

An occasional series of working papers prepared by the Downtown DC Business Improvement District to foster dialogue about critical issues relating to Downtown Washington's economic, social and physical development.

# Greening Downtown DC: Strategies for Protecting the Planet, People and Profit

## **EXECUTIVE SUMMARY**

Downtown Washington, DC, has emerged as an influential leader in many aspects of urban revitalization and is now poised to become one of the nation's most environmentally sustainable places. Several factors are behind this trend, including rising energy costs creating immediate demand for greater energy efficiency and new technologies to control costs. In addition, the DC government has embraced sustainability as concerns about global warming proliferate and as tenants demand sustainable office buildings to counter negative environmental effects.

The result is a need to create a business model that embraces "the triple bottom line," a way of doing business that protects the planet, people and profit.

With the area's health, vibrancy and sustainability a priority, the Downtown DC Business Improvement District (BID) has embraced a holistic approach to help guide and accelerate efforts to make the Downtown BID area more competitive and attractive to investors, businesses, employees, residents and visitors.

The Downtown BID has launched an initiative, "Greening Downtown DC," a comprehensive set of programs and services where the Downtown BID serves as a facilitator and a catalyst by forming partnerships to undertake research, establish measures, communicate information and convene training sessions. The Downtown BID's greening initiative targets four interrelated areas:

- Greening new and existing buildings
- Educating tenants on green best practices
- Improving public spaces
- Enhancing transportation options



Focusing on the triple bottom line of environmental protection, social responsibility and economic viability makes perfect sense. It's not only the right thing to do, but it pays dividends—from healthy work places that foster employee productivity to green collar jobs that create new employment opportunities, to green buildings that achieve above-market rents.

Several factors are driving Downtown BID-area stakeholders to adopt green and sustainable practices that have already begun to position Washington, DC, to become one of the world's most sustainable cities. This paper focuses on Downtown BID partnerships and programs that support the city's commitment to sustainability and help property owners, businesses, residents and visitors become more effective environmental stewards of the Downtown and, thus, the planet.



# FRAMEWORK FOR CHANGE

Surging costs have created an immediate need for greater energy efficiency and innovative technology to control costs. At the same time, more American cities have embraced sustainability as concerns about global warming and pollution proliferate. In Washington, DC, Mayor Adrian Fenty has signed the U.S. Conference of Mayors Climate Protection Agreement, thereby adopting an international promise to reduce greenhouse gases below 1990 levels by 2012. To meet its requirement, DC must reduce its carbon emissions by about 5.3 billion poundsequivalent to taking more than 400,000 cars off the road.

Office buildings are the city's greatest carbon dioxide emitters. The Downtown BID, which serves more than 350 buildings, has taken the Cool Capital Challenge, an initiative by a consortium of businesses, governments, schools, congregations, individuals and organizations committed to using eco-friendly strategies, to take a billion-pound bite out of the DC metropolitan area's carbon emissions by 2009. The Downtown BID has pledged to help reduce carbon emissions by 71 million pounds. Meeting the pledge will lead to annual energy cost savings of about \$4 million.

To be truly sustainable, cities are adopting legislation to implement best practices. DC's Green Building Act of 2006

#### Our goal is to encourage green buildings buildings designed, built, renovated and operated in an ecological and resourceefficient way.

Matt Klein President, Akridge Chairman, Downtown BID Board of Directors

requires private new construction to meet Leadership in Energy and Environmental Design (LEED) standards by 2012, making DC the first large American city to require the LEED greenbuilding rating for both public and private projects. However, in reality, the market effectively expects new Class A office buildings to be areen.

Other forces also are driving change: companies marketing their "brand" and promise to customers or clients that they will provide an eco-friendly environment sensitive to changing global environmental realities; and tenants in existing buildings asking property managers to focus more on indoor air quality, energy efficiency and other aspects of green building practices that lower operating costs and improve the quality of life for their employees.

Transportation and lifestyle choices are two other important market forces driving change that have tremendous

