

Penn North Area Master Plan





Otis Rolley, III Director

December 2006

Acknowledgements:

- Councilwoman Belinda Conaway
- Mayor's Office of Neighborhoods
- Baltimore Housing
- Baltimore Development Corporation
- City of Baltimore Department of Recreation and Parks

With special thanks to:

- The residents of Penn North
- Penn North Community Association
- Ms. Annie Hall, community leader and organizer
- Tarita Coles, former Western District Comprehensive Planner

Planning Team Leader:

Andrea Limauro, Western District Comprehensive Planner

Planning Team:

Keia Butts, *Urban Design Planner* Eric Holcomb, *Historical Preservation Planner* Terry Royce, *Planning Assistant*



Martin O'Malley, Mayor



Otis Rolley III, Director of Planning

Adopted by the City of Baltimore Planning Commission - December 21st, 2006

DEPARTMENT OF PLANNING MISSION STATEMENT

To provide the highest level services and leadership in urban and strategic planning, historical, and architectural preservation, zoning, design, development, and capital budgeting to promote the sustained economic, social, and community development of the City of Baltimore

TABLE OF CONTENTS

| 1 | THE PLAN FOR PENN NORTH | 5 |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| | 1.1 Overview of Area Master Planning | 5 |
| | 1.2 The Neighborhood of Penn North | 5 |
| | 1.3 Plan Purpose | 7 |
| | 1.4 Demographic Profile | 7 |
| | 1.5 Neighborhood History | 8 |
| 2 | PENN NORTH'S COMPETITIVE ADVANTAGES | .10 |
| | 2.1 Neighborhood Assets | .10 |
| | 2.2 Location and Access | .10 |
| | 2.3 Neighborhood Recreation, Parks and Services | .12 |
| | 2.4 Historic Resources and Neighborhood Character | .14 |
| | 2.5 Development Potential | .16 |
| | | |
| 3 | NEIGHBORHOOD CHALLENGES | .22 |
| 3 | NEIGHBORHOOD CHALLENGES 3.1 Disinvestment and Poverty | |
| 3 | | .22 |
| 3 | 3.1 Disinvestment and Poverty | 22 26 |
| 3 | 3.1 Disinvestment and Poverty3.2 Crime | 22 26 28 |
| 3 | 3.1 Disinvestment and Poverty3.2 Crime3.3 Unsupportive Land Uses | 22 26 28 29 |
| 3 | 3.1 Disinvestment and Poverty | 22 26 28 29 31 |
| | 3.1 Disinvestment and Poverty | 22 26 28 29 31 32 |
| | 3.1 Disinvestment and Poverty | 22 26 28 31 32 |
| | 3.1 Disinvestment and Poverty | 22 26 28 31 32 32 33 |
| | 3.1 Disinvestment and Poverty 3.2 Crime 3.3 Unsupportive Land Uses 3.4 Pedestrian Safety and Traffic Control 3.5 Image and Identity GOALS AND RECOMMENDATIONS 4.1 Land Use and Zoning 4.2 Housing | 22 26 28 31 32 32 33 |

| 4.6 Recreation and Youth |
|--------------------------------------------------------------------------------------------------|
| 4.7 Implementation Chart |
| 4.8 Proposed Redevelopment Strategy |
| 4.9 Appendix A: Transit Oriented Development Design Guidelines for the Penn North Community41 |
| 4.10 Appendix B: Holding (Development) Capacity for the City of Baltimore 43 |

1 THE PLAN FOR PENN NORTH

1.1 Overview of Area Master Planning

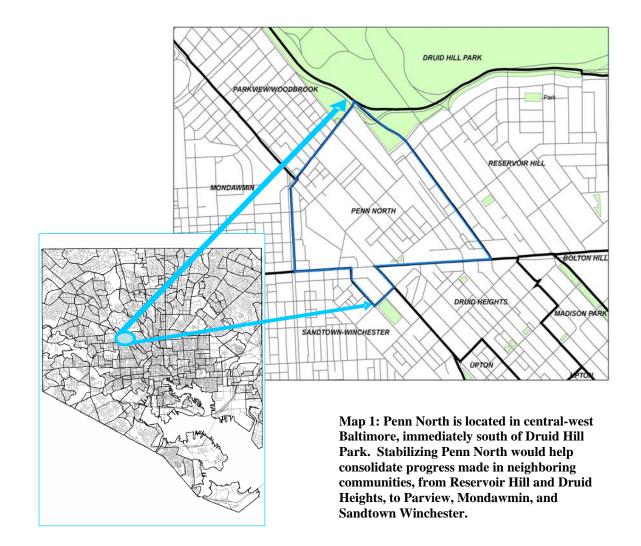
Continuing its commitment to put neighborhoods first, the Department of Planning prepares Area Master Plans (AMP) to approach neighborhood planning by focusing on physical redevelopment. The area master planning initiative concentrates primarily on the redevelopment of, and reinvestment in, areas where heavy public and private intervention is often necessary to address problematic issues such as high vacancy. There are several communities throughout the City with completed plans or plans underway, including Coldstream-Homestead-Montebello, Locust Point, Madison Square, Mount Vernon/Charles North, Park Heights, Pen Lucy, Poppleton, Westport/ Cherry Hill, Reservoir Hill, Greater Rosemont and Coppin Heights, Sharp-Leadenhall, Uplands, and Woodberry.

In recent years, the City of Baltimore has experienced resurgence in community and economic development activity resulting from regional, statewide, and national economic growth and concentrated reinvestment in the City's Inner Harbor and downtown. However, this growth has only recently begun to extend into Baltimore's inner-city neighborhoods. Area Master Plans aim to develop community and economic growth strategies that encourage neighborhood reinvestment and directs that investment to positive ends.

1.2 The Neighborhood of Penn North

Penn North suffers from an identity crisis. The neighborhood is primarily residential, but interspersed with remnants of its industrial past. Warehouses, a slaughterhouse, truck parking lots, and automobile repair shops occupy lots next to residences. Retail services in and around the neighborhood consist primarily of small, converted storefronts that do not meet most of the shopping needs of nearby residents. And while Penn North borders historic Druid Hill Park, the third oldest park in the United States, large warehouses and a ten-lane highway sever the neighborhood's connection to this tremendous asset. This hodgepodge of uses together with poor circulation within the neighborhood and poor access to assets in and near the neighborhood serves to make Penn North a disjointed and unfriendly place for residents to live.

In summer 2004, the City of Baltimore Department of Planning and a committee of dedicated residents agreed to work together to develop a plan that addressed Penn North's significant challenges and built upon its several assets. Prompted by a proposal by the State of Maryland and the City of Baltimore to relocate the State's Parole and Probation offices to Penn North - a proposal residents soundly rejected - the Department of Planning and residents commenced a planning process to address physical challenges like land use and circulation, as well as the negative impacts of a changing regional economy, disinvestment, and crime in the Penn North neighborhood.



The neighborhood of Penn North is located in central West Baltimore City. The neighborhood is bounded by Fulton Avenue to the west and north, McCulloh Street to the east, and North Avenue, and Cumberland Streets to the south. The neighborhood is bordered by up-and-coming Reservoir Hill, and by Parkview, Druid Heights, Sandtown, and Mondawmin neighborhoods. With the exception of Druid Heights and Sandtown, these neighborhoods are generally considered to be more stable than Penn North.

At the time of the Penn North AMP development, the community did not have any functional community associations. However, during the development of the plan, the planning committee members realized the necessity of working together to achieve their goals, and agreed to form the Penn North Community Association to represent and advocate their needs as a community.

1.3 Plan Purpose

The purpose of this plan is to distinguish the opportunities that exist in Penn North and to provide a framework to guide future development. The plan analyzes the conditions that present challenges to the neighborhood and identifies opportunities for change that build on the neighborhood's competitive advantages.

The planning committee identified the following issues to be addressed by this plan:

- Low homeownership rate
- Vacant properties and neighborhood stability
- Lack of recreational choices
- Drugs and crime
- Sanitation
- Low educational attainment
- Weak sense of community

- Weak Penn North community organization
- High unemployment and lack of employment sources
- Strained or no relationship between the community and local businesses
- Poor business facades/streetscapes
- Lack of traffic safety
- Unfriendly land uses and dated zoning
- Weak faith-based resources

1.4 Demographic Profile

According to the 2000 U.S. Census, the neighborhood of Penn North is home to 2,340 residents, of which:

- 53.6% are female,
- 69.4% are adults aged 18 and over, and
- 12.2% are 65 and over.

