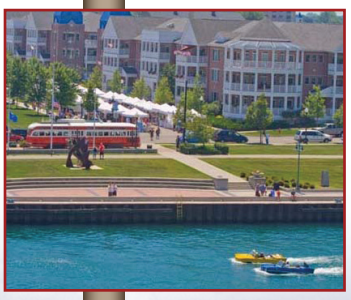
EPA United States Environmental Protection Agency

ROADMAP FOR AUTO COMMUNITY REVITALIZATION

A Toolkit for Local Officials Seeking to Clean Up Contamination, Revive Manufacturing, Improve Infrastructure & Build Sustainable Communities



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

Community leaders across America:

This *Roadmap for Auto Community Revitalization* is part of the U.S. Environmental Protection Agency's effort to promote the cleanup of brownfields and assist communities in their efforts to put contaminated properties into productive use. Cleaning up and reusing contaminated automotive sites protects human health and the environment, fosters economic revitalization and can pave the way to a more prosperous future for local communities.

The U.S. Environmental Protection Agency is committed to the cleanup and revitalization of contaminated properties. Under the leadership of Administrator Lisa Jackson and Administrator Gina McCarthy, the EPA is on the front lines of this revitalization effort. The Agency is working closely with communities impacted by the downturn in the U.S. auto industry to clean up automotive sites where necessary, and then put those sites back into productive use, generating new jobs and stronger local economies. EPA is dedicating staff, technical assistance, and funding resources to the assessment, cleanup and revitalization of auto brownfields. EPA is pleased to partner with the Manufacturing Alliance of Communities, the Department of Labor, and other federal agencies, and private foundations in the development of this report.

The auto industry and its workers helped build the nation's economic engine. EPA will stand with the communities that now are struggling to recover from the downturn in this industry to assist them in finding sustainable solutions for the revitalization of auto brownfields. The success stories and resource information provided in this *Roadmap for Auto Community Revitalization* can help our communities achieve success with their revitalization efforts.

Sincerely,

Mathy Stanislaus
Assistant Administrator

U.S. Department of Labor

Office of Recovery for
Auto Communities and Workers
Washington, D.C. 20210

Friends and Community Leaders,

When President Obama first took office, the nation's automotive sector was on the brink of failure, and U.S. automotive companies, suppliers, workers, and auto communities faced an uncertain future. The resulting industry overhaul led to lost jobs, a weaker economy, and contaminated and vacant properties in many locations across the country. For that reason, the President created the White House Council on Automotive Communities and Workers—composed of over 20 members, including the heads of all domestic cabinet agencies and key White House offices—to coordinate a federal response to issues arising from the auto sector's restructuring.

The original Executive Order directed federal agencies to work with the Automotive Council to aid communities in their recovery efforts. A subsequent Executive Order issued by the President shifted the responsibilities of the Council to the Secretary of Labor, with coordination from the Director of the National Economic Council, and allowed the Secretary to delegate the duties under the executive order to the Executive Director of the new Office of Recovery for Auto Communities and Workers (ORACW).

Since its inception, ORACW has served as a federal one-stop point of contact for transitioning communities to assist them in navigating the myriad of federal programs and resources that are available to facilitate economic recovery. A hallmark of ORACW's engagement has been the significant level of collaboration between federal agencies to advance local efforts. Of particular note is ORACW's partnership with the Environmental Protection Agency (EPA), which has provided substantial monetary support and technical assistance support to communities for environmental remediation and redevelopment; thus returning sites to productive use and attracting new jobs.

Consistent with this combined effort, ORACW and EPA often engage state and local officials jointly through round-tables, meetings and forums. Examples of this are a series of events in Saginaw/Bay City/Buena Vista Township and Lansing, Michigan, Walton Hills, Ohio and Anderson, Indiana among other communities. These sessions allowed stakeholders to have direct access to technical assistance and subject matter experts in dealing with their issues of greatest concern. The responses from communities have been overwhelmingly positive and remain an important part of the Administration's approach to assistance.

Though General Motors, Chrysler, Ford, and other automotive companies are restructured, profitable, and once again providing jobs and supporting local economies, many communities still face challenges. Consequently, ORACW, in conjunction with EPA and other federal partners, developed a tool kit to guide communities through the process of recovery by providing best practices and lessons learned over the past four years. The *Roadmap for Auto Community Revitalization* is the manifestation of this effort and is intended to assist communities as they move toward renewed economic viability.

Sincerely,

Jay Williams
Executive Director
Office of Recovery for Automotive Communities and Workers

Acknowledgements

This document is the result of the combined efforts of a partnership between the U.S. Environmental Protection Agency's (EPA) Office of Brownfields and Land Revitalization (OBLR), the Department of Labor's (DOL) Office of Recovery for Auto Communities and Workers, and the Manufacturing Alliance of Communities (formerly the Mayors Automotive Coalition (MAC)).

DOL, EPA, and the Manufacturing Alliance of Communities acknowledge the assistance provided by OBLR's contractor, Environmental Management Support (EMS), Inc. In addition, several organizations and individuals provided valuable assistance to the authors of this report. We acknowledge the cooperation of the mayors, city managers, economic development directors, and other officials from localities across the nation that are the drivers of automotive community revitalization. These leaders dedicate themselves to better communities and a better nation. Their struggles, stories and successes form the basis of this roadmap.

DOL, EPA and the MAC also acknowledge the cooperation of The Funders' Network for Smart Growth & Livable Communities, The Ford Foundation, and the Surdna Foundation in their collective efforts to support communities in the revitalization of brownfields.

Please note that DOL and EPA do not endorse the views, products, or services of any non-federal organization mentioned in this report.

Table of Contents

Index to Auto Communities in this Report


REVITALIZATION RD
SUSTAINABLE WAY

Introduction

The hopeful re-emergence of auto communities is fueled by hard work at the local level, and also due to a dedicated effort by the White House, U.S. Environmental Protection Agency, the Department of Commerce's Economic Development Administration (EDA), the Department of the Treasury (Treasury), the Department of Labor, the Department of Housing and Urban Development (HUD), and other federal agencies. Auto community revitalization also is being driven by state governments, and by other partners, including the Revitalizing Auto Communities Environmental Response (RACER) Trust, the Manufacturing Alliance of Communities (MAC), the Center for Automotive Research (CAR), The Funders' Network for Smart Growth & Livable Communities, the Surdna and Ford Foundations, regional and community-based foundations, and other organizations.

This *Roadmap for Auto Community Revitalization*, developed under the partnership between EPA's Office of Brownfields and Land Revitalization, the Department of Labor's Office of Recovery for Auto Communities and Workers, and the Manufacturing Alliance of Communities, provides resources and information for local communities that are affected by the recent restructuring of the U.S. auto industry. As these cities and towns move forward with efforts to rebuild sustainable and economically vibrant communities, this roadmap can provide useful information about the sources of funding and technical assistance currently available to communities with historical ties to the automotive industry, or "auto communities." This roadmap also provides many stories describing the experiences of auto towns, large and small, throughout the United States. These efforts were led by the mayors, city managers, economic development directors, and other elected and appointed officials who are driving auto community revitalization on the local level. These communities learn many lessons as they travel the long road to community revitalization. While every auto town is different, their stories can provide a roadmap for other cities, towns, and communities as they travel a similar path.

In recent years, about 350 auto manufacturing and supplier plants have closed.[1] Localities that traditionally relied upon the automotive sector for local jobs and property-tax revenue face significant challenges as they work to revitalize their communities and rebuild an economic base. Many of these auto communities experience significant job losses, decreased tax revenues, and sometimes population flight, at the same time that they must grapple with the challenges posed by the presence of idled and contaminated plants or "auto brownfields."

Cleaning up and redeveloping auto brownfields into new economic assets and community spaces can help auto communities move forward—by modernizing and retaining existing auto plants, reinvesting in a new generation of clean and green vehicles, diversifying into new economic sectors, and putting people back to work.

1 The Center for Automotive Research's November 2011 report, *Repurposing Former Automotive Manufacturing Sites* (Valerie S. Brugeman, MPP, et al.), indicates that a total of 120 automotive plants were closed by the automotive manufacturers since 2004, including 63 that closed since 2008. (Accessed March 22, 2012, at: www.dol.gov/autocommunities/Repurposing/RepurposedFacilities.pdf).

Large-scale quantitative data on supplier plants is much harder to find, but the U.S. Department of Commerce's 2011 report on the automotive supplier industry notes that in 2009 alone, 200 supplier companies were liquidated and another 50 requested Chapter 11 bankruptcy protection. (Office of Transportation and Machinery, U.S. Department of Commerce; *On the Road: U.S. Automotive Parts Industry Annual Report*, (2011), p. 3. Accessed March 22, 2012, at: www.trade.gov/static/2011Parts.pdf). These supplier companies likely had at least one plant, if not multiple plants, and this number does not include large suppliers who closed plants but did not go bankrupt. As a result, it is likely that the complete number of closed manufacturing and supplier plants is much higher than the 350 estimated here.

Led by EPA, the organizations mentioned above cooperated to produce this *Roadmap for Auto Community Revitalization* to help the communities that built the U.S. automotive industry move forward on the road to recovery. It is a compendium of resources that local governments in auto communities can use to deploy effective strategies for brownfields redevelopment and community revitalization. This roadmap:

- Identifies the **challenges** facing auto communities that seek to revive local economies and pursue property revitalization.
- Documents **case study and success story** examples.
- Describes useful **strategies** that are being put to work in cities and towns across the nation.
- Highlights **resources, initiatives, and incentives available** through federal and state governments and non-governmental organizations.
- **Describes other key tools** for community revitalization, including collaborative partnerships, innovation clusters, technical assistance teams, and funding/financing tools.

This roadmap provides the keys to drive revitalization in auto communities. As with any map, this report can help local governments chart a course and find their way to a better destination. With this roadmap, auto communities and their partners have a new tool to use in the quest to diversify their economies and repurpose auto brownfields.

Challenges Across America—Impact of the Auto Industry Restructuring on Auto Communities

The 2008 economic downturn in the United States delivered a significant blow to the profitability of many U.S. manufacturing industries. The downturn hit the U.S. automobile industry particularly hard. All three of the major U.S. auto manufacturers—Ford, Chrysler, and General Motors—experienced reduced sales and significant losses in profitability.

The closed auto manufacturing and supplier plants left behind during the restructuring present considerable environmental and redevelopment challenges for cash-strapped auto communities. These sites often have significant environmental contamination and can be very difficult to redevelop due to their size and environmental complexities. This contributes to blight and lowers local property values. Not only are these sites often community eyesores, they also represent lost economic opportunities and frequently create public-safety concerns.

One of the primary hurdles that auto communities must overcome is the loss of local tax revenue that accompanies the closing of major employers. Until recently, auto companies were the largest single local taxpayer and often also the largest utility ratepayer in many of these communities. Faced with major losses in revenue, communities are forced to eliminate staff. This diminishes local capacity and hinders the locality's ability to provide anything but the most basic services. At the same time, the need for services, including job training and social services, is both acute and fast-growing. This puts further pressure on localities to continue providing the basic services expected of them, despite declining revenues.

Detroit, Michigan

Impacts in Several Communities

The restructuring of the auto industry and the reduction in capacity among domestic companies affected many states and regional economies, as well as large cities and small towns throughout the country, particularly in the Midwest. Here are a few examples of the effects felt by auto communities due to the restructuring in the automobile manufacturing industry:

Ford plant in Wixom, Michigan

Wixom, Michigan: Originally built in 1957, the Wixom Ford Assembly Plant was one of the largest Ford plants in the world for most of the time it operated. The plant occupied 4.7 million square feet on a 318-acre site in a small community of 13,000 residents. By the time the plant closed in 2007 as part of Ford's "The Way Forward" initiative, only 1,100 workers were employed at the facility, down from 5,500 at its peak. Furthermore, the plant's share of local tax revenue decreased from nearly 50 percent of the city's tax collections to just over 10 percent. Now, Wixom wants to transform this site into a Gateway Commerce Center focusing on modern manufacturing and industrial uses, along with research and development and a limited retail and ancillary service component. Unfortunately, due to the enormity of the site and the complex issues associated with its cleanup and redevelopment, progress toward realizing this vision is slow.

Anderson, Indiana: In 1918, GM headquartered its Delco Remy division in Anderson. By the early 1970s, GM was supporting more than 27,000 jobs in this city of 60,000. Throughout the 1980s and 1990s, GM relocated these facilities, until the final GM plant in Anderson closed in 2006. These closures resulted in the loss of an estimated $10.5 billion in primary wages, $43.5 billion in industrial output, and $156 million in local and state tax revenues. Only a series of environmentally contaminated and idle sites remain in Anderson to mark GM's legacy, in a city in which 36 percent of the population once relied on auto manufacturing jobs. Yet Anderson is moving forward and building momentum for revitalization: The city is working in partnership with the RACER Trust to clean up and prepare for redevelopment two of its RACER Trust sites, using up to $10 million in cleanup funds included in the RACER Trust for that purpose. The city is planning mixed commercial and manufacturing reuses at these properties. (See the discussion of the RACER Trust later in this section.)

Inside a closed auto plant

Good news arrived in July 2012, when the City of Anderson and the Governor of Indiana announced that a major Honda supplier, Greenville Technology and its parent company Morioko, would build a new $21.7 million auto supply plant that will employ more than 300 people. In summer 2012, Anderson and the nearby community of Connersville convened an Auto Community Revitalization Roundtable that brought together local, regional, state, federal, non-profit, and private-sector leadership dedicated to revitalizing the closed General Motors, Visteon, and other auto-supplier sites in those communities. Similar Auto Community

Roundtables also were held in Buena Vista/Saginaw, Michigan; Walton Hills, Ohio; and Lansing, Michigan, during the summer.

Shreveport, Louisiana: GM built the Shreveport Assembly plant in 1981 to expand its truck production capacity. By 2007, the plant was the primary production location for the Hummer H3, then one of GM's premier SUV models. The Shreveport plant employed about 2,100 workers. When demand for Hummers dropped in response to rising gas prices and the economic recession, GM decided to discontinue its Hummer line and close its Shreveport facility. The last Hummer rolled off the line in May 2010, leaving only about 800 employees to make other heavy-duty trucks. The plant closed in August 2012. Now it is up to the RACER Trust to facilitate the redevelopment of this 467-acre site, which has been an integral part of the region's economy for three decades. Moreover, Shreveport is dealing with the closure of more than 20 auto supplier plants, a further blow to the region's auto sector.

Flint, Michigan: Flint often is considered the epicenter of automotive industry restructuring. Once home to more than 80,000 GM workers, Flint now has only about ten percent of its peak GM workforce, due to the closure of major Chevrolet, Buick, and supplier complexes. The result is more than 1,000 acres of brownfields across the city and along the Flint River. Flint also lost 40 percent of its population during the last 40 years, which led to widespread abandonment and neighborhood problems. With a fraction of its former tax base, the city's finances are being stretched to the breaking point by rising pension and healthcare costs.

Massena, New York: For almost 50 years, the GM Powertrain plant in Massena was a major economic driver in this community of about 11,000 people located across the St. Lawrence River from Canada. When the plant closed in 2009, 500 jobs were lost and the community was left with a 220-acre property that is heavily contaminated by polychlorinated biphenyls (PCBs). Although the GM bankruptcy proceedings provided $121 million for remediation, the community faces significant challenges in cleaning up and redeveloping the large site.

Federal Leadership in the Response to the Restructuring of the Auto Industry

In addition to the emergency financial rescue for GM and Chrysler, the federal government is supporting auto communities and workers most affected by the rapid changes in the U.S. auto sector. The federal government is working in partnership with auto communities to provide resources and assistance necessary to create jobs and strengthen local economies.

In June 2009, President Obama recognized the need to offer ongoing support to auto communities by creating the White House Council on Automotive Communities and Workers and the White House Office of Recovery for Auto Communities and Workers. Led during its inaugural year by Director Ed Montgomery, Ph.D., the White House Office of Recovery for Auto Communities and Workers provided a line of communication between auto communities and federal agencies. The Council held an extensive series of listening sessions in communities throughout the country and worked with numerous agencies to coordinate a unified federal response to auto communities. The President renewed the council's mission in June 2011, moved the Office of Recovery for Auto Communities and Workers to the Department of Labor, and appointed Mayor Jay Williams of Youngstown, Ohio, to be its new director.

EPA's Leadership

EPA provides practical, direct assistance to auto communities for cleaning up environmental contamination and revitalizing auto brownfields. EPA also plays a leadership role in the federal response to the restructuring of the auto industry and was instrumental in creating the RACER Trust.

Through its Brownfields Program, EPA empowers states, local communities, and other stakeholders to work together in efforts to prevent, assess, safely clean up, and sustainably reuse brownfields. For auto communities, EPA organizes site visits; provides technical assistance on a wide range of brownfields strategies; organizes revitalization workshops for auto communities; provides funding to several entities that provide direct assistance to communities, including EPA's Technical Assistance to Brownfields (TAB) Communities program; and provides assistance on environmental enforcement issues.

In addition, EPA offers grants to many auto communities through its Brownfields Assessment, Cleanup, and Revolving Loan Fund Grants Program; Targeted Brownfields Assessments; Area-Wide Planning Grants; and the Multi-Purpose Grants pilot program. EPA's 2011 National Brownfields Conference focused attention on the needs of auto communities through several workshop sessions and panel discussions featuring auto-community mayors and other stakeholders who discussed many issues in depth and shared lessons about successfully fostering brownfields redevelopment in auto communities.

EPA is a key player in several major initiatives to benefit automotive communities. The Agency established an agenda to encourage domestic manufacturing and dramatically increase U.S. exports. Together with HUD and the U.S. Department of Transportation (DOT), EPA works on the Partnership for Sustainable Communities, an historic multi-agency initiative that focuses federal investment on creating more robust and livable communities. This effort helps many auto communities, which often are urban and industrialized cities seeking to diversify their local economies while maintaining a strong downtown core. (See *Part 3: Resources Available to Communities* for a comprehensive listing of grants, loans, technical assistance, and other resources available to auto communities through EPA and other federal agencies, as well as from states, private foundations, and non-governmental organizations.)

