenage girls were able to voice their concerns about gang violence and graffiti in their neighborhood, air pollution from nearby factories, trash in the alleys, overgrown yards, and insufficient playground equipment in the parks. They also conveyed the strengths of their neighborhood including the library, the elementary school, the church and the recreation center. Through photos that they took themselves reflecting issues that they collectively came to agreement on, this project allowed these women and girls to communicate concretely to city officials the ways in which their neighborhood could be safer, healthier and cleaner.

The participants in the Photovoice project were invited to attend the design Charette organized by the City but they declined. They gave GWD permission to display their photos as long as faces were blocked out. Their desire to block out any faces came from a fear that they would be recognized as participants in the project that pointed out the gang activity in the neighborhood.

Examples of Photovoice Conducted by Swansea Summer Scholars Women

The smell from the Purina factory is horrible at 42nd Avenue between Vine and Gaylord Streets. The neighborhood is dirty

The trash in the alley behind the Valdez Perry branch of the library is an issue because it looks bad for the neighborhood. Also, it causes health problems for people.

Examples of Photovoice conducted by Cross Community Coalition Youth

The fence is there but kids still jump over it and there are kids that jump over and play in the train tracks and get hurt.

All the trains near the parks are an issue because people can't hear and also people can't sleep.

SECTION 2.2: LAND USE

2.2.2: Brownfield Assessments

EPA made available, via a Regional contract, up to $50,000 in funds for Phase I Targeted Brownfield Assessment (TBA). The Land Use Committee of HAND saw this as an opportunity to learn more about the toxics in the HAND neighborhoods and to potentially incentivize the redevelopment of key properties to public use.

Site Identified for a new light rail station by the Commerce City Planning Department.

a. Potential Toxics

The historic and current industrial uses of the HAND neighborhoods suggest the potential for toxic contamination including:

- Arsenic
- Lead
- Cadmium
- TCE
- other toxics associated with underground storage tanks and industrial uses.

The brownfield assessment funds would allow HAND to utilize an EPA contractor who could study the sites of interest to inform the community of the presence of toxics.

b. Identifying Sites

Boarded Up Methamphetamine Laboratories like this one in the Cole neighborhoods were included in GWD's inventory of potential brownfield sites.

Given the delay in the Elyria-Swansea neighborhood planning process (which might have resulted in several sites), the HAND Land Use Committee strategized on how to best utilize these assessment funds. Partners identified potential sites that they felt blighted the HAND neighborhoods or sites that could be converted to uses that would benefit the public. With assistance from the City of Denver's Brownfield Office, several sites nearing development were presented to the Committee, but none met the criteria for public benefit. Sites that met the criteria for use of these funds were sought by partnering with the Commerce City planning department, Del Norte Neighborhood Development Corporation (a local non-profit housing developer, and the Trust for Public Land. Using other funds, GWD conducted a more systematic inventory of potential brownfield sites in the Clayton, Sunnyside, Highland, and Five Points neighborhoods. These sites were presented to the Urban

Land Conservancy and other local developers to see if there was interest in working with HAND to assess and improve these sites.

Site Identified in Clayton Neighborhood with the assistance of Clayton Neighborhood Association President, Anthony Thomas

c. Challenges to Utilizing these Funds

The Land Use Committee had several misunderstandings with EPA about how to utilize these funds. At first, we thought that the funds could be used on any site we wanted to explore. This type of survey would have been beneficial for the community in understanding the toxics in their neighborhoods. We soon learned, however, that the Phase I could not be conducted without the permission of the land owner. We also learned that the funds could only be used if there was a likely chance of redevelopment within 180 days. These restrictions meant that we had to refocus our efforts on finding a property that was already slated for redevelopment that could benefit from the assessment funds. We hoped that the contribution of the assessment funds might allow HAND to influence the developer to do more for the community.

d. Oletski Valley

Despite the difficulties in identifying sites that met the criteria for utilizing the assessment funds, several interesting sites were identified for the project. A member of the Land Use Committee contacted a local developer in the search for sites to utilize the assessment funds. The developer notified the Committee of a property in Globeville that might be of interest. The Committee followed up with the Office of Councilwoman Judy Montero and became involved with the Oletski Valley. The Oletski Valley is a patchwork of open land with various owners between 48th Ave and 51st Ave and Logan St and Grant St. The majority of the site was cleaned up as part of the Globeville/Asarco Superfund site. Much of the vacant land is a utility line right-of-way, owned by Xcel Energy. Several other parcels are owned by the City of Denver. The Valley had become a source of contention between the City, Xcel, and the local residents. HAND was asked to help the residents work out a plan for improving the valley. We quickly found out that Brownfield Assessment funds could not be utilized on a former Superfund site. EPA tried to find a way to legitimize the use of the funds on this site, but ultimately could not.

Oletski Valley former Superfund Site

However, utilizing other funds, GWD was able to hire an intern and spend staff time to coordinate work with the Globeville residents and HAND to create a vision for the Valley. GWD and a pro-bono team from the American Planning Association worked with the Globeville Civic Association, HAND, and other stakeholders surrounding the Oletski Valley site on the vision which includes an accessible playground, a loop trail through the site, an outdoor classroom and gathering space, and several infrastructure improvements.

GWD is continuing to work with the stakeholders on the design and the logistics for utilizing and maintaining the site. This project will continue beyond the CARE grant funding with additional funds from the City of Denver and private foundations.

Informal soil testing was conducted in the Oletski Valley to help put the residents at ease regarding the Superfund Cleanup.

e. TPL and the River North Project

The Greenway Foundation with assistance from the Trust for Public Land (TPL) and in conjunction with the City of Denver and the local communities is leading a master planning process for the north end of the Platte River, which runs through several HAND neighborhoods. HAND presented the opportunity to utilize the assessment funds to TPL to support the development of public spaces along the river front. Two projects, Riverside Cemetery and Arkins Court were identified. Stacey Eriksen, a HAND Partner with the City's Brownfield Office, prepared the Targeted Brownfield Assessment applications for these two projects. If accepted, the assessments will occur after the end of the CARE grant. Approval for this was granted by EPA.

<u>Riverside Cemetery</u>

Riverside Cemetery, established in 1876, is Denver's oldest cemetery. More than 67,000 people are buried there, including 1,000 veterans and many notable Denver residents including early territory governors. Riverside Cemetery occupies a 77 acre site on Brighton Blvd that is both in Denver and Adams Counties. Riverside remained the area's most significant cemetery until the mid-20th century, and retains importance for scholars studying the early history of Denver. Today, the neighborhood is largely industrial, surrounded by a gas station, smokestacks, train tracks, and an industrial park, a few blocks from Interstate 70 that is starting to transition to other uses. The cemetery's final grave site was assigned in July 2005 when the management company, Fairmount Cemetery Inc., indicated that they would not accept further burials. The site had no water rights and water from the Burlington Ditch was no longer available after 2003 and costs were prohibitive to connect to City water. Fairmount has stopped watering and cut back drastically on services, claiming that their endowment was not large enough to water the

property and properly maintain all the graves. In 2005, Fairmount approached the city government and requested they take over operation of the cemetery; however, the city was forced to decline due to lack of funds. Local residents, concerned by the dying trees and grass and generally poor state of the cemetery, formed a group, Friends of Historic Riverside Cemetery, to bring public attention to the issue. The site has 13 acres of wetlands adjacent to the South Platte River. A proposal has been made to the property owners by the Trust for Public Land to purchase the parcels. The intent is for TPL to purchase the site and for the site to be managed jointly by the City and County of Denver and Adams County. This use is consistent with Blueprint Denver, River North Plan, and the River North Greenway Master Plan. Benefits include: protecting part of Denver's history; protecting 13 acres of wetlands adjacent to the South Platte River, which provide water quality improvements; and maintaining the area as open space for the community. A brownfield assessment will ensure protection of human health and the environment and resolve any all appropriate inquiry requirements for Trust for Public Land.

