

Brownfields Area-Wide Planning Pilots



Ideas and Lessons Learned for Communities

ACKNOWLEDGMENTS

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- The 23 Brownfields Area-Wide Planning pilot program recipients for sharing their experiences, ideas, lessons learned and project pictures.
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ABOUT THE EPA OFFICE THAT PRODUCED THIS REPORT

EPA's Brownfields and Land Revitalization Program is designed to empower states, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields. A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

EPA's Brownfields and Land Revitalization Program provides financial and technical assistance for brownfields activities through an approach based on four main goals:

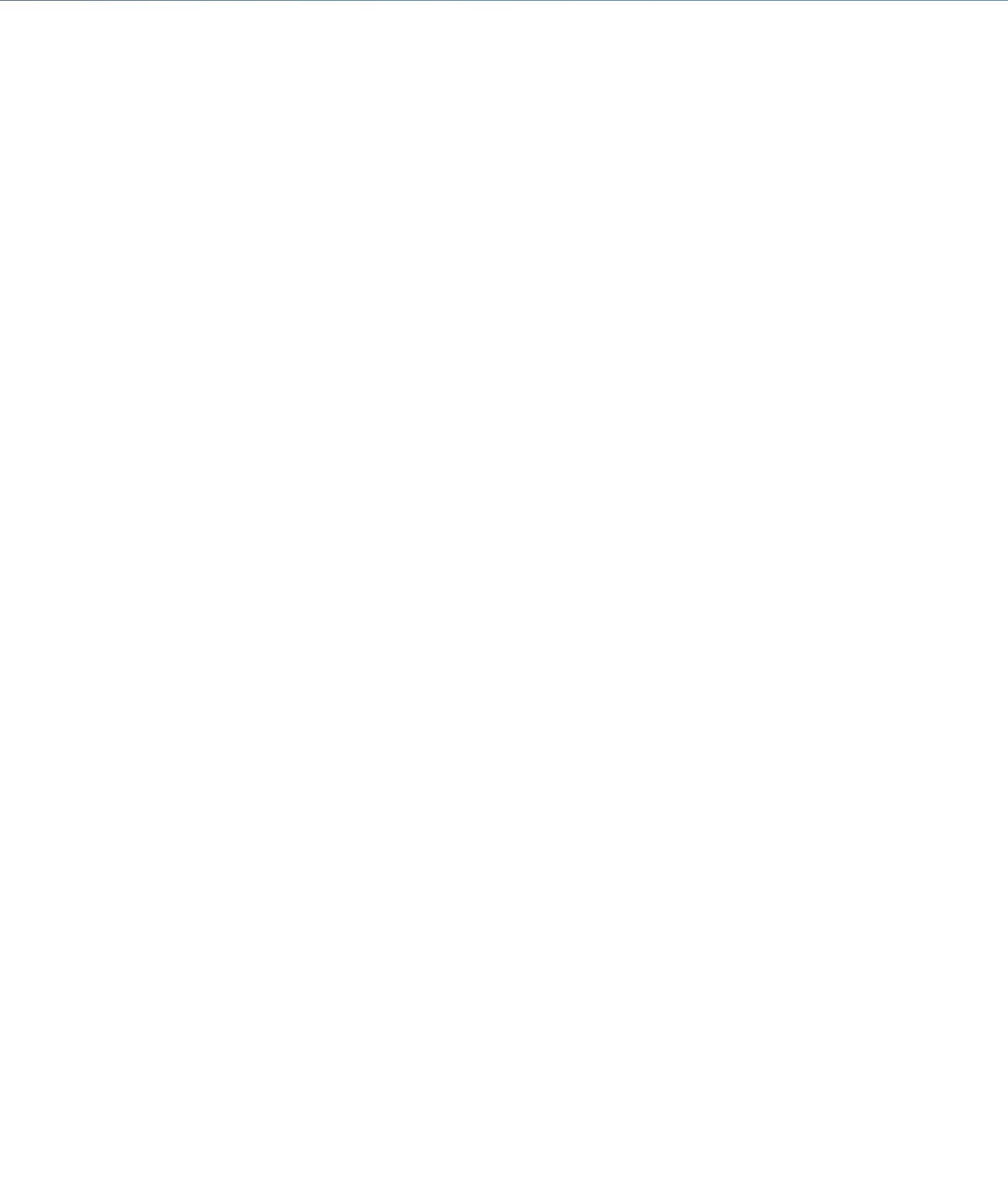
- Protecting the Environment Addressing brownfields to ensure the health and well-being of America's people and environment.
- Promoting Partnerships Enhancing collaboration and communication essential to facilitate brownfields cleanup and reuse.
- Strengthening the Marketplace Providing financial and technical assistance to bolster the private market.
- Sustaining Reuse Redeveloping brownfields to enhance a community's long-term quality of life.

More information can be found at www.epa.gov/brownfields.

COVER PHOTOS (clockwise from top left):

- Brownfield site reuse rendering along the south Platte River in Denver, CO.
- Brownfield site in the Tanner St Corridor/Ayer's City Industrial Park in Lowell, MA.
- Community brownfields design charrette for the PR#127 Petrochemical Zone of Guayanilla and Peñuelas, Puerto Rico hosted by DISUR.
- Brownfield site in the Mill Yard revitalization area in Sanford, ME.
- Blue Greenway community project hosted by the San Francisco Parks Alliance.
- Brownfields design charrette workshop materials for the 9th St Corridor in Goshen, IN.

For more information on EPA's Brownfields Area-Wide Planning (BF AWP) Program, please visit www.epa.gov/brownfields/areawide_grants.html.



Contents

Introduction	1
Cross-Project Theme 1: Manage for Successful Community Involvement	4
Cross-Project Theme 2: Form and Maintain Strong and Supportive Partnerships	13
Cross-Project Theme 3: Identify What Is Feasible	19
Cross-Project Theme 4: Prioritize Sites and Projects	25
Cross-Project Theme 5: Develop Strategies for Plan Implementation Throughout the BF AWP Process	29
Cross-Project Theme 6: Maximize Resources Through Targeted Project Area Investments and Leveraging	35
Cross-Project Theme 7: Maintain Strong Project Management Throughout the Project	43
Conclusion	46
Appendix: Brief Descriptions of the Project Areas for the 23 Brownfields Area-Wide Planning Pilots	47

Introduction

The U.S. Environmental Protection Agency's (EPA) Brownfields Area-Wide Planning (BF AWP) Program provides grant¹ funding to communities that struggle with the challenges presented by a concentration of brownfield sites in a particular area of their city or town, such as a neighborhood, downtown district, waterfront, or a local commercial corridor. The BF AWP Program enables these communities to research existing conditions and gather community input to create an area-wide plan that will guide the cleanup and reuse of the brownfield properties and the surrounding area.

EPA supports an area-wide approach to brownfields cleanup and redevelopment. When multiple brownfield sites are concentrated in a specific area, they are connected not just by proximity, but also often by environmental conditions and infrastructure, which together limit the environmental health, and economic and social prosperity of their surroundings. Rather than addressing brownfield sites one by one, an area-wide approach provides an opportunity to systematically consider the challenges related to multiple brownfields and incorporate site-specific assessment and cleanup into larger community revitalization efforts. An area-wide planning process enables a community to develop a shared vision for revitalization within the project area, strategize the best way to implement that vision, and more efficiently remediate and reuse brownfield sites to help reverse disinvestment.

HUD-DOT-EPA Partnership for Sustainable Communities

The BF AWP program is part of the U.S. Department of Housing and Urban Development, the U.S. Department of Transportation, and U.S. EPA's Partnership for Sustainable Communities ([HUD-DOT-EPA PSC](#)). Brownfields area-wide planning facilitates the realization of the Partnership's six livability principles by emphasizing meaningful public engagement opportunities, integration with community planning efforts, and neighborhood revitalization approaches that benefit local residents.

Sharing Lessons Learned

This report conveys key lessons learned across the 23 projects that received pilot grant funding from EPA's BF AWP Program. Compiled from grantee feedback and observation of their experiences as grantees, seven cross-project themes emerged:

1. Manage for Successful Community Involvement
2. Form and Maintain Strong and Supportive Partnerships
3. Identify What Is Feasible

¹ *Grant or grantee* refers to the cooperative agreement relationship between EPA and the recipient(s) who received funding to perform the BF AWP project(s). *Cooperative agreement* is explained at www.epa.gov/ogd/recipient/glossary.htm.

4. Prioritize Sites and Projects
5. Develop Strategies for Plan Implementation Throughout the Process
6. Maximize Resources Through Leveraging
7. Maintain Strong Project Management Throughout the Project

Each of the seven cross-project themes are described in this report, including summarized ideas and advice as shared by the BF AWP grantees. Cross-project themes each include a set of relevant basic concepts, as well as a set of specific lessons learned from BF AWP pilot projects. The “basics” section includes well-known, common core project concepts that the grant recipients reinforced as best practices throughout their projects. The “specific lessons learned from BF AWP pilot projects” represent ideas and approaches that the grant recipients found particularly useful, constructive, and effective for helping them successfully manage their brownfields area-wide planning process and develop a plan implementation strategy.

Brownfields Area-Wide Planning Pilot Grants

EPA competitively awarded BF AWP pilot grants in 2010. Under this pilot program, 23 recipients received grant funding to conduct brownfields area-wide planning projects.²

- The recipients of these grants represented diverse communities: five nonprofit organizations, one tribe, one regional planning commission, and 16 local governments from various-sized cities (five large cities, nine mid-sized, and four rural communities).
- The pilot projects included a variety of project area types, including old industrial areas, downtown districts, waterfronts, neighborhoods, recreational and other public spaces, local commercial corridors, and greenway corridors, that struggle with one or more brownfield sites.

Pilot projects consisted of research activities and technical assistance, such as:

- community engagement sessions to identify community priorities and opportunities to meet those priorities through cleaning up and reusing brownfield sites;
- brownfields area market studies and feasibility analyses;
- review of existing environmental conditions;
- coordination with existing community plans;
- brownfields area infrastructure analysis;
- brownfields site mapping;
- site reuse planning and schematic designs to reflect the community’s cleanup and reuse goals for the brownfield sites;

² See the Appendix for a list of the 23 grantees. Additional information can be found at www.epa.gov/brownfields/areawide_grants.htm.

- prioritization of brownfield sites for cleanup and reuse; and
- brownfields area-wide plan implementation strategies.

Each grantee synthesized their research and technical assistance activities to develop an area-wide plan for community brownfields revitalization, and identified the next steps necessary to implement the plan (i.e., the actions they needed to take and the resources they needed to secure). As part of their efforts to improve the local environmental and public health conditions surrounding brownfield sites, the grantees are now pursuing the following types of revitalization goals in their communities:

- improving active business and light industrial corridors to help maintain business viability;
- diversifying land uses – creating a better mix of commercial/light industrial businesses with residential;
- attracting manufacturing or industrial reuses where appropriate;
- enhancing community waterfront access and activities, including better programming for the sites and area;
- increasing recreation and green space opportunities, including community agriculture where able;
- combining eco-restoration with economic redevelopment;
- developing renewable energy opportunities; and
- creating public uses, such as a museum, library, and better access to health care and healthy food.