The RACER Trust

Perhaps the most important federal initiative to support auto communities is the creation of the RACER Trust, which is charged with the responsibility for cleaning up and redeveloping 89 former GM facilities. Today, RACER is the nation's largest owner of closed industrial land and administers one of the largest federal cleanup trusts in the nation's history.

When the Big Three automakers asked the federal government for an emergency financial rescue in 2008, auto community officials rallied together to ensure that closed auto plants would not be abandoned or forgotten. In January 2009, the MAC, an alliance of mayors from auto communities, met with White House and U.S. Treasury officials to discuss the challenges local communities would face if auto plants closed and were mothballed. In March 2009, the MAC proposed the creation of a federal trust to help ensure that closed auto sites were not mothballed and to make funding available to address environmental contamination and other costs at these closed facilities.

In response, the White House Council on Automotive Communities and Workers, the U.S. Treasury, EPA, and the Department of Justice (DOJ) formed a team to explore the creation of a trust for the cleanup and redevelopment of Old GM or Motor Liquidation Corp (MLC) sites. Funding was reserved in the GM bankruptcy process to help cover these expenses. Negotiations began with the state and tribal governments, and the federal government consulted with communities across the nation. From these events, the idea of creating a GM environmental response trust began to emerge.

Spilled gasoline inside a former auto supplier plant

In early 2011, a settlement was reached among the federal government, 14 states, the St. Regis Mohawk Tribe, the MLC, and other parties on the creation of a trust. The RACER Trust was authorized by the federal bankruptcy court and launched at EPA's National Brownfields Conference in April 2011. Upon its creation, the RACER Trust owned 89 former GM properties with 66 buildings, totaling 44 million square feet in 40 communities across the nation.[2] The Trust started with $773 million in cleanup and property management funds available to foster the cleanup and redevelopment of these sites.[3]

The RACER Trust assembled a team consisting of the Trustee and environmental cleanup, redevelopment, legal, and other experts to facilitate the cleanup, sale, and redevelopment of these sites. RACER Trustee Elliott Laws declared his intent to allocate funding for these sites immediately and said that the RACER team will promote redevelopment within local communities and markets at the fastest pace possible.

The most important characteristics of the RACER Trust are that the trust gives communities with a RACER property considerable leverage to influence the selection of developers interested in purchasing the property, and includes safeguards to ensure that the redevelopment and reuse of these properties addresses the interests and vision of the affected community. Key community engagement provisions of the RACER Trust governing structure include:

- The Trustee is required to reach out to local governments with a RACER-listed property to determine their preferences for redevelopment of the property, and to take those end-use preferences into consideration when seeking a potential purchaser for the property.
- RACER has a redevelopment manager and staff who focus directly on the productive reuse of these sites during, or after, the cleanup.
- When selecting a potential purchaser of a RACER property, the Trustee, unlike most property owners, must consider a number of criteria that go far beyond the purchase price offered. Although the Trustee has final discretion with regard to property sales, when making his decision he must weigh: (a) the potential for reuse to spur job creation; (b) the potential for reuse to increase local

2 RACER Trust website. Accessed March 22, 2012 at: racertrust.org/About_RACER/About_Us.

3 "Motors Liquidation Company (f/k/a General Motors (GM) Corporation) Bankruptcy Settlement," on the U.S. Environmental Protection Agency website. Accessed March 22, 2012 at: http://www.epa.gov/enforcement/cleanup/cases/cercla/mlc2012.html.

tax revenue and encourage further economic development; and (c) input provided directly by the impacted local government.

- The Trustee is required to notify the affected local government 30 days prior to completing any sale of a RACER property to allow the locality to provide input into the pending transaction. The designated RACER Redevelopment Manager is explicitly tasked with soliciting input from auto communities and acting as a liaison between the Trustee and communities with a RACER property.
- A local or state government can seek to obtain a RACER automotive brownfield from the Trustee. This can be a benefit to localities when a site is stalled, and the private market is not taking action to redevelop the site. Moreover, the typical legal requirements for local-government acquisition of a brownfield are more flexible under this Trust approach.

Although the RACER Trust is a relatively new and unique entity, its structure provides a valuable model for addressing other non-RACER GM, Ford, and Chrysler sites; supplier sites; and stranded auto properties. The elements of the RACER Trust's approach that are critical to successfully addressing auto brownfields are: collaboration among multiple levels of government; formation of an interdisciplinary team to address brownfield sites; a focus on redevelopment; ensuring a central role for the auto communities to guide reuse plans; and creative leveraging of funding to accomplish these goals.

A Roadmap to Auto Community Revitalization

This section presents a series of case studies to show the various roads traveled by auto communities as they move toward a sustainable future. It also provides a guide or roadmap to best practices and discusses effective approaches that automotive communities can take to build sustainable economic diversification and address closed and contaminated auto brownfields.

The Many Roads to Auto Community Revitalization

- Keeping the Auto Plant Open
- Saving the Supplier
- Building the Next Generation of Vehicles
- Diversifying into New Economies
- Turning Auto Sites into Community Spaces and Green Spaces
- Reimagining the Future

The Many Roads to Revitalization

"Success" for auto communities is realized in different ways. For one community, the goal may be to save a vulnerable auto plant or supplier. For another, it may be reinvesting in the traditional auto industry to produce innovative, new manufacturing of "clean and green" advanced vehicles. In other communities where the auto sector may be gone, the focus is on diversifying the economy into new, non-auto manufacturing jobs such as green technologies, or into non-manufacturing sectors or commercial, retail, or mixed-use development. Other successes may be more incremental. Assessing, cleaning up, or demolishing an auto brownfield in preparation for future development, or providing job training to prepare former auto workers for new jobs in other sectors can be important first steps in the long road to recovery for auto communities, even before a site is redeveloped or new employers are found.

GM truck plant, Flint, Michigan

These are some of the many roads to revitalization that auto communities are taking:

1. Keeping the Auto Plant Open

Despite recent events, the U.S. auto industry remains one of the mightiest and most productive economic sectors in the world. Many communities have auto plants that are critical to the local economy. As the U.S. auto sector rebounds and regains profitability, many communities are successfully rebuilding this sector and retaining auto manufacturing jobs. Even when auto plants close, many are repurposed as automotive manufacturing centers. According to the Center for Automotive Research, as many as 22 closed sites across the nation now are back in action as auto manufacturing plants.[4]

"Our mayor and city council did not run from the problem. They set forth the objective to save SHAP."

Sterling Heights City Manager
Mark Vanderpool

Rags-to-Riches Auto Revitalization in Sterling Heights, Michigan: Sterling Heights was home to four major Ford and Chrysler plants over the years. The city contains Ford's Transmissions and Axle plants, as well as Chrysler's Sterling Heights Assembly Plant (SHAP) and the Sterling Heights Stamping Plant. The Chrysler Stamping Plant produces the Chrysler Sebring and Dodge Avenger and other auto components. When Chrysler began to slide into bankruptcy, the Chrysler Stamping Plant in Sterling Heights was slated for permanent closure. Two years later, in a rags-to-riches story, Chrysler invested a billion dollars and created more than 900 new jobs in Sterling Heights. This investment also prevented the creation of a brownfield that could have posed an additional environmental challenge for Sterling Heights. Today, the Chrysler SHAP and Stamping plants have a billion-dollar positive impact on Sterling Heights and surrounding communities.

In 2009, Chrysler announced its intention to close the SHAP facility in December 2010. Other major suppliers, including Collins and Aikman, Tenneco, Ex-Cello, Cadillac Products, Detroit Tool, and Cadence Innovation, already had closed facilities in Sterling Heights. These closures and auto restructuring had major impacts in Sterling Heights: More than 1,600 workers were laid off, producing an 11.3-percent unemployment rate.

Had it happened, the closure of the SHAP facility alone would have resulted in an annual loss of $2.6 million in the city's tax receipts. "That day in April 2009 when Chrysler announced plans to close SHAP was one of the darkest days in the history of the city," said Mayor Richard Notte. "The notion that such a large facility would be closed and thousands of jobs would be lost was almost too much to comprehend." But it did not happen.

Sterling Heights leadership stepped forward to proactively address the threatened closure of the Chrysler SHAP facility. The city established the Sterling Heights Automotive Task Force, composed of city, state, and federal officials and non-profit and private-sector representatives. The city also put together a Manufacturing Strategy Team of city officials who are engaged with the business community and with state and federal leadership. The Sterling Heights Task Force participated in numerous discussions with Chrysler officials, strategy meetings in Washington, DC, with White House officials and federal legislators, and rallies outside the SHAP facility. The Task Force also worked with unions, schools, private industry, utility companies, railroads, and the Italian Consulate (given that Italian automaker Fiat was a new owner of Chrysler).

4 Brugeman, et al.; see Footnote 1 on page 1.

As a result of these efforts, Chrysler decided to buy the SHAP facility out of bankruptcy for $20 million and invest over $1 billion to upgrade the plant by creating 1.425 million square feet of new space, completing other renovations, and purchasing new equipment, machinery, and special tooling. This represents the largest single business investment in the city's history, and it added 900 auto jobs in a new second shift while also preserving 3,000 existing jobs. The plant upgrade will be one of the largest construction projects in Michigan and will allow workers at the plant to produce a variety of vehicle models based on innovative, flexible production platforms. Indeed, Chrysler plans to make the SHAP plant a state-of-the-art manufacturing facility utilizing advanced technology and manufacturing techniques. Mayor Notte remarked, "Chrysler LLC's commitment to this community is jaw-dropping. Clearly the team effort established to keep this plant open paid off."

In a statement announcing the additional investment, Scott Garberding, senior vice president and head of manufacturing for Chrysler Group LLC said, "A plant that was slated to close nearly two years ago will now be a state-of-the-art facility that will play an integral role in the success of this company by building the next generation of all-new vehicles." This fantastic turnaround resulted from the collaborative efforts of stakeholders at every level of government together with the private sector and other groups that saw the need to preserve jobs and manufacturing in Sterling Heights. Sterling Heights and the State of Michigan will invest in and support the SHAP expansion effort. The city is providing a six-year, 100-percent tax exemption from a proposed total personal property investment of $537 million to be made at SHAP, and the Michigan Economic Growth Authority is providing Michigan Brownfields Tax Credit resources to make the upgrade of this over 50-year-old facility a reality.

City Manager Mark Vanderpool summed it up, saying, "We're thrilled that SHAP will be a part of the company and this community for decades to come. It's amazing considering, as Chrysler has said itself, it is a rags-to-riches story for this facility."

GM Reinvestment Helps Lansing Lead the Nation in a Resurgence of American Manufacturing: General Motors continues to invest in its state-of-the-art auto plants in Michigan's capital of Lansing, which is helping the city emerge as the nation's leader in manufacturing growth. Although three GM sites in Lansing are closed and now undergoing cleanup and redevelopment planning through the RACER Trust, two other GM plants are growing—and growing stronger. In October 2010, GM decided to invest $37 million in the Lansing Delta Township Assembly Plant to increase manufacturing capabilities, and $190 million in the Lansing Grand River plant, which will create 700 jobs and allow the facility to produce award-winning Cadillac vehicles, including the new luxury Cadillac ATS. Mayor Virg Bernero, founder of the MAC, declared, "This is GM's global footprint right here in Lansing, Michigan."

RACER Trust property in Lansing, Michigan

GM's investment helped Lansing become the nation's leader in manufacturing job growth in the period of 2009-2011, according to the Urban Institute's January 2012 MetroTrends study of America's largest 100 metropolitan areas (www.metrotrends.org). With this announcement, Mayor Bernero declared,

"Lansing is not just leading Michigan's comeback; we are leading the nation's economic rebound. This proves the proposition that manufacturing is vital to the health of our national economy. Great nations cannot just consume greatly; they must produce greatly. We have to make things. Lansing workers are helping to put the 'P' back in America's GDP."

Lansing now wants to build upon its substantial automotive manufacturing sector by attracting more automotive jobs to the region. In March 2012, the Lansing Economic Area Partnership, Inc. (LEAP) created an Automotive Industry & Property Taskforce composed of local and state officials, labor leaders, and leading businessmen to facilitate the cleanup and redevelopment of former auto manufacturing sites in Lansing.

Bay City, Michigan, Keeps on Rolling with Auto Investment: The Bay City GM Powertrain Plant was a manufacturing site since the 1860s, when it was used to make water pipe out of logs strapped in steel. William Durant (who created General Motors in 1908) acquired the site when it was a bicycle plant. He determined that since the plant was making the best bicycle wheels, it also could make the auto parts he needed. Today, the Bay City GM factory workers manufacture camshafts and connecting rods for the engines found in the Chevrolet Volt, Cruze, and Sonic. It is Bay City's largest employer and taxpayer.

It almost was not so. The plant's long manufacturing history could have ended in the GM bankruptcy of 2009 and the property could have become another brownfield challenge, if not for the efforts of Bay City. Fearing the loss of the plant and many jobs, Bay City joined with its allies to work locally and nationally to support reinvestment in the U.S. auto industry and ensure the revitalization of this economically vital property. This advocacy paid off. GM invested $154 million into the Bay City plant, which added or retained 174 jobs and ensured that the site did not become another abandoned brownfield. In a July 2011 visit to the Bay City Powertrain Plant, U.S. Secretary of Transportation Ray LaHood remarked, "This is a success story that needs to be told over and over."

2. Saving the Supplier

For every auto-manufacturing job, there are more than two jobs in auto supply companies. Auto supply companies are located in nearly every state, according to the Center for Automotive Research's report, *Contribution of the Automotive Industry to the Economies of All Fifty States and the United States*.[5] However, many auto suppliers closed as a result of the auto sector's financial problems. Many of these sites are now brownfields, but local communities are fighting to keep the sites alive and thriving. In some places, success is almost at hand.

Suppliers Return Home to Fenton and Grand Blanc: Weakened by the auto sector recession, Acument Global Technologies closed its doors in early 2009 and eliminated 123 jobs in its Fenton, Michigan, facility. But that was not the end of the story. After Mayor Sue Osborn, City Manager Lynn Markland, and other Fenton leaders assembled a team of allies to bring these jobs back, good news arrived in June 2011 with the

"This plant right over here, it's empty right now. They're going to bring in new equipment and they're going to develop that plant and update it to be an electric motor manufacturing plant."

Scott Worden
Magna Electronics

5 www.cargroup.org/?module=Publications&event=View&pubID=16.

reopening and reinvigoration of the Acument plant. Acument is among the world's leading providers of mechanical fastening products and services for the transportation market, serving companies such as Ford and GM, and employing more than 2,000 workers at facilities in North America, South America, and Europe, including more than 500 people in Michigan.

Fenton officials worked with the State of Michigan, the MAC, and the federal government to push for incentives to recreate critical auto jobs in Fenton. When the Michigan Economic Development Corporation offered an $875,000 tax incentive, Acument decided to retool the facility as a new Acument North American Processing and Technical Center. The company invested $5.1 million in new equipment to support the processing of parts for the auto industry in Fenton and other nearby facilities. This investment created 70 jobs in Fenton and is expected to generate up to 150 jobs over three years in Acument's 88,000-square-foot facility.

According to Acument official Timothy Weir, "We had to take some difficult steps in order to survive the economic conditions. We were sorry we had to do that because it affected the lives of lots of families in the Fenton area, but sometimes companies have the opportunity to revisit areas like this."

Acument also will create at least 26 new jobs in nearby Grand Blanc Township. Grand Blanc is pleased that another automotive supplier, Magna Electronics, announced in 2010 and 2011 that it would invest more than $70 million to expand its facility in Grand Blanc to make batteries and parts for the Ford Focus electric vehicle and to make its "E-Car" rear-view cameras for a variety of vehicles. These investments will create 835 jobs for engineers, operators, and managers. Supported by tax credits from the State of Michigan and tax abatements from Grand Blanc Township, the Magna Electronics jobs will create tremendous benefit for this eastern Michigan community.

When the Magna Electronics expansion was announced, then-Governor Jennifer Granholm said that she was excited to see a community with such a rich auto-manufacturing history take a step forward as the industry moves toward producing hybrid and electric vehicles. She said, "The transformation to produce the next vehicle, the next vehicle being the electric vehicle, that's a great story for this community, a community that has been disproportionately battered by the challenges that the auto industry has been experiencing."

3. Building the Next Generation of Vehicles

The auto industry of the past is quickly transforming into an economic powerhouse for clean, fuel-efficient and alternative-fuel vehicles produced by the traditional Big Three and foreign automakers, as well as by innovative startups. As the nation seeks to reduce its oil consumption and with a new requirement to double vehicle fuel economy standards by 2025, automakers are in a race to produce better engines, new technologies, and the most innovative and efficient cars and trucks. This next generation of vehicles already is driving auto community revitalization.

Volt Gives a Jolt to Hamtramck's Future: The General Motors Hamtramck-Detroit Assembly plant straddles the border of the two cities and has been a critical part of the Hamtramck economy for 27 years. Today, the plant contributes to efforts to reduce auto emissions by producing fuel efficient vehicles. Its 1,100 workers remember when GM cut a second shift in 2007, and when the company laid off 500 workers in 2008 because of slow vehicle sales. During the auto sector crisis in 2009, the city feared the plant would close. By 2010, the City of Hamtramck was seeking state approval to declare bankruptcy.

But Hamtramck's economy got a jolt with the resurgence of GM after its 2010-2011 restructuring. GM decided to make the highly efficient Chevy Volt and two other Chevrolet models at the Hamtramck-Detroit Assembly Plant, declaring that it would add 2,500 jobs and two shifts at the plant—a high point for jobs in the 26-year history of the plant. "It's mind-boggling that we can go from near-extinction to full employment in two years," said Don LaForest, bargaining chairman for UAW Local 22.

"When the old NUMMI plant closed earlier this year, it seemed that manufacturing at this site was headed for extinction. But thanks to the Tesla Motors team, this factory will be creating jobs and building clean energy automobiles that can travel 300 miles per charge without a drop of gasoline."

