

Urban Industry Initiative

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White Paper

Industrial Land Use

Preservation for the future

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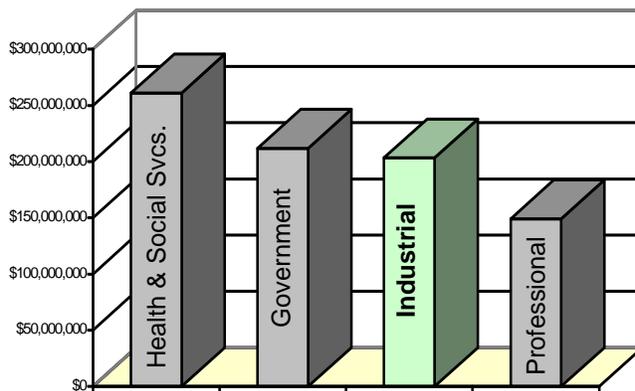
I. Introduction

At the heart of any discussion concerning industrial land in Philadelphia is the problem of attraction verses inventory. For example, we cannot seriously approach manufacturing firms about establishing a facility in Philadelphia because we have little or no land to offer them, or worse – no idea *what land* is available. We cannot make a solid argument for preserving a parcel of industrial land if we cannot produce a likely industrial purpose (a buyer). So what comes first, the land or the buyer, *the chicken or the egg*? We recommend three suggestions as a place to start:

- First, a commitment must be made to the notion that our industrial land is valuable. It's valuable to our neighborhoods because it provides good paying jobs and it's valuable to our City because it provides a valuable source of tax revenue, along with the promise that every \$1.00 in manufactured goods generates an extra \$1.43 worth of additional economic activity - more than any other economic sector (according to the US Dept. of Labor).
- Second, whether we are talking about industrial, commercial, retail or residential land use, there must be an overriding plan that makes sense today *and* tomorrow. The freewheeling use of variances is hurting the future of this City, resulting in a patchwork of incompatible land uses.
- Third, establish a balanced and well thought out policy for land utilization which encompasses at least the next 20 years, and then devote the resources necessary to populate that land with the desired kind of uses.

In Philadelphia, available land is constantly sought to supply development initiatives: the City's residential market is growing, spurring additional commercial development, and opportunities in hospitality and education create a need for changes to infrastructure. Residential and commercial developers, concerned about noise and sound pollution, are calling for the relocation of industrial companies and seek to rezone large tracks of industrial land.

Contribution to City Wage Tax, by Sector
(Source: City Of Philadelphia Dept. of Revenue. Period: Calendar 2006)



Because of these pressures, coupled with the lack of an overall land use strategy, industrial land is threatened by variances acre by acre. Available industrial land, whether cleared for use, cluttered or contaminated, is targeted for conversion to non-industrial uses. Annually, industrial acres are lost, and industrial sites continue to be converted for use by other types of business: only 65% of industrial land is currently being used by industry.

This land is vital to Philadelphia's future. The industrial sector is the third largest contributor to City revenue with contributions of over \$200 million in city wage tax every year. The average annual salary for manufacturing is over \$43,000 a year, which is a living wage. The majority of companies do not require a college degree when hiring and are willing to train employees. This gives added emphasis to each acre of industrial land. If utilized

properly, it will be what provides the economic fuel for our City's neighborhoods.

Definitions:

Philadelphia Zoning Code defines **industrial** as these sectors: utilities (gas, electric, water treatment, refineries), construction, manufacturing, wholesale, information (i.e. telecommunication, cell phone, and radio towers), transportation/ warehousing, waste management/remediation (including recycling, junkyards), agriculture, and potentially other industry (hazmat businesses, noise or EMF emissions, uses incompatible with residential/office).

It's important to note that this definition refers more to how the land is used, rather than to the economic sector responsible for the activity. For example, the placement of radio towers require the land to be zoned



industrial, but radio station personnel are not considered part of the industrial sector and are therefore not included in an economic analysis of the industrial sector in Philadelphia.

Zoning Codes in Philadelphia

Limited Industrial (L-1 through L-5) exists primarily in older sections of the City where industrial uses are located in residential neighborhoods. Those uses which cause a minimum of noise, smoke, odors or other similar disturbances are allowed. The distinction between classes depends on level of development permitted. L-1 requires front and side yards, L-5 plots can be wholly used for by a building. Examples: bottling plants, research laboratories, warehouses, printers and clothing manufacturers.

General Industrial (G-1 and G-2) permits a broader range of industrial activities, including those with considerable emissions of smoke and odor. G-2 zoning, the City's most common industrial zoning, is a more broad scope, including firearms manufacturing and cement making. Additional examples: auto repair shops, dry cleaning establishments, manufacturing of fabricated metal products and textile mills.

Least Restricted (L-R) allows any legal industrial use. Examples: blast furnaces, slaughterhouses, manufacturing of industrial chemicals and trash transfer stations.

Port Industrial (PI) is zoning for docks, piers, storage sheds and similar facilities for water borne cargo.

Food Distribution Center (FDC) for food distribution uses.



II. Problem Development, Historical Overviews

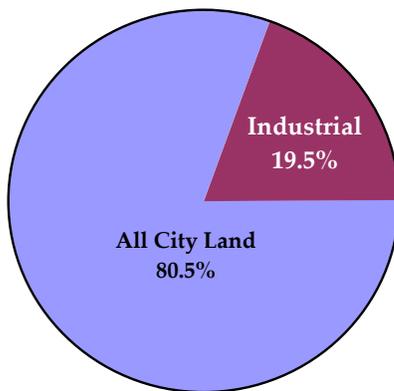
It might be helpful to look at what we don't have in terms of an industrial land strategy, the "cause," and how this "affects" economic development, if we are to understand what we need to do.

Cause	Effects
<p><i>Philadelphia is without an industrial land use policy.</i></p> <p><i>Industrial land is not protected from rezoning.</i></p> <p><i>There is no inventory of available industrial land.</i></p>	<ul style="list-style-type: none"> • Based upon recent history it is reasonable to assume that there will be considerable market pressure to convert industrially zoned land to residential/commercial. Without a more holistic land use plan, Philadelphia is in very real danger of losing much of its industrial land and with it, its industrial capacity and potential. • Industrial companies are being forced to move out of the City to accommodate their expansion needs. • Existing industrial companies become "hemmed in" by residential properties, leading to conflicts and isolation. • Active marketing of industrial land will not be possible as long as inventory remains unstable or unavailable.

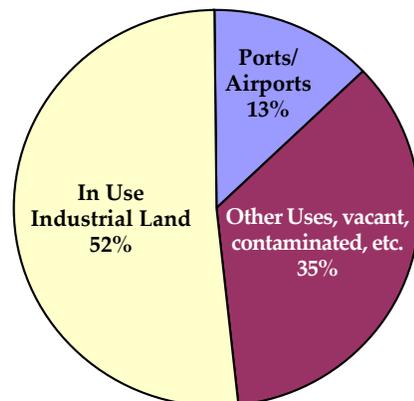
Most industrial companies in Philadelphia are small, particularly in the manufacturing sector. 60% of this City's 1300 manufacturers have 20 employees or fewer. We have been losing these small companies at an alarming rate. Between 1970 and 2005, Philadelphia has lost approximately 200,000 manufacturing jobs and not all of these have been lost due to manufacturing's general economic decline. Many have been lost because companies have moved to where they could expand or to where they were not crowded by residential construction.

Below are basic figures on industrial land in Philadelphia:

Portion of the City Land Zoned Industrial



Use of Industrial Land



- Of 92,414 total acres of Philadelphia, 18,046, or 19.5% of City land, are currently zoned for industrial use. In 1990, 18,446 acres (21% of City land) were zoned for industrial use.
- Historically, 65% of all industrial land is used for industrial purposes, a percentage which includes 2,297 acres committed to Philadelphia's ports, Philadelphia County's portion of Philadelphia International Airport and the entire Philadelphia Northeast Airport. The remaining 35% is either used for other purposes or is available, vacant and/or contaminated.
- Excluding ports and airports, approximately 9,433 acres (10% of Philadelphia) are being used specifically for industrial purposes.



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- When one considers that only 52% of the City's industrial land is actually in use, then the percent of total land relegated to industrial becomes 10% rather than the 19.5% actually zoned industrial.

These numbers can be put into perspective by looking at a comparison of the Northeast and Upper Midwest industrial sectors; the following provides a scope of percentages of industrial land (total City acreage):

- The national average for large cities in the United States is approximately 12%;
- Cleveland (31.6%) and Baltimore (27%) are cities with higher percentages;
- Washington D.C. (5.06%) and Indianapolis (4.4%) represent the lower end of the spectrum;
- New York City, the nearest large city, is close to the average, at 14.5%.

To support the industrial sector, the City of Philadelphia needs to make industrial land preservation a primary focus in future economic planning.

The Urban Industry Initiative realizes the need for a concrete industrial land planning strategy, and argues that without integrating industrial land preservation into present and future economic planning; the City of Philadelphia will squander an opportunity to stabilize one of the City's highest revenue-generating sectors.

Lost To Philadelphia's Economy

The 200,000 manufacturing jobs Philadelphia has lost since 1970 has cost the City an estimated 2 billion dollars in tax revenue alone. Every month, we lose companies ranging in size from 10 to 200 employees, simply because they cannot find the additional land they need to grow or expand. Every parcel of unoccupied industrial land is costing this city both money and opportunity lost for its citizens. All that is required to stop this bleeding is a determined policy to protect our industrial land and a plan to re-populate it with the living wage jobs manufacturing represents.



III. Other Cities Solutions

A. Commonality Between Philadelphia's Issues and Other Large Cities

Since the turn of the 20th century, the Mid-Atlantic and Upper Midwest have faced a litany of challenges, depleting what was once the nation's industrial core. Companies relocating to suburban and southern locations have created a migration away from urban centers, stripping them of both jobs and revenue. Industry throughout these regions has also faced challenges from within the cities themselves; a growing demand for professional and knowledge based services and residential market growth, absorbing waterfront land that once bustled with industrial activity. Residents argue that industry hinders standards of living, and local government has lost its focus on the revenue and job creation potential of industrial taxpayers. In general, many Mid-Atlantic and Upper Midwest cities have moved away from traditional industrial use.