Building from initial successes and lessons learned from the pilot projects, EPA competitively selected 20 additional recipients to receive BF AWP project grant funds in fiscal year (FY) 2013. The FY13 projects are underway and will continue through 2015. EPA expects that the lessons compiled in this report will be useful to current and future grantees, as well as other communities across the country, as they embark on the process of developing an area-wide plan and implementation a strategy for cleaning up and reusing brownfield sites.

Cross-Project Theme 1: Manage for Successful Community Involvement

Meaningful and ongoing public engagement is the foundation of a successful brownfields area-wide planning project. Active community involvement helps ensure that the brownfield sites selected for cleanup and reuse reflect the community's priorities, and the subsequent redevelopment enhances the community's character and future opportunities.

A fundamental component of BF AWP is that stakeholders who are affected by brownfields contamination (whether real or perceived) and historical disinvestment must benefit from the cleanup and reuse of the sites. These stakeholders must have a sense of ownership in developing the community's vision for brownfields cleanup and reuse, and strong input in the decision making. When the planning for brownfields cleanup and reuse is driven by meaningful public engagement, the community members, project partners, public funders, and private investors recognize that there is strong commitment to, and capacity for, making improvements in the area. This commitment to revitalization can be used to prioritize resources and hold decision makers accountable.

Meaningful engagement of the community means using a variety of active involvement approaches throughout the project. Advisory committees, public meetings, one-on-one interactions, community tours, and brownfields charrettes³ are just some of the ways stakeholders can share information and provide feedback that will inform the area-wide plan.

Stakeholders include residents, businesses, government, nonprofits, and interest groups, as well as organizations and individuals whose valuable input, partnership, and resources can be used for the brownfield area revitalization.



Community engagement activities for the BF AWP “Brown to Green” project led by Communities for a Better Environment (CBE) (Huntington Park, CA). *Photo credits: CBE*

³ A charrette is an interactive, collaborative planning and design workshop that is used to engage a range of community stakeholders around a project, get their input and develop site designs in response to that input. In the BF AWP context, a community can host a charrette around key brownfield sites in the community. EPA has additional information on design charrettes at www.epa.gov/sustainability/analytics/design-charrettes.htm

Community Involvement Basics

- Consider public engagement to be an ongoing activity integral to the success of your project, not limited to a handful of events.
- Start early and continue the engagement throughout the project. Early momentum enables the community to get started with identifying their priorities for brownfields revitalization and can set the right tone for the overall project.
- Be inclusive and transparent. Include the full spectrum of residents, businesses, organizations, and public agencies at the start of the project and as part of the project advisory committee. Engage with new stakeholders, and work with existing partners in different settings. Explain how decisions about the future of the project area will be reached.
- Hold project meetings and events within the affected community, and schedule them at times when the community members are available (e.g., after work hours, on weekends).
- Create a project website or use a social media site. Keep it current with all of the latest information, reports, and progress updates, and make it interactive so that you can solicit and respond to feedback. Use the Web to complement, but not replace, more direct community engagement activities.
- Every opinion counts. Respect all voices and encourage reluctant parties to participate. Provide opportunities to receive one-on-one or small group feedback from those who are not comfortable speaking out in a large public meeting.
- If building on a related community planning or partnership effort, revisit the BF AWP project starting point often, and gladly bring everyone up to speed. Do not assume that all stakeholders have been following previous work on the project.

Specific Lessons Learned from BF AWP Pilot Projects

- **Make community involvement a top priority by budgeting appropriately:** Ensure that the BF AWP project budget strongly reflects the importance of stakeholder engagement activities and opportunities to provide feedback throughout the entire project. Balance the outreach and communication activities that occur with property owners in the project area with those with the general public (e.g., neighborhood outreach activities). Look for additional resources that can keep the community engaged over the long term as the project moves from planning to implementation.
- **Identify project champions in your local leaders:** Work with local leaders from all sectors of the community and encourage them to become champions of the project. Strive for diverse representation of neighborhoods and community groups. Closely involve these local leaders, incorporate their ideas, and ask them to involve others throughout the planning phase and all the way through project implementation.

- **Let the community speak for itself. Have community leaders engage and lead key elements of the project:** Request that community leaders involved in the BF AWP process present, or co-present, information about the project whenever the opportunity arises. Local community leaders are aware of the concerns of their members, and in some cases, these leaders may be able to build trust and commitment for the project better than project staff or contractors. Encourage the community leaders to lead tours of brownfield sites in their neighborhoods, and share histories and insights that will influence the neighborhood vision for the project area.

The support and involvement of local leaders who become BF AWP project area champions will build credibility for and interest in the project. These champions can also be called upon to provide media interviews to help get the word out about the project.

- **Create a project advisory committee:** Engage a diverse group of local leadership, subject matter experts, champions, and businesses who will give advice and input that will help shape the project. Have this committee meet regularly and frequently.
 - Use an application process to select advisory committee members; this helps to ensure that you are including the most dedicated stakeholders whose involvement will endure over time. Set expectations for committee member time commitments and establish clear roles for the committee.
 - Encourage the project advisory committee to evolve into a project implementation committee after the BF AWP process has concluded. Decide who else needs to be included on the implementation

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Project Challenge: Dealing With Reluctant Property Owners

Grantee tips for engaging property owners who are reluctant to participate in the BF AWP process include:

- Engage property owners regularly throughout the BF AWP process and maintain active communication.
- Keep property owners in the loop and ask for their opinion. It takes time to build trust, so build relationships slowly.
- Take time to listen to the property owner's concerns. You may need to have small group or one-on-one discussions to flesh out the issues. Property owners are often wary, apprehensive, or unclear regarding government actions. Make connections back to the project goals that demonstrate how BF AWP supports their priorities.
- Use peer relationships with other property/ business owners who have worked through the process to help frame the benefits of the BF AWP effort.
- Speak in terms of economic benefit and real estate. How is involvement in the BF AWP effort good for the property owner? Speaking the same language as the property owners can improve relationships.

team. Assign responsibility for key actions to specific members on the committee.

- Encourage the members of the advisory committee to share regular updates with the groups they represent. This will help spread project information and support, and maintain a transparent process.
- **Promote a renewed sense of place throughout the project area:** Help stakeholders and prospective investors see past the label of a “brownfields area” and work with the community to renew or establish the project area’s identity. Draw from the area’s unique history by reviving an old mill district or restoring/preserving historic buildings, or encourage a new look and feel to the area by creating a “Green Zone” or “Community Arts District.” Strengthening the identity of the area helps attract a cluster of like-minded and synergistic businesses, which not only makes the neighborhood unique but also improves competitiveness with other areas not facing the same types of challenges from brownfields.
- **Choose an involvement strategy that fits your community:** The BF AWP pilot grantees successfully used a range of public engagement strategies, chosen based on what worked best for each project. For some projects, well-established approaches, such as press releases, door-to-door visits, and mailed invitations resulted in robust community meeting attendance. Other communities found that different techniques were more effective, such as early engagement with local businesses, one-on-one meetings, direct outreach to community-based groups, websites, and social media.
 - Recognize if your stakeholders are experiencing “meeting fatigue” around local planning issues, or have a history of disenfranchisement or distrust in the public process, so you can develop more suitable outreach methods that result in long-term, productive engagement with the community.
 - Vary your outreach methods and types of activities.
 - Use both conventional (e.g., newspaper ads, library bulletins, public meetings, webinars) and unconventional outreach methods (e.g., bike and site tours, social media, electronic polling during meetings, tactical urbanism approaches) to reach and get involvement from a broader array of stakeholders.
 - Try to accommodate diverse schedules by holding a variety of events and include activities that are suitable for multigenerational participants.

Pilot Project Example

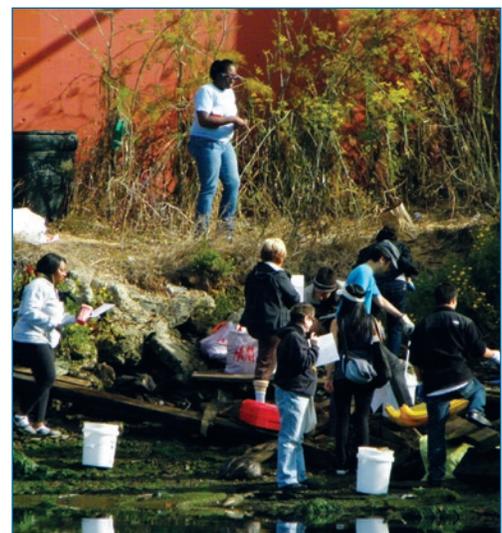
The Jacobs Center for Neighborhood Innovation (San Diego, CA) grantee incorporated a community planning process called VOCAL (Voices of the Community at All Levels), which included 18 representatives from different cultural backgrounds who helped ensure that community residents led the planning process. In addition to community input sessions, VOCAL members participated in a series of six brownfields-focused workshops that included the topics of reuse planning, assessment and remediation strategies, remediation and health impacts, infrastructure support, economic redevelopment, and a next-steps resource plan.

- **Develop anticipated project outcomes and common goals with the community, and ensure that they are clearly communicated:** Set the expectation that involvement in the BF AWP process is a vehicle for change, not just an exercise on paper. Together with the project advisory committee and the community, determine the common goals around which the project will focus and revisit these at community engagement events so that stakeholders can see how the process is working to meet those goals. Avoid using jargon or terms not fully understood or embraced by the community.
- **Plan your message with partners and goals in mind:** It is likely that the BF AWP process and goals will overlap with those of project partners, including other city departments, regional agencies, or nonprofits in your community. Help these partners realize how their own goals can be met with clear messages about the potential outcomes and shared benefits of the BF AWP process.

Pilot Project Examples

Using other public events, common facilities, and businesses can help get the word out about the BF AWP project. Some examples from BF AWP grantees include:

- Sanford, ME: The city held a BF AWP public event in conjunction with the city's holiday tree lighting ceremony.
- Goshen, IN: The city showcased the project area through a display at City Hall.
- Phoenix, AZ: A local pizzeria advertised upcoming community meetings via flyers placed on pizza boxes, which both advertised the meeting and the business's commitment to the project.



San Francisco Parks Alliance (CA) sponsored coastal cleanups, vegetation planting sessions, and numerous other involvement activities along the Blue Greenway (including bike, boat, and kayak tours) to help spread the word about the project and provide various opportunities for community input.

Photo credit: San Francisco Parks Alliance

- **Think about how to sustain involvement in the project over the long term:** Neighborhood revitalization takes time; achieving it requires a long-term strategy and commitment. Make sustaining involvement into future years a priority.
- **Engage youth to bring unique perspectives into the project:** Creating special opportunities for community youth participation will help shape the vision for brownfields in unique ways. Incorporating the ideas of the younger population means that the plan will reflect the priorities of those who will benefit the most in the long term. Youth involvement also helps capture the support of public officials, philanthropic organizations, and interest groups who otherwise might not lend their time and resources to brownfields cleanup and reuse.
- **Seek to understand opposition to the project:** Address opposition to the BF AWP process directly and transparently. Having public meetings early on can help to identify project opposition that could pose obstacles down the road. Take time to learn about the opposing parties' views and concerns; ensure that they feel recognized in the process. Encourage other stakeholders to address these opposing views in order to have an honest dialogue among those invested in the process.