BENCHMARKING: The Most Critical Step Companies Can Take	
Tools for benchmarking and comparing similar property types:	
<ul> <li>LEED Green Building Rating System:</li> <li>Developed by the U.S. Green Building Council (USGBC)</li> <li>Addresses a property's overall impact on the environment</li> <li>Assigns points for sustainable features; base number required</li> <li>Awards silver, gold or platinum status to projects exceeding basic certification</li> <li>Certifies buildings in various stages, from design to existing renovation</li> <li>Expands the scope of ratings to include:</li> <li>NC-New Construction</li> <li>EB-Existing Buildings</li> <li>CI-Commercial Interiors</li> <li>ND-Neighborhood Development (currently in pilot phase)</li> </ul>	<ul> <li>Energy Star <i>Portfolio Manager:</i></li> <li>Developed by EPA and U.S. Dept. of Energy</li> <li>Measures and tracks energy use</li> <li>Measures and tracks carbon emissions</li> <li>Creates industry standard for tracking energy efficiency</li> <li>The Energy Star benchmark:</li> <li>Is recognized and incorporated into existing LEED building rating system</li> <li>Is a starting point for selecting and implementing energy management strategies</li> <li>Highest rating is the Energy Star Label, obtained by:</li> <li>Scoring 75 or higher</li> <li>Conducting an audit by a certified engineer</li> </ul>
The rating systems provide a mechanism for measuring sustainability that lead to environmental stewardship and, ultimately, to socially responsible and economically viable	
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environmental impact. According to smart growth guru and real estate developer Jonathan Rose, the decision to live in suburbia versus the city and in single-family housing versus multifamily housing can have a critical impact on the environment. Living and working Downtown offers a more sustainable and efficient lifestyle because the transportation and housing choices available in urban areas have considerably less environmental impact as residents and employees are able to walk, bike or take public transportation as part of their daily routine.

These market forces all converge to play a role in the "triple bottom line," which integrates the principles and practice of sustainability into all facets of life to build an equitable balance between economic, social and environmental influences. The concept is gaining increasing attention. Commonly referred to as the "three Ps" - people, planet and profit - it makes perfect sense for building a remarkable urban experience that pays wholesale dividends for everyone.

The implications for cities such as DC are dvnamic:

# viable practices. They allow businesses and properties to establish benchmarks and take proven steps to continue moving DC and the region forward by focusing on the triple bottom line.

Source: Energy Star, USGBC



Green buildings achieve higher occupancy, above-market rents, long-term tenancy, lower operating costs and higher sale prices.

Healthy work places, coupled with flextime and varied public transportation options for getting to and from work, lead to greater employee recruitment, retention and productivity.

Green collar jobs, a result of the shift to more sustainable practices and materials, create new employment opportunities at all economic levels.

• The triple bottom line aligns environmental and economic objectives to bring mainstream cultural understanding to the community's long-term vision.

Eco-friendliness and sustainability appeal to the creative class -workers such as scientists, professors, poets or architects who are paid to think or fix problems- a group that cities are spending billions of dollars to attract.

Caring about and investing in the environment is the right thing to do for the future of the planet and the environment's health. It also makes good social and economic sense because doing business in an interconnected world ultimately leads to sustainable success.

Given Downtown's workforce, growing residential population, transit access, walkable neighborhoods and emerging bicycle networks, it has the potential to become one of the most energy efficient urban areas in the world by pursuing strategies to reduce energy consumption and carbon emissions, promoting multi-family living and enhancing and expanding public transportation options. The triple bottom line takes on increasing significance because the link between sustainability and community life are wholly integrated and cannot be ignored.

### ROLE OF THE DOWNTOWN BID

Historically, the Downtown BID has strived to provide steady leadership within and beyond its one-square-mile border by taking the initiative, often in partnership with others, on issues as diverse as economic growth and diversification, transportation and homelessness. Now, it is also working to assume a major role in moving Downtown sustainability forward and providing tangible, significant benefits.

The Downtown BID's first Leadership Paper. Downtown: The Economic and Fiscal Enaine of the District of Columbia. shows that Downtown produces 22% of citv revenues, a total in excess of \$1.1 billion annually. The Downtown and Golden Triangle BID's net fiscal 2007 impact was about \$644 million. equivalent to nearly 58% of the DC Public Schools' locally funded budget. The report also noted that the two BID areas have an employment base that exceeds the entire number of DC residents in the workforce, and it is the first source of employment for Washingtonians of all income levels.

To keep the economic and fiscal engine running efficiently and to counter the impacts of skyrocketing energy costs, the Downtown BID is implementing the "Greening Downtown DC" initiative to assist







Source: CoStar, Downtown BID

stakeholders with all the elements necessary for success.

As such, "Greening Downtown DC" embraces programs and services that position the Downtown BID as a facilitator and a catalyst, one that forms partnerships to undertake research, establish measures, communicate information and convene training sessions. To date, the Downtown BID is taking the following key actions as part of the initiative:

- Evaluate the impact of Downtown buildings' energy consumption and Downtown travel on the environment and share information about the best financing arrangements available for property owners to invest in new energy efficient technologies and retrocommissioning;
- Meet with property managers to assess current practices, then in partnership with Cool Capital Challenge, conduct training and educational workshops where service providers and practitioners present best practices;
- Identify and recognize Downtown buildings that employ best practices and implement new initiatives during training workshops, through eco-bicycle tours and in communications and presentations; and
- Develop a set of benchmarks by which the Downtown BID area's performance can be measured relative to other communities and itself to determine needs and opportunities.