But urban industry still survives. Each challenge to Philadelphia's industrial sector is also a challenge that can be found elsewhere. In this commonality with other cities is the opportunity for Philadelphia to identify and capitalize on the strategies others have used with success.

*Reference information and detailed summaries of each city's land use efforts can be found in: *Appendix: Industrial Land Use Summaries by City* (on page 21)

	Loss of Industrial Land	Lack of Available Industrial Land	Loss of Waterfront Land	Little Government Recognition	Migrating/Shrinking Workforce	Competition with Suburbs	Global Competition
Philadelphia	√	√	√	√	√	√	√
Newark	√	√			√	√	
New York City	√	√				√	√
Baltimore	√	√	√		√	√	√
Boston		√			√	√	
Pittsburgh	√	√	√	√	√	√	√
Cleveland		√	√	√	√	√	√
Indianapolis					√		
Chicago	√	√		√		√	√
Minneapolis	√	√	√				√

The above chart displays the issues Philadelphia's industrial sector shares with other cities. These common issues were identified by each city as current; however, several have enacted strategies to address the problems. With the majority of the strategies being relatively new, it is difficult to provide extensive data on results. But progress can be seen with policy created; below, issues are highlighted with examples from other cities.

1. Loss of Industrial Land/Lack of Available Land: Detailed in the previous chapter, Philadelphia's industrial land has been subject to rezoning over the past 50 years. Real estate market demand has pushed for significant rezoning of industrial land; traditional industrial areas have been replaced with commercial corridors and residential development. Viable land for new industrial development is scarce, with rehabilitation seemingly more profitable if geared towards non-industrial uses. Without protection, this sector will lose opportunities to grow existing companies and attract new business, as the City loses its potential to generate revenue and provide obtainable jobs for Philadelphia's neighborhoods.

Chicago (on page 25) guarantees specific, traditionally-industrial areas of the city are preserved over time through Industrial Corridors and Planned Manufacturing Districts. The city identified the most viable areas and protected each with corridor-status: development within each corridor is restricted to industrial (or industrial-aligned) purposes only. Furthermore, areas have been designated for manufacturing specifically, providing additional protection from rezoning and non-conforming development.

New York City (on page 21) enacted a similar strategy to Chicago's, creating restrictive Industrial Business Zones. These zones preserve industrial cores, and concentrate on creating new development within. This effectively "organizes" New York City's industrial sector, combining like uses and providing "strength in numbers." The rezoning and new restrictions in both New York City and Chicago make it difficult – and prohibitive – for rezoning to pick apart these areas, guaranteeing a place for industrial development for the future.

2. Loss of Waterfront Land: Specifically, Philadelphia faces pressure to rezone along the Delaware River waterfront. This is harmful to industry, as viable shipping and distribution areas are replaced with residential development. Delaware River dredging is a reality, but there has been no effort to protect sufficient land to house the project and the additional jobs that will be created from it. Once dredged, the Delaware River will become more attractive to foreign business, providing possibilities to international markets. The deepened river will be a strong marketing tool, but without guaranteed land along the waterfront new industry will be unable to relocate.

Both **Minneapolis** (on page 26) and **Baltimore** (on page 22) share Philadelphia's problem: residential development has pushed traditional industry off the water. Realizing that these new communities will need jobs to sustain them, Minneapolis fought for compromise along the waterfront, preserving the northern and southern ends of the Mississippi River with the assistance of City Council. City Council adopted specific criteria for rezoning, and also strengthened industrial zoning boundaries along the northern and southern ends of the river. In return, economic development agencies will stand back on central river rezoning and development. This will keep industry and residential development somewhat separate, while providing jobs for those moving to the new communities.

Industrial activity on the Baltimore Harbor, a booming residential and commercial district, has been recognized as vital to the city's economy. Another form of compromise, the inner-harbor was "released" in exchange for zoning restrictions along deep water access. The City of Baltimore created the Maritime Industrial Zone Overlay District, protecting industrial land along deep water access, and also enforces Change-of-Use Guidelines - regulations for rezoning requests, protecting additional Harbor land.

3. Little Recognition by Government: The City of Philadelphia has, for the most part, ignored industrial sector preservation and growth opportunities. The City lacks a land use policy for the sector, and often allows non-industrial development to occur on industrial land. Businesses leave for lower taxes and more municipal recognition. If catered to, the sector would be more inclined to respond to City requests and cooperate with development initiatives. Also, retention efforts could be strengthened, preventing additional business from leaving the City.

New York City has recognized the importance of its industrial sector by giving it a place in the Mayor's administration. Mayor Bloomberg has formed the Industrial and Manufacturing Business Council and opened the Office of Industrial and Manufacturing Businesses, an initiative responsible for overseeing policies, implementing programs and coordinating communication between government and business. Both enhance the sector's visibility in economic development, and provide immediate access to the Mayor.

4. Outwardly Migrating Workforce/ Competition with Suburbs:

Baltimore adopted several land acquisition and rehabilitation policies in an effort to create new, marketable sites to compete with suburban development. These policies capitalized on grants and loans by the Environmental Protection Agency; each project will target underutilized areas near industrial-friendly infrastructure. With a "most for the money" mentality, the Baltimore Development Corporation uses minimal resources and a strict surveying process for efficiency. Combined with Change-of-Use Guidelines to prohibit possible attractive locations from being rezoned, these new sites are being marketed as prime location, with better access to highways, the Baltimore Harbor, affordable housing and a ready workforce. This strategy is relatively new; however several sites have been purchased and are in the process of rehabilitation.



5. Global Competition: Common across the nation, businesses are constantly competing with foreign competitors.

Unfortunately, no *one* strategy has been able to "outrun" foreign production. **Minneapolis** is currently employing a marketing campaign to European businesses, and while relatively new (early 2007) the city is close to securing an unnamed Swedish company. Sustainability efforts in **Cleveland** (*on page 24*) have concentrated on updating traditional manufacturers for the future, making each more eco-friendly and more viable for the future. The Department of Labor, recognizing the problems caused by global competitors, stresses the opportunities in advanced manufacturing, utilizing intelligent systems and implementing process improvement techniques.

B. Key Components to Other Cities' Land Use Strategies

The UII has reviewed the solutions implemented and proven successful in other large Mid-Atlantic and Upper Midwestern cities. Recognizing that the issues our city faces are similar – if not identical – to those of cities such as New York, Chicago, Baltimore and Cleveland, the UII has analyzed these cities' approaches to establishing a balanced industrial land use policy. From this research, we were provided with several policy solutions - innovative, dynamic and even practical in approach - that are applicable to the present situation facing Philadelphia.

Different measures have been taken by each city. New York City and Chicago, for example, have employed industrial districts as their primary tool for industrial business preservation. Cleveland has focused on land rehabilitation through Federal and State funds (a land bank initiative), cleaning brownfields and promoting eco-friendly manufacturing technology. Baltimore and Minneapolis have targeted marketable sites and protected them from residential use, and Boston has undergone major rezoning and provides development funds through its Back Streets Program.

While each city may have unique components, like Newark's rezoning program or New York's tax credit incentive, all cities with a comprehensive industrial land use policy share common policy elements. Below are some of the more important elements, a "must do" list for Philadelphia, if it is to achieve a workable policy.

*Reference information and detailed summaries of each city's land use efforts can be found in: **Appendix: Industrial Land Use Summaries** by City (p.21)

MULTI-DEPARTMENT COOPERATION

There is no mistaking the fact that those cities with the most comprehensive and successful plan were those best able to foster wide cooperation among all interested parties. This ranges from New York who involved almost everybody in the process to Pittsburgh who could get almost no one to cooperate, thereby wasting resources. Pittsburgh still has no workable industrial land use policy.

New York City: The Bloomberg administration called a multitude of City departments to come together and create a feasible industrial land use strategy for both present day economic efficiency and future planning purposes. The Mayor and Deputy Mayor for Economic Development and Rebuilding, Daniel Doctoroff, created the Task Force, comprised of members of the Department of City Planning, the New York City Economic Development Corporation and the Department of Small Business Services. The Parthenon Group LLC (market research company) also provided assistance. Additionally, the following were represented in the Task Force: The Department of Transportation, the Department of Finance, the Department of Citywide Administrative Services, the Department of Environmental Protection, the Department of Buildings, the Department of Sanitation, the Department of Information Technology and Telecommunications, and the New York City Police and the Fire Departments.

Cleveland: Cleveland's Citywide 2020 Plan, "Connecting Cleveland," brought government, business and neighborhood leaders together to combine efforts and provide direction for the City's future. The effort was collaboration between City departments and neighborhood forums. In addition, the project was well supported with funding provided by The Cleveland Foundation and The George Gund Foundation (for research).



Newark (on page 20): The Master Plan was encouraged by Newark Mayor James Sharpe in response to requests for accurate zoning. The plan was created by: The Department of Economic and Housing Development and Phillips Preiss Shapiro Associates, Inc., Planning and Real Estate Consultants in association with Schoor DePalma Engineers and Design Professionals. Before adoption, it was reviewed extensively by: the City of Newark, Municipal Council, Department of Administration, Central Planning Board, Department of Economic and Housing Development and the Office of Boards.

Indianapolis (on page 23): Every decade City officials and department heads, along with participation from business and community leaders, meet to discuss the City's economic and neighborhood development strategy. Cooperation is written into the City Charter, and provides "an easy process, a great think tank for meeting City needs."

Pittsburgh (on page 22): Organizations and departments within the City refuse to cooperate, each proposing and funding different studies and strategies. Over the past decade, a comprehensive industrial strategy has yet to reach Pittsburgh City Hall. The last four studies have cost parties over \$1million in research and development, without a policy adopted. City agencies continue to engage in turf wars.

