

CASEBOOK



PUTTING CONCEPTS INTO PRACTICE: TRIPLE BOTTOM LINE ECONOMIC DEVELOPMENT



This project is supported with funding from the U.S.
Economic Development Administration.

THE
TRIPLE BOTTOM LINE
TOOL

This project was funded by the U.S. Economic Development Administration as part of Technical Report Award Number 99-07-13871

Appreciation is given to the interviewees who generously shared their time and insights. The authors are solely responsible for the report content and endorsement or approval by the interviewees or their organizations is not implied.

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OVERVIEW

The Triple Bottom Line Tool is a web-based platform designed to help investors, decision-makers, and economic development professionals enhance investment performance by better accounting for impact on a broad array of economic, environmental, and social factors – what’s referred to as the triple bottom line or TBL. This casebook was created as a companion to the Triple Bottom Line Tool (TBL Tool) in order to help illustrate what triple bottom line economic development may look like in practice and share lessons learned.

In the following pages we introduce the concept of triple bottom line economic development, review how the cases were identified, and discuss our findings. The eighteen cases are organized alphabetically, and Table One provides a list of cases by project type.

THE CONCEPT OF TRIPLE BOTTOM LINE ECONOMIC DEVELOPMENT

The triple bottom line (TBL) is a term that originated in the corporate sector and refers to the economic, environmental, and social value of an investment. John Elkington, a business consultant and author, is credited with coining the term. Other phrases used to capture this concept include “people, planet profit,” sustainability, and “three legs of the stool.” The concept aims to better account for the very real value of investment impact that accrues outside a firm’s financial bottom line so that capital is employed as efficiently and effectively as possible.

A triple bottom line approach to economic development provides a way to add value to investments and align projects with a range of community priorities. Sometimes referred to as triple value adding, TBL investment aims to leverage resources to get the best possible outcome. For example, imagine that an investment in a road is being considered. The project may be configured to achieve triple bottom line impact by including: **1)** multi-modal choices that reduce traffic, improve air quality, and provide healthy commute and

recreation choices (economic, environmental, and social benefit), **2)** design features that protect habitat, enhance groundwater recharge, reduce heat effects, and increase property values (environmental, economic, and social benefit), and **3)** career access opportunities (economic and social benefit). Applying a TBL lens enables multiple community objectives to be realized and adds value to the project.

ABOUT THE TRIPLE BOTTOM LINE TOOL

Traditionally, economic development investment impact has been measured in jobs created and dollars leveraged. While important, these two measures do not provide a complete picture of the many significant impacts that investment can have. Investors and decision-makers are increasingly seeking ways to ensure that their economic development investments align with goals for social, environmental, and economic performance. Progress has been made on a number of fronts (e.g., B Corp, GIIRS, IRIS and LEED)¹; however, there is no common standard or framework to assess economic development investments with respect to triple bottom line goals. Responding to this gap, the U.S. Economic Development Administration (EDA) has funded the creation of an on-line tool to design and assess economic development investment for triple bottom line impact.

¹. Companies may become certified B Corporations if they meet specific third party standards for social and environmental performance. In a number of states, companies may obtain legal status as a Benefit Corporation meaning they have certain obligations regarding purpose, accountability, and transparency. Benefit Corporations are not required to be certified. The Global Impact Investing Ratings System (GIIRS) provides third party ratings for the social and environmental impact of a company or fund. Impact Reporting and Investing Standards (IRIS) provides a common set of metrics for reporting financial, environmental, and social impact of an organization or product. Leadership in Energy and Environmental Design (LEED) provides third party certification for the built environment ranging from individual buildings to neighborhoods and communities.

The Triple Bottom Line Tool can be used in a number of ways. For example, it can be used to optimize project impact (*design tool*); it can be used to winnow or compare projects (*decision tool*); and it can be used to describe project impact (*communication tool*). The TBL Tool, which can be accessed at <http://tbltool.org/>, is designed to be easy to use and to respond to various sizes and types of communities and investments. The TBL Tool is useful to policymakers, investors, and economic development professionals and is relevant in the public, private, and non-profit sectors.

ABOUT THE CASEBOOK

This casebook was compiled in order to help illustrate how triple bottom line elements can be incorporated into economic development investment. Cases were identified through research that supported development of the TBL Tool including a national survey of approximately 500 economic development practitioners, a literature review, interviews with EDA staff, and focus groups with economic development professionals. Information about the research process can be found in the "TBL Tool User's Guide" and the companion report, "TBL Economic Development: Assessing Current Practice and Theory."

The cases presented here represent diverse economic development contexts, with examples of economic development projects and strategies in rural and urban communities from across the U.S. The range of project types illustrated includes business development, industry and manufacturing, institutions and services, mixed use development, and culture, recreation, and tourism. Table One provides the list of cases by project type.

Inclusion of a project in the casebook is not meant to suggest that all elements of the TBL have been addressed, nor is it meant to imply endorsement of the project. The purpose of the casebook is to illustrate how triple bottom line concepts have

been applied to various types of projects in various setting, and to share lessons learned.

KEY FINDINGS

While each case is unique, a number of themes were identified regarding lessons learned. Perhaps more than anything, these cases demonstrate the power and effectiveness of integrated and inclusive planning and partnership, coupled with continuous learning. From incubators to infrastructure, contributors to project success included a clearly articulated vision and plan, realistic assumptions and due diligence, playing from strengths, a patient and long-term view, and an ability to navigate changing conditions and respond to emerging opportunities.

Working with diverse disciplines, departments, and stakeholders enabled triple bottom line gains to be achieved due to enhanced project design, stronger buy-in, and additional resources. Through collaboration, projects were able to link and leverage ideas and resources, thus enabling them to get more done, share costs, and innovate for better results. Observed one interviewee, "collaboration will write your success or failure – particularly as resources become scarcer." While partnership and collaboration are not new to economic development, there is a sense that the approach is changing – for example, with new skills and attitudes regarding network development and stakeholder engagement. Strategies vary with context, though best practice was defined by an attitude of mutual respect and learning, a valuing of diverse talents and resources, and a commitment of time and resources that align with the needs of the project.

A related theme pertains to the essential contribution to project success made by the public sector. Local, regional, state, and federal agencies have played a vital role not only in fostering economic development, but in fostering economic development that achieves triple bottom line results. Through strategies such as cost sharing, incentivizing preferred practice, education and training partnership, stakeholder convening, infrastructure investment, and regulation to protect

health and safety, the public sector in these cases was instrumental in creating conditions necessary for private investment to flourish.

These cases also demonstrate the benefits of applying a whole system perspective to economic development. For example, a brownfield redevelopment project achieved efficiencies by linking site clean-up with site development, and a business incubator found greater success by addressing a range of factors that shape business viability (increased access to capital, addressed policy barriers, and stimulated demand through marketing or purchasing programs). By taking a multi-disciplinary, whole system approach, investment decisions more fully accounted for costs and benefits across the project life cycle and better addressed the range of factors influencing project success. Such an approach is important for making sound investment decisions that are cost effective in the long run and support community priorities. Indeed, it was striking to note how many of the cases included a remediation component – a stark reminder of the legacy of past development efforts that may have neglected to take a whole systems approach.

In many cases there was an identified need for enhanced capacity to successfully incorporate a triple bottom line perspective into economic development. This includes developing staff expertise to ensure that core concepts are understood, as well as building or enhancing relationships with partners and stakeholders.

It is interesting to note that TBL language was not used in many of the cases – the projects were simply responding to community goals or market opportunities that happened to embody TBL principles. As one interviewee noted, “It never occurred to us to connect to the double or triple bottom line. It was very real and authentic to our priorities, not to an external audience or framework in mind.” Thus, while some of the language and practice may be new, the ideas are grounded in community-defined priorities.

Exploring the ways that communities are applying a triple bottom line perspective to economic development investment we found that while many concepts and strategies are familiar, new territory is being covered. For example:

- Environmental stewardship has gained attention, with green practices in building and operations increasingly the norm and profitable opportunities emerging in areas such as industrial design and energy conservation and production. Cases that represent these concepts include Bingham Junction, City of San Jose, Clean Energy Works, Coastal Enterprises, Evergreen Cooperatives, Northwest Maritime Center, and Sonoma Mountain Village.
- Pathways to opportunity and inclusive engagement strategies that are well designed and executed can help ensure that projects respond to community priorities and that benefits of development accrue to current residents. In these cases, engagement is viewed as a strategy that yields better results, not as a checkbox to be completed or hoop to jump through. These concepts are illustrated well by the Clean Energy Works of Oregon, Evergreen Coop, and Village at Market Creek cases.
- Accountability mechanisms can be effective for making sure that promises made are delivered upon. Accountability systems need not be punitive; rather, the process can be structured to ensure that diverse interests are met and that agreements can accommodate changing conditions. The provision of assurances to developers (e.g., regarding permitting timeframes or brownfield liabilities) and to investors (e.g., accountability for incentives) was identified as facilitative of project success in a number of cases. Cases that illustrate these strategies include the City of Austin, Coastal Enterprises, and Sonoma Mountain Village.


- Targeted diversification – from funding sources to project or tenant portfolios – was identified as important for managing uncertainty and promoting resilience. Among the cases that highlight this approach are ACEnet, City of San Jose, Devens, Harbor Gardens, and Newton.
- Whole system approaches can increase project efficiency and effectiveness. Initiatives that have very intentionally applied an integrated approach include ACEnet, City of Austin, City of San Jose, Clean Energy Works of Oregon, Coastal Enterprises, Devens, Newton, Sonoma Mountain Village, and The Village at Market Creek.


The imperative to design economic development investment for efficiency and effectiveness is stronger now than perhaps ever before. A triple bottom line approach can help achieve these goals and optimize project value and impact. In most of the cases, trails were blazed – taking risks while exercising caution, and bridging innovation with proven paths. We hope that the insights and lessons learned from these cases, coupled with the platform provided by the TBL Tool, can help you optimize your project for triple bottom line impact. We also hope that you will contribute your stories so that theory and practice regarding triple bottom line economic development can continue to evolve.


CASE TYPES


KEY


 business development

 culture, recreation, or tourism

 strategies or tools

 industry or manufacturing

 institutions or services

 mixed use

Cases By Type of Economic Development

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DUBUQUE, IA
AMERICA'S RIVER PROJECT
CULTURE, RECREATION, TOURISM



A tribute to the Mighty Mississippi creates a vibrant cultural district and in the process catalyzes a community's renaissance.

OVERVIEW

Like many “rustbelt” communities in the Northeastern and Midwestern United States, Dubuque was hard hit by the farm crisis and a declining manufacturing sector. By the mid-1980s, unemployment was in the double digits and the area experienced so much out-migration that signs and t-shirts were made that said, “Will the last one out of Dubuque please turn off the lights?” Downtown vacancy rates were high and the once vibrant riverfront was considered a wasteland. Yet today, businesses, residents, and tourists flock to the area and the City has won numerous awards for livability.

A number of efforts contributed to the city's transformation, though the America's River project is considered particularly catalytic. In 1980, the Dubuque County Historical Society opened the River Museum, aiming to tell the story of the Mississippi – a river that traverses 2,500 + miles and 10 states, providing transportation, wildlife habitat, recreation, drinking water, and more. In the late 1990s, the Museum was looking to expand, and the confluence between education and restoration interests became apparent: the project could help bring to life a vibrant mixed-use district in the downtown riverfront area that had been prioritized in an extensive community visioning and planning process.

In 2001, the City submitted a successful application to Vision Iowa – a state program to fund tourism

and quality of life projects. The State's investment provided the necessary momentum for the America's River Project, including a year-long community planning process to create a strategy for the project.

Remediation of several brownfields on the site began in 2003, ensuring the safety of the site for occupants and supporting the health of the river's ecosystem. Completed in two phases, the America's River Project spans 90+ acres and includes a museum, aquarium, and education center, riverwalk trail, residential units, restaurants, retail, offices, hotels, casinos, and conference facilities. The National Mississippi River Museum and Aquarium is a Smithsonian affiliate and the only museum and aquarium in the United States dedicated to educating people about the Mississippi and rivers of the world. A third phase of development that is part of a larger stormwater management initiative is underway, creating a linear parkway that connects the riverfront to the urban core and including amenities such as hiking and biking trails and scenic overlooks.



Photo Courtesy of Dubuque Chamber of Commerce

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

The project's contribution to economic vitality cannot be overstated, particularly in terms of direct and indirect jobs created and leveraged investment. The project has been successful beyond expectation, surpassing initial estimates for attendance and impact. For example, just four years after opening, the National Mississippi River Museum and Aquarium hosted its 1,000,000th visitor. The project has created approximately 800 jobs and retained the same, for a total of 1,600 direct jobs. It has contributed to the local economy through tax base, job creation, and tourism revenues.

The project also demonstrates how quality of place can contribute to economic development. Increasingly, businesses want to locate in walkable, amenity rich places. The America's River Project was catalytic to the creation of a vibrant, mixed use area that has helped attract businesses to the community and bring further economic impact. Clawback provisions were stipulated for job creation and retention performance by firms receiving incentives; all businesses have met their requirements.

NATURAL RESOURCE STEWARDSHIP

This case exemplifies the close connection between environmental quality and economic vitality. Clean-up of the site's parcels (brownfields) paved the way for development to occur, and in the process reduced exposure to harmful chemicals and improved river ecology. The Bee Branch Creek Restoration portion of the project improves stormwater management and connects the riverfront and urban core in a way that adds amenities and value to the area. The development itself is designed to reconnect people to the river, both through the Riverwalk as well as the many educational activities that introduce the area's habitat and wildlife and raise awareness about the interconnections between human and environmental health.

