

Atlantic Station, Atlanta, Georgia: A Sustainable Brownfield Revitalization Best Practice¹

*By Christopher De Sousa and Lily-Ann D'Souza
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SITE HISTORY

As a best practice in brownfield revitalization, Atlantic Station is exemplar of sustainable post-industrial redevelopment. The master-planned transformation of an under-utilized steel mill into a mixed-use, transit-oriented community offers a case study of brownfield redevelopment to manage growth sustainably. The case study, however, also underscores the challenges that complicate large-scale urban renewal projects, while offering lessons that other cities considering brownfield redevelopment can benefit from.

The story of Atlantic Station's development begins with the decline of the Atlantic Steel Company. Established in 1901 as the Atlanta Hoop Company, the mill specialized in the manufacture of "wagon wheels and cotton bales."² By the 1920s, production expanded to include "nails, barbed wire, plough shears and galvanized steel" and was reflected in the company's new name, Atlantic Steel.³ When production peaked in the 1950s, more than 2,300 people were employed at the mill, manufacturing 750,000 tons of steel products a year.⁴ In 1979, the mill was purchased by Ivaco Inc., a steel manufacturer based in Montreal, Canada. Atlantic Steel was subsequently forced to scale back its operations as the domestic steel industry collapsed in response to foreign competition in the early 1980s.⁵ The de-industrialization of the mill continued into the 1990s. By 1997, only 400 people were employed by the Atlantic Steel Company. Operations ceased the following year.



¹ Methodological note: Information for this case study was obtained from available project reports, site visits, and structured interviews with key stakeholders, including developers, planners, consultants and community representatives. For any questions, please contact Christopher De Sousa, Associate Professor, Director, School of Urban and Regional Planning, chris.desousa@ryerson.ca. Research assistance provided by Sean Ryan, Jason Tilidetzke, Laura Lynn Roedel, Elizabeth Durkin, and Kevin Duffy from the University of Wisconsin-Milwaukee, and Michael Hayek and Lily-Ann D'Souza from Ryerson University.

² City of Atlanta, Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District (Atlanta: Office of Planning, 2005), p. 15.

³ Western Pennsylvania Brownfields Center, Atlantic Station (Pennsylvania: Carnegie Mellon University, 2008), p. 1.

⁴ Western Pennsylvania Brownfields Center, p. 1.

⁵ Kevin L. Bacon, Jr, Richard Dagenhart, Nancey Green Leigh, and John Skach, The Economic Development – Urban Design Link in Brownfield Redevelopment (Economic Development Journal, Spring 2008), p. 34.



Historic photo of Atlantic Steel (date unknown)⁶

Three conditions guaranteed that the property would eventually be redeveloped: 1) its size; 2) its locational assets; and 3) the rapid population growth in metropolitan Atlanta. Atlantic Steel's manufacturing complex was developed on 138 acres, west of midtown Atlanta. The size of the property therefore presented an unparalleled opportunity for development near Atlanta's downtown core. The property is also adjacent to major transportation infrastructure, such as the Norfolk Southern Railroad and Interstate 75/85, which incidentally serves as its northern and eastern boundaries.

While the site would have been situated at the edge of Atlanta's urban core when it was first developed, by the time the mill closed in the 1990s three residential neighborhoods – Home Park, Loring Heights and Ansley Park – had already come to surround the property. Over time, the Heavy Industrial zoning designation of the Atlantic Steel property became incompatible with the residential character of the surrounding neighborhoods.

Despite the decline of Atlantic Steel, which was reflective of the broader pattern of de-industrialization occurring throughout the country, Metropolitan Atlanta was experiencing an unprecedented level of population growth. As people began to move back into the urban core for the first time in 50 years, Atlanta became the fastest growing city in the Southeast.⁷ And while the decline of Atlantic Steel contributed to the loss of thousands of jobs, it also presented a tremendous opportunity.⁸ The size of the lot in combination with its locational assets and the need for the city to absorb population growth pointed toward the development of a new urban neighborhood.

⁶ US EPA, downloaded November 11, 2012 from http://en.wikipedia.org/wiki/File:Atlantic_steel_mill.jpg

⁷ EPA [1], Atlanta, GA Turns Dixisteel into Atlantic Station (Region 4, n.d.).

⁸ EPA [1].

While the confluence of these conditions generated interest among developers who recognized the site's potential for redevelopment, the property's brownfield status discouraged many of them from investing in it. Even in the context of aggressively sought-after real estate opportunities, developers did not want to assume the financial risk of being liable for the environmental remediation that likely followed decades of heavy industrial activity.⁹ This is arguably an unintended consequence of the CERCLA policy framework.¹⁰ The site, however, was not entirely abandoned and in 1997, a contract between Jacoby Development Inc. (JDI) and Ivaco Inc. was made to remediate and redevelop the Atlantic Steel property. The site was subsequently rezoned in 1998 as 'Commercial and Mixed Use' by the City of Atlanta in anticipation of its redevelopment.¹¹ By then, JDI had partnered with AIG Global Real Estate to finalize the project vision.



Narjoe Timber and Supply Co., just north of Atlantic Station (2010)

PROJECT VISION

Atlantic Station is renowned for its "live-work-play environment," based on a mixed-use New Urbanist and transit-oriented model of development.¹² This contrasts, however, with the original project vision that was put forward for Atlantic Station's redevelopment. Four master plans for the site detail the project vision as it evolved, beginning in 1997, to meet the needs of Atlanta's economic, environmental and social context.