Specifically, the "Greening Downtown DC" initiative falls into the following four integrated areas:

#### 1. GREENING NEW AND EXISTING BUILDINGS

The Downtown BID area has an established network of property managers. Working with them is the key to building maximum efficiency into Downtown's sustainability and "greening" efforts. Therefore, the Downtown BID is working with property owners and managers to identify best practices and approaches to make older buildings more energy efficient by improving operational practices and the physical plant.

DC is fortunate. The Downtown BID area already is leading by example as documented by the LEED and Energy Star certification programs which have recognized dozens of properties that have achieved these high levels of excellence.

A number of BID-area property owners and management firms, including Hines, Akridge and the Willard InterContinental Hotel already use best practices to help reduce energy costs by 10% to 30%. As such, these properties are models, and the Downtown BID identifies them as exemplars of sustainability when sharing information with others pursuing similar energy reductions.

Other ways in which the Downtown BID assists property management:

Promote the use of the Energy Star Portfolio Manager tool to benchmark properties, establish initial parameters and priorities and track changes. Also develop, in partnership with Cool Capital Challenge and the Institute for Market Transformation, a checklist of energy efficient practices and systems for property managers and building engineers;

Promote using LEED standards for developing new

**Energy Star** Labeled Buildings 16 12 2006 2007 2006 2007 2008

\*Represents number of buildings in the first guarter.

At this rate, the number of rated buildings will increase more than 100% by the end of 2008. It could soar higher as property owners respond to a proposed Energy Bill that would make it mandatory for buildings to be benchmarked using Energy Star.

Source: Energy Star

buildings and LEED-EB for managing and operating existing buildings;

Facilitate training and provide technical assistance for improving energy efficiency; and

Connect owners and managers with public and private sector transportation programs that can increase travel options at their properties (e.g., the District Department of Transportation's Bicycle Program, Zipcar sharing and Internet carpool services).

#### 2. EDUCATING TENANTS ON GREEN BEST PRACTICES

Sustainable opportunities, and reductions in energy consumption in commercial buildings, will not be fully realized if tenants fail to participate. Their day-to-day business activities must adapt to take advantage of new cost-saving technologies and innovations implemented by property managers and building engineers. Thus, tenants' daily activities, schedules and habits all factor into the overall sustainability equation and, therefore, are important to pinpointing opportunities for energy savings and eco-friendly behavioral changes.

Increasingly, companies realize that saving energy, recycling materials, conserving water and reducing waste are very simple steps they can take to reduce costs while being a friend of the environment. However, as "green" expectations increase among consumers and employees, many businesses also are exploring more innovative approaches, such as offsetting travel impacts and subsidizing bicycle and transit use.



By becoming more environmentally sustainable, we can transform this area into a cutting-edge model of green business practices.

Richard H. Bradley
 Executive Director
 Downtown Business Improvement District

To serve by example, the Downtown BID has partnered with the Sustainable Business Network of Washington (SBNOW) to test SBNOW's Green Business Program. The pilot program audits a tenant's operation and offers certification. It is designed to encourage businesses to take a holistic look at operations, quantify and evaluate their impact and find opportunities for improvement. The program also helps the public determine whether businesses are truly green, and to what extent.

Businesses can do plenty to assume leadership in fostering green and sustainable best practices. To this end, the Downtown BID works with Downtown tenants to:

Identify and implement energy efficient workplace practices;

 Become a model itself by using eco-friendly materials, turning off computers when unused and employing sustainable construction practices and materials;

Provide information to tenants that gives them direction and recommends consulting assistance to help transform practices; and

Connect employers with the District Department of Transportation's (DDOT) Transportation Management Program for assistance in reducing employees' energy consumption for work trips.

#### 3. IMPROVING PUBLIC SPACES

The Downtown BID recognizes that the public environment can be improved to embody all the characteristics of a green environment. To achieve this, there need to be amenities such as public receptacles for recycling, energy-efficient bulbs for lighting streets and traffic signals and healthy trees that can have extensive effects on air quality.

Going forward, the Downtown BID will continue to focus the daily efforts of its safety and maintenance workers, known as SAMs, to remove trash from streets, sidewalks and parks that otherwise would end up in the sewers and in our waterways.

