

## Brownfields Impacts Quantified – Massachusetts Brownfields Tax Credit Serves Multiple Public-Purpose Objectives

*Evans Paull, Redevelopment Economics*

In Whitinsville, Massachusetts, the long-vacant and historic Whitin Mill was redeveloped by Alternatives Unlimited as a center to help people with developmental and psychiatric disabilities develop a new life purpose. In Worcester, an 11-acre vacant and derelict industrial parcel was redeveloped as Gateway Park, a bioengineering and biotechnology center that represents \$84 million in new investment and employs 440 people. In Boston's Back Bay section, an under-utilized parking lot was developed as The Clarendon, a mixed use and mixed market rate/affordable project, providing 282 units within three blocks of three transit stations. The LEED-certified project is projected to reduce carbon emissions by 1,383 metric tons, annually, relative to alternative greenfields development.

What these seemingly disparate development projects have in common is that each ran into significant contamination issues that might have stopped progress and left the community with blighted and contaminated land; however, each project was able to take advantage of the Massachusetts Brownfields Tax Credit (BTC) to recover a significant portion of the cleanup costs, thereby overcoming a key hurdle and leading to successful redevelopment.

The three projects represent the diverging public objectives that are often involved with brownfields projects: economic development, environmentally-responsible growth, and social equity. The just-concluded analysis of the Economic, Environmental, and Fiscal Impacts of the Massachusetts Brownfields Tax Credit found successful achievement of each of those objectives, plus one more: *BTC projects produced revenues to the Commonwealth that exceeded the original tax outlay by more than seven to one.*

**Brownfields Tax Credit** – The credit, adopted in [a 1998 reform bill](#), encourages brownfields redevelopment by lessening the impact of cleanup costs on the bottom line. Taxpayers (including non-profits) are allowed a credit against their Massachusetts tax liability for net environmental response and removal costs incurred on properties located within an economically distressed area. The amount of the credit varies according to the extent of the environmental remedy. The BTC is 25 percent for cleanups that result in activity and use restrictions (such as limiting the

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### ECONOMIC DEVELOPMENT



**44 completed BTC projects generated:**

- 14,000 temporary construction jobs
- 7,110 direct permanent jobs (15,900 counting indirect jobs);

*Gateway Park in Worcester, pictured above, was one of two BTC projects that successfully targeted cutting edge life sciences research and bio-technology businesses.*

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**Craig L. Blais, President & CEO, Worcester Business Development Corporation:**

*"Brownfields Tax Credits help close the financial gaps that exist in many urban, brownfields projects. The credits allow the WBDC to continue their mission of expanding the tax base and creating jobs in and around the City of Worcester".*

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remediated property to industrial or commercial use) or 50 percent for cleanups that achieve the higher cleanup standard associated with unrestricted use of the remediated property. The credit was made transferable in 2006.

**Study Scope – [Redevelopment Economics](#)** had access to information about 56 projects, representing \$53.8 million in BTC outlays. These projects represent just over half (51.8%) of all Brownfield Tax Credits approved by the Commonwealth in the years 2009 to 2012. Of those 56 projects, 44 were completed or under construction, representing \$38.8 million in BTC credits.

**Leveraging Investment and Jobs** – The BTC completed projects represented \$1.99 billion in direct new capital investment and \$3.9 billion in total (direct and indirect) capital investment. BTC outlays leveraged other funding sources at a rate of \$46.70/other funds to \$1.00/BTC. Public redevelopment funding from all sources represented 5.4 percent of total capital investment, for a leverage ratio of \$18.60/total capital investment to \$1.00 of public redevelopment funding. The median commercial project involved a leverage ratio of \$3,751/BTC outlays to produce one permanent job. These leverage ratios compare very favorably to national benchmarks.

**Economic Distress, Affordable Housing, and Social Equity** – The 1998 statutory authority for the program limited eligibility to the Commonwealth’s designated Economically Distressed Areas; therefore, the 14,000 temporary jobs, 7,110 permanent jobs, and \$1.9 billion in investment should all be counted as assisting areas of the State that need the infusion of economic activity.

In 2006, the BTC program became transferable, which led to significant use of the credit by non-profits and CDC’s. Eight of the 44 completed BTC projects were non-profit-led development. Affordable units accounted for 17 percent of the residential units produced in BTC.

