



Smart Growth America
Making Neighborhoods Great Together

From Vacancy to Vibrancy

A guide to redeveloping underground storage tank sites through area-wide planning

March 2012





Smart Growth America

Making Neighborhoods Great Together

Smart Growth America advocates for people who want to live and work in great neighborhoods. We believe smart growth solutions support thriving businesses and jobs, provide more options for how people get around and make it more affordable to live near work and the grocery store. Our coalition works with communities to fight sprawl and save money. We are making America's neighborhoods great together.

Smart Growth America is the only national organization dedicated to researching, advocating for and leading coalitions to bring smart growth practices to more communities nationwide.

1707 L St. NW Suite 1050, Washington, DC 20036
(202) 207-3355
www.smartgrowthamerica.org

This report was written by Elizabeth Schilling/Smart Growth America and Mara D'Angelo/Smart Growth America, with insights and editing from Peter Meyer/E.P. Systems Group, Kris Wernstedt/Virginia Tech, Adhir Kackar/U.S. Environmental Protection Agency, Steve McNeely/U.S. Environmental Protection Agency, Robin Hughes/U.S. Environmental Protection Agency, Jody Kass/New Partners for Community Revitalization, and Rayla Bellis, Masumi Kikkawa, Garrett Ballard-Rosa/Smart Growth America.

On the cover

The Palm Springs Visitors Center, at the corner of North Palm Canyon Drive and Tramway Road in Palm Springs, California, is located in the building of a former Tramway Gas Station. Photo by Tom Watson via [Flickr](#).

Learn more from the National Brownfields Coalition

Learn more about underground storage tank sites and brownfields redevelopment issues across the country by joining the National Brownfields Coalition, a coalition of Smart Growth America. Sign up at www.smartgrowthamerica.org/brownfields.

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Executive summary

In response to increasing demand for homes in close-in neighborhoods, many cities and towns are pursuing redevelopment of places that have struggled with blight and disinvestment for years. These redevelopment initiatives are frequently impeded by the presence of properties with known or suspected contamination issues, which have often remained vacant in spite of federal, state and local programs to support cleanup. Many of these lingering sites are abandoned gas stations, auto repair shops, and former small industrial sites known to or suspected to house underground storage tanks.

Smart Growth America is proud to present *From Vacancy to Vibrancy*, a tool to help communities and their leaders mobilize the resources they need to clean up and reuse these sites. This guide describes how multi-site planning can turn small sites, particularly those regulated as underground storage tank (UST) sites, into community assets. By addressing contaminated sites in the context of broader neighborhood market conditions, needs and goals, multi-site planning can engage the public, realize economies of scale, and make new resources available for site cleanup.

UST sites are often
unique opportunities for
revitalization.

The opportunity in UST sites

UST sites are often both small and centrally located, and both these traits make them unique opportunities for revitalization. As demand rises for housing in neighborhoods close to town and in city centers – persisting in spite of larger challenges in the real estate market nationwide – UST sites are in a position to catalyze reinvestment and redevelopment initiatives.¹

The challenges of UST sites

The size and location of UST sites can also pose challenges to their redevelopment. Because of their small size, UST sites are often individually ineligible for environmental insurance and conventional financing options used to clean up other brownfields and are more expensive to clean up on a per-acre basis. Their size also means these sites can accommodate a limited range of redevelopment projects, making them a challenge to market to developers. Both of these challenges can be addressed, however, through multi-site planning.

Multi-site planning as a tool for neighborhood revitalization

The concept of multi-site planning grew from efforts to bring the economic, social and health benefits of redevelopment to the fore, rebalancing the equation to increase the importance of UST sites. By looking at all of the UST and brownfields sites in a particular neighborhood, area-wide planning engages residents and lays the foundation for partnerships between governments, nonprofits and private developers.

There are two distinct approaches to multi-site planning for brownfield redevelopment, **area-wide planning** and **corridor planning**. Both approaches can improve outcomes by:

- 1. Realizing efficiencies and economies of scale;**
- 2. Allowing communities to inventory and market sites for redevelopment;**
- 3. Engaging stakeholders and pooling diverse resources; and**
- 4. Bringing new resources to low-priority sites.**

In 2010, the U.S. Environmental Protection Agency (EPA) launched a pilot program that recognizes the value of multi-site planning as a powerful strategy for brownfield revitalization.² In addition to these Area-wide Planning Grants, federal and state governments provide other financial and technical resources that can be used to support multi-site planning.

Some states – such as Ohio, Wisconsin, New York and Colorado, which are discussed more in Section IV – have developed programs specifically to promote this approach to remediation and neighborhood revitalization, while other states continue to develop new policies to support the excellent outcomes of these local and regional planning efforts.

Area-wide planning engages residents and lays the foundation for partnerships between governments, nonprofits and private developers.

Strategies for leaders

There are several things neighborhood, municipal and state leaders can do to begin using or supporting multi-site approaches to revitalization. This guide describes the context for multi-site planning, with basic information about state and federal brownfield program requirements and brownfield redevelopment financing strategies. It describes multi-site planning initiatives across the country, including several innovative ideas for state support of local efforts. A list of resources is included for further exploration.

Remediating contaminated land is the first step in creating stronger, more resilient neighborhoods – and that's something all leaders should be working for.



Garland, Texas

I. Setting the context: The big role of small sites

The pressure to redevelop vacant, abandoned, and underutilized properties is increasing in many cities as regions undergo fundamental shifts in the real estate market. Demographic changes, higher gas prices and a growing concern with health and childhood obesity are driving increased demand for homes in walkable neighborhoods closer to jobs, shops and schools.³ Redevelopment and infill in existing neighborhoods represent an increasing share of new construction in many regions nationwide, a trend that has persisted despite the real estate market downturn.⁴

This shift in demand presents a major opportunity for neighborhoods that have struggled with disinvestment and blight. Redevelopment can put unused properties back on municipal tax rolls, stabilize surrounding property values, and create business and employment opportunities. But these neighborhoods are often handicapped by the presence of multiple brownfields – properties known or suspected to be contaminated with hazardous materials. Brownfield sites can be difficult to redevelop because investors are wary of the high costs and regulations associated with cleanup. Even a single brownfield site can make it more difficult to redevelop the surrounding neighborhood, whether because it occupies a key site that could anchor other plans, or simply because it creates an eyesore that reduces the appeal of surrounding properties.