JDI's reputation as an 'entrepreneurial developer' is attributed to its "success building conventional suburban big-box projects."¹³ Not surprisingly then, the original master plan put forward by Jacoby Development Inc. and AIG Global Real Estate (JDI-AIG), perpetuated the "suburban model of land use compartmentalization...The master plan proposed three distinct development areas – a retail mall, a multifamily residential complex, and an office park – separated by landscaped buffers and linked together by a new arterial street crossing the Interstate 75/85 on the east to connect to Midtown Atlanta."¹⁴ The three areas would be developed independently by different developers. The original project vision "concentrated on moving people in and out as quickly as possible. It was large-scale, mass-market-oriented, and included gated garden apartments and industrial uses."¹⁵ This particular project vision,

⁹ R. Dagenhart, N. G. Leigh & J. Skach, *Brownfields and urban design: learning from Atlantic Station* (Transactions on Ecology and the Environment, Vol. 94, 2006), p. 184.

¹⁰ Kevin L. Bacon, Jr, Richard Dagenhart, Nancey Green Leigh, and John Skach, *The Economic Development – Urban Design Link in Brownfield Redevelopment* (Economic Development Journal, Spring 2008), p. 30.

¹¹ City of Atlanta, *Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District* (Atlanta: Office of Planning, n.d.) p. 27.

¹² EPA [2], *Atlantic Station (Atlantic Steel Redevelopment Project)* (Atlanta, 2008).

¹³ Jason Miller, *Evolution of a Brownfield* (New Towns, Spring 2006), p. 1.

¹⁴ Kevin L. Bacon, Jr, Richard Dagenhart, Nancey Green Leigh, and John Skach, *The Economic Development – Urban Design Link in Brownfield Redevelopment* (Economic Development Journal, Spring 2008), p. 35.

¹⁵ Jason Miller, *Evolution of a Brownfield* (New Towns, Spring 2006), p. 1.

however, conflicted with the broader public policy objectives that the City of Atlanta was pursuing to manage population growth sustainably.¹⁶

The City of Atlanta was acutely aware that developing a low-density, suburban-style community would exacerbate existing challenges caused by sprawl.¹⁷ In the absence of natural physical boundaries that would traditionally constrain growth, “the [Atlanta] region has historically witnessed a sprawling, separated land-use pattern.”¹⁸ In fact, Atlanta exemplifies sprawl and is one of the least dense metropolitan areas in the U.S.¹⁹ The City of Atlanta was, therefore, considering a new approach to development, based on the principles of Smart Growth that would encourage sustainable growth while addressing congestion and air pollution. This was particularly important given that Atlanta’s population was projected to continue growing, reversing a 50 year trend. The city’s population had already doubled since 1980 and was “expected to increase...by an additional 2.5 million in the next 25 years.”²⁰ The original master plan was incidentally not well received by the City of Atlanta or the Midtown Alliance, a coalition of stakeholders, prompting JDI-AIG to revise its proposal.

JDI-AIG’s master plan revision benefited from the ideas of Brian Leary, the current President and CEO of Atlanta Beltline Inc. At the time, Leary was a graduate student in the Georgia Institute of Technology’s city planning program. He presented his Master’s thesis, “Atlantic Station: A Place to Live, Work and Play,” to Mr. Jacoby of JDI and was subsequently hired to steer the project’s zoning applications. He eventually became the Vice President of Design and Development of Atlantic Station, LLC. According to Leary, “The master plan went from big-box site, to a sort of ‘macro mixed-use’...to broken-up superblocks with pedestrian areas...Bike lanes were added to the streets, and wider streets will eventually accommodate a dedicated transit line.”²¹

The revised master plan submitted by JDI-AIG addressed the criticisms made about the first master plan, although the original concept was mostly preserved. According to Bacon et al., the plan also “reflected the influence of...stakeholder voices that became involved in the process through the city’s Neighborhood Planning Unit development review



Atlantic Station buildings stacked on the parking deck (2010)

¹⁶ EPA [1], Atlanta, GA Turns Dixiesteel into Atlantic Station (Region 4, n.d.).

¹⁷ City of Atlanta, Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District (Atlanta: Office of Planning, n.d.).

¹⁸ Atlantic Regional Commission, 2009 Livable Centers Initiative Implementation Report (Atlanta, 2009), p. 10.

¹⁹ Atlantic Regional Commission, p. 10.

²⁰ EPA [1], Atlanta, GA Turns Dixiesteel into Atlantic Station (Region 4, n.d.).

²¹ Jason Miller, Evolution of a Brownfield (New Towns, Spring 2006), p. 4

framework."²² The plan also integrated Smart Growth principles, which led to the use of higher densities, mixed uses, and increased pedestrian and transit accessibility.²³ While segregated land uses persisted, a new mixed-use district, as well as an "expanded street network...to improve connectivity" distinguished the revised proposal from the original master plan. "The major change was placement of an 8000 car parking deck under the entire retail district. Although claimed as a logical step to cap part of the contaminated soil on the site, it appears that the parking deck was suggested first and foremost as a plinth [base] for a traditional town-like retail district on top."²⁴

While the revised JDI-AIG master plan was considered an improvement over the original proposal, an independent third plan was commissioned by the U.S. Environmental Protection Agency (EPA). The EPA intervened in the project shortly after the City of Atlanta approved zoning for the construction of the arterial bridge that would travel over I-75/85. Although the site is adjacent to the I-75/85 freeways and nearby transit routes, the nature of Atlantic Steel's operations precluded the development of multi-modal access. As a result, the property is physically isolated, with limited connectivity to surrounding neighborhoods. The proposed bridge would address, in part, the site's physical isolation and limited connectivity, while offering a direct route to Midtown Atlanta. The EPA's intervention, however, was based on Atlanta's non-compliance with the federal Clean Air Act.²⁵ Non-compliance with the CAA triggers a mandatory multi-year planning process and the implementation of programs and actions to reduce pollutants. As a noncompliant area, Atlanta was prohibited from constructing new roads, freeways or bridges. Indeed, the projected addition of people, cars, and new pollution sources to the site became a key factor for planning the project in a more sustainable manner.