U.S. Senator Dianne Feinstein

Tesla Electrifies Fremont Community with New Manufacturing: The Tesla Motor Company, an American electric car company, revved up a 50-year-old auto plant in Fremont, California, when it took over a former GM facility to produce the Tesla Model S and other models that minimize air pollution. The Tesla Model S is the first electric premium sedan designed from the ground up to take full advantage of the electric vehicle architecture. The new Tesla facility was a GM plant from 1962 until it closed in 1982. It was reborn for the first time in 1984, when GM and Toyota reopened the facility as New United Motor Manufacturing, Inc. (NUMMI), a joint venture to manufacture vehicles built collaboratively and sold under both brands. GM joined in NUMMI to learn new lean manufacturing techniques from Toyota, while the Japanese company used NUMMI as its first manufacturing base in North America. However, the venture ended in 2009 when GM decided to discontinue a Pontiac model built at NUMMI. Toyota decided it also would pull out of NUMMI later that year. The last vehicle rolled off the line on April 1, 2010. Fremont lost 4,700 NUMMI jobs, and another 20,000 related jobs in the community were put at great risk.

In May 2010, Tesla announced that it would buy part of the NUMMI plant and collaborate with Toyota to build electric vehicle parts. Tesla will build its Model S vehicle there and initially will employ 1,000 workers. The company also plans to build future Tesla vehicles at NUMMI. Located near Silicon Valley to take advantage of innovations in consumer electronics, the Tesla plant at NUMMI is expected to produce 20,000 new vehicles in 2013.

Smyrna, Tennessee, Turns Over a New Leaf with Nissan: Nissan Motors commenced car production at its major assembly plant in the Central Tennessee city of Smyrna in 1983. Today, this 5.2-million-square-foot facility employs 6,000 workers and has a production capacity of 500,000 vehicles per year. The community was electrified when Nissan announced in 2009 that Smyrna would produce a new, all-electric, plug-in vehicle, the "Leading, Environmentally Friendly, Affordable car," or the "LEAF." The LEAF has a 99-miles-per-gallon EPA fuel rating and can drive 73 miles on a full charge. Nissan is constructing a new, 1.3 million-square-foot battery plant and upgrading the existing assembly plant in preparation for production and sales of up to 200,000 battery modules and 150,000 LEAFs each year, beginning in late 2012. The LEAF manufacturing and battery plants will create up to 1,300 jobs when operating at full capacity, with three shifts, seven days per week.

Nissan is investing $1.7 billion in a manufacturing upgrade in Smyrna, supported largely by a $1.4 billion U.S. Department of Energy (DOE) loan under the Advanced Technology Vehicles Manufacturing Loan Program, a program authorized by Congress as part of the Energy Independence and Security Act of 2007.

This DOE program is designed to accelerate the development of vehicles and technologies that increase U.S. energy independence, create cleaner means of transportation, and stimulate the American economy.

Connersville Captures Carbon Motors Corporation in Closed Car Complex: In 2009, Carbon Motors, a producer of highly efficient, purpose-built police cars, announced plans to move its corporate headquarters to a mothballed Visteon auto-supplier plant in Connersville, Indiana. The company plans to invest $350 million in a "Carbon Campus" in Connersville that would include the company's headquarters, research and development, production, service training, sales, and recycling operations. This project also involves retooling a closed, contaminated auto-parts manufacturing plant that once employed 800 workers into a LEED-certified facility and creating 1,550 new direct jobs, including 500 jobs for Tier 1 suppliers who will share the facility and 8,000 indirect jobs in an area that has a 16 percent unemployment rate. Even though Carbon Motors learned in March 2012 that it would not be able to access DOE loan-guarantee assistance to redevelop the site, the company is actively pursuing financing from private and other sources and remains committed to the Connersville community.

4. Diversifying into New Economies

In some communities, the automotive sector is essentially gone or severely limited. Even in places where the auto sector still is strong, auto communities seek to diversify into broader manufacturing and revitalize their economies. These communities are building on existing assets, including their highly skilled workforce, infrastructure advantages, and regional economic clusters, to build the new economies of the future. These new sectors involve a wide range of industries, including green technologies, advanced manufacturing technology, medical services, entertainment, logistics, corporate headquarters, industrial parks, and other job centers.

"We are developing a 'community corner' area within the company so employees can see info about local companies and support them, as well as using Flint vendors whenever possible. As we continue to grow, we expect to create more opportunities to support our community."

Diplomat Specialty Pharmacy President and CEO Phil Hagerman

Flint Rebounding with Technology Centers: The City of Flint, Michigan, has as strong a historic connection to the auto industry as any community in the country. Flint continues to face challenges, but also is moving forward with renewed vigor to diversify its economy in innovative ways. This includes transforming contaminated former auto-sector sites into new technology centers that can support the high-tech, high-skills jobs of the future.

One of Flint's most exciting initiatives is the rebirth of an automotive complex as a regional center for medical technologies. The site is the location of the former Fisher Body Plant No. 1, where sit-down strikers pushed for auto-worker unionization in the 1930s, World War II tanks rolled off the assembly lines in the 1940s, and GM later shifted activity from auto-manufacturing to design work. However, GM closed the site as part of its 2009 bankruptcy.

With significant brownfields remediation and site improvements, the property now is the Great Lakes Medical Technology Center. The center includes a 1.2-million-square-foot complex that houses several companies in Class A office and research-and-development space, including the Insight Institute of Neurosurgery and

Diplomat Specialty Pharmacy call center, Flint, Michigan

Neuroscience and the headquarters for Diplomat Specialty Pharmacy. The center is projected to be the largest non-automotive economic development project in Flint's history. Today the center houses more than 1,100 jobs in the neuroscience, medical technology, and pharmaceutical sectors and is expected to support more than 3,500 jobs by 2020.

"This is an opportunity to reinvent and revitalize a community," said Phil Hagerman, Diplomat's president and CEO, in April 2010. Diplomat's Flint facility includes an advanced specialty pharmacy compounding laboratory, an industry training and education center, a high-technology software development and data center, a national patient call center, and amenities for employees that include daycare and a healthy foods cafeteria that also provides family meals to go.

In 2011, the Great Lakes Medical Technology Center was designated a new Michigan Renaissance Zone eligible for business, real, and personal-property tax abatements for 15 years. The estimated value of these tax credits is $61.5 million. Diplomat plans to retrain and transition dislocated local workers, using $14 million in state and federal job training funds over 10 years. "The facility is becoming a regional center of medical technology," said Flint Mayor Dayne Walling. Diplomat President Hagerman agrees. He says, "Our goal is to create a biotechnology corridor."

Flint's diversification into new economic sectors also includes the launch of Swedish Biogas International's new renewable-energy biogas plant at the city's municipal wastewater plant. King Carl XVI Gustaf of Sweden attended the groundbreaking for the Flint biogas facility, which will use human waste and food waste to create biogas to fuel the metropolitan bus system and other large vehicles. A partnership with Kettering University and a state-sponsored Center for Energy Excellence expanded the economic development impact of this pilot project. The biogas company announced plans to invest another $3 million at its Flint site. "It's exciting that Swedish Biogas International Inc. is already looking at ways to grow their business and increase the number of jobs created here locally, and that's good news," says Flint Mayor Dayne Walling, who joined Senator Debbie Stabenow and leaders from the State of Michigan and Kettering University to promote the biogas effort.

Swedish Biogas International plans a renewable energy biogas plant in Flint, Michigan

Revitalization in Flint is supported by the Center for Community Progress, a local non-profit organization that has grown into a national leader in the cleanup and renewal of blighted housing and brownfields. Visit www.communityprogress.net.

Yet another technology center that will diversify Flint's economy is the new $5 million Center for Transportation Technology launched by Baker College at an 11-acre brownfield that was an automobile dealership for 60 years. Utilizing four existing buildings totaling 62,000 square feet, the center will house programs to train up to 600 students in transportation management, automotive technology, small engine and marine engine technology, and heavy equipment operator and truck driver certificate programs. It also will include small business incubators and other programs that address change in the transportation industry. "Working together, nobody will be able to hold this community back," said Baker College President Julianne Princinsky.

Hooray for Hollywood! Entertainment Center on GM Supplier Brownfield in Columbus, Ohio: The closure of the Delphi Columbus Automotive Plant and the loss of 426 jobs hit residents of a distressed area on Columbus's West Side very hard. But there is a new game in town. The City of Columbus made a sure bet by transforming the closed, contaminated, 123-acre plant into a new Hollywood Casino complex. With groundbreaking in April 2011, work began on a new $350 million, 300,000-square-foot entertainment facility that included the cleanup of the contaminated property and created 3,500 construction jobs. When the casino complex opens in late 2012, it is expected to create 2,000 new, permanent jobs and generate $63.2 million annually in taxes for the State of Ohio, Franklin County, the City of Columbus, and the local school districts. The owners of the casino also will provide a $50 million fee to the State of Ohio for workforce development programs.

The environmental aspects of the Delphi Columbus transformation were very daunting. The casino developer spent $25 million for remediation. The cleanup addresses contamination dating back decades, including contamination with barium, chromium, zinc, sulfuric acid, and industrial solvents in three large lagoons; a hazardous waste depot; a coal-fired power plant; a waste treatment plant; and several tanks that stored fuel, lubricants, and chemicals. Up to 1,800 tons of waste sludge were dumped in unlined lagoons every year from 1957 until the 1970s. The Delphi site also had contamination from the storage of mercury ignition tubes for welders; used light ballasts that contain PCBs; and rags soaked in solvents,

The transformation of the 182-acre, 3.2-million-square-foot, former GM Baltimore Assembly Plant into the $150 million Chesapeake Commerce Center is another example of how quickly a large auto brownfield can be cleaned up and turned around. Over its 70 years of operation until it closed in 2005, the GM Plant produced nearly every car in the GM lineup. Duke Realty teamed with Hull & Associates to clean up and prepare the closed GM site for reuse in only 18 months. Today the site includes warehouse, distribution, and office space in 16 planned buildings situated close to the Port of Baltimore. The speedy cleanup was possible due in large part to the commitment of an intergovernmental public/private partnership that included the developer, the Maryland Department of Environment, and U.S. EPA Region 3. The regulators agreed to integrate state and federal cleanup requirements—one of the first "One Cleanup Program" innovations championed by EPA.[6]

6 This Baltimore success story has been well chronicled. For more information, see EPA's *Shifting Gears: Driving Towards Auto Sector Property Revitalization* (April 2008) at www.epa.gov/brownfields/policy/autosector.pdf; *Revitalizing Mothballed Properties: Challenges, Success Stories & Solutions* (October 2008) at: nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P1002IB3.txt, or *From Idle to Full Throttle: The Development of the Chesapeake Commerce Center,* by Kara A. Allison (February 2010) in Brownfields Renewal Magazine, at: www.brownfieldrenewal.com/story-news-features_case_study_from_idle_to_full_throttle__the_development_of_the_chesapeake_commerce_center-919.html.

waste oils, and lubricants. The development team consisted of several firms with experience remediating auto sites—Hull & Associates, the Duke Realty Corporation, and Hemisphere Development. The firms used innovative remediation approaches that included recycling of 98 percent of the demolition debris from the site. The development team demolished 1.4 million square feet of derelict and abandoned structures and completed the remediation in less than a year.

Aerotropolis in Hapeville, Georgia, is "Off to the Races" with Porsche Headquarters: As part of its "The Way Forward" restructuring, in October 2008, Ford Motor Company closed its 130-acre Hapeville Assembly Plant, located adjacent to the Hartsfield-Jackson Atlanta International Airport. After nearly 50 years of operation, the site had significant contamination. The purchaser of the property spent nearly $10 million to clean up and prepare the site for development. The site is expected to return to productive use soon, since Porsche Cars North America decided to locate its corporate headquarters in an innovative, mixed-use development there.

In June 2008, Ford announced the sale of the Hapeville Assembly Plant property to Jacoby Development. Jacoby planned to develop an airport-centric commercial office development called "Aerotropolis," a 6.5-million-square-foot business district expected to include office, retail, restaurant, and hotel space as well as airport parking. Porsche will be the marquee tenant. The company will invest up to $100 million in a 26-acre headquarters campus with a 150,000-square-foot office tower that houses 400 employees, plus a classic Porsche restoration shop, a fine dining restaurant, and a 1.6-mile driving circuit with on-road and off-road courses. The revitalization is slated for completion in summer 2013. The Porsche project will be supported by a newly created Georgia Enterprise Zone that offers developer incentives that are expected to provide a $15 million boost to the company. At the announcement of Porsche's plan for Aerotropolis, Georgia Governor Nathan Deal remarked, "We are becoming very rapidly the state that is the automotive capital of the U.S.!"

The Aerotropolis development may be suitable for Fortune 500 companies, accounting and consulting firms, logistics-related companies, and multinational corporations that need to move people globally. The development's parking structure will have solar panels on its roof that will generate 10 megawatts of electricity—more than 10 times the power generated by any other solar project currently planned in Georgia. In addition, the Aerotropolis parking area will channel rooftop rainwater into cisterns that will provide graywater for the entire 130-acre project while protecting the headwaters of the Flint River from polluted runoff. This new development is an example of innovative community redevelopment of brownfields with environmental stewardship, similar to the award-winning Atlantic Station development on the site of a contaminated former steel mill in downtown Atlanta, also a Jacoby Development project.

An Auto Plant Renaissance in Norfolk, Virginia: The Jacoby Development Group also is converting the former Ford Norfolk Assembly Plant into the Virginia Renaissance Center for commercial and renewable energy development. Norfolk Assembly opened in 1925 and produced vehicles ranging from the Model T to the F-150 pickup truck. The plant closed in 2007 as part of Ford's competitive reorganization. Jacoby bought the site in March 2011 and entered into an agreement with Belgium-based Katoen Natie, a worldwide global logistics provider. The Belgian company will invest $12 million to refurbish and equip the 662,000-square-foot former Ford body shop and establish a warehouse and distribution center that will create 225 new jobs. Jim Jacoby touts the Virginia Renaissance Center as "an economic anchor that allows us to turn our attention to the sort of renewable energy-related manufacturing that will take advantage of the area's strong labor force." The Commonwealth of Virginia supported the deal by providing financial assistance to the first tenant through the Virginia Enterprise Zone Program and

Virginia Jobs Investment programs. Governor Bob McDonnell said, "It is gratifying to see the former Ford Assembly Plant being brought back to life."

Rebirth of Early Auto Plant in Ohio: The City of Moraine in western Ohio has a rich place in the history of American manufacturing innovation. In addition to producing early airplanes, the Moraine plant played a central role in the development of GM and Delco, and even produced early appliances and other breakthroughs. At its peak, the Moraine plant employed 18,000 people, and fostered a robust auto-supplier network that employed thousands. In 2008, GM announced it would close the Moraine Plant. The final 2,400 jobs at the plant were lost when the last truck rolled off the line in 2009. "This was a huge GM town, and now no more," said John Heitmann, a professor at the University of Dayton who teaches classes on automobile history and its impact on American life.

This GM town already is transforming itself into a new center of American ingenuity and jobs creation. In 2011, the Moraine Plant was taken over by the RACER Trust, which sold the plant to the IRG Company. IRG will redevelop the four-million-square-foot plant in four sections to serve a variety of commercial and industrial tenants. The new plant is expected to employ between 1,000 and 2,000 workers.

Small Ohio Communities Pursue "Bright" Ideas at Auto Sites: A pair of small neighboring communities in Ohio are facing challenges due to changes in the automotive sector. The City of Bedford (population 13,000) lost auto suppliers and faces challenges at other contaminated brownfields. The Village of Walton Hills (population 2,400) enjoyed nearly 60 years of production at the Ford Stamping Plant. The plant had 5,000 employees at its peak, but it is slated to close in 2014. Both communities are pursing "bright" ideas for the revitalization of these auto sites.

In Bedford, the 50-acre S.K. Wellman site, which produced truck clutches and brakes from 1952 to 1986, closed and left significant environmental contamination. Hull & Associates acquired the site and began redevelopment in 2008. The site became the Tinkers Creek Commerce Park, a state-of-the-art building that houses a Hull commercial office and offices for Hemisphere Development Corporation, two of the most innovative and successful brownfields redevelopment companies in the nation. The business park includes a 93-kilowatt, ground-mounted, solar photovoltaic energy array that will generate about 80 percent of the energy demand at the office complex. The solar array was constructed with the support of a $266,000 grant from the American Recovery and Reinvestment Act, provided through the DOE's state energy program and the Ohio Department of Energy.

Walton Hills is moving proactively to address the impending loss of the Ford stamping plant. The village already is reaching out to businesses, coordinating with the state, and seeking support from the federal government. In July 2012, the village convened an Auto Community Revitalization Roundtable that brought together local officials; state environmental, economic development, and job training officials; federal officials, including White House leadership and managers or administrators; non-profit and community foundation representatives; the MAC; private-sector business leaders; and the Ford Motor Company to discuss strategies for productive reuses for the Ford plant when it closes, as well as for other brownfield sites in Walton Hills.

5. Turning Auto Sites into Community Spaces and Green Spaces

Some communities are transforming their former auto brownfields into new downtown centers, neighborhood spaces, and parks and recreational assets that are hallmarks of community revitalization.

Community Seeks to Create a New Legend of Sleepy Hollow at Vacant GM Site: General Motors started manufacturing vehicles at its Sleepy Hollow, New York, plant in 1915, but changes in the U.S. auto industry forced GM to close the plant in 1996. Since then, the site has undergone significant remediation under the jurisdiction of the New York Department of Environmental Conservation. In 2012 the Village of Sleepy Hollow gave GM a crucial development permit. Now the site, which is a prime piece of real estate situated on the Hudson River, is being marketed for redevelopment. The development master plan features 1,777 housing units, a 140-room hotel, and 172,000 square feet of retail and office space. Another 45 acres will be devoted to parkland and other community uses. In summer 2012, Sleepy Hollow opened the Sleepy Hollow River Walk along the Hudson River, made possible by GM's agreement to open the former manufacturing site to community use.

