



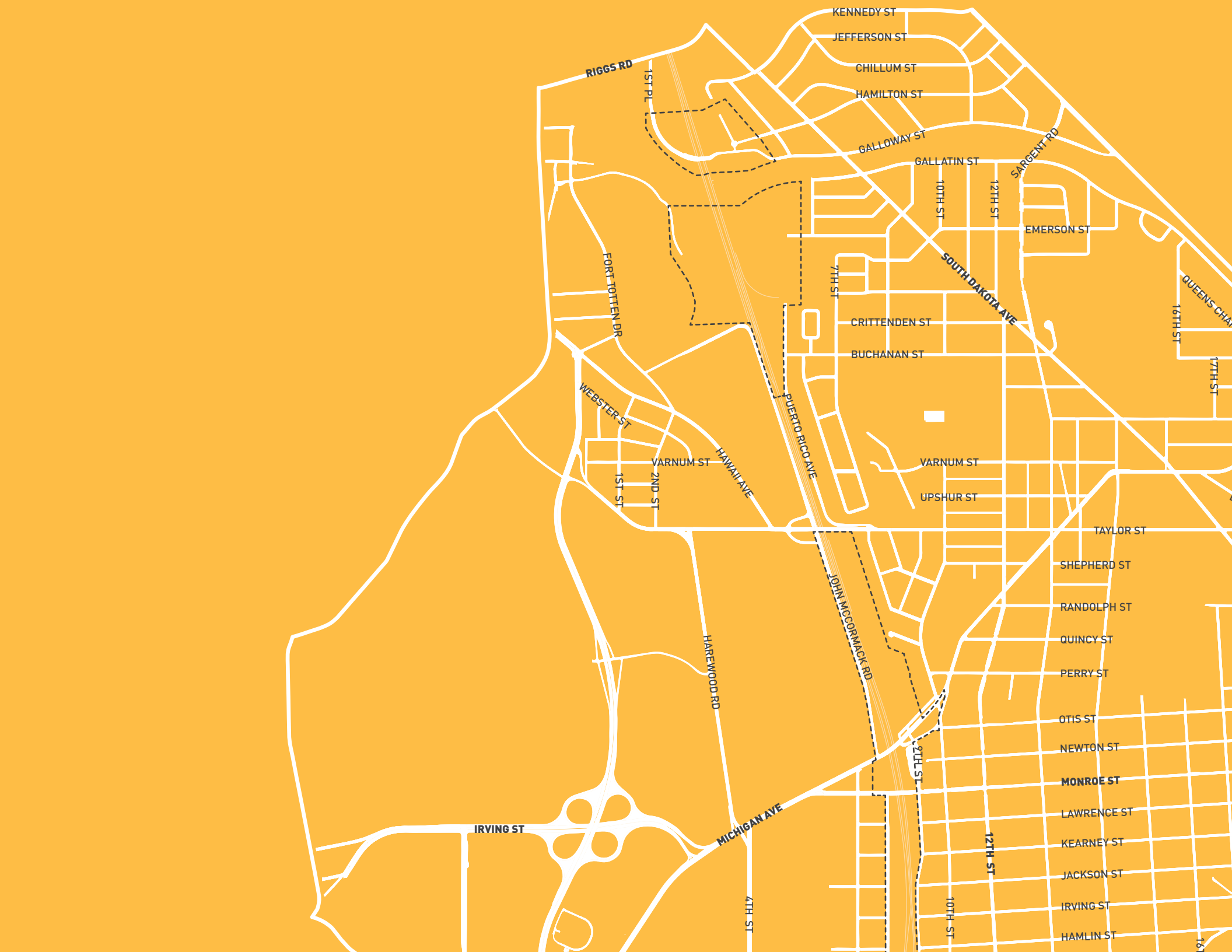
**GOVERNMENT OF THE  
DISTRICT OF COLUMBIA**

VINCENT C. GRAY, MAYOR

**AUGUST 2014**



The District of Columbia  
**WARD 5 INDUSTRIAL LAND TRANSFORMATION STUDY**



RIGGS RD

1ST PL

FORT TOTTEN DR

WEBSTER ST

1ST ST

2ND ST

VARNUM ST

HAWAII AVE

HAREWOOD RD

IRVING ST

MICHIGAN AVE

4TH ST

KENNEDY ST

JEFFERSON ST

CHILLUM ST

HAMILTON ST

GALLOWAY ST

GALLATIN ST

10TH ST

12TH ST

SARGENT RD

EMERSON ST

SOUTH DAKOTA AVE

7TH ST

CRITTENDEN ST

BUCHANAN ST

PUERTO RICO AVE

VARNUM ST

UPSHUR ST

JOHN MCCORMACK RD

9TH ST

12TH ST

10TH ST

TAYLOR ST

SHEPHERD ST

RANDOLPH ST

QUINCY ST

PERRY ST

OTIS ST

NEWTON ST

**MONROE ST**

LAWRENCE ST

KEARNEY ST

JACKSON ST

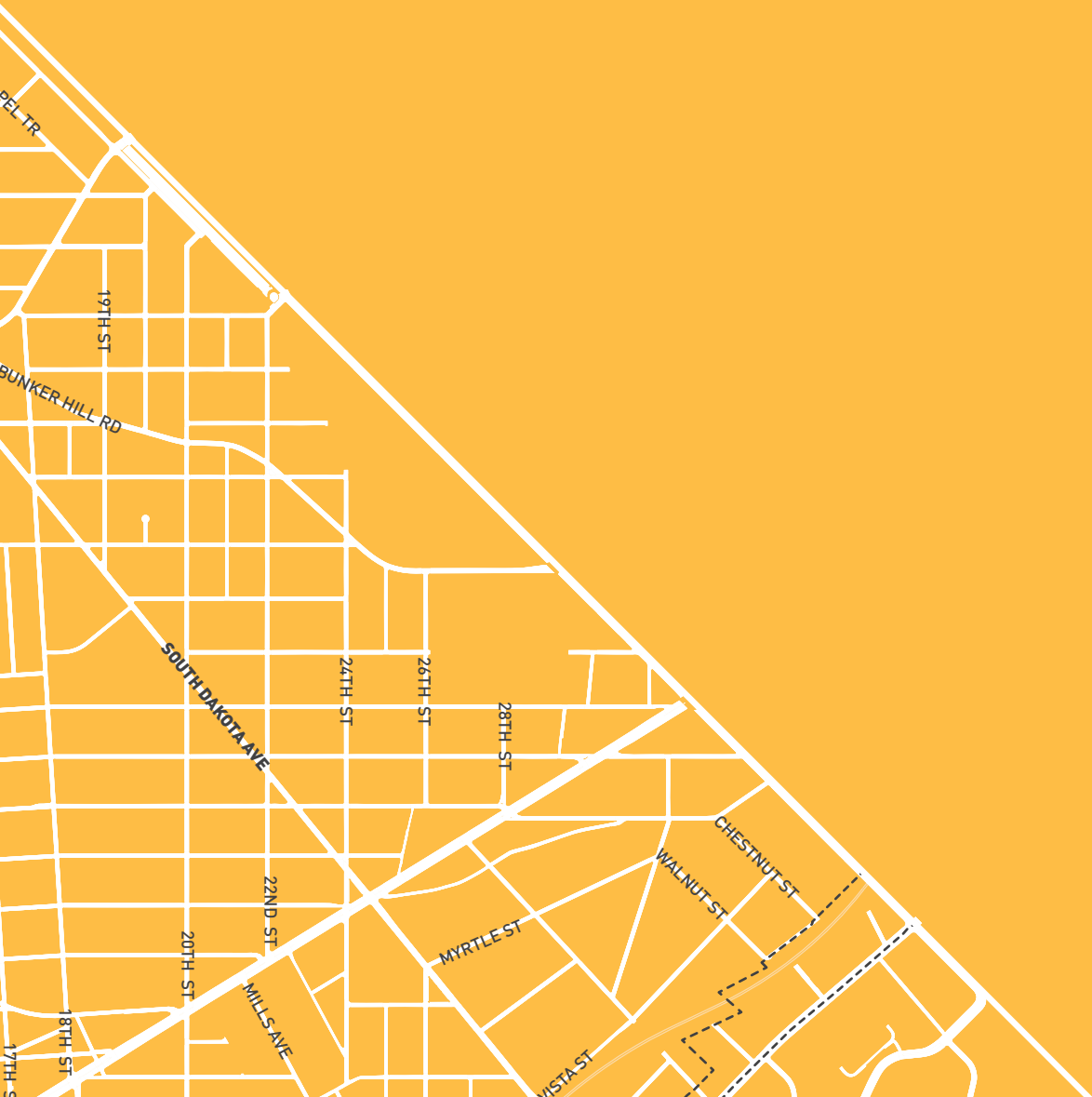
IRVING ST

HAMLIN ST

16TH ST

17TH ST

16TH ST



**KEY:**



NOTE: SOUTH WARD 5 CAN BE FOUND ON THE BACK INSIDE COVER



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## LETTER FROM MAYOR VINCENT C. GRAY

Dear Residents and Business Owners,



I am delighted to present to you Ward 5 Works, a five-year strategy to realize the full potential of Ward 5's industrial land as a thriving asset where we can grow good-paying jobs, leverage existing and emerging businesses, promote local entrepreneurship and increase environmental stewardship. This strategy is also about ensuring that businesses and municipal facilities are good neighbors that create benefits and amenities for surrounding communities. This report is the result of the hard work and dedication of the Ward 5 Industrial Land Transformation Task Force that I created in January 2013 in collaboration with Ward 5 Councilmember Kenyan McDuffie.

While population growth in the United States has slowed to a pace not seen since the Great Depression, the District has continued to grow rapidly – 13,000 additional residents between 2012 and 2013 – illustrating our ability to be one of the most attractive and competitive cities in the nation. We have been able to reverse decades of population loss because of our visionary ability to see value in some of our least appreciated assets and transform some of our most blighted areas into what they are today—making DC the magnet for investment it has become.

This repositioned industrial land will be an essential ingredient for realizing the inclusive economic development and sustainability targets outlined in my One City Action Plan, Sustainable DC Plan and Five-year Economic Development Strategy. While the District does not have the strong manufacturing and industrial heritage of some other cities, it still boasts over 500 businesses located on Ward 5 industrial land alone. Some have thrived here for generations, providing opportunities for small business owners, and creating thousands of well-paying jobs that provide training and employment to residents at the entry level and beyond. These are the types of jobs that we need to invest in and grow in the District. Other businesses represent important new sectors for the District, including local food, creative, technology and green industries. Through coordinated policy, I anticipate that industrial land will not only achieve much higher performance and better environmental stewardship in the surrounding communities, but also provide amenities and help to meet my goals of economic diversification, growth in small and green businesses, first-class municipal operations and an expanding range of jobs for different skill levels – all the while complementing the move to a greener, more equitable city.

Ward 5 Works proposes to invest our substantial resources, energies and creativity in industrial land for the next five years. I extend my thanks and appreciation to the members of the Ward 5 Industrial Land Transformation Task Force for taking on the charge and developing this strategic plan. I am confident that if we collectively commit to the strategies outlined in this report, we will realize remarkable improvements to Ward 5 industrial areas as they become magnets for green and creative businesses that will help diversify the District's economy, create jobs for all skill levels, and provide desirable amenities and services for the Ward 5 community.

Sincerely,

A handwritten signature in black ink that reads "Vincent C. Gray". The signature is written in a cursive, flowing style.

Vincent C. Gray  
Mayor of the District of Columbia



## A LETTER FROM COUNCILMEMBER KENYAN R. MCDUFFIE

Dear Residents and Business Owners,



In the fall of 2012, I introduced the Ward 5 Industrial Land Transformation Task Force Act. The legislation contemplated the creation of a task force led by the DC Office of Planning that would develop a plan for the revitalization of Ward 5's industrial land.

Ward 5 holds the majority of the city's industrial land, which presents both opportunities and challenges. Residents who live near this area have for decades borne the difficulties arising from industrial activities. Notably, however, there are many responsible and successful industrial business owners who prize Ward 5's industrial land as an affordable and flexible place to do business within the city's borders. When envisioning the task force, easing the friction between these seemingly incompatible land uses – residential and industrial – and encouraging responsible companies, was my top priority.

Working with Mayor Vincent C. Gray, the Ward 5 Industrial Land Transformation Task Force was convened via Executive Order in early 2013 and it immediately set to work. Its impressive membership roster includes Ward 5 residents, subject-matter experts and key government officials. The Task Force met at a variety of sites across the Ward, held four focus groups and solicited extensive feedback from residents at a Ward 5 open house. The content of this report begins an overdue discussion about capitalizing on the potential of Ward 5's industrial land in a manner that accommodates both industrial and residential uses in close proximity. We address issues critical to residents, such as buffering between residential and industrial zones, co-location of municipal uses and possibilities for community amenities and commercial offerings. We also think deeply about how to redefine urban industry to reflect the values of sustainability, economic diversification and career-oriented workforce development.

Importantly, the report moves us forward in our collective thinking about one of the District's most important gateways: New York Avenue. The report presents a vision that transforms New York Avenue into a gateway truly fitting of the nation's capital and provides some strategic steps toward achieving that goal.

Five years from now, having implemented many of the recommendations in this report, I envision an urban landscape that inspires pride. Ward 5's industrial land could become a thriving hub for jobs and workforce training within 21st-century industrial enterprises. Select areas could serve as a haven for artists and recreational opportunities. And the entire area could be shaded by an extensive tree canopy.

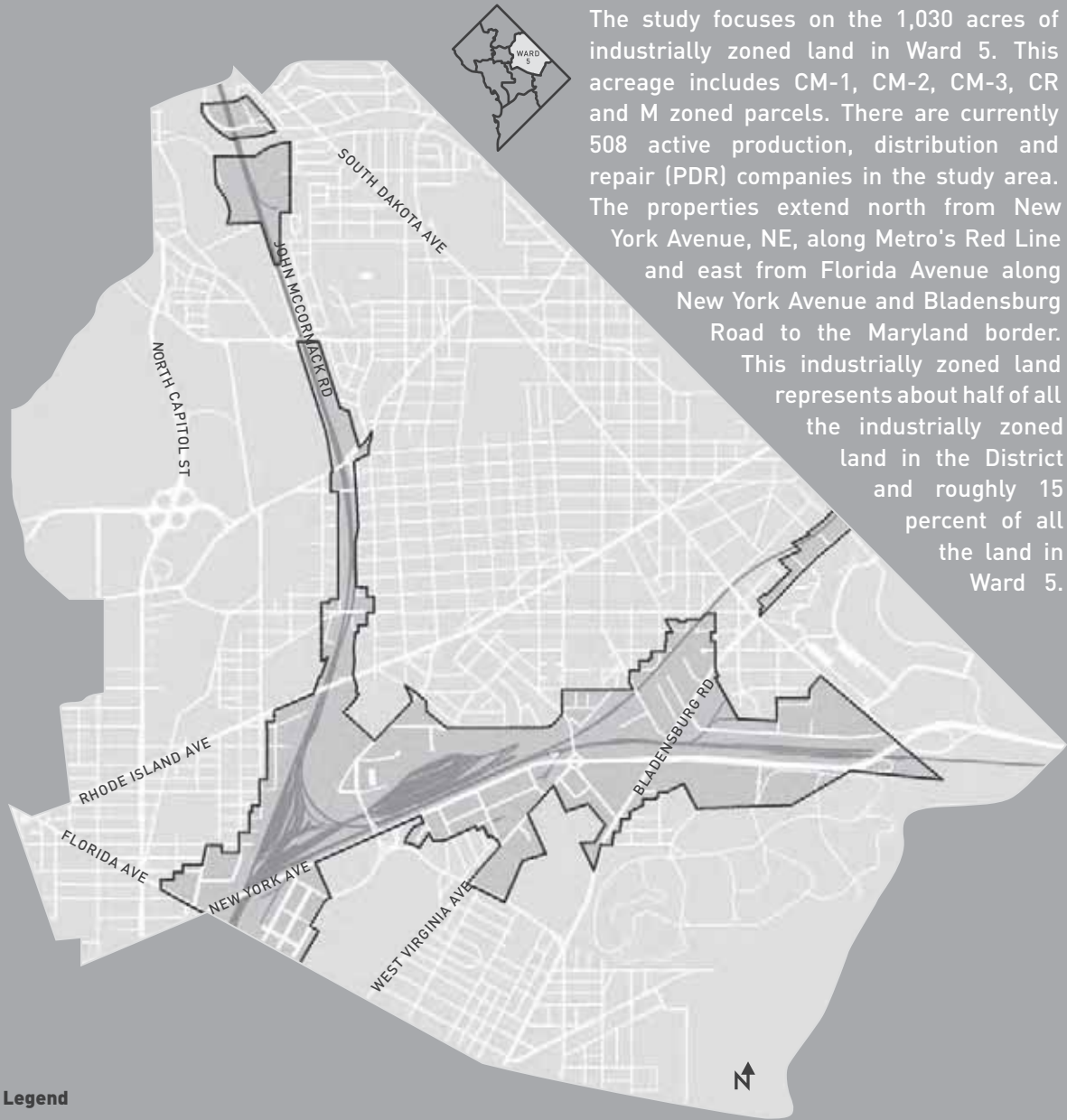
I am so pleased that we are, for the first time, planning strategically for the use and management of Ward 5's industrial land and I am delighted to share these ideas with you.

In solidarity,

A handwritten signature in black ink, appearing to read 'K. R. McDuffie'. The signature is stylized and fluid, written over a light-colored background.

Kenyan R. McDuffie  
Councilmember, Ward 5

## STUDY AREA



The study focuses on the 1,030 acres of industrially zoned land in Ward 5. This acreage includes CM-1, CM-2, CM-3, CR and M zoned parcels. There are currently 508 active production, distribution and repair (PDR) companies in the study area. The properties extend north from New York Avenue, NE, along Metro's Red Line and east from Florida Avenue along New York Avenue and Bladensburg Road to the Maryland border. This industrially zoned land represents about half of all the industrially zoned land in the District and roughly 15 percent of all the land in Ward 5.

### Legend

□ STUDY AREA

00



# EXECUTIVE SUMMARY

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## VISION & GOALS

The Mayor's Executive Order on January 31, 2013 established a task force to create a strategy for the modernization and adaptive use of industrial land in Ward 5. The Ward 5 Industrial Land Transformation Task Force, comprising residents, business owners and District agency representatives, defined the following vision and goals that guide this strategy.

### VISION

In the next five years, Ward 5 will adapt its existing industrial land to develop a cutting-edge and sustainable production, distribution, and repair industry that diversifies the District's economy, serves as a hub for low-barrier employment, complements and enhances the integrity of neighborhoods, and provides opportunities for arts, recreation and other community amenities.

### GOALS

- 01** Diversify the District's economy and bolster existing businesses.
- 02** Grow and create more businesses, particularly in new and emerging industries.
- 03** Promote inclusive job growth, offering residents a range of employment opportunities, well-paid jobs with low entry barriers and career ladder potential.
- 04** Address nuisance/operational issues of some existing businesses.
- 05** Improve environmental stewardship and performance.
- 06** Serve municipal functions and optimize efficiencies, co-locations.
- 07** Provide desired community amenities.
- 08** Create great places, improve physical appearance and enhance connectivity.

## 8 STUDY GOALS FROM THE TASK FORCE



01

**Diversify Economy &  
Bolster Businesses**



02

**Grow New &  
Emerging Businesses**



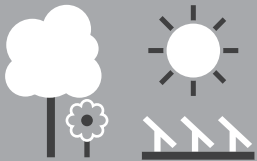
03

**Promote Inclusive  
Job Growth**



04

**Address Nuisance  
Issues**



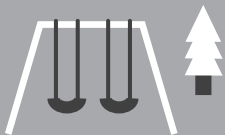
05

**Improve Environmental  
Stewardship & Performance**



06

**Optimize Municipal  
Functions**



07

**Provide Community  
Amenities**



08

**Create Great  
Places & Connectivity**

## THE CHALLENGE

Ward 5's industrial land offers a strategic asset to Washington, DC. Many businesses operating within Ward 5's industrially zoned areas support the District's economy and create jobs for city residents. However, the District's supply of industrial land and buildings is under market pressure to convert to other uses. Moreover, many buildings located in industrial areas of Ward 5 are in need of modernization to accommodate new industries and some industrial business activities present a nuisance to neighboring residential areas.

In spite of the existing conditions, which can and should be addressed, industrial land holds tremendous opportunity to stimulate economic growth, employ residents with career-ladder jobs, maintain affordable land values and offer amenities to surrounding communities. The District and its residents have the opportunity to improve, support and re-imagine this vital and diverse area to expand jobs and amenities. This endeavor will support the more than 500 businesses in construction, manufacturing, transportation and related fields already at work in Ward 5. The District government will address nuisance properties and activities that make industrial land less attractive to neighbors and new businesses. The effort will also foster new companies, focused on locally made foods, goods and technologies, and consolidate Ward 5's existing municipal facilities.

Industry continues to adapt to the changing world economy. The smokestacks and assembly lines of large-scale manufacturing operations no longer reflect the realities of today's industrial base. Industrial users now include a range of creative and start-up maker businesses as well as research and development enterprises. Ward 5 is uniquely positioned to attract and grow these businesses by building on its existing PDR and industrial land base, the strong consumer market of the metro region and its distinctive locational advantage inside the District.

**The District and its residents have the opportunity to improve, support and re-imagine this vital and diverse area to expand jobs and amenities.**

## DC INDUSTRY MATTERS

Though largely hidden from DC residents' daily lives, Ward 5's industrial areas generate many important benefits:

- » Extensive base of production, distribution, and repair (PDR) businesses with 10,700 employees;
- » Entrepreneurial opportunities, particularly for small businesses;
- » Locally produced goods and services;
- » Convenient access to repair and other services;
- » Entry-level and career ladder jobs for lower-skilled workers; and
- » Support for the District's day-to-day municipal operations, including street repair, warehousing, vehicle maintenance and storage of salt and other materials.

## MARKET CONDITIONS AND OPPORTUNITIES

Traditional PDR uses — construction, manufacturing, wholesale trade and administrative, support and waste management — represent about 10 percent of the city's total job base. Although PDR employment in the District has been steady to declining in recent years and despite the District's land prices being higher than those of suburban jurisdictions, demand for facilities in Ward 5's industrial areas is still relatively strong. Most PDR companies now locating in the District are seeking access to the District's customer base (both residents and businesses), the local workforce, prestige of a District address or a facility near their homes.

Additionally, the city's overall supply of industrial land is dwindling and Ward 5 now has roughly one-half of the city's total supply of industrial land. There is little available flex space (single-story, office/warehouse space) and several buildings do not meet the needs of modern industry. Small to medium sized companies report great difficulty in finding appropriate space, particularly at affordable prices.

By leveraging this existing demand for small and medium-sized PDR spaces and by capitalizing on current economic trends, the District of Columbia in partnership with local stakeholders has the opportunity to transform the industrial areas of Ward 5 into a hub of cutting-edge and sustainable PDR businesses. Key opportunities include:

- » "Maker" uses (small-scale production that includes both engineering oriented pursuits, as well as tradition crafts/trades);
- » Food production and distribution, including alcoholic beverages;
- » Media and communications;
- » Specialty sports and recreation facilities;
- » Arts and creative uses; and
- » Green, sustainable businesses.

### PDR EMPLOYMENT



#### Production



#### Distribution



#### Repair

## POTENTIAL SOLUTIONS

The strategic recommendations for the next five years span a wide range of policies, actions and place-based investments.

### **Governance**

Create an industrial advocate to speak for industrial users, serve as a liaison to neighboring residents and provide clear communication with the Ward 5 community. The industrial advocate would spearhead marketing/branding, business attraction, technical assistance and coordination among businesses.

### **Zoning, Land Use and Regulation**

Revise the zoning code to preserve and more effectively use industrial land, buffer residential uses from the impacts of industrial uses, encourage inclusion of retail space in PDR businesses and reduce the time required to obtain a building or occupancy permit.

### **Nuisance Uses and Buffering**

Improve existing waste management activities and limit future ones. Enforce waste transfer station settlement agreement to reduce negative impacts on adjoining neighborhoods. Buffer neighborhoods from intrusive uses and launch a pilot Good Neighbor program to encourage a code of behavior that respects the rights and needs of both industrial businesses and residents.

### **Environmental Stewardship and Performance**

Improve the overall environmental performance of the Ward 5 industrial land by capturing and treating stormwater on site; creating renewable energy opportunities and energy efficiency upgrades; and ameliorating air quality through technology, green buffers and tree canopies.

### **Workforce Development**

Strengthen District residents' skills and job readiness through workforce development programs. Coordinate Department of Employment Services resources with an Industrial Advocate to ensure District residents have a pipeline to new PDR jobs.

### **Economic Development**

Engage major educational institutions, assist small businesses in upgrading their facilities and support growth in emerging industries, including local media and communications.

### **Business Finance and Assistance**

Help Ward 5 businesses to access financial resources and technical assistance.

### **Marketing and Branding**

Build support for industrial uses and change perceptions of Ward 5.

### **Industrial Space**

Partner with the private sector to support development of affordable space for PDR and new and emerging businesses with particular focus on arts uses and makers, media and communications, food industries and green, sustainable businesses. Explore potential for a "creative hub."

### **Municipal Uses**

Redevelop the District's West Virginia Avenue property as a world-class, sustainable site supporting consolidated state-of-the-art operations for agency facilities within Ward 5. Use municipal facilities to enhance the community.

### **Infrastructure and Transit**

Enhance access to Ward 5 with investment in bicycle infrastructure, pedestrian connections, bus service, streetcar and other premium transit options.

### **Community Amenities**

Invest in new and upgraded community amenities, such as parks, retail, restaurants, streetscapes and family-friendly destinations. Incorporate community amenities into municipal use facilities. Recruit and incentivize specialized sports and recreation-oriented businesses.

## PRIORITY ACTIONS

Going forward, the highest priority actions for the next two years include:

- » Improve existing and minimize future waste management activities;
- » Work with 1220 W Street, NE waste transfer station to install landscaping, sound barriers and other improvements that would improve the relationship with residential neighbors;
- » Enforce the settlement agreement to bring the Rodgers Brothers recycling waste transfer station into compliance;
- » Designate an Industrial Advocate/Creative Economy Sector Manager to begin marketing/branding, coordination, technical assistance and neighborhood relations;
- » Prepare the master facilities plan for co-locating Ward 5 municipal uses on the West Virginia Avenue site, creating state-of-the-art facilities and operations;
- » Launch a pilot Good Neighbor program;
- » Expand DCRA's Small Business Resource Center with additional programs to assist small businesses in securing building and occupancy permits more efficiently;
- » Study PDR zoning in greater depth and consider modifications to enhance PDR uses and explore allowing limited "make/live" districts;
- » Evaluate site opportunities for a "creative hub";
- » Organize an "Industrial Development Forum" to gather private sector resources and ideas for implementation;
- » Implement a buffer strategy to enhance transition areas;
- » Deploy District resources to improve the environmental performance of the industrial area; and
- » Create a grant competition for the establishment of community tool libraries.



### Food Production & Distribution

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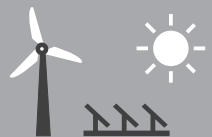
### Media & Communications

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### Arts & Makers

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### Green, Sustainable Industry

## STUDY AREA



The study focuses on the 1,030 acres of industrially zoned land in Ward 5. This acreage includes CM-1, CM-2, CM-3, CR and M zoned parcels. There are currently 508 active production, distribution and repair (PDR) companies in the study area. The properties extend north from New York Avenue, NE, along Metro's Red Line and east from Florida Avenue along New York Avenue and Bladensburg Road to the Maryland border. This industrially zoned land represents about half of all the industrially zoned land in the District and roughly 15 percent of all the land in Ward 5.

### Legend

□ STUDY AREA

# DC INDUSTRY MATTERS

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## INTRODUCTION

Ward 5's industrial land offers a strategic asset for Washington, DC. The District, however, has historically given relatively little focus to this sector to develop a concerted strategy for capitalizing on its potential. Going forward, the area's industrial activity will play an important role in the local economy as it creates quality jobs for unemployed and underemployed residents. The District has the opportunity to act now to protect and grow this vital and diverse area of industrially zoned land.

Along with supporting the local industrial sector, transforming Ward 5's industrial land will reinforce several initiatives, including the District's commitment to diversifying its economy, growing small businesses and promoting sustainability. At the same time, this policy shift will address several prominent nuisance properties that offer limited growth opportunities in the area. The strategies outlined in this study create a blueprint and an action plan for the next five years.

This endeavor will build on the more than 500 production, distribution and repair (PDR) businesses already working in Ward 5 (listed in Appendix A), while fostering new businesses making locally-produced foods, goods and technologies, offering a tremendous opportunity

to reimagine how best to consolidate, enhance, and modernize essential municipal facilities that employ large numbers of PDR workers.

Market forces are rapidly increasing demand for Ward 5 properties. The District's growing population base, coupled with rising residential rents and prices throughout the city, has propelled demand for Ward 5 houses and apartments. That demand has translated into significant new developments near the NoMa Metro and other Red Line stations on former industrial land. Redevelopment proposals for Ivy City and other New York Avenue locations are targeting additional industrial properties. As a result, the supply of industrial sites and buildings is declining and prices are escalating. Industrial users are being priced out of the District, removing opportunities for entrepreneurship and job creation. This phenomenon is particularly troubling for two reasons: (1) industrial land stabilizes nearby property values within an affordable range, and (2) PDR jobs typically pay higher wages and offer more significant career mobility than low-barrier jobs in other industries.

Emerging industries and on-going shifts in the national economy are changing the nature and scale of demand for industrial buildings and land. New businesses are evolving in older industrial buildings, responding to demand for new services and products, particularly for local, sustainable



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## TASK FORCE MEMBERS:

**Kenyan R. McDuffie**

Councilmember, Ward 5

**Harriet Tregoning**

Task Force Chairperson, Former Director, DC Office of Planning

**Victor Hoskins**

Former Deputy Mayor for Planning and Economic Development

**Keith Anderson**

Director, District Department of the Environment

**Terry Bellamy**

Former Director, District Department of Transportation

**Betsy Keeler**

Office of the Chief Financial Officer

**Stephen Campbell**

Department of General Services

**Hallie Clemm**

Department of Public Works

**Eric Jones**

Ward 5 Resident

**Jaime Fearer**

Ward 5 Resident

**Peta-Gay Lewis**

Advisory Neighborhood Commissioner Single Member District 5D01, Ward 5 Resident

**Victoria Leonard**

Ward 5 Resident

**Jalal Greene**

Ward 5 Resident

**Edward Johnson**

Ward 5 Resident

**Carol Mitten**

Ward 5 Resident

**Ron Dixon**

President and CEO, The Dixon Group

production. Ward 5 is very well-positioned to meet these emerging demands and continue to support existing businesses essential to the District economy.

The District of Columbia has the opportunity to reposition Ward 5's industrial land to play a critical role in growing and diversifying the economy and enhancing sustainability.

## THE TASK FORCE AND ITS CHARGE

In the fall of 2012, Councilmember Kenyan McDuffie introduced the Ward 5 Industrial Land Transformation Task Force Act of 2012. The legislation contemplated the creation of a Task Force, led by the DC Office of Planning, that would develop a plan for the revitalization of Ward 5's industrial land. His action helped to catalyze this initiative.

On January 31, 2013, Mayor Vincent C. Gray created the Ward 5 Industrial Land Transformation Task Force (the "Task Force") to develop strategies for adapting and modernizing the industrial land in Ward 5. This 16-member Task Force, chaired by the Director of the DC Office of Planning, includes eight community members and representatives of the Chief Financial Officer of the District of Columbia (OCFO), Office of the Deputy Mayor for Planning and Economic Development (DMPED), Department of General Services (DGS), Department of Public Works (DPW), District Department of the Environment (DDOE) and District Department of Transportation (DDOT).

Charged with promoting jobs and increasing efficiencies in Ward 5's industrial land, the Task Force held six meetings, a site tour, focus groups and a public open house. This study is the product of that Task Force effort.





## VISION AND GOALS

The Task Force defined the vision and goals that guide this industrial development strategy as follows:

### VISION

In the next five years, Ward 5 will adapt its existing industrial land to develop a cutting-edge and sustainable production, distribution, and repair industry that diversifies the District’s economy, serves as a hub for low-barrier employment, complements and enhances the integrity of neighborhoods, and provides opportunities for arts, recreation and other community amenities.

### GOALS

- 01** Diversify the District’s economy and bolster existing businesses.
- 02** Grow and create more businesses, particularly in new and emerging industries.
- 03** Promote inclusive job growth, offering residents a range of employment opportunities, well-paid jobs with low entry barriers and career ladder potential.
- 04** Address nuisance/operational issues of some existing businesses.
- 05** Improve environmental stewardship and performance.
- 06** Serve municipal functions and optimize efficiencies, co-locations.
- 07** Provide desired community amenities.
- 08** Create great places, improve physical appearance and enhance connectivity.

## 8 STUDY GOALS FROM THE TASK FORCE



**01**  
Diversify Economy & Bolster Businesses



**02**  
Grow New & Emerging Businesses



**03**  
Promote Inclusive Job Growth



**04**  
Address Nuisance Issues



**05**  
Improve Environmental Stewardship & Performance



**06**  
Optimize Municipal Functions



**07**  
Provide Community Amenities



**08**  
Create Great Places & Connectivity

## APPROACH AND METHODOLOGY

In pursuing these goals, the Ward 5 Industrial Land Transformation Study builds on several citywide analyses of District industrial areas. These studies include the 2006 Industrial Land Study completed by the DC Office of Planning and the 2007 Production, Distribution and Repair Facilities Plan conducted by the former DC Office of Property Management (now DC Department of General Services).

Additionally, the Comprehensive Plan and several existing Small Area Plans provide specific guidance on the role of PDR areas and future land use policy for Ward 5 industrial properties. Finally, a recent set of District-wide policy strategies — the One City Action Plan, Five-Year Economic Development Strategy, Sustainable DC Plan and Creative DC Action Agenda — have further highlighted the opportunity to leverage and transform the Ward 5 industrial areas as new sustainable and creative economic engines for the District (additional details on page 13).

The study process involved four major components: property inventory; market analysis; case study review of best practices; and stakeholder outreach.

As part of this effort, a detailed inventory of Ward 5's physical setting was prepared that documented the current status of individual properties. A market analysis of PDR industry and industrial real estate trends in Ward 5, the District and the region provided a sound economic base for the strategy formulation (see Appendix B).

Stakeholder input has been critical to this study—in addition to significant direction from the Task Force, a targeted communications and outreach effort engaged a diverse group of Ward 5 stakeholders in the planning process. This outreach included four focus groups of representatives from the community, food industry, creative and technology industries, and building and community development businesses. Interviews with Ward 5's largest industrial users, long-time businesses and real estate brokers and developers active in the area supplemented the focus group findings. Additionally, Councilmember Kenyan McDuffie convened a large communitywide meeting in September 2013 that attracted more than 80 participants to provide feedback.

The consultant team conducted several case studies, including five in-depth studies of areas in Philadelphia, Pittsburgh, Brooklyn, Sheffield and the Bay Area (West Berkeley and San Francisco, California). Additional case studies examined municipal use complexes and techniques for buffering industrial and residential uses.

### CASE STUDY LOCATIONS

**Brooklyn**

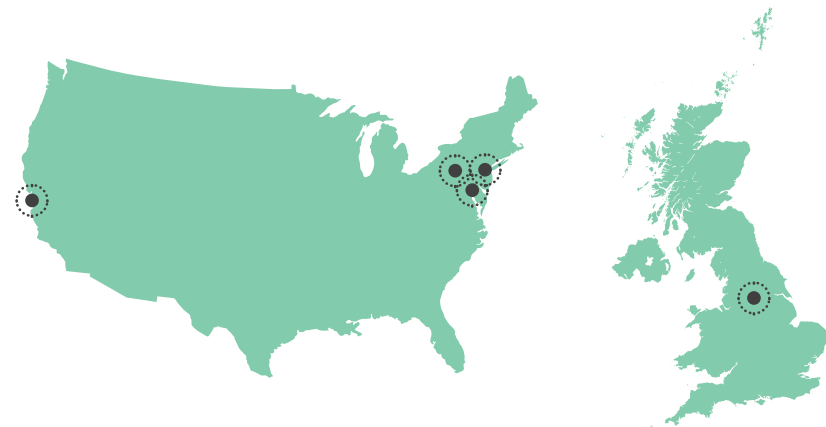
**Bay Area**

(West Berkeley & San Francisco, CA)

**Philadelphia**

**Pittsburgh**

**Sheffield, UK**



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## FOCUS GROUPS

Stakeholder involvement centered on four focus groups of representatives from the community, food industry, creative and technology industries, and building and green construction community.

More extensive summaries of the focus group discussions appear in Appendix C. The feedback from the meetings with these groups is summarized as follows:



### Community Focus Group

This session identified a general distrust and disconnect between the community and businesses in the Ward 5 industrial area. Local companies are largely unknown to residents and none of the nine community leaders who participated in the focus group knew anyone who works in the Ward 5 industrial area. Residents identified businesses as disruptive and offered solutions, including more arts-related activities, creative businesses and retail.



### Food Focus Group

Food companies are price-sensitive and have difficulties finding space in Ward 5 at the right size and right cost. Start-up businesses are also having a hard time getting support from real estate brokers because of their small size; this problem constrains their ability to locate appropriate facilities. This focus group brought forth the idea of “green tape” versus red tape to make the process of getting business licenses and occupancy permits easier in the District.



### Arts Community Focus Group

This group raised similar issues to the food group over finding work space and dealing with real estate brokers, but unlike the food users, the participants desire raw spaces and cited a small accessory retail component as a very important feature for them. Generally speaking, creative businesses settle in areas with restaurants that attract people (potential customers) and feel their presence reinforces the restaurants. They would also like to see more live/work space in the Ward 5 industrial area.



### Building and Community Development

This group feels positive about the direction of Ward 5, but is concerned that potential gentrification in the area will limit its affordability.

## WHAT IS THE "MAKER" ECONOMY?

- Small-scale production that includes both engineering-oriented pursuits, as well as traditional crafts/trades.
- Maker economy is becoming an important, emerging sector.
- Driven by contemporary do it yourself (DIY) culture and local/sustainable consumption models.
- Makers usually start with one to five employees and look for cheap industrial spaces of less than 3,000 square feet.
- Growth is closely associated with shared spaces (e.g., Union Kitchen and Fab Lab) that allow exchange of ideas, tools, skills.
- Maker businesses and the innovation economy are mutually reinforcing. They also employ traditional PDR workers.