Underground storage tank sites

This report focuses on one particular type of brownfield with a distinct impact on revitalization efforts: **underground storage tank (UST) sites**. A UST site is any property with one or more buried or partially buried tanks that have been used to store petroleum or other hazardous substances. When gas stations, auto body shops, industrial facilities or other types of development close down, these tanks are often left behind. As they age, the tanks are prone to leakage, and can contaminate both soil and groundwater, posing a serious environmental threat.

Cleaning up and redeveloping UST sites offers the same benefits as any brownfield cleanup: in the short term, groundwater is protected from contamination, neighborhoods can become healthier and more vibrant places for people to live and work, and surrounding property values can improve. In the long term, redevelopment of these sites leads to increased local tax revenues, new jobs and residents

in the neighborhood, and a stronger contribution to the regional economy. Perhaps most important, redevelopment of contaminated sites can improve the health and wealth of families living near them.

Too often, though, the barriers to redeveloping UST sites appear insurmountable. Federal regulations, state requirements and the size and location of these sites all pose challenges. The relative cost of assessing contamination and cleaning up a small site is too expensive, and proximity to other buildings means increased scrutiny from neighbors and a limited range of suitable new uses. Long-term disinvestment as well as the decay that impacts neighborhoods with multiple brownfield sites makes it more difficult to attract reinvestment. Given these difficult barriers to redevelopment, UST sites and other brownfields can remain abandoned for years.

Turning UST sites into community assets

The key to overcoming these challenges is to tackle UST sites not one at a time, but collectively. Multi-site planning strategies – including **area-wide planning** and **corridor planning** – are relatively new tools in the world of brownfield redevelopment. Multi-site planning strategies play to the strengths of UST sites and reduce the overall costs of assessment and cleanup, making it much easier to turn these troublesome sites into valuable community assets.

Multi-site planning processes can be used to reduce red tape, build synergies between neighboring properties and create other incentives for redevelopment. They help towns reuse existing properties in their tax base and attract businesses and private investment in the process. They also address the structural issues that site-by-site approaches to cleanup and redevelopment cannot, targeting the market challenges that cause sites to become chronically underutilized in the first place.

About this guide

From Vacancy to Vibrancy is intended to give community leaders and planners a better understanding of UST sites, along with their challenges and the potential of multi-site planning.

This report is intended to function like a map, providing the information you need to understand the “lay of the land.” Along the way, you will find references to many additional sources of information that will allow you to dive deeper into the topics discussed, along with specific examples to illustrate what other communities are already doing.

Many communities have dramatic stories to tell about their successes, demonstrating their use of multi-site strategies to re-imagine their communities and solve a variety of challenges. These stories, a few of which are featured here, show that the complex process of brownfields reclamation is accessible to communities of all sizes and income levels.



Portland, Oregon

II. USTs: Unbelievably Sticky Territory or Uniquely Suited for Transformation?

USTs are defined in federal law as one or more tanks, having ten percent of their volume underground, that are used to store potentially hazardous substances. In 1984 Congress directed the U.S. Environmental Protection Agency (EPA) to begin regulating USTs, and established programs to clean up leaking tanks, prevent future leaks, and establish standards for the construction and operation of tanks still in use. According to EPA, the United States has nearly 600,000 federally regulated UST sites, and state regulations cover many more.⁵

It is tempting to think of UST sites as smaller, less complicated versions of federally regulated brownfields. After all, the barriers to redevelopment are similar: cleanup costs may outweigh potential profit margins on the property; complex regulations and multiple public processes can slow timelines and add costs; both types of sites are typically in neighborhoods with depressed real estate markets.

Despite the similarities, significant differences in how the federal government and its state partners regulate these sites set them apart. For instance, until 2002 federal funds for brownfield assessment and cleanup were not available for UST sites. Polluted UST sites instead relied on a separate trust fund, funded through a federal gas tax but administered by the states.

In addition to the distinctions created by different regulatory details, the size and relatively low environmental impact of UST sites has often made them a lower priority for cleanup and redevelopment. Given the choice between a single large site with obvious economic development potential and a smaller, isolated site, private and public investors are likely to choose the site with the larger pay-off. On a site-by-site basis, larger, higher-visibility brownfield sites are the obvious priority.

Looking through the redevelopment lens

In the late 1990's, a new way of looking at environmentally compromised sites began to take hold. The National Association of Local Environmental Professionals and the Northeast-Midwest Institute began to describe UST sites as "opportunities for economic and community revitalization, but with an environmental

twist.”⁶ Potentially contaminated sites began to be seen as valuable assets to be reclaimed rather than hurdles to revitalization.

This perspective is the one long taken by community-based developers. In addition to focusing on potential assets as a matter of course, many community developers recognize that vacant and underutilized properties impact the values of the surrounding neighborhood. In their analysis, the economic benefits of reclamation extend well beyond the UST site itself.

Small sites, big potential

UST sites are usually small parcels, which can limit the range of new buildings and other redevelopment projects they can accommodate. Their small size also means that UST sites are often individually ineligible for environmental insurance and conventional financing options used to clean up other brownfields and are more expensive to clean up on a per-acre basis. These factors can make it difficult for individual site revenues to rise above cleanup costs, posing challenges to communities looking to attract investors.

Along with challenges, though, the characteristics of UST sites also offer several strengths. UST sites are often cheaper and easier to clean up than other brownfield sites, largely because petroleum is a common contaminant with well-established and easily accessible cleanup technology. And because petroleum is a regulated substance, it can be easier for private companies to negotiate cleanup with state agencies.

From a neighborhood redevelopment standpoint, UST sites are often critical because of their location. Frequently located along major thoroughfares or at high traffic corners, UST sites can often be used anchor wider revitalization efforts. They are often adjacent to residential neighborhoods or commercial buildings that will see an immediate benefit from their reuse. The prospect of immediate improvements and the visibility and accessibility of these smaller sites mean that USTs can be a powerful catalyst for community engagement and investment in redevelopment efforts.