Arkins Court

3728 Arkins Ct, consists of three parcels along the Platte River. The parcel area totals 21621 ft^2 with one house built in the late 1800s on the site. A proposal has been made to the property owners by TPL to purchase the parcels. The intent is that TPL will purchase and later sell to the City and County of Denver for a small pocket park. This use is consistent with Blueprint Denver, River North Plan, and the River North Greenway Master Plan. The benefits include providing a park for an area that is becoming residential and doesn't have many parks; and providing a pocket park in an area adjacent to the South Platte River that will contribute to overall water quality improvements.

f. Momentum for the Project

It was difficult to keep the momentum for this project because of the aforementioned challenges to utilizing the funds. GWD secured a small amount of additional funding to hire an intern who could focus on the brownfield issue and work with the Globeville residents. Without specific staff funding for this project, it would have been unlikely that HAND could have utilized these assessment funds.

g. Outputs

The main outputs of the project were:

- Number of potential brownfield sites identified: 40
- Community members engaged: 10
- Partners (HAND and non-HAND partners) engaged: 10

h. Outcomes

The most significant outcomes of the project include:

- Vision document for the Oletski Valley. This will be used to guide the project forward.
- Capacity building for HAND partners on the use of brownfield assessment funds and brownfield issues in general.

- Two sites will be tested (Riverside Cemetery and Arkins Court) which will help reduce the costs and facilitate the purchase and development of the sites as a park and open space.

II. Reflection on Brownfields Project

a. How likely is it that the progress achieved could have been made without your CARE partnership?

The CARE funds provided the impetus for HAND partners to explore the issue of Brownfields in our community. Without the opportunity of these funds, it is very unlikely that HAND would have been involved with the Globeville community members or TPL.

b. What do you consider your project's greatest achievement?

The greatest achievement of this project was to assist the Globeville community develop a vision for the Oletski Valley.

c. What was your greatest challenge and how did you deal with it?
See above regarding the challenges in utilizing these funds.

d. What would you do differently next time in terms of organizing and structuring your partnership to achieve your project objectives?

NA

e. How might you have been more strategic in designing or implementing your project?
We would have budgeted staff time to coordinate and implement this part of the HAND project.

f. If you chose to create one, did you find using a logic model or other goal-driven model helpful? Please explain. Did the model change over time? If so, how? NA

g. To what extend did your CARE community communicate or engage with other CARE communities and how was that interaction helpful? NA

h. Did media coverage play a role in your project? If so, please explain. No.

i. In what ways did you rely on EPA for assistance (assessing risks in your community, conflict resolution, partnership support, voluntary programs, such as Tools for Schools or Pollution Prevention)?

EPA played a very significant role in this project by providing support on the appropriate uses of the Brownfield funds. Stacey Eriksen (EPA staff on loan to the City of Denver) helped HAND identify potential sites and draft the TBA application, and provided technical support overall.

j. What role did your Project Officer and other EPA staff play in your work? What would you have liked more of or less of? See i above.

k. To what extent do you think that this project increased the capacity of your organization? Your partnership? Your community? Please provide examples.

Land Use Committee members learned a significant amount about Brownfields and TBA funding. The capacity for identifying and assessing potential brownfield sites is now embedded in the knowledge base of GWD and FREF, the two community partners on the Land Use Committee.

l. Did your project produce any new "community leaders?" Please describe.

Four residents of Globeville have agreed to form a steering committee to further the vision for the Oletski Valley.

m. What advice would you offer to other communities undertaking similar work?

- Find out the full scope of the restrictions for utilizing brownfield assessment funds before attempting to identify sites.
- Work with local leaders to identify the sites that could impact the community the most.

n. Reflection on EPA decision to limit Brownfield funding to Level 1 Grantees

It is our understanding that EPA has decided to limit the access of Brownfield assessment funding to CARE Level 1 Grantees as they are more likely to be in the assessment phase of the project. As described in the first part of this section, there were many challenges with utilizing these assessment funds. I would imagine that some CARE projects would run into these challenges while others may not. Some may have a partner ready to develop a parcel that is in the perfect stage for a TBA. Others, like HAND, may be continuously examining land use opportunities that might ultimately be able to utilize a TBA. The phase of the CARE project (e.g. Level 1 vs Level 2) does not seem to be the indicator as to whether these challenges will be too great to allow the funds to be utilized. For example, a Level 1 grant may identify the need for more parks, but it may not be until well into the Level 2 project that the location for the park can be identified and the purchase agreement can be made to make use of a TBA.

III. What Next?

a. Will members of your partnership continue to work on these issues?
GWD will continue to work with the Globeville residents on the redevelopment of the Oletski Valley. .

b. How will this work be sustained?
GWD has sought funding to continue the work in the Valley. $40,000 has been approved by the City for engineering analysis and design work.

c. If neither your organization nor the members of the partnership plan to continue the work, please describe why. NA

d. Describe a continuing or next source of funding you have for your work or other groups in your community that have continued the work and have found funding. See b. above.

SECTION 2.3: DIESEL AND POINT SOURCE POLLUTION PREVENTION

The primary purpose of the diesel and point-source pollution prevention project was to reduce cross media impacts from small businesses on residents of low income and minority communities in North Denver. Potential environmental and health problems that arise from these businesses come in the form of increased smog and particulate matter that are potential causes of asthma, and the improper disposal of waste that contaminates land with the potential of reaching the groundwater. Residents in North Denver are continually exposed to pollution that negatively impacts their health on a daily basis. Trucks from nearby diesel fleets emit large amounts of pollutants in close proximity to residences. Improper pollution prevention practices by auto repair shops adversely impact the surrounding neighborhoods and contribute to degraded air and water quality

a. What toxic risks did your project address?

Diesel exhaust is known to contain numerous toxic air contaminants. These include:

- Arsenic
- Acetaldehyde
- Benzene
- Inorganic lead
- Manganese compounds
- Mercury compounds
- Methanol
- Phenol
- Cyanide compounds

Diesel engines exhaust about 100 times more particulate than gasoline engines for the same load and engine conditions. Several studies have found that fine particulate matter is correlated with asthma and other respiratory diseases.

Many toxics are utilized in the daily operations of auto repair shops. The table on the following page documents several of these toxics and their typical use in an Auto Repair Shop:

Toxic or hazardous substance	Product or Purpose in Auto Repair Shop
ethylene glycol, nitrites	antifreeze
Glycol ethers. Benzene, lead, and other heavy metals.	Brake fluid. (benzene, lead, and other heavy metals can be found in used brake fluid).
methylene chloride	Carburetor cleaner
Mercury	Switches in hood and trunk lighting assemblies
Asbestos	Brake Linings
Lead	Lead wheel weights, battery cable ends, radiators, heater cores, steering columns, soldered parts, batteries, and electronic components.
F-listed solvents such as methylene chloride, tetrachloroethylene, xylene, carbon tetrachloride, chlorinated fluorocarbons, 1,1,1-trichloroethane, trichloroethylene and acetone.	Degreasing agents; paint stripper.
methyl ethyl ketone and chlorinated compounds	Metal surface cleaning solvents
1,2,4-trichlorobenzene	Solvent and dielectric fluid, a degreaser, and a lubricant
Diisocyanates	Automotive finishes
1,1,1-trichloroethane or perchloroethylene	Parts cleaners

b. What toxic reduction strategies did you pursue?

The diesel and auto repair projects used a strategy of direct education and support for small businesses in the form of one-on-one shop visits that included a survey of existing conditions and individually tailored follow-up information. Initial interviews were conducted to determine the needs and interests of the business managers or owners. These initial interviews were utilized to adjust the approach or develop additional materials that could best impact these businesses. Specific strategies are described below.