COMMUNITY WELL-BEING

The America's River Project has helped to make Dubuque a high quality community in which to work, live, and play. The project has contributed to preservation and enhancement of historically and culturally significant resources. The interactive museum introduces visitors to the river habitat, wildlife, and culture including influential explorers, inventors, settlers, and artists. The museum includes a library and engages in numerous education programs including Riverworks Discovery – a national project that aims to educate children and their families about the commerce, culture and conservation of the great rivers of America and their watersheds. Events on the riverfront include celebrations of local culture, such as the Taste of Dubuque and the America's River Festival.



Photo Courtesy of Dubuque Chamber of Commerce

KEY STRATEGIES AND LESSONS LEARNED

DIVERSITY IS KEY

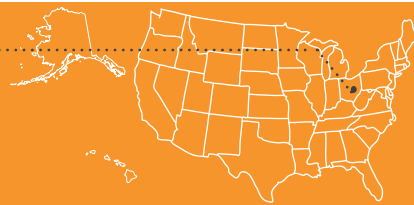
As with the river that inspired the project, diversity is a key feature contributing to success. The project would not have been possible without the participation of a broad array of partners. Financial contributions and expertise were provided by dozens of partners – from federal, state, and local agencies to educational and environmental organizations. Multiple partners brought diverse

ideas and resources to the table, making for a more rich and successful end product than would have been possible otherwise. Further, by working together, networks of relationships were formed that were productive for identifying and realizing additional opportunities to collaborate toward shared goals. The project's diversity with respect to uses and programming was also important, creating a mix of revenue streams and appeal across ages, interests, and price points.

SUCCESS HAPPENS WHEN PREPARATION AND OPPORTUNITY MEET

The community made a significant investment in visioning, planning, and laying the groundwork for the project. When opportunities arose, the community was well-positioned to respond. Hard work and determination helped to create opportunities and to pursue them successfully.

APPALACHIAN REGION, OH
APPALACHIAN CENTER FOR
ECONOMIC NETWORKS.
BUSINESS DEVELOPMENT



Rural economic development initiative adds value to regional assets by developing networks, fostering innovation, and taking a systems approach to business development.

OVERVIEW

The Appalachian Center for Economic Networks Inc. (ACEnet) was founded in 1985 to respond to high unemployment levels facing rural communities in Appalachian Ohio. ACEnet's approach to business development is a holistic one that focuses on adding value to regional assets by cultivating capacity of individuals, organizations, and sectors over time – with the success of each seen as connected to the success of the others. ACEnet offers a range of services to new and expanding businesses including technical assistance, market development, access to financing, and business incubation facilities. Their efforts also are designed to address issues that influence business climate – for example, helping to build consumer demand for local products or improve policies that impact business.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

ACEnet provides business entrepreneurship training to over 200 individuals annually. Their food business incubator is one of the oldest and most successful in the nation. Approximately 150 businesses use ACEnet's kitchen facility each year, with over \$28 million in sales generated in 2011. Approximately 40 businesses have graduated to their own restaurant, café, or processing facility. Food We Love is a marketing campaign whose unique brand and distribution system is designed to highlight regional products. In stores, products are co-located

on wooden display units that are locally-produced as well. Building on initial success developing a specialty food cluster, ACEnet and its partners have cultivated a meta-cluster that links food, artisan, and tourism businesses.

NATURAL RESOURCE STEWARDSHIP

Many of the farmers that ACEnet works with use organic or sustainable practices that help maintain the health of soil, water, and biological systems. In addition, keeping the business of agricultural viable reduces land conversion pressures and the subsequent loss of important stewardship functions those lands perform, such as ground water recharge and provision of wildlife habitat. On-site, ACEnet staff and tenants have taken steps to save money while reducing resource use – for example, recycling materials, composting, using programmable thermostats, and cooperatively purchasing in bulk to reduce transportation costs.



Photo Courtesy of Leslie Schaller, ACEnet

COMMUNITY WELL-BEING

ACEnet's mission of economic opportunity centers on community and sustainability. Their economic development efforts grow from and serve the region's people and places, with a special focus on low- and moderate-income entrepreneurs. Wealth is viewed not just as profit, but as the human, natural, and financial capital that economic development depends upon. Thus, economic development is anchored in the preservation of regional distinctiveness and in capacity building of individuals, organizations, and communities.

KEY STRATEGIES AND LESSONS LEARNED

APPLY A WHOLE SYSTEM APPROACH AND STAY IN FOR THE LONG-HAUL

An incubator facility is just one piece of the business development puzzle. ACEnet works to ensure that businesses have all the pieces in place that are needed to succeed – including business planning, marketing, product development and testing, access to capital, and distribution channels – along with the incubator facility. They deliver a portfolio of services, at the appropriate stage of business development and partner where appropriate to meet these needs.

In addition, a whole systems approach has meant that efforts are focused not just on individual businesses, but on the larger market and policy context impacting business viability. For example, seeing small producers struggle to meet regulations or access processing and distribution facilities, ACEnet worked with its partners to promote policy and infrastructure changes that are necessary for the success of local food systems, small farmers, and small businesses. Staff observe that business growth and policy change can be long-term endeavors, and caution that expectations and plans be set accordingly.

FOSTER NETWORKS AND A CULTURE OF INNOVATION

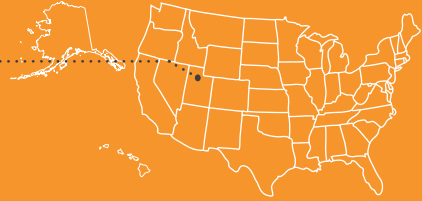
ACEnet has found that as businesses share knowledge, skills, and resources with each other they identify efficiencies, synergies, and opportunities for value creation. Though difficult to measure, network development is viewed as a productive investment that facilitates innovation and performance.

Being part of a national learning network has been valuable for ACEnet. The organization has accessed valuable resources through its involvement with such efforts as the National Business Incubator Association, the Good Food Network, the Community Food Security Coalition, and the U.S. Department of Agriculture (USDA) "Know Your Farmer, Know Your Food" program.

DIVERSIFY REVENUE STREAMS TO MAINTAIN RESILIENCE

Diversification of the organization's revenue streams has been key, but has also been difficult. Encumbering debt and taking risks sometimes feels like a stretch, but it has allowed ACEnet to generate revenue and not be dependent upon grants. This theme carries through to their business advice, as they help producers diversify and add value to their crops.

MIDVALE CITY, UT
BINGHAM JUNCTION
MIXED USE



An integrated approach to planning, remediation, and development produces a highly regarded mixed use development.

OVERVIEW

In the late 1990s Midvale City, a small but growing community near Salt Lake City, was nearly built out and searching for options to accommodate additional housing and employment centers. A number of desirable features were identified at the 350-acre former Midvale Slag site: It was a large parcel with good transportation access and potential recreation amenities. However, there was one major hitch. Its former use as a smelting site had left a legacy of hazardous contamination.

A partnership between the property owners and local, state, and federal agencies was assembled to bring the land back into productive use – a noteworthy accomplishment given some rocky relations in the past. The effort was guided by a community-defined Master Plan that called for mixed uses, public open spaces, pedestrian connections, a light rail station, and quality design. Development objectives were integrated with site clean-up, and innovative solutions were defined in the realms of both remediation and financing. Part way into a twenty-year build-out, the site today includes retail and office space, 1,400 residential units, a grocery store, a transit station, and a waterfront parkway.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

The project has produced over 1,000 jobs and the estimated land value of over \$150 million generates significant annual tax revenue. While a sizable number of the jobs were relocated from other



Photo Courtesy of Brownfield Renewal Magazine

locations, the consolidation garnered efficiencies for the company and its employees. Many of the jobs provide wages above county average, a trend that is expected to continue as the build out is completed.

NATURAL RESOURCE STEWARDSHIP

Major environmental benefits of the project include remediation of contaminated soil and water, and restoration of the river shore. Site clean-up included reuse of materials, providing the added benefit of reduced development costs. For example, when roads needed to be extended across the site, smelter wastes were graded and capped in place as roadbed material. Some of the buildings have been certified Silver and Gold LEED – further contributing to resource stewardship.

COMMUNITY WELL-BEING

Bingham Junction contributes to community-well being in a number of ways. The project includes pedestrian trails, public art, and a mix of housing types – including workforce and affordable housing. A significant portion of the site is reserved as open space, including connection to the regional Jordan River Parkway Trail. Retail businesses, including a much-needed grocery store, serve the community and a light rail station connects the development to Salt Lake City and the greater metro area.

KEY STRATEGIES AND LESSONS LEARNED

PLAN FOR WHAT YOU WANT

The achievements of this project did not occur by happenstance; they happened by design. Development proposals were guided by the community's vision paired with specific regulations and controls on the site. The community's master plan called for quality development, mixed uses, pedestrian and transit linkages, and community-serving amenities. The City's investment in infrastructure, including high quality fiber optics, was important for business recruitment.

COLLABORATE

The project would not have been possible without each of the stakeholders' contribution. Most importantly, this required deliberate conversations where various parties could learn about each others' perspectives and explore together options for the site's cleanup and redevelopment.

PROVIDE NECESSARY ASSURANCES

Along with marketing, documents regarding liability and site availability sent important signals regarding safety and certainty. This was important in helping attract prospective developers and tenants.

INTEGRATE REDEVELOPMENT AND CLEAN-UP

Efficiencies were achieved by considering redevelopment goals at the time of remediation. For example, utility corridors were installed and materials were reused during site clean-up.

AUSTIN, TX

CITY OF AUSTIN ECONOMIC DEVELOPMENT INCENTIVE PROGRAM STRATEGIES AND TOOLS



Economic development incentive program maximizes community benefit while ensuring transparency and accountability.

OVERVIEW

Responding to citizen concerns regarding the impact of economic development incentives, Austin's City Council refined its firm-based incentive program to be more transparent and accountable. The program has four key elements:

- Thorough analysis of community impact including net effects on services, finances, and community quality of life
- Transparency regarding costs and benefits of the economic development incentive
- Public review and deliberation regarding the proposed incentive
- Incentive payment conditioned on performance.

The program has been successful for structuring incentive agreements to align with community priorities, ensuring that promises made are delivered upon, and increasing public understanding of and support for economic development incentives.

The incentive review process considers a number of criteria that pertain to economic, environmental and social performance. These include overall economic and fiscal impact, linkages to the local economy, infrastructure impact, and commitments to culture and quality of life, local hiring, strong wages, workforce diversity, and opportunities for advancement. The incentive allowed is based on the project's score on a 0 to 100 scale. In general, projects that score 60 to 79 points are eligible for a reduction of up to 30% of the present value of

sales and property tax liability, and projects that score 80 points or more are eligible for up to 50% of the present value of sales and property tax liability. In general, total combined investments shall not exceed 50% of the present value of the total estimated tax liability over 10 years and investments shall not exceed 80% of the total estimated tax liability in any single year. However, a firm that meets the threshold for "extraordinary economic impact" may qualify for an investment of 100% of the present value of the total estimated tax liability over 10 years. To meet the threshold for extraordinary economic impact, a firm must be in a targeted industry, involved in leading edge technology, generating 500 jobs or more, and/or receiving state economic development funds.

The project score is presented to Council along with the results of a web-based fiscal impact analysis tool (WebLOCI) and other relevant information about the project. The City entered into eleven incentive agreements between the program's inception in 2007 and 2011.

Payments associated with the City of Austin incentive program are provided after performance agreements are met, ensuring that promises made are delivered upon. The reviews are conducted by a certified public accounting (CPA) firm. This has proven useful for protecting a company's proprietary information while demonstrating compliance with the terms of the agreement. Rather than using clawbacks, which aim to recover incentives if agreements are broken, the City provides annual financial payments based on verified compliance with the incentive agreement. If a company is not able to meet targets – usually due to a shift in the economy – they can inform the City in writing about the change and terminate the agreement. The City has not lost funds because payment is made for performance rather than up front.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

The incentive program is designed to yield significant numbers of high quality jobs, pathways to opportunity, and net fiscal benefit. A web-based fiscal impact analysis tool (WebLOCI) is used to determine whether proposed economic development investments will have a positive net financial benefit to the City. The investment review and subsequent incentive agreements address local hiring, wages and benefits, training and advancement opportunities, diversity in hiring and promotion, support for local firms, community engagement, and opportunity for small and minority businesses.

NATURAL RESOURCE STEWARDSHIP

Projects must be located within the City's Desired Development Zone and must comply with environmental regulations to be considered for incentives. The development zone is designed to accommodate growth while protecting important water resources. Commitments to green building (Austin's Energy Green Building Program 2-Star or USGBC LEED) are also considered.

COMMUNITY WELL-BEING

In addition to economic and environmental items that promote community well-being, the review considers whether the firm has cultural outreach programs or actively encourages employees to engage in volunteer or charitable efforts. In addition, the Desired Development Zone targeted for development is based on Smart Growth principles that support accessibility and location efficiency. Finally, with respect to governance, the incentive review process includes a public comment period, posts incentive agreements on-line, and requires that third party verification of results be submitted each year before incentive payments are made.

KEY STRATEGIES AND LESSONS LEARNED

ALIGN INCENTIVES WITH COMMUNITY GOALS

By defining performance metrics that align with a broad range of community priorities, Austin's economic development incentive review process helps to ensure that deals made will have the best possible impact on the community. Staff noted that without such metrics, it is tempting to say yes to every project, particularly when the only metrics for performance are deals made and jobs created. Further, by linking the incentives to the Desired Development Zone, the City was able to target development away from critical resource areas and toward areas where better fiscal balance and co-location advantages would accrue. Finally, by remaining open to new ideas and information, the process can evolve over time to stay current with community goals.



Photo Courtesy of Jim Linton, City of Austin

TRANSPARENCY PAYS MULTIPLE DIVIDENDS

The community's call for greater transparency has produced a number of positive impacts. Greater scrutiny has prompted stronger analysis of assumptions and data, and contributed to higher quality agreements. The standard and predictable application helps developers know what to expect and ensures that fair consideration is provided. Also, a more transparent and inclusive process has helped to demystify the process and increase support for development incentives.