Rebalancing the cost-benefit equation

Community developers have been at the forefront of efforts to address UST sites and other brownfields in the context of a neighborhood vision. Many community developers have identified sites that are key to wider neighborhood revitalization, and seek new ways to bring attention and resources to those sites. The concept of multi-site planning, described in more detail in the next section, grew from these efforts to bring the economic, social and health benefits of redevelopment to the fore, rebalancing the equation that has too often put UST sites at the end of the line for redevelopment efforts.

III. Multi-site planning for brownfield redevelopment

Multi-site planning looks at UST and other brownfield sites in the context of their surrounding neighborhood. The strategy uses these sites as launching points for neighborhood redevelopment that engages residents, maximizes public and private investment, and addresses the multiple, interconnected challenges of struggling communities. The process of multi-site planning mobilizes new resources, while potentially reducing the cost of site cleanup and multiplying benefits for surrounding property owners. The benefits of multi-site planning are especially relevant for small UST sites, which tend to be clustered in certain neighborhoods or corridors.

There are two distinct approaches to multi-site planning for brownfield redevelopment: **area-wide planning** and **corridor planning**.

Area-wide and corridor planning both begin with an inventory of UST or brownfield sites. Participants

analyze the potential of these properties in the context of the larger neighborhood, providing a more robust understanding of sites' potential than a single site analysis could generate. For example, a multi-site plan would determine the redevelopment potential of a vacant property by considering the state of local infrastructure, the proximity of other vacant or abandoned properties, housing, commercial, and industrial activity, recent construction and the region's transportation needs.

What goes in to an area-wide plan?

There is no prescribed approach to creating an area-wide plan, but there are several common elements in successful plans.

- A written work plan that signals a public sector commitment to target resources to an area over time;
- A description of major activities, goals, partners, deliverables, and measures of success required to revitalize a well-defined area in accordance with a community's vision;
- A neighborhood-driven process for engaging residents and businesses in crafting an area wide revitalization strategy or plan;
- Consideration of baseline data, including an inventory of vacant sites in the area, a preliminary market study, and a feasibility analysis;
- Specific reuse plans for some subset of sites in the neighborhood, if not all of them, as well as a list of related infrastructure and amenities needed to implement the community's vision; and
- A strategic plan that identifies a timeline and next steps for securing implementation funding available from the private sector as well as county, state, and federal programs.

Area-wide planning addresses the needs of entire neighborhoods, incorporating multiple brownfield sites and surrounding properties into a common vision that guides revitalization efforts. Area-wide plans take into account existing conditions, community needs, and market realities, then develop specific strategies to use a wide variety of available resources to achieve community goals for everything from local business development to neighborhood open space.

This approach is not unique to brownfields redevelopment. Many cities and towns prepare "small area plans" (sometimes called "district plans" or "specific plans") that focus in on one neighborhood's future. Area-wide plans use a similar approach and incorporate the unique needs associated with brownfields sites.

This strategy is more efficient and more engaging than treating each brownfield site as an individual problem, especially when a single neighborhood has multiple small sites. The broader, neighborhood-wide view helps to overcome many of the economic barriers to UST and other vacant property reuse, and simultaneously addresses the market conditions that make it difficult to attract investors to a brownfield site. This strategy can also improve confidence that individual brownfield sites will not continue to drag down surrounding values. The increased potential for strong returns makes sites more viable candidates for private sector cleanup or redevelopment, thus saving public dollars.

When it is driven by community engagement, area-wide planning can also create robust public support for projects included in the plan, helping reduce delays, prevent lawsuits, leverage new resources, and maintain commitment to the plan over time.

Corridor planning addresses redevelopment needs along transportation corridors, such as rivers, rail lines, or roadways. The main distinction between area-wide planning and corridor planning is their scale. A corridor may run through several neighborhoods, counties, or even states. These larger scale projects present a unique opportunity to make brownfield revitalization part of infrastructure projects like water and sewer lines or roads. This strategy can expedite brownfields revitalization efforts, help communities get more out of their redevelopment investments and create lasting value along a corridor.

Corridor planning is particularly relevant to UST sites because they tend to be located along major thoroughfares. By creating a plan to remediate a cluster of sites along a transportation corridor rather than one site at a time, a region or jurisdiction can take advantage of economies of scale, leveraging resources and overcoming many of the barriers associated with smaller scale revitalization efforts.



Building an area-wide plan: Kansas City's Green Impact Zone

Kansas City, Missouri's Green Impact Zone is an area-wide planning initiative aimed at revitalizing a distressed 150-square block area in the heart of Kansas City plagued by more than 185 brownfield sites, including 94 known or potential UST sites. Troost Avenue on the western edge of the zone was the legal line of segregation during the days of Jim Crow and has continued to serve as a division between rich and poor, black and white, and jobless and employed. Today a quarter of all properties in the zone are vacant, while in some blocks this number soars to 75%. In certain U.S. Census tracts, unemployment is above 50%.

The Green Impact Zone initiative has successfully channeled community motivation to revitalize the area by establishing a common vision for the Zone. This vision has provided a framework for targeting resources to make specific infrastructure and housing improvements, invest in economic development and sustainability initiatives and address vacant properties. Representatives from 10 neighborhoods and community development organizations act as a coordinating council.

Several catalytic redevelopment projects are already underway in the Zone, including the conversion of an abandoned school into 186 affordable and market-rate housing units. For further information, visit www.greenimpactzone.org.

Corridors' larger scale also means that more than one local government may be involved with developing and implementing a corridor plan. Rather than building new relationships from scratch, successful corridor planning efforts take advantage of the inter-jurisdictional working relationships already in place to support infrastructure planning and development, such as a metropolitan planning organization, a council of governments, or another regional planning body.

Finally, the scale of the corridor also necessitates broader and more complex fundraising, coordinating, and community outreach efforts than is typically needed by smaller area-wide planning efforts in order to realize the benefits of this approach.