INDUSTRIAL LAND PRESERVATION

Newark: Its Master Plan is in response to market and socioeconomic forces that have developed over the past ten years. While several historically-dominant industrial areas have been stagnant or deteriorating over the past 50 years, others, like the airport corridor and Port Newark, have seen substantial growth. The land use component establishes the need for industrial land, and states a commitment to refrain from rezoning industrial land: "it would be a mistake for Newark to enact zoning regulations which curtailed the development of heavy industry in these areas or to enact regulations which might interfere with or undermine the viability of this highly valuable sector of its economy." To reduce non-conforming land (land use not consistent with its designated zoning) the Master Plan calls for rezoning efforts to provide sufficient available land in sustained and/or growing areas (for example, additional land surrounding Newark Airport rezoned to conform with industrial use) while accurately rezoning deteriorating land for additional uses (light manufacturing and commercial). Accurate rezoning and coordinated land use will increase each sector's vitality and sustainability, as available land can be categorized and targeted infrastructure can be pursued for specific regions. Alterations to the current zoning code will allow for more heavy industrial use along Port Newark.

Minneapolis: Policy recommendations were presented as three different Options, each varying in degree of assistance to the industrial community (financial assistance for training and marketing, zoning protection, and land development). The City reviewed these three options, combined components and created a fourth (labeled Option #2.5). The Option was adopted to secure zoning protection for industrial land by creating boundaries for industrial areas and preserving sites along the Mississippi River for industrial use. Currently, the City is in the process of calculating industrial needs for present and future use, and intends to present zoning recommendations within the next few months. These zoning recommendations will protect industrial land along the Mississippi waterfront in response to a growing housing market.

Baltimore: The City has seen a strong push to rezone its industrial land for office, residential and hotel use (primarily along Baltimore Harbor), and realizes that in order to remain competitive within Maryland's manufacturing sector, it must secure industrial sites for expansion and marketing. Industrial sites are now being protected through Change-of-Use Guidelines - the City's rezoning rules outlining regulations for rezoning efforts. These guidelines are intended to protect industrial land from flash-market trends. Specifically, they preserve sites along the Baltimore Harbor (near deep water access - the most practical area for shipping). In addition, the City created the Maritime Industrial Zone Overlay District, guaranteeing protection along the Harbor's historically-popular industrial areas (another measure to protect deep water access from hotel and office use).

Similarities to Philadelphia: Port and Riverfront Issues

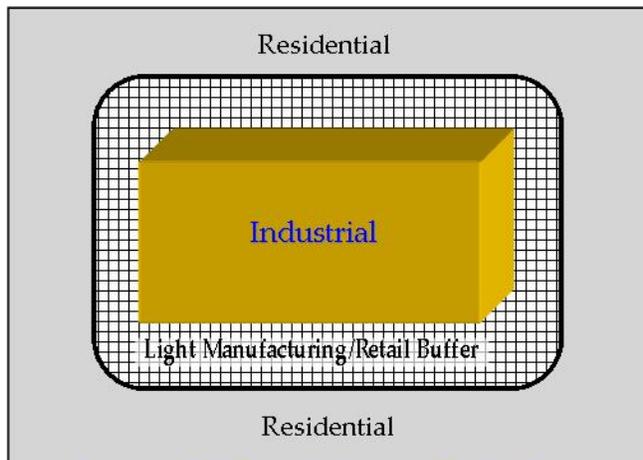
In spite of enormous residential and commercial demands, both Baltimore and Minneapolis are examples of cities that made hard decisions about what was best for their future. In the end, both decided to protect a portion of their most valuable real estate for industrial development. Like Philadelphia, these cities recognize that not all of their citizens will be or *should* be white collar workers. As a result, their planning teams allocated zoning that took advantage of natural buffer zones and preserved a balance of land types likely to generate the greatest economic benefit to both the City and its residents.



Chicago: The City of Chicago has created a system of Industrial Corridors, each placing attempts to rezone in the hands of the Planning Commission (as opposed to rezoning through City Council ordinances and variances). In addition to preservation, these corridors promote industrial business by providing financial incentives (subject to eligibility) through State and County funding. Industrial Corridors house Planned Manufacturing Districts (PMDs); PMDs, which consist of land clusters for manufacturing, range from four to five thousand acres and restrict rezoning for non-conforming uses (all planned development is to be consistent with the intended use for the area). The PMDs have no expiration date, keeping preserved manufacturing sites intact for the future. In addition to these steps specifically for the industrial sector, the City has recently reformed its zoning code, realigning zoning designations with actual and practical uses for each area (a component to zoning reform was the redrawing of each Industrial Corridor's boundaries).

PROTECTION FROM OTHER LAND USE INFRINGEMENT

New York City: New York City's approach to protecting industrial businesses recognizes the potential for harm to industry by other land use types and addresses it from several angles. NYC's strategy is centered on the creation of Industrial Business Zones (IBZs), protected industrial districts guaranteed not to rezone for other land use types. In addition to zoning protection, these 18 IBZs guard the industrial and manufacturing community with marketing campaigns focused to discourage illegal conversion, the formation of an illegal conversion hotline to assist the enforcement of the Environmental Control Board (ECB), a Commercial Fleet Parking Violations Pilot Program, relocation of NYC Business Solution Centers (BSC) to IBZs and the Dumpster Shed Program.



Chicago C-3 Zoning Hybrid—Buffer Zone

Furthermore, NYC ensured cooperation between IBZs and bordering neighborhoods by working with IBZ developers and community leaders to establish boundaries for each community to adhere to. Before the IBZs were created, the City was surveyed to ensure that neighboring communities would not infringe on the IBZs right to conduct business. IBZ developers in return took steps to incorporate aspects of the community into the IBZ itself. As a further measure of protection, two initiatives were recently launched to handle concerns of the industrial community: The Office of Industrial and Manufacturing Businesses, a initiative responsible for overseeing policies, implementing programs and coordinating communication between government and business and The Industrial and Manufacturing Business Council, which is a public/private part-

nership appointed by the Mayor to advise the administration on industrial policy.

Chicago: Industrial Corridors and Planned Manufacturing Districts (PMDs) protect the industrial community by grouping together companies of similar industry, as the City attempts to enhance buffers from residential neighborhoods through infrastructure improvements and zoning (the hybrid C-3 zoning (light manufacturing and retail), for example, is employed as a dividing line between manufacturing businesses and residential areas). Additionally, PMDs, such as the Pilsen PMD, have co-existed with residential neighborhoods by employing a majority of the residents and establishing strong neighborhood links. For example, Pilsen residents found that over 60% of those living in the neighborhood worked in the Pilsen PMD. Also, in an effort to protect themselves, business owners and employees in several PMDs have worked together to form a strong political voice, and by becoming in-

Protected Industrial Districts: An Idea That Makes Sense

The first urban industrial park in the Commonwealth of Pennsylvania, the Port Richmond Industrial Development Enterprise (PRIDE) was created by the Urban Industry Initiative in 2000. It made sense to take a group of industrial companies located within a common geography and formally unify them for a common purpose – improving the area (cleanliness, security, infrastructure, etc). In addition, PRIDE manufacturers employ area residents and both work towards common goals. The component missing from these industrial districts here in Philadelphia is the force of legislation, added to districts in other cities like Chicago and New York, where districts are protected from rezoning efforts.



volved have the ability to lobby attention to their issues.

Newark: Newark's economic development and land use plan is divided into goals. Goal #3 of the Master Plan prevents harmful and conflicting land uses from being permitted in inappropriate locations by ending cumulative zoning (zoning permitting commercial and residential uses in industrial areas). Also, Newark's transportation network aids industry: areas are removed from residential neighborhoods, as Newark's mass transit system links residential neighborhoods to industrial areas, working on a schedule aligned to typical industry hours (shifts) and therefore making it simple for employees to get to work quickly without living in the immediate vicinity. Growth in these industrial areas are without conflict from commercial and residential uses, and serve growing industrial areas to preserve their locations, thus negating reason to relocate to another area within the city (and therefore create additional conflicts.)

Minneapolis: As land rehabilitation begins, developers are encouraged to create buffers between commercial districts and newly created industrial sites. These buffers, a recommendation adopted by the City, should reduce the possibility of nuisance complaints (noise, smoke, odor) and traffic congestion.

CREATING MARKETABLE SITES

Baltimore: With the Baltimore Harbor as a highlight, the City focused heavily on redeveloping underutilized sites to create marketable areas for foreign business (competing with suburbs). The redevelopment costs on behalf of the City were aided by EPA grants and loans (\$1.2 M); newly rehabilitated sites are projected to return a profit in overall City revenue within 2 ½ - 4 years after the initial sale.

Minneapolis: Realizing the need to produce opportunities for new residents (Minneapolis and St. Paul recently saw an intense housing boom), the strategy's additional recommendations urge the City to develop marketable sites for new industrial business. Receiving an immediate positive response (since November, 2006), two Minnesota manufacturers are relocating to metro-Minneapolis once the sites are completed, and a large company in Sweden (undisclosed) is strongly considering moving its headquarters to St. Paul.

Synergy Is Possible

The Port Richmond Industrial Development Enterprise (PRIDE) raised \$2.3 Million to make infrastructure improvements to the area, which benefits residents and companies alike. The widening of street corners so tractor trailers could turn without running up on side walks, improved pedestrian lighting, facade renovations and security cameras throughout the neighborhood are examples of this. In addition, PRIDE companies are committed to hiring from the neighborhood and regularly work with residents to improve employment & training opportunities. The 88 PRIDE companies employ 849 people, 68% of which are from this neighborhood.

In a 1997 Ull survey of Philadelphia manufacturing companies it was found that:

"The neighborhood is important [to manufacturers] in terms of local workforce, low-cost space, physical infrastructure and security (all economic factors). The decline in the quality of these factors is leading a number of firms to consider leaving the city within the next five years (1997 projection)."