The EPA subsequently hired Duany Plater-Zyberk (DPZ), planning consultants specializing in New Urbanism, to facilitate a three-day public design charette. The charette led to the creation of an alternate master plan that "abandoned the idea of land use compartmentalization and instead created a street network based on the traditional urban subdivision, continuing the adjacent Home Park neighborhood block format into the Atlantic steel site."²⁶ The DPZ master plan therefore suggests an entirely mixed-use development that promotes connectivity at the local scale. It also prioritizes the public realm, rather than private development space, as a framework for redevelopment.

JDI-AIG integrated several recommendations from the DPZ model into its second revised master plan. For instance, "smaller dimensioned blocks were introduced to produce a network of local streets, although their connections to the surroundings were minimal. A more fine grained mix of uses was [also] introduced on a few block frontages."²⁷ The Smart Growth urban design interventions were modest, however. As a result, the design and character of the original master plan prevailed. The changes, however, were enough to gain regulatory approval from the City of Atlanta, the State of Georgia and the EPA, allowing the project to proceed.

²² Kevin L. Bacon, Jr, Richard Dagenhart, Nancy Green Leigh, and John Skach, The Economic Development – Urban Design Link in Brownfield Redevelopment (Economic Development Journal, Spring 2008), p. 35.

²³ Kevin L. Bacon, et al., p. 35.

²⁴ R. Dagenhart, N. G. Leigh & J. Skach, Brownfields and urban design: learning from Atlantic Station (Transactions on Ecology and the Environment, Vol. 94, 2006), p.191.

²⁵ R. Dagenhart, et al., p. 191.

²⁶ Kevin L. Bacon, Jr, Richard Dagenhart, Nancy Green Leigh, and John Skach, The Economic Development – Urban Design Link in Brownfield Redevelopment (Economic Development Journal, Spring 2008), p. 35.

²⁷ R. Dagenhart, N. G. Leigh & J. Skach, Brownfields and urban design: learning from Atlantic Station (Transactions on Ecology and the Environment, Vol. 94, 2006), p. 192.

PROJECT CHARACTERISTICS AND DEVELOPMENT

Project Characteristics

The final master plan organizes Atlantic Station into three development areas – the District, the Commons, and the Village.

•	<p><i>The District:</i></p> <ul style="list-style-type: none">- The District, which opened in March 2004, is the mixed-use section of the development, and is located on the east side of the property. This area comprises several mid-rise office buildings, retail stores, restaurants, and apartment units.²⁸
•	<p><i>The Commons:</i></p> <ul style="list-style-type: none">- The Commons, situated west of the District, is the residential section of the redevelopment. It features homes surrounding a large pond and park. Historical attributes from the steel mill, such as pressed steel sculptures and smoke stacks have been displayed in the park to preserve the site's industrial heritage.
•	<p><i>The Village:</i></p> <ul style="list-style-type: none">- The Village is located on the far west side of the property and contains a combination of mixed income housing and small retail development. An existing two-story, 336,000-square-foot IKEA store is also located in this section.²⁹



²⁸ EPA [1], Atlanta, GA Turns Dixiesteel into Atlantic Station (Region 4, n.d.).

²⁹ Jason Miller, Evolution of a Brownfield (New Towns, Spring 2006), p. 3.



The District, Commons, and Village (2010)

Once completed, the redevelopment will consist of six million square feet of Class A office space; 3,000 to 5,000 residential units (for sale and for rent); two million square feet of retail and entertainment space, including restaurants and movie theatres; 1,000 hotel rooms; and 11 acres of public parks.³⁰ The redevelopment is expected to leverage \$2 billion in public and private investment.

Construction of Phase One of the project overlapped with the site remediation and clean-up phase of development, and began in 2001.³¹

Site Remediation

Redevelopment of the Atlantic Steel property was initiated in 1998, prioritizing site remediation. Atlantic Steel partnered with JDI to remediate the property's contaminated soil and groundwater.³² A remedial action plan,

³⁰ Miller, p. 3.

³¹ EPA [1], Atlanta, GA Turns Dixisteel into Atlantic Station (Region 4, n.d.).

³² City of Atlanta, Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District (Atlanta: Office of Planning, n.d.).

projected to cost \$10 million, was created following a risk-based site assessment framework to determine the level of cleanup required at the site.³³ The plan was administered by The Atlantic Station, L.L.C. and was approved by the State of Georgia Environmental Protection Division (GAEPD) in December 1999.

The remedial action plan necessitated the removal of 180,000 cubic yards of steel slag contaminated soil.³⁴ Steel slag is a by-product of steel manufacturing that, in the absence of regulatory controls, had been disposed of directly onto the property. The remedial action plan indicated that the contaminated soil would be treated at state-approved landfills. The plan also required the installation of a groundwater extraction system to prevent contaminated water from migrating to adjacent properties or into the municipal sewer system. Building materials from the demolished mill were also scheduled to be recycled as part of the cleanup agreement.

Records from the developer indicate that the remedial action plan was largely followed. Approximately 165,000 tons of contaminated soil, the equivalent of 9,000 dump truck loads, was removed from the site.³⁵ A groundwater collection and treatment system was subsequently installed on the property.³⁶ It will monitor and treat contaminated groundwater before it is discharged to the city sewer system. Roughly 132,000 cubic yards of construction debris, mainly concrete from the steel mill's underground support structures and foundations, were reused as backfill, in combination with some clean fill material to cap the entire site.³⁷

The GAEPD monitored the site remediation process, and in December 2001 issued a Plan Certification Report declaring the property remediated.³⁸ The State of Georgia subsequently issued a No Further Action (NFA) letter for the property, indicating that it was ready for redevelopment.

