

US EPA ARCHIVE DOCUMENT

## CARE Level II Grantee Final Report

Grantee: **Grace Hill Settlement House**  
Project location: **St. Louis City**  
Project title: **Grace Hill Clean Air Project**  
Grant period: **October 2005 – December 2007**  
Project Manager: **Doug Eller**  
EPA Project Officer: **Gwen Yoshimura**

### I. Your Partnership

Please describe your CARE partnership and explain how it operated. Please make sure that your description includes the following:

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

Air pollution was the number one issue identified by the St. Louis citizens that participated in the 1997 EPA Listening Tours. With this environmental concern in mind, there was a pre-CARE project titled St. Louis Community Air Project (CAP). Work completed by this pre-CARE CAP, in collaboration with the St. Louis University School of Public Health, supported the results of the Listening Tour. They found that St. Louis citizens wanted to better understand this issue, but that they did not know where to go for more information; they also stated that they believed that industry was the main cause for air pollution when actually more than half of air pollution in St. Louis has been identified as coming from vehicles. Most people were also unaware of indoor air pollution which can be 5 to even 100 times more toxic than ambient air (*Aerlas*, April 2008, Indoor Air Quality: An Overview).

Regionally, for the fourth consecutive year, St. Louis City and County, St. Genevieve, St. Charles, and Jefferson Counties scored an “F” for ozone air pollution (smog) according to the American Lung Association State of the Air 2003 report (available at <http://lungaction.org/reports/stateoftheair2003.html>). St. Louis was also listed as the worst of 125 cities with the highest environmental toxicity according to *Organic Style* cited by the *Journal of Property Management*, November, 2003.

The St. Louis Community Air Project monitored for over 100 air toxics and identified the following six pollutants of concern: acetaldehyde, arsenic, benzene, chromium, diesel particulates and formaldehyde. These are all common urban air toxics and this CARE Level 2 (2005) project helped the St. Louis metro area work towards their reduction. In addition to directly reducing diesel particulates, this project reduced the five other pollutants of concern as *they are all present in diesel exhaust.*

An issue that brought people together in the first year of the CARE project was school bus idling. Over 990 school buses provide 21,900 children with transportation to and from school each day in St. Louis City. These children average 90 minutes per school day on a bus. Children’s lungs are still developing and breathe 50% more air per pound of body weight than adults. Diesel school buses emit particulate matter and other pollutants in exhaust that when inhaled have been linked to causing cancer, aggravate asthma and allergies, and cause other serious health problems for children as well as reducing alertness and learning capacity.

Air pollution is blamed for one in three Americans being at risk to suffer soot-related health problems (*Post-Dispatch*, September, 2005, citing an EPA statistic). As reported by St. Louis City Division of Air Pollution Control monitors, North St. Louis, North St. Louis has the highest particulate matter reading (particles in the air) in Missouri.

**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.**

The CAP Project continues to have positive working relationships with the following people and organizations:

<b>Affiliation</b>	<b>Name/ Title</b>	<b>Project Contribution</b>
American Lung Assoc. of the Central States	Susannah Fuchs, Director of Environmental Health	Attended CAP community meetings; provided information
Community Activist	Alycia Green, advocate	Advocated for projects and CAP issues in internal and external meetings
Community Air Partnership/ SLACO	Erica Sutherlin, Program Director	Partnered with project initiatives, including Neighborhood College and No Idling initiatives.
St. Louis Earth Day (a non-profit organization)	Terri Reilly, Executive Director	Supported no idling issue at Earth Day
East-West Gateway Council of Governments	Steve Nagel, Director of Community Planning and Outreach	Regional perspective; supported initiatives to improve no idling enforcement
First Student	Jeff Kintzle, Eastern Missouri General Manager	Supported training intervention to bus drivers and other no idling initiatives
Green Building Council	Emily Andrews, Chapter Coordinator	Provided advice to CAP; supported enforcement of no idling laws
Metro Arts in Transit	Hoang Nguyen, Project Manager	To publicize student no idling posters on Metro buses
Missouri Department of Natural Resources	Mollie Freebairn, Chemist III	Expanded diesel emission interventions to include retrofits
Missouri Department of Natural Resources	Lucy Thompson	Presented at and promoted the auto body workshop.
Missouri Environmental Assistance Center, University of Missouri	Marie Steinwachs, Director	Organized metal finisher's workshop with CAP.
Ranken Technical College	Larry Schmidt, Auto Collision Repair Department Head	Promoted and provided accommodations, contacts, and a sponsor for the St. Louis auto body workshop.
The Alliance of Automotive Service Providers – MO	Ken Kohnen	Promoted and provided contacts and advice for the St. Louis auto body workshop.
Design for the Environment	Mary Cushmac	Presented at and helped organize the St. Louis auto

		body workshop.
Covidien (formerly Mallinckrodt, and Tycho-Mallinckrodt)	Julie Summers	Reduced toxic releases at Covidien and participated in local point source reduction discussions
Elantas (formerly PD George)	Todd Thomas	Participated in local point source reduction discussions
Metropolitan Sewer District, Bissell Point Plant	Ed Cope	Participated in local point source reduction discussions
McKillip and Associates	Monte McKillip	Consultant organizing and leading local point source reduction discussions
American Commercial Lines (ACL) (formerly American Commercial Terminal- ACT)	David Evans	Collaborated to reduce PM emissions from ACL coal terminal
North Broadway Business Association	Carol Perry, President	Supported reduction of business emission in N. St. Louis
St. Louis City Alderpersons	Dionne Flowers, 2 <sup>nd</sup> Ward	Alderpeople supportive of cleaner air initiatives
“ “	Freeman Bosley, Sr., 3 <sup>rd</sup> Ward	“ “
“ “	April Ford-Griffin, 5 <sup>th</sup> Ward	“ “
“ “	Phyllis Young, 7 <sup>th</sup> Ward	“ “
St. Louis City Division of Pollution Control, Department of Health	Katina Stewart, Chief of Enforcement	Assisted promotion of no idling enforcement law changes and violation enforcement. Partner and contact for Hotline calls.
St. Louis City Division of Pollution Control, Department of Health	Tom Wiese, Don Simpson, Shirley Wolverson, Andy Hilliker	Assisted with point and area source assessments
St. Louis City Office of the Mayor	Tim Embree, Assistant to the Mayor	Supported expansion of no idling zones to downtown St. Louis
St. Louis City Refuse Department	Jill Hamilton	Provided green cleaning materials
St. Louis City Streets Department	Todd Waeltermann, Director	Partnered with schools to create the no idling zones
St. Louis Public Schools	Deanna Anderson, Asst. Supt. of Operations	Instrumental in approving no idling zones
“ “	Roger CayCe, Exec. Director of Facilities Manager	Supportive of addressing indoor air school issues
“ “	Linda Kraiberg, Art Supervisor	Supportive of student no idling poster contest
St. Louis Regional Asthma Consortium	Susie Schau, Executive Director	Provided consultation, support
US EPA, Region 7	Gwen Yoshimura, Program Officer	Oversaw CAP Project, provided support and resources
“ “	Marcus Rivas, Program Officer	Enabled Grace Hill CAP to achieve capacity to become

		CARE grant recipient
“ “	Richard Tripp, Air Permitting and Compliance Branch	Provided information on point and area sources
“ “	Shelly Rios, Air Planning and Development Branch	Pulled emissions information on point and area sources
US EPA, Blue Skyways/ School Bus USA	Amy Bhesania, Environmental Protection Specialist	Supported no idling efforts
“ “	Alan Banwart, Environmental Protection Specialist	Expanded capacity of CAP to look at other vehicle emission issues

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

The project brought many new partners to the effort, including point source businesses. Each partner assisted in achieving change and emissions saved as related to the CARE grant objectives and Logic Model. (See above table.)