At the time PRIDE was established in 2000, one in five companies was contemplating leaving the City. **To date, all have remained.**

Newark: With industrial land added to the Newark Airport and Port Newark, Newark is currently developing additional sites for marketing purposes, strengthening the region as dominantly-industrial. The City has rezoned portions of these areas to permit heavier-industrial uses, making both Newark Airport and Port Newark a viable opportunity for more types of industrial business.

Cleveland: The City has successfully secured funds from the EPA, Cargo County and State of Ohio to create marketable sites from contaminated brownfields and underutilized areas. These funds are being focused on redevelopment through the Industrial and Commercial Land Bank (in pilot phases); the Land Bank, after trial tests, expects profit from rehabilitated sites within 3.2 years. Gaining large community support for marketing rehabilitated land for industrial purposes, Cleveland guarantees assistance with "green" strategies for companies.

NEIGHBORHOOD PARTICIPATION

New York City: The City was able to survey each neighborhood for responses to industry and infrastructure development. Not only did this aid the coordination of IBZs, but was also able to cater to neighborhood's specific desires. Developers, such as XO Projects Inc., were hired to infuse neighborhood interests

and "personality" into each individual project, enhancing the zones' use for present and future purposes. An example, the Southwest Brooklyn Zone includes neighborhood-friendly aspects of manufacturing, with specific relation to the area, such as consideration of traffic routes and agreements concerning parks on Bay Street and Richards Street.



Chicago: Several PMDs employ a high percentage of residents within the neighborhoods they border, keeping the residential community in-tune with the district's progress.

Newark: Newark polled and interviewed residents and business leaders to ensure zoning reform in the Master Plan aligned with neighborhood and business community needs. Now, the Master Plan is easily accessible online for residents, and the City encourages feedback.

Cleveland: Citywide 2020, promoting connectivity, made neighborhood surveying a key component to the strategy, as it's dubbed "a neighborhood-based plan." Individual communities' needs were assessed, and the City welcomed recommendations from citizens and business owners. Citywide 2020, although relatively new, is considered a successful plan for keeping citizens and businesses informed of the entire planning process.

GOVERNMENT ACTION

Minneapolis: Policy recommendations were reviewed with City Council immediately following the Industrial Land Use Study and Employment Policy Plan study. The City worked with three recommendations provided by the study and pieced together a fourth, adopted as Option #2.5. This new Option included an agreement that the planning parties would compromise on the measure and that City Council would adopt it instantly. It was adopted in November, 2006 and the additional recommendations (#4-15) were immediately reviewed and adopted as well.

Baltimore: While suggestions were not formally adopted by the City, the Planning Commission and Baltimore Development Corporation have implemented most of the recommendations (on a smaller scale for individual circumstances). The Harbor's deep water access (through the Maritime Industrial Zone Overlay District) and areas threatened by residential and office use have been protected with measures recommended in the study, and initiatives like the Camden-Carroll Strategy (land acquisition) and Hollander Ridge (change of use policy) are direct recommendations currently in use. The analysis itself is being used as a guideline for Baltimore's Planning Commission rezoning effort.

Cleveland: The Citywide 2020 Plan contains a "Vision" component, which ensures that the City will do what it says, in terms of implementation. The 2020 plan is "designed to jumpstart" the project by incorporating implementation strategies and capital improvement recommendations into itself. In addition, it guarantees that "all segments of City government" will take action.

New York City: With industrial preservation part of the Bloomberg administration's agenda, government attention was guaranteed. To ensure cooperation, the administration created a task force to consider industrial sector needs, and included a large number of departments and representatives – thus making every sector of the City an interested party.

Newark: The Land Use Element is the only element mandated by the State's Municipal Land Use law to appear in a Master Plan; this guarantees attention from City and State government.

Pittsburgh: Four studies since 2001 have been conducted, with no government policy being created as an effect. The most recent costing \$425,000 (Battelle), and others between \$100,000 - \$250,000. The economic development and research agencies of the City are believed to be "inept," (Post-Gazette) as each land use and economic development study conducted has turned stale before ever appearing before the City. Pittsburgh media and citizens constantly criticize the City for not acting on the research.

C. Philadelphia's Objective

The efforts taken by other cities provide Philadelphia with both options and direction, allowing the City to align its objectives with the key factors others have focused upon. For Philadelphia to sustain its current industrial and manufacturing businesses, and also remain competitive, Philadelphia government must come together to outline, draft and implement a comprehensive industrial land use policy. This policy should be a cumulative effort, representing the input of several government and quasi-government agencies and should target the following:



-
1. **Determine what our industrial needs (in terms of land) are, and outline a zoning policy that supports those needs (preservation of industrial land).**
 2. **Protect industrial districts now (those areas containing only industry), perhaps using Chicago's C-3 Hybrid – retail – light manufacturing buffer zones.**
 - **Create a strategy to limit the restrictions other land uses impose on industrial business and preempt infringement from these uses with zoning, infrastructure (buffers) and ordinances.**
 3. **Immediately protect mixed industrial/residential areas from new residential/commercial/retail construction until further zoning analysis is completed.**
 4. Pursue zoning reform to accurately align designation with actual use and needs.
 5. Identify potential industrial sites for restoration; assess practicality for intended uses.
 6. Develop a marketing initiative to connect newly zoned and rehabilitated sites to foreign opportunities.
 7. Develop a system for inventorying industrial properties for proper and aggressive marketing.
 8. Survey neighborhoods and business communities to identify needs of specific areas and strengthen community-industry relations.
 9. Ensure industrial sector-representation in zoning reform efforts.
 - * The first three objectives are critical; without preserved land, zoning reform and guaranteed protection, the remaining objectives become much more difficult to achieve.

Additionally, this policy must address future considerations; the sector's growth projected over the next 20 years enhances the opportunity to accurately balance land use and achieve economic efficiency. In terms of future land use, this policy should:

- Assess the need for industrial land over the next 20 years.
- Take measures to provide a sufficient amount of industrially-zoned land.
- Balance land uses through zoning measures according to specific neighborhoods' business and residential make-up.

Framing objectives on the success of other cities, Philadelphia can pull analysis and outcomes from prior efforts while shaping its own. The City can mirror successful initiatives, or take aspects of different recommendations and add to its own unique solutions. With framework established and a list of objectives as our guidelines, the UII has analyzed Philadelphia's industrial issues and proposes recommendations to stabilize the sector and promote economic balance and efficiency.

IV. Recommendations

Summary

1. Protected industrial districts containing only industry: using Chicago's C-3 Hybrid – commercial and retail buffer zones.
2. Mixed industrial/residential areas: using PRIDE model, Urban Industrial Park (UIP), protected from new residential/commercial/retail.
3. SEPTA bus routes following industrial schedule, connecting industrial with residential areas.
4. Zero net loss policy. For example: industrial land converted to residential at one location must be made up somewhere else, so there is "no-net loss" in the end.
5. Institute a system for inventorying industrial land so parcels may be marketed. Opportunities exist in Europe and Asia to attract industrial companies.

A. Determine the need for industrial land (with consideration for the next 20 years), and preserve the necessary land to protect the sector.

The City of Philadelphia must recognize the value of the industrial sector – a recognition which would be affirmed by a zoning strategy that protects industrial land. This protection would not only preserve land for present day use but for the future as well, and assert the importance of the industrial sector in terms of Philadelphia's long-term economic plan.

Balance

A viable economic agenda needs to coordinate the growth of both residential and commercial corridors *and* possess a commitment to preserve industrial land. A percentage of city land must be guaranteed to industrial interests for present and future purposes, and that land needs to be protected from any rezoning efforts. The bulk of this land will, of course, be used for residential and commercial interests and rezoned for mixed use (for example, light manufacturing, storage and parking lots, retail and commercial use). This rezoning process should consider like-use alignment, the creation of permanent boundaries for industrial districts and the possibility in mixed-zoning, to promote transition or buffer zones to protect neighborhoods from heavy industry areas.

RECOMMENDATION:

The recommendation proposes:

- The industrial sector's land needs are determined;
- Those needs are met (through zoning) and;
- Guaranteed (by enforcing a No-Net Loss Strategy, i.e., a land use commitment requiring a permanent number of acreage (minimum) to support an economic sector);
- Specific areas are zoned permanently for industrial use (in the form of Industrial Districts);
- Industrial land not needed to support the sector is rezoned for more accurate uses.

By calculating the actual need for industrial land, the City can use zoning reform to protect more practical industrial sites for preservation, and convert those less practical for other uses. Areas designated as industrial districts, ports and intensively industrial (such as older "industrial neighborhoods") will be the focal point of preservation.

The key component of this recommendation is protection for needed industrial land; protection being defined as a safeguard from rezoning and City Council ordinances, variances in land use and infringement by other types of land uses. By establishing strict zoning boundaries, a No-Net Loss Strategy provides the City a finite number of acres to coordinate industrial uses and organize marketing strategies.

A No-Net Loss Strategy (if 3% is taken, 3% must be found) provides:



- Immediate additional acres for non-industrial land use;
- An inventory of industrial-zoned acreage for economic development and marketing;
- Guaranteed protection for the preserved acres of industrial land;
- An opportunity to concentrate like-land uses and;
- A finite number of industrial acreage defined for future City-wide economic planning.

This recommendation creates a greater potential for serving public and business interests. The City receives additional land for other sectors and mixed use, while industrial businesses are guaranteed a secured percentage of land for future planning. It also provides an opportunity to reallocate zoning to specific areas, creating the opportunity for land use compensation (larger sites of industrial land that is deemed more effective if rezoned residential or commercial can be exchanged for the rezoning of smaller sites to industrial in strategic locations).

B. Establish Strong Industrial Districts, which will create and promote incentives for businesses to (re)locate in Philadelphia.