MANAGE DATA AND EXPECTATIONS

Quality reviews are contingent upon quality data; it is important to use the best possible information, clearly document data sources and assumptions, and be able to discern and follow-up when a figure doesn't look quite right. At the same time, the added value of fine grain detail must be balanced with the costs of additional data collection and analysis. City staff use conservative figures when making estimates so that policymakers and the public are not basing decision on overly optimistic projections. When collecting firm data, staff are prepared to assist companies that may have trouble fulfilling data requests either because the companies do not have the data on hand or do not understand what's being asked. Further, they anticipate that some firms will be reluctant to disclose information publicly during early stages of development. Austin has responded to this concern by being clear upfront about the information to be shared publicly and the timing of the information release.

SAN JOSE, CA
**CITY OF SAN JOSE ECONOMIC
DEVELOPMENT STRATEGY
ECONOMIC DEVELOPMENT STRATEGY**



A focus on community priorities paired with a culture of collaboration and innovation brings a triple bottom line perspective to the city's economic development strategy.

OVERVIEW

San Jose, California is a culturally and ethnically diverse community, recognized as a global hub of technology innovation. The City has defined a coordinated approach to economic development, land use and transportation planning, environmental management, and workforce development that is facilitating achievement of community goals for prosperity, livability, and sustainability. This coordinated and leveraged approach is grounded in the City's Economic Strategy, General Plan (Envision 2040), and Green Vision – a set of 10 aggressive goals pertaining to economic growth, environmental stewardship, and fiscal responsibility. The Green Vision (adopted 2007) and Economic Strategy (adopted 2010) are separate documents, however, they are linked in purpose and implementation and are viewed as a coordinated effort by the Office of Economic Development.

San Jose's efforts reflect an understanding of the inextricable links between environmental stewardship, economic vitality, and community well-being. Internal and external partnership is viewed as essential for effectively responding to significant issues and opportunities. Breaking down traditional "silos," cross-departmental teams collaborate in defining and implementing plans and budgets. San Jose's strategies and results have garnered a number of accolades including awards from the International Economic Development Council (IEDC) and the U.S. Chamber of Commerce Business Civic Leadership Center.



Photo Courtesy of the City of San Jose

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

Economic vitality goals are being supported in a number of ways including incubation of clean tech companies, demonstration of clean technologies, support for business location and expansion, collaboration between companies, workforce development, and a buy local program that uses social media to help residents and businesses identify local shops to patronize. Well on its way toward the Green Vision goal for the creation of 25,000 new Clean Tech jobs in 15 years (2007 – 2022), to date the City has fostered the creation of more than 7,000 green jobs.

NATURAL RESOURCE STEWARDSHIP

Environmental performance is an important driver of the City's strategic planning. An adequate and affordable water and energy supply is viewed as good for business, and mixed-use neighborhoods are promoted not only because they make efficient use of resources and existing infrastructure, but also because they create a built-in customer base for local businesses and foster a type of place-making



Photo Courtesy of Team San Jose

that is attractive to businesses and workers. The Office of Economic Development assisted with the development of Envision 2040 and Green Vision to promote these stewardship goals and is engaged in implementation efforts. For example, the Office of Economic Development has partnered on waste-to-energy and efficient lighting projects to help both the City and businesses realize cost savings and to help stimulate demand for clean technologies targeted as a growth industry.

COMMUNITY WELL-BEING

The City's strategies to locate new workplaces and housing along transit-accessible, walkable, bikable, village-scale environments contributes to quality of place, livability, and active living. The Economic Strategy encourages neighborhood-serving retail and also identifies investments in art, parks, sports, and entertainment in order to attract talent and create vibrant spaces that spur interaction. Workforce development to meet diverse populations and career goals is prioritized and includes a range of initiatives including a program to assist veterans.

KEY STRATEGIES AND LESSONS LEARNED

TAKE A UNIFIED AND COLLABORATIVE APPROACH TO ECONOMIC DEVELOPMENT

San Jose's Economic Development strategy includes a number of non-traditional elements such as promotion of urban villages, arts, and entertainment. Understanding that a broad array of factors influence economic development – from quality of place to workforce and market development – the Office of Economic Development makes it their mission to address these factors. Examples include partnering with the planning department to ensure that business recruitment and retention is facilitated with quality environments and a predictable development process, and targeting energy efficiency upgrades to low-income families so that savings accrue where the need is greatest.

Addressing the system of factors that influence economic development requires crosscutting collaboration with internal and external partners. Internally, the City approaches system issues through affinity groups of related departments called "city service areas." For example, the Office of Economic Development coordinates an affinity group of related departments responsible for physical and economic development of the city. Called the Community and Economic Development City Service



Photo Courtesy of the City of San Jose

Area, this cluster of departments includes economic development, housing, transportation, public works, and planning, building and code enforcement. Leaders from these departments meet regularly and preparation of budgets is coordinated. The benefits of collaboration are heightened in the current climate of resource constraints, making the case for leverage and alignment between departments and organizations.

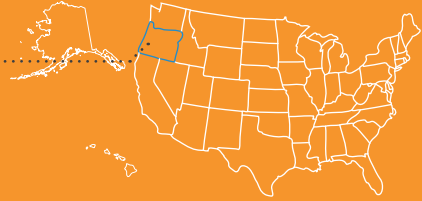
IMPLEMENT FEEDBACK LOOPS

San Jose's Green Vision includes a clear set of performance goals and progress is tracked in a user-friendly format on the internet and in print materials. The City's Economic Strategy includes an 18-month workplan and periodic reports are posted on the City's website. The Office of Economic Development engages in continuous dialogue with community partners and industry leaders in order to respond to real world conditions. The culture of the area is one of collaboration and innovation, so a system of internal and external feedback loops is viewed as essential to adaptively manage as circumstances change and opportunities present themselves.

ADDRESS DEMAND AND SUPPLY

The Office of Economic Development addresses both demand and supply factors shaping markets. Building on lessons learned with statewide energy policies, the Green Vision set ambitious goals to help drive demand for renewable energy, energy efficiency, and green buildings, and support supply-side innovations that help San Jose achieve its goals. The City assists with market development by facilitating demonstration of technologies that respond to their environmental performance goals – for example, electric vehicle charging stations, waste to energy conversion, and LED lights.

OREGON CLEAN ENERGY WORKS OF OREGON BUSINESS DEVELOPMENT



Energy conservation program creates green collar jobs that sustain families while helping the economy and environment.

OVERVIEW

At Clean Energy Works of Oregon (CEWO), investments in energy efficiency yield triple bottom line impact. The investments save energy, reduce carbon emissions, improve home comfort and value, create jobs, and contribute to the local economy. The program works by addressing homeowner barriers to energy improvement as well as workforce barriers to employment in the industry.

On the homeowner side, qualifying homeowners receive 1) a custom report detailing energy saving opportunities identified in a home energy assessment conducted by a vetted and certified Home Performance contractor and 2) access to rebates and easy financing for energy efficient home improvements. The process is simplified by having a qualified Energy Advisor available to help homeowners prioritize improvements and financing options, complete paperwork, and coordinate certified contractors. This one-stop shop format makes it easy for homeowners to identify and implement deep and comprehensive home energy remodels.

On the workforce side, CEWO helps create “high road” jobs that pay good wages and benefits, and provides access to this industry by historically underrepresented or disadvantaged workers and businesses (e.g., people of color, veterans, women, disabled individuals). Their strategy includes training workers, providing ongoing scholarship opportunities, assisting with hiring coordination, and building existing contractor capacity in such



Photo Courtesy of Energy Trust of Oregon

areas as marketing, business systems management, and creating a culturally competent workplace. In partnership with the local Worksource (workforce development agency), CEWO helps offset the costs associated with training new workers. Contractors who hire new entry-level workers can be reimbursed 50% of the wages paid during the essential training period and ninety day retention period.

Clean Energy Works Oregon grew from a successful pilot program started in 2009 in Portland, Oregon. Clean Energy Works Portland aimed to test new ways of delivering home energy upgrades and included a pioneering community workforce agreement with specific contracting, training, and employment policies designed to ensure employment and career opportunity goals were successfully met

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

The CEWO program is keeping existing construction workers on the job and expanding opportunity for others. Since launching in March 2011, 791 construction workers have been employed on energy upgrade projects: 129 of those workers were new construction hires, and 60% of those came from qualified training programs. Average (mean) wage is approximately \$23.20 per hour, with roughly 87% of workers receiving access to employer provided health insurance. Fifty-six percent of work hours have been performed by underrepresented people in the industry, including women and people of color. Nineteen percent of project dollars flowing to companies have gone to minority or women-owned small businesses. The program has leveraged \$16 million in private investment.

NATURAL RESOURCE STEWARDSHIP

Approximately 1,189 homes were retrofitted as of Spring 2012. The average annual energy savings per home is over 7,000 kilowatt hours and 5.9 tons of CO2 emissions. These savings help ensure that natural capital is not wasted, greenhouse gas emissions are reduced, and quality of air, land, and water resources is maintained.



Photo Courtesy of Energy Trust of Oregon

COMMUNITY WELL-BEING

The CEWO program improves community well-being in a number of ways. The energy savings that make homes more comfortable, affordable, and valuable also contribute to a cleaner, healthier environment and reduced dependence on foreign and non-renewable energy supplies. The program also contributes to community well-being through its effective governance procedures. The program features active engagement and collaboration with diverse stakeholders and includes thoughtful accountability provisions designed to be flexible with context while ensuring progress towards goals.

KEY STRATEGIES AND LESSONS LEARNED

PARTNERSHIP IS ESSENTIAL FOR SUCCESS

The guided one-stop approach proved very effective for helping homeowners overcome barriers to energy efficiency improvements. Similarly, convenient support for workforce training and placement helped contractors and prospective employees successfully overcome barriers to career opportunities. CEWO has been able to deliver these efficiencies by working with a range of public, private, and non-profit partners including utilities and lenders. Diverse parties that are necessary for the effort to work were each able to see the value of participating in the program.

BE CLEAR WHERE YOU WANT TO GO AND BE FLEXIBLE WITH HOW TO GET THERE

A central focus of the CEWO program is the creation of employment opportunities and career pathways for historically underrepresented and disadvantaged populations. Clear performance standards are defined, though are responsive to context (e.g., hiring goals appropriate to community demographics, health care standards that are reasonable for small businesses). Evaluation mechanisms are in place, though corrective rather than punitive efforts are emphasized if performance falls short. The need for flexibility applies to marketing and operations as well. For example, marketing for some ho-

meowners may target the environmental benefits of the retrofits, while others may be more interested in comfort or savings. On the operations side, tailoring might involve on-bill repayments through the utility in one locale, while an area without this option may partner with a credit union to provide homeowner financing. A statewide High Road Committee, comprised of diverse stakeholders, has been established to help set standards, evaluate progress, and recommend actions.

HELP BUSINESSES HELP THEMSELVES

For CEWO, the challenge has not been generating consumer demand, but the need for contractors that have the capacity to do the work. Growing small businesses has taken time. CEWO has a business support component to help the smaller firms grow, for example, by teaching small contractors about business systems and management or developing a mentorship program with large and small contractors. In rural areas, the mentorship need is even higher. More experienced contractors get credit for their mentoring efforts in the CEWO contractor application process.

ENGAGE WITH LOCAL LEADERS

Having an elected official champion the project was key. The mayors' office in Portland played a significant role in developing the community workforce agreement. CEWO communicates with officials throughout the state about the benefits of the project. In turn, economic development staff in those areas help market the program locally.

MAINE AND NEW ENGLAND COASTAL ENTERPRISES, INC. BUSINESS DEVELOPMENT AND TOOLS



Financial institution uses Triple Bottom Line principles to guide loan decisions.

OVERVIEW

Community Development Financing Institutions (CDFIs) are U.S. Treasury certified investment organizations whose mission is to improve economic and social conditions in underserved communities through access to credit, capital, and financial services. Recognizing the interconnections between economic, social, and environmental conditions in the community, Coastal Enterprises, Inc., a CDFI, revised its investment and review strategies to consider triple bottom line impact.

Coastal Enterprises, Inc. (CEI) has been at the forefront of triple bottom line investment for over a decade. Their journey has included innovation and reflection regarding impact measurement including an organization-wide process to define the meaning and operational implications of the three Es (economy, environment, equity), and collaboration with other CDFIs to explore implications for practice and policy. One outcome was the development of a Triple Bottom Line scorecard that is used to guide investment review. The scorecard has been tailored to different applications (e.g., New Market Tax Credits versus business loans). For example, in one application impacts are quantified and in another a score of 1 to 5 is assigned to specific criteria. The information is entered into a database so that CEI can track how investments are responding to the three Es. Lessons learned, highlighted below, are instructive to any investor interested in aligning investments with triple bottom line impact.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

Since its founding in 1977, CEI has participated in over \$806 million of financing to more than 2,100 ventures, representing 26,184 full-time jobs at closing. Currently, CEI has \$791.2 million in capital under management/committed. CEI seeks to support pathways to opportunity for low-income community members and other targeted populations. Employment Training Agreements (ETAGs) established between CEI and borrowers/investees are usually part of the loan agreement for loans over \$50,000 and have proven useful for ensuring that traditionally underserved populations are able to access employment opportunities.

NATURAL RESOURCE STEWARDSHIP

Natural resource industries such as forestry, agriculture, and fisheries are an important component of CEI's portfolio and stewardship of these vital resource industries is a priority. CEI supports resource stewardship by investing in businesses that sustainably manage natural resources, produce environmental products or services, and/or are involved in pollution prevention. In addition, CEI takes an active role by helping businesses identify natural resource opportunities that can positively impact profitability or market



Photo Courtesy of Maine State Planning Office

access (e.g., energy audits and investments or certifications such as in sustainable forestry). Similar to the ETAG program, EcoTags are sometimes used to incentivize environmental performance by reducing interest rates when mutually agreed upon benchmarks are met.