In the neighborhood 97.4% of residents are Black/African-American compared to 64.3% in the City of Baltimore generally.

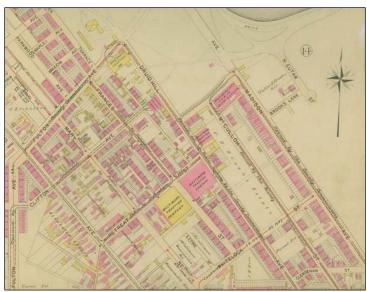
1.5 Neighborhood History

Penn North is a neighborhood with a past emblematic of the ups and downs of Baltimore's history. Like the City, Penn North began as an immigrant community, developed into a thriving working-class neighborhood, then suffered the impact of declining population, the proliferation of drugs and crime, and concentrated poverty.

Located north of North Avenue in what used to be Baltimore County, the area was established in the 1840's and 1850's as a rural slaughterhouse enclave. Before the area's annexation to Baltimore City in 1888, the first neighborhood inhabitants included mainly German immigrants working as butchers. The neighborhood centered on Reisterstown Road (now called Pennsylvania Avenue within the Penn North boundaries) which was the primary trade route to Pennsylvania and western Maryland. The first streets to be developed for housing in Penn North were Druid Hill Avenue, Francis, Woodbrook, and the 1300 block of North Avenue.



Figure 1: Rendering of Pennsylvania and North Avenues in 1869



Map 2: 1886 map of Penn North

The advent of the streetcar industry in Baltimore generated Penn North's greatest residential and industrial development boost. In 1890, tracks were laid along North Avenue for the electric streetcar and several street car companies sprang up throughout the neighborhood, bringing with them street car storage garages and employees like track laborers, conductors, and motormen. Other residents of the neighborhood

included iron merchants, butchers, stenographers, blacksmiths, bakers, day laborers, teamsters, clockmakers, clerks, ministers, foremen, and teachers.

Initially, the neighborhood was primarily white, including Jewish, Irish, German, Russian, and Lithuanian immigrants. Around the turn of the 20th century, African-American population swelled immigrant alongside the population. In the 1900's the City's black elite settled along McCulloh Street, Druid Hill, and Madison Avenues. Frederick Douglass High School in the nearby Mondawmin neighborhood, the West Baltimore Elementary and Coppin Teachers College in Sandtown served African-American students.

During the Great Depression the neighborhood lost many jobs, housing conditions declined, and slum landlords acquired cheap property throughout the neighborhood. However, Penn North and surrounding neighborhoods continued to be the center of life for Jewish immigrants and African-Americans. Pennsylvania Avenue, just south of Penn North, enjoyed a national reputation for African-American entertainment with well-known acts like Red Foxx, Duke Ellington, Billy Holiday, and Ella Fitzgerald. Indeed, West Baltimore's African-American citizens led the fight for civil rights in the 1950's and 1960's, resulting in local achievements like the construction of new schools in Penn North and the desegregation of Gwynns Oak amusement park.

Since the 1960's, however, the Penn North neighborhood has experienced increasing housing vacancies and blight due in part to the loss of population happening throughout the City at large. Redevelopment and revitalization efforts occurred in fits and starts and have produced two stellar successes.

In 1990 and 1996 two redevelopment projects, Enterprise B.U.I.L.D. and Justice Place, produced 70 and 11 town homes, respectively, for moderate income homeowners. An optimistic indication of Penn North's future is that turnover in these projects is minimal with the majority of these structures occupied by the original owners, indicating dedication and a degree of stability in the community.



Figure 2: From left: Enterprise B.U.I.L.D Nehemiah's Homes and Justice Place

2 PENN NORTH'S COMPETITIVE ADVANTAGES

Competitive advantages are characteristics that make a neighborhood more attractive, more marketable, or more viable than similar places. Neighborhoods must compete with others to attract residents, businesses, institutions, and other investment. By analyzing the existing conditions in Penn North, one is able to identify opportunities to capitalize on the neighborhood's competitive advantages and to minimize its challenges.

2.1 Neighborhood Assets

Penn North's competitive advantages arise from some of its current challenges as well as its inbuilt assets. The neighborhood is endowed with many elements, some with unrealized potential, that, when threaded together, can lead to a vibrant, thriving neighborhood. The area has several assets that can be built upon or enhanced to help revitalize the community while, some of its current problems, when addressed properly, will become catalyst for change. These competitive advantages can be grouped into four categories:

- Location and Access
- Neighborhood Recreation, Parks and Services
- Historic Resources and Neighborhood Character
- Development Potential

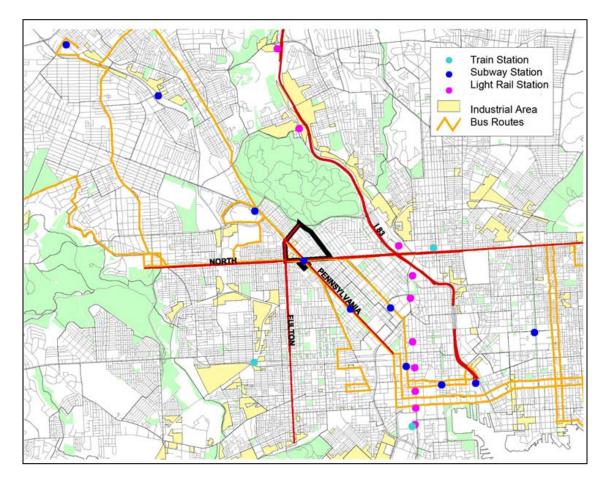
2.2 Location and Access

Penn North has an advantage over many other Baltimore neighborhoods because of its location and accessibility. Penn North is located in central-west Baltimore, approximately 0.5 miles away from the I-83 interchange, the heavily traveled expressway to downtown Baltimore, and is roughly two miles from Baltimore's Central Business District.



Figure 3: The Penn North Metro Subway Station and the Tickner Building at the intersection of North Avenue and Pennsylvania Avenue

The proximity of the neighborhood to the expressway and to the city center makes it an attractive location for downtown workers, for businesses with clientele in the central business district, for residents seeking entertainment and closeness to the Inner Harbor. The neighborhood is along the major, truck-accessible corridors of Pennsylvania, North, and Fulton Avenues, approximately 0.5 miles from the Rosemont Industrial area, making it a convenient location for potential off-site office or operations center for industrial businesses located in Rosemont.



Map 3: Map of transportation around Penn North

In addition, Penn North has ready access to public transportation. The southern edge of the neighborhood, at the corner of Pennsylvania and North Avenues is a hub of public transportation. The intersection is served by several bus lines and by the Penn North Transit Station on the Metro Subway line. The neighborhood station is one of the most actively utilized stations in the City with more than 5,500 people entering and exiting every weekday. The subway is a convenient way to commute to jobs and services downtown, at Johns Hopkins Hospital, Baltimore's largest employer, Mondawmin Mall or Owings Mills Mall in Baltimore County.

2.3 Neighborhood Recreation, Parks and Services

The clearest example of an asset with unrealized potential is Penn North's proximity to historic Druid Hill Park. This 745-acre park on the National Register of Historic Places borders Penn North just to the north. The park is noted for its garden and recreational features like natural streams, lakes, swimming pools, tennis courts, the Baltimore Conservatory, the Maryland Zoo. The Citv of Baltimore Department of Recreation and Parks has а comprehensive and

ambitious plan for the creation of new gateways to the park, the restoration of some of the old attractions, the

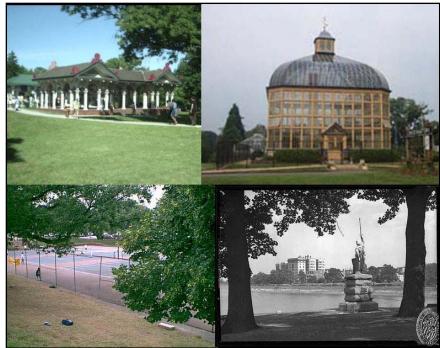


Figure 4: Recreation in and around Penn North: top-left, Maryland Zoo; top-right, Howard Peters Rawlings Conservatory and Botanic Gardens; bottom-left, Cloverdale Courts in Druid Hill Park; bottom-right, a view of Druid Hill Park Lake

improvement of pedestrian and bicycle access and movement to and in the park and a magnificent expansion of the Botanical Gardens. The Maryland Zoo also plans expansions of its exhibits. These public investments will make residential proximity to the park increasingly valuable.