Listed below are Philadelphia's Industrial Districts:

- Northeast Philadelphia (including NE Airport, Byberry East, Byberry West and Red Lion)
- Southwest Philadelphia (including Eastwick and Philadelphia International Airport)
- North Delaware (beginning from Penn Treaty Park to the Poquessing)
- South Delaware (including the waterfront, Food Distribution Center, and the east portion of Navy Yard)
- American Street
- Hunting Park West
- Parkside
- Hunting Park East
- Callowhill/Franklin
- Grays Ferry/Lower Schuylkill (including the west portion of Navy Yard)
- Aramingo (including Port Richmond Industrial Development Enterprise, Inc. and Richmond Corridor Association)
- Lawncrest

Acre for Acre Comparison (where it really counts)	
Acre of Industrial Land	Acre of Retail Land
<ul style="list-style-type: none"> • Holds 15 Full time employees • Average Combined Annual Salary: \$656,425/acre • Average Annual Salary per employee: \$43,732 	<ul style="list-style-type: none"> • Holds 27.5 Full time employees • Average Combined Annual Salary: \$562,500/acre • Average Annual Salary per employee: \$20,455
<small>Estimates provided by PIDC 2007 and Philadelphia County: Occupational Employment Statistics Survey Data for 2006</small>	

These districts provide the freedom for businesses to conduct their industrial activities with limited restrictions. Furthermore, aggregations of industrial activities allow the City to concentrate its services and target infrastructure improvements to support industry in Philadelphia.

RECOMMENDATION:

Guaranteeing protection and strengthening identity, Industrial Districts are an ideal solution to land preservation, and better serve industrial and manufacturing business. Implemented, they will provide opportunities in marketing, the ability to target industry and organization for the sector.

Industrial Districts:

- Will be identified with City Planning Commission's existing definition and with sensitivity to neighborhoods' identity (current *and* developing), other business, and actual land use;
- Will have strict boundaries;
- Will not expire, and can only be changed through a pre-established review process;

- Will vary in restriction, as districts will be divided into classifications determining business and development permitted (i.e., a district in Port Richmond will allow for mixed use and, by definition, be less restrictive, while a district in South Philadelphia (Port) or Juniata will not permit any other uses (all planned development is to be consistent with the intended use for the area);
- Will prohibit any non-industry related projects (according to designation);
- Will be protected from any proposed zoning ordinances.

These districts would be the key tool in preserving the industrial sector. Not only would industry be safeguarded from rezoning, but also be protected from residential and commercial uses infringing on its right to do business (i.e., noise complaints, use of companies' parking areas, illegal dumping on industrial sites). Boundaries would be clearly established and strengthened with physical and zoning buffers (such as "warning" signs, parks, infrastructure and mixed use or transitional zoning (for light manufacturing, commercial and retail, etc.)). By doing this, land uses won't "bleed" into one another, curbing a potential for conflict.

Additionally, these districts will provide incentives, both financial and other, to attract business to (re)locate within Industrial Districts. Opportunities in State and Federal funding, PIDC tax abatements, benefits from Keystone Opportunity Zones and Empowerment Zones and other tax incentives could be provided for companies within the districts' borders. Also, districts could provide concentrated clean-ups, targeted infrastructure improvements, a connection to non-profits to use green technology and additional incentives for building with consideration towards sustainability efforts.

C. Protect industrial land from zoning reform, ordinances and variances, as well as illegal conversions.

After an initial zoning reform, which will account for the needs of the industrial sector, the City must take specific measures to protect this land from future (re)zoning. This protection must be guaranteed by the Zoning Code Commission, the Philadelphia City Planning Commission and City Council. Zoning review and reform should be conducted by a single entity, one which follows strict guidelines to guarantee that any planned development aligns with area intentions. Additionally, illegal conversion (illegal use of land for purposes other than its designation) must be monitored.

RECOMMENDATION:

All zoning assessments must be based on the "big picture" and consider the needs of the entire City, both today and into the future. It is essential that zoning changes be made by only one authority. When only local interests are considered, without consulting how changes may affect the whole, a patchwork of unrelated uses will result. In summary:

- Specific industrial areas, land designated with No-Net Loss status and (or if included in) Industrial Districts, will receive special exemption from all rezoning measures;
- A single review authority or entity, established by ordinance, will be created;
- This single entity will review any reform requests, ensuring all planned development aligns with the area's intended use;
- Can refuse any planning that does not align with the area's intended use;
- Will make all changes to zoning, if necessary.

Protection from legal change of use provides consistency and stability for industry, and also enhances marketing opportunities. It preserves industrial land totals for future use, and would create framework for infrastructure improvements (specific to an industry) and will assist in city-wide economic planning.

Additionally, illegal conversion can be addressed: laws must be strictly enforced and monitoring of No-Net Loss land and/or Industrial Districts must be guaranteed. An illegal-conversion hotline, a phone number directly linked to the appropriate License and Inspections office (for tips), should be created.

D. Ensure zoning reform representation.



On the May 15th, 2007 Primary ballot, voters passed the following question (Question #6):

“Shall the Philadelphia Home Rule Charter be amended to provide for the creation, appointment, powers and duties of an independent Zoning Code Commission which would recommend amendments to the Philadelphia Zoning Code to make the Code consistent and easy to understand, and to enhance and improve Philadelphia’s city planning process while encouraging development and protecting the character of Philadelphia’s neighborhoods?”

RECOMMENDATION:

With Question #6 passed, the City of Philadelphia can guarantee representation of industrial interests with an appointee from either one of the Mayor’s five appointees or one of the City Council President’s appointees; or one of ten community leadership positions chosen by the District Councilmember; or amend the current Commission composition to include a 32nd member, one representing industrial land interests.

As a second option (if Commission openings are not available), interested parties can appoint one or more representative(s) to monitor each public meeting and lobby for industrial interests.

E. Explore opportunities to strengthen land bank and reinforce expenditures with a tax revenue cycle

Currently, expenditures from the Land Bank are replenished directly by the sale of acquired land. Industrial sites, however, typically are more difficult to make market-ready due to rehabilitation costs for restoring contaminated land. And combined with the land value itself, which is approximately one-fourth the market value of residential land, using the Land Bank to purchase industrial sites is considered an added expense rather than a possible profit.

But the cost comparison does not fully detail industrial land’s potential. Even though industrial land is the less profitable sale, the activity and development on that land will be revenue generating, producing jobs and, over the course of time, more tax revenue than residential uses. Furthermore, the cost of rehabilitating industrial land for new development is less than the cost of an industrial business leaving Philadelphia (due to the inability to expand or passing on the opportunity to locate in Philadelphia due to the lack of available land).

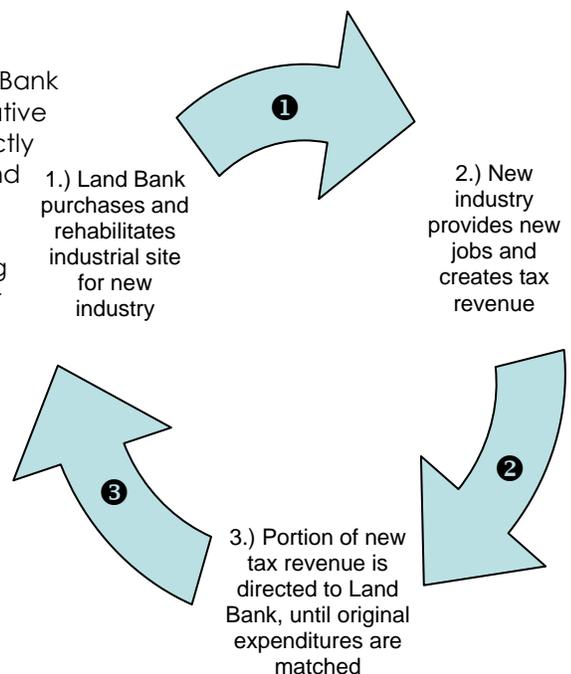
RECOMMENDATION:

A possibility in creating additional sources of revenue for Land Bank expenditures needs to be explored. The Urban Industry Initiative proposes investigating a tax revenue cycle that directly replenishes Land Bank expenditures specifically for industrial land development.

The Land Bank would function as it normally would, acquiring and rehabilitating an industrial site. Once sold and used for industry, a portion of the assessed city taxes would be cycled directly back to the Land Bank. A percentage of the tax revenue would be returned annually to the Land Bank until its original expenditure is accounted for (in combination with the revenue made from the initial sale).

The cost to the Land Bank for rehabilitation and development efforts would be:

- 1) Accounted for by the creation of new industrial investment on previously unavailable land (and the



revenue it generates in terms of new employee taxes, economic spin off, expenditures, etc.) or

- 2) Less costly to the City in terms of investment and taxes lost if a company relocates outside of Philadelphia due to lack of space to expand.

Although each site can be resold for development only at a specifically set price, the site used for investment *new* to Philadelphia will generate revenue once utilized (offsetting the lower price paid by industrial companies). If the rehabilitated land is purchased by a company currently located in Philadelphia, a portion of that company's taxes could be dedicated to replenishing the Land Bank, since the cost to the City would be greater if that company would relocate altogether.



V. Appendix

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INDUSTRIAL LAND USE STRATEGY SUMMARIES

Cities Researched:

Newark, NJ ▪ New York City, NY ▪ Baltimore, MD
Boston, MA ▪ Pittsburgh, PA ▪ Cleveland, OH
Indianapolis, IN ▪ Chicago, IL ▪ Minneapolis, MN

a. NEWARK, NJ

Strategy under focus:

The City of Newark Master Plan was initiated by Mayor James Sharpe and created by the Department of Economic and Housing Development and Phillips Preiss Shapiro Associates, Inc., Planning and Real Estate Consultants in association with Schoor DePalma and Engineers and Design Professionals. Before adoption, it was reviewed by the City of Newark, Municipal Council, Department of Administration, Central Planning Board, Department of Economic and Housing Development and the Office of Boards.