## WHY INDUSTRIAL LAND POLICY MATTERS

During the course of the study, the Task Force and consultant team identified a number of key issues directly affecting Ward 5 and its future development patterns. While Washington's industrial land plays a valuable role in the DC economy, attention and action are required to maximize the potential benefits to the broader city.

Given both local and national trends, Ward 5 is well-positioned to support both existing and emerging PDR employment (production, distribution and repair). However, to do so, it must move to address physical challenges, including several underutilized and nuisance parcels in the Ward.

Specifically, the following observations establish a context for this study. They provide the reasons for why it is important to have a unified strategy for protecting, enhancing and supporting Ward 5's industrial land and the businesses located within its boundaries.

## LEVERAGING DISTRICT PRIORITIES

Repositioned industrial land is an essential ingredient for realizing greater economic development and achieving sustainability targets as contemplated in three recent District strategies. This study can leverage the economic development and sustainability priorities of these strategies to bring more resources to Ward 5 and more attention to its PDR areas.



### ONE-CITY ACTION PLAN

- » Grow and diversify the District economy – support innovative Sectors.
- » Provide a business-friendly environment; business regulatory reform task force.
- » Educate and prepare the workforce for the new economy.



### SUSTAINABLE DC PLAN

- » Create three times the number of small businesses.
- » Grow five times as many jobs providing green goods and services.
- » Achieve zero waste and other waste reduction targets.
- » Reduce greenhouse gas emissions.
- » Expand the number and range of jobs available to District residents.



### 5 YEAR ECONOMIC DEVELOPMENT STRATEGY

- » Become the most business-friendly economy in the nation.
- » Develop as largest technology center on the East Coast.
- » Provide affordable office space for early-stage tech.
- » Establish a presence for creative economy organizations along emerging corridors.
- » Establish a culinary incubator and training.
- » Repurpose vacant or underutilized properties for use by local artists and community.





## REASON 01: ENTREPRENEURIAL ACTIVITY

Over the past decade, the District has emerged as an increasingly important hub for entrepreneurial activity.

### **Ward 5 Industrial Businesses Help Diversify the District's Economy**

Both the District's existing PDR businesses and emerging green, creative, tech and craft food sectors are helping to broaden the local economy with businesses that serve non-federal markets. Strengthening existing businesses and attracting new ones in Ward 5 will contribute to a wider range of economic activities in the Ward and city as a whole.



### **Ward 5 Businesses Provide Valuable Goods and Services**

More than 500 businesses in Ward 5's industrial areas contribute to the local economy and provide District residents with important services—and these businesses support a very different workforce from the city's prevailing knowledge economy. Food markets provide access to fresh produce and artisanal goods, while local distributors supply restaurants throughout the city. Distribution centers, such as FedEx, support other businesses. Contractors construct new buildings and renovate existing homes and structures, often using sustainable materials and methods. Local repair shops fix automobiles, equipment and furniture, supporting both residents and businesses. Breweries and distilleries create highly prized local products. Maintenance yards keep taxis, limousines and the District's fleets and equipment operating. Ward 5 studios and other facilities allow artists, theater companies and other cultural uses to flourish.



**PDR jobs offer wages that range from \$5 to \$7 per hour more than those offered by retailers and restaurants.**

## REASON 02: EMPLOYMENT OPPORTUNITIES

Ward 5 industrial development can help to achieve the Five-Year Economic Development Strategy for the District of Columbia goal of creating 100,000 new jobs by 2018. Ward 5 industrial land supports a range of jobs that pay well and offer career advancement potential.

### **PDR Entry-Level Jobs Offer Career Advancement Potential**

Inclusive job growth is one of the District's primary goals for its economy, as expressed in the One City Action Plan (i.e., jobs for all residents). As the District moves toward a knowledge economy where most jobs require at least a college or associate degree, industrial businesses offer entry-level jobs with opportunities for career advancement, but limited educational requirements.

Throughout the District of Columbia, underemployed residents with no college education need access to jobs. Few PDR jobs require higher education, relying instead on on-the-job training. Many local PDR businesses provide extensive on-the-job training and apprenticeship programs that allow workers to advance in their careers. Expanding this sector can significantly improve the job opportunities available to DC residents. Creating a strong base of PDR employment should be a key strategy in reducing unemployment and underemployment among District residents.

### **PDR Jobs Pay Well and Provide Better Opportunities for District Residents**

PDR jobs offer wages that range from \$5 to \$7 per hour more than those offered by retailers and restaurants. For workers with limited education or job skills, such jobs are critical to their ability to escape poverty and earn a living wage.

Ward 5 PDR jobs and particularly District government PDR jobs provide employment to a much higher percentage of District residents than do other jobs in the city. More than 70 percent of the Department of Public Works jobs are held by city residents and in several divisions that share exceeds 70 percent.

## REASON 03: UNIQUE BUILDINGS

From a physical perspective, many of the buildings in Ward 5 are unique resources that align with the national trend of re-using older industrial buildings and neighborhoods.

### **Industrial Buildings Support Entrepreneurial Development**

The District's expanding population and economic base create exciting new opportunities for the city's development. Creative entrepreneurs increasingly are drawn to the city because of the high quality of life. This infusion of new population, economic energy and knowledge workers will allow the District to attract innovative businesses and promote entrepreneurship that can make the city a leader in technology, green businesses and the creative economy. Growing and diversifying the District's economy are among the top goals laid out in the One City Action Plan. Entrepreneurship will play a critical role in this diversification as the District pursues ambitious economic targets such as increasing small businesses three-fold by 2032 (Sustainable DC Plan).

Achieving the goal of becoming a greener, more sustainable and economically diverse city will depend, in part, on transforming the city's industrial land. Repurposing and improving the efficient use of industrial land will accommodate more businesses attracted to the layout, functionality and low cost of industrial spaces. These business opportunities include existing PDR industries and those in emerging sectors—e.g., fresh markets and food production, commercial kitchens, breweries/distilleries, "green" or environmentally-oriented businesses, art studios and galleries, filmmaking, theater production, etc.

### **Reuse of Industrial Buildings Creates Unique Working Environments**

Nationally and internationally, quality physical environments coupled with new technologies and business models are key ingredients of successfully transformed industrial developments. Many of the new trends in industrial land—sometimes referred to as the "Next Industrial Revolution"—favor places just like Ward 5: pre-World War II-era manufacturing districts with inexpensive, existing buildings offering unique architectural character and/or adaptable settings for various types of businesses. Authentic, gritty environments have great appeal for many emerging businesses.

## REASON 04: SHARED ECONOMY

Increasingly, businesses are looking at nontraditional and shared facilities. In the District, Ward 5 is a logical location for these types of places.

### **Sharing Economy is Evolving Nationally**

New modes of sharing access to major equipment and other resources that are expensive but used only occasionally are changing the economy. Zipcar is one of the most prominent examples, whereby individuals pay for access to shared cars when they need them, allowing much more intensive and efficient vehicle use when compared to individual ownership.

Extending this concept into industrial uses, shared access to technology and production equipment is lowering the cost of entry for entrepreneurs who cannot afford to purchase all of the expensive equipment they need (e.g., 3D printers). Some of these businesses are reusing older industrial buildings for shared workshops that support "makers" — craftspersons, artisans, designers and small manufacturers.

## REASON 05: OVERCOMING CHALLENGES

Despite these positive trends, major challenges to transforming Ward 5's industrial land remain. A number of nuisance properties limit Ward 5's development and alienate neighbors. Additionally, external market factors also present challenges to Ward 5's transformation.

### **Nuisance Properties Are Constraining Ward 5's Potential**

Ward 5 industrial land includes uses that negatively impact nearby residential neighborhoods with odors, noise and heavy truck traffic on residential streets. Particular nuisance properties make the area less attractive to neighbors and new businesses. Transforming industrial land is essential to providing Ward 5 neighborhoods with more compatible operations and desired amenities, allowing Ward 5 to live up to its ultimate potential.

### **Development Pressures Reduce the Supply of Industrial Land and Buildings**

As the District's economy has expanded, the city's supply of industrial land and buildings has declined. Since 1975, the District has lost one-quarter of all its industrially zoned land. Currently, the city has only five percent of its land zoned for industrial use. Ward 5's 1,030 acres of industrially zoned land represent nearly half of all the industrially zoned land remaining in the city.

### **Rising Industrial Land Prices Are Choking Small Business Creation and Growth**

Development pressures to convert industrial land and buildings to allowed, but less industrial, uses are already reducing the effective supply of industrial land and raising prices above the level that most small businesses can afford. Entrepreneurial opportunities for small business creation and growth are being choked by the high cost and limited availability of industrial space. Local businesses report that the cost and availability of industrial space are the primary issues affecting their operations.

### **District Municipal Uses Require a Protected Base of Industrial Land**

The District depends on industrial land to support its essential municipal services, such as construction and roadway material supply and processing; public utilities maintenance; storage; waste storage, processing and transfer; and maintenance/storage of public vehicles. Continued population growth will only increase future demand for these municipal services.





## STUDY ORGANIZATION

To address this broad set of issues and challenges, this study is organized into four additional chapters:

**Chapter 2:** Provides a study area overview and a market analysis.

**Chapter 3:** Summarizes the best practices identified through the case studies.

**Chapter 4:** Recommends policy, governance and financing strategies as well as place-based strategies for transforming Ward 5 industrial land.

**Chapter 5:** Provides a matrix summarizing the recommended actions and identifying timelines and responsible parties.

Technical appendices provide:

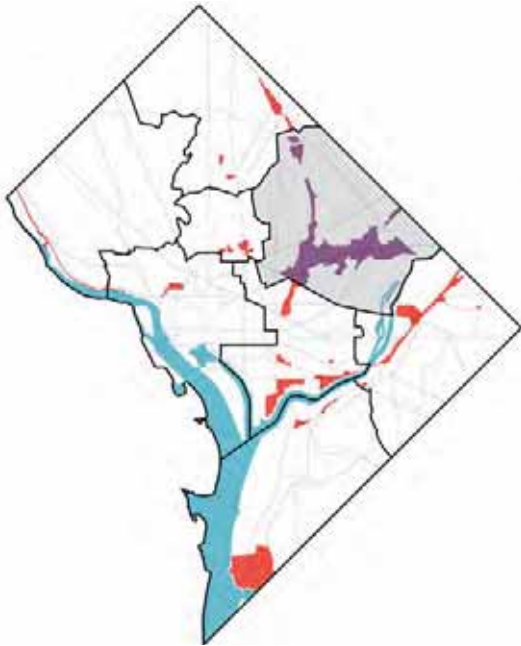
- » List of Ward 5 PDR businesses;
- » In-depth industrial market analysis;
- » Summaries of focus group discussions;
- » Case study summaries for Philadelphia, Pittsburgh, Brooklyn, Bay Area and Suffolk, United Kingdom; and
- » Overview of existing workforce and economic development programs.

Since 1975, the District has lost one-quarter of all its industrially zoned land.

02

# STUDY AREA OVERVIEW

## INDUSTRIAL LAND IN THE DISTRICT



### Legend

- INDUSTRIALLY ZONED AREAS
- WARD 5 INDUSTRIALLY ZONED AREAS
- WARD 5

Source: Office of the Chief Technology Officer; Ayers Saint Gross

## INTRODUCTION

Achieving the Task Force’s stated goals requires a thorough study of market forces and physical conditions.

Understanding current conditions and prevailing land use patterns is instrumental to the larger mission of transforming this area.

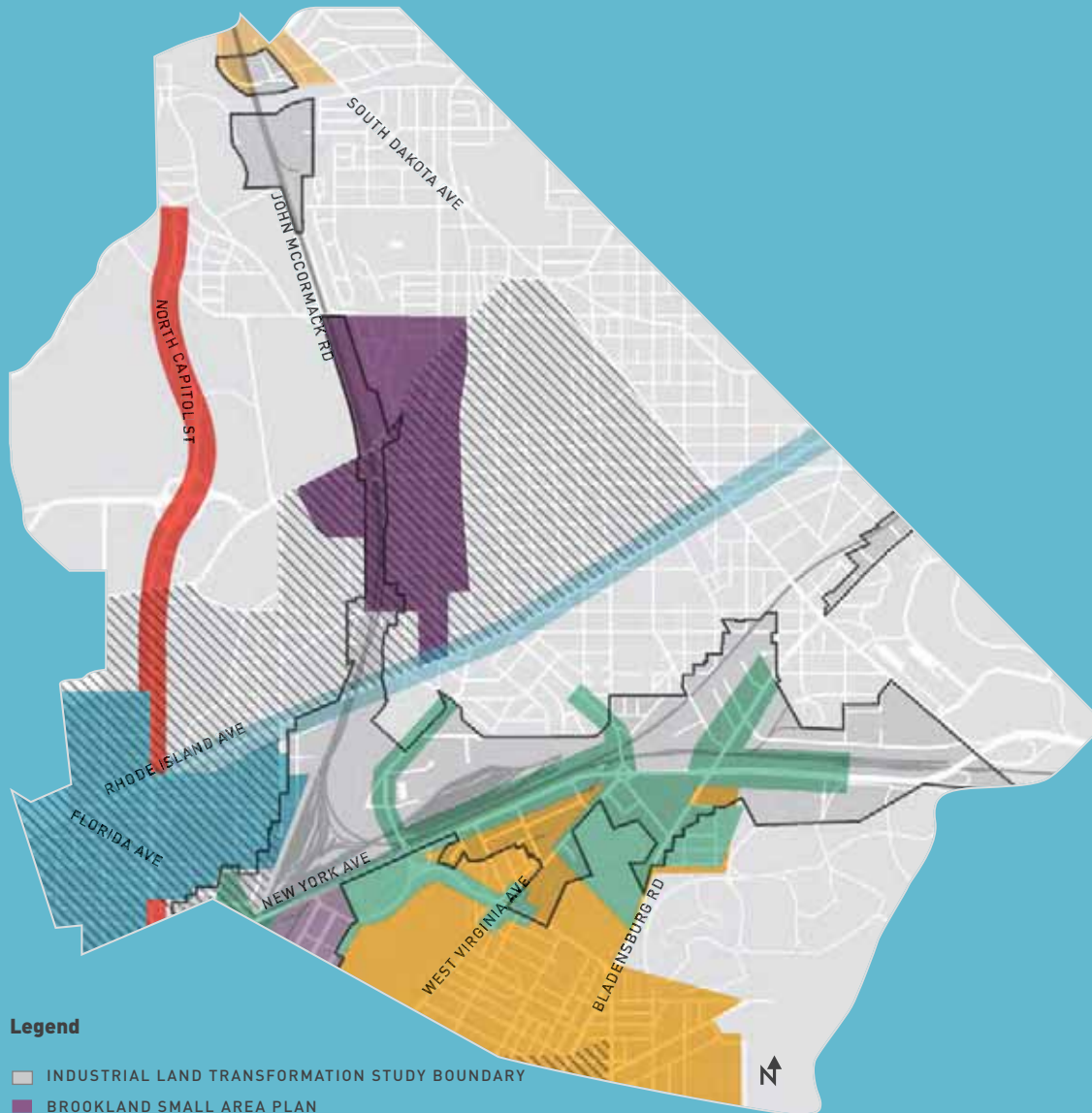
Several factors play a significant role in supporting PDR jobs and addressing nuisance properties, including the following:

- » Current Land Use Zoning
- » Current PDR Employment Patterns
- » Existing Site Characteristics and Conditions
- » Industrial Buildings and Physical Conditions
- » Transportation and Access

The study area’s physical character and, to some extent, land use patterns provide a physical structure that shapes the recommendations and planning strategies featured in Chapter 4. The market analysis\* covers employment and market trends. Those trends serve as the basis for identifying potential target industries and new users for Ward 5’s industrial land.

\* A full market analysis is provided in Appendix B.

## WARD 5 NEIGHBORHOOD PLANS



### Legend

- INDUSTRIAL LAND TRANSFORMATION STUDY BOUNDARY
- BROOKLAND SMALL AREA PLAN
- MID-CITY EAST SMALL AREA PLAN
- FLORIDA AVENUE MARKET SMALL AREA PLAN
- RIGGS ROAD AND SOUTH DAKOTA AVENUE AREA FINAL DEVELOPMENT PLAN
- THE NORTHEAST GATEWAY REVITALIZATION STRATEGY & IMPLEMENTATION PLAN
- NEIGHBORHOOD INVESTMENT FUND
- GREAT STREETS PLAN
- NEW YORK AVENUE GREEN INFRASTRUCTURE PLAN
- RHODE ISLAND AVENUE SMALL AREA PLAN

Source: Office of the Chief Technology Officer; Ayers Saint Gross

## NEIGHBORHOOD PLANS

Over the past decade, the District has completed numerous plans, studies and initiatives for several areas of Ward 5 (see map at left). Although some of these efforts have encompassed areas of Ward 5's industrially zoned land, this study represents the first comprehensive and in-depth look at Ward 5 industrial areas as a whole.

## CURRENT LAND USE AND ZONING

Zoning plays a critical role in Ward 5 as it is the city's primary tool to define land use and density. This consideration is particularly relevant for PDR industries as they typically require lower-cost land and space located in areas where they can operate relatively unimpeded. Industrial zoning provides such locations by separating industrial from residential uses that would be impacted by PDR noise and traffic. As a center of government and commerce, Washington is limited in its industrial base compared to other major cities. Industrial land in the District occupies only five percent of its land. Ensuring adequate land remains for the city's industrial and municipal users requires thoughtful, rigorous industrial zoning strategies.

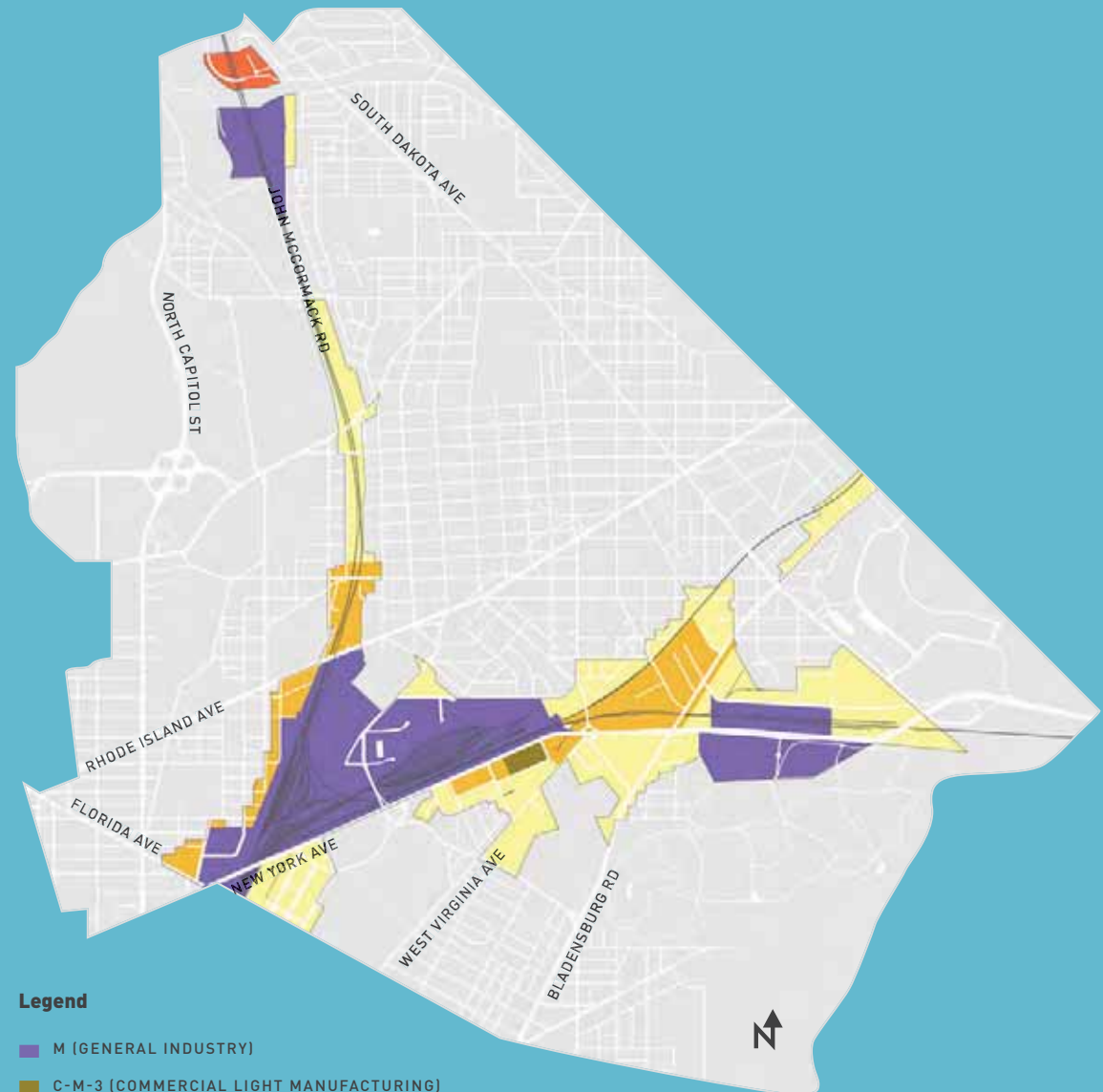
Five zoning categories cover Ward 5's industrial land. Zone M permits heavy industrial uses to a maximum floor area ratio (FAR)<sup>1</sup> of 6.0 with a maximum height of 90 feet. Zones C-M-1 through C-M-3 allow commercial and light industrial uses. They differ in their maximum allowable development density as follows:

- » C-M-1: low bulk commercial, 3.0 FAR, maximum height of 3 stories or 40 feet.
- » C-M-2: medium bulk commercial, 4.0 FAR, maximum height of 60 feet.
- » C-M-3: high bulk commercial, 6.0 FAR, maximum height of 90 feet.

One last zone, CR, allows light industrial development mixed with other uses, including housing. The total FAR for this zone is 6.0 with a maximum height of 90 feet for all buildings and structures. In the CR zone, only half of the total building area can accommodate non-residential uses.

<sup>1</sup>Floor area ratio (FAR) measures density of development. It is the ratio of the total above-ground square feet of building space divided by the square feet of land.

### EXISTING ZONING



#### Legend

- M (GENERAL INDUSTRY)
- C-M-3 (COMMERCIAL LIGHT MANUFACTURING)
- C-M-2 (COMMERCIAL LIGHT MANUFACTURING)
- C-M-1 (COMMERCIAL LIGHT MANUFACTURING)
- CR (MIXED USE COMMERCIAL RESIDENTIAL)

Source: Office of the Chief Technology Officer; Ayers Saint Gross



## WARD 5 NEIGHBORHOODS / INSTITUTIONS AND INDUSTRIAL AREAS



### Legend

■ STUDY AREA BOUNDARY

Reviewing these current zoning regulations leads to several conclusions:

District industrial land zoning regulations are very permissive and allow many types of non-industrial uses, including retail, commercial, education and hotels—almost any type of use other than residential. While the CR zone is the only classification in the industrial area that allows residential use, it represents less than one percent of Ward 5’s industrial land. Allowing other uses on industrial land creates potential for converting land to non-industrial uses and long-term land use changes. It also creates potential use conflicts.

As one of the fastest growing cities in the nation, Washington, DC boasts an average increase of 1,100 new residents per month since the 2010 Census. This growth is fueling robust redevelopment activity throughout the city. As development pressure mounts on District land, many industrial properties have converted to commercial and residential uses that generate higher returns. Since 1975, the amount of industrially zoned land in the District has declined by 25 percent.

Market demand for space near Metrorail stations has led to new housing, hotel and office development on former industrial land in the NoMa district and Eckington neighborhood. In some cases, this rebuilding has resulted from land use designation changes driven by Small Area Plans and citywide policies to increase the District’s population base and take advantage of transit infrastructure. In other cases, the development has occurred incrementally in response to market pressures. All of these patterns are leading to the decline of DC’s industrial land.

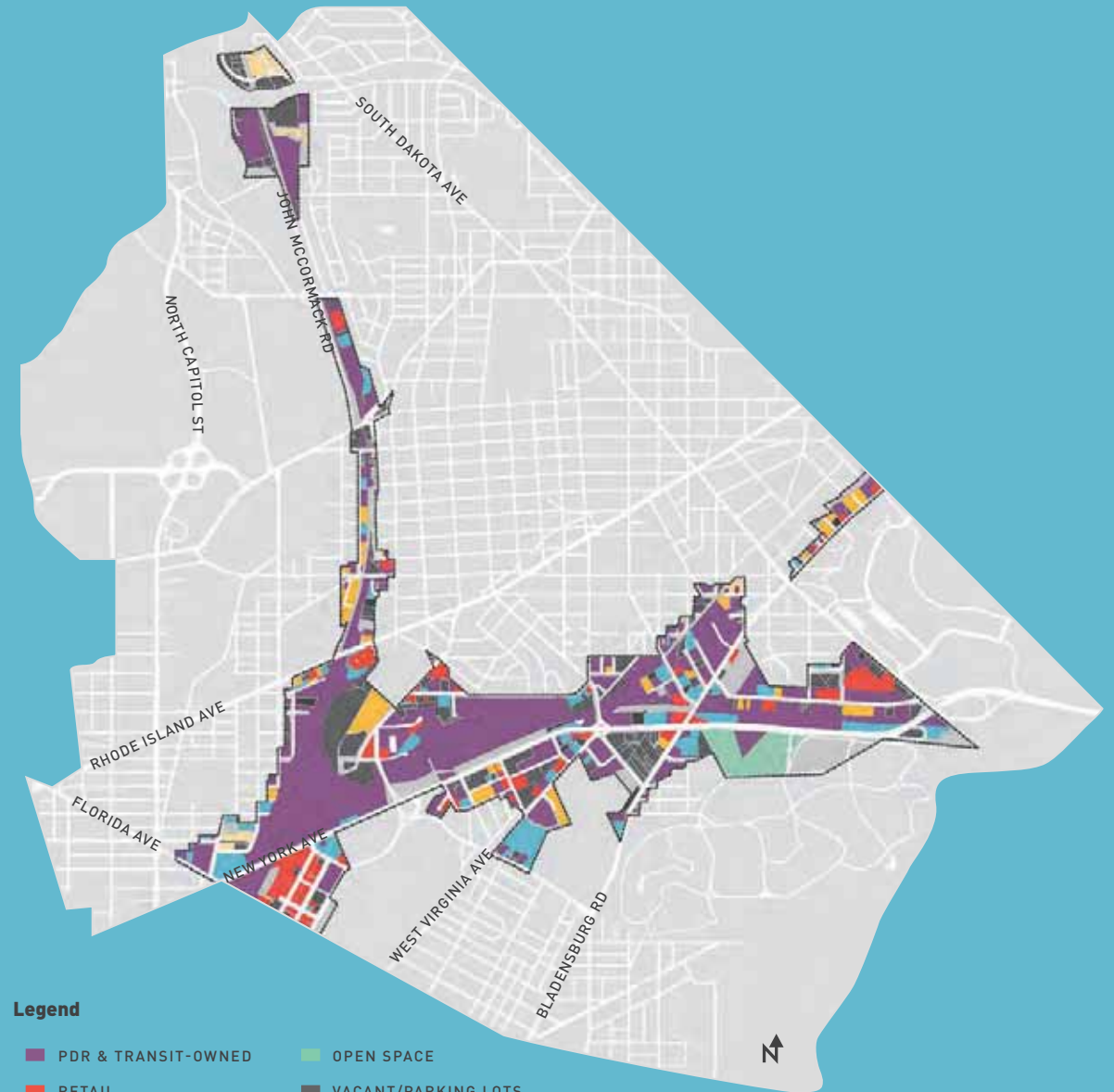
The introduction of non-industrial uses into an industrial area changes the land use context, increasing the likelihood of nuisance complaints, land use and traffic conflicts, and additional rezoning requests. As a result, land prices escalate significantly and often price out industrial users that depend on low-cost facilities. Moreover, the shift to non-industrial uses places upward pressure on the land value of nearby residential areas.

From a public sector perspective, the need for industrial land increases as demand for municipal services and utilities expands with residential and job growth. Some municipal agencies need close-in space to operate efficiently.

## LAND USE

PDR uses predominate in the study area but the area's land use pattern is a hodge-podge of uses, that reflects the permissive nature of current industrial zoning. Rail uses represent the largest PDR properties. Civic and non-profit organizations are scattered throughout the area, taking advantage of less expensive land and building space. This category includes a number of charter schools. Retail uses occupy 50 parcels with a particular concentration in the Florida Avenue Market and the Rhode Island Place shopping center at the Rhode Island Avenue Metrorail station. Few residential properties are located within the study area, but they border many parts of the study area. Very little open space exists within the study area boundaries.

## LAND USE



### Legend

- PDR & TRANSIT-OWNED
- RETAIL
- CIVIC & NON-PROFIT
- RESIDENTIAL
- OPEN SPACE
- VACANT/PARKING LOTS
- COMMERCIAL

Source: Office of the Chief Technology Officer; Ayers Saint Gross

## WARD 5 EXISTING PDR BUSINESSES

Many of Ward 5's PDR businesses have been in their current location for a long time. A review of approximately 914,000 square feet of industrial property along the V Street corridor in Ward 5 shows more than one-third of the space is occupied by businesses that have been there 10 years or more. Another 20 percent of the space is occupied by businesses there five to nine years.

The more than 500 existing businesses in the study area include many typical PDR uses as well as a growing number of representatives of emerging industries. The majority of the businesses on Ward 5's industrial land are small businesses with fewer than 10 employees. The largest Ward 5 employers represent a cross section of PDR users, from traditional construction companies to business processing and technology infrastructure operations.

The warehouse and distribution industry within Ward 5 generates more than \$200 million in annual sales and consists of long-time operators with more than one location in the Washington region and those specializing in distribution to DC-based businesses. Surprisingly, general line grocers represent only nine of the 71 wholesale businesses in Ward 5, accounting for \$5.9 million in annual sales. Ward 5's five meat merchants support \$55 million in annual sales.

As allowed under current zoning, the existing retail operations on industrial land include eight used car lots. Twenty-one auto repair services, particularly body shops and taxi repair shops, are concentrated within the Ward 5 industrial areas. On average, these auto repair operations employ nine workers.

Another major cluster focuses on home improvement contractors and other specialty trade operators such as plumbers.

The health care and social service sector includes more than 35 businesses, of which 40 percent are non-profit organizations. Several of the for-profit entities are home health aide referral services with small offices serving clientele throughout the Washington region. These businesses reported being attracted to Ward 5 by both accessibility and affordability.

The parcel inventory also shows small clusters of arts and entertainment activities in Brookland and wholesale distribution activity at Florida Avenue Market. (A few of these critical industries are profiled on pages 26-29 to highlight the strength and diversity of the existing business base in the study area.)

## MUNICIPAL USES

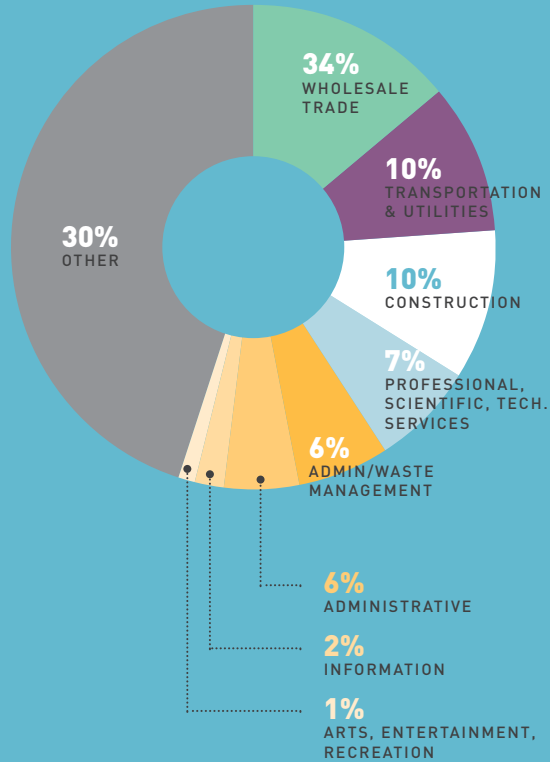
The study area includes a number of municipal facilities. The West Virginia Avenue property houses much of the Department of Public Works' (DPW) Ward 5 operations and the District Department of Transportation's (DDOT) fleet storage. Additionally, this DPW facility offers a fueling station used by various District fleets that includes lower emissions fuels like compressed natural gas (CNG) and E-85. Trailers provide the on-site office space for administrative functions and personnel.

DPW's Fleet Administration includes fleet repair and maintenance, fueling, storage and related operations. The DPW Solid Waste Management Administration's (SWMA) street and alley cleaning trucks as well as other equipment are stored at the West Virginia Avenue facility. This SWMA location provides excellent access for servicing DC residents. DPW's Parking Service Administration operations at West Virginia Avenue incorporate office space for meter reading employees and storage of associated vehicles. Finally, DDOT's Traffic Services Administration warehouse and outdoor storage functions occupy space on the West Virginia Avenue site.

Other Ward 5 municipal users include the District of Columbia Housing Authority's logistics management operations, the Metropolitan Police Department general support service division and operational support command, the Department of Health's Maternal Primary Care Administration (MPCA), Fire and Emergency Medical Services and the Office of Contracts and Procurement.



## WARD 5 PDR BUSINESS BY INDUSTRY



## MUNICIPAL USES IN STUDY AREA

- DDOT fleet storage and salt dome
- DPW vehicle repair and storage
- DC Housing Authority logistics and management operations
- DC Department of Health's Maternal Primary Care Administration
- DC Office of Contracts and Procurement

## WARD 5 LARGEST PRIVATE EMPLOYERS

Business Name	Business Type
Tiempos USA LLC	Temporary Employment Service
Services Benefit Plan Administrative Services Corp.	Business Process & Technology Infrastructure
Dynamic Concepts, Inc.	Construction & Information Technology
News World Communications Inc., Washington Times	Newspaper
Federal Express Corp.	Delivery Service
Global Healthcare Service, Inc.	Home Healthcare Service
District Paving Corp.	Construction
DC Healthcare, Inc.	Group Home Operator
Federal Valet Car Parking, Inc.	Hired Vehicles
Washington Wholesale Liquor Company	Wholesale Distributor
International Limousine Services, Inc.	Hired Vehicles
World Vision, Inc.	Non-profit
AM Briggs, Inc.	Wholesale Food Distributor
U Street Parking	Parking Management
City General, Inc.	Electrical Contractor
OceanPro Industries	Wholesale Food Distributor

Source: Dun & Bradstreet. Partners for Economic Solutions

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## OCEANPRO INDUSTRIES, LTD.

OceanPro provides seafood to more than 2,500 accounts throughout the metropolitan DC area and supports such local non-profits as Miriam's Kitchen, DC Central Kitchen, Habitat for Humanity and others. Founded in 1988 as Profish Limited, the privately held company focuses on seafood processing and fresh fish wholesale.

From its staff of two, the company has expanded to an estimated workforce of 98. It boasts a low turnover rate and offers in-house training programs to encourage advancement opportunities for entry-level employees. Approximately 40 percent of its employees are DC residents.

As it expanded, Profish acquired a warehouse building in Ivy City off New York Avenue to take advantage of local access to suppliers and restaurants in order to get its products to customers more quickly. The company changed its name to OceanPro Industries, Ltd in 1995 and added staff to increase its ability to meet consumer needs.

The owners are committed to the Ivy City neighborhood and recently purchased two properties in the area, including a 5,800-square-foot smokehouse to be operated by about 15 employees. A second business, the Ivy City Tavern, will provide a much needed retail outlet for the community.



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## SMALL BUSINESS RESOURCE CENTER

The Department of Consumer and Regulatory Affairs (DCRA) officially launched its Small Business Resource Center (SBRC) on April 26, 2011. It is designed to provide one-on-one technical and educational assistance and group workshops to future and current business owners seeking to navigate through the District's regulatory environment. Through the SBRC, DCRA has established partnerships with both the private sector and District and federal government agencies to provide small business education assistance to SBRC customers. The SBRC is a key initiative among the District's efforts to become a more business-friendly jurisdiction.

The services offered include:

- » Business licensing application process
- » Business formation
- » Pre venture
- » Start up
- » Building permits
- » Certificates of occupancy
- » Development Ambassador Program
- » Plan reviews
- » Third party reviews
- » Business planning preparation
- » Lending preparation

## DANCE PLACE

Founded in 1978, Dance Place (also known as DC Wheel Productions, Inc.) began as a performing arts and education company. The group moved from Adams Morgan to its current Brookland location on 8th Street in 1987 after the rent for its original building had quadrupled. At the time, Dance Place's senior management could only find two suitable locations: one property in Brookland and another at 14th and P Streets. Over the past few decades, the company has expanded its operations, growing to 12 full-time employees and eight part-time in 2013. More than half the employees take transit, bike or walk to work.

Dance Place was established as a performance venue and school offering classes for adults and children. Since moving to its Brookland warehouse, the arts organization has expanded its role as a provider of community youth programs (including an after-school program, teenage job training and seven-week summer camp). Currently, the organization occupies its main performance venue along 8th Street, studio space, creative education center and office in the adjacent Artspace Brookland Lofts and temporary space in the Edgewood Arts building. It has plans to upgrade and expand its current 6,000-square-foot facility to accommodate its growing staff and clientele.

Along with indoor classes and performances, Dance Place offers community arts programs, including some during summer weekends. In partnership with Monroe Street Market, Dance Place expanded its programming to include a free series of interactive music, dance and visual arts events at the open plaza near the end of the Arts Walk by the Drew Bridge as part of the "Art on 8th" initiative. Outdoor arts programming is seasonal, but Dance Place plans to continue the community programming with a set-aside in its capital campaign for program enhancements and building renovations.





## AVSMOOT, LLC

Founded in 2005, AVSmoot, LLC, began as a small operation in Southeast DC. The company provided historic restoration and other general contracting services, such as painting, window and door restoration, and other ornamental repairs. In 2007, the firm moved to Ward 5, drawn to the affordable rent and larger spaces of a building on Bladensburg Road. One of only three building component manufacturing businesses in DC, AVSmoot now employs 30 full-time employees. Its work force grows to an estimated 80 jobs during peak construction periods. While less than half of its employees are DC residents, AVSmoot screens candidates for residency, attempting to give priority to locals.