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

The Grace Hill CAP was the glue that brought organizations together around centrally identified air issues and the catalyst that ensured action took place. Without CAP having the time and expertise to follow through with actions and continually press forward with these issues, no activity would have occurred and the issues would not have been addressed. The most important skills included:

1. Technical Expertise. Grace Hill developed a much stronger working knowledge and expertise on air issues in order to redefine them for the community in terms that they understood. This also enabled our staff to better communicate with regional, national and business experts. This learned skill will benefit Grace Hill in the future as opportunities present themselves for renewed program development and action.
2. Communication Skills. Program staff has gained skills in their ability to engage neighborhood residents from very low-income areas of the City around concerns with the air and quality of life issues. Staff has also been able to articulate toxic emission concerns to high levels of government and organizations in terms that resonate with them.
3. Partnership Building. CAP has been effective in its ability to build partnerships on various levels to participate in interventions leading to emissions saved. CAP succeeded in partnering with grassroots advocates (i.e. Alycia Green and Don Hardin) and highly structured organizations (i.e. St. Louis Public School, Covidien and the Office of the Mayor). See I. b. for more examples.
4. Effective Action. CAP has succeeded in its ability to be persistent and get things done. Grace Hill now knows better how to navigate our local, state and federal organizations (e.g. local school system, local political system, MDNR, Missouri Air Conservation Commission, East-West Gateway, EPA programs). We know what questions to ask and where to go to get answers. As a Non-for-profit organization, this additional knowledge will aid our future social, environmental and economic work.

**e. Which partners were most active? How?**

Community residents. Community residents were always there for CAP staff ready to participate and voice their opinions. Once residents were given basic information on air issues, residents provided education to other residents, met with point sources, promoted the green cleaner product, and attended stakeholder meetings.

St. Louis Public Schools. This school system is a world unto itself, with strong dynamics and politics that make it extremely difficult to work with. Despite this, CAP staff were able to develop a strong partnership with the St. Louis Public Schools that resulted in a Board of Education No Idling resolution. After building these relationships and explaining the environmental benefits that would result from the resolution, Grace Hill was given the go ahead to install no idling zones at all 88 of the public schools.

This work resulted in an increased interest from additional businesses, such as the City's Equipment Services Division with 2500 diesel vehicles and Covidien, a major chemical plant in North St. Louis that depends heavily on truck transportation, in posting No Idling signage (as well as interest from the Mayor's office in suggestions for possible Greening Initiatives for the Mayor's office to pursue) and reducing diesel emissions and in partnering with the school system to improve indoor air in the schools at a future date (i.e. using the Tools for Schools program).

Grace Hill also improved awareness of this effort, and idling issues in general, through a district wide No Idling Poster Art Contest. The contest involved art classes in all 88 schools and over 90 'best works' were submitted to the contest. Award-winning posters and others have been submitted to Metro to be printed on placards for installation on public transportation buses. The effects of the poster contest regarding children better understanding the hazards of idling was graphically evident in the students' work, which consistently made strong, pointed statements. Generally, the bus drivers were depicted as benign characters but many times the buses were the culprit with pleas by the children for driver control of these evil entities (i.e. "Be idle Free, Don't Kill Me").

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

(See above table.)

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

Grace Hill Settlement House is located in the community and the CARE staff live within the community as well, so communication with vulnerable members (youth, elders, and those with respiratory illnesses) was constant. Staff attended regularly scheduled "other" community meetings, held its own stakeholder meetings which residents attended, and involved residents (children as well as adults) in our CARE project's actions. One specific example of how Grace Hill involved the community members while giving them valuable experiences and promoting skill growth: Grace Hill had community members attend different events (such as point source meetings) and present a summary of the event at the stakeholders meeting.

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

Originally, CAP was going to use existing community meetings to involve residents and communicate with stakeholders. Ms. Yoshimura insisted that the CAP Project organize its own stakeholder meetings, which it did and were held quarterly. Ms. Yoshimura also helped initiate contact with partners, such as Alderwoman Young and point sources such as Covidien and MSD.

Ms. Yoshimura also provided EPA resources, defined expectations to meet logic model outcomes, attended stakeholder meetings, and provided advice and encouragement.

**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 partnership was built on five separate projects with different combinations of the community and Grace Hill staff working each sub-project separately --- there was not one single community group. Partners likewise played individual roles within the CAP Project objectives but did not ever meet together as one. In part this was due to the wide variety of projects—from producing a green cleaner principally for homes to addressing emissions from major point sources. CAP staff has come to realize that idle reduction *alone* could have been the entire CARE Level II proposal objective involving signage, zones, a state law, enforcement, company policies, etc. The Project probably would have been more effective, comprehensive and creative if all partners met together, but due to varied partner interest, time constraints and organizational missions, CAP successfully segmented their participation and built relationships from primarily communicating by e-mail to jointly attending an out of state conference in order to achieve objectives without overburdening partners.

The stakeholder meetings contained some organizations related to air issues, i.e. Asthma Consortium, Missouri Department of Natural Resources (MDNR), Metropolitan Sewer District (MSD), City of St. Louis's Office of Pollution Control. But some of our partners never attended the community meetings (CAP was dealing with high-level administrative staff from organizations such as First Student, the St. Louis Streets Department, and St. Louis Public Schools, on very specific aspects of the project). Grace Hill used the stakeholder meetings to inform the work done with these partners.

Resident attendance at our community meetings, too, varied greatly from quarter to quarter with only a few neighbors consistently attending. However, the partners and community members' ownership of their sub-project (one or more of the five projects taken on) was very strong. For instance, some seniors were really sold on the Project-produced green cleaner, and in fact, have received funding after the end of the CARE project to make the cleaner for other seniors. Another resident was particularly concerned about point sources and attended meetings with major companies. Still other residents were very involved monitoring school bus idling.

The beginning of the CAP program required a steep learning curve by staff. The original intended director for the program, who had years of full-time experience, was very knowledgeable, and had been successful in leading important initiatives, left the clean air field to take a job promoting green buildings. Efforts were made to interview and select a good candidate. Unfortunately, the director who was eventually hired for the position had limited experience and left one year into the project period. The project did not refill the full-time position but transferred more of the Administrator's time into the Director's role.