Planning and Regulatory Approvals

The initial proposal put forward by JDI-AIG was commended for re-purposing an underutilized brownfield and catalyzing investment in Atlanta. Accordingly, changing the zoning designation proved to be the least complicated planning approval required for the redevelopment. Over time, residential neighborhoods developed around the property to house Atlantic Steel's employees.³⁹ By the time JDI expressed interest in redeveloping the property, the adjacent land uses were characterized by single-family homes. The Atlantic Steel property, zoned as Heavy Industrial, had become incompatible with the surrounding area. In 1998, the City of Atlanta rezoned the entire property as Commercial and Mixed Use in support of the Atlantic Station redevelopment.⁴⁰ The rezoning was completed prior to the final sale of the property to JDI in 1999.

Although regulatory approvals pertaining to brownfield remediation at the state level were more complex, they were facilitated through cooperation among project stakeholders. In order to simplify the approval procedure for site remediation, steps were taken to streamline the cleanup and redevelopment processes. For example, the GAEPD designated one person to make decisions, thereby expediting responses for review and approval. The owner and developer used the same consultant to address both remediation and redevelopment issues. "The presence of these

³³ EPA [1], Atlanta GA Turns Dixisteel into Atlantic Station (Region 4, n.d.).

³⁴ Western Pennsylvania Brownfields Center, Atlantic Station (Pennsylvania: Carnegie Mellon University, 2008), p. 1.

³⁵ EPA [1], Atlanta, GA Turns Dixisteel into Atlantic Station (Region 4, n.d.).

³⁶ Western Pennsylvania Brownfields Center, Atlantic Station (Pennsylvania: Carnegie Mellon University, 2008), p. 2.

³⁷ Jason Miller, *Evolution of a Brownfield* (New Towns, Spring 2006).

³⁸ EPA [1], Atlanta, GA Turns Dixisteel into Atlantic Station (Region 4, n.d.).

³⁹ City of Atlanta, Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District (Atlanta: Office of Planning, n.d.), p. 15.

⁴⁰ City of Atlanta, p. 28.

members at face-to-face meetings, with the authority to make real-time decisions, kept the project on track and reduced the administrative costs of working with governmental agencies.”⁴¹

Transportation planning requirements at the federal level were initially a regulatory obstacle, but ultimately contributed to the final project vision of the redevelopment. A key feature of the redevelopment is the 17th Street Bridge, as it provides a direct connection between Atlantic Station and nearby transportation and transit routes. The bridge was mandated by Atlanta’s zoning requirements to improve accessibility to the project site, and was prioritized by the Georgia Regional Transportation Authority (GRTA).⁴² Construction of the bridge, however, would contravene federal regulatory conditions due to Atlanta’s noncompliant status with the Clean Air Act (CAA), and was proscribed by the EPA.⁴³



The 17th Street Bridge (2010)

The City of Atlanta has been noncompliant with the CAA since the early 1980s for failing to develop a 20-year regional transportation plan and for exceeding ground level ozone air quality standards.⁴⁴ The City of Atlanta is therefore prohibited from building any new roads, bridges or freeways that require federal approval unless it can be argued that they will improve air quality.⁴⁵ In addition, federal subsidies for transportation projects are suspended in noncompliant areas. Automobile dependency consequently increased in the absence of alternative transit options, exacerbating Atlanta’s air quality and congestion issues.⁴⁶ Without the bridge, however, the redevelopment project was not viable and was effectively quashed.

An innovative solution was reached through a collaborative process between JDI-AIG and the EPA, as well as other stakeholders.⁴⁷ While the move by the EPA initially precluded the redevelopment plan, JDI-AIG applied for regulatory flexibility by suggesting that as Smart Growth project, Atlantic Station is in effect a Transportation Control Measure (TCM). Even in a noncompliant area, projects that offer the benefits of a TCM can be provided with an exception.⁴⁸

Regulatory flexibility was achieved through Project XL, a “program promoting environmental eXcellence and Leadership (XL).”⁴⁹ Project XL allows states and local governments, businesses and federal facilities to partner with the EPA to achieve broader environmental and public health policy objectives.⁵⁰ In its Project XL application, JDI-AIG reasoned that population growth in Atlanta is projected to continue, primarily through low-density greenfield development. This would be particularly true if the Atlantic Station redevelopment was not approved. Low-density

⁴¹ EPA [3], Atlantic Steel (Atlanta, October 2007).

⁴² Susie Dunn, Interview (Atlanta, Atlanta Regional Commission); EPA [2], Atlantic Station (Atlantic Steel Redevelopment Project) (Atlanta, 2008).

⁴³ Jason Miller, *Evolution of a Brownfield* (New Towns, Spring 2006), p. 2.

⁴⁴ City of Atlanta, *Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District* (Atlanta: Office of Planning, n.d.), pp. 2 and 4.

⁴⁵ EPA [1], *Atlanta GA Turns Dixisteel into Atlantic Station* (Region 4, n.d.).

⁴⁶ City of Atlanta, *Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District* (Atlanta: Office of Planning, n.d.)

⁴⁷ See City of Atlanta, p. 5 for a list of stakeholders who contributed to Project XL.

⁴⁸ EPA [2], *Atlantic Station* (Atlantic Steel Redevelopment Project) (Atlanta, 2008).

⁴⁹ EPA [4], *Project XL and Atlantic Steel - Supporting Environmental Excellence and Smart Growth* (Urban and Economic Division, September 1999), p. 1.

⁵⁰ EPA [1], *Atlanta, GA Turns Dixisteel into Atlantic Station* (Region 4, n.d.).

greenfield development is largely responsible for Atlanta’s present air quality and congestion concerns. As an urban infill project, the Atlantic Station redevelopment offered potential to promote Smart Growth and effectively reduce vehicle miles travelled (VMT).