COMMUNITY WELL-BEING

Community well-being is at the core of CEI's mission. In addition to providing access to employment opportunities, CEI works with partners to ensure that barriers to employment are addressed, for example, with childcare and job training. CEI's investments also contribute to community well-being by helping to protect and enhance historic and cultural resources and traditions, foster livable communities, protect environmental health, and create and preserve affordable housing (1,300+ units to date).

KEY STRATEGIES AND LESSONS LEARNED

INCENTIVIZE PREFERRED PRACTICES

Employment Training Agreements (ETAGs) have been useful for achieving employment goals. Documents signed as part of the loan agreement commit employers to target a percentage of newly created jobs to diverse job seekers in exchange for a modest rate incentive when mutually agreed upon hiring targets are met. Key to the success of this strategy is a comprehensive workplace assessment that evaluates the quality and range of employment opportunities and commitment to diversity goals. CEI staff assist businesses to assess their training needs, create workforce development plans, and connect to appropriate workforce development partners that will assist with recruitment and training. Agreements regarding environmental practices (EcoTAGs) have been used with more limited applications.

ALLOT THE TIME AND EXPERTISE REQUIRED

CEI's investment decisions take into account a number of factors in addition to traditional investment criteria – a labor intensive process that requires expertise beyond traditional financing acumen. CEI has staff with appropriate expertise (e.g., farming, fishing, energy, and forestry) so that TBL impacts of potential investments can be reasonably considered. Further, beyond simply reviewing proposals for TBL impact, staff with specific content expertise are able to point businesses to resources that can improve their triple bottom line. In rural communities especially, but for small businesses in general, often there is not the capacity to identify these resources; having staff serve as a conduit to these resources helps position clients for greater impact and success.

CLARIFY THE PURPOSE OF THE TOOL

CEI uses the TBL scorecard as an assessment tool to guide potential investments rather than as an evaluation tool because longitudinal data collection and monitoring is prohibitively expensive. Also, knowing that important fine grain detail can be lost in an aggregate scorecard, CEI views the tool as an aide to investment negotiations and decisions rather than a final arbiter.

DEVENS, MA
DEVANS
MIXED USE



Military base conversion pairs economic development with environmental conservation to foster community vitality and resilience.

OVERVIEW

When Fort Devens Military Base was slated for closure in 1993, the neighboring communities engaged in a visioning and planning process that prioritized environmental conservation, job creation, and a mix of private and public land uses. The 4,400 acre site had a number of unique assets to build upon, however, there were significant challenges as well – not the least of which were the loss of an estimated 7,000 jobs and issues inherent in a project that spans three separate municipalities.

To bring the plans to life, the base closure area was designated as the Devens Regional Enterprise Zone, with the Devens Enterprise Commission (DEC) created to provide planning and regulatory control and MassDevelopment, the state economic development entity, charged with managing the redevelopment process – including selling and leasing land, providing municipal services, and offering financing and technical assistance. The three communities within which portions of the site lay provide direction through the review process and nominate six of the twelve DEC Commissioners.

The property was rezoned to accommodate industrial, commercial, institutional, office, residential, and conservation uses. An expedited and unified review process delivers action on most development applications within 75 days or less. The combination of efficient review, amenities, and infrastructure capacity has contributed to the project's success. Today, the site is home to

approximately 80 businesses with more than 3,200 employees – exceeding the 2,900 civilian jobs on site before the closure.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

Plans for the site call for a mix of business sizes and types in order to provide a range of employment opportunities, as well as resilience from impacts associated with the loss of a single primary employer. Within that mix, business development efforts are targeted to employers associated with clusters that are a good fit for the community (e.g., military defense, life science, medical devices, plastics, renewable energy technology).

Approximately 90% of the 3,200 jobs currently at Devens are considered “quality jobs” with wages over \$40,000. Further, career access opportunities include a biotech lab technician program at the community college that has employment pathways to the Bristol-Myers Squibb complex located on site, and a job corps program whose food service training provides catering service to Devens businesses.

Making the connection between economic vitality and environmental stewardship, the non-profit Devens Eco-Efficiency Center assists businesses and organizations to reduce operating costs and environmental impact through efficiency, reuse, and recycling.



Photo Courtesy of MassDevelopment Finance Agency

NATURAL RESOURCE STEWARDSHIP

Environmental quality was articulated as a priority in the Reuse Plan and has been addressed in a number of ways including remediation of contaminated sites, conservation of open space, and promotion of green building and operations. Approximately 2,800 acres of the site are designated as open space to preserve the site's natural beauty, provide passive and active recreational opportunities, create buffers between land uses, and maintain critical green infrastructure such as wetlands, floodplains, aquifers, and wildlife and plant habitat. Nearly half of the open space is permanently protected and the site includes the region's first Audubon-certified International Signature Sanctuary environmentally friendly golf course. Twenty moderately priced single and multi-family zero-net energy homes are under construction and public projects that meet a minimum dollar and size requirement are required to construct to the state's LEED Plus standard. Standards are in place to promote renewable energy use and low impact development, as well as performance based climate change mitigation.

The Eco-Efficiency Center runs a number of programs that provide education and technical assistance designed to help organizations improve their triple bottom line. Examples include using roof run-off for irrigation, reusing packing materials, and utilizing low impact site design and landscape maintenance practices. An Environmental Businesses Zone was established to locate businesses related to environmental remediation and recycling, however, that strategy shifted over time when it became clear that resource and by-product exchanges should be encouraged throughout Devens and not limited to one zoning district.

COMMUNITY WELL-BEING

Careful consideration has been given to the effects of the base redevelopment on neighboring communities including compatible uses, complementary design, impacts on housing and retail markets, and fiscal impacts to local governments. For example, a viewshed protection district is in place to reduce impacts in certain view

corridor, the historic character of the site is being preserved, and the focus on mixed-use village scale development aims to create an attractive place to work, live, and play.

Community well-being is defined in social, economic, and environmental terms and redevelopment benefits are designed to bridge the project area and the surrounding community. The site includes a network of trails and open spaces including a 44-acre park that hosts sports programs, camps, and special events. Connectivity and accessibility support environmental and health goals and include strategies such as walking and biking, shuttles, vanpools, and electric charging stations. Enhanced commuter rail service is due to open in 2013.

A number of social services provide important assistance to residents on-site and off, including the Job Corps Center, Loaves and Fishes Food Pantry, a daycare center with slots reserved for local working parents, and a 13-unit LEED certified shelter for women and children. The Job Corps Center and Community College provide workforce training, including partnerships with businesses on site.

Housing affordability is addressed by reserving approximately 25% of units for low- and moderate-income families and special needs populations. Impacts on surrounding housing markets are kept in check through a limit on the number of new homes on site.



Photo Courtesy of MassDevelopment Finance Agency

KEY STRATEGIES AND LESSONS LEARNED

TAKE AN INTEGRATED, RESPONSIVE, PLAN-BASED APPROACH

Key to the project's success is a vision that serves community interests, a plan to achieve that vision, a collaborative structure to implement the plan, and a viable process to track progress, revisit goals, and refine plans and strategies as conditions change. This includes creating a process for engaging in productive dialogue and partnership over time. Annual reports and five-year reviews provide an update on progress made and challenges encountered. These reviews have been useful for identifying issues, trends, and opportunities for improvement. Examples of changes resulting from these reviews include improved standards for green practices and enhancement of an existing commuter line in order to expand commute options. In 2000, a sustainable indicators report was developed to assess how redevelopment efforts align with sustainability goals, however, ongoing data collection has not occurred due to funding constraints.

RECRUIT SMARTLY

Devens has gained a reputation for its efficient, supportive, and consistent review process. For example, Bristol Meyers Squibb (BMS) chose to locate a large biopharmaceutical manufacturing plant in Devens after an international search because the site had the necessary infrastructure capacity, a unified and expedited permitting process, and competitively priced utilities. Devens' commitment to sustainability aligned with the company's mission and was an additional selling point. Devens has also promoted economic resilience by maintaining a diverse business base, even when recruiting large anchor tenants or targeting specific sectors.

CHATTANOOGA, TN ENTERPRISE SOUTH INDUSTRIAL PARK INDUSTRY AND MANUFACTURING



Abandoned munitions manufacturing site is transformed into a thriving industrial park, bringing well-paying jobs and environmental amenities to the community.

OVERVIEW

The City of Chattanooga and Hamilton County, Tennessee, collaborated with state and federal partners to transform approximately 6,000 acres of blighted land into a major jobs center and nature park. Recognizing that the site's size and proximity to rail and highway were valuable attributes, community leaders targeted industries suited to the site and the community's vision for well-paying jobs.

Plans for the conversion of the federally-owned former ammunition facility began in the 1990s, with acquisition and remediation occurring in the early 2000s. Through an agreement with the National Park Service, about half of the acreage was designated as a nature preserve that serves as a buffer to the surrounding neighborhoods and provides 25 miles of paved and unpaved hiking,



Photo Courtesy of Chattanooga Chamber of Commerce

biking, and ADA accessible trails. Groundbreaking for Enterprise South took place in 2003, the first tenant signed in 2004, and in 2008 Volkswagen (VW) selected the site as the location for its new North American manufacturing plant.

With over 2,500 well-paying jobs and a focus on environmental performance, the successful recruitment of Volkswagen was the realization of the long held community vision. In addition to VW, Enterprise South tenants include more than a half-dozen suppliers for the automaker, a nanotechnology company, a data collection and management firm, a health and wellness center, an Amazon distribution center, a food processing warehouse and terminal, a fragrance company, and offices for the County Board of Education.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

The project has so far brought nearly 5,000 direct high quality jobs to the Chattanooga area. Volkswagen, as the anchor tenant, has brought in 2,500 jobs. Nineteen VW suppliers and vendors have located in the region, creating more than 1,300 additional jobs. Thousands more indirect jobs are expected as well.

Volkswagen has taken the lead on efforts to provide pathways to opportunity for the labor force. The company voluntarily set hiring targets for local and minority residents. For example, Volkswagen obtained commitments from the contractor Graycor to source 11% of their contract to minority and woman-owned suppliers. Also, VW has a strong partnership with local workforce development training programs and Chattanooga State Community College.

NATURAL RESOURCE STEWARDSHIP

The project was built on a brownfield site requiring extensive environmental remediation. Where the landscape of the site was not suitable for development due to topography, a nature preserve was created. Stream restoration in the nature preserve has enhanced the natural habitat in the area. The VW facility has received LEED platinum certification – the highest designation and the first platinum award for an automobile manufacturing plant. VW has also installed state-of-the art energy efficient equipment, saving a considerable amount of energy and money for the plant. Other environmentally friendly measures include the use of safe water-based paint that reduced emissions in the paint shop by 20% and reuse of stormwater in the plant operations.

COMMUNITY WELL-BEING

Community benefit accrues primarily through the creation of high wage jobs and amenities provided on the site. Day care and health care facilities are provided within the industrial park and the project's 3,000-acre nature preserve provides recreation opportunities for the community. The park area also includes meeting space and historic exhibits.

KEY STRATEGIES AND LESSONS LEARNED

BE STEADFAST YET FLEXIBLE

Although the project took a very long time to come to fruition – extending beyond mayoral and gubernatorial cycles – the project leaders held firm to their vision, diligently responding to and learning from challenges that emerged along the way. Project leaders worked to enhance their competitiveness, including securing Automotive Megasite certification – a recruitment tool that verifies criteria for continuous acreage, transportation access, infrastructure and labor capacity.

PARTNERSHIP IS ESSENTIAL

The project would not have been possible without public and private partnership across many levels. For example, the federal government allowed the City and County to take site possession prior to full payment. Partnerships with universities and colleges for employee training, and with the State of Tennessee for the construction of a new highway exit, were key parts of the incentive package offered to Volkswagen.

MARKETING BROWNFIELDS MAY REQUIRE EXTRA ATTENTION

Potential businesses were wary of locating on the brownfield site. In order to assure them that the former ammunition site was safe, the Chamber worked with the state Department of Conservation and the Army Corps of Engineers to market the site and explain that no extra liabilities were involved. This partnership helped immensely in re-branding the site everybody knew as the ammunition plant. The Chamber also provided additional liability insurance to boost peace of mind.

CLEVELAND, OH EVERGREEN COOPERATIVES BUSINESS DEVELOPMENT AND SERVICES



A new model of job creation aims to stabilize communities through locally-serving, employee-owned green businesses.

OVERVIEW

Cleveland's University Circle is home to some of the region's finest hospitals, universities, and museums, as well as some of its most poverty-plagued neighborhoods. Traditional job-training and business attraction initiatives have brought limited improvement to the neighborhood and its residents. Seeking a new approach to community revitalization, a partnership of major anchor institutions, community-based organizations and other civic leaders was formed in 2005. Among the outgrowths of the partnership has been the Evergreen Cooperative Initiative – a collection of locally-serving, employee-owned green businesses.



Photo Courtesy of Janet Century

The Evergreen Cooperative Initiative creates businesses based on the following principles: **1)** provide goods and services that are not but could be sourced locally (i.e., dollars leaking out of the local economy); **2)** apply green practices, **3)** pay living wages and offer training and advancement opportunities and; **4)** adopt an employee-owned business model that fosters wealth creation opportunities. Targeting institutions that are “anchored” in the community – such as universities and hospitals – the market potential was assessed at close to \$3 billion.

Two Evergreen Cooperative businesses have been launched to date – the Evergreen Cooperative Laundry and Ohio Cooperative Solar. Located on a former industrial site, the Evergreen Cooperative Laundry is housed in a LEED certified facility that processes 10 million pounds of laundry annually using EPA-approved chemicals and the latest in energy-efficient technologies. The Ohio Cooperative Solar performs large-scale solar panel installations and building weatherization services. Launched in 2009, the business became profitable in six months. Green City Growers, a hydroponic fresh food production business, is in the planning stage.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

To date, the Evergreen Cooperatives have created 75 jobs in the community that provide stable employment with opportunities for advancement. About half of these jobs are worker-owner positions. Employee-owners receive full health benefits at no charge, and profit sharing that is estimated to yield approximately \$60,000 over an eight-year period. In addition, the model specifically targets traditionally disadvantaged populations that have a difficult time entering the workforce. After six months,

workers who have demonstrated their proficiency and commitment are invited to become employee-owners.