- 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 greatest benefit to the CARE partnership has been members' additional interaction and contact with the people of the community. This has been true for MDNR, MSD, Office of Pollution Control, and Covidien, as proven by continuing dialogue after the program has ended.

- k. Has your organization engaged in a similar process to CARE in which you had a similar role? Please describe briefly.**

The Grace Hill AmeriCorps Trail Ranger Project has initiated two partnership meetings which meet monthly: The Riverfront Trail Advisory Committee meets to review the Ranger Project activities and development of the Riverfront Trail as a community asset. Attending our meetings were environmental groups, riverside business organizations, residents, and Rangers. The Bicycle Implementation Group meets City Hall to coordinate bike path development and issues within St. Louis. Attending are City department stakeholders such as Streets, Parks, Water and the Mayor's Office and environmental groups.

Grace Hill also successfully used the \$50,000 offered by EPA to conduct Phase I and II environmental studies on a selected area within the community. After several sites were considered, Grace Hill chose the City-owned property at the Mary Meachum Freedom Crossing site. Mary Meachum is the first nationally recognized Underground Railroad site in Missouri and a community effort was underway to develop the area into a national tourist destination. Studies were successfully completed revealing no levels of concern and paving the way for an eventual capital campaign.

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

No.

## **II. Your Project**

Please describe your CARE project and provide copies of important materials that you developed. Please make sure that your description includes the following:

- a. What toxic risks did your project address?**

In 2003 St. Louis Community Air Project monitored for over 100 air toxics and identified the following six pollutants of concern: acetaldehyde, arsenic, benzene, chromium, diesel particulates and formaldehyde. These are all common urban air toxics and the 2005 CARE project helped the St. Louis metro area work towards their reduction. In addition to directly reducing diesel particulates, this project also achieved reductions to the five other pollutants of concern as *they are all present in diesel exhaust*.

- b. What toxic reduction strategies did you pursue?**

The areas addressed were related to the original Grace Hill CARE grant proposal and refined from discussions between Grace Hill and EPA staff. The project targets were:

- I. Reduction of the 6 CAP identified pollutants of concern through intervention with point and area sources;
- II. Changed behavior of community residents in the use of cleaning chemicals;
- III. Decrease in air pollution at target schools;



- IV. Pollution reduction through use of the hotline;
- V. Reduced toxic pollution through changed behavior of community residents.

For specific toxic reduction strategies, see attached: Grace Hill CARE Logic Model.

**c. How did you reach agreement on implementation decisions?**

Implementation strategies were discussed in advance of the Project start by EPA and Grace Hill staff. A Logic Model was developed as a result. This discussion was very important because the Project was able to start with both EPA and Grace Hill staff being on the same page from the very beginning.

During the proposal review phase, EPA believed that the research and development production of Grace Hill's green cleaner was an attractive feature of the grant and would be an entrepreneurial endeavor which would provide sustainability to the Project after the CARE funds ended. However, EPA lawyers determined that EPA could not financially support the cleaner in the areas of developing a business plan, marketing, sale, or planning for the sale of the product. Grace Hill could promote green cleaners generically, and Grace Hill could distribute bottles for donations, as a model green cleaner. The 'EPA' logo was also removed from the label. The result was that the major financial sustainability factor posed in the proposal was eliminated.

As the Project progressed, implementation decisions were guided by the developed workplan and Logic Model. Community members and partners were asked for input on topics ranging from effectiveness of green cleaners, what schools should be targeted for idling reduction activities, and what barriers might exist with the Hotline and how to overcome them. Administrative project decisions were made by a partnership between Grace Hill CAP staff, usually the Director, and the EPA Program Officer.

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

As strategy implementation played out, new partners were developed and included, such as the City Streets Department, which at the onset of the Project, staff did not anticipate would be needed. A partnership with First Student bus company was also not included in the onset but became an essential partner for bus driver training and intervention.

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

EPA, especially the Project Officer but also the CARE program as a national initiative itself, was the most important outside set of resources for our project. The Project Officer played a large role in helping Grace Hill stay on track and reach many of the benchmarks along the way. Even though EPA traditionally operates in the regulatory realm and is less well-versed in dealing with community-level issues and therefore could not always provide useful guidance in the dynamics of low-income African American neighborhoods, the Project Officer was involved and supported CARE staff in its community initiatives.

**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.**

EPA has developed many tools that were helpful, such as the diesel emissions calculator, logic model, emission research fact sheets, and Tools for Schools, and developed tools that have not been helpful due to their complexity or difficulty in learning their use on line.

EPA has made a good effort to develop tools to quantify emissions, something that community organizations would not have themselves but it was needed to quantify the grant's outcomes.

The greatest EPA deficit seems to be a lack of community organizations involved in CARE, meaning non-profits representing grass root efforts. It is Grace Hill's opinion, that local, institutionalized, bureaucratic agencies are generally less effective in involving the community, are less willing to employ people who do not live in or are from the area, do not have a real understanding of the impact the environmental issues have on everyday lives, and are far less passionate on making real change.

There are some outstanding examples of community groups in CARE but most of the attendees, for instance at CARE conferences, are either EPA staff or local governmental staff. A conference composed of community leaders, advocates and staff would be more effective in supporting the CARE initiatives nationally. Some assessment by EPA staff and grantees on uses of resource tools would be appropriate before the conference—especially tools already being used effectively.

**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 Grace Hill CAP was slow in building momentum and had no easy wins on which to build. Even though Grace Hill CAP was a Level II grantee, it really ended up starting out as a Level I regarding capacity-building—the strong stakeholder group that was developed during the Level I-equivalent dissolved with the departure of a key staff person which Grace Hill was hoping to hire as its director. Subsequently, the project started out with all new staff except for the part-time Administrator. There was a long learning curve involved and the original project director hired under the Level II grant resigned after the first year. It was decided that no new Director would be hired because of the amount of time the hiring process would take and the relatively short time left in the grant contract. This allowed personnel funds to be used to bring on seasoned consultants to address specific activities and the existing Administrator increased his time from 15% to become a 50% time director.

Project momentum did not really occur until toward the end of the first project year when meaningful contacts were made with targeted point sources and partnerships with St. Louis Public Schools and the First Student bus company partners. One of Grace Hill's biggest accomplishments has been the momentum that has grown since the Project started working on air issues and the fact that Grace Hill is now widely viewed as the primary clean air advocacy program in the metro-area. Now, Grace Hill is poised to make an even greater impact with idling issues, improvements to our indoor air within the school environment, and diesel retrofitting initiatives and this relates directly to our long-term sustainability. Funding is critical to make this happen.