The rationale put forward by JDI-AIG prompted the EPA to conduct its own empirical analysis of the benefits of compact, mixed-use, transit-oriented development on the site. Data indicated that the smart growth aspects of the redevelopment would help reduce air pollution, among other environmental benefits.⁵¹ The EPA recognized, however, that while the location of the proposed development influences VMT and emissions, site design is equally significant. The EPA then evaluated the original Jacoby site design, and determined that it could be improved to reduce driving and emissions. DPZ was hired by the EPA at that point to leverage opportunities to reduce VMT and emissions in the proposed Atlantic Station site plan. The EPA approved the Project XL agreement after JDI-AIG revised the site plan, based on DPZ’s recommendations, to enhance the project’s congestion and air pollution mitigation effects through diversity, design and density.⁵² With the necessary planning and regulatory approvals in place, the project was able to proceed.

Financing and Development

The scale of the Atlantic Station redevelopment, which included significant brownfield remediation, necessitated a public-private partnership between JDI-AIG and the City of Atlanta to secure the \$2 billion needed for project financing. Organizing the project into three phases prioritized infrastructure projects while distributing the financial cost of the redevelopment over several years.

With authorization from the Georgia Redevelopment Powers Act, the City of Atlanta established the Atlantic Station Brownfield Tax Allocation District (ASBTAD) to generate financing for the redevelopment. A Tax Allocation District is a tax increment financing overlay that utilizes incremental property tax revenues to finance site remediation and infrastructure improvements.⁵³ Tax Increment Financing (TIF) is frequently used to “stimulate private sector investments which otherwise may not have been feasible.”⁵⁴ The ASBTAD was implemented in 2001, to coincide with Phase One of the project, and will expire in 2026.⁵⁵

Table 1, Atlantic Steel Redevelopment Phasing and Financing⁵⁶

Development Phase	Cost (million)	Source of Funding
Phase I (2002)		
Roads and Utilities	\$30	Tax Allocation District (TAD)
Environmental Remediation	\$25	TAD
Capping (Environmental)	\$25	TAD
Right-of-way	\$50	Developer
Parking	\$30	TAD

⁵¹ EPA [2], Atlantic Station (Atlantic Steel Redevelopment Project) (Atlanta, 2008); See also EPA [4], Project XL and Atlantic Steel - Supporting Environmental Excellence and Smart Growth (Urban and Economic Division, September 1999).

⁵² City of Atlanta, Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District (Atlanta: Office of Planning, n.d.), p. 6; EPA [1], Atlanta, GA Turns Dixisteel into Atlantic Station (Region 4, n.d.).

⁵³ Smith, Gambrell and Russell, LLP, Tax Increment Financing (Issue 10, Winter 2004); EPA [2], Atlantic Station (Atlantic Steel Redevelopment Project) (Atlanta, 2008).

⁵⁴ Smith, Gambrell and Russell, LLP, Tax Increment Financing (Issue 10, Winter 2004).

⁵⁵ EPA [1], Atlanta, GA Turns Dixisteel into Atlantic Station (Region 4, n.d.).

⁵⁶ City of Atlanta, Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District (Atlanta: Office of Planning, n.d.), p. 28.

Development Phase	Cost (million)	Source of Funding
Bridge	\$50	State/Federal
Total Phase I	\$210	
Total Phase I TAD Contribution	\$110	
Phase II (2005)		
Roads and Utilities	\$15	TAD
Parking	\$15	TAD
Total Phase II	\$30	
Total Phase II TAD Contribution	\$30	
Phase III (n.d.)		
Roads and Utilities	\$15	TAD
Parking	\$15	TAD
Total Phase III	\$30	
Total Phase III TAD Contribution	\$30	
Total TAD Contribution for Atlantic Steel Project: \$170,000,000		

While the City of Atlanta allocated \$170 million in tax increment financing for the redevelopment, JDI-AIG also contributed \$25 million toward the site remediation and preparation. The majority of redevelopment was financed by the private sector.

Prior to the redevelopment, Atlantic Steel paid approximately \$300,000 a year in property taxes.⁵⁷ The economic impact of the redevelopment project was nearly immediate as the estimated incremental increase in tax revenues for the year 2006 (over the 2001 base year) was \$8,347,722.⁵⁸ The redevelopment is now generating nearly \$30 million in property taxes a year. In addition, the retailers present on the new development contribute \$10 to \$20 million a year in Special Interest Local Option Sales Taxes. Atlantic Station has generated thousands of new jobs that generate hundreds of millions of dollars in total salaries.⁵⁹

Environment

Regulatory requirements compelled the developers to integrate sustainable design principles in the project to address Atlanta's air quality concerns. A Green Star Environmental Plan (developed by the National Ready Mixed Concrete Association and U.S. EPA⁶⁰) was created to ensure that the redevelopment would be environmentally friendly. The Green Star Environmental Plan focuses on five areas affected by the redevelopment —land, air, water, green buildings, and smart growth. Georgia's State Energy Program provided over \$80,000 to support the initial concept and planning phases for the energy phase of Atlantic Station's Green Star plan in an effort to help it compete for federal green bond financing, which required plans to achieve aggressive energy and environmental goals.⁶¹

⁵⁷ Western Pennsylvania Brownfields Center, Atlantic Station (Pennsylvania: Carnegie Mellon University, 2008).

⁵⁸ Smith, Gambrell and Russell, LLP, Tax Increment Financing (Issue 10, Winter 2004).

⁵⁹ Western Pennsylvania Brownfields Center, Atlantic Station (Pennsylvania: Carnegie Mellon University, 2008).