Relation to industrial land use:

Analyzes current use of and demand for industrial land and compares actual land use with designated zoning. It also discusses reasons for protecting the industrial sector and its vitality, the sector's relationship to other neighborhoods, and the support it receives from infrastructure and mass transit.

Target of strategy:

To ensure accurate zoning and provide support and protection to the industrial sector, via additional infrastructure and mass transit improvements and by ending cumulative zoning.

Key Components:

The first step towards economic efficiency, the Master Plan's Land Use Element surveys neighborhoods and determines viability of current zoning. Concerning the industrial sector, stagnant or deteriorating industrial areas are rezoned for more efficient (residential, commercial) uses, and the Land Use Element reinforces growing industrial areas (for example Port Newark) by adding industrially-zoned land (which, prior to the plan, was zoned inappropriately or "not in use"). In addition, less restrictive zoning has been applied to these growing areas to support marketing initiatives. The plan also calls for government to seek additional infrastructure improvements specific to industry (example, wider merging lanes, stronger roads and sidewalks, enhanced buffers from other land uses).

b. NEW YORK CITY, NY

Strategy under focus:

City of New York's Industrial Policy Plan, initiated by Mayor Michael R. Bloomberg and Daniel L. Doctoroff, the Deputy Mayor for Economic Development and Rebuilding. The plan was the cumulative product of the "Task Force," the policy-making group comprised of the Department of City Planning, the New York City Economic Development Corporation, the Department of Small Business Services, and The Parthenon Group LLC. Additionally, the following were represented in the "Task Force:" Department of Transportation, Department of Finance, Department of Citywide Administrative Services, Department of Environmental Protection, Department of Buildings, Department of Sanitation, Department of Information Technology and Telecommunications, and the New York City Police and Fire Departments.

Relation to industrial land use:

New York City's Industrial Policy Plan acknowledges the problems many industrial and manufacturing businesses face, such as space constraints, real estate uncertainty, high costs and unsupportive business environments. The Plan is designed to protect industrial and manufacturing companies through permanent industrial business zoning, as well as create an environment of security and long term prosperity for the industrial and manufacturing sectors.

Target of strategy:

To initiate rezoning and relocation efforts, that intends to inspire cooperative business environments between the city, businesses and the residents. The Plan will protect industrial land and jobs and align similar industries for more effective zoning and infrastructure development, and also provide business centers to assist the industrial and manufacturing industries with business endeavors and communication with City government.

Key Components:

At the center of the plan are city-created Industrial Business Zones (IBZs), permanent zones to foster industrial growth. The IBZs provide the following for the industrial and manufacturing community: guaranteed protection from rezoning, with a central zoning reform review process, relocation incentives for industrial businesses (tax credits up to \$1,000 per each industrial job relocated), area planning studies in order to determine individualized solutions for each IBZ and a comprehensive marketing campaign, highlighting IBZ-benefits for companies overseas. To maintain an "Industry-Friendly Environment," the City created the Commercial Fleet Parking Violations Pilot Program, relocated NYC Business Solution Centers to IBZs and created the Dumpster Shed Program. In addition to new developments and programs, the City plans opened the Office of Industrial and Manufacturing Businesses, an initiative responsible for overseeing policies, implementing programs and coordinating communication between government and business. The City will create an Industrial and Manufacturing Business Council as well (a public/private partnership appointed by the Mayor to advise the administration on industrial policy).

c. BALTIMORE, MD

Strategy under focus:

The industrial land use analysis and strategy for the development of the city's industrial sector formulated by Bay Area Economics and the Baltimore Development Corporation (BDC). Research and analysis was performed by Randall Gross/Development Economics, HNTB Corporation, Milestone Associates and Woodley Appraisal Group, Inc.

Relation to industrial land use:

The City is being pressured to rezone industrial land for more profitable uses, most notably Baltimore Harbor development, which has sparked a demand for offices, hotels and residences. Deep water access on the Harbor's waterfront needs protection for the City to remain competitive with other state industrial areas, and additional measures need to be taken to enhance the City's appeal to the industrial market.

Target of strategy:

The City's largest concern is to protect deep water access on the Harbor and, overall, increase supply of marketable industrial sites. The strategy recognizes the importance in strengthening the capacities to redevelop land for industrial use. Competition with other state industrial areas, brownfields redevelopment and zoning guideline reform are under focus.

Key Components:



Although not formally adopted in its entirety, pieces of the study have been implemented. Initial measures immediately implemented were the Change-of-Use Guidelines, rules outlining regulations for rezoning requests, and creation of the Maritime Industrial Zone Overlay District, a restrictive industrial district protecting deep water access for industry. The city then accessed EPA grants and loans and state funding to fund three city initiatives for land rehabilitation and site marketing: the West Baltimore Industrial Tax Increment Financing District, a program financing acquisition and redevelopment, Fairfield, an urban renewal plan for infrastructure improvements, and Hollander Ridge, a land redevelopment initiative. These three initiatives were originally specific to one neighborhood, but the study's recommendation to expand them city-wide was acted upon in 2005. The Planning Commission is currently using the study as a guideline for zoning reform, and the BDC states that new sites are being considered for the study's initiatives, including a 100+ acre project.

In addition to the BDC's study, a General Assembly-authorized Task Force is exploring possibilities in improving Maryland's Brownfields Voluntary Cleanup Program, and in 2002 Baltimore began allowing eminent domain to be used for economic development purposes (provided by the General Assembly and City Council action).

d. BOSTON, MA

Strategy under focus:

A comprehensive city redevelopment strategy, a cumulative effort from the Boston Redevelopment Authority, Boston Zoning Commission, Inspectional Services Department, Zoning Board of Appeal, the Boston Industrial Development Financing Authority, the Back Streets Program and the Boston Local Development Corporation.

Relation to industrial land use:

Although not a heavy-industrial city, the City of Boston acknowledges its importance to certain communities, even as it continually declines in contribution to City revenue. To stabilize the industrial economy and enhance the overall welfare of Boston neighborhoods, zoning reform, buffering and land use alignment have been explored as solutions.

Target of strategy:

Through zoning reform the City of Boston aims to create new commercial and industrial districts specific to nearby neighborhoods. The "Local Industrial Districts" incorporate stronger buffering and more off-street parking. These initiatives, combined with additional assistance from the Back Streets Program, an initiative to fund distressed neighborhoods, are the only measures in the strategy addressing the industrial sector.

Key Components:

The City introduced zoning restrictions on non-industrial development for the Marine Industrial Park, the City's only protected industrial area. For the entire sector, the Back Streets Program, which incorporates land, job training and financial resources to retain business and spur growth, provided additional funds and low-interest loans. Also, the Boston Industrial Development Financing Authority offers tax exempt financing for projects and equipment that cost over \$3 million and the Boston Local Development Corporation provides loans up to a maximum of \$150,000.

e. PITTSBURGH, PA

Strategy under focus:

N/A, data received from the City of Pittsburgh and Pittsburgh Post-Gazette (newspaper).

Relation to industrial land use:



Pittsburgh has been unsuccessful in creating a comprehensive industrial land use policy. No provisions have been made for future land use.

Target of strategy:

Pittsburgh's current economic development strategies focus on residential and commercial development. An attempt to provide a future plan for the city's industrial future has not been initiated.

Key Components:

N/A; without a policy in place, the City has responded to market forces with rezoning and land use conversion. The industrial sector's importance to the City has declined, and the growing demands for neighborhood development and commercial business have become the City's primary targets. Former industrial areas have been redeveloped into residential and commercial corridors.

Notable converted areas include:

- South Side Works
- Summerset at Frick Park
- Bedford Hill
- Pittsburgh Technology Center
- Washington's Landing
- Crawford Square

f. CLEVELAND, OH

Strategy under focus:

The Citywide 2020 Plan is a comprehensive strategy planned to enhance all aspects of the city. It was created by the City of Cleveland and Cleveland City Planning Commission, and in collaboration with Capital Improvements, Lakefront Planning, KSU Urban Design Center, Downtown Planning CWRU Poverty Center and Web Design City Architecture. It was made possible by funding from the Cleveland Foundation and the George Gund Foundation. It was supported and reviewed by the Cleveland Neighborhood Development Coalition, Cleveland City Council and Neighborhood Progress.

Relation to industrial land use:

Citywide 2020 looks to enhance every aspect of Cleveland. Under the theme of "Connectivity," the strategy is designed to join businesses with neighborhoods, develop under-and-unutilized land, and protect land for industry to grow. It recognizes its strong manufacturing history and provides opportunities for the sector to be updated through sustainability initiatives.

Target of strategy:

By 2020, the specific objectives for the industrial sector are to address under-utilized land, rehabilitate contaminated land and create marketable sites. Also, with its strong manufacturing base, Chicago intends to connect manufacturers to green technology (to make businesses more sustainable), and develop infrastructure to accommodate industry.

Key Components:

Citywide 2020 addresses rehabilitation and marketing with the same initiative. The current redevelopment and marketing strategy is specifically concentrated on assembling parcels of contaminated or vacant land and unused infrastructure, clearing and rehabilitating the site and marketing it as one large site (the first targets are Eastern Cleveland and the under-utilized River Valley). Brownfield rehabilitation efforts receive support from Cuyahoga County, the State of Ohio and Federal sources (EPA grants), used through an industrial land-bank (in its pilot phase). The Industrial and Commercial Land Bank's Midland test phase projects total repayment of investment in 3.2 years.



E-For-Us, a nonprofit for clean energy focused on industrial companies, has grown under Citywide 2020's umbrella. Making Cleveland a national leader in the development and application of "green building" and "sustainability" technologies is the chief goal. Presently, to ensure manufacturing's importance, manufacturers are called to create eco-friendly and green materials for a city-wide effort to embrace alternate energy.