Whereas areas that overlook the park, like Reservoir Hill and Auchetoroly Terrace in Parkview, have experienced revitalization in recent years partly because of their connection to the park, Penn North has not enjoyed the same trend. One reason for this is that the neighborhood is cut off from the park by a 10-lane high-speed street and by the Department of Public Works-owned Baltimore Traction Building which literally walls the neighborhood from accessing the park. When the park was developed, it led directly into the Penn North neighborhood. However, in the mid-1900's, transportation designers constructed Druid Park Lake Drive, a high-speed throughway that divides the community from the park by 10 lanes of speeding cars. Pedestrian crossing to the park is made even more difficult by the fact that the only access point from the neighborhood, the intersection of Fulton Avenue and Druid Park Lake Drive, has no special traffic calming and pedestrian safety feature. Improvements projects for this intersection, aimed at rectifying these very problems, are already in the City pipeline and should result in significant improvements already in the next couple of years.

Another recreational asset easily accessible to Penn North residents is the Cloverdale Courts. Although severed from the main portion of the park by Druid Park Lake Drive,

these basketball courts and green space are integral part of Druid Hill Park. While residents sometimes complain about the courts as a source of loitering and noise, the park is, nevertheless, a heavily-used neighborhood recreational resource.



Figure 5: On the left: Worn-out pavement markings at the intersection of Fulton Avenue and Druid Park Lake Drive. On the right: The frequently used Cloverdale Courts.

Westside Elementary School, located on the northwestern edge of the Penn North neighborhood, has met the State of Maryland's requirements for making Adequate Yearly Progress in all categories of all grades tested. The fact that Westside Elementary has attained this important milestone makes it an even more important community asset.



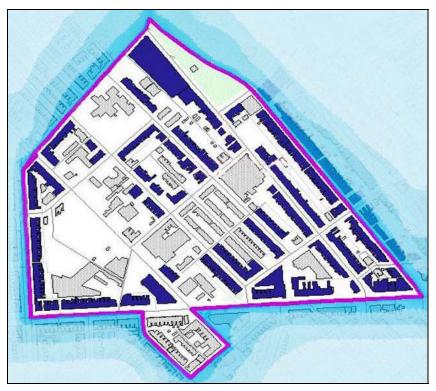
Figure 6: Left, Parkview Recreation Center; right, the Enoch Pratt Free Library Pennsylvania Avenue Branch.

The Parkview Recreation Center is also located on the same premises as the school. This easily accessible recreation center located in the heart of the residential area is a true asset for the community offering recreation activities to children and adults.

One of the most distinguishable services to the Penn North community is the Pennsylvania Avenue branch of the Enoch Pratt Free Library. This two-story renovated library holds special community events all year-round as well as making available for free to all residents 30.000 volumes and 17 internet-connected computers.

2.4 Historic Resources and Neighborhood Character

While many blocks of Penn North are blighted, several blocks of intact housing have been deemed by the Division of Historic and Architectural Preservation to be eligible for a historic designation. The architectural features of rowhouses along McCulloh, Francis, Madison, Woodbrook Streets, Clifton and Fulton Avenues make historic designation and its attendant rehabilitation possible through federal and/or local tax credits. The blocks highlighted in dark blue in Map 4 show those identified by staff of the Baltimore City Historic and Architectural Preservation Division as eligible for possible historic designation.



Map 4: Blocks eligible for historic designation are highlighted in dark blue in the above map.



These blocks have classic Baltimore architecture, narrow streets, and street trees that create an intimate sense of place. While many of these blocks suffer from growing vacancy, they remain the framework upon which a thriving neighborhood can build.

Figure 7: Mature trees, wide sidewalks, and rowhouses along Woodbrook Avenue.



The intersection of Pennsylvania and North Avenues is a key intersection on Baltimore's West side. This bustling intersection is the gateway to the Penn North neighborhood to the north and Pennsylvania Avenue's famous historic entertainment district to the south. The intersection showcases a mix of important civic, commercial, transportation, and historic sites, including the Pennsylvania Avenue branch of the Enoch Pratt library, the historic Tickner commercial building, the Etting Cemetery, Baltimore's first Jewish cemetery established in 1799, the Arch Social Club, home to the nation's first private men's club in the former Schanze Theater, and the Penn North Plaza Senior Building, a residential mixed-use apartment buildina.

Figure 8: The Arch Social Club and the Schanze Theater on Pennsylvania Avenue.



Figure 9: Historic Tickner building at the corner of Pennsylvania and North Avenue.

Figure 10: Olmstead-designed Fulton Avenue median

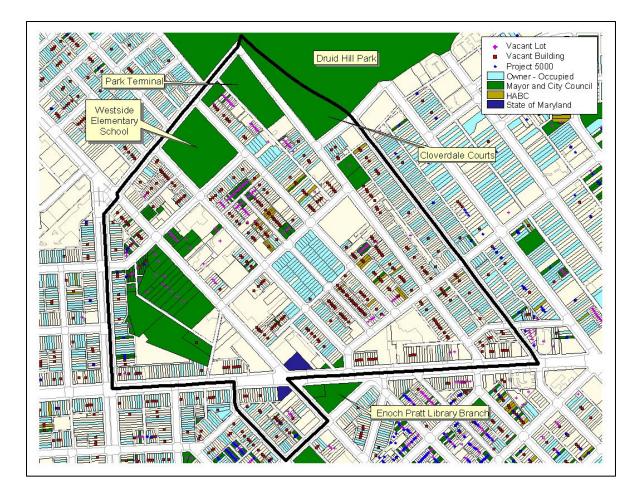
In the early 1900's Frederick Olmsted designed a wide, landscaped, lighted median in the center of Fulton Avenue. The median was an essential amenity adding character to a street bordered by middle-class, four-story row homes. However, in the 1950's the median was destroyed to create federal highway Route 1, north-south trucking route. Fulton Avenue and its new median are slated to be reconstructed in 2007 with a 10-foot wide, planted median and bike lane, enhancing the redevelopment and vibrancy already coming back to the street.

2.5 Development Potential

Probably Penn North's greatest asset is its development potential. Development and redevelopment activities have occurred in sporadic periods in recent decades leaving incomplete, but available, tracts of land and concentrated vacant housing.

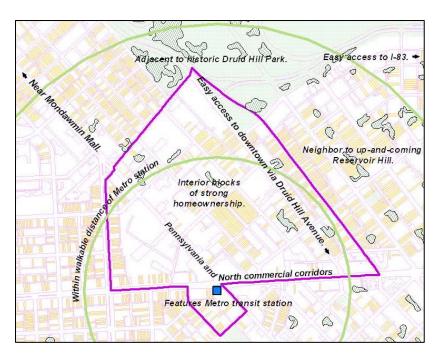
Baltimore City's Holding Capacity study (see Appendix B) conducted in 2005 estimated that Penn North has potential building capacity of 760 to 1343 dwelling units based on the amount of vacant and underutilized land, current zoning, land use regulations and policies, and economic markets.

The following map depicts vacant structures, homeowner-occupied structures, vacant lots and city-owned land. Westside Elementary School, Park Terminal (former traction company), and Druid Hill Park are city-owned assets.



Map 5: Map of ownership and vacancy in Penn North.

As the map shows, Penn North has many areas of concentrated vacant land and vacant buildings that represent an opportunity for major redevelopment projects.