⁶⁰ http://nrmca.org/operations/ENVIRONMENT/certifications_greenstar.htm

⁶¹ Bhedwar, Cyrus, Georgia SEP Update (Atlanta, GA: Georgia Environmental Facilities Program, 2006)

As an EPA XL project, JDI-AIG must provide the EPA with an annual report identifying whether the redevelopment meets the conditions and targets established during the planning phase. The progress report includes data on VMT and emissions, density and mixed use, and efforts to promote broader public policy objectives. Based on the progress report submitted by JDI-AIG for 2008, the EPA reports that:

"the average vehicle miles traveled (VMT) for residents and employees of Atlantic Station is significantly lower than the rest of the region. The regional average VMT for individuals is about 34 miles per day. On average, Atlantic Station residents travel 14 miles per day, and employees working at Atlantic Station travel 12 miles. Furthermore, while single-occupancy vehicle trips constitute more than 60 percent of trips in the region, in Atlantic Station about half the trips made by residents and employees are in single-occupancy vehicles."⁶²

Land

A key strategy of the Green Star Environmental Plan was to recycle underutilized land in the city to protect Atlanta's greenfield areas from development. As an urban infill project, Atlantic Station re-purposes a 138-acre brownfield site in central Atlanta, while conferring other environmental benefits. In addition to remediating the contaminated property, the project also promotes compact, mixed-used, and multi-modal transit development as a means to reduce automobile dependency.⁶³

Air

Due to concerns about Atlanta's air quality, the redevelopment had to demonstrate that it would serve as a strategy to reduce air pollution. The EPA completed an empirical analysis comparing the proposed Atlantic Station redevelopment with similar developments on greenfield sites located in Atlanta's urban edge. The results indicated that the Atlantic Steel redevelopment would reduce VMT by 34 percent and Nitrogen Oxide (NOx) emissions by 45 percent relative to the greenfield developments.⁶⁴ The urban infill and site design characteristics of the redevelopment contributed to the projected reductions.

Water

Site-specific and regional water concerns were also factored into the redevelopment. Given the property's history of heavy industrial activity, groundwater contamination was a concern. As part of the remediation process, an interceptor system was installed to 1) treat contaminated groundwater before it is discharged into the municipal system, and 2) prevent contaminated groundwater from migrating to adjacent areas. The redevelopment also upgraded water infrastructure on the site by separating stormwater, sanitary and sewer lines.⁶⁵ A two-acre pond in the Commons also serves as a stormwater management strategy on the site, while addressing regional watershed concerns. Site design, grading and drainage interventions also ensure that finite water resources are managed sustainably.⁶⁶

⁶² EPA [2], Atlantic Station (Atlantic Steel Redevelopment Project) (Atlanta, 2008).

⁶³ EPA [4], Project XL and Atlantic Steel - Supporting Environmental Excellence and Smart Growth (Urban and Economic Division, September 1999), p. 10.

⁶⁴ EPA [5], "What are Brownfields." *Revitalizing Southeastern Communities, A Brownfields Toolkit*. EPA Region 4, 2005, p. 7.

⁶⁵ Shaun Green, Interview (Atlanta, Georgia Regional Transportation Authority).

⁶⁶ City of Atlanta, Atlantic Steel Brownfield Redevelopment Plan & Tax Allocation Bond District (Atlanta: Office of Planning, n.d.), p. 10.

Green Buildings

The Green Star Plan establishes a commitment to promote sustainable building design and provide a national model for green development. Atlantic Station is pursuing Leadership in Energy and Environmental Design (LEED) certification, with a goal to develop 100 percent of the project's commercial buildings to LEED standards. Completed in 2004, the development's first commercial building, 171 17th Street, was designed and constructed to achieve LEED certification. The 500,000-square-foot building became the first office tower in the world to be certified Silver in LEED's Core and Shell Development Program.⁶⁷ The most recent performance update of Atlantic Station found that the project is home to 1.4 million square feet of LEED-certified office space, of which 840,000 square feet is certified Gold.⁶⁸

Although not originally planned, many of the residential units in the project are being developed using green building techniques. Developers found that green design principles were compatible with conventional building practices, and that economies of scale could be achieved for installing renewable energy technologies, such as a geothermal heating and cooling system, in a new development.

Smart Growth

Developing sustainably was a priority for Atlanta in the late 1990s, as unprecedented population growth was projected to continue beyond 2020. The conventional pattern of low-density, greenfield development contributed to Atlanta's noncompliant status under the federal CAA. By shifting new development to the city center, the project effectively reduced greenfield development while promoting compact, mixed-use, multi-modal growth. Accordingly, Atlantic Station protected over 1,000 acres of greenfield from being developed.⁶⁹

BENEFITS, BARRIERS, AND LESSONS LEARNED

Atlantic Station was honored as "the nation's best brownfield redevelopment" with the EPA's Phoenix Award in 2004.⁷⁰ As one of the earliest and largest examples of brownfield remediation and redevelopment, Atlantic Station serves as a national model of the benefits that can be leveraged through urban renewal projects. Obstacles that challenged the redevelopment, and the lessons learned to resolve them, are equally important.

The privately-led redevelopment project was commended for remediating an underutilized brownfield and catalyzing investment in Atlanta. In addition to remediating the property's contaminated soil and groundwater after decades of heavy industrial activity, the redevelopment addressed regional stormwater management concerns through on-site water recovery measures. The redevelopment also contributed to Atlanta's economic development by increasing property tax values and restoring jobs that were lost as Atlantic Steel declined.

⁶⁷ Atlantic Station, LLC. *Green Star Environmental Plan: Green Buildings*. Available at:

http://www.atlanticstation.com/concept_green_bldgs.php http://www.atlanticstation.com/concept_green_bldgs.php

⁶⁸ Atlantic Station Master Owners Association 2011 US EPA 2011 Office of Environmental Accountability, U.S. EPA Region IV Atlantic Station Transportation Control Measures 2012 Performance Update pg 10

⁶⁹ California Energy Commission. *Energy Aware Planning Guide: Smart Growth Development*
<http://puff.lbl.gov/transportation/transportation/energy-aware/energyaware-l-1-1.html>

⁷⁰ R. Dagenhart, N. G. Leigh & J. Skach, Brownfields and urban design: learning from Atlantic Station (Transactions on Ecology and the Environment, Vol. 94, 2006), p. 190.