ADVICE COLUMN

Project Challenge: Managing Opposition to the Project

Below are some methods that BF AWP grantees have used to help manage opposition to their projects during community forums:

- An electronic voting system can be used to facilitate community participation and ensure that every attendee at the meeting has a voice. It is also an effective mechanism to demonstrate the overall feelings of a group, especially when a small number of people loudly dominate the meeting. A vote can be taken to see how many people share the opinions expressed and the conversation moves forward quickly if there is no consensus around that point.
- Raised-hand questions are not allowed. Instead, attendees must write down their question, name, and community represented. This process maintains transparency; it also takes some of the emotion out of the meeting and keeps the discussion on topic.
- Breaking out into smaller groups with project staff members facilitating each table discussion allows quieter people to take time to think through their opinions, provide input, and feel comfortable talking. This also ensures that their message is directly heard by the project staff.
- Setting the right tone for the meeting up front is important. One community changed the tone of their meeting by having a local councilperson speak, then a minister led a prayer about tolerance. Then they held a small group discussion where everyone was able to participate.
- Know who is opposing the action and seek to understand why. Addressing their issue directly and succinctly can help the meeting stay on track.

Pilot Project Examples

- BF AWP grantees in Sanford, ME; Goshen, IN; Monaca, PA; and Communities for a Better Environment, CA, engaged youth in various ways throughout their projects. One particularly effective way to get input on community priorities and brownfields site reuse ideas was to hold design charrettes for school students. Consider presenting the BF AWP project to high school science classes and university engineering and architecture students, and explain to them how their input can be incorporated into the project. Enlist their ideas and future help as the project goes forward.
- The City of Kalispell, MT conducted extensive outreach to individual stakeholders in the area, completing over 80 face-to-face meetings with area property owners and providing 10 presentations to community organizations. Their approach enabled local stakeholders to better understand and stronger participation in the BF AWP project.

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Outreach Management

Desarrollo Integral del Sur (DISUR), a BF AWP grantee in Puerto Rico, shared the following ideas for managing the public outreach process:

- Declare transparency early: Your community may be wary and even mistrustful at the start of your project due to promises not followed through on in the past. It is important to set the stage for transparency in the project early on and deliver on that transparency.
- Create an online project report: To assist in project transparency, post the project goals, key contacts, team members, and project schedule online. Keep the list of project milestones and downloadable versions of completed reports available for review on your project's website.
- Prepare a public exhibition: DISUR was able to design a public exhibition and then produce a catalog for outreach during and after the project. This helped spread public awareness during the planning process and provided them with a public information tool for continued communication.
- Communicate frequently: Once you have the phone numbers and email addresses of contacts, create a database and keep people informed about project developments. Social media can (to an extent) serve this purpose; it also provides another forum for gathering community feedback about brownfield plans.
- Form media relations: Develop a media list early and start reaching out to the appropriate reporters, editors, producers, and bloggers at the local newspaper, radio station, television, etc.



DISUR centered their BF AWP project area on an old petrochemical corridor in southwestern Puerto Rico. Community members participated in design charrettes to re-imagine improvements and new land uses for this area, and worked with DISUR to develop a plan for how to clean up and reuse key brownfield sites in the area. Many infrastructure upgrades are needed to support local residents and encourage new commercial industries (such as solar energy generation and ecotourism, among others) to bring jobs to this area.

Aerial photo credit: Lizzie Herrera for Aerofoto Internacional Puerto Rico Charrette series photo credit: Juan C. Feliciano and Maria M. Rivera Grau for DISUR, Inc., Puerto Rico



Project community meetings in the Montview Corridor (Aurora, CO) were discussion based and designed to be interactive.

Photo credit: City of Aurora, CO



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Tips for how the design and tone of your brownfields area-wide plan and implementation strategies should support and reinforce your community engagement effort

- Your brownfields area-wide plan should:
 - explain the community engagement process;
 - provide cleanup and reuse scenarios for specific brownfield sites, and explain how the reuse of these sites will meet community priorities;
 - explain how uncertainty is reduced for cleanup and redevelopment because brownfields regulation, zoning, and other policy barriers already have been considered and the plan was developed with community and political support;
 - include a strategy for using public resources and/or attracting private and nonprofit investment to the area; and
 - contain a strong implementation section with clear strategies, a list of prioritized actions for the near, intermediate, and long term, and responsibilities assigned for accomplishing the actions.
- Executive summaries should be written carefully and include a concise overview of the project goals and plan, as well as key next steps, action items, and the project partner(s).
- The tone of the planning process, and of the plan itself, is absolutely critical. Your project can easily lose support if you are not careful with the tone in every part of the process.
 - Instead of using planning jargon, start conversations with stakeholders with exploratory questions, such as What do you like about living in your community? How do we use the assets we already have, but in a better manner? Which of these assets would you like to build from and what new assets do we need?
 - The final plan should reflect the community's ownership of the project process, priorities identified, and commitment to implementing the plan. Write from the first person plural perspective. Do not allow the plan to be primarily a list of recommended actions that the city or nonprofit should take because this can have a polarizing effect.
- Make it easy for the public to comment on the draft version of the plan. Post the draft online and place hard copies around town for review. Gather public input, address questions, and incorporate comments in the final version. Determine how the feedback can inform the implementation of the plan.
- Celebrate the completion of plan development with your community. Have a public event that rolls out the final brownfields area-wide plan and kicks off the implementation phase. Arrange the event around activities that start plan implementation, such as school, park, or riverfront cleanups; volunteering at a community-based organization; a ground-breaking event for new development; fundraising activities; or making an outreach video describing next steps.

Cross-Project Theme 2: Form and Maintain Strong and Supportive Partnerships

The strength of the BF AWP process, the ability to create a brownfields revitalization plan that represents community priorities, and the capacity for implementing the plan directly correlate to the partners that participate in and provide support for the project. Working around common goals with committed partners before, during, and after the development of the brownfields plan will provide a strong foundation and guide the project.

All successes regarding plan development and implementation will occur because of local drivers – partnerships among government, community-based organizations, businesses, foundations, and other stakeholders – who provide the enthusiasm, share the responsibility, and bring in the resources needed for the project. These organizations will provide the input necessary to develop the plan and establish long-term networks for implementation.

Partnership Basics

- Have a clear understanding of the perspectives and sectors represented by your partners, including:
 - governmental entities (federal, state, tribal, regional, or local);
 - interest groups (public, private, citizen, advocacy, or nonprofit);
 - various subject matter experts (housing, environmental, economic development, transportation, education, public health, social welfare, faith-based, etc.); and
 - leadership (elected and appointed officials, executive directors, etc.).
- Keep it simple. Make it easy for a supporting organization or stakeholder to be a partner in the process. Be clear about the role that each partner can play and why they are important.
- Create partnerships that strengthen ties and build trust and credibility among multiple levels of government, community organizations, and private entities.
 - Multi-sector partners help leverage the best knowledge, priorities, and resources.
 - Utilize partners' abilities and unique contributions to the project, and have them assume responsibilities that your agency or organization cannot.
 - Formalized partnerships help ensure active participation and continued commitment to the project.

Specific Lessons Learned from BF AWP Pilot Projects

- **Bring new and existing partners together:** Form new collaborations and renew long-standing partnerships by integrating existing relationships with new partners. Work on building trust among all partners that can be fostered through transparency and clear expectations. Determine early on when will be the most appropriate time to engage new partners, and find specific opportunities for them to add value to the process.
- **Clearly articulate shared goals that the project can help achieve:** When partners share common goals, they are better able to work together and alongside the community. This translates into a shared sense of ownership and commitment for brownfields area-wide plan development and implementation, and continued involvement for near- and long-term success.

ADVICE COLUMN

What is the range of potential partners to consider for your BF AWP project?

Grantees shared these examples of various BF AWP partners that they engaged:

- Faith-based groups
- Youth and student groups
- Local elected officials and members of the state legislature or U.S. Congress
- Educational groups, including school boards, parent-teacher associations, and local colleges and universities
- Business owners
- Chamber of Commerce, Rotary Club
- Local and regional water boards, economic development authorities, and emergency preparedness groups
- Clinics and hospitals
- Developers and realtors
- Press, local bloggers, and media
- Local artists, arts organizations
- Cultural groups
- Local populations whose primary language is not English
- Young families, local parents groups
- Property owners, including absentee and abandoned site owners
- Renters
- Nonprofit organizations, both community-based (e.g., local employment center, Groundwork Trust) and local chapters of nationwide organizations (e.g., Trust for Public Land, Urban Land Institute)
- Local offices of relevant federal and state agencies (e.g., EPA, HUD, DOT, USDA, etc, and state equivalent offices)

Consider the best way to engage each partner in the BF AWP process. You may need to meet one-on-one or in small groups to first establish credibility and interest from the partner before bringing all of the partners together around the discussion table.

- **Use your partners to broaden influence and build support:** Partners with good community standing and influence can elevate the profile of the BF AWP project. They can leverage political commitment, strengthen relationships, and build public trust.
 - A partner may be in a better position to lead different parts of the revitalization effort than your organization, due to their position and relationships within your community.
 - Partners with community development experience may help bring in contacts and relationships with sustainable and equitable development-minded developers, nonprofits, and businesses, which can help generate greener and healthier land uses in the community.
 - Partnerships can help build the business and property owner support needed to establish area-wide plan implementation vehicles like business improvement districts (BIDs), tax increment financing (TIF) districts, changes needed to local policy and zoning, and so forth.
 - Include local elected officials in activities and events (e.g., public gatherings, charrettes, ribbon-cutting ceremonies) that will help them understand the BF AWP project and gain their commitment to implementation.



Project partners tour the West End brownfields planning area in Chicopee, MA. Photo credit: Frank Gardner, US EPA Region I

- Share responsibility for implementation across multiple partners who have various authorities to direct resources to the project as available.
- Think about the best way to include other municipalities from your region as partners in your local brownfields revitalization effort. Nearby communities are likely to share similar goals with your BF AWP community, and your joint efforts can be complementary.
- **Formalize partnerships to help ensure long-term involvement:** As the project evolves, so will the partnerships. Where using informal, ad hoc partnerships to solicit input may have been appropriate early in the BF AWP process, more formal agreements can better serve the purpose of defining roles, allocating responsibility, increasing accountability, and encouraging transparency among partners over the long term.
- **Be prepared to put in the needed effort to develop and maintain partnerships over the long term:** The readiness of a community and its partners to undertake a BF AWP process and carry it through to plan completion and implementation should be discussed and assessed up front. Regular, repeated coordination with all project partners is necessary. Sometimes, extensive one-on-one meetings are needed to build partnerships. The organization leading the BF AWP project will need to work hard to attract the right partners and keep them engaged throughout the process.
- **Strengthen internal partnerships and keep everyone in the loop:** Use the interdisciplinary nature of the BF AWP process to involve other members of your organization, and encourage them to have a specific role in its success. Several city staff members who worked on BF AWP pilot projects shared that it was immensely valuable, albeit difficult, to coordinate elements of the BF AWP process across departments within their city. Looping in these other offices and connecting the project to overall organizational goals helped them make stronger project allies.

Examples of formalized partnerships

include intergovernmental agreements, memoranda of understanding, project charters, written mandates from mayor/city or county council/other leadership, public-private agreements, community benefit agreements, advisory committee ground rules, and financial or in-kind contributions from partners. Documenting the partnership will establish and manage expectations for the project and clearly define partner roles.