AVSmoot conducts diligent workforce development efforts to find employees in the specialized field of historic restoration. The company pre-screens applicants for its specialized apprenticeship program through Booker T. Washington Public Charter School. In partnership with the school, AVSmoot dedicates a staff member to create a unique curriculum based on preservation briefs from the US Department of Interior and a textbook written by AVSmoot. This apprenticeship program, reviewed by the District of Columbia Department of Employment Services, demonstrates significant investment in workforce development and a dedication to find, train and retain quality employees.



## DYNAMIC CONCEPTS, INCORPORATED

Dynamic Concepts, Inc. (DCI), founded in 1979 and based in Ward 5, provides technical and management support services in cabling infrastructure installation, information technology, operations and maintenance, wireless communications and utility infrastructure to businesses and federal and local governments.

The company has become one of Ward 5's largest employers through its high-profile projects, including state-of-the-art technology for the Washington Nationals ballpark, Verizon Center and Walter E. Washington Convention Center. DCI offers technical jobs and entry-level construction positions, participating in a District of Columbia apprenticeship program and providing internal training programs. At the peak of the construction cycle, DCI employed more than 490 full-time employees. Currently, roughly 60 percent of DCI's 300 employees are DC residents.

## Clients & Projects

DCI offers comprehensive end to end services and products to meet diverse and constantly-evolving customer requirements. As business partners to companies such as Avaya, Ruckus, Verizon and Motorola, we are able to draw upon global expertise and products to deliver best-in-the-world solutions to our customers.

GSA Advantage!



### Clients

Clark Construction

District of Columbia Government

IBM

Metropolitan Washington Airports Authority

Motorola

MTTG Joint Venture

Social Security Administration

Turner Construction

U. S. Department of Defense

Vandenberg Air Force Base

Verizon

Washington Convention Center

Washington Metropolitan Area Transit Authority

Washington Nationals Major League Ballpark

Xerox



**Washington Nationals Major League Ballpark**

Nationals Ballpark features state-of-the-art technology, including a 4,500 square foot high-definition scoreboard.



**FedEx Field**

FedEx Field is an 85,000-seat stadium and home to the Washington Redskins National Football League team.



**Verizon Center**

The Verizon Center is a sports and entertainment arena in downtown DC.



**Robert F. Kennedy Memorial Stadium**

DCI provided project management, cable installation, security and bowl surveillance, audio visual system ...



**Martin Luther King Jr. Memorial**

The MTTG Joint Venture, specifically Turner Construction Company, chose DCI to install, document, and test a complex security system ...



**Dulles International and Reagan National Airports**

DCI, as a subcontractor to the H Corporation, provided all necessary personnel, equipment and materials ...



**National Air & Space Museum Stephen F. Uzar-Hazy Center**



**Office of the Chief Technology Officer**



**Department of Human Services (DHS)**

## TOP WARD 5 INDUSTRIES BY EMPLOYEE COUNT

- Transportation/ Warehouse
- Construction
- Wholesale Trade
- Health Care and Other

## TOP WARD 5 INDUSTRIES BY SALES

- Information
- Transportation/ Warehouse
- Wholesale Trade
- Construction

## CURRENT PDR EMPLOYMENT PATTERNS

Advancing PDR employment in Ward 5 requires looking at the state of those jobs today. A comprehensive inventory of Ward 5 industrial parcels reveals several prominent clusters of PDR activities. The largest concentration of existing PDR businesses occurs north of New York Avenue, as shown on the accompanying map.

Compared to the overall job market in the District, the share of PDR jobs in the city is declining. From 2002 to 2012, total employment in the District and metropolitan area grew by 13 percent, according to US Bureau of Labor Statistics data, adding jobs in the professional, scientific and technical services, government, health care and social assistance sectors. During this same period, the number of jobs in PDR industries—including manufacturing, construction, wholesale trade, transportation and utilities, administrative, support and waste management<sup>2</sup>—decreased in both the region and city.

**Ward 5 currently has  
10,700 industrial jobs,  
representing 1.5 percent of  
the District's job base.**

Currently, Ward 5's industrial areas have roughly 10,700 jobs, representing 1.5 percent of the District's job base. These businesses focus on serving the local market rather than regional or national markets. They compete for a finite supply of industrial land and buildings in a city otherwise dominated by governmental and commercial enterprises.

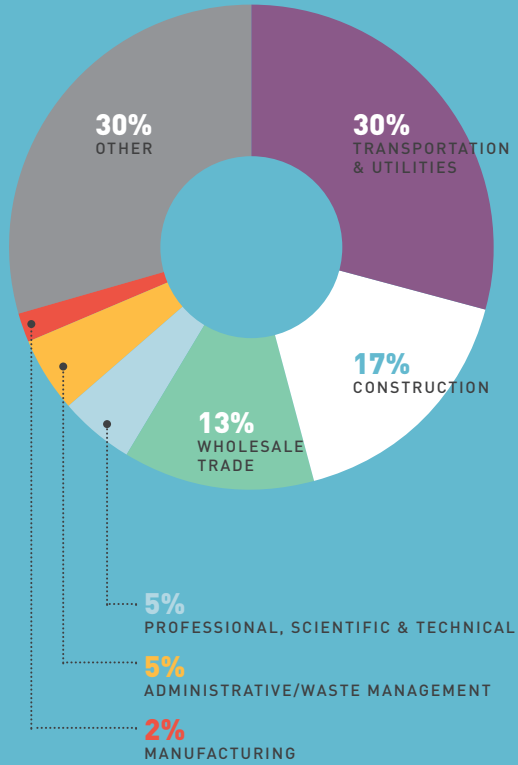
The largest industries in Ward 5 are construction, transportation and utilities, wholesale trade, and health care and social services<sup>3</sup>. These industries follow both traditional operations while expanding into the green sector, offering training in sustainable practices within each industry. Employers within the transportation and utilities sector in Ward 5 include the Washington Metropolitan Area Transit Authority (WMATA), Amtrak and United States Postal Service—they comprise 29 percent of Ward 5's employment base.

While the combined efforts of PDR industries dominate Ward 5's employment base, information industry businesses, including media and communications, are the largest revenue generators in the area. PDR industries may encounter significant challenges in building a bigger workforce because of predicted slow regional growth in this sector, but they are well positioned for increased stability because of the actions of individual entrepreneurs. New and emerging businesses can significantly shift an industrial market, particularly one as small as in Ward 5's; one successful business can reverse an employment loss within just a few years.

<sup>2</sup>Administrative and Support and Waste Management, which includes temporary employment agencies and janitorial and security services grew 2.6 percent in the region from 2002 to 2012.

<sup>3</sup>Included in "Other" category in "PDR Properties in Ward 5" infographic on page 31.

## WARD 5 PDR EMPLOYEES BY INDUSTRY



- ➔ More than 500 PDR companies exist in Ward 5
- ➔ Several prominent clusters of PDR activities
- ➔ Greatest concentration of existing businesses north of New York Avenue

## PDR PROPERTIES IN WARD 5



### Legend

■ PDR USES, NON-GOVERNMENTAL AND NON-TRANSIT

Source: Office of the Chief Technology Officer; Ayers Saint Gross



## EXISTING AREA CHARACTERISTICS AND CONDITIONS

Property characteristics, such as parcel size, ownerships patterns and building conditions, all have a profound effect on supporting and growing PDR employment in Ward 5. Building and site conditions in particular can also contribute to nuisances and friction with neighboring communities. By comparing these physical characteristics with market assessments and community input, a broad profile of the study area's assets and challenges emerges.

Parcels within the study area offer a wide range of sizes, from less than an acre to more than 20 acres. The parcel inventory shows that only 20 percent of properties are larger than 10 acres. The majority of the largest parcels are controlled by government agencies, transit authorities and railroads. Stakeholder input reveals that these sites are critical for operations and will continue in use for the long term, possibly with facility upgrades. Land owned by the federal government, District government, Washington Metropolitan Area Transit Authority (WMATA) and Amtrak represents almost half of the 1,030-acre study area. Traditionally, this land has not been—and may not be—available for redevelopment outside of a public-private partnership. Given both their size and geographic dispersal, these parcels contribute to the study area's lack of connectivity.

Blighted properties that generate noises, obnoxious smells, pests (such as rodents and insects) and environmental pollution present major concerns for residents in Ward 5. Input from area stakeholders suggest these conflicts occur, as expected, in areas where buffers do not exist or business operations encroach. The "vacant / under-leased and nuisance properties" identified on the opposite page include two major nuisance properties identified by community residents. In particular, two solid waste transfer stations were singled out as sources of odors, noise and other negative impacts on surrounding neighborhoods: the 1220 W Street, NE Trash Transfer Station and the Rodgers Brothers Recycling facility in the 2200 and 2300 blocks of Lawrence Street, NE. The District Department of Consumer and Regulatory Affairs (DCRA) has negotiated settlement agreements with these two businesses that require improvements to the sites and their operations. The agreements call for periodic inspections by DCRA to enforce the agreements. During the community focus group, residents identified other properties as presenting concerns to their communities. In these and other cases, better buffering, performance standards and improved enforcement should help mitigate friction between these properties and their residential neighbors.

The community focus group identified a general distrust and disconnect between the community and businesses in the Ward 5 industrial area. Local companies are largely unknown to residents and none of the nine community leaders who participated in the focus group knew anyone who works in the Ward 5 industrial area. Residents identified businesses as disruptive and offered solutions, including more arts-related activities, creative businesses and retail.

Similar issues affect the District's municipal space needs. Many municipal uses—vehicle storage and repair, salt storage, bus maintenance and storage, etc. — are industrial or quasi-industrial in nature. These uses would be difficult to site in a residential or commercial district due to potential land use conflicts and depend on industrially zoned land.

Other community concerns regarding the inventory include the presence of unoccupied or partially occupied buildings, which detract from the overall environment. The heaviest concentrations of vacant or under-leased properties are located south of New York Avenue. There are relatively few vacancies along the Metrorail Red Line corridor in Ward 5.

Blighted properties that generate noises, obnoxious smells, pests and environmental pollution present major concerns for residents in Ward 5.

## VACANT / UNDER-LEASED AND NUISANCE PROPERTIES



### Legend

- VACANT PROPERTIES
- UNDER-LEASED BUILDINGS
- ⊕ IDENTIFIED NUISANCE USES

Source: Office of the Chief Technology Officer; Ayers Saint Gross

## PARCEL OWNERSHIP



### Legend

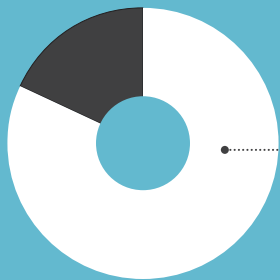
- FEDERAL GOVERNMENT
- DC GOVERNMENT
- AMTRAK OWNERSHIP
- WMATA OWNERSHIP

Source: Office of the Chief Technology Officer; Ayers Saint Gross

Land owned by the federal government, Washington Metropolitan Area Transit Authority and Amtrak represents almost half of the 1,030-acre study area.

## PARCELS AT A GLANCE

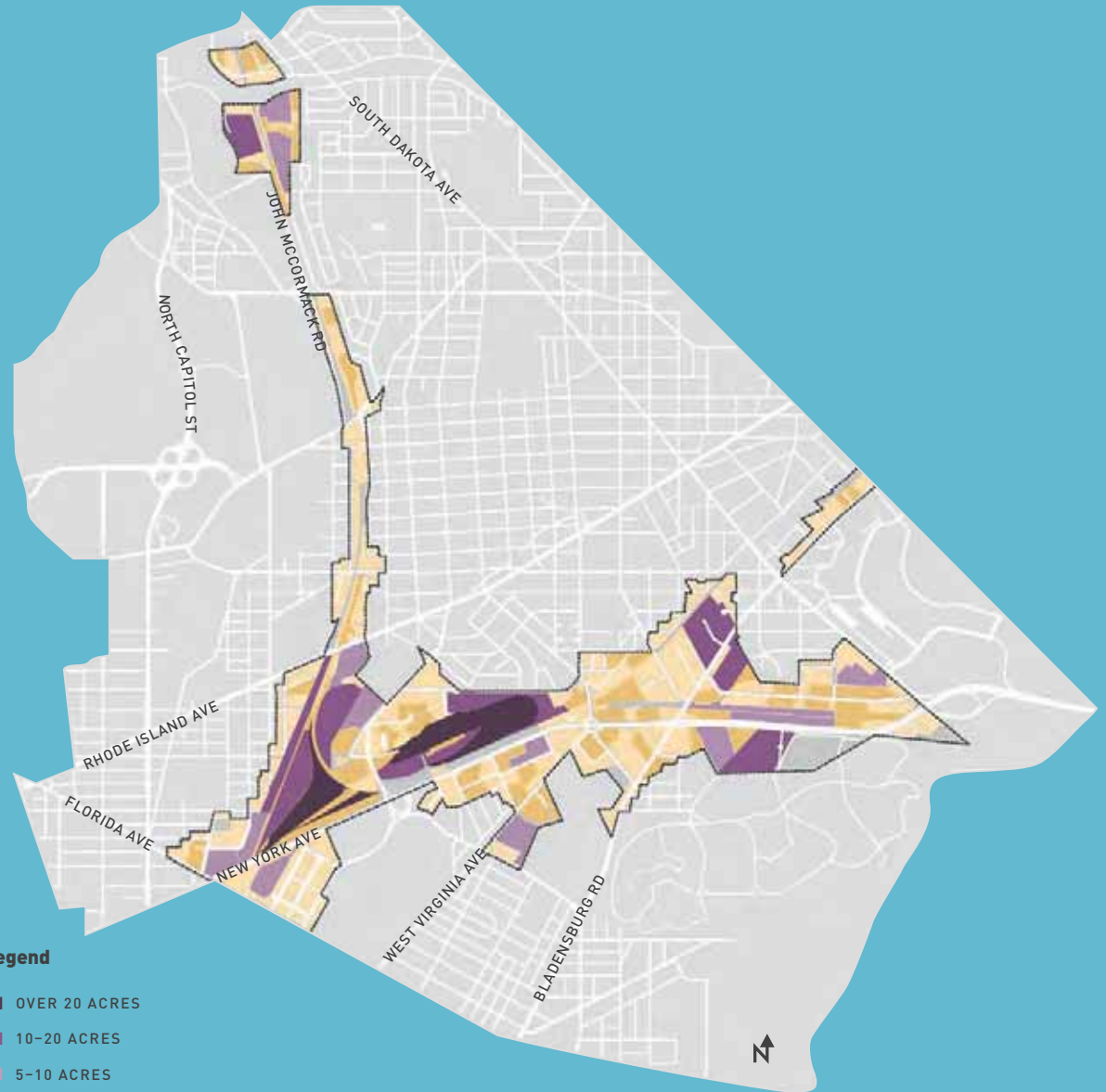
- Small parcels are primarily privately owned
- Large parcels are mostly owned by large entities – Amtrak, WMATA, CSX



**82%**  
of Ward 5 parcels  
are less than two  
acres

Less than 20% of Ward 5 industrial properties is composed of parcels of 10 acres or more.

## PARCEL SIZES



### Legend

- OVER 20 ACRES
- 10-20 ACRES
- 5-10 ACRES
- 2-5 ACRES
- LESS THAN 2 ACRES

Source: Office of the Chief Technology Officer; Ayers Saint Gross

## WARD 5 BUILDING INVENTORY

Industrial space has evolved over time and meeting current industry expectations is critical to supporting this activity in Ward 5.

### INDUSTRIAL BUILDING TYPOLOGY

Industrial space tends to fall into two distinct categories: industrial space and flex space. Modern industrial buildings are designed to be easily convertible as users and needs change. With this in mind, these structures typically incorporate 18- to 32-foot ceilings, truck docks and open floors easily divisible for multiple tenants. Single-story flex space combines finished office space and warehouse or workroom space to meet the needs of smaller PDR businesses.

Flex industrial space is characterized by the following:

- » Typically comprises one or two stories;
- » Offers a mix of activities;
- » Includes office space; and
- » Designed for leasing in small increments.

Industrial space is characterized by the following:

- » Usually single story and typically designed for use by a single tenant;
- » Often built to suit for a single purpose, such as manufacturing; and
- » Typically less easily adapted.

The existing supply of industrial space in Ward 5 does not meet the needs of existing businesses for modern space with efficient layout and truck docks, adequate utility service and energy efficiency. The supply inadequacies constrain the potential for enhanced efficiency and intensification of use.

### BUILDING CONDITION

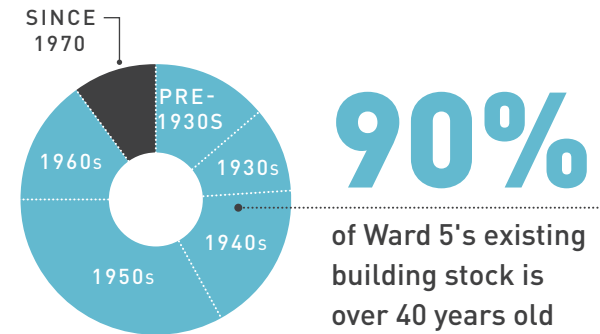
Based on CoStar ratings, an estimated 83 percent of the building stock in Ward 5 is rated as Class C. Class C office space consists of older building stock that receives lower rents and/or sales prices when compared to Class B or Class A buildings. Class C buildings offer no additional amenities (with inferior mechanical systems) and typically have below average maintenance and upkeep. They compete for tenants based on rent levels. As a result, Class C buildings are often targeted as re-development opportunities. Improving these poor conditions will have a big impact on elevating the area's image and addressing friction points with the neighborhood.

### BUILDING AGE

Ninety percent of the buildings in the Ward 5 industrial area are more than 40 years old. The inherent architectural character associated with the age of commercial industrial buildings creates functional problems due to constricted floor plates, lower ceiling heights and cramped loading dock configurations. Adapting older buildings requires significant up-front investment.

### BUILDING SIZE

The inventory of buildings within Ward 5 ranges from 15,000 to 100,000 square feet without any large buildings suitable for modern distribution (which typically require a minimum of 250,000 square feet). More than one in five buildings ranges from 30,000 to 49,999 square feet, matching the largest portion of vacant space in neighboring Prince George's County.

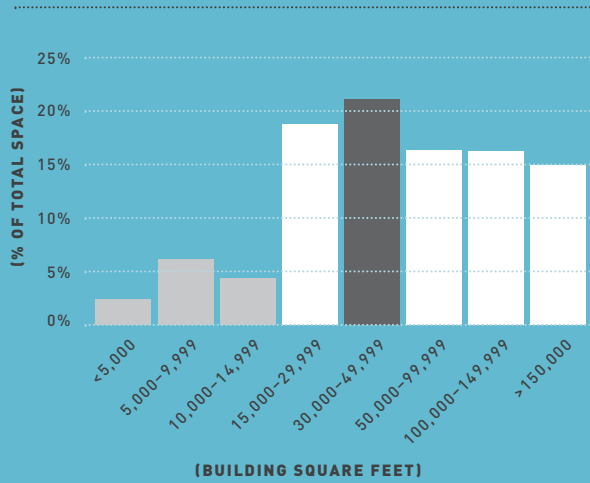


Source: CoStar, Partners for Economic Solutions, 2013

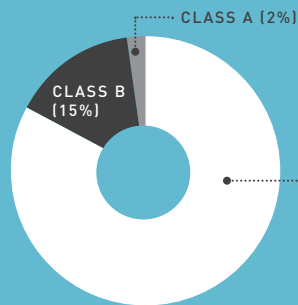


## BUILDING CONDITIONS AT A GLANCE

- Only 1 in 10 buildings are between 5,000 and 15,000 sq ft, smaller than a typical stand-alone drugstore—the ideal size for start-ups and creative uses.
- Ward 5's 30,000 to 50,000 sq ft building stock struggles to compete with space in less expensive jurisdictions.



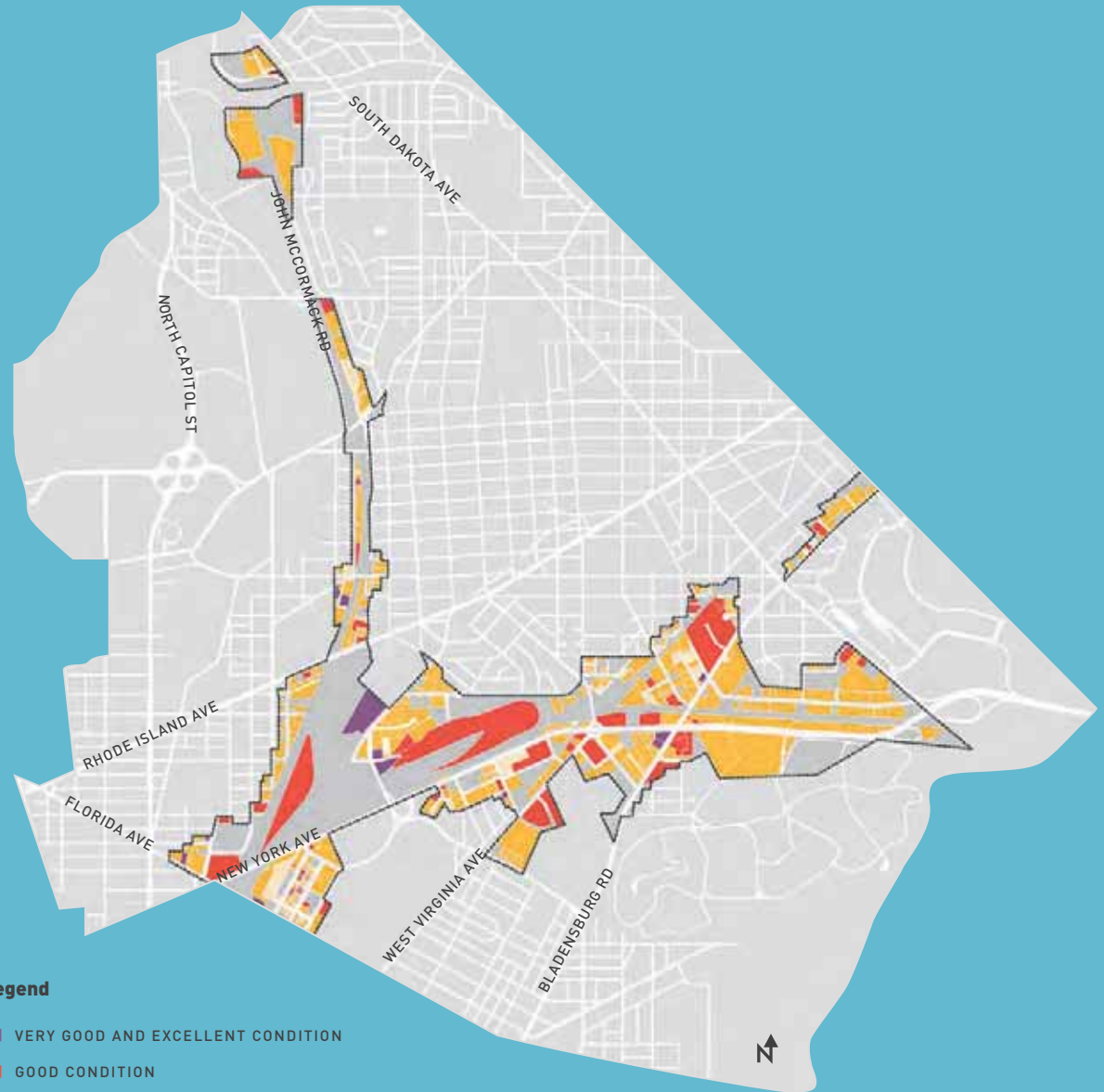
Source: CoStar, Partners for Economic Solutions, 2013



**83%**  
of Ward 5's existing building conditions are Class C

Source: CoStar, Partners for Economic Solutions, 2013

## BUILDING CONDITION



### Legend

- VERY GOOD AND EXCELLENT CONDITION
- GOOD CONDITION
- FAIR AND AVERAGE CONDITION
- POOR CONDITION

Source: Office of the Chief Technology Officer; Ayers Saint Gross

## INDUSTRIAL REAL ESTATE TRENDS

Over the past several decades, the CoStar Group, a DC-based commercial real estate research firm, reported a stable to declining amount of industrial space in both the city and Ward 5. CoStar's research shows the District's inventory of industrial space declined from 2003 to 2012 by seven percent, reaching 11.2 million square feet. This decline can be attributed to building demolition to accommodate new, non-PDR uses. Specifically in Ward 5, the inventory of seven million square feet of industrial space decreased with the loss of two buildings during the same period (2003-2012).

Regional and competitive submarkets are increasing their supply of industrial space. The Washington, DC region added slightly more than 1 million square feet of industrial space annually over the past 10 years to a total inventory of 161 million square feet.

Industrial market conditions diverged for the two most competitive jurisdictions in suburban Maryland (Montgomery and Prince George's counties). Montgomery County increased its industrial space inventory by only 465,000 square feet, or 2.1 percent, during the past decade. Prince George's County's much larger supply of industrial property grew at twice that rate, adding 2.1 million square feet (4.3 percent growth) to create a total of 49.7 million square feet. The District did not participate in this growth due to the high cost of land and the limited supply of available sites for industrial uses.

Regionally, the demand for industrial space, as measured by the absorption pace (increase in the amount of occupied space), slowed significantly in recent years with the Great Recession (2008-2010). By the second quarter of 2013, industrial space occupancy rates in the region had fallen to 89.5 percent, well below the "healthy" range of 92 to 95 percent occupied space. The District's industrial space fared better with a 92.1 percent occupancy rate, but that was still below the 95 percent rate of 2006. Ward 5 is generally keeping pace with the other industrial land in the District with an occupancy rate at 90.1 percent in mid-2013, down from 94.9 percent in 2006.

The region's market for flex space—building shells designed to accommodate companies needing office, light manufacturing and/or warehouse space—grew more rapidly over the past decade. About 20 percent or 11.2 million square feet were added to the regional inventory to reach 68 million square feet at the end of 2012. Prince George's County experienced growth in logistics and distribution demand for flex space. Montgomery County's research and development laboratories also fueled

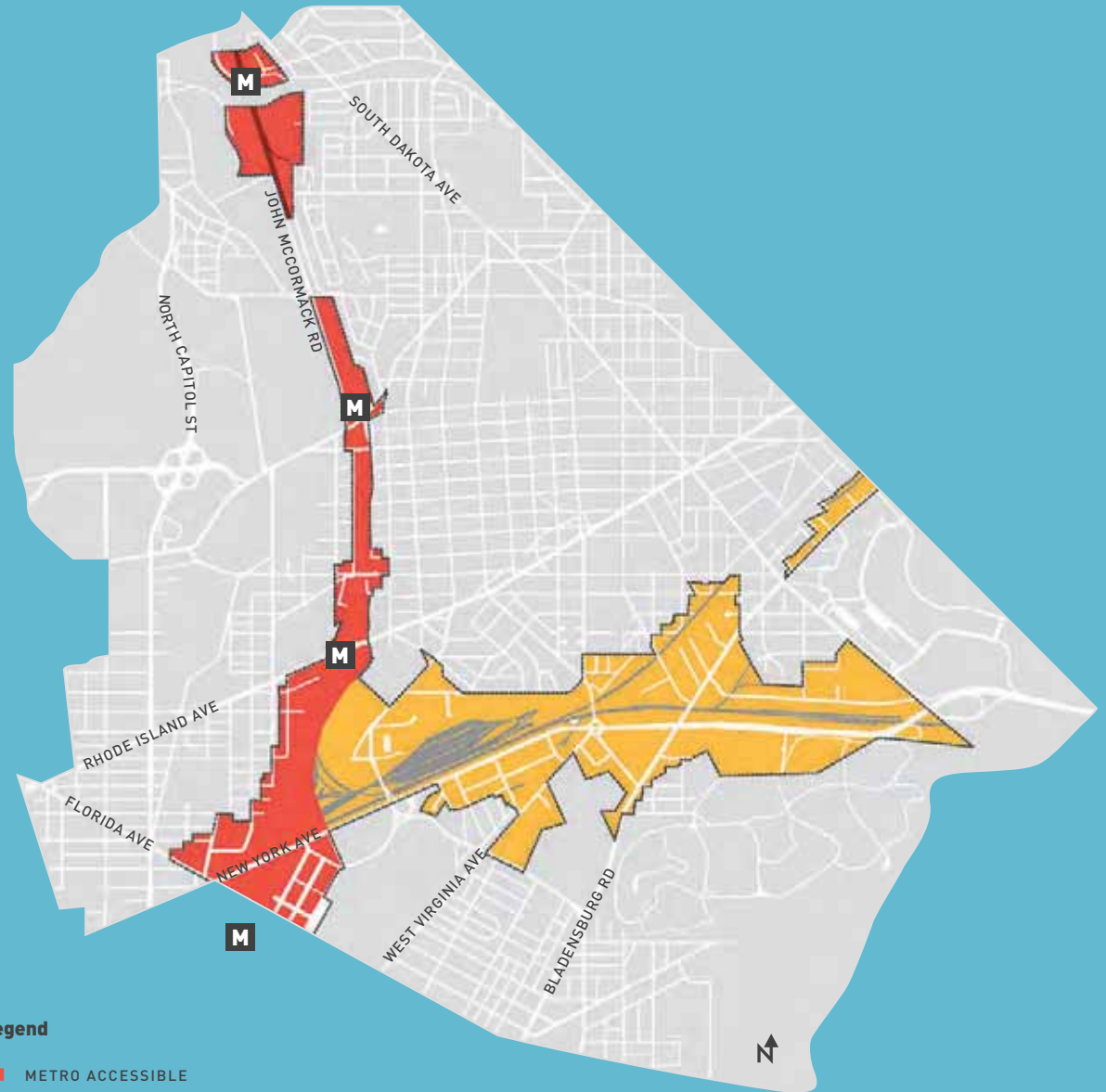
the increase in flex space. However, the pace of construction in Prince George's County overshot demand, resulting in an occupancy rate that fell from 89.2 percent in 2007 to 83.2 percent at the end of 2012.

The extensive supply of vacant space in Prince George's County competes with Ward 5 buildings. The available supply of flex space in DC could not meet demand with a high occupancy rate of 96.7 percent in the second quarter of 2013; the slow absorption pace (less than 7,000 square feet in 2006, 2008 and 2009) reflected the need for additional space. Ward 5's available flex space totaled only 38,000 square feet in the second quarter of 2013 for an overall occupancy rate of 93.1 percent.

Reviewing Ward 5's industrial and flex inventory showed distinctions between transit-proximate property (with an inventory of 3.2 million square feet) and those auto-accessible properties (with an inventory of 4.4 million square feet). Properties along the Metrorail Red Line averaged vacancy rates between 2.5 and 6.0 percent over the last five years. This compares to vacancy rates between 10 and 15 percent for industrial and flex space along New York Avenue and Bladensburg Road. The rent differential between these two subareas ranges from \$3.50 to \$4.00 with higher rents for properties near the Red Line.

The extensive supply of vacant space in Prince George's County competes with Ward 5 buildings.

## MARKET DIVERGENCE



### Legend

- METRO ACCESSIBLE
- AUTO ACCESSIBLE
- M METRO STOP

Source: Office of the Chief Technology Officer; Ayers Saint Gross

## TRANSPORTATION AND ACCESSIBILITY

One key driver for PDR employment is transit access. Many urban PDR businesses choose locations with a wide range of public transportation options that offer low-cost alternatives for accessing jobs. Several aspects of the local transit network will play a role in advancing PDR employment in Ward 5.

A general lack of transit exacerbates the limited access to many parts of this study area. Limited transit options hinder employees getting to their jobs as well as connecting this area to adjacent neighborhoods.

### TRANSIT

The four Metrorail stations in the study area are located on the north/south spine of the study area and serve only a small portion of the Ward 5 industrial area. Only a few Metrobus routes run through the study area and provide direct connections between the community and businesses. The major bus routes run along the study area's periphery; they include the 81 and 82 on Rhode Island Avenue, line B2 on Bladensburg Road and lines 90 and 92 on Florida Avenue. More locally-serving bus routes operate within the study area, such as the D3, D4 and D8. The area will need more direct and more frequent bus service if it is to become a more important economic hub.

The District's Department of Transportation (DDOT) has unveiled a plan to build streetcars and additional premium transit service throughout the District. The proposed Phase 2 Plan includes improved service along Rhode Island Avenue and Florida Avenue crossing the study area. However, the construction timeline of Phase 2 remains unclear. It is also uncertain how this anticipated transportation infrastructure will affect Ward 5 and its industrially zoned land. The new premium service will remain at the periphery of the industrial area and will do little to correct the limited public transit to industrial sites.

MARC (Maryland Area Regional Commuter), a commuter rail system operated by the Maryland Transit Administration, has two lines that run through the study area and terminate at Union Station: the Camden Line and Penn Line. Currently, no MARC stations are situated in the study area.

## TRANSIT ACCESS

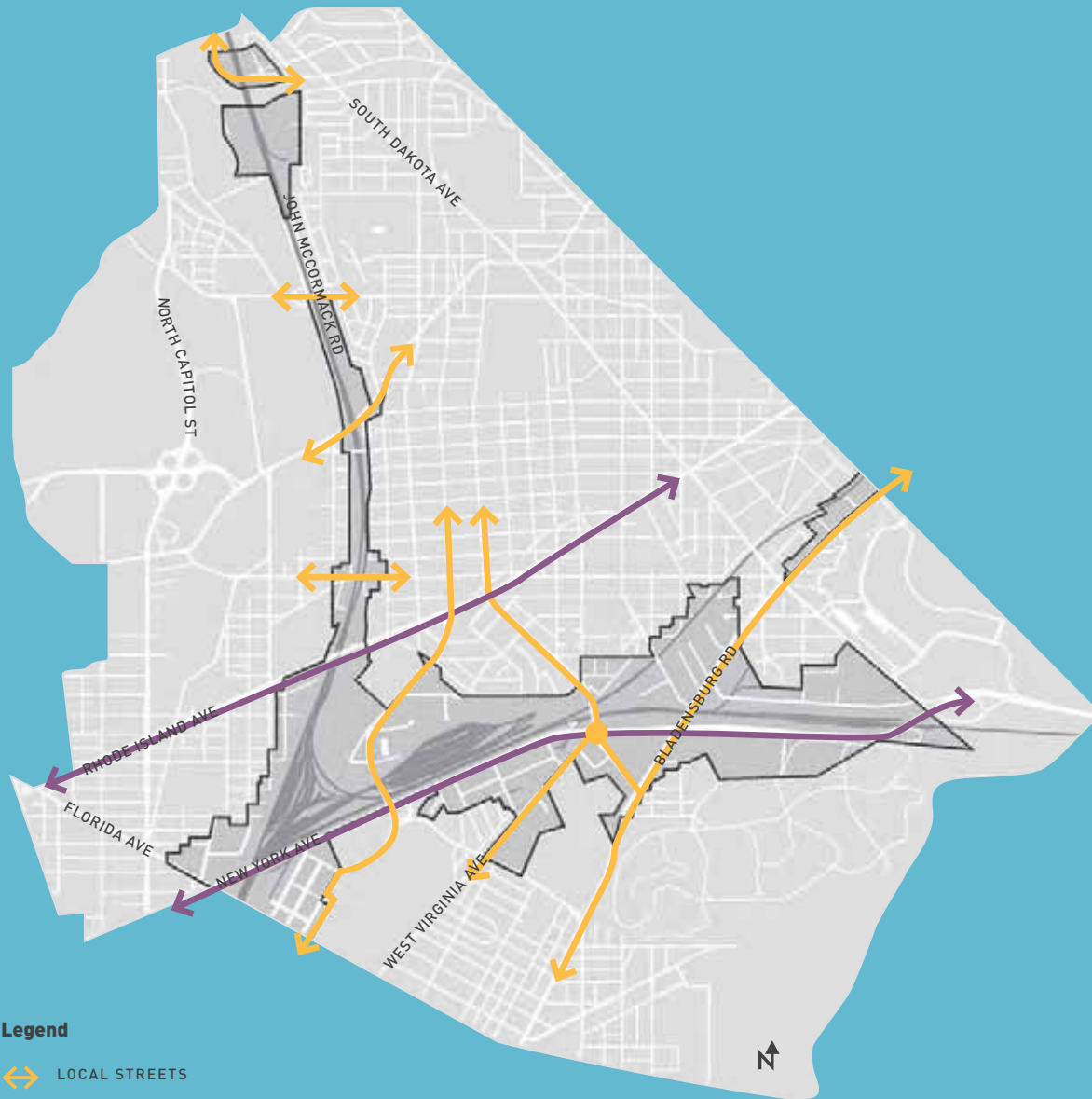
- Transit amenities are critical
- Four stations in the study area
- Transit options are not distributed evenly throughout the industrial area

## EXISTING TRANSIT INFRASTRUCTURE





## VEHICULAR ACCESS



### Legend

- LOCAL STREETS
- HIGHWAYS
- RAIL LINES

Source: Office of the Chief Technology Officer; Ayers Saint Gross

## VEHICULAR ACCESS

In the District, industrial land is typically spread along the railways—a pattern that explains why the study area contains so many rail lines. Today, however, roads play a much more dominant role in the transportation of goods. The land in this study area is essentially organized around two dominant transportation frameworks: New York Avenue and the Metrorail Red Line.

New York Avenue serves as the main vehicular spine to the industrial area and runs generally east to west. This corridor accommodates industrial users with roads designed for tractor trailers and direct access to the region's interstate highway system.

The other streets in the study area are narrower and do not connect through the study area as they are often disrupted by the rail lines. As a result, specific portions of the Ward 5 industrial area are among the least accessible areas in the District. Areas such as Edwin Street, Farragut Street and Adams Place are accessible by a limited number of routes, which could impact their growth potential. Rhode Island Avenue (US 1) also serves a portion of the study area in a limited way.

## PEDESTRIANS AND BICYCLES

Ward 5 boasts one of the most popular bike trails in the District—the Metropolitan Branch Trail (MBT)—which runs along the Metrorail Red Line, connecting the NoMa neighborhood to Fort Totten. There are plans to expand this off-road trail from Fort Totten to Silver Spring, Maryland, which will further enhance its connections to neighborhoods. Regionally, the MBT will connect to other important trails, such as the Capital Crescent Trail, Anacostia Trails System, and be integrated into the East Coast Greenway. Another off-street bike trail has been built along South Dakota Avenue on the east side of the study area. This trail, however, lies only between New York Avenue and Bladensburg Road, and is not connected to any designated bike lanes.