Diesel Fleet Outreach

The initial focus of the diesel outreach was to assist small fleet owners in the maintenance and repair of fleets. The subcommittee expected that proper maintenance and repair of these small fleets would provide the opportunity to reduce emissions and increase property disposal and storage of fluids. After several visits, it became clear that many of these small fleets outsourced their maintenance and repair operations and that this was not the main interest of the fleet managers. This observation required us to change the nature of the interviews from being focused on maintenance and repair, to being more encompassing of fleet safety best practices, the use of alternative fuel vehicles for a fleet environment, and retrofit options for emissions and idling reduction. The strategy evolved to conducting an initial interview, presenting issues of safety, alternative fuel vehicles, and retrofit options. Follow-up visits were made to provide additional information specific to the needs identified during the surveys.

Auto Shop Outreach

The method in which the auto shop business pollution prevention project was conducted consisted of several steps. The project was introduced to the owners and managers of the shops

by speaking with them directly and detailing the purpose of the project. If the owner or manager agreed to participate in the program, Ray Ribota would ask him a list of questions from a survey to understand how the shop functioned.

The second visit consisted of educating the shop managers about environmental regulations as well as the importance of industrial hygiene to protect the health of the shop's employees. The video provided from the Boston Safe Shops was shown to the shop manager and employees on a laptop, and questions were then taken from those who saw it. The Safe Shop Toolkit from the Boston Safe Shops program was described and a copy was given to the shop. The business visited also received a listing of different environmental regulations that was compiled from the Boston Safe Shops and Denver Environmental Health (DEH).

Additional follow up visits were conducted as needed. Of these follow ups, many were done to help the business directly reduce environmental impacts, such as providing information on alternatives to toxic substance used in the shop, providing MSDS for specific products, or setting up the business with fluids recycling and waste management services.

c. How did you reach agreement on implementation decisions

The diesel subcommittee developed the original work plan and oversaw the implementation of the projects. Shaun Per reported back his findings from the first several businesses to the diesel subcommittee to make changes and adjustments as needed. He continued with the next ten shops, again submitting reports to the subcommittee for approval and comments. Ray Ribota worked closely with subcommittee partners in developing the outreach protocol for the auto repair shops. He contacted partners directly for assistance or to make minor changes as needed.

d. Did you reshape your partnership in any way to address strategy implementation?

There was a slight restructuring in the staffing of the project. The original intent was to hire two people at 0.7 FTE. Each would be responsible for his/her business area (diesel outreach or auto repair outreach). In interviewing people for the jobs, it became clear that Shaun Per would bring an extraordinary amount of expertise to the project in a consultant role. The staffing was, therefore, restructured to hire Mr. Per as the primary consultant and then to hire a member of the target community as an intern. The benefit to this structure was that the project would have the expertise of Mr. Per, but also build capacity in the community for addressing this type of environmental hazard. Ray Ribota was hired as the intern. He is fluent in English and Spanish, a graduate student in Environmental Studies, and a long-time resident of one of the target neighborhoods.

e. What outside resources (e.g., people, programs, approaches, etc.) were most important to your project?

Diesel Fleet Outreach

HAND chose to hire Shaun Per to organize and conduct the majority of the Diesel Fleet Outreach. Mr. Per has extensive background working with business practices of small fleets in Commerce City and Denver. He brought expertise as well as business contacts to the project.

Many additional resources were utilized in order to respond to the needs of the diesel fleet owners. Assistance was acquired from the EPA, the City of Denver's Environmental Health Department (DEH), the Regional Air Quality Council, and a local diesel mechanic. Gregg Thomas and Matthew R. Marshall of DEH provided information on idling and data on retrofitting technologies. Mr. Marshall also provided the assistance in designing the diesel fact sheet that was used to introduce the program in the visits to the diesel fleet businesses. The Regional Air Quality Council provided information and resources on retrofits to minimize the air emissions generated by the diesel fleets. Randy Richardson, a diesel mechanic for more than twenty five years, provided information on diesel engines and their efficiency. The CDPHE representatives Kirk Mills, Phyllis Woodward, and Patrick Hammel also were helpful in providing additional advice, support, and ideas for the project.

Auto Repair Shop Pollution Prevention

Visiting the Boston Safe Shops program was critical to our ability to get this program off the ground in Denver. The Boston Safe Shops is a project implemented by the Boston Public Health Commission that conducts community-based outreach to auto repair and auto body shops in Boston, Massachusetts. The Boston Safe Shops provided education, training, and other materials that were beneficial to the auto shop outreach. Early in the project, Ray Ribota visited the Boston Safe Shops program to gain first-hand knowledge of the program operations, resources, and day-to-day activities. The Boston Safe Shops provided Ray with essential information on how to approach these small shops with useful and relevant information. Ray directly utilized materials from Boston Safe Shops including the Safe Shop Toolboxes (a series of laminated informational materials), a video on pollution prevention, and outreach surveys. Boston Safe Shops also provided critical information on what types of environmental issues might be likely in these shops. The final survey used in the project was developed by combining questions used from the Boston Safe Shops program with specific concerns provided by DEH.

f. Was there any environmental issue that EPA seemed to lack the tools or means (e.g., Partnership Programs, data tools, other expertise) to address? If so, please describe the situation or need you had.

Much of the expertise for the diesel and auto repair pollution prevention outreach came from outside of EPA. We relied on the Boston Safe Shops program, the Regional Air Quality Council, and Denver Environmental Health for this information.

It became apparent from the client feedback that many fleet managers are clamoring for further information on alternative fuel vehicles (AFVs). The two biggest questions they have regarding AFVs are:

1. What types of AFVs are available for purchase for a fleet environment? (i.e. pickup trucks, box trucks, semi tractors, tractor/trailers, step vans, flatbed trucks), and

2. What are the most effective types of alternative fuels for a fleet environment, where vehicles are required to carry or tow a lot of weight, or work in tough conditions with a lot of dirt and grime?

It is difficult and time consuming for these fleet managers to find answers to these two questions, so they tend to place their review of AFV's for their fleet environment on the backburner. To speed the adoption of alternative fueled vehicles in small commercial/heavy-duty fleets, clear and concise information with answers to the two questions above must be developed and disseminated. This information must also remain current in the rapidly changing environment of alternative fueled vehicles.

g. How did you build momentum over the course of your project? Did you secure any "early wins" to help build momentum? Did you look for additional funding early on? What was acquired?

Much of this project was in the hands of the consultant and intern, with reporting back to the subcommittee. The project had a quick start with Shaun Per reaching out to his business contacts. Unfortunately, the project then had a break in momentum while the committee was charged with hiring the intern. The momentum again picked up when GWD took responsibility for advertising and hiring the intern. Ray Ribota was selected by the HAND committee and hired by Groundwork Denver on behalf of HAND and the momentum was regained for the diesel outreach and the auto repair shop outreach.

h. What were the significant outputs of your project (meetings held, materials developed, people trained, etc.)?

The main outputs of the project were the number of diesel fleets and auto shops participating in the project. Additionally, outreach materials and final reports were developed for each project.

Diesel Fleet Outreach Outputs

63 fleet businesses contacted
30 fleet businesses participating in the survey
15 fleet businesses accepting follow-up information and support on safety, retrofit options, and alternative fuel vehicles.
30 reports prepared documenting the fleet business operations and needs
Fact Sheet developed
AFV package of information developed
Final report prepared

Auto Repair Outreach Outputs

41 auto repair businesses contacted
21 auto repair businesses participating in the initial survey
16 auto repair businesses accepting follow-up information and support on MSDS, oil recycling, and alternative less-toxic products.
Survey developed
Final report prepared

i. What were your project's most significant outcomes (changes in policy, behavior, and practice, e.g., auto shops' shift to less toxic materials, ban adopted on school bus idling, change in local agencies' policy or procedures, school district commitment to IPM for pest control, etc.)?