ADVICE COLUMN

Involving Federal Agencies in Your BF AWP Project

Determining the most appropriate time to engage with federal agencies is an important discussion to have with your BF AWP project team early on. The involvement of federal agency representatives will depend on what they can offer to the project in terms of assistance. Several of the BF AWP grantees felt ready to include agency representatives from the start of the project, and even included these representatives on the project advisory committee. Other communities, however, were not comfortable engaging federal agency representatives until their project was further along, and they had a better understanding of their resource needs and specific implementation challenges.

- **Determine which partners are needed but are currently missing:** Reach out to various public and private organizations and let them know about your BF AWP project. Invite the participation of representatives from state departments of environmental protection and economic and community development; federal, tribal, or regional agencies; and foundations and local educational institutions. Ask these representatives to share their subject matter expertise when exploring implementation options, such as financing authorities, grants/loans, and anticipated funding amounts; navigating programs; sharing government or foundation funding priorities; and identifying examples/case studies relevant to your project. Working with EPA's Brownfields and Land Revitalization Program or HUD-DOT-EPA Partnership for Sustainable Communities points of contact can help you make connections with other federal and state agencies.

Pilot Project Example

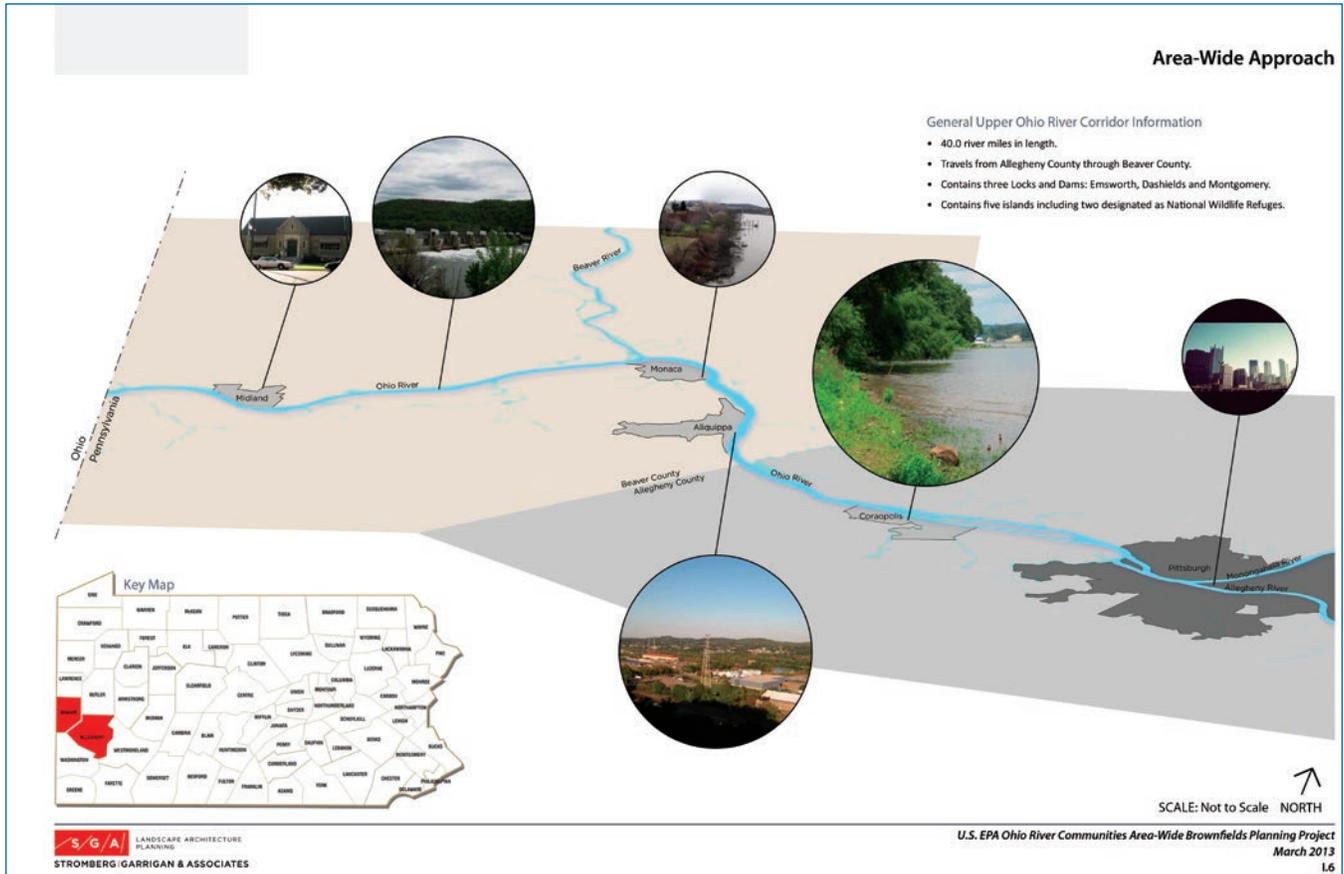
One outcome of the Confederated Tribes of the Colville Reservation's BF AWP pilot project was that they were able to strengthen their internal tribal partnership. Colville Tribes used the process to evaluate and improve their intra-tribal environmental management paradigm. The brownfields cleanup and reuse vision for a new solid waste transfer station was planned to help make the site reuse sustainable over the long term. Now, the tribal council has approved the next steps needed to implement the area-wide plan for the brownfield sites, and has clearly delineated internal roles and responsibilities within their partnership to make it happen.

ADVICE COLUMN

Interested in working with partners to develop a Business Improvement District (BID) for the BF AWP project area?

Some ideas from BF AWP grantees on how to create a BID to help energize local businesses and residents for action:

- Investigate whether your state requires legislation for special districts.
- Work with businesses to identify the benefits of a BID and who will lead the effort to develop the district. This facilitates the petitioning process. Often it is better that a BID petition comes from the private sector than from local government.
- A BID model could be used to attract developer interest to the area. Common area appearance improvements can go a long way.
- A BID may be one way to get existing property owners engaged to work toward betterment of the area. A BID can also put pressure on a recalcitrant property owner to better maintain and clean up their property.



The Borough of Monaca, PA and three neighboring communities, the Borough of Midland, the City of Aliquippa, and the Borough of Coraopolis, partnered together to develop a cleanup and reuse strategy for key brownfield sites along the 40-mile Ohio River corridor.

Graphic credit: Stromberg/Garrigan & Associates

Cross-Project Theme 3: Identify What Is Feasible

Market studies, infrastructure assessments, and environmental conditions provide important parameters for Brownfields reuse.

Brownfield revitalization plans must consider community priorities alongside realistic expectations regarding the market, availability of infrastructure, and existing environmental conditions. Conducting market-based studies, developing an economic analysis, reviewing environmental data, and assessing the state of area infrastructure will help to ensure that the cleanup and redevelopment proposed through the BF AWP process strikes a balance between the aspirational vision of the community and the reality of the amount of resources needed to build that vision.

Evaluate the feasibility of the project by understanding how the existing conditions and expected market demand in the brownfields area influences the BF AWP process. This information will lead to more specific strategies for plan implementation, which will increase the likelihood that the cleanup and redevelopment can be completed.

Feasibility Basics

- Projects requiring private market investment and development can use an economic analysis or market study of the brownfields area to identify what reuses the local market can support. This analysis can provide information on:
 - the timing of market demand (near term versus long term);
 - types and amount of redevelopment that can be supported by the market demand;
 - intensity of proposed land uses;
 - estimated purchase prices or rental rates; and
 - market absorption rates.
- Additional feasibility evaluations can identify the extent to which a project is dependent on other investment or cleanup actions. For example:
 - What is the condition of the infrastructure in the area?
 - Can the infrastructure support and maintain the planned redevelopment for the brownfield area or is investment in infrastructure needed?
 - What is the environmental condition of the area and of the specific brownfield sites?
 - Will the project require a public subsidy?

Specific Lessons Learned from BF AWP Pilot Projects

- **Use existing condition and market studies to guide brownfield cleanup and redevelopment goals:** Ensure that the vision for brownfields area is grounded in practicality and attainability. This approach contributes to the transparency within the BF AWP process and reinforces trust in the process.
 - Shape a plan for brownfields redevelopment that is guided by market studies, infrastructure analysis, and the ability to remediate known environmental conditions within the project area, alongside the community's revitalization goals.
 - Manage stakeholder expectations if market and other feasibility studies for the project area will be done after the community creates a vision. Prepare the community for conversations about the tradeoffs needed if the study does not fully support the vision.

Interim Reuses for Sites

Interim reuses are generally less intensive land uses that provide immediate local benefits and prevent contaminant exposure. Taking interim steps toward completing the BF AWP vision can provide additional time for collaborating with partners or researching and pursuing planned infrastructure investments, while maintaining a focus on brownfields area improvement and demonstrating to the community that their priorities are being addressed.



Transportation infrastructure and site access issues are challenges that exist in (clockwise from top) Goshen, IN, along the Ohio River brownfields area in PA, and Chicopee, MA.

Photo credits: Goshen, IN: Jon Grosshans, EPA Region V

Ohio River: Stromberg/Garrigan & Associates

Chicopee, MA: Frank Gardner, EPA Region I

- Longer-term implementation strategies might need to include short-term solutions that will help bridge any feasibility gaps in the redevelopment plan.
- In cases where the market, infrastructure, environmental conditions (e.g., prohibitive cost of cleanup), or local policy does not coincide with the community's vision, consider whether there are interim actions (e.g., improved maintenance of properties, limited cleanup measures) or reuses for key properties that can provide some more immediate community benefits and investment.
- **Check cleanup and reuse compatibility with other sites, plans, and zoning:** A core concept of the BF AWP process is that the reuse of a brownfield property will be influenced by the conditions and uses of the properties around it. Consider the following:
 - Investment in one property often begets new investment in an adjacent or nearby property. Develop a cleanup and redevelopment strategy that systematically takes into account recent investment.

ADVICE COLUMN

Interested in engaging with greener-minded developers?

Some ideas from BF AWP grantees on how to bring more green, sustainable and equitable development approaches to your BF AWP process:

- Ensure that your community vision includes goals that reflect sustainable and equitable development approaches, and emphasize these goals in all of your communications about the project area. This will get the word out that greener redevelopment practices are desired and expected in the project area.
- Brand the project area as a green and healthy district. This can help lure greener businesses and industries that want to be in that district because it helps build their own credentials. It can also make the project area more competitive with other locations.
- Talk early with potential developers about including green and healthy building design elements and how to design leases that advance the goals of your community. Follow a green building rating system (e.g., LEED, Green Globes) or EPA green building programs if this is helpful for communicating your sustainable redevelopment goals, and consider how a community benefit agreement could help support equitable development.
- Include a developer on a project advisory group. For example, in the BF AWP pilot project in Phoenix, AZ, a developer was included and was able to use connections to bring additional stakeholders into the planning process. It also resulted in a pool of developers interested in the project area.
- Use zoning for the brownfields area as a tool to require greener development, such as providing credits (e.g., height variances) to developers that use greener development methods and creating overlay districts in certain areas to encourage specific types of development.
- Offer a more expedient review process for greener development projects. Often, time can be as important as money for developers.