New condominium development in Kenosha, Wisconsin

Kenosha Creates Harbor Park on Closed Chrysler Site: With its Harbor Park development, Kenosha, Wisconsin, created one of the most vibrant downtown waterfront redevelopments in America. Harbor Park sits on what once was a closed and badly contaminated Chrysler American Motors Company (AMC) factory. The AMC factory opened in 1960 on the site of a 90-year-old mattress factory situated on Lake Michigan in the heart of downtown Kenosha. Chrysler acquired the site when it purchased AMC in 1987 but closed it just a year later. The city lost 5,000 jobs and was left with a contaminated 69-acre site. The city purchased the site for one dollar in 1994.

Kenosha partnered with the Wisconsin Department of Natural Resources and took the site through the state's Voluntary Remediation and Redevelopment Program. The city partnered with the Urban Land Institute to plan redevelopment of the site and devoted $18.5 million in tax increment financing for cleanup and infrastructure improvements. Today, Harbor Park is a world-class waterfront with high-quality downtown housing, a marina, a farmers market, the Kenosha Public Museum, and the Kenosha Civil War Museum—all connected by an old-fashioned streetcar transit system.

Rubber Meets the Road in Fitchburg Riverfront Park Revitalization: When Fitchburg, Massachusetts, lost a major factory and 600 jobs in 1998, it spurred the city to move forward with a comprehensive urban renewal plan. One positive result of Fitchburg's plan is the transformation of the closed Hope Rubber Factory into a riverfront park. Aided by a $200,000 EPA Brownfields Assessment Grant, Fitchburg and its Riverfront Park Citizens Committee were able to address assessment and cleanup of contamination at Hope Rubber. Fitchburg completed its Riverfront Park in 2003. The two-acre site includes an outdoor theater, river promenade, nature trails, lighting, benches, and beautiful landscaping.

Riverfront Park, Fitchburg, Massachusetts

Flint Uses Plants to Remediate Former Auto Site: One of the most historic auto sites in the nation, the "Chevy in the Hole" complex on the Flint River in Flint, Michigan, once employed about 8,000 workers. It was one of the plants involved in the 1936-1937 United Auto Workers' sit-down strike. Now the 120-acre site is one of the community's largest vacant properties. Significant environmental contamination complicates its reuse. Flint plans to transform the site into a regional greenspace, using funding from EPA's Brownfields Program to assess and clean up the property and funding from the U.S. Forest Service to plant trees to facilitate the site's cleanup using phytoremediation. Phytoremediation is the process of planting trees to clean up contaminated soil, an approach that enables the site to begin its transition into a greenspace while environmental cleanup work is ongoing. By using such techniques, communities can turn eyesores into community assets, even in cases where full site reuse might be years down the road. In August 2012, Flint secured a prospective purchaser agreement with EPA and DOJ that clarifies environmental liability issues associated with the site. This will allow the city to acquire the site and move it toward reuse, protected from undue risk related to liability for past environmental contamination.

6. Reimagining the Future

Some automotive manufacturing communities that lost significant jobs and tax revenue changed so dramatically since the heyday of the auto industry that they are reimagining their futures. With significant population and job loss over decades, these communities are "right-sizing" and repurposing surplus lands. They are consolidating development into priority growth areas and exploring the downsizing of blighted spaces into urban forestry and agriculture, tourism and recreational areas, and other innovative uses. Detroit, as well as Flint, Youngstown, Cleveland, and other communities that were prominent in the auto industry since its birth, has grown smaller and suffered the impacts of disinvestment. Propelled by the need to move forward, many automotive and manufacturing communities throughout the Midwest are reimagining, reinventing, and transforming the landscapes and economies of the entire region.

In its 2010 report, *The Next Economy: Economic Recovery and Transformation in the Great Lakes Region*,[7] the Brookings Institution explains how shrinking cities began to recognize that a large surplus of land and buildings undermines real estate markets, reduces the tax base, and diminishes the ability of localities to attract and retain new businesses and skilled workers. Moreover, vacant and blighted land is inefficient, expensive, and difficult to support with infrastructure and police, fire, and other public services. In Detroit, for example, the city's jurisdiction is so large that Manhattan, San Francisco, and Boston all could fit within the city limits. With a loss of 60 percent of its population since 1950, nearly 30 percent of Detroit's lands are vacant and blighted, and 39 of 54 urban neighborhoods are considered to be unsafe and unhealthy.

That is why leaders such as Detroit's Mayor Dave Bing, Flint's Mayor Dayne Walling, and Youngstown's former mayor Jay Williams embraced the idea of reimagining and transforming their cities to be successful as smaller, more efficient communities. Sometimes referred to as "Legacy Cities," these communities are tearing down blight; encouraging and incentivizing citizens to voluntarily consolidate into more viable neighborhoods; and fostering new uses of land that include greenspace, recreational areas, green infrastructure for stormwater management, urban gardens, and farms. As Mayor Bing said, "We are asking people who have lived here for generations to change. But if we don't change, we'll fail, and I don't want to be part of that failure."

7 www.brookings.edu/papers/2010/0927_great_lakes.aspx.

Not all auto communities need to change so drastically. Still, the dramatic efforts required in major cities illustrate the kind of bold and imaginative thinking that all auto communities must embrace to succeed. Auto communities can regain their competitive edge by cleaning up contaminated sites and reinventing themselves to become more dynamic and sustainable. This involves reinventing their economies, reinventing infrastructure, and reinventing manufacturing. In other words, auto communities can imagine a better future and move forward on the road to revitalization.

Opening of new BAE Systems engineering campus on former auto supplier site in Sterling Heights, Ohio

Roadmap for Auto Community Revitalization

Auto communities are using many approaches to community revitalization. While every town is different, auto communities are identifying the most effective routes to successful community revitalization and learning many lessons along the way that they can share with each other.

The "lessons learned" described below can provide a useful roadmap for auto communities. This section also provides three extended case studies describing how two communities—Dayton, Ohio, and Oklahoma City, Oklahoma—put these lessons into action. This information may help other communities navigate the process of cleaning up former industrial properties and revitalizing their communities.

Roadmap for Auto Community Revitalization

1. Assess the community's status, prioritize resources, and match the best strategies.
2. Provide leadership from the top, backed by the right team.
3. Form a multi-stakeholder, intergovernmental team.
4. Connect to community and regional priorities, assets, and economic clusters.
5. Use and upgrade infrastructure assets.
6. Begin with the end in mind.
7. Involve citizens and workers from the start.
8. Use local resources and build local capacity to leverage further investment.
9. Partner with state and federal agencies.
10. Attract private sector support.
11. Stay tough and persistent for the long road—and build on small successes.
12. Reach out to other auto communities and partner organizations.

1. Assess the community's status, prioritize resources, and match the best strategies.

The first step is to assess the community's current automotive economy and its outlook, and then to determine the auto restructuring challenges it must address to move forward. Consider these questions:

- Is your community rebuilding from a decades-long shift away from auto manufacturing and auto jobs, like Anderson, Indiana, or Flint, Michigan? Or are you addressing a more recent, major, and debilitating plant closure, such as one of the many Big Three auto manufacturing plants that have closed in the past few years?
- Are your plans for economic or auto brownfields cleanup and revitalization well underway but encountering barriers related to capacity, funding, or infrastructure issues? Or are you still in the planning and visioning phase?
- Are you seeking to rebuild a sustainable auto sector based on more advanced and greener vehicles, or must you plan to shift to entirely new economic sectors?
- Can the community take advantage of regional economic assets and growth, or is the city stuck in a weak and struggling market?

Answers to these questions and others will help communities determine the most appropriate and promising approaches to revitalization, the resources that must be gathered, and the scope of change that the community can expect to achieve over the coming months and years. Conducting a thorough and realistic self-assessment of the state of the community's auto industry and other economic sectors, liabilities, and assets—with the involvement and cooperation of citizens and key stakeholders—can help the community prepare for the future and enable it to follow the lead of other communities that faced the same challenges. Conversely, if community leaders and citizens are not ready to make an honest self-assessment about the status of the local economy and instead try to revive plants that are long gone, new opportunities could pass them by.

Conducting an honest assessment of the community's status enables leaders to prioritize resources, staff, and effort into the best brownfields revitalization opportunities. In many communities, it will not be possible to tackle every closed plant or contaminated site at once. Instead, each community should evaluate which properties are best suited for new productive reuse based on their location, size and surroundings, infrastructure assets, and the nature of environmental contamination. Human factors, including the extent to which the property owners are cooperative and willing to redevelop or sell the sites, community and political support for site reuses, and other considerations also are important factors in the equation. Often, steady progress and success at a higher priority site can yield dividends and progress that inspire community confidence, leverage further resources, attract further private investment, and position the community to tackle other brownfields challenges.

Once the community has articulated a unified vision of the future and set clear priorities, local leaders can begin developing the plans necessary to realize that vision. For example, Youngstown, a former steel town and auto supplier center, addressed the long slide of manufacturing disinvestment and declining population in the city by undertaking an ambitious, comprehensive planning effort known as "Youngstown 2010." Led by former Mayor Jay Williams and conducted in partnership with Youngstown State University and city residents, the plan envisions a smaller, greener, and cleaner city that makes efficient use of available resources and capitalizes on local and regional cultural amenities and business

advantages. Novel in its approach to dealing effectively with a declining population, the Youngstown 2010 Plan and subsequent updates are helping the city build for the future. The plan draws interest from cities around the world that are experiencing post-industrial population loss or declining birth rates. Moreover, Youngstown's effort to determine where it fits into modern economic times helped the city acquire a $650 million investment in a new V&M Star Steel pipe mill, a one-million-square-foot facility that will put 350 people to work making steel tubes for domestic energy drilling.

2. Provide leadership from the top, backed by the right team.

Remaking a community whose economic base is shifting away from traditional automotive manufacturing or parts supply requires leadership from top elected officials backed by an effective team of staff and volunteers. The mayor, county executive, township supervisor, or other top elected official needs to be a visible and determined leader who facilitates community engagement by working in partnership with the council, business community, and local citizens. It often is advantageous for a mayor to dedicate a lead staff person or volunteer to focus efforts on automotive revitalization. In Lansing, Mayor Virg Bernero focused on strengthening and expanding two existing GM plants and on cleaning up and revitalizing three closed plants for new community development and green manufacturing. He embarked on a public and media outreach effort, forged new partnerships, and dedicated his time to the expansion of new advanced-manufacturing efforts. He also reached out to the state and federal governments for help. His outreach to mayors in other cities facing similar challenges led to the founding of the Mayors Auto Coalition. Mayor Bernero assigned the city's economic development, planning, public works, and public outreach teams to pursue these activities. As a result, GM decided to invest nearly $200 million to expand one plant, and plans are underway for the reuse of a closed GM/RACER Trust property as the Lansing Green Innovation Park for Clean Manufacturing.

3. Form a multi-stakeholder, intergovernmental team.

Local governments cannot revitalize the local auto sector alone; it is important to form strong and durable partnerships with a variety of community stakeholders and with every level of government. One way is to form an advisory council or action team that includes involvement by local, state, and federal governments; the business sector; community groups; environmental groups; and philanthropic, academic, and other stakeholders. Such a body should have a clear mission to help rebuild and diversify the local auto sector economy.

Chrysler's Twinsburg Stamping Plant

For example, in spring 2009, when Chrysler entered bankruptcy and announced plans to close its stamping plant in Twinsburg, Ohio, the community braced itself for the loss of more than 1,000 jobs and millions of dollars in tax revenue. Mayor Katherine Procop immediately assembled a Twinsburg Task Force that included local businesses, citizens, the academic community, state economic development officials, federal agency officials, and state and federal elected representatives. The Task Force worked

to develop a response to the plant closing, support displaced workers, and plan an economic reuse of the site. Despite many challenges, Twinsburg maintained a strong and vigilant focus on the revitalization of the auto site.

In June 2011, a deal was announced to transfer ownership of the closed site to a developer. The developer plans to turn the former plant into a major industrial park that will provide new employment opportunities for local and regional workers. In addition, Twinsburg obtained a $135,000 grant from the U.S. Economic Development Administration to create a strategic recovery plan for the auto site, as well as a $2.2 million grant through the State of Ohio's Job Ready Sites Program to fund infrastructure development at the site. Further, Twinsburg is anticipating assistance for site cleanup from the Clean Ohio Revitalization Fund, which provides matching grants for the remediation of environmental contamination at brownfields sites.

4. Connect to community and regional priorities, assets and economic clusters.

A city facing a declining manufacturing sector or a closed auto plant cannot revive or redevelop in isolation. Harvard's Institute for Strategy and Competitiveness found that struggling manufacturing communities must assess and build relationships with regional economic clusters of interconnected companies, specialized suppliers, and associated institutions in a field that is strong or emerging in the region. This is why EDA is targeting federal resources to cities that are building upon "regional economic clusters" that integrate regional business, higher education, infrastructure, and other assets that can be used to reinvest and renew local economic prospects.

In many communities, there is a renewed focus on developing and expanding manufacturing investments and jobs as more companies consider insourcing these plants and as federal and state governments provide incentives and support for developing advanced manufacturing research and development and production. In Michigan's Capital Region, for example, the Lansing Economic Area Partnership partnered with the City of Lansing, the City of East Lansing, Ingham County, and Michigan State University to create the Lansing Regional SmartZone. The SmartZone spurs the growth of technology-based businesses throughout the greater Lansing area by providing support to new and emerging businesses, including market research, access to capital, incubation space, and business development services. This initiative is possible because of the region's skilled labor base, strong support within the business community, and the involvement of academic institutions such as Michigan State University. Such partnerships can promote the cleanup and redevelopment of former auto manufacturing plants and other brownfields.

5. Use and upgrade infrastructure assets.

Many brownfields are located in prime areas that are served by existing infrastructure, which makes the properties more attractive for development than greenfield or ex-urban sites that may need significant infrastructure upgrades. Communities seeking to revitalize closed auto brownfields should inventory the infrastructure assets at these sites, identify necessary upgrades, and tout these infrastructure advantages when marketing the sites to developers. A solid assessment of infrastructure should include access to transportation (proximity to roads, interstates, rail lines, and public transit, as well as pedestrian access), and sanitary sewer, drinking water, telecommunications (including fiber optics),

DAYTON GETS BACK TO ITS INNOVATION ROOTS BY REINVENTING AS "TECH TOWN" USA

The 30-acre GM Harrison Radiator complex in downtown Dayton was an important cornerstone of the downtown's economy since the site began industrial use in the 19th century. At its height, the complex supported thousands of local jobs while producing air conditioners for GM vehicles. When the complex closed for good in 1995, it left behind dilapidated and obsolete buildings that blighted the area and hindered the site's redevelopment. With numerous environmental and economic factors obstructing its reuse, the GM Harrison complex sat vacant for years. However, even as the site sat unused, the community and the city government snapped into action to begin cleaning up the site and create a new vision for its redevelopment. City officials collaborated closely with GM to begin characterizing contamination at the site, with GM sponsoring significant environmental assessment and monitoring work. Led by then-Mayor (and now Congressman) Michael Turner, Dayton developed a vision for the GM Harrison site and the Webster Station neighborhood surrounding it. In collaboration with regional economic development partners and community leaders, the city's first plan capitalized upon the region's position as one of the top tool-and-die hubs in the nation by redeveloping the site as "Tool Town"—a tooling and machining business park.

The Tool Town concept initially held significant promise. However, by the early 2000s, international competition began to decimate the domestic tool-and-die industry and changes in the global auto-supply market made the plan infeasible. These market trends forced Dayton to revisit its vision for the GM Harrison property, reexamine its position in the regional economy, and forge a new plan for turning the site into a regional jobs center. This time, under the leadership of a new administration led by Mayor Rhine McLin, the city decided to build upon Dayton's long history as a home of innovation and entrepreneurship—from the Wright Brothers' first airplane factories to the many advances pioneered by Charles Kettering at Delco/GM—as well as the city's robust set of regional innovation assets, including Wright Patterson AFB, the University of Dayton Research Institute, Wright State University, Lexis-Nexis, and Teradata (a leading data warehousing company spun off from NCR). After considering these assets, Dayton decided to transform the GM Harrison site into a new center of technological innovation. This new "Tech Town" was carefully designed to be not only an economic development project, but also a physical asset for Dayton's downtown. The design creates a modern, urban campus with an identity

Illustration of Tech Town

separate from the traditional downtown core and standard suburban office parks. Tech Town is being built as an environmentally friendly and aesthetically unique business park.

The development of Tech Town is led by CityWide Development Corporation, Dayton's nonprofit economic development body. CityWide Development Corporation owns the property, markets Tech Town to potential tenants, and plays a pivotal role in convening stakeholders for the development of the Tech Town master plan.

Dayton had to leverage significant local resources and develop major partnerships with key state and federal agencies to make Tech Town a reality. To prepare the site for redevelopment, the city received $6 million from the Clean Ohio Fund for remediation and demolition, $2.9 million through the U.S. Army Corps of Engineers for water and sewer infrastructure upgrades, and $375,000 in environmental assessment resources from EPA. In addition, the State of Ohio helped the city recover more than $5 million from GM during the company's bankruptcy proceedings for additional environmental costs at the site. Dayton also obtained federal and state assistance to construct the initial buildings in the Tech Town complex. A $2.5 million U.S. EDA grant was used to construct the first new building at Tech Town, the LEED Gold-certified Creative Technology Accelerator. In addition, Tech Town received $5 million in grants and $2.8 million in loans from the State of Ohio for construction costs. Altogether, this state and federal funding enabled Dayton to leverage the millions of dollars to invest in site preparation, demolition, and construction activities.

Although still a work in progress, today Tech Town is a shining example of how auto communities can repurpose former automotive plants to reinvigorate their local economies and diversify their economic base. A total of 100,000 square feet of LEED-certified office space already is constructed, and the site attracted several premier tenants, including the University of Dayton's Institute for Development and Commercialization of Advanced Sensor Technology, the Dayton RFID Convergence Center, and The Entrepreneurs Center, a business incubator for advanced technology companies. When fully built out, Tech Town is expected to accommodate approximately 400,000 square feet of office and research space and support up to 2,500 jobs.