Providing quality green elements and public green space is important to attracting and retaining commercial tenants. To ensure that public spaces contribute significantly to greening, the Downtown BID works to:

Partner with the DC Department of Public Works and the

American Beverage Association to create a pilot public recycling program placing 25 blue recycling cans throughout the Downtown BID area;

Track all 2,500 trees within the Downtown BID area using a Geographic Information System (GIS) to monitor their condition because the daily stresses of urban life challenge trees' ability to thrive, and partner with entities such as the DDOT's Urban Forestry Administration and Casey Trees, as well as Downtown property managers, that play a role in enhancing the Downtown BID area's physical space;

Partner with the National Park Service to enhance and maintain Downtown parks; and

Seek new, environmentally friendly public space uses, such as On the Fly vending carts, which use zero-emissions batterypowered vehicles and source food locally.

#### DC LEED BUILDING FACTS

Many tenants, including the U.S. General Services Administration (GSA), are requiring that their leases be in LEED-certified or higher-rated buildings. As a result of the market demand created by tenants and the wave of new construction built to LEED standards, DC now has more LEEDregistered properties awaiting certification than any other city in the country. The DC Office of Planning notes that the city has 20 LEED-certified buildings and more than 150 additional buildings that are LEED-registered—more than any other city in North America.

Source: USGBC, DC Government

#### 4. ENHANCING TRANSPORTATION OPTIONS

Downtown boasts one of the most effective public commuter transportation networks in the country, where 39% of the workforce uses public transportation. That figure is expected to increase as gasoline prices continue to soar, forcing more commuters to opt for public transportation and leave their cars at home.

At the same time, commuter trips represent only 20% of the trips people make regularly using public transportation. The Downtown BID realizes that much more can be done, not only to increase public transportation options for both work and non-work related trips, but also to reduce congestion on Downtown streets which forces vehicles to idle for long periods, adding to carbon emissions and delaying goods and passenger deliveries. As a result, the Downtown BID is taking steps to:

Collaborate with DDOT to design rational curbside uses that

minimize conflicts, reduce double-parked vehicles and safety hazards for pedestrians and bicyclists and provide better access to bus stops;

Work with property owners to identify and resolve impediments to goods and service delivery to buildings off-street to take some pressure off of the curbside;

Encourage using smart parking technology on the curb and off-street to help reduce automobiles' carbon contributions and meet with Downtown BID stakeholders and decision makers to facilitate using market-rate metered parking and real-time parking availability information, both of which have proven their value to congestion reduction in other U.S. cities; and

Promote efficient, affordable surface transit such as the DC Circulator, express buses and streetcars and assist DDOT with bicycle parking installations, striping Downtown streets for bike lanes and promoting bike sharing as a good transportation choice for travel.

# CONCLUSION

Over the past decade, Downtown has undergone a remarkable transformation. Once perceived as a government office park lacking in vitality, it has since blossomed into a vibrant community bolstered by significant reinvestment and enthusiasm, making for a remarkable urban experience. This momentum has now moved beyond Downtown's core and into emerging areas such as Mount Vernon Triangle, NoMA and the Capital Riverfront.

From the city's perspective, this activity provides huge benefits that help fund public programs and create jobs. From the Downtown BID's perspective, the momentum also helps to promote Downtown as a responsible sustainable partner that is committed to pursuing and promoting aggressively the highest standards of efficiency and sustainability for both new and existing buildings.

However, with this commitment comes a sense of urgency to do the right things by embodying the triple bottom line to create a more sustainable and equitable city—a first-class international hub viewed as a model whose deeds resonate worldwide. Thus, The District of Columbia is committed to being the greenest and most environmentally sustainable **major city in the country.** 

- Mayor Adrian Fenty

the Downtown BID will continue to do what it does best on behalf of stakeholders: convene roundtables, disseminate best practices, expand partnerships with various government agencies, non-profit organizations and private companies to promote the Downtown BID area as a green leader.

DC has the desire, wherewithal and steadfastness to provide the necessary leadership instrumental to enhancing the urban environment befitting a city of its stature. A smart, sustainable future is the goal. Achieving it is palpable. And the Downtown BID area is on its way.

#### WEB RESOURCES

Downtown BID – www.downtowndc.org/green Green DC, DC Government web page – www.green.dc.gov U.S. Green Building Council – www.usgbc.org EPA Energy Star – www.energystar.gov Cool Capital Challenge – www.coolcapital.org

#### **TELL US YOUR STORIES**

We would like to know your stories about being green. To share your experiences, visit our website at:

#### www.downtowndc.org/greenstories

For additional information about Greening Downtown DC please contact:

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The Downtown DC Business Improvement District (BID) is a private, non-profit organization that provides safety, hospitality, maintenance and beautification, homeless, economic development, transportation, streetscape and marketing services to Washington's center city. Property owners have agreed to tax themselves to provide services to the Downtown BID area, which covers 138 blocks from Massachusetts Avenue on the north to Constitution Avenue on the south, and from Louisiana Avenue on the east to 16th Street on the west. For more information, please visit www.downtowndc.org.



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