NATURAL RESOURCE STEWARDSHIP

The Evergreen Cooperative's environmental focus has provided a number of competitive advantages. Redeveloping an existing site to house the LEED-certified laundry facility provided savings that could be diverted to operating capital. Energy efficient equipment yields significantly lower operating costs that allow the company to provide services at a more economical price than competitors. At Ohio Solar, weatherization and solar installation projects are reducing fossil fuel use, which save dollars while contributing to environmental quality and increased energy independence.

COMMUNITY WELL-BEING

Evergreen Cooperatives is a for-profit business venture with community well-being at its center. The business model is designed to directly improve the lives of workers and the communities they reside in. This includes providing employment opportunities to people who want to grow their skills or earn a second chance. The businesses' green practices are better for community health, while their local wealth strategy grows jobs and income for local residents. Further, creating jobs where the jobs are needed is provides "location efficiency" that requires less time and money for commuting.



Photo Courtesy of Janet Century



Photo Courtesy of Janet Century

KEY STRATEGIES AND LESSONS LEARNED

MAKE OWNERSHIP ATTAINABLE

The inspiration for the Evergreen Cooperative Initiative came in part from the Mondragon Cooperative Corporation (MCC) in Spain. One of the world's best known consortiums of employee-owned companies, MCC has more than 80,000 employees and is credited as having been a major catalyst to the turnaround of that region of Spain. The worker-owned model was selected for its ability to build assets as well as jobs.

While drawing lessons from MCC, it was important to structure the ownership model to fit this context. For example, where MCC sets the buy-in price at one year's salary, here the price was set at a more attainable level and the buy-in can be financed through a pay deduction of \$.50/hour over three years.

DEVELOP A CULTURE OF OWNERSHIP

Adequate training and skill-building are critical to ensure worker-owner success. This includes both technical training in areas ranging from equipment to management, as well as skill building in process issues such as consensus-based decision-making. Research from the Ohio Employee Ownership Center has shown that meaningful and effective participation in decision-making, not just financial ownership, is key to cooperative success. The cooperative has a policy that the CEO for a business will be from the community within no more than 36 months of business start-up. Significant investments in training have been made, with Kent State University being an important partner for training of staff and board members.

ENSURE NON-DISPLACEMENT OF EXISTING JOBS

Creating jobs in one business by taking them from another does not produce net benefit. Addressing this issue head on, the Evergreen Cooperatives are very intentional about their job creation strategy. This includes targeting job creation in sectors where dollars are leaving the local economy (e.g., the work is outsourced) and being proactive where local job losses may occur. For example, local nursing homes may be doing laundry in-house but at a high cost. When Evergreen Cooperative Laundry takes on such an account they work with the client to ensure that the laundry workers at the facility are reassigned to other duties. Evergreen suggests that these conversations occur at the CEO/CFO level in order to be successful.

PITTSBURGH, PA
HARBOR GARDENS PARK
AND DREW MATHIESON CENTER
MIXED USE DEVELOPMENT AND EMPLOYEE TRAINING



Expansion of a vocational training program turns a derelict property into a commercially viable office park and greenhouse facility, raising property values and creating local employment opportunities in the process.

OVERVIEW

When the Bidwell Training Center sought to expand their vocational training program, opportunity was seen in a brownfield parcel adjacent to their existing facilities. The Manchester Bidwell Corporation (MBC), parent organization to the Training Center, partnered with several public and private entities to clean up the site and develop two facilities – a 40,000 square foot greenhouse and a 63,000 square foot office building. Drew Mathieson Center, the greenhouse, provides hands-on horticulture and agriculture training, with products sold in local markets. The office building, Harbor Gardens Park, houses a portion of the Bidwell Training Center as well as a bank branch, local catering company, and billing offices for the University of Pittsburgh Medical Center.

These initiatives are part of a larger collection of programs designed to bring cultural enrichment and skill development to residents in an economically depressed neighborhood of Pittsburgh, as well as disadvantaged and dislocated residents of Southwestern Pennsylvania. MBC's initiatives, which include the nationally recognized Manchester Craftsmen's Guild and MCG Jazz recording studio and concert hall, have brought economic opportunity and cultural enrichment to the community, along with beauty, inspiration, and hope.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

Staff of the Bidwell Training Center work with area businesses to develop high quality programs that respond to employer needs. Currently, majors are offered in culinary arts, horticultural technology, medical claims processing, medical coding, pharmacy technician, chemical laboratory technology, and electronic medical technology. The program provides career training to more than 200 students per year. Graduation and placement rates average 80%, creating opportunities for upward mobility that have lasting results on individuals and their community. Beyond providing successful workforce training services, the project has also helped to revitalize the area.

NATURAL RESOURCE STEWARDSHIP

Remediation of the project site provided important environmental benefit to the area. In addition, prior to the development of the Drew Mathieson Center, there were few examples of high functioning, large-scale greenhouses in an urban environment in the U.S.; the facility has served as an example of urban greenhouse technology.



Photo Courtesy of Manchester Bidwell Corporation

COMMUNITY WELL-BEING

The Manchester Bidwell Corporation moves from a core philosophy that environment – both physical and emotional – shapes lives. Training facilities are infused with beauty, and programming and mentorship are based on respect and inspiration. Targeting disadvantaged populations, MBC views people as assets rather than liabilities and aims to help them realize their potential and contribute productively to society. The training facility has improved the physical quality of the community and brought programming to residents with need.

KEY STRATEGIES AND LESSONS LEARNED

THE BUILT ENVIRONMENT COMMUNICATES A MESSAGE

The Bidwell Training Center is viewed not just as a job training program, but as a base from which people can improve their sense of worth and potential to learn, grow, and contribute. To that end, the effect of the built environment on how people see themselves and how they relate to others was a major factor in the design of the buildings and site. MBC sets a high standard for the aesthetics of their facilities, believing that high quality environments help to communicate to the people training there that they are worthy of investment.

SOMETIMES SUCCESS IS IMMEASURABLE

Many of MBC's program impacts are difficult or impossible to measure. Tracking performance of an individual over their lifetime, and ascribing specific outcomes to their participation in Bidwell programs is not feasible. At the same time, the Bidwell Training Center has been able to document impact with quantitative measures such as graduation and placement rates, complemented by personal stories of program participants. The replicability of the portions of MBC's National Center for Arts and Technology program are being tested through contextual adaptation of the model at sites in San Francisco, Grand Rapids, and Cleveland.

INDUSTRY PARTNERSHIP IS ESSENTIAL

The success of the training program is in no small part due to the industry relationships that have been cultivated. Programs are designed to respond to industry-defined needs, and trainers with the necessary skills and knowledge often come from the target employers. Funding and allies for the program grow from industry partnership. For example, the University of Pittsburgh Medical Center (UPMC) became an anchor tenant for Harbor Gardens in the preconstruction phase due to its long-term relationship with MBC hiring graduates of the medical training program.



Photo by Heather Mull, Courtesy of Pittsburgh City Paper

ALASKA, MASSACHUSETTS, VIRGINIA
NATURAL RESOURCE BASED COMPREHENSIVE
ECONOMIC DEVELOPMENT STRATEGIES
ECONOMIC DEVELOPMENT STRATEGY



Natural resource based communities connect economic resilience, environmental stewardship, and quality of life, and focus on partnership to achieve community goals.

OVERVIEW

A Comprehensive Economic Development Strategy (CEDS) identifies the current conditions, goals, and priority projects of a given economic region. Natural resource based communities face unique opportunities and challenges when defining their economic strategy because long-term viability generally requires a careful balance between utilization and conservation of the natural resources that undergird the economy. This case illustration examines how three natural resource based communities have strived to achieve that balance by addressing economic, environmental, and social benefit in their CEDS. The three CEDS include Bristol Bay, Alaska; Cape Cod, Massachusetts; and Accomack-Northampton, Virginia. A brief overview for each community is provided below, followed by key strategies and lessons learned that are common to the three.

BRISTOL BAY

Bristol Bay is a geographically isolated region of southwest Alaska, accessible only by plane or boat. Bounded by three mountain ranges, the area is home to stunning scenery and premier fishing habitat. The commercial fishing industry has been a mainstay of the economy but has been challenged in recent years by a number of factors.

Unemployment levels are seasonal but high, and economic development is hindered by high fuel costs, distance to markets, and lack of infrastructure.

Subsistence and informal economies are important in this region, contributing to both household needs and preservation of cultural traditions. Mining, oil, and gas projects have been proposed, but have received mixed support from the local communities given their impact on natural resource quality and the fishing industry.

The Bristol Bay CEDS was developed with extensive community input, including a visioning project that brought a council of eight respected community leaders to meetings in 27 of 31 villages that were attended by nearly 1,000 residents in the region. An electronic voting technology was effectively used in the meetings, helping to ensure that all participants were able to share their opinions. Five goals were defined: quality of life and wellness, protection of subsistence lifestyle, education and workforce development, sustainable economic development, and infrastructure to support target industries and community culture. Identified priorities include development of alternative energy sources to serve the region, and cultivation of fishing, tourism, and local small businesses that protect the pristine environment and sustain the rich heritage of the native people.



Photo by Gwen Wilson, Courtesy of Bristol Bay Native Association



Photo Courtesy of Cape Cod Commission

CAPE COD

Cape Cod, Massachusetts has an international reputation for its natural beauty and historic character, exemplified by the doubling of its population in summer months from approximately 221,000 to 500,000. Recognizing the uniqueness of the area, state and local authorities established the Cape Cod Commission in 1990 with the purpose of conserving natural resources, fostering balanced economic growth, and ensuring development and preservation of key infrastructure and amenities that support community quality of life. The Commission, in partnership with the Cape Cod Economic Development Council, led the development of the Cape Cod (Barnstable County) CEDS which flows from and is consistent with its Regional Policy Plan.

The Regional Policy Plan's four core economic development principles that inform the CEDS include: **1)** protect and build upon the Cape's competitive advantage of unique natural environment, historic village character, working agricultural land, harbors, and cultural heritage, **2)** use natural, physical, and human capital efficiently, **3)** foster balance and diversity of business types, **4)** expand opportunity and wealth through exports, import substitution, capital attraction, and locally owned business.

The CEDS planning process included the development of regional priority projects by five topic work groups (infrastructure, workforce, industry clusters, direct business assistance, and overall business climate for the region), followed by the vetting of identified priority projects in focus groups with

community leaders. The focus groups confirmed the strong consensus of the work groups, though with useful and surprising additions. The action-oriented format, compressed timeframe, and complementary deliberations were viewed as very effective.

The Commission has been engaged in planning, education, and facilitation of partnerships to support implementation of priority projects. Efforts have included establishment of the Cape Cod Fisheries Trust permit system to support long-term viability of the fishing industry, assessment of options to support local markets, a focus on low impact and compact development, and improvements to infrastructure quality and capacity. The SmarterCape Partnership is identifying ways that technology can contribute to economic development, efficient public services, and improved quality of life. The Regional Economic Strategy Executive Team (RESET) process is bringing targeted technical assistance to assist towns with land use planning and development issues. To help track progress toward CEDS goals the Commission created Stats Cape Cod, an on-line data forum that provides information on demographic and economic benchmarks for the region.

EASTERN SHORES OF VIRGINIA

Bordered by the Atlantic Ocean to the east and Chesapeake Bay to the west, Accomack and Northampton Counties are home to some of the United States' finest coastal resources. The region's geographic isolation has proven to be both an asset and a liability. Its natural resources and remoteness provide a competitive advantage in agriculture, aquaculture, tourism and, increasingly, retirement living. At the same time, the location has made it difficult to retain and attract businesses. For example, two industrial parks developed in recent years have not attracted long-term tenants despite incentive programs and marketing efforts.

In 2007, the counties partnered with Virginia Tech, one of the State's universities, to develop their Comprehensive Economic Development Strategy. Data analysis to assess current conditions was paired with a participatory process that used visual images and examples of best practice to identify

community assets and define strategies to build on those assets. The analysis of existing conditions identified seven clusters as the primary generators of new jobs and investment in the area: aerospace, agriculture, aquaculture, education/research, studio businesses, tourism, and retiree services. Cluster area experts were brought into the strategy process early in order to incorporate their perspectives and priorities.

Community members defined a vision for a thriving rural community where the natural resource base is managed for long term viability, economic opportunity is available to all residents, historic and cultural resources are maintained, and residents have access to abundant open space and parks, education and training, and safe affordable housing. Goals, strategies, and investment priorities defined to support this vision focus on business retention and expansion, infrastructure, workforce development, tourism, quality of place, and research and development.



Photo by Dave Temens,
Courtesy of Accomack-Northampton Planning District

KEY STRATEGIES AND LESSONS LEARNED

While each of these natural resource based communities is unique, similarities in their economic development approach and lessons learned were identified and are described below.

ENGAGE FOR RESULTS NOT REQUIREMENTS

Effective engagement means more than public hearings and comment periods. To achieve good levels of meaningful participation it is essential that creative, contextually appropriate strategies be used. From real-time voting, to potlucks, to work sessions with cluster leaders – well-designed engagement strategies can lead to a stronger product that is widely supported and help build the shared vision and network of relationships needed for successful implementation of the strategy.

CONNECT THE DOTS

In each of these communities, the connections between people, place, and prosperity are being made. Economic development is seen as both a means and an end – supporting and supported by quality of place and a healthy, educated population. Communities are interested in more than growth; they are interested in businesses that pay a living wage and maintain environmental integrity and beauty. Economic, environmental, and social well-being are seen as connected, and CEDS are addressing all three. An important component of this connection is the collaboration that can result when the CEDS process brings diverse stakeholders together to define their shared vision and strategy.