- ✓ Assess the community's assets.
- ✓ Provide leadership.
- ✓ Connect to community and regional assets.
- ✓ Use infrastructure assets.
- ✓ Begin with the end in mind.
- ✓ Involve citizens and workers.
- ✓ Build local capacity to leverage investment.
- ✓ Attract private sector support.
- ✓ Partner with state and federal agencies.
- ✓ Stay tough and build on small successes.

and stormwater management infrastructure. This assessment also should include other infrastructure advantages, including access to waterfronts, proximity to downtowns or other significant commercial areas, connections to educational and social service infrastructure, and other advantages, such as availability of a nearby skilled workforce.

The availability of existing infrastructure and prime location of many brownfields often means significant cost savings for redevelopers and users, as well as the local jurisdiction. Many studies show that brownfields redevelopment projects often have significantly lower infrastructure costs than greenfield development, due to the availability of existing infrastructure and the fact that development of brownfields and infill sites tends to be more compact and involve more intense land uses than developments on sprawling greenfield sites. In many cases, infrastructure upgrade and installation costs at brownfield sites are 50 to 80 percent less than the infrastructure costs at similar greenfield projects.[8]

Auto communities also should have a realistic idea of the infrastructure upgrades that may be needed at key auto brownfield and other revitalization sites, and should prepare initial plans for financing and addressing these issues. Federal and state grants, bonds, and other financial tools can help localities leverage resources for infrastructure upgrades (see *Part 3: Resources Available to Auto Communities*, for potential resources for infrastructure upgrades).

6. Begin with the end in mind.

To revive a stalled auto economy or redevelop a closed auto plant, a community will benefit from forming a shared community vision about the types of economic activities to pursue and the best end use of idle properties. Resources for community visioning and action planning, highest-and-best use economic analyses, market feasibility studies, graphic conceptions of reuses, and other resources to create a community economic reuse plan are available from a variety of sources. These include grants from philanthropic foundations, EPA's Brownfields Program, EDA's Economic Development Planning Program Grants and Local Technical Assistance Grants, and the DOL. In addition to grant resources, several state, federal, and non-profit entities provide technical or staff support to assist local governments with these efforts.

Creating and defining a community vision can help the community prioritize activities, recruit resources, provide certainty to the private sector, and build momentum toward eventual reuse. The Funders' Network for Smart Growth & Livable Communities, for example, provided "Reuse SWAT Teams" to five targeted automotive communities to help them plan for the reuse of their closed auto plants. In Toledo, Ohio, The Funders' Network convened city, county, state, and federal government representatives and other stakeholders to launch a community planning process to foster revitalization of a closed Jeep plant that became a new regional hub for solar and biosciences manufacturing.

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8 See, e.g., Evans Paull, Redevelopment Economics, *Infrastructure Costs, Brownfields vs. Greenfields*, Redevelopment Economics Report, (June 2012). Accessed August 16, 2012 at http://www.redevelopmenteconomics.com/yahoo_site_admin/assets/docs/Infrastructure_Costs_-_brownfields-greenfields_final2.208110246.pdf; James Frank, *The Costs of Alternative Development Patterns: A Review of Literature*, Urban Land Institute. 1989; Scott Bernstein, *Using the Hidden Assets of America's Communities and Regions to Ensure Sustainable Communities*, Report of Center for Neighborhood Technology (2003). Accessed August 16, 2012 at http://www.cnt.org/hidden-assets/.

7. Involve citizens and workers from the start.

Local government officials leading efforts to revitalize auto communities need to convene citizens, workers, and other stakeholders to ensure that revitalization plans meet the needs and desires of the public. For example, St. Paul, Minnesota, addressed the challenge posed by the closure of the 87-year-old, 144-acre Twin Cities Assembly Plant by forming a Ford Site Planning Task Force. The 25 members of the task force represent citizens, the business community, labor, the environmental community, and Ford. It is staffed by city officials and supported by expert planning and redevelopment consultants. The task force takes a collaborative approach to site redevelopment that integrates construction, energy, transportation, waste, open space, and recreation goals for the sustainable reuse of the plant. The task force explored five reuse planning scenarios for the plant, which is located in a prime St. Paul neighborhood. The panel also conducted a green manufacturing reuse study and a sustainable stormwater feasibility study, developed open space guidelines, and addressed other aspects of site reuse to ensure that the effort results in the most desirable and sustainable revitalization for St. Paul.

Toledo's Jeep plant, before and after redevelopment

8. Use local resources and build local capacity to leverage further investment.

Although finding local funding can be daunting, it also is critically important. It is unlikely that other levels of government or the private sector can provide all of the funding necessary for a major revitalization project. Obviously, funding is needed to clean up and revitalize any brownfield, and this is particularly true for large auto brownfields with very significant assessment and cleanup costs. There may be few resources available to address expensive environmental cleanups at brownfield sites in communities with a closed plant. Still, even limited local resources can play a critical role by sparking the initial site assessment and reuse planning effort, providing the matching-share contribution often required for receipt of state and federal dollars, and offering key incentives to developers interested in revitalizing a closed site. Localities also can reap benefits by investing time and resources into learning about and tapping potential sources of state and federal assistance, as well as assistance available from nonprofit or philanthropic organizations.

Fairlane Green development in Allen Park, Michigan

Local governments have several tools that can be used to incentivize redevelopment and leverage additional resources for cleanup and reuse of auto brownfields. These tools include:

Tax Increment Financing: Tax increment financing (TIF) is the most popular form of public financing for brownfields site cleanup and economic development. TIF can be used for a variety of economic revitalization efforts and often plays a key role in strategies for addressing financing gaps for brownfield redevelopment projects in economically distressed areas.

TIFs are built on the concept that redevelopment will create future value that can be used to support financing for the activities needed now (such as environmental cleanup or infrastructure improvements) to help create that new value. The TIF process uses the anticipated growth in property taxes generated by a development project to finance upfront public-sector investment in the property. Instead of imposing a new tax or higher tax rate to finance cleanup and redevelopment costs, local governments use TIF to reallocate new revenues from development to pay for development costs. TIF bonds can be issued for the specific purposes of the redevelopment, such as acquiring and preparing the site; cleaning up contamination; upgrading utilities, streets, or parking facilities; and carrying out other necessary site preparation activities and improvements. This makes TIF an ideal tool for brownfield projects. In addition, TIF programs can be used easily in conjunction with other types of funding, such as grants or loans.

One example of TIF in action at an automotive brownfield is the Fairlane Green success story, a project undertaken by the Ford Land Development Company in Allen Park, Michigan. The site was a clay quarry that Ford converted into a landfill for the company's hazardous waste disposal in the mid-1950s. Ford closed the landfill and worked with the Michigan Department of Environmental Quality (MDEQ) to prepare the 243-acre brownfield for redevelopment as a mixed-use destination center with dining, retail, entertainment, and recreational components. The multi-phase development was recognized by the Phoenix Award Institute.

Tax Increment Finance Best Practices Reference Guide, by the Council of Development Finance Agencies & International Council of Shopping Centers (2007), is an excellent resource on TIF. It is available at www.mrsc.org/artdocmisc/cdfa.pdf.

To encourage development of the site, Ford obtained approval in 2002 for up to $30 million in TIF from the State of Michigan and the City of Allen Park to reimburse the extraordinary costs associated with building atop a landfill. These costs included measures to reduce settlement, protect the landfill cap, reinforce slopes, and construct utilities. At the time, this was the largest TIF package ever offered by the State of Michigan together with a municipality.

The result is Fairlane Green, a sustainable redevelopment project that at the time was the largest landfill redevelopment in Michigan and the largest site under construction for retail development in the United States. The first two phases of Fairlane Green opened in 2006 and encompassed 850,000 square feet of retail space as well as several ponds and trails. When complete, Fairlane Green will comprise one million square feet of LEED-certified retail space, a 43-acre park, and 3.5 miles of paved trails.

Fairlane Green also lives up to its name, with nearly two-thirds of the site devoted to natural green space, green infrastructure for stormwater management and on-site irrigation, reduced impervious surface, water conservation technology, energy-efficient design and reflective roofs for reduced energy consumption, and a LEED Gold certification. The project also created 2,000 permanent jobs and hundreds of construction jobs, and will contribute $3 million annually to the local tax base.

Municipal General Obligation (G.O.) Bonding: Communities traditionally issue G.O. bonds that are backed with the full faith and credit of the locality to acquire land, prepare sites, and make infrastructure improvements—all of which are key elements in a brownfield cleanup and redevelopment strategy. Moreover, the community's ability to repay this bond debt is enhanced by the growth in property tax revenues as more brownfields are brought back to productive use.

Tax Abatements: It is common for auto communities to recruit investment by automotive manufacturers and suppliers and other industries by offering tax abatements on the value of personal property invested at a plant through a retooling or plant upgrade. For example, Bay City, Michigan, offered a 50-year exemption from taxes on plant equipment upgrades made by General Motors at the GM Powertrain Plant, which manufactures components for the Chevy Volt and other vehicles. This incentive helped avert a potential shutdown of this critical plant.

Public-Debt Leveraging: Debt leveraging is a strategy that increases the return on equity when the investment is financed partially with borrowed money. For brownfields, a public or quasi-public entity can serve this purpose by fronting the capital, which makes private investments less risky. This strategy is not used often, but can be an effective way to attract private capital to brownfields. For example, the St. Paul Port Authority helps back private loans to companies by purchasing up to 25 percent of the real-estate value in a private loan that can be used to cover construction, structural improvements, or expansion of operations. The Port Authority also offers loan guarantees to help ensure that companies can access lines of credit for working capital and equipment. Because this type of financing often is difficult for newly located companies to secure, public-debt leveraging can be a powerful tool local governments can use to attract private-sector investment.

Local Capacity to Seek External Resources: Seeking and applying for federal and state grants, technical assistance, tax incentives, and other resources can be complicated and confusing. Even when resources are limited, local governments are well served by investing some time and capacity into learning how to navigate potential sources of state and federal assistance. Whether this involves hiring a full-time grants director, contracting with a grants consultant, or working with local community colleges or non-profit foundations, a community may benefit by investing time and resources into applying for and acquiring grants and loans. These investments can bring great returns.

Communities also can take advantage of the technical assistance offered by federal agencies either directly to local communities or through organizations. For example, EPA provides cooperative-agreement funding to regional Technical Assistance to Brownfields Communities centers that offer independent assistance to communities developing applications for Brownfields Assessment, Cleanup, and Environmental Workforce Development grants. Another example is the assistance provided by Economic Development Representatives in EDA regional offices who help localities in each state explore and seek resources from EDA and other agencies for economic development planning, infrastructure upgrades, and economic revitalization projects. (For a complete listing, see *Part 3: Resources Available to Auto Communities*.)

9. Partner with state and federal agencies.

Partnerships with state and federal agencies are critical. A single locality cannot revive a shifting manufacturing economy or address a major plant closure on its own. Just as there must be strong

local leadership for auto community revitalization, cities and counties need strong federal and state leadership to provide technical assistance, reuse-strategy support, and resources for planning, infrastructure upgrades, and economic reuse. In its November 2011 report, *Repurposing Former Automotive Manufacturing Sites*,[9] the Center for Automotive Research observed, "federal, state, and local government incentives played a positive role in many redevelopments" of closed auto plants that were retooled and put back into productive use.

The small but determined community of Buena Vista, Michigan, is a township of nearly 10,000 people dealing with a double blow: closure of a major GM site and the abandonment of the town's main commercial area, the former Fort Saginaw Mall. In 2009, Buena Vista Township acquired the vacant and contaminated mall site and began planning and rezoning for revitalization of the property as a dynamic, mixed-use town center with commercial, retail, community, and educational uses. Buena Vista is making significant progress with state and federal assistance: the township secured $730,000 in U.S. Department of Transportation grants for revitalization of transportation infrastructure at the site, used $660,000 in HUD Community Development Block Grant funding awarded through the Michigan Economic Development Corporation to demolish the dilapidated mall site and clean up environmental contamination, secured $400,000 in HUD Economic Development Initiative funds to prime the site for redevelopment, and partnered with EPA's Office of Brownfields and Land Revitalization and EPA Region 5 to secure $100,000 in EPA Targeted Brownfields Assessment resources.

The RACER Trust will deploy $5 million to clean up and promote the redevelopment of the township's closed GM manufacturing site. Township supervisor and project leader Dwayne Parker said, "Our partnership with state and federal leaders is a key for success in our local efforts, and will help us reach our end goal of new business, new jobs, and new community spaces."

Another example of successful and effective intergovernmental cooperation can be seen in Wilmington, Delaware, where GM closed a 3.2-million-square-foot assembly plant in 2009. Wilmington partnered with the State of Delaware and the DOL's Office of Recovery for Auto Communities and Workers shortly after the plant closed. An intergovernmental team mapped out a reuse strategy for the site. The plant owners worked with the state to obtain a $3.8 million National Emergency Grant from the DOL to provide retraining, job search assistance, career planning, and other employment services to laid-off workers. Shortly afterward, Delaware Technical and Community College applied for and was awarded $1.2 million in EDA grants to develop a plan for auto-sector revitalization and establish a Green Building Technology and Alternative Energy Training Center in Wilmington.

10. Attract private sector support.

Local governments can provide the spark for economic revitalization and brownfields cleanup and reuse, but the fuel for real acceleration comes from private-sector investment in new plants and new economic development. Localities can partner early with local and regional business organizations and leaders to explore private-sector investments. For example, in Detroit, Mayor David Bing encourages the business community to participate in partnerships. Public-private collaboration is helping Detroit attract new business downtown and raise funds for public works and infrastructure upgrades, matching funds for grants, and other private investment that will help Detroit re-imagine and rebuild a sustainable future.

9 www.cargroup.org/assets/files/repurposing.pdf.

11. Stay tough and persistent for the long road—and build on small successes.

Reusing large auto brownfields often means reinventing a local economy—a monumental task that cannot be accomplished overnight. The task requires perseverance. In Kenosha, city leaders worked for more than a decade to transform the contaminated Chrysler AMC plant into Harbor Place. Despite these efforts, in 2009, Chrysler's bankruptcy led to the closure of a second major manufacturing plant. Kenosha will take over the redevelopment of this plant in 2012. The city continues to take steady steps forward in environmental assessment, brownfield cleanup, economic planning, business recruitment, and attracting resources to enable the city to continue the economic revitalization of this lakefront tourism, educational, and business hub. The can-do spirit of the community keeps momentum going even during the toughest of times, and is an important example for other auto communities facing similar economic challenges.

12. Reach out to other auto communities and partner organizations.

Automotive communities can tap into a vibrant and growing network of organizations that provide resources and support to local communities and enable them to connect with other auto communities across the nation. These organizations include the Manufacturing Alliance of Communities (formerly the Mayors Auto Coalition); the Center for Automotive Research; the Northeast-Midwest Institute; The Funders' Network for Smart Growth & Livable Communities; the Center for Community Progress; the Brookings Institution; the International City/County Management Association; and the Surdna Foundation, Ford Foundation, Mott Foundation, and other national and community-based foundations. (See *Part 3: Resources Available to Auto Communities*.)

OKLAHOMA CITY TINKERS WITH A HIGH-TECH FUTURE BY TRANSFORMING CLOSED GM PLANT

In 2005, GM announced it would close its Oklahoma City auto manufacturing plant, a 430-acre site with 3.8 million square feet of building space. Closure would mean the loss of more than 2,300 jobs. By 2009, the community turned things around, thanks to a partnership with Tinker Air Force Base (AFB). Tinker AFB employs 27,000 military and civilian workers and generates about $3.4 billion annually in state economic activity. Today, the former GM site is an innovative, new Tinker Aerospace Complex (TAC). It is a success story that showcases how an auto community can diversify into broader economic sectors.

Following GM's announcement, local leaders led by the Greater Oklahoma City Chamber of Commerce, Oklahoma City, and Oklahoma County met with GM to urge the company to reconsider its decision to close the plant. They quickly realized that GM's decision was final. They needed to find another productive use for the property. Oklahoma City leaders were uncomfortable with GM's proposed two-year timetable for selling the property, so they made immediate plans for redevelopment.

Because the GM plant is adjacent to the Tinker AFB, the city insisted on a reuse that focused on industrial or manufacturing jobs. They assessed the site's key assets, particularly its excellent existing infrastructure, which includes a Burlington Northern-Santa Fe Rail spur, a major roadway, electric power substation, and water and sewer service. Based on a clear assessment of the site and the local economy, the community developed a reuse vision to provide much-needed space for an expansion of Tinker AFB manufacturing, technology, and aircraft maintenance activities.

Despite Tinker's importance as one of the military's largest and most active logistics and industrial manufacturing centers, many of its operations were scattered among 69 structures, many of which were outmoded. Tinker needed space to expand its operations. The vacant GM facility provided a great opportunity to do so.

The Oklahoma City team began discussions with Tinker AFB, the Department of Defense, the State of Oklahoma and other key parties. This grew into a robust partnership to develop a reuse plan for the GM site. The plan represented more than just a redevelopment opportunity: It was critical to Oklahoma City's longtime commitment to keeping the Tinker AFB an important jobs center that was not vulnerable to base closure or realignment.

Oklahoma City asked the State of Oklahoma to lead negotiations with GM on a purchase price and to ensure that the project moved expeditiously. The next challenge was raising the money needed to buy the site. When the state was unable to provide the $55 million needed for purchase, Oklahoma County devised a plan to buy the property and lease it to the U.S. Air Force. The partnership composed a public county bond referendum to raise the $55 million needed for site acquisition and launched a robust public outreach campaign to provide information and gather input from citizens and key stakeholders. The partnership also worked with the congressional delegation to facilitate communications with officials at the Department of Defense and other federal agencies to keep the project on track, even when it hit obstacles.