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

ACTIVITY OUTPUTS. Significant outputs in chronological order are:

<b>Output</b>	<b>Significance</b>	<b>Date</b>
<b>2005</b>		
First 'In the Air' clean air Neighborhood College Class completed	Resident trainer trained to conduct classes; 15 neighbors in N. St. Louis graduate; substituted 15 green cleaners for toxic cleaner	December
CAP, DNR, EPA, and City Office of Pollution Control meet	Partnership begins to address processes to address issues. Discuss Hotline process.	December 15
<b>2006</b>		
CAP, EPA, and City meet	Continued discussion to strategize on addressing air issues	January 30
CAP, EPA Region 5 and 7, City, County, State meet	To coordinate possible efforts between Illinois and Missouri	March 27
CAP, EPA, City meet	To discuss specifics about point and area sources	May 2
Stakeholder Meeting held – 1 <sup>st</sup> meeting	Neighbors/ stakeholders attended. Discuss overview of project, discuss approach and solicit feedback on five project areas. Specifically gain input on point sources of concern.	May 2
Neighbor school bus monitors are trained and observe bus idling	Neighbor monitors observe almost 50% of the school buses idling over 10 minutes	May
CAP, EPA meet	Begin discussing how to address 3 identified point sources of concern in Missouri	June
'In the Air' clean air Neighborhood College class completed	11 neighbors in N. St. Louis graduate; substituted 11 green cleaners for toxic cleaner	June
Partnership formed with St. Louis Public Schools in 1 <sup>st</sup> meeting with Deanna Anderson and SLACO	The partnership formed from this meeting spawned major interventions to reduce school bus diesel emissions and protect children's health	June 15
Outreach on clean air issues provided to 340 people	Awareness of clean air issues raised; neighbors solicited to participate	July
Presentation at East-West Gateway (EWGW) Council of Governments	Raises awareness of Grace Hill's work and the CARE program, gain support of agencies and businesses represented at EWGW	July 27
Stakeholder Meeting held	Updates provided on projects and neighbors involvement, input solicited on issues and next steps. Specific break-out sessions generate ideas for Hotline outreach and	August 17

	marketing, and what schools to target and how to engage the schools in reducing school bus idling. Issue of oil dumping also brought up (to be addressed with partner MSD before next meeting)	
'In the Air' clean air Neighborhood College Class completed	29 neighbors in South St. Louis graduated; substituted 29 green cleaners for toxic ones	September
Meeting with MSD	Introduced MSD to the Project's objectives, MSD agreed to be a partner.	October 19
Stakeholder Meeting held	Participants identified schools where they had observed high bus idling, recommended these for the "pilot" list of schools to target for idling reduction. Neighbor reported out on meeting with MSD that took place earlier that day. Provided updates and solicited feedback, asked stakeholders to come to upcoming meeting with businesses and schools.	October 19
Meeting with Covidien on toxic emissions	Introduced Covidien to the Project's objectives, which Covidien agreed to be a partner. Began dialogue on what Covidien's emissions and controls are, what additional controls could be pursued and identified emission that should have been controlled, started partnership with Project	October 20
'In the Air' clean air Neighborhood College Class completed	28 neighbors in South St. Louis graduated; substituted 28 green cleaners for toxic cleaner	October 27
Performance Track meeting	Point sources, Grace Hill attend for new initiative	November 8
Stakeholder Meeting held	MSD and Blair Street monitor toured, Don Simpson from the City's Air Pollution Control Program discusses air pollution and monitoring with the community. Community participates in a role-playing game which raises awareness of how different groups/businesses/sources influence one another and provides a fun, engaging way to share facts and information. Point out different businesses in the area, things to watch for (such as "dirty" stack emissions) and how to report them if observed.	December 6
School Board passes proclamation to make District 'idle free' and create No Idling Zones at each school (but proclamation is not yet signed by Board President and takes	4 neighbors, including a SLPS school boy, partners and staff speak at SLPS Board meeting. Board proclamation enables Project staff to create No Idling Zones at all 88 schools—such an important and	December 12

months more of effort to achieve)	significant opportunity that the scope of the no idling effort is altered to include entire City, and project resources are considered and redistributed to support this change in scope.	
<b>2007</b>		
While providing no-idling training to Laidlaw (now First Student) bus drivers, staff received complaints by bus drivers about the coal dust covering buses outside and inside at the large Hall Street bus yard; about the same time, it comes to 'CAPs attention that DNR's Hall Street particulate matter monitor shows exceedances, possibly linked to the nearby coal loading yard owned by American Commercial Lines (ACL).	Concerns developed about the impact that the ACL coal dust may have on the respiratory health of both bus drivers and children.	February
First Student and Hazelwood bus drivers trained to reduce idling – drivers signed 'no idling' pledge cards	508 First Student bus drivers and 85 Hazelwood School District (outside of Project area) bus drivers were trained to reduce bus idling	February – March
Green cleaner bottles distributed at Southside Health Center, Norhill Community Center, Bethlehem Lutheran Head Start, Teen Mom program, First Student bus company, Patch Community Center, Wesley House	1,068 bottles of green cleaner used instead of toxic cleaner	February – April
CAP forwards coal dust concerns to Laidlaw administrators; staff document several testimonies from drivers and take graphic pictures of the bus yard showing dust on inside of buses; pictures are forwarded to DNR	This action informs DNR and Laidlaw that community is on this and issues should be addressed	March
First Student letter commits to 'idle free' program and partnership with Project	Puts commitments into writing	March 13
Stakeholder Meeting held	Neighbors discuss ACL issue with coal dust and buses. Staff presents PowerPoint on anti-idling in preparation for Spring monitoring to start next month. DNR presents on indoor air pollution. Blue Skyways recognition plaque presented to the community.	March 22

Grace Hill Settlement House Board approves policy on idling reduction	Set standard for other non-profit organizations	March 22
'In the Air' clean air Neighborhood College Class completed	10 neighbors graduated; substituted 10 green cleaners for toxic cleaner	March 23
Head Start Policy Council approves No Idling Zones for Centers	5 Head Start Centers to receive No Idling Zones	April
SLPS Board rep signs proclamation for entire St. Louis Public School District to be idle free.	Staff begins coordinating No Idling Zones with 88 principals	April 25
'In the Air' clean air Neighborhood College Class completed	11 neighbors graduated; substituted 11 green cleaners for toxic cleaner	May 3
Neighbors train to become monitors to record school bus idling	Neighbors take hands-on action to address air pollution problem	May 5 - 17
No Idling Zone dedication at first public school	Partners and neighbors celebrated together; AP article published by several newspapers in the state	May 18
Monitors chart idling times of school buses	Second organized event to provide data for comparison to baseline and post-intervention efforts	May 22 - 30
Stakeholder Meeting held	Neighbors review air issues including dedication of No Idling Zone and results of monitoring efforts of idling buses. Seniors, especially, extol virtues of Project-produced green cleaner and advocate for continued production even after Project is over. Discussion occurs around Asthma Consortium presentation.	July 12
SLPS commits by letter to a partnership with Grace Hill to improve school indoor air	Necessary documentation for Project sustainability initiative to implement Tools for Schools program in future	July 31
91 letters sent to the 91 public school principals (now only 88 schools remain open) to begin staff follow-up with each school to set No Idling Zone	Important step in creating No Idling Zones at each school to consult with each principal after approval has been reached at the School Board and administrative level	August 7
'In the Air' clean air Neighborhood College Class completed at Patch (located in south St. Louis City)	38 neighbors graduated; substituted 38 green cleaners for toxic cleaner	August 24
SLPS Principals designate No Idling Zones at their schools (huge effort by staff to meet each Principal with Streets Department)	No Idling Zones are sketched by Streets Department for striping/ signage and archived for future replacement, repair if needed	September
CAP makes suggestions to ACL's permit process being reviewed by MO Air Conservation Commission	Suggestions could significantly reduce the problem and include shorter piles, pilings further away from bus yard fence, taller and impervious fence between properties, signs with reporting phone number facing outside their boundaries; more pile waterings	September 14