- Know what other community plans apply to this project area and determine how the BF AWP process can be consistent with and integrate those plans. These are important elements of overall project feasibility.
- Identify early on whether the zoning for the project area is compatible with the planned brownfields revitalization or if changes will be necessary.
- **Engage with potential end owners and users to get their input on the site reuse options that seem most feasible:** Check in with experts and ask those who may be interested in operating the site once it is cleaned up and redeveloped (e.g., for running a business or nonprofit, developing housing, building a park or other recreation area). In their opinions, what types of land reuses seem feasible and cost effective?
- **Assess the state of the infrastructure to determine whether improvements will be needed:** Successful reuse of brownfield sites will depend on the availability of infrastructure. Assessing the condition of existing infrastructure and its ability to support the planned reuse is critical. Evaluate transportation (roads, sidewalks, transit) and utilities (drinking water, stormwater, sewer, power, telecommunication, waste management, etc.) for the capacity to accommodate site reuse scenarios over the long term. In addition, you may need to identify how to improve access and circulation for traffic and pedestrians in the area. The feasibility of your BF AWP project will be influenced by the following infrastructure considerations:
 - The density and type of reuse on the brownfields that the infrastructure can support;
 - Any area infrastructure improvements needed; and
 - How long it will take to make the infrastructure improvements, as well as the amount of public or private funding needed.

Pilot Project Examples

- The City of Denver, CO, completed corridor-wide mapping of existing conditions in the 11-mile South Platte River brownfields area, including brownfields sites, infrastructure (highways, railroads), ownership, impermeable surfaces, and stormwater infrastructure. These maps helped the city make decisions about which brownfields cleanup and reuse projects could include stormwater management and green infrastructure components. This work complemented river and greenway improvements taking place under the River Vision Implementation Plan.
- In addition to several community meetings, the BF AWP grantee in Ogdensburg, NY, held a meeting specifically with developers to get their input on potential cleanup and reuses for the key brownfields along the waterfront of the St. Lawrence and Oswegatchie rivers. This meeting provided valuable insight and expertise to the community's BF AWP process and brought developers up to speed on the community's goals for the project.

Pilot Project Examples

- In Cleveland, OH, the city was able to share data with the Northeast Ohio Regional Sewer District (NEORS) and the Cleveland Opportunity Corridor project. A large portion the city's research into the environmental conditions of key brownfield sites that could be cleaned up and considered for green infrastructure reuse was useful to NEORS. Data from the BF AWP project were also instrumental in helping to influence the Cleveland Opportunity Corridor roadway alignment, and save the expansion opportunities of the two existing businesses (Miecelli's Dairy and Orlando's Bakery).
- Jacobs Center for Neighborhood Innovation (San Diego, CA) and the City of Atlanta, GA, each coordinated their BF AWP pilot projects with ongoing [health impact assessment](#) (HIA) efforts in their communities. With HIA data in hand, these communities were able to incorporate specific concerns from area residents, and opportunities to improve multiple aspects of public health, through the cleanup and reuse of brownfields in the project area.

- **Identify existing environmental conditions:** Incorporating information from existing condition reports, local public health advisories, and environmental injustices will inform and influence the BF AWP. This includes using quality, pre-existing site assessment data to inform your project and comparing the data against how much environmental cleanup is needed to achieve the community's vision for the area. Having and sharing this information at the start of the public process means that these issues and concerns can be raised early on, and decisions on how they should be addressed will be based in reality.
- **Obtain, update, and share data:** The data on which your BF AWP project and implementation strategies are based need to be clear, transparent, accessible, and current. Compile and share the necessary information about the project area, including data on environmental, economic, and public health conditions; population, transportation, and housing trends; and area cultural history.
- **Demonstrate project viability with an economic development strategy:** An economic development strategy done in tandem with brownfields area reuse planning will demonstrate how the plan is economically viable, and will provide information on the jobs, housing, and other community improvements anticipated. This information helps to build support for the plan. Create an example cost analysis of each cleanup and redevelopment project (e.g., a pro forma worksheet) and use it to help determine public costs versus private costs. This will give the community, partners, and private sector developers a better idea of the type of redevelopment you are looking for and an estimate of the costs.



Much of the New Bern, NC, Five Points neighborhood lies in a flood plain, making it more susceptible to severe weather events and changing climate conditions. When creating the brownfields plan for this area, the city considered potential flooding issues and how the brownfield sites could be affected. In coordination with their BF AWP efforts, the city also did resiliency planning for coastal areas, using technical assistance provided by EPA's Office of Sustainable Communities.

Graphic credit: Goody Clancy

Cross-Project Theme 4:

Prioritize Sites and Projects

Resources for brownfields cleanup and neighborhood revitalization are limited in every community, so it is essential that you prioritize redevelopment sites and projects within the BF AWP project area. The prioritization process should set the stage for step-by-step implementation of the plan.

Prioritization Basics

When prioritizing the sites and projects on which to focus for the brownfields area-wide plan, many BF AWP grantees considered characteristics such as:

- Proximity of the site or project area to sensitive populations
- Presence of human health or environmental threats
- Size of the property
- Likelihood of cleanup and redevelopment, and the availability of a known, interested end user
- Availability of other resources to contribute to the project
- Potential of site cleanup and redevelopment to spur additional improvements in the project area
- Whether the site is publicly owned, or the property owner is willingly committed to the BF AWP revitalization process

Specific Lessons Learned from BF AWP Pilot Projects

- **Make the project manageable by keeping to a reasonable project area size and number of brownfields:** Determine a reasonable number of brownfield sites around which the project will focus. When developing project area goals, be as specific as possible. Do not try to create a brownfields area-wide plan for too many sites or too large of a project area. Consider what can be realistically implemented over time.
- **Consider how site control and accessibility may affect the project:** Site control, the availability of public infrastructure to support site reuse, funding for site assessment and cleanup, and the ability to leverage additional investment are factors that reflect a readiness to move forward with a project, and each should be taken into account. Properties may be more ready to move forward if they:
 - are owned by a person or organization closely involved in the BF AWP process;
 - are adjacent to public or private investment; and/or
 - have specific interest from prospective property purchasers, developers, or property owners.
- **Predetermine whether key properties are eligible for resources:** Screening properties in the project area for public incentives (e.g., tax incentives for private investment), federal or state grants, or loan eligibility can help with organizing the list of properties into project priorities. A prioritized list helps keep the project focused on key next steps, and resources can be directed more quickly toward these projects if their eligibility is predetermined.

- **Develop site selection criteria and discuss with property owners and the public:** BF AWP grantees developed and applied various rationale and criteria for selecting sites for reuse and implementation planning. Discuss possible sites with current property owners before offering the sites for prioritization in a public forum.
- **Look for opportunities to achieve project efficiencies and economies of scale:** Identify where site cleanup and reuse activities will be coordinated around multiple properties in order to achieve some economies of scale. Also look for an opportunity to focus on properties adjacent to recent investment and with compatible existing uses.
 - Consider how the sites and projects tie together. Can an issue that is a problem for one site end up being helpful to another site in some way?
 - Have a strong sense of the state of infrastructure; try to identify what efficiencies you can achieve by cleaning up and reusing brownfields while making infrastructure improvements.

Pilot Project Example

In Roanoke, VA, the BF AWP grantee used a reverse site selection model. The city first conducted a market analysis to determine what businesses or investors were interested in redeveloping properties of the size the city had in the area and for what end use. The city used this analysis to make decisions about how to develop, prioritize, and implement their plan, including which brownfield sites to clean up first.



Photo credit: City of Roanoke, VA

- **Recognize which sites have the potential for being catalysts in the project area:** Which possible brownfield redevelopment projects are potential “game-changing opportunities,” and are likely to have a catalytic effect across the area? Small or large, a brownfields site cleanup and reuse project that is completed can often kick-start revitalization in other parts of the project area. Ensure that an outcome of your BF AWP process is that the key/catalyst brownfield sites have detailed site preparation and reuse plans ready-to-go so that once implemented, these projects can spur additional area improvements.
- **Seize opportunities to start implementing part of the project:** When an opportunity comes along to implement a component of the plan, take advantage and move forward as soon as possible. Small successes can have a catalytic influence, leading to greater successes and momentum. Do not wait until the entire BF AWP process is concluded to take action if a key project can get underway sooner.

Pilot Project Example

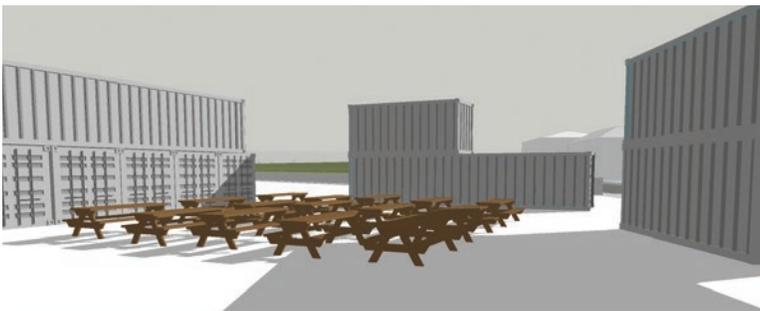
The BF AWP grantee in Tulsa, OK, was innovative in engaging the community around selecting and prioritizing sites for their project. The city and project consultants made up a community game and used Monopoly-type cards to get participants to choose priorities around site selection criteria such as property ownership, visibility, development potential, and community benefits.

Photo credit: City of Tulsa, OK





Site renderings and conceptual drawings that depict the cleaned up and reused brownfields are powerful tools that not only help interpret the community vision, but are also useful when deciding how to prioritize the project. Two- or three-dimensional images of the proposed site designs help all project stakeholders, including potential developers, better understand the “big picture” community goals, and generate ideas for sequencing key project elements.



Ironbound Community Corporation in Newark, NJ, worked within the community priorities of recreation, greening and growing, and flexible markets to develop a brownfields area-wide plan that keeps the project spaces adaptable for several different types of uses.

Graphics credits: Jonathon Rose Company

Cross-Project Theme 5: Develop Strategies for Plan Implementation Throughout the BF AWP Process

One goal of the BF AWP process is to enable a brownfields community to make a quick and smooth transition from planning activities to project implementation. It is important to identify early on which near- and long-term actions will lead to incremental, on-the-ground progress that is consistent with the goals of the community. Once these are identified, ensure that they are clearly articulated in the brownfields area-wide plan. The community vision for brownfields revitalization can only be achieved when the right resources are secured and leveraged at the right time and the full and continued commitments of key partners, local leadership, and project stakeholders are in place.

If you strive to make the entire BF AWP process an implementation-oriented program in your community, you will set the tone for having practical, matter-of-fact conversations with project area stakeholders around how to implement the plan. Working with them to create specific implementation strategies should occur alongside development of the plan.

Implementation Strategy Basics

- Begin the BF AWP process with the goal of being able to implement the final plan. Project area goals should be ambitious yet realistic. Set the expectation at the project kickoff that there will be much implementation work to do even after the plan has been finalized.
- Work under the principle that successful implementation will happen because of good planning, local drivers, partners, leveraging, and determination. Do not rely primarily on federal or state resources to implement the plan.
- Ensure that the BF AWP process is focused on identifying:
 - funding resources needed and a timeline for obtaining them;
 - leveraging opportunities;
 - key partners and which aspects of the plan they are responsible for; and
 - how to break down the plan into near-term and long-term actions.
- Do not wait until the plan is fully developed to start on implementation. Start on implementation as soon as the opportunity is presented.
- Prepare the community for the often long effort between starting the BF AWP process and full-scale implementation. Advertise and celebrate incremental progress to maintain momentum.