Other than the MBT, pedestrian and bicycle amenities are limited in both quality and quantity within the study area. The industrial character and reliance on vehicular transportation contribute to an environment that is generally not conducive to walking and biking other than on designated bicycle lanes. There are some bike lanes that have been built around the study area, such as 12th Street and 18th Street, but very few bike lanes penetrate. There are numerous Capital Bikeshare stations in Ward 5, but they tend to be concentrated along the MBT and in the center of adjacent neighborhoods. In general, the New York Avenue portions of the study area have few bicycle-friendly streets and few destinations to ride to.

## BICYCLE FACILITIES



Source: Office of the Chief Technology Officer; Ayers Saint Gross

## MARKET IMPLICATIONS

### EXISTING USERS

Taken together, the preceding existing conditions and market analysis provide a framework for assessing Ward 5's challenges and strengths in growing PDR jobs and opportunities. Starting with market conditions, some general observations can be made as follows:

The existing supply of industrial and flex spaces does not meet the needs of existing and emerging businesses, and limits the potential for improved efficiency and business growth. Privately held, obsolete buildings with lower quality spaces represent more than 80 percent of the building inventory in the Ward 5 study area. The only benefit to these buildings is lower rents for PDR businesses that require reduced operating costs to compete.

In the District of Columbia, the limited supply of land for industrial uses leading to higher rental rates makes competition with suburban Maryland jurisdictions difficult. Within the Washington region, industrial space had an average asking rental rate of \$9.31 per square foot in the suburbs compared to \$10.35 in the city. Over the past several years, the District's industrial rental rates decreased as occupancies dropped and regional competition for obtaining industrial tenants increased. For example, the differences between the average rent in Prince George's County and Ward 5 averaged between \$3.50 and \$4.00 in 2009 and declined to \$1.65 in 2012 – still a significant difference between suburb and city.

PDR businesses in Ward 5 report a need or a desire to be located in the District and, therefore, are willing to pay the higher rents. In many instances, these businesses need easy access to their customers and workforce, and often the prestige associated with a Washington, DC address helps market their products. Those in the construction industry cite the Certified Business Enterprise (CBE) preference, which provides a competitive advantage in bidding for DC government contracts.

### EMERGING USERS

The existing arts and entertainment cluster in Brookland, and food manufacturing and processing in and around the Florida Avenue Market are ripe for expansion.

The District's skilled film and media labor pool and its stature as the nation's capital create opportunities to grow existing companies and create new media and communications companies in Ward 5. The city also offers the chance for eco-friendly businesses to grow in Ward 5, given the Sustainable DC Plan issued in 2012 and its incentives to support "green" industries.

**DC industrial rents average \$1.65 higher per square foot than rents in Prince George's County.**

## JOB GROWTH POTENTIAL (2014-2024)

As Ward 5 redevelopment occurs, job growth will increase with both the intensification of existing space and entry of new entrepreneurs.

Future demand will require development of more small-scale spaces for PDR users and makers, bolstering the Ward 5 economy and creating new jobs.

Existing Space: 2,700 to 3,000 jobs

Potential New Space: 700 to 1,500 jobs

Projected 35% to 39% potential job growth

## FLORIDA AVENUE MARKET AND UNION KITCHEN

One of the oldest business clusters in Ward 5 is the Florida Avenue Market where meats, fish, dairy and produce were sold by hundreds of vendors in close proximity to a railroad freight terminal. The market flourished from the 1930s until the 1980s when many merchants left the area for modern distribution centers and supermarkets in the suburbs.

Today, the area's food distribution and production role is being revived and expanded with private investments in Union Market and the nearby Union Kitchen. Union Market houses a variety of food vendors offering fresh local produce, spices, olive oil, pasta sauce, meats, baked goods, organic dairy products, soups and ready-to-eat foods. Coupled with an aggressive events program, Union Market is attracting customers from around the city while creating a distinctive image and sense of community.

Union Kitchen, located just south of Ward 5, is a privately-run incubator business that provides shared commercial kitchen space and equipment for a wide range of food entrepreneurs, including food truck operators. It provides technical assistance, networking and access to graphic artists and promotional support to these start-ups. An offshoot of the company, The Lot @ Union Kitchen, offers an outdoor venue and a beer garden for concerts and events to draw customers for its tenants. Other programs and classes also help to create visibility and markets for local food entrepreneurs.





## MARKET IMPLICATIONS



### Arts and Makers

The Brookland neighborhood has attracted a truly eclectic mix of arts and entertainment enterprises to the industrial properties along the Metrorail's Red Line corridor. These businesses range from Dance Place and a prop shop for the Shakespeare Theatre company to artist studios, lofts and galleries. With limited performance space, the Brookland neighborhood manages to bring together local artists and artisans for monthly art swaps, collaborative showings and other shared resource opportunities.

Employment trends and other industry standards do not fully capture the scale and capacity of Brookland's arts and entertainment scene. Interviews with area arts organizations stressed the importance of affordable space for artists to work. These groups voiced concern about an inability to secure long-term leases at affordable rents sufficient to support shared workspace for emerging arts and artisans.

The creative industries focus group raised issues over finding work space and dealing with real estate brokers. These participants desire raw spaces and cited a small accessory retail component as a very important feature for them. Generally speaking, creative businesses settle in areas

with restaurants that attract people (potential customers) and feel their presence reinforces the restaurants. They would also like to see more live/work space in the Ward 5 industrial area.

While industrial property in Ward 5 tends to have the most competitive rates for suitable space in the District, neighboring arts districts in Mount Rainier and Hyattsville, Maryland, compete on price. As home to Catholic University and the Red Line Metrorail station, Brookland can compete with Silver Spring, Maryland, for the arts, tapping the prestige of a DC location.

Unlike in San Francisco and New York, the arts and cultural community in the Brookland neighborhood still needs to build its reputation. Expanding the supply of affordable space along the Red Line will meet a portion of the arts and entertainment community needs as long as prices and rents remain relatively stable.



### Food Manufacturing and Processing

The food production and processing industry in Ward 5 includes both wholesale distribution efforts and gourmet boutique food and beverage production. The wholesale trade industry unloads and packages goods to sell directly to retailers, focused on nondurable goods, particularly food and sundries.

Growth in beverage production and distribution centers on craft beer and wine. In DC, retailers are able to buy alcohol directly from local suppliers without the need for a wholesale distributor, allowing breweries to distribute their own products. Often viewed as positive neighbors by residents, these operations may expand further in Ward 5, given the benefits of the local transportation network and regulatory environment.

Finally, market interest in locally grown produce and healthy food alternatives creates a demand for urban farming alternatives. In fact, urban agriculture may be viewed as a key potential reuse for older industrial buildings in Ward 5, through techniques such as hydroponics or vertical farms.

Food companies are price-sensitive and have difficulties finding space in Ward 5 at the right size and right cost. Participants of the food focus group characterized the cost of industrial space as their number one problem, one that overshadows all the other challenges.

Start-up businesses are also having a hard time connecting with real estate brokers because of their small size, constraining their ability to locate appropriate facilities. This focus group brought forth the idea of "green tape" to make the process of getting business licenses and occupancy permits easier in the District. The delays inherent in securing an occupancy permit are quite burdensome to small businesses.





## Media and Communications

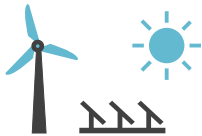
Washington's diverse and vibrant creative economy includes a variety of filmmakers, broadcasters and other digital media producers and service providers. Many of these businesses have the technical expertise, experience and industry contacts to expand and serve new markets, but they lack access to advanced equipment and sound stages.

The District struggles to compete with Maryland for the film industry, losing out to its neighboring jurisdiction on episodic television production due to insufficient financial incentives, a more challenging regulatory framework, higher wages and advances in digital technology that reduce the need to shoot on location. The city's higher wages for International Alliance of Theatrical Stage Employees and reported challenges working with high security agencies (Secret Service, U.S. Capitol Police and National Park Service) present roadblocks to the film industry.

However, the District capitalizes on niche markets within the film industry, including documentary filmmaking, commercials and workforce training

videos. A long-term commitment to increased incentives and District assistance in developing one or two moderate-scale sound stages (between 7,500 to 15,000 square feet) could tip the scale and allow DC to compete effectively to major film and television productions.

Such a sound stage would prove useful to attract both out-of-town and local filmmakers, and could provide a green screen and rooms for gaming and smartphone application development. While the traditional technology companies developing new software are not generally attracted to sound stage facilities, new facilities in Ward 5 could attract companies in video game development and app creation.



## Green Industry

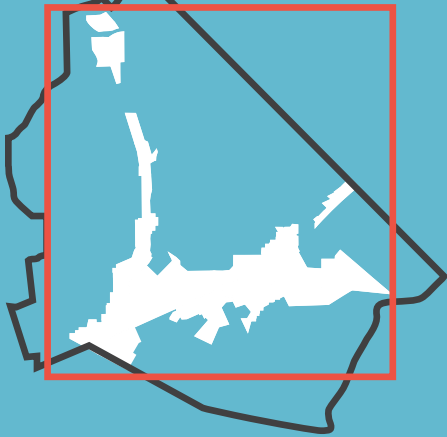
The District's initiatives to enhance the city's sustainability and market demand for better, more environmentally sound ways of living create opportunities for green, sustainable industry. The Sustainable DC Plan encourages green roofs, renewable energy, buildings achieving Leadership in Energy and Environmental Design (LEED) certification, recycling, rain gardens, reuse of recycled building materials and other strategies to reduce energy consumption and respect the natural environment. Each of these practices creates opportunities for new and existing businesses to pursue new sustainable products and services, while requiring different types of facilities in which to create these offerings.

The growing adoption of sustainable practices by existing businesses and real estate developers continues to support the administrative, support and waste management industries found throughout Ward 5. The growth in recycling and composting may not be able to be accommodated in the city, but specialty trades supporting the local green economy could flourish in Ward 5. As profiled previously in this report, the Ward 5 construction

company, AVSmoot, LLC, offers custom manufacturing of windows, doors and other building materials using sustainable preservation techniques. The company is committed to advancing carpenters' skill sets to incorporate green practices.

# INDUSTRIAL AREA ZONES & SUB-AREAS

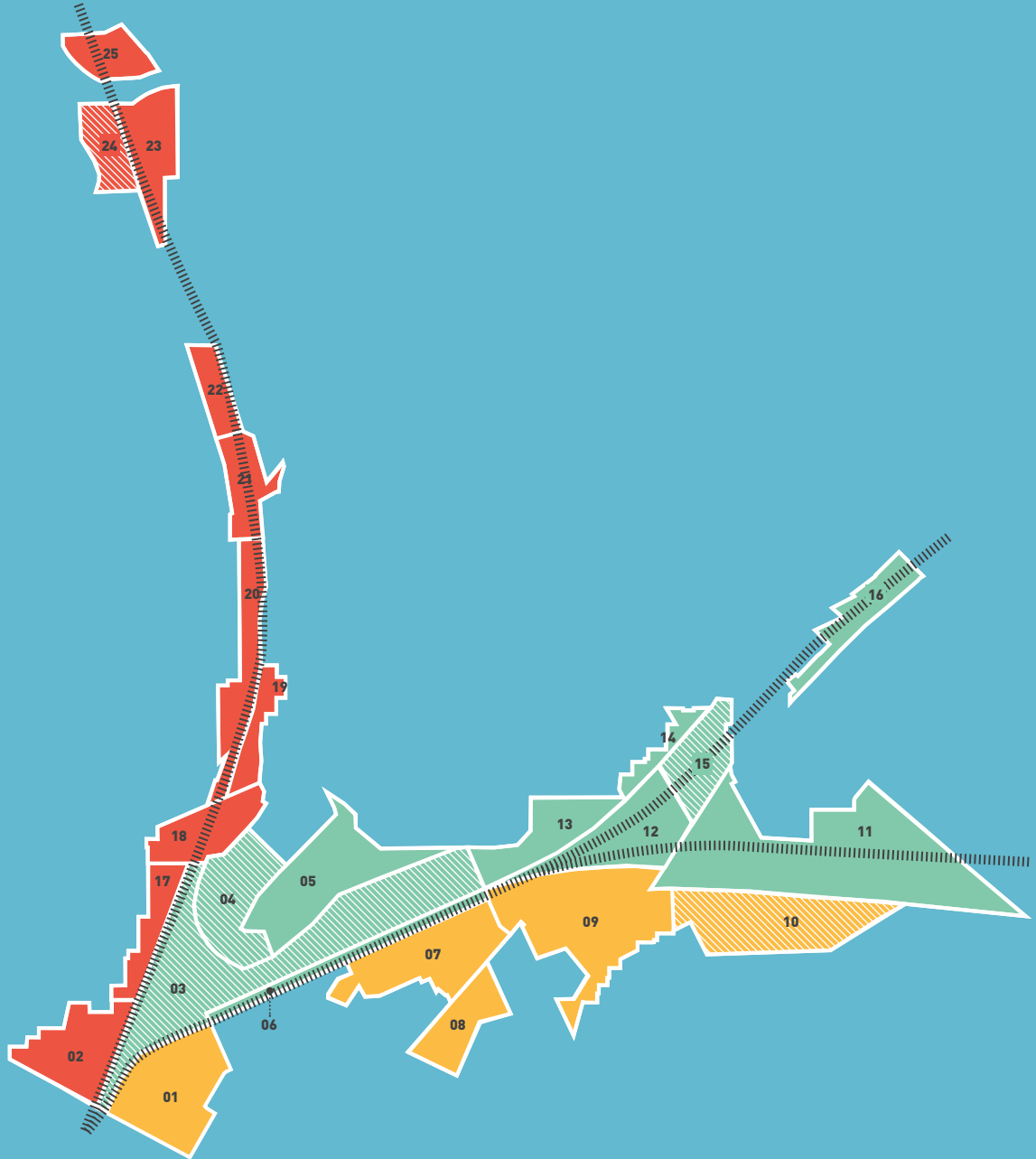
## Key



## Legend

- |||| RAIL LINES
- AREA 1: RED LINE
- AREA 2: NEW YORK AVENUE NORTH
- AREA 3: NEW YORK AVENUE SOUTH
- ▨ LONG TERM PUBLIC PROPERTIES

Source:



## SUB-AREA ORGANIZATION

One critical step in using the study area conditions findings to advance Task Force goals lies in creating a physical framework for the study area—one that identifies where various initiatives and planning strategies can and should have a physical impact in Ward 5.

Approximately 1,030 acres in size and highly fragmented, the Ward 5 study area is too large and complex to be considered as a single, coherent development site. In any place-based action plan, defining an overall site organization and sub-areas is essential to establishing clear, actionable planning strategies.

The physical character of the Ward 5 study area is largely defined by vast stretches of transportation infrastructure—major roadways, train yards and parking lots. Encompassing more than half of the 1,030 acres, these areas are typically physically distinct from each other and from neighboring parts of the city. Much of the study area is fragmented—broken down by dramatic grade changes, fences, walls and non-pedestrian roadways, and a lack of connecting roads. For example, nearly the entire length of New York Avenue that runs through Ward 5 is configured as a limited-access highway with minimal grade crossings. From a planning perspective, parcels facing onto New York Avenue and the Metrorail Red Line are physically distinct parts of the urban fabric and, in most cases, will remain so for the foreseeable future.

Given the physical disparity of much of the study area, it is highly useful to identify distinct subareas within Ward 5—contiguous zones that have a clear identity and physical boundaries.

## 3 ZONES; 25 SUB-AREAS

At a broad level, the study area can be divided into three zones:

### Red Line Zone

This zone encompasses the parcels directly adjoining the Metrorail Red Line corridor. Many of the sites in this zone are not contiguous and tend to be smaller and somewhat interspersed with well established neighborhoods and nearby Catholic University. This area is largely defined by its access to transit and bike trails. Both modes make this zone highly desirable for residential and commercial development, and several arts and educational organizations have located in this area. Rhode Island Avenue also plays a key role in the Red Line Zone as it provides direct vehicular and bus access to downtown.

The other two zones are the contiguous areas adjoining New York Avenue. As noted above, this thoroughfare—which is designated US 50, a major highway arterial—completely separates the eastern parts of the study area into two disparate territories.

### New York Avenue North

This zone encompasses an extensive network of existing PDR businesses, including the Bladensburg postal facility and concentrations of manufacturing and warehousing along W Street, Adam's Place and V Street—along with municipal functions such as the WMATA storage facility on Bladensburg Road. While many businesses in this zone are successful, this zone also includes several, prominent nuisance properties which, due to their close proximity to existing residential neighborhoods, are a source of community friction. Unlike the Red Line Zone, the New York Avenue North Zone features poor vehicular and pedestrian connectivity to the broader District – relying on two New York Avenue grade intersections at Montana Avenue and Bladensburg Road, and the 9th Street flyover to access downtown and the New York Avenue South zone.

### New York Avenue South

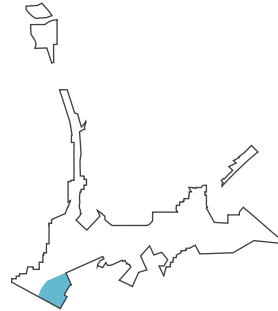
This zone encompasses an extensive network of existing PDR businesses, including the Florida Avenue Market and a cluster of warehousing and some manufacturing in Ivy City—along with municipal functions centered along West Virginia Avenue. New York Avenue South also encompasses extensive, non-PDR users, including the National Arboretum and proposed site of a new Walmart. In some ways, this area is already sustaining PDR growth—particularly among food industries based in the Florida Avenue Market, though this zone also features several blighted and underperforming properties as well. Unlike the situation in New York Avenue North, sites in this zone feature somewhat better vehicular and pedestrian connectivity as both West Virginia Avenue and Florida Avenue connect to the broader city. This area still requires improved pedestrian and transit access to meet its potential as a PDR hub.

Working with the Task Force, the consultant team identified 25 distinct sub-areas within these three zones, which are described on the following pages. In Chapter 4, specific physical recommendations will be tied to these sub-areas and certain locations will be identified as immediate action sites.

## 01: Florida Avenue Market

This is the city's site for wholesale distribution, the DC Farmer's Market and several unique stores. The historic nature of some of the buildings and the functions of the area offer a certain character and grittiness not found elsewhere in the city that many find appealing. However, the Florida Avenue Market Site (FLA Market) is also significantly underdeveloped, has become increasingly rundown and many of the structures need repair.

There is recent interest from the development community in this location. The Union Market development has been very successful in providing a vision for what the FLA Market could become. Gallaudet University and other land owners in this area are also seeking to redevelop significant portions of the FLA Market with mixed-use projects.



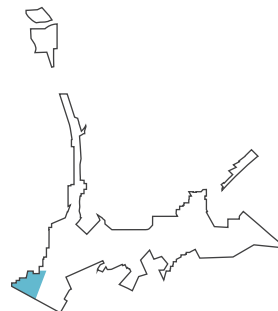
01



## 02: New York Avenue Gateway

The NoMa-Gallaudet University Metrorail station was opened in 2004 and became a catalyst for the transformation of this area. A former industrial location, this area, together with the NoMa neighborhood to the south, is becoming a dynamic, mixed-use hub in the District. Remaining industrial uses include a large Pepco building and a FedEx distribution center.

There is tremendous development interest in this area. Recently completed and upcoming mixed-use development projects are attracting people who want to take advantage of this area's proximity to the Metrorail station. The recent residential development in this sub-area, the Trilogy, brought 603 new units to the area. The Washington Gateway project is currently under construction on the corner of New York and Florida avenues, and will bring one million square feet of mixed-use development, including commercial, residential and hotel uses.



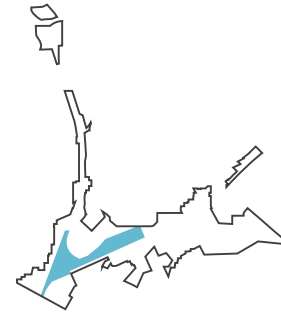
02



### 03: Rail Yards

PDR uses have historically required direct access rail infrastructure to receive supplies and distribute goods. The rail yards in the study area are used by Amtrak, WMATA and CSX. Rail use is projected to grow with CSX's National Gateway project to upgrade bridges and tunnels to accommodate double-stacking of containers on rail cars.

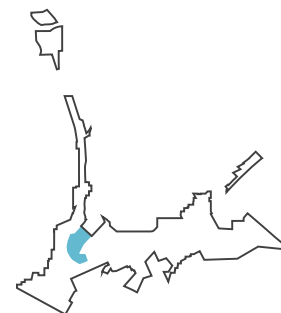
03



### 04: Post Office Site

The Brentwood Mail Sorting Facility is the United States Postal Service's primary mail sorting facility for the District of Columbia.

04

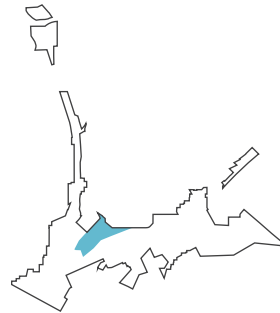




### 05: W Street

This sub-area of the industrial study consists of dead-end streets stemming from Brentwood Road. This area contains the former Black Entertainment Television office building, many fleet storage sites and construction material storage.

This site also has a privately-owned trash transfer facility, which opened in 1988. There are numerous complaints by adjacent neighbors claiming that this facility emits excessive, unpleasant odors and attracts rodents and other animal pests. The facility backs onto residential properties along 13th Street, NE. Also in the area is a Department of Public Works solid waste collection facility with 116 fleet vehicles. Fort Myer Construction is headquartered in the sub-area and stores construction materials on site.

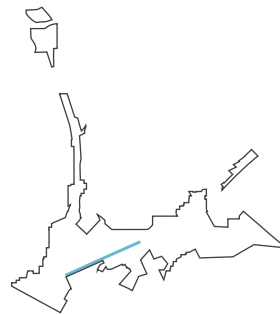


05



### 06: New York Strip

This thin strip of land runs along New York Avenue and separates the avenue from the rail yard. Because of its dimensions, potential redevelopment is severely limited. The New York Avenue Infrastructure Plan recommends a linear park, which ties into the recent efforts to improve New York Avenue as an important gateway into the city. Currently, portions of the site are used to park school buses.



06

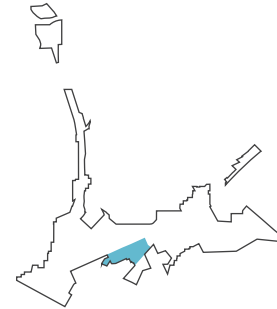


### 07: Ivy City

Ivy City is a small neighborhood along New York Avenue. It is a mixture of residential and industrial uses. This area is home to the well-known landmark, the old Hecht's warehouse, which sits on the corner of New York Avenue and Fenwick Street.

The Alexander Crummell School near Okie and Kendall streets is located in the center of Ivy City and is currently shuttered. It has been committed to use by tour buses with facilities for bus drivers.

OceanPro Industries operates a seafood processing facility in the sub-area and is opening a retail tavern. The sub-area also includes a homeless shelter and a nightclub.

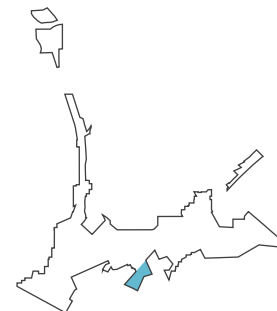


07



### 08: West Virginia Avenue

The West Virginia sub-area is almost entirely owned by the District of Columbia and currently houses many municipal uses for the District's Department of Public Works. An older commercial strip along Mount Olivet Road has several boarded-up spaces.



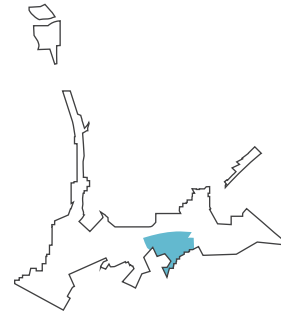
08



### 09: Montana Avenue Circle

The Montana Avenue Circle sub-area can serve as an important gateway to Ward 5 and the District. There are many commercial uses emerging along New York Avenue and a large commercial development is being planned for a cleared site bounded by New York and Montana avenues, and Bladensburg Road.

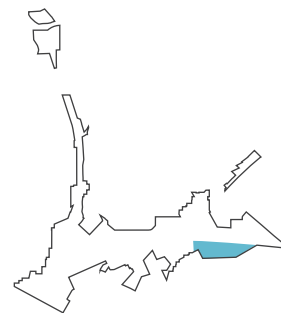
09



### 10: Arboretum

A portion of the National Arboretum along New York Avenue is the site of the historic United Brick Corporation brick complex, which closed in 1972. The brick kilns date to 1927. This property is the only remaining former brickyard site in the District and was added to the National Register of Historic Places in 1978.

10

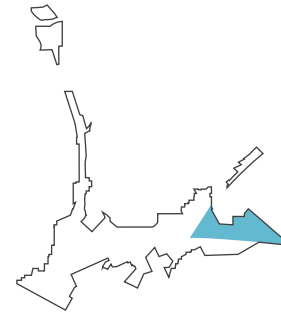


### 11: V Street

The V Street sub-area is bounded by rail lines to the south, South Dakota Avenue to the east and Bladensburg Road to the west. The northern portion of the area transitions to an established neighborhood. Development on V Street itself comprises two story flex buildings with high-bay garages on the ground floor and office space above.

The portion of the area along South Dakota Avenue is used for construction vehicle storage.

11



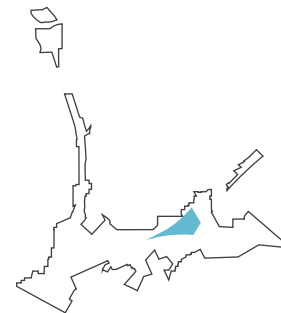
### 12: Adams Place

The western part of this sub-area is located at the point where the rail line splits. The rail lines mark the northern and southern boundary of this triangular site.

Half of the parcels at Adams Place are owned by the DC government and used for DCPS storage and school bus parking. The remainder of Adams Place is organized around the street of the same name and the building's backs face the rail lines. Queens Chapel Road runs along the site's east side and the road is elevated on the north end in order to bridge over the rail line.

Other significant uses are nightclubs, a waste management operation and a concrete construction company.

12

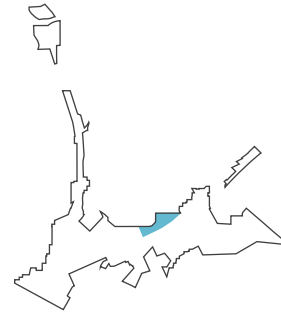




### 13: Montana Avenue

The area to the west of this sub-area contains properties that store construction vehicles and building supplies. Residential areas across W Street face directly into this site.

The east side of Montana Avenue is a low-lying area that houses many uses identified as nuisances. Many taxi repair shops use both their sites and public right-of-ways as fleet storage. There is also a trash transfer and recycling facility along Lawrence Avenue that contributes to noise, odors and debris and is almost totally unscreened. Loomis Park is in the sub-area and could be enhanced to serve as a buffer to the adjacent neighborhoods.

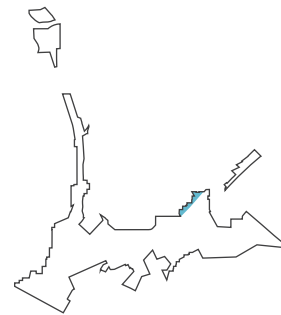


13



### 14: Evarts and 26th Street

This sub-area is a small strip situated between the rail lines to the east and residential neighborhoods to the west. The building structures consist of small industrial spaces. There are also a few instances of fleet storage.



14



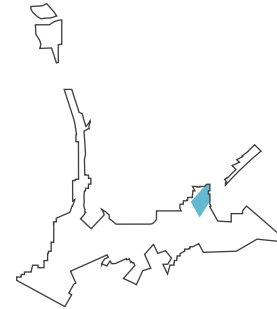


### 15: WMATA Storage

Most of the sub-area is owned by WMATA. The agency houses at this location buses operated by the Bladensburg Division. This lot is WMATA's largest fleet storage lot. The Bladensburg Division is currently one of two sites that support compressed natural gas (CNG) and provide CNG fueling.

The northern portion of the sub-area is a mixture of PDR buildings. There are one-story brick buildings that face Bladensburg Road and could be suitable for small retail establishments.

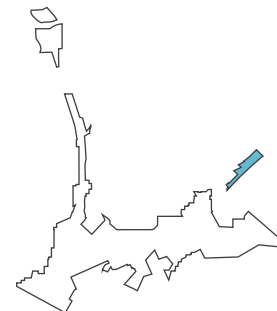
15



### 16: Bladensburg Road

This sub-area is very close to the Maryland border and is located between Bladensburg Road and the rail line. The buildings in this area are unique because of the retail frontage along Bladensburg Road and industrial uses operated in the rear of the properties. This type of structure can serve as a model for better integrating flex industrial buildings into neighborhoods.

16

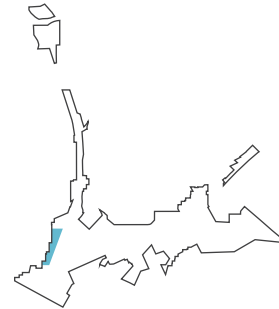


### 17: 5th Street

The 5th Street sub-area sits on top of the New York Avenue Gateway site (sub-area 2). It comprises both industrial flex buildings and multi-story warehouse buildings. This area also has multiple lots dedicated to bus fleet storage and construction material storage along the rail lines.

The Metropolitan Branch Trail runs north and south along the eastern side of this area, connecting the NoMA neighborhood to the Fort Totten Metrorail station.

The new Carlos Rosario International Public Charter School, which recently opened on V Street, NE, demonstrates the permissive nature of the industrial zoning code.



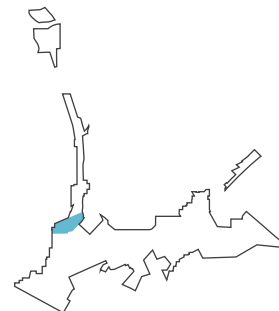
17



### 18: Rhode Island Metro

As with all Metrorail locations in the District, there has been an increase in developer interest in providing commercial and residential uses proximate to this transit infrastructure. Rhode Island Row is a 274-unit, mixed-use development that includes 70,000 square feet of ground-level retail space.

The land to the west of the Metrorail line that also runs along Rhode Island Avenue is commercial in nature with some community and religious institutions.



18



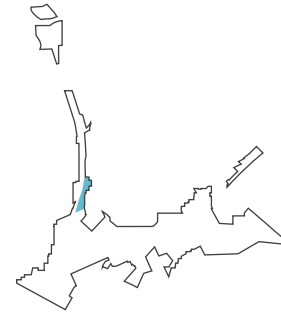
## 19: Reed Street

This sub-area runs along the eastern side of the rail line perpendicular to Rhode Island Avenue. It comprises multi-story warehouse and industrial buildings as well as empty lots. These lots are used for car and tour bus storage.

One former industrial building has been renovated by the Mount Calvary Christian Academy. Other sub-area businesses include a car repair operation and a uniform shop.

Many of the multi-story warehouse buildings are vacant, probably in expectation of market changes due to their proximity to the Rhode Island Metrorail station.

19



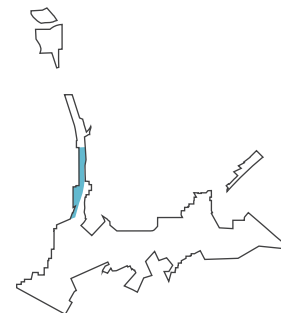
## 20: 8th street

This sub-area is a long segment that is bounded by a number of residential streets to the west, Monroe Street to the north, the rail line to the east and it passes Franklin Street to the south.

The northern section of this site supplements a number of developments and businesses dedicated to dance and the arts. This portion will further relate to the new development at the Brookland Metro sub-area (sub-area 21).

Just south of Franklin Street are a number of charter schools attracted to the industrial buildings' size and rents/prices. These schools include the High Road Upper School, DC Prep and William E. Doar, Jr. public charter schools.

20

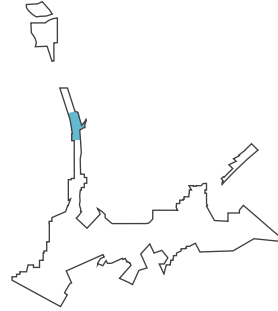


## 21: Brookland Metro

The sub-area at the Brookland Metrorail station has undergone a recent transformation with the addition of the Monroe Street Market and one million square feet of mixed-use development.

The area north of the Metro station currently houses a number of large footprint buildings and paved surface parking areas. It is immediately adjacent to a low-density residential area to the north and Turkey-Thicket Community Center to the east.

Brookland's Small Area Plan envisions this area to include new residential and offices that are better integrated into the neighborhood fabric as well as buffering and screening from tracks and PDR uses.

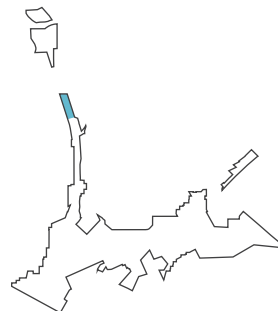


21



## 22: University Heights

This sub-area along the rail line consists of a series of large buildings that are used by a mix of PDR businesses, including a catering company and the Shakespeare Theatre Company's set construction and painting shop. One of these buildings was recently converted into a self-storage facility. This area provides a good example of mixing new and old buildings.



22

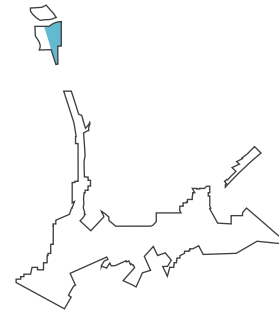




### 23: Food Bank Site

In 2012, the Capital Area Food Bank moved into a new 123,000 square-foot distribution center located in the southern portion of this site. This modern distribution facility achieved a LEED Silver rating for its incorporation of solar panels, low-flow plumbing fixtures and energy-efficient lighting. The northern portion contains a mixture of townhouses, a plumbing business and a DC Department of Transportation facility.

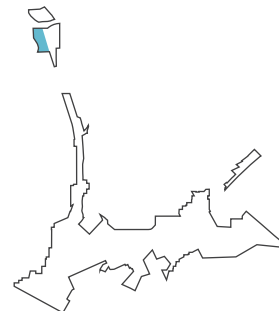
23



### 24: Fort Totten Trash Transfer Site

The District's Department of Public Works' Fort Totten Transfer Station lies between the rail line to the east and Fort Totten Park on the west. It is a District-wide facility that accepts solid waste, household hazardous waste and electronic equipment from city residents. District residents can also collect compost at this site. The transfer station is well buffered from residential uses on Hawaii Avenue by Fort Totten Park and Catholic University athletic fields.

24



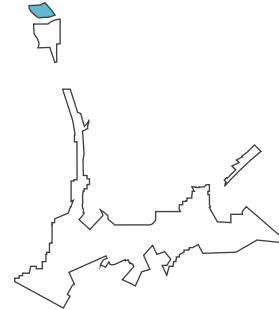


## 25: Fort Totten Metro

The sub-area surrounding the Riggs Road and South Dakota Avenue intersection is currently undergoing significant transformation similar to most Metrorail locations.

In 2009, the DC Office of Planning completed a community visioning process to produce the Riggs Road and South Dakota Avenue Area Redevelopment Plan. The implementation of this plan will create a walkable, mixed-use neighborhood. The first phase, Aventine at Fort Totten, offers affordable luxury apartments.

25





03

# BEST PRACTICES

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Reflecting the Task Force’s goals to diversify the District’s workforce and address key nuisance properties, the existing conditions and market analysis in Chapter 2 highlight many strengths and weaknesses in the study area.

On the one hand, existing PDR businesses, coupled with emerging companies, represent a potential critical mass of new and diverse employment for the city—and this potential is further reinforced by a number of existing structures that, when properly renovated, offer desirable physical places to advance and grow these types of businesses.

On the other hand, several under-leased and nuisance properties—along with recent market forces—have held back Ward 5, preventing it from playing a more vital role in the city’s economy.

These situations are not unique to DC.

In fact, many communities around the globe are facing and addressing similar challenges. In response, they are developing new policies, financing strategies and physical design models that can transform districts like Ward 5 into economic and cultural hubs—places that people flock to—both to work and enjoy the local goods and products.

This chapter reflects numerous lessons learned from a variety of cities that have transformed their industrial land. While none of these examples exactly matches the situation in Ward 5, each of them points to successful practices in protecting existing PDR jobs while encouraging the growth of new and emerging businesses.

Lessons learned from these case studies go beyond creating PDR jobs to focus on state-of-the-art municipal facilities that can serve as models for improving Ward 5 municipal workplaces. And several address buffering and nuisance concerns that can hinder industrial growth and impact residents’ quality of life. This chapter starts with four broad case studies that point to both public and private sector strategies for transforming industrial land.



## PDR CASE STUDIES

To evaluate relevant best practice efforts, in-depth profiles of significant production, distribution and repair (PDR) developments in the following cities were completed in:

- » Brooklyn, New York
- » Pittsburgh, Pennsylvania
- » West Berkeley and San Francisco, California
- » Philadelphia, Pennsylvania
- » Sheffield, England

These examples present a wide range of lessons-learned about industrial facilities, business models, infrastructure and financial incentives. While the four examples share many common traits, they are distinguished by key differences, namely the level of governmental involvement—with Philadelphia providing the most public sector support and incentives, and West Berkeley providing the least. Brooklyn and Pittsburgh rely heavily on both public- and private-sector anchors.



### CASE STUDY LOCATIONS

Brooklyn

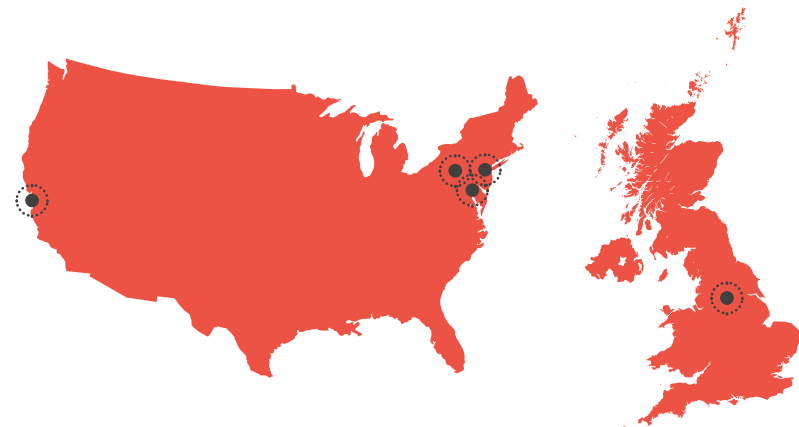
Bay Area

(West Berkeley & San Francisco, CA)

Philadelphia

Pittsburgh

Sheffield, UK





## BROOKLYN CASE STUDY SUMMARY

Brooklyn, New York City's most populous borough, has emerged from Manhattan's shadow to become celebrated for its unique real estate developments, changing demographics and increasing job opportunities. Over the past century, the area's piers and ports have been reinvented to reflect shifting industry and workforce demands. Brooklyn's numerous warehouses and wide inventory of under-developed buildings have presented many opportunities for redevelopment and new activities for this formerly industrial waterfront. What has resulted is a borough rich in culture, trend-setting, innovation and arts.