Map 6: Penn North location, assets and transit-oriented development (TOD) potential

The high holding capacity of the neighborhood coupled with the proximity to a major transit station and intersection makes most of the neighborhood a prime area for transit oriented development. Transit-oriented or transit-supportive development tends to be compact, has multiple uses, encourages walking, and provides a sense of place and civic interaction. Development around transit should be of higher intensity and density than in surrounding areas. Public policy experts recommend that residential areas should have a minimum density of 12 dwelling units per acre or 30 residents per acre in order to support rail transit. With 33 people and 18 dwelling units per acre, Penn North has slightly more than the minimum recommended density to support rail transit. Future residential developments should meet or exceed these densities to capitalize on the proximity to the Metro station, to civic resources like the Pennsylvania Avenue Library, and other community assets.



Figure 11: The 6 acres of vacant land on the 2600 block of Pennsylvania Avenue represents a great opportunity for TOD in the City. Vacant land owned by the City offers a clear prospect for infill development. One such opportunity is represented by the 2600 Block of Pennsylvania Avenue which offers roughly six acres of cleared land under the control of the City. This parcel has been recently offered through a public request for proposal (RFP) for transit oriented development. Proposals include apartment buildings with retail space on Pennsylvania Avenue.

Another opportunity for development is represented by the blocks that are majority vacant and could be targeted by the City for site assemblage to foster development activities. One such opportunity is the 2500 block of Salem Street where there is currently a mix of privately owned vacant properties and City owned vacant land. The City should target this block for further assemblage to result in contiguous properties to be offered for redevelopment. Another option is that of seeking a public/private partnership where City owned land could become part of a larger redevelopment project if a private entity assembles the remaining vacant buildings.

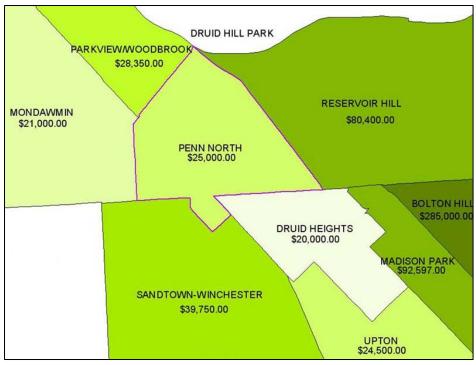
Finally, a major infill opportunity is represented by the Lifelike Products building, a former streetcar garage of the Baltimore Transit Company which burned down in January 2005, the adjacent privately owned vacant houses and the City owned vacant lots on the 2500 block of Druid Hill Avenue. If all assembled together these properties could be redeveloped into a new residential project wrapped around all corners of the Druid Hill Avenue and Retreat Street intersection.



Figure 12: What remains of the former Baltimore Transit Company building after a major fire in 2005.

Although the value of the present median home sales in Penn North are among the lowest in the area (see following map, Map 8), Penn North has proven to have a strong market for new products. The Justice Place and Enterprise B.U.I.L.D. developments, located in the interior of the neighborhood, function as a strong anchor for future projects and as a positive testimony of market demand for new homeownership products.

Moreover, to the east of Penn North, are three very strong neighborhoods - Reservoir Hill, Bolton Hill and Madison Park. Bolton Hill was among the first central Baltimore neighborhoods to experience a rebirth in recent years. Adjacent Madison Park and Reservoir Hill are currently enjoying a very healthy real estate market, in part because of Baltimore Housing's intervention strategies such as Project 5000, Healthy Neighborhoods, targeted code enforcement, and selective demolition.



Map 7: Median Sales 2004.

Map 7 shows the significantly higher median home sale values for neighborhoods surrounding Penn North. These neighborhoods serve as anchors to central West Baltimore, and with continued growth and interest in historic neighborhoods throughout Baltimore, they can potentially spark development interest in surrounding neighborhoods.

Furthermore, a 2004 retail capacity analysis showed that within a one-mile radius around the Penn North Metro station, there were unmet retail demands of more than 370,000 square feet.

| Retail Store Type | Median Sales Sq Ft | Trade potential 0-1 Mile | Sq footage supported |
|-------------------------------------------|-----------------------|-----------------------------|----------------------|
| Apparel and Accessory Stores | \$187.55 | \$19,490,149 | 103,921 |
| Eating and Drinking Places | \$372.93 | \$53,548,329 | 143,587 |
| Food Stores | \$426.62 | \$50,011,716 | 117,227 |
| Furniture and Home Furnishings Stores | \$151.63 | \$5,986,524 | 39,481 |
| Home Appliance, Radio, and T.V. Stores | \$237.73 | \$4,134,093 | 17,390 |
| General Merchandise | \$163.30 | \$11,227,560 | 68,755 |
| Total | 1 | 1 | 373,134 |

Table 1: Analysis of Unmet Retail Demand

Residents are currently underserved by retail, restaurant, and entertainment services. Restaurant offerings are primarily fast-food carry-outs that do not offer high-quality foods. Retail establishments are marginal. Penn North residents often have to go outside of their neighborhood to fulfill basic daily needs like groceries.



Figure 13: Left, vacant commercial buildings on North Avenue; Right, vacant commercial buildings on Pennsylvania Avenue. Unmet retail demand in the community translates into an opportunity for commercial investment on the major corridors especially in proximity of the transit station.

When this unmet market demand is coupled with the undeveloped land on Pennsylvania Avenue, only one block from the station, it creates the potential for transit-supportive, higher density, mixed-use redevelopment within easy walking distance of public transit. Increasing mix-use development around existing transit stations is a citywide priority as underlined in the City's Comprehensive Master Plan in LIVE, Goal 2 Objective 3.

In addition to strong residential neighborhoods to the east, Penn North will also benefit from the public and private investment planned in the surrounding neighborhoods; first and foremost the redevelopment of the Mondawmin Mall and Coppin State University's expansion.

Table 2: Development Activities in and around Penn North

Development Activities

Mondawmin Mall Redevelopment: General Growth Properties has initiated a \$70 million renovation and expansion of the Mall. The future Mall will include the addition of a bigger national grocery store, a national big box retail store and a medium box sports apparel store, as well as a general remerchandised retail offer inside the principal structure

New Shiloh Village: New Shiloh Village, a faithbased partnership between New Shiloh Baptist Church and Bon Secours Hospital, will include new senior housing, expanded parking, divinity school, and day care.

Coppin Campus Expansion: Coppin University is implementing its expansion plan which grows campus activities northward to Gwynns Falls Pkwy, where a new 5000 seat athletic arena is planned, and southward below North Avenue, where the Health and Human Services Building will be built.

Druid Heights Redevelopment: Phase II of the Druid Heights redevelopment area includes new single-family affordable and market-rate housing currently being constructed.

Reservoir Hill Mixed Use Redevelopment:

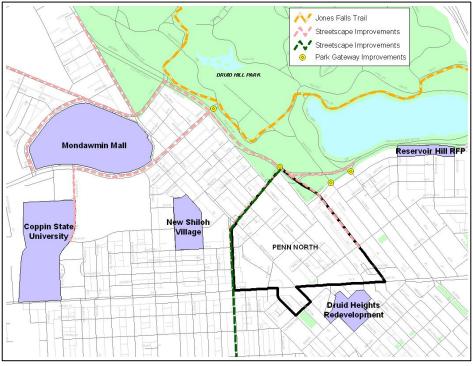
Baltimore Housing is in the process of choosing a developer for two large City-owned parcels on Druid Park Lake Drive. The structure will take advantage of the views and access to Druid Hill Park.

Pedestrian and Streetscape Improvements

Fulton Avenue Median Restoration: The Baltimore City Department of Planning and Department of Transportation are developing plans to restore the Olmstead-designed median from Edmondson Avenue to Druid Park Lake Drive to provide a pedestrian-friendly neighborhood connection to the Park.

Druid Lake Street Improvements and Jogging Path: Modifications have been made to provide room for the completion of the walking/jogging path around Druid Lake and upgrading of the remaining section of the walking/jogging path.

Pedestrian Entrance Improvements: Major pedestrian entrances in Druid Hill Park are to be renovated to improve neighborhood access to the park and the Jones Falls Greenway. Improvements will include new walks, new steps, ADA ramps, park lighting, and park entrance signs.



Map 8: Some of the main redevelopment projects around Penn North.

3 NEIGHBORHOOD CHALLENGES

Alongside significant assets, Penn North has a wide range of challenges to overcome. The following chapter briefly describes the challenges that residents and the City of Baltimore will face in their pursuit of a thriving, revitalized neighborhood.