According to a public sector interviewee, Atlantic Station also signaled a dramatic shift, changing the culture of urban and regional development in Atlanta. As an urban infill project, the Atlantic Station prioritized compact, high-density, mixed-use and multi-modal development over the conventional lower-density, single-use, auto-dependent sprawling pattern of growth that was partially responsible for Atlanta’s congestion and air quality issues. The redevelopment therefore leveraged the use of existing infrastructure, while enhancing community amenities and ensuring employment, housing and recreational opportunities for a cross-section of Atlanta’s population. As a result, Atlantic Station also serves as a Transportation Control Measure to mitigate congestion and air pollution. Indeed, a recent performance report examining Atlantic Station’s progress toward achieving the environmental goals found that Atlantic Station’s cleaner modes of commuting reduced vehicle miles traveled by 316,466, volatile organic compounds by 340,093 grams, and commuting costs by \$158,233 in 2010.⁷¹

The New Urbanist features applied in the Atlantic Station project seem to have had an effect on the character of other neighborhood development projects, including brownfield projects, throughout the city. The list below outlines just a few of the projects in Atlanta that seem to have been influenced, directly or indirectly, by the approach taken at Atlantic Station.

•	<p><i>Glenwood Park</i></p> <ul style="list-style-type: none"> - <i>A 28-acre brownfield located a couple of miles from downtown Atlanta that was turned into a model community linking environmentally sustainable and New Urbanist design concepts.</i> <i>http://glenwoodpark.com/</i>
•	<p><i>Inman Park</i></p> <ul style="list-style-type: none"> - <i>A National Historic District where various industrial buildings have been adapted to office, residential, retail, and other uses. The Blue Horse, for instance, is an adaptive -reuse of a 1954 stationery and school supply building into office space. The neighborhood is also home to an array of artist and creative businesses</i>
•	<p><i>The Atlanta BeltLine</i></p> <ul style="list-style-type: none"> - <i>Using an existing 22-mile historic rail corridor that encircles the city, the Atlanta BeltLine aims to link 45 inner suburban neighborhoods with pedestrian-friendly rail transit and multi-use trails. The new space seeks to be a catalyst for economic growth and sustainable development throughout the city, following the Transit-Oriented Development framework.</i>
	<p><i>Westside Urban Market</i></p>

⁷¹ Atlantic Station Master Owners Association, Atlantic Station Transportation Control Measures 2010 Performance Update (Atlanta: Prepared for Office of Environmental Accountability, U.S. EPA Region IV, 2011), p. 6.

	<ul style="list-style-type: none"> - <i>Developers turned Atlanta's derelict original meatpacking district into a hip urban market with an interesting mix of boutique retailers and restaurants.</i>
	<p><i>The District at Howell Mill</i></p> <ul style="list-style-type: none"> - <i>Located near one of Atlanta's many historic mills, developers of the District demolished an abandoned and condemned structure, and removed debris from a former dump on the site, to pave the way for a mixed-use retail and residential development.</i>
	<p><i>Lindbergh City Center</i></p> <ul style="list-style-type: none"> - <i>This transit-oriented development was constructed on approximately 50 acres surrounding the Metropolitan Atlanta Rapid Transit Authority's Lindbergh Station. It comprises 4.8 million square feet of development: 2.7 million square feet of office space, 330,000 square feet of retail space, 566 apartments, 388 condominiums, and a 190-room hotel.</i>

There were, however, several inherent challenges associated with the redevelopment. In addition to the size of the property, the scale and scope of the project were unprecedented. Brian Leary of Atlantic BeltLine, Inc. also acknowledges that implementing the project vision was a challenge from day one, citing “the remediation plan, the bridge approvals, the economy, 9/11” as delays.⁷² Increasing connectivity and accessibility to the site was more complicated than constructing an arterial bridge, as originally planned.

The overlapping complexity of local-, state- and federal-level planning and regulatory approvals highlights the importance of collaboration between project stakeholders. For instance, dialogue between the EPA and JDI-AIG ensured that environmental and economic considerations pertaining to the project would be addressed in the revised master plan. Congestion and air pollution were addressed by increasing diversity, design and density in the site plan. The EPA, however, was also sensitive to the development pro forma, and hired DPZ as a consultant “for the firm’s expertise in mixed-use, infill development, but also because its projects are commercially successful.”⁷³ In fact, interviewees indicated that the EPA was particularly pleased with the results of the Project XL agreement that was achieved, giving the agency confidence to engage in more public-private partnerships.

While the redevelopment of Atlantic Station evolved to address Atlanta’s broader societal needs, community consultation throughout the master planning phase incurred both support for and resistance to the project. For instance, “multiple public meetings, group discussions, individual contacts and a full public notice and review process [were] held during the rezoning of the property.”⁷⁴ At a macro level, community members and stakeholders supported the project’s plan to enhance the city’s economic, environmental and recreational opportunities by transforming an under-utilized brownfield. However, at a micro level, the residential neighborhoods – Loring Heights, Home Park and Ansley Park – adjacent to Atlantic Station were displeased by the scale of the redevelopment “and wanted controls to

⁷² Jason Miller, *Evolution of a Brownfield* (New Towns, Spring 2006), p. 4.

⁷³ EPA [4], *Project XL and Atlantic Steel - Supporting Environmental Excellence and Smart Growth* (Urban and Economic Division, September 1999), p. 6.