Overall land use plans are designed to limit the negative impacts of urban sprawl and promote more efficient use of existing infrastructure and community facilities. For the industrial sector this means developing roads that provide direct truck access between freeways and industrial areas, by-passing neighborhoods where truck traffic degrades the quality of life for residents. Truck and transportation routes are also being coordinated for efficiency.

g. INDIANAPOLIS, IN

Strategy under focus:

Every decade City officials and department heads, with participation from business and community leaders, meet to discuss Indianapolis' Insight, the City's economic and neighborhood development strategy.

Relation to industrial land use:

In the industrial sector, concerns lie within the distribution of growth and the quality of development.

Target of strategy:

Although the City's industrial sector is weak (and diminishing further), the strategy does contain components important to the sector. Indianapolis' Insight focuses on balanced land-use and ensuring transportation routes that are efficient – both affecting the sector's stability.

Key Components:

Regionalism, comprehension of land use intensity and land use mapping were reviewed. Land use goals include specifying land use categories and critical areas, integrating the transportation planning within land use development strategies, utilizing land use regulation to encourage industry development while maintaining a plan for proposed neighborhoods and using City-County Council partnership, Metropolitan Development Commission and the Board of Zoning Appeals to limit deviations from the proposed land-use plan.

The City plans to promote the use of brownfields by creating new/updating existing infrastructure for accessibility and rezone brownfields sites to more "flexible" districts.

Preventing residential land use near highway interchange areas, rail yards, airports and areas of noise and traffic and identifying areas for infrastructure improvements are also on the Insight agenda.

h. CHICAGO, IL

Strategy under focus:

The City, while not creating an official comprehensive strategy, has made impressive steps for the protection and growth of its industrial economy.

Relation to industrial land use:

Industrial business began to deteriorate in Chicago, specifically due to the lack of preserved industrial land and problems industrial businesses and manufacturers faced from other land use infringement.

Target of strategy:



The City's strategy centers on the creation and protection of Industrial Corridors and Planned Manufacturing Districts (PMDs), permanent industrial districts. The City also urges buffers between land uses to divide residential and industrial neighborhoods.

Key Components:

Industrial Corridors were established to preserve the future of industry within Chicago. The City created Planned Manufacturing Districts (PMDs), ranging from five to 4,000 acres, within the corridors. The Corridors permit only compatible uses (with industry) and are protected against individual parcel rezoning. Although industrial land parcels inside these corridors are able to be rezoned, any rezoning requests must go before the Planning Commission. However, rezoning within PMDs cannot be individual properties, and all planned development must be consistent with each PMD's intended use.

TIF districts also exist within Industrial Corridors, and the City provides numerous opportunities to help manufacturers relocate and expand through funding programs, including:

- Industrial Bonds (tax-exempt bond financing)
- Plant Optimization Studies (consulting firms that maximize space efficiency)
- Laboratory Facilities Fund (25% coverage, up to \$1.25 M, for construction costs)
- Empowerment Zone and Enterprise Zone tax credits
- Low-interest loans and micro loans
- A facade improvement program
- The Small Business Improvement Fund (TIF for capital improvements for small and medium industrial - and commercial - firms)
- Reduced property tax assessments for specific industrial uses in certain areas
- The Seawall Improvement Fund
- Business Express Program (assigns account managers to businesses to connect with loan programs and EZ tax credits)

Chicago uses condemnation, tax reactivation and lien foreclosure to acquire and assemble industrial parcels. In addition, Chicago offers infrastructure investment opportunities, which are targeted to corridors in need of bridge replacements, highway condition improvements and clearance improvements.

Over the past 10 years, zoning reform has strengthened the boundaries of Industrial Corridors and PMDs. In addition to zoning buffers, the City is pursuing infrastructure improvements to prevent infringement on industrial business. A Land Bank is still not in the City's plans; however it is a goal for the future.

i. MINNEAPOLIS, MN

Strategy under focus:

The analysis was created by the Minneapolis Industrial Research Steering Committee (members of the City's Economic Development Department and land brokers and developers) and the Department of Community, Planning, and Economic Development. Research was conducted by Maxfield Research Inc., Short Elliot Hendrickson, Inc. and Quam Sumnicht Associates, Inc.

Relation to industrial land use:

The analysis, with policy recommendations, was created to address issues of industrial-to-residential conversions and the need to support a recent housing boom with jobs (which do not require a college education). Industrial jobs are projected to recover from a declining trend, however, future estimates show there will be insufficient land for industrial uses.

Target of strategy:

Minneapolis recognizes the demand for industrial space and jobs. The analysis proposed recommendations to categorize existing land and building types (moderate and mature), identify opportunities to address



volatility in vacancy rates, redevelop public-owned site for flex space and establish zoning guidelines to protect industrial land.

Key Components:

The analysis concluded with policy recommendations; varying in degree, the three recommendations (listed as Options) included strategies to strengthen boundaries of Industrial Business Park Opportunity Areas within the Minneapolis Plan (city-wide economic agenda), restrict development within these areas to industrial and industry-supporting development only, and enhance Employment Districts.

Additional recommendations accompanied the three Options; these recommendations included allowing more conditional uses in Industrial Districts, incorporating industrial uses into Employment Districts, implementing buffers, setting aside available industrial business assistance for targeted employers, aligning workforce investments with targeted industrial employers, instituting a biannual survey of industrial businesses, improving outreach to the business community and coordinating infrastructure investments with needs of targeted industrial employers.

The City and City Council reviewed the three proposed Options and collaborated with the Minneapolis Industrial Research Steering Committee to create a fourth Option, Option #2.5. This Option was immediately adopted and included stronger employment and marketing strategies but less-restrictive zoning regulations and boundary definition. However, it did preserve industrial areas initially considered to be better used as residential. The analysis also recommended outlining a city-wide guideline for rezoning industrial land and adopting criteria for rezoning amendments related to industrial land (which is being considered for 2007-2008).



Why Manufacturing Companies Would Want To Relocate To Our Fair City

In 2002 the Urban Industry Initiative did market research on European manufacturers who had reached market saturation for their products there. The purpose of this was to see if they could locate potential candidates for establishing a manufacturing facility in Philadelphia. Our thinking was that for a manufacturer who was at or near market saturation for their product(s) in Europe, access to the U.S. market would represent the “brass ring” in market opportunities. Philadelphia could offer them an ideal location on the east coast and a tax structure far less costly than what they were used to in Europe. The UII even would throw in free marketing assistance.* Unfortunately, at the time the City showed no interest in pursuing this opportunity.

More traditional marketing has sought to relocate domestic companies to Philadelphia, but this is a huge and expensive challenge - to convince someone to pull up stakes and move everything, even from the next state, without a very good reason. The advantages to domestic companies diminish exponentially when compared with European or Asian manufacturers.



- Excellent Port Facilities (virtually as fast to 1st ocean buoy as NYC)
- Huge labor market
- Superb access to inter-state roads (N-S and West)
- International Airport
- Access to Rail
- Located near all major East Coast Markets & Distribution Points.

Perhaps the only barrier Philadelphia faces in successfully marketing its industrial land is the lack of any real inventory. Without land, we are faced with the chicken or the egg scenario discussed in the introduction.

*The UII was successful in locating an Irish company with new refrigeration technology and production facilities in Canada, Iceland and the UK. This company began production of the StorGuard™ product line here in Philadelphia through a joint venture with Philadelphia Pipe Bending Company who acquired the technology license.

HIGH-GROWTH SECTORS OF INDUSTRY

In summary, it may be difficult to forecast technological outcomes, particularly in this time of wide spread global change and competition. The UII has a particular expertise in Philadelphia manufacturing and as such, will confine this section to a discussion of this important sub-sector of industry. Historically, it can be said that as manufacturing progresses, other sub-sectors of industry, such as energy, transportation, wholesale, etc., mirror it. Currently manufacturers in Philadelphia, as well as those around this country, are feeling the pressure to change and change for manufacturing means modernization. Gone are the days of belching smokestacks and greasy emissions. Philadelphia's manufacturers must innovate to remain competitive and to remain alive.

Innovation may, at least initially, result in a decrease in jobs. As newer technology replaces "manpower" there will be certain jobs no longer required. But innovation and technology also result in new opportunity and growth which historically creates jobs, so the net result can still be increased employment. From 2000 to 2002 the Urban Industry Initiative ran a New Product Development Group for Philadelphia manufacturers, teaching product innovation to many of our oldest companies. At the end of this process, the companies which emerged were not only stronger; they were better positioned for the future. Together, these companies were responsible for the creation of 281 new jobs and \$16.5 million of new investment.

Innovation Means Jobs

Between 2000 and 2002, UII's New Product Development Group created 281 new jobs (148 from the neighborhoods) and \$16.5 million of new investments. Initially this meant that certain jobs were no longer needed, but in the end, there was a net gain.

But there are several paths for manufacturing's technological future in Philadelphia. To fulfill increasing demand for widescale product customization, manufacturing is becoming less vertically centralized and integrated and more widely distributed. Managing and coordinating production in this environment has the potential for stimulating a range of technologies such as Web based intelligent systems and technologies in the logistics area to deal with security checks, emissions, ergonomics, fuel efficiency, and information and communications. Future opportunities lie in creating the services as well as the technologies to accomplish this management and coordination function.

Another path is focused on high-value niche areas for manufacturing. The medical devices market is an example of a high margin business that manufactures with higher wage, skilled workers that can work with sophisticated equipment to fulfill stringent quality standards. It is interesting that today's medical device companies depend on traditional technologies and skills in the metalworking sector, even as the industry is among the current and future users of additive manufacturing technologies that apply rapid prototyping and stero lithography to create highly customized products. The future of manufacturing will also rest on the ability of future high value niche areas to be identified, innovated, and exploited.

A third path places attention toward revolutionary opportunities generated by advances in nanotechnology. Highly miniaturized, functional, and efficient electronics devices, and precise and selective biomolecular materials are part of this future. At the same time, it is not yet well known how to manufacture nanomaterials and how to integrate nano- and large-scale manufacturing. Advancing these developments depends on the ability to foster multidisciplinary interconnections between researchers in a range of scientific and engineering disciplines, business managers, policy makers, and educators. A new type of engineer that combines generalist, leadership, and technical capabilities is envisioned to provide a bridge between business, policy, and technical worlds.