3.1 Disinvestment and Poverty

Several statistics from the 2000 Census are indicative of Penn North's current instability, especially when compared to citywide and statewide numbers.

Map 10 below shows the percent of change in population between the 1990 and 2000 U.S. Census counts. Since 1990 the population in the Penn North neighborhood has declined 18%; Baltimore City's has declined 11.5%. Of 1,220 housing units in Penn North, 30.3% were vacant; the City had a 14.1% rate of vacancy.



Map 9: Population Change 1990-2000

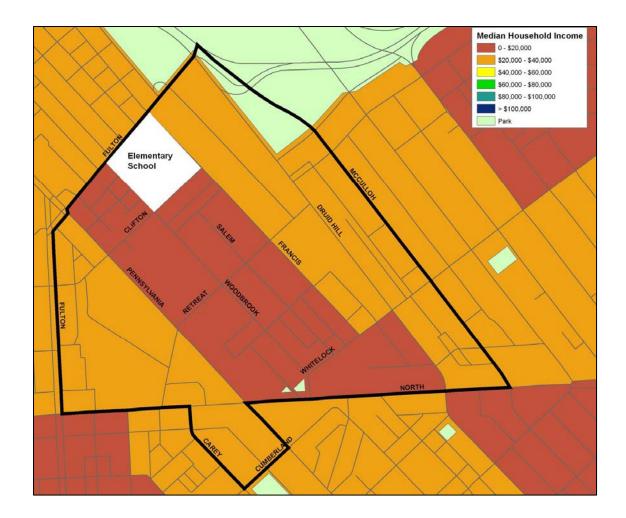
The median household income for Penn North, Baltimore City, and the State of Maryland respectively are \$17,000, \$30,080, and \$52,868.

Table 3 describes the poverty level by household type in Penn North, the City of Baltimore, and the State of Maryland for families; families with female householder, no husband present; and individuals.

| Table 3: Poverty Level by Household Type | | | |
|------------------------------------------|----------|--------------------|------------|
| | Families | Female Householder | Individual |
| Penn North | 41.1% | 50.9% | 47.3% |
| City of Baltimore | 18.8% | 31.5% | 22.9% |
| State of Maryland | 6.1% | 18.4% | 8.5% |



Map 10: Household Income with respect to other neighborhoods



Map 11: Household Income in Penn North

Penn North has a poverty rate six times that of the State. In Penn North 23.0% of the civilian labor force is unemployed, compared to 10.7% citywide and 4.7% statewide. Renters occupy 65.3% of household units, compared to 49.7% citywide. Fifty-six percent of renters pay more than 30% of their household income for rent.



Map12: Percentage below Poverty rate

Similarly, Baltimore Neighborhood Indicators Alliance's *Vital Signs* publication reported other more troublesome statistics of economic well-being and poverty for Penn North than for the City generally. The aggregate 2000 statistics for the Penn North and Reservoir Hill neighborhoods show that the two communities together had 61.6% of married couples with children and 88.5% of other kinds of families living below the Maryland Self-Sufficiency wage standard. The City's rates for the same family groupings were 41.30% and 81.70% respectively.

3.2 Crime

Like other west Baltimore neighborhoods, Penn North has high rates of poverty, drug abuse, and crime that particularly affects the quality of life of residents and the neighborhood's ability to attract commercial and residential investment. The latest BNIA's *Vital Signs*, released in 2006, reports that 2004 crime rates in the Penn North/Reservoir Hill conglomerate were often greater than those for the City generally:

- Overall crime rate: Penn North's rate of reported criminal offenses was 74.90 per 1000 people, while the City of Baltimore's rate was 63.59.
- Violent crimes: Penn North's rate of violent crimes was 21.23 per 1000; the City's was 18.82.
- Juvenile drug arrests: Penn North's rate was 48.74 per 1000 people; the City's was 50.86.

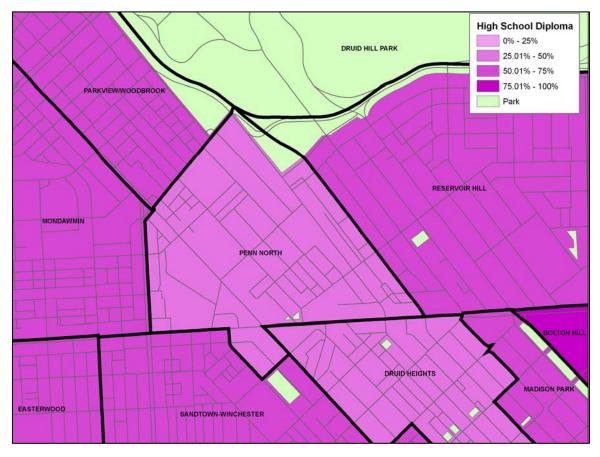
Although overall these statistics show an improvement both at the City and neighborhood level, from the same *Vital Signs* statistics for 2003, clearly, the City must address the drug problem, crime and poverty in Penn North and all other neighborhoods in order to continue the unprecedented growth that Baltimore has experienced in recent years.

In the Penn North neighborhood, as in many other areas of the City, drug activity is most frequent where the vacancy rate is the highest. Acting upon the many areas with extremely high rates of vacancy will surely help secure the neighborhood.

Providing positive alternatives to the youth in Penn North will also help decrease the crime rate. Improvements in schooling, employment and recreation are sorely needed. Acting upon the 23% unemployment rate of the civilian labor force should be a priority. Investment that creates jobs for residents in the community should be encouraged. Existing businesses and future development projects should consider giving priority to local residents for employment, internships and training. This can only be a volunteer effort by developers, as the City cannot enforce compulsory hiring or training programs, but could be facilitated by the local community organization that could help bridge the gap between unemployed youth in the neighborhood and employers.

Along with job opportunities, strategies to increase the school attainment and to lower drop-out rates for the youth of Penn North should be found. As Map 14 shows, a dramatically low percentage of Penn North's population holds a high school diploma – its rate is the lowest among the neighboring communities.

Also, safe recreational facilities should be provided both by the City and by the private sector. In the next two years, the City, through its Capital Improvement Program, will improve residents' access to Druid Hill Park and improve the Westside Elementary School playground. Private sector projects that include entertainment venues, like theaters, movie rentals, gyms, sit-down restaurants, safe bars, and bowling alleys, should be encouraged.



Map 13: School attainment in Penn North is very low, as is employment, among youth.

3.3 Unsupportive Land Uses

While Penn North can currently be described as a mixed-use, mid-density neighborhood, its mix of uses does not service the needs of the community and contributes to its blighted state. The neighborhood has a non complimentary mix of automotive and lightand heavy-industrial uses, like warehouses, a commercial laundry facility, a slaughterhouse, a towing yard, automotive repair shops, bus and truck storage lots, and a Arabber horse stable. While some of these businesses create some jobs for residents, their uses and rundown state have also contributed to limiting larger investment in the area.



Figure 14: Pennsylvania Avenue's unsupportive land uses.

While existing zoning supports many of these establishments, there are several that operate illegally, against the tenets of the zoning code. Some businesses violate zoning and traffic ordinances that prohibit parking, storage, or dumpsters on sidewalks, or forbid blocking alleys and streets with vehicles or refuse.



Figure 15: Many of the uses and establishments in Penn North are not residential-friendly. Some of the operating car and truck repair shops, for instance, illegally park vehicles on sidewalks.

3.4 Pedestrian Safety and Traffic Control

Penn North is surrounded by several wide, multi-lane streets that present daunting challenges to pedestrians. The intersection of Pennsylvania and North Avenues is quite wide and unfriendly to pedestrians. The intersection is characterized by poorly marked crosswalks, misaligned pedestrian signals, and overly large turning radii that favor vehicular movement over safe pedestrian crossing.

Within the neighborhood, Druid Hill Avenue offers commuters a convenient alternative route to downtown. Not surprisingly, the street becomes very busy during morning rushhour. Residents of Penn North report that drivers often speed down the long, narrow street, creating a hazard for pedestrians and other drivers.



Figure 16: The intersection of Pennsylvania and North Avenue presents a challenge to pedestrians

To the north, pedestrians are dissuaded from accessing Druid Hill Park by the 10-lane Druid Park Lake Drive. Pedestrians find navigating the highway difficult because they are hindered by the lack of pedestrian signals and a lack of visual connection to the park due to the wide road and topography. Furthermore, the lack of a gateway or signage pointing to the park does not invite residents and visitors to it, nor provide a visual integration of the park and neighborhood.