Planning on the corridor scale: The Tamiami Trail

The Tamiami Trail Petroleum Brownfields Revitalization Initiative in Florida is a good example of corridor planning with cooperative stakeholder engagement. A Florida Scenic Highway that connects Tampa to Miami, the Tamiami Trail passes through big cities, rural towns, and the Everglades. New interstate development has shifted traffic away from the Trail, and abandoned gas stations have become commonplace. The Revitalization Initiative focuses on a 70-mile stretch of the Trail in Sarasota and Manatee counties that is contaminated by more than 500 petroleum brownfield sites and touches many distressed communities.



The Revitalization Initiative has successfully incorporated the needs of all the communities along the Trail into a single vision and capitalized on existing community networks and organizing structures along the length of the corridor. When the Initiative launched in 2009, the Sarasota/Manatee Metropolitan Planning Organization (MPO) became an organizing vehicle for community outreach. Revitalization Initiative staff also partnered with local nonprofits, educational institutions and the NAACP to solicit community input and share updates, and participated in monthly meetings with stakeholders to capture as much community feedback as possible throughout the planning process.

The Brownfields Revitalization Initiative is still underway. Project staff are currently working to inventory former gas station sites and brownfields along the corridor and bring new partners into the effort. For more information, download the Environmental Law Institute's fact sheet about the Initiative at www.eli.org/pdf/tamiamitrailfactsheet102709.pdf.

Benefits of multi-site planning

Area-wide planning and corridor planning can both help realize efficiencies and economies of scale, offering solutions for all of the challenges of UST site redevelopment mentioned previously – small parcel size, uncertain market conditions, statutory or regulatory hurdles and cleanup effort and cost. They can also attract private sector investment and help public sector investments stretch farther. The following is a more detailed explanation of how these benefits work.

1. Realize efficiencies and economies of scale

Targeting multiple sites can help make smaller, more difficult-to-finance sites viable, not only by taking advantage of the relationship between sites, but also by creating efficiencies in a number of areas.

- Particularly at the neighborhood scale, multi-site planning allows for **complementary use of different sites**, considering how sites can work together to accommodate needed end uses. For instance, a small vacant site could provide required stormwater infrastructure for an adjacent, large facility that would otherwise be prohibited. Siting a major development project (like a transit station) on one site or cluster of sites can raise the value of the sites around it. Sophisticated financing schemes can be used for a cluster of properties that cannot be used on a single small site. For instance, a tax increment-financing (TIF) district can be established to support the entire designated area, or a key piece of it.
- **Site assessment and cleanup can be more efficient and cost effective when clusters of sites are targeted**; for instance, getting core sampling digging equipment into multiple sites in a neighborhood at the same time can save money on site investigations. Working simultaneously on multiple sites can also streamline investigation and remediation; when a site is treated individually, important synergies can be missed; for instance, if only one site is targeted, contaminants present on proximate sites can threaten to re-contaminate it through groundwater.
- Targeting multiple sites for cleanup can help them **qualify for environmental insurance policies**. Environmental insurance can help bound cleanup costs, protect against liability for previously unknown contamination and conditions that are created or exacerbated by construction, and guard against third party claims for injury or pollution. Environmental insurance policies for cleanup costs of less than one or two million dollars are typically either unavailable or unaffordable. Bundling several properties under single ownership allows the sites collectively to surpass the remediation cost threshold. Even without insurance, treating multiple UST sites as a single pool can help balance the exceptional risk of one property encountering unanticipated and potentially costly cleanup surprises with the unexceptional risks of the other properties in the portfolio.

With corridor planning in particular, planning efforts can realize additional efficiencies if redevelopment investments are coordinated with infrastructure investments like street and streetscape improvements, trails, bicycle lanes, transit lines, and water and sewer lines. Coordinating infrastructure provisions and environmental remediation can achieve even greater revitalization outcomes as well as opportunities for cost savings. For instance, Wisconsin's Department of Transportation (WI DOT) uses clean soil displaced from road improvements and construction to cap brownfields sites. This synergy between objectives saves WI DOT money on fill disposal and the Wisconsin Department of Natural Resources spending on site preparation.⁷

2. Inventory and market sites for redevelopment

By looking beyond the boundaries of individual sites, multi-site planning is an opportunity to also examine an area's assets, needs, and opportunities. This comprehensive assessment makes it possible to prioritize public investments to achieve specific goals beyond brownfield cleanup. It also provides a robust dataset for private-sector investors interested in redevelopment.

Inventorying an area can identify which vacant sites are highly viable for redevelopment, which have the potential to bring catalytic change to the community, and which may need extra help due to lingering challenges. In doing so, this process can prioritize public expenditures and identify other investments – such as transportation infrastructure, affordable housing, or educational services – necessary to support a community's vision for the area. In addition to making the most of limited public resources, this



Catalyzing redevelopment: San Diego's Village at Market Creek

The Village at Market Creek in San Diego, California is an example of how multi-site planning can use one strategic project to catalyze broad community change.

The Village at Market Creek is a 52-acre community in the heart of southeastern San Diego's highly diverse Diamond Neighborhoods, an area facing historic underinvestment, high unemployment rates, and poor health among residents. At least 12 undeveloped properties within the Village were known or suspected brownfield sites, and the Village and surrounding neighborhood contained at least 20 leaking USTs.

Despite these barriers, a community-driven revitalization initiative led by the Jacobs Center for Neighborhood Innovation has begun to transform the Village at Market Creek. The ongoing success of this effort is largely due to the momentum generated by the Village's first major redevelopment project, the conversion of a contaminated 10-acre former factory site into a retail and cultural center called Market Creek Plaza. Completed in 2004, the Plaza houses the first major grocery store in the neighborhood in 30 years, as well as several restaurants and a community center.

The Market Creek Plaza project has played a transformative role in the neighborhood by serving as a high-profile success around which community members can rally, bringing more than 1,700 new jobs back into the neighborhood and providing a framework for ongoing community member investment in the broader revitalization effort.

Read more at www.marketcreekplaza.com.

prioritization process supports marketing efforts by communicating clear goals for the area's future use.