Boosted by the outreach campaign led by the Oklahoma City Chamber of Commerce, the "Friends of Tinker AFB" bond referendum passed. Later that summer, the state agreed

to provide $10 million toward the purchase, which meant that the county needed to sell only $45 million in bonds. The County also saved millions of dollars by recycling materials in the plant.

Partnerships were key to transforming a former GM site into the new Tinker Aerospace Complex

Oklahoma County and Tinker AFB entered into a 50-year, one dollar per year lease agreement that gave Tinker an option to buy the property. In exchange, Tinker agreed to clean up contamination and retrofit the plant for reuse as an aircraft engine repair, maintenance, and manufacturing center providing high-skills, high-wage jobs. Over the next five years, the Air Force is expected to spend between $50 million and $100 million for environmental remediation, renovations, and improvements to the property. The Air Force benefits by obtaining about one million square feet of Class-A manufacturing space at a fraction of the cost of a new build and removing 45 obsolete buildings on the main Tinker base.

Initially, the TAC hired 500 new workers, mostly aerospace engine specialists. By 2014, it is expected to employ 2,000 workers. The TAC also will house public-private business partnerships, including cooperative research and development partnerships to advance science, manufacturing, and technology to meet Air Force requirements and transfer technology into the commercial marketplace.

The community also addressed the needs of the 2,364 workers who lost their jobs at the GM facility. About 75 percent of the workers took transfers to other GM plants or accepted severance packages. Other workers used employment services provided through a new Recruiting, Retraining and Re-Employment Center (R3 Center) that was established in 2006 to support displaced GM workers from that plant.

"This is how, as an economic development professional, you can work with partners and create an opportunity out of a difficult situation," said Roy Williams, President & CEO of the Greater Oklahoma City Chamber of Commerce. Oklahoma City Mayor Mick Cornett summed up the successful program by saying, "The officials at Tinker are enthused, the Pentagon is impressed, and it helps solidify our relationship with the most important economic driver we have."

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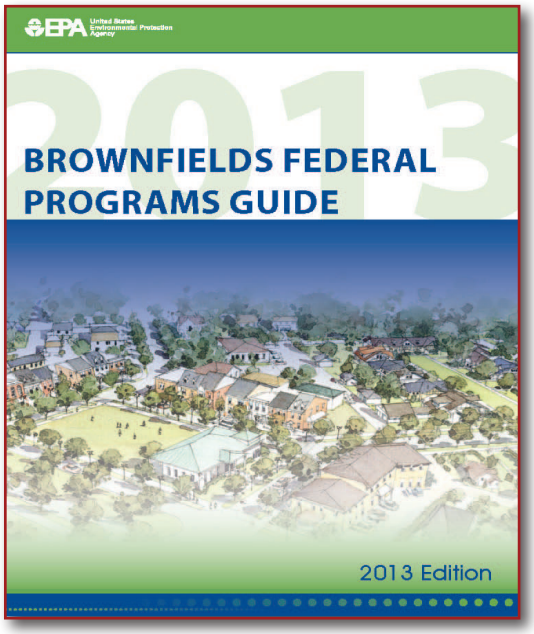
- ✓ Partner with state and federal agencies.
- ✓ Stay tough and build on small successes.

Resources Available to Auto Communities

This section provides an introductory guide to funding and technical assistance resources available to auto communities from a variety of sources—federal and state governments, the RACER Trust, tax incentives for brownfields redevelopment, and non-profit and non-governmental organizations.

Federal Resources

Substantial federal resources are available to auto communities as they continue to face challenges. A wide range of federal agencies provide financial and technical assistance that can help auto communities build stronger and more vibrant local economies. For additional information on federal brownfield resources and more detailed information about many of the programs described here, see EPA's *Brownfields Federal Programs Guide*, available at www.epa.gov/brownfields/partners/bf_fed_pr_gd.htm.



Brownfields Federal Program Guide

Most federal programs are subject to the annual appropriations cycle. Although most of the programs discussed in this section are well established, Congress must provide funding each year for these programs. For this reason, some federal programs will expand, others will terminate, and new programs not included in this section may be created. Furthermore, no single source of federal, state, private, or foundation funding is likely to singlehandedly transform a community or lead to the redevelopment of a large auto brownfield. For major initiatives to be successful, communities often have to assemble a package of financing programs with a combination of these resources. One federal grant might fund the planning of a specific project, while other grants or loan programs may be better suited to funding various aspects of its implementation.

The chart on the next page provides a quick guide for identifying the most appropriate federal program or source of assistance for a variety of purposes. The programs available through each agency are categorized according to the activities supported and types of assistance offered, as follows:

- ***Technical Assistance***—Funds or direct assistance provided for activities ranging from explanations and hands-on assistance with grant writing and review, to site characterization and remediation advice, or access to expert consultants who provide subject-matter assistance.
- ***Visioning***—Programs that provide funding or other resources to support the preliminary planning work for brownfields cleanup and reuse, such as holding community meetings and developing a community-wide vision for a site.
- ***Planning/Design***—Programs that provide funding or other resources to support the initial planning work required to begin preparing a site for reuse, including such activities as developing cleanup or redevelopment plans, specific building designs, and engineering or economic analyses.
- ***Assessment/Remediation***—Programs that provide funding or other resources for work related to conducting environmental site assessments and remediating sites.
- ***Infrastructure/Construction***—Programs that offer funding, financing, or other resources for the construction of public infrastructure such as roads or utilities, or construction of buildings.
- ***Job Training***—Programs that provide funding or other resources for the provision of job training services, including specific training programs and/or other workforce development activities.
- ***Private Incentives***—Programs that provide funding or other resources that can be used to directly subsidize private investments in brownfields, primarily through tax incentives or by providing greater access to low-interest financing.

Table 1: Quick Guide to Federal Programs and Resources

Environmental Protection Agency							
Brownfields Assessment Grants		V	PD	A			
Brownfields Cleanup Grants				A			
Brownfields RLF Grants				A			
Brownfields Area-Wide Planning Grants	TA	V	PD				
Technical Assistance to Brownfield Communities (TAB) Providers	TA	V	PD				
Smart Growth Implementation Assistance Programs (SGIA)	TA	V	PD				
Building Blocks for Sustainable Communities	TA	V	PD				
Environmental Workforce Development and Job Training Grants						J	
Economic Development Administration							
Planning Program Grants		V	PD				
Local Technical Assistance Program	TA		PD				
Economic Adjustment Assistance	TA	V	PD	A	I		PI
Public Works Program				A	I		PI
CEAP	TA	V					
Department of Labor							
Trade Adjustment Assistance	TA						PI
National Emergency Grants	TA						PI
Housing and Urban Development							
CDBG	TA	V	PD	A	I	J	PI
Section 108 Loan Guarantees	TA	V	PD	A	I	J	PI
Department of Transportation							
TIGER Grants				A		J	
Transporatation Alternatives Program				A		J	
Department of Energy							
ATVM Loans							PI
Department of Agriculture							
Community Facilities Program					I		
Business and Industry Loans					I		PI
Rural Business Enterprise Grant Program	TA				I		PI
Federal Housing Finance Agency							
FHFA AHP/CIP/CICA Financing					I		PI
Small Business Administration							
7(a) Loans					I		PI
HUBZone							PI

Abbreviations used in table

TA	Technical Assistance	I	Infrastructure/Construction
V	Visioning	J	Job Training
PD	Planning/Design	PI	Private Incentives
A	Assessment/Remediation		

U.S. Environmental Protection Agency

EPA takes an active role in helping communities clean up and redevelop automotive brownfields. EPA's Brownfields Program provides valuable resources, including grants for site assessment, cleanup, revolving loan funds, and environmental workforce development, as well as technical assistance to overcome environmental challenges and enhance community participation in the brownfields redevelopment process (www.epa.gov/brownfields). In addition, EPA's Office of Sustainable Communities promotes smart growth and sustainable redevelopment (www.epa.gov/smartgrowth). For a more comprehensive discussion of EPA's brownfields-related resources that are available to communities, see the *Brownfields Federal Programs Guide* referenced above.

Brownfields Assessment Grants—Communities can apply for grants of up to $200,000 for the assessment of properties potentially contaminated with hazardous substances or petroleum. This funding can be used to conduct environmental site assessments at brownfields, conduct reuse planning, organize community involvement activities, and create brownfield inventories. Assessment grants may be awarded for a specific property or on a community-wide basis. Communities can request a waiver to increase the maximum funding available for a site-specific assessment for up to $350,000. In addition, three or more eligible entities may form a brownfields coalition and request up to $600,000. For more information, visit www.epa.gov/brownfields/assessment_grants.htm.

Assessment grants can be used to:

- Perform Phase I or Phase II environmental site assessments (ESAs) on properties to identify the type and extent of contamination at the site.
- Create a brownfield inventory of potentially contaminated properties and prioritize sites for cleanup.
- Conduct community involvement and outreach to ensure stakeholder involvement.
- Conduct cleanup planning related to brownfield sites.
- Monitor community health to determine the health impact of local brownfields.
- Monitor and enforce institutional controls to prevent human exposure to hazardous substances at brownfield sites (local governments only).
- Purchase environmental insurance for individual brownfield sites.

Brownfields Cleanup Grants—Communities and non-profits can apply for up to $200,000 per site to conduct environmental remediation at sites contaminated with hazardous substances or petroleum. The applicant must own the property that is the subject of the grant. Applicants must demonstrate that Phase I and Phase II environmental site assessments were completed. A 20-percent cost share is required unless a hardship waiver is granted. For more information, visit www.epa.gov/brownfields/cleanup_grants.htm.

Cleanup Grants can be used to:

- Conduct environmental remediation activities at brownfield sites owned by the applicant.
- Monitor community health (local governments only).
- Monitor and enforce institutional controls to prevent human exposure to hazardous substances (local governments only).
- Purchase environmental insurance for individual brownfield sites.

Brownfields Revolving Loan Fund Grants—Communities can apply for up to $1 million, at least 50 percent of which must be used to create a revolving loan fund to provide no-interest or low-interest loans for brownfields cleanup. A 20-percent cost share is required unless a hardship waiver is granted. For more information, visit www.epa.gov/brownfields/rlflst.htm.

Revolving Loan Fund Grants can be used to:

- Capitalize a revolving loan fund to provide low- or no-interest loans and subgrants to clean up contaminated properties.
- Manage the revolving loan fund and administer the grant.
- Perform health monitoring at targeted brownfield sites (local governments only).
- Monitor and enforce institutional controls to prevent human exposure to hazardous substances (local governments only).
- Purchase environmental insurance for individual brownfield sites.

Spotlight: Elkhart County, Indiana

Historically, Elkhart County was the center of the domestic recreational vehicle industry. With dozens of plants and supplier facilities located throughout Elkhart County, the county was especially hard-hit by the national decline in domestic manufacturing. In 2009, county's unemployment rate rose above 15 percent. To reposition its former industrial sites for redevelopment and reuse, Elkhart County applied for and received three EPA Brownfields Assessment Grants between 2006 and 2011. The city used this funding to create a sophisticated online inventory of the county's brownfields that developers can use to quickly identify sites for reuse. In addition, Goshen, the largest city in Elkhart County, was able to build upon the success of the initial EPA brownfields grant to win more than $3 million in additional grants through EPA's Brownfields Assessment, Cleanup, Revolving Loan Fund, and Area-Wide Planning Grant programs.

For more information about Elkhart County's brownfield grant successes, contact Laura Coyne, Redevelopment Coordinator, at lcoyne@elkhartcounty.com.

Environmental Workforce Development and Job Training (EWDJT) Grants—Communities and non-profit organizations can apply for up to $200,000 in funding to deliver environmental workforce development and job training programs focused on hazardous and solid waste management, assessment, and cleanup-associated employment activities. EWDJT grants are provided to recruit, train, and place residents of communities impacted by blighted properties, contaminated sites, and

waste management facilities in environmental jobs that cleanup contractors may otherwise fill from outside the affected community. For more information, visit www.epa.gov/brownfields/job.htm.

Environmental Workforce Development and Job Training Grants can be used to:

- Recruit participants for job training programs.
- Conduct outreach to communities impacted by environmental issues, as well as low-income persons, unemployed residents, and other vulnerable populations.
- Train program participants for jobs in the environmental field, with a focus on solid and hazardous waste remediation, environmental health and safety, and wastewater-related training.
- Provide instruction in innovative technologies and environmentally friendly remediation techniques.

Brownfields Area-Wide Planning Grants—First offered in 2010, EPA's Brownfields Area-Wide Planning Grants provide assistance to communities to facilitate community involvement in planning the reuse of multiple brownfield sites through research, technical assistance, and training. EPA identified auto brownfields as a priority for this initiative. Grantees are expected to develop an area-wide plan for the brownfields-impacted area and identify the steps needed to implement the plan. For more information, visit www.epa.gov/brownfields/areawide_grants.htm.

Area-Wide Planning Grants can be used to:

- Collect information and identify community priorities related to brownfields cleanup and near-term or long-term revitalization.
- Evaluate existing environmental conditions, local market potential, and needed infrastructure improvements.
- Develop strategies for brownfields site cleanup and reuse.
- Identify resources or leverage opportunities to help implement plans, including specific strategies for public and private-sector investments and improvements necessary to help with cleanup and area revitalization.

Technical Assistance to Brownfields Communities—EPA provides competitively

Brownfields Multi-Purpose Grants—A Model for the Future?

In 2012, EPA's Brownfields Program piloted a new type of grant that allowed communities to apply at the same time for assessment and cleanup funding for a brownfield site rather than in separate grant cycles. EPA awarded Multi-Purpose Grants to nine communities, with each community receiving up to $400,000 in funding to assess and clean up a single contaminated property. Bay City, Michigan, was awarded a Multi-Purpose Pilot Grant, which is being used to assess and clean up the Uptown site, a 43-acre property that includes an area that was formerly occupied by an auto supplier. After the site is assessed and cleaned up, Bay City plans to redevelop it as a LEED-certified, mixed-use commercial and retail regional jobs center.

awarded funding to four regionally based organizations to provide technical assistance services directly to communities facing brownfields challenges. These TAB providers offer a range of assistance that is tailored to individual community needs, including: facilitating stakeholder engagement for all phases of brownfields redevelopment (including planning and visioning sessions); providing educational opportunities on scientific, environmental policy and other technical matters related to brownfield sites; identifying potential funding sources; providing independent reviews of EPA and other grant applications; interpreting environmental documents; and helping communities understand the health impacts and risks posed by specific sites throughout the redevelopment process. Communities facing brownfields challenges can determine whether they can get technical assistance by contacting the TAB provider that supports their geographic area. TAB grantees for various geographic areas are:

- *EPA Regions 1, 2, and 3:* The New Jersey Institute of Technology www.njit.edu/tab/.
- *EPA Regions 5, 6, 7, and 8:* Kansas State University www.engg.ksu.edu/chsr/outreach/tab/.
- *EPA Regions 2, 4, 9, and 10:* The Center for Creative Land Recycling www.cclr.org/resources.

Need Help Writing Brownfields Grant Proposals?

Under a cooperative agreement with EPA, Kansas State University (KSU), the TAB provider for EPA Regions 5 and 7, developed a software tool that assists communities that are applying for EPA Brownfields Assessment and Cleanup Grants. This program, named TAB EZ, provides a template for grant applications and walks the user through the application process step by step to make sure that all required criteria are addressed. In addition, it has a number of available grant writing resources, including sample applications. TAB EZ was developed by KSU and its contractor, CABEM Technologies, Inc., as a public service and is available nationwide, free of charge. You can access TAB EZ at www.tabez.org. Please note, however, that EPA evaluates each application for brownfields funding on its own merits. As a result, using TAB EZ does not guarantee that you will receive an EPA Brownfields Grant.

Be aware that TAB technical assistance providers do not represent EPA. EPA evaluates each application for brownfields funding on its own merits. Obtaining technical assistance on an application from a TAB provider does not guarantee that you will receive an EPA Brownfields Grant.

Smart Growth Implementation Assistance—Each year, EPA provides direct technical assistance to a limited number of local, regional, and state governments to help them incorporate smart growth techniques into their future development strategies. Communities compete for assistance that is provided by a team of national experts who are contracted by EPA to conduct a multi-day site visit that results in a detailed final report. For more information, visit www.epa.gov/dced/sgia.htm.

Building Blocks for Sustainable Communities—This EPA program provides targeted technical assistance to communities seeking to develop ways to enhance local quality of life and promote environmental

sustainability. The purpose of the program is to stimulate a discussion about growth and development, strengthen local capacity to implement sustainable approaches, and provide ideas about how to change local policies and procedures to make communities more economically and environmentally sustainable.

EPA is supporting communities with the Building Blocks program in two ways: First, EPA provides direct technical assistance to communities selected through a national competition. This direct assistance is provided in the areas of complete streets, green streets, green buildings, land use-clean water linkages, parking audits, preferred growth areas, and smart growth (including smart growth zoning for small cities and rural communities, smart growth tools for fiscal and economic health, and walking audits). Second, EPA provides competitively awarded financial assistance to four non-profit organizations with extensive sustainable communities expertise to provide technical assistance to localities. These organizations are Smart Growth America, Global Green USA, Project for Public Spaces, and the Cascade Land Conservancy. For more information, visit www.epa.gov/smartgrowth/buildingblocks.htm.

U.S. Economic Development Administration

EDA provides resources to auto communities suffering from economic distress. Several EDA programs provide grant funding for projects that will create or retain jobs in economically distressed areas. EDA's investments are intended to be catalytic, spurring private capital investment and long-term job creation by building vibrant economic ecosystems that support bottom-up, regionally driven economic development opportunities. In addition, EDA's Economic Adjustment Assistance (EAA) and Public Works (PW) grants require communities to demonstrate a median income below 80 percent of the national median or an unemployment rate one percent above the national average.

Local Technical Assistance Program (TAP)—EDA provides funding under its Local Technical Assistance Program to communities seeking more information on local economic challenges and potential opportunities. This funding can be used to prepare impact analyses, highest-and-best-use analyses, feasibility studies, and market analyses. Grants usually require a 50-percent local cost share.