Green cleaner bottles distributed to participants of a church picnic	120 bottles distributed and 120 baseline surveys collected on commercial product use (distribution of surveys completed using non-EPA funds)	September 22
A meeting is called by ACL at their offices and includes EPA, City Office of Pollution Control, and Grace Hill and Laidlaw attends after a special request by CAP; 25: Meeting held at ACL with all attending and issues discussed; ACL seemed to want to keep a dialogue open with Laidlaw to address any further incidents	Even though the permit standard states “permittee shall not cause or allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin,” it was obvious that the permit, which did not include CAP suggestions, was not going to adequately address the problem.	September 25
CAP director testifies in front of the MO Air Commission in KC, with pictures, to make the permit stronger;	No changes made in the permit but was pointed out that ACL has been there since the 1970’s and Laidlaw only for a few years; also pointed out that the problem seems to be a land use issue.	September 27
‘In the Air’ clean air Neighborhood College Class completed at Norhill (outside Project target area)	18 neighbors graduated; substituted 18 green cleaners for toxic cleaner	September 28
Blue Skyway Collaborative Award presented	Provided recognition, support as a partner	October 4
Monitors observe bus idling at schools	Post-intervention data collected at 9 schools	October 15 – 19
Meeting with Tim Embree, Office of the Mayor, St. Louis City	Voices support as partner with Project initiatives	October 16
First Point Source meeting held	First of 5 meetings to identify emissions to be reduced; companies present business operation overview	October 18
No Idling Zones completed	First 15 schools have No Idling Zone striping and signage installed	October 19
Project staff joins Mayor’s Greening Task Force	Provides ongoing direct Project input to Mayor’s office	October 23
CAP director speaks with Laidlaw bus yard manager who states that coal dust problem still exists coming onto busses; CAP letter sent to ACL stating more action needed including impartial monitor to quantify fugitive emissions	In January, 2008, ACL initiates further changes including smaller piles and piles located further from bus yard property line. This results in less dust blowing into the bus yard and into the buses.	November 5
Metal Finishers Workshop held	Intervention provided to 18 electroplaters; follow-up to be conducted in 6 months	November 7-8
Point Source meeting with community and 3 point sources	Point sources present operating limits and emission reports and asked to identify ways to reduce emissions further	November 9

Turn the Key, Be Idle Free SLPS poster art contest held – 88 schools participate and 90 posters submitted for contest	Posters to be used on Metro buses and at bus driver gathering areas	November 15
Auto Body Workshop held	50 participants learn about/share auto body rules and regulations, as well as best management practices and pollution prevention activities.	November 16
Point Source meeting	EPA Project Officer and City and State representatives report on regulatory role and discussion on reducing emissions occur	November 29
Tools for Schools Conference	SLPS and Grace Hill staff attend conference in Washington DC for future partnership to improve school air	December 6 – 8
Stakeholder Meeting held – final meeting	Voted to support Covidien initiative to cease burning diesel to cool chemicals in summer. Members interested in meeting again if Grace Hill funding found to provide staff time to organize	December 12
No-Idling Enforcement Panel event held	Built momentum to address changes in current St. Louis idling law and begin initiative for a state law. Participants, including Mayors Office expressed support for revised and expanded laws	December 12
Point Source final meeting	Meeting focused on next steps and suggestion to expand partners for greater point source impact.	December 17

Material	Use
Grace Hill Clean Air Project program pamphlet	Describes program and provides contact information
School Bus Idling Fact Sheet	Explains diesel emissions, health concerns, and positive responses to take; basis for written policies
Proclamation for Idle Free Schools	Template for schools to set policy; used for St. Louis Public School Board
Policy for Idle Free Organizations	Template to set limits on idling for organizations; used for Grace Hill Settlement House Board
No Idling Zone signage	3 varieties created, using city street standards, for: 1) Head Start Centers, 2) Public Schools, and 3) Truck/bus yards
Idle Free Poster	2' x 3' compilation of student art work hung at truck and bus yards to remind drivers to 'turn the key'
Idle Free Metro Bus Cards	Different student art with added captions for Metro to print and install inside public buses
Green Cleaner User Guide	How to use Project-produced green cleaner the most effectively



Clean Air Cleaning Tips and Tricks	How to use green cleaning, pesticides, paint stripper, etc. in a 31 page booklet, taken from City Refuse
'In the Air' Neighborhood College Course Curriculum	Using EPA-funded materials developed by Earthway's Center, revised by EPA Program Officer and Grace Hill staff to meet community needs
Clean Air Hotline flyers	Two versions: 1) Provides reporting number for air complaints; 2) Has tear-off numbers to keep
Monitor training curriculum	Short curriculum for community resident training to effectively monitor and observe school bus idling
St. Louis City Greening Initiative	Presented to Mayor's Office detailing greening precedents taken in other cities in areas of Transportation, Recycling, Buildings, Point and Area Source Emissions, School Indoor Air, Greening the Land, and city management structures to coordinate efforts.
Auto Body Workshop flyer	Attracted participants to workshop
Electroplating Workshop flyer	Attracted participants to workshop