Four redevelopment areas offer valuable lessons for Ward 5:

- » Greenpoint/Williamsburg – Greenpoint Manufacturing and Design Center (GMDC)—a very successful reuse of abandoned industrial buildings for small maker businesses. GMDC, a non-profit company, relied on an in-house construction crew to implement a steady building investment strategy; it now has seven buildings encompassing 725,000 square feet, housing 100 businesses with approximately 500 workers.
- » Brooklyn Navy Yard – a physically secured hub of innovation, artistry, media and sustainability on a former shipyard site. Its more than 300 acres account for 10,000 jobs in a striking range of businesses. One prominent tenant, Steiner Studios, is renovating historic buildings and erecting new sound stages and back lot facilities.
- » Gowanus, Red Hook and Sunset Park – three neighborhoods of revitalized piers and industrial land that have overcome the challenge of limited access to public transportation.
- » Industry City – a cluster of revitalized warehouses developed privately for manufacturers, distributors and studios for artists and entrepreneurs. The area has been designated an Industrial Business Zone, which cannot be rezoned for residential uses.

## Redevelopment Organizations

Many successes in Brooklyn's redefined industrial areas, such as Greenpoint, Williamsburg, Brooklyn Navy Yard and south neighborhoods, are facilitated by local economic development organizations and non-profits. These entities distribute incentives for potential tenants, provide support in leveraging available tax breaks and credits, and offer a single place for new and start-up businesses to become familiar with city, state and borough assistance programs and regulatory requirements. For each of these major redevelopment projects, on-site management entities ensure security, fill vacancies, target space utilization and provide ongoing programming for the community and business owners. In addition to the aid from on-site management entities, philanthropic support and public subsidy fill funding gaps for capital and, on occasion, operational shortfalls.

Also critical to Brooklyn's redevelopment have been investments made by the New York City Economic Development Corporation and loans made by the New York City Industrial Development Agency.



## PITTSBURGH CASE STUDY SUMMARY

Pittsburgh is an outstanding example of a post-industrial city that has shifted its economy from heavy manufacturing over the past five decades to an economy driven by higher education, medicine and now, energy industries. Over the past two decades, the University of Pittsburgh, Carnegie Mellon University, Duquesne University and other higher education institutions have emerged as major economic drivers— along with health care. Placemaking investments, including town squares and riverfront improvements, have helped to attract interest and commitment to the city from Millennial workers and the businesses that employ them.

Relative to the issues facing Ward 5, three Pittsburgh neighborhoods have particular relevance:

- » The Strip District —a two-mile strip of industrial land near downtown that has evolved from the region’s food distribution center to an eclectic mix of businesses, including food producers and wholesalers, food retailers, creative industries, restaurants, cafés and nightclubs. The district’s gritty environment, authenticity, low-cost space and creative vibe give it a unique character.
- » Lawrenceville – a long-time heavy industrial corridor that is attracting technology industries to its mix of industry, retail and housing. Carnegie Mellon University’s National Robotics Engineering Center (NREC) converted an old steel mill into a modern industrial building. Two incubator buildings have accommodated and supported spin-off companies and other creative industries.
- » East Liberty – a major urban commercial district that floundered following ill-advised urban renewal projects and has now emerged as a major tech and retail center. Following several major investments in the arts and placemaking, the area now hosts Google’s Pittsburgh research hub as well as co-working and maker spaces.

## Redevelopment Organizations

Two major organizations spearhead economic and industrial development with support from a network of philanthropic organizations, non-profits and neighborhood-based Community Development Corporations.

The Urban Redevelopment Authority of Pittsburgh (URA), which operates with an independent board appointed by the Mayor, is the city’s economic development agency. It acts as a catalyst and facilitator for a diverse portfolio of projects and investments, ranging from land assembly and business support to housing construction and rehabilitation.

The Regional Industrial Development Corporation of Southwestern Pennsylvania (RIDC) is an independent private non-profit formed in 1955 by business, corporate, government and labor leaders for a regional approach to economic development. RIDC invests heavily in developing industrial parks in the region and the city, including reuse of several former steel mills.



## BAY AREA CASE STUDY SUMMARY

Both San Francisco and Berkeley, California, have recognized the importance of preserving land and facilities for small-scale manufacturers and other industries in the face of competition for industrial buildings for conversion to housing and other uses, and the resulting pressure on land prices.

West Berkeley has been an industrial area since the 19th century. In the early 1980s, building owners and developers began to convert old factories into lofts, offices, and live/work space. During this period, concerned about the displacement created by industrial building conversions, a coalition of artist groups, manufacturing firms and Berkeley citizens began working with city staff to protect West Berkeley's industrial zones, motivated in part by the many well-paid jobs created for workers who lack advanced education.

In 1993, after an eight-year planning process, the City Council unanimously approved the West Berkeley Plan. The plan's primary feature is strict zoning to reinforce the precedence of industrial activity and preserve manufacturing space by preventing encroachment by conflicting uses and relieving the speculative price increases that accompany the expectation of conversion to more profitable uses. The area has 310 businesses with roughly 5,000 workers, of whom one-half are members of racial minorities.

The San Francisco planning department issued a study in 2002 examining the role of PDR industries in the city's economy that concluded that although PDR firms pay above average wages and support economic diversity and stability, they typically are unable to compete in the real estate market with most other uses. As a result, the city has prioritized provision of space for small manufacturers and other businesses in recent redevelopment projects.

The 69-acre Pier 70 industrial complex, for example, is being redeveloped for 2.5 million square feet of office space, 1,000 residential units, 270,000 square feet for retail, arts and light industrial space, and eight acres of parks and open space. Its developer plans to rehabilitate two historic industrial buildings to provide 130,000 square feet of space for small-scale production, arts and retail use.

The 5M Project involves redevelopment of the historic San Francisco Chronicle building and site for 1.8 million square feet of office, residential, retail, arts, cultural and educational uses. It also includes space for TechShop, SFMade and the Hub. TechShop offers shared space and use of equipment, and the Hub is an incubator for social enterprises.





## PHILADELPHIA CASE STUDY SUMMARY

Historically an industrial hub, Philadelphia is working to sustain its PDR economy while also growing an innovation economy that leverages its higher education and life sciences sectors. Today many of the city's multi-story industrial buildings are being redeveloped into sites for entertainment, artisan and craft businesses and residential loft developments.

The Philadelphia Industrial Development Corporation (PIDC) has led efforts to rebuild the city's economy since its founding in 1958 as a private non-profit. Half of its 30-person board of directors is appointed by the mayor and half by the president of the Philadelphia chamber of commerce, balancing policy inputs with the discipline of the private market. PIDC is self-sustaining, primarily through fees for service, with an annual budget of roughly \$10 million and a staff of 60.

Involved in a wide variety of initiatives and projects, PIDC has remained focused on three primary activities:

- » Creation of developable sites for industrial and commercial activity;
- » Investment in Philadelphia businesses; and
- » Marketing Philadelphia to the business and investment community.

PIDC's major projects include:

**Philadelphia Navy Yard** – redevelopment of a 1,200-acre waterfront site of a former shipyard. The Navy Yard has been rebuilt with upgraded infrastructure, new office construction and rehabilitation of many existing buildings. Space totals 6.5 million square feet, attracting and retaining 130 companies with 10,000 employees.

**TJ Maxx regional distribution facility** - a one million square foot facility that employs more than 1,500 workers. This facility led PIDC to expand its definition of an "industrial" job and recognize that distribution jobs align well with the skills inherent in a manufacturing workforce.

**American Street Corridor** – revitalization of a historic industrial district characterized by multi-story industrial buildings on small lots and a series of vacant lots and buildings. An aggressive program of vacant land stabilization, murals, public safety initiatives, litter removal, housing counseling, children and youth programming, façade grants, business rent rebates and financial and technical assistance has turned the corridor around and set the stage for private and non-profit initiatives.

Crane Arts, a 100-year-old former plumbing warehouse in the corridor, now accommodates dozens of studios, arts organizations and galleries and attracts visitors from across the region and beyond. Globe Dye Works was a yarn-dyeing factory that has been redeveloped by a woodworking company and then shared with artists, artisans and fabricators. "Where art meets industry," the operation provides a range of maker spaces, from 500 square-foot artist studios to fabrication spaces of 30,000 square feet or more.



## SHEFFIELD CASE STUDY SUMMARY

Located in Southern Yorkshire in central England, Sheffield has a history based on manufacturing. Significant decreases in industrial activities over time have resulted in a population loss and a crisis of leadership and economic vitality. Sheffield was hit hard in the mid-1970s by the oil crisis and the globalization of trade and manufacturing. Unemployment reached 15.5 percent in 1974 and manufacturing employment fell to less than half of its previous level.

The Cultural Industries Quarter is a district that was formed in the mid-1980s support small businesses in an inner-city area of former metal workshops. It is now recognized as one of the United Kingdom's first cultural districts fostering a thriving center of production, including fine arts, photography, film-making, music, recording, graphic and product design.

Red Tape Studios and the Audio Visual Enterprise Centre were the quarter's first anchors. Then Workstation, a 70,000 square-foot managed workspace created for the cultural/media center, and the Showroom Cinema were developed by a specially formed non-profit on land owned by the City Council.

The Cultural Industries Quarter has generated a positive city image, supporting cultural and tourism industries. The Quarter now has more than 300 small businesses in film, music, TV, design and computers.



By "yellow book" via Flickr



## GREENPOINT MANUFACTURING & DESIGN CENTER

The Greenpoint Manufacturing and Design Center (GMDC) is a 501(c)(3) non-profit company that develops and operates space for small-scale industrial tenants in obsolete manufacturing facilities. Since 1993, GMDC has redeveloped seven buildings in Brooklyn that total 725,000 square feet. Its developments accommodate an estimated 100 businesses that employ approximately 500 workers. The tenants in GMDC's buildings include woodworkers, ceramists, glass makers, sculptors, furniture makers, cabinet makers, jewelry-and metalsmiths, silk screeners, artists, printmakers and food entrepreneurs.

GMDC's first renovation project was a 366,000 square-foot former jute mill that was built in 1868 to make rope for the marine industry. The six-story brick structure was in such disrepair by the 1980s that its owner abandoned it and left the building to be acquired by New York City in a tax foreclosure. Woodworking and cabinet firms, artists and artisans occupied the building under month-to-month leases with the city. In the meantime, city officials attempted to sell the building for residential development but were unable to find a buyer. When they decided to demolish the property in the early 1990s, a group of tenants joined neighborhood groups and business leaders to create the non-profit GMDC in order to acquire the building from the city.

In 1993, the city and GMDC signed an agreement whereby GMDC purchased the building for \$1 and the city contributed \$1 million to GMDC to help defray the cost of installing new electrical, plumbing and fire safety systems that would meet building code requirements. After taking ownership, GMDC developed a plan to finance the renovations and established a line of credit with a local bank for building rehabilitation and tenant improvements.

Although the building did not carry a mortgage, GMDC was nevertheless hindered by a low level of operating income that initially prevented it from undertaking expensive improvements. Instead, it took a more economical approach by relying on an in-house construction crew to implement a steady building investment strategy that allowed GMDC to expand its tenant base. Monthly cash flow slowly improved and more expensive renovations were gradually completed.



## **BEST PRACTICES AND LESSONS LEARNED**

### **REDEFINE “INDUSTRY”**

The word “industry” no longer means the smokestacks and assembly lines associated with large-scale manufacturing. Many of the businesses locating in these areas involve a wide range of maker, creative and start-up businesses, along with research and development enterprises. These employers also include logistics and repair companies—and while these groups are not involved in traditional manufacturing, they still rely heavily on an industrial workforce. Many municipal and transit employees also fall into this category.

### **RECOGNIZE THAT INDUSTRIAL BUILDINGS ARE KEY RESOURCES**

In each case study, key revitalization efforts focused on re-using existing industrial buildings and infrastructure to accommodate new businesses. Many of these medium-and large-sized structures can be easily subdivided to accommodate a variety of much smaller businesses than prevailed before World War II. The relatively robust quality of the original construction has helped these buildings survive through many decades. Taking advantage of these existing structures provides inexpensive spaces that meet the needs of multiple industries.

## **ZONE TO PROTECT INDUSTRIAL USES AND AFFORDABLE RENTS**

Permissive zoning can encourage commercial, hotel and/or residential developments that lead to land speculation and increased property values—typically pricing the land out of the reach of most industrial space users. To prevent such escalation, West Berkeley adopted a long-term commitment to strictly enforce its industrial zoning code—denying zoning adjustments that would replace industrial properties with buildings that have higher market values. This move addressed land speculation encouraged by ongoing regulatory uncertainty that contributed to chronic vacancy problems among existing industrial buildings, given that property owners anticipated up-zoning.

Committing to long-term industrial uses while prohibiting conversion to residential uses helps ensure long-term stability for existing businesses, artists and artisans, and other small operations that would otherwise be priced out of the market.

### **MAINTAIN AFFORDABLE RENTS AND LAND COSTS**

Young companies are very sensitive to the cost of space. In their earliest stages, capital is very tight and rarely available for high-rent space or the purchase of expensive facilities. The availability of inexpensive space depends on keeping land values in check through zoning controls.

### **RECOGNIZE FUNDING GAPS ARE NORMAL**

The typically high cost of renovation coupled with the low rents required of industrial tenants often result in a financial gap that must be filled to ensure a successful redevelopment. Many case study projects relied on several funding mechanisms to help close this gap, including direct city investment, federal infrastructure grants, historic and other tax credits, and investment by philanthropic institutions.

Both the Brooklyn and Philadelphia Navy Yards received massive grant funds from the federal government. In addition, private investments by immigrants seeking visas under the EB-5 program have also funded several of the Brooklyn and Philadelphia examples. When deployed by a developer with creative financing expertise, Historic and New Markets Tax Credits can provide additional funding for adaptive reuse of industrial buildings.

## CONSIDER PRIVATE, NON-PROFIT GOVERNANCE

Governance of the industrial area is critical—the market discipline provided by a board of directors with substantial private-sector representation, like the Philadelphia Industrial Development Corporation, is invaluable in focusing the economic development activities and achieving financial self-sufficiency within the area.

Revenues from financing and other fees have allowed the Philadelphia Industrial Development Corporation to support its own operating costs. The Port Richmond Industrial Development Enterprise program in Philadelphia shows the potential for a special assessment district approved by the business community to provide public safety, cleanup and capital improvements.

## SPUR REDEVELOPMENT THROUGH PUBLIC/PRIVATE PARTNERSHIPS

Examples in Philadelphia, Pittsburgh and Brooklyn all reinforce the importance of having a dedicated entity focused on supporting industrial redevelopment. For almost six decades, the Philadelphia Industrial Development Corporation (PIDC) has pursued redevelopment and economic diversification through reuse of industrial facilities and creation of competitive industrial sites. Its model emphasizes the importance of qualified staff focused on industrial development on a day-to-day basis, working with businesses and proactively advancing industrial properties. Such a development entity requires a much larger scale of operations than possible in Ward 5 to operate effectively.

For much of Pittsburgh's redevelopment and revitalization, the Urban Redevelopment Authority of Pittsburgh (URA) has partnered with major foundations, philanthropic partners and non-profits whose mission aligns with strategic investments in industrial activities.

In Brooklyn, the investments made by citywide economic development entities and non-profit organizations (Southwest Brooklyn Industrial Development Corporation, East Williamsburg Valley Industrial Development Corporation, Greenpoint Manufacturing and Design Center) that encourage growth and stability in existing industrial areas are influenced by market-rate pressures.

## RECOGNIZE THE IMPORTANCE OF SITE CONTROL

Redeveloping an established industrial district often depends on controlling key sites, including properties controlled by owners unwilling to sell. Because the costs of assembling and repairing industrial properties typically exceed their market value and ultimate sales price, the private sector cannot be expected to undertake major brownfield remediation, so public ownership is often an important determinant of site preparation and redevelopment. Potential tools for land acquisition include swaps of other city-owned properties.

## TAP LOCAL FOOD, MEDIA AND TECHNOLOGY COMPANIES

Around the country, local food producers are tapping into the growing national "buy local" movement, supplying artisanal and organic products to consumers. Likewise, film and media companies are playing an increasingly important role in developments like the Brooklyn Navy Yard. Pittsburgh's Lawrenceville neighborhood is developing a variety of robotics companies, building on the efforts of Carnegie Mellon University's National Robotics Engineering Center.

## SFMADE AND SMALL-SCALE MANUFACTURING

SFMAde is a non-profit organization that was founded in 2010 and represents 400 San Francisco-based manufacturing companies. Its mission is to promote San Francisco's manufacturing sector, encourage entrepreneurship and innovation, and support local workforce employment opportunities. It operates programs for business advisory services, industrial real estate assistance, hiring assistance and youth apprenticeships.

Most notably, SFMAde created a nationally recognized local brand platform that promotes consumer awareness of locally-made products. It publishes and distributes a free Discover Locally Made map that shows the locations of more than 70 retailers that sell goods produced by SFMAde members. It also has a mobile shopping tool for smartphones and tablets, and its SFMAde decals are displayed in the windows of stores that carry member products. Most members produce consumer goods, including apparel, accessories, food and beverages. SFMAde has six paid staff members and a \$500,000 annual budget funded by the City of San Francisco, other public agencies, financial institutions through Community Reinvestment Act funds and corporate sponsors.



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## ARTISAN'S ASYLUM, SOMERVILLE, MA

Artisan's Asylum is the largest maker space on the East Coast. Its 270 members include 140 on-site tenants (and a waiting list of 250) occupying 40,000 square feet of space. This Somerville, Massachusetts-based company was founded in 2010 by Gui Cavalcanti, a recent robotics engineering graduate from Olin College. Its original space was a 1,000 square-foot studio in Somerville, just outside Boston, that Cavalcanti leased for himself and friends interested in robotics. When the group held an opening party with other inventors, 100 people attended. Within months, Artisan's Asylum organized as a non-profit and moved into a 9,000 square-foot space. A year later, it had more than 200 members and moved to a 31,000-square-foot space. In 2012, membership reached 270 and Artisan's Asylum moved to its current facility, a former envelope factory.

Unlike other maker spaces centered on shared work areas, Artisan's Asylum only devotes 40 percent of its operations to such workshops. These communal areas are used for woodworking, metalworking, machining, welding, bike repair, sewing, lampworking, jewelry, electronics assembly, 3D printing and painting/finishing. The other 60 percent of Artisan's Asylum is devoted to 130 personal studios, ranging from 50 to 250 square feet. With so much space dedicated to ongoing businesses at a relatively high rental rate, Artisan's Asylum tends to attract more professionals and early stage entrepreneurs than artists and hobbyists.



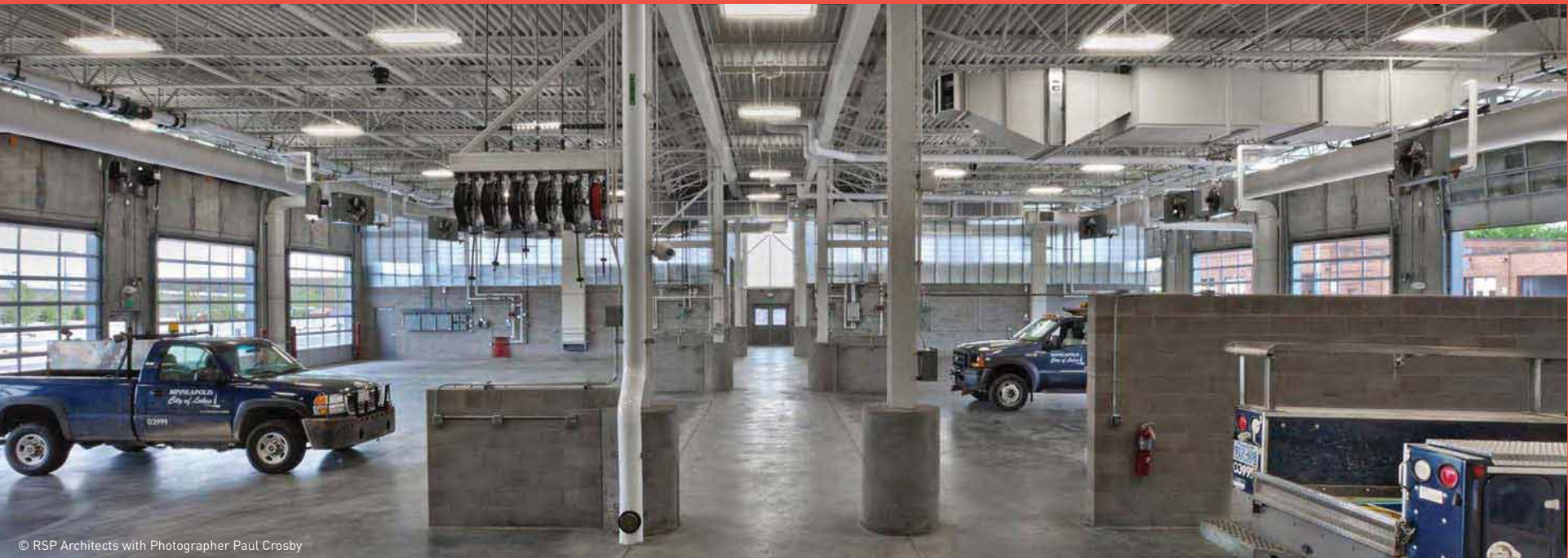


## HIAWATHA MAINTENANCE FACILITY, MINNEAPOLIS, MN

Minneapolis' Hiawatha Maintenance Facility replaced 18 buildings with two new buildings that include 33,000 square feet of office space, a 28,000 square-foot maintenance bay and 20,500 square feet of untempered storage. An existing building was completely renovated for office space. The nine-acre site is in an industrial corridor and faces a single-family neighborhood. The project achieved LEED Platinum status through a series of energy-saving and other environmental techniques, including geothermal connection for heating and cooling, an energy recovery ventilation system, in-floor radiant slab heating and design for use of natural lighting. Energy use was reduced by 60 percent in comparison to conventional buildings. Existing underground tunnels between buildings were reused for stormwater management. Demolished buildings and asphalt were crushed for recycling in the permeable site substrate, and bioswales and permeable pavement helped reduce runoff. Designed by RSP Architects, the project cost \$11 million and opened in 2010. Recycled mesh from a bridge was incorporated into the site fencing.



© RSP Architects with Photographer Paul Crosby



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## PROVIDE SHARED FACILITIES AND EQUIPMENT

Most tech companies and small businesses are ill-equipped to undertake real estate investments and prefer to rent space that is ready for move-in. Co-working and other opportunities to share space and equipment allow early-stage companies to conserve their limited capital. Brooklyn's Greenpoint Manufacturing and Design Center (GMDC) has been very successful in reusing older industrial buildings to provide shared facilities for artisans and small manufacturers. Its beginnings were relatively modest in terms of staffing and experience, and it took seven years before the group was ready to redevelop a second building.

Grove Dye Works, 3rd Ward and Crane Arts in Philadelphia also demonstrate the appeal of shared space and equipment in supporting artists, artisans and other makers. Co-working and shared educational experiences also help to build community and engage nearby residents. Several similar entities are highly successful, including groups like WeWork, Cambridge Innovation Center and the Hub. However, as the 3rd Ward's recent bankruptcy illustrates, the challenge of these businesses reaching financial self-sufficiency emphasizes the importance of rigorous financial planning and fund-raising to generate the required initial capital, rather than depending on future revenues to retire debt.

Some of Brooklyn's redevelopment and revitalization has depended on non-profit entities acting as "credit tenants" and subleasing to emerging businesses—offering start-ups access to market-rate developments they otherwise could not afford.

Shared facilities are particularly appropriate for start-up and other small businesses. For example, artisan food makers who are in the start-up phase typically require 1,200 square feet or less, some need only 500 square feet. For such small tenants, space within a larger subdivided building is the most practical approach.

## SUPPORT GROWING DEMAND FOR LOCALLY-MADE GOODS

The New York and San Francisco metro areas are notable for their large populations and high disposable incomes. Both have developed effective campaigns to encourage buying of local goods. Many of the manufacturing businesses in these areas specialize in food and liquor, clothing, furniture and home goods produced locally. It is highly likely that this trend will grow and spread to many American cities—especially those with high incomes and relatively young populations as in Washington, DC.

## VALUE THE AUTHENTICITY OF PLACE

Many former industrial areas have a gritty character that gives them an authenticity that is highly valued by young and creative people. Many makers, artists and entrepreneurs in emerging businesses value the aesthetic of mixing newer, contemporary renovations with gritty and "real" industrial structures.

## APPRECIATE THE VALUE OF PLACEMAKING

Pittsburgh's East Liberty neighborhood succeeded in attracting Google and other technology companies due in large part to its development as a well-rounded community with retail, restaurants, entertainment, arts, affordable housing and pedestrian-oriented environments. Similarly, the emergence of several former industrial areas as successful new employment centers has depended on creation of places that attract entrepreneurs and a young workforce.

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## CENTRAL PLATTE CAMPUS, DENVER, CO

On a highly visible, 18-acre site along I-25, the City and County of Denver established its central command for Denver civic services. The seven-building, 105,000 square-foot facility was built in 2010 at a cost of \$29 million. RNL Design developed a distinctive design for the Gary Price Operations Center with a saw-toothed roof. The north-facing sides accommodate translucent polycarbonate windows for natural daylight, and the south-facing sides have photovoltaic panels.

The complex includes:

- » 39,546 square-foot fleet maintenance building;
- » 29,056 square-foot shop warehouse/office building;
- » 13,493 square-foot heated vehicle storage facility;
- » 6,640 square-foot fuel wash garage with fueling islands;
- » 15,676 square-foot sand/salt storage dome; and a magnesium chloride tank farm.

The project achieved LEED Gold certification through photovoltaics, daylighting, solar orientation and water-saving strategies.

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## NEWTOWN CREEK WASTEWATER TREATMENT PLANT, BROOKLYN, NY

The Newtown Creek Wastewater Treatment Plant in Brooklyn, NY sits on 53 acres and is designed by Ennead Architects. The upgrades and repairs to the facilities cost totaled \$5 billion with funding from the New York City Department of Environmental Protection. High-quality design helped to address the community's concerns about expanding the facility. The treatment plant incorporates a waterfront park and a promenade as a green buffer.



## MUNICIPAL USE CASE STUDIES

Public works complexes around the country offer experiences relevant to the District's use of Ward 5 land for municipal purposes. Previously profiled were six projects in:

- » Minneapolis, Minnesota;
- » Denver, Colorado;
- » Johnson County (Olathe), Kansas;
- » Raleigh, North Carolina;
- » Ankeny, Iowa; and
- » Brooklyn, New York.

Case study summaries are provided in Appendix C.

## DESIGN FOR ENVIRONMENTAL EXCELLENCE

The Hiawatha Maintenance Center in Minneapolis achieved a Platinum rating through the Leadership in Energy and Environmental Design (LEED) program of the U.S. Green Building Council. Denver's Central Platte Campus and Johnson County's Public Works Facility were awarded Gold LEED status. Johnson County provided an extra allowance for the LEED reporting and filing requirements for both the construction manager and architect.

The projects incorporated several techniques to reduce their environmental impacts, including:

- » Reuse of existing buildings and materials from buildings demolished to make way for new construction;
- » Geothermal and photovoltaic energy sources;
- » Reliance on natural lighting;
- » Energy recovery ventilation systems and in-floor radiant slab heating;
- » Sub-drainage systems, permeable surfaces and bioswales to manage stormwater runoff; and
- » Recapture of stormwater for reuse on site.

## INCORPORATE HIGH-QUALITY DESIGN AND PUBLIC AMENITIES TO INCREASE COMMUNITY ACCEPTANCE

Major expansion of the Newtown Creek Wastewater Treatment Plant in Brooklyn incorporated design enhancements to address the community's concerns about expanding the facility. Inclusion of a waterfront park and a promenade as a green buffer was well received by the surrounding community. Raleigh is soliciting public art for inclusion in its Downtown Remote Operations Facility.

## OPTIMIZE EFFICIENCY WITH CO-LOCATION STRATEGIES AND BE AGGRESSIVE ABOUT FUTURE NEEDS

In Ankeny, Iowa, the municipal strategy began by co-locating municipal users with no current relationship or ability to share resources. At the time of land acquisition and initial design, the siting of the two municipal structures did not allow for expansion and the access easements limited the site layout. Estimates of future needs failed to consider the residential growth, leading to capacity constraints.

## SEEK ALTERNATIVE FUNDING MECHANISMS

Most public works facilities are funded through general obligation bonds backed by the jurisdiction's full faith and credit. Ankeny, Iowa, developed its \$11 million state-of-the-art public works shop through a public/private partnership. The city sold the land to the developer for construction of the facility and then leased back the facility for a 20-year period before taking ownership. This allowed annual lease payments rather than an up-front investment of the full cost.

Raleigh is using Limited Obligation Bonds to fund its new Downtown Remote Operations Facility, leaving the construction manager at financial risk to deliver the project on time and on budget. These bonds are backed by the city's credit rating rather than a pledge of full faith and credit. Johnson County received a federal grant to build a compressed natural gas fueling station.

## SPITTELAU WASTE INCINERATION PLANT, AUSTRIA, VIENNA

The plant at Spittelau was first commissioned in 1971 to burn municipal waste and provide the heat for a hospital located two kilometers away. A series of technological and environmental upgrades occurred between 1986 through 1989 while at the same time undergoing a major “facelift” by Viennese artist, Friedensreich Hundertwasser.

This facility receives 250 vehicles each day and is designed to burn 250,000 tons of waste per year. Some of the environmental advancements include filters to remove heavy metals, hydrochloric acid and sulfur dioxide that results from the burning process. The plant generates its own electricity and also provides 15 MW of electricity to the main electrical grid. The heat produced by Spittelau is enough to heat more than 60,000 households.

The synergistic combination of art and environmental technology coupled with the joyful and iconic character of the building has elevated this municipal facility to be one of Vienna’s favorite landmarks visited by tourists and locals.





## RESTORING CONNECTIONS - PHOENIX FLOWERS, GLASGOW, SCOTLAND

The industrial land in the north area of Glasgow is centered on the Forth and Clyde Canal built in 1790. The canal became a major industrial transit link by the mid-1800s, moving 3 million tons of goods and 200,000 passengers ever year. As the traffic on the canal grew, a healthy industrial area emerged that included timber mills, glass works and foundries. The canal operated until 1963; the communities alongside the canal have gone into decline with significant social challenges. Compounding this descent, this industrial land became separated from the rest of the city by large highways built in the 1960s. Only a single underpass connection remained connecting this area from the remainder of downtown Glasgow.

Working toward reducing the anonymity of the area by designing an urban landscape which reinforces pedestrian connections under the highway, the Phoenix Flowers (a name referencing Phoenix Park, which pre-dated the construction of the highway) use landscape, lighting and design to rebrand the area. What was once a dark, bleak and seemingly dangerous underpass connection is now a celebrated and vibrant transition point for pedestrians and cyclists.



© Dave Morris



© 7N Architects



## AIR QUALITY - PORT OF LOS ANGELES WILMINGTON WATERFRONT PARK, WILMINGTON, CA

A 30-acre brownfield site, the Wilmington Waterfront Park, is the result of the successful collaboration between the neighborhoods in Wilmington, CA and the Port of Los Angeles, providing much needed green space and a buffer to nuisances resulting from port activity.

Adjacent to one of the nation's busiest ports, the community was concerned about noise and air quality. This traditionally industrially-based town is also characterized by a lack of green space and connections to the water that provided its coastal heritage.

This new waterfront park reduces noise mitigation from industrial traffic through a 16-foot elevated landform. This raised platform also provides views to the Pacific Ocean. An actual physical connection to the water is created through an extension to the California Coastal Trail.

Air quality improvements were actualized through the use of titanium dioxide, which has been found to convert air pollutants to inert organic compounds through photocatalytic technology. Along the Port's industrial edge, terrace walls are coated with titanium oxide.



## LANDSCAPE SCREEN AND PLANT TRELLIS

“Green screen” and other similar products consist of a modular, three-dimensional wire trellis system that can be applied to new and existing structures or used in freestanding applications. Plants and/or vines secured in the ground or in adjacent planters at the base of the trellis climb and cover the trellis, creating a living wall or fence.

The applications for this product are endless. In a former industrial site, British Telecom used a freestanding wall to screen parking. The freestanding option is ideal in areas of Ward 5 where tight spaces limit wide plantings.

Closer to home in Suitland, Maryland, the U.S. Census Bureau attached a trellis system on its parking structures. Being relatively light weight, this trellis system can be attached to a number of existing building types.

It is possible to consider unique applications as well, such as in Vancouver, British Columbia, where the pedestrian realm was improved with the addition of plants to cover the elevated transit system.







## NOISE ABATEMENT - MIAMI SOUND WALL

Martha Schwartz Partners was commissioned by Metro Dade Art in Public Places to design a one-mile long sound barrier to separate airport noise from adjacent neighborhoods. The side of the wall next to the neighborhood faces north, placing it in shadow. Therefore painted murals were turned down as not being an effective solution to brighten the wall. The chosen solution harnessed sunlight by using colored glass set into a concrete wall. The glass captures sun from the airport side to enliven the neighborhood side of the wall. Additional playfulness is added through the wall's undulating form to denote motion.



## LANDSCAPE SCREEN - "SMARTSLOPE" RETAINING WALL

This retaining wall system is currently used along New York Avenue at the Dakota Crossing development. This retaining wall creates "pockets" of soil which provide space for plants to grow and eventually cover the wall. The result is a vertical wall of vegetation.



  
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DC EMPANADAS	
<b>SIDE SALADS</b>	<b>WIND</b> Whopper of Max Deliciousness Our Best... <b>Delite Salsa</b> Mild/Medium/Hot... <b>SPECIALS</b> ... ...
<b>SOUPS</b>	<b>EMSPANADAS</b> Speedy Gonzalez ... ...
<b>DESSERTS</b>	Whoopie Pies ... ...
<b>DRINKS</b>	Blenheim's Ginger Ale Cheerwine San Benedetto Peach Tea

  
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**DC EMPANADAS**  
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# RECOMMENDATIONS

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## MISSION

The first three chapters of this study present the need for protecting and increasing PDR employment in Ward 5; the current state of these jobs and the prevailing PDR market conditions in Ward 5; a physical framework for assessing these opportunities; and a wide range of PDR and buffering strategies drawn from relevant case studies in other cities around the country and beyond.

This chapter synthesizes the content from the first three chapters into a coherent set of action items and identifies key place-based initiatives that would have a transformational effect on Ward 5 and PDR employment in the District.

Based on the earlier findings, existing and new businesses in Ward 5 will need additional focus to:

- » Stay in the District;
- » Grow their businesses;
- » Upgrade and/or make more effective use of their assets and facilities;
- » Provide more good-paying jobs for District residents; and
- » Become better neighbors for Ward 5 residents.

In considering these points, it is also useful to recall the Task Force's vision and goals for Ward 5 industrial land.

## VISION

In the next five years, Ward 5 will adapt its existing industrial land to develop a cutting-edge and sustainable production, distribution, and repair industry that diversifies the District's economy, serves as a hub for low-barrier employment, complements and enhances the integrity of neighborhoods, and provides opportunities for arts, recreation and other community amenities.

## GOALS

- 01** Diversify the District's economy and bolster existing businesses.
- 02** Grow and create more businesses, particularly in new and emerging industries.
- 03** Promote inclusive job growth, offering residents a range of employment opportunities, well-paid jobs with low entry barriers and career ladder potential.
- 04** Address nuisance/operational issues of some existing businesses.
- 05** Improve environmental stewardship and performance.
- 06** Serve municipal functions and optimize efficiencies, co-locations.
- 07** Provide desired community amenities.
- 08** Create great places, improve physical appearance and enhance connectivity.

## 8 STUDY GOALS FROM THE TASK FORCE



01

Diversify Economy &  
Bolster Businesses



02

Grow New &  
Emerging Businesses



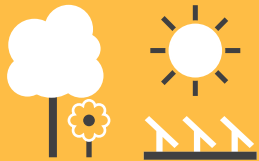
03

Promote Inclusive  
Job Growth



04

Address Nuisance  
Issues



05

Improve Environmental  
Stewardship & Performance



06

Optimize Municipal  
Functions



07

Provide Community  
Amenities



08

Create Great  
Places & Connectivity

Addressing the Task Force's Vision and Goals are 12 strategies divided into two broad categories — policy actions and place-based actions.

The first seven strategies include regulatory and financial mechanisms that apply to the entire study area. They are not site-specific — in many cases, these actions require public-sector support or participation. In contrast, the five place-based strategies represent physical investments in specific places. They require both public and private-sector support and participation.

### POLICY STRATEGIES

- » Governance
- » Zoning, land use and regulation
- » Environmental stewardship and performance
- » Workforce development
- » Economic development
- » Business finance and assistance
- » Marketing and branding

### PLACE-BASED STRATEGIES

- » Nuisance use and buffering
- » Industrial space
- » Municipal uses
- » Infrastructure and transit
- » Community amenities

## POLICY STRATEGY 01: GOVERNANCE

Changing the District's industrial environment and achieving the desired goals of job creation and business development demand a dedicated, civic-minded champion, as the required policy initiatives and efforts to influence private investment decisions will not happen on their own. The challenge requires an advocate charged with implementing the new strategy—one that will be held accountable to the community and can maintain the day-to-day focus essential to effective implementation. This work calls for respected and credible leadership who can work with the Mayor, Council, new and existing businesses, Ward 5 residents and prospective developers.