Diesel Outreach

While we had hoped that during the timeframe of the project we would have seen the adoption of specific changes (e.g. retrofits, changes in safety or maintenance practices, purchase of AFVs), this did not occur. We did, however, gain a much greater understanding of the needs of this sector which will help project partners move forward with the development of a longer-term project that we believe will have the desired results. In developing the next phase of the project, we have gained the following invaluable information:

Access to the smallest of fleets is difficult due to lack of a business address (many operate out of residences) and language and/or cultural barriers. Ideas to address this issue include:

- Seek the involvement of a respected community leader or activist, someone that can make an introduction to these operators and provide them with a compelling reason for a meeting.
- Hire and train someone with skills in the languages expected in the neighborhoods.
- Seek out businesses through a more direct approach of canvassing the desired neighborhoods during hours that owners are more likely to be on site.

A further need identified in the project was to provide the interviewed fleet companies with more specific information on alternative fuel vehicles. Many of these companies are interested in investigating the use of alternative fuel vehicles in their fleets. However, they don't know where to go in order to receive clear and concise information regarding these types of vehicles. Many of these companies tow trailers or transport goods with a heavy payload, so they are concerned that the current crop of alternative fuel vehicles can't cope with carrying or towing this amount of weight. Being able to provide these companies with information that speaks specifically to the suitability of alternative fuel vehicles may result in direct environmental improvements in a future program.

Auto Repair Outreach

As in the diesel outreach project, one of the most significant outcomes of this project was for the project team to gain a better understanding of the needs and interests of this sector. This information will help us move forward in developing a longer-term project that will result in direct environmental outcomes. The following valuable information was gained:

- Lack of MSDS, lack of cleanliness, and improper storage and recycling of fluids were the three biggest areas of concern identified.
- Information on fluids recycling and pickup was not readily available to Spanish-speaking managers and owners.
- Several shops expressed fear or unease with participating in the project due to distrust that HAND would "turn-in" the business to inspectors or regulators. This highlights the

need to build long-term relationships with these businesses and to maintain "arms length" between the regulators and the organization charged with the project.

Several shops expressed interest in a free health screening for their employees. This is a service provided by Boston Safe Shops as an incentive for participating in the project. Groundwork Denver is pursuing options to deliver such a service to participating shops in the future. Two shops did institute oil and filter recycling as a direct result of this project. Both shops now have their waste oil picked up and recycled, as well as the oil filters that were previously thrown in the dumpster and sent to the landfill. The shop, 'Los Amigos' took the additional step of purchasing an oil storage tank. As a result of the recycling aspect of the business outreach, there are two new shops, Los Amigos and Jr. Auto Repair that now reduce their waste and are now less prone to violating OSHA and environmental regulations.

j. What specific reductions in environmental risks did your project achieve?

We do not know of any specific reductions in environmental risks that resulted from the diesel outreach. We are seeking additional funds for this project to be able to build upon the relationships developed, follow-up with more information, and evaluate whether changes were made as a result of the project.

Two auto repair shops entered into agreements with a local company to have their waste oil and oil filters picked up for recycling. They were provided with barrels and instructed on how to keep the oil free of solvents (oil mixed with solvents results in hazardous waste and cannot be recycled). These shops will now recycle approximately 15 gallons of oil and 20 filters per month.

k. Were there differences between your original plan and what actually occurred in your project? Did you achieve your objectives? Please explain. What objectives were not met and why?

Diesel Fleet Outreach

The initial focus was to target companies that might not currently be subject to environmental permitting and have not had interaction with any pollution prevention subjects previously. The initial strategy was to target micro or small fleet operators, because these types of fleets were deemed most likely to be "worst offenders" for environmental concerns and fleet maintenance, largely due to not having a dedicated fleet manager or environmental health and safety staff. After initial client visits to these companies it was noticed that several of the companies were no longer in business, or had scaled back their fleet operations to such a degree that they were no longer a viable candidate for participation in the project. Another issue in targeting the originally identified fleet companies was that initial surveys suggested that even the smaller fleets on the list were following an adequate process for fleet maintenance and repair services, largely because they outsourced maintenance and repair to independent facilities. This reduced the environmental impact of their fleets, and lessened the likelihood that these companies were "worst offenders"

for emissions and hazardous waste management. This was a drastic departure from what we expected to find when we interviewed these small fleet companies. This required us to change the nature of the interviews from being focused on maintenance and repair, to being more encompassing of fleet safety best practices, the use of alternative fuel vehicles for a fleet environment, and retrofit options for emissions and idling reduction.

A small change in the work plan was also made to allow HAND members to take advantage of the local conference of the Rocky Mountain Clean Diesel Collaborative. RMCDC is a group of federal, state, and local governments and non-governmental organizations designed to promote clean diesel practices throughout Colorado and other Region 8 states. HAND diesel subcommittee members, Charlie Chase and Gregg Thomas, presented a plenary session at the conference to involve business and fleet managers in a hands-on exercise to identify best techniques to convince businesses and fleets to participate in the diesel fleet outreach program.

The Auto Repair Shop Outreach proceeded as planned.

In the end, we visited 104 businesses, engaged 51 in initial surveys, and provided follow-up information and services to 31. This met the goal of the project. In the end, however, we did not meet the objective of achieving quantifiable pollution prevention during the timeframe of the grant (except in two auto repair shops). We underestimated the effort that would be required to build the trust and relationships to achieve these goals, and the timeframe required to see changes in operations. We are seeking additional funds to continue this project to allow this additional relationship-building, support, and evaluation of the project.

l. What other resources (not already covered in your discussion of your partnership or outside resources above) did your project mobilize, both financial and in kind?

RACQ provides rebates for diesel truck fleets to install pollution reduction technologies. The RACQ rebate pays for the technologies, but the fleet owner must pay for the installation. The diesel outreach included information on this opportunity. We found that most of the companies did not know about this opportunity. Many seemed interested in the idle reduction technology, but were not at a point that they could immediately invest in the installation of the technology.

II. Reflection on Diesel and Point Source Pollution Prevention

a. How likely is it that the progress achieved could have been made without your CARE partnership?

While these ideas had been of interest to the City for several years, the CARE partnership finally brought together the various stakeholders that were needed to start these pilot programs. The funding allowed us to visit the Boston Safe Shops program and bring that expertise to Denver, and to hire a diesel expert to start the diesel fleet outreach program.

b. What do you consider your project's greatest achievement?

The greatest achievement of this project was to successfully connect with small businesses that potentially contribute significantly to neighborhood-level toxics but are typically "under the radar" with regard to local and federal regulations. We learned important information about these two sectors that will be invaluable for moving ahead with programs that result in environmental

outcomes. Providing the internship opportunity and a new skill set to a community resident met the important goal of increasing community capacity.

c. ***What was your greatest challenge and how did you deal with it?***

The greatest challenge for this work was to achieve pollution prevention reductions within the planned two visit schedule for each shop. We learned that relationship building, technical assistance, and evaluation will take much more effort than two visits. Achieving real results in a sector that is not used to this type of attention and may not have economic resources at hand, will take a longer term, more intensive program. In the auto repair shop sector, we took a much more intensive approach to achieve the oil recycling changes in two shops. Ray made multiple visits to the shop, set up meetings between the shop owner and the oil recycling companies, translated marketing and contract materials to Spanish, translated conversations between the oil recycling company and the shop owner, and followed up to ensure that the recycling barrels had been delivered. This similar approach would be necessary to build the trust and provide the technical support to achieve results among all of the businesses.

d. ***What would you do differently next time in terms of organizing and structuring your partnership to achieve your project objectives?***