PROTECT YOUR BASE

Environmental quality is a priority to these communities because natural resources are their competitive advantage. Natural resources are the underpinning of the economy and long-term viability of the community is predicated upon effective resource stewardship.

LAY THE FOUNDATION

Economic development strategies need to assess what infrastructure is necessary to support the community's aspirations, as well as whether the associated infrastructure quality and capacity can realistically be delivered. This includes physical capital as well as human and financial capital. For example, in one community an innovative industrial park is underutilized due in part to poor connectivity to the site, workforce limitations, high rents, and excessively restrictive covenants.

MOVE FROM GOALS TO OUTCOMES

Communities have defined a vision for economic, environmental, and social well-being, however, the pathway from aspiration to achievement is not always well-delineated. Effective strategies need an implementation plan that includes lead and supporting organizations and timelines, performance indicators, regular monitoring and feedback, and effective communication and coordination between various partners.

NEWTON, IA NEWTON TRANSFORMATION ECONOMIC DEVELOPMENT STRATEGY



Community rebounds from loss of major employer by transitioning its economy through collaboration, diversification, and a focus on renewable energy.

OVERVIEW

The Maytag Corporation provided a large and stable employment base to Newton, Iowa for over 100 years. In 2006, shortly after its acquisition by Whirlpool, the Maytag headquarter office and manufacturing plant in Newton closed. This meant nearly 1,900 jobs lost in a community of about 15,500 people – on the heels of roughly 2,000 jobs lost during plant contractions over the previous five years. The Newton Transformation Council, an ad hoc group of community stakeholders, organized to respond to this massive economic disruption. As part of that effort, a community forum attended by more than 300 citizens was held, resulting in a shared vision that centers on excellence in education, technology, research and development; a culture of entrepreneurship; a focus on renewable energy; and maintaining small town culture and quality of life.

Newton was able to capitalize on its assets of a highly skilled workforce, underutilized buildings, and a good transportation infrastructure to attract and nurture businesses that align with the community's vision. This transformation was made possible by an integrated approach that was data driven and inclusive of diverse stakeholders from across the community and the region.

Recognizing that the Maytag closure had regional consequences, the Council collaborated with leaders from a seven county area to inventory assets, strengthen networks, and define a regional economic development plan. The regional plan's

goals include alignment of workforce supply and demand, provision of infrastructure to foster sustainable communities, and cultivation of entrepreneurial culture.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

Today Newtown is rebounding with 1,100 new jobs, a 39% increase in hotel revenue and \$80 million dollars in new property assessed value. The community has diversified its economic base, recruited companies that fit its renewable energy focus (wind and biodiesel), and seen the conversion of a former Maytag warehouse into a Career Academy offering workforce training and education opportunities through Des Moines Area Community College.

NATURAL RESOURCE STEWARDSHIP

Jobs and quality of life were the Council's initial focus, but the environment became understood as a natural ally to those goals. Natural amenities such as local parks, bike and hike trails, and undeveloped wooded areas proved valuable for business recruitment. Businesses located in repurposed buildings – one of the greenest building strategies available – and economic development planners worked with incoming businesses to maximize energy efficiency in their buildings so that savings could be directed toward economic growth. In addition, a focus on renewable energy industries has provided a way to contribute to energy independence and environmental protection while creating jobs.

COMMUNITY WELL-BEING

Citizens expressed a desire to maintain the community's character and livability, in part by

investing in the revitalization of downtown. Preserving and restoring existing buildings conserves resources and enhances the public spaces that are a draw to businesses, workers, residents, and visitors. The first initiative to support this goal emerged when Whirlpool transferred two downtown buildings to Des Moines Area Community College (DMACC). The buildings now house a Career Academy accessible to residents of all ages. The regional innovation plan also prioritizes place-making and accessibility through the provision of infrastructure, amenities, and diverse housing options.



Courtesy of Des Moines Area Community College

KEY STRATEGIES AND LESSONS LEARNED

DEFINE YOUR VISION AND ALTERNATIVE SCENARIOS

As Newton faced a very different future, it was important for the community to develop a vision of what they wanted that future to look like. One important component of this process was the visioning process that engaged diverse residents of Newton. Another important component was The Futures Game – a simulation workshop held with regional leaders to demonstrate how different decisions might affect the region over a twenty-year horizon. The exercise had a significant impact on thinking about how best to position the region for long-term economic, environmental and social stability.

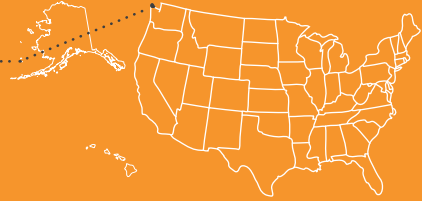
GOOD DATA, WELL CONNECTED GETS RESULTS

It was essential that economic transformation efforts be based on good data – including an analysis of strengths, weaknesses, opportunities, and threats (SWOT). Equally important was the need for integrated collaboration across sectors and counties. Analysis of workforce characteristics, commute patterns, and industry mix demonstrated the interdependence of the region's communities. The regional planning processes helped participants to expand and enhance their networks, resulting in partnerships that support plan implementation. For example, it was a regional partner that recruited a wind manufacturing company to locate in Newton.

TARGETED DIVERSIFICATION PROVIDES FOCUS AND RESILIENCE

When the area's major employer left town, the community became acutely aware of its economic vulnerability and put an emphasis on economic diversification. At the same time, leaders recognized the potential for Newton to build on its strengths to compete in the emerging renewable energy sector. It took advantage of existing infrastructure and successfully attracted cutting edge businesses that provided growth opportunities while diversifying the economy. Further, its incentive program included accountability mechanisms to ensure future employers would hire the number of people promised in initial negotiations.

PORT TOWNSEND, WA
NORTHWEST MARITIME CENTER
MIXED USE



Maritime Center catalyzes marine and tourism business while protecting valuable beach access and creating a treasured community space.

OVERVIEW

Located in Port Townsend, Washington – an historic Victorian coastal community on the Olympic Peninsula – the Northwest Maritime Center is a vibrant 27,000 square foot multi-purpose facility that provides space for boat building and storage, meetings and conferences, research and education, offices, retail, and community gatherings. Serving local residents, tourists, and maritime businesses, the project preserves important cultural traditions while enhancing economic vitality.

Interest in preserving and enhancing the area's working marina had been perking for some time, but no action had been taken. The impetus for the project came when the site was slated for residential or hotel development that was out of character for the area and would have privatized beach access. In 1997, a coalition of individuals and organizations stepped forward and formed the non-profit Northwest Maritime Center to bring the project to fruition. Ground-breaking for the project took place in 2008, with portions of the facility completed and in use in 2009. The grand opening was held in Spring 2010.

Co-locating businesses, organizations, and events has allowed for synergies and collaborations to more easily be identified and implemented. Further, the high quality design of the space makes it very functional and inviting. The 35th annual Wooden Boat Festival drew its largest crowd ever last year, with festival attendees filling area hotels to capacity and bringing revenue to local businesses.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

The project is having direct and indirect economic impact. Directly, the project accounts for approximately 16 FTE including staff of the Northwest Maritime Center, chandlery, and café, and approximately 30 summer staff. A commitment to local businesses has carried through from contracts with local woodworkers, artisans, and builders in the design and construction phase, to utilizing a local vendor that features local products in the café, and stocking locally made products in the chandlery – the West coast's foremost resource for "all things wooden boat." The Center is having indirect economic benefit as well. For example, events at the Center help maritime related businesses make sales and also contribute to the community's important tourism industry. "Off season" events have been added in order to increase impact, and courses are offered to youth and adults to open doors to maritime careers.



Photo by Nic Lehoux, Courtesy of Northwest Maritime Center

NATURAL RESOURCE STEWARDSHIP

Environmental restoration and protection was an important component of the project. First, site clean-up was required to remedy contamination

from its former use as a fuel storage terminal. When the new pier was constructed to accommodate larger historic vessels and public events, the award-winning design incorporated measures to protect important eelgrass habitat and minimize shadow effects that negatively impact migrating fish. Students from the community helped restore 3,000 square feet of eelgrass beds. The Center earned LEED Gold certification and purchases 100% of its power from Puget Sound Energy's "green power" program. Also, operating costs have been reduced by employing the latest technology in energy efficiency.

COMMUNITY WELL-BEING

Port Townsend's downtown waterfront district has Historic Landmark designation and the city is one of only three Victorian seaports in the nation. The community's historic and cultural resources are preserved and enhanced by both the Center's design and programming. Its location is easily accessible by multiple modes of travel including boat, foot, bicycle, bus, and automobile. The site includes public pier and beach access, as well as a public plaza that features a Compass Rose comprised of donor bricks that honor contributing community members. Public access is guaranteed in perpetuity. Traditional craft is on display both through the completed boats on site, as well as spaces to view boats being made.

Community engagement was a priority, with multiple phases of focus groups and outreach to various stakeholders. Facility spaces are made available at a discounted rate to community and non-profit organizations. The Maritime Center partners with a number of organizations to deliver formal and non-formal educational programming from sailing to boat-making. For youth, abstract concepts come to life as teachers incorporate aspects of boating culture into classes – from the mathematics of navigation to physical education classes that expose children to the cultural landscape. The Puget Sound Explorer Discovery program brings every 7th grader in the city and county school districts out on the water.

KEY STRATEGIES AND LESSONS LEARNED

RIGHTSIZE

The vision for the Center included a mix of spaces and uses and the facility successfully realizes that vision. A lingering question regards the merits of building to the capacity you envision or phasing the project to grow over time. On one hand, the bold vision inspired people and helped galvanize support. The timeline and deliverable was discrete and the full build-out allowed major activities to quickly get out of the gate. On the other hand, there were risks associated with creating excess capacity, particularly as the economy slowed.



Photo by Nic Lehoux, Courtesy of Northwest Maritime Center

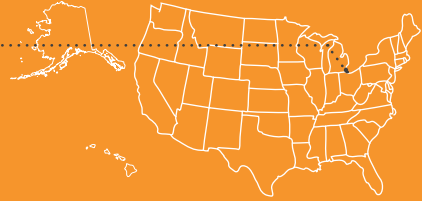
DIVERSIFY AND PARTNER

Diversification in partners, funding, and programming have contributed to project success. The diverse mix of partners strengthened support for the project and brought the range of expertise and resources necessary to achieve the vision. Diversification of revenue includes such strategies as expanding programming to include classes in the off season, and making the venue available for rental for public and private events.

MANAGE EXPECTATIONS

Lessons regarding partner expectation emerged in two areas. First, while capital campaigns are often attractive to donors, it is important to be clear about and plan for funding of on-going programming and operations. Second, significant community engagement in project visioning was valuable and necessary, however, it would have been helpful to more carefully address the expectations of people providing input, particularly given the long planning and implementation horizon. Related to the issue of long planning horizons is the need to be responsive and flexible to changing conditions, while maintaining a commitment to the core vision.

MONROE, MI
**RIVER RAISIN NATIONAL
HISTORIC BATTELFIELD**
CULTURE, RECREATION, TOURISM



Historic battlefield gains National Park Service status and in the process contributes to recreation, culture, education and redevelopment in the area.

OVERVIEW

River Raisin Battlefield – the site of a large and significant engagement in the War of 1812 – lay buried under a paper mill for nearly 100 years. Although hidden, the site’s historic value was recognized with designation as a Michigan Historic Site in 1956 and listing on the National Register of Historic Places in 1982. The desire to recover and interpret the battlefield grew over time, with public, private, and civic organizations contributing expertise, funding, and other resources to realize the vision.

A small section of the site became available in the mid-1980s and was purchased with the intent of creating an interpretive experience. In 1990, the county’s Historic Commission and Historic Society opened the River Raisin Battlefield Visitor Center on the parcel. In 1995 the mill closed, further catalyzing efforts to reclaim the battlefield and ensure that its historical and archeological significance were preserved and shared. Restoration of the site included demolition of the abandoned paper mill and remediation of contaminated land. A number of local, state, and national partners contributed to the effort, culminating in the designation of River Raisin Battlefield into the National Park System in 2010.

Development on the site includes a Visitor Center and auxiliary shelter for educational activities and events. The site links to the River Raisin Heritage Trail, connecting the battlefield to the river, town, and Sterling State Park.



Photo Courtesy of National Park Service

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

When the riverfront’s paper and automotive industries declined, the community lost a significant number of jobs. While the River Raisin Historic Battlefield project will not replace all of those jobs, it contributes directly and indirectly to local economic vitality. Leveraging a community asset, the project is supporting the growth of tourism, film, and recreational business. In addition, efforts are under way to expand the site to include a monument and museum pertaining to General George Custer, a historically significant military officer who spent much of his life in Monroe. Brownfield redevelopment on adjacent properties is also taking place and contributing to job creation and tax payments. These include, for example, an award-winning 45-acre housing development and a wind turbine manufacturing plant that has a training partnership with the community college.

NATURAL RESOURCE STEWARDSHIP

Repurposing the battlefield site and adjacent parcels required remediation of pollution caused by the prior industrial uses. Clean-up of the land and river was a partnership, benefiting human and environmental health and facilitating recreation and tourism based economic development.

COMMUNITY WELL-BEING

The project has contributed to the community's sense of history, culture, and pride, while making a historically significant resource available to a wider audience. Educational opportunities serve local residents and visitors, providing insights into prior ways of life and changing relationships among peoples and nations over time. The site is within walking distance of downtown and connects to an 8-mile linear park constructed to universal access design standards that provides access to historic sites, parks, and natural features.