Specific Lessons Learned from BF AWP Pilot Projects

- **Bring together an implementation task force:** Identify and rely on the creative thinkers and those who know how to get things done in your community. Develop implementation strategies around who is in the best position to implement each component of the plan and how progress can be tracked and evaluated.
- **Understand that moving from planning to implementation does not have to be a linear process:** Implementation activities can occur alongside plan development; they do not have to happen only after the plan is fully developed. Be flexible enough with the process so that if an opportunity comes up to start an activity that aligns with the community's vision for the project area, you can take advantage of it.
- **Get started on implementation now:** Brownfields site assessment, site cleanup, and project infrastructure improvements (e.g., repaved roads, better transit service, streetscape and lighting upgrades, enhanced telecommunications and electricity, water quality and sewer upgrades) in the project area are all implementation activities. Another important implementation activity is

Pilot Project Example

The BF AWP grantee from Aurora, CO, developed a steering committee from the various stakeholder groups. The city shared each new deliverable produced under the EPA grant with the steering committee, so the members were aware of incremental progress being made. Steering committee members took that message back to their constituent groups, which helped keep everyone informed and momentum behind the project. Periodically, the city convened larger stakeholder meetings to give a full update and report out on the project.

ADVICE COLUMN

What are some early preparations a community can take at the start of their BF AWP project to help them become ready to implement their plan?

- Discuss plan implementation early and throughout the process, especially the specific resources and actions needed to accomplish the plan.
- Identify financing opportunities up front to help ground your plan in a feasible, market-based approach. Steer clear of creating a project area plan that needs to be overly subsidized with federal or state funds. The local market will need to support your plan.
- Useful and resourceful partners are needed at the project start. Get commitments from project partners that they will work with you throughout the project and see it through to completion.
- Use available federal and state funds as seed money for your project, but look for local resources and investment to carry the project through to completion. Do not rely on the possibility of securing federal and state resources to implement the plan because many of these programs can be highly competitive and are often oversubscribed.

tying the public policy you develop through the BF AWP to local planning tools. Adopting the plan and addressing public policy barriers, changing project area zoning as needed, establishing TIF for the area, piloting innovative stormwater management techniques, and creating a BID for the project area can all be important implementation steps. Educate the community about the benefits of these activities and explain how they fit into the BF AWP implementation process.

- **Identify resources that align with your project:** Begin the BF AWP process by brainstorming with project partners about what resources are or will be available for implementation.
 - Identify attainable resources at the federal, state, regional, and local levels that can be used to remediate targeted brownfield sites. Include technical assistance, discretionary grants, formula grants, and low-interest loan opportunities.
 - Where possible, align the existing resources of project partners and use them to help advance the BF AWP process and goals.
 - Link the plan outcomes to opportunities to secure private funding. Determine which private investors may be interested in investing in the project area revitalization and include them appropriately.

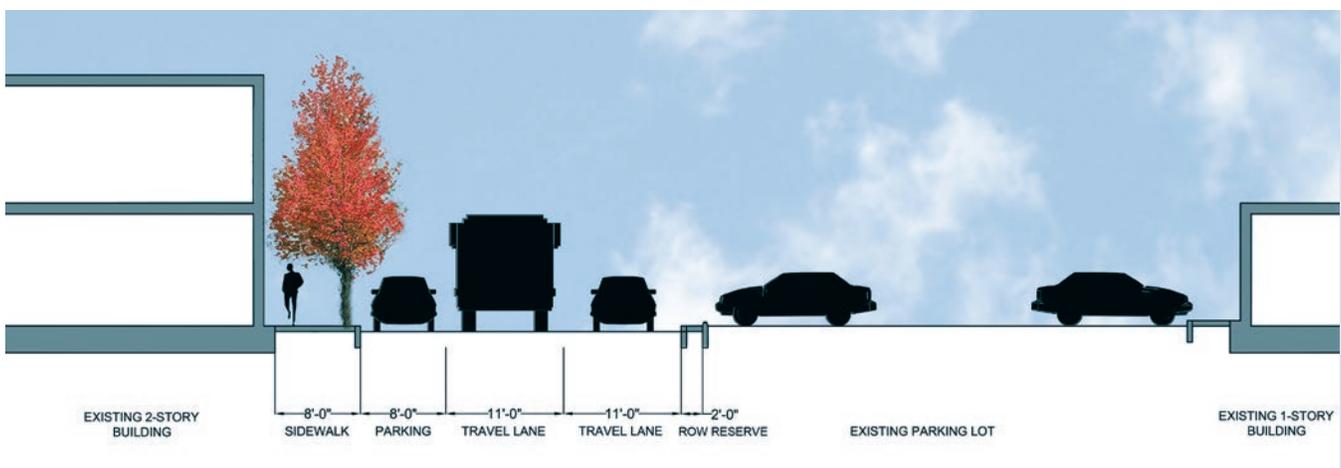
Early actions can get the ball rolling on implementation. Look for “cheap and easy” changes that can signal a start to implementation and build some momentum. For example, the BF AWP grantee in Atlanta, GA made stoplight signalization in the project area better and this helped to make the area more inviting.

Pilot Project Example

Encourage investment in the BF AWP project area that responds to private sector needs where appropriate:

- The BF AWP grantee in Phoenix, AZ, responded to developer interest in the project area by upgrading street infrastructure and making site improvements. These helped to make a redevelopment deal work.
- The BF AWP grantee in Lowell, MA, worked with area businesses to determine how site design, streetscape, and traffic flow could be improved to better meet the needs of the community. The city was then able to set up ownership arrangements with key businesses to implement some of these improvements.

- **Break down the project into specific implementation actions:** Fully achieving the community's goals and vision for the brownfields project area will be complex. It is essential that the implementation strategies become action items that are broken down into manageable steps. Take a “what if?” approach, as in “what if this actually happens?,” to help everyone think through specific strategies and partners. Hosting an implementation workshop is a good way to engage key stakeholders in prioritizing these actions into immediate and longer-term steps. During the workshop, consider how to answer the following questions:
 - What is the array of projects that we want to accomplish?
 - Can we break down the overall project plan into smaller pieces?
 - How can we make progress on the small items first?
 - Can we capitalize on ongoing projects/investments that are ready to go?
 - Which resources do we need to seek, and when?



Examples of short-term implementation projects for the City of Lowell, MA, include streetscape improvements and redesign of Tanner Street to make the BF AWP project area more accessible and attractive. *Graphics credits: City of Lowell, MA*

ADVICE COLUMN

Some specific implementation challenges that nonprofits may encounter:

- Brownfields site ownership or control: Nonprofits may not have interest or ability to hold title to property, which may be necessary for doing in-depth brownfields site investigations, cleanup, or redevelopment.
- Funding availability: Nonprofits may not be eligible to receive all sources of public funding (e.g., EPA Brownfields Assessment grants) so partnering with including local government and other organizations is important.
- Local government needs to adopt the plan: Nonprofits will need to actively engage city leadership to ensure that the final area-wide plan for the brownfields project area can be formally adopted by the city, and become a specific neighborhood plan or part of the city's comprehensive plan.

- **Identify “stopper” issues:** Certain issues may have stopped brownfields site redevelopment in the past, such as legal or enforcement matters or reluctant property owners. Address these issues early on so that the brownfields site is not prevented from being cleaned up and redeveloped.
- **Introduce new activities and programming into the area:** Using properties in new ways can generate, or renew, community interest in the BF AWP project area. Host activities that bring a variety of people to the area, and allow them to enjoy themselves and experience the area's potential. Brand the arrival of new or interim uses, such as a farmers' market, festivals, food trucks, or popup retail or restaurant, as part of the BF AWP community process.
- **Build on small successes:** Use a first success as a building block; for example, advertise the incremental progress as a tangible, on-the-ground result. Once you are successful with one project, it is often easier to do the next project.
- **Connect to job training opportunities:** Engage your local workforce development center to discuss the skills that are needed to advance your plan and how to develop those skills within the project area. Job training opportunities that ready the local workforce can help attract new businesses. Support local hiring throughout all stages of the cleanup and redevelopment.
- **Celebrate interim milestones:** Set short-, mid-, and long-term goals, and structure actions to achieve interim development successes. Widely advertise and publicly celebrate when BF AWP milestones are met.
- **Keep up the momentum to maintain interest:** Be mindful that investment can be slow to follow and resources hard to get. Develop a specific strategy for keeping momentum and stakeholder interest in the BF AWP project, particularly after the plan has been created but the hard work of implementation continues. Find every opportunity to champion the community's vision for this project area and make incremental progress on the key properties that are needed to advance the plan.

- **Consider how your project plans support the priorities of the funders whose resources you are seeking:** One strategy that a community may consider is how their BF AWP project plans align with the specific goals and priorities of available resources. This strategy usually requires developing a detailed timeline and project funding matrix to link potential funding sources with the brownfields cleanup and other catalyst projects.
- **Share your project area story over and over again:** Be thoughtful about the best way to spotlight your BF AWP project and get the attention you need from elected leaders and local, regional, state, and federal officials. Find opportunities to share the story about this project and show how this type of investment is helping your community develop the right tools and strategies to solve local problems.



Community input helped to shape these design concepts for the Core Revitalization Area downtown district in Kalispell, MT.

Graphic/photo credit: City of Kalispell, MT

Cross-Project Theme 6: Maximize Resources Through Targeted Project Area Investments and Leveraging

Various resources are needed to manage the multiple logistical, technical, informational, and financial needs of developing and implementing a brownfields area-wide plan. Having the right partners from public agencies, community or interest groups, property owners, foundations, and private businesses is crucial for expanding the capability of the organization leading the BF AWP process and supporting different aspects of the project.

Targeted Project Area Investments and Leveraging Basics

- Engage agencies with recent or planned capital investments in the project area, such as infrastructure improvement projects or new development. Understand how the timing of these investments influences your project. Use this engagement to identify opportunities in which those agencies' goals and the BF AWP goals are complementary.
- Build relationships with appropriate federal, state, tribal, and regional agencies; share the local importance of the project with how it aligns to the priorities of these organizations.
- Use the BF AWP process to demonstrate community consensus points, support, and readiness to be able to quickly use implementation resources once received.
- Showcase partnerships that have a history of successfully leveraging resources; use these to demonstrate the capacity for managing and using other competitive resources.

Specific Lessons Learned from BF AWP Pilot Projects

- **Look for opportunities to leverage your organization's resources alongside your partners' resources:** Recognize from the beginning that completing the large BF AWP project will involve the collective work of multiple partners acting in different capacities. Coordinate and strategize with other local government departments and community-based organizations, and share implementation approaches with regional, state, federal, and tribal agencies. Use these opportunities to build knowledge and support for your project, discuss leveraging possibilities, and improve your understanding of available technical assistance and funding.
 - Work together with project partners and across city departments to determine how resources can be combined or acquired to start cleanup and redevelopment on the priority brownfield sites.
 - Become knowledgeable on how to leverage local funding resources to meet federal or state grant funding match requirements.
 - The targeted layering of investments in the project area will not only bolster the overall revitalization effort, but also will provide evidence of a municipality's commitment to supporting private investment with complementary public investment.