As with the other HAND projects, a subcommittee was assigned to oversee the completion of the projects. In the case of the diesel and point source pollution projects, the subcommittee was charged with several key tasks, including hiring and overseeing the consultant and the intern who would accomplish most of the work. Over the grant period, several of the key members of the subcommittee either lost interest in the project or had changes to their job descriptions which made it difficult to commit the time needed to move this project forward. HAND had no structure in place to continually engage more partners or to deal with this type of attrition. (This problem is described in more detail in Section 3: Reflections). This subcommittee structure and lack of accountability resulted in some challenges in moving this project forward. For example, the project was stalled for over six months waiting for the hire of the community-based intern. Potential solutions to this problem include dedicating a paid subcommittee chair, who is responsible for ensuring these tasks are completed, authorizing the program manager to complete tasks of the subcommittees, or empowering the steering committee to track accountability might have improved the situation. Again, the Reflections section talks about this problem overall for the HAND projects.

e. ***How might you have been more strategic in designing or implementing your project?***

In hindsight, we can see a few changes that may have resulted in more environmental outcomes. However, the project as it was designed, was very useful in helping us gain an understanding about the shops and businesses that we didn't previously have:

- Focusing on one or two outcomes for each sector, such as increasing oil recycling in the auto repair sector, may have been more manageable and had more tangible results.
- Allowing for more time with each shop, rather than aiming for a larger number of shops, would have helped us build the relationships and provide the technical support that may have resulted in more environmental outcomes.

f. ***If you chose to create one, did you find using a logic model or other goal-driven model helpful? Please explain. Did the model change over time? If so, how?*** NA

g. ***To what extend did your CARE community communicate or engage with other CARE communities and how was that interaction helpful?***

The Boston Safe Shops program was funded through a CARE Level II grant. Also see Section I.e.

h. ***Did media coverage play a role in your project? If so, please explain.***

No. We did not have media coverage for the diesel and auto repair shop projects.

i. ***In what ways did you rely on EPA for assistance (assessing risks in your community, conflict resolution, partnership support, voluntary programs, such as Tools for Schools or Pollution Prevention)?*** NA

j. ***What role did your Project Officer and other EPA staff play in your work? What would you have liked more of or less of?***

Our project officer reviewed the progress of the project, provided input as necessary and served as a member of the diesel subcommittee. During the first six months of the project, the subcommittee considered focusing entirely on diesel fleets. The EPA PO made available current Dun and Bradstreet information which showed that focusing on both diesel fleets and auto repair shops would be more appropriate.

k. ***To what extent do you think that this project increased the capacity of your organization? Your partnership? Your community? Please provide examples.***

This project allowed one of the partner organizations, Groundwork Denver, to enter into a completely new area of community-based environmental work. With this project completed, we feel confident in moving forward to seek additional funds for this type of work. This project also allowed Ray Ribota to develop some expertise in this area. As a long time resident of North Denver, Ray has brought new capacity to the community. It is GWD's intent to continue to employ Ray after the end of the project.

l. ***Did your project produce any new "community leaders?" Please describe.***

Ray Ribota, a long-time resident of the HAND communities was able to gain new expertise in health, safety, and environmental issues surrounding auto shops. As a student of Environmental Studies with an emphasis in health, this experience provided him with significant professional development.

m. ***What advice would you offer to other communities undertaking similar work?***

- Don't underestimate the time it takes to build relationships and gain trust with these types of businesses.
- Seek advice or training from other similar projects, like the Boston Safe Shops program.

- Hire people with the language skills necessary to engage the businesses.
- Hire people who are willing to approach businesses at unusual hours, in residential environments, and without appointments.

III. What Next?

a. Will members of your partnership continue to work on these issues?
GWD and DEH have discussed the desire to seek additional funds to continue to work on this project.

b. How will this work be sustained?
We will have to find funding to sustain staff to continue this project

c. If neither your organization nor the members of the partnership plan to continue the work, please describe why. NA

d. Please describe a continuing or next source of funding you have for your work or other groups in your community that have continued the work and have found funding.
We have not yet found an appropriate funding source

SECTION 2.4: SCHOOL – COMMUNITY - BUSINESS PARTNERSHIP PROJECT

Due to cost-savings in the project work plan, it became clear that approximately $20,000 was available to conduct additional community outreach that achieved the goals of HAND. GWD and FREF proposed to utilize a school serving the HAND neighborhoods as the focal starting point for community outreach for the remainder of the grant. FREF would work with the students on environmental issues within the school and then GWD, FREF, and the students would extend the reach from the school into the community, enlisting local business and families in the young people's initiatives while also providing them with technical assistance to prevent and reduce pollution in their business practices. The focus of the project was the City of Denver's Climate Action Plan which strives to reduce the city's greenhouse gas emissions. Skinner Middle School, which serves young people from several North Denver neighborhoods, was the main focus for the project.

a. What toxic risks did your project address?

The project aimed to reduce energy use in the home and increase proper disposal of household hazardous waste.

Electric power plants are known to produce the following toxics:

- Mercury
- Lead
- Arsenic
- Chromium
- Dioxin
- Sulfuric Acid
- Radionuclides
- Beryllium
- Selenium

Household hazardous waste often contains pesticides, fertilizers, cleaners, personal care products, batteries, fluorescent light bulbs, paints, and chemicals. Many of these projects contain toxic substances including:

- Mercury
- Lead
- Silica
- Toluene
- Formaldehyde
- Organochlorines
- Phthalates
- monoethanolamine
- Other carcinogens, endocrine disruptors, and neurotoxins

b. What toxic reduction strategies did you pursue?

We worked with students and families to reduce energy use in the home and to understand proper handling and disposal of household hazardous waste.

FREF supported teachers and students in setting up projects that would address these issues at schools in the HAND areas. During the summer, work involved ongoing training and support to ensure the sustainability of this effort at those sites. Once the school year started, FREF supported teachers in implementing service learning opportunities for their students. At Skinner, FREF worked with several teachers to engage the students around the climate action plan and the energy audit partnership.

GWD utilized its Porch Bulb Project strategy to identify families in the HAND area that would be interested in reducing energy use and greenhouse gas emissions. In this strategy volunteers go door-to-door and offer to swap out front porch lights from incandescent to compact fluorescent bulbs. For residents who agree, the bulb is swapped out by the volunteer, providing an immediate benefit to the resident through measurable energy and cost savings. This straightforward action opens the door to a more in-depth conversation about energy savings in the home. For those who are interested, a second appointment is made for a trained energy specialist to perform the energy audit, make low-cost improvements, and educate the occupant about simple energy saving measures that can be made in the home.

c. How did you reach agreement on implementation decisions

GWD and FREF worked together to accomplish the goals of this project.

d. Did you reshape your partnership in any way to address strategy implementation?

The initial proposed plan included a project timeline beginning in April 2008, when the Skinner students would be able to share their environmental projects with the community. This project was in addition to the original work plan for the CARE grant. Finalizing the work plan and budget took longer than expected simply because it required determining final cost allocations of all of the ongoing projects. This delay led to a necessary reorganization of the project with an attempt to engage students and families attending summer activities at the school and then a re-engagement of the students in the fall. GWD adjusted its community outreach approach to focus more on families rather than businesses. The family participants could be engaged in summer and then connected to the students' work in the fall. The concept of the business engagement was reliant on connecting the work of the students to the businesses. GWD felt it was not workable to reverse the order of this part of the project. While this reorganization impacted the interaction between the students and the community in the short term, FREF and GWD are working together beyond the grant period (with other funding sources) to build the relationships intended by this project.

e. What outside resources (e.g., people, programs, approaches, etc.) were most important to your project?

GWD utilized materials developed under a project funded by Energy Outreach Colorado (EOC). EOC funds were also utilized to implement real energy savings measures in the homes of the participating families. The City of Denver has a free household hazardous waste pickup program.