In determining the organization best suited to this need, it is useful to outline the roles that need to be played in implementing an industrial strategy for the District and Ward 5. These roles need not be filled by a single organization, but must include the following:

- » Strong advocacy for modernizing and retaining Production, Distribution and Repair uses
- » Act as a liaison to the community, and ensure clear communication with residents
- » Marketing, branding and promotions, including a Buy DC program
- » Supporting coordination and cooperation among business owners
- » Establishing a network hub—providing links and contacts with:
  - › Small business service providers
  - › Maker, start-up, creative and other tenants
  - › Brokers
  - › Property owners
  - › Government agencies
  - › Educational and medical institutions
  - › Arts organizations
  - › Foundations
  - › Workforce training programs and the Workforce Investment Board
- » Encouraging partnerships for building development by:
  - › Negotiating public/private partnerships
  - › Marketing incentives
- » Providing technical assistance to small businesses by:
  - › Helping businesses identify qualified contractors for space upgrades
  - › Facilitating permits and cutting red tape
  - › Providing business planning assistance to enhance local capacity
  - › Establishing links to micro-loan, grant and other financing programs
- » Educating small businesses about facility financing opportunities through:
  - › Immigrant Investor Program known as “EB-5” and administered by the U.S. Citizenship and Immigration Services
  - › Industrial revenue bonds
  - › New Markets Tax Credits
  - › DC-based financial incentives
- » Attracting new businesses and investment
- » Ensuring clean and safe operations by providing:
  - › Neighborhood cleanup
  - › Neighborhood improvements
  - › Code enforcement
- » Helping with funding to establish new:
  - › Business incubators
  - › Shared spaces and technology
- » Recruiting and screening area residents for jobs
- » Assisting municipal users in working with the community on facility plans.

## DEVELOP AN INDUSTRIAL ADVOCATE

### Action 1.1: Designate an industrial Advocate for industrial users and industrial areas.

The District would benefit from an Advocate who promotes industrial land and users and links businesses to District programs and other resources. The Advocate role could be initiated as an industrial sector manager at a District agency such as the Deputy Mayor for Planning and Economic Development (DMPED). The industrial sector manager could begin to immediately undertake priority actions identified in this Study and commence coordination with District agencies and other stakeholders on implementation. Some of the initiatives involving major District investments in public/private partnerships MAY require higher-level involvement from the Mayor and Council, and could also be augmented by outside entities with experience in immigrant investor programs, tax credits and other financing tools.

Over time, the Industrial Advocate role could evolve from solely a sector manager within District government into a separate entity or industrial Business Improvement District (BID). Such an industrial advocacy organization could be a non-profit funded under a contract arrangement stipulating clear performance measures. The group should be accountable to DMPED and linked with the Washington DC Economic Partnership. The city's existing BIDs could provide technical assistance and training for the new staff. A public/private governing board could include Ward 5 businesses, residents, District agencies, the Deputy Mayor for Planning and Economic Development, the Directors of the District Department of the Environment, Department of Small and Local Business Development, Department of Consumer and Regulatory Affairs and the Ward 5 Councilmember.

Examples of industrial BIDs exist in Los Angeles, Philadelphia and several other large cities. Typically, the BIDs focus on clean and safe programs to stabilize communities and bring together area businesses under a common umbrella. The study area's spread-out nature would make it difficult to operate an efficient clean and safe program. Its physical configuration along two rail lines involves great distances between its component parts, making it much more expensive to provide clean and safe services than is possible in a compact district. Planning and implementation of neighborhood improvements, including buffering industrial uses from residential neighborhoods, should take precedence over the street clean-up and other activities traditionally supported by business improvement districts (BIDs).

## SUPPORT KEY EMERGING INDUSTRIES

### Action 1.2: Partner with non-profits to support key emerging industries.

The Advocate and District agency staff working on industrial areas should facilitate the connection between existing or future non-profits focusing on emerging industries, including media, communications, food and arts/maker and businesses. These organizations would offer hands-on assistance to businesses, linking them to resources and each other, possibly within the context of shared facilities.

## POLICY STRATEGY 02: ZONING, LAND USE AND REGULATION

### SLOW THE LOSS OF INDUSTRIAL LAND

Industrial land and building prices and rents are increasing beyond the level that some industrial businesses can afford, pricing those businesses out of the District market. This phenomenon reflects the dwindling supply of industrial land as properties are converted to commercial and other more profitable uses.

Zoning plays an important role in setting development expectations and real estate values. One reason why industrial land is so expensive in DC is that zoning in industrial areas is very permissive, allowing most uses except for residential. As a result, industrial land values reflect the potential value for commercial uses that support much higher land prices by virtue of higher space rents/prices and higher-intensity development. When there is a market for commercial uses, a property owner can achieve a much higher return from developing for commercial rather than industrial use. As demand grows for commercial and institutional uses in Ward 5, that demand encourages owners of industrial property to redevelop for non-industrial uses or to plan for future conversion in the future. Once that expectation is formed, property owners often stop investing in their industrial property in anticipation of redevelopment.

In addition to office and commercial uses, the current industrial zoning allows schools to locate in these areas. The opening of pre-k to 12 schools in these areas not only reduces the supply of industrial space but also significantly raises the price of its land. It also brings conflicting



expectations as to the nature of the industrial area and the acceptability of industrial uses on nearby properties. Vocational schools, however, that provide job-training should continue to be allowed in these areas given their linkages to the local economy.

**Action 2.1: Revise the zoning code to preserve Ward 5 industrial land.**

To preserve industrial land and space for neighborhood-friendly businesses, the DC Zoning Commission and the Office of Planning should refrain from rezoning industrial land, at least within designated areas of cohesive industrial use in Ward 5. The District could adopt Industrial Business Districts that strengthen the long-term protections.

More importantly, the industrial zoning categories should be amended to exclude higher value uses, particularly:

- » Stand-alone self-storage facilities without industrial uses activating the ground floor;
- » Educational institutions other than workforce training facilities; and
- » Hotels outside the newly created New York Avenue PDR District (Action 2.3).

Self-storage facilities would be an appropriate use for the upper floors of a multi-story facility. Educational institutions invite children and other protected categories to areas of production that are not intended for education and recreation, creating conflicting expectations for the use destination for the larger area. Additionally, charter schools should be encouraged to take advantage of underutilized and vacant public school facilities with better neighborhood access and amenities.

**PROPOSED PDR ZONING DISTRICTS FOR FUTURE STUDY**

As supported in Actions 2.1 through 2.5, potential PDR Districts to be considered for future study:

FUTURE ZONING DISTRICT	ATTRIBUTES
PDR Business District	<ul style="list-style-type: none"> <li>» This potential district would act as a PDR conservation area and focus mainly on protecting PDR uses from competing uses</li> <li>» Allow PDR uses with tiered districts according to industrial use and intensity</li> <li>» Exclude higher value uses</li> <li>» Apply ZRR provisions about buffers, GAR and special exceptions for night clubs and waste-related uses</li> </ul>
PDR Buffer District	<ul style="list-style-type: none"> <li>» This potential district would be located where industry is currently abutting residential</li> <li>» Allow only compatible and/or activating PDR and other uses</li> <li>» Enforce stricter performance standards</li> <li>» Provide adequate on-site parking</li> <li>» Apply ZRR provisions about buffers, GAR and special exceptions for night clubs</li> </ul>
Make/Live District	<ul style="list-style-type: none"> <li>» Do not allow waste-related uses</li> <li>» This potential district would be limited to strategic locations near existing residential and transit infrastructure</li> <li>» Allow only compatible and/or activating PDR and other uses</li> <li>» Allow residential uses above required ground floor PDR/Maker uses</li> <li>» Apply stricter performance standards</li> <li>» Provide adequate on-site parking</li> <li>» Apply ZRR provisions about buffers, GAR and special exceptions for night clubs</li> </ul>
NY Ave PDR Gateway District	<ul style="list-style-type: none"> <li>» Do not allow waste-related uses</li> <li>» Allow make/live, hotel and commercial uses along the avenue’s frontage</li> <li>» Apply ZRR provisions about buffers, GAR and special exceptions for night clubs</li> <li>» Include special streetscape standards and encouragement of public art as a community amenity</li> <li>» Do not allow waste-related uses</li> </ul>

## DC'S ZONING UPDATE AND INDUSTRIAL AREAS

The DC Comprehensive Plan of 2008 calls for “substantial revision and reorganization” of the DC Zoning Code, including the possible creation of new zones. To address this direction, the DC Office of Planning initiated the zoning regulations review (ZRR) process in 2007. Research and public meetings, including an industrial land working group, led the DC Office of Planning to propose revisions to the DC Zoning Code that would make the zoning current and help to implement the policy objectives of the Comprehensive Plan. These proposals are currently being considered by the DC Zoning Commission.

For the industrial areas, the ZRR proposal would address Comprehensive Plan direction by maintaining industrially zoned land, while proposing new regulations that better address possible impacts on adjacent land uses and residents, including the following:

- » Rename current CM and M Zoning Districts to better reflect current uses.
- » Retain permitted building height, but limit the building area that could be devoted to non-PDR uses. The zones where heavy industry is permitted (which tend to be the most separated from residential uses) would allow the least amount of building area to be devoted to non-industrial uses.
- » Apply green area ratio (GAR) to industrial properties, requiring new development to meet environmental standards through the inclusion of environmental features, such as green roofs and improved landscaping. This will help to “green” industrial areas, improve air quality and stormwater retention, and reduce the urban heat island effect.
- » Require a wide, landscaped buffer between any PDR use and residential zone, with an 8-to10-foot high solid screen (wall, fence or landscape screen).
- » Restrict night clubs by allowing them only by special exception with the Board of Zoning Adjustment (BZA) approval, subject to location and potential impact conditions.
- » Allow waste-related services, such as a trash transfer station, only by special exception, subject to locations and conditions intended to address potential impacts.

These proposed changes would also respond to some of the goals and priorities of this study. For the current status of the ZRR process, please refer to the Office of Zoning website ([www.dcoz.dc.gov](http://www.dcoz.dc.gov)) or the ZRR website ([www.dczoningupdate.org](http://www.dczoningupdate.org)).

### **Action 2.2: Study existing PDR zones to preserve production and stimulate new maker spaces.**

A study should be undertaken to identify areas for Industrial Business District protections and also some very limited locations where PDR uses on the ground floor could be combined with residential development on upper floors (i.e., “Make/Live Districts”). With a higher overall density, the land could be used more productively while still providing as much dedicated space for production uses. Cross-subsidy from the residential uses could reduce the required rents for the first-floor PDR uses.

There remain compatibility and other issues that must be resolved before a new zoning provision could be approved. This zoning category should be strictly limited to a very few locations so as not to disrupt the industrial land market and displace existing businesses.

## ENHANCE THE NEW YORK AVENUE GATEWAY

### **Action 2.3: Create a New York Avenue PDR District as a gateway district.**

As a major gateway to the District, hotel and commercial uses should be allowed along the New York Avenue frontage in a newly created New York Avenue PDR District. In addition to industrial uses, hotels and commercial uses, this potential new zone could allow the eclectic mixing of Make/Live buildings and artistic and maker uses. This zone would include public space design guidelines that encourage the rebuilding of the Avenue as a pedestrian friendly and green environment. Large public art installations could be part of a Planned Unit Development community amenity package to create an enticing and lively gateway feel.

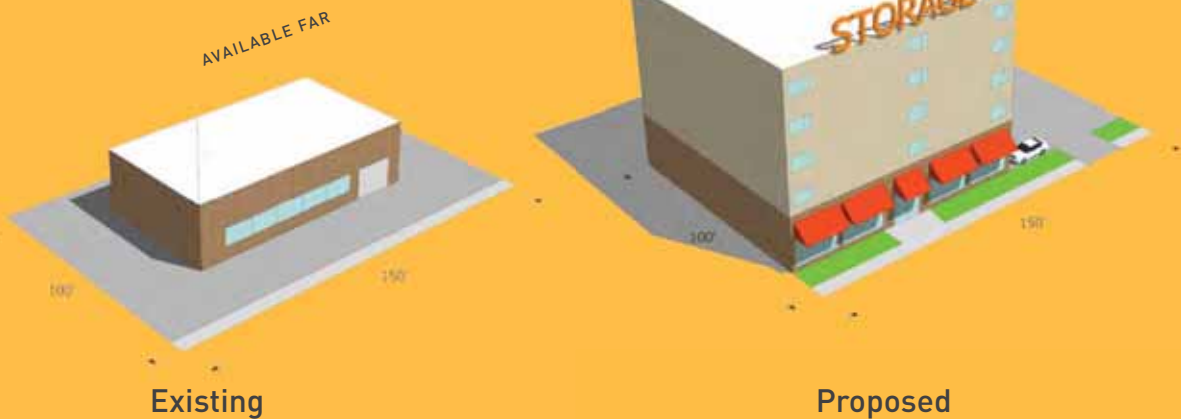
## USE ZONING TO REDUCE INDUSTRIAL/RESIDENTIAL FRICTION

### **Action 2.4: Establish a new industrial buffer district to better transition from industrial areas to residential neighborhoods.**

Where edges of the industrial areas are proximate to housing, new industrial buffer areas should be established to create physical and land use buffers which limit PDR uses to more compatible businesses that have fully contained operations and no outside storage (e.g. auto repair shops to be fully enclosed and properly ventilated). Zoning provisions in these buffer areas should include buffering requirements, ensure adequate on-site parking and incorporate performance standards.

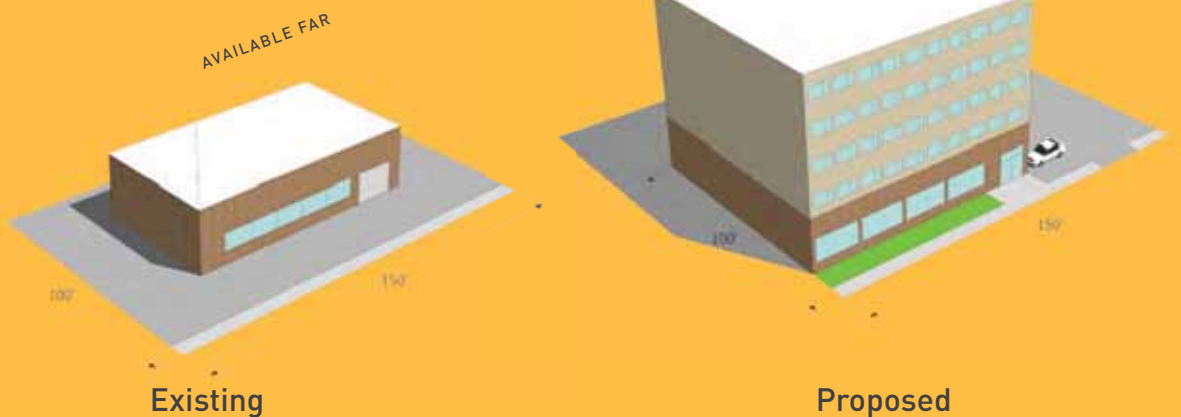
## ZONING TO CREATE BUFFER USES, ACTIVATION AND NEW AFFORDABLE PRODUCTION SPACE

### STORAGE USE



Requiring PDR space to be included as part of the frontage of self storage buildings should further activate industrial areas while creating needed space for small makers and producers.

### MAKE/LIVE USE



Allowing the limited development of make/live units with production space on the first floor will create affordable space for makers, small PDR businesses and artists while adding a good buffer use where residential and PDR areas are in close proximity to each other.

### Action 2.5: Create a Make/Live districts to buffer industrial and residential uses.

This potential new district would be limited to strategic areas served by transit and where industrial and existing residential coexist. It would incentivize new maker/PDR spaces on the first floor(s) with residential uses above, possibly through the use of a density bonus.

### ENCOURAGE INDUSTRIAL BUSINESSES TO INCLUDE RETAIL ACTIVITY

#### Action 2.6: Revise special events permitting process and increase staffing to expedite the process.

Arts and other special events can be a major community amenity, one that helps build relationships between residents and local businesses. Participants of the arts focus group reported that getting a permit for a special event takes a long time because the process is complex and only two staff persons deal with event permits. Adding another staff person could help reduce this impediment to community events.

#### Action 2.7: Revise regulations that inhibit inclusion of retail outlets and/or periodic events.

Once-a-month beer and food tastings at the local brewery or pasta shop are a means of building good neighborhood relations and activity as well as marketing opportunity. Regulations that inhibit local businesses from periodically offering retail events or incorporating retail outlets into their industrial facilities should be reviewed and revised. These regulations could relate to business licenses, restroom facilities and sales tax collection as well as zoning.

## POLICY STRATEGY 03: ENVIRONMENTAL STEWARDSHIP AND PERFORMANCE

Improve the overall environmental performance of the Ward 5 industrial land by capturing and treating stormwater on site; creating renewable energy opportunities and energy efficiency upgrades; and ameliorating air quality through technology, green buffers and tree canopies.

### IMPROVING AIR QUALITY IN INDUSTRIAL AREAS

#### Action 3.1: Continue to enforce air quality laws.

Air quality is of particular concern to residents who live in homes near industrially zoned areas. The District Department of the Environment's Air Quality Division (AQD) is charged with the enforcement of the District's air quality laws, including odors, engine idling and other emissions. Because of the industrial nature of many businesses in Ward 5, there can be negative air quality impacts on surrounding residences.

In 2012 and 2013, half of all air quality inspections in the District were conducted in the Northeast quadrant, which means that Ward 5 received considerable air quality enforcement because it constitutes a large portion of the quadrant. As an area of both light and heavy industrial use, Ward 5 should continue to be a focus of AQD's proactive inspections and responses to complaints. AQD should also continue to take enforcement actions as allowed under regulation and appropriate to the situation. Moving forward, data will be collected on the time of day and location of air quality complaints. This data will be utilized to strategically deploy existing resources.

#### Action 3.2: Reduce commercial traffic through residential neighborhoods.

The District should consider prohibiting truck traffic in targeted residential neighborhoods to reduce air pollutants and enforce compliance with current truck routes. Additionally, improved buffering between industrial and residential areas can ameliorate the impact of commercial traffic emissions on residential neighborhoods.

#### Action 3.3: Expand Ward 5's tree canopy and maintain tree boxes.

Tree boxes along residential and commercial sidewalks improve air quality and enhance a neighborhood's visual appeal. The District Department of Transportation (DDOT) should expand sidewalks in neighborhoods with

minimal tree canopies to accommodate additional tree boxes and maintain existing boxes. In communities such as Ivy City, narrow residential sidewalks – or a lack of sidewalks – require creative planning through tools such as reshaping existing roadways to accommodate trees, reduce impervious paving and manage stormwater runoff.

#### Action 3.4: Promote non-automobile modes of transportation.

Some areas of Ward 5 are disconnected from convenient, non-automobile modes of transportation. Decreased car and bus use will, in turn, lessen emissions. Expanded neighborhood bicycling routes in areas such as Ivy City, Trinidad, Woodridge and Brookland, in combination with additional bicycle parking facilities, will encourage transit between isolated residential areas and retail, restaurant and grocery store sites.

### STORMWATER INFRASTRUCTURE

#### Action 3.5: Increase low impact development implementation.

Increase low impact development in public and private properties by installing trees, green roofs, pervious pavement and rain gardens to capture and treat stormwater on site. The District Department of General Services (DGS) and DDOE should collaborate to pursue opportunities proactively to green District-owned fleet parking facilities. Given that the Hickey Run subwatershed is a priority for remediation, the District Department of the Environment (DDOE) should actively work with private property owners to implement low impact development strategies by marketing existing grants, rebates and opportunities to generate stormwater retention credits for the public.

#### Action 3.6: Permit community gardens on vacant property.

Many municipalities permit the establishment of community gardens on vacant or blighted property through the use of land banks or similar agreements. The District should consider establishing a program comparable to those in place in Baltimore and Philadelphia through the DC Department of Parks and Recreation.

### ENERGY

#### Action 3.7: Increase energy efficiency and alternative sources of energy production.

Increase the energy efficiency of industrial buildings and find opportunities to increase alternative sources of energy production (i.e., solar panels) by working with DDOE and the DC Sustainable Energy Utility (DCSEU) to more actively market existing energy efficiency and renewable energy programs to industrial businesses and property owners.





## **POLICY STRATEGY 04: WORKFORCE DEVELOPMENT**

The Ward 5 industrial areas offer the opportunity to benefit unemployed and underemployed District residents through creation of quality jobs, particularly for Ward 5 residents who have the advantage of proximity. Ward 5 had an unemployment rate of 13.1 percent in 2013.

Production, distribution and repair (PDR) industries are particularly well suited to creating entry-level jobs that pay higher wages than do retailers and provide opportunities for career advancement to higher-paying jobs. Assuring that DC residents benefit depends on enhancing their workforce skills and linking them to development programs offering career pathways.

### **STRENGTHEN THE WORKFORCE**

#### **Action 4.1: Expand successful workforce development programs and create relationships among PDR businesses to promote career pathways for Ward 5 unemployed and underemployed residents.**

The District has an array of organizations with pre-apprenticeship and apprenticeship programs that have proven track records in training and preparing residents to work in construction and related industries. These organizations include public high schools like Cardozo and Phelps public schools; charter high schools like YouthBuild, Sasha Bruce and Booker T. Washington; and unions like the Laborers' International Union of North America (LiUNA). Fostering relationships between PDR businesses and these proven programs will lead to more local hiring and strengthen community ties.

#### **Action 4.2: Expand use of the on-the-job training programs by Ward 5 businesses.**

Expand the use of the existing on-the-job training programs by Ward 5 businesses. The Department of Employment Services should identify and enroll additional businesses willing to employ long-term unemployed residents and provide on-the-job training in exchange for financial incentives.

#### **Action 4.3: Establish a digital media vocational institute.**

Media and communications offer a key opportunity for growth of a vibrant industry in Ward 5 and the District. Tremendous opportunities lie in engaging middle and high school students, and preparing them for careers

in media and communication. Media and other creative industry professions offer outlets for their creativity and a chance to develop specialized skills that will carry them into future careers. A specialized vocational training institute should be established in conjunction with the creative hub (Action 9.9) to improve DC residents' digital media skills and career opportunities in the industry.

Specialized training programs focused on digital media and technology could be developed with McKinley Technology High School, Duke Ellington School for the Arts, William E. Doar, Jr. Public Charter School for the Performing Arts, other public schools and the University of the District of Columbia – Community College, integrating real world applications with science, technology, engineering and math (STEM) education. Ideally, the programs would be developed with direct input from the industry.

#### **Action 4.4: Expand existing green construction skills training programs.**

The Sustainable DC Plan calls for major expansion of green, sustainable buildings and upgrading of existing buildings to enhance their energy efficiency and reduce the consumption of non-renewable natural resources. Existing programs that train DC residents in green construction techniques (including Cardozo High School, Booker T. Washington and LiUNA) allow workers to gain new skills and compete for the industry's evolving jobs. Green construction contractors should be encouraged to hire program graduates.

## **POLICY STRATEGY 05: ECONOMIC DEVELOPMENT**

### **ENGAGE MAJOR EDUCATIONAL INSTITUTIONS**

#### **Action 5.1: Engage Catholic University, Gallaudet University and other local institutions in programs to support and collaborate with emerging industries.**

Several of the case studies emphasized the importance of collaboration with local universities to maximize opportunities for business development. Ward 5 benefits from the presence of Gallaudet University, Catholic University of America and Trinity Washington University. Each institution should be approached to explore its interest in possible joint ventures focused on the emerging industries of arts/makers, food and media and communication.

Additional opportunities may be available in support of the institutions' sustainability initiatives, such as purchase of locally produced foods. Commitments to direct some of the institutions' purchasing power to local businesses, particularly employee-owned businesses, could leverage their expenditures in support of Ward 5 businesses. Potentials include laundry service contracts with employee-owned businesses that hire and train low-income residents.

### **HELP SMALL BUSINESSES UPGRADE THEIR FACILITIES**

#### **Action 5.2: Expand façade improvement funding to industrial properties.**

The District should consider expanding its façade improvement financing program to include properties in Ivy City, Florida Avenue Market and other Ward 5 industrial areas. This program will help existing businesses and property owners to upgrade their facilities, improving the areas' appeal to businesses. Work with property owners to improve private properties through better fencing, landscaping, façades and signage to increase the aesthetics of the property.

### **ATTRACT AND SUPPORT NEW INDUSTRIES**

#### **Action 5.3: Create a new Creative and Industrial Economy sector manager position within the District government**

Create a new industrial manager position within the Deputy Mayor for Planning and Economic Development office to lead industrial and creative business development and coordinate policy and day-to-day operations/ actions with the industrial advocate (see Action 1.1).

#### **Action 5.4: Focus on PDR industry development by incentivizing, attracting and retaining innovative PDR businesses.**

The District should dedicate resources to actively growing sectors (i.e. food industry and green services) within the PDR industry that will diversify the District's economy, provide low-barrier jobs for District residents and enhance the quality of industrially zoned neighborhoods. The District would benefit from an Advocate who promotes these uses; links them to District programs and other resources; and helps form public/private partnerships to develop industrial space for both existing and emerging businesses.

#### **Action 5.5: Expand access to grant funding for independent filmmakers, artists and other cultural activities.**

Washington has an impressive base of documentary and other independent filmmakers. Many depend on grant funding to support their work. The District of Columbia Commission of Arts and Humanities administers a competitive grant program that has been important for many local filmmakers. The District should consider expanding funding for independent filmmakers, artists and cultural activities.

#### **Action 5.6: Recruit specialty sports and recreation businesses.**

The District should recruit specialized sports and recreation-oriented businesses that are typically available only in the District's suburbs. These businesses would service a dramatically under-served market of individuals and families that otherwise travel to Maryland and Virginia to participate in specialized recreational activities, and provide another means to reduce retail leakage into the suburbs. Large industrially zoned facilities could house specialty sports facilities such as boxing, indoor climbing, gymnastics, batting cages, ice skating, a velodrome, etc., and family-oriented recreational facilities, such as a children's indoor play center, movie theater, miniature golf, etc.



## **POLICY STRATEGY 06: BUSINESS FINANCE AND ASSISTANCE**

Although some successful businesses begin on a shoestring budget, most need access to outside financing to grow. Support for existing and new businesses needs to include additional access to financing sources.

### **HELP WARD 5 BUSINESSES ACCESS FINANCIAL RESOURCES**

#### **Action 6.1: Help businesses and developers access funding for industrial space development.**

Several funding sources (listed in Appendix E) exist to help fill the gap between the cost of developing facilities and the private investment justified by the future rental revenue. The District should help developers and businesses pursue development funding from US Economic Development Administration grants, EB-5 visas, New Markets Tax Credits, historic tax credits, brownfield clean-up funding, Industrial Revenue Bonds and/or Small Business Administration (SBA) loans to support new industrial space.

#### **Action 6.2: Continue to assist companies in accessing financial resources.**

The Department of Small and Local Business Development (DSLBD) works with local businesses to access micro-loans, SBA financing, Small Business Innovation Research (SBIR)/Small Business Technology Transfer Program (STTR) funding and other financing programs. It should continue to emphasize those efforts and help existing and new companies access other resources, such as the Department of the Environment's opportunity grants for green businesses.

#### **Action 6.3: Expand outreach about Department of Small and Local Business Development (DSLBD) services for Ward 5 businesses.**

Ward 5 businesses need to be more aware of the availability of DSLBD's technical assistance and financing services. The industrial advocate could facilitate expanded outreach to reach more Ward 5 businesses.

#### **Action 6.4: Create materials and partnerships to help local businesses access EB-5 funding and crowdfunding.**

The Jumpstart Our Business Startups (JOBS) Act now allows businesses to advertise for investments without the cost of traditional registration with the Securities and Exchange Commission. Investors are limited to individuals with a net worth of at least \$1 million or annual incomes of at least

\$200,000. Intermediary organizations are developing to ensure compliance with the act by certifying that prospective investors meet the established criteria.

DSLBD should work with qualified intermediaries to develop briefing materials on JOBS Act crowdfunding and EB-5 immigrant visa financing. DSLBD should provide initial consultation with businesses considering these funding sources and then connect them with qualified intermediaries.

#### **Action 6.5: Promote and market Industrial Revenue Bond (IRB) program to industrial users and provide targeted assistance to industrial businesses going through the IRB process.**

DMPED should continue to promote its Industrial Revenue Bond (IRB) program to industrial users and provide targeted assistance to industrial businesses going through the IRB process. The Industrial Advocate could assist by identifying and connecting businesses to the program.

#### **Action 6.6: Continue to streamline the building and occupancy permit processes to significantly reduce the time required.**

The Small Business Resource Center (SBRC) provides one-on-one technical and educational assistance and group workshops to future and current business owners seeking to navigate through the District's regulatory environment. Services include assisting businesses to complete a business license application, secure a building permit and certificate of occupancy, and go through plan review. These services should be marketed to Ward 5 businesses to increase their awareness and use of the SBRC. The District should continue its efforts to streamline the building and occupancy permit processes to reduce the time required significantly.

#### **Action 6.7: Work with area foundations to provide financial support for small businesses.**

DSLBD should continue to work with area foundations to advance assistance programs and/or capital investments in local food production, artists and artisans, arts organizations, green businesses and others.

#### **Action 6.8: Alert Ward businesses to the Manufacturing Extension Partnership's services.**

The Manufacturing Extension Partnership (MEP) provides individualized assistance to local manufacturers to help with such issues as improving the efficiency of their manufacturing processes and designing streamlining approaches to reduce operating costs. An outreach strategy and marketing material should be prepared for distribution to Ward 5 businesses.



## **POLICY STRATEGY 07: MARKETING AND BRANDING**

A key role of the industrial advocate discussed in Policy 1 should be to raise awareness and support for the District's industrial businesses. Marketing and branding actions will be critical to changing perceptions of both industry and the Ward 5 industrial areas.

### **BUILD SUPPORT FOR INDUSTRIAL USES**

#### **Action 7.1: Communicate the importance of industrial uses and areas.**

Presentation materials should be prepared to educate policymakers and residents as to the importance of maintaining industrial uses and land in the District. Think Local First, a local non-profit, could help with this process.

### **BUILD AWARENESS OF DISTRICT BUSINESSES**

#### **Action 7.2: Support the Made in DC program.**

Think Local First has initiated a Made in DC program to raise awareness of District-based businesses and encourage residents to buy local. The Washington, DC Economic Partnership should consider partnering with the group to achieve higher visibility and greater participation.

### **ENHANCE NEW YORK AVENUE**

#### **Action 7.3: Invest in major streetscape improvements and public art along New York Avenue.**

Create public space streetscape guidelines to rebuild New York Avenue to be pedestrian friendly and more sustainable (green infrastructure for stormwater). Work with PUD applicants to include large format public art as part of their community amenity packages. Brand the Avenue.

### **CHANGE PERCEPTIONS OF WARD 5**

#### **Action 7.4: Develop the "Ward 5 Works" brand.**

The Ward 5 Works brand could be used to improve the Ward's image. The brand should be developed for use in multiple publications and signage.

## **HELP BUSINESSES FIND APPROPRIATE INDUSTRIAL SPACE**

#### **Action 7.5: Improve businesses' access to industrial space by enhancing the Washington, DC Economic Partnership (WDCEP) database and services.**

The Washington, DC Economic Partnership works with businesses considering a District location, particularly retailers, to help them find appropriate space. That effort should be expanded to help PDR businesses identify appropriate spaces by enhancing WDCEP's database of available space. PDR businesses should be linked with industrial space owners and brokers who will work with small tenants.

### **ALERT BUSINESSES TO THE AVAILABILITY OF TECHNICAL ASSISTANCE**

#### **Action 7.6: Prepare an outreach campaign to alert Ward 5 businesses to the availability of technical assistance.**

An outreach campaign should be prepared to engage Ward 5 businesses and educate them as to the range of services and technical assistance available to them through Department of Small and Local Business Development (DSLBD), Manufacturing Extension Partnership (MEP) and other agencies.

## PLACE-BASED STRATEGY 08: NUISANCE USES AND BUFFERING

### ENFORCE WASTE TRANSFER STATION SETTLEMENT AGREEMENTS AND REGULATIONS

Waste transfer stations are vital to a community's waste management system, serving as the link between a community's solid waste collection program and a final waste disposal facility. These facilities are used to consolidate waste from multiple collection vehicles into larger, high-volume transfer vehicles for more economical shipment to distant disposal sites.

Ward 5 citizens have voiced concerns about two solid waste transfer stations in their community that are poorly sited, designed or operated: the trash transfer station at 1220 W Street, NE; and the Rodgers Brothers Recycling facility in the 2200 and 2300 blocks of Lawrence Street, NE. After lengthy litigation, the District government entered into settlement agreements with the two operators that required them to make extensive improvements to their facilities and operations.

#### **Action 8.1: Pursue regulatory and legislative interventions to improve existing and limit future private waste management activities.**

District government agencies, led by DDOE and DCRA, should work with residents and affected operators to upgrade and enhance the framework for regulating waste management facilities.

#### **Action 8.2: Work with 1220 W Street, NE Trash Transfer Station to install landscaping, sound barriers and other improvements.**

The District should work as an active partner with the owner of the 1220 W Street, NE trash transfer station to implement landscaping and sound barrier improvements to ensure better relationships with adjacent residential neighbors. The property owner should involve local non-profits, e.g., Casey Trees, that may offer support for efforts to improve the landscape. The District Department of Environment staff could assist with technical advice on best practices for green infrastructure. The rendering on page 104 provides a visualization of how the landscaping and sound barrier could look. As an alternative, the District should plan for a long term change of use at this site.

#### **Action 8.3: Work with the Rodgers Brothers Recycling operation to fully enclose the solid waste facility.**

The Settlement Agreement signed on September 6, 2012 by the District and the owners of the properties located in the 2200 and 2300 blocks of Lawrence Street, NE – Rodgers Brothers Custodial Services, Inc., George Rodgers, Jr. and Innovative Recyclers – requires Rodgers Brothers to undertake a series of actions. Most important is full enclosure of the structure and operation. Other provisions require installation of a deodorizing system, perimeter lighting, upgraded water supplies for dust abatement and a security camera system along with resurfacing of the yard, repair of the building façade and perimeter landscaping. The District of Columbia should work with the owners to meet the provisions of the Settlement Agreement. If desired and feasible, facilitate the partnership with a local non-profit or other entity to include artistic and green elements to the improvements as suggested in the rendering on page 105.

#### **Action 8.4: Continue to enforce existing regulations and settlement agreements to their full extent to improve conditions at waste transfer stations.**

The District should review and enforce existing regulations and the Rodgers Brothers Settlement Agreement to their full extent to improve conditions at waste transfer stations on an on-going basis.

#### **Action 8.5: Explore policy and legislative approaches that can optimize management of the District solid waste stream.**

The Sustainable DC Plan establishes a primary goal of reducing the volume of waste generated and disposed with a target of sending zero solid waste to landfills annually and reducing total waste generation by 15 percent by 2032. Achieving that goal requires that the District prepare a robust Waste Action Plan and a monitoring system that allows characterization and quantification of the total waste stream generated by the city's residents and businesses. The District should explore policy and legislative approaches that can optimize management of the District solid waste stream to achieve the waste and recycling goals. Rigorous enforcement of District health and environmental laws, in conjunction with diversion of waste collected by commercial haulers through District-operated waste transfer stations, would result in waste management practices that would have a less negative impact on communities in Ward 5 adjacent to industrial areas.

## **BUFFER RESIDENTIAL NEIGHBORHOODS FROM INTRUSIVE INDUSTRIAL USES**

### **Action 8.6: Install landscape or other physical buffers at key locations.**

At several stakeholder meetings, local residents raised nuisance issues related to industrial issues in Ward 5. District agencies should work with the community to identify and prioritize locations where industrial uses impact neighboring residential uses. Landscape or other buffers should be designed and installed to reduce the friction between uses. The District's Department of Environment offers property owner consultation on best practices for green improvements. These physical buffers should be prioritized in the new PDR buffer district (see Action 2.4).

### **Action 8.7: Use buildings and make/live projects as a buffer for industrial uses in designated areas.**

Make/live and commercial uses can provide effective buffers between industrial and residential uses. Action 2.4 establishes buffer zones at the edges of industrial areas in close proximity to housing. In select areas of this new buffer district, especially in areas near public transit, limited make/live may be allowed.

## **LAUNCH A GOOD NEIGHBOR PILOT PROGRAM**

### **Action 8.8: Launch a pilot Good Neighbor Program for private and public property and uses.**

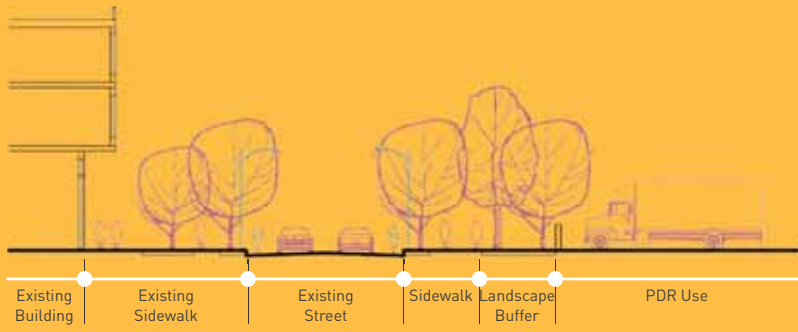
The distrust that exists between residents and industrial area businesses results, in part, from their lack of contact and the actions of a few businesses. The District should initiate a pilot Good Neighbor Program to communicate expectations about business and municipal operations near residential neighborhoods and encourage dialogue. A good neighbor policy that spells out expectations for businesses located near residential neighborhoods should be developed and communicated through a brochure and a web site. These tools would address topics such as employee parking on site rather than in the neighborhood, truck routes that avoid residential streets, site clean-up and maintenance, building upkeep and landscaping.

The outreach effort also could include information about funding for building improvements and signage (See Action 7.4). Businesses should be encouraged to meet their neighbors, possibly through an open house, to reduce their anonymity. Municipal uses located in Ward 5 could increase their community interaction through the local schools with such activities as "truck touches" for children and field trips to watch the on-site operations of truck fleets.

Lessons learned from the pilot program should be incorporated into the extension of the program to other Ward 5 industrial areas, particularly those with municipal facilities.