Spotlight: Twinsburg, Ohio

In 2009, Chrysler announced that it would close its 2.2-million-square-foot stamping plant in the City of Twinsburg. This plant operated for more than 50 years in the community and employed about 1,200 workers when the closure was announced. In 2010, Twinsburg obtained a $135,000 EAA grant to develop and implement a recovery action plan to facilitate the reuse of the former Chrysler plant. This plan documented local and regional impacts of the closure, identified specific challenges and opportunities for redevelopment, and outlined a series of steps for Twinsburg to take in preparation for the site's reuse.

For more information about Twinsburg's EDA grant, contact Larry Finch, Director of Community Planning and Development, at lfinch@twinsburg.oh.us.

Local Technical Assistance Funding can be used to:

- Prepare feasibility studies that help inform the revitalization of idle or underutilized properties.
- Conduct economic studies that help local policymakers make more informed economic development decisions.
- Enhance organizational capacity to respond to significant economic events.

Public Works Program—EDA Public Works funding enables communities to construct or rehabilitate public infrastructure and facilities that are essential to job creation and economic development. Grants can be used to support business incubators, industrial parks, incubators, and utility infrastructure needed for a private development, among other uses. A local cost share of 50 percent generally is required.

Public Works Funding can be used to:

- Construct new public infrastructure (including roads, water/wastewater pipes, and stormwater management systems that serves to incentivize private sector jobs.
- Rehabilitate infrastructure to entice new economic development and private-sector investment.
- Expand or create public facilities that seek to create private sector activity, such as rural economic development centers.
- Create a business incubator or industrial park that will create new jobs.

Economic Adjustment Assistance Program—Projects that are eligible under the Public Works Program also are eligible under EAA, but EAA also provides funding for a variety of non-construction projects, such as the development of economic recovery strategies or the establishment of revolving loan funds. EAA funding is specifically targeted to communities that have experienced or are under the threat of serious damage to their underlying economic base. A local cost share of 50 percent usually is required.

Economic Adjustment Assistance Funding can be used to:

- Develop an economic recovery strategy that creates a plan for rebounding from a significant economic dislocation, such as a plant closure.
- Hire a recovery coordinator to supplement local economic development capacity and respond to a significant economic event.
- Establish and capitalize a revolving loan fund that can provide low-interest loans to businesses that create jobs in economically distressed areas.

Planning Program Grants—Grants help regional organizations, Economic Development Districts, Indian tribes, and other eligible organizations develop, implement, revise, or replace comprehensive economic development strategies (CEDS). A CEDS is a strategy-driven plan for regional economic

development, a result of a "regionally owned" planning process designed to guide the economic prosperity and resiliency of an area or region. An EDA-approved CEDS is a prerequisite for requesting an EDA-funded PW or EAA investment. EDA also provides limited planning-grant assistance for short-term planning activities. Grants generally require a 50-percent local cost share.

Planning Funding can be used to:

- Create or make revisions to Comprehensive Economic Development Strategies.
- Build organizational capacity in Economic Development Districts so that they can help coordinate regional approaches to economic development.
- Help regional organizations in the country's most economically distressed areas to coordinate their response to severe economic events and work to create and retain high-skill, high-wage jobs.

Community Economic Adjustment Program (CEAP)—Since 2006, EDA has funded CEAP as a partnership between the Center for Automotive Research, the University of Michigan, Purdue University, Cleveland State University, and Ohio University. With an explicit mission to provide technical assistance to communities that are impacted by the downturn of the automotive industry in Michigan, Ohio, Indiana, and Wisconsin, CEAP staff help communities identify available funding opportunities, prepare or review grant applications, and organize stakeholder participation in economic development efforts. For more information, visit www.irlee.umich.edu/ceap/index.html.

U.S. Department of Labor

As one of the leading agencies on the White House Council on Automotive Communities and Workers, DOL works actively on behalf of automotive workers throughout the country. However, DOL grants programs generally are distributed through an established system of service providers and rarely are awarded directly to local governments.

Trade Adjustment Assistance (TAA)—The TAA program provides a path for employment growth and opportunity through aid to U.S. workers who lost their jobs as a result of foreign trade. Workers and their union representatives can file petitions for TAA if they lost their jobs or are in a reduced work schedule due to increased imports. Certified workers are eligible to access a range of training and job search services, along with income support and other financial benefits. The TAA program provides trade-affected workers with opportunities to obtain the skills, resources, and support they need to become re-employed. The program benefits and services that are available to individual workers are administered by the states through agreements between the Secretary of Labor and each state's governor. Program eligibility, technical assistance, and oversight are provided by DOL's Employment and Training Administration's Office of Trade Adjustment Assistance. For more information, visit www.doleta.gov/tradeact/pdf/2011_brochure.pdf.

Spotlight: Kenosha, Wisconsin

In late 2010, Chrysler closed its engine plant in Kenosha, leaving about 450 employees out of work. Within two months, DOL awarded the Wisconsin Department of Workforce Development a $2.6 million National Emergency Grant to provide services to the workers impacted by the plant closure. This funding, administered by the Southeastern Wisconsin Workforce Development Board, is being used to provide supportive services to help these workers find new employment.

National Emergency Grants—The Secretary of Labor has discretionary authority to award grants to states and local Workforce Investment Boards to temporarily expand job placement, training, and other employment services to workers impacted by economic events that cause significant job losses. DOL used this authority several times to help communities experiencing automotive plant closures. For more information, visit www.doleta.gov/neg/.

U.S. Department of Housing and Urban Development

In addition to supporting affordable housing, HUD promotes community development through several programs, most notably the Community Development Block Grant (CDBG) program. HUD also is the lead agency for the HUD/DOT/EPA Partnership for Sustainable Communities.

Community Development Block Grants—CDBG funding is a flexible program that communities can use to address a wide range of community development needs. CDBG funds are distributed annually by formula to 1,200 general units of local government (including large cities and counties), states (which can then direct CDBG funding to smaller communities that do not receive a direct entitlement), and U.S. territories. CDBG funding can be used for a variety of purposes, including increasing access to affordable housing, expanding economic opportunities to persons with low or moderate incomes, and for economic development and reducing blight. This funding frequently is used by communities for brownfields redevelopment projects. For more information, visit portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs.

Section 108 Loan Guarantees—Section 108 is the loan guarantee provision of the CDBG program. Section 108 loans allow communities to access federally guaranteed, low-interest loans for periods up to 20 years. Communities can use these loans to conduct a variety of eligible activities, including economic development and revitalization projects. Activities eligible under CDBG also are eligible under the Section 108 loan program. Communities must pledge their annual CDBG allocation as security for the loan. CDBG non-entitlement communities must apply in conjunction with their state. For more information, visit portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/108.

HUD and the Partnership for Sustainable Communities

The Partnership for Sustainable Communities was launched in 2009 as an interagency partnership involving the Department of Housing and Urban Development, the Department of Transportation, and the U.S. Environmental Protection Agency. United around six livability principles, these agencies are working together to align federal policies, improve access to affordable housing, enhance competitiveness, increase the number of available transportation options, and lower transportation costs while protecting the environment in communities nationwide. This interagency collaboration is reflected in the grant-making processes of the participating agencies. HUD, DOT, and EPA officials work together to draft grant solicitations, review grant applications, and coordinate investments. HUD streamlined sustainability across many of its grant programs by awarding "Preferred Sustainability Status" to a number of forward-thinking communities and regions that receive bonus points on competitive grant applications for projects that complement their sustainability goals. Although not funded for 2012, funding for this program could be restored in future years. In previous years, HUD offered two primary grant programs available to auto communities to promote sustainability planning:

- *Community Challenge Planning Grants*—This program provided funding to a number of communities to create or revise local master plans, zoning guidelines, and ordinances to facilitate brownfield redevelopment and concentrate growth in the urban core of their community.
- *Sustainable Community Regional Planning Grants*—This program provided grants to regional forms of government to develop integrated and multi-faceted sustainability plans across multiple jurisdictions or a metropolitan region.

Flint, Michigan, for example, is working on a plan for sustainability with the assistance of a HUD Community Challenge Planning Grant from the Partnership for Sustainable Communities. The city is developing its first comprehensive master plan since 1960. The plan will build on the emerging best practices for addressing population decline, vacant properties, and economic diversification. The process ignited interest in the community from corporate CEOs to neighborhood block captains because of the need for an integrated and coordinated investment strategy that ensures assets are leveraged and outcomes are equitable for the diverse city and region.

For more information about the Partnership for Sustainable Communities, visit www.sustainablecommunities.gov.

U.S. Department of Transportation

DOT provides funding for transportation infrastructure that can enhance the economic viability of brownfield sites or create more livable and vibrant downtowns.

Transportation Investment Generating Economic Recovery (TIGER) Grants—TIGER grants are offered on a competitive basis directly to states, tribes, ports, or localities for major capital projects that will enhance economic competitiveness, safety, state of good repair, environmental sustainability, and livability. To qualify for funding, projects must have completed necessary permitting and environmental reviews. There is a required 20-percent cost share for projects in urbanized areas and $1 million for projects in rural areas. For the past three funding rounds, the minimum grant was $10 million for projects in urban areas and $1 million for projects in rural areas. Although funding has been provided for planning grants under TIGER II, it is uncertain if future rounds of the grant competition will allow use of TIGER funds for planning. Congress did not provide for planning grants in the two most recent rounds of TIGER Discretionary Grants projects. For more information, visit www.dot.gov/tiger/.

TIGER Funding can be used to:

- Conduct planning, design, and environmental work needed for a project to proceed to construction (but only when construction costs also are included in the project).
- Acquire rights-of-way needed for the project.
- Construct transportation infrastructure improvements, including but not limited to:
  - Highway and bridge improvements (widening, new construction, high occupancy toll lanes, bridge repair and replacement, and grade separations).
  - Bus and light rail infrastructure.
  - Creating transit centers.
  - Establishing electric vehicle networks.
  - Streetcars.
  - Bicycle and pedestrian trail networks.
  - Passenger and freight rail enhancements.
  - Port infrastructure.

Transportation Alternatives Program (TAP)—In July 2012, President Obama signed the Moving Ahead for the 21st Century Act (MAP-21), which establishes transportation policy and funding programs through fiscal year 2014. Although MAP-21 eliminated many of the federal government's discretionary transportation grant programs, it also created the new Transportation Alternatives Program and directed that up to $800 million be used for this new resource for community transportation projects. A consolidation of many former discretionary programs, TAP provides states

Spotlight: Lansing, Michigan

The historic "REO Town" section of Lansing is best known as the birthplace of the automobile assembly line. Today, much of the automobile industry's footprint in REO Town is gone, but Lansing is working to revitalize this historic area by making it more livable and environmentally sustainable. In 2011, the city received a $500,000 DOT Federal Highway Administration grant to reconstruct the primary avenue through REO Town into a "complete" street that enables bicycle and pedestrian traffic to travel safely through the area. This project is expected to contribute to the continuing revitalization of REO Town.

For more information about this project, contact Chad Gamble, Director of Public Service, at cgamble@lansingmi.gov.

with funding that they must distribute competitively to local transportation projects. These funds will go to non-traditional transportation projects, such as bicycle and pedestrian enhancements, recreational trail improvements, and other activities. For more information about how to access TAP funding, contact your state department of transportation.

TAP funding can be used to:

- Plan, design, and construct infrastructure that provides safer transportation choices for pedestrians, cyclists, transit riders, and other non-drivers.
- Construct overlooks, viewing areas, turnouts and other improvements that enhance the recreational value of scenic roads.
- Maintain, restore, and construct recreational trails for non-motorized traffic.

U.S. Department of Energy

DOE plays a pivotal role in helping auto communities attract more sustainable green jobs. DOE awarded more than $35 billion in guaranteed loans over the past several years. Several of these loans were awarded to projects in auto communities. Although loan guarantee authority for some of DOE's loan programs has expired, the Advanced Technology Vehicles Manufacturing (ATVM) program may have funding available to encourage the manufacture of greener vehicles.

Advanced Technology Vehicles Manufacturing Loans—DOE's Loan Programs Office provides direct loans to vehicle manufacturers and component manufacturers to support the development of advanced technology vehicles. All passenger automobiles or light-duty trucks that meet 125 percent of the 2005 Corporate Average Fuel Economy (CAFE) standards qualify as advanced technology vehicles, as do ultra-efficient vehicles. Loan funding can finance reequipping, expanding, or establishing manufacturing facilities, as well as associated engineering integration costs. Applications from qualified businesses are accepted on a rolling basis until funding is expended. For more information, visit lpo.energy.gov/?page_id=43.

U.S. Department of Agriculture

The U.S. Department of Agriculture's (USDA) Rural Development Program provides community and economic development funding for rural communities on a state-by-state basis through districts within each state. Identifying a state director's office and local contact will facilitate access and help in applying for grants and loans from USDA's Rural Development Program. Visit www.rurdev.usda.gov/recd_map.html to find websites and contact information for each state director's office.

Community Facilities Program—USDA provides grants and loan guarantees for commercial lending that will develop essential community facilities, including public safety and hospital facilities, for communities with populations of up to 20,000 people. USDA also can make direct loans to applicants that are unable to obtain commercial credit for development of essential community facilities. In either case, the loan term can run up to 40 years or for the useful life of the facility (if less than that). USDA Rural Development can award grants to distressed rural communities that cannot qualify for a private or USDA loan for essential community facilities. For more information, visit www.rurdev.usda.gov/HCF_CF.html.

Business and Industry Guaranteed Loans—USDA provides loan guarantees for up to 80 percent of the project cost to communities, businesses, and non-profit organizations in communities with less

than 50,000 people. The program is administered at the state level by state USDA rural development offices. Funding can be used to help businesses expand or modernize facilities, purchase equipment or supplies, or acquire property and buildings. For more information, visit: www.rurdev.usda.gov/BCP_gar.html.

Rural Business Enterprise Grant Program—USDA provides grants to public entities and private non-profit corporations for projects that will facilitate the development of small and emerging small businesses. These grants help fund business incubators, support public infrastructure, and provide revolving loan fund assistance. Eligible activities include acquisition or development of land, easements, or rights of way; and construction, conversion, or renovation of buildings, plants, machinery, equipment, access streets and roads, parking areas, and utilities. For more information, visit www.rurdev.usda.gov/BCP_rbeg.html.

Federal Housing Finance Agency

The Federal Housing Finance Agency (FHFA) oversees the Federal Home Loan (FHL) Banks that are located in various regions through the United States. FHL Banks work with their member banks or other institutions to provide discounted cash advances and letters of credit to private-sector parties for financing local economic development projects, such as brownfields redevelopment projects that benefit low- and moderate-income families or activities that are located in low- and moderate-income neighborhoods. The key lending programs financed through FHFA and administered through FHL Banks are the Affordable Housing Program (AHP); the Community Investment Program (CIP), which has housing and community development components; and the Community Investment Cash Advances (CICA) program for community development. All FHL Banks offer an AHP and CIP, and most offer one or more types of CICA programs. The CICA program provides financing for targeted economic development projects, including brownfields. All of these tools are delivered through member banks in the Federal Home Loan system. These generally are community-based banks. Sometimes, public institutions that can channel federal resources into local projects also are eligible under CICA. For more information, visit www.fhfa.gov.

Small Business Administration

The Small Business Administration (SBA) provides technical and financial assistance to small businesses. SBA encourages the redevelopment of brownfields.

7(a) Loan Program—The 7(a) Loan Program is SBA's primary program to help startup and existing small businesses obtain financing when they might not be eligible for business loans through normal lending channels. It also is SBA's most flexible business loan program, since financing can be guaranteed for a variety of general business purposes. Businesses that are located in rural areas, have been impacted by the North American Free Trade Agreement (NAFTA), and are exporters can access financing through this program. For more information, visit www.sba.gov/category/navigation-structure/loans-grants/small-business-loans/sba-loan-programs/7a-loan-program.

Historically Underutilized Business Zone (HUBZone)—SBA designates certain urban and rural areas that meet standards for poverty or unemployment as HUBZones. American-owned small businesses that are located within HUBZones and employ HUBZone residents are eligible for certification through SBA's Empowerment Contracting program. The federal government's goal is to award three percent

of all dollars for federal prime contracts to HUBZone-certified small businesses. Certified businesses also receive a 10-percent price evaluation preference in full and open contract competitions, as well as enhanced access to subcontracting opportunities. To determine if your community is in a HUBZone, review the maps available on SBA's website: www.sba.gov/hubzone/.

Leveraging Federal Tax Incentives into Auto Brownfields

Harnessing available tax incentives is one of the most effective ways to leverage private-sector investment at brownfield sites. Although local and state tax incentives are important tools in a brownfield redevelopment strategy, a community also can attract private-sector development by showing companies how to access federal tax incentives. EPA's *Guide to Federal Tax Incentives for Brownfields Redevelopment* (www.epa.gov/swerosps/bf/tax/tax_guide.pdf) describes many of these incentives in detail.

Potential Resource

Brownfields Expensing Tax Incentive—This tax incentive allows private entities to fully deduct the costs associated with the environmental assessment and remediation of a brownfield in the year these costs are incurred, rather than capitalizing them over time. To qualify for this incentive, the entity must own the property being remediated, be engaged in business activities, and receive confirmation from a state environmental agency certifying that the property is a brownfield. Although this incentive expired at the end of 2011, it has strong support within Congress and may be extended retroactively, as has happened previously. For more information, visit www.epa.gov/brownfields/tax/index.htm.

The following are some of the federal tax incentives that most often are used to revitalize brownfield properties in automotive communities:

New Market Tax Credits—These tax credits are distributed competitively by the U.S. Department of the Treasury's Community Development Financial Institutions Fund to certified Community Development Entities (CDEs). CDEs provide the tax credits to corporations or individuals that make qualified equity investments in the CDE, thereby enabling the organization to invest capital in economic development projects located in low-income communities. Businesses are awarded a tax credit that totals 39 percent of their investment in the CDE, which is claimed over a seven-year credit allowance period. A variety of entities, including non-profit community development or housing organizations, land banks, and community-based philanthropic foundations can be certified as CDEs and receive New Market Tax Credits. Brownfields developers can approach existing CDEs to help fund their projects or may, in certain circumstances, consider applying for CDE certification themselves. For more information, including a list of currently certified CDEs, visit www.cdfifund.gov/what_we_do/programs_id.asp?programID=5.