The Department of Recreation and Parks has secured funding to improve pedestrian access to the Park in the Funding Year 2007. This project will address a variety of pedestrian safety issues on Druid Park Lake Drive not only at the intersection with Fulton Avenue but at other main intersections to the north.





Figure 18: Above: Existing conditions



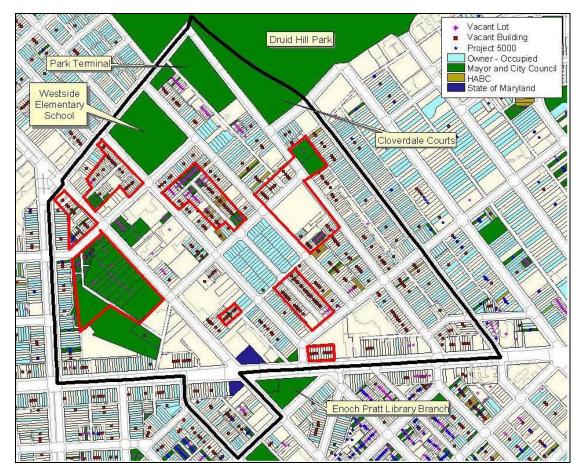
Figure 19: Above: Potential improvement

Figure 17: Currently the northern edge of the neighborhood is separated from Druid Hill Park by 10lane Druid Park Lake Drive

3.5 Image and Identity

Like other distressed neighborhoods in the City of Baltimore, residents have cited sanitation to be a major problem. Trash littered vacant lots and streets and rat infestation threaten the health of residents. Residents attribute the sanitation problems to neglect by absentee landlords and to newcomers to the neighborhood who do not know or ignore rules about trash pick-up. Furthermore, several food establishments mishandle waste, which in turn encourages the proliferation of rats.

Because of sanitation issues, high rates of vacancy, crime and poverty, Penn North is burdened by a negative image. Such a negative image hinders economic and community development by discouraging investors and potential home buyers.



Map 14: The areas surrounded in red have been identified as having the worst sanitation and litter problems. Not surprisingly, these are also the areas with the most vacant buildings and lots.

Compounding this negative image is the lack of gateways, signage, landmarks, or other markers that identify Penn North apart from surrounding neighborhoods, indicate entrance or exit from the neighborhood, or integrate the neighborhood with surrounding assets. Significant structures like the transit station, library, and Tickner building are not highlighted as landmarks. While much of the City-owned Baltimore Traction building is historically and architecturally significant, it also serves as a solid barrier between the park and the growing Reservoir Hill neighborhood.

4 GOALS AND RECOMMENDATIONS

During the development of this plan, the Penn North Planning Committee, made up of a group of neighborhood residents, identified the issues to be addressed in the planning process. The following planning objectives are critical to improving the community and its long term success:

To stabilize the neighborhood and advance community development by:

- improving homeownership opportunities,
- eliminating vacant properties and blight,
- □ improving access to recreation, and
- □ strengthening the sense of community within the neighborhood.

To stimulate economic development by:

- □ increasing opportunities for employment,
- encouraging growth of existing businesses, and
- □ improving access to beneficial commercial services.

To improve the quality of life by:

- decreasing criminal activity and improving the perception of safety,
- improving sanitation within the community, and
- □ enhancing traffic safety to increase access to community resources.

4.1 Land Use and Zoning

The neighborhood should capitalize on the proximity to the Metro station, presence of undeveloped land, and vacant and blighted housing to build a thriving, mixed-use, mixed-income neighborhood.

A zoning study should be conducted to determine the best zoning options for Penn North to:

- Enhance transit-oriented development opportunities, especially on the south-west side of the 2600 block of Pennsylvania Avenue future TOD in Penn North should conform to the standards and regulations in Appendix A;
- Encourage development densities at or above current densities;
- Encourage a mix of uses that serve the community with retail, entertainment, and employment on Pennsylvania Avenue and North Avenue;
- Phase out incompatible and automobile-oriented uses along Pennsylvania Avenue, North Avenue, and throughout the neighborhood, and explore the

relocation of automobile-oriented and industrial businesses incompatible with a residential mixed-use neighborhood.

- Create a sense of "place" by orienting new buildings toward the streets, and creating compact, pedestrian-friendly design and streetscapes.
- Maximize land uses at 2600 Pennsylvania Avenue; require new developments to provide any off-street parking behind or under buildings or in structured garages.
- Encourage shared-parking arrangements between commercial establishments, churches, or other uses that require multiple parking spaces.
- Apply strict landscape and design standards to all existing and future businesses

4.2 Housing

- Stabilize blocks by targeting the neighborhood with code enforcement activities and the receivership program.
- Offer opportunities for safe, clean and affordable housing in all redevelopment and new development projects throughout Penn North.
- Require developers seeking public financial assistance to provide mixedincome housing units by reserving 10 - 20% of the housing units for low- and moderate-income homeownership and rental in addition to meeting the threshold requirements for any financial or programmatic support
- Encourage private investment to maintain and upgrade the existing housing stock with home rehabilitation assistance programs like the Healthy Neighborhoods Initiative.
- Consider designating Penn North as a national historic district to maintain the architectural heritage of the neighborhood while offsetting some of the costs of redevelopment to investors.
- Target acquisition of vacant buildings for rehabilitation opportunities.

4.3 Gateways, Streets and Corridors

- Enhance major intersections to provide attractive, pedestrian-friendly gateways to the Penn North neighborhood.
- Provide attractive, pedestrian-friendly streetscape and traffic controls along major thoroughfares to enhance safety for pedestrians while maintaining appropriate space for movement of trucks and other through traffic.

4.4 Sanitation

- Improve lighting in areas with recurrent dumping problems.
- Explore possibility of surveillance cameras to catch dumpers in the act.

The residents of the planning committee agreed to several neighborhood-based strategies to combat sanitation problems throughout the neighborhood. The residents agreed to have the Penn North Neighborhood Association to:

- Educate community residents on 311 process.
- Ask residents to call 311 consistently.
- Write letters from the Association to problem property owners asking them to address sanitation issues.
- Invite problem property owners to community meetings to discuss persistent sanitation problems.
- Organize community clean-up activities on regular basis
- Increase neighborhood-wide use of rat eradication program

4.5 Crime

- Use surveillance cameras in areas of high street crime and drug activity.
- Improve lighting throughout the neighborhood.
- Utilize defensible space strategies throughout the neighborhood.
- Demolish and redevelop blocks with high vacancy rates to discourage loitering and drug trafficking and to increase residential density.
- Increase police presence in major crime areas

4.6 Recreation and Youth

- Improve the playground at the Westside Elementary School and improve fencing and maintenance of the park area. More night patrolling of the park by local police and more neighborhood involvement are also necessary.
- Work with the Department of Recreation and Parks to promote and expand community activities, fairs, and services during after-school hours of the Parkview Recreation Center.