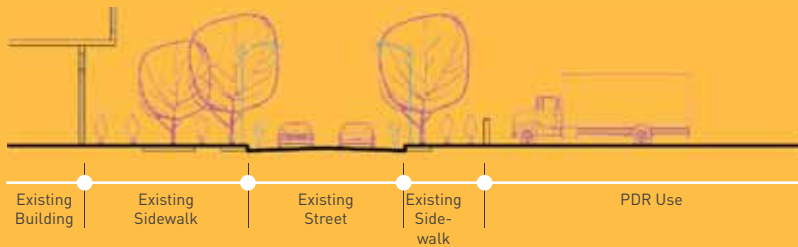
## BUFFER TYPES AND PUBLIC REALM IMPROVEMENT

### TYPE 1: WIDE LANDSCAPE BUFFER



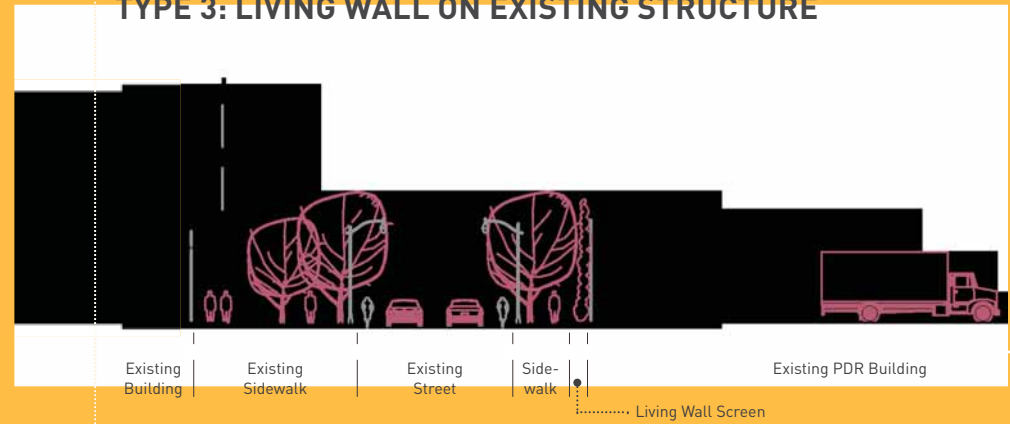
Where suitable, use a variety of plants with different heights to create a layered effect. Incorporate a masonry wall or a metal fence (aluminum or wrought iron) for security and additional screening.

### TYPE 2: NARROW LANDSCAPE BUFFER



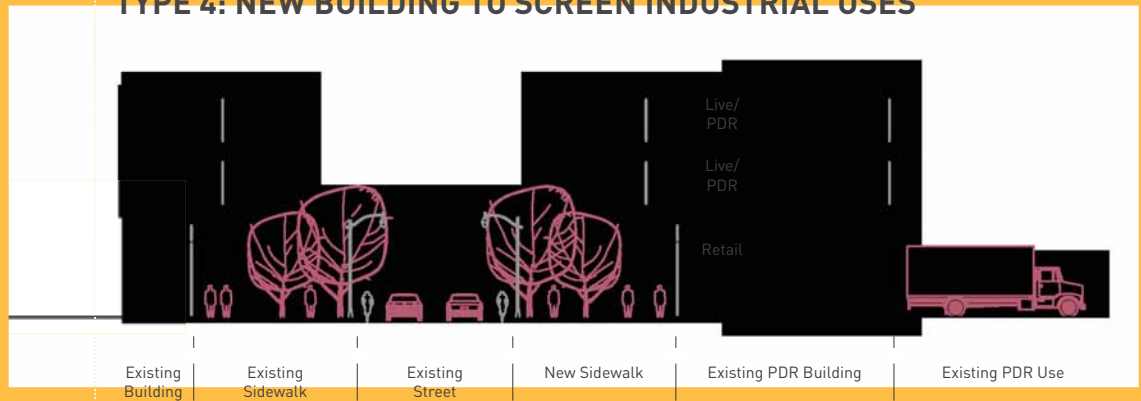
In more narrow areas where landscape screening is desired, plantings can be accented with a free-standing trellis wall. Plant evergreen and flowering vines to cover the trellis.

### TYPE 3: LIVING WALL ON EXISTING STRUCTURE



Where close-in buildings or walls prohibit a varied planting palette, attach a trellis system to the structure. Plant evergreen and flowering vines at the base of the trellis to create a living wall.

### TYPE 4: NEW BUILDING TO SCREEN INDUSTRIAL USES



Multi-use buildings with active uses on the ground floor and PDR uses above can create an effective screen to more intrusive nuisances from existing neighborhoods. These new buildings or renovated existing buildings activate the street and help create a more pleasant experience.



## BUFFER TYPES

Type 1: Wide Landscape Buffer



Type 2: Narrow Landscape Buffer



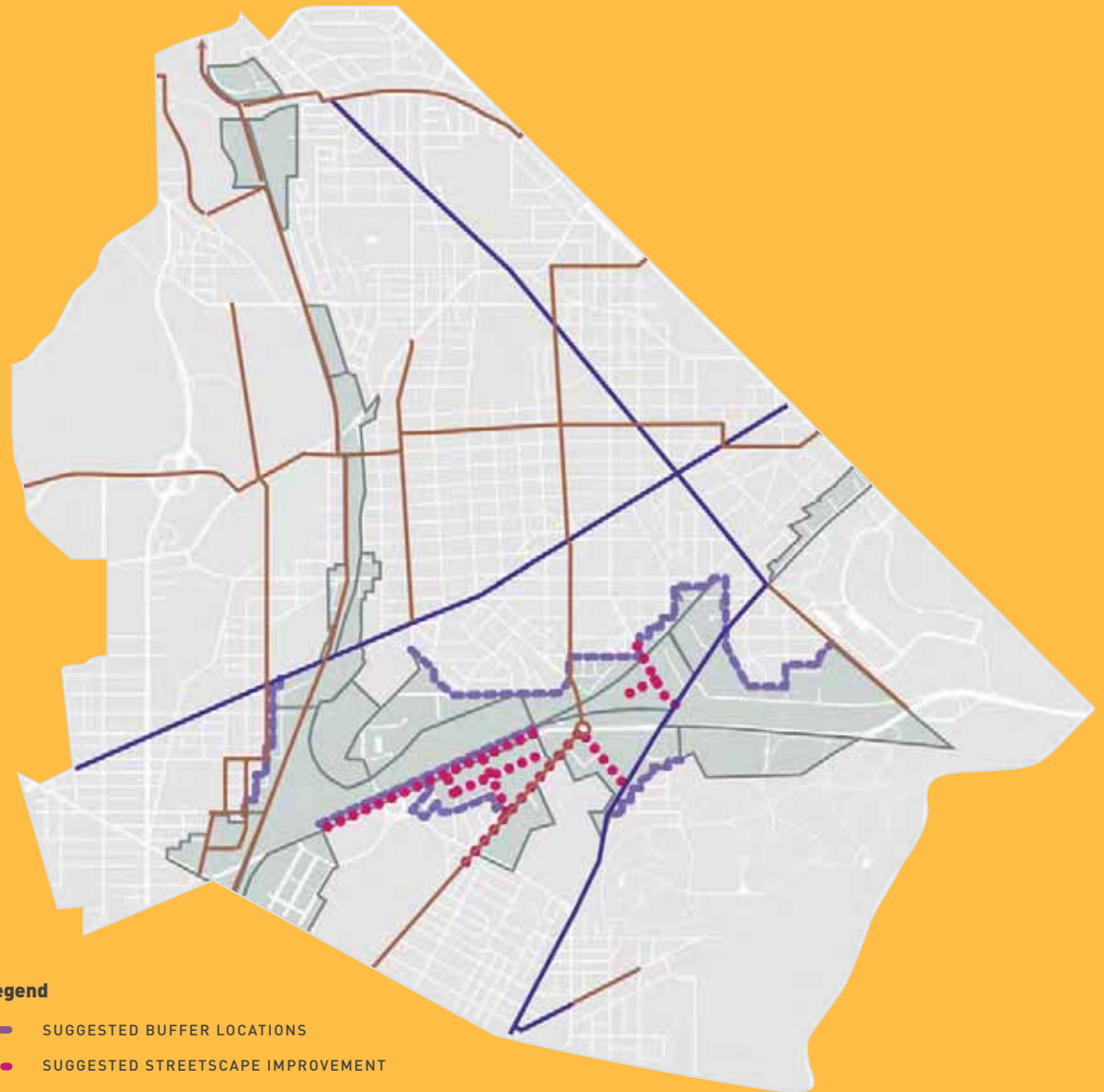
Type 3: Living Wall on Existing Structure



Type 4: New Building To Screen Industrial Uses

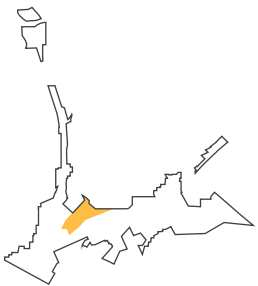


## BUFFER LOCATIONS AND PUBLIC REALM IMPROVEMENT



### Buffer Type 2: W Street Facility

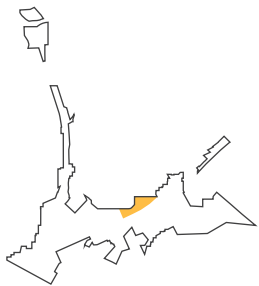
A trellis, sound barrier and multiple tree plantings could screen this trash transfer facility from the backyards of adjacent neighbors.





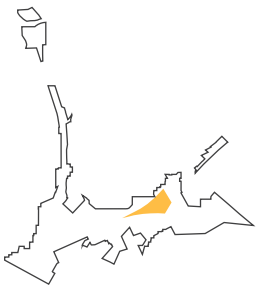
**Improved Streetscape and Buffer Type 4:  
Lawrence Avenue**

The open-air refuse pile can be enclosed, thereby controlling the nuisance to the neighborhood. Further screening of this facility can be accomplished by streetscape improvements and additional planting.



## Queens Chapel Road

Queens Chapel Road could be enhanced by an improved sidewalk to reinforce a pedestrian connection across the rail lines. This portion of Queens Chapel Road is a high point as it crosses the rail lines and the industrial area is easily seen. Landscape could improve the curb appeal of this area by the addition of living walls and green roof systems to existing buildings.



EXISTING CONDITIONS







**RECYCLE**

## PLACE-BASED STRATEGY 09: INDUSTRIAL SPACE

A primary issue for Ward 5 businesses is the high cost of industrial space compared to other areas in the region. This expense dwarfs most of the other challenges facing DC's small businesses, particularly young companies that have not yet achieved their full potential.

The traditional route for these companies is to lease an existing space and more than 80 percent follow this practice. Few young companies can afford to build facilities to their specifications. Development takes too long to accommodate their business needs, the process requires real estate skills they do not have and new construction is typically far too expensive in the early stages when every dollar must be stretched to fund the company's operating and capital needs.

Private industrial developers typically fill this real estate expertise gap and can address the timing issue by building basic industrial or flex space speculatively before tenants make commitments to lease or buy. The space is thereby immediately available when a company is ready to get started or expand. In established markets with a steady demand for space, speculative construction is an important part of a business or industrial park's development strategy.

However, DC has not had speculative construction in this sector given limited demand, current rents that don't support the cost of development and the risks of building for small, untested tenants. The lease commitments required by developers to secure financing (five or more years) are a major burden to entrepreneurs who are asked to personally guarantee the rent. Most small

companies need much shorter and flexible leases to respond to their need to preserve startup capital and respond to changes as they grow. If the District is to capitalize on its expanding base of entrepreneurs and makers, it must address these fundamental market failings.

### ASSURE LONG-TERM AFFORDABILITY OF INDUSTRIAL SPACE

#### **Action 9.1: Encourage renovation of historic and other industrial buildings.**

The preponderance of Ward 5's industrial buildings offer Class C space and require upgrades to better meet the needs of PDR industries. The District should contact owners of key under-leased properties to encourage renovation of historic and older buildings. In some situations, a partnership approach to redevelopment should be explored.

### SUPPORT DEVELOPMENT OF NEW MULTI-TENANT SPACE

As startup companies refine their products and business plans, they enter the second stage of development and typically graduate from formal incubators and/or shared spaces. To progress, they typically need 1,500 to 3,000 square feet of space but remain financially constrained in how much they can afford to spend on rent. The private market typically does not develop space for second-stage tenants due to the limited rents and the high risks of business failure. The size of the needed facilities is too small for an independent structure but well suited to flex or other multi-tenant spaces that can be subdivided to accommodate different-sized tenants.

#### **Action 9.2: Cooperate in development of a multi-tenant industrial building for small food producers.**

Sustainable DC Plan Food Actions 3.2 and 3.3, which address the development of food incubators and food hubs, point to policy and market need to develop more food incubators and a food hub in the District. These institutions offer the opportunity to expand existing food-related businesses, value-added production, aggregation of product and clientele, and distribution of the food-related products.

Together, Union Market and Union Kitchen have raised awareness and demand for artisanal food products, providing a platform for small food companies to reach a larger audience and ultimately grow their independent businesses. At this stage, local food producers' greatest unmet need is access to affordable space for second-stage companies ready to graduate from the shared kitchen incubator, such as the one offered by Union Kitchen.

Development of a multi-tenant industrial building specialized to the needs of small food producers would allow start-up businesses to move to the next stage of development. Ideally located in the Florida Avenue Market area, a multi-tenant building could accommodate businesses of different sizes, allowing them to expand into additional space as they grow. The challenge lies in creating spaces that these small businesses can afford. The District should consider a partnership with an industrial developer that could reduce the required rents.

### **Action 9.3: Support development of space for green and sustainable businesses.**

The Sustainable DC Plan encourages the creation of green roofs and other low impact development (LID) features, renewable energy, buildings achieving Leadership in Energy and Environmental Design (LEED) certification, recycling, reuse of building materials and other strategies to reduce energy consumption and respect the natural environment.

Each of these practices creates opportunities for new and existing businesses to pursue new sustainable products and services while requiring different types of facilities in which to create these offerings. However, this potential market for smaller spaces with flexible and affordable lease terms isn't yet met in Ward 5 where single-tenant buildings are the norm. Development of new multi-tenant facilities could fill this gap.

### **ENCOURAGE SHARED TECHNOLOGY AND INFRASTRUCTURE FOR SMALL BUSINESSES**

#### **Action 9.4: Collaborate with an experienced operator of maker spaces that provides shared use of technology and facilities.**

The success of such entities as TechShop, a fabrication and prototyping studio providing members access to professional tools and software, builds on the power of shared equipment to reduce the cost and risks of business startups in technology and maker industries. While such maker spaces may reach self-sufficiency, most require significant initial investments on the order to \$2 to \$3.5 million to improve spaces and purchase equipment. Such businesses also need funds for their operations and staff that provides services to members.

The District's Five-Year Economic Development Strategy and Sustainable DC Plan both emphasize support for new businesses in helping the city to diversify its economy. Such incubator facilities are most successful if driven by a group of dedicated and passionate people committed to day-to-day operations and guided by experienced operators who can help navigate

the business model's inherent complexities and avoid typical startup problems. They often require a partnership between a local grassroots organization (either non-profit or for-profit) and an experienced operator. Clusters of similar companies can share resources, support each other and benefit from specialized training. However, the recent failure of 3rd Ward, a shared space and equipment venture in Brooklyn and Philadelphia, underscores the importance of a sound financial plan coupled with good business management.

### **PROVIDE SPACE FOR ARTS USES AND MAKERS**

#### **Action 9.5: Rehabilitate a building for arts uses and makers.**

Reuse of an existing building for industrial and office activity could support a cluster of similar maker companies and artist studios and workshops. Co-working and small space leases with short terms and affordable rents would meet a significant need. The recent success of arts-related development near the Brookland Metrorail station, including Dance Place, indicates significant demand for affordable studio space. An older industrial building could be renovated for both maker and artist spaces with a common management. Ideally, such a building would be located in one of four locations: near the Brookland Metrorail station; near the Rhode Island Avenue Metrorail station; in the Ivy City area; or in the Florida Avenue Market area.

#### **Action 9.6: Allow limited make/live development in buffer districts.**

On a few selected sites on the edges between industrial areas and residential neighborhoods, make/live spaces could be developed. This allowance for residential development on industrial land is suitable in very limited situations where buffering between the different

## BUILDING RENOVATION

The Greenpoint Manufacturing and Design Center (GMDC), Brooklyn Navy Yard and other industrial entities across the country have demonstrated the appeal and potential of renovating and subdividing historic buildings to meet the needs of small businesses. GMDC in Brooklyn offers shared space and equipment to support small businesses involved in advanced manufacturing and/or artisanal production.

Such operations typically require significant public assistance – a \$1 sale of a historic building to GMDC and millions of dollars in subsidies for the Brooklyn Navy Yard as a whole. Financial support is needed in the early years due to the high costs of development and renovation; high rate of business turnover and failures; and the salaries of staff needed to lease, manage and maintain the buildings, and coach tenants.

uses is required to improve the residents' quality of life and the businesses' ability to operate efficiently. Depending on the results of the Action 2.2 evaluation of a new make/live district, additional arts/makers space could be created as a ground-floor use in higher-density make/live buildings.

## SUPPORT DEVELOPMENT OF A CREATIVE HUB FOR THE MEDIA AND COMMUNICATIONS INDUSTRY

### Action 9.7: Participate in development of a creative hub.

Ward 5 offers the opportunity to develop a creative hub focused, at least initially, on media and communications, building on Washington's extensive creative community of filmmakers, broadcasters and other media businesses. Currently, the high costs of green-screen and other technologies limit access to critical tools of the trade.

A creative hub that combines shared facilities and equipment with offices and other space for a major cluster of digital media and related companies would provide a substantial boost for the industry. The complex could include professional studio facilities for use by both large-scale and smaller digital media productions. The studios could be supported by a robust fiber optic network for broadcasting and live streaming as well as post-production, design, editing and animation services.

A specialized vocational training institute should be added to this creative hub to improve DC residents' digital media skills and career opportunities in the industry. The institute could combine classroom training with access to internships and other hands-on experiences.

The creative hub concept need not be limited to the media industry alone. The vibrancy and vitality of clustered creative workers in this location could support growth in several related fields, including robotics, mixed media arts, animation and design, fashion and 3-D manufacturing. Depending on the mix of uses, the creative hub could start with roughly 100,000 square feet of space dedicated to the digital media companies and training institute, expanding over time.

Ward 5's industrial land offers the ideal setting for such a facility in providing lower-cost land and more space for trucks and production trailers than other locations within the city. The creative office space and classrooms would fit well within a repurposed industrial building.

Two potential sites – Ivy City and Florida Avenue Market – offer tremendous opportunities for such facilities. Of the two, Ivy City has greater land and building availability than the Florida Avenue Market.





## THE PLANT, CHICAGO, IL

In 2010, the private real estate firm, Bubbly Dynamics, LLC, purchased a former meatpacking plant to create a sustainable center of urban agriculture. Its plans to create a vertical farm complete with a brewery (tea and beer), an aquaponic farm for plants and fish, and a commercial kitchen and food incubator—all within a net-zero closed waste system—began immediately.

The Plant operates under both for-profit and non-profit entities. About a third of the 100,000-square-foot warehouse is currently leased by companies producing craft food products for sale.

“Plant Chicago” is the name of the non-profit that owns and operates most of the vertical farming space in the building. It will also own and operate the shared kitchen and will conduct research and educational programming in the building related to sustainable food production and economic development. Fundraising continues for potential expansion into roughly 45,000 square feet of food production space in 2014.

## PLACE-BASED STRATEGY 10: MUNICIPAL USES

### PROVIDE FOR LONG-TERM NEEDS FOR MUNICIPAL FACILITIES

#### Action 10.1: Develop a long-term plan for municipal facilities.

The District needs to plan for its long-term needs by maintaining and improving operational efficiency of municipal uses, such as truck and automobile maintenance and storage of snow plows. Some of these civic functions, including a fleet fueling station and street repair operations, need to be retained within District boundaries. This municipal facilities plan should explore opportunities for co-location and the consolidation of Ward 5’s municipal uses within one location.

### REDEVELOP THE WEST VIRGINIA AVENUE PUBLIC FACILITY

#### Action 10.2: Develop a state-of-the-art municipal facility on West Virginia Avenue.

In the near term, District agencies have the opportunity to consolidate uses within Ward 5 and improve conditions in the Department of Public Work’s (DPW) West Virginia Avenue facility. The West Virginia Avenue facility should be redeveloped as a world-class model of sustainable development for co-located municipal uses. Consolidation provides DC municipal users with greater operational efficiencies and allows for enhanced use of relinquished industrial sites.

The expanded and intensified DPW headquarters could host and co-locate multiple DPW administrative and other functions within a single setting on the West Virginia Avenue site and possibly DPW’s Okie Street site across the street. The phased development of the property would include administrative offices, vehicle maintenance and servicing, a truck wash station, material storage, a compressed natural gas station and employee and fleet parking. The new facility should be lined with privately owned commercial retail and PDR business uses that will activate West Virginia Avenue and include community amenities. (See Action 10.3.) The site should feature the highest standards in green and sustainable technology and design, incorporating measures for energy and water conservation, stormwater management best practices and buffering. Consolidation could potentially free other Ward 5 sites for non-municipal uses and should be prioritized for innovative uses and community amenities.

The first step toward implementation involves a detailed master facilities plan for the West Virginia Avenue facility that evaluates agency needs and

explores opportunities for co-location with other vehicle maintenance activities. This plan should also outline creative financing opportunities. A Capital Improvement Program budget request should be developed for the initial feasibility and planning study and the development that will follow. With compelling design and world-class environmental features, the District municipal facility would provide national leadership in sustainable development.

## USE MUNICIPAL FACILITIES TO ENHANCE THE COMMUNITY

### **Action 10.3: Incorporate high-quality design and community amenities into the West Virginia Avenue location and other municipal use facilities to enhance the surrounding community.**

Redesign of the West Virginia Avenue facility offers the opportunity to incorporate high-quality design and community amenities. Creative design should integrate quality art and architecture into the project. Meeting LEED standards often involves attractive treatments, such as bioswales and other water features, to capture and clean stormwater. Buildings developed along the West Virginia Avenue frontage should incorporate spaces for small retail and/or PDR businesses. The compressed natural gas (CNG) fueling station in the West Virginia Avenue location could be open to residents as well as District agency vehicles. A state-of-the-art truck wash facility would eliminate unpleasant odors. Streetscape and other improvements would be a natural component of site redevelopment. Compelling design and the community amenities developed in the West Virginia Avenue site should serve as a prototype for future improvements to municipal facilities.

### **Action 10.4: Pursue stormwater retention credits for the new West Virginia Avenue public facility.**

A potential funding source has been created by the District Department of the Environment (DDOE) through its new stormwater management, soil erosion and sediment control regulations. New developments and renovation projects of at least 5,000 square feet are now required to retain the stormwater runoff equivalent to that generated by 1.2 inches of rain. Up to one-half of this amount can be offset by payments in lieu to DDOE or purchase of stormwater retention credits (SRC) from property owners who retain runoff in excess of what is required for their parcels. Those credits are fully transferable between properties and do not expire until committed to a project that is generating excess stormwater. Each year, the new development must purchase SRCs or pay the in-lieu fee.

A municipal user or another property owner could install stormwater retention facilities, such as pervious surfaces, green roofs, a bio-retention

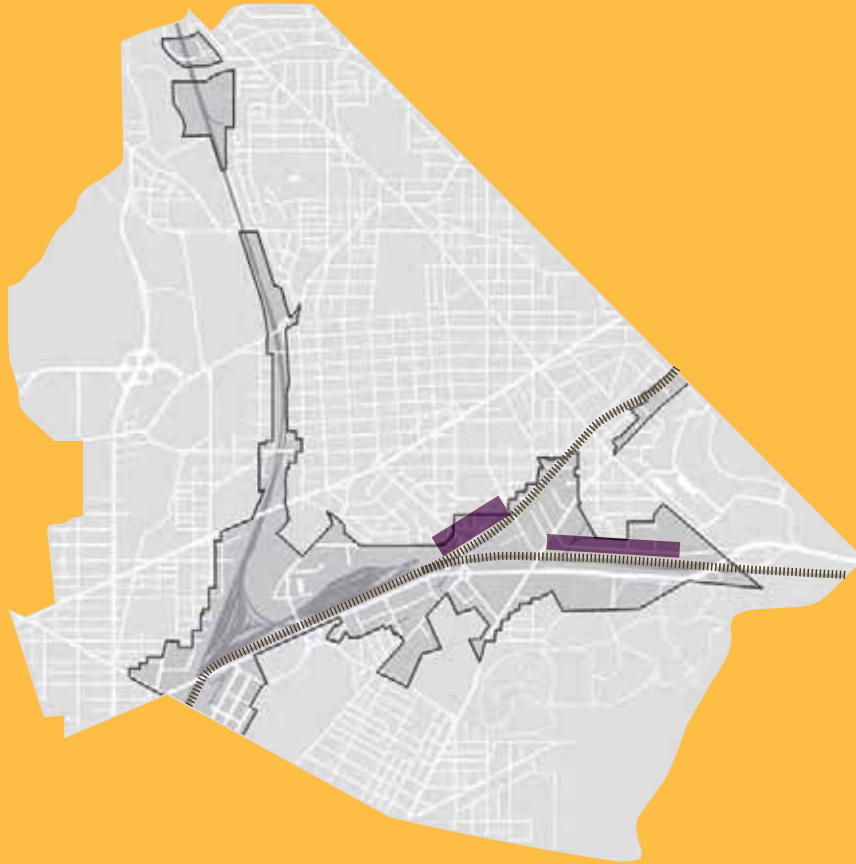
facility or a rain garden. Depending on the amount of excess retention capacity created, the owner could sell SRCs to a developer whose site could not accommodate on-site solutions. At this stage, it is not clear what value the SRCs will carry. They will be traded on the open market and will find their own price based on the balance between demand and available supply. Presumably, the price will be less than the \$3.50 in-lieu fee for retaining one gallon of water for one year. DDOE estimates that the price could range between \$0.94 and \$3.50 per gallon per year.

The vision of redeveloping the West Virginia Avenue fleet maintenance and repair facility as a world-class LEED Gold facility could include demonstration of state-of-the-art techniques to capture, retain and reuse stormwater on site. Developing excess capacity for stormwater retention beyond the requirement for the site would generate credits that could be sold to developers of projects unable to meet the runoff standards on their properties.

The West Virginia Avenue site may benefit from funded projects under the Clean Rivers Initiative, which includes plans to construct a tunnel under a portion of the site as part of the Bloomingdale flood mitigation effort. The preliminary site preparation work for the tunnel could become a cost savings for the facility.



## MARC RAIL LINES



### Legend

- EXISTING MARC RAIL LINES
- GENERALIZED AREA FOR POTENTIAL FUTURE MARC STATION

Source: Ayers Saint Gross

## PLACE-BASED STRATEGY 11: INFRASTRUCTURE AND TRANSIT

### ENHANCE ACCESS TO WARD 5

#### Action 11.1: Invest in bicycle lanes and pedestrian connections to improve connectivity.

The District Department of Transportation and Office of Planning should plan and create new bicycle lanes and pedestrian connections from Ward 5 industrial locations to public transit and local business districts. New pedestrian connections should include South Dakota Avenue, Bladensburg Road and Rhode Island Avenue. Public realm improvements, including sidewalks as shown in the map on page 107, should be provided along Queens Chapel Road, West Virginia Avenue, Montana Avenue, Adams Place and streets in the Ivy City neighborhood.

Additional Capital Bike stations should be considered at Union Market, Ivy City, Fort Totten Metrorail station and Rhode Island Avenue Metrorail station. Bike lanes and other enhancements should be encouraged where their inclusion would not negatively impact truck turning movements.

#### Action 11.2: Expand Ward 5's transit infrastructure through streetcar service.

The District should invest in streetcar service along Rhode Island Avenue in line with its streetcar plan. A streetcar spur from the H Street line along Bladensburg Road would enhance transit service to Ward 5 residents and businesses.

#### Action 11.3: Explore the potential for a MARC station near Queens Chapel Road.

Discussions should be held with the Maryland Department of Transportation about a potential MARC station near Queens Chapel Road that could serve the New York Avenue corridor.



**Action 11.4: Increase frequency and hours of bus service to Ward 5 industrial areas.**

Increasing the frequency of Metrobus service and extending its hours of operation would provide better access for employees of Ward 5 businesses as well as District residents.

**Action 11.5: Add street lighting to sections of Ward 5.**

Adding lighting has been effective in improving safety for pedestrians, businesses and residents. Additional streetlights should be installed. In addition, area businesses should be encouraged to keep on low-level lighting even when the business is closed to further enhance area safety.

## **PLACE-BASED STRATEGY 12: COMMUNITY AMENITIES**

### **DEVELOP ADDITIONAL COMMUNITY AMENITIES**

**Action 12.1: Invest in new community amenities.**

Amenities such as parks, retail, restaurants and streetscapes in the Ward 5 industrial area need to be established to improve the quality of life in the area and support local businesses and residents. The community has expressed a desire for additional family-friendly destinations and establishments. As the industrial area develops to meet the requirements of the new generation of industry, there could be opportunities to include additional facilities to serve the community, such as small parks, public art, retail and restaurants, or recreation and entertainment uses. Municipal facilities should incorporate community amenities wherever possible.

### **INCORPORATE RETAIL SPACE IN PDR BUSINESS FACILITIES**

**Action 12.2: Encourage existing and new wholesalers, artisans, food producers and other maker businesses to include retail space and hold periodic events.**

The District's zoning and permitting regulations and processes should be revised to encourage the inclusion of on-site retail space and/or periodic retail sales (e.g., tastings) in maker production facilities (particularly food). Where the market will support them, small retail spaces to serve the community and buffer industrial uses should be encouraged.

### **IMPROVE LOOMIS PARK**

**Action 12.3: Improve and activate Loomis Park.**

When the Rodgers Brothers recycling operation and facility on Lawrence Street, NE are improved, the District should issue a request for proposals to design playground equipment, picnic furniture and public art to improve and activate Loomis Park. The design process should include opportunities for the local community and artists to participate.

### **ENHANCE ENVIRONMENTAL PERFORMANCE**

**Action 12.4: Incorporate more green features into public realm, expand tree canopy.**

Work with Casey Trees, the District Department of Environment and other District agencies to support best practices in green infrastructure throughout the public realm and on private property. These existing programs can partner with businesses and community to expand the tree canopy. Education and outreach to property owners and area residents should address maintenance needs and responsibilities. Additionally, as a result of the new green area ratio (GAR) standard in the updated zoning code, new development will be required to dedicate a portion of site as green.

### **CREATE COMMUNITY TOOL LIBRARIES**

**Action 12.5: Create a grant competition for the establishment of Community Tool Libraries.**

Community Tool Libraries make construction tools available for short-term use by residents, non-profits and businesses. The District should create a grant competition for the establishment of two Community Tool Libraries that could serve and activate buffer areas. It would be good to partner with a local group or non-profit where need is highest and there are sustainable opportunities for partnerships. One library could be located in Ivy City where self-help housing investments by non-profits such as Habitat for Humanity create a need for tools. A second library could be created in Brookland where there is an existing cluster of arts uses.

## NEW YORK AVENUE

New York Avenue serves two roles. While it is the principal vehicular corridor through Ward 5, it is also a key gateway to the District for thousands of commuters and visitors. Today's New York Avenue presents an incoherent jumble of underutilized, sometimes abandoned, buildings and surface parking lots. Between Montana Avenue and 9th Street NE, this situation is especially acute as shown in the existing conditions photograph.

Yet this segment of New York Avenue presents a transformational opportunity for Ward 5, as the reuse of several existing buildings—including the Hecht's Warehouse Building—can create a dynamic, new threshold into the District.







THE HECHT

FAB

INNOVATION



A number of actions should be considered for the New York Avenue Gateway District:

- » Artwork and greenery should be a major feature of the New York Avenue Gateway District and play a major role in visually establishing the corridor as a grand gateway to the city. The rendering on the opposite page reflects a recommendation from the 2010 New York Avenue Green Infrastructure Study. The extensive strip of paved land north of the Avenue offers a tremendous opportunity to create a linear buffer-park with bike-pedestrian pathways and public art. Another option for improving the circulation, appearance and environmental performance of New York Avenue could include a multipurpose trail and linear park on the southern side of New York Avenue, closer to businesses and activity.
- » Existing buildings along the southern edge of New York Avenue can be repurposed and re-clad—establishing a visually engaging streetscape that highlights retail, residential, and proposed new maker and industrial hub. This combination of renovated buildings and renewed landscapes would create a revitalized city gateway and provide opportunities to advance the city’s sustainability goals.
- » Retail and dining amenities could play a central role in establishing the vibrancy of the New York Avenue Gateway District. A broad array of businesses that serve the needs of commuters and District residents alike is appropriate for the corridor. The significance of vehicular traffic along the New York Avenue corridor cannot be understated and should be harnessed as an important driver of economic development. New York Avenue has the highest traffic count in the District, with 123,300 vehicles traveling along the corridor within a 24 hour period on an average weekday. In-fill amenities anchored by the Fort Lincoln development to the East and Union Market to the West may stem retail leakage into the suburbs and generate significant tax revenue from out-of-state commuters.
- » Mixed use development that contemplates multifamily residential is encouraged to enhance density to support commercial development along the New York Avenue Gateway District. Although most of the New York Avenue gateway is not walking distance from mass transit, consideration should be given for quality affordable multifamily development in this area of the city, as demonstrated by the Flats at Atlas on Bladensburg Road. Moreover, while there are already several hotels on New York Avenue, emphasis should be placed on attracting additional hotels to serve overflow from downtown and to enhance density on the corridor.
- » Incentives to encourage the development of the New York Avenue Gateway District should be structured and marketed to developers and specifically desired retail and commercial tenants, maker uses, and PDR activities that encourage job creation. These incentives might include tax abatements, tax increment financing, and other subsidies.
- » A New York Avenue Gateway District working group of project managers from the Office of the Deputy Mayor for Planning and Economic Development should convene to manage the process of structuring incentives, marketing the gateway project to developers, and to liaise with sister agencies to plan and implement a gateway beautification program.









GALLAUDET UNIVERS

MONTANA CIRCLE KEY  
NORTH/SOUTH CONNECTION

GATEWAY TO  
NEW YORK AVE NORTH







## PDR HUB

During the case study analysis, one key strategic idea emerged from several of the interviews and site visits:

**Create a catalytic PDR “hub”—a specific physical place that can anchor many of the recommendations described above—then work to ensure that this hub is both highly successful and visible, and use its success as a foundation for spreading PDR activities and advocacy throughout the surrounding area. Don’t try to take on too many parts of the study area or move too quickly—choose a strategic focal area and make sure to get it right.**

In the Chapter 3 case studies, several iconic developments—the Brooklyn and Philadelphia navy yards and districts like Bakery Square in Pittsburgh and 5M in San Francisco—do exactly that, providing both a physical center for PDR activities along with a broader narrative of their transformational power. In each case, the development has become the city’s symbol of industrial transformation and the basis for related projects.

**Meeting the Task Force’s vision and goals from Chapter 1 requires creating a similar catalytic hub in Ward 5.**

Ideally, this catalytic project would occupy a key site or sub-area that offers adequate physical space, visibility and connectivity to accommodate several of the recommendations outlined above. This site would offer adjacency to a variety of existing PDR businesses and anchor institutions, and also serve a diverse base of emerging industries as well.

Physically, an ideal site would encompass a mix of existing structures and open parcels—allowing it to offer both the low-cost, authentic space favored by emerging businesses and also market-rate flex space that can compete with regional PDR hubs outside the city. Somewhere in this site would be a singular building that can represent a “front door” for the PDR community and create a consolidated “address” for industrial advocacy groups or agencies. This catalytic project site will require a high level of intermodal connectivity, including vehicles, bikes and pedestrians. Lastly, this zone should be available for immediate development with parcels that can be developed quickly without a need for lengthy or complicated land assembly.





CONSOLIDATED DPW FLEET STORAGE, FUELING AND MAINTENANCE BEHIND DPW HEADQUARTERS BUILDING

NEW DPW HEADQUARTERS BUILDING WITH ACTIVE GROUND FLOOR USES

FRONT DOOR, GATEWAY TO NEW DISTRICT, SHOWCASE CENTER

PROPOSED CRUMMELL SCHOOL RENOVATION

RENOVATED EXISTING BUILDINGS FOR NEW PDR/ CREATIVE USES WITH ACTIVE GROUND FLOOR USES

ALLOW FOR NEW PDR BUILDINGS WITH NEEDED LOADING AREA

USE EXISTING BRIDGE AS A NEW PEDESTRIAN CONNECTION ACROSS NEW YORK AVE.





POSSIBLE DC WATER BUILDING OR PDR/MAKER BUILDING WITH ACTIVE GROUND FLOOR USE

POSSIBLE DEVELOPMENT AT THE CRUMMELL SCHOOL SITE WITH A VIEW EASEMENT TO ALLOW VIEWS OF THE CRUMMELL SCHOOL FROM NEW YORK AVENUE

POSSIBLE DEVELOPMENT INFILL ALONG NEW YORK AVENUE TO CREATE ACTIVE PEDESTRIAN ENVIRONMENT

"NEW YORK STRIP," SUB-AREA 6 FROM CHAPTER TWO RELOCATED TO RUN ALONG THE BUILDINGS TO CREATE A REGIONAL PEDESTRIAN/BICYCLE TRAIL

It is also important to note that many municipal users in Ward 5 have a similar need for a centralized hub—a site that allows them to build state-of-the-art office and maintenance facilities to address the rising demand for municipal services spurred by the District's recent growth.

Identifying potential catalytic hub sites in Ward 5 requires viewing the overall study area through the lens of the three broad site zones and 25 resulting sub-areas outlined in Chapter 2. Most sub-areas in the Red Line Zone are discontinuous and relatively small. Factoring in rising market-rate rents in the adjoining neighborhoods, no parcels in this zone fit the criteria for a PDR hub.

There are a few sites in the New York Avenue North Zone physically better suited to become PDR hubs, but these sites tend to be highly isolated from the rest of the District. For the immediate future, their lack of connectivity makes them less attractive to emerging businesses, which rely on accessibility and proximity to vital urban areas to thrive. This calculus points to the New York Avenue South Zone as the logical place to start a PDR hub—several sub-areas in this zone merit further attention.

It is always helpful to reduce the number of sites in question. Two of the New York Avenue sub-areas, the Arboretum and Montana Avenue Circle sites, are already committed to non-PDR users or are not really in play for industrial development. And while the Florida Avenue Market is growing into a food and maker hub, a number of landowners in the sub-area, including Gallaudet University and Edens/Sonny Oh, are embarking on major development projects that are only peripherally driven by advancing PDR businesses. It is important to recognize that this sub-area is not a good candidate for a PDR hub as outlined above.

This process of elimination points to two sites, New York and West Virginia Avenues, that offer the District a viable opportunity to grow PDR jobs while addressing its municipal needs. Following the criteria outlined above, these sub-areas offer adequate physical space, visibility and connectivity along with adjacency to a variety of existing PDR businesses and anchor institutions, including emerging industries.