Wage Comparison in Philadelphia		
	Average weekly rate	Average annual rate
Retail Trade	\$454	\$23,597
Manufacturing	\$830	\$43,140
Leisure & Hospitality	\$490	\$25,485

Source: US Department of Labor 2005

As was said, technological outcomes are not always easy to forecast; witness 1980s-era predictions about the fully automated and integrated shop floor (which never fully came to pass). Nevertheless it does appear that there are a set of next generation technologies around mass customization and flexible production, high-value niche areas, and nanotechnology that have the



potential to sustain and advance Philadelphia manufacturing in the future. Global competitors are also working in these same technological areas. In addition to industrialized nations, countries such as China and India are developing very competitive indigenous research, engineering, education, and training capabilities.

The following industries are expected to experience high service/product demand and a need for additional employees, capital and/or land to accommodate growth. They were determined high-growth by the President's Job Training Initiative (DOL-ETA), a program identifying new and increasing job opportunities in high demand and economically vital sectors of the American economy. Each industrial sector industry is accompanied with supporting information from additional sources, including the Department of Labor, The Bureau of Labor Statistics, Penn Future, The Federal Register, The National Council for Advanced Manufacturing and the Pittsburgh Technology Council. NAICS are in parentheses.

INDUSTRIAL SECTOR

The industries below are defined as "Industrial" by NAICS and land needs would be categorized as such by the City Zoning Code.

Advanced Manufacturing

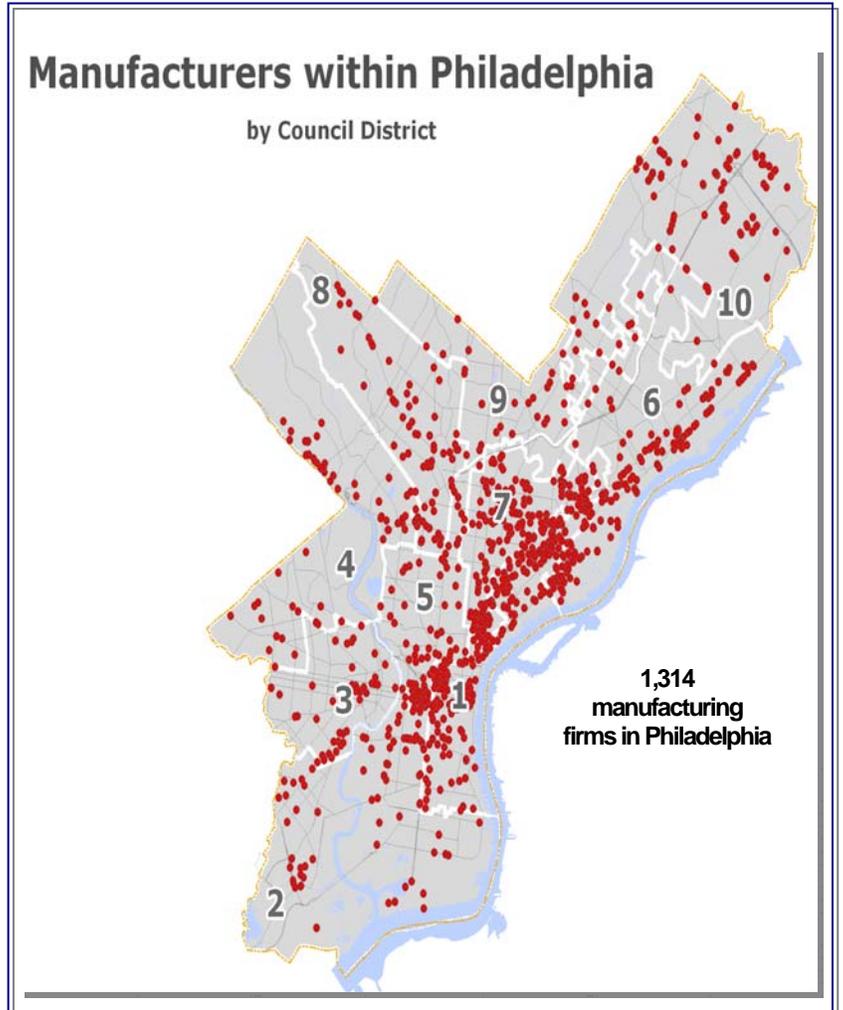
Advanced manufacturing is the practice of incorporating (or replacing outdated systems with) high-tech processes into current production methods. Advanced methods have supported domestic manufacturers to remain globally competitive, with businesses implementing process improvement techniques, incorporating quality management systems, and overhauling their production operations with advanced technology. Almost any manufacturer can make "the leap" to advanced methods, from iron and steel forging to machine shops, with proper adjustments and updates to its current production processes.

According to the Department of Labor, advanced manufacturing was identified as a "high growth industry" under the President's Job Training Initiative for several reasons. In addition to remaining a strong component of economic growth, the U.S. manufacturing industry is undergoing transformations in terms of the technology being used, the market dynamics, the demographics of the workforce and the skills needed to work in an advanced manufacturing environment. The DOL's remarks on the sector's future:

Cluster Analysis: Diversity of Philadelphia Manufacturing		
DESCRIPTION	# OF ESTABLISHMENTS	PERCENTAGE
merchant wholesalers (non-durable goods)	1	0%
health & personal care products	1	0%
motions picture & sound industries	1	0%
food service & drinking products	2	0%
professional, scientific & technical products	4	3%
administrative & support service products	4	3%
Auto repair & maintenance service providers	4	3%
retail trade (specialty food products)	5	3%
beverage & tobacco	6	0%
merchant wholesalers (durable goods)	8	1%
publishing industries	9	1%
petroleum and coal	12	9%
non-metallic minerals	18	1%
transportation equipment	21	2%
textile mills	26	2%
primary metal	31	2%
computer & electronics	32	2%
electrical equipment, appliances & components	35	3%
textile product mills	39	3%
plastics & rubber	40	3%
paper	48	4%
apparel	54	4%
chemical	56	4%
machinery	68	5%
furniture & related	74	6%
food	121	8%
miscellaneous	159	12%
printing and related	215	16%
fabricated metal	220	16%
Total	1314	

“A modern manufacturing facility bares little resemblance to the gloomy factories that are the common public perception. To remain viable in the face of intense global competition, U.S. manufacturers have become (or need to become) high-tech enterprises. Successful U.S. manufacturers are implementing process improvements, increasing quality controls, and installing advanced robotics and other intelligent production systems. This transformation recognizes that U.S. manufacturers face increasing difficulty competing on the basis of low costs, especially low-cost labor. Rather, through technological and process advancements, U.S. manufacturers are competing successfully based on higher productivity and greater value to customers. This new competitive advantage is based on such factors as speed to market, flexibility to changing customer demands, mass-customization, and higher quality.”

In addition to improving conventional manufacturing, new technologies are spurring accelerated growth in emerging industries based on intelligent production methods. The most notable (which is also used as an umbrella for related sciences) is **biotechnology**. This technological application uses biological systems and living organisms to make or modify products or processes for specific use, is not a traditional manufacturing industry, with only components contributing to the manufacturing sector. But those contributing aspects are a perfect example of application of advanced methods in emerging industry. The President's Job Training Initiative claims biotechnology and its divisions are expected to grow intensely, as Bureau of Labor Statistics states the industry has added over 100,000 occupations in the past five years, with expected industry growth at 12.3% each year.



Biotechnology and its divisions are actual industries, whereas advanced manufacturing is a process to improve industry. Businesses incorporate this process to become more viable for future use. Examples of such businesses in Philadelphia are Microcision Inc., Everite Machine Products Co. and Prebelli Industries.

Aerospace Manufacturing (33641)

The aerospace industry comprises companies producing aircraft, guided missiles, space vehicles, aircraft engines, propulsion units, and related parts. Aircraft overhaul, rebuilding and parts are also included. The Department of Labor states other sectors of the economy depend on aerospace businesses and related disciplines for technical skills and technologies that are critical elements of our security infrastructure and improve America's position in the global marketplace, with additional reasoning cited in the President's Commission on the Future of the United States Aerospace Industry.

With \$161 billion in sales, increasing investments from the sector in National security and homeland security and the fact that military spending continued to show faster growth than any other U.S. budget element,

the aerospace industry shows no signs of slowing. The aerospace industry has a positive trade balance of between \$20 billion and \$40 billion in trade exports, which is equal to the rest of the economy, put together.

Automotive Manufacturing and Automotive Maintenance (3361, 3363, 8111)

This industry includes all companies that manufacture and/or distribute vehicles, including passenger cars, trucks, locomotives, motorcycles, commercial ships, pleasure boats, and/or recreational vehicles, and additionally, all maintenance/repairs and custom automotive work.

The strongest area of growth, determined by the Department of Labor/Employment and Training Administration, is the automotive services sector, with service technicians and mechanics expected to experience the strongest growth in employment. It is estimated that over 319,000 new employees will be needed in this field between now and 2012 due to job creation and the replacement of workers who leave the field or retire.

Energy (211111, 211112, 213, 221, 2211, 221119, 32411, 341, 562)

The Energy Industry incorporates a broad range of sectors, including petroleum and natural gas extraction, refining and distribution, electric power generation, distribution, and mining. A necessity for all, the U.S. Bureau of Economic Analysis recognizes the continued growth of the sector to address a growing population, developing cities and suburbs, and a need for new energy sources. Examples of emerging energy technology in Pennsylvania include biofuels, natural gas and wind power.

INDUSTRY THAT MAY REQUIRE INDUSTRIAL LAND

Construction (233, 234, 235), Transportation (481, 482, 483, 484, 485, 486, 487, 488), Biotechnology (541)



Investing In The Future



An Economic Development Agency of the City of Philadelphia

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