This program was promoted to the participating families. The EPA Energy Star materials were very useful in the development of the business outreach program.

f. Was there any environmental issue that EPA seemed to lack the tools or means (e.g., Partnership Programs, data tools, other expertise) to address? If so, please describe the situation or need you had. No.

g. How did you build momentum over the course of your project? Did you secure any "early wins" to help build momentum? Did you look for additional funding early on? What was acquired?

Due to the timing of this project being impacted by summer vacation, it was difficult to gain momentum at first. We adjusted our work plan to achieve the goals of the project despite the difficult timing. GWD utilized the assistance of the NCCC Summer of Service to conduct the community outreach that led to the family participation. This assistance built the momentum for achieving the project goals.

NCCC Summer of Service helped residents of Chaffee Park reduce energy use and greenhouse gas emissions.

h. What were the significant outputs of your project (meetings held, materials developed, people trained, etc.)?

Outputs:

- Community events held: 5
- Youth and adults reached at community events: 2300
- Teachers trained: Skinner staff that were trained and offered this opportunity = at least 15
- Students engaged in projects: 66
- Families engaged in energy savings (porch bulb swap): 86
- Home energy audits conducted: 31
- Business audits conducted: 2
- Student home inventory developed
- Business audit and toolkit developed

i. What were your project's most significant outcomes (changes in policy, behavior, and practice, e.g., auto shops' shift to less toxic materials, ban adopted on school bus idling, change in local agencies' policy or procedures, school district commitment to IPM for pest control, etc.)?

	Number	CO_2 reduction (lbs)
CFLs installed during outreach	86	10320
Number of CFLs installed (in addition to porch bulbs)	119	14280
Number of units where H2O pipes were insulated	22	1544
Number of units where H2O Heater Adjusted	13	6540
Number where programmable thermostats installed	4	2761
Number of power strips installed	2	689
Number of low-flow shower heads installed	1	416
Signed up for recycling	13	15964
Need Household Hazardous Waste pickup	14	NA[1]
Educators trained to engage youth in environmental issues	15	
Youth participating in a wide range of environmental projects, including introduction to energy issues at home and school.	66 during project, 15 to date in current school year	
School projects: Initiating and supporting recycling at the school Working to better manage traffic (idling and congestion) around the school Energy conservation Water quality and conservation (with at home outreach) Grounds beautification		

j. What specific reductions in environmental risks did your project achieve?

See table in section g for reduction in terms of CO_2 emissions. Other associated toxics from power plant emissions will also have been reduced due to reduced energy use.

k. Were there differences between your original plan and what actually occurred in your project? Did you achieve your objectives? Please explain. What objectives were not met and why?

See section c that describes the change in focus to more family outreach and fewer business participants. We worked with 31 families instead of 20 and 2 businesses instead of 10.

***l. What other resources (not already covered in your discussion of your partnership* or outside resources above) did your project mobilize, both financial and in kind?** NA

II. Reflection on School-Community-Business Partnership Project

a. How likely is it that the progress achieved could have been made without your CARE partnership?

This allowed Groundwork Denver and FREF to explore the concept of bringing the school, community, and businesses together to work on environmental projects. While the timing prevented us from fully achieving this goal, especially on the business end, we were able to develop a methodology that can be used in the future.

b. What do you consider your project's greatest achievement?

The greatest achievement for this project was to engage so many families in energy and greenhouse gas emissions reduction. 86 families received direct implementation of at least a CFL porch bulb. 31 families received significantly more services that will result in measurable reductions on their energy bills. The importance of this strategy is that families who may not be interested in climate change issues see the direct benefit of energy bill savings while achieving climate change reduction goals.

For FrontRange Earth Force, this project provided us an opportunity to use several strategies to engage the community and really look at how do we "go deeper" in school communities. We learned quite a bit about estimating levels of engagement. For example, the age-old assumption that "going through the students" will get us to the parents" is not a foolproof strategy, at least with middle school aged students. Likewise, we had expected the partnership with the school's neighborhood center to serve as a strong gateway to the community. While the partnership provided significant inroads for the program, it was not at the scale we had assumed it would be coming in to the project.

c. *What was your greatest challenge and how did you deal with it?*

The timing of the project with regard to student vacations was the greatest challenge. We dealt with it by altering our community outreach strategy.

d. *What would you do differently next time in terms of organizing and structuring your partnership to achieve your project objectives?*

We would start the project earlier so as to engage the students in the spring semester.

e. *How might you have been more strategic in designing or implementing your project?*

GWD should have moved quicker in approving the final budget for the project so as to allow for earlier engagement of the students. This project was an addition to the initial work plan, and was possible because of other projects coming in under budget or reallocating funds. The final budget was a moving target until it was clear what the final expenditures of the ongoing projects would be.

f. *If you chose to create one, did you find using a logic model or other goal-driven model helpful? Please explain. Did the model change over time? If so, how?* NA

g. To *what extend did your CARE community communicate or engage with other CARE communities and how was that interaction helpful?* NA

h. ***Did media coverage play a role in your project? If so, please explain.***

No. We did not have media coverage for the project.

i. *In what ways did you rely on EPA for assistance (assessing risks in your community, conflict resolution, partnership support, voluntary programs, such as Tools for Schools or Pollution Prevention)?*

The Region 8 officer for Energy Star provided us with significant resources on business energy efficiency and audits.

j. What role did your Project Officer and other EPA staff play in your work? What would you have liked more of or less of? Review and approval of the work plan.

k. *To what extent do you think that this project increased the capacity of your organization? Your partnership? Your community? Please provide examples.*

This project increased the capacity of Groundwork Denver in that is allowed us to experiment with this method of reaching out to the community through the Porch Bulb Project and then extend the service to full environmental audits. This method has already been adapted for a collaborative project that includes Groundwork Denver, Mile High Youth Corps, Sun Power, Greenprint Denver, and other City partners to deliver the same type of service to the entire Sunnyside neighborhood.

The project also provided Groundwork Denver with the opportunity to develop a business audit methodology. While this was not used extensively in this project, GWD will use it moving forward with a service provided to small businesses in the community.

This project encouraged FREF to reach into other parts of the Skinner school community (i.e., the neighborhood center) to extend our support for youth engagement. As a result, we have been able to train the center's staff in strategies that are more oriented to supporting youth leadership in their after school offerings.

l. Did your project produce any new "community leaders?" Please describe.

Yes. Several student leaders have emerged from this work. One of them now serves on FrontRange's Youth Action Board.

m. What advice would you offer to other communities undertaking similar work?

- Summer is a difficult time to engage students unless one is running a program that has explicitly recruited the young people. For example, building in service work for the AmeriCorps NCCC Jr. program worked well. We tried to fit the energy outreach program into the summer programming in place at the Skinner Neighborhood Center with much less success. Have a Plan B: having the business outreach hinge on the student program meant

that we had difficulty generating that outreach without them. We would have been better off to have had that piece linked less closely.

III. What Next?

a. Will members of your partnership continue to work on these issues?

GWD, DEH, Greenprint Denver and other partners have just finished a pilot project that utilized the outreach strategy honed in this project. This collaborative effort will continue into the future.

GWD and FREF are committed to work with the families of the students engaged at Skinner Middle School. Students were given a home energy audit to complete with their family. Participating families have been offered a free home environmental audit by GWD to enhance the work completed by the students.

FREF continues to support energy use as part of its Greenprint Schools Initiative that incorporates the audit developed through this partnership.

b. How will this work be sustained?

GWD and Greenprint Denver are seeking funds for the neighborhood outreach portion of the project. FREF will continue to raise funds to work in the HAND area schools.

c. If neither your organization nor the members of the partnership plan to continue the work, please describe why. NA

d. Please describe a continuing or next source of funding you have for your work or other groups in your community that have continued the work and have found funding.