Physically, these sites encompass a mix of existing structures and open parcels—allowing for both the low-cost, authentic space favored by emerging businesses and also market-rate flex space that can compete with regional PDR hubs outside the city. In the Ivy City sub-area, the Hecht's Warehouse Building is indeed a singular building that can represent a "front door" for the PDR community and create a consolidated "address" for industrial advocacy groups or agencies.

Given their adjacency to both New York Avenue and West Virginia Avenues, these sub-areas provide a wide range of intermodal connectivity, accommodating vehicles, bikes and pedestrians. And many parcels in this sub-area — particularly those owned by the District — are available for immediate development without land assembly.

## West Virginia Avenue

West Virginia Avenue is an important corridor in Ward 5. Flanked by two of the study area's key opportunity sites, it provides a direct, multi-modal link to downtown and connectivity to nearby Gallaudet University and H Street corridor beyond.

In the critical stretch of West Virginia Avenue where the proposed Ivy City PDR and West Virginia Avenue municipal hubs overlap, one can imagine a strategic intersection that anchors the city's PDR community, providing an "address" for a wide range of existing and emerging businesses. Comparable places play a pivotal role in PDR hubs in other cities, not only attracting and growing PDR ventures, but also providing a highly visible venue for city economic development forces to highlight and celebrate these initiatives.

A modified new intersection near West Virginia Avenue and 15th Street would offer a particularly good opportunity to create such a place. This conceptual rendering shows how the south side of West Virginia could be lined with municipal offices with street-level, small-scale production and retail—while the north side could provide PDR space in existing buildings and a highly public, new green manufacturing hub that can house emerging businesses focused on low impact development and stormwater retention. West Virginia Avenue would be recast as a "complete green street" with sustainable landscapes and enhanced pedestrian and bike access.







05



# IMPLEMENTATION

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## PRIORITY ACTIONS

Chapter 4 outlined a series of actions to address the full range of issues facing Ward 5. This implementation strategy summarizes those actions by major category and identifies lead and partner agencies and the time frame associated with each action. Going forward, the highest priority actions for the next two years include:

- » Improve existing and minimize future waste management activities;
- » Work with 1220 W Street, NE waste transfer station to install landscaping, sound barriers and other improvements that would improve the relationship with residential neighbors;
- » Enforce the settlement agreement to bring the Rodgers Brothers recycling waste transfer station into compliance;
- » Designate an Industrial Advocate/Creative Economy Sector Manager to begin marketing/branding, coordination, technical assistance and neighborhood relations;
- » Prepare the master facilities plan for co-locating Ward 5 municipal uses on the West Virginia Avenue site, creating state-of-the-art facilities and operations;
- » Launch a pilot Good Neighbor program;
- » Expand DCRA's Small Business Resource Center with additional programs to assist small businesses in securing building and occupancy permits more efficiently;
- » Study PDR zoning in greater depth and consider modifications to enhance PDR uses and explore allowing limited "make/live" districts;
- » Evaluate site opportunities for a "creative hub";
- » Organize an "Industrial Development Forum" to gather private sector resources and ideas for implementation;
- » Implement a buffer strategy to enhance transition areas;
- » Deploy District resources to improve the environmental performance of the industrial area; and
- » Create a grant competition for the establishment of community tool libraries.

## STUDY GOALS FROM THE TASK FORCE



01

Diversify Economy & Bolster Businesses



02

Grow New & Emerging Businesses



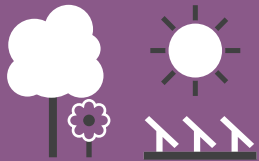
03

Promote Inclusive Job Growth



04

Address Nuisance Issues



05

Improve Environmental Stewardship & Performance



06

Optimize Municipal Functions



07

Provide Community Amenities



08

Create Great Places & Connectivity

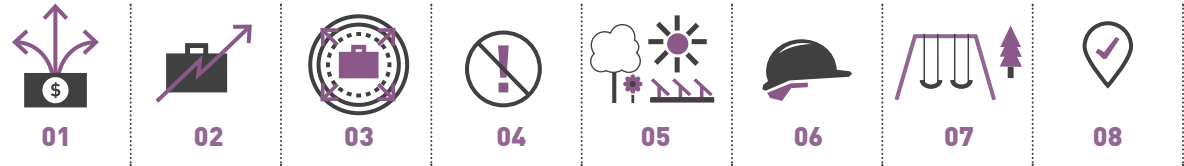
## ABBREVIATIONS

<b>CDBG</b>	Community Development Block Grant
<b>DCCAH</b>	District of Columbia Commission on Arts and Humanities
<b>DCOP</b>	District of Columbia Office of Planning
<b>DCPS</b>	District of Columbia Public Schools
<b>DCRA</b>	Department of Consumer and Regulatory Affairs
<b>DDOE</b>	District Department of the Environment
<b>DDOT</b>	District Department of Transportation
<b>DC Water</b>	District of Columbia Water and Sewer Authority
<b>DGS</b>	Department of General Services
<b>DHCD</b>	Department of Housing and Community Development
<b>DMPED</b>	Deputy Mayor for Planning and Economic Development
<b>DOES</b>	Department of Employment Services
<b>DPR</b>	Department of Parks and Recreation
<b>DPW</b>	Department of Public Works
<b>DSLBD</b>	Department of Small and Local Business Development
<b>MPTD</b>	District of Columbia Office of Motion Picture and Television Production
<b>OCFO</b>	District of Columbia Office of the Chief Financial Officer
<b>OSSE</b>	District of Columbia State Superintendent of Education
<b>SBRC</b>	DCRA's Small Business Resource Center
<b>WDCEP</b>	Washington, DC Economic Partnership
<b>WMATA</b>	Washington Metropolitan Area Transit Authority

# GOVERNANCE

Create efficient and effective organizations and/or initiatives to raise awareness of industrial issues and implement industrial land transformations.

## Study Goals Addressed by Governance:

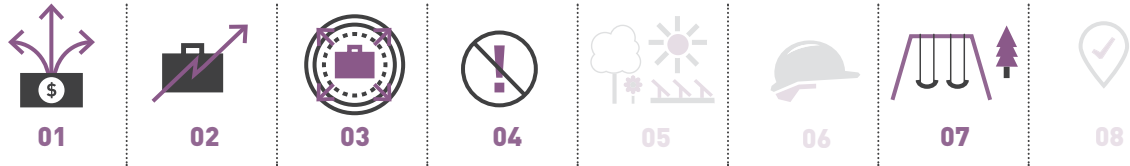


ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 1.1: Designate an industrial Advocate to promote industrial land and users and link businesses to District programs and other resources.	1-8	Near-Term	Mayor; DMPED	WDCEP; DSLBD, DCOP
Action 1.2: Partner with non-profits to support emerging industries including media, communications, food and arts/maker and businesses.	1, 2, 3	Mid-Term	DMPED	DSLBD; SBRC

# ZONING, LAND USE AND REGULATION

Preserve industrial land and uses while protecting and respecting residential neighbors and encouraging community amenities.

## Study Goals Addressed by Zoning, Land Use & Regulation:



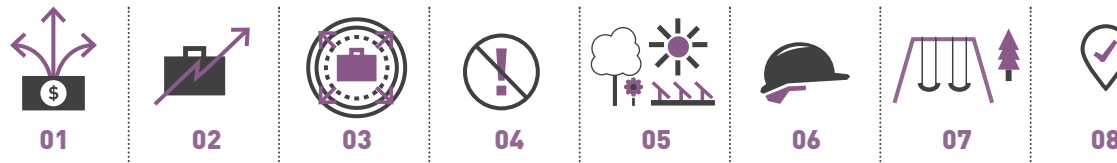
ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 2.1: Revise the zoning code to preserve industrial land by restricting eligible uses in industrial zones such as stand-alone self storage; educational institutions (other than vocational schools); and hotels (outside the New York Avenue PDR District). Refrain from rezoning industrial land.	1, 2, 3	Near-Term	DCOP	—
Action 2.2: Study existing PDR zones to preserve production and stimulate new maker spaces.	1, 2, 3	Near-Term	DCOP	—
Action 2.3: Create a New York Avenue PDR District that allows hotel, make/live, commercial uses and industrial development.	1, 2, 3	Near-Term	DCOP	—
Action 2.4: Create industrial buffer districts that limit PDR uses to fully contained uses with no outside storage or operation (e.g., auto repair garages only if fully enclosed). Use zoning provisions to improve the compatibility of industrial uses with adjoining residential uses by including buffering requirements, ensuring adequate on-site parking and incorporating performance standards. These buffer zones should be applied to areas where the friction between PDR and residential uses is highest.	4	Near-Term	DCOP	—
Action 2.5: Create a Make/Live districts to buffer industrial and residential uses close to transit and existing residential areas.	4	Mid-Term	DCOP	—
Action 2.6: Revise special events permitting process and increase staffing to expedite the process.	2, 7	Near-Term	DCRA	DCOP; Liquor Commission
Action 2.7: Review and revise zoning and building code regulations that inhibit food and other businesses from conducting periodic tastings and/or incorporating retail outlets into their buildings.	1, 2, 3	Near-Term	DCOP; DCRA	—



## ENVIRONMENTAL STEWARDSHIP AND PERFORMANCE

Improve environmental performance by capturing and treating stormwater on site; creating renewable energy opportunities and energy efficiency upgrades; and ameliorating air quality.

### Study Goals Addressed by Environmental Stewardship & Performance:



ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 3.1: Ward 5 should continue to be a focus of Air Quality Division's (AQD) proactive inspections and responses to complaints. AQD should also continue to take enforcement actions as allowed under regulation and appropriate to the situation. Collect data depicting the time of day and location of air quality complaints and use data strategically to deploy existing resources.	4,5	Near-Term	DDOE	—
Action 3.2: Consider prohibiting truck traffic in targeted residential neighborhoods to reduce air pollutants and enforce compliance with current truck routes. Additionally, improve buffering between industrial and residential areas.	4,5	Near-Term	DDOT	—
Action 3.3: Expand sidewalks in neighborhoods with minimal tree canopies to accommodate additional tree boxes and maintain existing boxes.	5,7,8	Near-Term	DDOT	—
Action 3.4: Expand neighborhood bicycling routes and bicycle parking facilities in areas such as Ivy City, Trinidad, Woodridge and Brookland.	5,7,8	Near-Term	DDOT, DCOP	—
Action 3.5: Install green roofs, pervious pavement and rain gardens on public and private properties to capture and treat stormwater on site. The District Department of General Services (DGS) and DDOE should collaborate to pursue opportunities to green District-owned fleet parking facilities. The District Department of the Environment (DDOE) should implement low impact development strategies by marketing existing grants, rebates and opportunities.	5	Mid-Term	DDOE, DGS	—
Action 3.6: Encourage the establishment of community gardens on vacant or blighted property through the use of land banks or similar agreements.	4,5,7,8	Near-Term	DCOP	—
Action 3.7: Increase the energy efficiency of industrial buildings and find opportunities to increase alternative sources of energy production (i.e., solar panels) to more actively market existing energy efficiency and renewable energy programs to industrial businesses and property owners.	5	Near-Term	DDOE, DCSEU	DGS

# WORKFORCE DEVELOPMENT

Prepare District residents for jobs in PDR and emerging industries.

## Study Goals Addressed by Workforce Development:

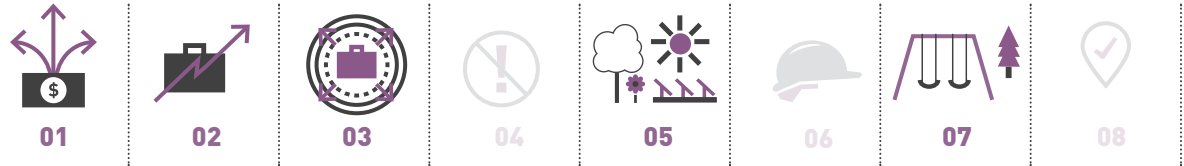


ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
<p>Action 4.1: Expand successful workforce development programs and create relationships between PDR businesses to promote career pathways for Ward 5 unemployed and underemployed residents.</p>	1,2,3	Near-Term	OSSE; DOES	—
<p>Action 4.2: Expand the use of the existing on-the-job training program by Ward 5 businesses. Identify additional businesses willing to employ long-term unemployed residents and provide on-the-job training in exchange for financial incentives.</p>	3	Near-Term	DOES	—
<p>Action 4.3: Develop a digital media vocational training institute in collaboration with industry partners, McKinley Technology High School and Duke Ellington School of the Arts. The institute could be located within a creative hub and combine classroom training with access to internships and other hands-on experiences.</p>	1, 2, 3	Mid-Term	DOES; DCPS; Industrial Advocate	—
<p>Action 4.4: Expand existing programs (including Booker T. Washington and Cardozo High Schools) to train District residents in the latest green construction skills, working through a workforce intermediary to link graduates to local jobs.</p>	3	Mid-Term	DOES	—

# ECONOMIC DEVELOPMENT

Enhance the District's and Ward 5's ability to compete for emerging industries.

## Study Goals Addressed by Economic Development:



ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 5.1: Engage Catholic University and Gallaudet University in programs to support and collaborate with emerging industries.	1, 2, 3	Continual	DMPED; DCOP	Emerging Industry Non-Profits
Action 5.2: Work with property owners to improve private properties through better and more aesthetically pleasing property fencing, landscaping, façade improvement and signage.	5	Near-Term	DHCD	—
Action 5.3: Create a new Creative and Industrial Economy sector manager position within the District government to lead industrial and creative business development and coordinate policy and day-to-day operations/actions with the industrial advocate.	1, 2, 3	Near-Term	DMPED	DCOP
Action 5.4: Focus on PDR industry development by incentivizing, attracting and retaining innovative PDR businesses.	1, 2, 3	Near-Term	DMPED	—
Action 5.5: Expand funding for grants for independent filmmakers, artists and other cultural activities.	1, 2, 3	Mid-Term	DCCAH	MPTD
Action 5.6: Recruit specialty sports and recreation businesses.	7	Near-Term	WDCEP, DMPED	—

## BUSINESS FINANCE AND ASSISTANCE

Help existing and new companies to access financing, flourish and expand.

### Study Goals Addressed by Business Finance & Assistance:



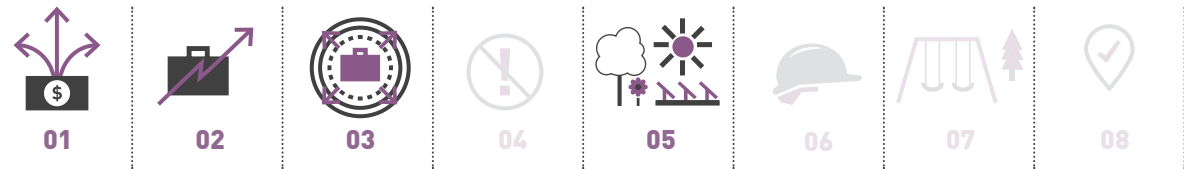
ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 6.1: Help developers and businesses pursue development funding from US Economic Development Administration grants, EB-5 visas, New Markets Tax Credits, historic tax credits and brownfield clean-up funding to support new industrial space. Support local businesses eligible for fixed-asset financing through Industrial Revenue Bonds and/or Small Business Administration loans.	1, 2, 3	Continual	DMPED; Industrial Advocate	DSLBD
Action 6.2: Continue to assist companies in accessing micro-loans, SBA financing, SBIR/STTR funding and other financing programs. Helplink "green" businesses to District Department of the Environment opportunity grants.	1, 2, 3	Continual	DSLBD; Industrial Advocate	Emerging Industry Non-Profits; DDOE
Action 6.3: Expand outreach to Ward 5 businesses to alert them to available assistance in accessing outside financing.	2	Near-Term	DSLBD	Emerging Industry Non-Profits; DDOE
Action 6.4: Work with qualified intermediaries to develop briefing materials on crowdfunding and EB-5 immigrant visa financing. Provide initial consultation with businesses considering these funding sources and then connect them with qualified intermediaries.	1, 2, 3	Near-Term	DSLBD	—
Action 6.5: Continue to promote its Industrial Revenue Bond (IRB) program to industrial users and provide targeted assistance to industrial businesses going through the IRB process.	2	Near-Term	DMPED	DSLBD
Action 6.6: Continue to streamline the building and occupancy permit processes to significantly reduce the time required. Market the availability of services to Ward 5 industrial businesses through the Small Business Resource Center.	2	Near-Term	DCRA	—
Action 6.7: Work with key area foundations on moving forward assistance programs and/or capital investments in local food production, artists and artisans, arts organizations, green businesses and others.	1, 2, 3	Mid-Term	DMPED	DCCAH
Action 6.8: Work with Manufacturing Extension Partnership (MEP) to alert Ward 5 businesses to the availability of one-to-one assistance in improving the efficiency of manufacturing processes and identifying streamlining approaches for cost savings. Prepare an outreach strategy and marketing materials.	2	Near-Term	MEP; DSLBD	Industrial Advocate; Emerging Industry Non-Profits



# MARKETING & BRANDING

Raise awareness and support for the District's industrial businesses.

## Study Goals Addressed by Marketing & Branding:

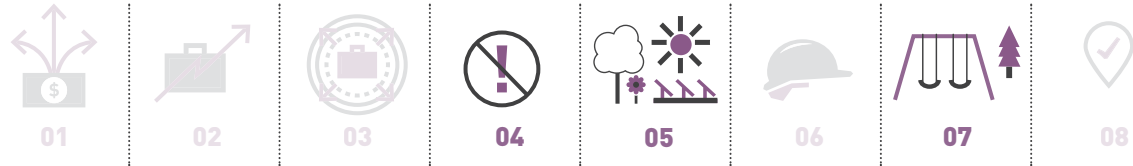


ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 7.1: Educate policy makers and residents as to the importance of revitalizing industrial uses and land in the District. Prepare educational materials. Partner with Think Local First.	1, 2, 3	Continual	Industrial Advocate	—
Action 7.2: Tap regional buying power to support local artisans and manufacturers. Partner with Think Local First and the Urban Manufacturing Alliance to implement a DC Made branding and education campaign.	1, 2, 3	Near-Term	WDCEP	Think Local First
Action 7.3: Invest in major streetscape improvements and additional public art along New York Avenue to reinforce its role as a major gateway to the District.	5	Mid-Term	DDOT	—
Action 7.4: Develop the Ward 5 Works brand to improve the Ward's image.	1, 2	Near-Term	Industrial Advocate	—
Action 7.5: Expand WDCEP's activities in Ward 5 to include tours. Create a more comprehensive database of available industrial properties and space.	1, 2, 3	Near-Term	WDCEP	—
Action 7.6: Prepare an outreach campaign to contact Ward 5 businesses and educate them as to assistance programs and other opportunities available to them.	2	Near-Term	DSLBD	Emerging Industry Non-Profits

# NUISANCE USES AND BUFFERING

Reduce frictions between industrial and residential uses to improve residents' quality of life and businesses' ability to operate efficiently.

## Study Goals Addressed by Nuisance Uses & Buffering:

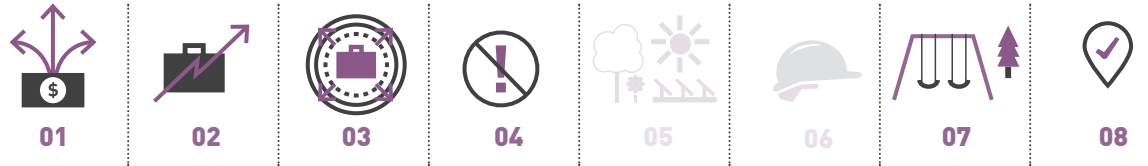


ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 8.1: Pursue regulatory and legislative interventions to improve existing and limit future private waste management activities.	4, 5	Near-Term	DPW	DDOE
Action 8.2: Work with 1220 W Street, NE trash transfer station property to implement landscaping, sound barrier installation and other upgrades that would improve the relationship with residential neighbors.	4, 5	Near-Term	DPW; DCOP	DCRA; Corporation Counsel
Action 8.3: Work with Rodgers Brothers Custodial Services, Inc., George Rodgers, Jr. and Innovative Recyclers to fully enclose the solid waste facility located at the 2200 and 2300 blocks of Lawrence Street, NE.	4, 5	Near-Term	DPW; DCOP	DCRA; Corporation Counsel
Action 8.4: Continue to enforce existing regulations and settlement agreements to their full extent to improve conditions at waste transfer stations.	4	Mid-Term	DCRA; Corporation Counsel	—
Action 8.5: Explore policy and legislative approaches that can optimize management of the District solid waste stream to implement Sustainable DC Plan goals related to waste and recycling. Such approaches would result in waste management practices that have a less negative impact on communities in Ward 5 adjacent to industrial areas.	4	Long-Term	DPW	—
Action 8.6: Implement landscape buffers at key locations to buffer residential neighborhoods from intrusive industrial uses.	4, 5	Near-Term	DCOP/Industrial Advocate	DHCD; DDOT
Action 8.7: Develop a zoning overlay that would allow make/live units as a transition from industrial to residential uses. Explore opportunities for using commercial uses to buffer industrial uses.	4, 5	Near-Term	DCOP	—
Action 8.8: Launch a pilot Good Neighbor Program for private as well as public property and uses. The Industrial Advocate should work with District agencies to improve private properties through better and more aesthetically pleasing property fencing, landscaping, façade improvement and signage. Apply similar upgrades to publicly managed properties. Use lessons learned and extend program to all Ward 5 industrial areas.	4, 5, 7	Near-Term	DMPED; DGS	DCOP

# INDUSTRIAL SPACE

Use existing and new industrial buildings to meet business needs for affordable space and support emerging industries.

## Study Goals Addressed by Industrial Space:

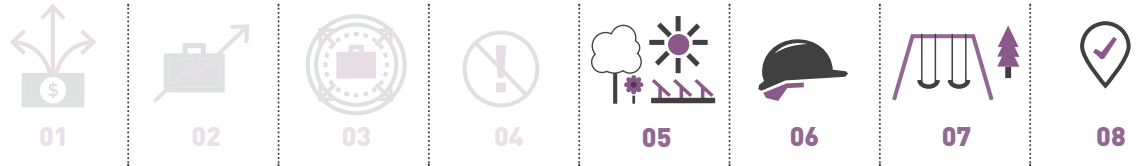


ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 9.1: Contact owners of key under-leased properties to encourage renovation of historic and other older buildings.	1, 2, 3	Near-Term	DMPED/Industrial Advocate	—
Action 9.2: Cooperate in development of a multi-tenant industrial building for small food producers.	1, 2, 3, 7, 8	Near-Term	DMPED/Industrial Advocate	DDOE, DCOP
Action 9.3: Support development of space for green and sustainable businesses.	1, 2, 3	Near-Term	DMPED/Industrial Advocate	DDOE, DCOP
Action 9.4: Encourage development of shared technology and infrastructure for small businesses and individual entrepreneurs. Collaborate with an experienced operator of maker spaces that provide shared access to technology and other equipment.	1, 2, 3, 8	Near-Term	DMPED/Industrial Advocate	—
Action 9.5: Encourage the rehabilitation of buildings for arts uses and makers.	1, 2, 3	Mid-Term	Industrial Advocate	—
Action 9.6: Allow limited make/live development in buffer districts.	2, 4, 8	Near-Term	DCOP	—
Action 9.7: Participate in development of a creative hub that combines shared facilities and equipment with offices and other space for a major cluster of digital media and related companies.	1, 2, 3, 8	Near-Term	DMPED	MPTD; Emerging Media Industry Non-Profit

## MUNICIPAL USES

Create world-class sustainable facilities for quasi-industrial municipal uses to meet the District's service needs and enhance the surrounding communities.

### Study Goals Addressed by Municipal Uses:



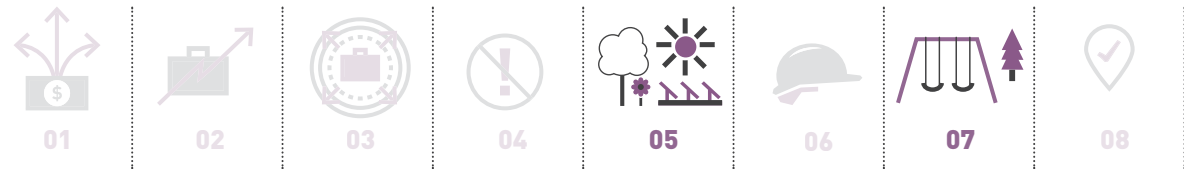
ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 10.1: Develop a long-term plan for municipal facilities by improving operational efficiency of municipal uses, such as truck and automobile maintenance and storage of snow plows.	6	Near-Term	DGS; DPW	—
Action 10.2: Develop the West Virginia Avenue DPW property as a world-class model of sustainable development for co-located municipal uses. The consolidated DPW headquarters could host and co-locate multiple DPW administrative functions within a single setting, including administrative offices, vehicle maintenance and servicing, a truck wash station, material storage, a high-pressure natural gas station, and employee and fleet parking. The facility should feature the highest standards and sustainable technology and design, incorporating best practice measures for energy and water conservation, stormwater management best practices and buffering.	5, 6, 7, 8	Near-Term	DPW; DGS	DC Water and DCFD
Action 10.3: Incorporate high-quality design and community amenities into municipal facilities to enhance the surrounding community.	5, 6, 7	Continual	DGS	—
Action 10.4: Seek creative approaches to fund needed municipal use facilities, including selling stormwater credits, swapping strategically located municipal land for funding of new sites or facilities in desired locations, and exploring partnership opportunities with developer funding of new facilities.	5, 6, 7, 8	Near-Term	DPW; DGS; DC Water	OCFO; DMPED



# INFRASTRUCTURE AND TRANSIT

Improve Ward 5 accessibility through transit and connectivity improvements.

## Study Goals Addressed by Infrastructure & Transit:

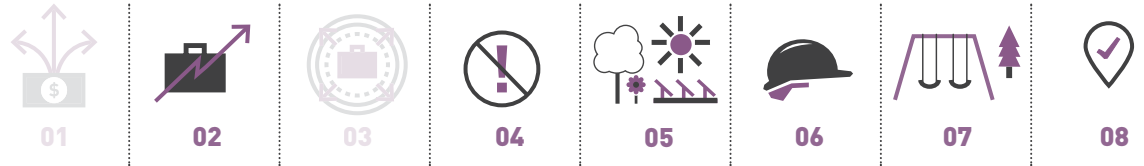


ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 11.1: Plan for and create new bicycle lanes and pedestrian connections from Ward 5 industrial locations to transit and local business districts. Design streets for multimodal uses.	5, 7	Mid-Term	DDOT	
Action 11.2: Develop the planned Rhode Island Avenue streetcar route. Study a streetcar spur from H Street along Bladensburg Road.	5, 7	Long-Term	DDOT	
Action 11.3: Explore the opportunity for a new MARC station commuter rail in the District.	5, 7	Long-Term	DDOT	
Action 11.4: Increase frequency and hours of bus service to Ward 5 industrial areas.	7	Near-Term	WMATA; DDOT	
Action 11.5: Install additional streetlights to improve public safety for pedestrians, businesses and residents.	7	Near-Term	DDOT	

# COMMUNITY AMENITIES

Improve environmental conditions in industrial areas and enhance Ward 5 residents' quality of life through provision of new community amenities.

## Study Goals Addressed by Community Amenities:



ACTION	STUDY GOALS ADDRESSED	TIMELINE	LEAD AGENCY	PARTNER AGENCY
Action 12.1: Enhance the quality of life for Ward 5 residents and business through investments in new community amenities. Plan for and create new open spaces.	5, 7	Mid-Term	DCOP; DPR	DPW; DGS
Action 12.2: Encourage existing and new wholesalers, artisans, food producers and other businesses to include ancillary retail.	2, 7	Near-Term	Emerging Industry Non-Profits; DCOP	—
Action 12.3: Improve and activate Loomis Park. Create opportunities for the local community and artists to participate in the process.	5, 7	Mid-Term	DPR	DCCA
Action 12.4: Work with Casey Trees and the District Department of Environment and other District agencies to support best practices in green infrastructure throughout the public realm and on private property. These existing programs can partner with businesses and community to expand the tree canopy. Education and outreach to property owners and area residents should address maintenance needs and responsibilities.	4,5,6,7,8	Near-Term	DDOE	DDOT; DGS; Casey Trees
Action 12.5: Create a grant competition for the establishment of two Community Tool Libraries that could serve and activate buffer areas. Partner with a local group or non-profit where need is highest and where there are sustainable opportunities for partnerships. One library could be located in Ivy City where self-help housing investments by non-profits such as Habitat for Humanity create a need for tools. A second library could be created in Brookland where there is an existing cluster of arts uses.	7	Near-Term	DHCD	—



06



# ACKNOWLEDGMENTS

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**Tom Murphy, Senior Fellow**

Urban Land Institute and former Mayor of Pittsburgh

**Don Smith, Director**

Regional Industrial Development Corporation

**Rob Stephany, Program Officer**

The Heinz Endowments, Community and Economic Development

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## BAY AREA CASE STUDY DISCUSSIONS

**Michael Cohen, Principal, Strada – Former San Francisco Director of Economic Development**

San Francisco Office of Economic and Workforce Development

**Alexa Arena, Senior Vice President – 5M project in San Francisco**

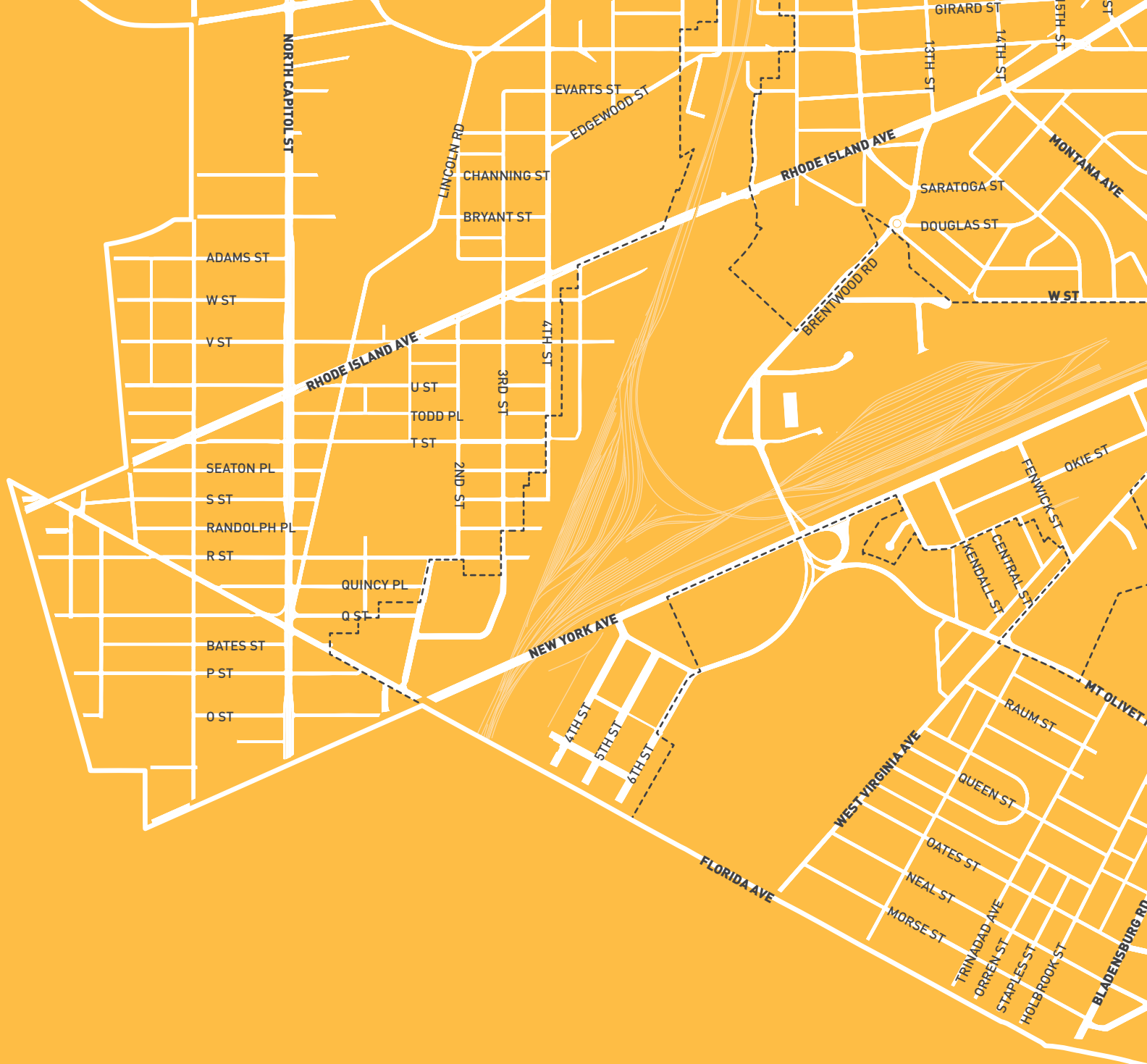
Forest City

**Michael Goldin, Owner**

Swerve Industries

**Terezia Nemeth, Former Vice President for Asset Services and Development**

Alexandria Real Estate Equities Inc.



NORTH CAPITOL ST

ADAMS ST

W ST

V ST

SEATON PL

S ST

RANDOLPH PL

R ST

BATES ST

P ST

O ST

RHODE ISLAND AVE

LINCOLN RD

CHANNING ST

BRYANT ST

U ST

TODD PL

T ST

2ND ST

3RD ST

15TH ST

QUINCY PL

Q ST

NEW YORK AVE

4TH ST

5TH ST

6TH ST

FLORIDA AVE

WEST VIRGINIA AVE

QUEEN ST

OATES ST

NEAL ST

MORSE ST

TRINIDAD AVE

ORREN ST

STAPLES ST

HOLBROOK ST

BLADENSBURG RD

MT OLIVET

RAUM ST

KENDALL ST

CENTRAL ST

FENWICK ST

OKIE ST

RHODE ISLAND AVE

SARATOGA ST

DOUGLAS ST

W ST

MONTANA AVE

EVARTS ST

EDGEWOOD ST

13TH ST

15TH ST

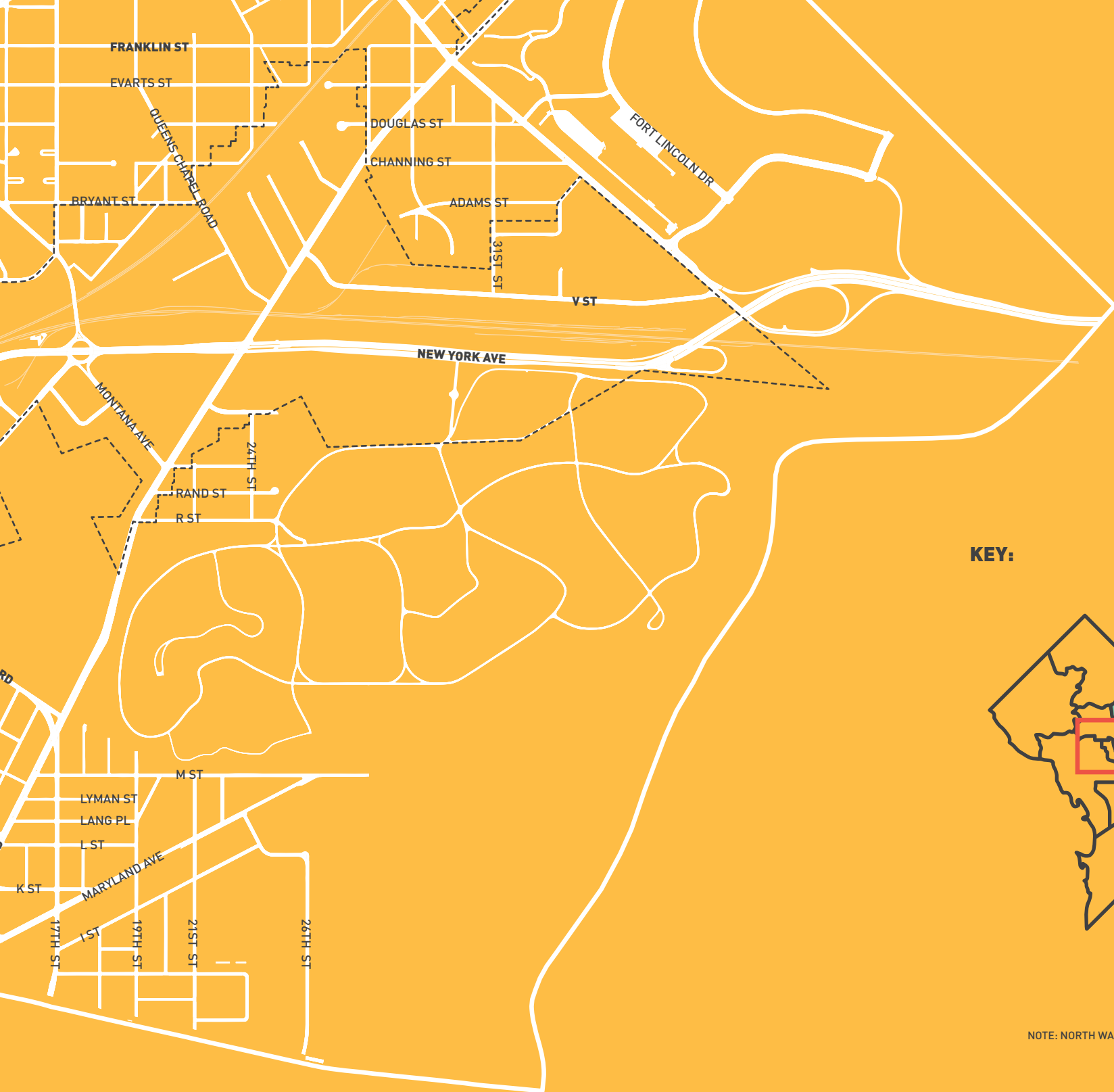
15TH ST

15TH ST

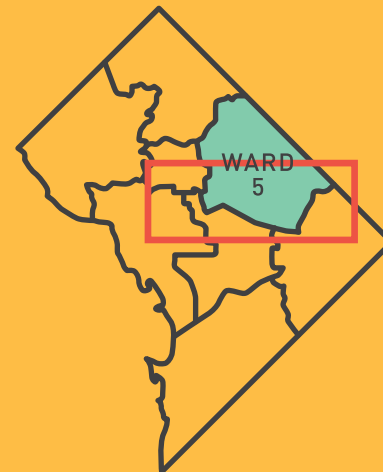
15TH ST

15TH ST





**KEY:**



NOTE: NORTH WARD 5 CAN BE FOUND ON THE FRONT INSIDE COVER