4.7 Implementation Chart

LAND USE and ZONING

| TASK | RESPONSIBLE AGENCY/ORGANIZATION |
|-----------------------------------------------------|------------------------------------------|
| Conduct zoning study to determine changes in | Department of Planning (DOP), Penn North |
| zoning that would advance Penn North Area Master | Community Association, Pennsylvania Ave. |
| Plan objectives | Redevelopment Collaborative (PARC) |
| Introduce legislation in City Council to rezone the | DOP, City Council, Penn North Community |
| neighborhood in ways that would advance the goals | Association, PARC |
| and objectives of the Penn North Area Master Plan | |
| Amend Penn North Transit Station Urban Renewal | DOP, City Council, Penn North Community |
| Plan to reflect Penn North Area Master Plan | Association, PARC |
| objectives and to reflect findings of zoning study | |
| Apply strict landscape and design standards to all | DOP, Department of Housing and |
| existing and future businesses and residential | Community Development (HCD), Penn |
| developments | North Community Association, PARC |

HOUSING and DEVELOPMENT

| TASK | RESPONSIBLE AGENCY/ORGANIZATION |
|----------------------------------------------------------------|------------------------------------------|
| Stabilize blocks with minimal abandonment - | HDC |
| particularly on intact streets like Francis, Fulton, and | |
| McCulloh through housing code enforcement | |
| strategies and through the Receivership Program | |
| Facilitate the redevelopment of areas with | HCD, DOP |
| significant deterioration of housing stock and dense | |
| concentration of abandoned buildings and vacant | |
| lots, such as Salem Street , by acquisition, demolition | |
| and consolidation of vacant land | |
| Consider designating non-redevelopment areas of | Division of Historical and Architectural |
| Penn North as a national historic district | Preservation (CHAP), DOP |
| Relocate Arabbers stables from 1900 block of | HCD, DOP, BDC, Arabbers, Arabbers |
| Retreat Street to appropriately zoned location | Preservation Society, PARC |
| possibly in Upton as per Upton Area Master Plan | |
| Relocate Baltimore Public Schools System | HCD, BCPSS, DOP |
| facility from 2600 block of Bruce Street | |
| Explore the relocation of automobile-oriented and | BDC, DOP |
| industrial businesses incompatible with a | |
| residential mixed-use neighborhood. | |

GATEWAYS, STREETS and CORRIDORS

| TASK | RESPONSIBLE AGENCY/ORGANIZATION |
|-----------------------------------------------------|-----------------------------------------|
| Enhance the intersection of Pennsylvania and | Department of Transportation (DOT), DOP |
| North Avenues to provide an attractive, pedestrian- | |
| friendly gateway to the Penn North neighborhood. | |
| Provide attractive, pedestrian-friendly streetscape | DOT, DOP |
| and traffic controls along North and Pennsylvania | |
| Avenues | |
| Reconfigure Druid Park Lake Drive and Druid Hill | DOT, DOP, Department of Recreation and |
| Avenue to increase pedestrian safety with traffic | Parks (DRP) |
| calming measures and improved pedestrian signals | |
| Reconfigure Druid Park Lake Drive to provide a | DOT, DOP, DRP |
| gateway and transition between Druid Hill Park and | |
| the Penn North neighborhood. | |

SANITATION

| TASK | RESPONSIBLE AGENCY/ORGANIZATION |
|------------------------------------------------------|------------------------------------------|
| Improve lighting in areas with recurrent dumping | DOT |
| problems | |
| Explore possibility of surveillance cameras to catch | Baltimore City Police Department (BCPD) |
| dumpers in the act | |
| Educate community residents on the 311 process. | Penn North Community Association, |
| Ask residents to call 311 consistently | Mayor's Office |
| Write letters from the Association to problem | Penn North Community Association |
| property owners asking them to address sanitation | |
| issues. | |
| Invite problem property owners to community | Penn North Community Association |
| meetings to discuss persistent sanitation problems. | |
| Organize community clean-up activities on regular | Penn North Community Association |
| basis | |
| Increase neighborhood-wide use of rat eradication | Penn North Community Association, Health |
| program | Department |

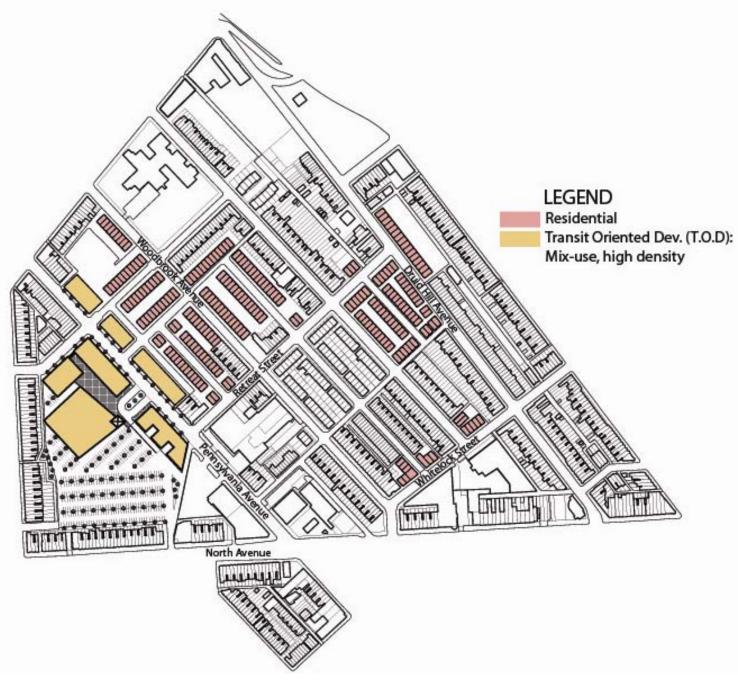
CRIME

| TASK | RESPONSIBLE AGENCY/ORGANITATION |
|----------------------------------------------------|----------------------------------------|
| Establish police substation on the 2700 block of | BCPD, DOP |
| Pennsylvania Avenue | |
| Increase cooperation between police and | BCPD, Penn North Community Association |
| community organization | |
| Increase foot patrolling in the neighborhood | BCPD |
| Redevelop Salem Street to discourage loitering and | HCD, DOP |
| drug trafficking. | |
| Utilize defensible space strategies throughout the | DOP, HCD, DOT, BCPD |
| neighborhood. | |
| Improve lighting throughout the neighborhood. | DOT |
| Use surveillance cameras in areas of high street | BCPD |
| crime and drug activity. | |

OTHER

| TASK | RESPONSIBLE AGENCY/ORGANIZATION |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Work with Elementary School and Recreation Center to increase community access and activities in the school | Baltimore City Public School System (BCPSS), School Principal, DRP, Penn North Community Association |
| Encourage local businesses to participate in community events | Penn North Community Association, PARC, BDC |
| Work with business community to establish better working relationship with community organization and respect codes and legislations | Penn North Community Association, PARC, BDC, HCD, City Council |
| Encourage local businesses to establish chambers of commerce on Pennsylvania Avenue and North Avenue and work with BDC for façade improvement programs | BDC, Penn North Community Association, PARC, DOP |

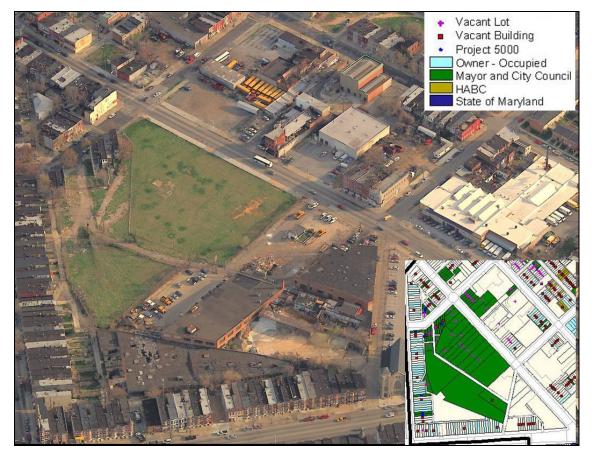
4.8 Proposed Redevelopment Strategy



Map 15: Redevelopment Plan

Redevelopment Area 1

Existing Conditions:

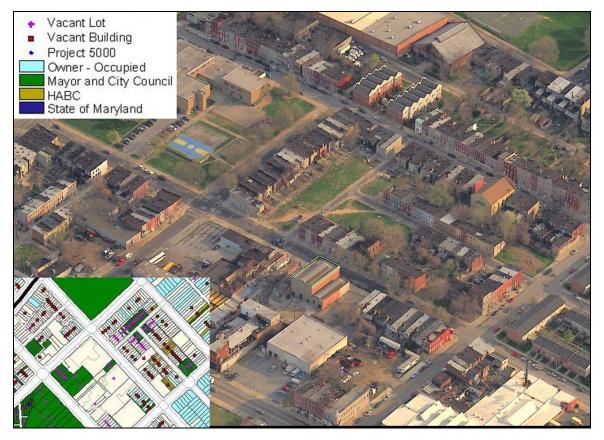


Redevelopment Strategy:

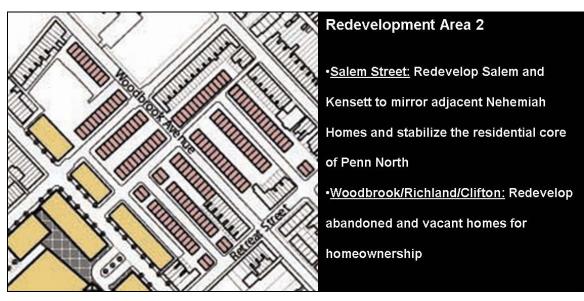


Redevelopment Area 2

Existing Conditions:



Redevelopment Strategy:

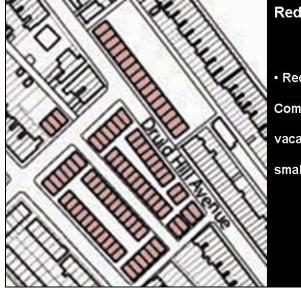


Redevelopment Area 3

Existing Conditions:



Redevelopment Strategy:



Redevelopment Area 3

Redevelop the former Baltimore Transit
Company building site and the adjacent
vacant lots with single family housing or
small apartment buildings.