GWD has funding from Energy Outreach Colorado and the Xcel Energy Foundation to do similar work in two other neighborhoods. FREF has received funding from Audubon to continue its school-based energy work at Skinner and across the city.

SECTION 3: OVERALL PROJECT REFLECTION

The thoughts and comments of the following HAND participants are included in this section: Wendy Hawthorne (GWD), Charlie Chase (project manager), Lisa Bardwell (FREF), Anthony Thomas (Clayton Civic Association), Karen Kellen (EPA), Deldi Reyes (EPA), Gregg Thomas (DEH), and Fernando Pineda-Reyes and Diana Ford Pineda (CREA Results).

a. How likely is it that the progress achieved could have been made without your CARE partnership?

Stakeholders began meeting to discuss air quality and other environmental issues in NE Denver as a result of a situation analysis performed by EPA. It is difficult to predict what might have happened to the stakeholder group without the CARE funding. It may have eventually dissolved, or it may have operated very differently. It is safe to say that it is very unlikely that the number of projects with their direct impacts would have been accomplished without the CARE funding.

While some of the activities under the HAND project were consistent with ongoing work of partner organizations, the CARE grant built new partnerships and gave the projects a more cohesive focus that would not have been likely to have happened. For example, the Elyria-Swansea neighborhood plan may have proceeded, but it wouldn't have included the extent of community outreach or the studies of special interest to the community that it included with CARE funding. FREF programming in schools would have occurred, but the students may not have had the range of experts and diverse topics that became available through the CARE funding. GWD would have explored Brownfield projects, but would not have had the access to the assessment funds or expertise offered by the CARE grant, both of which helped GWD attain a different level of understanding in this realm. Other projects may never have occurred without the CARE funding, such as the auto repair and diesel truck outreach. Overall, the CARE funding built an enormous amount of capacity in the Denver community in a short timeframe to address toxics in the community and engage the community in unique ways. It also allowed one of the partners to develop CREA Results as a new business working with Spanish speaking communities on a variety of issues.

b. What do you consider your project's greatest achievement?

The greatest achievement of the project was the partnerships built and catalyzed among non-profit organizations, city agencies, state agencies, federal agencies, schools, community groups, and individual community members. These partnerships will be maintained in the future to encourage many other projects in the community. The community residents who were involved in the project were provided with a new level of environmental information about their community and also developed invaluable relationships with EPA and DEH that will help them address problems in the future.

The project also helped the HAND partners access communities that often seem out of reach. The promotora work built bridges with the monolingual Spanish-speaking community to provide important health and environmental information; the diesel and auto repair business outreach worked with businesses that are typically outside of regulatory agencies; the energy outreach brought energy efficiency improvements to low-income families who hadn't accessed the

services that might be available to them; the youth outreach projects gave young people opportunities to address issues they cared about, and the Photovoice project gave voice to concerns of youth and Spanish-speaking residents that would have otherwise gone unheard in the neighborhood planning process.

c. What was your greatest challenge and how did you deal with it?

Maintaining the general interest level in the community members was the greatest challenge of the project. While all of the individual projects engaged community members, there was no overall continued leadership by the residents in the communities who would be affected by the project. HAND had decided early on to rely on the registered neighborhood associations and grassroots non-profit organizations to engage these residents and for this community leadership role. The Clayton Civic Association was represented throughout the project, but others did not stay engaged. In fact, on-going inter-neighborhood difficulties related to non-HAND issues eventually added to this challenge. HAND continued to hold meetings at various community locations and tried to engage community members in each of the projects to the greatest extent possible, but, in the end, this problem was never really solved.

The divisive nature of one community resident, who represented an important neighborhood association, also added to a loss of focus on the project's broader goals, as well as the loss of community and business partners from the project. To address this challenge, the partnership developed ground rules and formal working agreements by working under an EPA agreement with the Consensus Building Institute. A case study about this process can be found at http://www.epa.gov/adr/cprc_evaluation.html.

A second challenge was that HAND didn't have a strategy in place to really push the effort as a whole forward. In the end, partners were committed to do their pieces of the work, but not as motivated or engaged around general community outreach or sustainability of the partnership. The CARE grant was structured in such a way that these outreach and partnership efforts were relegated entirely to volunteer efforts with no funding or strategy to work on these important issues. HAND's decision to hire a program manager whose job it was to coordinate and facilitate, not to legislate or to do the work of the committees was very fitting with the CARE philosophy in terms of the manager's job being one of building and supporting capacity for the work to continue in perpetuity. But, it also meant that there was no leadership to deepen and sustain the broader vision of what HAND might have become in the community. True collaborative efforts are difficult, and HAND didn't have a strong enough strategy and/or work plan to fully develop this broader vision. HAND held several meetings to discuss sustainability of the collaborative, but ultimately there was not the energy for working together on this broader vision.

Another challenge occurred once the funding for the grant came through. A number of partners who were not part of the project funding did not feel valued or that they were participating in a fashion useful for their organizations. The partners who did receive funding focused on their project work and not as much on the whole CARE process. As a result the overall ability of HAND as an organizing agent was greatly lessened. They were few opportunities to engage, report and keep partners fully involved and aware of the sub-groups work development, challenges and successes.

Another challenge that impacted the ability to engage community residents (in the opinion of Groundwork Denver, but not reflective of the opinion of everyone interviewed for this report) was that the HAND projects did not address the biggest and most noticeable air quality issues in the neighborhoods. Prior to funding from CARE, the partners went through a process of identifying assets, brainstorming projects and organizing into subgroups around main themes. During this process, it became clear that it would be difficult to address some of these biggest issues if all of the partners were to stay involved and it became clear that some of these issues were better covered in other venues. For example, EPA couldn't participate if the partnership was going to comment on the highway which was undergoing National Environmental Policy Act (NEPA) review. In a more extreme example, Suncor Refinery staff clearly would not be interested in participating in efforts to shut down the refinery, which was the interest of one of the community partners. In fact, Suncor and many of the business representatives including Colorado Motor Carriers Association, Blue Sun Biodiesel and the rendering plant left HAND because a community member continually became physically violent and threatening. In order to keep all of the partners at the table and work in a collaborative and voluntary effort, some of these areas which represented a more obvious target for community concern over air quality were determined to be outside of the scope of the project. Groundwork Denver experienced the challenge of engaging people on smaller scale air quality issues like indoor air quality and truck idling, when larger more obvious problems loomed in the neighborhood. Simply focusing on the larger issues, however, would not have guaranteed successful community involvement without addressing the other challenges described above.

d. What would you do differently next time in terms of organizing and structuring your partnership to achieve your project objectives?

There are several things that we would have done differently to better address the challenges described in Section c above. These include:

1. At the outset, define ground rules and conflict management strategies to address conflicts more quickly and effectively. These were implemented after the partnership underwent a struggle with a community partner, but significant damage was already done resulting in the loss of community and business partners never to be regained.

2. Structure the partnership to allow some members to address different topics of concern, even if the whole partnership did not agree on those topics. This would have required the group to develop agreements on language, voting, methods of opting out of projects, or subgroup formation much earlier in the process than otherwise occurred. It may have also meant that different stakeholders operated independently to develop goals and strategies for particular projects.

3. Fund someone whose main job description was community and partner engagement. As described above, community engagement was left up to the partners on a voluntary basis. None of the partners had the time or funding flexibility to make this a large priority.

4. Incorporate community participation at a much higher level, allowing for flexibility in the work plan to incorporate issues and concerns of the community as they evolved. This occurred to a degree in the small area plan and was at the core of FREF's youth engagement process. We

could have included additional resources in the grant to address new concerns as they developed. This may have been accomplished by setting aside funding for stipends to community workers.

5. Increase communication to HAND partners as well as potential stakeholders throughout the project period and addressing all of the project accomplishments as well as general air quality issues. This might have been done through an e-newsletter or simply monthly emails.