- 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.)?**

Outcome	Significance
Reduced Covidien emissions a) iodine b) from Building X Dust Collector	a) additional scrubber installed resulting in emissions saved b) new filters installed resulting in emissions saved
Changed house cleaning practices reducing toxic use	A documented 1,348 bottles of CPA-produced green cleaner were distributed and used by community residents in place of harsh commercial house cleaners. A controlled follow-up of cleaner use was conducted with 120 church-goers. The baseline results were that 73% noticed harsh smells and 56% had a bad reaction of some degree from their commercial cleaner. Using the green cleaner, 96 respondents stated that no one experienced a harsh smell and no one had a bad reaction of any degree from the cleaner (see attachment for data sheet)
Reduced school bus idling	Percentage of buses idling over 10 minutes was reduced from 52% to 43% for the 9 schools observed. All 88 public schools have signed up for No Idling Zones. Once completed and assuming that 43% of the 750 buses now idling over 10 minutes is eliminated through continued education, awareness campaigns, and outreach, the following savings will be made: 224,000 gallons of fuel will be saved, \$785,610 in costs saved, 1,102 tons of NOx, 29 tons of PM, and 2,491 tons of CO2 . See IV b. for discussion on how this effort will be continued. (NOTE: Although an enforcement plan was proposed through

	the CAP No Idling Panel, no entity now exists to coordinate effort.)																		
Reduced particulate matter in the form of coal dust on First Student bus yard and in buses	Impacts vulnerable population – children, bus drivers (see attached pictures of coal dust in bus yard) now have fewer harmful particulates to breathe																		
Practices of Metal Finishers changed, saving emissions	<p>Of the 18 electroplaters who completed Metal Finishers Workshop,</p> <p>Action as a Result of Training:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">Adopt P2 Policies (1)</td> <td style="text-align: right; padding-right: 20px;">1</td> </tr> <tr> <td style="padding-left: 20px;">Develop System (2)</td> <td style="text-align: right; padding-right: 20px;">2</td> </tr> <tr> <td style="padding-left: 20px;">Map Processes to Identify Waste Streams (3)</td> <td style="text-align: right; padding-right: 20px;">3</td> </tr> <tr> <td style="padding-left: 20px;">Improve Compliance (12)</td> <td style="text-align: right; padding-right: 20px;">12</td> </tr> <tr> <td style="padding-left: 20px;">Implement P2 Suggestions (2)</td> <td style="text-align: right; padding-right: 20px;">2</td> </tr> <tr> <td colspan="2" style="padding-left: 20px;">Other:</td> </tr> <tr> <td style="padding-left: 20px;">Improve Energy Efficiency (1)</td> <td style="text-align: right; padding-right: 20px;">1</td> </tr> <tr> <td style="padding-left: 20px;">Inspection Readiness (1)</td> <td style="text-align: right; padding-right: 20px;">1</td> </tr> <tr> <td style="padding-left: 20px;">Re-Evaluate Prog. &amp; Issues (1)</td> <td style="text-align: right; padding-right: 20px;">1</td> </tr> </table>	Adopt P2 Policies (1)	1	Develop System (2)	2	Map Processes to Identify Waste Streams (3)	3	Improve Compliance (12)	12	Implement P2 Suggestions (2)	2	Other:		Improve Energy Efficiency (1)	1	Inspection Readiness (1)	1	Re-Evaluate Prog. & Issues (1)	1
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Practices of Auto Body companies changed, saving emissions	DfE provided each shop/school with a copy of the DfE Best Practices Self-Evaluation Checklist, which can be used to evaluate current shop practices and identify areas for improvement. DfE estimates (based on paint usage) the improvements implemented by one small shop could reduce overall VOC emissions by 218 lbs/yr (34%) and particulate emissions by 316 lbs/yr (99%), while saving the shop about \$13,000 on reduced material costs.																		

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

Covidien practices:

*Dust Collector* – Dust emitted into air was stated as non-toxic by environmental compliance officer. Officer calculations stated that 18.5 lbs/hr were being emitted (see attached calculations by Covidien). Unknown how long this would have occurred without community intervention. The beginning of the emission is unknown but Grace Hill staff observed event for at least 30 days before intervention was made so a conservative estimate of 6.66 tons were released.

*Iodine Emission* – Compliance officer did not compute emissions saved as promised.

American Commercial Lines practices:

*Fugitive coal dust* – Visible quantities of coal dust in the First Student bus yard have decreased since Grace Hill began working with ACL. The Hall Street PM10 monitor located in close proximity to ACL has shown decreases in both the monthly maximum 24 hour concentration and the monthly average concentration. Grace Hill initiated formal conversations with ACL on dust controls starting at the end of September 2007. Between October and December 2007, the maximum 24 hour PM10 concentration monitored at the Hall Street Monitor decreased from 188 ug/m3 to 47 ug/m3. The monthly average concentration decreased from 38.6 ug/m3 to 13.6 ug/m3. (As of March 2008, no monitor information was yet available for 2008.)

Metal finishers practices: Although 18 participants committed to changes, emissions saved have not yet been calculated.

Auto Body Shop practices: Each of the 50 participants was provided with a copy of the DfE Best Practices Self-Evaluation Checklist, which can be used to evaluate current shop practices and identify areas for improvement. DfE estimates (based on paint usage) the improvements implemented by one small shop could reduce overall VOC emissions by 218 lbs/yr (34%) and particulate emissions by 316 lbs/yr (99%), while saving the shop about \$13,000 on reduced material costs.

Household Cleaner emission reduction: CAP distributed 1,348 documented bottles of green cleaner which users substituted for popular commercial cleaning brands as documented by surveys. The following toxins were saved by using the 22 oz. green cleaner:  
Ethylene Glycol Monobutyl Ether (probable cause of chronic toxicity leading to serious health problems) : 148.3 ounces (22 oz. bottle of commercial cleaner such as Pine-Sol or 409 x .5% of EGME per bottle according to the Material Safety Data Sheet x 1,348 bottles of green cleaner used instead of commercial cleaner)

School Bus Idling reductions: All 88 St. Louis City public schools have signed up for No Idling Zones. Once completed and assuming that 43% of the 750 buses now idling over 10 minutes is eliminated through continued education, awareness campaigns, and outreach, the following savings will be made: 224,000 gallons of fuel will be saved, \$785,610 in costs saved, 1,102 tons of NOx, 29 tons of PM, and 2,491 tons of CO2.

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

The following differences between the original plan and what actually occurred were:

**I. Identify Pollution Sources**

Original Plan	What Occurred
<p><b>Point Sources.</b> The project was to address only area sources originally until Logic Model was devised with 5 point source ‘hot spots’ (point sources) identified which, after an inventory process, were selected using the criteria of the highest 6 CAP pollutants of concern in mind—3 in St. Louis, and 2 in Illinois.</p>	<p>Decided to approach sources on the MO side first, and time permitting move forward with IL sources. Decision based upon established partnerships and connections on the MO side which did not exist in Illinois. Three (3) of the identified point sources, MSD, Covidien (Mallinckrodt), and Elantas (P.D. George), all in North St. Louis, met with Project staff and consultant. Because of a new priority with school No Idling Zones, there was limited time left within the grant year to follow thru with all point sources. Impact was made in varying degrees with Elantas, Covidien, MSD, and ACL. Program intervention with both ACL and Covidien actually reduced emissions. Elantas and MSD became more aware of community interest and concern. Opportunity exists to expand initiative if funding identified. CAP staff remains vigilant watching for North Side industrial emissions.</p>