⁷⁴ Western Pennsylvania Brownfields Center, *Atlantic Station* (Pennsylvania: Carnegie Mellon University, 2008), p. 2.

isolate themselves.”⁷⁵ Resistance was attributed to “a difference in perspective and wealth”, particularly given that Atlantic Station represented a considerable amount of change in the middle of an established, 80-year old community.⁷⁶

Residents from these neighborhoods therefore used engagement and public participation events to persuade the developer to limit change. Loring Heights, for instance, opposed extending its neighborhood’s streets into the development to improve access and circulation, and successfully lobbied to limit connectivity. The same is true of Home Park, although some residents did advocate for connectivity. Ansley Park, a particularly affluent neighborhood in Atlanta, “was very adversarial.” Ansley Park residents did not participate in community consultation events until later in the master planning process, and resisted aggressively, threatening the developers with legal action. Considerable public outreach and education efforts by JDI-AIG and the City of Atlanta were essential to overcome perceived negative impacts and public resistance to the project.

Brownfield developers sometimes cite regulatory delays in slowing the pace of their projects. As noted above, in this case, although regulatory approvals pertaining to brownfield remediation at the state level were complex, in order to simplify the approval procedure for site remediation, the GAEPD designated one person to make decisions, thereby expediting responses for review and approval. The owner and developer also expedited the process by using the same consultant to address both remediation and redevelopment issues. The presence of these members at face-to-face meetings, with the authority to make real-time decisions, helped to keep the project on track and reduced the administrative costs of working with governmental agencies. Also as described above, regulatory flexibility was achieved through EPA’s Project XL, in which various entities can partner with EPA to achieve broader environmental and public health policy objectives.

While Atlantic Station has been celebrated for the benefits it generated as a brownfield redevelopment project, it is not without criticism. Critics point to the limitations of the final master plan design, which they maintain should have integrated more of DPZ’s recommendations. Despite the incremental improvements achieved through the master plan evolution, critics also contend that Atlantic Station retained the single-use character from the original project vision, and that internal and external connections are poorly structured.⁷⁷ In this respect, city-approved urban design guidelines would have provided a blueprint for development on the site.

Project partners and critics concede that the goal “was to figure out how to take a behemoth project and stitch it into the fabric of the city,” acknowledging that urban renewal is a process, not an end in itself.⁷⁸ Whether comments pertaining to Atlantic Station are positive or negative, they emphasize the importance of collaboration and partnerships between stakeholders early in the redevelopment process to ensure that the project objectives do not compromise the interests of the community. The lesson here is that while “developers have come to expect significant public assistance” in large-scale brownfield redevelopment projects, this is ultimately a trade-off to meet broader public policy objectives.⁷⁹ Leary is quoted as saying, “Atlantic Station believed that there should be more

⁷⁵ Brian Leary, Interview (Atlanta, Atlantic Station, LLC).

⁷⁶ Shaun Green, Interview (Atlanta, Georgia Regional Transportation Authority).

⁷⁷ R. Dagenhart, N. G. Leigh & J. Skach, Brownfields and urban design: learning from Atlantic Station (Transactions on Ecology and the Environment, Vol. 94, 2006).

⁷⁸ Kevin L. Bacon, Jr, Richard Dagenhart, Nancey Green Leigh, and John Skach, The Economic Development – Urban Design Link in Brownfield Redevelopment (Economic Development Journal, Spring 2008), p. 32; Jason Miller, Evolution of a Brownfield (New Towns, Spring 2006), p. 6.

⁷⁹ R. Dagenhart, N. G. Leigh & J. Skach, Brownfields and urban design: learning from Atlantic Station (Transactions on Ecology and the Environment, Vol. 94, 2006), pp. 192-193.

than one way to work, live and shop, and certainly more than one way to get there... Which is what we were trying to accomplish from a public policy perspective.”⁸⁰ Admittedly, the process of urban renewal is by nature incremental and slow. Atlantic Station is a success particularly as the project aimed to shift the culture of planning in a city characterized by sprawl.

Benefits of the project can be summarized as follows:

	<ul style="list-style-type: none"> • Economic <ul style="list-style-type: none"> - Increased property tax base - Employment development and diversification <ul style="list-style-type: none"> ○ Expected to create 20,000 new jobs and \$619 million in combined salaries - Urban renewal and revitalization - Leveraging of existing infrastructure and transportation options
	<ul style="list-style-type: none"> • Environmental <ul style="list-style-type: none"> - Brownfield remediation and land reutilization - Separation of sanitary and storm sewer systems - Reduction of automobile emissions and VMT - Utilization of existing infrastructure - Addressing of regional watershed concerns
	<ul style="list-style-type: none"> • Community/Society <ul style="list-style-type: none"> - New housing options downtown - Multi-modal transit options - First transportation improvements in 50 years - Options for housing, transit, walking and recreation

TIMELINE

YEAR	DESCRIPTION
1901	Atlantic Steel Company is established
1974	Atlantic Steel employs 2,000 people and produces 750,000 tons of steel
1979	Atlantic Steel is acquired by Ivaco Inc.
1997	Atlantic Steel property is contracted to Jacoby Development Inc. (JDI)
1998	Atlantic Steel Mill closes
1999	JDI closes on Atlantic Steel property and forms partnership with AIG Global Real Estate Investment Corporation

⁸⁰ Jason Miller, Evolution of a Brownfield (New Towns, Spring 2006), p. 6.

YEAR	DESCRIPTION
1999	Deconstruction and site remediation of Atlantic Steel property begins
2001	Site remediation completed; No Further Action letter issued by the state
2001	Phase One of the Atlantic Station redevelopment begins
2004	17 th Street Bridge, connecting Atlantic Station to midtown Atlanta, is completed
2004	Atlantic Steel redevelopment is recognized for excellence in Brownfield redevelopment through the EPA's Phoenix Award
2005	The District (Phase One) of the Atlantic Station redevelopment officially opens
2012	Redevelopment continues

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