**Generating Taxes and Saving Infrastructure Costs** – Business occupants of BTC completed projects generate \$47.8 million, annually in direct state tax revenues (and \$88.3 million in direct and indirect state taxes). Because retail is viewed as a dependent, non-generating sector, one could subtract that portion out, and the industrial-office-tech-hotel sectors would still generate \$35.6 million in direct state revenues annually (\$71.4 million if indirect is included). Under the conservative scenario of counting only direct non-retail impacts, the state is more than recouping its multi-year BTC investment (\$53.8 million) in one full year of occupancy by gaining \$33.6 million in construction-related taxes and \$35 million in revenues derived from non-retail business operations.

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## SOCIAL EQUITY



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*In addition to jobs and investment in distressed areas, completed BTC projects produced:*

- 636 units of affordable housing;
  - 198 assisted living units;
  - 22 units for the rehabilitation of addicted persons;
  - 55,000 sq ft for a community health center expansion;
  - 37,000 sq ft to enhance services for developmentally and psychiatrically disabled persons. Alternatives Unlimited renovation of the historic Whitin Mill is pictured above.
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Projected over ten years, the Commonwealth recoups \$7.74 in direct revenues (or \$13.56 in direct and indirect revenues) for each \$1.00 of BTC credits.

Aside from generating tax revenue, BTC also forestalls infrastructure investments that would otherwise be needed to accommodate growth. The state and local government cost savings attributable to BTC projects is between \$66 and \$104 million, which would indicate that taxpayers are more than recouping BTC outlays just in forestalled infrastructure investments.

### **SMART GROWTH AND CO<sub>2</sub> REDUCTION**



*BTC projects, such as The Clarendon (located in Boston's Back Bay section, pictured above), have smart growth location characteristics and can be credited with:*

- *Reducing vehicle miles traveled (VMT) and CO<sub>2</sub> emissions by 45 percent for residential/mixed use and by 25 percent for commercial projects (both relative to alternative sprawl);*
- *"Saving" 22,100 metric tons of CO<sub>2</sub>, which is the equivalent of taking 4,300 cars off the road each year.*

*Environmental Protection and Smart Growth* – Direct environmental gains are as follows:

- BTC projects have spent \$127.9 million in remediating properties to the Commonwealth's cleanup standards (this includes projects where remediation is complete but the redevelopment is not complete);
- 70 percent of BTC projects are being cleaned up to an unrestricted use standard, which will reap both environmental and fiscal rewards, the latter due to lowered requirements for State monitoring of institutional and engineering controls.

The following findings also indicate that BTC projects have the smart growth characteristics that are strongly correlated with indirect environmental gains:

- Residential BTC projects had an average density of 15.6 units per acre, about four times average suburban densities of 3-5 units per acre.
- The weighted average Walkscore of all BTC projects was 74.4, which ranks as "very walkable."
- At least four of the larger residential/mixed use BTC projects (838 units) were built with mass transit access in mind and clearly qualify as transit-oriented development.

Following from the above, Redevelopment Economics concluded that BTC projects reviewed, in comparison to alternative sprawl, can be credited with:

- VMT and CO<sub>2</sub> reduction, cited in the sidebar, above.
- Over 1,300 acres of farmland and greenfields were

- preserved by accommodating growth in existing communities;
- Stormwater run-off was lowered by 50 percent in comparison to alternative development.

*Conclusion* – Designed simply as an incentive to clean up contaminated land, the Commonwealth is additionally getting the benefit of: induced investment in distressed areas; expanded housing choices; job creation in existing communities; reduced greenhouse gases; enhanced community services; and foregone infrastructure spending.

*About the Study* – The study was prepared for presentation to NAIOP Massachusetts, the Commercial Real Estate Development Association, and the Massachusetts Economic Development Council. The full study has not been released, but will be available in early 2013.

*About Redevelopment Economics* – Redevelopment Economics, based in Baltimore, has prepared this report. The firm's principal (and the principal author of this report), Evans Paull, AICP, has 35 years of experience in urban redevelopment, with particular expertise in brownfields and sustainable development. Evans has performed economic, fiscal, and environmental impact analysis relative to: the Maryland Historic Tax Credit Program; the Westport Waterfront TOD Project, Baltimore; Powhatan Place, Ranson, West Virginia; Oriole Park at Camden Yards, Baltimore; nine tax increment financing projects, Baltimore; and brownfields investments, generically, for Northeast-Midwest Institute. The firm's involvement in economic and environmental impact analysis is posted here:

[http://www.redevelopmenteconomics.com/economic\\_fiscal\\_and\\_environmental\\_impact\\_analysis](http://www.redevelopmenteconomics.com/economic_fiscal_and_environmental_impact_analysis)