The second benefit of a multi-site inventory and market analysis is that it provides developers with information about existing conditions, planned public investments, community intentions and subsidies available for particular projects – all of which can encourage private investment. Multi-site planning reduces uncertainty by putting these initial pieces in place, and as a result it can make private development of properties within a designated area more cost effective. In the case of corridors, the prospect of strong connectivity between sites, which allows developers to build on the synergies of coordinated redevelopment, can be an additional inducement.

3. Engage stakeholders

Effective multi-site planning is based on transparent and meaningful community participation. Consultation with established community networks and important stakeholders at the beginning of the planning process ensures that proposed end uses for individual properties and the entire area are things that the community wants and will use. Engaged community members can become effective leaders of ongoing revitalization efforts, and they can help limit unexpected opposition to projects if they are treated as partners in development plans. Because neighborhoods and corridors with multiple brownfields and other vacant properties often suffer from other economic challenges, multi-site planning becomes an important method of restoring the social fabric as well as the built environment. Meaningful community engagement is not simple. Real engagement requires an investment of resources to support community leaders as they drive the planning process. Ideally, these resources can be used to hire technical experts who can give the community the information they need to participate in the planning process on equal footing with real estate and planning professionals.

Engaging community members, local businesses, community-based organizations and other stakeholders is well worth the investment, though, and can yield both tangible and intangible returns as residents, business owners and community groups learn about and invest in redevelopment plans:

- A nonprofit organization can secure a grant to invest in the area and recruit volunteers to help implement the grant;
- A local business can incentivize one of its primary suppliers to relocate to the area, or shift new jobs to its office there;
- A local community development corporation or other community-based organization can galvanize community interest and empower local residents to affect change in their neighborhood;
- Public commitment to and media coverage of UST redevelopment can raise the visibility of redevelopment efforts, bringing energy to a formerly neglected area; and
- Interaction of a wide cross-section of stakeholders in an open collaborative process can break down barriers between different groups and help reduce institutional rigidities that stymie cross-agency cooperation.

In the best-case scenario, as more stakeholders bring resources to bear, the visible successes of a multi-site planning effort snowball, and the list of investments and improvements implementing the plan continues to grow.⁸

Engaging community stakeholders: Milwaukee's 30th Street Industrial Corridor



The 30th Street Industrial Corridor in Milwaukee, Wisconsin is an example of a corridor planning effort that successfully engaged the public to drive forward a vision for revitalization. The corridor is a five-mile stretch on the northern side of Milwaukee that was once the heart of manufacturing in the city. There are over 200 known brownfields in the corridor that have hindered revitalization, including many with underground storage tanks.

Recent efforts to revitalize the corridor have been successful due largely to effective community engagement led by the 30th Street Industrial Corridor Corporation (ICC) in partnership with numerous community groups and non-profits. The ICC had regular telephone contact and held meetings with community organizations and residents, provided access to project materials at numerous locations in the community, adjusted the materials based on community input and held an open house where community members were able to learn about brownfield assessment work in the corridor and share their input and ideas for future development in the area. By incorporating the views and expertise of these diverse community groups early on, the Industrial Corridor Corporation's efforts brought new ideas and perspectives to the planning process and helped important stakeholders become invested in the project. For further information, visit www.thecorridor-mke.org.

To ensure its long-term success, a multi-site plan must include a strategy for funding the plan's implementation. Often this requires creative combinations of federal, state, and local sources of public funding, as well as contributions from community-based organizations and the private sector.

Indianapolis' Smart Growth Redevelopment District is indicative of this multi-source strategy. The district lies two miles northeast of downtown Indianapolis on an abandoned railroad corridor. Many industrial sites that line the corridor from the time when it was an active railroad have been abandoned, with 15 known and 65 suspected petroleum contaminated sites in the area.

To counter this wave of disinvestment, the city has pooled several sources of public and private funding to target this multi-site redevelopment project. A Neighborhood Brownfield Initiative grant has helped leverage a matching contribution from the Local Initiatives Support Coalition to clean up the former Production Plating Co., and a number of private foundations and local businesses have also contributed to the effort. This diverse stream of resources for brownfield redevelopment has played a crucial role in sustaining community revitalization in the neighborhood over the long term.

For further information, see the Smart Growth Redevelopment District website, www.smartgrowthindy.org.

Pooling diverse resources: Indianapolis' Smart Growth Redevelopment District

4. Bring new resources to low-priority sites

Federal and state laws help determine priorities for the allocation of UST grants and loans, and many state programs prioritize cleaning up their most polluted sites. UST sites in neighborhoods are often lower priorities because they are relatively "clean," posing little threat to surrounding residents. Program rules may not allow consideration of other important interlinked goals, such as the need for neighborhood revitalization and the provision of needed human services.

Multi-site planning can be a way for localities to help state UST regulators and their partners in other state agencies prioritize cleanup for low-threat sites. The process can draw attention to the ways site cleanup can support broader goals in a targeted area, mobilize community members, and create a structure for combining varied funding sources.

Meeting community goals through redevelopment: Florida's "Highways to Healthcare" initiative

Communities along several major transportation corridors in Florida face the dual challenge of petroleum-related brownfields and inadequate access to health care facilities. The "Highways to Healthcare" initiative plans to solve both.

The Initiative is a community-driven effort to redevelop contaminated UST sites and other brownfields along major corridors in Florida and to turn the sites into clinics and other health and

public service facilities. This multisite planning initiative has fostered nontraditional partnerships and provided a means to get lagging properties off the state's corrective backlog while also addressing the broader goals of neighborhood revitalization and human services. In St. Petersburg, for example, help from the Florida

Department of Environmental Protection's abandoned storage tank program led to the cleanup of a site that now houses the Johnnie Ruth Clarke Health Center, initially contaminated from both an offsite abandoned gas station and an on-site deteriorated boiler tank.

The redevelopment of this site has proven to be catalytic, spurring further development in the area including a performing arts center and retail and grocery shopping.⁹

For more information about the Highways to Healthcare initiative, download a presentation about the program from the National Association of Local Government Environmental Professionals at www.nalgep.org/ewebeditpro/items/O93F24871.pdf.