KEY STRATEGIES AND LESSONS LEARNED

GET YOUR NUMBERS RIGHT

Feasibility studies were based on realistic, conservative estimates. Project leaders observed how other communities had based economic strategies on overly optimistic projections and then wrestled with the consequences. One lesson is to ensure that the feasibility study is indeed that, and not a justification study. A related issue is the need to be explicit regarding assumptions embedded in the feasibility analysis – for example, whether the marketing and staffing is in place to generate the estimated number of potential visitors.



Photo Courtesy of National Park Service

ANCHOR EFFORTS IN PRAGMATISM, PARTNERSHIP, AND PERSEVERANCE

The project began with an interest in preserving and interpreting an important historical and cultural resource. Ideas and partnerships evolved over time. The project leaders moved at a pace and scale appropriate to the resources at hand, neither overpromising results nor selling short the value of protecting and enhancing important cultural and environmental features. Along with perseverance and patience, partnership was key – including contributions by local universities, historical societies, and local, state, and federal agencies – as was the ability to recognize and act upon emergent opportunities such as brownfield remediation assistance, potential land acquisitions, or compatible and synergistic development.

ROHNERT PARK, CA SONOMA MOUNTAIN VILLAGE MIXED USE DEVELOPMENT



Empty suburban industrial site is reconfigured as an environmentally friendly mixed-use neighborhood.

OVERVIEW

Forty miles north of San Francisco, a 200-acre abandoned industrial office park is being transformed into a vital mixed-use community with businesses, homes, parks, open space, and community facilities. Sonoma Mountain Village (SOMO) in Rohnert Park, California is designed for triple bottom line impact and is the first North American project to receive One Planet Communities (OPC) designation—a development approach that aims to create high quality lifestyles with an “ecological footprint” in balance with the earth’s ability to generate resources and absorb waste. One Planet Communities are based on ten sustainability principles (zero carbon, zero waste, sustainable transport, local and sustainable materials, local and sustainable food, sustainable water, natural habitats and wildlife, culture and heritage, equity and fair trade, health and happiness), though each project’s action plan is tailored to the country, culture, and site.

Codding Enterprises, a family-owned local developer, bought the property in 2005 after Agilent Technologies closed its manufacturing facility. The developers identified a number of factors favorable to mixed-use development on the site, including a manufacturing and commercial campus, existing infrastructure, and proximity to residences, commercial development, rail and a university. An interest in impact beyond green building led the company’s Chief Sustainability Officer to suggest the One Planet Communities Program. The first phase of development is focusing on commercial leasing of the existing buildings and currently has

16 businesses, a business incubator, and a restaurant and event center. Groundbreaking on homes has been slowed by current economic conditions, but is expected to begin in 2014. Presently, feasibility studies are underway for a number of cutting-edge condominiums above existing space. As a triple bottom line economic development project, SOMO is attracting and generating quality jobs, contributing to the tax base, conserving natural resources, and providing services and amenities for both new and existing residents.



Photo Courtesy of Codding Enterprises

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

SOMO’s commercial buildings are currently home to more than 550 jobs, with plans to reach 1,840 permanent onsite office and civic jobs and 732 service and retail jobs. These jobs are helping to fill the void left when Agilent Technologies left and 2000+ jobs were lost. Job quality is a focus, with an emphasis on high wage sectors and well-paying construction jobs. Codding Enterprises worked with the Accountable Development Coalition, a local

nonprofit group, to create Sonoma County's first-ever Community Benefits Agreement (CBA), which includes agreements regarding payment of union-equivalent wages and benefits on commercial construction projects (jobs are open to both union and non-union contractors), responsible contractor provisions, and promoting the hiring of local residents by business tenants and the developer through the creation of an on-line job bank. The agreement also stipulates payment of living wages by Coddling Enterprises to its SOMO employees.

SOMO is home to the NorthBay iHub at the Sonoma Mountain Business Cluster, a nonprofit business incubator specializing in sustainable resources and socially-relevant technologies. The incubator assists startup companies by providing mentoring and coaching, investment resources, support networks, and office space and services. The facility has excellent infrastructure and low energy bills thanks to two megawatts of on-site solar panels and investments in energy efficiency and conservation.

Sonoma Mountain Village is having a positive impact on the city's fiscal health through increased tax receipts (property and sales, with plans for a hotel), development fees, and job creation. Schools that have experienced declining enrollments will benefit from the projected increase in school age population. The developers have also agreed to provide a new fire station to serve southern Rohnert Park and a new first response fire vehicle. The City's grant for the Sonoma Mountain Business Cluster was contingent on the incubator matching the funds dollar for dollar and not relocating for a minimum of six years.

NATURAL RESOURCE STEWARDSHIP

Environmental quality is a central principle of the project and is manifest in building, site design, and operations. Solar photovoltaic arrays provide 100 percent of on-site energy today and increased capacity is expected to serve the completed project exclusively with renewable energy. Water conservation is incorporated into construction and landscaping. The reuse of existing buildings has meant significantly less resource use, and waste

diversion rates exceed 95 percent. Environmentally friendly materials have been used in construction (e.g., FSC certified wood, Greenguard certified furniture), complemented by an emphasis on avoided materials and reused materials. Buildings are designed to maximize access to natural daylight and fresh air to promote health and well-being as well as energy conservation. Showering facilities and storage lockers are available for employees who commute by bicycle. Pesticide use has been limited, and landscaping will include gardens and food-producing plants such as fruit trees, as well as habitat for bees and other pollinators. Thirty-five acres will be placed in a permanent open space conservation easement. The project was selected to participate in the U.S. Green Building Council's LEED for Neighborhood Development (ND) program and received the highest level – Platinum- certification. One of the site's largest tenants, Comcast, received LEED Platinum certification for its 35,000 square foot building. Environmental quality is contributing to the marketability of the site, both due to the amenity factor as well as the cost savings being realized from investments in efficiency.



Photo Courtesy of Coddling Enterprises

COMMUNITY WELL-BEING

Sonoma Mountain Village is designed as a healthy, environmentally friendly, high quality place to work and live. Community completeness is a central organizing principle, with all homes to be located within a five-minute walk of basic daily services, including groceries, daycare, schools, offices, transit, restaurants and cafes, a gym, parks and sports facilities. The project is integrated with the larger

community via regional transit and will be easily accessed by pedestrian walkways and bicycle paths. The development's form and scale are designed to foster community connection and sense of place – for example, inviting informal interaction with “nodes” along sidewalks, public parks, pedestrian-scale street lighting, and a central town square.

The project is also designed to be affordable to a range of household sizes and income levels. The affordable housing target defined in the community benefit agreement guarantees a minimum of 30 percent of homes as affordable, with 5 percent deed-restricted for households at or below 50 percent average median income (AMI), 10 percent deed-restricted at 80 percent AMI, and 15 percent sold at affordable rates between 80 and 120 AMI without deed restriction. Nearly all buildings will meet universal accessibility guidelines, which exceed federal requirements. The community is becoming a hub for sport and fitness activities and the Event Center is serving as a community anchor, hosting three to five events each week with priority given to groups with environmental and social sustainability missions.

KEY STRATEGIES AND LESSONS LEARNED

DIVERSE INPUT CONTRIBUTES TO A STRONGER PRODUCT

The developers were able to go beyond a simple focus on green building to a plan for tangible improvements in a range of environmental and community goals by working with BioRegional (the international nonprofit organization that leads One Planet Communities) and the Accountable Development Coalition (the local alliance of community organizations). The OPC program defines ten principles that all projects must address, with implementation designed to fit each context. The developers worked closely with the local community to ensure that the project is responsive to local conditions and concerns. Partnering with BioRegional, the project benefited from the expertise of leaders in sustainable development and

gained the credibility that comes with third-party certification programs. Partnering with community representatives, the project benefited from local expertise regarding conditions and solutions, and built relationships important for navigating the project over time. The benefits of cross-pollination have also emerged when working with tenants; for example, helping identify opportunities to green their practices.

IMPLEMENT A STRONG REPORTING FRAMEWORK

One Planet Communities Sustainability Action Plans ensure that rigorous and meaningful sustainability principles are incorporated into the development while responding to the context of a project. The One Planet Communities agreement specifies that Coddling Enterprises will submit Sustainability Action Plan monitoring reports every six months until 2020 and BioRegional will conduct annual independent audits of performance until that time. Progress reports provide feedback on accomplishments and identify areas for improvement. Such a framework provides a valuable mechanism to support continuous learning, improvement, and achievement of goals and fosters international collaboration and competition between the One Planet projects around the world. act upon emergent opportunities such as brownfield remediation assistance, potential land acquisitions, or compatible and synergistic development.

PLAY FROM YOUR STRENGTHS AND ADAPT AS NECESSARY

Given the site's existing industrial campus and the region's need for jobs, initial efforts at Sonoma Mountain Village focused on business development. The first phase of housing was stalled by the national housing crisis and prolonged recession, so the focus on commercial tenants also helped the project stay financially viable during a difficult economic period. In addition, the project plans to adapt as necessary to changing market conditions; for example, shifting some focus from single-family homes to apartments and condos. At the same time, while plans may be modified to respond to

changing conditions, commitments to overarching goals and principles remains.

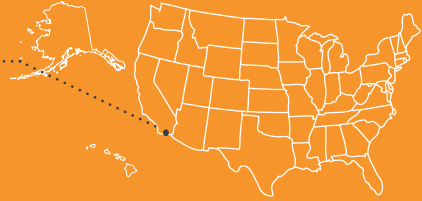
COMMUNITY BENEFIT AGREEMENTS CAN BRING BETTER RESULTS FOR DEVELOPERS AND THE COMMUNITY

Community Benefit Agreements (CBAs) are a policy tool that can be used to ensure that development projects respond to community priorities while meeting developer's interests. Typically, CBAs are negotiated through a coalition of community-based organizations that represent a range of livability issues (e.g., wages, environment, health). Negotiations between the community and developer that are well-structured and facilitated can result in better understandings about respective issues and the articulation of mutually beneficial agreements. The SOMO case illustrates how developers can productively engage with community members to identify project improvements and win crucial community support, and how community members can effectively engage with developers to define workable strategies that promote community goals.

SAN DIEGO, CA

THE VILLAGE AT MARKET CREEK

MIXED USE DEVELOPMENT



A development model focused on resident ownership of neighborhood change brings jobs and amenities to a neglected corner of the city.

OVERVIEW

The Village at Market Creek is a community-driven, mixed-used development being cultivated on sixty previously neglected, underutilized acres in southeastern San Diego. Completed projects include a commercial and cultural center, including the area's first supermarket in decades, a conference and events center, a business park, a vibrant outdoor amphitheater and cultural gathering place, a hands-on science enrichment center, an urban arts park, and two sections of creek restoration with footpath and interpretive features. The grocery store and amphitheater opened in 2001, the Plaza was completed in 2005, and the conference center and business park opened in 2008. The project is served by light rail and regional bus lines. Trolley Residential, the next phase of the project, may break ground as soon as 2013.



Photo Courtesy Jacobs Center for Neighborhood Innovation

Located in one of the most culturally diverse areas of the city, The Village at Market Creek has focused on resident engagement across cultures, neighborhoods, generations, and faiths since its inception. Engagement efforts are shaped by the belief that effective and sustainable change can only be achieved with resident ownership of planning, decision-making, implementation, and assets of change.

The project has led to significant job creation, as well as improvements in quality of life, health and safety, community capacity, retail sales and revenue generation. The project has received numerous honors and awards, including a LEED-ND Silver certification and a designation as one of the thirteen catalyst projects for the State's Sustainable Strategies Pilot Program. These achievements are particularly remarkable given the project's location in an area challenged by under-investment and racial divisions.

TRIPLE BOTTOM LINE HIGHLIGHTS

ECONOMIC VITALITY

When the first 20 acres of land for the project was purchased, there was one business with seven jobs on the site. Today, there are 36 businesses across the 60 acres of The Village providing 245 full-time jobs and 345 part-time jobs. An initial planning study identified that the lack of stores and services in the area was resulting in approximately \$60 million in economic leakage. Today, residents are benefiting from the economic gains that they help to generate. Economic activity for The Village totaled \$92.7 million in 2010. Market Creek Plaza, the cornerstone of The Village, accounted for just under \$50 million of that activity.

The project focuses on creating and keeping jobs in the neighborhood, with deliberate attention to removing barriers to business growth, employment, and ownership. Strategies for the local HUBE (Historically Underutilized Business Enterprise) contractors who built the Plaza and the Joe & Vi Jacobs Center included mentor-protégé programs, working lines of credit, and access to insurance and business skills training. More than 70% of the construction contracts to date have been awarded to women and minority-owned businesses. Approximately 65% of employees at the Plaza are from the neighborhood, and community employment in the Village overall is 49% (with more than 72% minority employees). Community benefit incentives have been incorporated into national tenant lease contracts that encourage businesses to maximize the impact of their businesses on the community. Commercial leases may include rent reductions based on the percentage of employees who live in the community. Similar incentives are being considered for lease agreements with locally owned and operated businesses, such as percentage rents that are based on gross sales and allow business owners time to build their customer base. Small, locally owned businesses have struggled during the economic downturn and attention is being given to how best to position these businesses for resilience. Additionally, construction contractors are being selected based on a Community Builders Program. The program bases 50% of the bid on value and experience and 50% on community benefits like hiring local residents and using local vendors. Training programs are offered in public safety, non-profit management, and culinary arts and hospitality.

Beyond fostering opportunities for employment and business development, the project is helping residents accrue financial benefit from the investment. In 2006, the country's first Community-Development Initial Public Offering (CD-IPO) was launched, providing residents, volunteers, and workers in the neighborhood an opportunity to become shareholders in the project. The project is doing well and the CD-IPO shareholders have received a 10% return on their investment each

year. These shareholders own 20% of Market Creek Partners, LLC, the for-profit entity that made resident ownership of the Plaza possible. Another 20% of the shares are owned by a resident-controlled community foundation, called the Neighborhood Unity Foundation. The Neighborhood Unity Foundation uses the dividends to fund resident-led projects in the community. There is a strategy to transfer the remaining 60% of shares, held by the Jacobs Center for Neighborhood Innovation, to the community by 2018. In fact, a group of 177 resident investors have re-invested their dividends into a Community Investment Fund to prepare for a future community investment.