<p><b>Area Sources.</b> Originally targeted to address 30 businesses, the Logic Model process reduced the number to 10 at the end of 2007 which was seen as more feasible. Again, area source categories were selected using the 6 pollutants of concern which eliminated dry cleaners (thought to be a likely candidate at one time).</p>	<p>During the first year, learning and planning took place, and Grace Hill went through the process of inventorying, characterizing, and selecting specific area source categories to work with. No contact with businesses was made until the 2<sup>nd</sup> year. A lesson learned was that once CAP started working through a professional organization, North Broadway Business Association, it increased/optimized local businesses' participation: businesses were already meeting together so no effort was needed to form a new gathering, CAP efforts would be on their turf, and interventions were viewed as a support to their company. Two target categories were selected, electroplating and auto body shops. A partnership was formed with Missouri Environmental Assistance Center of University of Missouri because of its staff experience and ability to address electroplating. CAP staff was to originally learn and parallel efforts to address auto body shops, however, we made an amendment to the workplan, substantially increasing our Idle Free Schools initiative workload, and were able to use an additional partnership (with Design for the Environment-DfE) found through EPA. CAP used DfE's expertise to complete the work with the auto body business intervention.</p>
<p><b>Stakeholders Meetings.</b> Originally, the idea was to use existing meetings in the community in order not to organize yet another community group. However, EPA felt that the issues warranted a dedicated meeting.</p>	<p>Attendance of the quarterly meetings was good (20-30 attendees) and issues discussed were received by the community as important. Attendance of the same residents varied from quarter to quarter. Community members were involved as bus observation monitors, green cleaner distributors, and representatives when meeting with point sources. Meetings also provided an opportunity for neighbors to raise concerns, practice presentation skills, and agencies/organizations to offer information or contacts to deal with the specific concerns.</p>

**II. 'Green' House Cleaners**

<b>Original</b>	<b>Current</b>
<p>Originally, this objective was called <b>Clean Air House Cleaner</b> referring to the CAP's house cleaning product and included research, marketing plan development, and sales, and tied to program sustainability. This was all eliminated by EPA since it</p>	<p>CAP discusses indoor air pollution and the benefits of green cleaners and speaks of the Clean Air product as an example of a green cleaner. <u>Hundreds of bottles of cleaner</u> have been produced and distributed either for free, for donations, or for MORE Time Dollars (a Grace Hill bartering</p>

<p>appeared as if EPA was supporting the development of a private business enterprise. Unfortunately, CAP was counting on this support to sustain the project after the grant was completed.</p>	<p>system).</p> <p>Surveys have been developed (not using EPA dollars) to set a baseline of current cleaner use and an evaluation survey to determine consumer response to the green cleaner. The cleaner has developed a loyal following amongst local neighbors, especially those with asthma. Grace Hill remains interested in obtaining external funds to develop an entrepreneurial initiative.</p>
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**III. Idle Free Schools**

<b>Original</b>	<b>Current</b>
<p>The original goal in the workplan was to cease 100% of the excessive school bus and car idling at public and private schools in the target area by project end. When the Logic Model was developed, it does not mention the 100% rate, which seems unrealistic. Staff developing the Logic Model conceptualized a process that was unlike how things turned out in reality. There was no understanding at this point of how we would engage the bus companies, how the City school district could get involved, nor how we could best engage the use of the ‘reporters’ (now called ‘monitors’).</p>	<p>Obtaining a baseline to determine idling rate for buses at targeted schools using monitors was a problem for several reasons, including their mere presence with clipboards was obvious, sometimes creating an intervention (by acting as a visual reminder to drivers to stop idling) instead. In spite of this and many other reasons included in this report, monitors recorded 52% of the buses idling over 10 minutes at the first 17 targeted schools. The bus mileage and fuel use data kept by First Student was to be used as a baseline too but First Student never followed through with its voluntary written partnership agreement (possibly because originally Grace Hill worked with Laidlaw, which was bought by First Student, and Grace Hill’s original contact at Laidlaw, Jeff Kintzle, later left the company). Additional workloads taken on and not originally conceived within the original plan, but instrumental in achieving the desired outcomes, include: training of the bus drivers on idling issues and practices, establishing No Idling Zones at the schools, and for the City school board to pass an idle free resolution for the district (which took about 8 months) before any interaction with the individual schools and CAP could take place. Now, however, the opportunity is being seized even beyond the end of the CARE grant to establish No Idling Zones at every public school (about 88) in St. Louis City, Grace Hill’s Head Start sites (5) and program facilities (2), and the Grace Hill Health Centers (6). This endeavor is a partnership between St. Louis Streets Department, the Mayor’s Office (and its new Green Initiative), St. Louis Public Schools and CAP.</p>

**IV. Clean Air Hotline**

Original	Current
<p>The Hotline was to receive up to 20 calls per week using publicity to get the word out and ‘reporters’ were to be recruited to regularly provide air information to a 24 hour hotline. Documented concerns were to be funneled through the City’s Office of Pollution Control.</p>	<p>The Hotline continued its 24 hour service virtually uninterrupted from the beginning of the project. However, few calls were ever made to the Hotline perhaps due to inadequate marketing and residents not believing odors were worth reporting. Volunteer reporters were difficult to recruit and few followed through with calls. It was difficult to ascertain the source of smells, causing frustration. Some successes occurred with good results including a school bus driver who called complaining of coal dust covering the bus yard. Grace Hill came to realize a lot of work would be necessary in order to educate people to make effective calls, and significant research and coordination between the City and sources would be necessary for there to be effective action taken based upon that call. Given the amount of work in other areas, especially with anti-idling, Grace Hill, in consultation with the City and the EPA Project Officer, decided not to pursue these Hotline projects and focused their efforts elsewhere.</p>

**V. In the Air: Tools for Learning About Airborne Toxics**

Original	Current
<p>Both Neighborhood College courses (called ‘In the Air’) and Detox Your Domicile trainings were to occur. Trainers were to be created by Detox Your Domicile training who would then train others.</p>	<p>The Neighborhood College classes were very popular and 8 were giving, meeting the Project objective. As an example of popularity, special funding was received to conduct the class by one community center which was outside of the CARE target area. These class participants also became involved in the stakeholder meetings and were vocal on air toxic issues. Beyond class participation, attendance at other meetings/events, and green cleaners substituted for toxic cleaners, no additional analysis of participant changed behavior was conducted as planned due to time constraints. Another local group, SLACO, took on training trainers for Detox Your Domicile, so Grace Hill amended this action item for our plan..</p>

**1. 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?**

The main resource mobilized through partnership was the St. Louis City Streets Department labor of installing No Idling Zone signage and striping the zones at the school sites which is still

in progress. Grace Hill has worked with the Streets Department and public school district to ensure that the striping and signage will be maintained for years to come.

### III. Reflection

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

There would have been virtually no progress without the CARE partnership.

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

The Project's greatest achievement has been its work with the 'no idling' issue: understanding the issue including its impact on health, the dynamics around it, and the potential for expansion, and Grace Hill and many other locals now being better and more knowledgeable advocates regarding our local air issues. For the Project to have created an opportunity for No Idling Zones to be installed at all 88 public schools is a great achievement. The Project is committed to follow thru so that all the Zones are actually installed and maintained, and the school students participate in an annual recognition of idling issues—this will be an even greater achievement.