5. Pool diverse funding sources

In addition to the multiple federal and state programs that support assessment and cleanup of individual sites, multi-site plans can also draw on public funds available for neighborhood redevelopment, including funds for infrastructure repair and replacement, affordable housing, education, and economic development, among others. This ability to support investments in cleanup with complementary public and private investments in infrastructure, buildings and economic development programming means that multi-site plans are more likely to be implemented effectively than a planning process that attempts to work around vacant sites.

Multi-site planning efforts also create structures for experts in different public programs to work together to understand and coordinate different funding sources. Guided by the plan itself and by ongoing community leadership, participants can sequence funding and identify financing gaps that can be filled by private investors, non-profits and charitable foundations – sources that would be inaccessible without the plan and the commitments it establishes.

IV. Federal and state resources for redevelopment

Communities seeking to assess and clean up UST sites can find support from a number of federal and state programs. This section highlights some important sources of financial support for UST reclamation and multi-site planning, and describes the innovative approaches of four states.

The programs summarized here are part of a complex network of programs and regulatory requirements. Beyond the federal regulations and requirements, each state has its own funding sources with distinct eligibility requirements and regulations. Navigating these programs requires special legal and technical expertise, and this guide is not intended to be a comprehensive explanation of all brownfield regulations that may apply to a given project. This guide is intended to give participants in a multi-site planning process a broad overview of state and federal processes.

The redevelopment process

As noted in Section III of this report, area-wide plans are distinguished from related land use plans by their commitment to identifying and remediating key sites. The figure below lays out the relationship between planning and clean-up milestones, showing how brownfield identification and cleanup activities fit into the process of developing a community vision (Step 1) and implementing plans (Step 6).



Figure adapted from “Reuse: Creating community-based brownfield redevelopment strategies.”¹⁰

The main difference between a site-specific redevelopment and a multi-site planning effort is the interaction between the public sector, property owners, and community residents. For instance, instead of leaving reuse options in the hands of the site owner, the community considers information about site conditions and limitations in the context of larger market conditions, needs, and the public vision for the entire area as they work together to explore reuse options.

This figure does not show all of the steps required to comply with legal requirements for site assessment and cleanup. Within the larger planning process, there is still a need for property owners and the public sector to pay close attention to the individual properties of concern, and the ultimate decision to invest in realizing the community’s vision will often rest in the hands of individual site owners.

Federal funding for UST site redevelopment

Several federal programs provide funding for UST site assessment, redevelopment planning and cleanup. The two largest and most widely used programs are the Leaking Underground Storage Tank (LUST) Trust Fund and a group of four Brownfields grants. In 2010, EPA piloted a new program specifically to support multi-site planning.

Federal regulations and UST site redevelopment

Some key regulatory requirements impact inactive UST sites:

- **Notification requirements** – Owners of tanks installed on or after May 8, 1986 are required to notify their state regulatory authority of the presence of the tank within thirty days of operation. Tanks taken out of operation before 1974 are not subject to this requirement.
- **Financial responsibility requirements** – Owners of USTs must demonstrate that they have the financial means to cover potential cleanup costs of leaking tanks, as well as compensate any third parties for property damage or injury resulting from leaks.
- **Cost recovery requirements** – Efforts must be made to recover UST site cleanup costs from the responsible site owners or operators if any LUST Trust Fund dollars are used.

These requirements are designed to prevent and mitigate the harmful impacts of tank leaks, but they can also complicate and impede redevelopment efforts. When a single property contains a UST as well as another source of contamination, the difficulties in sorting out requirements can be compounded. Multi-site plans facilitate redevelopment by providing a common forum for communities and state programs to identify and address the different requirements of multiple sites.

For a full overview, read EPA's report, *Musts for USTs*, at www.epa.gov/swerust1/pubs/musts.htm.

EPA's Office of Underground Storage Tanks administers the LUST Trust Fund. Since 1986, LUST funds have been available to cover the direct costs of UST site assessment and cleanup. According to EPA, 90% of LUST Trust Fund dollars are distributed directly to programs run by states and Native American Tribes.¹¹

EPA's Office of Brownfields and Land Revitalization administers four types of brownfield grants for assessment, cleanup, establishment of local revolving-loan funds, and environmental job training for residents of brownfields communities. In 2002, amendments to federal law redefined brownfields to include sites contaminated with petroleum products, and created a requirement that 25% of these grants be awarded to petroleum brownfields, including those with USTs.¹²

In 2010, the federal Sustainable Communities Partnership announced the availability of funds to support area-wide planning for brownfield cleanup and community revitalization. EPA selected 23 communities in the first round of pilot grants.¹³ Of these communities, ten already knew that they would be dealing with UST sites as well as other hazardous waste sites. Others intended to use part of their grant to conduct inventories of former gas stations.

There is a wealth of additional information on the many federal programs that support assessment, cleanup and redevelopment of petroleum brownfields. Section V, below, lists several sources, and the summary list in the American Planning Association's *Reuse: Creating community-based brownfield redevelopment strategies* is a good place to start.¹⁴

State funding for UST site redevelopment

State-level programs can play a central role in UST redevelopment, and four states, described below, have created programs to support local multi-site planning. As these examples illustrate, each state uses its own programs and rules to regulate and redevelop UST sites and petroleum brownfields. Thirty-seven states have federally approved UST programs in place, allowing them to enforce federal regulations and administer federal UST cleanup and redevelopment funds.¹⁵ To receive federal approval, each state program must be at least as stringent as the federal UST program in terms of regulations for site performance, enforcement and the scope of sites covered under the program. In the 13 states without an approved program, the state government and EPA work together through cooperative agreements and grants.

Many states supplement federal cleanup funds with financial assurance funds, which function as a substitute for or supplement to private insurance to cover site cleanup. Each state defines its own rules for coverage, deductibles, and the types of sites that are eligible for funding. Some states change or limit the amount of coverage a site can receive based on factors such as tank size, when the tank started leaking, and how closely the site owner has complied with state regulations. In some states, Financial Assurance Funds can be used to redevelop sites as well as clean them up, but in many cases only cleanup projects are eligible for state funding.