6. Plan for transitions within the partner organizations. For example, Cross Community Coalition's COPEEN was the primary partner for the Elyria-Swansea small area plan. When its staff left, the city ended up being lead on that part of the land-use committee. Over the duration of the CARE grant, at least 4 different City staff members were given responsibility for implementing the development of the small area plan. As a result, it was much more difficult to sustain continuity and the original vision and energy for how to develop the small area plan.

e. How might you have been more strategic in designing or implementing your project?

Many of these suggestions are incorporated into Section d above or in the individual project sections. Additional suggestions include:

- Apply for a CARE Level 1 grant in order to develop a richer and stronger partnership before trying to design the project.
- Focus the CARE grant on one of the issue areas rather than several areas of concern.
- Develop the work plan to strongly include community engagement strategies, strategies for continually engaging new members of the partnership, and developing and sustaining the broader vision of HAND.
- For individual projects, like the auto repair outreach, focus on one type of desired outcome rather than a broad range of outcomes.

f. If you chose to create one, did you find using a logic model or other goal-driven model helpful? Please explain. Did the model change over time? If so, how? Not applicable.

g. To what extend did your CARE community communicate or engage with other CARE communities and how was that interaction helpful?

The HAND project manager, Charlie Chase, was very involved with other CARE communities, sharing technical support between HAND and the other CARE communities. He worked with EPA to facilitate the National CARE Training Workshops each year. He led training sessions in 2006-2008 on youth and community voice in the CARE process, community leadership training, and issues development in CARE projects. He participated with CBI in a National Leadership training conference in 2006. He worked with many of the CARE communities directly in support of project issues such as the promotora process, Tools for Schools involving youth, leadership training as well as other issues. The Diesel Subcommittee worked with the Boston Safe Shops program to gain insight into the best ways to undertake a similar program in Denver. This included funding the HAND intern to visit the Boston project in person.

h. Did media coverage play a role in your project? If so, please explain.

Individual events were covered by the media but the program as a whole was not except for a media presence at a few of the HAND meetings and the initial check award ceremony.

i. In what ways did you rely on EPA for assistance (assessing risks in your community, conflict resolution, partnership support, voluntary programs, such as Tools for Schools or Pollution Prevention)?

EPA was one of our most committed partners. In addition to having our Program Officer, we had many other EPA staff playing critical roles including:

- Development of HAND group and convening the partnership (Karen Kellen & Deldi Reyes)
- Brownfields support (Karen Reed & Stacy Eriksen (on loan to City of Denver)
- Legal/Superfund/Air issues (Karen Kellen)
- Media (Diane Sanelli at the start of the project)
- Environmental Justice issues (Michael Wenstrom, Tami Thomas-Burton)
- Additional projects/outreach – mercury (Michael Wenstrom, Tami Thomas-Burton and interns)
- Tools for Schools (Ron Schiller)
- Energy Star (Patty Crow)
- Diesel (Kerri Fiedler and Tim Russ)
- Consultation with Consensus Building Institute. (Bill Long and Jeremy Ames, ORIA)

j. ***What role did your Project Officer and other EPA staff play in your work? What would you have liked more of or less of?***

The Project Officer served as an essential member of the steering committee, providing input on direction, project accomplishments, and technical support. She was a bridge to the many resources available to the project at EPA, such as pro-bono legal assistance, and connecting HAND partners with the appropriate EPA staff or materials. She provided oversight for the project reporting and other technical management.

As described in Section c. the governance structure and directives for the program manager left HAND somewhat "leaderless". Perhaps, the Project Officer could have pushed the Steering Committee to "steer", but this was not the defined role for EPA in this project.

k. To what extent do you think that this project increased the capacity of your organization? Your partnership? Your community? Please provide examples.

The project provided long-term focus for a number of partnerships that have progressed into other things:

- The project gave GWD funding to explore other partnerships and establish itself within the Denver community leading to a wide range of other opportunities.
- The project provided FREF with a long-term connection to City departments; the project pushed FREF into health issues to a greater extent and provided resources to do that (e.g. Tools for Schools and Smoke Free Pledges).

- The project gave CREA Results the opportunity to fine-tune a strategy that they have developed into a sound business organization and a three year on going program supported by Colorado Department of Public Health and Environment (CDPHE) under the State Tobacco Education and Prevention Partnerships (STEPP). The project also connected the more traditional "environmental" effort into the health community with partners such as the American Lung Association.
- The project provided an opportunity for CDHPE, the City of Denver and EPA to work together to summarize known Air Toxics information into a combined Air Presentation.

Community capacity was built through the:

- Youth leadership development through FREF and their student-driven approach to service learning and in particular, through the innovative use of the Tools for Schools program
- Job training and economic opportunities for the promotoras, leading also to the establishment of Padres Latinos de Commerce City, a parent constituency group.
- Inclusion of creative community processes, such as Photovoice, design charettes, and transportation studies that took engaged community members in the development of the Elyria-Swansea small area plan.
- Internship opportunity for a community resident to utilize his educational background on issues directly affecting his community.

l. Did your project produce any new "community leaders?" Please describe.

As described above, engaging the community in leadership roles was the biggest challenge of the project. However, the indoor air quality project which trained community residents to be health promoters (promotoras), resulted in several residents becoming important resources to their own communities. Some of these promotores were hired for other community outreach programs and are working together to identify new lines of funding to developed local work. Similarly, the intern hired for the auto repair shop outreach gained new skills to allow him to be a more effective environmental leader in the community. Several of the young people engaged through the CARE grant have gone on to assume leadership roles in their schools and youth leadership groups across the city.

m. ***What advice would you offer to other communities undertaking similar work****?*

- Build from a cohesive vision, vs. creating cohesion from disparate parts.
- Build in very specific methods and strategies for engaging the community and make sure that piece is funded and staffed.
- Develop a strategy and work plan to continually develop the broad vision and sustainability of the partnership.
- Have the vision drive funding vs. creating the work to fit the funding.
- CARE Level One process would have been very helpful for this and most projects

II. What Next?

a. ***Will members of your partnership continue to work on these issues?***

Absolutely. Many of the partners were doing work in these communities before and will continue afterwards, but with increased capacity for the issues addressed by HAND and with stronger and more diverse partnerships. The availability of EPA as a resource is now ingrained in many of these partners.

b. ***How will this work be sustained?***

Much of the work will continue through efforts of individual partners, but it is not likely to be coordinated or framed in the context of HAND per se. The work will be sustained by the partners who participated in the projects and who see this work as part of their ongoing mission.

c. ***If neither your organization nor the members of the partnership plan to continue the work, please describe why.*** NA

d. ***Please describe a continuing or next source of funding you have for your work or other groups in your community that have continued the work and have found funding.***

Many of the primary partners have integrated the HAND work into their ongoing missions. Many HAND partners are working together on specific projects and are seeking or have been awarded specific funding for these pieces (described in each section).

III. Feedback and Follow up

a. Please share any thoughts you have about what EPA could do to improve the CARE program.

- Award a 3-year grant but with a built-in process for developing the year 2 and year 3 work plan at the end of each year. This way, the work plan can evolve to address the needs of the community and address challenges as they arise.
- Allow a small fraction of the grant funds to be used for additional fund raising to fill the gaps identified in the work plan and to plan for sustainability.
- Create a website or e-newsletter template for grantees to utilize for communications with partners.
- Put together a document of “best practices” for future applicants, including things like conflict management and community engagement strategies.

b. We want to keep in touch and learn about the work that you do after your grant with CARE. Would it be okay for someone from the headquarters CARE team to contact you in the future to talk about how your work is progressing? Are there others we should contact instead of or in addition to you? If so, please provide their contact information.

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c. Would you be willing to be interviewed for a more in depth case study?
Yes
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