4.9 Appendix A: Transit Oriented Development Design Guidelines for the Penn North Community

A TOD center is a place of relatively higher density that includes a mixture of residential, employment, shopping, and civic uses located within an easy walk of a transit stop.

The promotion of TOD in the City is one of the objectives of "Live, Earn, Play, Learn – a Business Plan for a World Class City", Baltimore's new Master Plan (Live Section, Goal 2: Elevate the Design and Quality of City's Built Environment; Objective 3: Promote Transit Oriented Development (TOD) and Mix-Use Development to Reinforce Neighborhood Centers and Main Streets).

TOD in the City of Baltimore should follow the development guidelines offered in the City of Baltimore Development Guidebook.

Moreover, TOD is an identified neighborhood revitalization strategy of the Draft Penn North Area Master Plan. TOD within ¼ mile from the Subway Train Station in Penn North would be supported by the demand and market created by the more than 5,500 people that enter and exit the transit station and buses on a daily basis (2004 MTA ridership data) and by the under-serviced residents that already live in Penn North.

Development on the site shall exhibit the following design principles:

- Higher density development in relation to the surrounding community
- A mix of land uses, horizontally and vertically
- Compact pedestrian-oriented design and streetscapes
- Building design & orientation towards Pennsylvania Avenue
- Connected street pattern with small blocks and no cul-de-sacs
- A system of quality open space and amenities
- Limited and managed automobile parking

In addition, the development shall adhere to the following guidelines for land use, site and building design, and street patterns and parking:

Land Use

- Provide a mix of uses including residential, commercial, and retail to generate pedestrian traffic throughout the day, including evenings and weekends
- Automobile oriented uses, such as gas stations and drive-thru institutions, should be discouraged.

Site & Building Design

- Locate public spaces and buildings with active uses on the street-level immediately adjacent to Pennsylvania Avenue. Street-level residential development on Pennsylvania avenue should be discouraged
- The street-level along Pennsylvania Avenue shall be occupied by "active uses" such as retail, restaurants, cafes, or service-type businesses with windows and entrances facing the street and residential and business uses located above.
- Provide safe walking and bicycle paths to daily services such as stores, banks, cafes.

Street Patterns & Parking

- Prioritize structured parking instead of paved parking lots
- Provide a grid street system with compact blocks.

4.10 Appendix B: Holding (Development) Capacity for the City of Baltimore

Introduction: What is "Holding Capacity?"

Holding capacity is the potential number of future housing units that could be built on vacant and underutilized land based on current zoning, additional land use regulations and policies, and housing markets. Given assumptions about local land-use policies, growth trends, typical densities, and holding capacity, the number of future housing units can be projected under various growth scenarios.

The Need for Holding Capacity Data

The concept of estimating holding capacity in Maryland was first developed by the Maryland Department of Planning. Its purpose was to support the state's Smart Growth objective of directing development to Priority Funding Areas. Not only is it important to know how much land there is, but also what areas of the City are suitable for new development and ripe for redevelopment.

Capacity analyses were developed for the metropolitan counties surrounding Baltimore City. Baltimore City has developed this holding capacity estimate in collaboration with the Baltimore Metropolitan Council (BMC) and the Maryland Department of Planning. The effort was partially funded through the BMCs Unified Planning Work Program funds. Holding capacity estimates are useful for a number of planning purposes. Baltimore City has determined its holding capacity as a means to support population forecasting, transportation initiatives, and public and private housing development.

Methodology for Determining Holding Capacity

The overall methodology used for estimating the City's holding capacity is described in the Maryland Department of Planning's guidebook *Estimating Residential Development Capacity*, August 2005, which ensures uniformity in analysis and implementation for all jurisdictions in the state. In order to apply the general guidelines to the City of Baltimore, specific criteria were established to identify developable land, classified as either vacant or underutilized properties. All analyses were done at the parcel level. "Vacant" properties include parcels with no existing physical improvements on the site whereas "underutilized" properties consist of parcels that fall into one or more of the following categories:

- 1. Properties with a Vacant House Notice (VHN)
- 2. Downtown properties with potential for residential conversion
- 3. Off street surface parking lots in the Central Business District (CBD)
- 4. Properties that meet the 'Quick Take' criteria
- 5. Rezoned properties approved by Planning Commission in 2004-2005

Data Sources

In order to identify residentially developable land, 3 main criteria were used:

- 1. Allowable by zoning, which in the City of Baltimore are all zones except industrial zones
- 2. Allowable by ownership, (excluded City owned, university owned, etc.)
- 3. Allowable by environment, (excluded floodways, steep slopes, etc.)

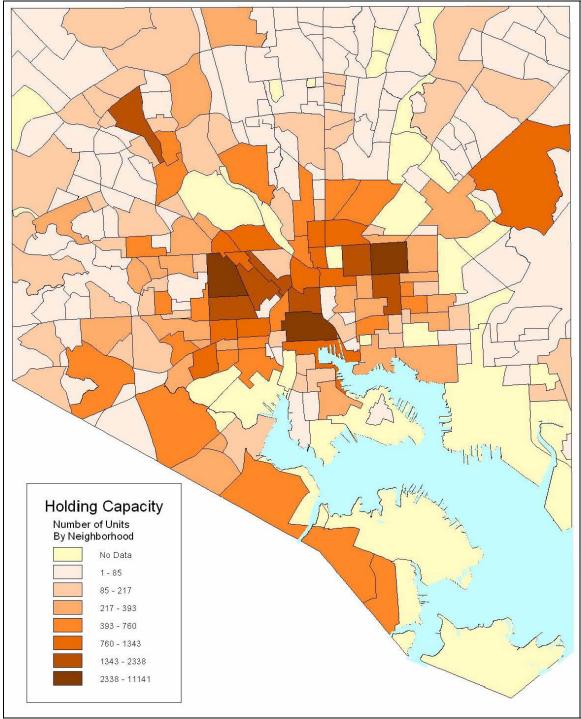
In order to classify a parcel as vacant, 4 sources of data were used and crossreferenced to check for consistency.

- 1. Tax Assessment
 - State Department of Assessment and Taxation, Improvement valuation
- Building foot print Mayors Office of Information Technology (MOITS), Planimetric GIS data
 Vacant by demolition
- 3. Vacant by demolition Baltimore Housing, Parcels with demolition recordation
- 4. Aerial Imagery MOITS, Pictometry Imagery

Identifying Development Capacity

Once the net supply of vacant and underutilized parcels were identified based on the methodology described (total for the city is 25,498 parcels), the capacity (number of units) was calculated using the underlying zoning for each parcel. For zoning categories with a single level of density (R1 through R4), the number of units on each parcel is set to capacity. For example, for R-1 and R-2 the unadjusted yield is 5.97 units per acre and R-3 and R-4 the unadjusted yield is 8.72 units per acre.

For zoning categories with multiple levels of density (R5 through R10, OR, B1 through B4), the mostly likely (modal) density was used to calculate capacity. In R-5, for example, the allowable yields (depending on unit type) range from 8.72 units per acre for single family detached to 14.53 units per acre for multi family attached, the modal density was set at 14.53 units per acre.



Map 16: Baltimore City Holding Capacity Map



Charles L. Benton, Jr. Building • 417 East Fayette Street • 8th Floor • Baltimore, MD • 21202 • 410 396 PLAN • liveearnplaylearn.com