Low-Income Housing Tax Credits (LIHTCs)—Each year, states receive an allocation of federal tax credits to promote the development of affordable housing, either through the construction of new buildings or the rehabilitation of existing buildings. States often allocate these tax credits to developers to finance low-income housing projects on former brownfields. Each state can issue LIHTC tax-exempt bonds for the development of low-income housing. LIHTCs may be used as part of a brownfields financing package if affordable rental housing is part of a project. For more information, visit www.hud.gov/offices/cpd/affordablehousing/training/web/lihtc/basics/.

Historic Rehabilitation Tax Credits—The National Park Service, in partnership with the Internal Revenue Service and State Historic Preservation Offices, awards a 20-percent tax credit for the restoration of certified historic properties, or a 10-percent tax credit for the rehabilitation of older, non-certified properties. This tax credit provides an incentive for the private sector to rehabilitate buildings in the older, industrial core of many auto communities. For more information, visit www.nps.gov/tps/tax-incentives.htm.

Renewable Energy and Energy Efficiency Tax Incentives

There are several energy efficiency and renewable energy tax credits that can be leveraged into private developments, including:

Business Energy Investment Tax Credits—A tax credit of 10 to 30 percent is available for investments in qualified renewable energy generation equipment, including solar, wind, fuel cells, geothermal, and combined heat and power systems. This tax credit provides the incentive for a company to invest in renewable energy deployments on a landfill or other contaminated property, as well as building-mounted renewable energy installations. The tax credit is in effect until the end of 2016. For more information, visit www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US02F.

Qualified Energy Conservation Bonds (QECB)—A total of $3.2 billion in bonding authority was distributed by the Internal Revenue Service to states and large local governments (population greater than 100,000) throughout the country in 2009, some of which remains available. Localities and states can use this authority to finance a variety of energy-efficiency capital expenditures, including renewable energy deployments and green public buildings. IRS 2012 guidance clarifies that QECB funding can be used for "green community programs" including promotion of energy savings through retrofitting initiatives for heating, cooling, lighting, water-saving, stormwater-reducing, or other efficiency measures; distributed generation initiatives; or transportation initiatives that conserve energy and/or support alternative fuel infrastructure (i.e., improvements to public bicycle paths or mass transit systems). The federal government provides a 70-percent direct-payment interest subsidy to the issuer of a QECB. For more information, visit www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US51F&re=1&ee=1.

Energy Efficient Commercial Buildings Tax Deduction—Owners of new or existing commercial buildings can deduct up to $1.80 per square foot for installing energy-efficiency measures that decrease the building's energy and power costs by 50 percent or more above minimum requirements. This deduction is authorized through the end of 2013. For more information, visit www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US40F&re=1&ee=1.

The RACER Trust

The RACER Trust was created in 2011 by the federal court handling the General Motors bankruptcy. The Trust owns and is responsible for cleaning up 89 properties formerly owned by GM and positioning the properties for redevelopment. At its inception, the Trust received $773 million to clean up and facilitate the resale and redevelopment of the 89 sites. Most of this funding is allocated to specific sites that have environmental contamination and must be remediated. The agreement that created the RACER Trust requires Trust officials to collaborate with local officials in impacted communities to

determine the community's preferences for reuse of local sites and to receive their input into major Trust decisions regarding the sites within their community. By working closely with RACER Trust officials, communities with Trust-owned sites can attract new development by effectively leveraging local, private, state, federal, and RACER funding. For more information about the RACER Trust, including a list of Trust-owned sites, visit the RACER Trust website at www.racertrust.org.

Other Funding and Tools

Although local strategies and federal incentives often play pivotal roles in the reuse of a brownfield property, many brownfield reuse initiatives also receive catalytic investments from a variety of other sources, including state funds, private capital, and other non-governmental resources.

Leveraging State Resources

States can contribute to brownfield reuse by leveraging targeted incentive packages and grant funding to complement federal and local resources. Although every state has programs that support economic development and brownfield redevelopment, the states most dramatically impacted by the automotive industry restructure are making special efforts to help revitalize automotive communities. This section outlines several of the most significant programs available to auto communities in four Midwestern states with deep ties to the automotive industry—Michigan, Ohio, Indiana, and Wisconsin.

Michigan

The State of Michigan regularly ranks among the top in the nation in providing liability protection, financial incentives, and government support to facilitate the cleanup and redevelopment of brownfields. Many Michigan communities create a Brownfield Redevelopment Authority that can enhance the number of local tools available to promote brownfield reuse.

- ***Michigan Economic Development Corporation (MEDC)***—MEDC leads Michigan's efforts to spur economic investment at former brownfields. In 2011, the Michigan legislature approved a fundamental change in the method MEDC uses to provide brownfield financial incentives. Starting in 2012, the state's Business Development Program will provide grants, loans, and other incentives of up to $10 million to businesses that create new jobs and make new investments in Michigan. This fund will be complemented by the Community Revitalization Program, which provides similar funding to projects that reuse vacant or historic buildings, act as a catalyst for additional community investment, and revitalize regional urban areas.
- ***Michigan Department of Environmental Quality (MDEQ)***—Each year, MDEQ provides about seven free environmental site assessments to communities with brownfields properties. Priority is given to properties with an active development project.

Ohio

The State of Ohio's Clean Ohio Fund often is cited as one of the most successful and well-funded brownfield programs in the country. Ohio has made significant efforts in recent years to work with communities impacted by the downturn of the auto industry.

- ***Clean Ohio Fund***—Funded by a $400 million bond in 2000 and a second $400 million bond in 2008, the Clean Ohio Fund is a multi-agency partnership that provides grant funding for communities to conduct site assessments, remediation, demolition, and infrastructure activities on brownfields. Sites that meet standards set forth by the Ohio Voluntary Action Program can receive a Covenant Not to Sue from the Ohio Environmental Protection Agency. Although it is not accepting applications as of September 2012 and the state is working to restructure the program, the Clean Ohio Fund is likely to remain an important resource for auto communities going forward.

- ***Brownfield Action Plan Pilot Program***—Modeled after EPA's Area-Wide Planning Grants pilot program, this Ohio Department of Development program provides communities with technical assistance to create a brownfield action plan and grant funding to implement the plan. Although Ohio has only held one competition for this program to date, they may open the program to new communities in the coming year.

- ***Auto Legacy Initiative***—The Ohio Department of Development operates an Auto Legacy Initiative to help communities with former auto sites remove environmental liabilities and repurpose properties. This initiative provides technical assistance to communities and developers, facilitates collaboration with federal and other stakeholders, and helps auto communities identify available funding from state, federal, and other sources.

Indiana

Indiana's Brownfields Program utilizes innovative regulatory tools and specific funding for auto brownfields to ensure that auto communities have the resources necessary to return former auto facilities to productive use.

- ***Indiana Department of Environmental Management (IDEM)***—IDEM is the state's environmental enforcement agency, and provides communities with funding through the Supplemental Environmental Project (SEP) program. Communities can partner with IDEM to access SEP funding when an entity in their jurisdiction settles a legal action by agreeing to pay a civil penalty into a SEP account. This funding is managed in conjunction with the community, which can utilize the funding to conduct environmental site assessment, cleanup, site preparation, and redevelopment activities.

- ***Indiana Brownfields Program***—The Indiana Finance Authority operates Indiana's Brownfields Program, providing grants and loans to communities for brownfields assessment and cleanup activities.

- ***Automotive Sector Brownfields Assessment Initiative***—Indiana's Auto Sector Initiative provides financial assistance to facilitate the redevelopment of auto brownfields, including dealerships. Through this program, communities can apply for contract assistance to conduct environmental site assessments at auto brownfields.

Wisconsin

The State of Wisconsin has been on the cutting edge of brownfields initiatives since the mid-1990s. The amount of brownfields funding available in any given year may vary.

- ***Wisconsin Economic Development Corporation (WEDC)***—WEDC provides grant funding through its Blight Elimination and Brownfield Redevelopment Program to local governments, businesses, and individuals seeking to clean up and redevelop contaminated industrial or commercial properties. Grants of up to $1.25 million are awarded. Funds may be used for environmental site assessment and remediation, as well as for demolition and infrastructure improvements. In addition, each year WEDC selects several communities for its Main Street Program, which provides in-depth technical assistance and limited additional funding to communities seeking to revitalize their downtowns.

Harnessing Private Capital

Private capital and investment is central to the revitalization and reuse of most closed auto plants. Although this roadmap does not provide detailed guidance on private financing, communities should be aware of at least a few opportunities to more effectively leverage private investments in auto brownfields. Please note that any mention of non-federal entities in this document is provided for informational purposes only and does not constitute an endorsement of the views, services, or products of any organization or entity.

Start Up America Partnership

The Start Up America Partnership, a public-private foundation initiative, was launched in 2011. The goal of the partnership is to promote the number and scale of new high-growth firms, particularly in clean technology and energy. Under this initiative, Small Business Administration-guaranteed bonds will provide two one-billion-dollar funds over five years as a match for private-sector investment in clean-technology firms and seed capital. The partnership works with private and non-profit parties to expand entrepreneurship education and mentorship programs that support startup businesses, particularly in underserved and economically distressed communities and in emerging sectors. As auto communities seek to diversify their economies and expand into new, innovative industries, they should be aware of these small business investment funds that provide a tool for potential companies seeking to invest in their towns. For more information, visit the Start Up America Partnership website at: www.s.co/.

Environmental Insurance

Private-sector companies may be unwilling to invest in auto brownfield sites due to the inherent financial risks associated with the unknown potential for environmental liability. Environmental insurance is an important tool for limiting exposure to such risks. Localities should be ready to support private-sector efforts to use environmental insurance at auto brownfields. Environmental insurance can facilitate brownfield acquisition or sales; help satisfy regulatory responsibilities; minimize liability for past, present, or future operations; and limit exposure to unexpected overruns in site remediation costs. Insurance can help deals close more easily because (1) unexpected cleanup costs encountered during the development process will not add to the developer's anticipated costs, and (2) insurance can ensure that the costs of additional contamination will not affect the ability of the purchaser to pay off mortgages or other notes.

Four types of insurance tools commonly are used to facilitate brownfields projects:

- *Environmental remediation insurance* covers releases that occurred before the policy was written but discovered after the policy was in place. More lenders are now requiring environmental remediation insurance to give them some comfort.

- *Stop-loss or cleanup cost-cap coverage* protects against cost overruns once a cleanup plan is defined, or against additional costs resulting from changes in regulatory standards.
- *Pollution legal liability insurance* offers protection against problems stemming from the migration of contamination to other sites, or from third-party and property injury claims.
- *Secured creditor insurance* insures the balance of loans when the borrower defaults and there is an environmental condition on the property.

EPA's Office of Brownfields and Land Revitalization provides general information about available types of environmental insurance resources at www.epa.gov/brownfields/insurance/.

Non-Governmental Organization Resources

There are a number of national and regional non-profit, philanthropic, and non-governmental organizations that are working to promote auto community revitalization. Several organizations that are addressing automotive community issues and offering services or resources to local officials are described below. There may be other organizations that provide similar services. The organizations listed below are included for informational purposes only. EPA does not endorse the views, products, or services of these entities.

The Mayors Automotive Coalition/Manufacturing Alliance of Communities

The Mayors Automotive Coalition (broadened in scope and renamed the Manufacturing Alliance of Communities in 2012) was founded by mayors and other local officials in auto communities in late 2008, as the domestic auto industry was on the verge of collapse. The organization was created to advocate for the needs of auto communities, and to form a collaborative information-sharing and technical assistance network serving elected officials and staff in communities with historic links to the automotive industry. Today, MAC works with more than 60 auto communities throughout the country and is rapidly expanding to bring other communities with significant manufacturing interests into this national network.

MAC also collaborates closely with federal officials and officials of the RACER Trust to ensure direct communication between local leaders from auto communities and key federal leaders. MAC provides a free monthly series of technical assistance webcasts for local officials in manufacturing communities. These webcasts provide updates and strategic advice on how communities can access federal funding and serve as a forum to disseminate local best practices and success stories. MAC also hosts regular summits and events for local officials from manufacturing communities that provide opportunities for direct peer-to-peer networking while facilitating contact between local officials and key federal, state, foundation, industry, and other non-governmental partners. For more information, visit www.autocommunities.us.

The Funders' Network for Smart Growth & Livable Communities

The Funders' Network for Smart Growth & Livable Communities (TFN) serves more than 100 philanthropic member foundations located in communities throughout the country, including many auto communities. TFN coordinates, strengthens, and expands funding and philanthropic leadership to yield environmentally sustainable, socially equitable, and economically prosperous regions and communities. TFN made the revitalization of auto communities a major national philanthropic priority. TFN is holding meetings in several auto communities to facilitate community involvement in

auto community revitalization and help communities leverage local foundation resources. For more information, visit www.fundersnetwork.org.

The Northeast-Midwest Institute

The Northeast-Midwest Institute (NEMW) is a Washington, D.C.-based, private non-profit and non-partisan research organization that is committed to economic vitality, environmental quality, and regional equity for the 18 states that comprise the geographic Northeast and Midwest regions of the United States. NEMW has been involved in brownfield issues in older industrial cities for decades and recently worked closely on efforts to help auto communities diversify their local economies and rebuild their urban cores. NEMW produced a series of reports on urban revitalization and related issues. These are available online at www.nemw.org/index.php/resources-a-analysis/reports.

The Center for Automotive Research

The Center for Automotive Research (CAR) is a non-profit organization based in Ann Arbor, Michigan, that focuses on important trends and changes related to the automobile industry and society at the international, federal, state, and local levels. CAR conducts industry research, develops new methodologies, forecasts industry trends, advises on public policy, and sponsors multi-stakeholder communication forums. CAR hosts several conferences annually on the automotive industry, with representatives from local governments, industry officials, and federal and state representatives. CAR also manages an Automotive Communities Partnership that helps disseminate research and best practices relevant to automotive community revitalization. CAR's recent report, Repurposing Former Auto Manufacturing Sites, and information about its other activities, can be found on its website: www.cargroup.org.

The Center for Community Progress

The Center for Community Progress is a nonprofit organization with offices in Washington, D.C., Flint, Michigan, and New Orleans, Louisiana. The Center for Community Progress works with communities throughout the country to help them turn vacant or abandoned properties into vibrant places. The organization provides technical assistance and capacity building help to communities, conducts research into property revitalization, and helps develop and advocate for policies that facilitate the reuse of abandoned properties. More information about the center can be found on its website: www.communityprogress.net.

National Foundation Efforts

In addition to the non-profit and philanthropic organizations listed here, several major national and local foundations have made significant investments in individual auto communities over the past several years and are likely to continue this support. The Surdna Foundation is funding a variety of efforts through its Strong Local Economies program to help auto communities diversify their local economies and encourage sustainable economic development. The Ford Foundation's $200 million Metropolitan Opportunity Initiative helps revitalization efforts in Detroit and other cities. The Mott Foundation is investing millions of dollars to help revitalize the City of Flint's economy while maintaining its basic municipal services. Support from these and other foundations plays an essential role in economic revitalization by catalyzing investment in many auto communities.

Acronyms

AHP	Affordable Housing Program
AMC	American Motors Company
ATVM	Advanced Technology Vehicles Manufacturing
B&I	Business & Industry [Guaranteed Loans]
CAFÉ	Corporate Average Fuel Economy
CAR	Center for Automotive Research
CDBG	Community Development Block Grant
CDE	Community Development Entity
CEAP	Community Economic Adjustment Program
CEDS	Comprehensive Economic Development Strategies
CICA	Community Investment Cash Advances
CIP	Community Investment Program
DEQ	[Michigan] Department of Environmental Quality
DOE	U.S. Department of Energy
DOL	U.S. Department of Labor
DOT	U.S. Department of Transportation
EAA	Economic Adjustment Assistance
EDA	Economic Development Administration
EPA	U.S. Environmental Protection Agency
FHL	Federal Home Loan
G.O.	General Obligation [Bonds]
GM	General Motors
HUBZone	Historically Under-Utilized Business Zone
HUD	U.S. Department of Housing and Urban Development
IDEM	Indiana Department of Environmental Management
LEED	Leadership in Energy and Environmental Design
KSU	Kansas State University
LEAP	Lansing [Michigan] Economic Area Partnership, Inc.
LIHTC	Low-Income Housing Tax Credit
MAC	Mayors Automotive Coalition/Manufacturing Alliance of Communities
MDEQ	Michigan Department of Environmental Quality
MEDC	Michigan Economic Development Corporation

MLC	Motors Liquidation Corporation
NAFTA	North American Free Trade Agreement
NEMW	Northeast-Midwest Institute
NUMMI	New United Motor Manufacturing, Inc.
PCB	Polychlorinated Biphenyl
PW	Public Works
QECB	Qualified Energy Conservation Bonds
RACER	Revitalizing Auto Communities Environmental Response Trust
RBEG	Rural Business Enterprise Grant
SBA	U.S. Small Business Administration
SEP	[Indiana] Supplemental Environmental Project
SGIA	Smart Growth Implementation Assistance
SHAP	Sterling Heights Assembly Plant
SUV	Sport Utility Vehicle
TAA	Trade Adjustment Assistance
TAB	Technical Assistance to Brownfields
TAP	Technical Assistance Program
TCSP	Transportation and Community and System Preservation
TFN	The Funders' Network for Smart Growth & Livable Communities
TIF	tax increment financing
TIGER	Transportation Investment Generating Economic Recovery
USDA	U.S. Department of Agriculture
WEDC	Wisconsin Economic Development Corporation

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Emergency Response
(5105T)

EPA 560-F-13-002
September 2013
www.epa.gov/brownfields/