- **Use initial grants as seed money; concentrate early funding received into the project area and use it to attract additional resources:** Brownfields resources from EPA or the state often provide the initial public investment and seed funds to revitalization projects, which help to open the door to additional private investment in the area. For example, the BF AWP grantees who have other EPA brownfield resources are using them to begin implementing their plans, including targeting their assessment grants, cleanup grants, revolving loan funds, and state and tribal assistance grants to the project area. These communities are also working with EPA regional offices to secure targeted brownfield assessments for key properties as resources allow.
- **Examples of project area investments and leveraging in the BF AWP pilot projects:** The BF AWP pilot project recipients have targeted local implementation resources and have attracted significant leveraging to the project area, resulting in many community improvements and continued project momentum. On the following pages are four examples from BF AWP grantees that have used a wide variety of existing resources and secured new leveraging from multiple public and/or private sources.

In each example, some of the resources were secured and used prior to the grant recipient receiving the EPA BF AWP funds; this demonstrates how the BF AWP process can be used to both build on prior investments in and attract new investment to the project area.

Pilot Project Example

The City of New Bern, NC, leveraged other EPA Brownfields grants alongside their BF AWP grant. The city initiated Phase I and Phase II brownfield site assessments using two community-wide assessment grants, then used the environmental information to help determine potential reuse options and costs, and create a brownfields area-wide plan that included three priority brownfield sites in the Five Points neighborhood.

Examples of Project Area Investments and Leveraging That Helps Further Implementation of BF AWP Pilot Projects

Grantee	Source of investment for implementation funds/ assistance	What assistance/funds have or will accomplish in the project area	Estimated amount or value
Sanford, ME	U.S. HUD Community Development Block Grant (CDBG) and match from the city	Downtown neighborhood revitalization grant; city matched funds with the purchase of property that will be used as a waterfront park/public gathering space adjacent to Sanford Mill	\$625K
	U.S. HUD Neighborhood Stabilization Program	Sanford Mill project; help with housing and ensuring that some residential units are subject to income eligibility limitations	\$3.5M
	EPA Brownfields	Assessment and cleanup grants for Millyard properties; one Targeted Brownfields Assessment (TBA)	\$2.1M
	Southern Maine Regional Planning Council Brownfields Revolving Loan Fund (RLF)	RLF subgrants for two of the properties within Millyard that received EPA's cleanup grant	\$400K
	Southern Maine Regional Planning Council Brownfields RLF	RLF loans for two of the properties within Millyard that received EPA's cleanup grant	\$1.1M
	EPA Water (Green Infrastructure)	Technical assistance to help redesign the former mill complex that drains to the Mousam River in order to revitalize the river as a recreational, ecological, and economic asset	\$40K
	New York University – Urban Planning Program	Midtown Mall Re-Use Planning Study	\$50K

Examples of Project Area Investments and Leveraging That Helps Further Implementation of BF AWP Pilot Projects

Grantee	Source of investment for implementation funds/ assistance	What assistance/funds have or will accomplish in the project area	Estimated amount or value
Ranson, WV	DOT TIGER II/U.S. HUD Community Challenge (with 30% local match)	2010 grant to connect Green Corridor to BF AWP commercial corridor; develop form-based Smart Code for the area and assist with engineering design for Fairfax Blvd.	\$1.4M
	U.S. HUD Brownfields Economic Development Initiative (BEDI)	2011 grant and low-interest loan for demolition, cleanup, infrastructure, and development preparation of former Kidde Foundry brownfield site (to become Powhatan Place)	\$4.5M
	EPA Brownfields	Multiple brownfield sites assessed under three different assessment grants	\$595K
	EPA Brownfields	Cleanup grant for Kidde Foundry site (to become Powhatan Place)	\$200K
	EPA Brownfields	Technical assistance for green infrastructure on brownfields in the project area	\$35K
	WV Department of Transportation/Division of Highways	2009 Transportation Enhancement grant for Third Ave. streetscape improvements	\$300K
	WV Department of Transportation/Division of Highways	Safe Routes to School grant for Ranson Elementary – Phases I, II, and III	\$268K
	WV Department of Transportation (with 20% local match)	American Recovery and Reinvestment Act funds for 5th Ave. streetscape and road improvements between Charles Town and Ranson	\$625K
	WV Division of Forestry	Jefferson County-Ranson-Charles Town Urban Tree Canopy study and tree planting events	\$45K
	State of West Virginia	Administration and constructions funds for Fairfax Blvd.	\$2.2M
	DOT TIGER IV	Engineering and construction of Fairfax Blvd. (to include innovative stormwater management techniques)	\$5M
City of Ranson	Engineering and construction of Fairfax Blvd. (to include innovative stormwater management techniques)	\$2.5M	

Examples of Project Area Investments and Leveraging That Helps Further Implementation of BF AWP Pilot Projects

Grantee	Source of investment for implementation funds/ assistance	What assistance/funds have or will accomplish in the project area	Estimated amount or value
Ranson, WV <i>(continued)</i>	EPA Office of Sustainable Communities	2011 Building Blocks technical assistance to study preferred growth area	\$15K
	EPA and National Fish and Wildlife Foundation	2012 grant to Charles Town and Ranson to do green infrastructure design at Evitts Run Park	\$100K
	Northern WV Brownfields Assistance Center	FOCUS West Virginia grant for Powhatan Place redevelopment study	\$5K



In Ranson, WV, the city was able to leverage the EPA grant for their BF AWP project alongside grant funding they received through the 2010 joint U.S. DOT TIGER II/U.S. HUD Community Challenge Grant. The city wants to incorporate a variety of green infrastructure stormwater management approaches throughout the public rights of way and on brownfield properties.

Graphics credit: Stromberg/Garrigan & Associates

Examples of Project Area Investments and Leveraging That Helps Further Implementation of BF AWP Pilot Projects			
Grantee	Source of investment for implementation funds/ assistance	What assistance/funds have or will accomplish in the project area	Estimated amount or value
Atlanta, GA	DOT TIGER V	Grant awarded for portions of the Southwest Trail	\$18M
	U.S. HUD Neighborhood Stabilization Program and match from the Annie E. Casey Foundation	Enabled city to purchase blighted/ abandoned homes within the project area	\$4M
	U.S. HUD Lead Hazard Control Program	Funds to Atlanta to evaluate and eliminate lead hazards in homes and provide job training	\$2.1M
	U.S. HUD Green and Healthy Homes	Funds to the Center for Working Families to help evaluate lead hazards in homes and provide job training	\$800K
	Invest Atlanta	Funds to make façade improvements around the BeltLine Trail	\$5M
	EPA Brownfields	Use of RLF for cleaning up brownfields around the BeltLine Trail	\$850K
	EPA Brownfields	Environmental Workforce Development and Job Training grant to the Center for Working Families	\$300K
	EPA Brownfields	TBAs for three properties within the project area: Create economic development site for the Pittsburgh community and community garden along Atlanta BeltLine; use supplemental TBA for the Boulevard Crossing site to expand soccer fields	\$400K
	EPA Brownfields	Technical assistance for manufacturing business needs-focused workshop in project area (part of the Investing in Manufacturing Communities Partnership)	Staff time, no \$ amount

Examples of Project Area Investments and Leveraging That Helps Further Implementation of BF AWP Pilot Projects

Grantee	Source of investment for implementation funds/ assistance	What assistance/funds have or will accomplish in the project area	Estimated amount or value
Kansas City, MO	U.S. Army Corps of Engineers (USACE)	Blue River Confluence Study of the Brush Creek/Blue River Confluence area, which runs along the western side of the BF AWP area and impacts several wetlands and riparian areas within the Municipal Farm	\$50K
	EPA Re-Powering America	Technical assistance feasibility study done by the National Renewable Energy Laboratory to determine the applicability of using biomass on several sites in the project area	\$35K
	EPA Brownfields	TBAs for sites in project areas 1, 2, 4, 7, 12, 13, and 19	\$233K
	EPA Brownfields	Technical assistance for a federal/state/regional/local partners implementation workshop in conjunction with the BF AWP plan development	\$20K
	U.S. Department of Defense	National Guard Armory expansion	Approx. \$2M
	Kansas City Community Gardens	Eastwood Hills Community Gardens: Oversight and development of the 1-acre community garden area (106 plots available to residents)	\$3K
	City of Kansas City, MO (KCMO)	Eastwood Hills Community Garden: Funding to KC Community Gardens for portions of the Eastwood Hills Community Gardens	\$69K
	KCMO	Public improvements (site clearing, water line, etc.) to Area 7 for BoysGrow farm site	\$22K
	KCMO	Abatement and demolition of the former Municipal Correctional Institute	\$285K
	KCMO	Potter's Field cemetery delineation – geophysical survey	\$25K

Two other examples are the Chicopee, MA, West End BF AWP project (led by the Pioneer Valley Planning Commission) and the Blue Greenway project from the San Francisco Parks Alliance, CA.

- A wide variety of resources have been invested to help make elements of the West End Brownfields plan for Chicopee, MA, a reality:
 - Federal resources from HUD programs supporting project improvements in the area total more than \$2.7M as a result of the city directing HOME Investments Partnership, Community Development Block Grant, and Sustainable Communities funding to the area. EPA brownfield resources of \$325K and U.S. Department of Energy block grant funds of \$128K also contributed to area improvements.
 - At the state level, Massachusetts Department of Transportation investments in the project area total more than \$10M, and Mass Development investments include more than \$210K.
 - Locally, the City of Chicopee has invested nearly \$800K for area demolition and LED streetlight improvements.
 - Private funding from various organizations, such as the downtown business association, developer, Urban Land Institute, Chicopee Neighborhood Development Corporation, affordable housing trust, and low-income housing tax credits total \$6.7M.
- San Francisco Parks Alliance (SFPA) is using several sources and partnerships to bring significant investment to the Blue Greenway:
 - A local bond measure that passed in 2012 (Proposition B, the Clean and Safe Neighborhood Parks bond) included \$34.5M for waterfront open spaces. Of that amount, \$16M is going to the Blue Greenway for creating part of the bike/pedestrian path and some green space along the way. SFPA's work in developing the brownfields area-wide plan was the basis for this \$16M investment.
 - By working closely with the City of San Francisco Department of the Environment, SFPA has also been able to leverage EPA brownfield cleanup funds and targeted brownfield assessments for key properties along the Blue Greenway. These brownfield investments are estimated to be approximately \$475K.
 - Using the results of EPA site assessments, the City of San Francisco, the Trust for Public Land, and private partners are in the process of considering which brownfield sites (or portions of sites) along the Blue Greenway should be secured for parks, open space, and residential development.
 - By working with the City of San Francisco Recreation and Parks Department and the Trust for Public Land, SFPA submitted a competitive grant application to the California Strategic Growth Council for the development of detailed designs for one of the key trail and recreational properties along the Blue Greenway.

Cross-Project Theme 7: Maintain Strong Project Management Throughout the Project

With all of the activities underway during a BF AWP process, the entire BF AWP project requires strong, committed project management and attention to detail.

Getting organized early on and staying organized throughout will help you manage all of the elements of the project, including maximizing community participation; keeping up with regular project advisory and project partner meetings; completing existing conditions research on the environment, market, and infrastructure; developing project priorities; and working with partners to create implementation strategies.