NATURAL RESOURCE STEWARDSHIP

To date, more than 32 acres of blight have been removed. Construction has included non-toxic and recycled materials, as well as energy efficiency and water conservation technologies. Day lighting has been used for energy savings and beauty. The Chollas Creek restoration is an award-winning project that includes wetland mitigation, habitat creation, flood control, public education, art, and walking paths. In operations, green practices include a recycling program and the use of linens and china in the event center rather than disposable serveware. About two acres of blight are being remediated as part of the site preparation for 52 units of affordable housing at Trolley Residential. The new homes will meet LEED-Silver certification criteria including green building materials, water conservation utilities, solar power and drought-resistant landscaping.



Photo Courtesy Jacobs Center for Neighborhood Innovation

COMMUNITY WELL-BEING

A complete community is being built where services were lacking. The project is walking distance to bus and trolley lines, the Plaza's anchor tenant is the first grocery store in the area in more than thirty years, a mix of uses and affordable housing are being developed, and there is increased integration among school, family, and health programming. Healthy living is fostered both through the physical infrastructure of compact, mixed-use, environmentally friendly facilities, as well as the social infrastructure of strengthened family and community networks, and economic opportunity. The housing phase of the project emphasizes affordability, with priority given to existing residents according to guidelines that are currently being developed by a resident affordable housing guide team. There will be between 800 and 1,000 affordable homes when the residential projects are completed, with affordability restrictions established in perpetuity.

A sense of place and community identity has been fostered through the creation of inviting public spaces and the cultivation of cross-cultural sharing. An Art and Design Team that included residents worked to create a look and feel that would reflect the community's diverse cultures in everything from the architecture of the buildings to public art installations. More than 1,000 local children worked with community artists to create hand-painted tiles for a mural. Eight cultural houses have been built, representing the traditional cultures from the surrounding community: African American, Filipino, Laotian, Mexican, Samoan, Somalian, Chamorro (Guamanian), and Sudanese. The houses include displays, art, and information about each culture.

KEY STRATEGIES AND LESSONS LEARNED

INVEST IN PEOPLE AND PLACE

The Village at Market Creek is a leading example of how neighborhood change can successfully engage residents in defining and realizing community goals. Here, listening is a process, not an event,

and development is something done with, not to or for, the community. Residents set priorities for the project and participate in decision-making, work teams, and governance. Investments in community capacity building are a priority in order to ensure that residents can effectively engage in development efforts. Project organizers serve as talent scouts, helping to nurture residents' unique talents and gifts, including youth. Coordinators are hired from the community and represent its diversity. Investing in people also means attending to the human spirit at the center of this work, making time for celebration and cultivating beauty, connection, and joy.

BUILD BRIDGES

The project takes a systems approach to development, addressing a range of issues that impact community vitality — from land use and transportation to education, health, safety, and employment training. Issues being addressed within the work of the multicultural teams have led to deeper their understanding and appreciation



Photo Courtesy Jacobs Center for Neighborhood Innovation

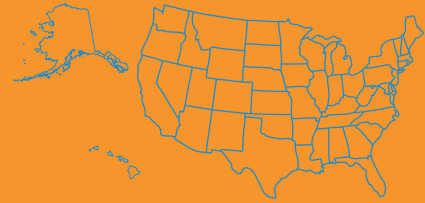
of each other while accomplishing specific tasks. In 2010, 916 residents participated in 44 working teams, each focused on specific issues related to development of The Village and broadening resident engagement and ownership. This process has created a network of people who know how to work and learn together—not a trivial matter in an area that has had a history of distance or conflict between diverse groups. The systemic approach to development has also necessitated and benefited from partnerships with local, state, and federal agencies as well as private, public, and philanthropic organizations.

**TO GO FAST, GO ALONE;
TO GO FAR, GO TOGETHER**

Drawing on an old African proverb, the project's success is anchored in a strategy of patient, responsive, collaborative engagement. The organizers of this project appreciate the need to meet people where they are, to move at a pace comfortable for participants, and to think in the long term but break the journey into manageable chunks. This includes creating short-term (e.g., 90-day) work groups that have a concrete purpose and endpoint. While participants typically stick around for the next increment, breaking things into shorter time frames creates less daunting commitments.

ENGAGE IN CONTINUOUS LEARNING

Monitoring and mid-course correction are important to any project, but particularly so for one that is breaking new ground, trying innovative approaches, and spanning a long time horizon. The Village at Market Creek initiative is well documented, with continuous improvement tied to setting benchmarks and tracking progress. The information is used internally and is also disseminated widely so that others may benefit from lessons learned. Challenges have ranged from permitting delays to a massive downturn in the economy. Whatever the rough spot, there is an opportunity for reflection and mid-course correction. By doing so the project continues to make remarkable progress, with triple bottom line benefits accruing and lessons learned informing future efforts.



Integrated approaches to infrastructure investments can facilitate economic development while maintaining environmental quality, improving health and well-being, and managing budgets for long-term fiscal responsibility.

OVERVIEW

Key infrastructure such as water, sewer, transportation, communications, and energy are essential to economic development. However, all infrastructure investments are not created equal. Their design and implementation can significantly impact economic, environmental, and social outcomes. In today's world, it is imperative that infrastructure investments deliver triple bottom line results – meaning they conserve and protect natural resources, contribute to quality of life, are cost effective, and provide access to opportunity for a diverse range of individuals, businesses, and communities.

The following resources help to illustrate how the triple bottom line is being incorporated into infrastructure investment design and decision-making. These resources are in no way an exhaustive compilation; rather, they provide examples of how TBL principles are being applied in practice. Illustrations are provided for rating and review systems, ports, and a community investment strategy

RATING AND REVIEW SYSTEMS

A number of rating and review systems have been developed for infrastructure investments. These range from rating systems that serve a national audience to review systems applied within a specific local, regional, or state agency. Three rating systems are highlighted here: Envision, INVEST, and GreenLITES.

ENVISION

Envision™ is an infrastructure rating system that considers community, environmental, and economic benefits for most types and sizes of infrastructure projects. The system is designed to address North American civil infrastructure such as roads, bridges, railways, ports, dams, water and sewer system, aiming to yield high performing infrastructure solutions that not only “do the project right,” but “do the right project.” This is achieved in part by applying a lifecycle approach (consider full costs and benefits across the life of a project) and encouraging productive collaboration among stakeholders.

The Envision Rating System is a collaboration between the Zofnass Program for Sustainable Infrastructure at the Graduate School of Design at Harvard University and the Institute for Sustainable Infrastructure (ISI) – a non-profit organization founded by the American Council of Engineering Companies (ACEC), the American Public Works Association (APWA), and the American Society of Civil Engineers (ASCE). When complete, the Envision system will include a suite of tools designed for various project phases (planning and design, construction, operation and maintenance, deconstruction and decommission) and stages (exploration, assessment, performance, decision support).

The rating tool is comprised of sixty credits grouped into five categories: Quality of Life, Leadership,

Resource Allocation, Natural World, and Climate and Risk. Each of the five categories includes two or three sub-categories. The degree to which a project meets the evaluation criteria for each of the sixty credits is graded on a one to five level of achievement scale. Levels of achievement include: restorative (improves system), conserving (net zero impact), superior, (remarkable performance), enhanced (on the right track), improved (encouraging), and conventional (state of the practice).

GREENLITES

GreenLITES (Green Leadership In Transportation Environmental Sustainability) is a certification program used internally by the New York State Department of Transportation (NYSDOT) to incorporate sustainability into transportation planning, design, and operations. The program is modeled after the U.S. Green Building Council's LEED program and the University of Washington's Greenroads program.

The rating questions are grouped into five categories: sustainable sites, water quality, materials and resources, energy and atmosphere, innovation or unlisted. Each category includes sub-categories; for example, the sustainable sites category includes alignment selection, context sensitive solutions, land use and community planning, wildlife protection and enhancement, and vegetation protection and enhancement.

Transportation projects and operation programs are scored based on the extent to which they address sustainable practices. There are four levels of certification: Certified, Silver, Gold, and Evergreen. Projects and programs are self-certified, however, a review by the Main Office is required for those that are designated Gold or Evergreen, or have points in the innovation category. A complementary Project Solicitation Tool was created to assist communities and metropolitan planning organizations to identify and design projects based on triple bottom line criteria.

INVEST

INVEST (Infrastructure Voluntary Evaluation Sustainability Tool) is a self-evaluation tool to help integrate sustainability best practices into highway and road projects. INVEST can be applied to projects or programs and includes a "basic" scorecard for smaller projects. Developed by The Federal Highway Administration (FHWA), the tool is not required and is not intended for comparison across projects and agencies. Version 1, released in 2012, incorporates end-user feedback on the web-based Beta Version.

PORTS

Ports provide crucial infrastructure that promote mobility and economic activity. Individual ports have taken leadership in addressing sustainability issues, as have industry networks. For example, the Sustainable Aviation Guidance Alliance (SAGA) has produced a guidebook and database to help airports plan, implement, and maintain sustainability programs and practices (<http://www.airportsustainability.org/>). Below are a few examples of how ports, both air and sea, have incorporated sustainability into their planning and operations.

PORTLAND AIRPORT

The creation of a long-range development plan for the Portland International Airport (PDX) centered on engagement, collaboration, and triple bottom line principles. Termed PDX Airport Futures, the effort resulted in a Master Plan for the airport through 2035 as well as intergovernmental agreements formalizing commitments to implement the plan. The plan accommodates a projected doubling of annual passenger volume while addressing environmental and social issues such as watershed improvements, noise and traffic impacts, and waste and water recycling. The plan, which has received national attention, can be found at: <http://www.pdxairportfutures.com/LearnMore.aspx>.

PORT OF LOS ANGELES

The Port of Los Angeles, the nation's busiest container port, has infused a triple bottom line framework to its vision, mission, and strategic plan and tracks its

progress in an annual Sustainability Report covering eleven issues and twelve programs.

Identified issue areas include health risk reduction, air quality, energy and climate change, water quality, stakeholder relationships, habitat protection, open space and urban gardening, land use, local economic development, environmental justice, and green growth. Issue performance is scored on a 0 to 6 scale, ranging from no attention (0) to achievement of goals and targets established by the city and goods movement industry (6).

The Port has defined twelve programs to address these issues, with most programs addressing multiple issues. Programs range from green design and construction to sustainable lease agreements, clean air improvements, stormwater management, environmentally preferable purchasing, and community and economic development. Program performance is scored on a 1 to 5 scale, ranging from in conception or planning phase (1) to comprehensively implemented (5). The Port also funds research and pilot programs and provides recognition to tenants and technology innovators.

Key to the Port's successes has been engagement and collaboration with stakeholders, a cross-cutting approach to issues, a mix of regulatory and market-based approaches, reporting mechanisms, feedback loops, strong leadership and a culture of innovation.

COMMUNITY INVESTMENT STRATEGY

An example of how triple bottom line approaches to infrastructure investment are addressed at the local level can be found in Hennepin County, Minnesota – a diverse mix of community types ranging from dense urban centers to rural areas. In order to effectively and efficiently serve these diverse communities, a Sustainable Development Strategy was defined that recognizes and responds to the interconnectedness of regional housing, jobs, and transportation. The Strategy focuses on improving transportation options, enhancing economic development and competitiveness, promoting

equitable and affordable housing, valuing and supporting existing communities. Implementation of the Strategy centers on collaboration across departments, jurisdictions, and sectors as well as an adaptable approach that responds to context and evolves as lessons are learned.

The Strategy includes Community Works projects – large infrastructure investments that can be catalytic for further improvement. These investments are designed to achieve multiple and intertwined benefit by incorporating the following five principles: stimulate economic development, build bridges for effective planning and implementation, maintain and improve natural systems, strengthen communities through connections, enhance the tax base. For example, the Minnehaha-Hiawatha Community Works project aims to enhance the impact of a light rail transit line that was initially designed and constructed with little consideration of broader development goals. The County has engaged stakeholders in a data-driven design and development process, including a two-year effort to identify and prioritize investments along the corridor. The process included a cultural and historic resources inventory, environmental assessment, market analysis, and rail corridor study. Beyond identifying investment priorities, the engagement process has been productive for identifying cost savings, increasing understanding and support for programs, and developing public and private partnerships that achieve better and more cost effective results.

KEY STRATEGIES AND LESSONS LEARNED

Despite diversity of geography and project type, a number of common themes can be identified in these efforts to promote triple bottom line outcomes for infrastructure investment.

BALANCE THE BOOKS

A triple bottom line approach considers social, economic, and environmental factors that often are not accounted for in financial terms. These costs across a project lifecycle are very real and cannot be ignored simply because they are not typically or easily measured. Efficient and effective investment is facilitated when true costs and benefits of a project are accounted for.

IMPLEMENT SYSTEMS FOR CONTINUOUS LEARNING TIED TO IMPROVEMENT

Long-term success is facilitated when performance is monitored and feedback integrated into the system. Each of the TBL approaches highlighted here have defined goals and operationalized ways to track performance and adaptively respond.

DESIGN FOR RESILIENCY

Triple bottom line approaches promote resiliency by addressing uncertainty in a range of factors such as fuel supply, population demographics and consumer demand, and natural or manmade disasters. Projects that are able to reduce vulnerabilities and adapt to change promote long-term resiliency.

CASE SOURCES

Cases were written based on interviews with key program staff, as well as a review of planning documents and media reports. Interviews and follow-up correspondences were conducted between 2011 and 2012. The main sources from which each case was drawn are provided below. Our sincere thanks are offered to the interviewees who generously shared their time and insights. All interviewees were provided an opportunity to review the case draft, however, the authors are solely responsible for case content. Appreciation is also extended to the photographers and agencies that gave permission to use their images.

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