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

The greatest challenge was a lack of a strong Grace Hill Project Director from the beginning. Efforts were made to interview and select a good candidate and unfortunately it didn't work out. The person ended up leaving at the end of the 1st year, which set the project back. The Project continued with an ineffective Director for a year and did not refill the full-time position but transferred more of the Administrator's time into the Director's role.

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

There would be a strong, dedicated, and experienced Director in place.

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

If the project were done over again, the proposal, even though it was to be multimedia, would have not tried to do so much and not undertaken five separate projects. At the end of the CARE partnership, staff realized that the "No Idling" issue alone was a very large initiative unto itself.

**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 logic model was an important tool which guaranteed that both Grace Hill and EPA staff were together what the Project's work needed to be and what the expectations were. It was useful as a guide as the Project progressed. The model did change over time as expectations for the Project changed. See **II. Your Project, k.**

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

The national CARE Conferences were really the only effective way to communicate and engage with other CARE communities. It was great being able to visit their program sites and every future CARE conference should be in a city where this could be part of the activities.

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

Yes, although there was no blockbuster story, media coverage was present and important for the No Idling Zone event. An Associated Press story was released by wire, Grace Hill newsletters were used to inform and recognize stakeholders, and a local paper covered the student poster art contest.

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

EPA was relied on as a guiding force with agencies that CAP had few connections and little knowledge as to their practices. The Program Officer assisted in integrating and partnering with these agencies and the CAP program. EPA was also invaluable in providing technical expertise with the nature of toxins, measurements, current laws and initiatives, resources, etc.

**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 Program Officer was especially important in this project. She worked very closely with CAP staff to assure timeliness of program action and focus on project objectives. Even though the Project Officer was across the state, she was very accessible and willing to travel to the grantee site. The Officer also took on an intervention with an area source by facilitating an Auto Body Workshop. It was critical to the CAP project to have someone as supportive as the Project Officer involved.

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

The CARE project greatly increased the capacity of the Grace Hill organization through the increased knowledge and experience that staff received. The use of this knowledge for the future is important ---to find other funding streams, to understand differing social issues, to use language unique to differing industries and organizations, i.e. the trucking industry, industrial complex, and governmental agencies, and have the capacity and confidence to build programming around any opportunity involving air concerns.

The partnership now has a closer affiliation and connection in purpose, but each agency still works independently and does not attend regularly scheduled meetings. Again, consistent contact around project issues with these agencies is important to maintain the prospect of effective action.

The CAP project has impacted some members of the community and has enabled them to be more knowledgeable and have better control of certain issues such as school bus idling and point source toxic emissions.

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

The Project provided a role for a community leader to operate the Hotline that eventually enabled her to become employed full-time with the United Way. CAP staff feels that her experience in the program enabled her to achieve full-time employment.

The Project also provided a structure for a community leader for his voice to be heard. This leader provided an informal discussion time for residents in the community where previously the community had no voice within a structured program nor contact with point sources, their



emission practices. This need for a "community voice" was his main concern. CAP gave this leader significant opportunities to allow his voice to be heard in an arena that could affect change.

The Project did not produce a community leader who took a project initiative solely upon his/herself as their own cause. CAP staff believes that its efforts opened the door for a leader to be produced because of the broad contact that the program had with residents, but none were forthcoming. The Project did increase capacity with staff members, who are from the community, to pursue new programs focused on air pollution issues.

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

The Project would offer all our materials, strategies and experience. Some major lessons learned include:

- use informed and articulate neighbors in staffing and attending all meetings
- develop broad partnerships and discern in writing what role each should be playing
- develop a close relationship with the funding agency for this work even if none is required in order to assure support, communication and understanding
- even though difficult, learn toxic air emission vernacular, memorize facts, and practice speaking with agencies and point sources to understand their language and perspectives

**IV. What Next?**

**a. Will members of your partnership continue to work on this issue or on other toxic reduction strategies to address other risks?**

It is unlikely that partners not already charged to address toxic reduction strategies, such as Public Schools, will have the capacity to continue. It is very important to have some with the time to facilitate, push, lead, and assist in the organization of these endeavors without other priorities taking precedent. Without funding for such efforts and leadership, it is unlikely that this will continue.

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

One of Grace Hill's biggest accomplishments has been the momentum that has grown since we started working on air issues and the fact that Grace Hill is currently viewed as the primary clean air advocacy program in the metro-area. Now, Grace Hill is poised to make an even greater impact with idling issues, improvements to our indoor air within the school environment, and diesel retrofitting initiatives and this relates directly to our long-term sustainability. Funding is critical to make this happen.

Efforts which are being sustained are:

- The signed proclamation, and the momentum is in place with the partnership between Streets, Public Schools and Grace Hill to complete school No Idling Zone signs and striping. Once completed, the Streets Department has committed to maintaining the zones.
- The annual art poster contest with St. Louis Public Schools is supported by the School Board and (depending on funding) will help sustain the efforts of the No Idling efforts.
- Bus driver training continued by First Student.
- A system of reporting faulty school buses with excessive emissions has been established between Grace Hill and First Student using consciousness-raised community residents.

- The green cleaner will continue to be produced by a senior program (STAES—System To Assure Elderly Support), many of whom were participants in the CAP Stakeholder meetings and are strong proponents of the benefits of the green cleaner—funds will be awarded through the Grace Hill Trust Fund for 2008.
- The coal dust intervention is sustainable, as dialogue has opened between American Commercial Lines, First Student, and the City Air Pollution Control Program.
- The point source interventions regarding new practices (ACL), added scrubbers (Covidien), and a ‘watchdog’ capability by Grace Hill staff and participating neighbors are sustainable
- Grace Hill's capacity has increased to the point where staff has gained great expertise and capacity to continue future environmental air projects.
- Individual volunteer/staff gained skills to acquire full-time employment with the United Way.
- City of St. Louis Mayor’s Office is proposing a revised ordinance calling for a 5 minute idling limit and including all vehicles because of the CAP No Idling Panel.
- A half-time staff person continues the CAP program through a CenSARA grant to the Missouri DNR and sub-contract with Grace Hill to involve commercial trucking companies with diesel retrofits.

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

There is currently a lack of monetary resources to employ staff and to be able to meet operating needs.

**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.**

After the CARE project ended, a proposal was developed and submitted to one funding source with two other funding organizations to be approached as well. Currently, CAP is operating with a half-time person on a sub-grant from MDNR to pilot diesel retrofits.

## V. Feedback and Follow up

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

- All organizations receiving CARE grants should begin at Level 1 – this will possibly enable the program to remain supported for four years, since addressing these types of issues is generally a long-term effort.
- More community organizations and fewer governmental entities should be funded to ensure greater community involvement.

**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.**

This contact would be welcome. Doug Eller would be the best contact now. Contact information has already been provided.

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

Yes, depending on time and a specific use of the study.