Project Management Basics

- Set up a recurring schedule and hold regular (e.g., biweekly) project meetings or conference calls with the members of the project team. Frequent meetings with the project team, including any contractors that are helping with the effort, is important to get and keep momentum behind the project.
- Use pictures of the project area to tell the story of the community history and current challenges. Include renderings that illustrate the community's vision for revitalization.
- If the BF AWP project overlaps with other brownfield grants or a related effort in the project area, closely coordinate on both efforts to determine how they can complement each other.
- Closely follow federal and local procurement rules if selecting contractors to assist with the BF AWP project. Ensure that the procurement actions are documented in the project files.
- Document the entire BF AWP process. Documentation will help you communicate the project goals and achievements. For example:
 - Video: Documenting the community brownfields charrette process with a video can serve two purposes: (1) it can help you document the charrette process itself, and (2) it can provide an excellent way for others to visualize the project.
 - Photos: Document the public meetings with photos that can later be used to illustrate the community engagement process and serve as photos for newspaper articles.
 - Record Interviews: Recorded radio interviews can be posted to social media sites.

Specific Lessons Learned from BF AWP Pilot Projects

- **Keep the project on track:** The BF AWP process should maintain a focus on creating an area-wide plan for reusing key brownfield sites and developing implementation strategies for the area-wide plan. Do not try to have the project encompass too many other items. Regularly revisit the project focus to remind all members of the project team to keep the focus on brownfields cleanup and reuse.
- **Advertise available project positions to, and recruit involvement from, the affected community:** Any advertisements for open positions (paid or volunteer) for the project team should reach possible candidates from the community being served, as well as wider professional circles.
- **Carefully select the contracted members of the project team and consider how to involve community members in that process:** One or more professional contractors may be needed on the project team, especially if they bring the skills necessary to perform any technical work and develop site renderings/schematics. When reviewing qualifications and proposals submitted by interested contractors, consider setting up a proposal review committee who can rank the project proposals based on a list of criteria that your organization sets. Include documentation to ensure that there is no conflict of interest among the review panel and the proposals being reviewed. Involving savvy and respected community members in the selection of the project contractors will add to project transparency and provide an additional opportunity for meaningful involvement.
- **Manage expectations by preparing and sharing an outline of the draft brownfields planning and implementation strategy document early on:** About halfway into the project, the project team should prepare a strong outline that describes all of the project elements that will be included in the document that contains the brownfields area-wide plan and implementation strategies. Share the document with key partners early on for their input, and include it in the outreach materials to the community so they know what to expect in the final plan. Use the outline as a guide for prioritizing and completing the activities that need to be done to finalize the document.

Pilot Project Example

In Tulsa, OK, the BF AWP project team members included a small group of contractors – one was a local expert, another was a national expert, and one was a design expert. The grantee felt that this combination was very useful because together, the contractors brought a broad set of skills to their project.

- **Use templates for repeated project management tasks to help manage and document activities:**

Developing templates for repeated project management tasks can help you be more efficient and serve as a reference for the project team. Examples of templates that could be useful to develop early on are:

- Meeting minutes: Meeting minutes will be an invaluable reference over and over again because they document what occurred in a meeting and identify next steps and responsibilities.
- Meeting attendance sheets: Attendance sheets help to segment communications lists of project stakeholders so that you can maintain frequent contact via email.
- Volunteer form: For any volunteers who are interested in helping with the project, a volunteer form can document their interests, contact information, and provide an understanding of how they will participate in the project.



Members of the project team document the ideas and input generated by stakeholders in Phoenix, AZ (at left), and Communities for a Better Environment (Huntington Park, CA).

Photo credits: Left: City of Phoenix, AZ. Right: CBE

Conclusion

Communities with brownfield sites already know that cleaning up and revitalizing these properties takes creativity, dedication, and a lot of hard work.

Because resources for remediating and redeveloping brownfield sites are typically delivered site by site, the affected community is not always given an opportunity to consider the collective burden of multiple sites when they are concentrated within a neighborhood, downtown, or local commercial or industrial corridor. An area-wide planning process will help the community approach the multiple challenges presented by a concentration of brownfields in a more organized and targeted manner. Working with community members and the range of local partners to envision how these brownfields should be reused, as well as doing research around the area's existing conditions, will result in a community plan and implementation strategy for brownfields cleanup and area revitalization. Using a BF AWP process is a valuable opportunity to build local ownership and commitment around a shared vision for the area's cleanup and redevelopment.

The 23 BF AWP grantees shared these key lessons learned and project advice, which may be helpful to other communities facing similar brownfields challenges. The pilot communities were able to demonstrate the value of engaging key partners and local stakeholders over the long term, and they increased their local capacity to leverage additional investment and attention into the brownfields project area. The grantees are now focused on keeping momentum around the BF AWP project by maintaining involvement with the community and attracting the necessary investment and project resources to implement their plans.

As each area-wide plan reflects the long-term brownfields revitalization goals of the community, full implementation of the plan will take will many years. All 23 pilot communities will need to continue to leverage the BF AWP process by seeking and coordinating resources to improve the brownfields project area. The continuing nature of these projects reinforces that the community needs to make incremental progress on implementation over the long term.

Appendix: Brief Descriptions of the Project Areas for the 23 Brownfields Area-Wide Planning Pilots

BF AWP Pilot	Project Area Description
<p>Atlanta, GA</p>	<p>Numerous brownfields in five redevelopment locations (tax allocation districts) in southwest Atlanta, connected by commercial and industrial corridors.</p> <p>Website: www.atlantabrownfieldprograms.com</p>
<p>Aurora, CO</p>	<p>Brownfields reuse in the western half of the Montview corridor in northwest Aurora in an area known as Westerly Creek Village.</p> <p>Website: https://www.auroragov.org/DoingBusiness/CityPlanning/PlansandStudies/WesterlyCreekVillage/index.htm</p>
<p>Cleveland, OH</p>	<p>Kinsman and Lower Buckeye neighborhoods located in the Cleveland Opportunity Corridor. Historic industrial uses have resulted in the area's many brownfield sites.</p>
<p>Communities for a Better Environment Huntington Park, CA</p>	<p>Huntington Park Brown-to-Green project area, which was home to heavy manufacturing operations until the 1960s.</p> <p>Document: www.cbecal.org/wp-content/uploads/2013/12/CBE-Huntington-Park-Brown-to-Green-Report1.pdf</p>
<p>Confederated Tribes of the Colville Reservation, WA</p>	<p>Two brownfield sites within approximately 1 mile of each other in the Nespelem District of the Colville Indian Reservation.</p>
<p>Denver, CO</p>	<p>South Platte River Brownfields Area, a quarter-mile buffer along the 11-mile riverfront.</p> <p>Website: www.denvergov.org/southplatte</p>
<p>Desarrollo Integral del Sur, Inc. (DISUR) Peñuelas and Guayanilla, PR</p>	<p>A 3,500-acre industrial area with former petroleum and chemical manufacturing and distribution sites. Area included nine neighborhoods in the rural municipalities of Peñuelas and Guayanilla.</p> <p>Website: www.disur.org/en/node/285</p>
<p>Goshen, IN</p>	<p>The 9th Street Corridor industrial brownfields area, surrounded by residential areas and several schools.</p> <p>Website: www.goshenindiana.org/content/redevelopment</p>

BF AWP Pilot	Project Area Description
Ironbound Community Corporation Newark, NJ	The Ironbound community, in the East Ward of Newark, which includes residential and recreational areas. Many manufacturing operations have closed, leaving behind brownfields and deteriorating infrastructure. Website: http://eastferryrevitalization.wordpress.com
Jacobs Center for Neighborhood Innovation San Diego, CA	The Village at Market Creek, an area with multiple brownfield sites in the center of the Diamond Neighborhoods of southeastern San Diego. Document: www.jacobscenter.org/_pdf/BF_AWP.pdf
Kalispell, MT	The Core Revitalization Area (CRA), located in downtown Kalispell. The CRA generally follows historic railroad tracks and contains multiple brownfields. Website: http://kalispell.com/community_economic_development
Kansas City, MO	The Municipal Farm property in the Eastwood Hills neighborhood. The property encompasses several municipal institutional sites that have either known or perceived environmental risks. Document: www.kcmo.org/idc/groups/cco/documents/citycommunicationoffice/sustainablereuseplan.pdf
Lowell, MA	The Tanner Street Corridor, which is mostly heavy and light industrial, with some commercial and residential areas on the periphery.
Monaca, PA	Four brownfields areas in the communities of Midland, Monaca, Aliquippa, and Coraopolis that lie along the 45-mile Ohio River Corridor. The four areas include many brownfield sites, which are primarily former steel mill-related and small-scale industrial lands. Website: www.ohioriverbrownfields.com
New Bern, NC	The Five Points neighborhood, an area adjacent to the city's downtown historic district. The neighborhood contains multiple brownfields, including abandoned gas stations, former dry cleaners, and many underutilized buildings. Website: www.newbernrenaissance.com
Ogdensburg, NY	Waterfront properties along the St. Lawrence and Oswegatchie rivers. The majority of the city's brownfields and vacant lands lie on this waterfront.

BF AWP Pilot	Project Area Description
<p>Phoenix, AZ</p>	<p>The Del Rio Area located in the center of Phoenix along Rio Salado. Within the project area lays the 160-acre Del Rio Landfill site, a high-priority brownfields site for the city.</p> <p>Website: https://www.phoenix.gov/oep/environment/land/brownfields/delrio</p>
<p>Pioneer Valley Planning Commission, MA</p>	<p>Downtown Chicopee's West End neighborhood, once home to major manufacturers of textiles, munitions, and shoes. These former uses have left many brownfield sites in the area.</p> <p>Website: https://www.chicopeema.gov/page.php?id=20993</p>
<p>Ranson, WV</p>	<p>The 1.5-mile Commerce Corridor along the Ranson-Charles Town border. The corridor contains numerous brownfield sites.</p> <p>Website: http://ransonrenewed.com</p>
<p>Roanoke, VA</p>	<p>The Rail Corridor Planning Area, which includes portions of four neighborhoods. Economic shifts and changes in transportation have left many brownfields and other underused, vacant, or abandoned properties, many of which are located near densely populated residential areas.</p> <p>Website: www.roanokeva.gov/85256A8D0062AF37/vwContentByKey/N28DWLVZ122BTFKEN</p>
<p>Sanford, ME</p>	<p>The Mill Yard located in downtown Sanford. This area was once the economic heart of the town and has a history of extensive industrial use that left behind brownfield sites.</p>
<p>San Francisco Parks Alliance San Francisco, CA</p>	<p>The Blue Greenway, a 13-mile corridor along the city's southeastern waterfront, where open spaces will be linked together for new recreational opportunities. The area includes brownfields from heavy industrial uses, sewer treatment plants, and power-generation facilities.</p> <p>Website: http://bluegreenway.org</p>
<p>Tulsa, OK</p>	<p>The Evans/Fintube property and surrounding communities in northern Tulsa. This area includes many brownfields in the form of abandoned structures, vacant lots, and active industrial facilities that are adjacent to residential and recreational areas.</p> <p>Website: www.cityoftulsa.org/our-city/economic-development/brownfields.aspx</p>