For more information about the programs and rules in your state, the best source is local. State government websites are often good starting points to find basic information and program contacts. In addition, the EPA maintains a complete list of EPA regional contacts and state programs in a Program Directory on the website of the Office of Underground Storage Tanks at www.epa.gov/oust.

Case studies: state support for multi-site planning

While area-wide and corridor planning strategies are primarily implemented at the local level, state-level structures can make multi-site planning efforts more successful by removing red tape and providing resources, technical expertise and assistance with navigating regulations and programs. The following case studies show how four states are providing support for area-wide and corridor planning. Additional state innovations for further consideration are described in the Appendix.

Wisconsin: Streamlining regulations, oversight, and funding

At the federal level, different laws govern petroleum and non-petroleum brownfields, and state programs are typically modeled to reflect that divide. This means that discovering petroleum contamination on a site can change its eligibility for various programs and funding. Likewise, working with more than one type of site can complicate efforts to address properties comprehensively through a multi-site planning process.

To help address these challenges, some states have experimented with creating "One Cleanup" programs and other streamlining measures. In 2006, the Wisconsin Department of Natural Resources signed a Memorandum of Agreement with the EPA Region 5 Administrator to facilitate their One Cleanup Program. The aim of the program was to simplify cleanup of petroleum and non-petroleum brownfields sites under

different regulatory programs with potentially conflicting approaches and cleanup standards by providing a single, consolidated approach. Under Chapter NR 700 of the state's Natural Resource Administrative Code, Wisconsin's Remediation and Redevelopment program now supports the assessment, cleanup and redevelopment of both petroleum and non-petroleum sites by providing assistance to any contaminated site regardless of its source and allowing clients—including entities that caused the contamination, purchased contaminated land, or are impacted by contaminated sites—to contact a single regulator, as opposed to separate agencies that administer different issues.

To read more, see the One Cleanup Program's website, www.dnr.wi.gov/org/aw/rr/cleanup/ocp.htm.

Colorado: Providing access to technical assistance

Providing access to information and technical assistance can help ensure that jurisdictions are able to effectively execute area-wide planning efforts. Localities commonly have limited planning department staff resources that must master a range of areas of expertise and juggle a number of moving parts within limited timeframes. Help from the state in navigating regulations, accessing funding streams and understanding complex brownfields liability, insurance, cleanup and redevelopment protocols can be invaluable.

Colorado is a prime example of a state that has a strong support system for multi-site planning efforts. As part of their Brownfields Program, the Department of Public Health and Environment contracts with a state-level non-profit corporation, Colorado Brownfields Foundation (CBF), to provide assistance with area-wide and corridor planning efforts.

One recent example of CBF's efficacy is its work through Colorado's Historic Byways Revitalization Initiative to provide technical and financial assistance to the Heritage Tourism Corridor Project in Park and Chaffee Counties. Multiple sites on the corridor include former gas stations and bulk petroleum storage sites. CBF's work on the project has included developing brownfields inventories, coordinating the use of Targeted Brownfields Assessments by the State of Colorado, and facilitating the use of state cleanup funds and federal Revolving Loan Funds. This assistance is made possible through CBF's partnership with the Colorado Department of Public Health & Environment (CDPHE) and Division of Oils and Public Safety (OPS), which allows CBF to help municipalities gain easier access to state-level funding and resources. Through the program, CBF is helping both counties pursue a corridor strategy for brownfields and UST cleanup, economic development and heritage tourism attraction.

For more information about the Colorado Brownfields Foundation, see www.coloradobrownfields.org.

New York and Ohio: Providing direct support for multi-site planning

Streamlining regulations and providing access to technical assistance can be critical, and some states have gone even further by establishing programs that directly assist communities that want to develop a multi-site plan.

New York's Brownfields Opportunity Areas program was conceived primarily to give community members a voice in the decisions that affect their future. In particular, the program is designed to engage the community in changing the noxious reuse patterns commonly found in low-income neighborhoods and communities of color, which are often burdened with multiple brownfield sites, high incidences of

disease and unemployment. The program provides municipalities and community-based organizations with technical assistance and highly flexible financial assistance—up to 90 percent of the eligible project costs—to develop and implement area-wide plans. These funds can be used for a range of activities such as visioning, market analyses, and implementation strategies for areas or communities. The program also establishes a partnership between the state and the proposing entity, as well as a priority and preference for funding and financial assistance.

For more information about New York’s Brownfields Opportunity Areas program, see www.dec.ny.gov/chemical/8447.html.

Ohio’s Sustainability Reinvestment Pilot Track for its Clean Ohio Revitalization Fund (CORF) is another model for state support of area-wide planning. Administered by the Ohio Department of Development’s (ODOD) Urban Development Division and Ohio Environmental Protection Agency, CORF was approved by Ohio voters in 2000 to fund statewide brownfield cleanup and redevelopment. Last year, Ohio added a new category to the program, the Sustainability Reinvestment Pilot Track, which provides up to \$1.5 million to demolish, conduct environmental cleanup and improve infrastructure on catalytic brownfield sites with the potential to spur area-wide revitalization. With three focus areas – sustainable infrastructure, urban waterfronts, and wind and solar projects called “cleanfields” and “brightfields” – the track will help target transformational sites for a variety of critical reuse strategies.

More recently, ODOD has announced a new Brownfield Action Plan Pilot Program. The initiative is modeled loosely on the U.S. Environmental Protection Agency’s Area-Wide Planning Pilot Program launched in 2010, but based on feedback from Ohio communities about their specific needs. As a result of that feedback, ODOD constructed the program so that it would provide two complementary types of assistance: nuts-and-bolts technical assistance about the elements of area-wide planning – from building partnerships and engaging the community, to thinking through long-term financing – as well as seed funding to begin implementation once plans are complete.

In addition to being crafted to meet the specific needs of Ohio communities, the program also exemplifies the growing trend of institutionalizing interagency coordination to achieve multi-disciplinary outcomes; the Brownfield Action Plan Pilot Program will combine program income from Ohio’s Brownfield Revolving Loan Fund (funded by an award from EPA) with federal Community Development Block Grant funds (received from the US Department of Housing and Urban Development) to target both programs’ common goals.

For more information about Clean Ohio Revitalization Fund, visit www.clean.ohio.gov/BrownfieldRevitalization. Learn more about the Ohio’s Brownfield Action Plan Pilot Program at www.development.ohio.gov.

V. Additional resources

Underground storage tank sites background and regulations

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Websites

Environmental Law Institute, Petroleum Brownfields Resource Center
http://www.eli.org/Program_Areas/petroleum_brownfields_resource_center.cfm.

U.S. Environmental Protection Agency:

- Office of Underground Storage Tanks: <http://www.epa.gov/oust>
- Community Engagement and the Underground Storage Tank Program: <http://www.epa.gov/oust/communityengagement/index.htm>
- Office of Sustainable Communities: <http://www.epa.gov/smartgrowth/index.htm>
- Brownfields Program: <http://www.epa.gov/brownfields>
- Petroleum brownfields: <http://www.epa.gov/oust/petroleumbrownfields/index.htm>
- Area-Wide Planning Pilot Grants: http://www.epa.gov/brownfields/areawide_grants.htm

Stay involved

Learn more about brownfields redevelopment issues across the country by joining the National Brownfields Coalition at www.smartgrowthamerica.org/brownfields.

Appendix

The next frontier: Emerging state policies for multi-site UST redevelopment

Many states already recognize the benefits of multi-site planning and are providing support for area-wide or corridor brownfield redevelopment in a variety of ways. As more and more states recognize the value of multi-site planning in revitalization efforts, new ideas will likely emerge to promote these effective methods to mobilize resources around community revitalization. This appendix explores emerging state policies to support local multi-site redevelopment initiatives.

Providing incentives to implement integrated planning

Direct funding for multi-site planning – like the grants and technical assistance available in New York and Ohio – is critical. States may also consider an additional step: rewarding multi-site planning efforts with long-term support for implementation.

To help support the work of multi-site plan implementation, state-level programs might allow areas that have created certified area-wide or corridor plans to earn extra points on applications for state-level brownfields tax credits, economic development funds, or transportation infrastructure dollars; provide subsidies for environmental insurance or other benefits in these areas; or help expedite permitting and regulatory processes for area sites (an incentive that doesn't cost taxpayers a dollar, but is very valuable to developers looking to invest in contaminated sites).

For instance, New York's Brownfields Opportunity Areas program contains a "preference and priority" provision that allows sites in designated Opportunity Areas to get priority for funds from programs that support activities such as economic development, vacant property rehabilitation/demolition, and waterfront revitalization.

Creating institutional arrangements for regional decision-making

As outlined above, corridor planning can create a specific set of challenges because it often spans multiple neighborhoods, municipalities, or counties, and can touch on issues from housing to transportation to the environment along the way. Given the complexities of inter-jurisdictional coordination, an increased state focus on establishing effective institutional structures for corridor planning could be extremely beneficial.

State-level transportation policy has exhibited an emerging trend towards institutionalized regionalism and coordination that may offer a model for corridor-based brownfields policy as well. For instance, in 2005, legislation in the State of Illinois mandated the merger of the Chicago Area Transportation Study (the region's transportation planning organization) with the Northeastern Illinois Planning Commission (the comprehensive planning agency for the region) into the Chicago Metro Agency for Planning (CMAP), a single entity responsible for integrating land use and transportation planning under a single agency. CMAP now works to protect natural resources, improve mobility, and minimize traffic congestion for the entire seven-county region.

This successful policy in the transportation field might offer a model that could be applied by states seeking to facilitate corridor-based brownfields redevelopment efforts. State-level legislation might incentivize (or require) the creation of a regional coordinating body around targeted areas that could help formalize engagement between the area's transportation, brownfields, and planning agencies, streamline regional investments, promote community engagement, and provide leadership around a long-term

revitalizing vision for the area. Such a partnership would capitalize on a growing trend towards increased interagency collaboration, and help increase the efficiency and effectiveness of any one agency's efforts along a single corridor.

Integrating brownfields into commercial corridor revitalization programs

UST sites located along major thoroughfares are well positioned to benefit from a handful of state-level programs targeted specifically to the redevelopment of corridors. For instance, most states have Main Streets programs, which coordinate benefits like historic preservation tax credits, technical assistance, and a list of other programs and incentives to help encourage small business development, infrastructure investments, and redevelopment of downtown main streets. Incorporating access to UST-specific experts and information into these programs could help integrate UST redevelopment more fully into Main Street redevelopment efforts.

Geographically targeted economic development programs such as Enterprise Zones, Business Improvement Districts, and Environmental Justice Overlay Zones, or financing programs targeted at commercial corridors, like Pennsylvania's Mixed Use Facility Financing Initiative, may offer additional opportunities to explicitly integrate UST redevelopment and community development goals by providing access to information and expertise, or brownfields-specific incentives and funding, through these existing structures.

Addressing LUST corrective action backlogs

Despite tremendous progress, almost 100,000 leaking underground storage tanks remain nationwide, posing a threat to human health and the environment. The goal of state tanks programs is to clean up the sites remaining in this "corrective action backlog."

As described above in Section III, multi-site planning can be used to bring additional attention to low-priority sites lingering in the backlog. Florida has the largest backlog of leaking USTs in need of corrective action of any state in the nation, yet the Florida Department of Environmental Protection (FDEP) has statutory constraints that limit its ability to address its backlog, including a requirement to address the highest priority cases first. Especially when funding is short, this means that lower priority sites – often among the easiest to close – remain on the backlog indefinitely.

One emerging way of using corridor revitalization strategies to create corrective action exit strategies is to link two common state-level goals: the provision of healthcare and brownfields redevelopment. The "Highways to Healthcare" Initiative in Florida is one example. Tacoma, Washington serves as another notable success story, where concerns about the impact of petroleum on the health of communities led to a collaborative cleanup effort in the region in partnership with the Tacoma-Pierce County Department of Health.

Endnotes

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